

Administrative Procedures for Floodplain Management and Compliance



SAN DIEGO

The City of

Reference Guide for City Staff & the General Public



For all questions or comments, please contact Emir Williams, <u>ewilliams@sandiego.gov</u>, Stormwater Department

Published: May 2023

This document can be found at: <u>www.sandiego.gov/floodplain</u>



TABLE OF CONTENTS

·	5
Common Terminology	6
Regulatory Agencies	10
Other Supporting Documents	12
Compliance Drivers	13
The City's Commitment	13
NFIP	13
CRS	13
PL 84-99	13
Quick Start: Private Projects vs. Public Projects in a SFHA	14
Submitting a Project in the SFHA	18
Floodplain Administrative Overview	19
Intake	20
Review	22
Acceptance or Rejection	25
Recordkeeping	28
Additional Requirements That Shall Be Enforced	29
Required Floodplain Construction Documents	30
Conditional Letter of Map Revision	31
Special Cases	22
What to Submit	
-	
What to Submit	33 34
What to Submit Where to submit	33 34 34
What to Submit Where to submit Time Frame	
What to Submit Where to submit Time Frame Submit to FEMA	
What to Submit Where to submit Time Frame Submit to FEMA Public Notification Letters	
What to Submit Where to submit Time Frame Submit to FEMA Public Notification Letters Microsoft Word mailing label example	
What to Submit Where to submit Time Frame Submit to FEMA Public Notification Letters Microsoft Word mailing label example Letter of Map Revision	
What to Submit Where to submit Time Frame Submit to FEMA Public Notification Letters Microsoft Word mailing label example Letter of Map Revision What to Submit	33 34 34 35 36 36 40 40 42
What to Submit Where to submit Time Frame Submit to FEMA Public Notification Letters Microsoft Word mailing label example Letter of Map Revision What to Submit Where to Submit	33 34 34 35 36 36 40 40 40 42 42





Microsoft Word mailing label example44
No-Rise Certificate47
What to Submit47
Where to Submit51
Time Frame51
Elevation Certificate
What to Submit53
Where to Submit53
Time Frame54
Coastal V-Zone Certificate55
What to Submit56
Where to Submit57
Time Frame57
Levee Right-of-Way Justification58
Allowable Encroachments61
What to Submit62
Where to Submit64
Time Frame64
Submit to USACE65
Appendix – Flowcharts67
Floodplain Management and Compliance Overview68
Floodplain Construction Documents – Overall Process @ A Glance69
Floodplain Construction Documents – Elevation Certificate
Floodplain Construction Documents – No-Rise Certificate71
Floodplain Construction Documents – Coastal V-Zone Certificate
Floodplain Construction Documents – Conditional Letter of Map Revision73
Floodplain Construction Documents – Letter of Map Revision
Floodplain Construction Documents – Levee Right-of-Way Justification
Floodplain Administrative Responsibilities – For All Projects in the Floodplain76



Purpose

This Standard Operating Procedures (SOP) document details the minimum actions required for the **INTAKE, REVIEW, ACCEPTANCE** and **RECORDKEEPING** of all new and substanitally improved projects, as well as all repairs due to substantial damage when proposed in a Special Flood Hazard Area (SFHA) and/or near a Levee.

Stormwater and Development Services are the two City departments primarily responsible for the intake, review, acceptance and recordkeeping. However, all City departments and the general public are encouraged to review this document to understand the overall process and the procedures that must be followed. All City departments are responsible for coordinating effectively to ensure that all projects comply with the City's municipal code and federal and state regulations.



While this SOP is intended to be comprehensive, it cannot nor is it intended to encompass all possible scenarios. Some projects may require a case-by-case review. This SOP has no legally binding effect and may be rescinded or modified at the Department's complete discretion in accordance with applicable laws. This SOP does not establish legally enforceable responsibilities beyond what is required by the terms of the applicable statutes, regulations or binding judicial precedent.

Beyond maintaining compliance, the City of San Diego wants everyone to be safe and understand the risks and concerns present when building or conducting any construction or maintenance activities in the floodplain.



Common Terminology

Special Flood Hazard Area (SFHA): SFHA is a term used to identify a geographic area mapped on a Flood Insurance Rate Map by FEMA as having at least a 1% annual chance of flooding. Projects in these areas must follow strict regulations regarding development.





National Flood Insurance Program (NFIP):

The NFIP makes federally backed flood insurance available in those states and communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. Learn more at <u>www.fema.gov</u>.

Flood Insurance Rate Map

(FIRM): A FIRM is an official FEMA map of the flood zones and Base Flood Elevations within a community.

1	F	PRM			
FIRM			_	_	
	-	=			
			_	_	:
		3) —	-	=

Flood Insurance Study (FIS): A compilation and presentation of flood risk data for specific watercourses, lakes and coastal flood hazard areas within a community. When a flood study is completed for the NFIP, the information and maps are assembled into a FIS. The FIS report contains detailed flood elevation data in flood profiles and data tables.

Natural Floodplain Functions: The functions associated with the natural or relatively undisturbed floodplain that moderate flooding, maintain water quality, recharge groundwater, redistribute sand, and sediment and provide fish and wildlife habitat.





Insurable (Structure) Building: A walled and roofed building, other than a gas or liquid storage tank, principally above ground and affixed to a permanent site as well as a manufactured home on a permanent foundation.

Base Flood Elevation (BFE):



The base flood elevation is a value determined by FEMA that helps identify an area's flood risk and the risk of structures flooding if the water surface rises to the level equivalent to the1% annual chance flood event.

One percent annual chance flood: This is the boundary of the flood with a 1% chance of being equaled or exceeded in any given year, also known as the 100-year floodplain.

Floodway: Channel of a stream that must be kept free of encroachments so that the 100-year flood discharge can be conveyed.

Letter of Map Amendment (LOMA): A LOMA is an official amendment, by letter, to an effective National Flood Insurance Program (NFIP) map. A LOMA establishes a property's location in relation to the Special Flood Hazard Area (SFHA). LOMAs are usually issued because a property has been inadvertently mapped as being in a floodplain but is actually on natural high ground above the base flood elevation.

Letter of Map Revision (LOMR): A letter from FEMA officially revising the current NFIP map to show changes to floodplains, floodways or flood elevations.

Coastal V-Zones: The part of the coastal SFHA where wave heights can be between 1.5 and 3 feet during the base flood event. Because of the higher risk of damage to homes and



other structures in this Zone, FEMA encourages the practice of building to Zone V standards, which are the most hazardous of Special Flood Hazard Areas.

Flood Zones: A geographical area shown on a Flood Hazard Boundary Map (FHBM) or a Flood Insurance Rate Map (FIRM) that reflects the severity or type of flooding in the area.





Levee: A man-made structure, usually an earthen embankment, designed to contain, control or divert the flow of water to help provide flood protection.



Substantial Improvement: Any reconstruction, rehabilitation, addition, or other proposed new development of a structure or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

(1) Any project for improvement of a structure to correct existing violations or state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

(2) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

See Land Development Manual for more information (Appendix S - <u>www.sandiego.gov/sites/default/files/appendix_s.pdf</u>)

Notice to Proceed: Written permission from the City noting that all the necessary approvals have been granted and the next stage of the project may begin on the specified date.



Regulatory Agencies

This SOP was developed in accordance with the San Diego Municipal Code (SDMC) which is the primary source for floodplain regulation in the City of San Diego.

The floodplain regulations in the SDMC are based on the floodplain management requirements set forth by the Code of Federal Regulations (CFR) and the United States Code (U.S.C.), as well as the performance standards set forth by the American Society of Civil Engineers (ASCE).



The City's floodplain ordinance governs what can and cannot be done in SFHAs. The ordinance can be found in Chapter 14, Article 3, Division 1 titled "Environmentally Sensitive Lands Regulations", in the

San Diego Municipal Code (SDMC).

SDMC §143.0101:

https://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art03Division01.pdf

Additional Definitions – Land Development Manual, Appendix S: <u>https://www.sandiego.gov/sites/default/files/appendix_s.pdf</u>



The CFR is the codification of the general and permanent rules that must be met in SFHAs, <u>in addition to the City's floodplain regulations</u>. The base CFR for the City's NFIP compliance can be found in Title 44, Chapter 1, Subchapter B, Part 60, Subpart A, Section 60.3 titled "Floodplain Management Criteria for Flood-Prone Areas".

