Map MODERNIZATION

Federal Emergency Management Agency

FEMA's Flood Hazard Mapping Program

Guidelines and Specifications for Flood Hazard Mapping Partners

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Appendix K: Format and Specifications for Flood Insurance Rate Maps

FEDERAL EMERGENCY MANAGEMENT AGENCY

www.fema.gov/fhm/dl_cgs.shtm

April 2003

Table of Revisions for Appendix K,

Format and Specifications for Flood Maps

The following Summary of Changes details revisions of Appendix K subsequent to the initial publication of the *Guidelines* in February 2002. These changes represent new or updated guidance for Flood Hazard Mapping Partners.

Affected Section or Subsection	Revision Date	Revision Description
Various	April 2003	Moved the following item specifications (From / To): **Gaging Stations** (K.1.2, Other Base Map Features and Notes / K.4.3, Other Flood Hazard Features and Notes) **River mile markers** (K.1.2, Other Base Map Features and Notes / K.4.3, Other Flood Hazard Features and Notes) **Neatlines** (K.4.3, Other Flood Hazard Features and Notes / K.2, Map Frame Features and Notes) **Colorado River floodway screen** (K.4.2, Standard Flood Hazard Features and Notes / K.4.3, Other Flood Hazard Features and Notes)
Throughout	April 2003	Revised Map Number convention: deleted space between Map Number and suffix; added suffix to Index panel numbers
Throughout	April 2003	Changed "DOQ" references to "orthophoto;" "non-DOQ" to "vector;" "DFIRM" to "digital FIRM"
K.3.1	April 2003	Added a description of the Index production process
K.3.1.3	April 2003	Added example of an all 0.2% (500-year) floodplain panel PNP note and updated PNP examples
K.3.1.4	April 2003	Re-titled "Note to Users," updated specifications for Designated Coastal Barriers note, added specifications for Map Number label, added Community Panel Number
K.3.1.6	April 2003	Added specifications for Area Not Included labels
K.3.2.1	April 2003	Updated Listing of Communities table
K.3.2.2	April 2003	Updated Map Repositories list examples
K.3.3	April 2003	Updated Index title block examples
K.3.4	April 2003	Added guidance for the use of 8.5" x 11" Map Indexes
K.4.1.2	April 2003	Added to the list of base map features to be shown on the FIRM, updated bridge label specifications, added airstrip graphic specification, added halos to bench mark "X", updated guidance for showing political & cultural entities, added specifications for secondary horizontal grid crosshairs, updated specifications for horizontal grid labels, added guidance on using local vertical monuments
K.4.2	April 2003	Updated Limit of Study graphic specifications, zone boundary definition, floodway screen example; added an alternate cross section example and leader usage notes; revised levee note wording
K.4.2.7	April 2003	Clarified use and depiction of Limit of Detailed Study and Limit of Study labels

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Affected Section or Subsection	Revision Date	Revision Description
K.4.2.9	April 2003	Added alternative Cross Section labeling styles for use in areas with space limitations
K.4.4.3	April 2003	Updated guidance on using abbreviated CBRS notes
K.5	April 2003	Updated map legend examples
K.5.1	April 2003	Added new map revision note (to reflect the incorporation of a new community) and graphic specifications for map bar scales
K.5.1.2	April 2003	Modified guidance on when and how to prepare a CBRS legend
K.6	April 2003	Added more specific guidance on how to list floodprone communities on the map title block
K.7	April 2003	Added graphic specifications for Map Locator Diagrams
K.8	April 2003	Deleted three Notes to Users regarding bench marks
K.9	April 2003	Added sample Title Block with Preliminary stamp
K.10	April 2003	Modified guidance on deliverable digital file formats for the MSC

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Appendix K
Format and Specifications for Flood Maps

Mapping Partners are to use this Appendix as a guide for the production and use of Flood Insurance Rate Maps (FIRMs). It sets forth specifications for the graphic elements that are shown on the FIRMs, including the mapping format representation, presentation of base map information, map frame sizing, legend, title block and notes to user appearance, and presentation of flood hazard information. It also addresses the specifications for the FIRM Map Index, Flood Boundary and Floodway Map (FBFM) Map Index and all Preliminary and Final map deliverables.

**NOTE: FEMA recognizes that not all Geographic Information Systems or Computer-Assisted Drafting and Design software support identical font styles. Therefore, the font specifications listed throughout this Appendix are to be used as a starting reference point only; any font herein that cannot be matched shall be emulated as closely as possible using True Type fonts, with consideration given to space constraints and the overall presentation of the finished product.*

K.1 Map Production Methods and Formats [February 2002]

There are two methods of FIRM production - digital and manual. There are several distinct classifications of FIRM formats. These are Standard, Map Initiatives, Partial Map Initiatives, Countywide, Single-Jurisdiction (also referred to as "community-based"), and FIRM/Flood Insurance Study (FIS) Report Combination. Many of these methods and formats can be mixed and interchanged, as with a digital Partial Map Initiatives FIRM.

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K.1.1 Digital Method [February 2002]

The assigned Mapping Partner shall produce digital FIRMs whenever possible for new FIRMs and for revisions of existing FIRMs. Manual (non-digital) techniques shall be employed in FIRM production only when it is more cost effective to do so and when there is not a specific request from the FEMA Regional office to convert the FIRM to digital format.

K.1.2 Manual Method [February 2002]

The word "manual" refers to the standard color separation techniques primarily used in the 1970s, 1980s, and early 1990s for FIRM production. Other factors may also influence the conversion of a manual cartographic FIRM to a digital FIRM such as a community's ability and desire to use a digital product and the availability of digital base maps.

It is important to note that when processing the revision of an existing FIRM manually, the assigned Mapping Partner must maintain the appearance of the existing FIRM by emulating all fonts, line weights, line styles, and screens. The specifications found in the Guidelines and Specifications for Flood Map Production Coordination Contractors, Appendix B, dated February 17, 1999, shall serve as guidance. Additionally, Mapping Partners performing manual revisions shall remove Elevation Reference Marks shown on the panels and identify the locations of

benchmarks within the community. See Volume 1, Section 1.4 for a discussion of benchmark selection and Subsection K.4.1.2 for benchmark specifications.

K.1.3 Standard Map Format [February 2002]

"Standard" format refers to a style of presenting flood hazard information that was superceded by the Map Initiatives format beginning in the mid 1980s. Many communities' National Flood Insurance Program (NFIP) maps date to this period and are presented in the Standard format, with floodplains and floodways shown separately on FIRM and FBFM panels. However, unless specifically directed by FEMA, all revisions shall be processed in either one or a combination of the formats described below.

K.1.4 Map Initiatives Format [February 2002]

The assigned Mapping Partner shall produce all FIRM creations and revisions in the Map Initiatives format whereby the information formerly shown separately on the FIRM and FBFM are combined and shown on the FIRM. The Map Repository address shall be added to the FIRM Index and in the legend of the panels that have been updated to the Map Initiatives format. If a full conversion to the Map Initiatives format cannot be justified, the Partial Map Initiatives format should be used.

K.1.5 Partial Map Initiatives Format [February 2002]

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The assigned Mapping Partner shall use the Partial Map Initiatives format for revisions of standard format FIRMs that do not affect the majority of the FIRM panels. The Partial Map Initiatives format combines all flood hazard information to be shown on the revised FIRM panels, thereby eliminating specific FBFM panels. The Partial Map Initiatives format should only be chosen for a revision that is not large enough to justify converting the entire community FIRM to Map Initiatives or countywide format. An example of this would be a 10-panel standard format community FIRM requiring a revision of two panels. In this case, the assigned Mapping Partner would revise the two affected panels in the Map Initiatives format and eliminate the corresponding FBFM panels.

When the Partial Map Initiatives option is chosen, the assigned Mapping Partner shall include special paragraphs to explain the mixed format in the FIS report. The specifics of this are detailed in Appendix J of these Guidelines. Because the Partial Map Initiatives format often requires the FBFM Index to be reprinted, this appendix includes notes to be used for FBFM Index revisions (see Subsection K.3.1). These notes explain the elimination of FBFM panels. As with Map Initiatives format, the Map Repository Address shall be added to the FIRM panels and Index.

K.1.6 Countywide Map Format [February 2002]

FIRMs will often be prepared in the FEMA Countywide format, whereby all jurisdictions within a given county are shown on one set of map panels. The assigned Mapping Partner shall prepare new countywide FIRMs in Map Initiatives format using digital production techniques. FEMA encourages the use of community- or county-supplied digital base maps for the production of

countywide FIRMs; therefore, each base map supplied for this purpose will have its own unique specifications and appearance. The assigned Mapping Partner shall focus on the intent of the presentation and make every effort to conform to the standard base map specifications presented in Subsection K.4.1. A digital base map supplied by a community may contain unique graphic specifications, such as the portrayal of road centerlines or edge of pavement. The assigned Mapping Partner shall make changes to a digital base map only to facilitate map presentation, ease of use, or internal consistency in base map features; the assigned Mapping Partner shall coordinate these changes with the community that provided the data. Any significant deviations from the format presented in these Guidelines must be coordinated with the FEMA Lead or other designated FEMA staff.

There are several additional points to consider when creating a countywide FIRM:

- Countywide mapping must provide seamless coverage within the entire county area. Any mismatches in floodplains, flood hazard information, base map information, etc., that previously existed between communities must be resolved.

- To ensure seamless coverage, portrayal of floodplains, Flood Profile and Floodway Data table information should be continuous for the length of the flooding sources. With that, the cross-section information must be re-lettered sequentially for the length of the detailed flooding sources.

Multiple-County Communities

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When processing a countywide FIRM that contains a multiple-county community, the assigned Mapping Partner shall select from one of the three options listed in order of preference – show the community as an "Area Not Included" and concurrently issue a new Single-Jurisdiction format FIRM, as described in Option 1 below, or show the community on one or more FIRMs, as indicated in Options 2 or 3 below. Seamless mapping coverage between all affected jurisdictions must be obtained and overlapping coverage and/or disclaimed flood hazard information shall be avoided.

Before a decision is made on the processing method which occurs during Project Scoping phase (see Volume 1, Section 1.3), the following questions must be answered:

- Does the subject community prefer to keep its community-based FIRM?

- 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?

- How many panels would be added to the countywide FIRM in order to include the subject community in its entirety?

Once the questions above 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.

Processing Option 1

Under this option, the FIRMs of the surrounding counties would show the community as an "Area Not Included" (no flood hazard or base map information shown), and the community would retain its Single-Jurisdiction format FIRM. If orthophoto base maps are used for the countywide FIRMs, the base map imagery will continue through the Area Not Included. 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 for adjacent counties may be necessary to ensure that no overlaps or gaps in coverage exist.

Only 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 national parks, military reservations, etc. shall be shown and labeled on the FIRM.

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Processing Option 2

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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% of the community area is located within the countywide FIRM being processed.

When Option 2 is chosen, the assigned Mapping Partner shall notify the FEMA Map Service Center (MSC) to supersede the community-based FIRM for the multiple-county community. The MSC must also be notified to include a notation in the Flood Map Status Information System that the subject multiple-county community is shown in its entirety on the new countywide FIRM. The adjacent counties will continue to show the subject multiple-county community as an Area Not Included 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

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 have 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 FIRM.

When 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 study complication), thereby making it impossible for all countywide FIRMs to become effective at the same time, the multiple-county community shall retain the community-based FIRM (see Option 1 above). 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 continuing and non-conflicting coverage for all land areas being mapped. Once all issues causing the delay are resolved, the assigned Mapping Partner can then proceed with the inclusion of the community into each countywide FIRM.

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

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K.1.7 Single-Jurisdiction Format [February 2002]

In the Single-Jurisdiction format, all areas within a single community's jurisdiction are shown on one FIRM. The assigned Mapping Partner shall prepare single-jurisdiction FIRMs when funding constraints or lack of suitable base map data prohibit full countywide mapping.

Many FIRM updates affect only a portion of a community (i.e., only a few map panels instead of the entire community). When this is the case, a decision must be made whether to convert an entire manual FIRM to a digital FIRM during the revision or whether to process revisions manually. The decision shall be made with the following in mind:

- FEMA's goal is to convert its entire inventory of manual maps to a digital format.
- One of the primary benefits of digital mapping is that it will reduce the cost of future revisions.
- Many of the steps required to convert a study to a digital product require nearly as much time for a partial digital study as for a full digital study, thus reducing costs in the long run.

Digital conversion of only the revised panels (partial digital conversion) is not the preferred option, but may be undertaken when funding constraints prohibit full digital conversion.

K.1.8 FIRM/Flood Insurance Study (FIS) Report Combination Format [February 2002]

For small communities that are shown on single-jurisdiction FIRMs, a combination FIRM and FIS report may be created. This involves printing one FIRM panel as defined under the Map Initiatives format described above containing all identified floodplains for the community as well as a condensed version of the FIS report. The use of this format should eliminate the requirement to create and print a separate FIS report. Space limitations will guide the decision on using this map format. At a minimum, the assigned Mapping Partner shall include the Flood Profiles, and Floodway Data and Summary of Flood Discharges tables on the FIRM. The assigned Mapping Partner shall also modify the FIRM Notes to Users to reference the map instead of the FIS report as the source of certain pertinent information. Examples of the notes and how they are modified are shown in Subsection K.7.1. The decision to create a combination FIRM and FIS report shall be made in consultation with a FEMA Project Officer.

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K.2 Map Frames [February 2002]

Mapping Partners shall select frame sizes for Map Indexes and FIRM panels depending on whether the FIRM is being produced digitally or manually and whether the Index may be produced on 8 ½" x 11" paper. Specifications for map frame features and notes are presented Table K-1.

Table K-1. Map Frame Features and Notes

Example	Feature/Usage	Specification
JOINS PANEL [*panel number*]	**Panel Neatline and Joins Panel Note:** This note is used along each neatline of the map panel to indicate the number of the adjacent panel. The panel number includes only the 4-digit panel number and not the community number or the 5-digit FIPS code used for countywide FIRMs. In cases where more than one panel joins the subject panel (as is the case where a smaller scale panel abuts two larger scale panels), more than one "Joins Panel" note is shown along a single neatline.	**(Note)** 10 Pt. Arial CAPS * **(Neatline - Digital)** Line weight .010" **(Neatline - Manual)** Line weight .006"

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**NOTE: Throughout this Appendix, 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*

K.2.1 Z-fold Digital Frame Sizes [February 2002]

All digital FIRMs, including most Map Indexes, shall be printed in map frames of the dimensions shown below:

- Trimmed paper size: Height 25.875 " x Width 36"
- Map border size: Height 25.082" x Width 34.880"
- Legend borders: Height 16.87" x Width 5.44"
- Notes to User borders: Height 15.15" x Width 5.44"
- Title Block box:
  - Overall dimensions: Height 7.85" x Width 4.40"
  - Striped side box: Height 7.225" x Width 1.10"

- Title box: Height 7.225” x Width 3.30”
- Striped upper box: Height 0.50” x Width 1.10”
- Upper box: Height 0.50” x Width 3.30”

The map image size (the image inside the FIRM neatline) shall vary depending on the latitude of the community being mapped. Over edge areas may be included if they fit inside the map border.

Figure K-1 provides the dimensions of a digital FIRM map frame.

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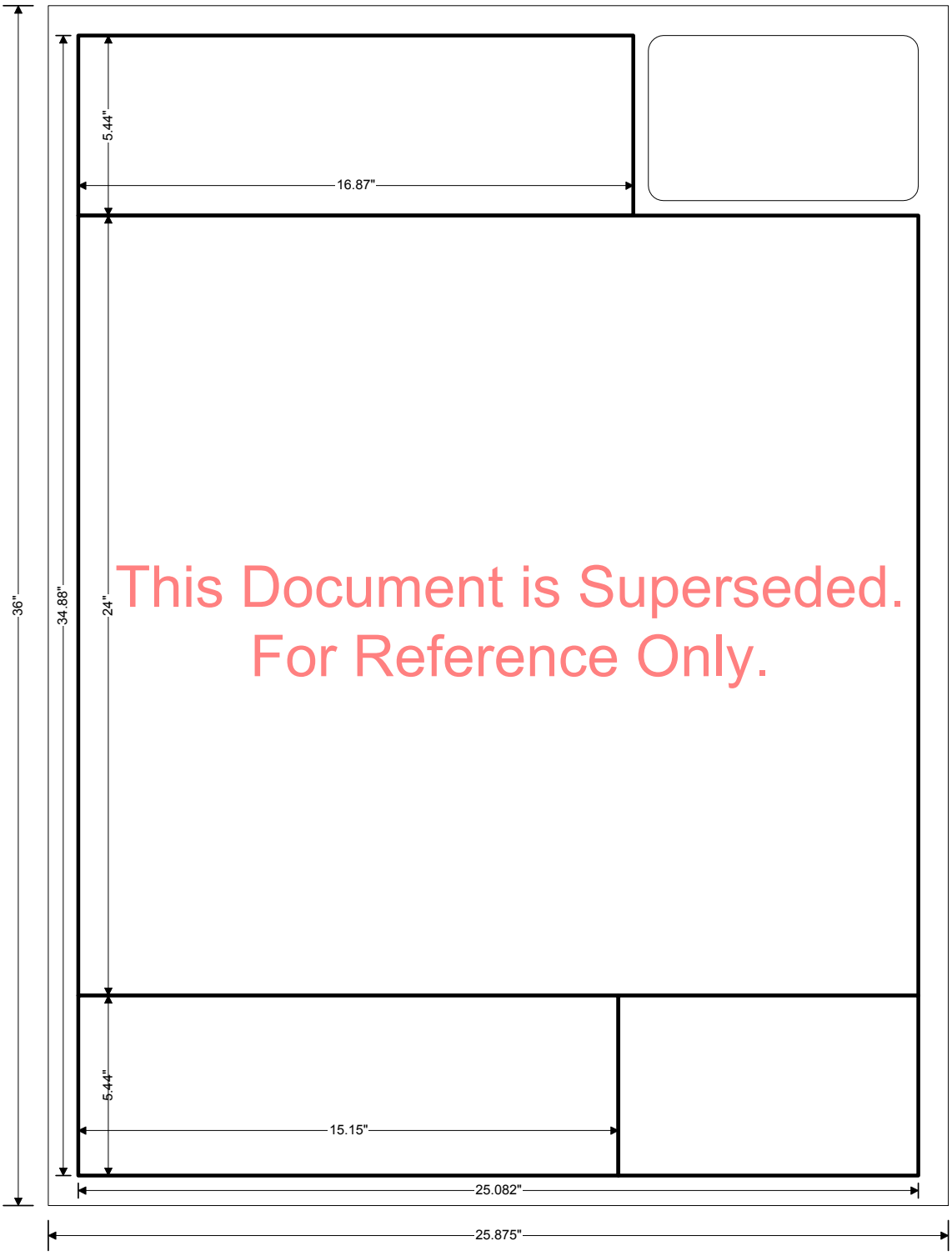

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Figure K-1. Digital Map Frame Dimensions

K.2.2 Z-fold Manual Frame Sizes **[February 2002]**

Manually-prepared FIRMs are printed in one of five map frame sizes, the dimensions of which are shown below. Refer to the diagram in Figure K.14-2 for additional Map Index dimensions.

A Frame	Trimmed paper size:	Height 25.79” x Width 18.76”
	Map neatline size:	Height 25.0” x Width 14.2”
B Frame	Trimmed paper size:	Height 25.79” x Width 22.33”
	Map neatline size:	Height 25.0” x Width 18.0”
C Frame	Trimmed paper size:	Height 25.79” x Width 26.28”
	Map neatline size:	Height 25.0” x Width 21.6”
D Frame	Trimmed paper size:	Height 25.79” x Width 29.03”
	Map neatline size:	Height 25.0” x Width 25.4”
E Frame	Trimmed paper size:	Height 25.79” x Width 37.52”
	Map neatline size:	Height 25.0” x Width 32.9”

Figure K-2 provides the dimensions of a manual FIRM map frame.

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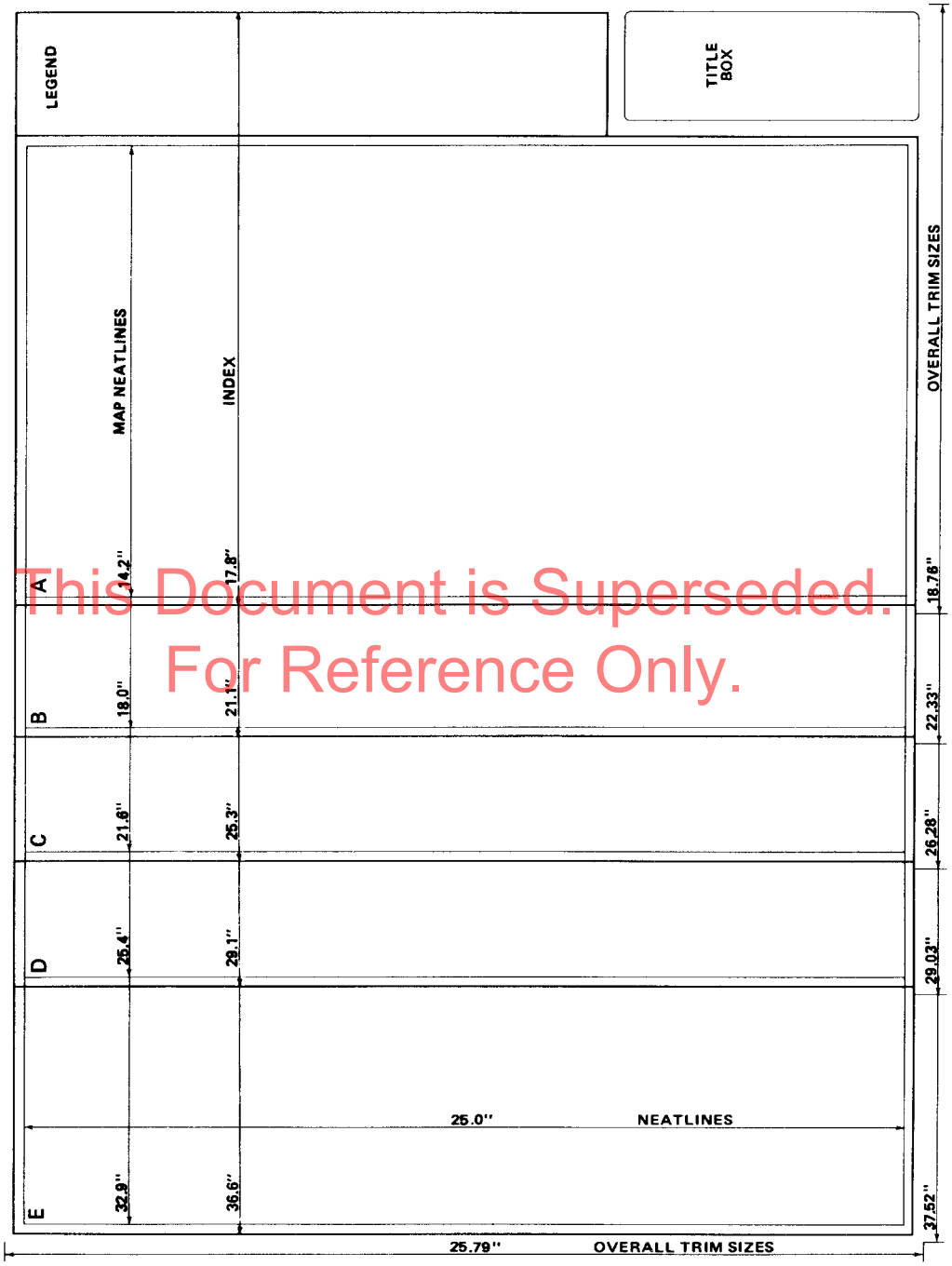

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Figure K-2. Manual Map Frame Dimensions

K.2.3 8½” x 11” Frames **[February 2002]**

Map Indexes for small communities with few map panels may be printed on 8½” x 11” paper. The dimensions of this map frame are shown below:

- Trimmed paper size: Height 8 ½ ” x Width 11”
- Map border size: Height 7.5” x Width 10.0”
- Title Block box:
  - Overall dimensions: Height 6.00” x Width 3.30”
  - Striped side box: Height 5.60” x Width 0.78”
  - Title box: Height 5.60” x Width 2.50”
  - Striped upper box: Height 0.385” x Width 0.78”
  - Upper box: Height 0.385” x Width 2.50”

Subsection K.3.4, Figure K-15, provides an example of an 8½” x 11” Map Index.

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K.3 Map Index [February 2002]

The assigned Mapping Partner shall produce a Map Index for every community that requires more than one printed map panel. Map Indexes may be prepared in an 8½" × 11" format for small- to medium-sized communities. When the panel count becomes large enough to render an 8½" × 11" Index unusable or illegible, a Z-fold Index is required. Z-fold Indexes must always be prepared for countywide FIRMs. Countywide FIRMs may require more than one Map Index sheet. A Map Index may be revised to include changes in community boundaries; the addition of map panels to the grid layout; the addition of roads, drainage lines, and other physical features; and revisions of dates and notes. When such revisions are necessary, the assigned Mapping Partner shall make these changes in a format consistent with that of the existing Map Index and according to the standards applied in the preparation of that Index.

When a new Map Index layout is necessary for a single-panel FIRM that must be expanded to a multiple-panel FIRM, or when an existing layout must be completely revised, the assigned Mapping Partner shall prepare a new FIRM Map Index.

K.3.1 Map Index Body Elements and Specifications [April 2003]

The entire jurisdictional area of the community, including corporate and Extraterritorial Jurisdictional (ETJ) limits, if appropriate, shall be divided into map panels, following standard grid layout procedures (see Volume I, Section 1.4 of these Guidelines). The Map Index shall have the same directional orientation as the individual map panels; for all digital FIRMs, north shall be oriented to the top of the page. Panel neatlines shall be accurately placed with respect to the community layout. The locations and names of major flooding sources, major roads, corporate limits, and selected railroads shall be shown to facilitate the orientation and location of the individual panels. These features are a subset of the vector data in the digital FIRM files. For orthophoto base map data, vectors for the major reference features shown on the Index may be derived from public domain sources, such as 1:24,000 scale U.S. Geological Survey (USGS) Digital Line Graphs (DLGs). Areas within the corporate limits that were not studied shall be labeled as such whenever the scale of the Map Index permits.

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K.3.1.1 Community-Panel Numbers and Map Numbers [February 2002]

Each panel shown on the Map Index must contain a map number. The map number may be comprised of the Community Identification Number (CID), four-digit panel number, and the suffix, or the countywide FIPS code, the letter "C", the four-digit panel number, and the suffix. The Map Index shall identify unprinted panels with asterisks and footnotes that define the reason(s) for the panel not being printed.

The appropriate reason(s) for the panel not being printed shall appear as a footnote(s) below the lower left-hand corner of the grid layout. A listing of appropriate footnotes is provided in Table K-2 in Subsection K.3.1.3.

Suffix changes shall be reflected both on the FIRM panel and the Map Index. The suffixes for unprinted panels should not change unless all panels are revised.

K.3.1.2 Map Dates [February 2002]

The FIRM Map Index shall show the FIRM effective date in the title block. This date shall be designated in the title block as "Effective Date" (on the first FIRM for the subject jurisdiction or first countywide) or "Map Revised" (on FIRMs that have been revised at least once). When the preliminary copy of the Map Index is prepared, this date should be left blank. When the final copy of the Map Index is prepared, the date determined for the FIRM shall be added. Sample Map Index title blocks are shown in Subsection K.3.3. Similar type styles and sizes are acceptable, and may vary due to Map Index size limitations.

Map Indexes shall also list the effective date of each FIRM panel below the panel number on the Map Index to assist the user in determining current panel dates, as shown in Figure K-3.

17097C0159B 06/20/97	17097C0159B 06/20/97
17097C0159A 09/04/94	17097C0159A 09/04/94

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Figure K-3. Panel Effective Dates on Map Index

When adding map dates under the panel numbers becomes problematic due to high levels of base map detail on the body of the Map Index, a second option is to list the dates of all printed panels in a separate FIRM Panel Dates table on the Map Index. When multiple Map Index panels exist, this table will list FIRM panels on a Map Index panel-specific basis. Figure K-4 shows a sample table with suggested font specifications.

10 Pt. Arial Bold CLC

FIRM Panel Dates For Printed Panels of Johnson County, FL (All Jurisdictions)

	Effective Date	Panel	Effective Date	Panel	Effective Date
0035 D	May 3, 2000	0145 D	May 3, 2000	0237 C	December 6, 1991
0039 E	July 7, 2001	0152 E	July 7, 2001	0242 B	January 8, 1988
0045 E	July 7, 2001	0155 E	July 7, 2001	0244 B	January 8, 1988
0053 D	May 3, 2000	0160 E	July 7, 2001	0252 D	May 3, 2000
0061 D	May 3, 2000	0164 B	January 8, 1988	0255 D	May 3, 2000
0062 D	May 3, 2000	0165 D	May 3, 2000	0256 D	May 3, 2000
0063 D	May 3, 2000	0166 B	January 8, 1988	0257 D	May 3, 2000
0064 D	May 3, 2000	0167 B	January 8, 1988	0258 D	May 3, 2000
0068 D	May 3, 2000	0168 B	January 8, 1988	0259 B	January 8, 1988
0086 C	December 6, 1991	0169 B	January 8, 1988	0261 B	January 8, 1988
0088 C	December 6, 1991	0176 D	May 3, 2000	0262 B	January 8, 1988
0090 C	December 6, 1991	0177 D	May 3, 2000	0263 B	January 8, 1988
0095 C	December 6, 1991	0178 D	May 3, 2000	0264 B	January 8, 1988
0110 D	May 3, 2000	0179 D	May 3, 2000	0267 B	January 8, 1988
0113 D	May 3, 2000	0181 D	May 3, 2000	0268 B	January 8, 1988
0114 D	May 3, 2000	0186 B	January 8, 1988	0269 B	January 8, 1988
0115 D	May 3, 2000	0201 C	December 6, 1991	0276 B	January 8, 1988
0119 D	May 3, 2000	0202 C	December 6, 1991	0277 B	January 8, 1988
0130 D	May 3, 2000	0204 D	May 3, 2000	0281 B	January 8, 1988

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9 Pt. Arial CLC

Figure K-4. FIRM Panel Dates

K.3.1.3 Panel Not Printed Footnotes [April 2003]

Specifications for the footnotes that shall be added to the Map Index to identify why certain FIRM or FBFM panels are not printed are presented in Table K-2.

