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/mit/tsd/dl_cgs.htm

FINAL

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Appendix K
Formats 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 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.*

[February 2002]

K.1 Mapping Methods and Formats

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There are two methods of FIRM production- Digital and Manual. There are several distinct classifications of FIRM formats. These are Map Initiatives, Partial Map Initiatives, Countywide, Single-Jurisdiction, FIRM/Flood Insurance Study (FIS) Report Combination, and Standard (separate FIRM and FBFM). Many of these methods and formats can be mixed and interchanged, as with a Digital Partial Map Initiatives FIRM.

[February 2002]

K.1.1 Digital Method

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.

[February 2002]

K.1.2 Manual Method

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 bench marks within the community. See Volume 1, Section 1.4 for a discussion of bench mark selection.

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K.1.3 Map Initiatives Format

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.

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K.1.4 Partial Map Initiatives Format

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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 Section K.3.1). These notes explain the elimination of FBFM panels. As with Map Initiative format, the Map Repository Address shall be added to the FIRM panels and Index.

[February 2002]

K.1.5 Countywide Map Format

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.

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K.1.6 Multiple-County Communities

When processing a countywide FIRM that contains a multiple-county community, the assigned Mapping Partner shall select from one of the three options listed in order of preference- retain the subject community-based FIRM (and revise if necessary) as indicated in Option 1 below, or superseded the community-based FIRM as indicated in Options 2 or 3 below. Seamless mapping coverage between all affected jurisdictions must be obtained and that 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.

K.1.6.1 Processing Option 1

Under this option, the community-based FIRM would be retained as a separate map, and the community would be shown as an "Area Not Included" (no flood hazard or base map information shown) on the countywide FIRM being processed and on the FIRMs for all surrounding of the counties in which the subject community falls. If a Digital Orthophoto Quadrangle (DOQ) base map is used for the FIRM, the base map imagery will continue through the Area Not Included. When this option is chosen, a concurrent community-based FIRM revision must be processed, if required, to ensure that seamless coverage between the multiple-county community and its surrounding counties in which it is located will be maintained. Minor revisions of the FIRMs for adjacent counties to ensure that no overlaps or gaps in coverage exist.

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K.1.6.2 Processing Option 2

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.

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K.1.6.3 Processing Option 3

Apportion the multiple-county community such that it is shown on multiple countywide FIRMs. 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 (Community-Based) Format

For single-jurisdiction FIRMs, all areas within a single community's jurisdiction are shown on one FIRM. The assigned Mapping Partner shall prepare a 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 on whether to convert an entire manual FIRM to digital format 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 digital format 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.

[February 2002]

K.1.8 Report/Map Combination Format

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 Initiates 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 Section K.7.1. The decision to create a combination FIRM and FIS report shall be made in consultation with a FEMA Project Officer.

[February 2002]

K.1.9 Standard Map Format

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Unless specifically directed to do otherwise, the assigned Mapping Partner shall not produce new or revised FIRMs and FBFMs in the Standard format as separate FIRM and FBFM panels. All revisions should be processed in either one or a combination of the formats described above.

[February 2002]

K.2 Map Frames

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.

[February 2002]

K.2.1 Z-fold Digital Frame Sizes

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"

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

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

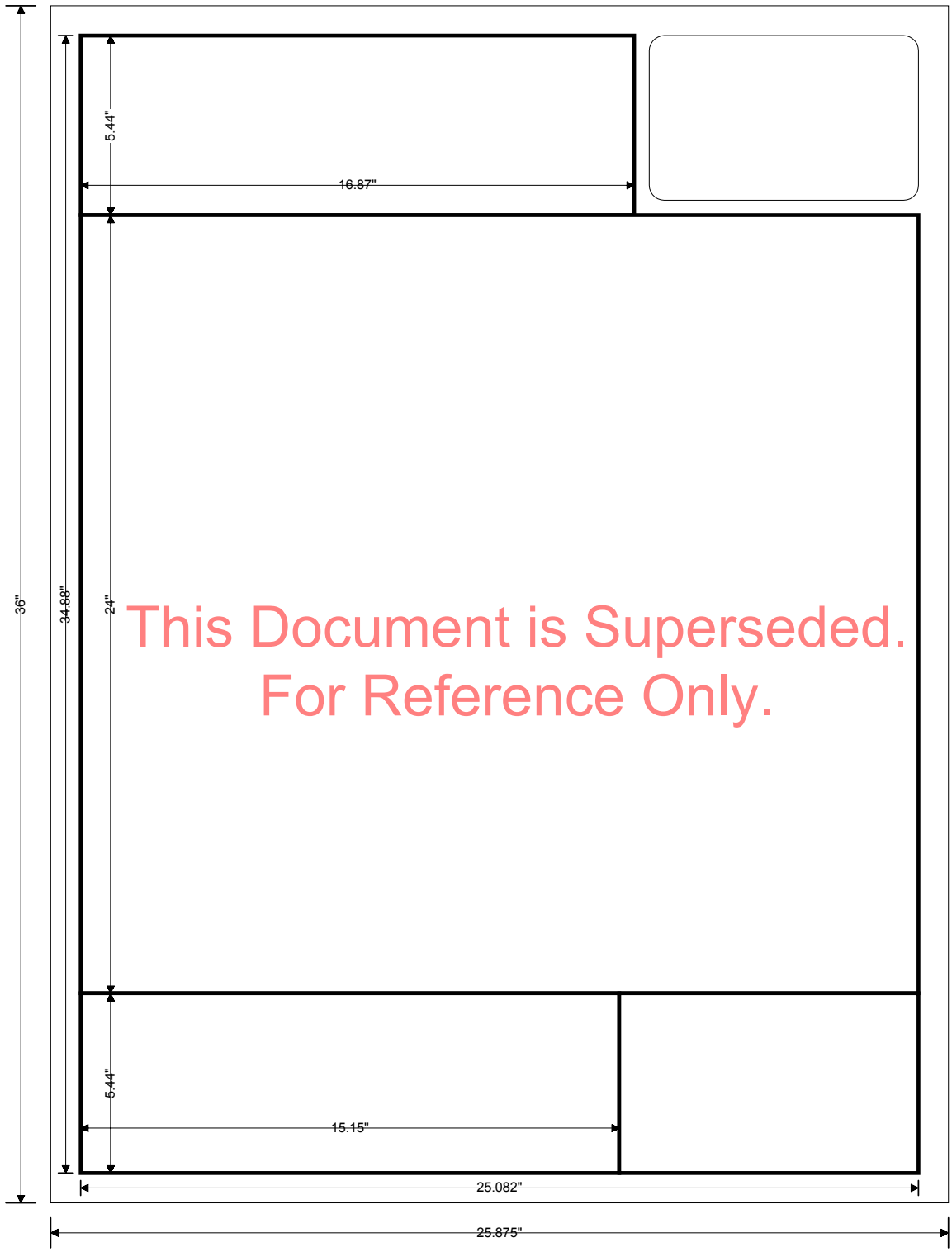

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Figure K-1. Digital Map Frame Dimensions

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K.2.2 Z-fold Manual Frame Sizes

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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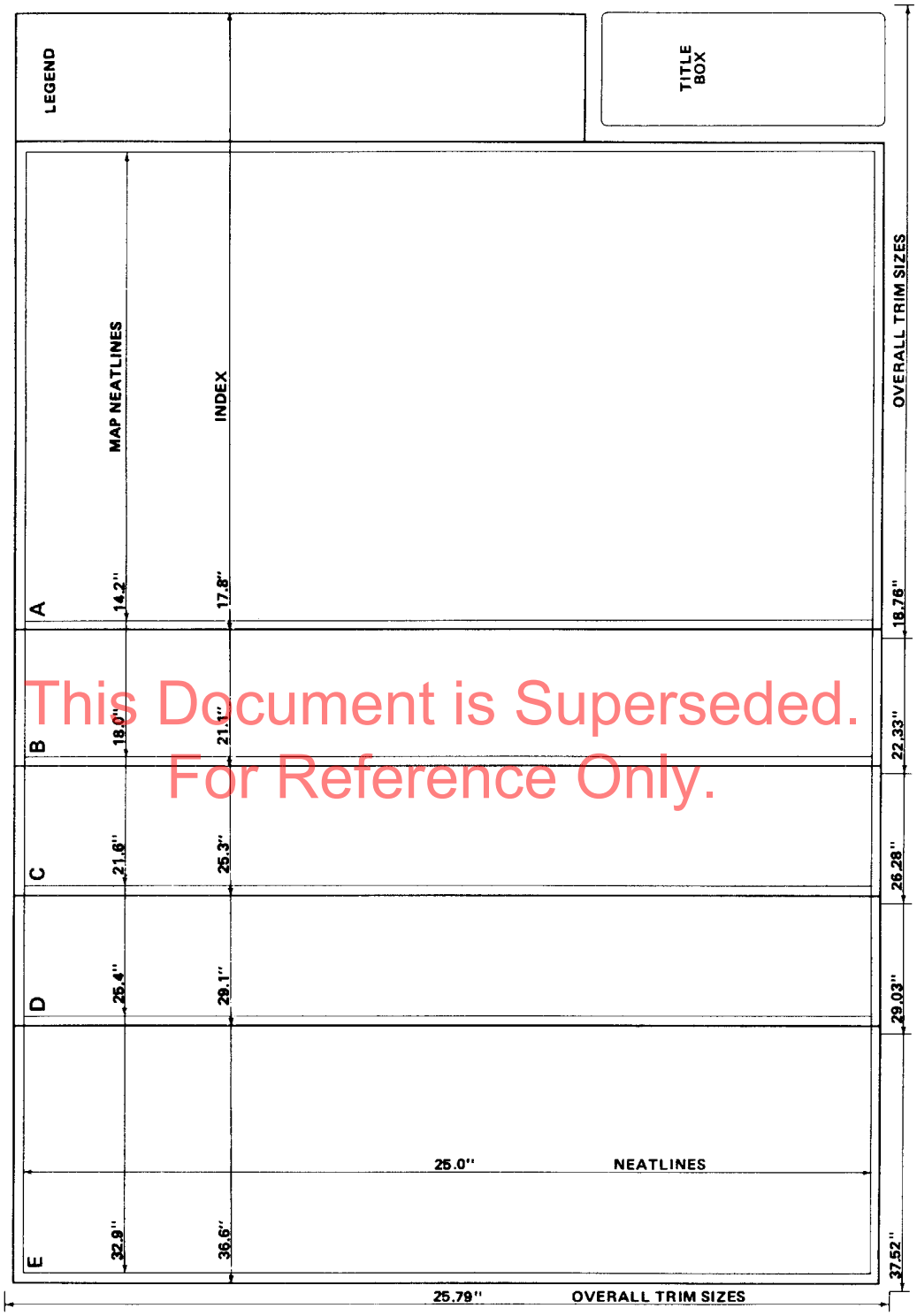

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Figure K-2. Manual Map Frame Dimensions

[February 2002]

K.2.3 8½" x 11" Frames

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"

Section K.3 provides an example of an 8½" x 11" Map Index.

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K.3 Map Index

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.

[February 2002]

K.3.1 Map Index Body Elements and Specifications

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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 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. Areas within the corporate limits that were not studied shall be labeled as such whenever the scale of the Map Index permits.

[February 2002]

K.3.1.1 Map Numbers

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 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 which define the reason(s) for the panel not being printed.

The appropriate reason(s) for the panel not being printed shall appear below the lower left corner of the grid layout. A listing of appropriate footnotes are listed in "Panel Not Printed" Footnotes table available later in this section.

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.

[February 2002]

K.3.1.2 Map Dates

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 Section 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.

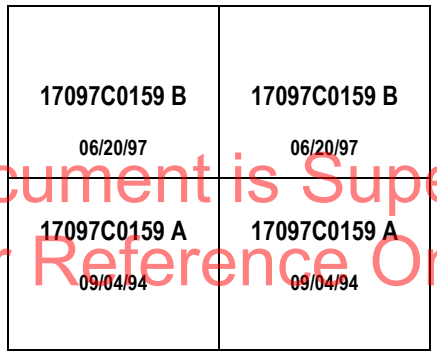

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Figure K-3. Panel Effective Dates on Map Index

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)					
Panel	**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

[February 2002]

K.3.1.3 Panel Not Printed Footnotes

The following notes shall be added to the Map Index to identify why certain FIRM or FBFM panels are not printed.

Panel Not Printed Footnotes *Font specifications that cannot be matched may be approximated		
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

Panel Not Printed Footnotes *Font specifications that cannot be matched may be approximated		
Example	**Usage**	**Specification**
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 (ELEVATION)	This note is used when the entire panel falls entirely within one flood hazard zone with one flood elevation. If the panel contains 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.	7-9 Pt. Arial CAPS
PANEL NOT PRINTED – AREA OUTSIDE CORPORATE / COUNTY BOUNDARY	This note is used to indicate paneled areas outside the subject jurisdiction.	7-9 Pt. Arial CAPS
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

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Panel Not Printed Footnotes *Font specifications that cannot be matched may be approximated		
Example	**Usage**	**Specification**
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

[February 2002]

K.3.1.4 Index Body Notes

The following notes 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.