Title 44 CFR § 60.3: https://www.ecfr.gov/current/title-44/chapter-l/subchapter-B/part-60/subpart-A/section-60.3





FEMA deems ASCE 24 to meet or exceed the minimum NFIP requirements for buildings and structures. If located within a SFHA, buildings and structures within the scope of the International Building Code (IBC), must be designed in accordance with ASCE 24.

Highlights of ASCE 24: https://www.fema.gov/sites/default/files/2020-07/asce24-14_highlights_jan2015.pdf

ASCE Library: https://ascelibrary.org/doi/book/10.1061/asce24



The U.S.C. and CFR governs the designated right-of-way of federally authorized civil works projects. USACE built levees along the San Diego River and Tijuana River that were turned over to the

US Army Corps of Engineers. City of San Diego to monitor and maintain as the designated Local Sponsor. The base U.S.C. and CFR for USACE compliance can be found as shown below.

U.S.C. 2011 Title 33 Chapter 9 Subchapter I Section 408: <u>https://uscode.house.gov/view.xhtml?req=granuleid:USC-2000-title33-</u> <u>section408&num=0&edition=2000</u>

33 CFR, § 208.10 (a)(5): https://www.ecfr.gov/current/title-33/chapter-II/part-208#p-208.10(a)(5)



Other Supporting Documents

In addition to the base federal regulations, there are government publications of technical bulletins, technical letters and other resources that provide guidance for complying with the requirements that should be used and enforced as they apply.

National Flood Insurance Technical Bulletins

https://www.fema.gov/emergency-managers/risk-management/building-science/national-floodinsurance-technical-bulletins





USACE Engineering Manuals

https://www.publications.usace.army.mil/USACE-Publications/Engineer-Manuals

Pub Number				Latest	
4	Proponent	Title	Pub Date	Review	Info
EM 5-1-11	CECW-I	Project Delivery Business Process	9/1/2022		0
EM 200-1-2	CEMP-RT	Technical Project Planning (TPP) Process	2/29/2016		0
EM 200-1-4	CEMP-RT	Risk Assessment Handbook - Volume I: Human Health Evaluation	1/31/1999		0



Compliance Drivers

The City's Commitment

The City strives to maintain its eligibility in the **NFIP**, **CRS** and the **PL 84-99** programs. As a result, in 1970, the City Council signed a resolution to evaluate flood hazards in all official actions relating to land use in floodplain areas (Resolution No. 201305). <u>https://docs.sandiego.gov/council_reso_ordinance/rao1970/R-201305.pdf</u>

Nation Flood Insurance Program (NFIP)

FEMA's NFIP allows communities that adopt and enforce the minimum federal floodplain regulations to purchase federally subsidized flood insurance policies at a rate less than those offered by private insurance companies. The City's failure to comply with the minimum NFIP standards will render the City ineligible and its communities will lose the opportunity to purchase federally subsidized flood insurance.

Community Rating System (CRS)

Through the NFIP, FEMA offers a voluntary recognition program called the Community Rating System (CRS). Under the CRS, flood insurance premium rates are discounted to reward community actions that exceed the minimum NFIP requirements and meet the three goals of the CRS, which are: (1) reduce flood damage to insurable properties; (2) strengthen and support the insurance aspects of the NFIP; and (3) encourage a comprehensive approach to floodplain management.

With the City's Chief Operating Officer's approval, the City applied for entry into the CRS program in November 2022, and the City's effective date in the program will be October 1, 2023.

Public Law (PL) 84-99

The USACE Levee Rehabilitation & Inspection Program, Public Law 84-99 (PL 84-99), provides participating cities, counties and states with flood fighting assistance, and rehabilitation of Federal and non-Federal flood risk management projects (levees) that were damaged or destroyed from a high-water event.



Quick Start: Private Projects vs. Public Projects in a SFHA



Private projects originate from private citizens or private entities and can be anything below, on or above ground.

For consistency, all Federal, State and other government originated projects will be treated as Private Projects.

Public projects originate from departments within the City of San Diego, and can be anything below, on or above ground.



All projects in a SFHA or within the levee right-of-way shall demonstrate that the floodplain requirements are met, and the project shall not move forward until the project impacts are clear, acceptable and within compliance as determined by the Stormwater Department and/or the Development Services Department.

Where to begin?

All projects shall begin by determining if the project is in a Special Flood Hazard Area by visiting FEMA's *Flood Map Services Center* through the link below.

https://msc.fema.gov/portal/home

irch

Enter your project address to see the interactive map for your results.



You may also visit the FEMA *Flood Map Service Center Search* tool to view or download any of the effective FIRMs in PDF format.

Jurisdiction		Jurisdiction Name	Product ID 🛛
State		Jurisdiction Name or FEMA ID	Product ID
CALIFORNIA	~		
County		(Ex. Fairfax County-wide or 51059C)	(Ex. Panel Number,
SAN DIEGO COUNTY	~		
Community			
SAN DIEGO, CITY OF	~		

If the project touches the floodway, any portion of the floodplain (all flood zones other than Zone X) or the levee right-of-way, then you are in a Special Flood Hazard Area (SFHA) and must comply with the minimum floodplain regulations.





Next, to confirm whether the project encroaches on the levee right-of-way, visit <u>https://www.sandiego.gov/floodplain</u> and click on Levee Map.



For internal City staff using ArcGIS or ArcMap, load the following:



"SWD.CITY. STORM_WATER" and search for
 "SDW.CITY.DRAIN_LEVEE" and "SDW.CITY.DRAIN_LEVEE_POLY".

Project is not in the SFHA?

Floodplain compliance is not required.



Project is in the SFHA?



Know the Requirements

The project shall comply with the San Diego Municipal Code for Special Flood Hazard Areas, found in the following sections:



Chapter 14, Article 2, Division 2 (Drainage Regulations):

https://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art02Division02.pdf

Chapter 14, Article 3, Division 1 (Environmentally Sensitive Lands):

https://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art03Division01.pdf



Know What to Submit for Floodplain Compliance

The project must submit the following Floodplain Construction Documents, as they apply, so the City can thoroughly evaluate the project's direct and overall impacts.

Each Regulated Floodplain Construction Document listed below has a dedicated section in this Standard Operating Procedure that shall be followed to meet the minimum requirements.

List of Regulated Floodplain Construction Documents:

FLOODPLAIN CONSTRUCTION DOCUMENTS	WHEN IS THIS NEEDED
CONDITIONAL LETTER OF MAP REVISION	Project is in the floodplain
LETTER OF MAP REVISION	Project changes the flood risk
NO-RISE CERTIFICATE	Project encroaches on the floodway
ELEVATION CERTIFICATE	Insurable structure in the floodplain
LEVEE RIGHT-OF-WAY JUSTIFICATION	Project encroaches on a levee
V-ZONE CERTIFICATE (COASTAL ONLY)	Project is in a coastal V-zone





Image Source: City of McMinnville





Submitting a Project in the SFHA



Floodplain Administrative Overview

The following diagram provides an overview of the administrative actions that SWD and DSD will take whenever a project is proposed in a Special Flood Hazard Area.







- a. All projects shall be checked against the Flood Insurance Rate Maps (FIRM) to determine if the project boundary touches or is within the 100-year floodplain.
- b. All projects shall be checked against the City's Levee GIS Database to determine whether the project's boundary encroaches on the levee right-of-way.
 - Internal City staff using ArcGIS or ArcMap may load
 "SWD.CITY.STORM_WATER" and search for
 "SDW.CITY.DRAIN_LEVEE" and "SDW.CITY.DRAIN_LEVEE_POLY".
 - ii. Non-internal City staff may visit <u>https://www.sandiego.gov/floodplain</u> and click on Levee Map.
- c. If the project is within the floodplain, it must receive a project tag of one or more of the following:

REGULATED	NOT REGULATED
FEMA-Floodway	FEMA – Zone X
FEMA-Zone A	
FEMA-Zone V	
LEVEE	

Note that flood zones AE, AO, V & VE are all regulated. X-zones are not regulated.

Note that DSD uses PTS and Accela for their recordkeeping. SWD currently uses a temporary database tracking system until the permanent solution is finalized.

Note that if any Project is later determined to not be in the SFHA will have its tags updated to FEMA – Zone X.

d. All private projects with any of the regulated tag distinctions listed in item C shall receive a DSD floodplain review cycle as part of their permit process.



