8. DFIRM NOTES TO USER

8.1. Notes to User

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

The following notes are shown in the DFIRM Notes to User section. Several notes contain variables that are specific to the conditions that exist in the DFIRM. The variable is chosen and inserted when the DFIRM is prepared. The variables are shown in italics in these examples.

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

This note is shown on all DFIRM panels.

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

This note informs the user that supplemental flood elevation information is located within the FIS report. It is omitted from the Notes to User if the DFIRM is not accompanied by an FIS report. A modified version of this note, shown below, is used on combination DFIRM and FIS panels.

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

This note informs the user that supplemental flood elevation information is located on the map panel. It is used on combination DFIRM and FIS panels.

8.1.4. **Coastal Base Flood Elevations (BFEs)** shown on this map apply only landward of 0.0' *National Geodetic Vertical Datum of 1929 (NGVD 29) / North American Vertical Datum of 1988 (NAVD 88)*. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

This note provides map users with additional information on the interpretation of coastal BFEs. The vertical datum variable is shown in italics. This note is omitted if the DFIRM is not accompanied by an FIS report. A modified version of this note, shown below, is used on combination DFIRM and FIS panels.

8.1.5. **Coastal Base Flood Elevations (BFEs)** shown on this map apply only landward of 0.0' *National Geodetic Vertical Datum of 1929 (NGVD 29) / North American Vertical Datum of 1988 (NAVD 88)*. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table shown on this map. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

This note informs the user that additional information on the interpretation of coastal BFEs is located on the map panel. It is used on combination DFIRM and FIS panels.

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

This note references boundaries and widths of the floodway. It also references the NFIP as the authority for floodways and refers users to other floodway data in the FIS report. This note is omitted if the DFIRM is not accompanied by an FIS report. A modified version of this note, shown below, is used on combination DFIRM and FIS panels.

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

This note refers users to other floodway data located on the map panel. It is used on combination DFIRM and FIS panels.

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

This note refers the user to the FIS report for additional information on flood control structures within the jurisdiction. This note is omitted if the DFIRM is not accompanied by an FIS report. It is also omitted on combination DFIRM and FIS panels.

8.1.9. The **projection** used in the preparation of this map was *Universal Transverse Mercator (UTM) Zone 17*. The **horizontal datum** was *NAD83, GRS 80* spheroid. Differences in datum, spheroid, projection or *UTM* zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

This note provides map users with information about the projections and datums used in the production of the DFIRM. The variable items are italicized.

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

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

This note references vertical datums (used for flood elevation determinations) and refers map users to the National Geodetic Survey website. The vertical datum variable is shown in italics.

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

This note tells users where they can find additional information about the bench marks shown on the DFIRM. When local qualifying monuments are included on the DFIRM, a reference phone number and URL (if available) are included and a modified version of the bench mark note shown above is used.

8.1.12. **Base map** information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1998 or later.

Base map information shown on this FIRM was provided in digital format by the Flood County Office of GIS. This information was photogrammetrically compiled at a scale of 1:4,800 from aerial photography dated February 1996.

These notes provide basic information about the base map source(s) used in the production of the DFIRM. It includes the base map producer (community agency or USGS), scale, and approximate date of the base map data.

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

This note is used when the DFIRM base map files contain improved/updated stream configurations in areas where detailed flood hazard analyses have not been revised. If this condition applies to five streams or fewer, the streams are listed by name. If it applies to more than five streams, the stream names are omitted. This note is omitted if it does not apply to any streams in the jurisdiction or if the DFIRM is not accompanied by an FIS report. On combination DFIRM and FIS panels, the words "in the Flood Insurance Study report" (shown in italics) are omitted.

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

This note is shown on all DFIRM panels.

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

This note is used on countywide DFIRMs to provide map users with information about what they can find on the Map Index.

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

This note is used on single jurisdiction DFIRMs to provide map users with information about what they can find on the Map Index.

8.1.17. An accompanying Flood Insurance Study (FIS) report, Letters of Map Revision or Letters of Map Amendment revising portions of this panel, and digital versions of this panel may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA:

Phone: 800-358-9616
Fax: 800-358-9620
www.fema.gov/msc

This note refers users to FEMA's Map Service Center for other pertinent information that may be available. A modified version of this note, shown below, is used omitted if the DFIRM is not accompanied by an FIS report.

8.1.18. Letters of Map Revision or Letters of Map Amendment revising portions of this panel and digital versions of this panel may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA:

Phone: 800-358-9616
Fax: 800-358-9620
www.fema.gov/msc

This note refers users to FEMA's Map Service Center for other pertinent information that may be available. This note is used on DFIRMs that are not accompanied by an FIS report.

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

This note refers the map user to the FEMA website and the 1-877-FEMA-MAP phone number. It is shown on all DFIRM panels.

8.1.20. Special Flood Hazard Areas were determined by approximate study methods. Therefore, no Flood Insurance Study report was developed.

This note is used on DFIRMs that are not accompanied by an FIS report.

8.2. Coastal Barrier Legend

If the abbreviated Coastal Barrier notes are used on the body of the DFIRM, a special Coastal Barrier Legend is used. The Coastal Barrier Legend contains the following elements. These notes are the same as the non-abbreviated notes used on the body of the DFIRM shown in Section 5.8.4.

8.2.1. 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 DFIRM.

8.2.2. 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 DFIRM.

8.2.3. 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 DFIRM.

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

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

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.

8.3. Graphic Representation of Title Block, Legend, and Notes

The following section provides examples of various title block, legend, and Notes to Users and their graphic portrayal on DFIRMs.

DFIRM Notes to User

FEATURE	SPECIFICATION	EXAMPLE
Notes to Users Title	22 Pt. Theme Bold CAPS 22 Pt. Univers Bold CAPS 22 Pt. Arial Bold CAPS	**NOTES TO USERS**
Notes	8 - 10 Pt. Univers Medium CLC Key words bold 8 - 10 Pt. Arial CLC Key words bold	Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**.
Coastal Barrier Legend	22 Pt. Theme Bold CAPS 22 Pt. Univers Bold CAPS 22 Pt. Arial Bold CAPS	**COASTAL BARRIER LEGEND**
Coastal Barrier Legend Notes	10 Pt. Univers Medium and Bold CAPS and CLC 10 Pt. Arial and Arial Bold CAPS and CLC	**10-01-83 Coastal Barrier** FLOOD INSURANCE NOT AVAILABLE FOR NEW CONSTRUCTION ……..
Coastal Barrier Legend Coordinator Note	10 Pt. Univers Bold CLC 10 Pt. Arial Bold CAPS	**Comments or concerns regarding Coastal Barrier Resources System areas…….**

8.4. Sample Notes to User

The following pages contain sample notes to users for the following different types of DFIRMs:

- Countywide, DOQ Base Map
- Countywide, Vector Base Map
- Single Jurisdiction, DOQ Base Map, Multi Panel
- Single Jurisdiction, DOQ Base Map, Only Panel Printed
- Coastal Barrier Legend

Countywide, DOQ Base Map

NOTES TO USERS

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

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

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

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

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

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 18. The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

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

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

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

Base map information shown on this FIRM was derived from U. S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1992 or later.

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

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

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

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment revising portions of this panel, and digital versions of this FIRM may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA;

Phone: 800–358–9616
FAX: 800–358–9620
www.fema.gov/msc

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

Countywide, Vector Base Map

NOTES TO USERS

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

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

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

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

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

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 18. The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

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

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

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

Base map information shown on this FIRM was provided in digital format by the Flood County Office of GIS. This information was photogrammetrically compiled at a scale of 1:4,800 from aerial photography dated February 1996.

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

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

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

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment revising portions of this panel, and digital versions of this FIRM may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA;

Phone: 800–358–9616
FAX: 800–358–9620
www.fema.gov/msc

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

Single Jurisdiction, DOQ Base Map, Multi Panel

NOTES TO USERS

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

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

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

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

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

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 18. The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

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

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

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

Base map information shown on this FIRM was derived from U. S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1992 or later.

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

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

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

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment revising portions of this panel, and digital versions of this FIRM may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA;

Phone: 800–358–9616
FAX: 800–358–9620
www.fema.gov/msc

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

Single Jurisdiction, DOQ Base Map, Only Panel Printed

NOTES TO USERS

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

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

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

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

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

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 18. The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

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

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

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

Base map information shown on this FIRM was derived from U. S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1992 or later.

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

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

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment revising portions of this panel, and digital versions of this FIRM may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA;

Phone: 800–358–9616
FAX: 800–358–9620
www.fema.gov/msc

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

Coastal Barrier Legend

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.

9. MAP SCALES, LAYOUT, AND PANEL NUMBERING

9.1. Map Scales

For DFIRMs, the map scales to be used are 1"=500', 1"=1,000', or 1"=2,000' depending on the density of information, width of floodplains, type of study (i.e., detailed or approximate), and scale of any previously prepared FIRMs. A scale of 1"=2,000' generally is used only for panels containing areas of approximate study, but may also be used for areas of detailed study with extremely wide floodplains. A scale of 1"=1,000' is used for areas of detailed study with moderately wide floodplains or areas where map features cannot clearly be shown at 1"=2,000'. A scale of 1"=500' is used for areas of detailed study with narrow floodplains, coastal areas with narrow zones of different elevations, or areas of very dense map features (i.e., heavily built-up areas). Often, it is appropriate to use a mixture of scales in a single community or county.

9.2. Map Layout

9.2.1. Coordinate system and Horizontal Datum

A standard coordinate system and horizontal datum for all DFIRMs is desirable so that they can be easily referenced to each other. Additionally, FEMA's goal is to maintain nationwide DFIRM data sets in a central on-line repository, and a common coordinate system and horizontal datum facilitates this as well.