Index Body Notes *Font specifications that cannot be matched may be approximated		
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
<u>MAP REPOSITORY</u> (Maps available for reference only, not for distribution.) Manatee County Building Division Floodplain Section, 2nd Floor 1112 Manatee Avenue West 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, Community Name, and Address)** 10 Pt. Arial CAPS and CLC

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Index Body Notes *Font specifications that cannot be matched may be approximated		
Example	**Usage**	**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, 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.	10 Pt. Arial CAPS

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Index Body Notes *Font specifications that cannot be matched may be approximated		
Example	**Usage**	**Specification**
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://web1.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 numbers 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

[February 2002]

K.3.1.5 Flood Boundary and Floodway Map Index

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For Reference Only.

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 the table below 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 the table below for the proper wording of the note.

When preparing a revised FBFM Map Index, map dates may 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 supercede Flood Boundary and Floodway Map panels.

[February 2002]

FBFM Index Body Notes *Font specifications that cannot be matched may be approximated		
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 the FIRM and FBFM.	20 Pt. Impact
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

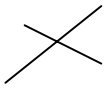
This Document is Superseded.
For Reference Only.

K.3.1.6 Map Index Panel Element Graphic Specifications

The table below 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.

Map Index Panel Elements

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

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"

This Document is Superseded.
For Reference Only.

Map Index Panel Elements *Font specifications that cannot be matched may be approximated		
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 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
City of Lafayette (AREA NOT INCLUDED)	Area Not Included Note	Line weight .020” **(Community name)** 8-24 Pt. Times New Roman CAPS or CLC **(Note)** 8 – 11 Pt. Arial CAPS
FOREST BOUNDARY ROOSEVELT STATE FOREST	Forest, Park or Reservation Boundary, Boundary Label and Area Label (Large areas only)	**(Boundary Label)** 6-8 Pt. Arial CAPS **(Boundary)** Line weight .015” Dot diameter .030”, spacing .400” **(Area Label)** 6-10 Pt. Times New Roman CAPS or CLC
1202300275 C **41050C0050 E**	FIRM Map Numbers	8 – 18 Pt. Arial Narrow Bold CAPS

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For Reference Only.

Map Index Panel Elements *Font specifications that cannot be matched may be approximated		
Example	**Feature**	**Specification**
8/30/00	FIRM Panel Effective Dates	8 Pt. Arial Narrow CAPS

[February 2002]

K.3.2 Countywide Index

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.

[February 2002]

K.3.2.1 Listing of Communities

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 with an indication of 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."

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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.

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 within that community was published. This date is added to clarify which communities are affected by the republication of the Map Index, since the Map Index is updated every time a panel within the county is republished. An example of a Listing of Communities table is shown in Figure K-5.

The following note 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.

10 -12 Pt. Arial Narrow CAPS

14 – 22 Pt. Arial CAPS with underscore

LISTING OF COMMUNITIES

COMMUNITY NAME	COMMUNITY NUMBER	LOCATED ON PANEL(S)	INITIAL NFIP MAP DATE	INITIAL-FIRM DATE	MOST RECENT FIRM PANEL DATE
LAKE FOREST, CITY OF	170374	0169, 0188, 0190, 0257, 0259, 0276, 0277, 0278, 0279, 0285	FEBRUARY 1, 1974	FEBRUARY 18, 1981	SEPTEMBER 4, 1994
LAKE VILLA VILLAGE OF	170375	0029 0035, 0036, 0037, 0038, 0039, 0041	MAY 3, 1974	JULY 2, 1981	SEPTEMBER 4, 1994
LAKE ZURICH, VILLAGE OF	170376	0228, 0229, 0233, 0236, 0237, 0241	MARCH 29, 1974	JULY 5, 1983	JUNE 20, 1997
LIBERTYVILLE, VILLAGE OF	170377	0134, 0142, 0161, 0162, 0163, 0164, 0166, 0168, 0252	NOVEMBER 2, 1973	JANUARY 16, 1980	SEPTEMBER 4, 1994
LINCOLNSHIRE, VILLAGE OF	170378	0254, 0256, 0259, 0262, 0266, 0267	NOVEMBER 9, 1973	JULY 16, 1980	SEPTEMBER 4, 1994
LINDENHURST, VILLAGE OF	170379	0041, 0042, 0044	APRIL 5, 1974	JANUARY 2, 1980	SEPTEMBER 4, 1994
LONG GROVE, VILLAGE OF	170380	0144, 0231, 0232, 0233, 0234, 0241, 0242, 0251, 0253, 0254, 0261, 0263	APRIL 5, 1974	MAY 19, 1981	SEPTEMBER 4, 1994
METTAWA, VILLAGE OF	170381	0164, 0168, 0169, 0252, 0255, 0257	OCTOBER 18, 1974	MARCH 29, 1980	SEPTEMBER 4, 1994
MUNDELEIN, VILLAGE OF	170382	0139, 0142, 0143, 0144, 0161, 0163, 0232, 0251	JUNE 28, 1974	JULY 2, 1981	SEPTEMBER 4, 1994
NORTH BARRINGTON, VILLAGE OF	170383	0207, 0208, 0209, 0217, 0226, 0228, 0236	MARCH 22, 1974	OCTOBER 18, 1983	SEPTEMBER 4, 1994
NORTH CHICAGO, CITY OF	170384	0159, 0167, 0180, 0186, 0190	APRIL 5, 1974	DECEMBER 5, 1980	JUNE 20, 1997
OLD MILL CREEK, VILLAGE OF	170385	0045, 0061, 0062	AUGUST 30, 1974	AUGUST 1, 1980	SEPTEMBER 4, 1994
PARK CITY, CITY OF	170386	0156, 0157, 0159	MARCH 1, 1974	OCTOBER 15, 1981	SEPTEMBER 4, 1994
RIVERWOODS, VILLAGE OF	170387	0259, 0266, 0267, 0270, 0286	MARCH 1, 1974	AUGUST 15, 1980	SEPTEMBER 4, 1994
ROUND LAKE, VILLAGE OF	170388	0110, 0126, 0127, 0128, 0129	MARCH 29, 1974	AUGUST 1, 1980	SEPTEMBER 4, 1994
ROUND LAKE BEACH, VILLAGE OF	170389	0038, 0039, 0043, 0126, 0127, 0131	APRIL 5, 1974	AUGUST 1, 1980	SEPTEMBER 4, 1994
ROUND LAKE HEIGHTS, VILLAGE OF	170390	0038	MARCH 29, 1974	JANUARY 2, 1980	SEPTEMBER 4, 1994
ROUND LAKE PARK, VILLAGE OF	170391	0127, 0129, 0133, 0137, 0141, 0142	MARCH 29, 1974	JUNE 4, 1980	SEPTEMBER 4, 1994
THIRD LAKE, VILLAGE OF	170392	0044, 0132, 0165	SEPTEMBER 6, 1974	DECEMBER 25, 1981	JUNE 20, 1997
TOWER LAKES, VILLAGE OF	170393	0206, 0207	APRIL 5, 1974	MARCH 2, 1981	SEPTEMBER 4, 1994
VERNON HILLS, VILLAGE OF	170394	0163, 0164, 0251, 0252, 0253, 0254, 0256, 0258	FEBRUARY 4, 1977	AUGUST 1, 1980	SEPTEMBER 4, 1994
VOLO, VILLAGE OF	171042	0105, 0110, 0112, 0116, 0117	JANUARY 17, 1975	NOVEMBER 3, 1982	SEPTEMBER 4, 1994
WADSWORTH, VILLAGE OF	170395	0055, 0056, 0057, 0058, 0059, 0062, 0064, 0066, 0067, 0068	MARCH 1, 1974	FEBRUARY 4, 1981	SEPTEMBER 4, 1994
WAUCONDA, VILLAGE OF	170396	0116, 0117, 0118, 0119, 0140, 0207	APRIL 5, 1974	DECEMBER 1, 1981	SEPTEMBER 4, 1994
WAUKEGAN, CITY OF	170397	0066, 0067, 0068, 0069, 0086, 0087, 0088, 0089, 0095, 0154, 0156, 0157, 0158, 0159, 0166, 0177, 0180	MAY 10, 1974	JUNE 15, 1981	SEPTEMBER 4, 1994
WINTHROP HARBOR, VILLAGE OF	170398	0076, 0077, 0078, 0079, 0081	MARCH 8, 1974	DECEMBER 2, 1980	SEPTEMBER 4, 1994
ZION, CITY OF	170399	0057, 0059, 0076, 0077, 0078, 0079, 0081, 0085, 0086, 0087	MARCH 29, 1974	JANUARY 16, 1981	SEPTEMBER 4, 1994

8 - 10 Pt. Arial Narrow CAPS

This Document is Superseded.

Figure K-5 Listing of Communities Table

Listing of Communities Table Note *Font specifications that cannot be matched may be approximated		
Example	**Usage**	**Specification**
NOTICE 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 below 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.3.2-1 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

[February 2002]

K.3.2.2 Community Map Repository List

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The assigned Mapping Partner shall ensure that Countywide Map Index contains a Community Map Repository 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. The Community Map Repository list shall be placed above or in close proximity to the north arrow. A sample Community Map Repository list is provided below.

Countywide Map Repositories Note *Font specifications that cannot be matched may be approximated		
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 **(Reference note, Community Name, and Address)** 9-12 Pt. Arial CAPS and CLC

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[February 2002]

K.3.2.3 Multiple Map Index Panels

FIRMs that are contained on one Map Index panel have the Map Number "IND0." It may sometimes be necessary to create multiple Map Index panels for large countywide FIRMs. In such cases, the Listing of Communities table and Community Map Repository 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. When multiple Map Index sheets are created, the Map Numbers of those sheets shall be IND1, IND2, etc., and an Index Locator Diagram shall be added to the Map Index, proportionate in size to other elements. Examples of an Index Locator Diagram are shown in Figures K-6 and K-7.

[February 2002]

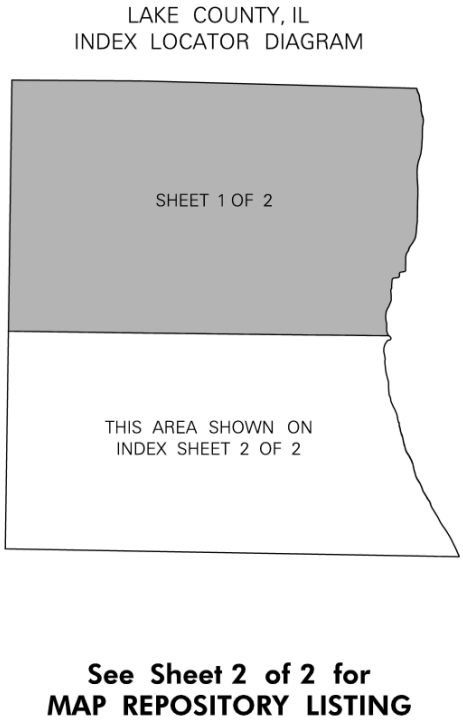

Figure K-6 Index Locator Diagram Sheet 1 of 2

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For Reference Only.

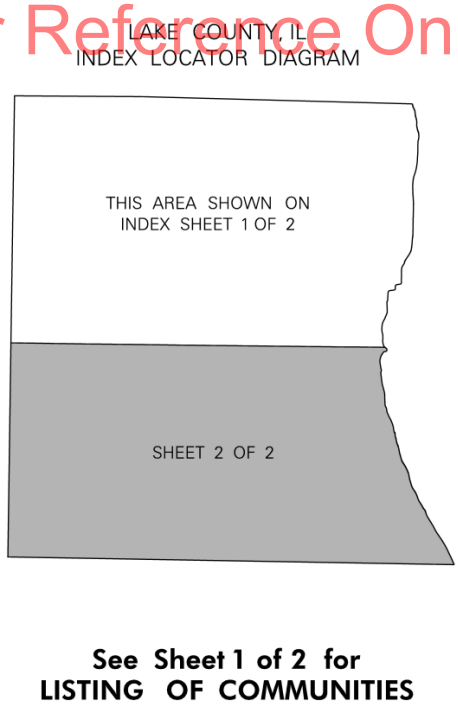

Figure K-7 Index Locator Diagram Sheet 2 of 2

K.3.3 Index Title Block

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 DFIRM Index Title Block (Figure K-8);
- Countywide Multi-sheet DFIRM Index Title Block, Sheet 1 of 2 (Figure K-9);
- Countywide Multi-sheet DFIRM Index Title Block, Sheet 2 of 2 (Figure K-10);
- Single-Jurisdiction DFIRM 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).

Figure K-14, "Title Block Element Specifications," lists the specifications for the title block elements.

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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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For Reference Only.

