Flood Insurance Rate Map (FIRM) Panel Technical Reference

Format for Flood Insurance Rate Maps

November 2016

FEMA

For more information, please visit the FEMA Guidelines and Standards for Flood Risk Analysis and Mapping webpage (www.fema.gov/guidelines-and-standards-flood-risk-analysis-and-mapping). Copies of the Standards for Flood Risk Analysis and Mapping policy, related guidance, technical references, and other information about the guidelines and standards development process are all available here. You can also search directly by document title at www.fema.gov/library.

Implementation Instructions

This version of the Technical Reference must be used on projects as described below. Generally, the changes in this version may also be implemented on any project, in coordination with the FEMA Project and Contracting Officer's Representative.

Revision Date	Implementation
November 2016	Implemented for all projects beginning Data Development after November 30, 2016.

Table of Revisions

The following summary of changes details revisions to the FIRM Panel Technical Reference subsequent to its most recent version in May 2016.

Affected Section or Subsection	Revision Date	Revision Description
Section 3.1	November 2016	Added specification for FIRM Panel neatline.

Table of Contents

1.0 Introduction 1
2.0 Map Production Formats 1
2.1 Countywide Format 1
2.2 Multiple-County Communities 1
2.3 Partial Countywide Map Format 3
2.4 Single-Jurisdiction (Community-based) Format 5
3.0 Map Frames 6
3.1 Frame Sizes 6
3.2 Frame Size Exceptions 6
4.0 Map Body 11
4.1 Base Map 11
4.1.1 Depiction of Base Map Features 12
4.2 Depiction of Flood Hazard Features 18
4.2.1 Floodplains and Floodways 18
4.2.2 Flood Hazard Information Based on Future-Conditions Analyses 19
4.2.3 Zone Labels 19
4.2.4 Base Flood Elevations 19
4.2.5 Cross Sections 19
4.2.6 Cross Section Labeling 19
4.2.7 Limit of Study 20
4.2.8 Coastal Transects 20
4.2.9 Coastal Transect Labeling 20
4.2.10 Limit of Moderate Wave Action 20
4.3 Other Flood Hazard Features and Notes 28
4.4 Coastal Barrier Resources System Map Components 28
4.4.1 Coastal Barrier Resources System Boundaries 29
4.4.2 Coastal Barrier Resources System Area Screens 29
4.4.3 Coastal Barrier Resources System Area FIRM Note 29
5.0 Map Legend 31
6.0 Notes to Users 38
7.0 Scale Box and Panel Locator Diagram 47

8.0 FIRM Title Block 51
9.0 Preliminary Flood Insurance Rate Map Deliverables 57
10.0 Map Service Center Deliverables 59
11.0 National Flood Hazard Layer 59

List of Figures

Figure 1. Map Frame Dimensions 7
Figure 2. Map Frame Dimensions Including Logo Sizes and Locations 8
Figure 3. Map Frame Margin Standards 9
Figure 4. Folding Standards 10
Figure 5. Text Size and Corresponding Halo Sizes 11
Figure 6. Legend Standards 31
Figure 7. FIRM Orthophoto Base Map Legend 33
Figure 8. FIRM Vector Base Map Legend 34
Figure 9. FIRM Notes to Users Standards 38
Figure 10. FIRM Notes to Users 39
Figure 11. FIRM Levee Notes to Users 39
Figure 12. FIRM Levee Seclusion Legend Addition 40
Figure 13. FIRM Levee Seclusion Legend Addition, Customized 40
Figure 14. Limit of Moderate Wave Action Notes to Users 41
Figure 15. Coastal Barrier Resources System (CBRS) Notes to Users 41
Figure 16. Scale Box and Map Locator Diagram Standards 47
Figure 17. Panel Locator Diagram 48
Figure 18. FIRM Title Block Standards 52
Figure 19. FIRM Title Block 53
Figure 20. Title Block with Preliminary Stamp 58

List of Tables

Table 1. Base Map Features: Leader Line 11
Table 2. Base Map Features: Transportation 13
Table 3. Base Map Features: Hydrographic 14
Table 4. Base Map Features: Hydraulic Structures 14
Table 5. Base Map Features: Boundaries and Political Areas 15
Table 6. Base Map Features: Horizontal Reference Grids and Panel Tile Notes 17
Table 7. Standard Flood Hazard Features and Notes 21
Table 8. Other Flood Hazard Features 28
Table 9. Coastal Barrier Resources System Features and Notes 29
Table 10. Map Legend Neat Lines 32
Table 11. Map Legend Features 36
Table 12. Notes to Users 42
Table 13. Panel Locator Diagram 48
Table 14. Scale Box 50
Table 15. FIRM Title Block 54
Table 16. Preliminary FIRM Title Block 57

1.0 Introduction

This document provides the specifications for the content and graphic presentation of all of the elements of a Flood Insurance Rate Map (FIRM). Additional guidance on graphic presentation of individual FIRM elements may be found in the FIRM Graphics Guidance document. Guidance on base map elements may also be found in the Base Map and FIRM Panel Layout Guidance document.

2.0 Map Production Formats

2.1 Countywide Format

FIRMs will most often be prepared in the Federal Emergency Management Agency (FEMA) countywide format, whereby all jurisdictions within a given county are shown on one set of FIRM Panels.

For FIRM Panels and FIRM Databases, cross-section information shall be lettered or numbered sequentially along each flood source, and contain Water Surface Elevations (WSELs) that are consistent for the length of the flooding source.

Where analyses overlap community boundaries and analyses do not agree, the analysis with the most recent effective date shall be used.

2.2 Multiple-County Communities

When processing a countywide FIRM that contains a multiple-county community, the assigned Mapping Partner shall select from one of the three processing options described below.

Before a decision is made regarding the processing method, which occurs during the Discovery/Project Planning Phase (see the Discovery Guidance document), the following questions must be answered:

- In how many counties does the subject community lie?
- How are the multiple-county communities shown on the FIRMs of surrounding counties?
- What is the status of the surrounding counties relative to countywide processing?
- Does the subject community have full jurisdiction over its lands?
- How much of the subject community falls within the county that is being processed?
- What is the map scale of the existing community-based FIRM or countywide FIRM?
- How many panels would be added to the countywide FIRM in order to include the subject community in its entirety?

Once these questions have been answered and all information has been obtained, the final decision regarding processing shall be made in consultation with the FEMA Project Officer. The three options discussed below ensure seamless mapping coverage for all jurisdictions and prevent overlapping and/or duplicated flood hazard information from being shown on two

separate FIRMs. The most up-to-date analysis should be applied from one community to another if there are data disagreements.

Processing Option 1: Single Jurisdiction

Under this option, the FIRMs of the surrounding counties would show the community as an "Area Not Included" (ANI), with no flood hazard or base map information shown, and the community would retain the format of its Single-Jurisdiction FIRM. If orthophoto base maps are used for the countywide FIRMs, the base map imagery will continue through the ANI. When this option is chosen during the processing of a countywide format FIRM, a concurrent community-based FIRM revision must be processed, if required, to ensure that seamless coverage between the multiple-county community and the surrounding counties will be maintained. Minor revisions of the FIRMs of adjacent counties may be necessary to ensure that no overlaps or gaps in coverage exist.

Only National Flood Insurance Program (NFIP) communities (i.e., those that have been assigned a Community Identification Number [CID]) may be shown as an Area Not Included. All other land-use areas, such as military reservations, shall be shown and labeled on the FIRM.

Processing Option 2: Entire Community Mapped in Only One of the Countywide FIRMs

Under this option, the entire community is mapped on the new countywide FIRM. This option shall be used when the following criteria are met:

- The multiple-county community can be shown on the new countywide FIRM without substantially increasing the panel count; and
- At least 70 percent of the community area is located within the countywide FIRM being processed.

When Processing Option 2 is chosen, the assigned Mapping Partner shall notify the FEMA Flood Map Service Center (MSC) to supersede the community-based FIRM for the multiple-county community. The MSC must also be advised to include a notation in the Flood Map Status Information System that the multiple-county community is shown in its entirety on the new countywide FIRM. The adjacent counties will continue to show the multiple-county community as an Area Not Included (ANI) on their FIRMs, even if their FIRMs are converted to the countywide format at a future date. This decision will be made on a case-by-case basis with the FEMA Project Officer.

Processing Option 3: Community Split Between Counties

Under this option, flood hazards in the multiple-county community are shown on the countywide FIRMs of the respective counties. This option shall be used only when the following criteria are met:

- All adjacent counties in which the multiple-county community is located either already have countywide FIRMs or will in the near future; and

- The multiple-county community has been consulted and has not expressed significant concerns with being shown on more than one countywide FIRM.

When Processing Option 3 is chosen, if the processing of any of the contiguous countywide FIRMs that share the subject community are delayed (usually as a result of an appeal, protest, or other flood risk project complication), thereby making it impossible for all countywide FIRMs to become effective at the same time, the multiple-county community shall retain the effective community-based FIRM or previous single- or multiple-county map for the portion of the community in the county with the delayed map. In this situation, the assigned Mapping Partner must consult the FEMA Project Officer for a decision on how to proceed. Decisions will be made on a case-by-case basis but must result in continuous and non-conflicting coverage for all land areas being mapped. Once all issues causing the delay are resolved, the assigned Mapping Partner can proceed with the inclusion of the community into each countywide FIRM.

When Processing Option 3 is chosen, the assigned Mapping Partner must notify the MSC to supersede the community-based FIRM for the multiple-county community.

2.3 Partial Countywide Map Format

Current methods for publishing partial countywide maps are very inefficient, mainly because new panel layout schemes differ from prior panel layouts, resulting in the partial overlap of unrevised panels surrounding the updated area with the panels for the revised area. Because the overlapping panels must be modified to avoid duplicate coverage and subsequently republished, the cost of updated information is higher, per panel, than the full countywide mapping. As a result, the burden and cost of producing partial countywide maps may outweigh the benefits.

Digital conversion of only the revised panels (partial digital conversion) is not the preferred option, but it may be undertaken when funding constraints prohibit a full digital conversion. Before requesting partial countywide mapping format approval from the FEMA Regional office, the Mapping Partner performs a cost comparison to the standard countywide format, written justification of the decision to pursue partial countywide mapping, and determines answers to the following questions:

- How many panels will the partial countywide mapping entail?
- How many existing panels will be unaffected?
- How many existing panels will need to be republished as “This Area Shown” panels? (These are panels that refer the user to another panel for information).
- How many communities are in the county?
- How many communities will be completely mapped by the partial countywide mapping?
- How many communities will be only partially mapped as a result of the partial countywide mapping limits?

- How many of these communities have an effective Flood Insurance Study (FIS) Report that will need to be revised and republished?
- Will adding additional panels to the partial countywide mapping plan complete any of these communities and eliminate their single-community FIS Report?
- How many existing detailed flooding sources are there in all communities?
- What are the existing map formats?
- How many Letters of Map Revision (LOMRs) will be incorporated into the partial countywide mapping?
- How many LOMRs will not be incorporated?
- How many detailed flooding sources will be fully mapped in the partial countywide mapping?
- How many detailed flooding sources will be only partially mapped as a result of the partial countywide mapping limits?
- How will the cross-section lettering appear on the partial countywide panels and the existing unrevised panels where a traditional continuous lettering series is not possible now?
- Will there be a datum issue created by the partial countywide mapping limits?
- Will adding additional panels to the partial countywide mapping simplify any of the cross section re-lettering and datum conversion challenges?

Because each proposed partial countywide mapping project is unique, FEMA will evaluate submittals on a case-by-case basis.

The FEMA Region, in consultation with FEMA Headquarters, will evaluate the request and approve or disapprove the request based on information provided by the Mapping Partner. The FEMA Region will advise the Mapping Partner of the decision in writing, and will copy Headquarters and FEMA's national contractor(s).

Datum Conversion

Since most existing FIRMs are referenced to the National Geodetic Vertical Datum of 1929 (NGVD29) and new FIRMs are referenced the North American Vertical Datum of 1988 (NAVD88), partial countywide mapping will, at a minimum, create dual-datum FIRMs for the counties. Flood Profiles and Floodway Data Tables (FDTs) within an individual FIS Report will now be potentially referenced to either datum, which will increase the complexity of production and quality control reviews. To minimize datum shifts within individual Flood Profiles and FDTs, minimize the number of partially mapped, detailed flooding sources by carefully selecting the FIRM panels to include in the partial countywide layout.

Lettered Cross Sections

In the traditional countywide process, the entire length of a detailed stream is re-lettered into a continuous sequence. In a partial countywide, some portions of a detailed stream may fall on panels not planned for publication, making a continuous lettering series impossible. To minimize lettering discontinuities, minimize the number of partially mapped detailed flooding sources as a result of the partial countywide limit; consider expanding the number of panels included in the new partial countywide layout to accomplish this. New cross sections inserted between existing cross sections should be numbered with an alphanumeric sequence (i.e., cross sections 5A and 5B may be inserted between existing cross sections 5 and 6).

2.4 Single-Jurisdiction (Community-based) Format

A single-jurisdiction FIRM is an option when funding constraints or lack of suitable base map data prohibit full countywide mapping.

3.0 Map Frames

The frame size for the FIRM panels is defined in the following sections.

3.1 Frame Sizes

All FIRM panels shall be printed to the dimensions shown below:

- Trimmed paper size: Height 36” x Width 24”, Architectural D (ARCH D)
- Map border size: Height 35.5” x Width 23.5”
- Map Panel border: Height 25.5” x Width 23”
- Legend, msc.fema.gov note border: Height 9” x Width 5.3”
- Notes to Users, Logos border: Height 9” x Width 5.6”
- Panel Locator, North Arrow, Scale Bar border: Height 9” x Width 5.6”
- Map Info Panel, FEMA NFIP Logo border: Height 9” x Width 5.3”
- Figures 1 through 4 describe the dimensions of a FIRM map frame, including the overall dimensions (1), the dimensions including logo sizes and locations (2), frame margin standards (3), and frame folding standards (4). See section 5, Map Legend, for detailed information regarding the legend.