The preferred coordinate system for DFIRMs is UTM referenced to NAD83. These are the coordinate system and horizontal datum most commonly used by USGS for DOQs. DFIRMs may be prepared in other coordinate systems and horizontal datums if necessary. This is primarily for studies that use a raster base map supplied in a coordinate system other than UTM NAD83. Raster base map data are not reprojected if at all possible, since this operation is so time consuming. The DFIRM vectors are projected to fit the raster base map data.

9.2.2. Rotation

The DFIRM data do not need to be rotated to align exactly to the map border. The slight tilt inherent in the data as the panels move farther away from the central meridians is acceptable.

9.2.3. Tiling

DFIRMs are tiled using a paneling scheme that is based on USGS 7.5-minute quadrangles or subdivisions thereof, depending on the scale of the DFIRM. Map panels shown at 1"=2,000' are tiled using the same

neatlines as the corresponding USGS 7.5-minute quadrangles. Map panels shown at 1"=1,000' are tiled using neatlines that correspond to USGS DOQs or 7.5-minute quarter-quadrangles. Map panels shown at 1"=500' are tiled using neatlines that correspond to USGS 7.5-minute quarter-quarter-quadrangles.

The quadrangle tiles are generated using the horizontal datum of the base map. If the base map is in NAD83, the quad grid should be generated in NAD83 and projected to match the coordinate system of the base map.

9.2.4. Guidelines for Conversion to Quad Tiling for Small Communities

When small jurisdictions that were formerly shown on one or a few panels now fall on significantly more panels as a result of quad-based tiling, the paneling scheme can be modified from strictly quad-based.

- If conversion to a quad paneling layout would double the panel count, a modified paneling scheme may be used.

- If the FIRM was shown as an Only Panel Printed formerly, and the quad layout necessitates creation of a DFIRM Index, a modified paneling scheme may be used.

9.2.5. Map Insets

All geographic areas shown on DFIRMs are created and maintained in real-world coordinates. Map insets are generally not used in preparing DFIRMs because of this requirement. Small areas around the perimeter of a county or community can be added to existing map sheets as overedge areas. Larger areas may require a separate map panel.

9.2.6. North Orientation

All DFIRMs are oriented so that north points to the top of the map sheet.

9.3. Panel Numbering

After the map scale(s) and layout for a community have been established, the map panels are numbered.

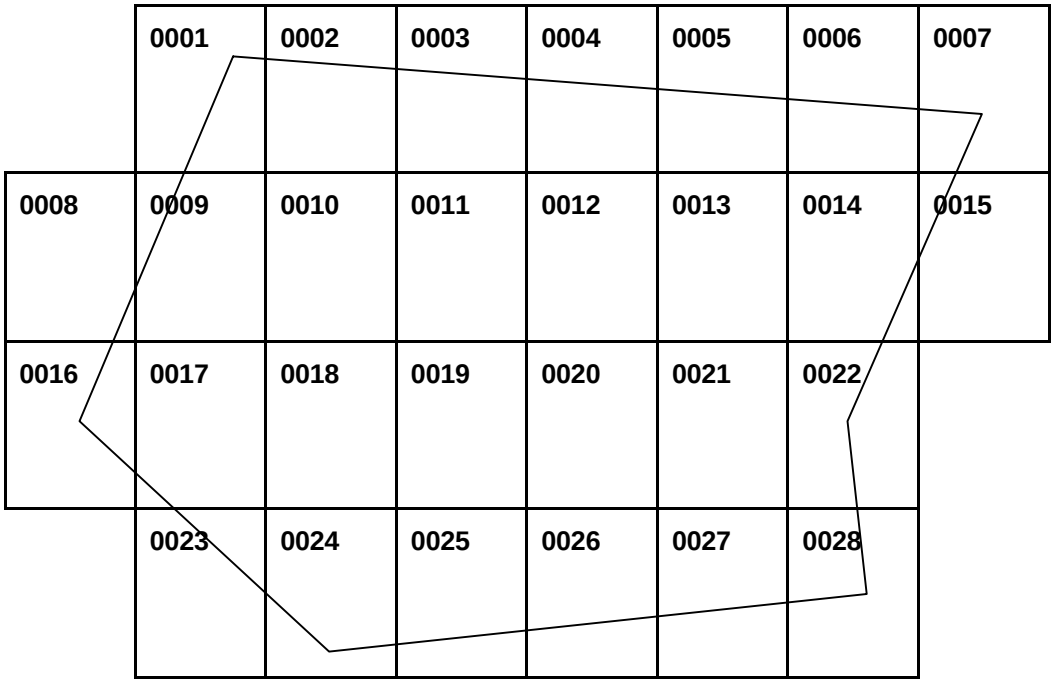
DFIRMs use a panel numbering sequence that relates panel number to map scale. Panels shown at 1"=500' use numbers divisible by 1, panels at 1"=1,000' use numbers divisible by 5, and panels at 1"=2,000' use numbers divisible by 25. The following table further illustrates the numbering sequence corresponding to the various map scales.

Map Scale	Panel Numbers
1"=500'	1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14, 16, 17, 18, etc.
1"=1,000'	5, 10, 15, 20, 30, 35, 40, 45, 55, 60, 65, 70, etc.
1"=2,000'	25, 50, 75, 100, 125, 150, 175, 200, 225, 250, etc.

9.3.1. Single-Scale DFIRMs

Single-scale DFIRMs are those where all panels within the community or county are printed at the same scale. The panel numbering follows sequentially from left to right and from top to bottom for single scale DFIRMs.

Single-Scale Panel Numbering Scheme (1" = 500')



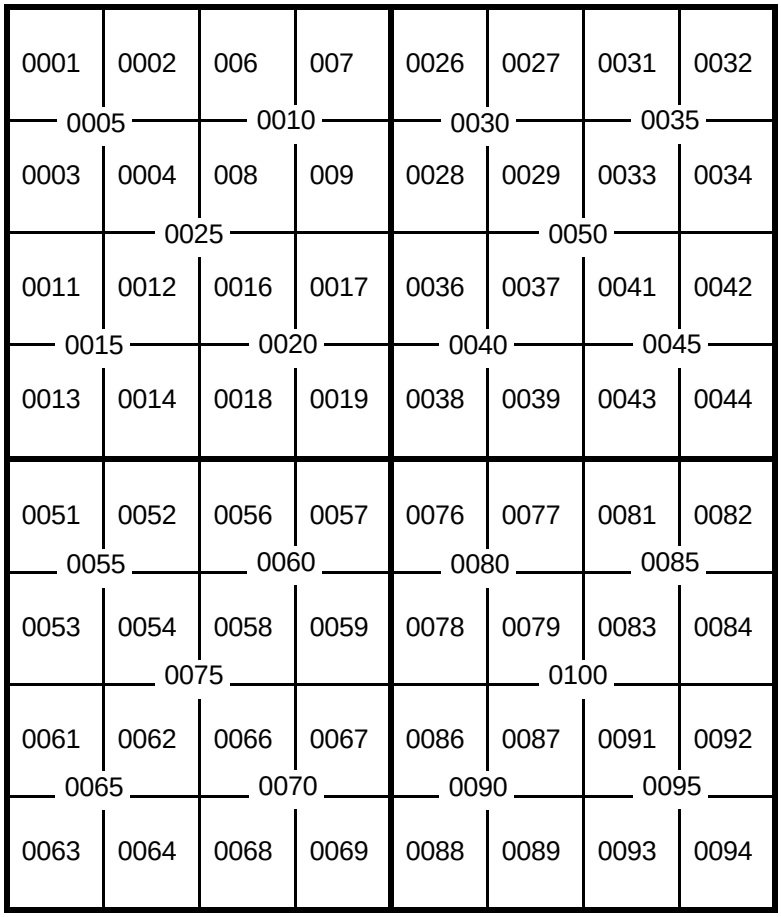
9.3.2. Multi-Scale DFIRMs

Multi-scale DFIRMs are numbered based on a logical breakdown of USGS 7.5-minute quadrangle sheets. A USGS quadrangle can be envisioned as having 16 possible subdivisions, with the smallest block