Table K-2. Panel Not Printed Footnotes

Example	Usage	Specification
PANEL NOT PRINTED – NO SPECIAL FLOOD HAZARD AREAS	This note is used to designate panels not printed because the entire panel area does not contain floodplain areas.	7-9 Pt. Arial CAPS

Table K-2. Panel Not Printed Footnotes ***Font specifications that cannot be matched may be approximated**		
Example	**Usage**	**Specification**
PANEL NOT PRINTED – NO SPECIAL FLOOD HAZARD AREAS; ALL AREAS WITHIN 0.2% ANNUAL CHANCE FLOODPLAIN	This note is used to indicate panels not printed because the panel area is entirely contained within the 0.2% annual chance floodplain (either Zone B or X). This note shall be used on a discretionary basis for relatively undeveloped areas of the community. If this area is behind a levee or if it appears that the subject area is at least moderately developed, it is recommended that the panel be printed.	7-9 Pt. Arial CAPS
PANEL NOT PRINTED – AREA IN ZONE D	This note is used to indicate panels not printed because the panel area is entirely Zone D.	7-9 Pt. Arial CAPS
PANEL NOT PRINTED – AREA NOT INCLUDED	This note is used when the area of an entire panel is contained in an Area Not Included.	7-9 Pt. Arial CAPS
PANEL NOT PRINTED – OPEN WATER AREA	This note is used when an area of all water and no land is contained within the panel area.	7-9 Pt. Arial CAPS
PANEL NOT PRINTED – AREA ALL WITHIN ZONE AE (EL **x**)	This note is used when the area of the panel falls within one flood hazard zone (either Zone AE or Zone VE) with one flood elevation. If the panel contains any land area, this procedure shall only be used with the approval of a FEMA Project Officer, as normally any land areas on a FIRM with identified flood hazards should be printed. The elevation value is given in parentheses, shown here with an "**x**."	7-9 Pt. Arial CAPS
PANEL NOT PRINTED – AREA OUTSIDE CORPORATE BOUNDARY	This note is used to indicate paneled areas outside the subject jurisdiction.	7-9 Pt. Arial CAPS
PANEL NOT PRINTED – AREA OUTSIDE COUNTY BOUNDARY	This note is used to indicate paneled areas outside the subject jurisdiction.	7-9 Pt. Arial CAPS

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Table K-2. Panel Not Printed Footnotes *Font specifications that cannot be matched may be approximated		
Example	**Usage**	**Specification**
PANEL NOT PRINTED - NO FLOODWAY DELINEATED; FOR FLOODPLAIN BOUNDARIES, SEE CORRESPONDING FLOOD INSURANCE RATE MAP PANEL PUBLISHED SEPARATELY	This note is used as a footnote on the FBFM Index to designate panels not printed because no floodway has been designated on that panel. Omit "published separately" if the FBFM Index is part of a Partial Map Initiatives publication. Omit "corresponding" if the FBFM paneling scheme is different from the FIRM.	7-9 Pt. Arial CAPS
PANEL NOT PRINTED – FLOODWAY DELINEATION SHOWN ON FLOOD INSURANCE RATE MAP	This note is used as a footnote on the FBFM Index to indicate that the floodway is now shown on the FIRM panel.	7-9 Pt. Arial CAPS
PANEL NOT PRINTED - AREA WITHIN *(community name)*, WHICH HAS A SEPARATELY PUBLISHED FLOOD INSURANCE RATE MAP; THE PORTION OF *(community name)* ON MAP NUMBER *(map number)* IS NOT WITHIN SPECIAL FLOOD HAZARD AREAS	This note is used to indicate a panel that is partially within an Area Not Included and partially within an area that does not contain floodplains	7-9 Pt. Arial CAPS

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K.3.1.4 Index Body Notes [April 2003]

The notes presented in Table K-3 shall be used on the body of the Map Index, when appropriate. On a single-jurisdiction FIRM Index, the Map Repository address shall be shown above or in close proximity to the north arrow.

Table K-3. Index Body Notes		
Example	**Usage**	**Specification**
THIS AREA OF THE COMMUNITY NOT PRINTED – ALL IN OPEN WATER	This note is used on the body of the Map Index to indicate an unmapped area of the community that is entirely in open water.	7-9 Pt. Arial CAPS
THIS AREA OF THE COMMUNITY CONTAINS NO SPECIAL FLOOD HAZARD AREAS AND IS THEREFORE NOT PRINTED	This note is used on the body of the Map Index to indicate an area of the community that does not have floodplain areas and is not paneled.	7-9 Pt. Arial CAPS

Table K-3. Index Body Notes *Font specifications that cannot be matched may be approximated		
Example	**Usage**	**Specification**
MAP REPOSITORY (Maps available for reference only, not for distribution.) Manatee County Building Division Floodplain Section, 2nd Floor 1112 Manatee Avenue Bradenton, Florida 34205	This is an example of a Map Repository listing for a single jurisdiction FIRM Index. The Map Repository is the location that the community has designated for storing its FIRM. The address is placed just above or in close proximity to the north arrow on the Map Index. The disclaimer, as stated, immediately follows the heading for the address.	**(Header)** 12 Pt. Arial CAPS with underscore and CLC **(Reference note and Address)** 10 Pt. Arial CLC
NOTE TO USERS **FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM.**	The following note must be added to all Preliminary FIRM Indexes and/or panel if panel is Only Panel Printed. It is also a standard paragraph in the transmittal letters to the communities. The note reminds the community to submit changes for street locations and names in or near the floodplains for incorporation into the final printed FIRM. The note does not appear on the final FIRM that is delivered to the Government Printing Office for printing. If the FIRM does not contain any Base Flood Elevations, the reference to the 90-day appeal period is omitted from the note.	**(Header)** 12-20 Pt. Arial Bold CAPS **(Reference note)** 12-20 Pt. Arial Bold CLC
– NOTE – Designated coastal barriers are located on panels 14, 18, 155[1], 161[1], 188, 304, 308, and 309. [1]Panel Not Printed	This note is added above the Map Index north arrow for any community that contains Coastal Barrier units. All panels containing Coastal Barrier units and/or Otherwise Protected Areas, including panels that are not printed are listed. Non-printed panels are listed with a footnote.	**(Header and Reference note)** 10 Pt. Arial CLC **(Footnote)** 8 Pt. Arial CLC
MAP NUMBER	A "MAP NUMBER" label is used once on each countywide Map Index to identify a sample of the numbers given to each panel.	8 Pt. Arial CAPS

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Table K-3. Index Body Notes *Font specifications that cannot be matched may be approximated		
Example	**Usage**	**Specification**
COMMUNITY-PANEL NUMBER	On single-jurisdiction Indexes, "COMMUNITY-PANEL NUMBER" is used once to identify a sample of the numbers given to each panel.	8 Pt. Arial CAPS
MAP DATES This FIRM Index displays the map date for each FIRM panel at the time that this Index was printed. Because this Index may not be distributed to unaffected communities in subsequent revisions, users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website at http://msc.fema.gov or by calling the Map Service Center at 1-800-358-9616. 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 Map Service Center at the number listed above.	An inventory of NFIP panels is available through the Map Service Center website. Therefore, this note shall be placed on all countywide format FIRM Indexes above the FIRM Panel Dates table (if this option is chosen) or in a clear area of the FIRM Index (if the dates are shown within the individual map grids). If more than one FIRM Index is required to show the jurisdiction, this note is placed on each FIRM Index panel.	**(Header)** 10 Pt. Arial Bold CAPS with underscore **(Reference note)** 9 Pt. Arial CLC

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K.3.1.5 Flood Boundary and Floodway Map Index [February 2002]

FBFM Indexes shall be revised whenever the FIRM is prepared in the Partial Map Initiatives format. The Partial Map Initiatives format may be used for restudy or revision map action when it is determined that total conversion to Map Initiatives is not cost effective.

When the Partial Map Initiatives format is used, the FBFM panel(s) is superseded by the FIRM panel and the FBFM Index reflects this change. The appropriate "Panel Not Printed" footnote should be added to the Index for FBFM panels that are superseded by Partial Map Initiatives FIRM panels. See Table K-4 for the proper wording of the "Panel Not Printed" footnote.

In addition to the Panel Not Printed footnote, a note shall be added to the body of the FBFM Index informing the user that the former FBFM panels have been superseded by the FIRM panels. See Table K-4 for the proper wording of the note.

When preparing a revised FBFM Map Index, map dates shall appear beneath each FBFM panel number within the map grid. The assigned Mapping Partner shall ensure that the remaining separately printed FBFM panels have the correct date under the panel number. Dates that appear on non-printed panels shall be removed.

The assigned Mapping Partner shall notify the MSC by memorandum or e-mail when Map Initiatives FIRM panels supersede FBFM panels.

Table K-4. FBFM Index Body Notes

Example	Usage	Specification
NOTE TO USER: **Floodways on Flood Boundary and Floodway Map panel(s)** [*list affected FBFM panel numbers*] **are shown on the corresponding Flood Insurance Rate Map panel(s).**	This note is used on the body of the FBFM Index in conjunction with the footnote to indicate that the FIRM has superseded the FBFM panel(s) when the floodway is now shown on the FIRM panel(s). Omit the word "corresponding" if the panel numbers are different between the FIRM and FBFM.	**(Header)** 20 Pt. Impact CAPS **(Reference note)** 20 Pt. Impact CLC
NOTE TO USER: **Panel(s)** [*list affected FBFM panel numbers*] **should be used for floodway information only. Please refer to the corresponding Flood Insurance Rate Map panels for up-to-date 100- and 500-year floodplain boundary information.**	This note is used on the body of the FBFM Index when the floodplain boundaries have been modified but the floodway boundaries have remained the same and therefore, the FBFM panels were not revised.	20 Pt. Impact

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K.3.1.6 Map Index Panel Element Graphic Specifications [April 2003]

Table K-5 provides graphic specification standards for the depiction of information on Map Indexes. Note that separate specifications for 8½" x 11" Map Indexes appear in Subsection K.3.4.

Table K-5. Map Index Panel Elements

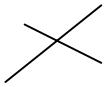
Example	Feature	Specification
	North Arrow	Line weight .010" Width 1.20" Height 0.70"
	Major Road	Line weight .030"
CAPITAL STREET	Street, Road, Avenue Name	8 Pt. Arial CAPS
	Interstate Highway Symbol	Standard Interstate Route Shield Line weight .010" Size .200" x .200" to .400" x .480" 8 Pt. Arial Bold Narrow CAPS
	U.S. Highway Symbol	Standard U.S. Route Shield Line weight .010" Size .200" x .200" to .400" x .480" 8 Pt. Arial Bold Narrow CAPS
	State Highway Symbol	Circle Line weight .010" Diameter .200" to .280" 8 Pt. Arial Bold Narrow CAPS
	County Highway Symbol	Rectangle Line weight .010" Size .150" x .250" to .300" x .400" 8 Pt. Arial Bold Narrow CAPS
 CHESSIE SYSTEM RAILROAD	Railroad and Railroad Name	Line weight .015" Tie length .060", spacing .300" 8 Pt. Arial Italics CAPS
	Airport	Line weight .010"

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Table K-5. Map Index Panel Elements

Example	Feature	Specification
Eighteen Mile Creek	River, Stream, Lake, or Other Hydrographic Feature and Feature Name	Line weight .008” to .010” 6 – 18 Pt. Times New Roman Bold Italics CLC
SHIP ISLAND	Small or Large Island	6 - 14 Pt. Arial CAPS
ASSABET RIVER DAM	Major Dam and Dam Name	Line weight .010 8 Pt. Arial CAPS or CLC
	International, State, County Boundary	Line weight .030” Dashing: 1.500” .050” .150” .050” .150” .050” 1.500”
	Corporate, Extraterritorial Jurisdiction, and Area Not Included Boundary (Countywide)	Line weight .030” Color: 63% Gray No dashing
	Corporate, Extraterritorial Jurisdiction Boundary (Single jurisdiction)	Line weight .030” Dashing: 1.500” .050” .150” .050” 1.500”
CITY OF BLADES	Community Label	6 – 10 Pt. Times New Roman CAPS or CLC
	Area Not Included Boundary (Single jurisdiction)	Line weight .020”
City of Lafayette (AREA NOT INCLUDED)	Area Not Included Label	**(Community name)** 8-24 Pt. Times New Roman CAPS or CLC **(Note)** 8 – 11 Pt. Arial CAPS
1202300275C 41050C0050E	FIRM Map Numbers	8 – 18 Pt. Arial Narrow Bold CAPS
8/30/00	FIRM Panel Effective Dates	8 Pt. Arial Narrow CAPS
	FIRM Panel Neatline	Line weight .008”

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K.3.2 Countywide Index [February 2002]

In addition to the Map Index features described in Subsection K.3.1, a countywide Map Index contains unique elements that enable the user to identify pertinent information for each individual community. These elements include a Listing of Communities table, a list of the Map Repositories, and multiple index sheets where applicable.

K.3.2.1 Listing of Communities Table and Note to User [April 2003]

The assigned Mapping Partner shall ensure that the countywide Map Index contains a Listing of Communities table that lists, in alphabetical order and in tabular form, all jurisdictions included in the FIS. The table shall also list non-floodprone communities in the county, footnoted as "Non-floodprone" indicating their non-floodprone status. The listing shall not include communities that are labeled as Areas Not Included. Each community shall have its CID listed on the table in the "Community Number" column. Each panel showing any portion of a community, including non-printed panels shall be listed next to the community in the "Located on Panel(s)" column. Non-printed panels shall be footnoted as "Panel Not Printed."

Historical map dates shall be listed in the "Initial NFIP Map Date," "Initial FIRM Date" and "Most Recent FIRM Panel Date" columns. The Initial NFIP Map Date is the date of the community's first flood hazard map, which may be a Flood Hazard Boundary Map (FHBM), a combined FHBM/FIRM, or a FIRM. If the Initial NFIP Map Date does not correspond to the Initial Identification Date in the legend of the most recent map panel, a footnote shall be placed beneath the table to state the Initial Identification Date.

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The Initial FIRM Date is the date of the community's first FIRM. The Most Recent FIRM Panel Date column shall list the last date on which a panel showing that community was published. This date will identify the communities affected by the republication of the Map Index, since the Map Index is updated every time a panel within the county is republished.

If a portion of the countywide panels are being revised for the first time since the countywide's initial publication and the "Most Recent FIRM Panel Date" column does not appear in the Listing of Communities table on the Map Index, the column shall be added along with the following footnote:

*Includes Most Recent Map Index

Every community in the Listing of Communities table will receive the revision Map Index but only those communities which appear on revised map panels will received the map panels. Therefore, the footnote shall be added to indicate that the Map Index may be the only panel with the revised map date for some of the communities in the listing. When the entire set of countywide panels is revised in the same revision, this note would no longer apply and thus be removed.

An example of a revised countywide's Listing of Communities table is shown in Figure K-5.

The note shown in Table K-6 shall be added above the north arrow of a countywide Map Index to clarify the meaning of the dates in the Listing of Communities table.

Table K-6. Listing of Communities Table Note

Example	Usage	Specification*
NOTE TO USER Future revisions to this FIRM Index will only be issued to communities that are located on FIRM panels being revised. This FIRM Index therefore remains valid for FIRM panels dated [*date*] or earlier. Please refer to the "MOST RECENT FIRM PANEL DATE" column in the Listing of Communities table to determine the most recent FIRM index date for each community.	This note is added to all countywide Map Indexes to inform map users that the Map Index may be republished in the future but not distributed to them unless they are affected by the revision. See Figure K-5 for an example of a Listing of Communities table referenced in this note.	**(Header)** 10 Pt. Arial Bold CAPS with underscore **(Reference note)** 9 Pt. Arial CLC

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Figure K-5. Listing of Communities Table

10 -12 Pt. Arial Narrow CAPS

14 – 22 Pt. Arial CAPS with underscore

8 - 10 Pt. Arial Narrow CAPS

LISTING OF COMMUNITIES

COMMUNITY NAME	COMMUNITY NUMBER	LOCATED ON PANEL(S)	INITIAL NFIP MAP DATE	INITIAL FIRM DATE	MOST RECENT FIRM PANEL DATE*
LAKE PARKS, TOWN OF	[illegible]	[illegible]	FEBRUARY 1, [illegible]	FEBRUARY 6, [illegible]	SEPTEMBER 1, [illegible]
LAKE VILLA, VILLAGE OF	[illegible]	[illegible]	MAY 1, [illegible]	JULY 2, [illegible]	SEPTEMBER 1, [illegible]
LAKE ZURICH, VILLAGE OF	[illegible]	[illegible]	MARCH 18, [illegible]	JULY 1, [illegible]	JUNE 21, [illegible]
LEMONT, VILLAGE OF	[illegible]	[illegible]	NOVEMBER 1, [illegible]	JANUARY 6, [illegible]	SEPTEMBER 1, [illegible]
LINCOLNSHIRE, VILLAGE OF	[illegible]	[illegible]	NOVEMBER 1, [illegible]	JULY 6, [illegible]	SEPTEMBER 1, [illegible]
LINDENHURST, VILLAGE OF	[illegible]	[illegible]	APRIL 1, [illegible]	JANUARY 2, [illegible]	SEPTEMBER 1, [illegible]
LONG GROVE, VILLAGE OF	[illegible]	[illegible]	APRIL 1, [illegible]	MAY 6, [illegible]	SEPTEMBER 1, [illegible]
MATTESON, VILLAGE OF	[illegible]	[illegible]	OCTOBER 1, [illegible]	MARCH 25, [illegible]	SEPTEMBER 1, [illegible]
MUNDELEIN, VILLAGE OF	[illegible]	[illegible]	JUNE 28, [illegible]	JULY 2, [illegible]	SEPTEMBER 1, [illegible]
NORTH BARRINGTON, VILLAGE OF	[illegible]	[illegible]	MARCH 18, [illegible]	OCTOBER 6, [illegible]	SEPTEMBER 1, [illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OLD MILL CREEK, VILLAGE OF	[illegible]	[illegible]	AUGUST 30, [illegible]	AUGUST 1, [illegible]	SEPTEMBER 1, [illegible]
PALATINE, VILLAGE OF	[illegible]	[illegible]	[illegible]	[illegible]	SEPTEMBER 1, [illegible]
PINGREE GROVE, VILLAGE OF	[illegible]	[illegible]	MARCH 1, [illegible]	AUGUST 5, [illegible]	SEPTEMBER 1, [illegible]
POLAND, LAKE, VILLAGE OF	[illegible]	[illegible]	MARCH 18, [illegible]	AUGUST 1, [illegible]	SEPTEMBER 1, [illegible]
POLAND, LAKE, BEACH, VILLAGE OF	[illegible]	[illegible]	APRIL 1, [illegible]	AUGUST 1, [illegible]	SEPTEMBER 1, [illegible]
POLAND, LAKE, HEIGHTS, VILLAGE OF	[illegible]	[illegible]	MARCH 18, [illegible]	JANUARY 2, [illegible]	SEPTEMBER 1, [illegible]
[illegible], LAKE, PARK, VILLAGE OF	[illegible]	[illegible]	MARCH 18, [illegible]	JUNE 4, [illegible]	SEPTEMBER 1, [illegible]
PARK, LAKE, VILLAGE OF	[illegible]	[illegible]	SEPTEMBER 1, [illegible]	DECEMBER 5, [illegible]	JUNE 21, [illegible]
TOWER LAKES, VILLAGE OF	[illegible]	[illegible]	APRIL 1, [illegible]	MARCH 2, [illegible]	SEPTEMBER 1, [illegible]
VERNON HILLS, VILLAGE OF	[illegible]	[illegible]	FEBRUARY 4, [illegible]	AUGUST 1, [illegible]	SEPTEMBER 1, [illegible]
VOLO, VILLAGE OF	[illegible]	[illegible]	JANUARY 7, [illegible]	NOVEMBER 1, [illegible]	SEPTEMBER 1, [illegible]
WAUCONDA, VILLAGE OF	[illegible]	[illegible]	MARCH 1, [illegible]	FEBRUARY 4, [illegible]	SEPTEMBER 1, [illegible]
WAUKEGAN, CITY OF	[illegible]	[illegible]	APRIL 1, [illegible]	DECEMBER 1, [illegible]	SEPTEMBER 1, [illegible]
WAUKEGAN, CITY OF	[illegible]	[illegible]	MAY 12, [illegible]	JUNE 5, [illegible]	SEPTEMBER 1, [illegible]
WEST DUNDEE, VILLAGE OF	[illegible]	[illegible]	MARCH 1, [illegible]	DECEMBER 2, [illegible]	SEPTEMBER 1, [illegible]
ZION, CITY OF	[illegible]	[illegible]	MARCH 18, [illegible]	JANUARY 6, [illegible]	SEPTEMBER 1, [illegible]

*INCLUDES MOST RECENT MAP INDEX

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For Reference Only.

K.3.2.2 Map Repositories List [April 2003]

The assigned Mapping Partner shall ensure that countywide Map Index contains a Map Repositories list containing an alphabetical listing of the map repository address of each community that will receive a copy of the FIRM. The communities that are classified as Areas Not Included will not receive a copy of the FIRM and communities that are classified as non-floodprone will receive copies of the Map Index only, provided by the MSC. The Map Repositories list shall be placed above or in close proximity to the north arrow. Specifications for the Countywide Map Repositories list are provided in Table K-7.

Table K-7. Countywide Map Repositories List

Example	Usage	Specification*
MAP REPOSITORIES (Maps available for reference only, not for distribution.) DAVIDSON COUNTY (UNINCORPORATED AREAS): Davidson County Government Center Planning Department 913 Greensboro Street Lexington, North Carolina 27293 DENTON, TOWN OF: Denton Town Hall 101 West Newsome Avenue Denton, North Carolina 27239 LEXINGTON, CITY OF: City of Lexington Community Development Department 31 West First Street Lexington, North Carolina 27292	This is an example of a Map Repository list for a countywide FIRM. The Map Repository is the location that the community has designated for storing its FIRM. The Map Repository address for each community included in the study is listed in alphabetical order on the body of the Map Index. If feasible, the list of addresses is placed just above the north arrow on the Map Index. The disclaimer, as stated, immediately follows the heading for the addresses.	**(Header)** 16-22 Pt. Arial Bold CAPS with underscore **(Disclaimer, Community Name, and Address)** 9-12 Pt. Arial CLC

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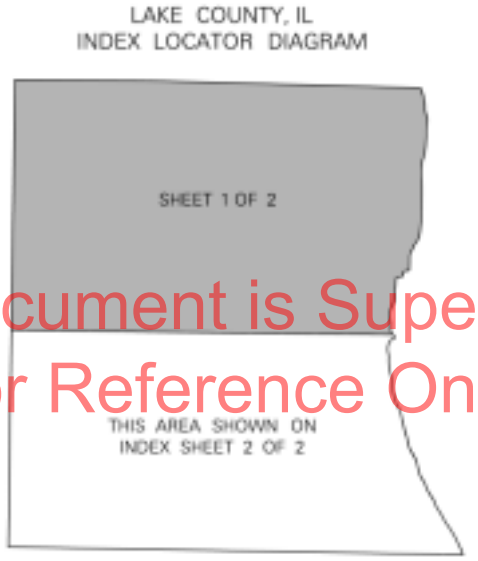
K.3.2.3 Multiple Map Index Panels [February 2002]

FIRMs that are presented on one Map Index panel have the Map Number "IND0." It may sometimes be necessary to create multiple Map Index sheets to present large countywide FIRMs. In such cases, the Listing of Communities table and Map Repositories list shall appear separately on a second Map Index sheet. Sometimes, it may also be necessary to split the image of the community itself onto multiple Map Index sheets. In such cases, a match line shall be added and labeled with a note that references the adjoining Map Index sheet. In addition, the Map Numbers of those sheets shall be "IND1," "IND2," etc., and an Index Locator Diagram shall be added to each Map Index sheet, proportionate in size to other elements. Examples of an Index Locator Diagram are shown in Figures K-6 and K-7. Also, see Figures K-9 and K-10 for examples of multiple-sheet Map Index title blocks.



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See Sheet 2 of 2 for
MAP REPOSITORY LISTING

Figure K-6. Index Locator Diagram for Sheet 1 of 2

Figure K-7. Index Locator Diagram for Sheet 2 of 2

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K.3.3 Index Title Block [April 2003]

The Index title block must be similar in appearance to the FIRM title block, with the exception that it must contain a listing of all of the printed panels instead of community-specific information. The following pages contain examples of the following Map Index title blocks:

- Countywide Digital FIRM Index Title Block (Figure K-8);
- Countywide Multiple-sheet Digital FIRM Index Title Block, Sheet 1 of 2 (Figure K-9);
- Countywide Multiple-sheet Digital FIRM Index Title Block, Sheet 2 of 2 (Figure K-10);
- Single-Jurisdiction Digital FIRM Index Title Block (Figure K-11);
- Single-Jurisdiction Manual FIRM Index Title Block (Figure K-12); and
- Single-Jurisdiction Manual FBFM Index Title Block (Figure K-13).

The specifications for title block elements are presented in Figure K-14.