- e. All private projects must receive a discretionary or ministerial review prior to submitting anything to SWD for review.
- f. All private and public projects with any of the regulated tag distinctions listed in item C shall be reviewed by SWD to evaluate the project's proposed impacts on the floodplain.
- g. All private and public projects in the SFHA that also encroach on the levee right-of-way will receive a floodplain tag called "Levee".
 - i. All projects shall be notified that all levee encroachments must be accepted by SWD and approved by USACE.
- h. DSD/SWD shall inform the applicant of any private or public project of the additional time required for all projects in SFHAs so that they can accommodate for the extra time in their project schedules. They shall also be informed that the City is bound by regulatory requirements that must be followed in their appropriate order before any permits, acceptances or approvals are granted.
- i. The applicant must be notified that the following floodplain construction documents in the table below may apply to their project.

FLOODPLAIN CONSTRUCTION DOCUMENTS	WHEN IS THIS NEEDED
CONDITIONAL LETTER OF MAP REVISION	Project is in the floodplain*
LETTER OF MAP REVISION	Project changes the flood risk
NO-RISE CERTIFICATE	Project encroaches on the floodway
ELEVATION CERTIFICATE	Insurable structure in the floodplain
LEVEE RIGHT-OF-WAY JUSTIFICATION	Project encroaches on a levee
V-ZONE CERTIFICATE (COASTAL ONLY)	Project is in a coastal V-zone

* See Conditional Letter of Map Revision section to see the unique cases when CLOMRs are not required





Review

- a. The reviews covered by this SOP are specific to how the project impacts or encroaches on the floodplain/SFHA. All other reviews (i.e., interior drainage, building and etc.), are all handled separately from this floodplain review and follow their own process and require their own timeline.
- b. All floodplain reviews done by SWD shall receive a response within 20 business days and there is no limit to the number of review-cycles a project can have.
- c. All floodplain reviews done by DSD shall follow the Permit Process Timeline (<u>https://www.sandiego.gov/development-</u> <u>services/permits/timeline</u>); there is no limit to the number of reviewcycles a project can have.
- d. Each round of comments will include a spreadsheet listing the details of each comment, and all marked up documents will be stored digitally and provided to the applicant.
- e. The applicant shall be informed that a No-Rise Certificate is required if the allowed development is proposed in a floodway.
 - i. The proposed fill and/or structural encroachment shall not increase the pre-project base flood elevations, floodway elevations or floodway data widths greater than 0.00 feet.
 - ii. All No-Rise Certificates must be submitted for review and approval by SWD.
 - iii. Upon completion of the improvements, a certified Professional Engineer or Surveyor shall sign a confirmation letter to confirm that the project was built as proposed to close out the project.
- f. The applicant shall be informed that a CLOMR & LOMR are required if the proposed project impacts the area's hydrologic and/or hydraulic characteristics by the incorporation of fill, structures, mitigation or any activities in the floodplain.



- i. All private projects must first receive a discretionary or ministerial review from DSD before submitting to SWD.
- ii. The applicant must submit a CLOMR to SWD for review and acceptance before the applicant can submit the CLOMR to FEMA for FEMA's review and approval.
- iii. After FEMA approves the CLOMR and issues an official letter, the applicant shall submit that letter to SWD and DSD for permission (i.e., grading permit, notice to proceed, etc.) to begin any projectrelated activity in the floodplain.
- iv. The CLOMR shall be followed by a LOMR *(within 30-days of the end of construction)* which the applicant must submit along with the As-Built plans to SWD for review and acceptance before submitting to FEMA for review, approval and official map change.
- v. An occupancy or grading hold shall be placed by DSD for private projects and shall not be cleared until FEMA's LOMR approval letter is received.
- vi. For all projects, structures shall not be occupied, or the project shall not be deemed complete until FEMA's LOMR approval letter is received.
- g. The applicant shall be informed that an Elevation Certificate is required for all insurable structures in a SFHA to obtain an occupancy permit.
 - i. For private projects, all Elevation Certificates must be submitted to DSD for a completeness review at all the following stages:

Construction Drawings	Building Under Construction <i>(at the</i> <i>foundation pouring stage)</i>	Finish Construction
--------------------------	---	------------------------



ii. For public projects, all Elevation Certificates must be submitted to SWD for a completeness review at all the following stages:

Construction Drawings	Building Under Construction (at the foundation pouring stage)	Finish Construction
--------------------------	---	---------------------

- h. The applicant shall be notified that a Coastal V-Zone Design and Construction Certificate is required for all insurable structures proposed in a coastal flood zone.
 - i. For private projects, all Coastal V-Zone Certificates must be submitted to DSD for a completeness review at all the following stages:

Building Under Construction (after anchoring)
(ujter unchoring)

ii. For public projects, all Coastal V-Zone Certificates must be submitted to SWD for a completeness review at all the following stages:



- i. The applicant shall be notified that a Section 408 permit is required for all allowable encroachments that are proposed within the levee right-of-way.
 - i. A Levee Right-of-Way Justification signed by a registered engineer shall be submitted to SWD (for both public and private projects) to be reviewed.
 - ii. Only after the proposed encroachment is determined by SWD to be acceptable shall the applicant submit the Levee Right-of-Way Justification request to USACE for review.



 Only after the USACE approves the Levee Right-of-Way Justification or determines that a Section 408 permit is not needed and an official USACE letter is received shall construction begin on the site.



Acceptance or Rejection

a. The following must occur before a Grading and/or Building Permit can be issued for private projects or before any construction activity may begin for public projects.

Conditional Letter of Map Revision (CLOMR)

i. The CLOMR must receive acceptance from SWD in the form of a Community Acknowledgment Form (CAF).

AND

ii. The CLOMR must receive approval from FEMA in the form of an official letter acknowledging how the proposed flood risk will be mapped if built as proposed.

AND

iii. Confirmation from SWD that the 30-day public notification comment period has expired and that all concerns from the neighboring properties have been addressed (if any).

No-Rise Certificate

iv. A No-Rise Certificate must be reviewed and accepted by SWD to confirm that the proposed project does not impact the area's hydrologic and/or hydraulic conditions. Once SWD has confirmed, SWD will provide the applicant with an official letter concluding the No-Rise review stating the rejection or acceptance of the project if built as proposed. Note that all acceptable encroachments within the



100-year floodplain may require compliance with other flood-related requirements.

V-Zone Certificate

- v. A Coastal V-Zone Certificate must be reviewed and accepted by DSD for all private projects and reviewed and accepted by SWD for all public projects at the design and construction stages.
- vi. The certificate must be 100% complete and certified.

Levee Right-of-Way

vii. The encroachment must be on the acceptable encroachment list per this SOP and the Levee Right-of-Way Justification must be submitted to SWD (for both private and public projects) and must confirm that the encroachment will not negatively impact the levee or its function in any way.

AND

viii. The Levee Right-of-Way Justification must be approved by USACE or determined by USACE that a Section 408 permit is not required. The official letter from USACE must be received.

AND

ix. The project plan shall include a dedicated sheet showing the levee encroachment.

Elevation Certificate

 If an insurable structure is proposed in the floodplain/SFHA, an Elevation Certificate must be accepted by DSD (for private projects) or SWD (for public projects) for 100% completeness at



the construction drawing stage to fulfill the City's Community Rating System (CRS) Requirements.

- xi. A revised EC shall also be submitted during the construction stage once the construction has begun, and the building foundation is being poured.
- xii. The final EC must be 100% complete, signed by a licensed professional and submitted within 30 days of the end of construction.

Letter of Map Revision (LOMR)

xiii. The LOMR must receive acceptance from SWD in the form of a community acknowledgment form (CAF).

AND

xiv. The LOMR must receive approval from FEMA in the form of an official letter confirming that the completed revisions will take effect on the FIRM.

AND

 xv. Confirmation from SWD that the 30-day public notification comment period has expired and all the neighboring concerns have been addressed (if any).





Recordkeeping

All Floodplain Construction Documents, the corresponding comments, and all letters and documentation from FEMA and USACE shall be retained and logged by both DSD (for all private projects) and SWD (for all private and public projects reviewed) so that annual reporting can be completed.

- a. DSD shall digitally store all floodplain construction documents in PTS, Accela, and OpenText.
- b. SWD shall digitally store all floodplain construction documents in its current database and on the department's local drive.
- c. All DSD floodplain records, including the status of permits, shall be available to SWD for general access and annual reporting.
- d. DSD & SWD shall ensure that the number of projects in the SFHA can be retrieved based on the flood zone designation.
- e. DSD shall produce reports listing the activities and all the floodplain construction documents on an annual basis.
- f. SWD shall geographically map the floodplain information in its current database.