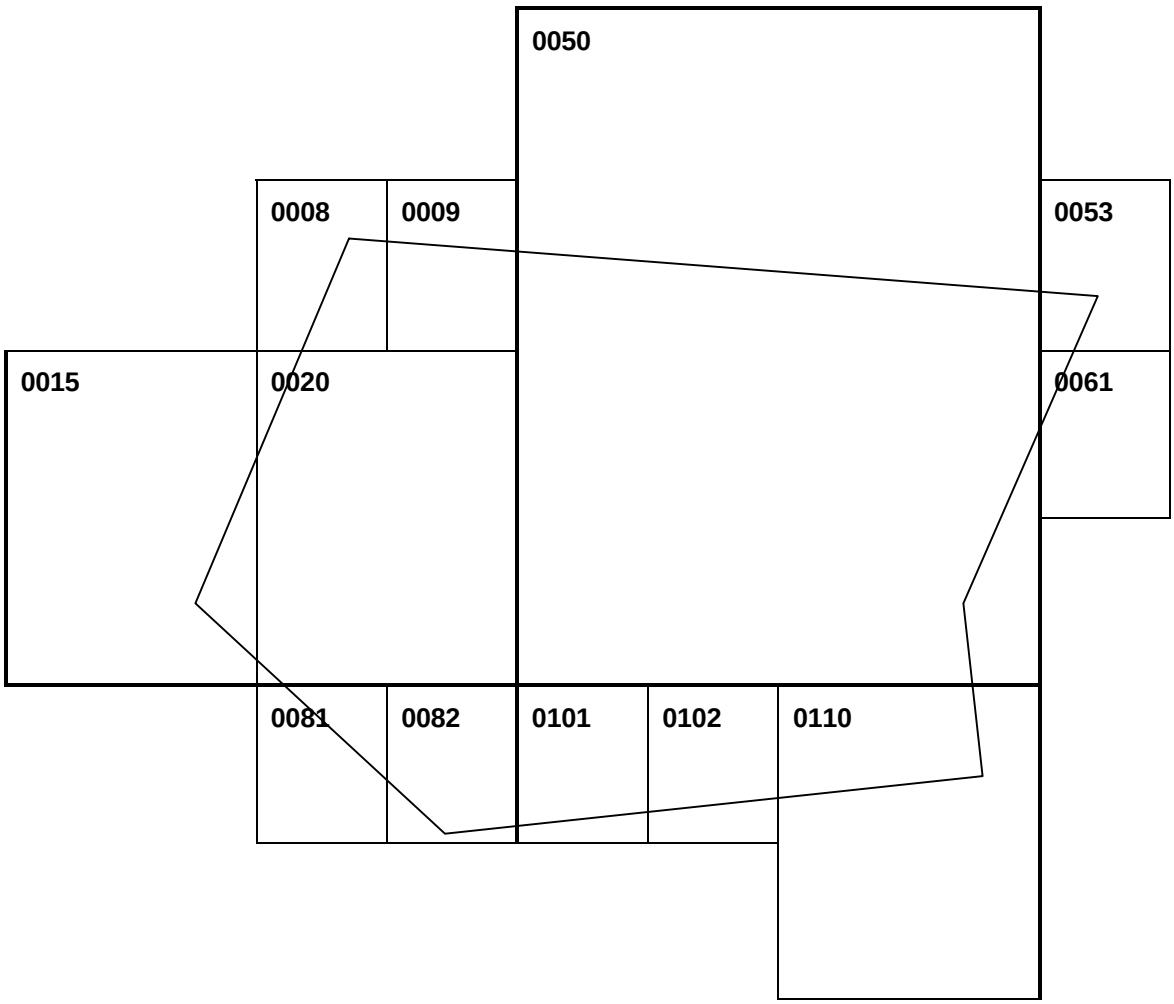
being a 1" = 500' scale segment, and the largest block being the entire quadrangle at a scale of 1" = 2000'.

Beginning with the first small-scale map panel, the four large-scale map panels that lie within the grid layout of the larger parent panel are numbered sequentially from left to right and top to bottom. The associated small-scale map panel is numbered sequentially after the four large-scale panels the area of which it duplicates (i.e., panel 0025 covers the same geographical area as panels 0005, 0010, 0015, and 0020 combined). This numbering system is continued in a similar manner to the numbering system for single-scale maps; that is, the next number series would be 0030, 0035, 0040, and 0045 for the larger-scale panels, followed by 0050 for the smaller-scale panel.

Multi-Scale Panel Numbering Scheme
(Heavy lines indicate USGS 7.5-minute quadrangle neatlines)



Multi-Scale Panel Numbering Scheme
(Heavy lines indicate USGS 7.5-minute quadrangle neatlines)



10. MAP FRAMES

10.1. Z Fold Map Panels

All DFIRMs, including most Map Indexes, are printed in map frames the dimensions of which are as follows:

- 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”

See the diagram on the following page for more details of the map frame dimensions.

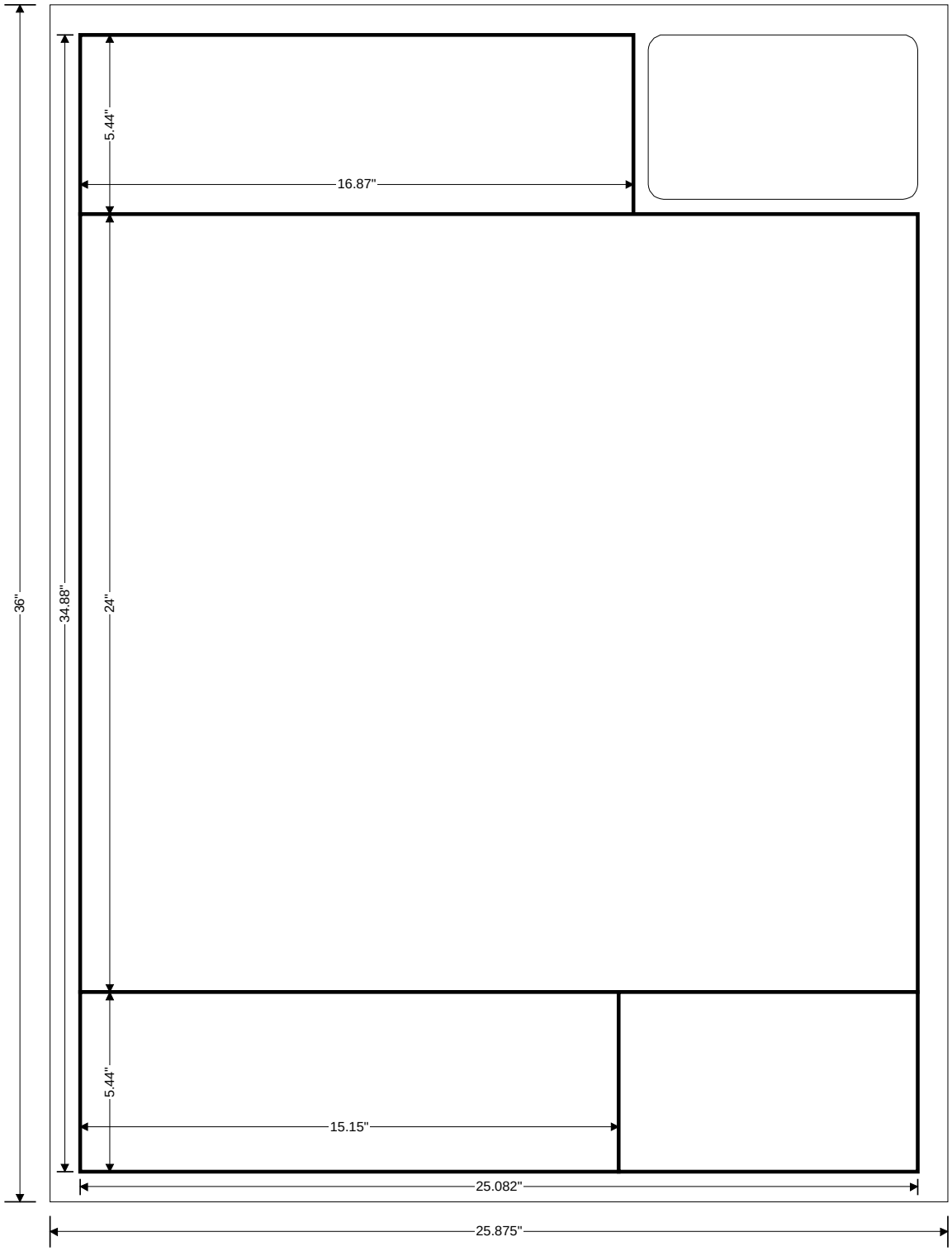
The map image size (the image inside the DFIRM neatline) varies depending on the latitude of the community being mapped. Overedge areas may be included if they fit inside the map border.

10.2. 8½” x 11” Map Indexes

Map Indexes for small communities with few map panels may be printed on 8 ½” x 11” paper. The dimensions of this map frame are as follows:

- 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”

Map Frame Dimensions



11. MAP INDEXES

11.1. Map Index Elements

For every community that is of a geographical size requiring more than one printed map panel, a Map Index is prepared. Map Indexes may be prepared in an 8 ½" × 11" format for small to medium communities. When the panel count is such that it renders an 8 ½" × 11" Index unusable or illegible, a Z-fold Index is prepared. Note that Countywide Map Indexes are always prepared in the Z-fold format. Countywide DFIRMs may require more than one Map Index panel.

11.1.1. Map Index Features

The Map Index has the same directional orientation as the individual map panels; for all DFIRMs, north is oriented to the top of the page. The locations and names of major flooding sources, major roads, corporate limits, and selected railroads are shown to facilitate the orientation and location of the individual panels. Areas that are within the corporate limits but were not studied are labeled as such whenever the scale of the Map Index permits.

11.1.2. Map Numbers

Panel neatlines are accurately placed with respect to the other features shown on the Map Index. Each panel contains a map number. The Map Index identifies unprinted panels with asterisks and footnotes. The appropriate reason(s) for the panel not being printed appears in the lower left hand corner of the grid layout.

The map number shown on the Map Index includes the letter suffix for each DFIRM panel depicted in the grid layout. Suffix changes are reflected both on the DFIRM panel and the Map Index. The suffixes for unprinted panels are not changed unless all panels are revised.

11.1.3. Map Dates

The DFIRM Map Index shows the DFIRM effective date in the title block. This date may be designated in the title block as "Effective Date" (for the first version of the FIRM for the subject jurisdiction) or "Map Revised" (for a FIRM that has been revised at least once). When the preliminary copy of the Map Index is prepared, this date is left blank. When the final copy of the revised Map Index is prepared, the new effective date determined for the revised DFIRM is added and designated as "Map Revised." Similar type styles and sizes are acceptable, and may vary due to Map Index size limitations.

Countywide Map Indexes also list the effective date of each DFIRM panel below the panel number on the Map Index to assist the user in determining current panel dates. A sample is shown below.

17097C0159 B **06/20/97**	17097C0159 B **06/20/97**
17097C0159 A **09/04/94**	17097C0159 A **09/04/94**

11.1.4. Listing of Communities

Countywide Map Indexes require a Listing of Communities table that lists, in alphabetical order and in tabular form, all incorporated communities in the county. The table also lists non-floodprone communities in the county but footnotes them with an indication of their non-floodprone status. The listing does not include communities that lie in more than one county if they are being disclaimed. See Section 11.5. for an example of a Listing of Communities table.