FEDERAL EMERGENCY MANAGEMENT AGENCY

MAP NUMBER
42103CIND0

EFFECTIVE DATE
OCTOBER 6, 2000

Federal Emergency Management Agency

Figure K-8. Countywide DFIRM Index Title Block

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM

FLOOD INSURANCE RATE MAP

LAKE COUNTY,
ILLINOIS
AND INCORPORATED AREAS

MAP INDEX

SHEET 1 OF 2

PANELS PRINTED: 5, 10, 15, 19, 20, 26, 27, 28, 29, 32, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 55, 56, 57, 58, 59, 61, 62, 63, 64, 66, 67, 68, 69, 76, 77, 78, 79, 81, 85, 86, 87, 88, 89, 95, 105, 110, 126, 127, 128, 129, 131, 132, 133, 134, 153, 154, 155, 156, 157, 158, 159, 177, 180

This Document is Superseded.
For Reference Only.

(SEE SHEET 2 FOR ADDITIONAL PANELS PRINTED)

FEDERAL EMERGENCY MANAGEMENT AGENCY

MAP NUMBER
17097CIND1

MAP REVISED
OCTOBER 6, 2000

Federal Emergency Management Agency

Figure K-9. Countywide Multi-sheet DFIRM Index Title Block, Sheet 1 of 2

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM
FLOOD INSURANCE RATE MAP

LAKE COUNTY,
ILLINOIS
AND INCORPORATED AREAS

MAP INDEX
SHEET 2 OF 2

PANELS PRINTED: 112, 114, 116, 117, 118, 119, 137, 139, 140, 141, 142, 143, 144, 161, 162, 163, 164, 166, 167, 168, 169, 186, 188, 190, 205, 206, 207, 208, 209, 215, 216, 217, 219, 226, 227, 228, 229, 231, 232, 233, 234, 236, 237, 238, 241, 242, 251, 252, 253, 254, 256, 257, 258, 259

(SEE SHEET 1 FOR ADDITIONAL PANELS PRINTED)

This Document is Superseded.
For Reference Only.

FEDERAL EMERGENCY MANAGEMENT AGENCY

MAP NUMBER
17097CIND2

MAP REVISED
OCTOBER 6, 2000

Federal Emergency Management Agency

Figure K-10. Countywide Multi-sheet DFIRM Index Title Block, Sheet 2 of 2

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM

FLOOD INSURANCE RATE MAP

CITY OF

ALLAGASH,

MAINE

AROOSTOOK COUNTY

MAP INDEX

PANELS PRINTED: 10, 20, 40, 65, 80

85, 101, 102, 105, 106, 107, 108, 109, 115

130

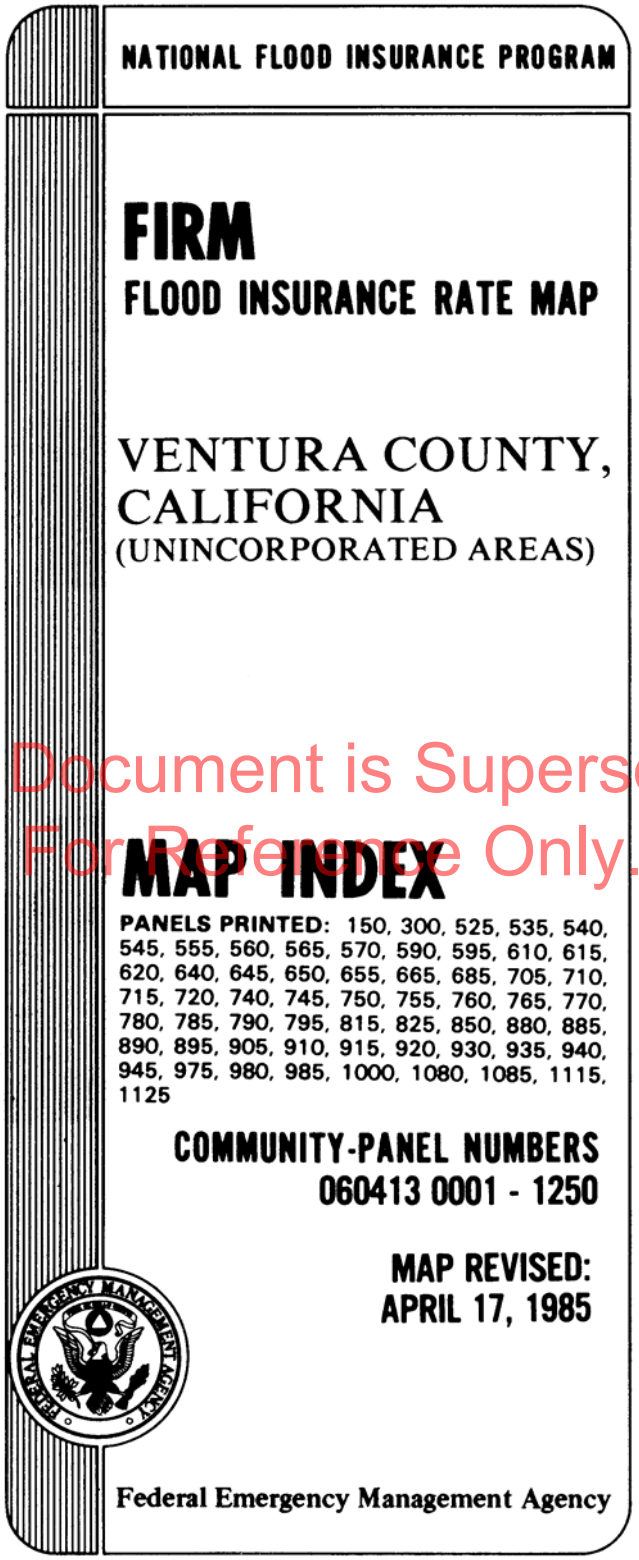
This Document is Superseded.
For Reference Only.

MAP NUMBER
230440IND0

MAP REVISED
SEPTEMBER 22, 1999

Federal Emergency Management Agency

Figure K-11. Single-Jurisdiction DFIRM 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

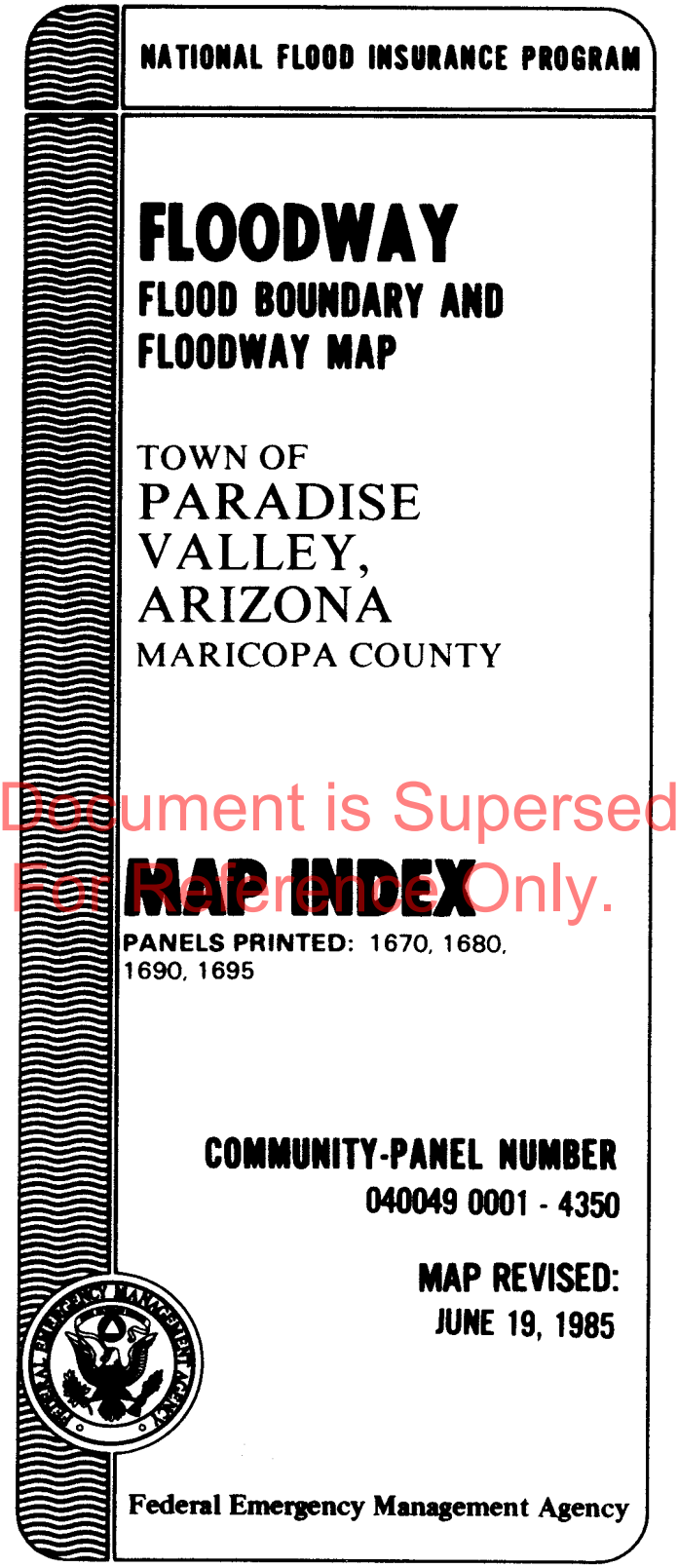
COMMUNITY-PANEL NUMBERS
060413 0001 - 1250

MAP REVISED:
APRIL 17, 1985

Federal Emergency Management Agency

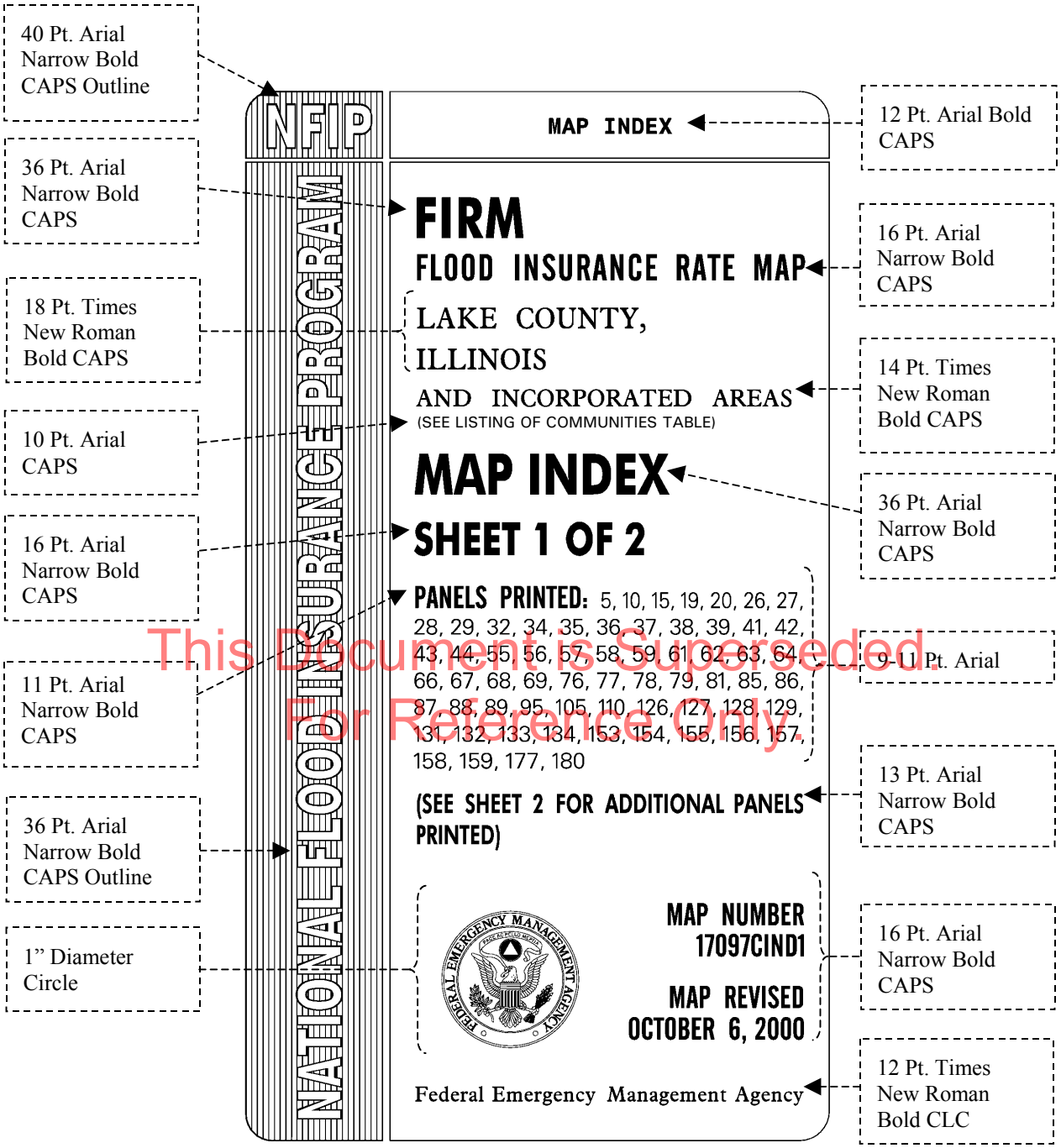
This Document is Superseded.
For Reference Only.