The map image size (the image inside the FIRM neatline) shall vary depending on the latitude of the community being mapped.

The map panel border shall be a plain black line with a line weight of 1.0pt.

3.2 Frame Size Exceptions

When the dimensions specified in section .2.1 cannot be matched because the map image sizes are larger due to far southern latitudes, a different system of measurement has been used, or other reasons that would make the use of ARCH D – sized paper not feasible, a different map size may be used at the discretion of the FEMA Project Officer. Examples may include Hawaii (Universal Transverse Mercator [UTM] projection size), North Carolina, and Puerto Rico (metric). If an alternative size is selected, all other map content not related to map format in this document must be adhered to.

Figure 1. Map Frame Dimensions

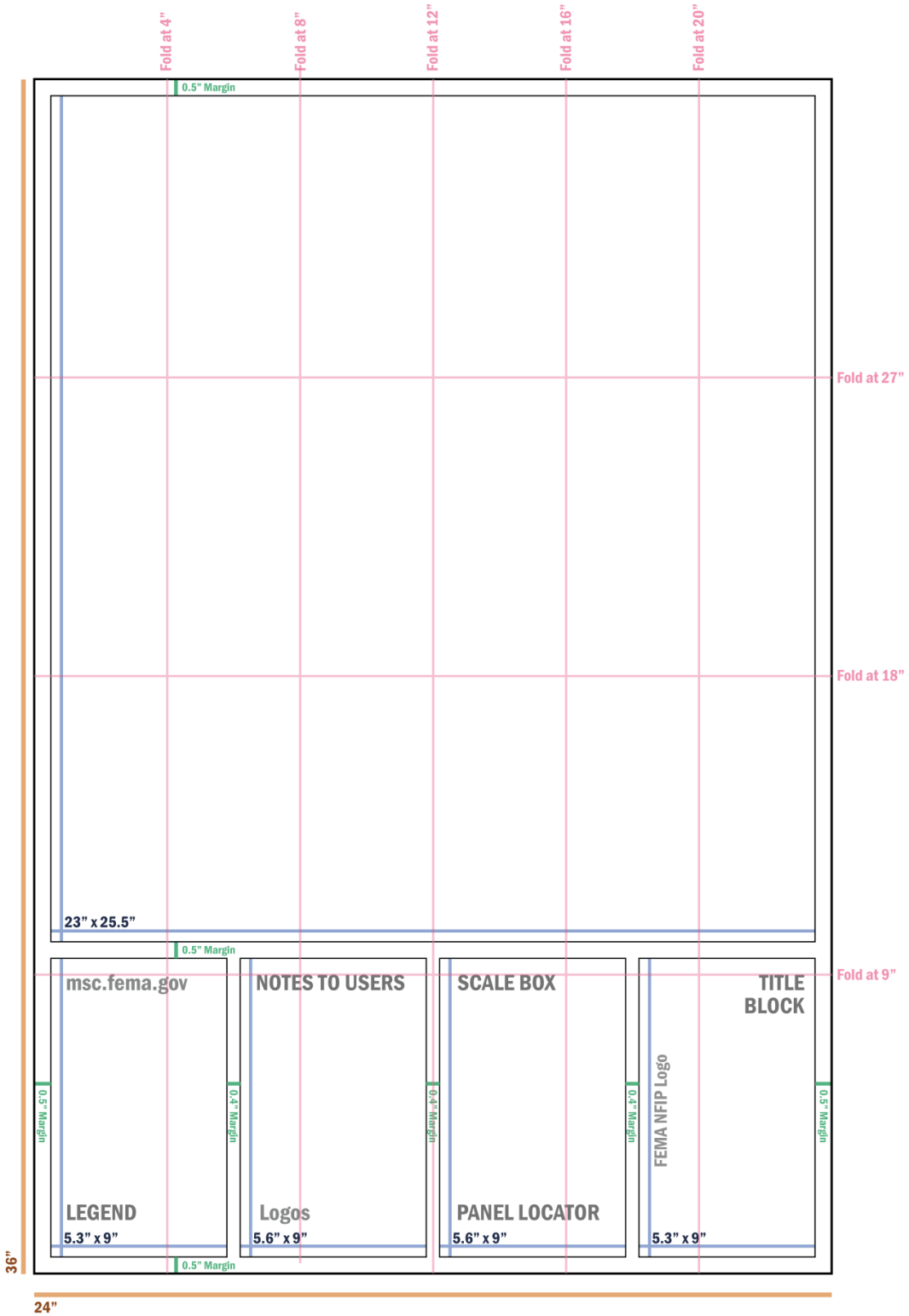


Figure 2. Map Frame Dimensions Including Logo Sizes and Locations

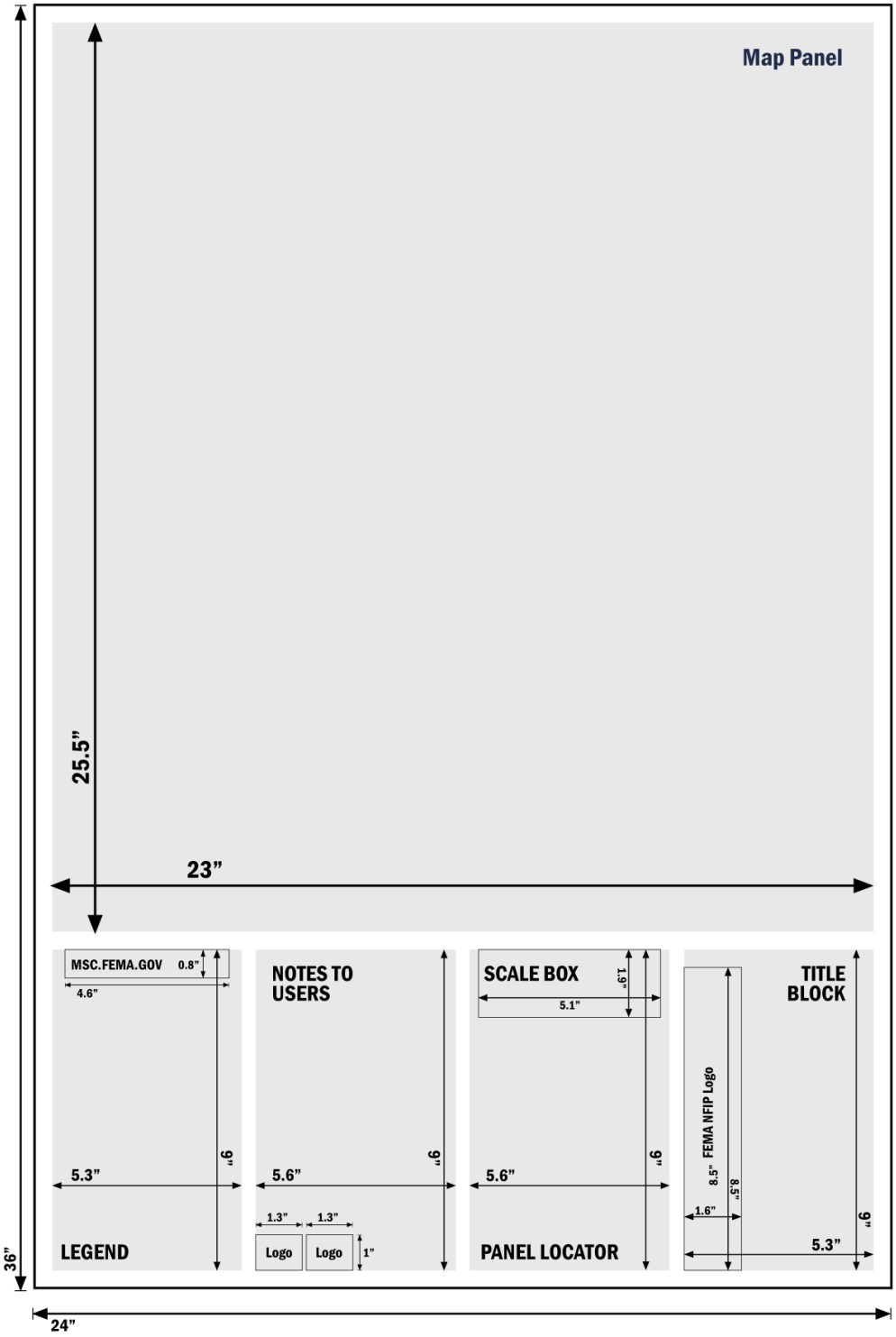


Figure 3. Map Frame Margin Standards

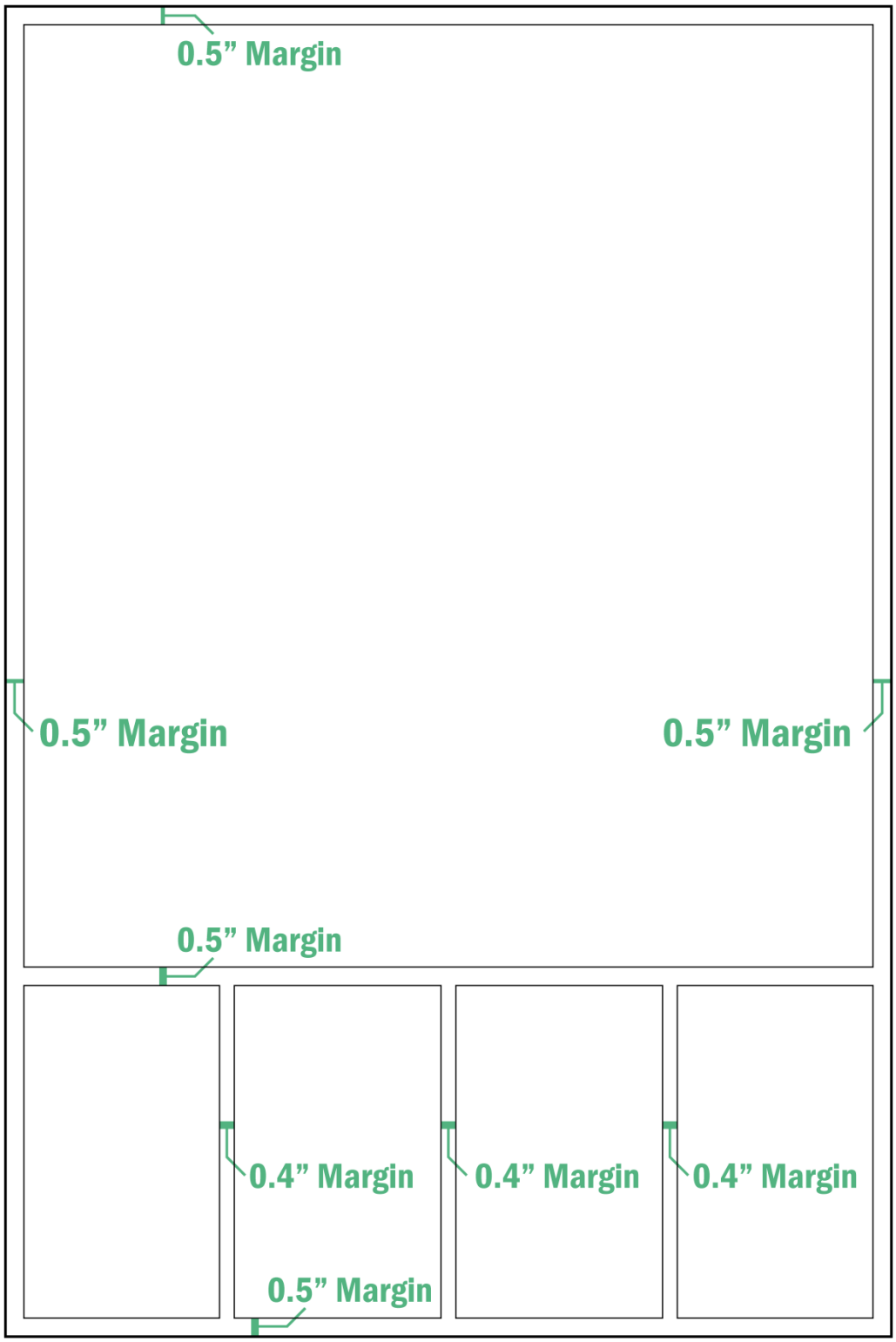
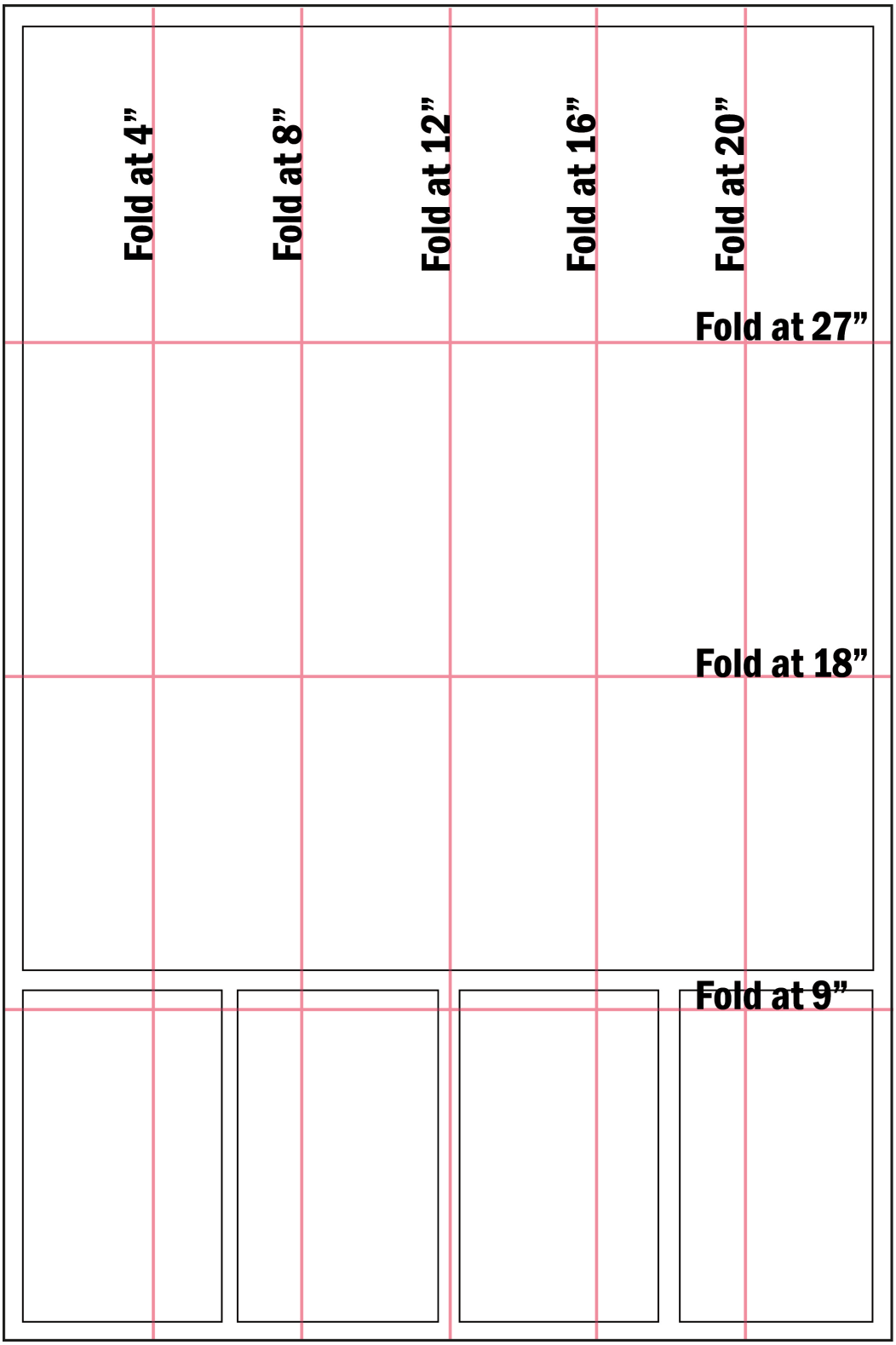