It is important to note that the column entitled Initial FIRM Date is used by insurance agents. For communities with effective FIRMs prior to December 31, 1974, the Initial FIRM date is December 31, 1974. For FIRMs that become effective after that date, the Initial FIRM date is the same as the FIRM effective date.

The Most Recent FIRM Panel Date column lists the last date on which a panel within that community was published or republished. 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.

11.1.5. Map Repositories

Countywide Map Indexes also require a Map Repository listing that contains an alphabetical listing of the map repository addresses of all communities that will receive a copy of the DFIRM. The only communities that will not receive a copy of the DFIRM are those that are classified as disclaimed or non-floodprone. Non-countywide Map Indexes do not require the Map Repository listing because the map repository address is shown on the DFIRM panel. See Sections 11.3.5. and 11.3.6. for examples of Map Repository listings used on Map Indexes.

11.1.6. Multiple Map Index Panels

It is sometimes necessary to create multiple Map Index panels for large countywide studies. In such cases, the Listing of Communities table and Map Repository listing may be on a separate Map Index sheet. It is also sometimes necessary to split the Map Index itself into multiple panels. If the Map Index is split into multiple panels, a match line is added and labeled with a note that references the adjoining Map Index sheet. When multiple Map Index sheets are created, the numbering of those sheets is IND1, IND2, etc., and an index location diagram is added to the Map Index. For DFIRMs that are contained on one Map Index panel, the Map Index is numbered "IND0." See Section 11.5. for examples of Map Index title blocks and index location diagrams used on multi-panel Map Indexes.

11.2. Map Index Panel Not Printed Footnotes

The following notes are added to the Map Index to identify why certain DFIRM panels are not printed.

11.2.1. 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.

11.2.2. PANEL NOT PRINTED – AREA IN ZONE D

This note is used to indicate panels not printed because the panel area is entirely Zone D.

11.2.3. PANEL NOT PRINTED – AREA NOT INCLUDED

This note is used when the area of an entire panel area is contained in an Area Not Included.

11.2.4. 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.

11.2.5. 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. This procedure is used only with the approval of a FEMA Project Officer, as normally any land areas on a DFIRM with identified flood hazards should be printed.

11.2.6. PANEL NOT PRINTED – AREA OUTSIDE CORPORATE / COUNTY BOUNDARY

This note is used to indicate paneled areas outside the subject jurisdiction.

11.2.7. PANEL NOT PRINTED - AREA WITHIN (*COMMUNITY NAME*), WHICH HAS A SEPARATELY PRINTED FLOOD INSURANCE RATE MAP; THE PORTION OF THE (*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.

11.3. Notes on Body of Index

11.3.1. 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 unpanelled area of the community that is entirely in open water.

11.3.2. 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.

11.3.3. MAP NUMBER

This note is used on the body of the Map Index to indicate an example of a map panel number (e.g., 41055C0150 D).

11.3.4.

NOTICE

Future revisions to this FIRM Index will be issued only to communities that are located on FIRM panels being revised. This FIRM Index therefore remains valid for FIRM panels dated [*date*]. 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.

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 from the FEMA Map Service Center at (800) 358-9616.

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 Section 11.5. for an example of a Listing of Communities table referenced in this note.

11.3.5.

MAP REPOSITORY
(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 DFIRM. The Map Repository address for each community contained within the study is found in the body of the Map Index. The Map Repository is the location that the community has designated for storing its FIRM. The address is placed just above the north arrow on the Map Index. The disclaimer, as stated, immediately follows the heading for the address(es).

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 listing for a countywide DFIRM. The Map Repository address for each community contained within the study is found in the body of the Map Index. The Map Repository is the location that the community has designated for storing its FIRM. The address is placed just above the north arrow on the Map Index. The disclaimer, as stated, immediately follows the heading for the address(es).

11.3.7.

- 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 title block and north arrow for any community that contains Coastal Barrier units. All panels containing CBRS units and/or OPAs, even panels that are not printed, are listed. The panels that are not printed are listed with a footnote that indicates that they are not printed.

11.4. Graphic Representation of Map Index Features

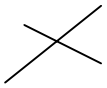
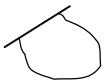
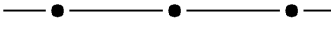
The following section provides examples of various Map Index features and their graphic portrayal.

Z Fold Map Index		
FEATURE	**SPECIFICATION**	**EXAMPLE**
MAP INDEX TITLE BLOCK FEATURES		
Title Box	Lineweight .010”	(See sample Map Index title blocks shown in Section 11.5.)
FIRM	36 Pt. Univers Bold Condensed CAPS 36 Pt. Arial Narrow Bold CAPS	**FIRM**
Flood Insurance Rate Map	16 Pt. Univers Bold Condensed CAPS 16 Pt. Arial Narrow Bold CAPS	**FLOOD INSURANCE RATE MAP**
NFIP	40 Pt. Univers Bold Condensed CAPS Outline 40 Pt. Arial Narrow Bold CAPS Outline	NFIP
National Flood Insurance Program	36 Pt. Univers Bold Condensed CAPS Outline 36 Pt. Arial Narrow Bold CAPS Outline	NATIONAL FLOOD INSURANCE PROGRAM
Panel Number	12 - 14 Pt. Univers Bold CAPS 12 - 14 Pt. Arial Bold CAPS	**MAP INDEX**
Community Classification	14 Pt. Times Roman Bold CAPS 14 Pt. Times New Roman Bold CAPS	**TOWN OF**
Community or Study Name	18 Pt. Times Roman Bold CAPS 18 Pt. Times New Roman Bold CAPS	**PIKE COUNTY, PENNSYLVANIA**
Community Type, County Name, Community Designator	14 Pt. Times Roman Bold CAPS 14 Pt. Times New Roman Bold CAPS	**WASHINGTON COUNTY** **(UNINCORPORATED AREAS)**
See Listing of Communities Table Note	10 Pt. Univers Medium CAPS 10 Pt. Arial CAPS	(SEE LISTING OF COMMUNITIES TABLE)
Map Index	36 Pt. Univers Bold Condensed CAPS 36 Pt. Arial Narrow Bold CAPS	**MAP INDEX**
Sheet Number	16 Pt. Univers Bold Condensed CAPS 16 Pt. Arial Narrow Bold CAPS	**SHEET 1 OF 2**

Z Fold Map Index

FEATURE	SPECIFICATION	EXAMPLE
Panels Printed Listing	8 – 11 Pt. Univers Bold CAPS 8 – 11 Pt. Arial Bold CAPS	**PANELS PRINTED: 25, 50, 75, 100**
Index Map Number	16 Pt. Univers Bold Condensed CAPS 16 Pt. Arial Narrow Bold CAPS	**MAP NUMBER 12037CIND0**
Effective Date / Map Revised Date	16 Pt. Univers Bold Condensed CAPS 16 Pt. Arial Narrow Bold CAPS	**EFFECTIVE DATE: JUNE 16, 1995**
FEMA Logo	Diameter 1.00”	
Federal Emergency Management Agency	12 Pt. Times Roman Bold CLC 12 Pt. Times New Roman Bold CLC	Federal Emergency Management Agency
MAP INDEX FEATURES		
North Arrow	Lineweight .010” Width 1.20” Height 0.70”	
Major Roads	Lineweight .030”	
Street, Road, Avenue Name	5 - 8 Pt. Univers Medium CAPS 5 - 8 Pt. Arial CAPS	CAPITAL STREET
Interstate Highway Symbol	Standard Interstate Route Shield Lineweight .010” Size .200” x .200” to .400” x .480” 6 – 8 Pt. Univers Bold Condensed CAPS 6 – 8 Pt. Arial Bold Narrow CAPS	
U.S. Highway Symbol	Standard U.S. Route Route Shield Lineweight .010” Size .200” x .200” to .400” x .480” 6 – 8 Pt. Univers Bold Condensed CAPS 6 – 8 Pt. Arial Bold Narrow CAPS	
State Highway Symbol	Circle Lineweight .010” Diameter .200” to .280” 6 – 8 Pt. Univers Bold Condensed CAPS 6 – 8 Pt. Arial Bold Narrow CAPS	
County Highway Symbol	Rectangle Lineweight .010” Size .150” x .250” to .300” x .400” 6 – 8 Pt. Univers Bold Condensed CAPS 6 – 8 Pt. Arial Bold Narrow CAPS	
Railroad	Lineweight .015” Tie length .060”, spacing .300”	