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



This Document is Superseded.
For Reference Only.

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



This Document is Superseded. For Reference Only.

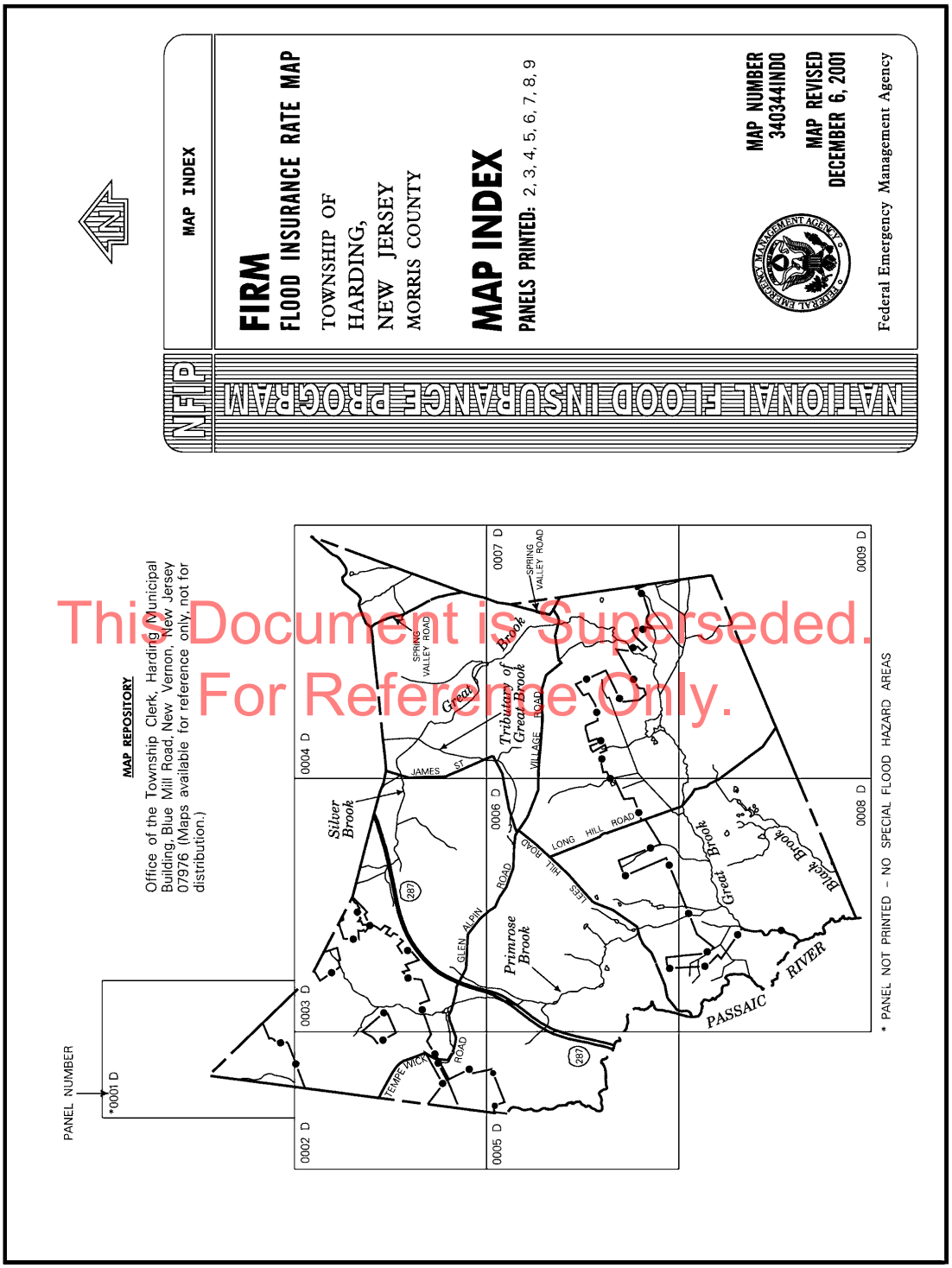
Figure K-14. Map Index Title Block Element Suggested Font Specifications

[February 2002]

K.3.4 8½”x11” Map Index

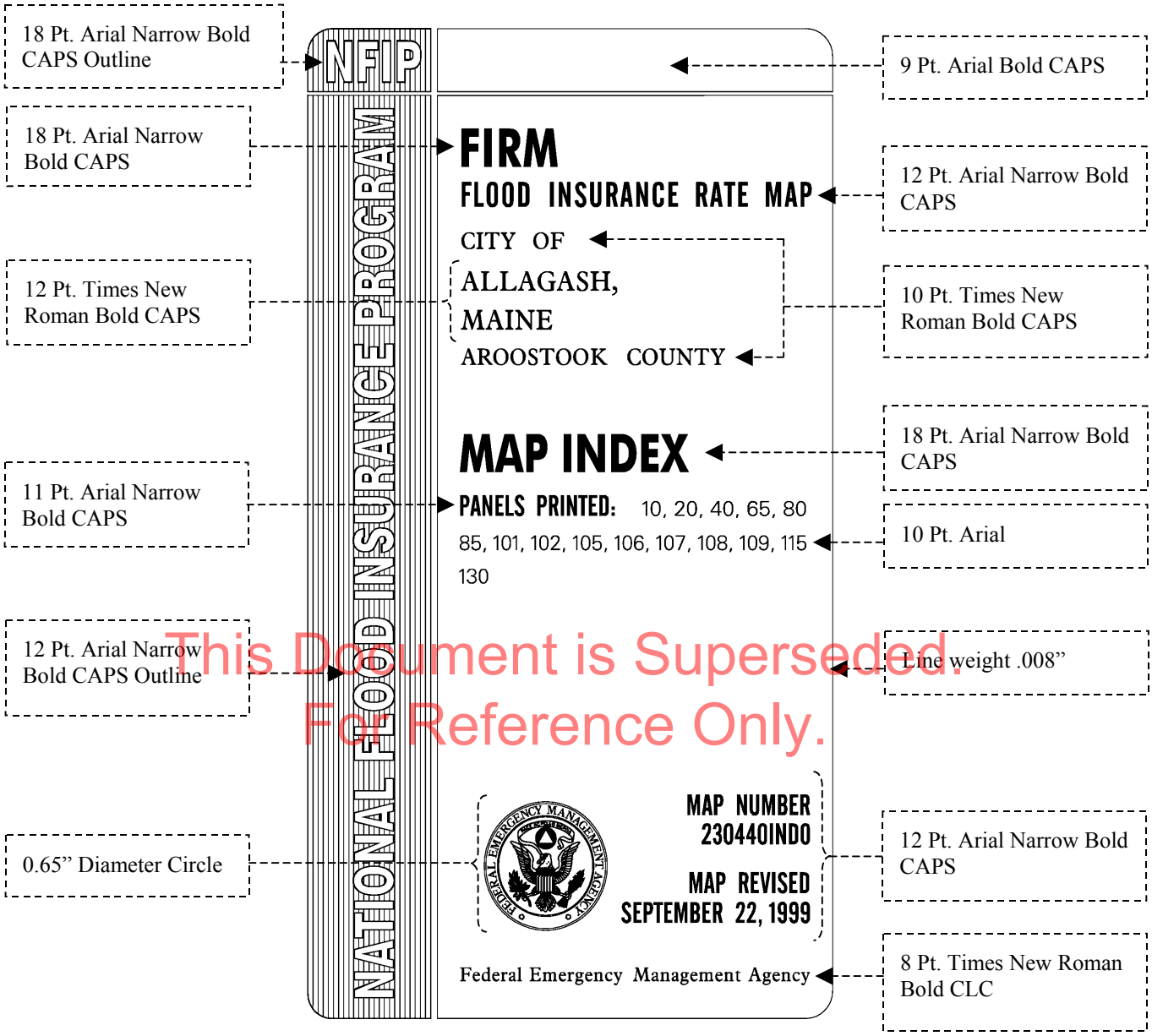
An example of an 8½” x 11 Map Index is presented in Figure K-15. As shown in Figure K-15, the specifications appear exactly as presented for the Z-fold Index but are at a smaller scale. Figure K-16 provides suggested font specifications for an 8½” x 11 Map Index. The table that follows Figure K-16 provides graphic specification standards for the depiction of information on 8½” x 11 Map Indexes.

This Document is Superseded.
For Reference Only.



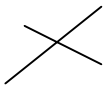
This Document is Superseded.
For Reference Only.

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



This Document is Superseded.
For Reference Only.

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

8½” x 11” Map Index Elements *Font specifications that cannot be matched may be approximated		
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
 CHESSIE SYSTEM RAILROAD	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

This Document is Superseded.
For Reference Only.

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"
CITY OF BLADES	Community Label	10 Pt. Times Roman CAPS
City of Lafayette (AREA NOT INCLUDED)	Area Not Included Note	Line weight .015" **(Community name)** 6-10 Pt. Times New Roman CAPS or CLC **(Note)** 5-8 Pt. Arial CAPS
FOREST BOUNDARY ROOSEVELT STATE FOREST	Forest, Park or Reservation Boundary, Boundary Label and Area Label (Large areas only)	**(Boundary Label)** 6-8 Pt. Arial CAPS **(Boundary)** Line weight .015" Dot diameter .030", spacing .400" **(Area Label)** 6-10 Pt. Times New Roman CAPS or CLC
	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
MAP NUMBER	Map 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 CAPS

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8½" x 11" Map Index Elements *Font specifications that cannot be matched may be approximated		
Example	**Feature**	**Specification**
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 **(Reference note, Community Name, and Address)** 7 Pt. Arial CAPS and CLC
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 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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[February 2002]

K.4 Map Body

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.

[February 2002]

K.4.1 Base Map

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, 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.

Once a base map has been accepted for use in FIRM production, 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.

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[February 2002]

K.4.1.1 Base Map Images

Whenever possible, the assigned Mapping Partner shall use DOQ images as they are received from the U.S. Geological Survey (USGS) or the community. The DOQ 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.

[February 2002]

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 shall be required to derive intelligence from raster maps. The most common form of raster image map is the digital orthophotos, especially the standard DOQs produced by the USGS.

Variations in tones between DOQ images are acceptable. If more than one DOQ image is included on a FIRM panel, lightening or darkening of individual images to balance tones is not necessary. Overall lightening of all DOQ 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 shall portray updates to roads or other features that have occurred since the DOQs were produced as vectors on top of the DOQs. A note shall be added to the map to clarify significant additions as necessary.

The assigned Mapping Partner shall show vectors that depict studied flooding sources on top of the DOQs to clarify their locations. Vectors shall not be shown outside the Special Flood Hazard Areas (SFHAs) unless specifically authorized by the FEMA Project Officer.

[February 2002]

Vector Images

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Vector base maps share to 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. Vector maps must be digitized so that features are topologically correct. Then, a Geographic Information System (GIS) can automatically derive intelligence from the vector features and perform adjacency, proximity, and connectivity analyses.

[February 2002]

K.4.1.2 Base Map Features

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 travelways 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 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; and
- Other features and notes shall be depicted.

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

In general, the hierarchy of base map features is as follows: (1) political boundaries, (2) flood hazard areas, and (3) physical features such as shorelines. Coincident base map features are to be shown such that the heaviest or widest line is most prominent. For example, if a corporate boundary, a road, and a floodplain boundary are coincident, only the corporate boundary is to be shown.

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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 DOQ-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 non-DOQ FIRMs shall be shown as black text. Further graphic specifications are provided in the tables below, with separate paragraphs emphasizing information of particular importance.

Please note that the tables contain specifications for DOQ and non-DOQ base maps. In general, the non-DOQ-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 DOQ-based FIRMs. Medium type fonts are used on non-DOQ-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.

[February 2002]

Roads

All primary roads, all roads located inside or within one inch of 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 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.

[February 2002]

Railroads

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.