Figure 4. Folding Standards



4.0 Map Body

The body of the FIRM shall comprise base map information and flood hazard information, including any special notes needed for clarification. In applicable communities, it shall also include areas designated as Coastal Barrier Resources System (CBRS) units, where Federal flood insurance is unavailable.

**NOTE: Throughout this document, the following abbreviation conventions are used to specify the case of text appearing on the FIRM:*

- *CAPS: All upper case*
- *CLC: Upper and lower case*

Halos

All labels shown on FIRM panels with a raster base map shall be depicted with a white halo to ensure readability of all annotation. Labels on FIRM panels using a vector base map shall be depicted with a white halo when overprinting occurs or the label is not clearly visible on the FIRM panel. Halo specifications are shown below in Figure 5.

Figure 5. Text Size and Corresponding Halo Sizes

Text Size (pt)	Halo Size (pt)
Below 12	0.75
12 - 14	1.0
Greater than 14	1.25

Leader Lines

Labels may be leadered to a feature using a plain line, if space does not permit the label to be adjacent.

Table 1. Base Map Features: Leader Line

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
————————	Leader line	Line weight 1.0 Pt, Black

***Font standards that cannot be matched may be approximated**

4.1 Base Map

Base maps form the backdrop against which flood hazard information is viewed. Base maps cover the entire geographical area of a community and include planimetric data such as transportation features, hydrographic features, hydraulic structures, landforms, and political boundaries. Base map features are employed by map users to identify properties and structures relative to the floodplains.

4.1.1 Depiction of Base Map Features

The assigned Mapping Partner shall depict the following types of base map features on the FIRM if they occur within the community:

- Transportation features, including roads and railroads, shall be depicted. If digital orthophotos are supplied, these features must be clearly visible. Structures that are included in the hydraulic models shall be included on the FIRM.
- Hydrographic features (e.g., streams, rivers, lakes, shorelines) shall be depicted following the guidance in Table 3 regarding the display of hydrographic features and Table 8 regarding profile baselines.
- Hydraulic structures (e.g., levees, dams, weirs, floodwalls, jetties) shall be depicted. All structures identified as levees shall be mapped, and those that do not meet the certification requirements in Section 65.10 of the NFIP Regulations should be mapped and noted as not providing protection from the 1-percent-annual-chance flood. Notes accompanying levees shall be shown on the map as specified in Table 7.
- Boundaries that identify county and State boundaries, corporate limits, extraterritorial jurisdiction (ETJ) areas, military lands, and tribal lands shall be depicted.
- U.S. Public Land Survey System (PLSS) features, also known as range, township, and section lines, and their designators, shall be depicted.

The assigned Mapping Partner shall separately symbolize base map features that are not clearly visible on the orthophoto if their location within a floodplain is significant to the floodplain analysis. Base map features that are referenced on the Flood Profile in the FIS Report shall be symbolized and labeled on the map.

Transportation Features

Any road shown and labeled on a Flood Profile shall be labeled on the map. As many named roads as possible should be labeled inside of and within 1 inch of a Special Flood Hazard Area (SFHA). Primary roads, as defined by the Master Address File (MAF) / Topologically Integrated Geographic Encoding and Referencing (TIGER) data, farther than 1 inch from an SFHA, shall be labeled.

Standards for the depiction of transportation features on base maps are provided in Table 2.

Table 2. Base Map Features: Transportation

Example (not shown to scale)	Feature	Standard* [Hatch Pattern] (RGB Values)
	Road	Line weight 1.22 Pt., Black
	Railroad	Vertical hash symbol offset at 90 degrees from main line; Line weight 4 Pt., Black, Hash spacing [7pt - 1pt - 7pt] Line weight 0.72 Pt., Black
234	Interstate Highway	Standard Interstate Route Shield Line weight 0.72 Pt. Black Size .200” x .200” to .400” x .480” 8 Pt. Arial Bold Narrow, Black, 0.75 Pt. White Halo, CAPS
234	U.S. Highway Symbol	Standard U.S. Route Shield Size .200” x .200” to .400” x .480” 8 Pt. Arial Bold Narrow, Black, 0.75 Pt. White Halo, CAPS Line weight 0.72 Pt., Black
234	State Highway Symbol	Circle Diameter .200” to .280” 8 Pt. Arial Bold Narrow, Black, 0.75 White Halo, CAPS Line weight 0.72 Pt., Black
234	County Highway Symbol	Rectangle Size .150” x .250” to .300” x .400” 8 Pt. Arial Bold Narrow, Black, 0.75 Pt. White Halo, CAPS Line weight 0.72 Pt., Black
SPRING CREEK LANE	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile	8 Pt., Arial Bold, Black, Aligned left, 0.75 Pt. White Halo, CAPS
RAILROAD	Railroad Label	8 Pt. Arial Italics, Black, Aligned left, 0.75 Pt White Halo, CAPS

***Font standards that cannot be matched may be approximated**

Hydrographic Features

All hydrographic features (streams, lakes, ponds, bays, and oceans) that have an identified flood hazard associated with them shall be labeled.

A profile baseline must be shown on vector-based and ortho-based FIRM panels for all valid studies with profiles or otherwise established Base Flood Elevations (BFEs). See Table 8 for profile baseline specifications. In areas where no profile baseline is available but a flood hazard has been identified, the bank or centerline representation of the hydrographic feature must be shown on vector-based FIRM panels. Line representations of hydrographic features are optional on ortho-based FIRM panels. They must not overlap the profile baseline and may be shown at the request of the FEMA Project Officer.

Standards for hydrographic features are presented in Table 3.

Table 3. Base Map Features: Hydrographic

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
	River, Stream, or Other Hydrographic Feature	Line weight 1 Pt., Blue (0, 77, 168)
Missouri Creek	Name of River, Stream, or Other Hydrographic Feature	11 Pt., Times New Roman, Italic, Aligned left., Blue (0, 77, 168), 0.75 Pt. White Halo, CLC

***Font standards that cannot be matched may be approximated**

Hydraulic Structures

All levees stored in the FIRM Database shall be shown on the map, with those providing base flood protection or better labeled per Table 7, and those not providing protection from the 1-percent-annual-chance flood (base flood) noted as per Table 7. Other hydraulic structures, such as dams, culverts, weirs, bridges, and floodwalls, shall be labeled on the FIRM panel only if shown on the Flood Profile of the FIS Report. The label name must match what is shown on the Flood Profile. Standards for the depiction of hydraulic structures are presented in Table 4.

Table 4. Base Map Features: Hydraulic Structures

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
Bridge	Bridge	Line weight 0.72pt, Black Wing tick length 1.8 pt., angle 45 degrees 8 Pt. Arial Italics, Black, Aligned left, 0.75 Pt. White Halo, CLC
Dam *Jetty* *Weir*	Dam, Jetty, Weir	Line weight 0.72pt, Black; 8 Pt. Arial Italics, Black, Aligned left, 0.75 Pt. White Halo, CLC
Aqueduct *Channel* *Culvert* *Storm Sewer*	Channel, Culvert, Aqueduct, or Storm Sewer	Line weight 1 pt, Black, Dashing [4pt - 1pt] 8 Pt. Arial Italics, Black, Aligned left, 0.75 Pt. White Halo, CLC
1%-ANNUAL-CHANCE FLOOD DISCHARGE CONTAINED IN STRUCTURE 0.2%-ANNUAL-CHANCE FLOOD DISCHARGE CONTAINED IN STRUCTURE FLOODWAY CONTAINED IN STRUCTURE	This note shall accompany any structure that contains flooding and shall only refer to the highest contained discharge.	8 Pt. Arial, Black, Aligned left, 0.75 Pt. White Halo, CAPS

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
West Ranch Levee	Levee, Dike or Floodwall.	Line weight 3.6 Pt., Black, Vertical hash symbol at 90 degrees, Hash spacing [4pt - 1pt] 8 Pt. Arial Italics, Black, Aligned left, 0.75 Pt. White Halo, CLC

***Font standards that cannot be matched may be approximated**

Political Entities and Boundaries

All political entities shall be depicted and labeled as described below.

Political entities (incorporated areas, unincorporated areas, ETJ areas, "Areas Not Included," etc.) shall be labeled with the appropriate jurisdiction names and CIDs or area designator. For incorporated communities, the community type shall be followed by the name of the community (e.g., City of Smithville), and the CID. For unincorporated county areas, the county name shall be followed by "Unincorporated Areas" and the county CID.

When ETJ areas are significant for the purposes of the NFIP, they shall be shown on the FIRM. The ETJ area shall be labeled with the community name, followed by the words "Extraterritorial Jurisdiction," and the CID number of the community exercising its ETJ authority.

Any area shown as an ANI because it is being mapped under another jurisdiction or because access to the area is limited for security reasons (e.g., a military base) shall be labeled with the entity's name and the notation "Area Not Included." All tribal lands are mapped on a case-by-case basis. Vector data, including flood information and base map information, shall not be depicted for areas defined as an ANI, regardless of why the area is not included. For orthophoto-based FIRMs, the raster orthophoto base map shall be shown in the ANI.

Military and tribal lands shall be labeled with the official name at least once. State and National Park and Forest labels are not required. However, if these areas appear in the database, the boundaries must appear on the FIRM panels. If parks or forests boundaries are present they shall be labeled. An example of a park or forest political label is shown in Table 5.

When boundaries of different types are coincident with each other or with base map features, the Mapping Partner shall show only one. Priorities are defined in the Hierarchies for Labels and Map Features section of the FIRM Graphics Guidance document. Jurisdiction standards are provided in Table 5.

Table 5. Base Map Features: Boundaries and Political Areas

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
	All Jurisdiction Boundaries	Line weight 0.6 Pt., Black Line weight 2.2 Pt., Yellow (255, 255, 0)

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
Flood County Unincorporated Areas 123456 **City of Coastland 123457**	Community Area Label and Community Identification Number	14 Pt. Times New Roman Bold, Black, Centered; 1.0 Pt. Halo, White, CLC
City of Blades **(AREA NOT INCLUDED)**	Community Area and Area Not Included Label	**(Community name)** 14 Pt. Times New Roman Bold, Black, Centered 1.0 Pt. White Halo, CLC **(Note)** 8 Pt. Arial, Black, Centered, 0.75 Pt. White Halo, CAPS
Fort Bragg Military Base	Area Label	14 Pt. Times New Roman, Bold, Black, Centered 1.0 Pt. White Halo, CLC
Flood County Unincorporated Areas 123456 **State Park**	Park or forest political label. This label is required only when park or forest boundaries are displayed.	14 Pt. Times New Roman Bold, Black, Centered; 1.0 Pt. Halo, White, CLC

***Font standards that cannot be matched may be approximated**

Horizontal Reference Grids

The assigned Mapping Partner shall ensure that the FIRM contains a primary horizontal reference grid and secondary horizontal reference grid ticks to orient map readers to real-world coordinates. In addition, the latitude and longitude in degrees, minutes, and seconds shall be referenced at each of the four corners of the map panel, and the UTM reference grid (or grid ticks) shall be included on the FIRM. When PLSS features are present, they serve as the primary horizontal reference grid. The primary FIRM projection is then shown utilizing both tics and crosshairs and serves as the secondary reference grid for the FIRM. If additional projection information is desired to be shown, it is only depicted as tic marks along the opposing panel edges. Further details on depiction of the horizontal reference grid are provided in the FIRM Graphics Guidance document.