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM

FLOOD INSURANCE RATE MAP

PIKE COUNTY,
PENNSYLVANIA
(ALL JURISDICTIONS)

(SEE LISTING OF COMMUNITIES TABLE)

MAP INDEX

PANELS PRINTED: 30, 35, 40, 45, 65, 90, 95, 110, 115, 120, 130, 135, 140, 155, 159, 160, 165, 167, 170, 178, 179, 183, 186, 187, 191, 192, 211, 213, 214, 230, 235, 240, 245, 255, 260, 265, 270, 280, 285, 290, 295, 305, 310, 315, 320, 330, 332, 333, 334, 337, 339, 340, 341, 351, 352, 380, 385, 410, 420, 430, 435, 440, 445, 455, 460, 465, 470, 480, 510, 530

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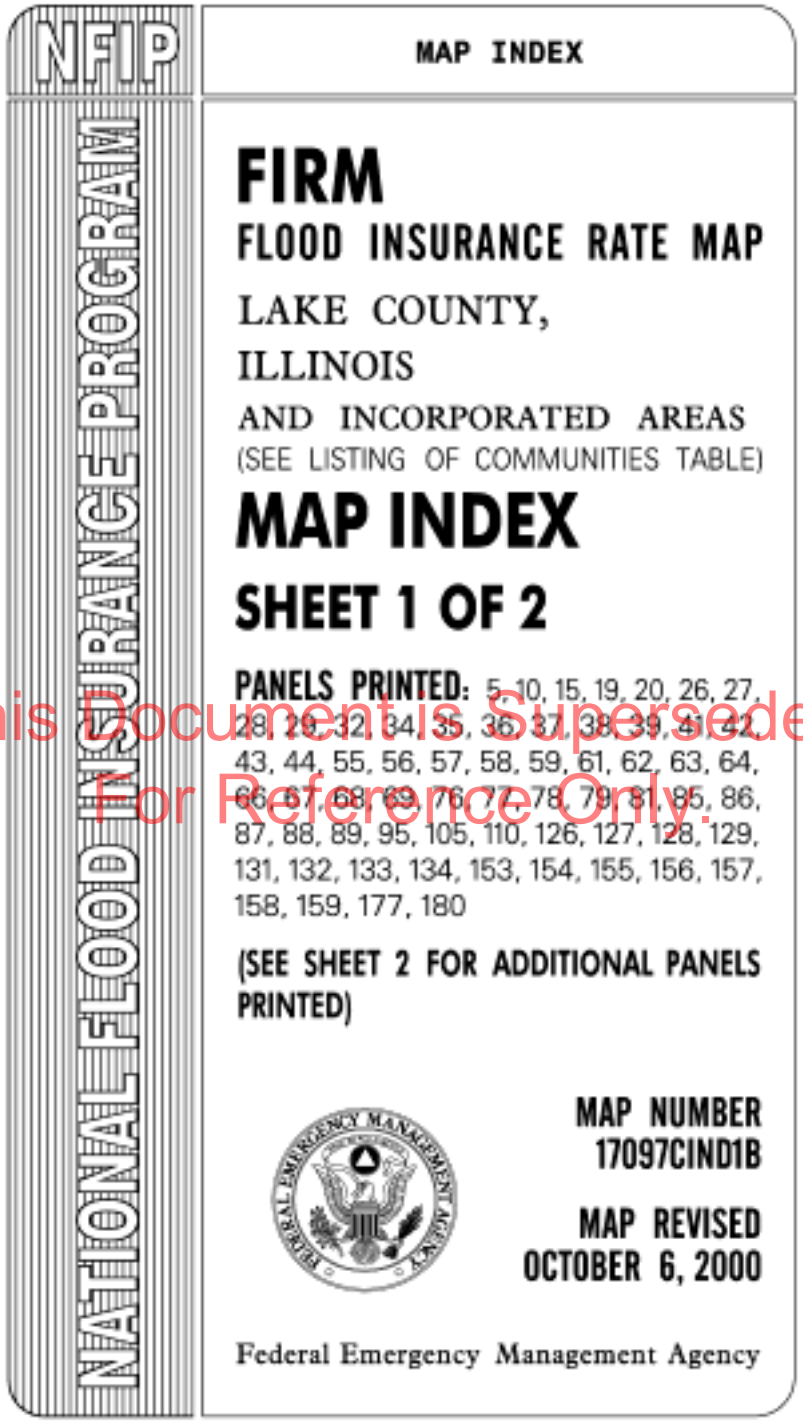
MAP NUMBER
42103CIND0A

EFFECTIVE DATE
OCTOBER 6, 2000

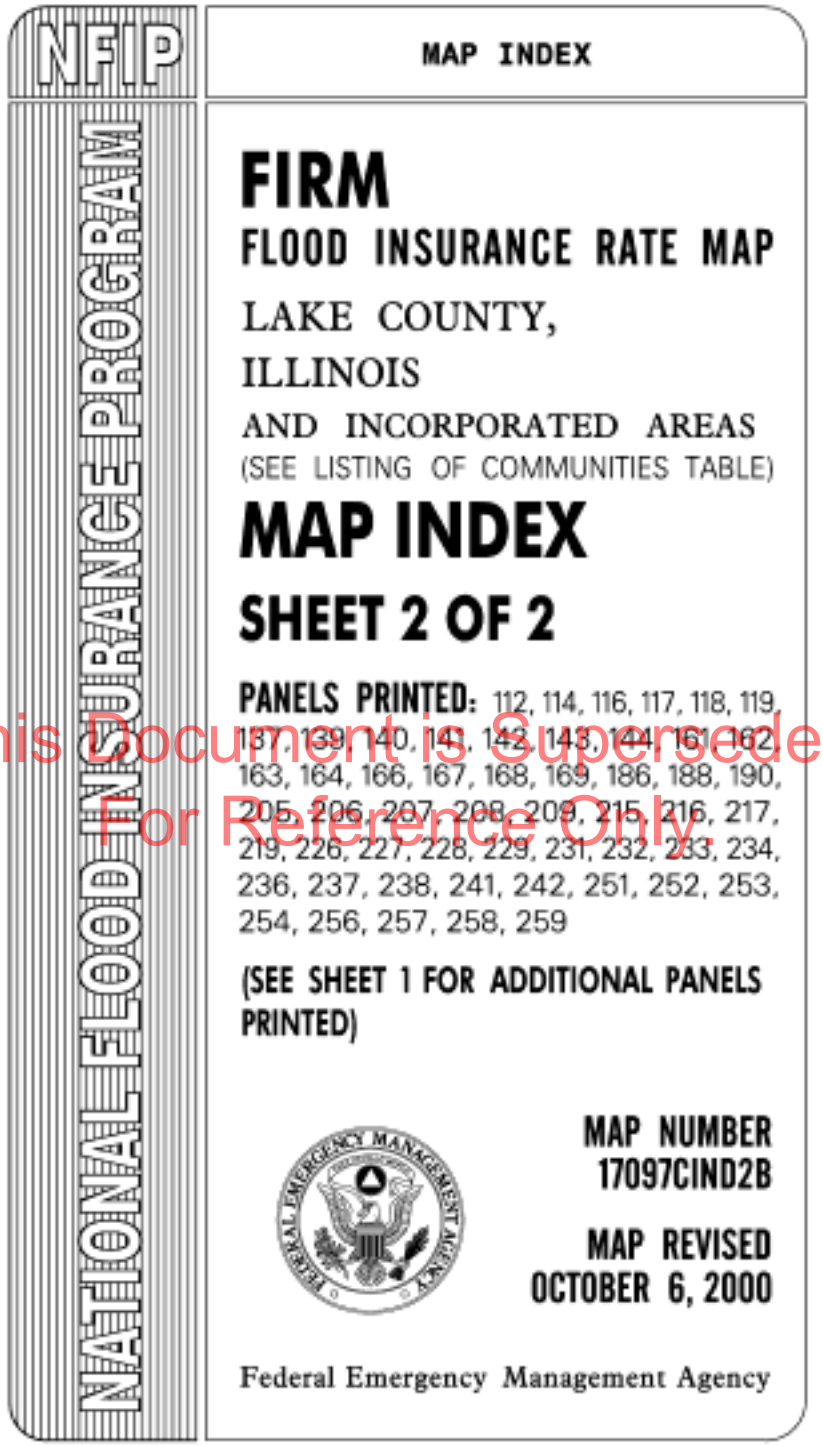
Federal Emergency Management Agency

Figure K-8. Countywide FIRM Index Title Block



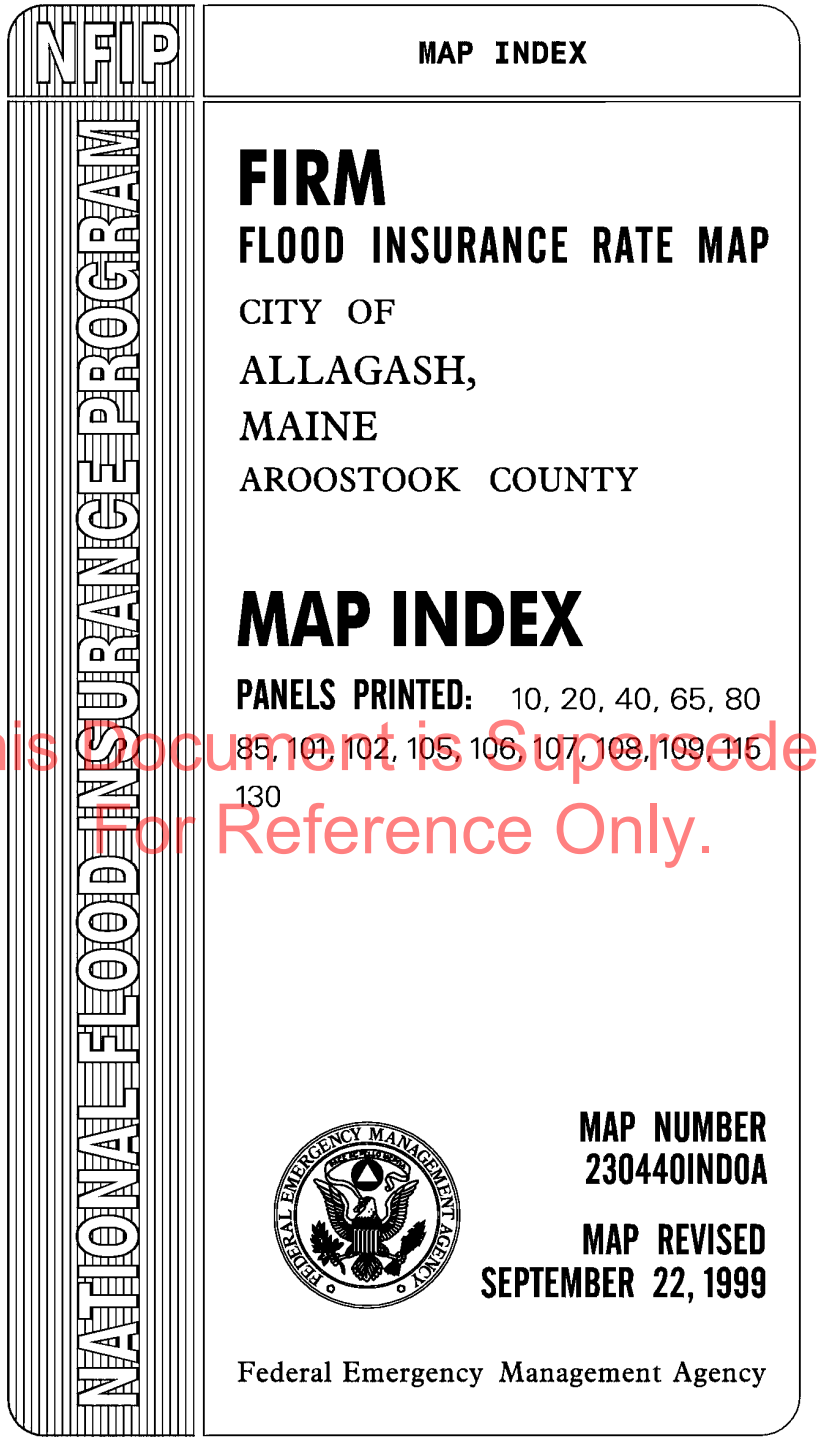
This Document is Superseded.
For Reference Only.

Figure K-9. Countywide Multiple-sheet FIRM Index Title Block, Sheet 1 of 2



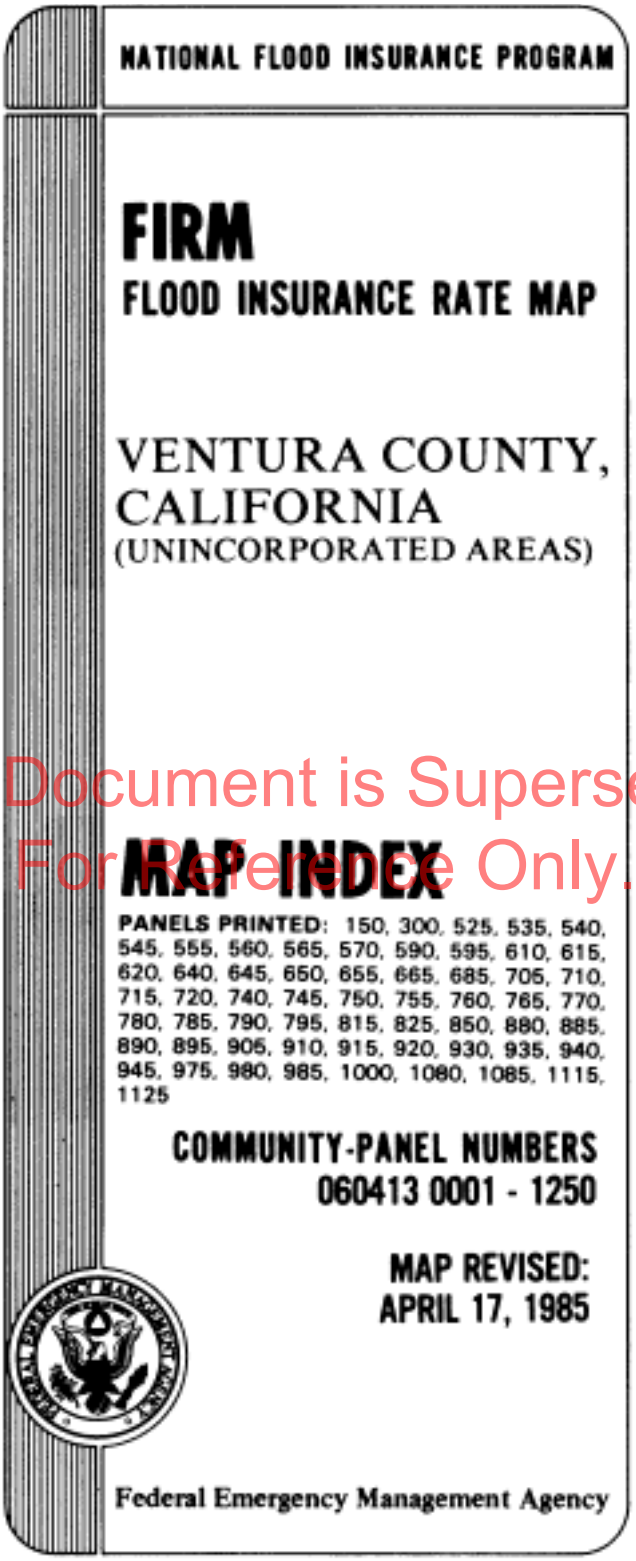
This Document is Superseded.
For Reference Only.

Figure K-10. Countywide Multiple-sheet FIRM Index Title Block, Sheet 2 of 2



This Document is Superseded.
For Reference Only.

Figure K-11. Single-Jurisdiction FIRM Index Title Block


NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

VENTURA COUNTY,
CALIFORNIA
(UNINCORPORATED AREAS)

MAP INDEX

PANELS PRINTED: 150, 300, 525, 535, 540, 545, 555, 560, 565, 570, 590, 595, 610, 615, 620, 640, 645, 650, 655, 665, 685, 705, 710, 715, 720, 740, 745, 750, 755, 760, 765, 770, 780, 785, 790, 795, 815, 825, 850, 880, 885, 890, 895, 905, 910, 915, 920, 930, 935, 940, 945, 975, 980, 985, 1000, 1080, 1085, 1115, 1125

COMMUNITY-PANEL NUMBERS
060413 0001 - 1250

MAP REVISED:
APRIL 17, 1985

Federal Emergency Management Agency

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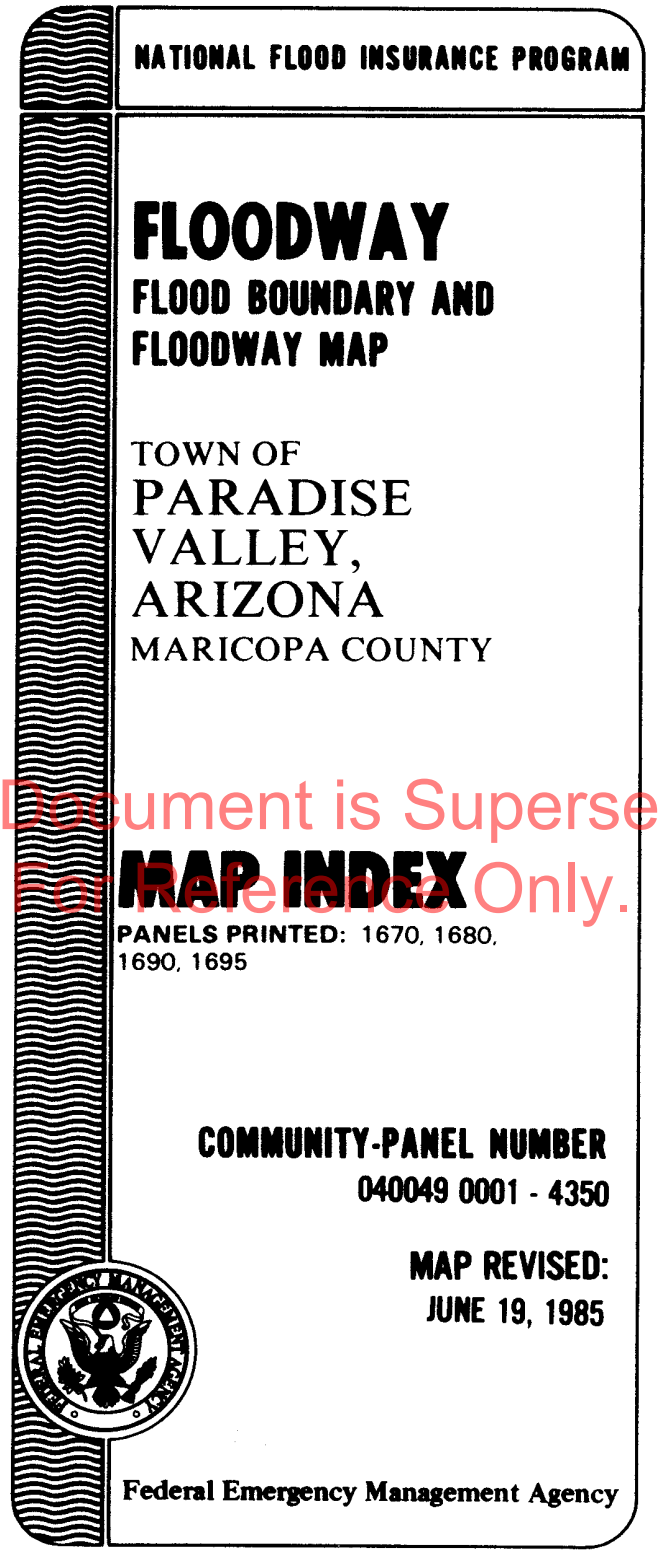
For Reference Only.

Figure K-12. Single-Jurisdiction Manual FIRM Index Title Block



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For Reference Only.

Figure K-13. Single-Jurisdiction Manual FBFM Index Title Block

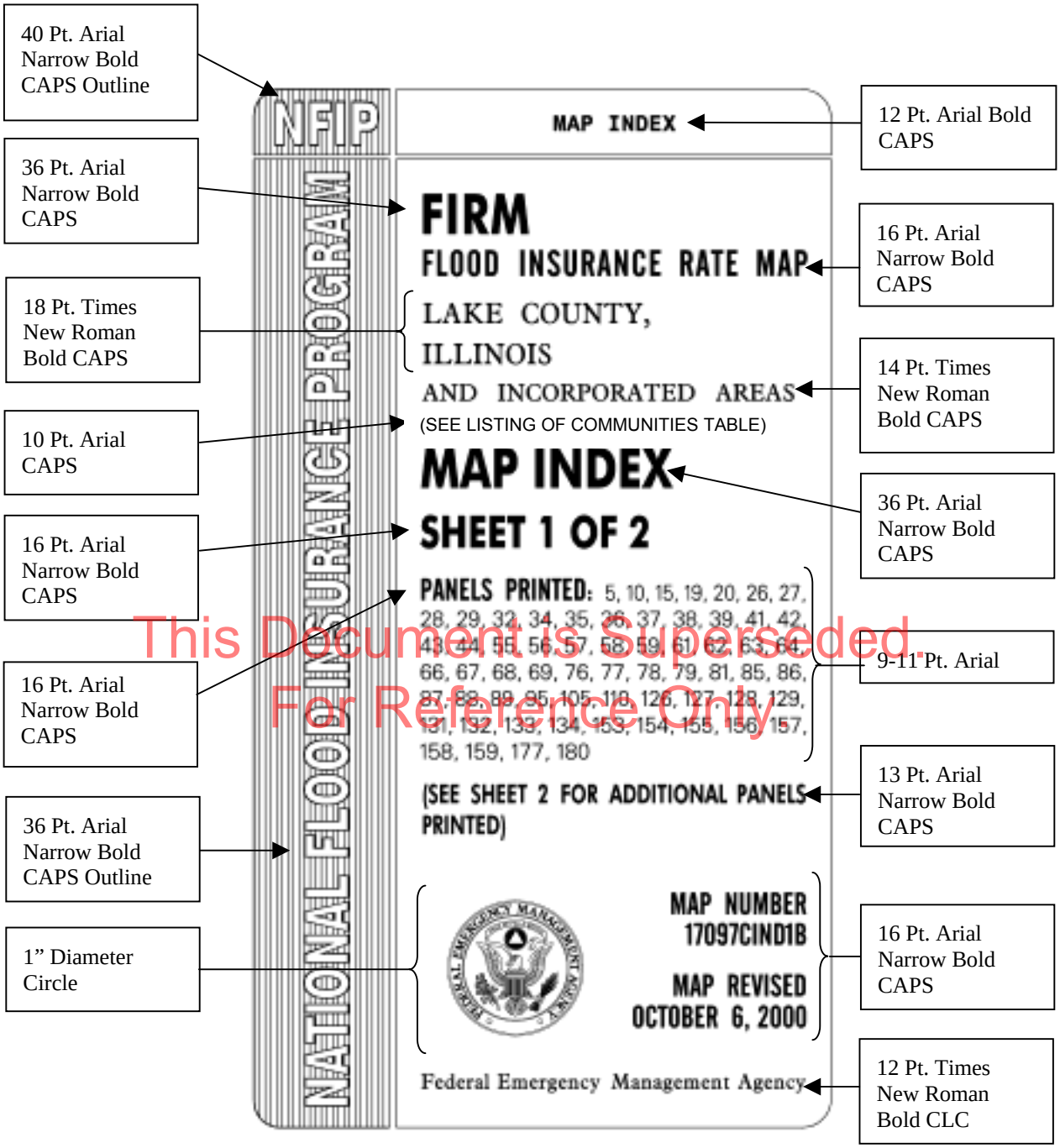

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Figure K-14. Map Index Title Block Element Suggested Font Specifications

K.3.4 8½”x11” Map Index **[April 2003]**

An 8½” x 11” Map Index may be used when the FIRM is presented in a single scale and does not exceed ten panels, or when the FIRM is presented in two scales with no more than four panels in the smaller scale. In addition, the depicted area should contain all major planimetric features, but must result in a clear presentation of information that does not hinder user orientation. The 8½” x 11” Map Index format shall not be used for countywide FIRMs.

An example of an 8½” x 11” Map Index is presented in Figure K-15, using the same specifications as presented for the Z-fold Index at a smaller scale. Figure K-16 provides suggested font specifications for an 8½” x 11” Map Index. Table K-8 provides the graphic specification standards. Designated Preliminary and Final Map Index notes defined in Subsections K.3.1.2 through K.3.1.4, including Panel Not Printed notes, should be applied to the 8½” x 11” Map Index as appropriate.

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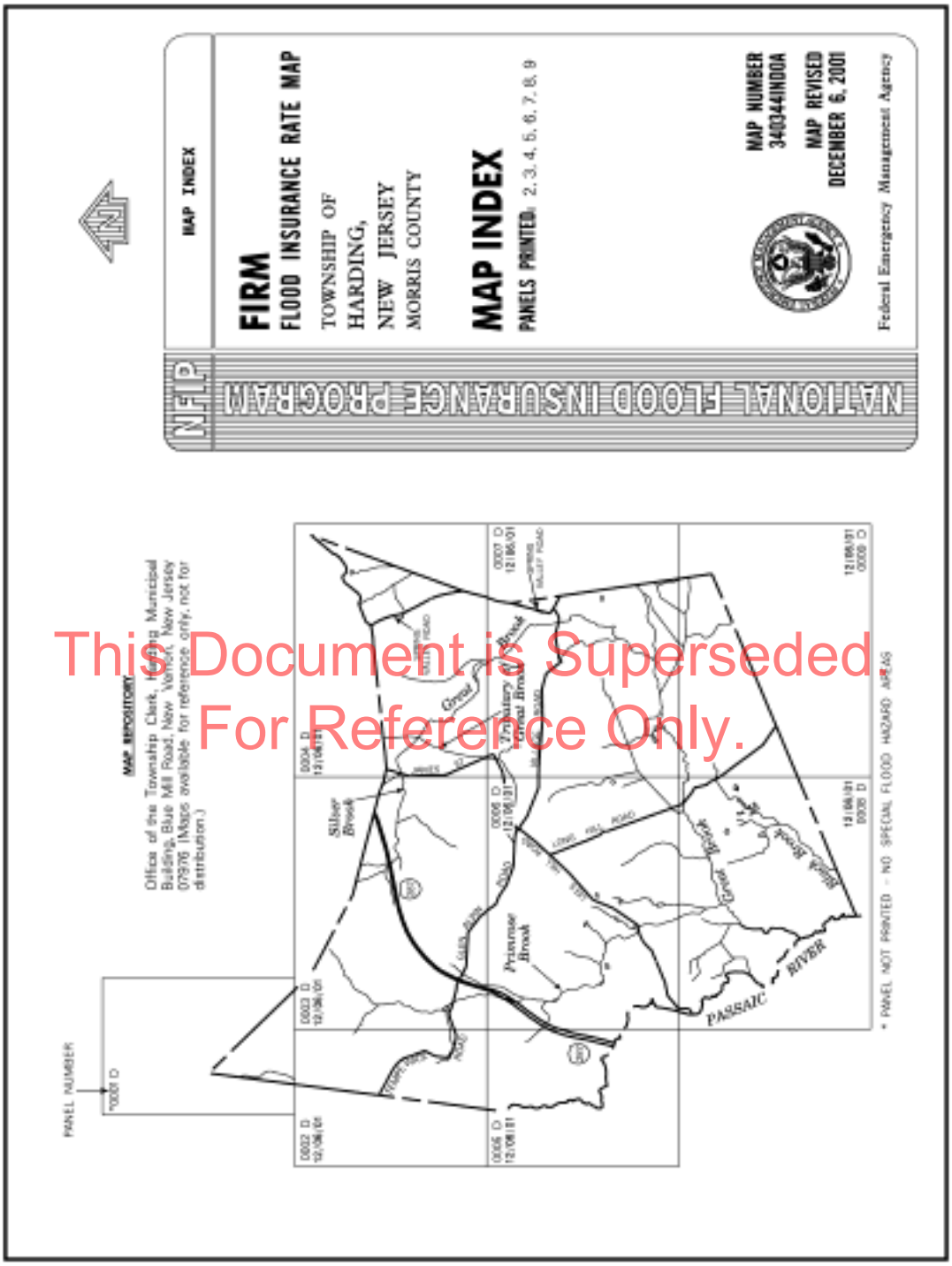

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Figure K-15. Example of 8½" x 11" Map Index

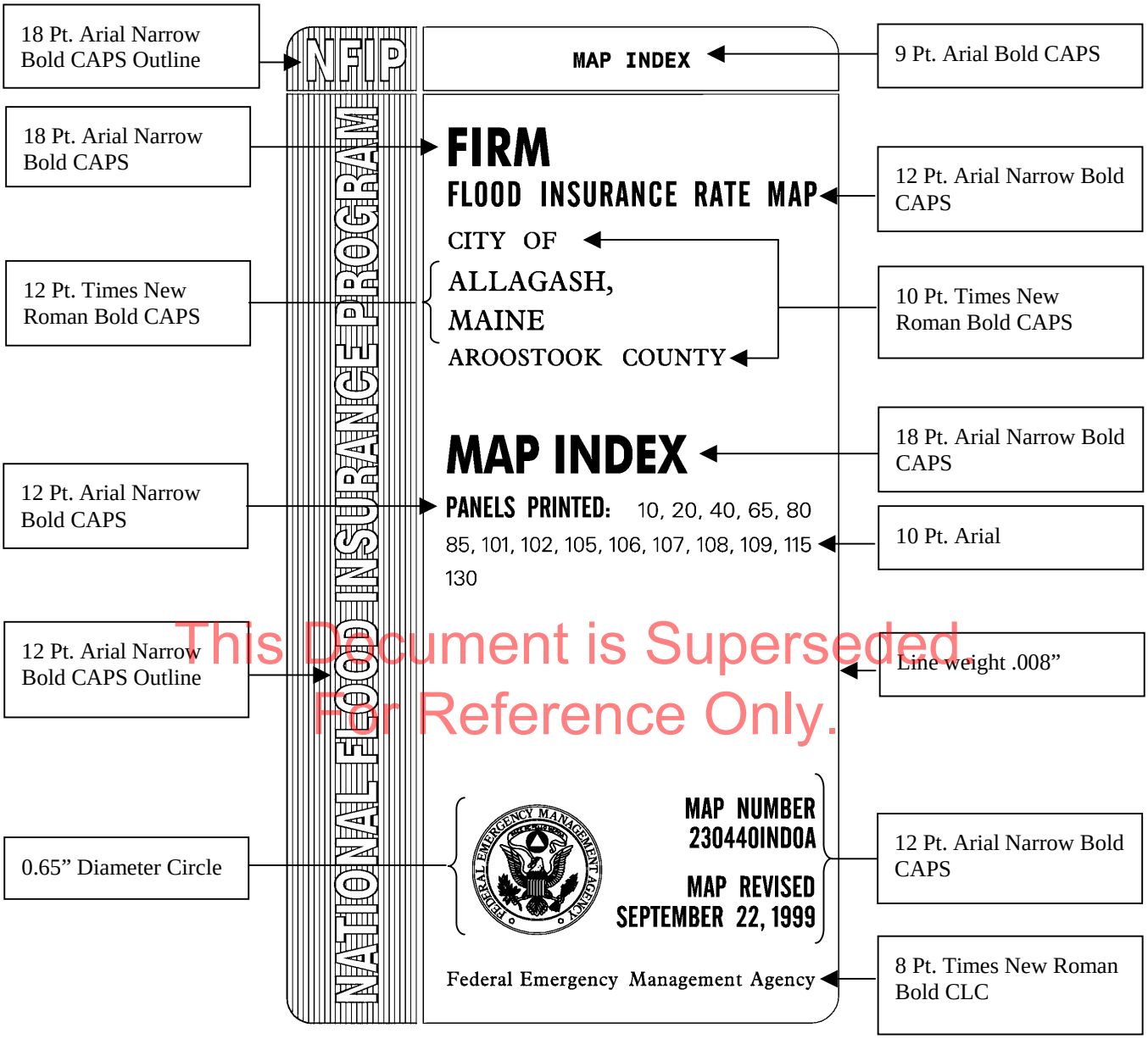

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Figure K-16. Title Block for 8½” x 11” Map Index, with Suggested Font Specifications

Table K-8. 8½” x 11” Map Index Elements

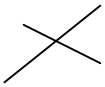
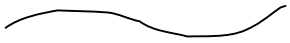
Example	Feature	Specification
	North Arrow	Line weight .008” Width 0.675” Height 0.40”
	Major Road	Line weight .020”
CAPITAL STREET	Street, Road, Avenue Name	8 Pt. Arial CAPS
	Interstate Highway Symbol	Standard Interstate Route Shield Line weight .010” Size .200” x .200” to .400” x .480” 6 Pt. Arial Bold Narrow CAPS
	U.S. Highway Symbol	Standard U.S. Route Shield Line weight .010” Size .200” x .200” to .400” x .480” 6 Pt. Arial Bold Narrow CAPS
	State Highway Symbol	Circle Line weight .010” Diameter .200” to .280” 6 Pt. Arial Bold Narrow CAPS
	County Highway Symbol	Rectangle Line weight .010” Size .150” x .250” to .300” x .400” 6 Pt. Arial Bold Narrow CAPS
CSX TRANSPORTATION	Railroad and Railroad Name	Line weight .008” Tie length .060”, spacing .300” 6 Pt. Arial Italics CAPS
	Airport	Line weight .010”
 ***Eighteen Mile Creek***	River, Stream, or Other Hydrographic Feature and Feature Name	Line weight .008” 6-10 Pt. Times New Roman Bold Italics CLC
SHIP ISLAND	Island	10 Pt. Arial CAPS

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Table K-8. 8½" x 11" Map Index Elements

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

Example	Feature	Specification
ASSABET RIVER DAM	Major Dam and Dam Name	Line weight .010 6 Pt. Arial CAPS or CLC
	International, State, County Boundary	Line weight .015" Dashing: .6" .05" .15" .05" .15" .05" .6"
	Corporate, Extraterritorial Boundary	Line weight .015" Dashing: .6" .05" .15" .05" .6"
	Area Not Included Boundary	Line weight .015"
City of Lafayette (AREA NOT INCLUDED)	Area Not Included Note	**(Community name)** 6-10 Pt. Times New Roman CAPS or CLC **(Note)** 5-8 Pt. Arial CAPS
	FIRM Panel Neatline	Line weight .008"
0005 B	FIRM Map Numbers	8 Pt. Arial Narrow CAPS
8/30/00	FIRM Panel Effective Dates	8 Pt. Arial Narrow CAPS
PANEL NUMBER	Panel Number Label	8 Pt. Arial CAPS
– NOTE – Designated coastal barriers are located on panels 14, 18, 155[1], 161[1], 188, 304, 308, and 309. [1]Panel Not Printed	This note is added near the Map Index north arrow for any community that contains Coastal Barrier units. All panels containing Coastal Barrier units and/or Otherwise Protected Areas, including panels that are not printed are listed. Non-printed panels are listed with a footnote.	8 Pt. Arial CLC
MAP REPOSITORY Office of the Township Clerk, Harding Municipal Building, Blue Mill Road, New Vernon, New Jersey 07976 (Maps available for reference only, not for distribution.)	This is an example of a Map Repository listing for a single jurisdiction FIRM Index. The Map Repository is the location that the community has designated for storing its FIRM. The address is placed just above or in close proximity to the north arrow on the Map Index. The disclaimer, as stated, immediately follows the address.	**(Header)** 9 Pt. Arial CAPS with underscore **(Address and Reference note)** 7 Pt. Arial CLC

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Table K-8. 8½" x 11" Map Index Elements *Font specifications that cannot be matched may be approximated		
Example	**Feature**	**Specification**
NOTICE TO MAP USERS **FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM.**	The following note must be added to all Preliminary FIRM Indexes and/or panel if panel is Only Panel Printed. It is also a standard paragraph in the transmittal letters to the communities. The note reminds the community to submit changes for street locations and names in or near the floodplains for incorporation into the final printed FIRM. The note does not appear on the final FIRM that is delivered to the Government Printing Office for printing. If the FIRM does not contain any Base Flood Elevations (BFEs), the reference to the 90-day appeal period is omitted from the note.	**(Header)** 9 Pt. Arial Bold CAPS **(Reference note)** 9 Pt. Arial Bold CLC
*PANEL NOT PRINTED – NO SPECIAL FLOOD HAZARD AREAS	"Panel Not Printed" Notes	7-8 Pt. Arial CAPS

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K.4 Map Body [February 2002]

The body of the FIRM shall be comprised of base map information and flood hazard information, including any special notes needed for clarification, and, in applicable communities, areas designated as Coastal Barrier Resources System (CBRS) units where federal flood insurance is unavailable.