[February 2002]

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Base Map Features *Font specifications that cannot be matched may be approximated		
Transportation		
Example	**Feature**	**Specification**
	Primary Road	**(DOQ)** Line weight .020" **(Non-DOQ)** Line weight .015"
	Secondary Road	**(DOQ)** Line weight .017" **(Non-DOQ)** Line weight .010"
	Unimproved Road	Dash .05", space .010" **(DOQ)** Line weight .010" **(Non-DOQ)** Line weight .008"

Base Map Features *Font specifications that cannot be matched may be approximated		
Transportation		
Example	**Feature**	**Specification**
CAPITAL STREET CAPITAL STREET	Street, Road, Avenue Name	**(DOQ)** 8 Pt. Arial Bold CAPS **(Non-DOQ)** 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”
234	Interstate Highway Symbol	Standard Interstate Route Shield Size .200” x .200” to .400” x .480” 6 – 8 Pt. Arial Bold Narrow CAPS **(DOQ)** Line weight .010” **(Non-DOQ)** 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 **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .008”
234	State Highway Symbol	Circle Diameter .200” to .280” 6 – 8 Pt. Arial Bold Narrow CAPS **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .008”

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Base Map Features *Font specifications that cannot be matched may be approximated		
Transportation		
Example	**Feature**	**Specification**
234	County Highway Symbol	Rectangle Size .150” x .250” to .300” x .400” 6 – 8 Pt. Arial Bold Narrow CAPS **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .008”
Cornish Bridge	Road or Railroad Bridge and Bridge Name	Line weight .010” Wing tick length .025”, angle 45° 8 Pt. Arial Italics CLC
Footbridge	Footbridge and Label	Wing tick length .025”, angle 45° 8 Pt. Arial Italics CLC **(DOQ)** Line weight .010” **(Non-DOQ)** 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 **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .006” to .010”
CHESSIE SYSTEM RAILROAD	Railroad and Name or Label	Tie length .060”, spacing .300” - .500” 8 Pt. Arial Italics CAPS **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .006” to .010”
	Abandoned Railroad	Tie length .060”, spacing .300” - .500” Dash .300”, space .020” **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .006” to .010”

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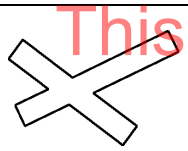
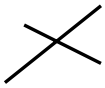
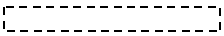
Base Map Features *Font specifications that cannot be matched may be approximated		
Transportation		
Example	**Feature**	**Specification**
– – – – – – – – – – – – – –	Dismantled Railroad, Old Railroad Grade	Dash .100”, space .020” **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .006” to .010”
ABANDONED 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
– – – – – – – – – – – – – – – *Ferry*	Ferry and Label	Line weight .010” Dash .050”, space .020” 8 Pt. Arial Italics CLC
 HAGERSTOWN AIRPORT	Airport and Airport Name	**(DOQ)** Line weight .017” **(Non-DOQ)** Line weight .010” 8 – 10 Pt. Arial CAPS
 HAGERSTOWN AIRFIELD *Airfield*	Airfield, Airfield Name, Airfield Label	Line weight .017” **(Name)** 8 – 10 Pt. Arial CAPS **(Label)** 8 Pt. Arial Italics CLC
 *Landing Strip*	Landing Strip and Label	Line weight .017” 8 Pt. Arial Italics CLC

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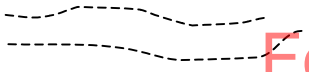
Hydrographic Features

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).

[February 2002]

Base Map Features *Font specifications that cannot be matched may be approximated		
Hydrographic		
Example	**Feature**	**Specification**
	River, Stream, or Other Hydrographic Feature	**(DOQ)** Line weight .010” **(Non-DOQ)** 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 **(DOQ)** Line weight .010” **(Non-DOQ)** 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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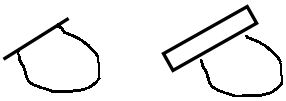
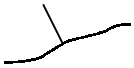
Hydraulic Structures

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.

[February 2002]

Base Map Features *Font specifications that cannot be matched may be approximated		
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 **(DOQ)** Line weight .008” **(Non-DOQ)** Line weight .006” to .008”
 Levee	Levee and Levee 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	**(DOQ)** Line weight .017” 8 Pt. Arial CLC **(Non-DOQ)** 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 **(DOQ)** Line weight .010” **(Non-DOQ)** 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 monument network, these monuments may also be shown on the FIRM with the appropriate designations. The assigned Mapping Partner shall show local 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.

Refer to Volume 1, Section 1.4 for additional information on the criteria for showing bench marks on FIRMs.

Base Map Features

*Font specifications that cannot be matched may be approximated

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Bench Marks

Example	Feature	Specification
DX5510 ×	Bench Mark	10 Pt. Arial CAPS Line Length .100” to .150” Angle 45° **(DOQ)** Line weight .017” **(Non-DOQ)** Line weight .010”

[February 2002]

Political Boundaries

All political boundaries shall be labeled with the appropriate jurisdiction name on each side of the boundary. The adjoining community’s boundary label should be determined by the hierarchy of the areas being identified (e.g., City of Fairfield [if the community is within the same state], City of Fairfield, Wisconsin [if the community is in a different state], or Washington County, Wisconsin [if the county is in a different state]). If the community boundary is also a state boundary, the state name shall be shown in conjunction with the outside area’s community name.

If there is not enough space along the boundary for a label because the jurisdiction area on the panel is small, the boundary itself shall not be labeled.

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. If the boundary labels do not fit inside the area of the multiple-county community, these labels shall be placed outside the community as close as possible to the community and leadered to the boundary. The corporate limits of a multiple-county community that lies in more than one county on a countywide FIRM should be labeled with the jurisdiction name on each side of the boundary. The corporate boundary outside the subject county should be labeled with the community label on the community side of the boundary and the adjacent community (incorporated or unincorporated) on the other side of the boundary.

When Extraterritorial Jurisdictional (ETJ) areas are significant for the purposes of the NFIP, they shall be shown on the FIRM. ETJ boundaries shall be are 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."

Jurisdiction names and CIDs shall be placed near the center of the jurisdiction, if possible to label the area. 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.

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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.

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[February 2002]

Other Boundaries

All areas governed by agencies other than those of the community being studied (military lands, Native American lands, parks, forests, state gamelands, wildlife refuges) shall be labeled with the official name at least once. If the area is large, additional labels should be added as needed. If the label does not fit inside the area, the label should be placed nearby and leadered into the area. The boundary of a park or other cultural feature should be labeled "PARK BOUNDARY" (or whatever the land use area boundary represents) along the outside, parallel to the boundary. If there is not enough space along the boundary, the boundary label may be omitted, but the area itself must always be labeled.

[February 2002]

Base Map Features *Font specifications that cannot be matched may be approximated		
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 **(DOQ)** Line weight .030” **(Non-DOQ)** Line weight .020” to .030”
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 **(DOQ)** Line weight .030” **(Non-DOQ)** 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
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.

[February 2002]

U.S. Public Land Survey System

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.

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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.

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.

Base Map Features *Font specifications that cannot be matched may be approximated		
Horizontal Reference Grids		
Example	**Feature**	**Specification**
_____	Range, Township, Section Line	**(DOQ)** Line weight .008” **(Non-DOQ)** 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	**(DOQ** Line weight .008” **(Non-DOQ)** Line weight .006”
___	Horizontal Reference Grid Ticks	Line weight .020” Length .300”
4276 000 M	Horizontal Reference Grid Coordinates (UTM)	10 Pt. Arial CAPS
365,000 FT	Horizontal Reference Grid Coordinates (State Plane)	10 Pt. Arial CAPS
80° 16’ 52.5”	Corner Coordinates (Latitude, Longitude)	10 Pt. Arial CAPS

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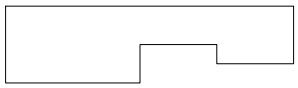
[February 2002]

Other Base Map Features and Notes

The following features and notes shall be added to the FIRM as needed.

Other Base Map Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**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	This note is used when the corporate limits of a community or county boundary 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 Section K.1.4 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 **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .008”

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Other Base Map Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
● 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"

[February 2002]

K.4.2 Flood Hazard Features

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.

[February 2002]

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K.4.2.1 Floodplains and Floodways

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.

[February 2002]

K.4.2.2 Flood Hazard Information Based on Future-Conditions Analyses

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.

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K.4.2.3 Zone Labels

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.

[February 2002]

K.4.2.4 Base Flood Elevations

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.

[February 2002]

K.4.2.5 Cross Sections

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.

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K.4.2.6 Cross-Section Labeling

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.

[February 2002]

K.4.2.7 Limit of Detailed Study and Limit of Study

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 FIRM, and these situations should not be labeled on the FIRM. Also note that the same rules apply to Flood Profiles. A Limit of Detailed Study shall be depicted as a zone boundary and labeled as a Limit of Detailed Study when it divides areas of different zone designations (e.g., Zone AE from Zone A).

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.

[February 2002]

K.4.2.8 Coastal Transects

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.

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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.

[February 2002]

K.4.2.9 Coastal Transect Labeling

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. Refer to Appendix J for additional information on the Transect Location Map.

The table below provides examples of these flood hazard map features and their graphic portrayal on FIRMs. Two sets of examples, one for FIRMs that are DOQ-based and one for those that are non-DOQ-based are provided. In general, the non-DOQ-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 DOQ-based FIRMs. Bold type fonts surrounded by a white halo shall be used on DOQ-based FIRMs. Medium type fonts shall be used on non-DOQ-based FIRMs where the gray shading used for flood hazard areas allows them to show more clearly.

All flood hazard features shall be shown on the FIRM in black unless otherwise indicated.

Flood Hazard Features and Notes

*Font specifications that cannot be matched may be approximated

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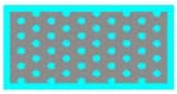
	Feature/Usage	Specification
(DOQ)  **(Non-DOQ)** 	1% annual chance Flood Hazard Area (Zones A, AE, AO, AH, AR, A99, V, and VE)	**(DOQ)** Area fill pattern Dot Diameter .020" Spacing .030" Offset between rows .025" Color: Cyan **(Non-DOQ)** 50% 133 lines per inch screen tint or equivalent area fill pattern
(DOQ) **(Non-DOQ)**	1% annual chance Flood Hazard Boundary Line	**(DOQ)** Line weight .020" Color: Cyan **(Non-DOQ)** Line weight .015"

Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
LIMIT OF STUDY LIMIT OF DETAILED STUDY **(DOQ)** **(Non-DOQ)**	The **Limit of Study** note is used to indicate 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 indicate 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 **(Line - DOQ)** Line weight .020” Color: Cyan **(Line – Non-DOQ)** Line weight .015” Color: Black
(DOQ) **(Non-DOQ)**	Boundary Dividing SFHAs of Different Elevations, Velocities, or Depths	Color: White **(DOQ)** Line weight .020” **(Non-DOQ)** Line weight .015”
(DOQ) **(Non-DOQ)**	0.2% annual chance Flood Hazard Area (shaded Zone X)	**(DOQ)** Area fill pattern Dots .020” diameter Spacing .030” Offset between rows .025” **(Non-DOQ)** 20% 133 lines per inch screen tint or equivalent area fill pattern
	0.2% annual chance Flood Hazard Boundary Line	**(DOQ)** Line weight .020” **(Non-DOQ)** Line weight .015”
	Areas Outside 1% or 0.2% annual chance Flood Hazard Areas (Zone X, D)	No screen or tint

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Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
	Zone D Boundary	Dash .500”, space .050 **(DOQ)** Line weight .020” **(Non-DOQ)** Line weight .015”
(DOQ) **(Non-DOQ)**	Floodway Area	**(DOQ)** 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 **(Non-DOQ)** 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”
	Colorado River Floodway	Area fill pattern Diagonal cross-hatching at 45° and 135° angles 10 lines per inch Line weight .010”
(DOQ) **(Non-DOQ)**	Floodway Boundary Line	Dash .375”, space .050” **(DOQ)** Line weight .020” Color: Cyan **(Non-DOQ)** Line weight .015”

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Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
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 - DOQ)** Line weight .004” **(Line – Non-DOQ)** 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
513	Base Flood Elevation Line	**(DOQ)** Line weight .017” **(Non-DOQ)** Line weight .010” to .030”
646	Base Flood Elevation Value	10 Pt. Arial Italics
A A	Cross Section	Hexagon .200” across 10 Pt. Arial Bold CAPS **(DOQ)** Line weight .017” **(Non-DOQ)** Line weight .010”
23 23	Coastal Transect	10 Pt. Arial Bold CAPS Circle Diameter .200” Dash .050”, space .010” **(DOQ)** Line weight .017” **(Non-DOQ)** Line weight .010”

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Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
←	Arrowhead Leader	**(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .006”
•—	Dot Leader	Dot Diameter .020” **(DOQ)** Line weight .010” **(Non-DOQ)** Line weight .006”
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

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Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
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 POSSIBLE 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
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 (*NGVD / NAVD*)	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.	8 Pt. Arial Bold CAPS

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Flood Hazard Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
FLOOD HAZARD INFORMATION IS NOT SHOWN ON THIS MAP IN AREAS OUTSIDE OF *[community/county name]*	This note is used on DOQ-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 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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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

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K.4.3 Map Body Features and Notes

The following notes 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.

Map Body Features and Notes *Font specifications that cannot be matched may be approximated		
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 - DOQ)** Line weight .010" **(Neatline - Non-DOQ)** Line weight .006"

Map Body Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
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”
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 Section K.4.1.2 for an example of a coincident political boundary note.	10 Pt. Arial CAPS

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Map Body Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
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"

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K.4.4 Coastal Barrier Resources System Map Components

In cooperation with the U.S. Department of the Interior, FEMA transfers CBRS boundaries to FIRMs using Congressionally adopted CBRS source maps. FIRMs clearly depict the different CBRS areas and their effective dates with special map notes and symbologies. It should be noted that although FEMA shows CBRS areas on FIRMs, the U.S. Congress is the only entity that may authorize a revision to CBRS boundaries.