Standards for reference grids are listed in Table 6.

U.S. Public Land Survey System

U.S. PLSS features (i.e., section lines with range and township information) shall be shown on a FIRM if they are available in digital format and/or were shown on a previous FIRM. See Table 6 for examples of township and range notes and labels.

Breakout Panels

If a printed panel falls within the area of a smaller-scale panel that is also printed, the smaller-scale panel shall show a breakout note in the blank area represented by the larger-scale panel (the breakout panel area). The standards for the breakout panel note are detailed in Table 6.

Table 6. Base Map Features: Horizontal Reference Grids and Panel Tile Notes

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
————————	Horizontal Reference Grid line	Line weight 0.57 Pt., Black
—	Horizontal Reference Grid Ticks	Line weight 1.44 Pt., Black Length .300”
+	Secondary Grid Crosshairs	Crosshair symbol, Line weight 10 Pt., Black
Land Grant	Name of Land Grant	12 Pt. Arial, Black, 1.0 Pt. White Halo Aligned left
7	Section Number	12 Pt. Arial, Black, 1.0White Halo, Aligned left
R. 43 W. T. 22 N.	Range, Township Number	10 Pt. Arial CAPS
NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 11 NORTH, RANGE 7 WEST.	Township and Range note for panels with a single township and range present on a panel. This note is only placed when a panel does not contain any township and range lines.	9 Pt. Arial, Black, 0.75 Pt. White Halo, Aligned Left, CAPS
MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 11 NORTH, RANGE 7 WEST AND TOWNSHIP 12 NORTH, RANGE 7 WEST.	Township and Range note for panels with either two townships or ranges present on a panel. This note is placed when a panel does not contain both a township and a range line.	9 Pt. Arial, Black, 0.75 Pt. White Halo, Aligned Left, CAPS
$^{42}76^{000m}$E	Horizontal Reference Grid Coordinates (UTM)	10 Pt. Arial Bold and 10 Pt. Arial Superscript Bold, Black, Centered, CAPS
365000 FT	Horizontal Reference Grid Coordinates (State Plane)	10 Pt. Arial Bold, Black, Centered, CAPS
80° 16’ 52.5”	Corner Coordinates (Latitude, Longitude)	10 Pt. Arial Bold, Black, Centered

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
THIS AREA SHOWN AT A SCALE OF [*scale*] ON MAP NUMBER [*number*]	This note is used in the blank area of a breakout panel. The map number includes the 10-digit map number without the suffix. The scale shall be stated in feet (e.g. 1"=500').	24 Pt. Arial, Black, Centered, CAPS

***Font standards that cannot be matched may be approximated**

4.2 Depiction of Flood Hazard Features

This subsection provides guidance for showing floodplains and regulatory floodways, flood insurance risk zone labels, BFEs, cross sections, limits of study, coastal transects, and other items needed to depict hydrologic and hydraulic analyses, and contains a table of their graphic standards.

4.2.1 Floodplains and Floodways

All flood insurance risk zones must be shown on the FIRM. Each flood risk zone shall be bounded by a flood zone boundary line when adjacent to another flood hazard area of a different type or elevation. Regulatory floodways shall be shown on the FIRM and at lettered or numbered cross-section locations. Floodway widths must agree with the values shown on the FDT in the FIS Report and the FIRM Database tables, within a maximum tolerance of 5 percent of the map scale or 5 percent of the distance, whichever is greater.

Special Floodway symbols and notes are shown in Table 7:

The use of GIS and automated mapping techniques for the delineation of floodplain and floodway boundaries allows very small areas of flooding to be shown in the digital files. Mapping Partners must exercise some judgment in selecting which of these areas to show on the FIRM and in the digital files. Please see FIRM Database Technical Reference for digital mapping tolerances.

4.2.2 Flood Hazard Information Based on Future-Conditions Analyses

At the request of community officials, FEMA will show future-conditions 1-percent-annual-chance floodplains on the FIRM and will reference them in the accompanying FIS Report for informational purposes. The future-conditions flood insurance risk zone will be labeled as "Zone X (Future)."

4.2.3 Zone Labels

All zone areas except Zone X (shaded and unshaded) shall be labeled at least once with the flood zone and, if appropriate, static elevation or depth. Zone X areas shall be labeled where they represent future-conditions (see 4.2.2) or areas protected by accredited levees.

In SFHAs with assigned static elevations, depths, or velocities, the static BFE, depth, or velocity value shall be placed under the zone label. Graphic standards for these cases are shown in Table 7.

4.2.4 Base Flood Elevations

All BFE lines stored in the FIRM Database must be shown on FIRM panels. The FIRM Database Technical Reference provides placement rules for BFE lines and cross sections. Static BFEs will be shown under the zone labels (e.g., in areas of ponding or coastal areas). Specifications for BFE lines and labels can be found in Table 7.

4.2.5 Cross Sections

Cross sections stored in the FIRM Database must be shown on the FIRMs if they are attributed as the following line types: "LETTERED", "MAPPED" and "NOT LETTERED, MAPPED". See the FIRM Database Technical Reference and the Domain Tables Technical Reference for more information on cross section line types.

4.2.6 Cross Section Labeling

Lettered or numbered cross sections for each stream studied by detailed methods shall be labeled alphabetically from the downstream to the upstream limits of the study.

Lettered or numbered cross sections shall be labeled on the map with a hexagon at one end of the cross section line.

All cross sections will be labeled with the regulatory water surface elevation (WSEL) value, rounded to the nearest tenth of a foot. All lettered or numbered cross section WSEL values should match the FDT in the FIS Report.

Cross section lines shall cross the entire floodplain, past the limits of the 1-percent-annual-chance floodplain, whenever possible. All graphic adjustments to cross sections shall remain separate from modeled cross section locations that are stored in the FIRM Database.

All lettered and numbered cross sections must be placed on the map. If unlettered cross sections cannot be shown on the FIRM because of crowding due to steep terrain, a note shall be placed referring the user to the profiles in the FIS Report. The note can be found in Table 7.

In the event that a cross section contains multiple elevations (e.g., the cross section spans a levee), the cross section shall be segmented and each segment labeled with its corresponding WSEL value and, when the cross section is lettered, a hexagon.

4.2.7 Limit of Study

A Limit of Study line (a red and white line) shall be placed at the terminus of SFHAs where the flood risk zone truncates and no floodplain follows. See Table 7 for detailed information about displaying Limit of Study lines on the FIRM. See the FIRM Graphics Guidance document for more information regarding the application of Limit of Study lines and other SFHA/Flood Zone Boundary lines.

4.2.8 Coastal Transects

For coastal flood hazard studies, the assigned Mapping Partner shall evaluate the effects of waves accompanying the storm surge flood event on BFEs and hazard zones. The wave analyses performed shall be referenced in the FIS Report and mapped on the FIRM. Wave transects shall be located with careful consideration of the physical and cultural characteristics of the land, so that they will closely represent conditions at those locations. Transect lines shall be delineated and labeled on the FIRM to identify the physical location of the wave transects described in the FIS Report.

The transect delineation on the FIRM should also help users determine which wave transect analysis may influence or directly affect their property or area of interest. The wave effects mapped for any transect begin at the shoreline and end at the limits of 1-percent-annual-chance flood hazards, even though the actual transect line on the FIRM extends further seaward and landward of the flood hazard areas. See the Coastal General Study Considerations Guidance document for more information regarding coastal transects.

4.2.9 Coastal Transect Labeling

Coastal transect numbers shall be placed in a circle on one end of the transect line.

Table 7 provides examples of the standard flood hazard map features and their graphic portrayal on FIRMs.

4.2.10 Limit of Moderate Wave Action

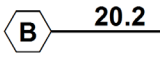
The inland limit of the area affected by waves greater than 1.5 feet is called the Limit of Moderate Wave Action (LiMWA). The LiMWA should be shown on FIRMs as an informational layer when identified.

Table 7. Standard Flood Hazard Features and Notes

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
(ortho) (vector)	All flood hazard lines coded as SFHA / FLOOD ZONE BOUNDARY. Lines coded as OTHER BOUNDARY indicate different source citations, apparent limits, or end of spatial extent and are not symbolized.	Ortho: Line weight 1 Pt., White (255, 255, 255) Vector: Line weight 1 Pt., Grey (178, 178, 178)
	The Limit of Study line is used to indicate the terminus of a 1-percent-annual-chance floodplain where the SFHA is abruptly truncated and no floodplain follows.	1 Line weight 1 Pt., White (255, 255, 255) 2 Line weight 2.5 Pt., Red (250, 52, 17)
	1-percent-annual-chance Flood Hazard Area (Zones A, AE, AO, AH, AR, AR/AE, AR/AH, AR/AO, AR/A, A99, V, and VE)	Blue (0, 230, 255), 70 percent Transparency
	Zone X of zone subtype 0.2-percent-annual-chance Flood Hazard Area (shaded Zone X)	Orange (255,128, 0), 70 percent Transparency
	Zone D areas	Tan (242, 230, 115), 70 percent Transparency
	Area with Reduced Flood Risk due to Levee	1 Line weight 5 Pt., Black (0,0,0), Angle 45; Offset 5, Separation 10; 70 percent Transparency 2 Line weight 5 Pt., Orange (255, 128, 0), Angle 45; Offset 0, Separation 10; 70 percent Transparency
	Area with Flood Risk due to Levee	1 Line weight 5 Pt., Black (0,0,0), Angle 45; Offset 5, Separation 10; 70 percent Transparency 2 Line weight 5 Pt., Tan (242, 230, 115), Angle 45; Offset 0, Separation 10; 70 percent Transparency

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
NO SCREEN	Zone X of zone subtype Area of Minimal Flood Hazard areas (unshaded Zone X). For orthophoto-based legends an orthophoto shall be shown in the background.	13 Pt. Franklin Gothic Medium Cond, Black, Centered, CAPS
	Floodway area	1 Line weight 5 Pt., Red (255, 0, 0), Angle 45; Offset 5, Separation 10; 70 percent Transparency 2 Line weight 5 Pt., Blue (0, 230, 255) Angle 45; Offset 0, Separation 10; 70 percent Transparency
Floodway too narrow to be shown. Refer to Floodway Data Table.	This note shall be used in areas where the floodway is less than 1/20th of an inch on the map.	10 Pt. Arial, Black, Aligned Left, CLC
<Floodway Type> - Refer to the Flood Insurance Study Report for additional information	Floodway symbol and note for the following specific floodway types: Floodway Floodway Contained in Structure Narrow Floodway Riverine Floodway Shown in Coastal Zone Administrative Floodway State Encroachment Area Community Encroachment Area Flowage Easement Area	1 Line weight 5 Pt., Red (255, 0, 0), Angle 45; Offset 5, Separation 10; 70 percent Transparency 2 Line weight 5 Pt., Blue (0, 230, 255) Angle 45; Offset 0, Separation 10; 70 percent Transparency 3 Note: 10 Pt. Arial, Black, Aligned Left, CLC
FLOOD INSURANCE IS NOT AVAILABLE FOR STRUCTURES NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER APRIL 8, 1987, IN THE DESIGNATED COLORADO RIVER FLOODWAY.	Congress established the Colorado River Floodway in the Colorado River Floodway Protection Act of 1986, Public Law 99-450 (100 Statute 1129). The Act imposes certain restrictions within the Floodway. If the Colorado River Floodway is shown on a panel, the panel shall be symbolized with this symbol and note.	1 Line weight 6 Pt., Blue (0, 230, 255) Angle 45; Offset 0, Separation 10; 70 percent Transparency 2 Line weight 4 Pt., Red (255, 0, 0), Angle 45; Offset 5, Separation 10; 70 percent Transparency 3 Line weight 4 Pt., Red (255, 0, 0), Angle -45; Offset 5, Separation 10; 70 percent Transparency 4 Note: 10 Pt. Arial, Black, Aligned Left , CAPS

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
 <Floodway Type> - Refer to the Flood Insurance Study Report for additional information	Floodway symbol and note for the following special floodway types: Area of Special Consideration Density Fringe Area	1 Line weight 6 Pt., Blue (0, 230, 255) Angle 45; Offset 0, Separation 10; 70 percent Transparency 2 Line weight 4 Pt., Red (255, 0, 0), Angle 45; Offset 5, Separation 10; 70 percent Transparency 3 Line weight 4 Pt., Red (255, 0, 0), Angle -45; Offset 5, Separation 10; 70 percent Transparency 4 Note: 10 Pt. Arial, Black, Aligned Left , CLC
	Future-Conditions 1% Annual Chance Flood Hazard	1 Line weight 5 Pt., Black (0, 0, 0), Angle -45; Offset 5, Separation 10; 70 percent Transparency 2 Line weight 5 Pt., Grey (130, 130, 130) Angle -45; Offset 0, Separation 10; 70 percent Transparency
ZONE AE	Zone Designation (A, AE, AO, AH, AR, A99, D, V, and VE)	11pt, Arial, Bold, Black, 0.75 Pt. White Halo, Centered, CAPS
ZONE AE (EL 16)	Zone designation with Static BFE	11pt, Arial, Bold, Black, CAPS, Centered; *Second line; 11 Pt., Bold, Arial, Black, 0.75 Pt. White Halo, CAPS
ZONE AR/A (EL 12 /)	Dual-Zone Designation (AR/A)	11pt, Arial, Bold, Black, 0.75 Pt. White Halo, Centered, CAPS *Second line; 11 Pt., Bold, Arial, Black, 0.75 Pt. White Halo, CAPS
ZONE AR/AE (EL 11) (EL 7)	Dual-Zone Designation (AR/AE)	11pt, Arial, Bold, Black, 0.75 Pt. White Halo, Centered, CAPS *Second line; 11 Pt., Bold, Arial, Black, 0.75 Pt. White Halo, CAPS
ZONE AR/AH (EL 425)	Dual-Zone Designation (AR/AH)	11pt, Arial, Bold, Black, 0.75 Pt. White Halo, Centered, CAPS *Second line; 11 Pt., Bold, Arial, Black, 0.75 Pt. White Halo, CAPS
ZONE AO (DEPTH 2)	Zone designation with Depth.	11pt, Arial, Bold, Black, CAPS, Centered; *Second line; 11 Pt., Bold, Arial, Black, 0.75 Pt. White Halo, CAPS