Additional Requirements That Shall Be Enforced

Plan Sets and As-Builts

All projects with plan sheets must contain the following:

A dedicated section on the Cover Sheet with the following notes:

- i. For C/LOMR and NRC, the Consultant that conducted the analysis.
- ii. The FEMA FIRM number(s).
- iii. The relevant Flood Zone(s).
- iv. The SDMC floodplain reference.
- v. Explicitly state whether the project is in the floodway.
- vi. Explicitly state whether the project encroaches on the levee ROW.
- vii. Note which Floodplain Construction Documents apply *(i.e., C/LOMR/ EC, etc.)*

On relevant plan sheets (all sheet types i.e., D, L,

etc.)

- i. Clearly delineate the 100-year floodplain and the floodway.
- ii. Clearly call out the floodplain and floodway limits.
- iii. Label all relevant Flood Zones.



Projects in Flood Zone A

Flood Zone A is a regulated flood zone that does not have base flood elevations. Projects that propose improvements in this zone shall be required to determine the existing base flood elevations based on FEMA's effective data, in addition to determining the impacts of their proposed improvements.

In the case where the resulting impacts do not change the flood risk or impact the flood hazard limits, a map change will not be required, but the newly determined BFEs must be recorded with FEMA.

To do this, the applicant must submit their CLOMR and LOMR to FEMA for approval to ensure that the newly determined data is reflected on the FIRM and available for all future projects in the area.



Required Floodplain Construction Documents

There are two categories of regulatory documents essential to the City's floodplain review process. Those categories will be referred to as <u>Map Change</u> and <u>No Map</u> <u>Change</u>.

A **Map Change** requires FEMA's approval, and it refers to any allowable new or substantial improvement that impacts an area's hydrologic and/or hydraulic characteristics to the point that causes a change in the base flood elevation and/or a change in the limits of the floodway or floodplain. See the components of a floodplain below.



A **No Map Change** does not require FEMA's approval; it refers to any allowable improvement that does not impact the pre-project base flood elevations, floodway elevations, floodway data or floodplain limits. A No-Rise Certificate is an example of a No Map Change.

CATEGORIES	FLOOD IMPACT	CITY ACCEPTANCE	FEMA APPROVAL
MAP CHANGE	Yes	Yes	Yes
NO MAP CHANGE	No	Yes	No

Map change reference table



The following regulatory documents are relevant to these two categories, and at least one or more of the following floodplain construction documents will be required for all projects in a SFHA.

DELIVERABLES (REGULATORY DOCUMENTS)	MAP CHANGE	NO MAP CHANGE
CONDITIONAL LETTER OF MAP REVISION	\mathbf{X}	\mathbf{X}
LETTER OF MAP REVISION		×
NO-RISE CERTIFICATE	×	N
ELEVATION CERTIFICATE	×	
LEVEE RIGHT-OF-WAY JUSTIFICATION	×	N
COASTAL V-ZONE CERTIFICATE	×	

Details on each document will be provided in the following sections.

Conditional Letter of Map Revision



A Conditional Letter of Map Revision (CLOMR) is required when a new or substantial improvement proposes a change to the floodplain that will cause an increase in the base flood elevation (flood levels) of more than 0.00 ft in a floodway and/or 0.1 ft in a floodplain.

A CLOMR alone is not sufficient to officially change an NFIP Flood Insurance Rate Map (FIRM) because it is only the first of a two-stage process.





The first stage is the CLOMR which represents the project's proposed design that shows its impacts and how it plans to meet the minimum floodplain requirements.



The second stage is the LOMR which represents the completed (As-Built) condition reflecting what was originally proposed and accepted. This stage initiates the official map (FIRM) change with FEMA.

An occupancy permit cannot be issued based on a CLOMR; the CLOMR can be used to request a grading permit or permission to begin construction once the CLOMR has been accepted by SWD and approved by FEMA.

Special Cases

A CLOMR analysis helps to protect against exacerbating the existing flood risk, and it helps to prevent adverse effects on surrounding homes and insurable structures, but in some cases, some projects in a SFHA may not require a CLOMR.

In those special cases, the determination shall be made by both DSD and SWD for all private projects, and the determination shall be made by SWD for all public projects.

These special case project types include:

- Substantial improvements that do not require a grading permit, or if a grading • permit is required, the post-project ground elevations do not increase.
- Substantially damaged projects that do not require a grading permit or if a • grading permit is required, the post-project ground elevations do not increase.







What to Submit

A CLOMR request shall include the required supporting information as listed below.

- 1. Completed application forms. The latest forms can be found on FEMA's website through the following address: (<u>https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms/mt-2</u>)
- 2. A narrative describing the purpose of the request, scope, project details, project address, parcel/APN and methodology used to analyze the project's impact.
- 3. Hydrologic computations, along with digital files of computer models used.
- 4. Hydraulic computations, along with digital files of computer models used *(including effective, duplicate, corrective, pre-project and post-project conditions).*
- 5. Certified topographic map with floodplain and regulatory floodway boundary delineations.
- 6. Annotated FIRM and/or Flood Boundary and Floodway Map (FBFM) to reflect changes due to the project. FIRMs and/or FBFMs can be accessed online at: <u>https://msc.fema.gov/portal</u>.
- 7. Design plans for all hydraulic structures and/or grading within the floodplain along the revised reach.
- 8. Proof of compliance with the Endangered Species Act (ESA). Detailed information regarding this requirement can be found on the FEMA website through the following link: (<u>https://www.fema.gov/flood-maps/change-your-flood-zone/esa</u>)
- 9. Proof of compliance with SDMC §143.0101, Title 44 CFR § 60.3, ASCE 24 and 33 CFR, § 208.10 (a)(5) as they apply.
- 10. A section acknowledging and discussing that the floodplain requirements are met, signed by a Professional Engineer.
- 11. A draft of the public notification letters, a list of the impacted property APNs, and the owner's contact information (see subsequent section).



Where to Submit

All private projects must receive a discretionary or ministerial review from DSD before submitting the CLOMR to SWD.

The CLOMR shall be submitted to SWD to confirm the project's compliance with the City's floodplain regulations before it can be submitted to FEMA.

FEMA will not approve a CLOMR without the City's prior acceptance.

The completed CLOMR package for both private and public projects, must be submitted to SWD via the following email address.

Send to: floodmgmt@sandiego.gov

Subject Line: CLOMR Submittal – Project Name | PTS number or Originating City Department

Message Body: Briefly introduce yourself, identify the point of contact, and describe the project and the proposed impacts.

Attachment or Link: CLOMR, digital modeling files, and all other supporting files. Please note that the City's email system only accepts attachments up to 20 MBs.

Time Frame

The CLOMR package can be submitted by the applicant only after the project has been formally submitted to DSD (private projects) or only after an initial meeting is held with SWD (public projects).



Once submitted, SWD will work with the applicant and provide the applicant with comments within 20 business days. Each round of comments will restart the 20-business day count.



Submit to FEMA

Only after the CLOMR has been accepted by SWD and the Community Acknowledgement Form (CAF) is signed by SWD – may the applicant then submit the City accepted CLOMR package to FEMA.

The current fee schedule for FEMA submittals can be found on the FEMA website through the following link:

FEBA website through the following link: <u>https://www.fema.gov/flood-maps/change-your-flood-</u> <u>zone/status/flood-map-related-fees</u>)



The Online Letter of Map Change portal for submitting to FEMA can be found through the following link:

https://hazards.fema.gov/femaportal/onlinelomc/signin).



Full details for submitting to FEMA can be found on the FEMA website through the following link:

flood-zone/paper-application-forms

https://www.fema.gov/flood-maps/change-your-

TIME FRAME

FEMA's review time may vary, but the standard timeframe could be up to 90 days.





Public Notification Letters

Once the CLOMR is submitted to FEMA and only after FEMA requests the public notification letters, the applicant may submit a request to SWD for the public notification letters to be reviewed and sent out to all affected property owners via the following email address.

Send to: floodmgmt@sandiego.gov

Subject Line: CLOMR Notification Request – Project Name | PTS number or Originating City Department

Message Body: Identify the point of contact, briefly describe your project and note the total number of affected property owners.

File Attachments:

1) A FEMA-approved notification letter in Microsoft Word format based on the template below

2) An Excel formatted list of all the affected property owners (i.e., owner's full name, mailing address, property address, property APN)

3) A Microsoft Word file with all the affected property addresses arranged in a label format based on the label information detailed below

4) A clear map showing the impacted areas with the existing and proposed changes clearly shown. The map must include the APNs of all impacted properties

Please note that the City's email system only accepts attachments up to 20 MBs.

	Label inform
Microsoft Word mailing label	Label <u>v</u> eno
example	Find update Product nur

Label Options					?	×
Printer informatio	n					
O Continuous	feed printer	5				
Page printer	s <u>T</u> ray:	Default tray (I	Main Tray) 🗸			
abel information						
Label information	Microsoft		~			
	Microsoft		Label infor	mation		




The following is an example of the CLOMR Notification Letter to use as a template.