K.4.1 Base Map [February 2002]

Base maps form the backdrop against which flood hazard information is viewed. Digital base maps also provide horizontal control for effective information compiled from existing FIRMs, FBFMs and FHBMs. 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. The printed FIRM shall not depict topographic (elevation) data such as contour lines. Base map features are employed by map users to locate properties and structures relative to the floodplains; therefore, the accuracy of the base maps used in the production of FIRMs is important to the overall precision of the FIRMs.

Base map data supplied by the community are preferred for use in FIRM production. Once a base map has been accepted, the locations of features in the base map data files are used as-is. To facilitate fitting data together from multiple sources, base map features from one source may be clipped where they meet those from another source. Small graphical mismatches between communities where roads or other features cross community boundaries must then be resolved. This processing should allow for the creation of seamless digital data files. For additional details regarding base map specifications, refer to Volume 1, Subsection 1.3.4.1.

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K.4.1.1 Base Map Types [February 2002]

This subsection contains guidance for the presentation of raster images and vector data used as FIRM base map information.

Raster Images

Raster maps can be produced from digital data or they can result from the digital scanning of paper maps, map negatives, and aerial photographs, and/or from the orthorectification of those images so that they are accurately georeferenced with any distortions removed. Georeferencing means that the map depicts the spherical earth projected as a plane map, normally with Universal Transverse Mercator (UTM) or State Plane coordinates, with or without tick marks or lines that depict parallels (lines of equal latitude) or meridians (lines of equal longitude). Human interpretation of scanned or imaged features is required to derive intelligence from raster maps. The most common form of raster image map is the digital orthophoto, especially the standard Digital Orthophoto Quadrangle (DOQ) produced by the U.S. Geological Survey (USGS).

Whenever possible, the assigned Mapping Partner shall use orthophoto images as they are received from the USGS or the community. The image shall cover the entire FIRM panel, even if some of the image falls outside the jurisdiction being studied. The assigned Mapping Partner shall not crop the image at the jurisdiction's boundary. However, no imagery shall be shown

outside the FIRM panel neatline. On FIRM panels that are only partially covered by the studied jurisdiction, a note shall be added in areas outside the jurisdiction to clarify that flood hazards may exist outside the jurisdictional boundary. An example of the note is shown in Subsection K.4.3.

Variations in tones between orthophoto images are acceptable. If more than one image is included on a FIRM panel, lightening or darkening of individual images to balance tones is not necessary. Overall lightening of all orthophoto images for a Flood Map Project using a single factor may be done so that flood hazard features can be clearly seen.

The assigned Mapping Partner may update roads or other features that have changed since the orthophotos were produced, placing vector data on top of the images if available. A note shall be added to the map to clarify significant additions as necessary.

The assigned Mapping Partner may show vectors that depict studied flooding sources on top of the orthophotos to clarify their locations. Vectors shall not be shown outside the Special Flood Hazard Areas (SFHAs) unless removing them would entail additional work.

Vector Data **[February 2002]**

Vector base maps depict linear features (e.g., roads, railroads, streams) digitized as single-line centerlines or, alternatively, as dual lines showing the outer extremities of linear features (e.g., left and right banks of streams, curb lines on both sides of streets). Roadway right-of-ways or buffered road centerlines are not desirable because they do not depict a feature that can be physically located by users, who rely on the base map features for general orientation. Users often measure distances from road features in order to locate structures for insurance rating purposes. Road centerlines or edges of pavement are more suitable for this type of use.

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K.4.1.2 Base Map Features [April 2003]

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

- Transportation features, including roads, railroads, and airports shall be depicted. If digital orthophotos are supplied, these features must be clearly visible. Bridges that are included in the hydraulic models shall be included on the FIRM. Unimproved roads or trails (i.e., those travel ways not intended for motorized vehicles or not usually used by motorized vehicles due to width or seasonal conditions) may be included, particularly if they cross the floodplains.

- Hydrographic features (e.g., streams, rivers, lakes, shorelines) shall be depicted.

- Hydraulic structures (e.g., levees, dams, weirs, floodwalls, jetties) shall be depicted.

- NGS bench marks shall be depicted.

- Political and other boundaries that identify county and state boundaries, corporate limits, extraterritorial jurisdictional areas, military lands, Native American lands, parks, forests, state gamelands, wildlife refuges, and similar areas 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. Graphic and usage specifications for other horizontal reference grid systems are also included here.
- Significant land forms shall be depicted.
- Other features and notes shall be depicted.
- All features listed above shall include names and/or labels.

The assigned Mapping Partner shall separately symbolize base map features that are not clearly visible on the orthophoto due to their location within a floodplain. For example, a dam symbol should be outlined if it is not visible on the orthophoto or if other floodplain features obscure it.

The assigned Mapping Partner shall derive base map feature names from community-supplied files or hardcopy sources, current FIRM panels, U.S. Census Bureau Topologically Integrated Geographic Encoding and Reference System files, and/or other sources. All feature names that are available in digital format shall be shown on the FIRM. All feature labels on orthophoto-based FIRMs shall be shown as black text with a white halo around the letters to enable the names to be clearly read against the intensity of the background image. Feature labels on vector-based FIRMs shall be shown as black text. Further graphic specifications are provided in the tables below, with separate paragraphs emphasizing information of particular importance.

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Please note that the tables throughout this section contain specifications for orthophoto and vector base maps. In general, the vector-based examples also apply to FIRMs that are produced manually. Specific exceptions are individually noted. In general, bold type fonts surrounded by a white halo are used on orthophoto-based FIRMs. Medium type fonts are used on vector-based FIRMs where the background allows them to show more clearly. All base map features and labels are shown on the FIRM in black unless otherwise noted.

Transportation Features

All primary roads, all roads located inside or within one inch of an SFHA, and any road shown and labeled on a Flood Profile shall be labeled on the map. When space permits, secondary and tertiary roads farther than one inch from an SFHA shall be labeled. If a community supplies digital road labels beyond the stated minimums, these labels shall be shown on the FIRM, provided they meet the text placement standards and do not render the map unusable due to excessive clutter.

Road name labels shall be placed parallel to the road and spaced so that there is no more than one-half inch between each word in the road name. Additional road name labels shall be added for roads that traverse entire FIRM panels, or as necessary for clarity.

All railroads that traverse the community's mapped area shall be labeled. When available, the formal name taken from the sources defined above is to be used. The name shall be placed along the feature when feasible or leadered, if space is limited. If several different names for the same feature are available and would cause clutter and/or confusion, the generic term "Railroad" shall be used. If the generic name option is used, the formal name shown on the unrevised flood profiles shall not be changed. Specifications for the depiction of transportation features on base maps are provided in Table K-9.

Table K-9. Base Map Features: Transportation

Example	Feature	Specification
	Primary Road	**(Orthophoto)** Line weight .020" **(Vector)** Line weight .015"
	Secondary Road	**(Orthophoto)** Line weight .017" **(Vector)** Line weight .010"
	Unimproved Road	Dash .05", space .010" **(Orthophoto)** Line weight .010" **(Vector)** Line weight .008"
CAPITAL STREET CAPITAL STREET	Street, Road, Avenue Name	**(Orthophoto)** 8 Pt. Arial Bold CAPS **(Vector)** 8 Pt. Arial CAPS
Private Road *Unnamed Road*	Private Road, Unimproved Road, Unnamed Road Label	8 Pt. Arial Italics CLC
	Road Shown on Manual FIRM at 1"=700' and Larger Scale	Line weight .006" Lane width .088"
	Road Shown on Manual FIRM at 1"=800' to 1"=1,500' Scale	Line weight .004" Lane width .028"
	Road Shown on Manual FIRM at 1"=1,600' and Smaller Scale	Line weight .004" Lane width .014"

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Table K-9. Base Map Features: Transportation

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

Example	Feature	Specification
234	Interstate Highway Symbol	Standard Interstate Route Shield Size .200” x .200” to .400” x .480” 6 – 8 Pt. Arial Bold Narrow CAPS **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”
234	U.S. Highway Symbol	Standard U.S. Route Shield Size .200” x .200” to .400” x .480” 6 – 8 Pt. Arial Bold Narrow CAPS **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”
234	State Highway Symbol	Circle Diameter .200” to .280” 6 – 8 Pt. Arial Bold Narrow CAPS **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”
234	County Highway Symbol	Rectangle Size .150” x .250” to .300” x .400” 6 – 8 Pt. Arial Bold Narrow CAPS **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”
Cornish Bridge	Road or Railroad Bridge and Bridge Name	Wing tick length .025”, angle 45° 8 Pt. Arial Italics CLC or CAPS **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”

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Table K-9. Base Map Features: Transportation

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

Example	Feature	Specification
Footbridge	Footbridge and Label	Wing tick length .025”, angle 45° 8 Pt. Arial Italics CLC **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”
Tunnel	Road or Railroad Tunnel and Label	Dash .050”, space .010” Wing tick length .025”, angle 45° 8 Pt. Arial Italics CLC **(Orthophoto)** Line weight .010” **(Vector)** Line weight .006” to .010”
CHESSIE SYSTEM RAILROAD	Railroad and Name or Label	Tie length .060”, spacing .300” - .500” 8 Pt. Arial Italics CAPS **(Orthophoto)** Line weight .010” **(Vector)** Line weight .006” to .010”
	Abandoned Railroad	Tie length .060”, spacing .300” - .500” Dash .300”, space .020” **(Orthophoto)** Line weight .010” **(Vector)** Line weight .006” to .010”
	Dismantled Railroad, Old Railroad Grade	Dash .100”, space .020” **(Orthophoto)** Line weight .010” **(Vector)** Line weight .006” to .010”
ABANDONED RAILROAD *Abandoned Railroad* *OLD RAILROAD GRADE* *Old Railroad Grade* *Dismantled Railroad*	Abandoned Railroad, Dismantled Railroad, Old Railroad Grade Labels	8 Pt. Arial Italics CAPS or CLC

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Table K-9. Base Map Features: Transportation **Fonts specifications that cannot be matched may be approximated*		
Example	**Feature**	**Specification**
Ferry	Ferry and Label	Line weight .010” Dash .050”, space .020” 8 Pt. Arial Italics CLC
HAGERSTOWN AIRPORT	Airport and Airport Name	**(Orthophoto)** Line weight .017” **(Vector)** Line weight .010” 8 – 10 Pt. Arial CAPS
HAGERSTOWN AIRFIELD *Airfield*	Airfield, Airfield Name, Airfield Label	**(Name)** 8 – 10 Pt. Arial CAPS **(Label)** 8 Pt. Arial Italics CLC **(Orthophoto)** Line weight .017” **(Vector)** Line weight .010”
Landing Strip	Landing Strip and Label	Line weight .017” Dash .030”, space .020” 8 Pt. Arial Italics CLC
	Arrowhead Leader	**(Orthophoto)** Line weight .010” **(Vector)** Line weight .006”
	Dot Leader	Dot Diameter .020” **(Orthophoto)** Line weight .010” **(Vector)** Line weight .006”

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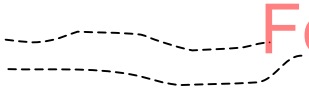
Hydrographic Features

All hydrographic features (streams, lakes, ponds, bays, and oceans) that have an identified flood hazard associated with them shall be labeled. Stream name labels shall be placed parallel to the feature and spaced so that there is no more than one-half inch between each word in the stream name. Additional stream name labels may be added for streams that traverse entire FIRM

panels, or as necessary for clarity. Large hydrographic features, such as oceans and lakes, shall be labeled in larger type fonts or more than once on individual FIRM panels (as necessary for clarity).

Specifications for hydrographic features are presented in Table K-10.

Table K-10. Base Map Features: Hydrographic

Example	Feature	Specification
	River, Stream, or Other Hydrographic Feature	**(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”
Eighteen Mile Creek ***Utah Lake***	Name of River, Stream, or Other Hydrographic Feature	7 – 24 Pt. Times New Roman Bold Italics CLC
Unnamed Tributary ***Tributary No. 1***	Unnamed Stream, Unnamed Tributary Label	7 – 11 Pt. Times New Roman Bold Italics CLC
 ***Century Wash***	Wash or Glacier and Name	Dash .050”, space .010” 7 – 11 Pt. Times New Roman Bold Italics CLC **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”
INTRACOASTAL WATERWAY	Intracoastal Waterway and Label	Line weight .010” Dash .070”, space .020” 8 – 10 Pt. Arial Italic CAPS
Canal *Ditch* *Pond* *Wash* *Glacier* *Swamp* *Marsh* *Cranberry Bog*	Unnamed Hydrographic Feature Label	8 Pt. Arial Italics CLC

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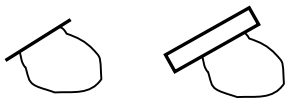
Hydraulic Structures

All hydraulic structures (dams, culverts, weirs, levees, and floodwalls) in or near identified floodplains (detailed or approximate) shall be labeled. The labels shall be placed near the structure and leadered in as appropriate. If no official name for the structure is available, the appropriate feature symbol and a label identifying the structure type (e.g., culvert) shall be added. Specifications for the depiction of hydraulic structures are presented in Table K-11.

Table K-11. Base Map Features: Hydraulic Structures

Example	Feature	Specification
 Culvert *Flume* *Penstock* *Aqueduct*	Culvert, Flume, Penstock, Aqueduct and Labels	Dash .050”, space .010” Wing tick length .025”, angle 45° 8 Pt. Arial Italics CLC **(Orthophoto)** Line weight .008” **(Vector)** Line weight .006” to .008”
 Levee	Levee or Dike and Feature Name or Label	Line weight .010” Length .060”, space .010” 8 Pt. Arial Italics CLC
 *Assabet River Dam* *Dam* *ASSABET RIVER DAM* *DAM*	Dam or Weir and Name or Label	**(Orthophoto)** Line weight .017” 8 Pt. Arial CLC **(Vector)** Line weight .010” 8 Pt. Arial CAPS or CLC
 Pier *Sea Wall* *Dock* *Diversion Structure* *Flood Control Structure*	Pier, Dock, Jetty, Sea Wall, etc., and Labels	8 Pt. Arial Italics CLC **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008” to .010”

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Bench Marks

The assigned Mapping Partner shall show all qualifying bench marks within a given jurisdiction that are cataloged by the National Geodetic Survey (NGS) and entered in the National Spatial Reference System (NSRS) as First or Second Order Vertical, having a stability classification ranking of A, B, or C on the FIRM. The marks shall be identified by their NSRS Permanent Identifier (PID).

When local jurisdictions have established their own vertical control monument network, these monuments may also be shown on the FIRM with the appropriate designations. The assigned Mapping Partner shall show local vertical control monuments on the FIRM only if the community has requested that they be included, the monuments meet the aforementioned inclusion criteria, and the community maintains the monuments and provides public access to information about the monuments such as their location, description, and elevation.

Specifications for the depiction of bench marks and local vertical control monuments on base maps are presented in Table K-12. Refer to Volume 1, Subsection 1.4.2.1 of these Guidelines for additional information on the criteria for showing bench marks on FIRMs.

Table K-12. Base Map Features: Bench Marks

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Example	Feature	Specification
DX5510 ×	Bench Mark	10 Pt. Arial CAPS Line Length .100” to .150” Angle 45° **(Orthophoto)** Line weight .017” (label and bench mark shown with white halo) **(Vector)** Line weight .010”
BM5510 ⊗	Local Vertical Monuments	10 Pt. Arial CAPS Line Length .100” to .150” Angle 45° Circle diameter .100” to .150” **(Orthophoto)** Line weight .017” (label and monument mark shown with white halo) **(Vector)** Line weight .010”

Political and Cultural Entities and Boundaries

All political and cultural entities shall be labeled as described below. If the label does not fit inside the area, the label should be placed nearby and leadered into the area. The area boundary shall also be labeled in accordance with the guidance below. Where boundary labels are appropriate but there is not enough space along the boundary, the boundary label may be omitted; however, the area itself must always be labeled.

Political entities (incorporated areas, unincorporated areas, Extraterritorial Jurisdictions, Areas Not Included, etc.) shall be labeled with the appropriate jurisdiction names and CIDs or area designator, placed near the center of the jurisdiction, if possible. For incorporated communities, the community type shall be followed by the name of the community (e.g., City of Smithville), and the CID placed immediately under the community name. For unincorporated county areas, the county name should be shown with "Unincorporated Areas" beneath it and the county CID should be placed immediately under that label.

On single-jurisdiction FIRMs, the appropriate entity name shall be placed on each side of the corporate limits boundary. The label for the adjoining community should be determined by the hierarchy of the area being identified. The following are examples of adjoining communities:

- "City of Fairfield" (the adjoining incorporated community is within the same county as the mapped jurisdiction).
- "Crenshaw County" (the adjoining county is within the same state as the mapped jurisdiction).
- "City of Fairfield" and "Wisconsin" (the adjoining community is within a different state than the mapped jurisdiction).
- "Washington County" and "Wisconsin" (the adjoining county is within a different state than the mapped jurisdiction).

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For the second and third example, the community boundary is also a state boundary; therefore the state name shall be shown in conjunction with the outside area's community name.

On countywide FIRMs, corporate limits boundaries shall be labeled with the appropriate jurisdiction name on each side of the boundary. If a multiple-county community is shown in its entirety on a countywide FIRM, the county boundary that divides the community shall be labeled with the county names on each side. If the boundary is also a state boundary, the state names shall be shown as well.

When Extraterritorial Jurisdictional (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 extraterritorial jurisdiction authority. ETJ boundaries shall be labeled on the ETJ side of the boundary with "[*Community Name*] Extraterritorial Jurisdiction Limits." If there are space constraints, the label may be shortened to "[*Community Name*] ETJ Limits."

Any area shown as an "Area Not Included" shall be labeled with the appropriate jurisdiction name and "Area Not Included" centered within the area. Flood hazard information shall not be depicted in these areas. In addition, orthophoto-based FIRMs shall not show labels for planimetric features; vector-based FIRMs shall not show base map information of any kind in an Area Not Included. An exception occurs when a flooding source studied in detail passes through the area, in which case the stream centerline or shoreline shall be shown. The Area Not Included boundary shall not be labeled. For additional information on depicting Areas Not Included, see Subsection K.1.6.

All other areas, such as military lands, Native American lands, parks, forests, state gamelands, and wildlife refuges shall be labeled with the official name at least once. If the area is large, additional labels should be added as needed. The boundary of a park, forest, or state gameland should be labeled "PARK BOUNDARY" (or whatever the land use area boundary represents) along the outside, parallel to the boundary.

When boundaries of different types are coincident with each other or with base map features, the Mapping Partner shall show only one, with preference given as follows (presented from highest to lowest priority):

1. Political boundary
2. Coastal Barrier boundary
3. Flood insurance risk zone boundary
4. Other boundaries
5. Base map feature

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In general, the heaviest or widest line is most prominent. For example, if a corporate boundary, a road, and a flood hazard zone boundary are coincident, only the corporate boundary is to be shown. Jurisdiction and park boundary specifications are provided in Table K-13.

Table K-13. Base Map Features: Boundaries

Example	Feature	Specification
VIRGINIA NORTH CAROLINA	International, State, County Boundary and Label	Dashing: 1.500" .050" .150" .050" .150" .050" 1.500" 10 Pt. Arial CAPS **(Orthophoto)** Line weight .030" **(Vector)** Line weight .020" to .030"

Table K-13. Base Map Features: Boundaries *Font specifications that cannot be matched may be approximated		
Example	**Feature**	**Specification**
CITY OF SEAFORD SUSSEX COUNTY	Corporate, Extraterritorial Jurisdiction, Urban Growth Boundary and Label	Dashing: 1.500” .050” .150” .050” 1.500” 10 Pt. Arial CAPS **(Orthophoto)** Line weight .030” **(Vector)** Line weight .020” to .030”
City of Blades **100031**	Community Area Label and Community Identification Number	8 – 24 Pt. Times New Roman Bold CAPS or CLC
City of Blades (AREA NOT INCLUDED)	Community Area Label and Area Not Included Label	**(Community name)** 8-24 Pt. Times New Roman Bold CAPS or CLC **(Note)** 8-20 Pt. Arial CAPS
	Area Not Included boundary	**(Orthophoto)** Line weight .030” **(Vector)** Line weight .020” to .030”
FOREST BOUNDARY ROOSEVELT STATE FOREST	Forest, Park or Reservation Boundary, Boundary Label and Area Label	**(Boundary Label)** 10 Pt. Arial CAPS **(Boundary)** Line weight .015” Dot diameter .030”, spacing .400” **(Area Label)** 8-24 Pt. Times New Roman CAPS or CLC

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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; the latitude and longitude in degrees, minutes, and seconds shall be referenced at each of the four corners of the map panel; and the Universal Transverse Mercator (UTM) reference grid (or grid ticks) are included on the FIRM. Other reference grids (e.g., State Plane) may also be included. UTM, State Plane, and latitude/longitude reference grids or grid ticks shall be shown on the FIRM extending to the FIRM neatline.

U.S. Public Land Survey System (PLSS) features (i.e. range, township, and section lines) shall be shown on a digital FIRM if they are available in digital format and/or were shown on a previous FIRM. The assigned Mapping Partner shall avoid mix-and-match situations where only some FIRM panels in a given jurisdiction contain section information. If the selected base map for a countywide FIRM does not include PLSS information, but some of the community-based FIRMs within the county showed this information previously, a concerted effort shall be made to ensure that the PLSS information is obtained and shown on the entire FIRM. The PLSS information shall meet the following specifications:

- Section numbers shall be placed in the center of the section (or portion of the section shown on the panel) parallel to the horizontal neatlines of the panel.
- Township lines shall be labeled at the left and right edges of the panel along both sides of the line.
- Range lines shall be labeled at the top and bottom edges of the panel along both sides of the line.
- Range, township, and section lines shall be terminated at the panel neatline and at the political boundaries of the subject community.

If the community being studied uses a PLSS grid, the primary grid shown on the FIRM shall be the PLSS. Otherwise, the primary horizontal reference grid shall be the same as the coordinate system of the digital data. For example, if the digital files are referenced to the UTM coordinate system, a UTM grid shall be shown on the map. If the digital files are referenced to the State Plane coordinate system, a State Plane grid of Northings and Eastings shall be shown on the map.

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If the community being studied uses a PLSS grid, the secondary grid ticks shall be the same as the coordinate system of the digital data. When digital files are referenced to the UTM coordinate system, UTM grid ticks shall be shown as cross hairs within the body of the map and ticks along the edge. State Plane grid ticks are not required but may also be shown along the edges of the panel. When the digital files are referenced to the State Plane coordinate system, both UTM and State Plane grid ticks shall be required.

If the community does not use a PLSS grid, the secondary grid ticks shall be shown as cross hairs within the body of the map and ticks along the edge. When the primary grid is UTM, the secondary grid ticks shall be State Plane. When the primary grid is State Plane, the secondary grid ticks shall be UTM.

The grid interval shown on the FIRM shall not vary between panels within the same FIRM even if the panels are shown at different scales. Generally, a UTM grid interval of 1,000 meters and a State Plane grid interval of 5,000 feet shall be used. Specifications for reference grids are listed in Table K-14.

Base Map Featur		
		Specification
	Range, Township, Section Line	**(Orthophoto)** Line weight .008” **(Vector)** Line weight .004” to .006”
R. 43 W. T. 22 N.	Range, Township Number	10 Pt. Arial CAPS
15 15 15 15 15	Section Number	8, 10, 14, 18, 24 Pt. Arial
	Horizontal Reference Grid line	**(Orthophoto) Map Horizontal Reference Grids)** Line weight .008” **(Vector)** Line weight .006”
—	Horizontal Reference Grid Ticks	Line weight .020” Length .300”
+	Secondary Grid Crosshairs	Line weight .020” Length .300” **(Orthophoto) Map Horizontal Reference Grids)** Color: White **(Vector)** Color: Black
$^{42}76^{000m}$E	Horizontal Reference Grid Coordinates (UTM)	8 – 10 Pt. Arial and 10 Pt. Arial Superscript CAPS
365000 FT	Horizontal Reference Grid Coordinates (State Plane)	8 – 10 Pt. Arial CAPS
80° 16’ 52.5”	Corner Coordinates (Latitude, Longitude)	8 – 10 Pt. Arial

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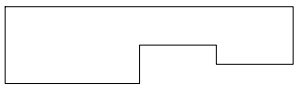
Other Base Map Features and Notes

The features and notes in Table K-15 shall be added to the FIRM as needed.

Table K-15. Base Map Features: Other Features and Notes

Example	Feature	Specification
SHIP ISLAND	Name of Large Island	14 – 24 Pt. Arial CAPS
Green Island	Name of Small Island	8 – 11 Pt. Arial CAPS or CLC
Cape Cod	Name of Point, Cape, Neck	8 – 24 Pt. Arial CAPS or CLC
Lost Canyon	Name of Gulch, Canyon, Draw	8 – 10 Pt. Arial CAPS or CLC
CORPORATE LIMITS COINCIDENT WITH SHORELINE COUNTY BOUNDARY COINCIDENT WITH SHORELINE	These notes are used when the corporate limits of a community or boundary of a county are coincident with a coastal shoreline. In these cases, only the shoreline is shown; the community boundary is not shown. See Section K.7 for coincident flood hazard features notes.	10 Pt. Arial CAPS
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. See Volume I, Subsection K.1.4.3.2 for a discussion of map scales, map layout, and FIRM tiling.	24 Pt. Arial CAPS
 *BENTON COLLEGE*	Significant Outlined Landmark and Name	8 Pt. Arial Italics CAPS **(Orthophoto)** Line weight .010” **(Vector)** Line weight .008”

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K.4.2 Flood Hazard Features [April 2003]

This subsection provides guidance for showing floodplains and regulatory floodways, flood insurance risk zone labels, Base Flood Elevations (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 specifications.

K.4.2.1 Floodplains and Floodways [February 2002]

The 1-percent-annual-chance (100-year) and 0.2-percent-annual-chance (500-year) floodplain boundaries must be shown on the FIRM. The boundaries of Zone D areas must be shown unless they abut the 1-percent-annual-chance floodplain, in which case the 1-percent-annual-chance floodplain boundary shall take precedence.

Regulatory floodways shall be shown on the FIRM and, at cross-section locations, must agree with the values shown on the Floodway Data table in the FIS report within a maximum tolerance of five percent of the map scale or five percent of the distance, whichever is greater. When the 1-percent-annual-chance and regulatory floodway boundaries converge such that they become coincident, only the floodway boundary shall be shown.