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity.	11pt, Arial, Bold, Black, CAPS, Centered; *Second line; 11 Pt., Bold, Arial, Black, 0.75 Pt. White Halo, CAPS
ZONE AR/AO (DEPTH 3) (DEPTH 1) OR ZONE AR/AO (EL 12) (DEPTH 1) OR ZONE AR/AO (/ DEPTH 1)	Dual-Zone Designation (AR/AO)	11pt, Arial, Bold, Black, 0.75 Pt. White Halo, Centered, CAPS *Second line; 11 Pt., Bold, Arial, Black, 0.75 Pt. White Halo, CAPS
ZONE X	Zone X – Protected by Accredited Levee	11pt, Arial, Bold, Black, 0.75 Pt. White Halo, Centered, CAPS
ZONE X (FUTURE)	Zone X – Future-Conditions 1% Annual Chance Flood Hazard	11pt, Arial, Bold, Black, 0.75 Pt. White Halo, Centered, CAPS
	Lettered Cross Section *with* Regulatory Water Surface Elevation Value	**CROSS SECTION LETTER** 1 10pt, , Arial Bold, Black, 0.75 Pt. White Halo, CAPS, Centered 2 18pt, Black, Hexagon Marker, Scaled to fit text **CROSS SECTION LINE** 1 Line weight 1 Pt., Black **ELEVATION VALUE** 1 10pt, Black, Arial Bold, 0.75 Pt. White Halo

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
5280 21.1	Numbered Cross Section *with* Regulatory Water Surface Elevation Value	**CROSS SECTION NUMBER** 1 10pt, , Arial Bold, Black, 0.75 Pt. White Halo, Centered 2 18pt, Black, Hexagon Marker, Scaled to fit text **CROSS SECTION LINE** 1 1 Pt., Black **ELEVATION VALUE** 1 10pt, Arial Bold, Black, 0.75 Pt. White Halo
17.5	Unlettered Cross Section *with* Regulatory Water Surface Elevation Value	**CROSS SECTION LINE** 1 1 Pt., Black **ELEVATION VALUE** 1 10pt, Arial Bold, Black, 0.75 Pt. White Halo
Note: Terrain is too steep to map all cross sections. Refer to profile for Water Surface Elevations.	Note for areas on profiles with steep terrain. It shall be placed whenever cross sections cannot be shown on the FIRM.	9 Pt., Arial, Black, Aligned Left; 0.75 Pt. White Halo
8	Coastal Transect	**TRANSECT NUMBER** 1 10pt, Arial Bold, Black, 0.75 Pt. White Halo, Centered 2 29pt, Black, Circle Marker, **TRANSECT LINE** 1 1 Pt., Black, Dashing [2 Pt. - 5 Pt. - 2.pt]
	BFE line	Line weight 1.25, Black
646	BFE value for the BFE line	10 Pt. Arial Italics, Black, 0.75 Pt. White Halo, Centered
	LiMWA – Limit of Moderate Wave Action. Indicates the inland limit of the area affected by waves greater than 1.5 feet. Arrows point at the V/A gutter.	1 Directional arrow height 12 Pt., Black (0, 0, 0) 2 Directional arrow spacing 8 Pt. from line start; arrows spaced 46 Pt. apart 3 Line weight 1.5 Pt., Black (0, 0, 0)

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
Note: This area is shown as being protected from the 1-percent-annual-chance or greater flood hazard by a levee system. Overtopping or failure of any levee system is possible. For additional information see the "Accredited Levee Note" in Notes to Users.	Accredited Levee Note. This note must be placed on the map panel with all accredited levee systems.	9 Pt., Arial, Black, Aligned Left; 0.75 Pt. White Halo
Note: This area is shown as being protected from the 1-percent-annual-chance or greater flood hazard by a levee system that has been provisionally accredited. Overtopping or failure of any levee system is possible. For additional information see the "Provisionally Accredited Levee Note" in Notes to Users.	Provisionally Accredited Levee Note. This note must be placed on the map panel with all provisionally accredited levee systems.	9 Pt., Arial, Black, Aligned Left; 0.75 Pt. White Halo
Note: This panel contains levees that have not been accredited and are therefore not shown as providing protection from the 1%-annual-chance flood.	Note for levees not providing protection from the1-percent-annual-chance flood. This note must be placed on the map panel with all levees systems not providing protection from the 1% Annual Chance Flood.	9 Pt., Arial, Black, Aligned Left; 0.75 Pt. White Halo
	Levee seclusion zone line. Directional triangles face inward toward the secluded area.	.039" Directional triangle height .08"Directional triangle width 8 Directional triangles per line inch .028" Offset between triangles and line .033" Line weight
See **Notes to User** for information about this boundary.	Note for secluded levee areas implemented under "Scenario 1" of Seclusion Map Notes. Refer to the *Levee Seclusion Guidance* document for more information on the use of this note.	9 Pt., Arial, Black, Aligned Left; 0.75 Pt. White Halo

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
The flood hazard data on this FIRM panel is affected by a levee, dike or other structure that has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure. The flood hazard data shown on this map has been re-published from the previous effective (historic) FIRM for this area [*after being converted from NGVD29 to NAVD88*].	Note for secluded levee areas implemented under "Scenario 2" of Seclusion Map Notes. Refer to the *Levee Seclusion Guidance* document for more information on the use of this note.	9 Pt., Arial, Black, Aligned Left; 0.75 Pt. White Halo
LIMIT OF STUDY	The Limit of Study label will be placed where the SFHA is abruptly truncated and no floodplain follows.	10pt, Arial, Black, 0.75 Pt. White Halo, Centered, CAPS

***Font standards that cannot be matched may be approximated**

4.3 Other Flood Hazard Features and Notes

The features in Table 8 shall be added to the FIRM, as needed, to clarify flood hazard areas or features within the flood hazard areas, or to help locate related information on the FIRM.

Table 8. Other Flood Hazard Features

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
	The profile baseline indicates the modeled flow path of a stream. It is required to be shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation. At the discretion of the FEMA Project Officer water lines may be shown on vector maps to represent the stream bank or stream centerline location. When profile baseline and water lines are available for the same stream reach, only the profile baseline must be shown in order to eliminate overlaps on the map.	Line weight 1Pt Blue (0,76,168), Dashing [20 Pt- 2Pt- 3 Pt- 2Pt 13]
	The transect baseline used in the coastal flood hazard model represents the 0.0-foot elevation contour and represents the starting point for the transect and the measuring point for the coastal mapping. It is shown as a single line with two dashes. A transect baseline shall be added to all new coastal studies funded in FY10 or later.	Line weight 1Pt Black, Dashing [15Pt- 2Pt- 3Pt- 2Pt - 3Pt - 14Pt]
	River Mile Marker	Circle Marker – 6.5 Pt., Black, 1.0 Pt. White Halo
M4.0	River Mile Marker Distance Label	10 Pt., Arial Bold, Black, 0.75 Pt., Centered White Halo

***Font standards that cannot be matched may be approximated**

4.4 Coastal Barrier Resources System Map Components

In cooperation with the U.S. Department of the Interior, Fish and Wildlife Service, FEMA transfers CBRS boundaries to FIRMs using congressionally adopted CBRS source maps. FIRMs must clearly depict the different CBRS areas and their insurance prohibition dates with

special map notes and symbologies. It should be noted that although FEMA shows CBRS areas on FIRMs, Congress is the only entity that may authorize a revision to CBRS boundaries.

This document uses the terms "Coastal Barriers" and "CBRS units." These terms are intended to be inclusive of all classifications of Coastal Barriers within the CBRS, including areas designated as Otherwise Protected Areas (OPAs).

4.4.1 Coastal Barrier Resources System Boundaries

Boundary lines must be shown to differentiate between contiguous barriers of different classifications, because each CBRS classification carries a different insurance prohibition. Each CBRS area shall be bounded on all sides by a boundary.

4.4.2 Coastal Barrier Resources System Area Screens

Although there are several different types of coastal barrier areas, there are only two unique map screens. Coastal barrier areas shall be portrayed with the two screens shown in Table 9 to differentiate between CBRS and OPA units, which contain differing prohibitions. All barriers must be labeled or identified by notes that list the CBRS classification of each area.

4.4.3 Coastal Barrier Resources System Area FIRM Note

All separate CBRS areas on a FIRM shall be labeled with the appropriate identification note showing the prohibition date associated with that CBRS area. Table 9 contains the CBRS identification notes.

Table 9. Coastal Barrier Resources System Features and Notes

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
COASTAL BARRIER RESOURCES SYSTEM BOUNDARY COINCIDENT WITH CORPORATE LIMITS	This note, shown on the body of the FIRM, is an example of one that may be used to clarify coincident features. See Section 4 for a discussion of coincident boundaries.	11 Pt., Arial, Black, Centered; 1 Pt. White Halo, CAPS
THIS AREA IS CONTAINED WITHIN THE COASTAL BARRIER RESOURCES SYSTEM	This note is used on FIRM panels when a CBRS area overlaps an area of floodway, and the assigned Mapping Partner believes that it may be unclear to users that the area within the floodway is also a coastal barrier. In this situation, both the floodway screen and the coastal barrier screen shall be shown, and the note shall be leadered to the area of overlap.	11 Pt., Arial, Black, Centered, Bold, 1 Pt. White Halo, CAPS

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
CBRS AREA _ _/_ _/_ _ _ _	Coastal Barrier Resources System Area Screen and Label	1 Area pattern: Line weight 0.72 pt, Black, Angle 135 degrees, Offset 0, Separation, 7. 2 Outline: Line weight 1 pt, Solid, Black 3 Text: 8 pt Arial Bold, Black, 0.75 pt White Halo, Centered, CAPS
OTHERWISE PROTECTED AREA _ _/_ _/_ _ _ _	Otherwise Protected Area Screen and Label	1 Area pattern: Line weight 0.72 pt, Black, Dashing [7Pt- 7Pt], diagonals hatching, Angle 135 degrees, Offset 0, Separation, 7. 2 Outline: Line weight 1 pt, Solid, Black 3 Text: 8 pt Arial Bold, Black, 0.75 pt White Halo, Centered, CAPS
	CBRS Boundary	Line weight 1 pt, Solid, Black

***Font standards that cannot be matched may be approximated**

5.0 Map Legend

The map legend shall contain those items that are needed to assist the map user in interpreting map symbols, flood hazard screens, linework, flood hazard zone information, and other regulatory information that is depicted on the FIRM panel. Planimetric data (such as roads and railroads) shall not be included in the FIRM legend.

Most of the FIRM legend elements are standardized and do not vary. However, the content of the FIRM legend varies slightly based on the chosen base map, its coordinate system and horizontal datum, the vertical datum used for the study, whether CBRS areas are included on the map, and the map scale. Figures 6 through 9 and 14 show the standards for the map legend, panel locator, map standards, and Notes to User Panel.

The MSC box should be centered on the 5.3” legend (Figure 10).

Figure 6. Legend Standards

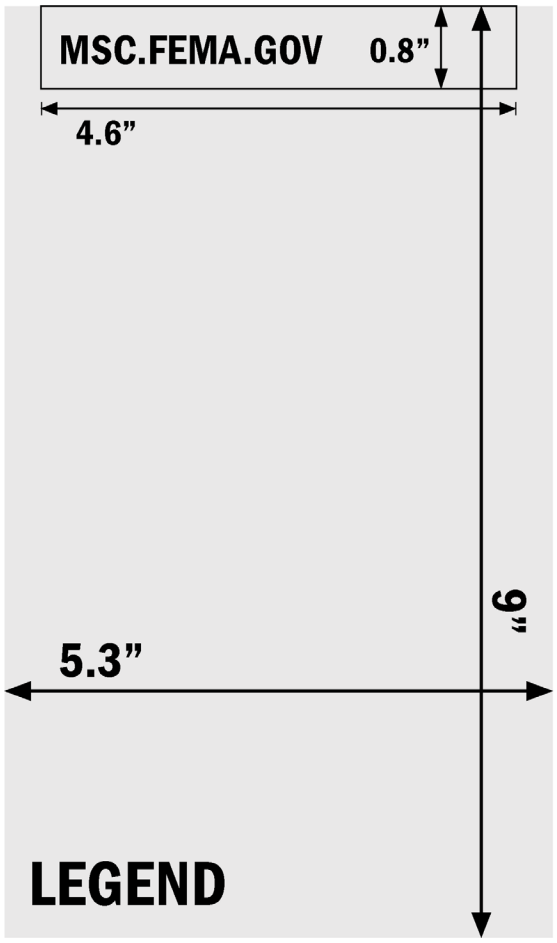


Table 10. Map Legend Neat Lines

Example	Feature/Usage	Standard*
	Lines used to separate Legend, Panel Locator, Notes to Users, and Title Block	0.35 Pt. Black (0,0,0) **Horizontal Line** 8.6" Tall **Vertical Line** 5.6" Wide **Vertical Line (Legend only)** 5.3" Wide

***Font standards that cannot be matched may be approximated**

The figures on the following pages contain examples of map legends for the following different types of FIRMs:

- FIRM Orthophoto base map (Figure 7); and
- FIRM Vector base map (Figure 8).