Once the notification letters are mailed out, SWD will send the applicant confirmation that the letters were sent via certified mail for the applicant to provide to FEMA.

The affected property owners will be given 30 days to express any concerns or questions. SWD will notify the applicant of any public concerns and questions and the applicant must resolve all concerns and address all questions.

After 30 days, SWD will notify the applicant that no concerns or questions were received or that the concerns and questions received were resolved.





The following is an example of the required exhibit(s) for the notification letters. The exhibit

must clearly show the before and after conditions as well as the affected parcels with their APN.





The following is an example of the exhibit that shall be provided for each neighboring property that will be impacted by the proposed improvement. The exhibit shall show the 100-year before and after water surface elevations around the property and structures.







Letter of Map Revision

A Letter of Map Revision (LOMR) is the process of officially revising the FIRM and/or FBFM based on the improvements proposed through the CLOMR.

A LOMR is the second of a two-stage process to confirm that the proposed project was built as approved and meets the floodplain requirements. It also details the postproject conditions that will be reflected in the official FEMA FIRM change.



For private projects, an occupancy permit or project closure can only be requested after the LOMR is accepted by SWD and after FEMA confirms that the FIRM change was approved.



For public projects, occupancy or project closure can only occur after the LOMR is accepted by SWD and after FEMA confirms that the FIRM change was approved.

What to Submit

A LOMR submittal follows the CLOMR and is done for the purpose of updating the flood hazard map based on the As-Built conditions of the project. This step is important because flood insurance rates are based on the most up-to-date FIRMs, which depict a property's flood risk.

A LOMR request shall include the required supporting information as listed below.

- Completed application forms. The latest forms can be found on FEMA's website through the following address: (<u>https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms/mt-2</u>)
- 2. A narrative describing the purpose of the request, scope, project details, parcel numbers and methodology used to analyze the project effects.
- 3. As-Built hydrologic and hydraulic analysis.
- 4. Duplicate effective and As-Built HEC-RAS results.



- 5. Annotated FIRM and/or Flood Boundary and Floodway Map (FBFM) to reflect the As-Built changes due to the project. Current FIRMs and/or FBFMs can be accessed online at: <u>https://msc.fema.gov/portal</u>.
- 6. Certified topographic work map with the As-Built floodplain and regulatory floodway boundaries delineated.
- 7. Certified As-Built plans that must include all hydraulic structures and/or grading within the floodplain along the revised reach. The As-Built plans must also include the floodplain notes on the cover sheet and clearly have the floodplain and floodway limits called out and delineated on the corresponding plan sheets.
- 8. Proof of compliance with the Endangered Species Act (ESA). Detailed information regarding this requirement can be found on the FEMA website through the following link: (<u>https://www.fema.gov/flood-maps/change-your-flood-zone/esa</u>).
- 9. Proof of compliance with SDMC §143.0101, Title 44 CFR § 60.3, ASCE 24 and 33 CFR, § 208.10 (a)(5) as they apply.
- 10. A section acknowledging and discussing that the floodplain requirements are met, signed by a Professional Engineer.
- 11. A draft of the public notification letters, a list of the impacted property APNs and the owner's contact information (see subsequent section).
- 12. The previously approved CLOMR, comments and all other documentation related to the CLOMR's approval.

An explanation of the items listed above can be found on FEMA's website through the following address: (<u>https://fema.gov/flood-maps/change-your-flood-zone/paper-application-forms/mt-2#instructions</u>)



Where to Submit

The LOMR shall be submitted to SWD to confirm that the floodplain measures detailed in the CLOMR were built and reflected on the certified As-Built plans.

FEMA will not approve a LOMR and officially change the flood risk maps without the City's prior acceptance.

The completed LOMR package for both private and public projects must be submitted to SWD via the following email address.

Send to: floodmgmt@sandiego.gov

Subject Line: LOMR Submittal – Project Name | PTS number or Originating City Department

Message Body: Briefly introduce yourself, identify the point of contact, and describe the project and the proposed impacts.

Attachment or Link: LOMR, Digital Modeling Files and all other supporting files. Please note that the City's email system only accepts attachments up to 20 MBs.

Time Frame

The LOMR package can be submitted by the applicant only after the As-Built plans are completed.



Once the LOMR is submitted, SWD will provide the applicant with comments within 20 business days. Each round of comments will restart the 20 business-day count.





Submit to FEMA

FEES

Only after the LOMR has been accepted by SWD and the signed CAF received, the applicant may submit the LOMR package to FEMA.



<u>https://www.fema.gov/flood-maps/change-your-flood-</u> zone/status/flood-map-related-fees



The Online Letter of Map Change portal for submitting to FEMA can be found through the following link:

https://hazards.fema.gov/femaportal/onlinelomc/signin



A full list of information for submitting to FEMA can be found on the FEMA website through the following link:

https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms



FEMA's review time may vary, but the standard timeframe could be up to 90 days.



Public Notification Letters

Once the LOMR is submitted to FEMA and only after FEMA requests the public notification letters, the applicant may submit a request to SWD for the public notification letters to be reviewed and sent out to all affected property owners via the following email address.

Send to: floodmgmt@sandiego.gov

Subject Line: LOMR Notification Request – Project Name | PTS number or Originating City Department

Message Body: Identify the point of contact, briefly describe your project, and note the total number of affected property owners.

File Attachments:

1) A FEMA-approved notification letter in Microsoft Word format based on the template below.

2) An Excel formatted list of all the affected property owners (i.e., owner's full name, mailing address, property address, property APN).

3) A Microsoft Word file with all the affected property addresses arranged in a label format based on the label information detailed below.

4) A clear map showing the impacted areas with the existing and proposed changes clearly shown. The map must include the APNs of all impacted properties.

Please note that the City's email system only accepts attachments up to 20 MBs.

Microsoft Word mailing label	
example	

Label Options				?	×
Printer information <u>C</u> ontinuous-feed printer Page printers <u>T</u> ray:		n Tray) 🗸			
Label information Label vendors: Microsoft Find updates on Office.com		~			
Product number:		Label infor	mation		
1/2 Letter 1/2 Letter 1/4 Letter 1/4 Letter 30 Per Page	^	Height: Width:	Address Label 1" 2.63" 8.5" × 11"		
30 Per Page <u>D</u> etails <u>N</u> ew Label]	ОК		Cancel





The following is an example of the LOMR Notification Letter to use as a template.



Once the Notification letters are mailed out, SWD will send the applicant confirmation that the letters were sent via certified mail for the applicant to provide to FEMA.

The affected property owners will be given 30 days to express any concerns or questions. SWD will notify the applicant of any public concerns, and questions and the applicant must resolve all concerns and address all questions.

After the 30 days, SWD will notify the applicant that no concerns or questions were received or that the concerns and questions received were resolved.





The following is an example of the required exhibit(s) for the notification letter. The exhibit must clearly show the before and after conditions as well as the affected parcels with their APN.





No-Rise Certificate

A No-Rise Certificate is required for all projects (public or private) when the improvement or encroachment is within a floodway, and the improvement shall not increase the base flood elevation, shall not increase the width of the floodway or adversely impact the flood risk hazards in any way.



Private Projects: Prior to requesting any building, grading or development permits or conducting any activities in the floodway, the applicant must first submit a No-Rise Certificate and obtain acceptance from SWD to confirm that the proposed development will not impact the pre-project base flood elevations, floodway elevations or floodway data.

widths.



Public Projects: Prior to conducting any building, grading, development or any activities in the floodway, the applicant must first submit a No-Rise Certificate and obtain acceptance from SWD to confirm that the proposed development will not impact the pre-project base flood elevations, floodway elevations or floodway data widths.

What to Submit

A No-Rise Certificate must be supported by technical data, signed, and sealed by a licensed engineer. The supporting technical data should be based on hydraulic and hydrologic analyses that utilize the same model used for the effective Flood Insurance Study (FIS) and FIRM.

The effective model must be requested from the FEMA Engineering Library at <u>FEMA-EngineeringLibrary@fema.dhs.gov</u>. A typical data request is approximately \$300 as of the date of this resource.

If it is demonstrated that the effective hydraulic model is unavailable, an alternative model can be prepared but must be calibrated to reproduce the FIS profiles within 0.5 feet.



Models used in the analysis must be on FEMA's accepted models' list.