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. Extremely small areas may be eliminated in some cases. However, in general, all 0.2-percent-annual-chance floodplain areas that are adjacent to 1-percent-annual-chance floodplain areas, no matter how thin, must be retained in the digital files.

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K.4.2.2 Flood Hazard Information Based on Future-Conditions Analyses [February 2002]

At the request of a community and with the approval of FEMA, FIRMs may include, for informational purposes, flood hazard areas based on projected- or future-conditions hydrologic and hydraulic analyses. If community officials request that FEMA show the future-conditions 1-percent-annual-chance floodplains on the FIRM, the future-conditions floodplains and flood insurance risk zone shall be shown on the FIRM and referenced in the accompanying FIS report. Although graphic specifications are flexible for the mapping of this flood insurance risk zone, the zone label will be "Zone X (Future Base Flood)." The future-conditions flood insurance risk zone shall be defined in the FIRM legend as follows:

> Zone X (Future Base Flood) is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined based on future-conditions hydrology. No BFEs or base flood depths are shown within this zone.

FEMA opted to use the Zone X (shaded) screen, in lieu of a new flood hazard zone designation, to depict the future-conditions 1-percent-annual-chance (100-year) floodplain to minimize confusion by users of the FIRM that make determinations regarding Federal mandatory flood insurance purchase requirements. Those users now recognize that areas designated as Zone X

(shaded) are floodprone, but that the mandatory flood insurance purchase requirement does not apply. Because the risk premium rates for buildings located in the future-conditions 1-percent-annual-chance (100-year) floodplain will be the rate comparable to other areas outside the SFHA, FEMA believes designating these areas as "Zone X (Future Base Flood)" will be sufficient distinction.

K.4.2.3 Zone Labels [February 2002]

All zone areas shall be labeled at least once with their appropriate flood zone and static elevation or depth, if appropriate. Zone labels should be repeated as necessary for clarity in large or complicated areas.

Very thin areas of 0.2-percent-annual-chance floodplain that border 1-percent-annual-chance floodplain areas shall be labeled where the areas become wide enough to be seen at the printed map scale.

In the 1-percent-annual-chance floodplains, the floodway fringe areas should not be considered separate areas requiring labels. One zone label should be sufficient for both the regulatory floodway and the floodway fringe.

When it is necessary to leader a label to isolated Zone X areas (shaded and unshaded) or clusters of Zone A areas, one label with two or more leaders may be used.

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K.4.2.4 Base Flood Elevations [February 2002]

BFEs of increasing elevation values shall be shown in floodplains as wavy lines perpendicular to the flow of the 1-percent-annual-chance flood. All BFEs should be labeled with an elevation value that is located above, below, or at the end of the line (i.e., where it meets the 1-percent-annual-chance floodplain boundary). If the BFE value cannot be placed within 0.1 inch of the BFE line, a leader line should be used to connect the BFE value to the BFE line. BFEs in floodplains with uniform elevations shall be shown as static (single) values. The value shall be placed below the zone label.

The basic intent of plotting BFEs on a FIRM is to represent the Flood Profile to within 0.5 foot of elevation tolerance. If BFEs are plotted correctly, the FIRM can be used to recreate the flood profile within 0.5 foot. Refer to Appendix C, Subsection C.6.3 for further guidance on BFE plotting.

K.4.2.5 Cross Sections [February 2002]

Cross sections shall be shown on the FIRM for all watercourses for which regulatory floodways have been determined. Cross-section locations and designations must correspond exactly to those shown on the Flood Profiles and in the Floodway Data tables presented in the FIS report. The distances between cross sections and those between cross sections and physical features shown on the FIRM must agree with those shown on the Profiles within a maximum tolerance of 5 percent of the distance measured on the FIRM or FBFM.

K.4.2.6 Cross-Section Labeling [February 2002]

Cross sections for each stream studied by detailed methods shall be labeled alphabetically from the downstream to the upstream limit of the study. At the request of a community and with the approval of the Project Officer, cross sections may also be labeled numerically. The typical numbering sequence is from the downstream to the upstream limit of study using the stream distance value at that location. Cross sections shall be labeled on the map with a hexagon at each end of the cross-section line. If there is not enough space to add a hexagon on each end, a hexagon may be placed on only one end. Cross-section hexagons shall be oriented so that the letter or number can be clearly read and is not upside down. If necessary to achieve this, the cross-section line should be trimmed or bent once it crosses the 0.2-percent-annual-chance boundary. Cross-section letters or numbers may follow the orientation of the hexagon or may be placed parallel to the bottom of the map sheet (0°).

Cross-section lines shall cross the entire floodplain (past the limits of the 0.2-percent-annual-chance whenever possible). If the cross-section line cannot exit either side of the floodplain on the panel, the hexagon should be placed in the middle of the cross-section line and the line removed behind the hexagon. All graphic adjustments to cross sections shall remain separate from modeled cross-section locations that are stored in the FIRM GIS files.

K.4.2.7 Limit of Detailed Study and Limit of Study [February 2002]

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Limit of Detailed Study labels shall be placed at the beginning and at the end of every area studied by detailed methods, when the terminus is indicated on the Flood Profile. Note that implied Limits of Detailed Study occur where the detailed study stops because of a stream confluence or when the stream exits the community on the FIRM. In these situations, it should not be labeled on the FIRM. Also note that this same rule applies to Flood Profiles. A Limit of Detailed Study shall be depicted as a thick, white line and labeled as a "Limit of Detailed Study" when it divides areas of different zone designations (e.g., Zone AE from Zone A). It shall be depicted as a thin, blue (orthophoto base) or black (vector base) line and labeled as previously stated when it is the terminus of the floodplain and there is no floodplain defined beyond it.

Limit of Study labels should be used whenever the study (approximate or detailed) ends abruptly and has no corresponding Flood Profile. This situation occurs most often along streams studied by approximate methods but can also occur on backwater arms of detailed studied streams.

K.4.2.8 Coastal Transects [February 2002]

For coastal flood hazard studies, the assigned Mapping Partner shall perform an evaluation of 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 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 to 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.

K.4.2.9 Coastal Transect Labeling [February 2002]

Coastal transect numbers shall be placed in a circle on both ends of the transect line. If both ends of the line cannot be labeled due to space limitations, one label at either end or a label placed in the middle of the transect line with the line removed behind the circle should be sufficient. Transect numbers may follow the orientation of the transect line or may be placed parallel to the bottom of the map sheet (0°).

Transect numbering should generally proceed consecutively from north to south or west to east along a shoreline. New coastal transects inserted between existing transects should be numbered with an alphanumeric sequence (i.e., transects 5A and 5B might be inserted between existing transects 5 and 6).

If constraints due to clutter limit the visibility of the transect lines on the FIRM, a Transect Location Map shall be used to portray the transects. Depending upon the coastal area to be shown, this map may be an 8 ½" x 11" page or 11"x17" foldout page placed in the FIS report. When a Transect Location Map is used, the FIRM GIS files include the transects in their correct geographic location relative to the other FIRM features if possible. Refer to Appendix J for additional information on the Transect Location Map.

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The table below provides examples of these standard flood hazard map features and their graphic portrayal on FIRMs. Two sets of examples, one for FIRMs that are orthophoto-based and one for those that are vector-based are provided. In general, the vector-based examples also apply to FIRMs that are produced manually. Specific exceptions to this are individually noted. Color shall be used to distinguish certain flood hazard features on orthophoto-based FIRMs. Bold type fonts surrounded by a white halo shall be used on orthophoto-based FIRMs. Medium type fonts shall be used on vector-based FIRMs where the gray shading used for flood hazard areas allows them to show more clearly.

All flood hazard features presented in Table K-16 shall be shown on the FIRM in black unless otherwise indicated.

Standard Flood Hazard Features and Notes		
		Specification
(Orthophoto) **(Vector)**	1% annual chance Flood Hazard Area (Zones A, AE, AO, AH, AR, A99, V, and VE)	**(Orthophoto)** Area fill pattern Dot Diameter .020” Spacing .030” Offset between rows .025” Color: Cyan **(Vector)** 50% 133 lines-per-inch screen tint or equivalent area fill pattern
(Orthophoto) **(Vector)**	1% annual chance Flood Hazard Boundary Line	**(Orthophoto)** Line weight .020” Color: Cyan **(Vector)** Line weight .015”
LIMIT OF STUDY LIMIT OF DETAILED STUDY	The **Limit of Study** note is used to identify the truncated terminus of a 1% annual chance floodplain of a stream or backwater area that has not been independently studied by detailed analyses (e.g., no flood profile is associated with this location). The **Limit of Detailed Study** note is used to identify the terminus of a 1% annual chance floodplain of a stream that has been studied by detailed methods. The stream name may also be added to this note for clarity.	**(Label)** 8 Pt. Arial CAPS
(Orthophoto) **(Vector)**	The Limit of Study/Limit of Detailed Study line is used to indicate the terminus of a 1% annual chance floodplain of a stream or backwater area that has not been independently studied by detailed analyses or of a stream that has been studied by detailed methods.	**(Line - Orthophoto)** Line weight .004” Color: Cyan **(Line – Vector)** Line weight .004” - .006” Color: Black

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Table K-16. Standard Flood Hazard Features and Notes **Font specifications that cannot be matched may be approximated*		
		Specification
(Orthophoto) **(Vector)**	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities. If this boundary is the terminus of the riverine 1% annual chance floodplain, it should also be labeled as Limit of Detailed Study.	Color: White **(Orthophoto)** Line weight .020” **(Vector)** Line weight .015”
(Orthophoto) **(Vector)**	0.2% annual chance Flood Hazard Area (shaded Zone X)	**(Orthophoto)** Area fill pattern Dots .020” diameter Spacing .030” Offset between rows .025” **(Vector)** 20% 133 lines-per-inch screen tint or equivalent area fill pattern
	0.2% annual chance Flood Hazard Boundary Line	**(Orthophoto)** Line weight .020” **(Vector)** Line weight .015”
	Areas Outside 1% or 0.2% annual chance Flood Hazard Areas (Zone X, D)	No screen or tint
	Zone D Boundary	Dash .500”, space .050 **(Orthophoto)** Line weight .020” **(Vector)** Line weight .015”

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Table K-16. Standard Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
(Orthophoto) **(Vector)**	Floodway Area	**(Orthophoto)** Area fill pattern Dots .020” diameter Spacing .030” Offset between rows .025” Color: Cyan Surprinted with diagonal hatching at 45° angle 10 lines per inch Line weight .010” Color: White **(Vector)** 50% 133-lines-per-inch screen tint or equivalent area fill pattern Surprinted with diagonal hatching at 45° 10 lines per inch, Line weight .004” to .010”
(Orthophoto) **(Vector)**	Floodway Boundary Line	Dash .375”, space .050” **(Orthophoto)** Line weight .020” Color: Cyan **(Vector)** Line weight .015”
LIMIT OF FLOODWAY	The **Limit of Floodway** note is used to indicate the terminus of a floodway in an area where the detailed analysis extends beyond the end of the floodway.	**(Label)** 8 Pt. Arial CAPS Line Color: Black **(Line - Orthophoto)** Line weight .004” **(Line – Vector)** Line weight .004” to .006”
ZONE AE	Zone Designation	11 Pt. Arial Bold CAPS
(EL 10) (DEPTH 2’) (VEL 15 FPS)	Static Base Flood Elevation, Depth, or Velocity	8 Pt. Arial CAPS

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Table K-16. Standard Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
513	Base Flood Elevation Line	**(Orthophoto)** Line weight .017” **(Vector)** Line weight .010” to .030”
646	Base Flood Elevation Value	10 Pt. Arial Italics
A A B A	Cross Section *and* Footed Cross Section and Center Label Cross Section (used with space limitations)	Hexagon .200” across Foot 0.1” 10 Pt. Arial Bold CAPS **(Orthophoto)** Line weight .017” **(Vector)** Line weight .010”
23 23 23	Coastal Transect *and* Center Label Coastal Transect (used with space limitations)	10 Pt. Arial Bold CAPS Circle Diameter .200” Dash .050”, space .010” **(Orthophoto)** Line weight .017” **(Vector)** Line weight .010”
	Arrowhead Leader. This is used to label hydraulic features and linear elements.	**(Orthophoto)** Line weight .010” **(Vector)** Line weight .006”
	Dot Leader. This is used to label flood zones and other areas.	Dot Diameter .020” **(Orthophoto)** Line weight .010” **(Vector)** Line weight .006”

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Table K-16. Standard Flood Hazard Features and Notes ***Font specifications that cannot be matched may be approximated**		
Example	**Feature/Usage**	**Specification**
FLOODING EFFECTS FROM [*source name*]	This note is used: 1) where the detailed flooding source is physically located outside of the community and cannot be shown on the FIRM panels, 2) where the flooding source is located within the study area but is shown more than one full panel away from the floodplain to be labeled, or 3) in countywide studies where the flooding source is shown on a panel that a community will not receive.	10 Pt. Arial CAPS
FLOODWAY IN THIS AREA TOO NARROW TO SHOW TO SCALE; REFER TO FLOODWAY DATA TABLE	This note is used to indicate that map scale limitations do not allow the visible and accurate portrayal of the actual width of the floodway.	10 Pt. Arial CAPS
1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL **1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT**	These notes are used to indicate where the 1% annual chance flood discharges do not overtop the channel banks or are completely contained within a culvert pipe. This area may be bordered by a 0.2% annual chance floodplain.	8 Pt. Arial Bold CAPS
0.2% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL **0.2% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT**	These notes are used to indicate where both the 1% and 0.2% annual chance flood discharges do not overtop the channel banks or are completely contained within the culvert pipe.	8 Pt. Arial Bold CAPS
FLOODWAY CONTAINED IN CHANNEL **FLOODWAY CONTAINED IN CULVERT**	These notes are used to indicate where the floodway boundaries coincide with the banks of a channel or where the floodway is contained within a culvert pipe.	8 Pt. Arial Bold CAPS
THIS AREA PROTECTED FROM THE 1% ANNUAL CHANCE FLOOD BY LEVEE, DIKE OR OTHER STRUCTURE SUBJECT TO FAILURE DURING LARGER FLOODS	This note is used to indicate that an area that has been shown as shaded Zone X on the landward side of the levee has an inherent flood risk in the event of a levee failure. In situations where there is a substantial area of 0.2% annual chance floodplain that exists in combination with the area protected from the 1% annual chance flood, the note below may be substituted.	8 Pt. Arial Bold CAPS

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Table K-16. Standard Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
THIS AREA INCLUDES AREAS PROTECTED FROM THE 1% ANNUAL CHANCE FLOOD BY LEVEE, DIKE, OR OTHER STRUCTURE SUBJECT TO FAILURE DURING LARGER FLOODS	This note is normally used in combination with a dashed line to identify and differentiate the 0.2% annual chance floodplain area from the area that is protected from the 1% annual chance flood.	8 Pt. Arial Bold CAPS
COASTAL BASE FLOOD ELEVATIONS APPLY ONLY LANDWARD OF 0.0 FEET [*datum*]	This note is used to indicate where a wave height analysis is in effect. The note varies according to the vertical datum used, and is placed on the map panel near the shoreline of the open body of water. This note may appear on older versions of FIRMs but should not be used when the FIRM has the Notes to Users Coastal Base Flood Elevation note (see Table K-22).	8 Pt. Arial Bold CAPS
FLOOD HAZARD INFORMATION IS NOT SHOWN ON THIS MAP IN AREAS OUTSIDE OF THE [*community/county name*]	This note is used on orthophoto-based FIRM panels that are only partially covered by the studied jurisdiction. The note is added in areas outside the jurisdiction to clarify that flood hazards may exist outside the jurisdictional boundary but are not shown on this map. On a countywide study, if the area is adjacent to a dual/multiple-county community shown in its entirety, include both the community name and the name of the county (community name AND county name). This note shall not to be used in addition to or in place of Area Not Included labeling.	10 Pt. Arial Bold CAPS
FLOOD HAZARD INFORMATION IS SHOWN WITHIN THE [*community name*] FOR INFORMATION ONLY. FOR FLOOD INSURANCE, REFER TO SEPARATELY PRINTED FLOOD INSURANCE RATE MAP FOR THE [*community name*].	This note is retained on countywide map panels, if applicable, to indicate that the named community is not included in the FIS because portions of it are also located within one or more other counties that currently are not in the countywide mapping format. This note should not be added to new countywide FIRMs because it corresponds to a method of handling multiple-county communities that is no longer used.	14 Pt. Arial CAPS

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Table K-16. Standard Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
FLOOD INSURANCE INFORMATION ON THIS MAP APPLIES ONLY TO THE AREAS WITHIN THE CORPORATE LIMITS OF THE [*community name*]. SPECIAL FLOOD HAZARD AREAS ARE SHOWN OUTSIDE OF THE [*community name*] FOR PLANNING PURPOSES ONLY.	This note is used on a FIRM when a Standard Format FBFM panel that showed additional flood hazard information outside of the jurisdiction being studied is now being combined with the FIRM in Map Initiatives format. The flood hazard information outside the studied jurisdiction may be kept on the map at FEMA's discretion.	14 Pt. Arial CAPS

K.4.3 Other Flood Hazard Features and Notes [February 2002]

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The notes in Table K-15 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 K-17. Other Flood Hazard Features and Notes		
Example	**Feature/Usage**	**Specification**
	Special Floodway	Area fill pattern Diagonal cross-hatching at 45° and 135° angles 10 lines per inch Line weight .010"
 STATE ENCROACHMENT LINE FLOWAGE EASEMENT BOUNDARY	These or similar notes are used to label the boundary of areas in which a community enforces more restrictive criteria for floodplain management than the minimum requirements of the NFIP.	**(Label)** 8 Pt. Arial CAPS **(State Encroachment Line)** Line weight .010" Circle diameter .060" **(Flowage Easement Boundary Line)** Line weight .010" to .020"

Table K-17. Other Flood Hazard Features and Notes

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

Example	Feature/Usage	Specification
ZONE D BOUNDARY COINCIDENT WITH CORPORATE LIMITS	This is an example of a note that may be used to clarify coincident features. Roads that are coincident with other features generally do not need to be clarified by notes. See Subsection K.4.1.2 for an example of a coincident political boundary note.	10 Pt. Arial CAPS
PROFILE BASE LINE	This note is used to identify a line on a map panel that indicates the modeled flow path of a stream when it does not coincide with the hydrographic feature shown on the map. The profile base line is used to represent channel distances as indicated on the Flood Profiles and Floodway Data tables. It is shown as a single line with one dash and labeled "Profile Base Line." A profile base line may be added to detailed studied streams for the following reasons: The hydraulic model reflects a more direct flow path than the channel configuration shown on the map. This is most often the case when the stream displays extensive meandering; An island splits the river shoreline. The profile base line is used to identify the main channel; A lake through which a stream flows is present, and the reservoir routing modeling method has been used to effect a continuous Flood Profile; or The flood flow path is undefined on the map but the flow path has been modeled.	**(Line label)** 8 Pt. Arial CAPS **(Line)** Line weight .010" Dashing: 1" .050" .100" .050" 1"
● M1.5	River Mile Marker	Dot Diameter .030" to .090" 10 Pt. Arial CAPS
◐	Gaging Station (shown if referenced in the hydrologic analysis)	Diameter .100"

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K.4.4 Coastal Barrier Resources System Map Components

[February 2002]

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 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 Appendix 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). For additional information regarding the CBRS, see Volume 2, Section 2.2 of these Guidelines.

K.4.4.1 Coastal Barrier Resources System Boundaries [February 2002]

The CBRS source maps show direct horizontal relationships between existing houses and the CBRS unit boundaries; these relationships must be maintained. Most often, the Coastal Barrier boundary has been delineated to keep houses that existed prior to the CBRS designation out of the designated Coastal Barrier.

The CBRS source maps use thick lines to represent CBRS unit boundaries. Although standard cartographic practice is to follow the center of a boundary, if the boundary has a direct relationship with a linework feature (such as being against the edge of a road), that relationship must be maintained, even if it means the edge of the boundary line shown on the CBRS source map will be used.

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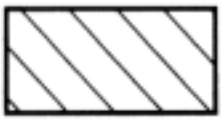
Boundary lines must be shown to differentiate between contiguous barriers of different classifications, because each CBRS classification carries a different insurance prohibition. All barriers must be labeled or identified by notes that identify the CBRS classification of each area.

K.4.4.2 Map Screens for Coastal Barrier Resources System Areas

[February 2002]

Although there are several different types of Coastal Barriers, there are currently two unique map screens. Coastal Barriers shall be portrayed with the two map symbols shown below to differentiate between CBRS and OPA units, which contain differing prohibitions. The CBRS and OPA prohibition dates (i.e., the date that the CBRS or OPA area was originally designated) shall be shown within each separate CBRS and OPA unit to assist users in determining the proper insurance prohibition date for each unit.



CBRS unit

OPA unit

FIRMs prepared after 1991 and prior to November 2000 show three unique map screens to reflect the three classifications of CBRS units. The three screens are as follows:

1983 Coastal Barriers	1990 or later Coastal Barriers	1991 or later Otherwise Protected Areas

Because the official CBRS source maps may show CBRS boundaries open to the sea, CBRS screens should not be terminated at shorelines unless the shoreline is coincident with the CBRS or OPA boundary. The boundaries and screens shall extend into the open water to the edge of the SFHA screen unless the Coastal Barrier boundary is closed on the official CBRS map and includes areas beyond the limit of the SFHA screen.

K.4.4.3 Coastal Barrier Notes for the Body of the FIRM [April 2003]

All separate CBRS areas on a FIRM shall be labeled with the appropriate identification note showing the prohibition date associated with that CBRS area. The assigned Mapping Partner shall use the abbreviated CBRS identification notes on the body of the FIRM and shall place a Coastal Barrier Legend below the Notes to User section of the FIRM border. At its discretion, the assigned Mapping Partner may place the Coastal Barrier Legend on the body of the map if there is insufficient space in the border. When there is insufficient space in the border and on the body of the FIRM to place the Coastal Barrier Legend, the full CBRS identification note shall be placed on the body of the FIRM within the CBRS area instead of the abbreviated CBRS note, and the Coastal Barrier Legend will not be used. See Subsection K.5.1.2 for more on the specifications of the Coastal Barrier Legend. Table K-18 contains abbreviated and full CBRS identification notes.

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CBRS identification notes, whether abbreviated or full, shall be located, whenever possible, on or near the land area, and shall not overprint existing base or floodplain features. When the note cannot be located on the land area because of space and clarity considerations, the note shall be placed in the open water within the CBRS screen, near the land area. When the note cannot be placed within the CBRS screen without creating overprints, the note shall be leadered to the land area.

Table K-18. CBRS Features and Notes

Example	Feature/Usage	Specification*
COASTAL BARRIER IDENTIFIED [*date*] **(SEE COASTAL BARRIER LEGEND)**	This is the abbreviated 1983, 1990, or later Coastal Barrier identification note that appears within the CBRS area on the body of the FIRM. This note is accompanied by a special Coastal Barrier Legend, which is placed below the Notes to Users section of the FIRM border. This legend shows the full CBRS identification note for each classification of CBRS unit present on all of the FIRM panels in the community or county. See Subsection K.5.1.2 for examples of the Coastal Barrier Legend.	8 Pt. Verdana Bold CAPS
OTHERWISE PROTECTED AREA IDENTIFIED [*date*] **(SEE COASTAL BARRIER LEGEND)**	This is the abbreviated 1991 or later OPA identification note that appears within the CBRS area on the body of the FIRM. This note is accompanied by a special Coastal Barrier Legend, which is placed below the Notes to Users section of the FIRM border. This legend shows the full CBRS identification note for each classification of CBRS unit present on all of the FIRM panels in the community or county. See Subsection K.5.1.2 for examples of the Coastal Barrier Legend.	8 Pt. Verdana Bold CAPS
FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER OCTOBER 1, 1983, IN DESIGNATED COASTAL BARRIERS.	This note, shown on the body of the FIRM, identifies an area classified as a 1983 CBRS unit. This note is used when there is insufficient space in the FIRM border or on the body of the FIRM to place the Coastal Barrier Legend.	8 Pt. Arial CAPS
FLOOD INSURANCE NOT AVAILABLE FOR NEW CONSTRUCTION OR SUBSTANTIALLY IMPROVED STRUCTURES ON OR AFTER [*date*], IN DESIGNATED COASTAL BARRIERS.	This note, shown on the body of the FIRM, identifies an area classified as a 1990 or later CBRS unit. This note is used when there is insufficient space in the FIRM border or on the body of the FIRM to place the Coastal Barrier Legend.	8 Pt. Arial CAPS
FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES - NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER [*date*] NOT USED IN A MANNER CONSISTENT WITH THE PURPOSE OF THE OTHERWISE PROTECTED AREAS.	This note, shown on the body of the FIRM, identifies an area classified as a 1991 or later OPA. This note is used when there is insufficient space in the FIRM border or on the body of the FIRM to place the Coastal Barrier Legend.	8 Pt. Arial CAPS

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Table K-18. CBRS Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification***
Comments or concerns regarding the Coastal Barrier Resources System or Otherwise Protected Areas should be directed to the Coastal Barrier Coordinator at the U.S. Fish and Wildlife Service; (_ _ _) _ _ _-_ _ _ _.	This note refers map users to the Fish and Wildlife Service's Regional Coastal Barrier Coordinator. It is placed below the CBRS identification notes in the Coastal Barrier Legend. See Subsection K.5.1.1 for examples of the Coastal Barrier Legend. If the full Coastal Barrier identification notes are used on the body of the FIRM instead of the abbreviated notes, the Coastal Barrier Coordinator note appears in the body of the FIRM panel close to the CBRS units. The phone number is inserted into the above note as follows: **(413) 253-8657** CT, DE, MA, ME, MD, NJ, NY, RI, VA **(404) 679-7106** AL, FL, GA, LA, MS, NC, PR, SC, VI **(612) 713-5350** MI, MN, OH, WI **(505) 248-6454** TX	10 Pt. Tahoma Bold CLC
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 Subsection K.4.1.2 for a discussion of coincident boundaries.	10 Pt. Arial CAPS
THIS AREA IS CONTAINED WITHIN THE COASTAL BARRIER RESOURCES SYSTEM	This note is used on FIRM panels when a Coastal Barrier 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.	10 Pt. Arial Bold CAPS
	Coastal Barrier Resources System Area	Area fill pattern Diagonal hatching at 135° angle 8 to 10 lines per inch Line weight .006" to .010"

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Table K-18. CBRS Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification***
	Otherwise Protected Area	Area fill pattern Broken diagonal hatching at 135° angle 8 to 10 lines per inch Line weight .006” to 010” Dash .130” to .150” space .750” to .850”
••••••••••••••••••••	Coastal Barrier Boundary	Dotted line Diameter .0875” spacing .0335”

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K.5 Map Legend **[April 2003]**

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 data within the body of the map. Planimetric data (such as railroads and political boundaries) 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, community variables (e.g., map repository, previous FIRM editions), whether Coastal Barrier Resources System (CBRS) areas are included on the map, and the map scale.

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

- Countywide Digital FIRM, Orthophoto Base Map (Figure K-17);
- Countywide Digital FIRM, Vector Base Map (Figure K-18);
- Single-Jurisdiction Digital FIRM, Orthophoto Base Map, Map Revised (Figure K-19);
- Single-Jurisdiction Digital FIRM, Vector Base Map, Effective Date (Figure K-20);
- Single-Jurisdiction Digital FIRM, Vector Base Map, Map Revised (Figure K-21);
- Single-Jurisdiction Manual FIRM, Map Initiatives Format, Map Revised (Figure K-22); and
- Single-Jurisdiction Manual FIRM, Standard Format (Figure K-23).

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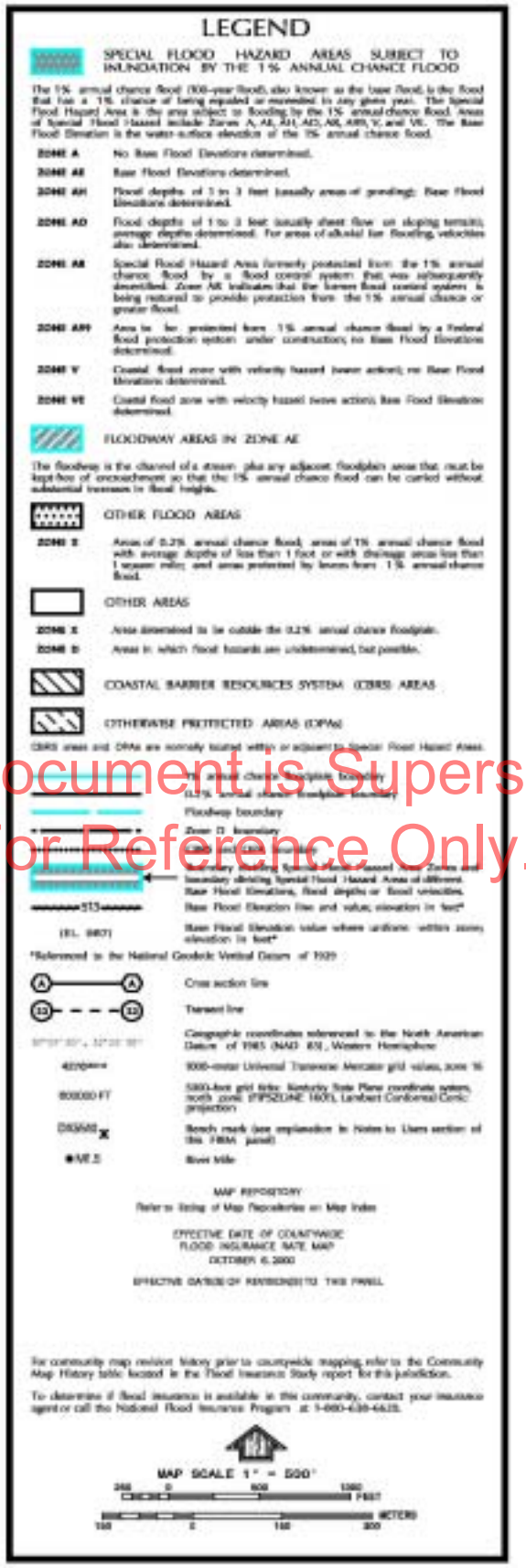

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A — No Base Flood Elevations determined.