Z Fold Map Index

FEATURE	SPECIFICATION	EXAMPLE
Railroad Name	6 - 8 Pt. Univers Medium Italics CAPS 6 - 8 Pt. Arial Italics CAPS	*CHESSIE SYSTEM*
Airport	Lineweight .010”	
River, Stream, or Other Hydrographic Feature	Lineweight .008” to .010”	
Name of River, Stream, or Other Hydrographic Feature	6 – 18 Pt. Century Bold Italics CAPS or CLC 6 – 18 Pt. Times New Roman Bold Italics CAPS or CLC	***Eighteen Mile Creek*** ***UTAH LAKE***
Large Island	6 - 14 Pt. Univers Medium CAPS 6 - 14 Pt. Arial CAPS	SHIP ISLAND
Major Dam	Lineweight .010”	
Name of Major Dam	6 - 8 Pt. Univers Medium Italics CAPS or CLC 6 - 8 Pt. Arial CAPS or CLC	*ASSABET RIVER DAM*
International, State, County Boundary	Lineweight .030” Dashing: 1.500” .050” .150” .050” .150” .050” 1.500”	
Corporate, Extraterritorial Boundary	Lineweight .030” Dashing: 1.500” .050” .150” .050” 1.500”	
Corporate, Extraterritorial Boundary Label	6 – 8 Pt. Univers Medium CAPS 6 – 8 Pt. Arial CAPS	CITY OF SEAFORD SUSSEX COUNTY EXTRATERRITORIAL LIMITS
Community Label & Community Identification Number (CID)	6 – 10 Pt. Times Roman CAPS or CLC 6 – 10 Pt. Times Roman CAPS or CLC	**City of Blades** **100031**
Area Not Included Boundary	Lineweight .020”	
Name of Area Not Included	6 - 10 Pt. Times Roman CAPS or CLC 6 - 10 Pt. Times Roman CAPS or CLC	City of Lafayette
Area Not Included (Note)	5 - 8 Pt. Univers Medium CAPS 5 - 8 Pt. Arial CAPS	(AREA NOT INCLUDED)
Forest, Park, Reservation Boundary	Lineweight .015” Dot diameter .030”, spacing .400”	
Name of Forest, Park, Reservation	6 - 10 Pt. Times Roman CAPS or CLC 6 - 10 Pt. Times Roman CAPS or CLC	US Military Reservation ROOSEVELT STATE FOREST
FIRM Panel Neatline	Lineweight .008”	
FIRM Map Numbers	8 - 18Pt. Univers Bold Condensed CAPS 8 - 18Pt. Arial Narrow Bold CAPS	**1202300275 B** **41050C0050 B**
FIRM Panel Effective Dates	8 - 14Pt. Univers Bold Condensed CAPS 8 - 14Pt. Arial Narrow Bold CAPS	**8/30/00**
Panel Not Printed Notes	7 – 10 Pt. Univers Medium CAPS 7 - 10 Pt. Arial CAPS	* PANEL NOT PRINTED – NO SPECIAL FLOOD HAZARD AREAS

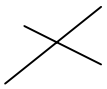
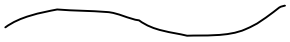
Z Fold Map Index

FEATURE	SPECIFICATION	EXAMPLE
Map Number Label	8 Pt. Univers Medium CAPS 8 Pt. Arial CAPS	MAP NUMBER
Listing of Communities Table	7 - 22 Pt. Univers Medium CAPS 7 - 22 Pt. Arial CAPS	LISTING OF COMMUNITIES COMMUNITY NAME / COMMUNITY NUMBER / LOCATED ON PANELS INITIAL NFIP MAP DATE / INITIAL FIRM DATE / MOST RECENT FIRM PANEL DATE
Community Name, Number, Panel, Dates in Listing of Communities Table	6 - 8 Pt. Univers Medium CAPS 6 - 8 Pt. Arial CAPS	**MONROE COUNTY 120089 ALL ...**
Index Notes	10 Pt. Univers Medium CAPS and CLC 10 Pt. Arial CAPS and CLC	**NOTICE** Future revisions to this FIRM Index will only be issued to……
Coastal Barrier Resources System Note	10 Pt. Univers Medium CAPS 10 Pt. Arial CAPS	- NOTE - Designated Coastal Barriers are located on panels 23 and 27.

8 ½" x 11" Map Index

FEATURE	SPECIFICATION	EXAMPLE
8 ½" x 11" MAP INDEX TITLE BLOCK FEATURES		
Title Box	Lineweight .008"	(See sample 8 ½" x 11" Map Index shown in Section 11.5.)
FIRM	18 Pt. Univers Bold Condensed CAPS 18 Pt. Arial Narrow Bold CAPS	**FIRM**
Flood Insurance Rate Map	12 Pt. Univers Bold Condensed CAPS 12 Pt. Arial Narrow Bold CAPS	**FLOOD INSURANCE RATE MAP**
NFIP	18 Pt. Univers Bold Condensed CAPS Outline 18 Pt. Arial Narrow Bold CAPS Outline	NFIP
National Flood Insurance Program	12 Pt. Univers Bold Condensed CAPS Outline 12 Pt. Arial Narrow Bold CAPS	**NATIONAL FLOOD INSURANCE PROGRAM**
Community Classification	10 Pt. Times Roman Bold CAPS 10 Pt. Times New Roman Bold CAPS	**TOWN OF**
Community or Study Name	12 Pt. Times Roman Bold CAPS 12 Pt. Times New Roman Bold CAPS	**PIKE COUNTY, PENNSYLVANIA**
Community Type, County Name, Community Descriptor	10 Pt. Times Roman Bold CAPS 10 Pt. Times New Roman Bold CAPS	**WASHINGTON COUNTY** **(UNINCORPORATED AREAS)**
Map Index	18 Pt. Univers Bold Condensed CAPS 18 Pt. Arial Narrow Bold CAPS	**MAP INDEX**
Panels Printed Listing	6 - 8 Pt. Univers Bold CAPS 6 - 8 Pt. Arial Bold CAPS	**PANELS PRINTED: 25, 50, 75, 100**
Map Number	12 Pt. Univers Bold Condensed CAPS 12 Pt. Arial Narrow Bold CAPS	**MAP NUMBER 155091IND0**
Effective Date / Map Revised Date	12 Pt. Univers Bold Condensed CAPS 12 Pt. Arial Narrow Bold CAPS	**EFFECTIVE DATE: JUNE 16, 1995**
FEMA Logo	Diameter 0.65"	
Federal Emergency Management Agency	8 Pt. Times Roman Bold CLC 12 Pt. Times New Roman Bold CLC	Federal Emergency Management Agency
MAP INDEX FEATURES		
North Arrow	Lineweight .008" Width 0.675" Height 0.40"	
Major Roads	Lineweight .020"	
Street, Road, Avenue Name	5 - 8 Pt. Univers Medium CAPS 5 - 8 Pt. Arial CAPS	CAPITAL STREET

8 ½" x 11" Map Index

FEATURE	SPECIFICATION	EXAMPLE
Interstate Highway Symbol	Standard Interstate Route Shield Lineweight .010" Size .200" x .200" to .400" x .480" 6 – 8 Pt. Univers Bold Condensed CAPS 6 – 8 Pt. Arial Bold Narrow CAPS	
U.S. Highway Symbol	Standard U.S. Route Route Shield Lineweight .010" Size .200" x .200" to .400" x .480" 6 – 8 Pt. Univers Bold Condensed CAPS 6 – 8 Pt. Arial Bold Narrow CAPS	
State Highway Symbol	Circle Lineweight .010" Diameter .200" to .280" 6 – 8 Pt. Univers Bold Condensed CAPS 6 – 8 Pt. Arial Bold Narrow CAPS	
County Highway Symbol	Rectangle Lineweight .010" Size .150" x .250" to .300" x .400" 6 – 8 Pt. Univers Bold Condensed CAPS 6 – 8 Pt. Arial Bold Narrow CAPS	
Railroad	Lineweight .008" Tie length .060", spacing .3"	
Railroad Name	6 - 8 Pt. Univers Medium Italics CAPS 6 - 8 Pt. Arial Italics CAPS	*CHESSIE SYSTEM*
Airport	Lineweight .010"	
River, Stream, or Other Hydrographic Feature	Lineweight .008"	
Name of River, Stream, or Other Hydrographic Feature	6 – 18 Pt. Century Bold Italics CAPS or CLC 6 – 18 Pt. Times New Roman Bold Italics CAPS or CLC	***Eighteen Mile Creek*** ***UTAH LAKE***
Large Island	6 - 14 Pt. Univers Medium CAPS 6 - 14 Pt. Arial CAPS	SHIP ISLAND
Major Dam	Lineweight .010"	
Name of Major Dam	6 - 8 Pt. Univers Medium Italics CAPS or CLC 6 - 8 Pt. Arial CAPS or CLC	*ASSABET RIVER DAM*
International, State, County Boundary	Lineweight .015" Dashing: .6" .05" .15" .05" .15" .05" .6"	
Corporate, Extraterritorial Boundary	Lineweight .015" Dashing: .6" .05" .15" .05" .6"	
Corporate, Extraterritorial Boundary Label	6 – 8 Pt. Univers Medium CAPS 6 – 8 Pt. Arial CAPS	CITY OF SEAFORD SUSSEX COUNTY EXTRATERRITORIAL LIMITS