The "No-Rise" supporting data package shall include, but is not limited to the following:

- 1. A Narrative describing the purpose of the request, scope, project details, parcel numbers and methodology used to analyze the project effects.
- 2. The Duplicate Effective model (printouts and/or the digital modeling files).
- 3. The Corrected Effective model (if applicable).
- 4. Existing conditions or pre-project model (printouts and/or the digital modeling files).
- 5. Proposed conditions or post-project model (printouts and/or the digital modeling files).
- 6. FIRM and topographic work map, showing floodplain and floodway, any additional cross-sections and the site location with the proposed topographic modification superimposed onto the maps.
- 7. A copy of the effective FIRM showing the current regulatory floodway.
- 8. Documentation clearly stating the analysis procedures. All modifications made to the effective Flood Insurance Study (FIS) model to represent revised existing conditions, as well as those made to the revised existing conditions modeled to represent proposed conditions.
- 9. Effective Floodway Data Table copied from the FIS report.
- 10. Statement defining source of additional cross-section topographic data and supporting information.
- 11. Cross-section plot, of the added cross-sections, for the existing and proposed conditions.
- 12. Any plan sheets that represent the project.
- 13. The source from which input for the original FIS model was taken.



14. The No-Rise Certificate Statement is signed and sealed by a licensed engineer.

For additional information regarding the supporting documents listed above, please refer to the following link (<u>https://semspub.epa.gov/work/10/500004410.pdf</u>).



Below is the No-Rise Certification that must be completed by a licensed engineer and submitted with the supporting documents listed above.

ENGINEERING "NO-RISE" CERTIFICATION
Proposed Development:(Name of Development)
Project Address:
This is to certify that I am a duly qualified engineer licensed to practice in the State of California.
It is to further certify that the attached technical data supports the fact that the development proposed in the floodplain will not increase the Base Flood Elevations (100-year flood), floodway elevations and the floodway widths on at published sections in the Flood.
(Name of Stream)
Insurance Study for, dated, dated
and will not increase the Base Flood Elevations (100-year flood), floodway elevations, and floodway widths at unpublished cross-sections in the vicinity of the proposed development.
Date
Signature
Phone Number
EMAIL
Representing
Address
City State Zip Code
CERTIFYING SEAL OR STAMP



Where to Submit

The No-Rise package can be submitted by the applicant only after the project has been formally submitted to DSD (private projects) or only after an initial meeting is held with SWD (public projects).



Both private and public projects shall be submitted to SWD and emailed according to the information below.

Send to: floodmgmt@sandiego.gov

Subject Line: No-Rise Submittal – Project Name | DSD Project Number or Originating City Department

Message Body: Identify the point of contact, briefly describe your project and note the total number of affected property owners.

Attachment or Link: No-Rise, digital modeling files, and all other supporting files.

Please note that the City's email system only accepts attachments up to 20 MBs.

Time Frame



Once submitted, SWD will provide the applicant with comments within 20 business days. Each round of comments will restart the 20 business-day count.





Elevation Certificate

An Elevation Certificate (EC) is extremely important because it is used to show that a new or substantially improved structure is adequately elevated to comply with the City's floodplain regulations. It is also used by insurance companies and the NFIP to determine the appropriate flood risk rating for flood insurance premiums.

The Elevation Certificate is a form published by FEMA that contains information related to the flood risk, property and building characteristics (i.e., the base flood elevation, flood zone, and the lowest floor elevation).

The Elevation Certificate must be signed and sealed by a licensed professional.

The completeness and accuracy of this document are very important to the property's safety and the City's CRS compliance, and the submitted documents will be reviewed thoroughly before they are accepted.



An Elevation Certificate can never be approved by the City. They can only be accepted by the City. The licensed professional who signs the document confirms that the data provided on the document is correct.





What to Submit

As of the date of this SOP, the current FEMA Elevation Certificate form is dated 2019 and the most current form must be used until a new form is made available.



The form can be found on the FEMA website through the following link: <u>https://www.fema.gov/sites/default/files/2020-</u> <u>07/fema_nfip_elevation-certificate-form_feb-2020.pdf</u>

Full instructions can be found on the FEMA website through the following link: <u>https://www.fema.gov/sites/default/files/2020-</u>07/fema_nfip_elevation-certificate-forminstructions_feb-2020.pdf



Photos of the property must be included in the submittal to be accepted, and all fields in the EC must be filled in or noted as "N/A."

Where to Submit

To comply with the CRS requirements, Elevation Certificates must be submitted by the applicant at three different stages of the project.

- 1) At the design stage.
- 2) When the structures are under construction.
- 3) 30-days after construction is complete.





Private Projects: DSD shall review the Elevation Certificates and the submittals shall be delivered according to the plan checker's instructions.



Public Projects: SWD submittals shall be emailed according to the information below:

Send to: floodmgmt@sandiego.gov

Subject Line: Elevation Certificate Submittal – Project Name & City Department

Message Body: Briefly introduce yourself, identify the point of contact and briefly describe your project.

Attachment: Signed EC and all supporting files.

Please note that the City's email system only accepts attachments up to 20 MBs.

Time Frame



Private Projects: Once submitted, DSD will provide comments based on their established review cycle schedule.

Public Projects: Once submitted, SWD will provide the applicant with comments within 20 business days, except for the submittal made during construction, which will receive an expedited review. For the design and final submittals, each round of comments will restart the 20 business-day count.



Coastal V-Zone Certificate

The National Flood Insurance Program (NFIP) requires the community to adopt a floodplain management ordinance that specifies minimum design and construction requirements. Those requirements include a certification of the structural design and the methods of construction.

Specifically, NFIP regulations and local floodplain management ordinances require that:

- A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction.
- A registered professional engineer or architect shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the following criteria:
 - The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the Base Flood Elevation (BFE).
 - The pile or column foundation and structure attached to it are anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the Base Flood.





What to Submit

The V-Zone Certificate is not a substitute for and cannot be submitted without an Elevation Certificate.

The following form will be made available on the City's Floodplain Management website (<u>www.sandiego.gov/floodplain</u>) and must be filled in and certified by a licensed engineer or architect.

The form must be submitted at the design stage AND once the building is in construction.