ZONE AE — Base Flood Elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR — Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 — Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V — Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream, plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary

0.2% annual chance floodplain boundary

Floodway boundary

Zone D boundary

Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

513 — Base Flood Elevation line and value; elevation in feet*

(EL. 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

A — A — Cross section line

13 — 13 — Transect line

32°07'30", 102°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere

4239000m — 1000-meter Universal Transverse Mercator grid values, zone 16

800000 FT — 5000-foot grid ticks: Kentucky State Plane coordinate system, north zone (FIPSZONE 1601), Lambert Conformal Conic projection

DX5513 X — Bench mark (see explanation in Notes to Users section of this FIRM panel)

• M1.5 — River Mile

MAP REPOSITORY

Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE

FLOOD INSURANCE RATE MAP

OCTOBER 6, 2000

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in 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.

MAP SCALE 1" = 500'

200 0 500 1000 FEET

150 0 150 300 METERS

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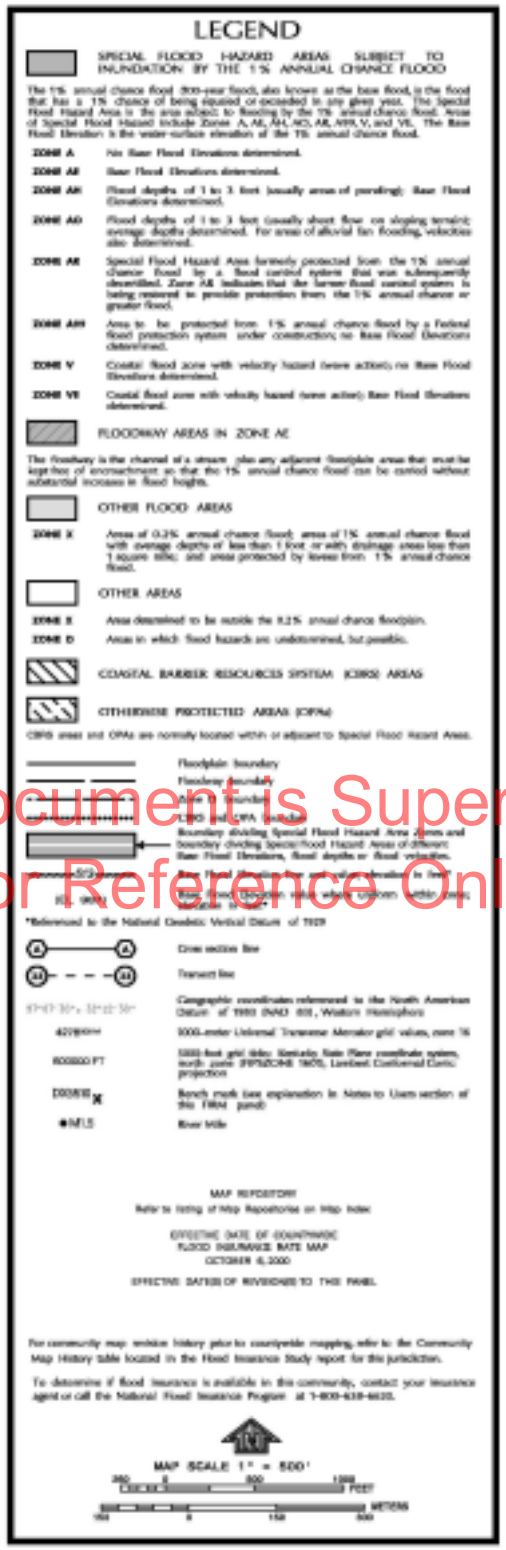
Figure K-17. Countywide Digital FIRM, Orthophoto Base Map Legend



This Document Is Superseded.
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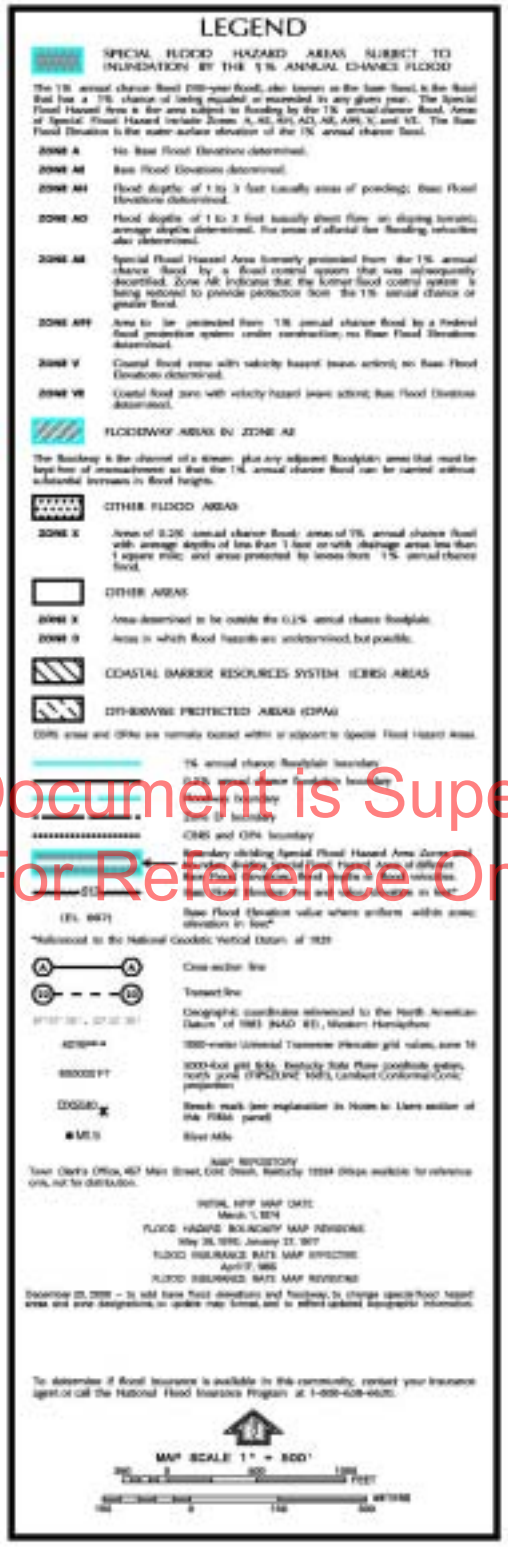
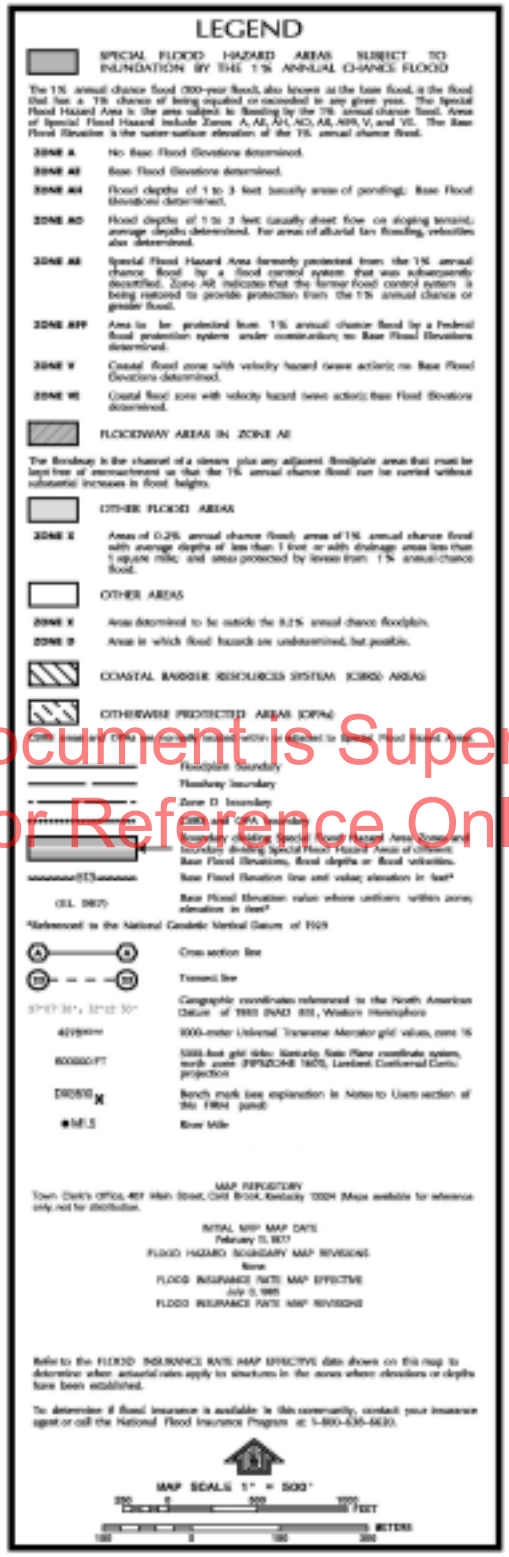
Figure K-18. Countywide Digital FIRM, Vector Base Map Legend



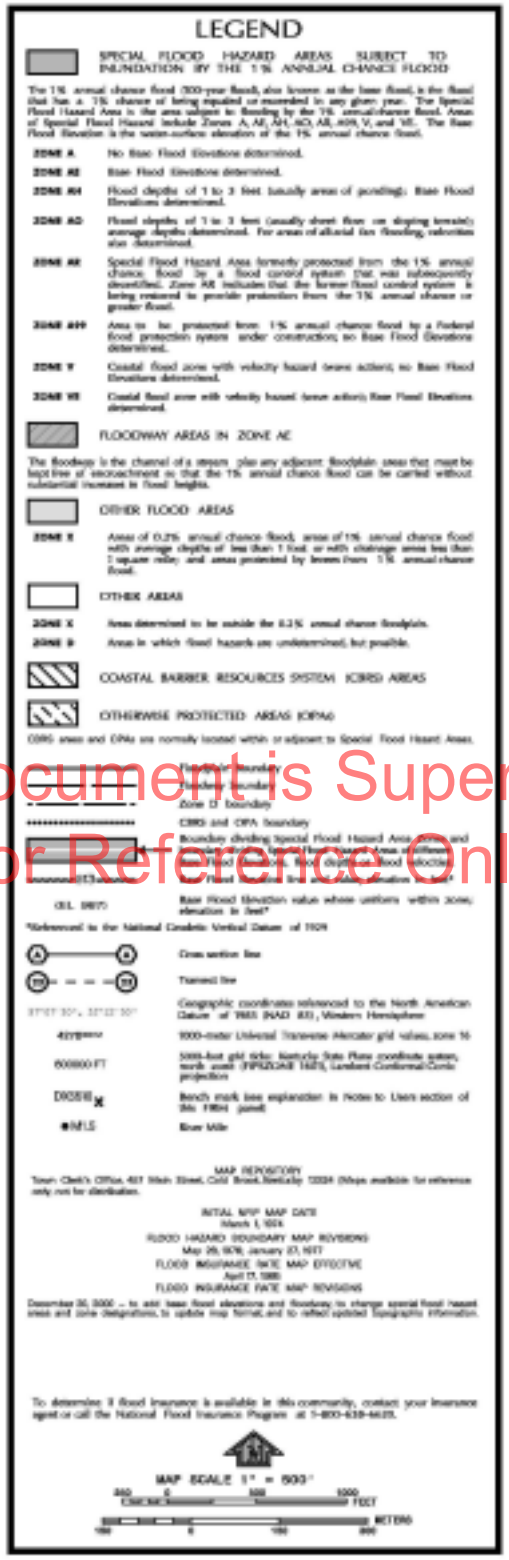
This Document is Superseded.
For Reference Only.

Figure K-19. Single-Jurisdiction Digital FIRM, Orthophoto Base Map, Map Revised Legend



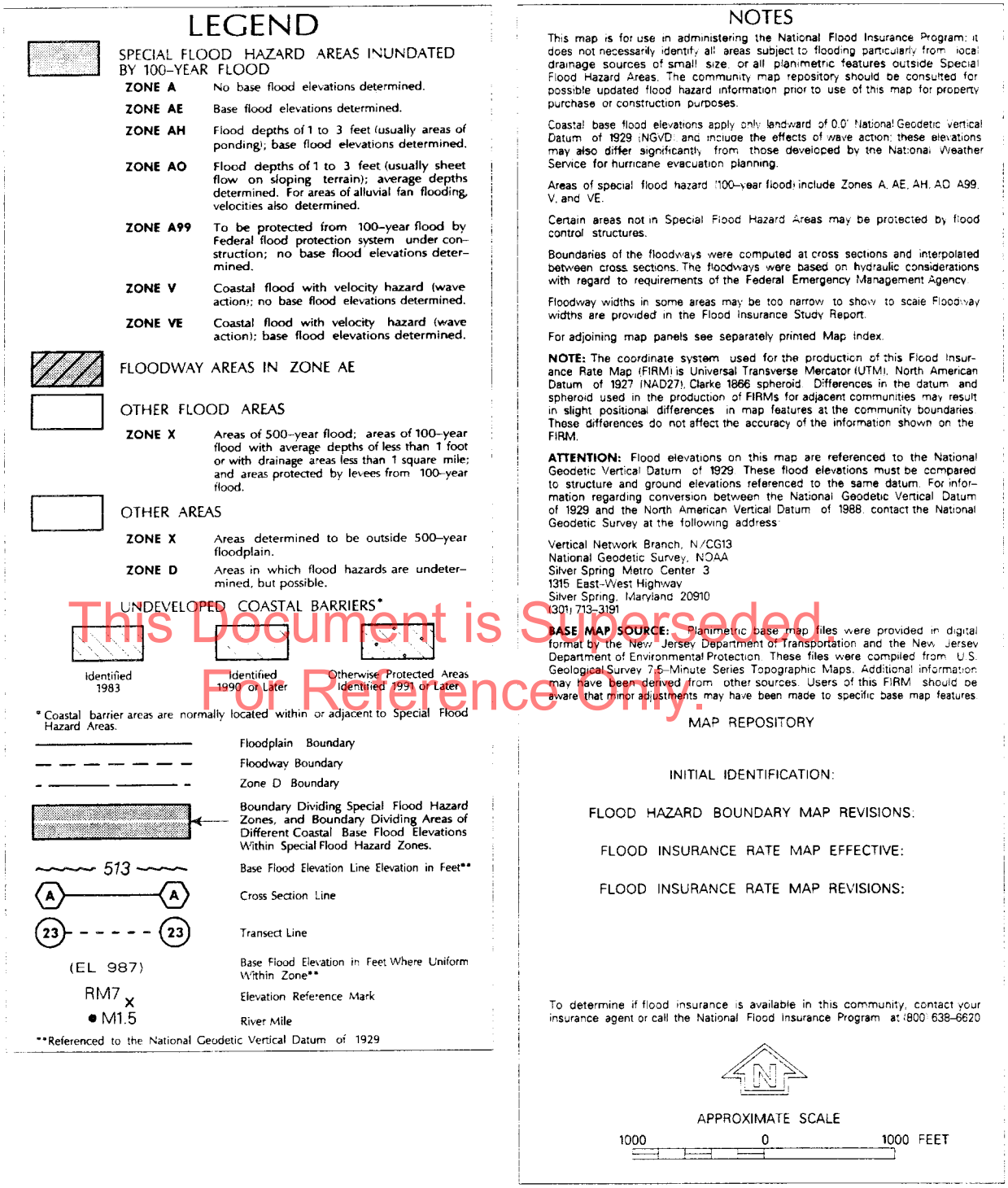
This Document is Superseded.
For Reference Only.

Figure K-20. Single-Jurisdiction Digital FIRM, Vector Base Map



This Document is Superseded.
For Reference Only.

Figure K-21. Single-Jurisdiction Digital FIRM, Vector Base Map, Map Revised Legend



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

ZONE A No base flood elevations determined.

ZONE AE Base flood elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE A99 To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.

ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.

ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

ZONE X Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

ZONE X Areas determined to be outside 500-year floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

UNDEVELOPED COASTAL BARRIERS*

Identified 1983 | Identified 1990 or Later | Otherwise Protected Areas Identified 1991 or Later

* Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

513 — Base Flood Elevation Line Elevation in Feet**

A — A — Cross Section Line

23 - - - - - 23 — Transect Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone**

RM7 x — Elevation Reference Mark

• M1.5 — River Mile

**Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for possible updated flood hazard information prior to use of this map for property purchase or construction purposes.

Coastal base flood elevations apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD) and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Areas of special flood hazard (100-year flood) include Zones A, AE, AH, AO, A99, V, and VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Floodway widths are provided in the Flood Insurance Study Report.

For adjoining map panels see separately printed Map Index.

NOTE: The coordinate system used for the production of this Flood Insurance Rate Map (FIRM) is Universal Transverse Mercator (UTM), North American Datum of 1927 (NAD27), Clarke 1866 spheroid. Differences in the datum and spheroid used in the production of FIRMs for adjacent communities may result in slight positional differences in map features at the community boundaries. These differences do not affect the accuracy of the information shown on the FIRM.

ATTENTION: Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, contact the National Geodetic Survey at the following address:

Vertical Network Branch, N/CG13
National Geodetic Survey, NOAA
Silver Spring Metro Center 3
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

BASE MAP SOURCE: Planimetric base map files were provided in digital format by the New Jersey Department of Transportation and the New Jersey Department of Environmental Protection. These files were compiled from U.S. Geological Survey 7.5-Minute Series Topographic Maps. Additional information may have been derived from other sources. Users of this FIRM should be aware that minor adjustments may have been made to specific base map features.

MAP REPOSITORY

INITIAL IDENTIFICATION:

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:

FLOOD INSURANCE RATE MAP REVISIONS:

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

N

APPROXIMATE SCALE

1000 0 1000 FEET

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Figure K-22. Single-Jurisdiction Manual FIRM, Map Initiatives Format, Map Revised Legend

KEY TO MAP

500-Year Flood Boundary	ZONE B
100-Year Flood Boundary	ZONE A1
Zone Designations	ZONE A5
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation in Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7×
Zone D Boundary	
River Mile	•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the Special Flood Hazard Areas (zones A and V) may be protected by flood control structures.

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas.

Coastal base flood elevations apply only landward of 0.0 NGVD.

For adjoining map panels see separately printed Map Index.

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Figure K-23. Single-Jurisdiction Manual FIRM, Standard Format Legend

K.5.1 Map Legend Components [April 2003]

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

- Flood hazard area and CBRS area screen descriptions;
- Flood insurance risk zone descriptions;
- Floodplain, regulatory floodway, and CBRS boundary descriptions;
- BFE and elevation labels, including a clear statement of the vertical datum used;
- Cross-section and transect labels;
- Geographic coordinate and primary and secondary horizontal reference grid labels, with notes stating the reference grids and projection used;
- Bench marks;
- River mile markers;
- Map repository notes;
- NFIP map dates;
- Map revision notes;
- General FIRM legend notes;
- North arrow; and
- Map scale.

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Map revision notes document the reasons for past and present FIRM revisions. The assigned Mapping Partner shall use one or more of the notes in Table K-19 to explain why a panel was revised. Revision notes shall be grouped under one date when applied to the same revision. All dates shall be written out in their entirety.

The map revision notes that are used for each FIRM revision shall be date-specific rather than panel-specific. All actions occurring on a specific date shall be combined into one map revision note and used on all panels for that particular revision. In addition, notes shall not be used on the first production of a countywide FIRM, even though these changes have occurred within the Flood Map Project that led to the countywide FIRM being developed. For map revision notes pertaining to Coastal Barriers, see Subsection K.5.1.1.

Table K-19. Map Legend Features and Notes

Example	Feature/Usage	Specification
LEGEND	Legend title	18 Pt. Verdana CAPS
SPECIAL FLOOD HAZARD AREAS SUBJECT TO….	Screen descriptions	10 Pt. Tahoma CAPS
ZONE AE	Zone labels	8 Pt. Arial Bold CAPS
Base Flood Elevations determined.	Zone or other map feature descriptions	8 Pt. Tahoma CLC
MAP REPOSITORY Thomasville City Hall, 10 Salem Street, Thomasville, North Carolina 27360 (Maps available for reference only, not for distribution.)	This is an example of the Map Repository note used for single-jurisdiction or non-countywide FIRMs. The complete address of the map repository is included in the legend. The disclaimer, as stated, follows the address. Note that the Map Repository should be a street address and not a PO box.	**(Header)** 8 Pt. Arial CAPS **(Address & Reference Note)** 8 Pt. Arial CLC
MAP REPOSITORIES Refer to Map Repositories list on Map Index	This note explains the location of the Map Repositories list used for countywide FIRMs. The map repository address for each floodprone community shown on the FIRM is listed on the Map Index. See Subsection K.3.2.2 for an example of a Map Repositories list.	8 Pt. Arial CLC
Geographic coordinates referenced to [*datum*], Western Hemisphere	This note identifies the horizontal datum of the geographic (latitude and longitude) coordinates shown at the four corners of each map panel. The note references either the North American Datum of 1927 or the North American Datum of 1983, whichever is used for the digital files.	8 Pt. Tahoma CLC
[*interval*]-meter Universal Transverse Mercator grid values, zone [*zone*]	This note identifies the projection of the primary horizontal reference grid shown on the FIRM, its interval, and zone. The grid interval shown depends on the scale(s) of the map.	8 Pt. Tahoma CLC

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Table K-19. Map Legend Features and Notes ***Font specifications that cannot be matched may be approximated**		
Example	**Feature/Usage**	**Specification**
[*interval*]-foot grid ticks: [*State*] State Plane coordinate system, [*zone*] zone (FIPSZONE [*zone identifier*]), [*projection*]	This note identifies the projection of the secondary horizontal reference grid ticks, their interval, and zone. The grid interval shown depends on the scale(s) of the map. This note references the State Plane zone (both spelled out and by FIPSZONE) if more than one zone is used in the state.	8 Pt. Tahoma CLC
INITIAL IDENTIFICATION [*date*] FLOOD HAZARD BOUNDARY MAP REVISIONS None FLOOD INSURANCE RATE MAP EFFECTIVE [*date*] FLOOD INSURANCE RATE MAP REVISIONS [*date*] – to add Base Flood Elevations, floodway, and Special Flood Hazard Areas; to change zone designations and Special Flood Hazard Areas; to update map format; and to reflect updated topographic information.	These headings and sample listings of NFIP map dates are used for manual single-jurisdiction studies. Historical map dates shall be listed in the FIRM legend for each printed panel. Dates may be supplied from various sources including the previous effective map. Standard map revision notes are provided below. See Subsection K.5.1.1 for standard Coastal Barrier revision notes.	8 Pt. Arial CLC
INITIAL NFIP MAP DATE [*date*] FLOOD HAZARD BOUNDARY MAP REVISIONS None FLOOD INSURANCE RATE MAP EFFECTIVE [*date*] FLOOD INSURANCE RATE MAP REVISIONS [*date*] – to add Base Flood Elevations, floodway, and Special Flood Hazard Areas; to change zone designations and Special Flood Hazard Areas; to update map format; and to reflect updated topographic information.	The Initial NFIP Map Date heading will be used on all digital single-jurisdiction studies.	8 Pt. Arial CLC
EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP [*date*] EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL [*date*] – to update corporate limits, to change Base Flood Elevations and Special Flood Hazard Areas, to update map format, to add roads and road names, to incorporate previously issued Letters of Map Revision, and to modify Coastal Barrier Resources System units.	These headings and sample listings of NFIP map dates are used for countywide studies. The revision information is only shown for countywide studies. See Appendix J for information on previous historical map dates for countywide FIRMs.	8 Pt. Arial CLC

This Document is Superseded.
For Reference Only.

Table K-19. Map Legend Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
[*date of revision*] - to update corporate limits	This note is used any time a revised FIRM shows a new corporate limit configuration. If an Area Not Included boundary is revised on the FIRM for the unincorporated areas of a county, this note specifically references the community (i.e., to update Town of Atlantic Beach corporate limits). An example date shown in italics has been placed in the note for clarity.	8 Pt. Arial CLC
[*date of revision*] - to decrease Base Flood Elevations	This note is used any time existing BFEs have only been decreased.	8 Pt. Arial CLC
[*date of revision*] - to increase Base Flood Elevations	This note is used any time existing BFEs have only been increased	8 Pt. Arial CLC
[*date of revision*] - to change Base Flood Elevations	This note is used when BFEs are both increasing and decreasing.	8 Pt. Arial CLC
[*date of revision*] - to add Base Flood Elevations	This note is used when BFEs are added to a new detailed A or V zone for an area previously unstudied or previously studied by approximate methods.	8 Pt. Arial CLC
[*date of revision*] - to add Special Flood Hazard Areas	This note is used when new detailed or approximate 1% annual chance flooding is added to an area previously unstudied.	8 Pt. Arial CLC
[*date of revision*] - to change Special Flood Hazard Areas	This note is used when the configuration of an existing SFHA is modified, or when the SFHA is redesignated.	8 Pt. Arial CLC
[*date of revision*] - to delete Special Flood Hazard Areas	This note is used when an SFHA is entirely removed from the FIRM.	8 Pt. Arial CLC
[*date of revision*] - to change zone designations	This note is used when X (0.2% annual chance) zones are changed to X (no flooding) zones, or vice versa; when A zones are changed to X (0.2% annual chance) zones; and when A or V zones are changed to detailed zones (AE or VE zones).	8 Pt. Arial CLC

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Table K-19. Map Legend Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
[*date of revision*] - to update map format	This note is used when an 11" x 17" FIRM is remapped into a z-fold, when a FIRM and FBFM are combined into a FIRM (Map Initiatives or Partial Map Initiatives), or when the FIRM is being prepared using digital methods for the first time.	8 Pt. Arial CLC
[*date of revision*] - to add roads and road names	This note is used when new roads and road names are added to the FIRM. Replace "add" with "update" when roads are moved or deleted, or when the names of roads change.	8 Pt. Arial CLC
[*date of revision*] - to reflect the incorporation of the [*community type*] of [*community name*]	This note is used when a new community is formed from the unincorporated areas of a county. Replace "incorporation" with "creation" for special jurisdictions such as municipal utility or water supply districts.	8 Pt. Arial CLC
[*date of revision*] - to include the effects of wave action	This note is used when a coastal wave height analysis has been added for the first time to an existing "non-wave height" FIS. Please note that revision notes covering BFE and SFHA additions, deletions, changes or modifications are not necessary when this note is used to describe changes to the FIRM resulting from the addition of a wave height analysis.	8 Pt. Arial CLC
[*date of revision*] – to update the effects of wave action	This note is used when a coastal wave height analysis has been revised.	8 Pt. Arial CLC
[*date of revision*] - to incorporate Primary Frontal Dune analysis	This note is used when an FIS is revised to reflect the inland limit of the Primary Frontal Dune.	8 Pt. Arial CLC
[*date of revision*] – to reflect revised shoreline	This note is used when all or part of the shoreline on a coastal FIRM has been revised.	8 Pt. Arial CLC

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For Reference Only.

Table K-19. Map Legend Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
[*date of revision*] - to reflect the effects of coastal erosion	This note is used when coastal erosion has been taken into account in the analysis.	8 Pt. Arial CLC
[*date of revision*] - to add Special Flood Hazard Areas previously shown on [*community name, state*] Flood Insurance Rate Map dated [*date*]	This note is used when a FIRM revision incorporates the annexation of an area with special flood hazards that was previously shown on another community's FIRM.	8 Pt. Arial CLC
[*date of revision*] - to incorporate previously issued Letters of Map Revision	This note is used when determinations made by Letter of Map Revision are incorporated into the revised FIRM. The original reasons for processing the LOMRs are not indicated.	8 Pt. Arial CLC
[*date of revision*] - to reflect updated topographic information	This note is used when the FIRM revision is based, at least in part, on new topographic information.	8 Pt. Arial CLC
[*date of revision*] - to incorporate previously issued Letters of Map Amendment	This note is used when determinations made by Letter of Map Amendment are incorporated into the revised FIRM.	8 Pt. Arial CLC
[*date of revision*] - to add floodway	This note is used when floodway delineation has been added. This note is used only on Map Initiatives format FIRMs.	8 Pt. Arial CLC
[*date of revision*] - to change floodway	This note is used when a floodway delineation change is the sole basis of the revision. This note is used only on Map Initiatives format FIRMs.	8 Pt. Arial CLC
[*date of revision*] - to advance suffix	This note is used when the only change to the FIRM is to change the map number suffix. This note is used only with the approval of a FEMA Project Officer.	8 Pt. Arial CLC
For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.	This note is shown only on countywide FIRMs.	8 Pt. Tahoma CLC

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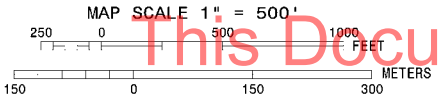
For Reference Only.