8 ½" x 11" Map Index

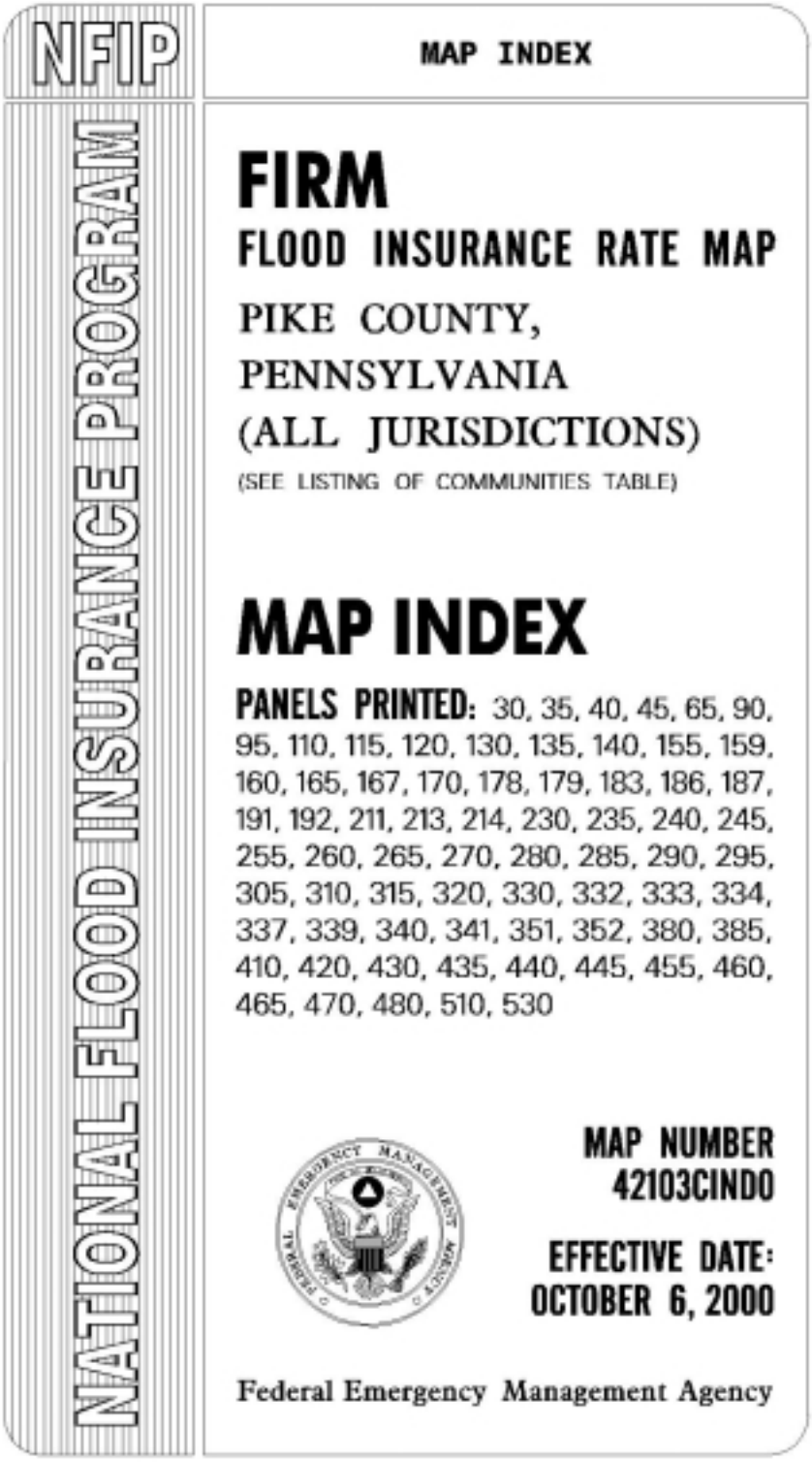
FEATURE	SPECIFICATION	EXAMPLE
Community Label & Community Identification Number (CID)	6 – 10 Pt. Times Roman CAPS or CLC 6 – 10 Pt. Times Roman CAPS or CLC	**City of Blades** **100031**
Area Not Included Boundary	Lineweight .015"	———————
Name of Area Not Included	6 - 10 Pt. Times Roman CAPS or CLC 6 - 10 Pt. Times Roman CAPS or CLC	City of Lafayette
Area Not Included (Note)	5 - 8 Pt. Univers Medium CAPS 5 - 8 Pt. Arial CAPS	(AREA NOT INCLUDED)
Forest, Park, Reservation Boundary	Lineweight .015" Dot diameter .03", spacing .4"	
Name of Forest, Park, Reservation	6 - 10 Pt. Times Roman CAPS or CLC 6 - 10 Pt. Times Roman CAPS or CLC	US Military Reservation ROOSEVELT STATE FOREST
FIRM Panel Neatline	Lineweight .008"	———————
FIRM Map Numbers	8 - 14Pt. Univers Bold Condensed CAPS 8 - 14Pt. Arial Narrow Bold CAPS	**1202300275 B** **0005 B**
FIRM Panel Effective Dates	7 - 12Pt. Univers Bold Condensed CAPS 7 - 12Pt. Arial Narrow Bold CAPS	**8/30/00**
Panel Not Printed Notes	7 – 10 Pt. Univers Medium CAPS 7 - 10 Pt. Arial CAPS	* PANEL NOT PRINTED – NO SPECIAL FLOOD HAZARD AREAS
Map Number Label	8 Pt. Univers Medium CAPS 8 Pt. Arial CAPS	MAP NUMBER

11.5. Sample Map Index Elements

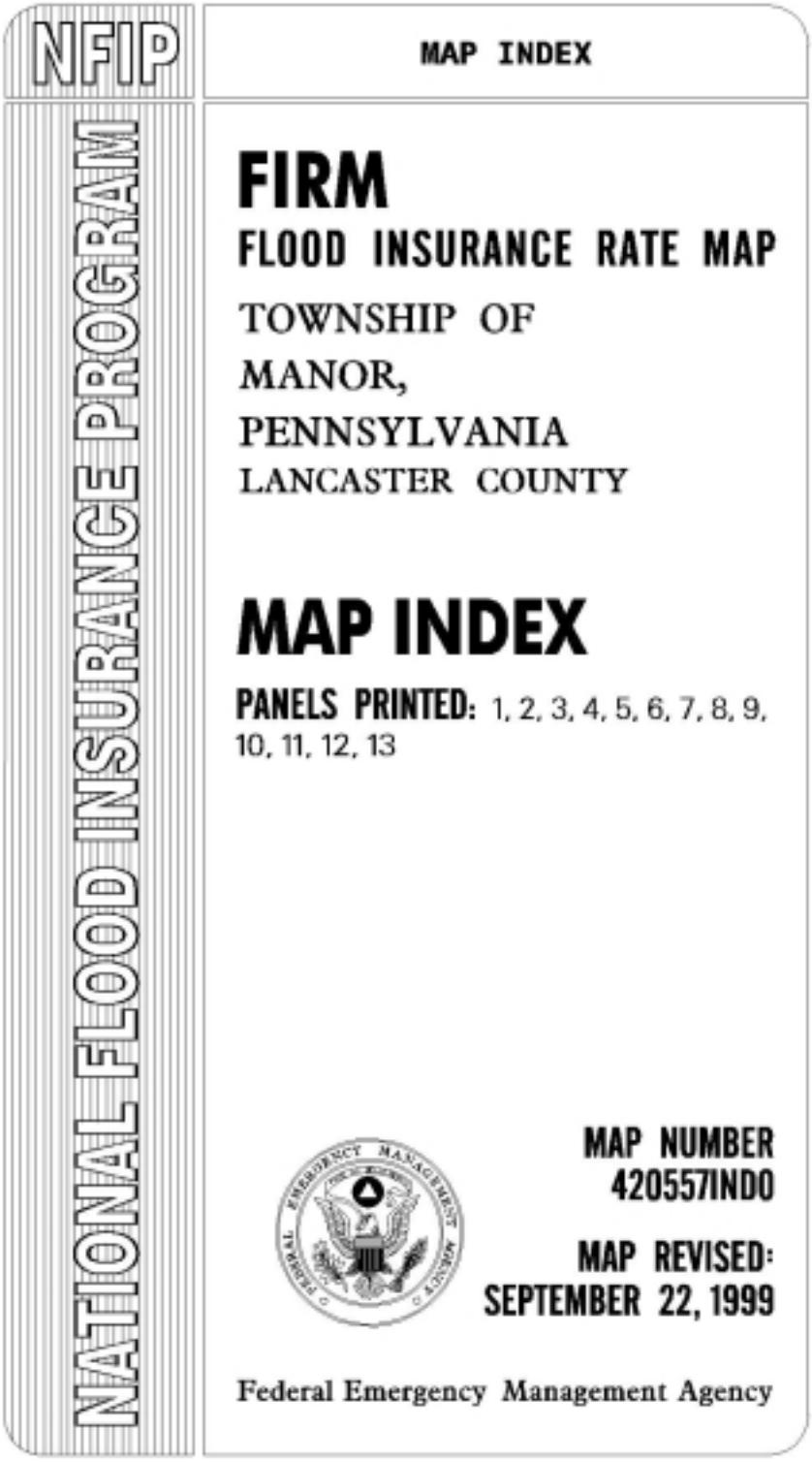
The following pages contain sample Map Index elements as follows:

- Countywide Map Index Title Block
- Single Jurisdiction Map Index Title Block
- Countywide, Multi Sheet Map Index Title Block, Sheet 1 of 2
- Index Locator Diagram Sheet 1 of 2
- Countywide, Multi Sheet Map Index Title Block, Sheet 2 of 2
- Index Locator Diagram Sheet 2 of 2
- Listing of Communities Table
- 8 ½" x 11" Map Index