Figure 7. FIRM Orthophoto Base Map Legend

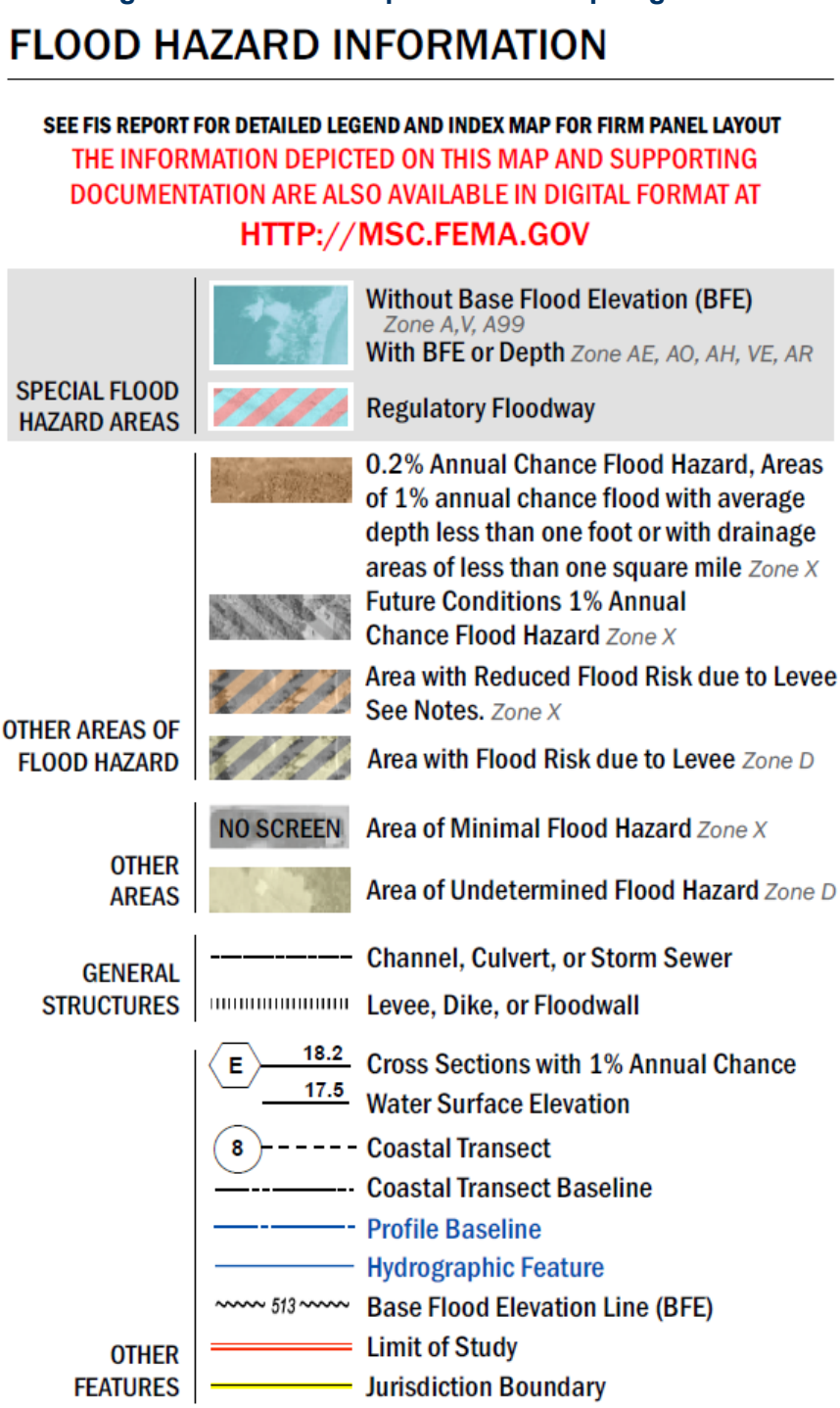
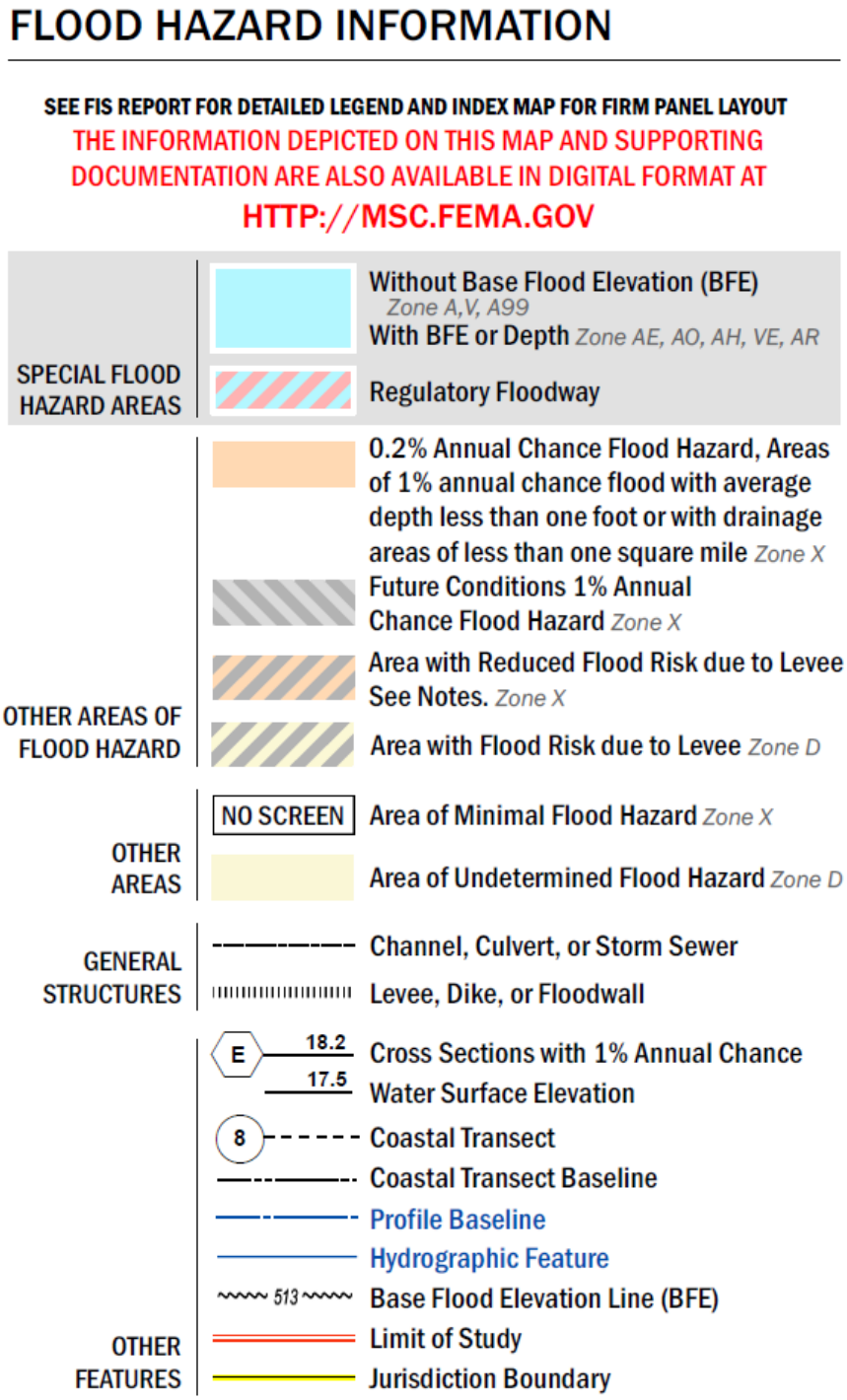


Figure 8. FIRM Vector Base Map Legend



Map Legend Components

The Map Legend provides the user with explanations of flood hazard feature representations as they are depicted on the FIRM. The following list contains items that shall appear in the Map Legend. The flood hazard features being described shall also be shown in the Map Legend; graphic standards for those features are provided elsewhere in these Guidelines. A table of standards for the items is also presented in this subsection (Table 11).

- Note referring the user to the FIS Report for a detailed legend and index map, and to the MSC website for other digital products;
- Flood hazard area and floodway descriptions;
- Floodplain, regulatory floodway, and CBRS boundary descriptions;
- Elevation labels; and
- Cross section and transect labels.

Information on map repositories, map revision dates and notes, and general FIRM legend descriptions can be found in the FIS Report Technical Reference.

Table 11. Map Legend Features

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
FLOOD HAZARD INFORMATION	Legend title	21 Pt. Franklin Gothic Medium, Black Aligned Left, CAPS
SPECIAL FLOOD HAZARD AREAS OTHER AREAS OF FLOOD HAZARD OTHER AREAS GENERAL STRUCTURES OTHER FEATURES	Legend header descriptions	13 Pt. Franklin Gothic Medium Cond, Black, Aligned Right, CAPS Special Flood Hazard Area Shading (225, 225, 225)
Future-Conditions 1% Annual Chance Flood Hazard *Zone X*	Example zone labels	1 14 Pt. Franklin Gothic Medium Cond, Black, Aligned Left, CLC 2 11 Pt. Franklin Gothic Book, Italics, Aligned Left, Grey (104, 104, 104)
Channel, Culvert or Storm Sewer	General Structure and Other Feature labels	14 Pt. Franklin Gothic Medium Cond, Black, Aligned Left, CLC
Profile Baseline	Hydrologic Feature labels	14 Pt. Franklin Gothic Medium Cond, Blue (0, 77, 168), Aligned Left, CLC

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT	FIS Report reference	11 Pt. Franklin Gothic Medium Cond, Black, Centered, CAPS
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTP://MSC.FEMA.GOV	This note is above the Legend and refers users to the MSC website.	1 14 Pt. Franklin Gothic Medium Cond, Red (255,0,0), Centered, CAPS 2 16 Pt. Franklin Gothic Medium, Red (255,0,0), Centered, CAPS

***Font standards that cannot be matched may be approximated**

6.0 Notes to Users

The Notes to Users section of the FIRM provides map users with contact information regarding how to obtain additional information, available related products, and flood insurance availability. The Notes to Users section also provides information about levees and the CBRS.

Small areas for State Seals or Cooperating Technical Partner (CTP) logos have been blocked out at the bottom of the Notes to Users for use as needed. Logo box placeholders do not need to be shown if no additional logos are included on the map.

Websites listed in Notes to Users should be black and not underlined.

The Limit of Moderate Wave Action Note and the Coastal Barrier Resources System Note shall include a legend as described in Table 7 for LiMWA and in Table 9 for CBRS.

Notes to Users dimension standards are shown in Figure 9, and examples are provided in Figures 10 through 15.

Figure 9. FIRM Notes to Users Standards

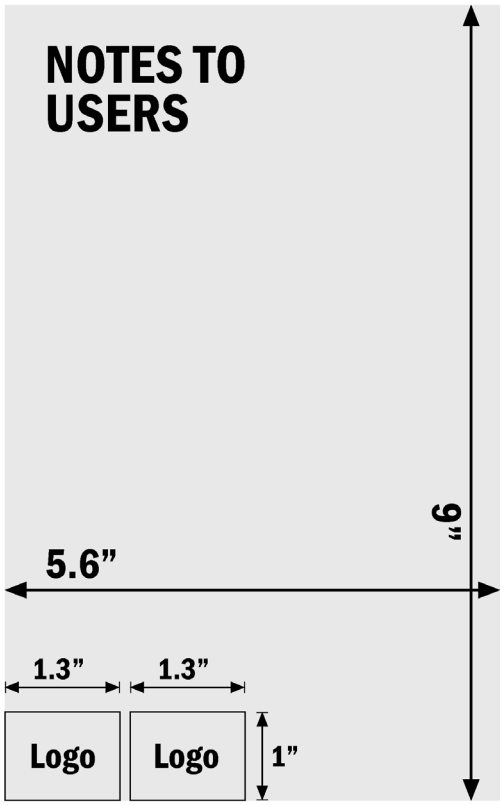


Figure 10. FIRM Notes to Users

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from U.S. Census Bureau TIGER files, dated 2010, and digital data provided by Flood County Geospatial Coordinator, dated 2010.

Local vertical monuments were used to create this map. To obtain current monument information, please contact the [community contact information, phone number] or visit the website at [website address].

Figure 11. FIRM Levee Notes to Users

ACCREDITED LEVEE: Check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit http://www.fema.gov/national-flood-insurance-program.

PROVISIONALLY ACCREDITED LEVEE: Check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent- annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations by (_____, _____). If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicate the levee system does not comply with Section 65.10 requirements, FEMA will revise the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit http://www.fema.gov/national-flood-insurance-program.

Whenever a seclusion boundary is shown on a FIRM panel, the Levee Seclusion Legend, shown in Figure 12, should be placed directly below the Notes to User section on the FIRM panel. This legend addition supports an abbreviated seclusion map note so that all secluded areas can be properly identified and labeled. Customized explanatory notes, as shown in Figure 13, can be added to the legend addition to clarify what is shown on the FIRM panel.