Table K-19. Map Legend Features and Notes ***Font specifications that cannot be matched may be approximated**		
Example	**Feature/Usage**	**Specification**
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 is shown on all FIRMs above the north arrow.	8 Pt. Tahoma CLC
Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.	This note is shown only on single-jurisdiction FIRMs that are being published for the first time (i.e., FIRMs that show an effective date in the title block, not a map revised date).	8 Pt. Tahoma CLC
	North arrow	Line weight .010” Width .700” Height .400”
	The digital FIRM scale bar includes references to both feet and meters and emulates the scale bar used by USGS on topographic quadrangles. The manual FIRM scale bar only includes the reference to feet. Note that this scale bar is not shown to actual size.	Line weight .010” **(Scale Bar [Feet])** Length: 2.5” **(Scale Bar [Meters])** Length: 3.0” **(Map Scale Note)** 10 Pt. Arial Bold CAPS **(Scale Bar Labels)** 10 Pt. Arial CAPS

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K.5.1.1 Coastal Barrier Resources System Map Revision Notes [February 2002]

The map revision notes pertaining to modifications of the Coastal Barrier Resources System are listed below. The Coastal Barrier revision notes matrix below provides guidance on the revision note to be used in the FIRM legend. The note used depends on whether CBRS areas and/or OPAs are being added to or removed from the community. Only one of the notes shown is used for any given community, so it must reflect the community as a whole. These revision notes, presented in Table K-20, are not panel-specific. They must reflect the action taken for the entire jurisdiction.

Revision Note	Barrier Added	Barrier Removed[1]	OPA Added	OPA Removed[1]
To add Coastal Barrier Resources Areas	x			
To remove Coastal Barrier Resources Areas		x		
To modify Coastal Barrier Resources Areas	x	x		
To add Otherwise Protected Areas			x	
To remove Otherwise Protected Areas				x
To modify Otherwise Protected Areas			x	x
To add Coastal Barrier Resources Areas and Otherwise Protected Areas	x		x	
To add Coastal Barrier Resources Areas and to remove Otherwise Protected Areas	x			x
To add Coastal Barrier Resources Areas and to modify Otherwise Protected Areas	x		x	x
To remove Coastal Barrier Resources Areas and to add Otherwise Protected Areas		x	x	
To remove Coastal Barrier Resources Areas and Otherwise Protected Areas		x		x
To remove Coastal Barrier Resources Areas and to modify Otherwise Protected Areas		x	x	x
To modify Coastal Barrier Resources Areas and to add Otherwise Protected Areas	x	x	x	
To modify Coastal Barrier Resources Areas and to remove Otherwise Protected Areas	x	x		x
To modify Coastal Barrier Resources Areas and Otherwise Protected Areas	x	x	x	x

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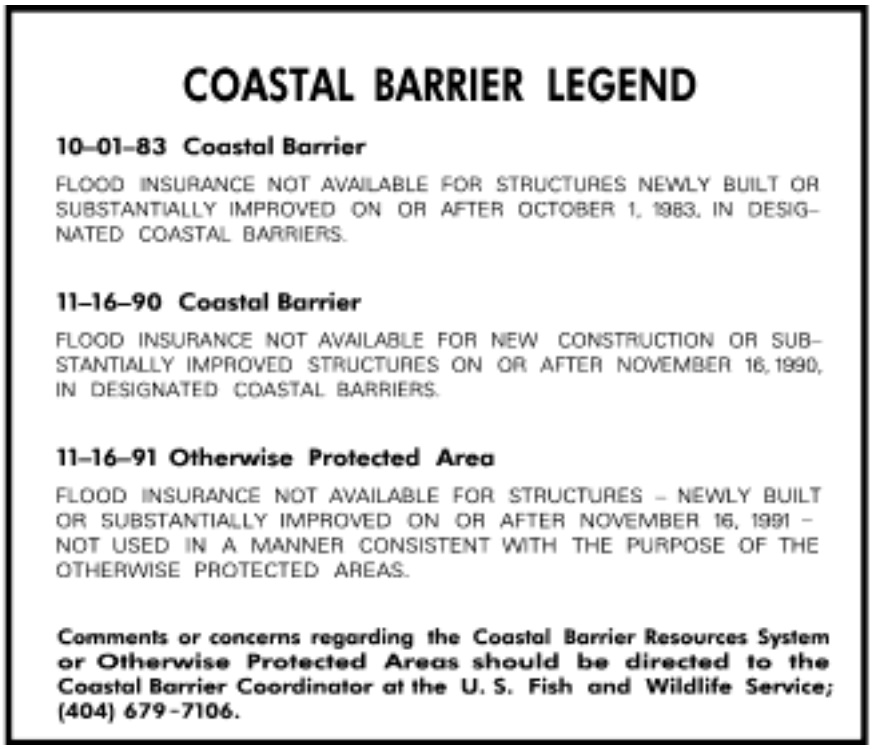
[1]This refers to any area, regardless of size, that has had the CBRS unit or OPA reduced in size in any area.

K.5.1.2 Coastal Barrier Resource System Legend [April 2003]

The Mapping Partner shall use a Coastal Barrier Legend with the abbreviated Coastal Barrier identification notes that appear on the body of the FIRM. This legend shall be placed under the Notes to Users section of the FIRM border in a separate frame area, and shall show the full CBRS identification note for each classification of CBRS unit present on all of the FIRM panels in the community or county. The identification notes shall be listed in chronological order. A Coastal Barrier Legend example (Figure K-24) is provided below, followed by Table K-21, of the specifications for features and notes.



COASTAL BARRIER LEGEND

10–01–83 Coastal Barrier

FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER OCTOBER 1, 1983, IN DESIGNATED COASTAL BARRIERS.

11–16–90 Coastal Barrier

FLOOD INSURANCE NOT AVAILABLE FOR NEW CONSTRUCTION OR SUBSTANTIALLY IMPROVED STRUCTURES ON OR AFTER NOVEMBER 16, 1990, IN DESIGNATED COASTAL BARRIERS.

11–16–91 Otherwise Protected Area

FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES – NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER NOVEMBER 16, 1991 – NOT USED IN A MANNER CONSISTENT WITH THE PURPOSE OF THE OTHERWISE PROTECTED AREAS.

Comments or concerns regarding the Coastal Barrier Resources System or Otherwise Protected Areas should be directed to the Coastal Barrier Coordinator at the U. S. Fish and Wildlife Service; (404) 679-7106.

This Document is Superseded.

Figure K-24. Coastal Barrier Legend

For Reference Only.

Table K-21. Coastal Barrier Legend Features and Notes

Example	Feature/Usage	Specification
COASTAL BARRIER LEGEND	Coastal Barrier legend title	18 Pt. Arial Bold CAPS
10-01-83 Coastal Barrier FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER OCTOBER 1, 1983, IN DESIGNATED COASTAL BARRIERS.	This note identifies an area classified as a 1983 Coastal Barrier. This note is placed in the Coastal Barrier Legend when the abbreviated version of this note is used on the body of the FIRM.	10 Pt. Arial Bold CLC 9 Pt. Arial CAPS
(_ _-_ _-_ _) Coastal Barrier FLOOD INSURANCE NOT AVAILABLE FOR NEW CONSTRUCTION OR SUBSTANTIALLY IMPROVED STRUCTURES ON OR AFTER (*date*), IN DESIGNATED COASTAL BARRIERS.	This note identifies an area classified as a 1990 or later Coastal Barrier. This note is placed in the Coastal Barrier Legend when the abbreviated version of this note is used on the body of the FIRM.	10 Pt. Arial Bold CLC 9 Pt. Arial CAPS

Table K-21. Coastal Barrier Legend Features and Notes

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

Example	Feature/Usage	Specification
(_ _-_ _-_ _) Otherwise Protected Area FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES - NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER (date) - NOT USED IN A MANNER CONSISTENT WITH THE PURPOSE OF THE OTHERWISE PROTECTED AREAS.	This note identifies an area classified as a 1991 or later Otherwise Protected Area. This note is placed in the Coastal Barrier Legend when the abbreviated version of this note is used on the body of the FIRM.	10 Pt. Arial Bold CLC 9 Pt. Arial CAPS
Comments or concerns regarding the Coastal Barrier Resources System or Otherwise Protected Areas should be directed to the Coastal Barrier Coordinator at the U.S. Fish and Wildlife Service: (_ _ _) _ _ _-_ _ _ _.	This note refers map users to the Fish and Wildlife Service's Regional Coastal Barrier Coordinator. If the abbreviated Coastal Barrier notes and special Coastal Barrier Legend are used, this note appears below the Coastal Barrier Legend. The phone number is inserted into the above note as follows: **(413) 253-8657** CT, DE, MA, ME, MD, NJ, NY, RI, VA **(404) 679-7106** AL, FL, GA, LA, MS, NC, PR, SC, VI **(612) 713-5350** MI, MN, OH, WI **(505) 248-6454** TX	10 Pt. Arial Bold CLC
10-01-83 Coastal Barrier FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER OCTOBER 1, 1983, IN DESIGNATED COASTAL BARRIERS.	This note identifies an area classified as a 1983 Coastal Barrier. This note is placed in the Coastal Barrier Legend when the abbreviated version of this note is used on the body of the FIRM.	10 Pt. Arial Bold CLC 9 Pt. Arial CAPS
_ _-_ _-_ _ Coastal Barrier FLOOD INSURANCE NOT AVAILABLE FOR NEW CONSTRUCTION OR SUBSTANTIALLY IMPROVED STRUCTURES ON OR AFTER [*date*], IN DESIGNATED COASTAL BARRIERS.	This note identifies an area classified as a 1990 or later Coastal Barrier. This note is placed in the Coastal Barrier Legend when the abbreviated version of this note is used on the body of the FIRM. Insert the prohibition date of the subject CBRS unit as shown in Figure K-24.	10 Pt. Arial Bold CLC 9 Pt. Arial CAPS

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For Reference Only.

Table K-21. Coastal Barrier Legend Features and Notes ***Font specifications that cannot be matched may be approximated**		
Example	**Feature/Usage**	**Specification**
_ _-_ _-_ _ Otherwise Protected Area FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES - NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER [*date*] - NOT USED IN A MANNER CONSISTENT WITH THE PURPOSE OF THE OTHERWISE PROTECTED AREAS.	This note identifies an area classified as a 1991 or later Otherwise Protected Area. This note is placed in the Coastal Barrier Legend when the abbreviated version of this note is used on the body of the FIRM. Insert the prohibition date of the subject CBRS unit as shown in Figure K-24.	10 Pt. Arial Bold CLC 9 Pt. Arial CAPS
Comments or concerns regarding the Coastal Barrier Resources System or Otherwise Protected Areas should be directed to the Coastal Barrier Coordinator at the U.S. Fish and Wildlife Service; (_ _) _ _ _-_ _ _ _.	This note refers map users to the Fish and Wildlife Service's Regional Coastal Barrier Coordinator. It is placed below the CBRS identification notes in the Coastal Barrier Legend. If the full Coastal Barrier identification notes are used on the body of the FIRM instead of the abbreviated notes, the Coastal Barrier Coordinator note appears in the body of the FIRM panel close to the CBRS units. The phone number is inserted into the above note as follows: **(413) 253-8657** CT, DE, MA, ME, MD, NJ, NY, RI, VA **(404) 679-7106** AL, FL, GA, LA, MS, NC, PR, SC, VI **(612) 713-5350** MI, MN, OH, WI **(505) 248-6454** TX	10 Pt. Arial Bold CLC

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K.6 Map Title Block **[April 2003]**

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. The community name must include, at a minimum, the community type (e.g., city, town, village, etc.), community name, and full state name. FIRMs for individual communities shall also include the name of the county, except in the cases of jurisdictions that are officially classified as "Independent." County FIRMs may include flood hazard information only for unincorporated areas administered directly by the county government, or for the entire geographic area within the county. "All Jurisdictions" FIRMs include flood hazard information for entire counties in which no separate county government exists; all land is administered by community agencies.

The title block shall include the identifying community information shown in the following examples of naming formats. These examples illustrate proper punctuation, line breaks, and wording (font types, sizes, and other specifications are shown in Figure K-30):

TOWN OF
ADAMS,
PENNSYLVANIA
JEFFERSON COUNTY

CITY OF
HAMPTON,
VIRGINIA
INDEPENDENT CITY

BOONE COUNTY,
ILLINOIS
(UNINCORPORATED AREAS)

CARBON COUNTY,
UTAH
AND INCORPORATED AREAS

PIKE COUNTY,
PENNSYLVANIA
(ALL JURISDICTIONS)

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For Reference Only.

The following pages contain figures of sample title blocks for the following different types of FIRMs:

Countywide Digital FIRM (Figure K-25);

Countywide Digital FIRM with CBRS Areas (Figure K-26);

Single-Jurisdiction Multiple-Panel Digital FIRM (Figure K-27);

Single-Jurisdiction Digital FIRM, Only Panel Printed (Figure K-28); and

Single-Jurisdiction Manual FIRM (Figure K-29).

Font size and style specifications are provided in Figure K-30. Figures K-31 and K-32 provide important information concerning the title block content.

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0333C

FIRM

FLOOD INSURANCE RATE MAP

PIKE COUNTY,
PENNSYLVANIA
(ALL JURISDICTIONS)

PANEL 333 OF 530

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DINGMAN, TOWNSHIP OF	421964	0333	C
MILFORD, BOROUGH OF	420759	0333	C
MILFORD, TOWNSHIP OF	422642	0333	C
WESTFALL, TOWNSHIP OF	421970	0333	C

This Document is Superseded.
For Reference Only.

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
42103C0333C

EFFECTIVE DATE
OCTOBER 6, 2000

Federal Emergency Management Agency

Figure K-25. Countywide Digital FIRM Title Block

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0038D

FIRM

FLOOD INSURANCE RATE MAP

FLOOD COUNTY,
USA
AND INCORPORATED AREAS

PANEL 38 OF 40

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FLOOD COUNTY	990099	0038	D
FLOODVILLE, TOWN OF	990098	0038	D

This Document is Superseded.
For Reference Only.

–NOTE–

THIS MAP INCORPORATES APPROXIMATE BOUNDARIES OF COASTAL BARRIER RESOURCES SYSTEM UNITS AND/OR OTHERWISE PROTECTED AREAS ESTABLISHED UNDER THE COASTAL BARRIER IMPROVEMENT ACT OF 1990 (PL 101–591).

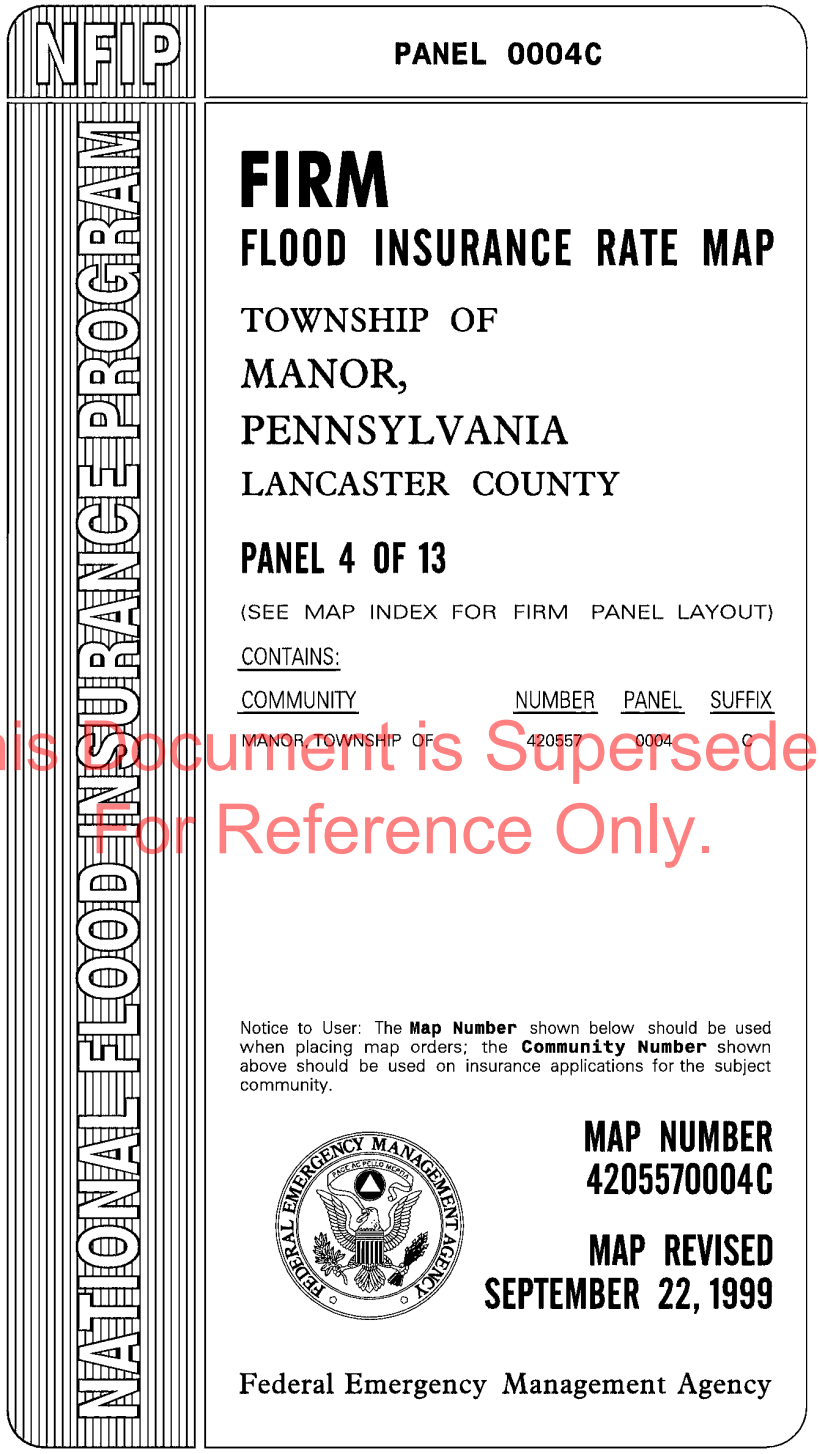
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
99009C0038D

EFFECTIVE DATE
AUGUST 19, 1998

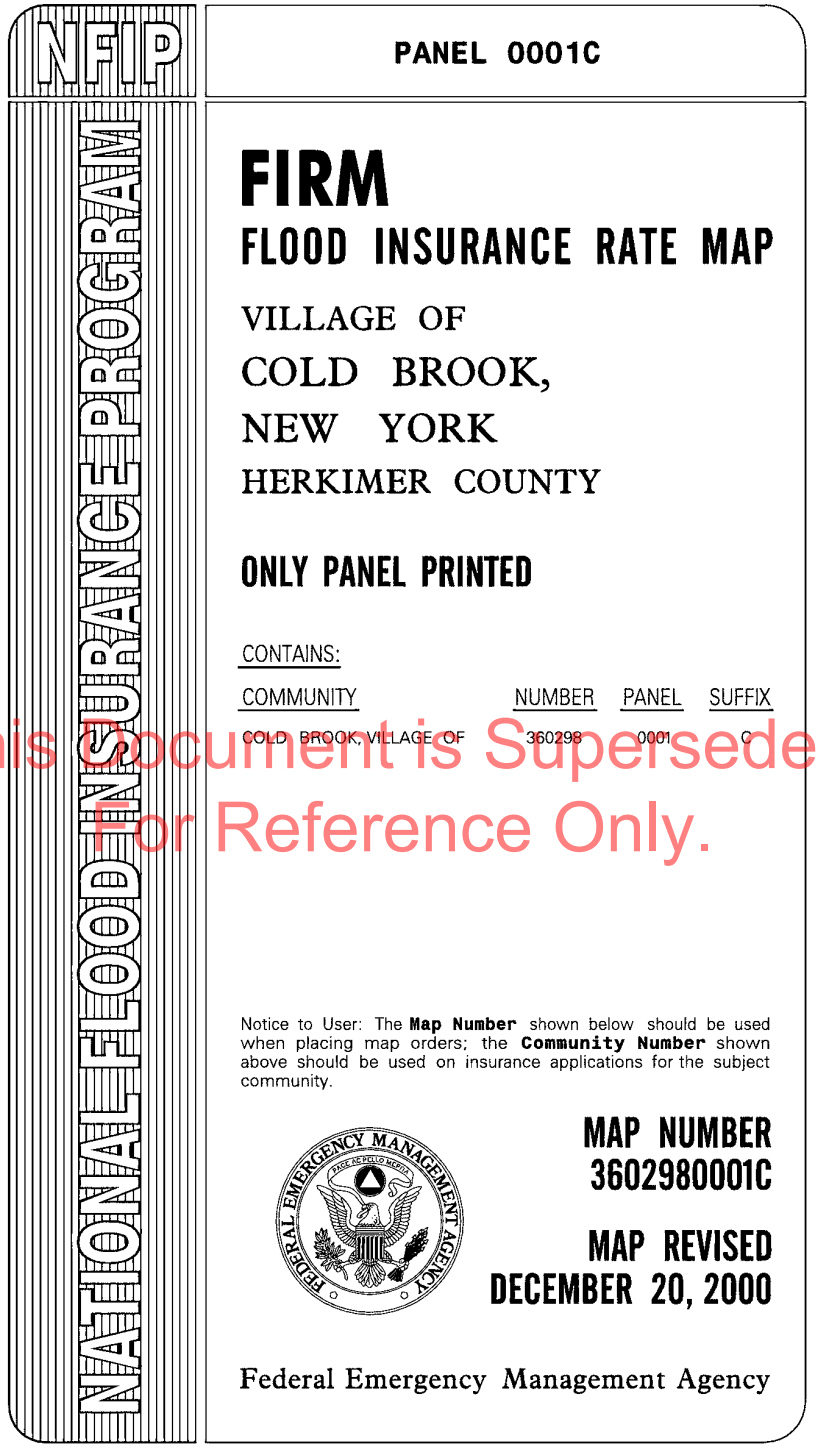
Federal Emergency Management Agency

Figure K-26. Countywide Digital FIRM Title Block with CBRS Areas



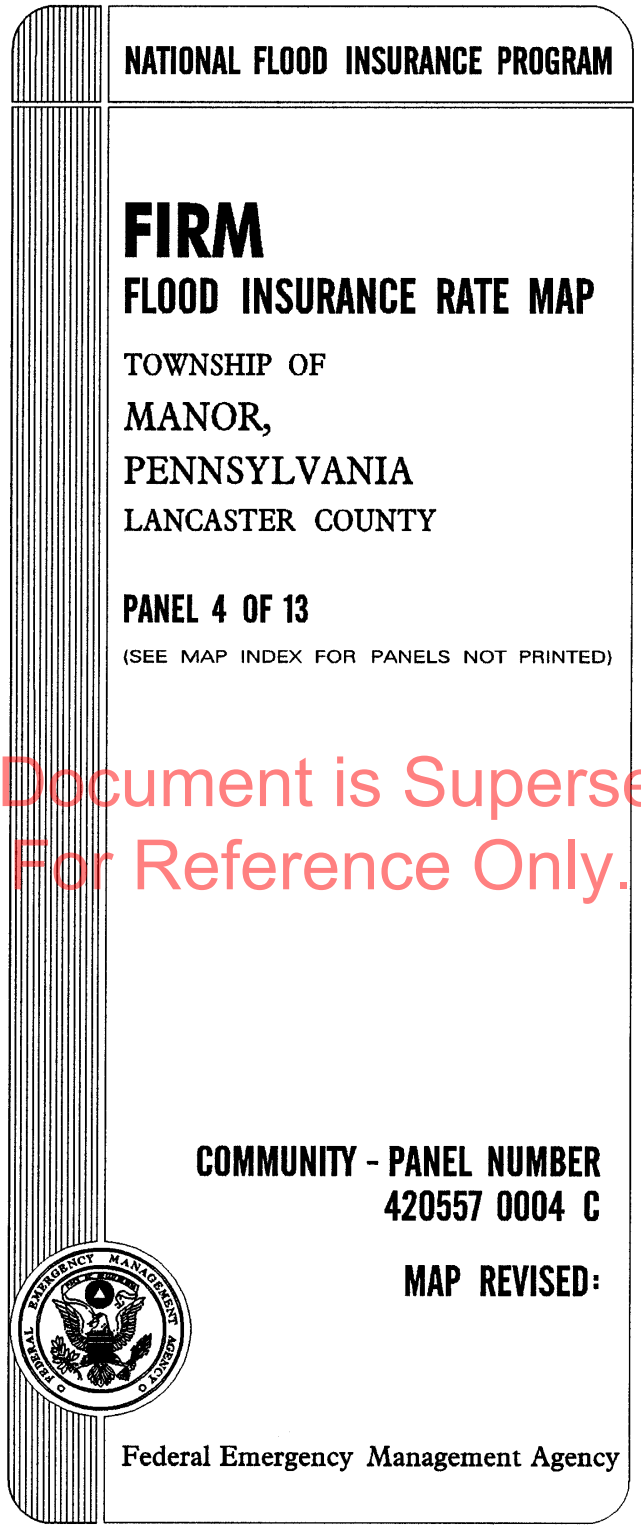
This Document is Superseded.
For Reference Only.

Figure K-27. Single-Jurisdiction Multiple-Panel Digital FIRM Title Block



This Document is Superseded.
For Reference Only.

Figure K-28. Single-Jurisdiction Digital FIRM Title Block, Only Panel Printed



This Document is Superseded.
For Reference Only.

Figure K-29. Single-Jurisdiction Manual FIRM Title Block

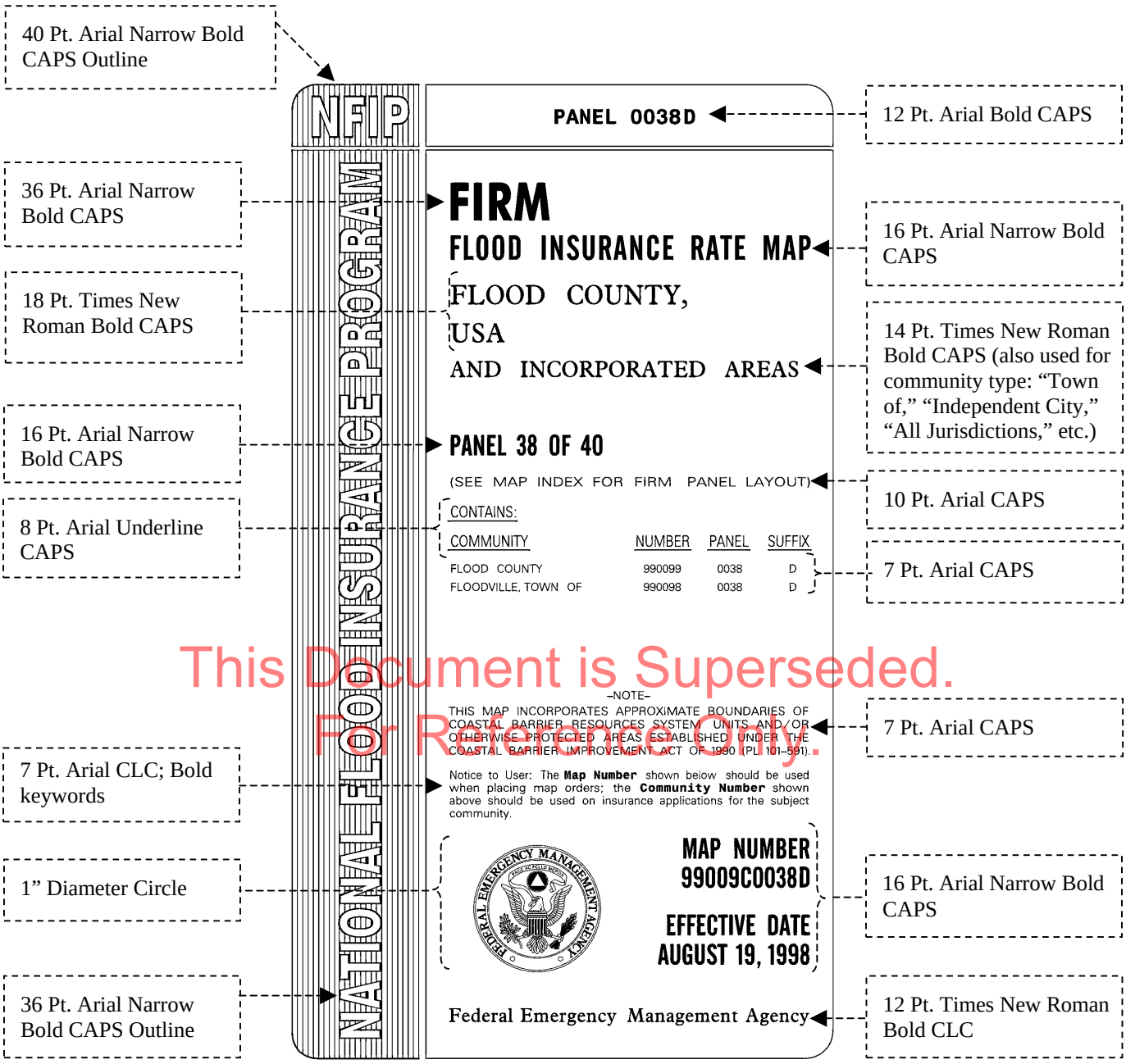


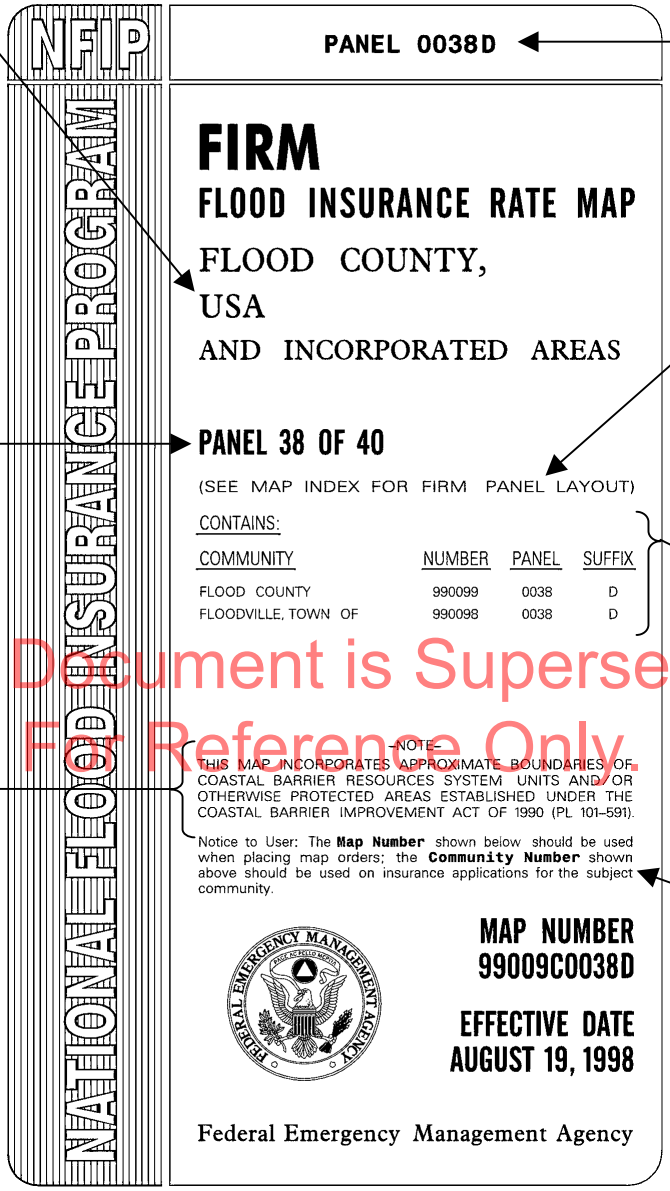
Figure K-30. Title Block Element Suggested Font Specifications

This example is based on a FIRM for a fictional community. When preparing title blocks, the state name is to be spelled out in full.