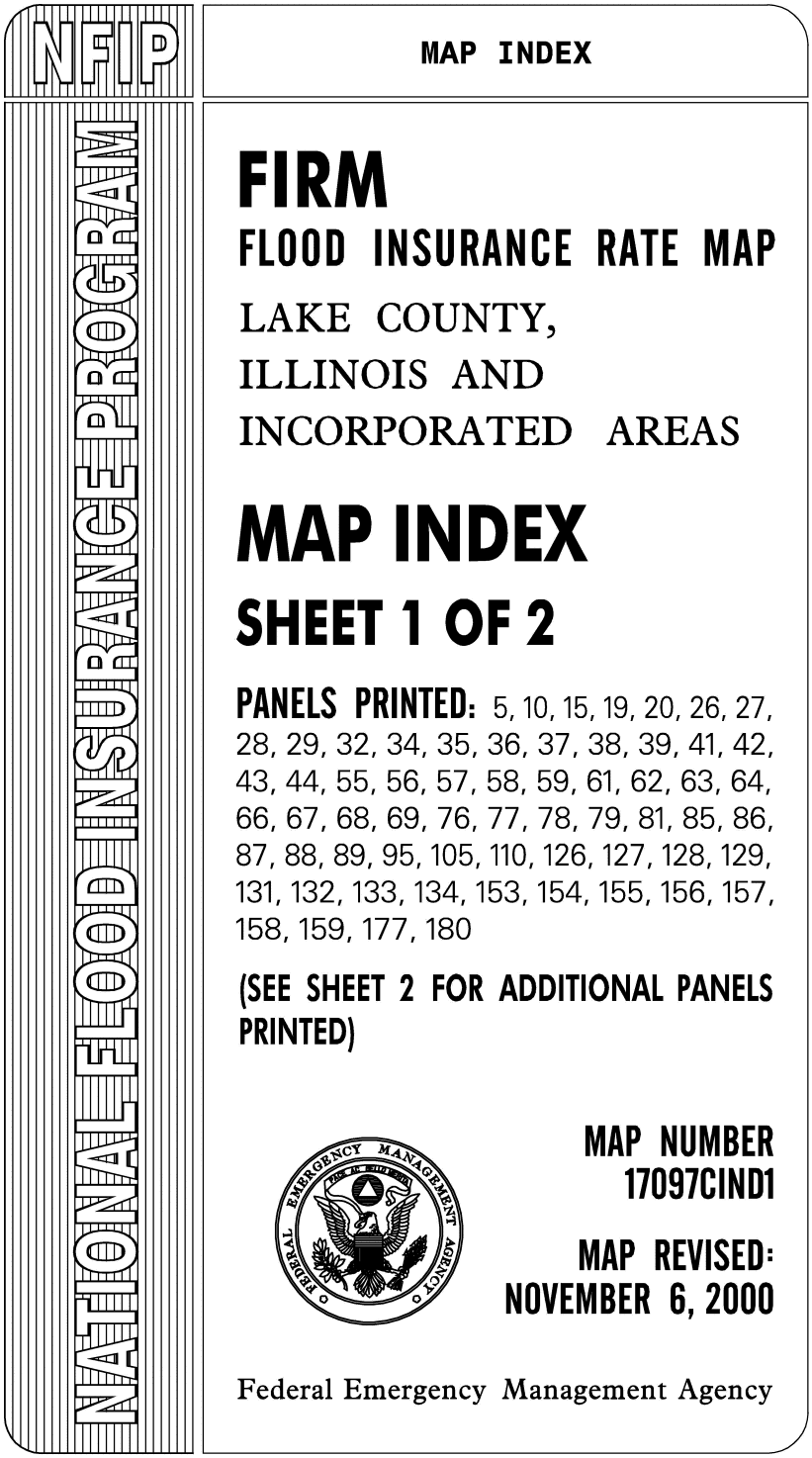
Countywide Map Index Title Block



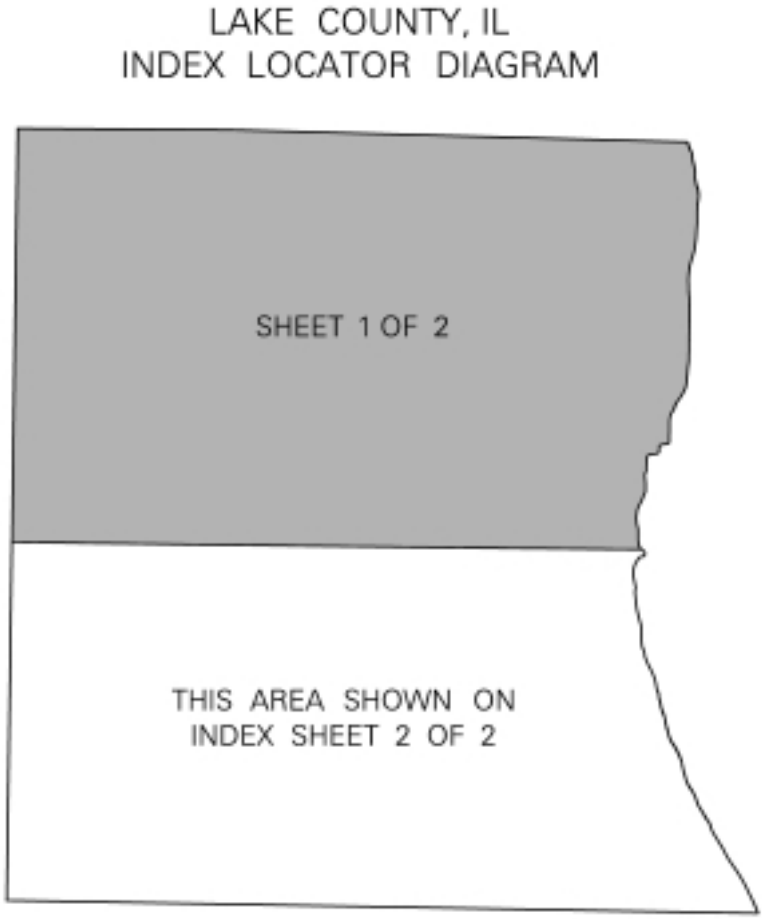
Single Jurisdiction Map Index Title Block