This Appendix uses the terms "Coastal Barriers" and "Coastal Barrier Resources System" units (CBRS). 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.

[February 2002]

K.4.4.1 Coastal Barrier Resources System Boundaries

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 existing homes 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.

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.

[February 2002]

K.4.4.2 Map Screens for Coastal Barrier Resources System Areas

Although there are several different types of Coastal Barriers, there are only 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.

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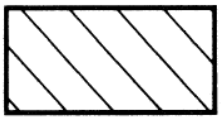
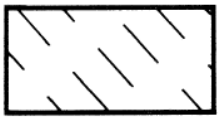
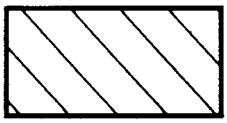


CBRS unit



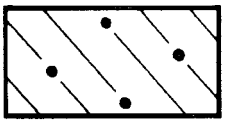
OPA unit

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.

[February 2002]

K.4.4.3 Coastal Barrier Notes for the Body of the FIRM

CBRS and OPA notes 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 or OPA screen, near the land area. When the note cannot be placed within the CBRS or OPA screen without creating overprints, the note shall be leadered to the land area.

CBRS Features and Notes

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

Example	Feature/Usage	Specification
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 CBRS unit. An abbreviated note (see below) accompanied by a special Coastal Barrier Legend may be used instead. See Section K.5.1.1 for examples of the Coastal Barrier Legend.	7 Pt. Arial CAPS
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 CBRS unit. An abbreviated note (see below) accompanied by a special Coastal Barrier Legend may be used instead. See Section K.5.1.1 for examples of the Coastal Barrier Legend.	7 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 identifies an area classified as a 1991 or later Otherwise Protected Area. An abbreviated note (see below) accompanied by a special Coastal Barrier Legend may be used instead. See Section K.5.1.1 for examples of the Coastal Barrier Legend.	7 Pt. Arial CAPS
COASTAL BARRIER RESOURCES SYSTEM BOUNDARY COINCIDENT WITH CORPORATE LIMITS	This note is an example of one that may be used to clarify coincident features. See Section K.4.1.2 for an example of a coincident political boundary note.	10 Pt. Arial CAPS

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For Reference Only.

CBRS Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
COASTAL BARRIER IDENTIFIED *(date)* (SEE COASTAL BARRIER LEGEND)	This is the abbreviated Coastal Barrier note for 1983 or 1990 or later Coastal Barriers. This note is used on all FIRM panels containing CBRS areas for a community with more than one different prohibition date. When this procedure is used, a special Coastal Barrier Legend is placed below the Notes to Users section of the FIRM border. This legend shows the entire CBRS map note for each classification of CBRS unit present on all of the FIRM panels in the community or county. See Section K.5.1.1 for examples of the Coastal Barrier Legend.	7 Pt. Verdana Bold CAPS
OTHERWISE PROTECTED AREA IDENTIFIED *(date)* (SEE COASTAL BARRIER LEGEND)	This is the abbreviated note for 1991or later Otherwise Protected Areas. This note is used on all FIRM panels containing CBRS areas for a community with more than one different prohibition date. When this procedure is used, a special Coastal Barrier Legend is placed below the Notes to Users section of the FIRM border. This legend shows the entire CBRS map note for each classification of OPA present on all of the FIRM panels in the community or county. See Section K.5.1.1 for examples of the Coastal Barrier Legend.	7 Pt. Verdana Bold 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.	10 Pt. Arial Bold CLC

This Document is Superseded.
For Reference Only.

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 Area 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 in the body of the FIRM panel close to the CBRS units. If the abbreviated Coastal Barrier notes and special Coastal Barrier Legend are used, this note appears below the Coastal Barrier Legend. See Section K.5.1.1 for examples of 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. Tahoma Bold CLC
	Coastal Barrier Resources System Area	Area fill pattern Diagonal hatching at 135° angle 8 to 10 lines per inch Line weight .006" to .010"
	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"
	Coastal Barrier Boundary on Manual FIRM	Line weight .015"

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For Reference Only.

[February 2002]

K.5 Map Legend

The map legend shall contain those items that are needed to assist the map user in interpreting map symbols, flood hazard screens, linework, flood hazard zone information, and other data within the body of the map. Planimetric data (such as railroads and political boundaries) shall not be included in the FIRM legend.

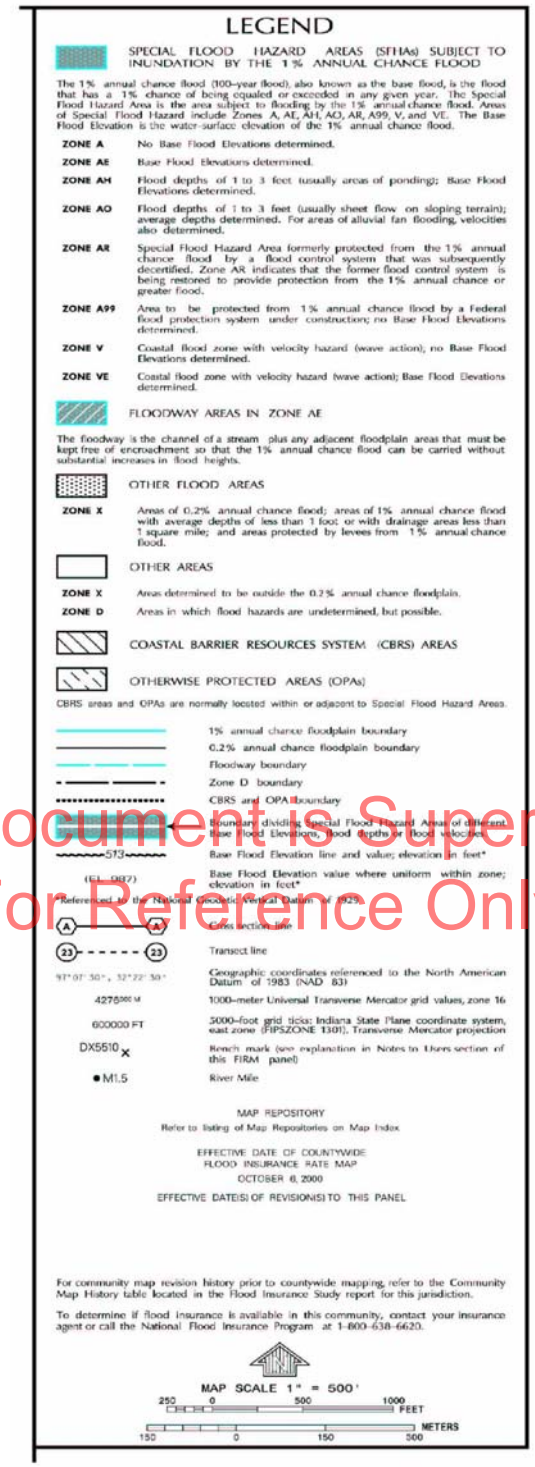
Most of the FIRM legend elements are standardized and do not vary. However, the content of the FIRM legend varies slightly based on the chosen base map, its coordinate system and horizontal datum, the vertical datum used for the study, community variables (e.g., map repository, previous FIRM editions), 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 DFIRM, DOQ Base Map (Figure K-17);
- Countywide DFIRM, Non-DOQ Base Map (Figure K-18);
- Single-Jurisdiction DFIRM, DOQ Base Map, Map Revised (Figure K-19);
- Single-Jurisdiction DFIRM, Non-DOQ Base Map, Effective Date (Figure K-20);
- Single-Jurisdiction DFIRM, Non-DOQ 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);.

This Document is Superseded.
For Reference Only.

Figure K-17.
Countywide DFIRM,
DOQ Base Map Legend



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) 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
	CBRS and OPA 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*
A — A	Cross section line
23 - - - - - 23	Transect line
97° 07' 30", 32° 22' 30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4275000 M	1000-meter Universal Transverse Mercator grid values, zone 16
600000 FT	5000-foot grid ticks: Indiana State Plane coordinate system, east zone (FIPSZONE 1301), Transverse Mercator projection
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
• M1.5	River Mile

*Referenced to the National Geodetic Vertical Datum of 1929.

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.

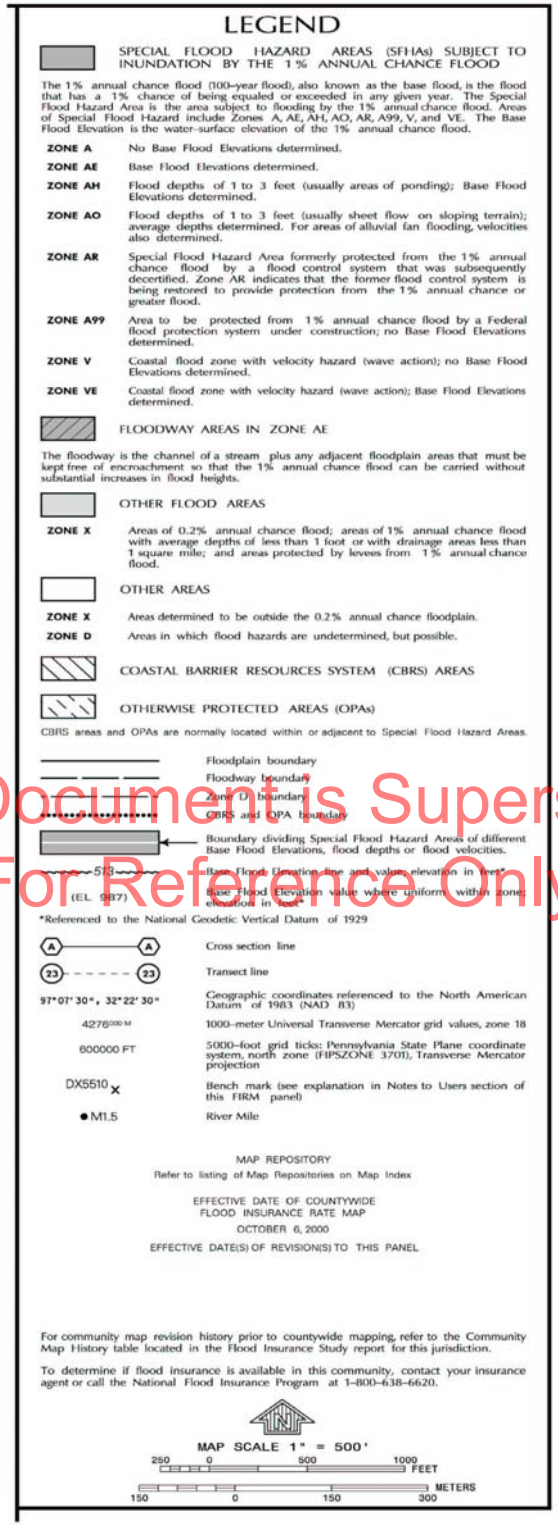
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

This Document is Superseded.
For Reference Only.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) 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.

Floodplain boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

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

573 — 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

23 - - - - - 23 Transect line

97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)

4276000 M — 1000-meter Universal Transverse Mercator grid values, zone 18

600000 FT — 5000-foot grid ticks: Pennsylvania State Plane coordinate system, north zone (FIPSZONE 3701), Transverse Mercator projection

DX5510 × — 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.

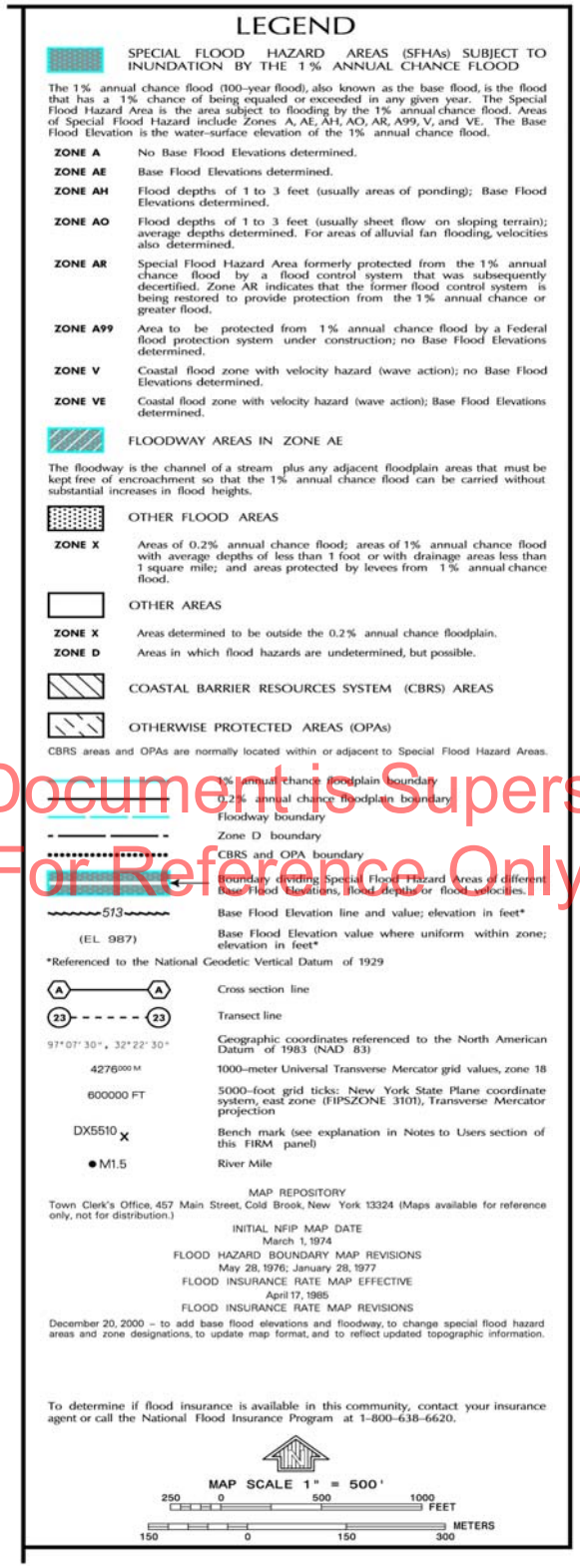
MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

This Document is Superseded.
For Reference Only.