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 sheet.

The CBRS note used in this example must appear on every panel that contains a CBRS unit. If the map panel contains a CBRS or OPA unit established under an act subsequent to Public Law 101-591, the note shall be modified to include the applicable law, as in the example below:

THIS MAP INCORPORATES APPROXIMATE BOUNDARIES OF COASTAL BARRIER RESOURCES SYSTEM UNITS AND/OR OTHERWISE PROTECTED AREAS ESTABLISHED UNDER THE COASTAL BARRIER IMPROVEMENT ACT OF 1990 (PL 101-591) AND/OR THE WILD EXOTIC BIRD CONSERVATION ACT OF 1992 (PL 102-440).



This Document is Superseded.
For Reference Only.

The FIRM panel number and suffix are included at the top of the FIRM title block to assist in locating FIRM panels for those users who store the maps upright in filing cabinets.

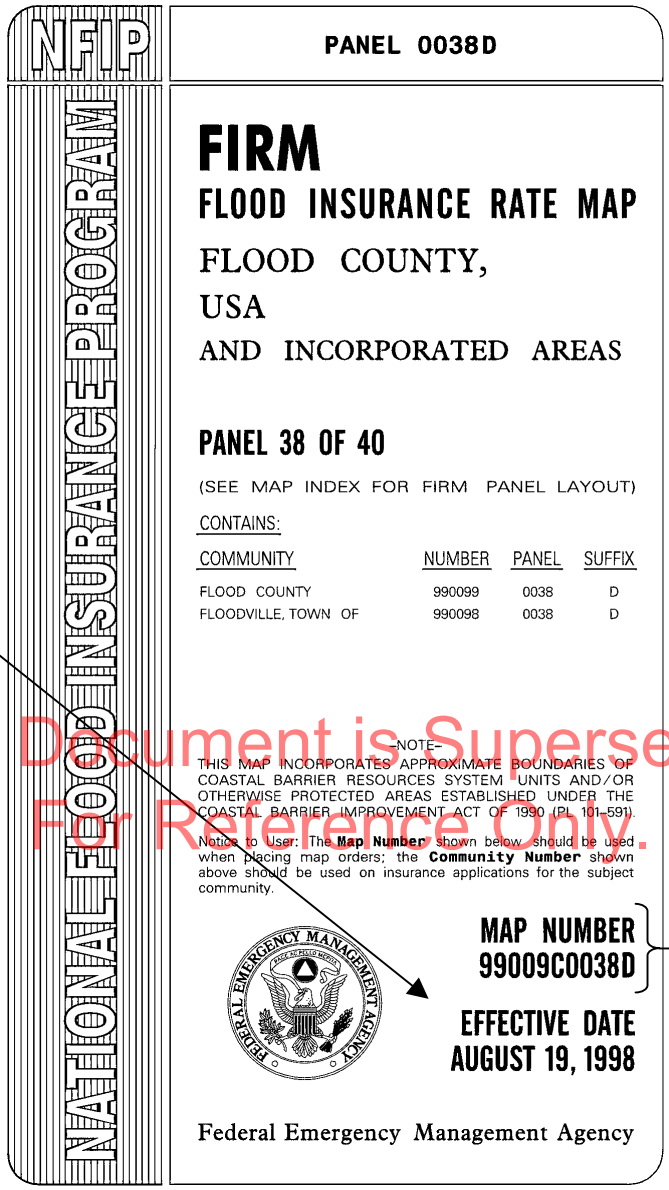
This note refers the map user to the index for an overview of the entire community. The note is omitted from "Only Panel Printed" FIRMs.

This list identifies the floodprone community (-ies) shown on the panel. For countywide FIRMs, the list includes any unincorporated areas of the county, if shown on the panel. For single-jurisdiction FIRMs, the list includes only the subject jurisdiction.

This note shall be placed on all FIRM title blocks to explain the use of the map number and the community number.

Figure K-31. Title Block Element Usage Notes

The effective date shall be absent when a Preliminary FIRM is issued, and added when the final FIRM is published. On revised FIRMs, "Effective Date" shall be replaced with "Map Re sed."



This Document is Superseded.
For Reference Only.

The Map Number is comprised of several components:

- either the 5-digit county FIPS code followed by "C" (on Countywide FIRMs) or the 6-digit community identification number;
- the 4-digit panel number; and
- the map suffix.

The map suffix is used to track published editions of each FIRM panel. All panels within a study do not necessarily have the same map suffix if they were not all updated at the same time. When each new edition of a FIRM is prepared, the suffix for each revised FIRM panel is changed to the next letter in alphabetical sequence, with the letter "I" being skipped. For first-time Countywide FIRMs, the suffix will be the next letter following the highest suffix letter of any FIRM panel of all the jurisdictions included in the countywide. Likewise, any FIRM being revised to reflect a completely new panel layout will have suffixes one letter higher than the highest letter of any previously published panel.

Figure K-32. Additional Title Block Element Usage Notes

K.7 Map Locator Diagram **[April 2003]**

Map Locator Diagrams serve the same function as a Map Index. The assigned Mapping Partner shall use the Map Locator Diagram only when one panel is printed and the entire community does not fit inside the panel neatlines (i.e., there are non-printed panels).

Figure K-33. Map Locator Diagram

The following guidelines shall be followed when preparing a Map Locator Diagram:

- The diagram shall be located in the title block, whenever possible.
- The diagram label font shall be Times New Roman bold CAPS; its size shall vary with space constraints and the size of the diagram.
- Because the Map Locator Diagram replaces the Map Index, the panels shall be numbered using four-digit panel numbers (for example, 0001) and include suffixes; the font shall be Arial CAPS; its size shall vary with space constraints and the size of the diagram.
- Applicable Panel Not Printed notes, presented in Subsection K.3.1, shall be used to explain the non-printed panel(s); the font shall be Arial CAPS; its size shall vary with space constraints and the size of the diagram.
- The panel that is printed shall be indicated with a 50%, 133-lines-per-inch screen tint or equivalent area fill pattern.
- The community boundary shall have a line weight of .01”; the neatline shall have a line weight of .006”.

This Document is Superseded.
For Reference Only.

K.8 Notes to Users [April 2003]

The "Notes to Users" section of the FIRM provides map users with general information about specific items on the FIRM, background and reference information about sources of data used to prepare the FIRM, and sources of additional information pertinent to specific items on the FIRM (e.g., bench marks). Key words shall be identified within the body of each note and highlighted in **bold** to assist the user in finding notes of interest.

The figures on the following pages contain sample Notes to Users for the following different types of FIRMs:

- Countywide Digital FIRM, Orthophoto Base Map (Figure K-34);
- Countywide Digital FIRM, Vector Base Map (Figure K-35);
- Single-Jurisdiction Multiple-Panel Digital FIRM, Orthophoto Base Map (Figure K-36); and
- Single-Jurisdiction Digital FIRM, Orthophoto Base Map, Only Panel Printed (Figure K-37).

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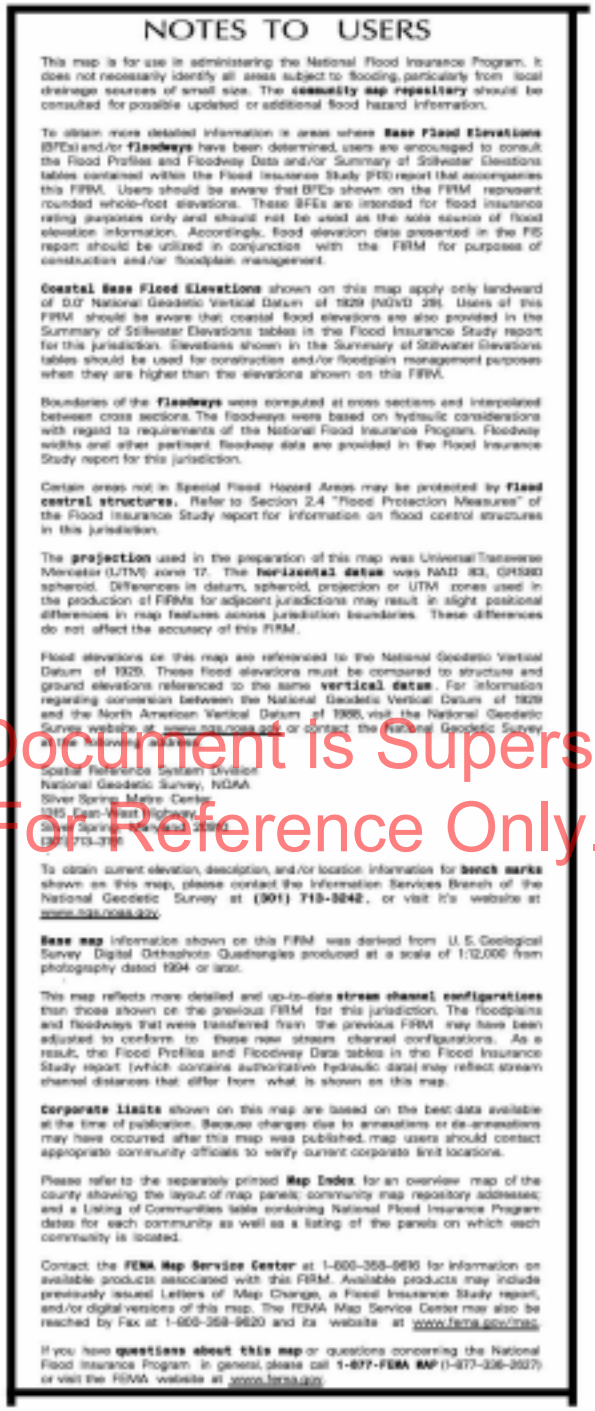
For Reference Only.



NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 17. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit it's website at www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1994 or later.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at www.fema.gov/msc.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at www.fema.gov.

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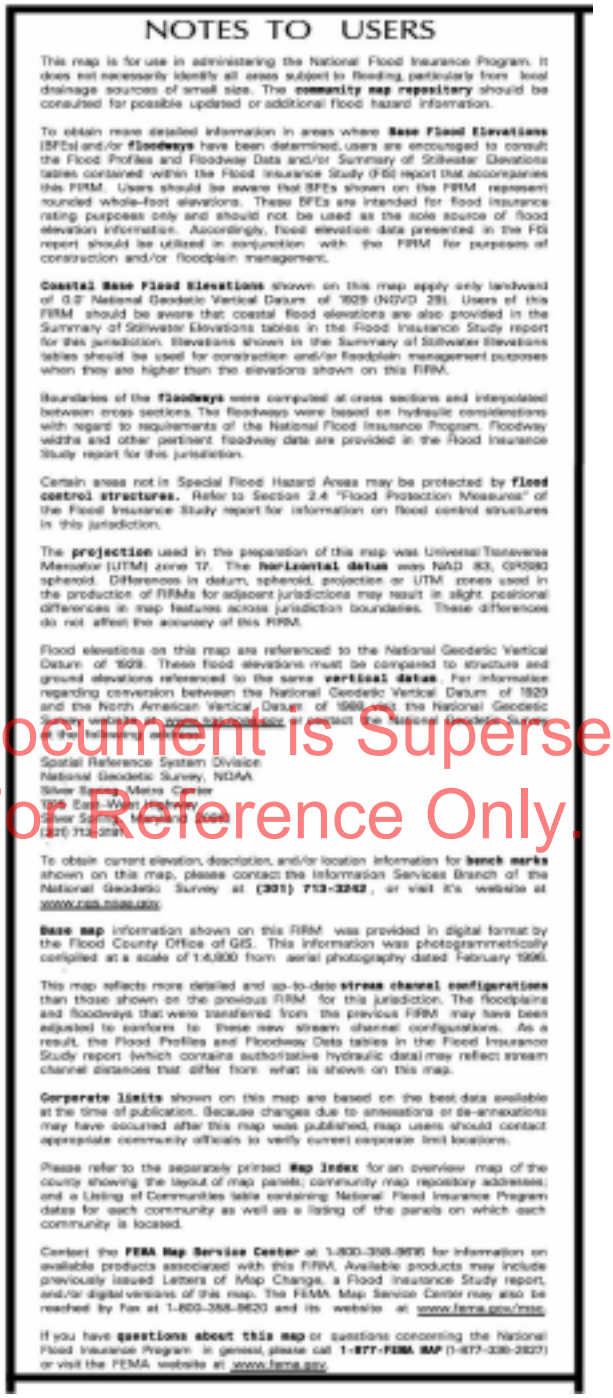
Figure K-34. Countywide Digital FIRM Notes to Users, Orthophoto Base Map



NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 17. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit it's website at www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the Flood County Office of GIS. This information was photogrammetrically compiled at a scale of 1:6,000 from aerial photography dated February 1996.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at www.fema.gov/msc.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at www.fema.gov.

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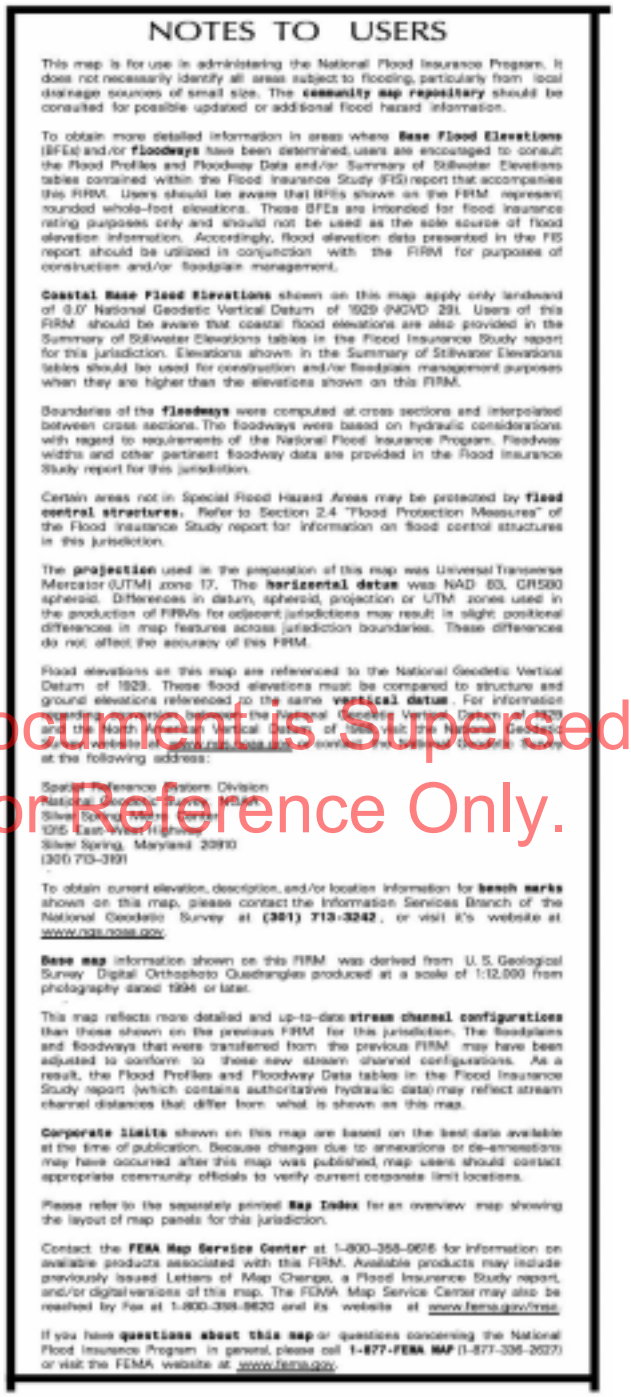
Figure K-35. Countywide Digital FIRM Notes to Users, Vector Base Map



NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 17. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, N/CG17
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit it's website at www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from U. S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1994 or later.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map showing the layout of map panels for this jurisdiction.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at www.fema.gov/msc.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at www.fema.gov.

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Figure K-36. Single-Jurisdiction Multiple-Panel Digital FIRM Notes to Users, Orthophoto Base Map

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables shown on this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the Flood profiles and Floodway Data and/or Summary of Stillwater Elevations tables should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table shown on this map. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Floodway Data table shown on this FIRM.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 17. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at [illegible] or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles (DOQs) produced at a scale of 1:12,000 from photography dated 1994 or later.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables shown on this FIRM (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at www.fema.gov/msc.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at www.fema.gov.

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For Reference Only.

Figure K-37. Single-Jurisdiction Digital FIRM Notes to Users, Orthophoto Base Map, Only Panel Printed

The assigned Mapping Partner shall use the following notes in the FIRM Notes to Users section. Several notes contain variables that are specific to the conditions that exist in the FIRM. The variable should be chosen and inserted when the FIRM is prepared. The variables are shown in italics in the examples in Table K-22.

Table K-22. Notes to Users

Example	Feature/Usage	Specification
NOTES TO USERS	Notes to Users title	18 Pt. Verdana CAPS
This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.	This note shall be shown on all FIRM panels.	10 Pt. Arial CLC (key words bold)
To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.	This note shall be used to inform the user that supplemental flood elevation information is located within the FIS report. It shall be omitted from the Notes to User if the FIRM is not accompanied by an FIS report. A modified version of this note, shown below, is used on FIRM and FIS report combination panels.	10 Pt. Arial CLC (key words bold)

This Document is Superseded.
For Reference Only.

Table K-22. Notes to Users ***Font specifications that cannot be matched may be approximated**		
Example	**Feature/Usage**	**Specification**
To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables shown on this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.	This note shall be used to inform the user that supplemental flood elevation information is located on the map panel. It is used on FIRM and FIS report combination panels only.	10 Pt. Arial CLC (key words bold)
Coastal Base Flood Elevations shown on this map apply only landward of 0.0' [*vertical datum*]. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.	This note shall be used to provide map users with additional information on the interpretation of coastal BFEs. This note shall be omitted if the FIRM is not accompanied by an FIS report. A modified version of this note, shown below, is used on FIRM and FIS report combination panels.	10 Pt. Arial CLC (key words bold)
Coastal Base Flood Elevations shown on this map apply only landward of 0.0' [*vertical datum*]. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table shown on this map. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.	This note shall be used to inform the user that additional information on the interpretation of coastal BFEs is located on the map panel. It is used on FIRM and FIS report combination panels only.	10 Pt. Arial CLC (key words bold)

This Document is Superseded.
For Reference Only.

Table K-22. Notes to Users *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
Special Flood Hazard Areas were determined by **approximate study methods**. Therefore, no Flood Insurance Study report was developed.	This note shall be used on FIRMs that contain only approximate flood analyses and are not accompanied by an FIS report.	10 Pt. Arial CLC (key words bold)
Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.	This note shall be used to reference boundaries and widths of the floodway. It also references the NFIP as the authority for floodways and refers users to other floodway data in the FIS report. This note shall be omitted if the FIRM is not accompanied by an FIS report. A modified version of this note, shown below, is used on FIRM and FIS report combination panels.	10 Pt. Arial CLC (key words bold)
Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Floodway Data table shown on this FIRM.	This note shall be used to refer users to other floodway data located on the map panel. It is used on FIRM and FIS report combination panels only.	10 Pt. Arial CLC (key words bold)
Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.	This note shall be used to refer the user to the FIS report for additional information on flood control structures within the jurisdiction. This note is omitted if the FIRM is not accompanied by an FIS report. It is also omitted on FIRM and FIS combination panels.	10 Pt. Arial CLC (key words bold)

This Document is Superseded.
For Reference Only.

Table K-22. Notes to Users ***Font specifications that cannot be matched may be approximated**		
Example	**Feature/Usage**	**Specification**
The **projection** used in the preparation of this map was [*projection*]. The **horizontal datum** was [*horizontal datum*]. Differences in datum, spheroid, projection or [*zone type*] zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.	This note shall be used to provide map users with information about the projections and datums used in the production of the FIRM.	10 Pt. Arial CLC (key words bold)
Flood elevations on this map are referenced to the [*vertical datum*]. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address: Spatial Reference System Division National Geodetic Survey, NOAA Silver Spring Metro Center 1315 East-West Highway Silver Spring, Maryland 20910 (301) 713-3191	This note shall be used to reference the vertical datum (used for flood elevation determinations) and to refer map users to the National Geodetic Survey website. See the map legend examples in Subsection K.5.1 for Vertical Datum notes placed in the map legend.	10 Pt. Arial CLC (key words bold)
To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov/.	This note shall be used to tell users where to find additional information about bench marks shown on the FIRM. When local qualifying monuments are included on the FIRM, a reference phone number and URL (if available) are included, and a modified version of the bench mark note is used.	10 Pt. Arial CLC (key words bold)

This Document is Superseded.
For Reference Only.

Table K-22. Notes to Users ***Font specifications that cannot be matched may be approximated**		
Example	**Feature/Usage**	**Specification**
Base map information shown on this FIRM was derived from [*base map source and scale*] from photography dated [*date*] or later. **Base map** information shown on this FIRM was provided in digital format by [*data source*]. This information was photogrammetrically compiled at a scale of [*scale*] from aerial photography dated February [*date*]. **Base map** information shown on this FIRM was derived from multiple sources. Base map files were provided in digital format by [*data source*]. This information was compiled from [*compilation sources and dates of data*]. Additional information was photogrammetrically compiled at a scale of [*scale*] from aerial photography dated [*date*].	These three examples show sample base map source notes. The base map source note shall be used to provide basic information about the base map source(s) used in the production of the FIRM. The note shall include the base map producer (community agency or USGS), scale, and approximate date of the base map data.	10 Pt. Arial CLC (key words bold)
This map reflects more detailed and up to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables [“*for (stream names)” “in the Flood Insurance Study report (which contains authoritative hydraulic data)”*] may reflect stream channel distances that differ from what is shown on this map.	This note shall be used when the FIRM base map files contain improved/updated stream configurations in areas where detailed flood hazard analyses have not been revised. If this condition applies to five streams or fewer, the streams are listed by name (inserted as shown in italics). If it applies to more than five streams, the stream names are omitted. This note is omitted if it does not apply to any streams in the jurisdiction or if an FIS report does not accompany the FIRM. On FIRM and FIS report combination panels, the words “in the Flood Insurance Study report” (shown in italics) are omitted.	10 Pt. Arial CLC (key words bold)

This Document is Superseded.
For Reference Only.

Table K-22. Notes to Users ***Font specifications that cannot be matched may be approximated**		
Example	**Feature/Usage**	**Specification**
Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for [*"for (stream names)" "in the Flood Insurance Study report (which contains authoritative hydraulic data)"*] may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.	This note shall be used when the FIRM base map files contain improved/updated stream configurations and improved floodplain configurations based on updated topographic information in areas where detailed flood hazard analyses have not been revised. If this condition applies to five streams or fewer, the streams are listed by name (inserted as shown in italics). If it applies to more than five streams, the stream names are omitted. This note is omitted if it does not apply to any streams in the jurisdiction or if an FIS report does not accompany the FIRM. On FIRM and FIS report combination panels, the words "in the Flood Insurance Study report" (shown in italics) are omitted.	10 Pt. Arial CLC (key words bold)
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.	This note shall be shown on all FIRM panels.	10 Pt. Arial CLC (key words bold)
Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.	This note shall be used on countywide FIRMs to provide map users with information about what they can find on the Map Index.	10 Pt. Arial CLC (key words bold)
Please refer to the separately printed **Map Index** for an overview map showing the layout of map panels for this jurisdiction.	This note shall be used on single jurisdiction FIRMs to provide map users with information about what they can find on the Map Index. It should be omitted if no index exists.	10 Pt. Arial CLC (key words bold)

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Table K-22. Notes to Users *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change [“, *a Flood Insurance Study report,*”] and /or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.	This note shall be used to refer users to FEMA’s Map Service Center for other pertinent information that may be available. It shall be shown on all FIRM panels. The FIS report phrase in italics may be omitted if no FIS report was produced to accompany the FIRM.	10 Pt. Arial CLC (key words bold)
If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/.	This note shall be used to refer the map user to the FEMA website and the 1-877-FEMA MAP phone number. It shall be shown on all FIRM panels.	10 Pt. Arial CLC (key words bold)

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K.9 Preliminary Flood Insurance Rate Map Deliverables

[February 2002]

Preliminary FIRMs shall be sent to communities for review and comment. Unlike final FIRMs, Preliminary FIRMs shall be plotted individually rather than printed with an offset printing process. FIRMs that were prepared using DOQ or community-provided orthophoto base maps shall be sent to communities in full color at the Preliminary stage; all other vector-based FIRMs shall be plotted in black and white for Preliminary distribution. All Preliminary Title Blocks shall be stamped "Preliminary" in a manner similar to that shown in Figure K-38.

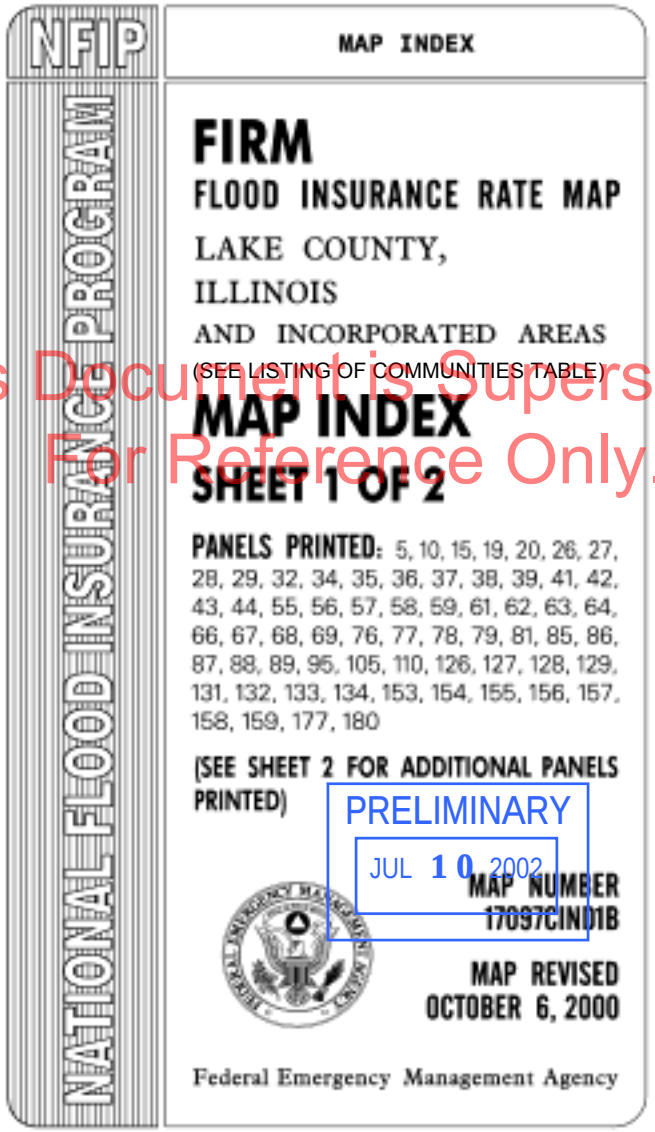

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Figure K-38. Title Block with Preliminary Stamp

K.10 Deliverables to Map Service Center [April 2003]

The assigned Mapping Partner shall send all FIRM deliverables to the MSC for printing by the U.S. Government Printing Office (GPO) on a regular pre-determined schedule. FIRM deliverables shall include digital files such as georeferenced raster images of the FIRMs and/or FBFMs, vector databases, digital orthophotos, and a Geo-Index update, and hardcopy and reproducible FIS deliverable materials. Detailed specifications for each deliverable product are defined in Volume 1, Subsection 1.5.2.8.

Digital files shall be in a universal graphic format, optimized for printing using two spot colors (black and cyan). The GPO shall be responsible for converting the digital files into printed documents. For photographic reproducibles, the assigned Mapping Partner shall submit one negative for each ink color used on the map.

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