Countywide, Multi Sheet Map Index Title Block, Sheet 1 of 2

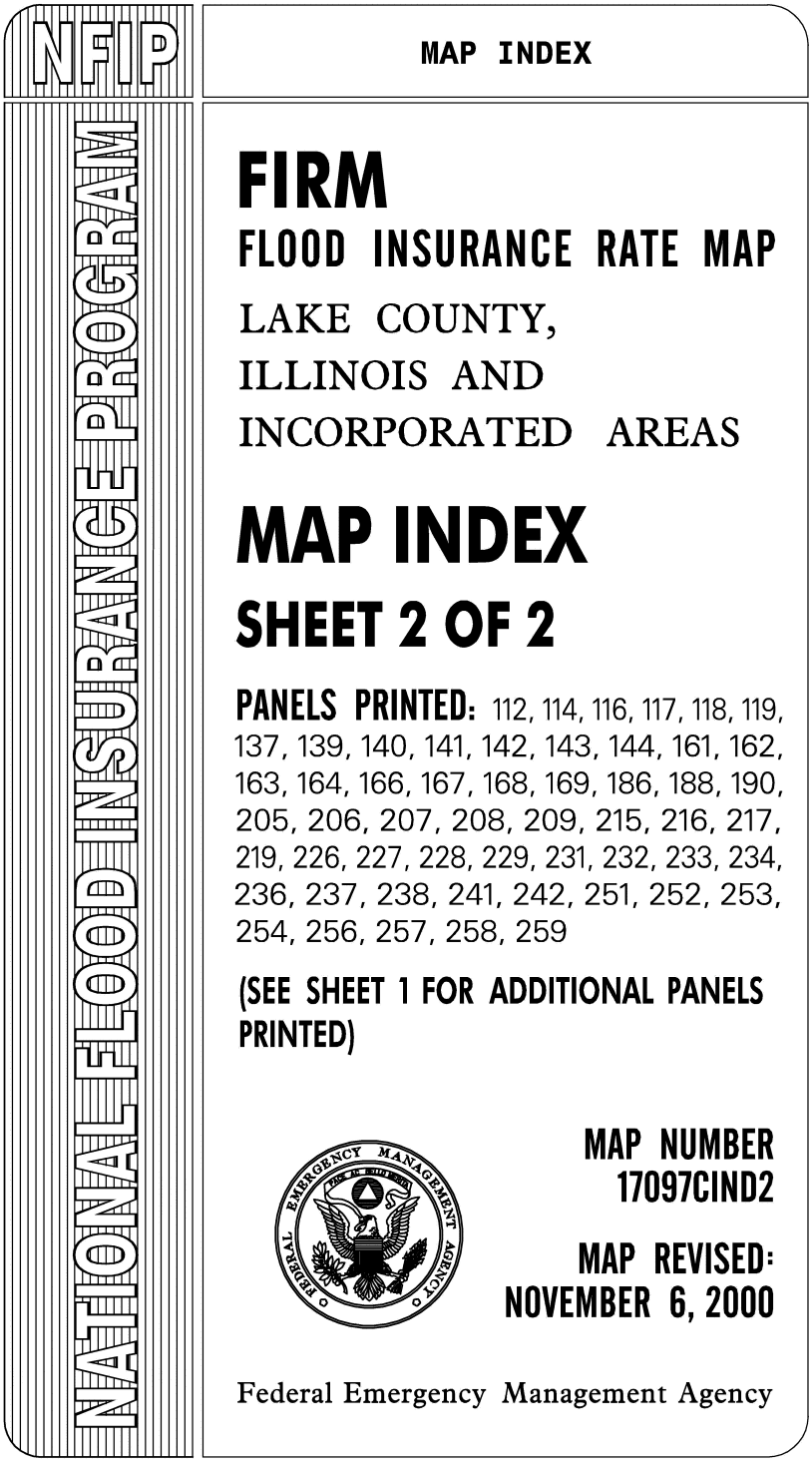


Index Locator Diagram Sheet 1 of 2

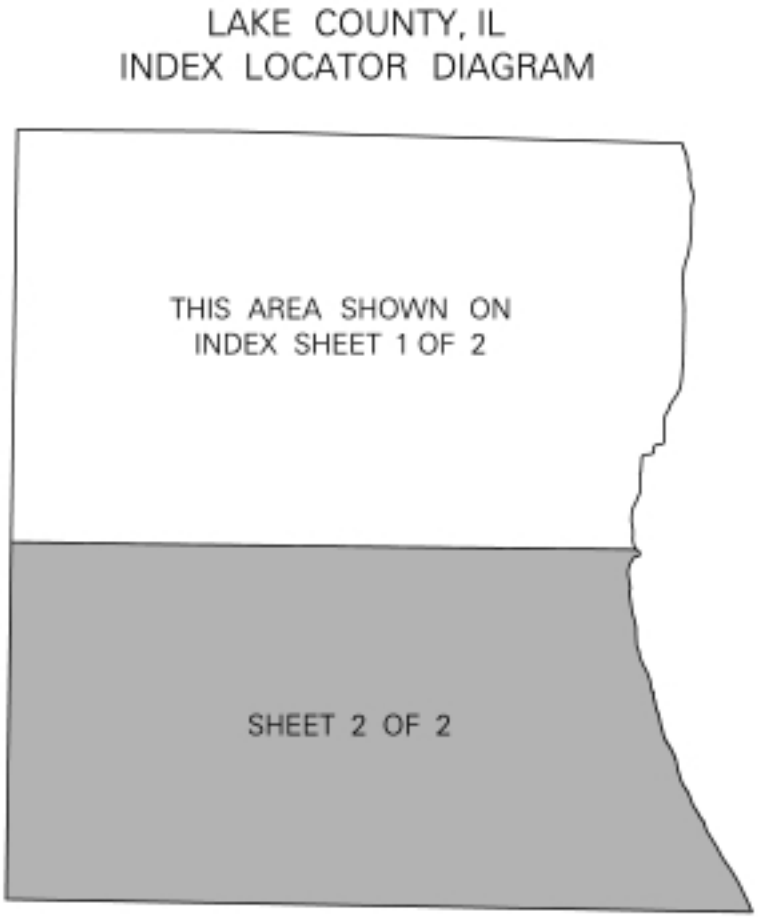


See Sheet 2 of 2 for MAP REPOSITORY LISTING

Countywide, Multi Sheet Map Index Title Block, Sheet 2 of 2



Index Locator Diagram Sheet 2 of 2



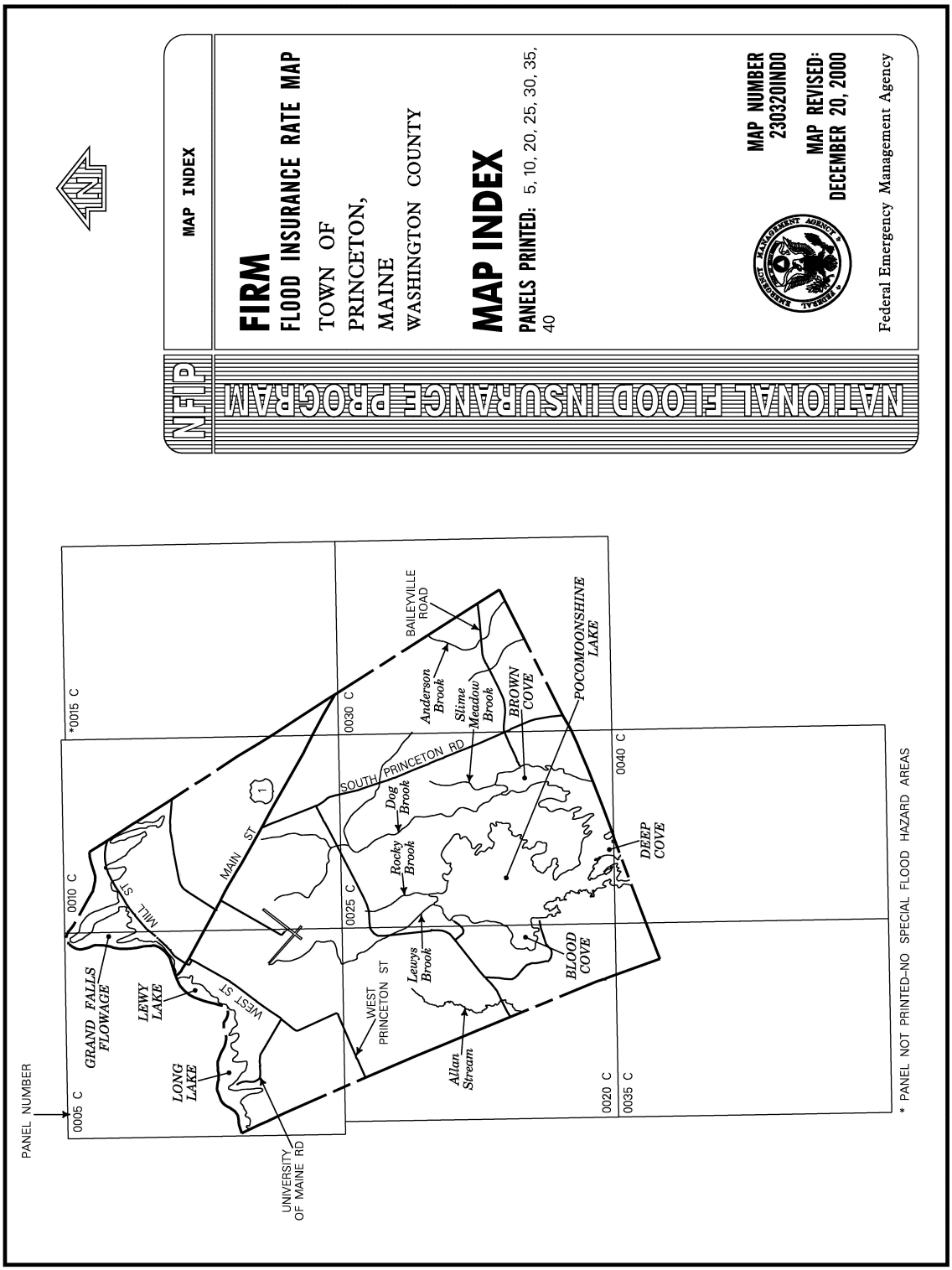
See Sheet 1 of 2 for LISTING OF COMMUNITIES

Listing of Communities Table

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, 0258, 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, 0256, 0257	OCTOBER 18, 1974	MARCH 28, 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	0055, 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, 0155	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 ½" x 11" Map Index



12. PRELIMINARY MAPS

12.1. Preliminary Map Graphics

Preliminary DFIRMs are prepared and sent to communities for review and comment. Unlike the final effective DFIRMs, the preliminary DFIRMs are not printed using an offset printing process but are instead plotted individually. The preliminary DFIRMs are generally plotted in black and white instead of color. All map features shown in cyan on the final DFIRM are shown in black on the preliminary DFIRM.

12.2. Notice to Users

The following note must be added to all preliminary DFIRM Index and/or DFIRM panels and as a standard paragraph in the transmittal letters to the communities. On preliminary DFIRM panels, the note appears in 10-point Univers Medium type, as shown below, or in a comparable type size and style. The note does not appear on the final DFIRM that is delivered to the Government Printing Office (GPO) for printing.

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.

13. GPO DELIVERABLES

All DFIRM deliverables are sent to FEMA's Map Service Center for printing by the GPO on a regular pre-determined schedule. The deliverables include photo reproducables of the DFIRM and/or digital files as well as all associated paperwork such as the Community Map Actions list and print requisition forms.

FEMA provides guidance on which deliverable format is required. If photo reproducables of the DFIRM are submitted to the Map Service Center, one negative is submitted for each ink color used on the map. If digital files are submitted, they are in a universal graphic format such as Adobe's® Portable Document Format (PDF) format optimized for printing. If digital files are submitted, the GPO printer is responsible for converting the digital files into printed documents.

For two-color DFIRMs, spot colors are used, and two-color digital files, not four-color files are produced. The two-color DFIRM files are prepared with black and a cyan blue spot color specified for use by the GPO printers.

14. DFIRM SAMPLES

Several full-size samples of DFIRMs are provided as a reference. The samples are as follows:

- Map Index
- DFIRM with vector base map
- DFIRM with DOQ base map (color)
- Preliminary DFIRM with DOQ base map (black and white)

List of Acronyms Used in this Document

BFE	Base Flood Elevation
BIL or BIP	Band Interleaved by Pixel
CADD	Computer Aided Design and Drafting
CAPS	Capitals
CBRS	Coastal Barrier Resources System
CD-ROM	Compact Disk – Read Only Memory
CFR	Code of Federal Regulations
CID	Community Identification Number
CLC	Capitals and Lower Case
DEM	Digital Elevation Model
DFIRM	Digital Flood Insurance Rate Map
DLG	Digital Line Graph
DGN	MicroStation Design File
DOQ	Digital Orthophoto Quadrangle
DTM	Digital Terrain Model
DWG	AutoCAD Drawing File
DXF	Drawing Exchange File
EL	Elevation
ERM	Elevation Reference Mark
ETJ	Extraterritorial Jurisdiction
FBFM	Flood Boundary and Floodway Map
FEMA	Federal Emergency Management Agency
FGDC	Federal Geographic Data Committee
FIRM	Flood Insurance Rate Map
FIPS	Federal Information Processing Standards
FIS	Flood Insurance Study
FPS	Feet Per Second
FTP	File Transfer Protocol
GIS	Geographic Information System
GPO	Government Printing Office
GPS	Global Positioning System
GRS	Geodetic Reference System
H&H	Hydrology and Hydraulics or Hydrologic and Hydraulic
JPEG	Joint Photographic Experts Group
LOMA	Letter of Map Amendment
LOMC	Letter of Map Change
LOMR	Letter of Map Revision
LFD	Letter of Final Determination
MB	MegaByte
MIF	Map Interchange Format
MNUSS	Mapping Needs Update Support System
NAD	North American Datum
NAVD	North American Vertical Datum
NFIP	National Flood Insurance Program

NGS	National Geodetic Survey
NGVD	National Geodetic Vertical Datum
NMAS	National Map Accuracy Standards
NOAA	National Oceonographic and Atmospheric Administration
NSRS	National Spatial Reference System
NSSDA	National Standards for Spatial Accuracy
OPA	Otherwise Protected Area
PDF	Portable Document Format
PID	Permanent Identifier
PLSS	Public Land Survey System
RMSE	Root Mean Square Error
SDTS	Spatial Data Transfer Standard
SFHA	Special Flood Hazard Area
SHP	ArcView Shapefile
TIFF	Tagged Image File Format
TIGER	Topologically Integrated Geographic Encoding and Reference
TIN	Triangulated Irregular Network
TSDN	Technical Support Data Notebook
URL	Uniform Resource Locator
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey
UTM	Universal Transverse Mercator