Figure 12. FIRM Levee Seclusion Legend Addition

ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure.

The flood hazard data inside this boundary on the FIRM panel has been republished from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88 .

When the FIRM seclusion legend is used, it may be customized with an additional sentence, as needed, to meet the specific seclusion mapping needs. Figure 13 shows two such examples.

Figure 13. FIRM Levee Seclusion Legend Addition, Customized

ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure.

The flood hazard data inside this boundary on the FIRM panel has been republished from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88

Please note that on this panel, the Town of Campti and the Village of Powhatan are excluded from this republished information.

ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure.

The flood hazard data inside this boundary on the FIRM panel has been re-published from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88.

Please note that on this panel, the extent of the Zone D flood hazard area is also coincident with this boundary.

Figure 14. Limit of Moderate Wave Action Notes to Users

LIMIT OF MODERATE WAVE ACTION: Zone AE has been divided by a Limit of Moderate Wave Action (LiMWA). The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between Zone VE and the LiMWA (or between the shoreline and the LiMWA for areas where Zone VE is not identified) will be similar to, but less severe than, those in the Zone VE.

Limit of Moderate Wave Action (LiMWA)

Figure 15. Coastal Barrier Resources System (CBRS) Notes to Users

COASTAL BARRIER RESOURCES SYSTEM (CBRS)

This map includes approximate boundaries of the CBRS for informational purposes only. Flood insurance is not available within CBRS areas for structures that are newly built or substantially improved on or after the date(s) indicated on the map. For more information see http://www.fws.gov/cbra, the FIS Report, or call the U.S. Fish and Wildlife Service Customer Service Center at 1-800-344-WILD.

CBRS Area

Otherwise Protected Area

The assigned Mapping Partner shall use the following notes (Table 12) in the FIRM Notes to Users section.

Table 12. Notes to Users

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
NOTES TO USERS	Notes to Users title	21 Pt. Franklin Gothic Medium, Black, Aligned Left, CAPS
For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.	This note directs users to the FEMA Map Information Exchange for other pertinent information that may be available and as a reference for communities annexing land. It shall be shown on all FIRM panels.	8 Pt. Arial, Black, Full Justified to 5.6”, CLC
For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.	This note directs the map user to the FIS Report for previous map date information. It shall be shown on all FIRM panels.	8 Pt. Arial, Black, Full Justified to 5.6”, CLC
To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.	This note provides users with flood insurance contact information. It shall be shown on all FIRM panels.	8 Pt. Arial, Black, Full Justified to 5.6”, CLC

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
Base map information shown on this FIRM was provided in digital format by <agency>. This information was derived from <source>, dated <date>.	This note shall be used to tell map users the source of the base map data. It shall be included on all FIRM panels, but the content of the note should be specific to the flood risk project. This is a sample note and should be worded according to the base provider information.	8 Pt. Arial, Black, Full Justified to 5.6", CLC
Local vertical monuments were used to create this map. To obtain current monument information, please contact the [*community contact information, phone number*] or visit the website at [*website address*].	This note directs users where to find additional information about local vertical monuments used to create the FIRM. It is only required when requested by a community.	8 Pt. Arial, Black, Full Justified to 5.6", CLC
ACCREDITED LEVEE: Check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit http://www.fema.gov/national-flood-insurance-program.	This note directs map users to the location of additional information about accredited levees. This note shall be on all panels that contain accredited levees.	8 Pt. Arial, Black, Full Justified to 5.6", CLC

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
PROVISIONALLY ACCREDITED LEVEE: Check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent- annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations by (_____, _____). If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicate the levee system does not comply with Section 65.10 requirements, FEMA will revise the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit http://www.fema.gov/national-flood-insurance-program.	This note directs map users to the location of additional information about provisionally accredited levees. This note shall be on all panels that contain provisionally accredited levees. Refer to the *Levees Guidance* document or FEMA PM 45 and its attachment for more information and instructions regarding the blanks in the note.	8 Pt. Arial, Black, Full Justified to 5.6”, CLC

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure. The flood hazard data inside this boundary on the FIRM panel has been republished from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88.	This note explains the levee seclusion zone. This note will be included on all panels that display secluded information.	8 Pt. Arial, Black, Full Justified to X.X", CLC
	Outline for levee seclusion zone legend addition.	.039" Directional triangle height .08"Directional triangle width 8 Directional triangles per line inch .028" Offset between triangles and line .033" Line weight
LIMIT OF MODERATE WAVE ACTION: Zone AE has been divided by a Limit of Moderate Wave Action (LiMWA). The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between Zone VE and the LiMWA (or between the shoreline and the LiMWA for areas where Zone VE is not identified) will be similar to, but less severe than, those in Zone VE.	This note explains the LiMWA boundary. The note will be printed only on the panels where the feature appears. There is no specific priority order for the listing of the note.	8 Pt. Arial, Black, Full Justified to 5.6", CLC
COASTAL BARRIER RESOURCES SYSTEM (CBRS)	Coastal Barrier Resources Note title.	10 Pt. Arial, Black, Bold, Aligned Left, CAPS

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
This map includes approximate boundaries of the CBRS for informational purposes only. Flood insurance is not available within CBRS areas for structures that are newly built or substantially improved on or after the date(s) indicated on the map. For more information see http://www.fws.gov/cbra, the FIS Report, or call the U.S. Fish and Wildlife Service Customer Service Center at 1-800-344-WILD.	This note directs users to the FWS for more information regarding the CBRS.	8 Pt. Arial, Black, Bold. CLC Full Justified to 5.6”

***Font standards that cannot be matched may be approximated**

7.0 Scale Box and Panel Locator Diagram

Panel Locator Diagrams serve as a reference to orient the map user to the entire community or county and to adjacent panels. The following guidelines shall be followed when preparing a Panel Locator Diagram, which shall be shown on every FIRM panel, unless a community or county has only one printed panel:

- The diagram shall be located within the 'Legend, Panel Locator' border on the bottom of the FIRM.
- The panels shall be numbered using four-digit panel numbers (for example, 0001).
- The font shall be Arial CAPS.
- The size shall vary with space constraints and the size of the diagram.
- The diagram shall center on the FIRM panel on which the locator lies and at a minimum will show all adjacent panels.
- The diagram shall have the map panel highlighted in dark grey.
- A diagram inset will show the area of detail within the county. If the entire county can fit in the Panel Locator Diagram, no diagram inset needs to be included.

The Panel Locator Diagram dimensions and an example are depicted below in Figures 16 and 17.

Figure 16. Scale Box and Map Locator Diagram Standards

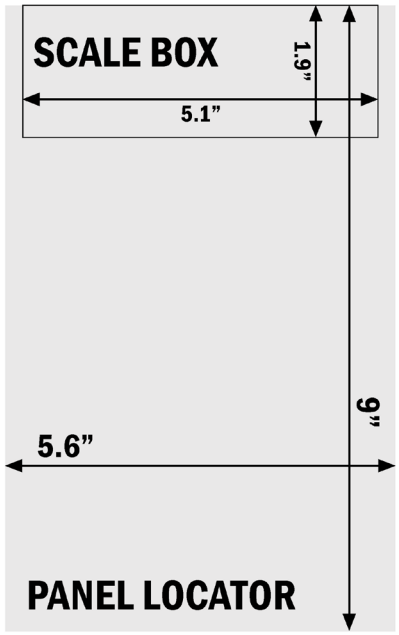


Figure 17. Panel Locator Diagram

Table 13. Panel Locator Diagram

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
PANEL LOCATOR	Panel Locator Title	21 Pt. Franklin Gothic Medium, Black, Aligned Left, CAPS
	County Background, for both the main diagram and inset map	Grey (204, 204, 204)
	Current Panel Fill Pattern	Dark Gray (52, 52, 52)
	Panel outline	0.25 Pt. line width, Dark Gray (78, 78, 78)

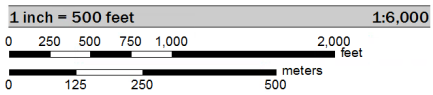
Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
0235	Current Panel Number. Four digit number.	12 Pt. Arial Narrow, Bold, White (255, 255, 255), Aligned Left
0585	Surrounding Panel Numbers. Four digit number.	12 Pt. Arial Narrow, Black, Aligned Left
0600*	Surrounding Panels not Printed. Four digit number with asterisk.	12 Pt. Arial Narrow, Black, Aligned Left
*PANEL NOT PRINTED	Panel Not Printed note.	11 Pt. Franklin Gothic Book, Black, Centered, CAPS
	Inset diagram extent locator	1 Pt. line width, Red (255, 0, 0)

***Font standards that cannot be matched may be approximated**

The scale box contains the north arrow, scale bar and information about map projections and datums. See Table 14 for standards.

The scale box should be centered in the 5.6” Panel Locator box (Figure 16).

Table 14. Scale Box

Example (not shown to scale)	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
SCALE	Scale Box Title	21 Pt. Franklin Gothic Medium, Black, Aligned Left, CAPS
Map Projection: Universal Transverse Mercator Zone 10N; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88	This note identifies the projection of the primary horizontal reference grid shown on the FIRM and identifies the horizontal datum of the geographic (latitude and longitude) coordinates shown at the four corners of each map panel. This note also identifies the vertical datum used for the digital files. Place above scale bar to the right of the north arrow.	9 Pt Franklin Gothic Book, Black, Aligned left, CLC "Map Projection:" title is Franklin Gothic Medium Cond, Black, Aligned left, CLC
	North arrow; can be ESRI standard or equivalent Place to the left of the scale bar.	Line weight .72 Pts. Width 0.2219" Height 0.9819" Black
	The FIRM scale bar includes references to both feet and meters and emulates the scale bar used by USGS on topographic quadrangles. Note that this scale bar is not shown to actual size; can be ESRI standard or equivalent. Place above panel locator in the section of the map collar to the left of the title block.	Line weight .72 Pts. **(Map Scale Note)** 15 Pt. Franklin Gothic Medium, Black, Lower Case **(Scale Bar [feet])** Length: 4", Black **(Scale Bar [meters])** Length: 3.3", Black **(Scale Bar Labels)** 12 Pt. Arial, Black, Lower Case

***Font standards that cannot be matched may be approximated**

8.0 FIRM Title Block

The FIRM title block shall contain those items that identify the community and provide panel-specific information, including the map number and effective date of the FIRM panel. Communities shall be listed in alphabetical order. Although FEMA allows for single-jurisdiction and unincorporated area mapping as well as countywide, this document has only set a table with standards for a countywide title block. The Mapping Partners should use it as a guide for those other types of mapping scenarios, with exceptions such as the community list.

The map number is based on a defined ID numbering system:

- Community-based FIRMs: 2-digit State Federal Information Processing Standard FIPS + 4-digit FEMA CID + 4-digit panel number + Suffix
- Countywide FIRMs: 2-digit State FIPS + 3-digit county FIPS + C + 4-digit panel number + Suffix

The map suffix is used to track published editions of each FIRM panel. When each new edition of a FIRM is prepared, the suffix for each revised FIRM panel is changed to the next alphabetical letter, with the letters “I” and “O” being skipped. For first-time countywide FIRMs, the suffix will be the next letter following the highest suffix letter of any FIRM panel that maps land within the extents of countywide mapping. Likewise, any FIRM being revised to reflect a completely new panel layout will have suffixes one letter higher than the highest of any previously published panel.

The version number indicates the version of these Guidelines and Standards under which a product was produced.

The title block shall include the identifying community information shown in the following examples of naming formats. These examples illustrate proper dimensions, punctuation, line breaks, and wording. A Title block example and layout standards are shown in Figures 18 and 19. Feature standards are shown in Table 15.

CARBON COUNTY, UTAH
and Incorporated Areas

ST. JOHN THE BAPTIST PARISH, LOUISIANA
and Incorporated Areas

CITY OF ALLAGASH, MAINE
Independent City

PIKE COUNTY, PENNSYLVANIA
(All Jurisdictions)

BOONE COUNTY, ILLINOIS
(Unincorporated Areas)