Figure K-18. Countywide DFIRM, Non-DOQ Base Map Legend



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) 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
	CBRS and OPA 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
23 - - - - - 23	Transect line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4276000 M	1000-meter Universal Transverse Mercator grid values, zone 18
600000 FT	5000-foot grid ticks: New York State Plane coordinate system, east zone (FIPSZONE 3101), Transverse Mercator projection
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
● M1.5	River Mile

MAP REPOSITORY

Town Clerk's Office, 457 Main Street, Cold Brook, New York 13324 (Maps available for reference only, not for distribution.)

INITIAL NFIP MAP DATE
March 1, 1974
FLOOD HAZARD BOUNDARY MAP REVISIONS
May 28, 1976; January 28, 1977
FLOOD INSURANCE RATE MAP EFFECTIVE
April 17, 1985
FLOOD INSURANCE RATE MAP REVISIONS

December 20, 2000 – to add base flood elevations and floodway, to change special flood hazard areas and zone designations, to update map format, and to reflect updated topographic information.

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.

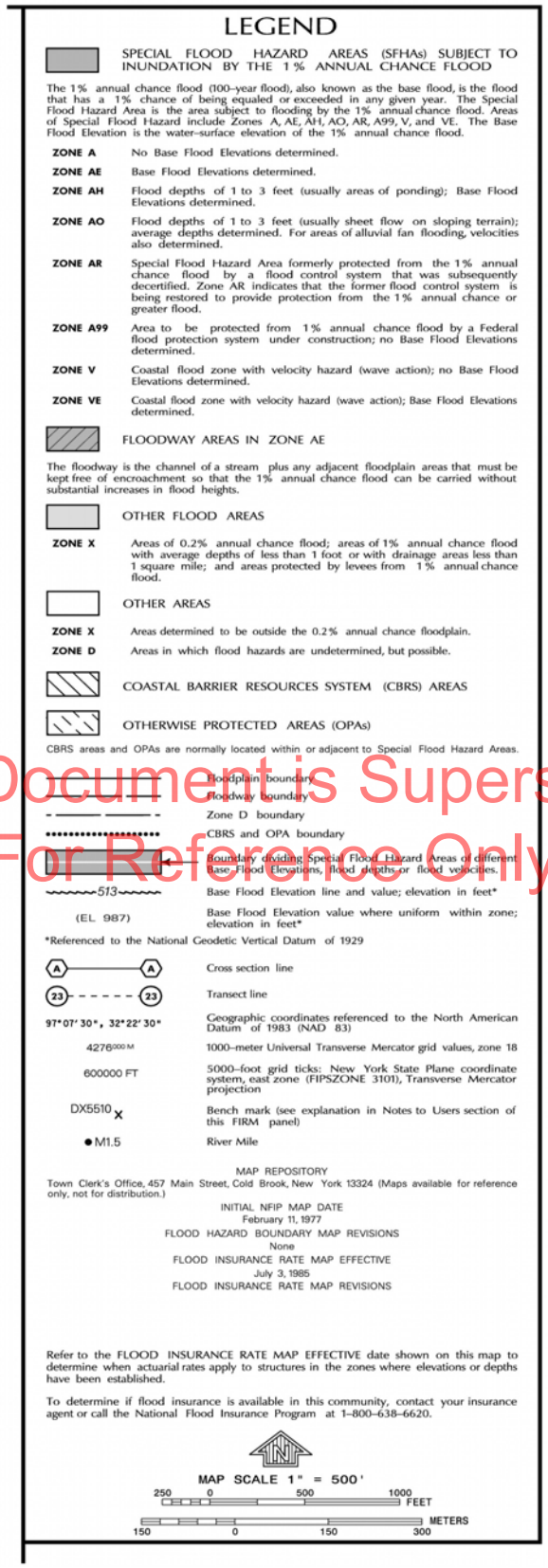
MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

This Document is Superseded.
For Reference Only.

Figure K-19. Single-Jurisdiction DFIRM, DOQ Base Map, Map Revised Legend



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) 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.

Floodplain boundary

Floodway boundary

Zone D boundary

CBRS and OPA 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

23 - - - - - 23 Transect line

97°07′30″, 32°22′30″ Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)

4276000 M 1000-meter Universal Transverse Mercator grid values, zone 18

600000 FT 5000-foot grid ticks: New York State Plane coordinate system, east zone (FIPSZONE 3101), Transverse Mercator projection

DX5510 × Bench mark (see explanation in Notes to Users section of this FIRM panel)

● M1.5 River Mile

MAP REPOSITORY

Town Clerk's Office, 457 Main Street, Cold Brook, New York 13324 (Maps available for reference only, not for distribution.)

INITIAL NFIP MAP DATE

February 11, 1977

FLOOD HAZARD BOUNDARY MAP REVISIONS

None

FLOOD INSURANCE RATE MAP EFFECTIVE

July 3, 1985

FLOOD INSURANCE RATE MAP REVISIONS

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.

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.

N

MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

This Document is Superseded.
For Reference Only.

Figure K-20. Single-Jurisdiction DFIRM, Non-DOQ Base Map

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) 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.

	Floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA 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
23 - - - - - 23	Transect line
97°07′30″, 32°22′30″	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4276000 M	1000-meter Universal Transverse Mercator grid values, zone 18
600000 FT	5000-foot grid ticks: New York State Plane coordinate system, east zone (FIPSZONE 3101), Transverse Mercator projection
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
● M1.5	River Mile

MAP REPOSITORY

Town Clerk's Office, 457 Main Street, Cold Brook, New York 13324 (Maps available for reference only, not for distribution.)

INITIAL NFIP MAP DATE
March 1, 1974
FLOOD HAZARD BOUNDARY MAP REVISIONS
May 28, 1976; January 28, 1977
FLOOD INSURANCE RATE MAP EFFECTIVE
April 17, 1985
FLOOD INSURANCE RATE MAP REVISIONS

December 20, 2000 – to add base flood elevations and floodway, to change special flood hazard areas and zone designations, to update map format, and to reflect updated topographic information.

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'

250 0 500 1000 FEET

150 0 150 300 METERS

This Document is Superseded.
For Reference Only.

Figure K-21. Single-Jurisdiction DFIRM, Non-DOQ 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

This Document is Uncontrolled For Reference Only.

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

KEY TO MAP

500-Year Flood Boundary	
100-Year Flood Boundary	
Zone Designations	ZONE B / ZONE A1 / ZONE A5 / ZONE B
100-Year Flood Boundary	
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation in Feet**	
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

[February 2002]

K.5.1 Map Legend Components

The Map Legend provides the user with explanations of flood hazard feature representations as they are depicted on the FIRM or FBFM. The following components shall appear in the legend:

- Flood hazard area and CBRS area screen descriptions;
- Flood hazard zones descriptions;
- Floodplain, regulatory floodway, zone, 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 the table below to explain why a panel was revised. Only one date is required when more than one note is used. 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.

Map Legend Features and Notes *Font specifications that cannot be matched may be approximated		
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 and other map feature descriptions	8 Pt. Tahoma CLC
1% annual chance floodplain boundary	SFHA boundary description	8 Pt. Tahoma LC
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.	8 Pt. Arial CAPS and CLC
MAP REPOSITORY Refer to listing of Map Repositories on Map Index	This note explains the location of the Map Repository note used for countywide maps. The map repository address for each community in the county is listed on the Map Index. See Section K.3.2 for an example of map repository listings used on the Map Index.	8 Pt. Arial CAPS and CLC
INITIAL IDENTIFICATION February 11, 1977 FLOOD HAZARD BOUNDARY MAP REVISIONS None FLOOD INSURANCE RATE MAP EFFECTIVE July 3, 1985 FLOOD INSURANCE RATE MAP REVISIONS December 20, 2000 – 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 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 Section K.5.1.1 for standard Coastal Barrier revision notes.	8 Pt. Arial CAPS and CLC

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Map Legend Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
INITIAL NFIP MAP DATE February 11, 1977 FLOOD HAZARD BOUNDARY MAP REVISIONS None FLOOD INSURANCE RATE MAP EFFECTIVE July 3, 1985 FLOOD INSURANCE RATE MAP REVISIONS December 20, 2000 – 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 CAPS and CLC
EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP June 28, 1995 EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL August 23, 1999 – 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 listings of NFIP map dates are used for countywide studies. See Appendix J for information on previous historical map dates for countywides.	8 Pt. Arial CAPS and CLC
January 31, 2001 - 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

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Map Legend Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
(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.	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
(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. "Update" instead of "add" is used when roads are moved or deleted, or when the names of roads change.	8 Pt. Arial CLC

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Map Legend Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
(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
(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), (year)	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.	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

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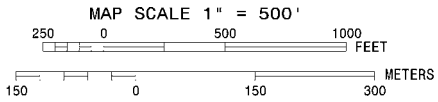
Map Legend Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
(Date of revision) - to add floodway	This note is used when floodway delineation has been added. This note is used only on Map Initiatives format FIRMs.	8 Pt. Arial CLC
(Date of revision) - to change floodway	This note is used when a floodway delineation change is the 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
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 CAPS and CLC
	North arrow	Lineweight .010” Width .700” Height .400”
	The DFIRM 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.	10 Pt. Arial Bold CAPS

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[February 2002]

K.5.1.1 Coastal Barrier Resources System Map Revision Notes

The map revision notes pertaining to modifications to 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 are not panel-specific. They must reflect the action taken for the entire jurisdiction.

Coastal Barrier Revision Notes Matrix

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.

[February 2002]

K.5.1.2 Coastal Barrier Resource System Legend

The assigned Mapping Partner shall only use the Coastal Barrier Legend shown below when the abbreviated Coastal Barrier notes are used on the body of the FIRM and there is more than one note that applies to the entire community. It shall be placed under the Notes to Users portion of the frame in a separate frame area. These notes are the same as the non-abbreviated notes used on the body of the FIRM shown in Section K.4.4. These revision notes are not panel-specific.

They must reflect the action taken for the entire jurisdiction. A Coastal Barrier Legend example (Figure K-24) is provided below, followed by a table of the specifications for features and notes.

COASTAL BARRIER LEGEND

11–16–90 Coastal Barrier

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

10–01–83 Coastal Barrier

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

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; (413) 253_ 8614.

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For Reference Only.

Figure K-24. Coastal Barrier Legend

Coastal Barrier Legend Features and Notes *Font specifications that cannot be matched may be approximated		
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 Legend Features and Notes *Font specifications that cannot be matched may be approximated		
Example	**Feature/Usage**	**Specification**
(_ _-_ _-_ _) 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
(_ _-_ _-_ _) 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

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[February 2002]

K.6 Map Title Block

The FIRM title block shall contain those items that identify the community and provide panel-specific information, including the map number and effective date of the FIRM panel. The community name must include, at a minimum, the community type (e.g., city, town, village), 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 this community information, as in the following examples of community naming formats :

Town of
Adams,
Pennsylvania
Jefferson County

City of
Hampton,
Virginia
Independent City

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Boone County,
Illinois
(Unincorporated Areas)

Carbon County,
Utah
And Incorporated Areas

Pike County,
Pennsylvania
(All Jurisdictions)

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

- Countywide DFIRM (Figure K-25);
- Countywide DFIRM with CBRS Areas (Figure K-26);
- Single-Jurisdiction Multi-Panel DFIRM (Figure K-27);
- Single-Jurisdiction DFIRM, 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, "Title Block Element Specifications." Figures K-31 and K-32 provide important information concerning the title block content.

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NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0333 C

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.

FEDERAL EMERGENCY MANAGEMENT AGENCY

MAP NUMBER
42103C0333 C

EFFECTIVE DATE
OCTOBER 6, 2000

Federal Emergency Management Agency

Figure K-25. Countywide DFIRM Title Block

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0038 D

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.