			N L C	7
NamePolicy Number (Insurance Co. Use)				.o. Use)
Building Address or				
Other Description		C		7. 0.1
City		State		Zip Code
1	SECTION I: Flood Insu	rance Rate Maj) (FIRM) Informatio	m
Community Number	Panel Number	Suffix	_ Date of FIRM Index	FIRM Zone
	SECTION II: NOTE: This Certificate doe	: Elevation Info es not substitute for		
1 Elevation of the Bott	om of Lowest Horizontal	Structural Memb	er 💧	feet (NGVD)
 Provide the second secon	n (BFE)	Sudetarar Memo	•••••••	feet (NGVD)
	Adjacent Grade			
4 Approximate Depth	of Anticipated Scour/Eros	ion used for Fou	ndation Design	feet (NGVD)
	f Pilings or Foundation Be			
5. Embedment Deptil 0	Things of Foundation De	now Lowest Auj	seent Orade	
	SECTION III: V	-Zone Certificat	ion Statement	
	NOTE: This section must be			1
	be used are in accordance with a st horizontal structural member			
to the effects of the win associated with the bas	undation and structure attached and water loads acting simul e flood. Wind loading values erosion at the foundation has	ltaneously on all bui used are those requi	lding components. Water I red by the applicable State	oading values used are those e or local building code. The
	SECTION IV: Brook	way Wall Cart	fication Statement	
	SECTION IV: Breaks			,
when t	NOTE: This section must be	certified by a regist	tered engineer or architec	t ware foot
	NOTE: This section must be reakaway walls exceed a desig	e certified by a regist gn safe loading resi	tered engineer or architec stance of 20 pounds per sq	nuare foot
I certify that I have develope methods of construction to b	NOTE: This section must be	e certified by a regist gn safe loading resist esign, plans, and spe	tered engineer or architec stance of 20 pounds per sq cifications for construction	nuare foot and that the design and
I certify that I have develope methods of construction to b following provisions:	NOTE: This section must be preakaway walls exceed a designed or reviewed the structural de	e certified by a regist gn safe loading resist esign, plans, and spe- s are in accordance v	tered engineer or architect stance of 20 pounds per sq cifications for construction with accepted standards of	nuare foot and that the design and practice for meeting the
I certify that I have develop methods of construction to b following provisions: Breakaway wall collaps The elevated portion o other structural dama	NOTE: This section must be reakaway walls exceed a designed or reviewed the structural de be used for the breakaway walls	e certified by a regist gn safe loading resist esign, plans, and spee s are in accordance v d less than that which g foundation system and water loads act	tered engineer or architect stance of 20 pounds per sq cifications for construction with accepted standards of h would occur during the b a shall not be subject to co	nuare foot and that the design and practice for meeting the ase flood; and bilapse, displacement, or
l certify that I have develop methods of construction to b following provisions: Breakaway wall collaps The elevated portion o other structural dama (wind and water loading	NOTE: This section must be reakaway walls exceed a designed or reviewed the structural de be used for the breakaway walls as shall result from a water load of the building and supporting ge due to the effects of wind a ng values to be used are defin	e certified by a regist gn safe loading resis esign, plans, and spe- s are in accordance w d less than that which g foundation system and water loads act red in Section III).	tered engineer or architect stance of 20 pounds per sq cifications for construction with accepted standards of p h would occur during the b a shall not be subject to co ing simultaneously on all	nuare foot a and that the design and practice for meeting the ase flood; and ollapse, displacement, or building components
I certify that I have develop methods of construction to b following provisions: Breakaway wall collaps The elevated portion o other structural dama (wind and water loading	NOTE: This section must be reakaway walls exceed a designed or reviewed the structural de be used for the breakaway walls as shall result from a water load of the building and supporting ge due to the effects of wind a ng values to be used are defin	e certified by a regist gn safe loading resis esign, plans, and spe- s are in accordance w d less than that which g foundation system and water loads act red in Section III).	tered engineer or architect stance of 20 pounds per sq cifications for construction with accepted standards of p h would occur during the b a shall not be subject to co ing simultaneously on all	nuare foot a and that the design and practice for meeting the ase flood; and ollapse, displacement, or building components
I certify that I have develop methods of construction to b following provisions: Breakaway wall collaps The elevated portion o other structural dama (wind and water loading	NOTE: This section must be reakaway walls exceed a designed or reviewed the structural de be used for the breakaway walls as shall result from a water load of the building and supporting ge due to the effects of wind a ng values to be used are defin	e certified by a regist gn safe loading resis esign, plans, and spe- s are in accordance w d less than that which g foundation system and water loads act red in Section III).	tered engineer or architect stance of 20 pounds per sq cifications for construction with accepted standards of p h would occur during the b a shall not be subject to co ing simultaneously on all	nuare foot a and that the design and practice for meeting the ase flood; and ollapse, displacement, or building components
I certify that I have develop methods of construction to b following provisions: Breakaway wall collaps The elevated portion o other structural dama (wind and water loading	NOTE: This section must be reakaway walls exceed a designed or reviewed the structural de be used for the breakaway walls as shall result from a water load of the building and supporting ge due to the effects of wind a ng values to be used are defin	e certified by a regist gn safe loading resis esign, plans, and spe- s are in accordance w d less than that which g foundation system and water loads act red in Section III).	tered engineer or architect stance of 20 pounds per sq cifications for construction with accepted standards of p h would occur during the b a shall not be subject to co ing simultaneously on all	nuare foot a and that the design and practice for meeting the ase flood; and ollapse, displacement, or building components
l certify that I have develop methods of construction to b following provisions: Breakaway wall collaps The elevated portion o other structural dama (wind and water loading	NOTE: This section must be reakaway walls exceed a designed or reviewed the structural de be used for the breakaway walls as shall result from a water load of the building and supporting ge due to the effects of wind a	e certified by a regist gn safe loading resis esign, plans, and spe- s are in accordance w d less than that which g foundation system and water loads act red in Section III).	tered engineer or architect stance of 20 pounds per sq cifications for construction with accepted standards of p h would occur during the b a shall not be subject to co ing simultaneously on all	nuare foot a and that the design and practice for meeting the ase flood; and ollapse, displacement, or building components





Where to Submit

The Coastal V-Zone Certificate must be submitted by the applicant at the design stage once the construction has begun.



Private Projects: DSD shall review the Coastal V-Zone Certificate and the submittal shall be delivered according to the plan checker's instructions.



Public Projects: SWD submittals shall be emailed according to the information below:

Send to: floodmgmt@sandiego.gov

Subject Line: Coastal V-zone Certificate Submittal – Project Name & City Department

Message Body: Briefly introduce yourself, identify the point of contact and briefly describe your project.

Attachment: Signed CV-zone and all supporting files.

Please note that the City's email system only accepts attachments up to 20 MBs.

Time Frame



Private Projects: Once submitted, DSD will provide comments based on the established review cycle schedule.

Public Projects: Once submitted, SWD will provide the applicant with comments within 20 business days. Each round of comments will restart the 20 business-day count.



Levee Right-of-Way Justification

Within the floodplain, there are levees that provide a specific level of protection against flooding in some special flood hazard areas.



The City maintains four levees that were constructed by the United States Army Corps of Engineers, who also regulate their ongoing condition and maintenance for the City's eligibility in the Federal Levee Rehabilitation Program. See the Table for affected communities below.



RIVER SOURCE	AFFECTED COMMUNITIES	LEVEES	WATERSHED(S)
San Diego River	Mission Bay Park Ocean Beach Peninsula Midway-Pacific Highway Linda Vista Old Town San Diego Mission Valley	Three Levees	San Diego River Mission Bay
Tijuana River	Tijuana River Valley	One Levee	Tijuana

City-owned levees along the San Diego River



City-owned levee along the Tijuana River



To see a larger PDF map of the levee right-ofway, visit <u>https://www.sandiego.gov/floodplain</u> and click on Levee Map.

For internal City staff using ArcGIS or ArcMap, load the following:

"SWD.CITY. STORM_WATER" and search for "SDW.CITY.DRAIN_LEVEE" and "SDW.CITY.DRAIN_LEVEE_POLY".





The levee right-of-way must be protected from development and unauthorized encroachments. The federal right-of-way extends outward 15 feet on the land side toe of the levee slope to form the federal right-of-way.



Unauthorized encroachments can impede water flow, causing the base flood elevation to rise, and weaken the structural integrity of a levee. To meet federal regulations, improvements shall not pass over, under, or through the levee right-of-way without prior acceptance from the City and approval from the USACE.

Any non-levee features built or growing within a levee right-of-way are considered an encroachment and all unauthorized encroachments are prohibited.



Allowable Encroachments

The following table provides a general list of various encroachments that are not allowed, as well as a general list of encroachments that are allowed on a case-by-case basis and pending USACE's Section 408 approval.

	ALLOWED	NOT ALLOWED
Septic Tanks		\checkmark
Wells		
Storage		
Parking		
Buildings		
Excavation		
Fill		
Trees		
Utilities		
Fences		
Poles		
Gates		
Services Roads		
Erosion Control		
Maintenance Improvements		



All proposed levee right-of-way encroachments must be approved by the USACE before any construction can begin and before a Grading Permit can be issued.



What to Submit

This process must be done during the planning stages of the project to ensure the proposed encroachment is acceptable prior to moving forward with a full design. Based on the complexity of the proposed encroachment, an initial design drawing and cross-sections will be needed.

Per Congressional mandate, under *Section 14 of the River and Harbors Act of 1899* and codified in *Section 408 (33 USC, 408)*, authorization of allowable encroachments on federal levees is based on the review and approval from USACE as well as acceptance from the City.

If the encroachment is necessary and on the allowable encroachment list shown above, then the USACE Permit Inquiries Checklist must be completed to initiate the review process.

The Levee Encroachment Justification packets shall include the following information:

- 1. Completed Permitting Inquiries Checklist. The Permitting Inquiries Checklist can be found on the USACE website through the following link: <u>https://www.spl.usace.army.mil/Missions/Permitting</u>.
- 2. Project location map showing 2-foot contours and the proposed encroachment along with any known utilities in the area.
- 3. Cross-section(s) of the proposed encroachment as it interacts with the levee.
- 4. Up to date, in-the-field photos of the area and a detailed description of the existing condition (not a Google map or other online snapshots).
- 5. Annotated As-Builts of the existing area highlighting the area of the encroachment.
- 6. Annotated FIRM of the area highlighting the area of the encroachment.
- 7. Right-of-way maps.
- 8. Geospatial data information (survey, GIS).
- 9. Project proposed plans (if available), cross-sections and proposed schedule.