Figure 18. FIRM Title Block Standards

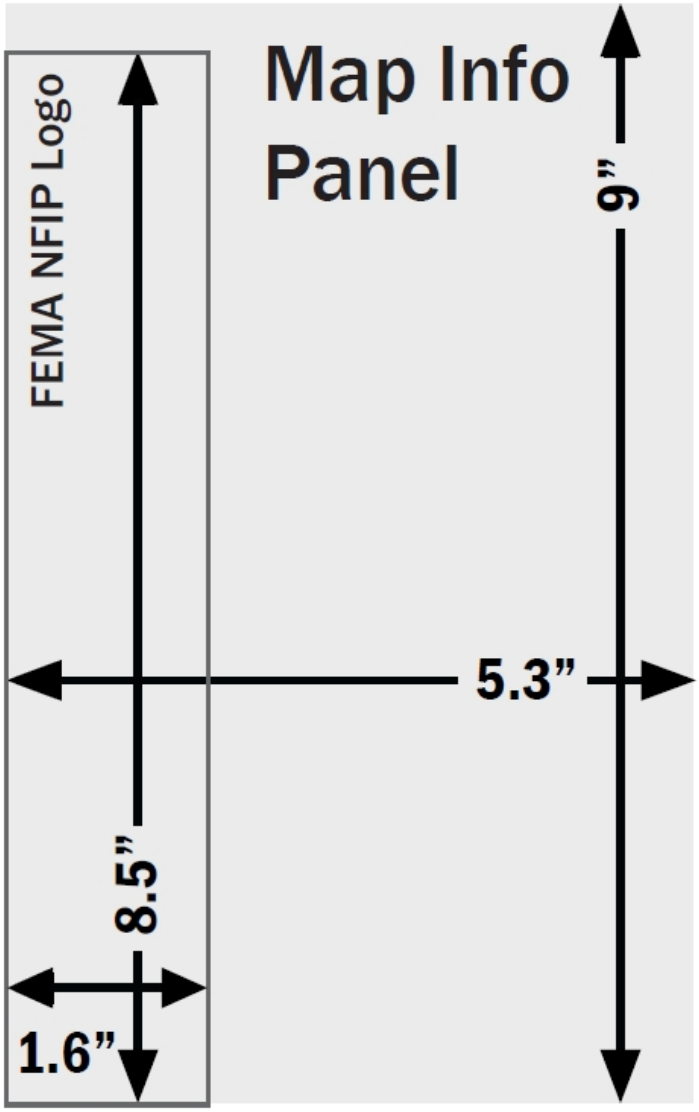


Figure 19. FIRM Title Block

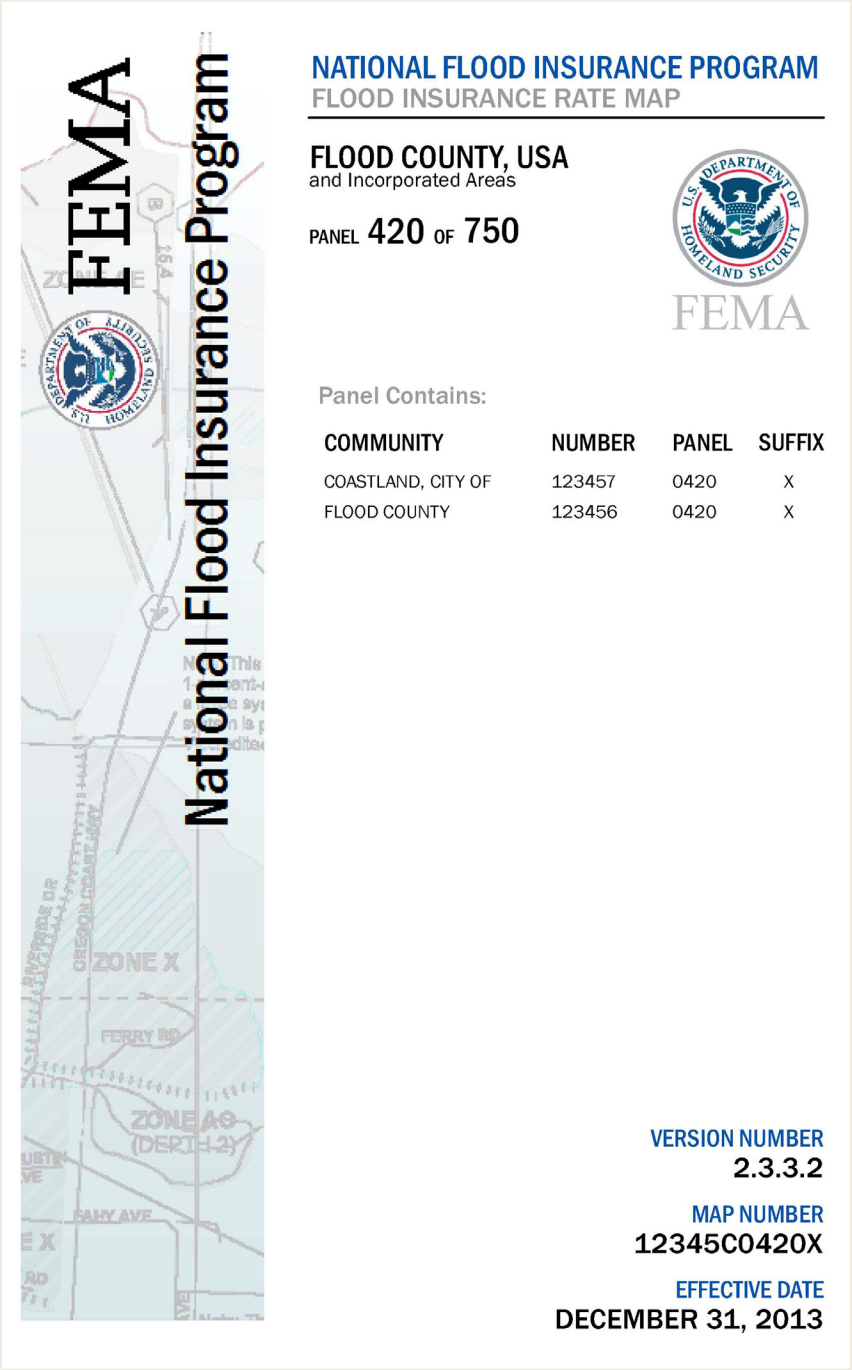
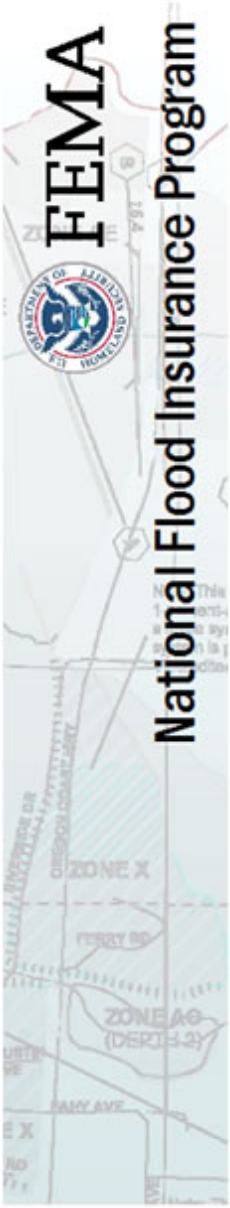


Table 15. FIRM Title Block

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
NATIONAL FLOOD INSURANCE PROGRAM	National Flood Insurance Program Header	16 Pt. Franklin Gothic Medium Cond, Blue (0, 82, 171), Aligned Left, CAPS
FLOOD INSURANCE RATE MAP	FIRM Header	13.5 Pt. Franklin Gothic Medium, Grey (156, 156, 156) , Aligned Left, CAPS
————————	Dividing line	Line weight 1 Pt., Black, 3.4" Long
FLOOD COUNTY, USA and Incorporated Areas	Flood risk project area name	16 Pt. Franklin Gothic Medium Cond, Black, Aligned Left, CAPS 10 Pt. Franklin Gothic Book, Black, Aligned Left, CLC
PANEL 420 OF 750	The FIRM panel number and the highest FIRM panel number in the series are included in the title blocks of multiple-panel FIRMs. "Only Panel Printed" shall be used when the community may be shown on a single map.	10 Pt. Franklin Gothic Medium Cond, Black, Aligned Left, CAPS 18 Pt. Franklin Gothic Medium Cond, Black, Aligned Left, CAPS
Panel Contains:	Text heading for community list	12 Pt. Franklin Gothic Medium, Grey (156, 156, 156), Aligned Left, CLC
VERSION NUMBER 2.3.3.2 MAP NUMBER 12345C0420X EFFECTIVE DATE DECEMBER 31, 2011 MAP REVISED DECEMBER 31, 2011	Version number, map number, and effective date or map revised date text. Map ID numbering based on the scheme outlined in this Technical Reference. Place this text in the bottom right corner of the title block.	12 Pt. Franklin Gothic Medium Cond, Blue (0,82,171), Aligned Right, CAPS 14 Pt. Franklin Gothic Medium, Black, Aligned Right, CAPS
COMMUNITY NUMBER PANEL SUFFIX	Community name, community number (2-digit State FIPS + 4-digit FEMA CID), panel number, and suffix column headings for community list.	12 Pt. Franklin Gothic Medium Cond, Black, Aligned Left, CAPS

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
FLOOD COUNTY 123456 0420 X	Listing of communities, associated CID, panel, and suffix	9 Pt. Franklin Gothic Book, Black, Aligned Left, CAPS
	National Flood Insurance Program and FEMA logo and banner.	Width: 1.6” Height: 8.5” Banner graphic should be acquired from FEMA’s Mapping Information Platform: http://hazards.fema.gov/ in the “Mapping Partner Resources” section of “Tools & Links.”

Example	Feature/Usage	Standard* [Hatch Pattern] (RGB Values)
FEMA	Department of Homeland Security Seal Place this seal in the top of the title block to the right of the panel number.	Width: 1” Height: 1.4”

*Font standards that cannot be matched may be approximated

9.0 Preliminary Flood Insurance Rate Map Deliverables

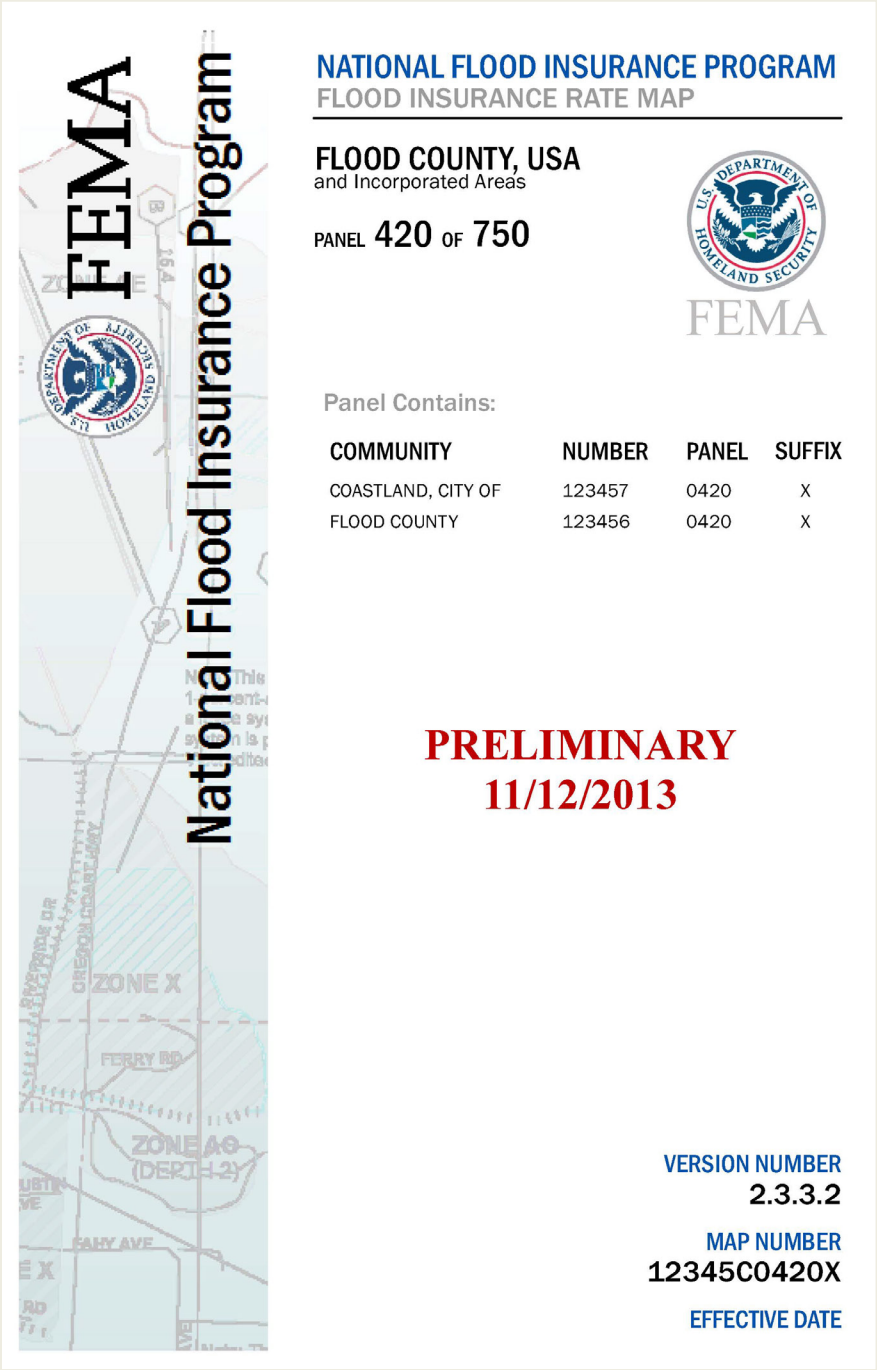
Preliminary FIRMs shall be sent to communities for review and comment. FIRMs shall be sent to communities in full color at the preliminary stage. All Preliminary Title Blocks shall be stamped "Preliminary" or "Revised Preliminary" as appropriate, in a manner similar to that shown in Table 16 and Figure 20. No effective date or map revised date shall be shown on the preliminary or revised preliminary title blocks.

Table 16. Preliminary FIRM Title Block

Example	Feature	Standard* [Hatch Pattern] (RGB Values)
PRELIMINARY 11/12/2010	Preliminary and Date stamp or digital watermark.	20pt Times New Roman, Red (192, 0, 0), Bold, Aligned Centered, CAPS
REVISED PRELIMINARY 11/12/2010	Preliminary or Revised Preliminary and Date stamp or digital watermark.	20pt Times New Roman, Red (192, 0, 0), Bold, Aligned Centered, CAPS

***Font standards that cannot be matched may be approximated**

Figure 20. Title Block with Preliminary Stamp



10.0 Map Service Center Deliverables

The assigned Mapping Partner shall send all FIRM deliverables to the MSC on a regular predetermined schedule. See the Data Capture Technical Reference for deliverable standards.

11.0 National Flood Hazard Layer

Graphic standards for the National Flood Hazard Layer (NFHL) should match the graphic standards for raster-based FIRMs as defined in this document within the technical limitations of the systems and formats used to host and maintain the NFHL. SFHA colors shall be matched to ensure consistency between FEMA products.