FEDERAL EMERGENCY MANAGEMENT AGENCY

MAP NUMBER
99009C0038 D

EFFECTIVE DATE
AUGUST 19, 1998

Federal Emergency Management Agency

Figure K-26. Countywide DFIRM Title Block with CBRS Areas

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0004 C

FIRM
FLOOD INSURANCE RATE MAP

TOWNSHIP OF
MANOR,
PENNSYLVANIA
LANCASTER COUNTY

PANEL 4 OF 13

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MANOR, TOWNSHIP OF	420557	0004	C

This Document is Superseded.
For Reference Only.

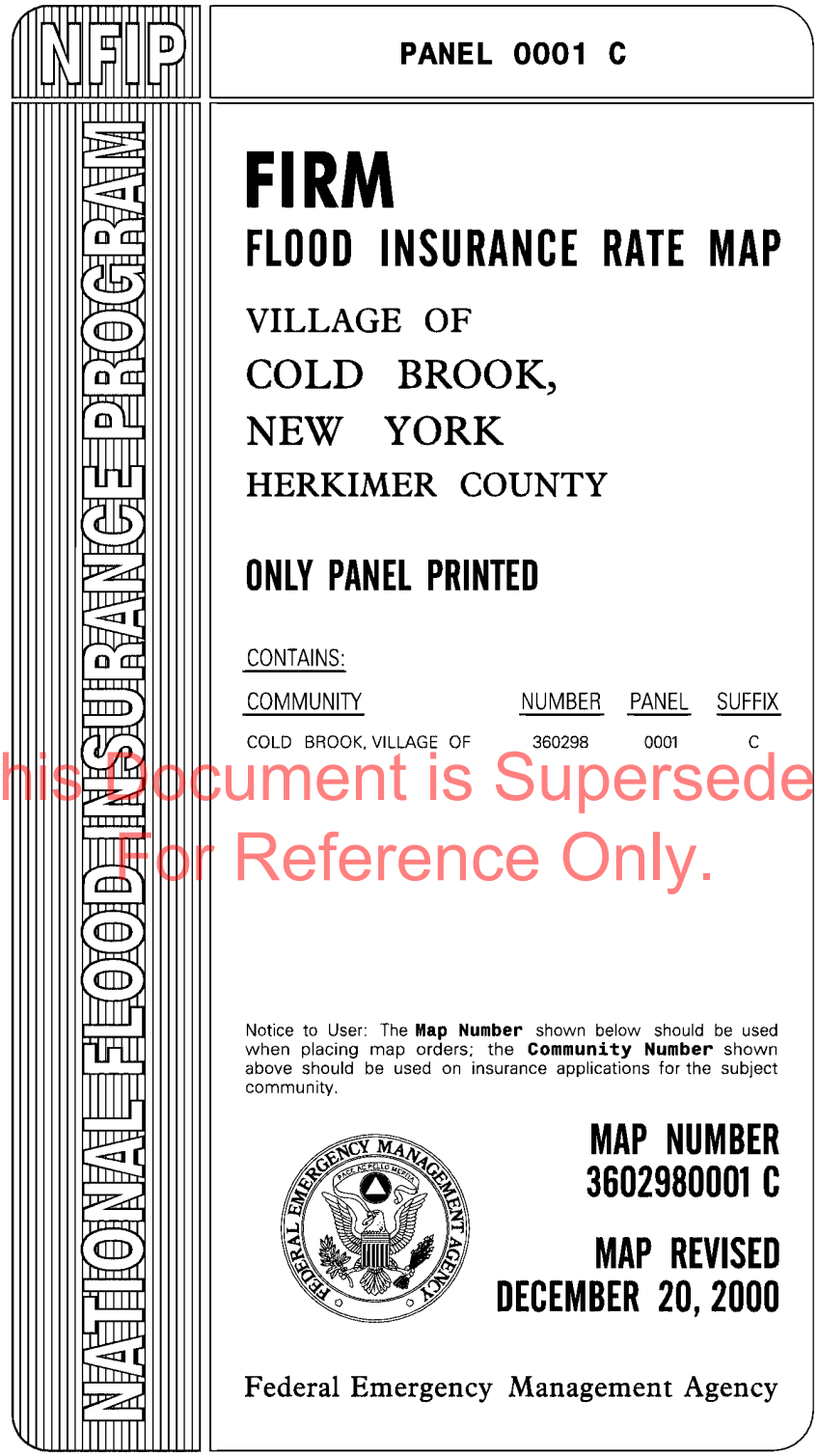
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
4205570004 C

MAP REVISED
SEPTEMBER 22, 1999

Federal Emergency Management Agency

Figure K-27. Single-Jurisdiction Multi-Panel DFIRM Title Block



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0001 C

FIRM

FLOOD INSURANCE RATE MAP

VILLAGE OF

COLD BROOK,

NEW YORK

HERKIMER COUNTY

ONLY PANEL PRINTED

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
COLD BROOK, VILLAGE OF	360298	0001	C

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

3602980001 C

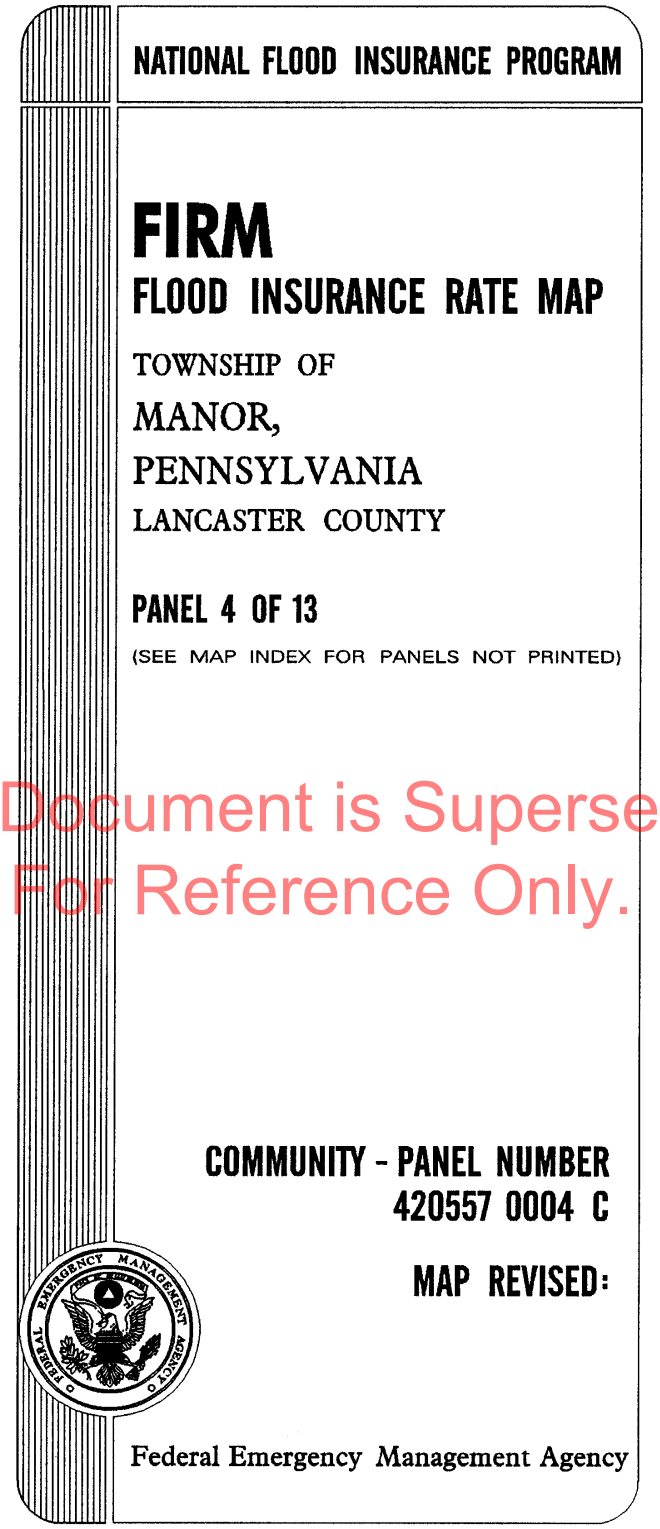
MAP REVISED

DECEMBER 20, 2000

Federal Emergency Management Agency

This Document is Superseded.
For Reference Only.

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



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For Reference Only.

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

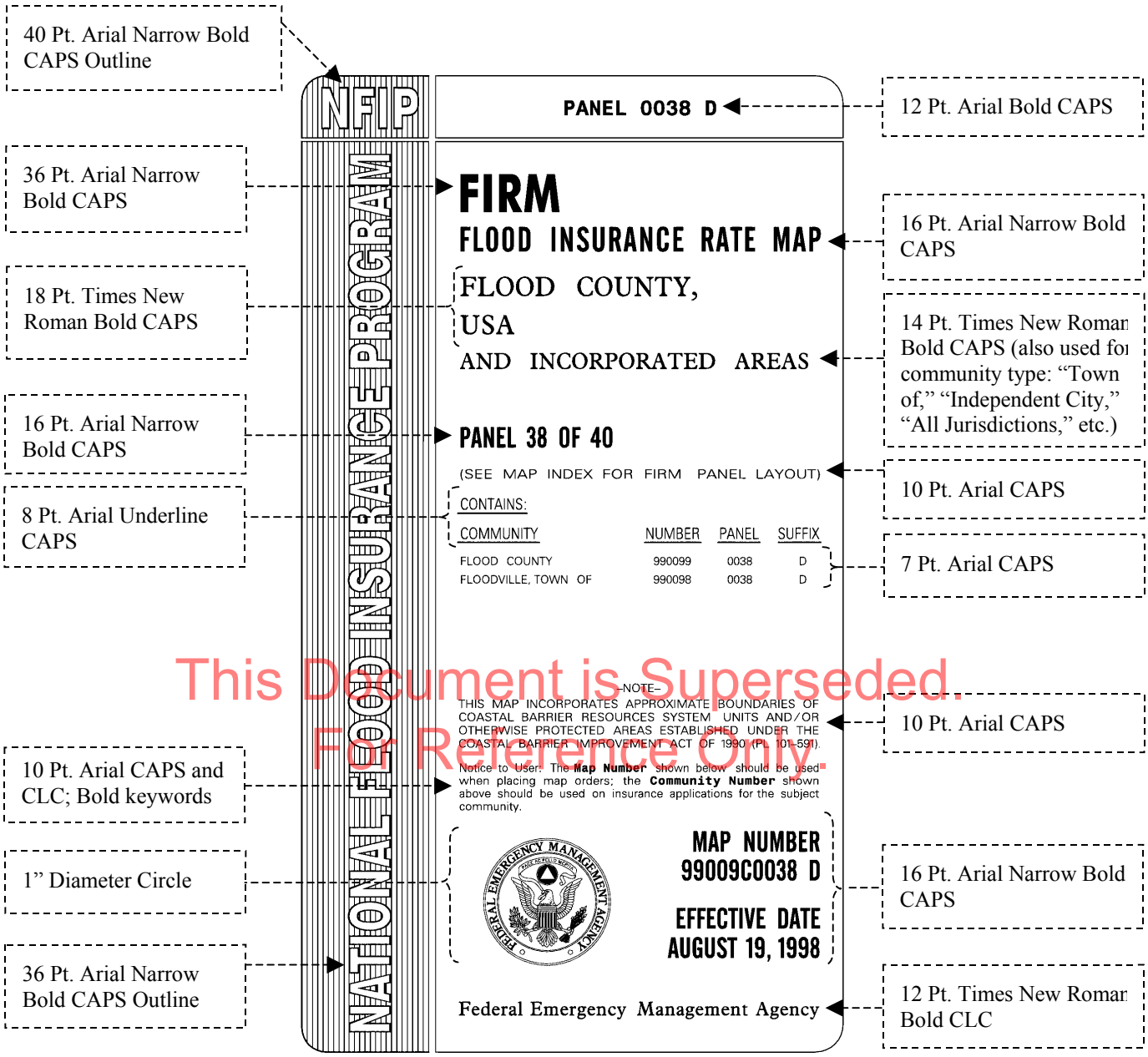

Figure K-30. Title Block Element Suggested Font Specifications

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 multi-panel FIRMs. "Only Panel Printed" shall be used when the community may be shown on a single map sheet.

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

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0038 D

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

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
99009C0038 D

EFFECTIVE DATE
AUGUST 19, 1998

Federal Emergency Management Agency

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 communities shown on the panel. Communities, including any county areas, are listed alphabetically.

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

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 Revised."

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FLOOD COUNTY	990099	0038	D
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–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).

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99009C0038 D

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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;
- a space; 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. Title Block Element Usage Notes

K.7 Map Locator Diagram

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.
- 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.
- Applicable Panel Not Printed notes, presented in Section K.3.1, shall be used to explain the non-printed panel(s).
- The panel that is printed shall be indicated with a screen.

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For Reference Only.

[February 2002]