U.S. Army Corps of Engineers Los Angeles District Permit Inquiries Checklist

I have a question	if my project would re	equire a permit for:	
Section 404:	Section 10/103: 🗆	Section 408: 🗆 l do no	t know: 🗆
Contact Name: _		Phone:	Email:
Project Name:			
Project Applicant	(Name of Agency / Co	mpany/ Persons prop	osing the project):
Project Location:	Street Address		
-			County:
			county
C A	(Google Maps pin dro		
Current land owr			
		Control District for a Se	ection 408 Permit? Yes: 🗆 No: 🗆
Provide contact:			
Have you contac	ted Regulatory Divisior	n for a Section 404/10/	103 Permit? Yes: 🗆
Provide contact:			
Describe the Pro	ject including how you	would access the site	(be as detailed as possible):
 □ side drain con □ bridges □ un □ environmenta 	nnection 🗆 dams 🗆	reservoir/basin modifi lscaping improvement al features □ gravel n	
Other work type	(if other work type, ex	plain):	
Attach a Project I	Location Map, a Projec	t Footprint Map, and s	ite photos.
	information to <u>SPLPer</u> send attachments in n		<mark>my.mil</mark> . Please keep emails to less than led.





Where to Submit

All Levee Right-of-Way Justifications must be accepted by the City prior to submitting them to USACE.



Both private and public projects shall be submitted to SWD and emailed according to the information below.

Send to: floodmgmt@sandiego.gov

Subject Line: Levee Encroachment Justification Submittal – Project Name & City Department

Message Body: Briefly introduce yourself, identify the point of contact and briefly describe your project.

Attachment: Levee Encroachment Justification packet and all supporting files. Please note that the City's email system only accepts attachments up to 20 MBs.

Time Frame



Once submitted, SWD will provide the applicant with comments within 20 business days. Each round of comments will restart the 20 business-day count.





Submit to USACE

USACE has permitting authority over activities affecting the waters of the United States.

Water in the United States includes surface waters such as navigable waters and their tributaries, all interstate waters and their tributaries, natural lakes, all wetlands adjacent to other waters and all impoundments of these waters.

As a result, other permits, including Section 404, 10 or 103 may also be required.



For both private and public projects, only after the Levee Right-of-Way Justification packet is accepted by the City, shall the applicant submit the Permitting Inquiry Checklist and supporting documents to the USACE for approval.



Send to: <u>SPLPermitInquiries@usace.army.mil</u>

CC: floodmgmt@sandiego.gov

Subject Line: Levee Permitting Inquiry Checklist Submittal – Project Name

Message Body: Briefly introduce yourself, identify the point of contact and briefly describe your project and how it interacts with the levee. As well as request formal review of your submittal package.

Attachment: Levee Permitting Inquiry Checklist and all supporting and required documents.

Please note that the City's email system only accepts attachments up to 20 MBs.

TIME FRAME

USCAE's review time may vary, but the standard timeframe could be up to 90 days.

FULL DETAILS

- Section 408 permitting overview: <u>https://www.spl.usace.army.mil/Missions/Section-408-Permits</u>
- Section 408 Permission Submittal Checklist: <u>https://www.spl.usace.army.mil/Portals/17/408%20Permits/Section408Submittal</u> <u>Checklist_20Aug2017_.pdf?ver=2017-08-25-184149-027</u>
- Section 408 Permission General Submittal Checklist: <u>https://www.spl.usace.army.mil/Portals/17/408%20Permits/USE%20General%20</u> <u>Requirement%20Checklist%20Section%20408%20submittal.pdf?ver=bf_Hsgt8sT</u> <u>NAqTWOWzSC9w%3D%3D</u>



Appendix - Flowcharts



CITY OF SAN DIEGO'S FLOODPLAIN MANAGEMENT

AND COMPLIANCE OVERVIEW

STATEMENT OF INTENT

AUT

REGULATORY

AGENCIES

To uphold the City's floodplain management responsibilities, we have established a consistent process for the **Intake**, **Review**, **Acceptance** and **Recordkeeping** for all regulated activities in Special Flood Hazard Areas. The objective of the Standard Operating Procedures document is to explain the actions needed to meet the regulatory requirements.

	Floodplain management was established through City
	Resolution 201305, dated November 24, 1970, which regulates
HORITY	development for adequate land use, measures and control with
	effective enforcement provisions consistent with the criteria set
	forth by the National Flood Insurance Program Regulations.



Federal Emergency Management

Agency for the National Flood Insurance Program and the Community Rating System



United States Army

Corps of Engineers for the Public Law 84-99, Levee Rehabilitation Program

 ADMIN
 Review → What shall happen when a project is submitted?

 ADMIN
 Review → What standards shall the project meet?

 Acceptance → What shall be done before acceptance?
 Recordkeeping → Where shall the regulatory floodplain construction documents be stored for quick retrieval?



Note: All projects will submit at least one or all the floodplain construction documents if in a Special Flood Hazard Area (SFHA).



REGULATORY FLOODPLAIN CONSTRUCTION DOCUMENTS

tificate	An EC is required for all Private & Public structures in an SFHA to obtain occupancy.
ficate	An NRC is required for any project in a floodway to obtain a Notice to Proceed.
ne	A CVC is required for any project in an SFHA coastal area to obtain a Notice to Proceed.
Letter ion	A CLOMR is required for any project that impacts the area's flood risk and must be accepted to obtain a Notice to Proceed. A LOMR , following a CLOMR, is required to obtain occupancy or grading sign-off.
of- tion	An LRJ is required for all projects that encroach on a levee and an approved LRJ is required to obtain a Notice to Proceed.
construction	

The City of

SAN DIEGO





KEY

EC \rightarrow An <u>Elevation Certificate</u> is required for all new or substantially improved insurable structures in the floodplain.

NRC \rightarrow A **<u>No-Rise Certificate</u>** is required if any portion of a new or substantial improvement is in the floodway.

CVC \rightarrow A <u>Coastal V-Zone Certificate</u> is required for all new and substantially improved projects along a shoreline or in a Coastal Zone.

C/LOMR \rightarrow A <u>Conditional Letter of Map</u> <u>Revision</u> is required for all new or substantially improved floodplain projects that impact the flood risk. A <u>Letter of Map Revision</u> is required to officially reflect the flood risk change on the FEMA Flood Insurance Rate Maps.

LRJ \rightarrow Levee Right-of-Way Justification is required for all projects that encroach on the levee right-of-way.

SWD → Stormwater Dept.

DSD → Development Services Dept.





KEY

EC → An <u>Elevation Certificate</u> must be certified and it shows that a building is properly elevated in a Special Flood Hazard Area (SFHA). This is required for all new or substantially improved insurable structures.

The latest form is dated 2019 and can be found here: <u>https://www.fema.gov/glossary/eleva</u> <u>tion-certificate</u>

ECs are only reviewed by the local community *(SWD or DSD)* and not submitted to FEMA.

NOC → Notice of Completion

NTP → Notice to Proceed

SWD → Stormwater Department

DSD → Development Services Department





SAN DIEGO

No Floodplain Requirements

KEY

NRC → A **<u>No-Rise Certificate</u>** is required for all projects (public or *private)* when the improvement or encroachment is within a floodway.

The improvement/encroachment shall not increase the floodway in any way (limits or water surface elevation) and it shall not adversely impact the flood risk hazard.

NRCs are only reviewed by the local community (SWD) and are not submitted to FEMA.

NTP -> Notice to Proceed

SWD → Stormwater Department





KEY

CVC → A <u>Coastal V-Zone Certificate</u> is required in coastal communities for all new and substantial improvements to ensure all buildings built in V-Zones are anchored to resist wind and water loads acting simultaneously. An Elevation Certificate is also required.

V-Zones \rightarrow Areas along the coast that may see storm-induced waves higher than three feet and flooding.

CVCs are only reviewed by the location community *(SWD or DSD)* and not submitted to FEMA.

NOC → Notice of Completion

NTP → Notice to Proceed

SWD → Stormwater Department

DSD → Development Services Department





Department	STEP 9	Only after the CNLs are mailed shall the applicant request FEMA's signoff Letter.
NOC → Notice of Completions		
City \rightarrow Refers to both SWD & DSD.	STEP 10	Only after FEMA issues the sign-off Letter, shall the applicant request occupancy and/or NOC from City.







No Levee Requirements

KEY

LRJ → Levee Right-of-Way Justification is required for all projects that encroach on the levee right-of-way. This process shall be done at the planning stage to ensure the encroachment is acceptable before the full design is completed.

LRJs must be accepted by SWD prior to submitting to USACE.

USACE must approve and issue a Section 408 Permit for the design plans to be approved.

SWD → Stormwater Department

USACE→ United State Army Corps of Engineers

Acceptable Encroachment: See the LRJ section in the City of San Diego Floodplain Management SOP found through the link below:

https://www.sandiego.gov/floodplain





Floodplain Administrative Responsibilities

For All Projects in the Floodplain

