



FAIRFAX COUNTY, VA

COOPERATING TECHNICAL PARTNERS MAPPING ACTIVITY STATEMENT

Mapping Activity Statement No. 1 – Digital Flood Insurance Rate Map Production

In accordance with the Cooperating Technical Partners (CTP) Partnership Agreement dated August 5th, 2003, between **Fairfax County, VA** and the Federal Emergency Management Agency (FEMA), Mapping Activity Statement (MAS) No. 1 is as follows.

SECTION 1—OBJECTIVE AND SCOPE

The objective of the Flood Map Project documented in this MAS is to develop a Digital Flood Insurance Rate Map (DFIRM) data set, and Flood Insurance Study (FIS) report for the unincorporated areas of **Fairfax County, Virginia**. The DFIRM data and FIS report will be produced in the FEMA Community-based Standard DFIRM Format.

This Flood Map Project will be completed by the following:

- **Fairfax County, VA;**
- **Michael Baker Jr., Inc.**, a contractor to **Fairfax County, VA**

The activities for this Flood Map Project and the Mapping Partners that will complete them are summarized in Table 1-1. The sections of this MAS that follow Table 1-1 describe the specific activities, responsible Mapping Partner(s), FEMA standards that must be met, and resultant map components. Activities that are to be accomplished by **Michael Baker, Jr., Inc.** under the direction of **Fairfax County, VA** are included in the “CTP” column in Table 1-1.

Table 1-1. Summary of Project Activities and Assignments

Activities	CTP	Baker	FEMA (MCC)
Activity 1 – Base Map Acquisition	X		
Activity 2 – Preliminary DFIRM Production (Non-Revised Areas)		X	

Activity 1 - Base Map Acquisition

Responsible Mapping Partner: **Fairfax County, VA**

Scope: Activity 1 consists of obtaining the digital base map for the project. **Fairfax County, VA** shall provide the digital base map. The required activities are as follows:

- Obtain digital files (raster or vector) of the base map.
- Secure necessary permissions from the map source to allow FEMA’s use and distribution of hardcopy and digital map products using the digital base map, free of charge.
- Certify that the digital data meets the minimum standards and specifications that FEMA requires for DFIRM production.
- Populate the DFIRM database with the information required by FEMA.

Standards: All work under Activity 1 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: In accordance with the TSDN format described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, **Fairfax County, VA** shall make the following products available to FEMA:

- Written certification that the digital data meet the minimum standards and specifications; and
- Documentation that FEMA can use the digital base map.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at http://www.fema.gov/pdf/fhm/frm_gsam.pdf.

Activity 2 – DFIRM Production (Non-Revised Areas)

Responsible Mapping Partner: **Michael Baker Jr., Inc.**

Scope: For all flooding sources, **Michael Baker Jr., Inc.** shall convert the information shown on the effective FIRM and Flood Boundary and Floodway Map (FBFM) panels for all unincorporated areas of **Fairfax County, VA**, to digital format using USGS and other original source materials in conformance with FEMA DFIRM specifications as documented in FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners*. **Baker** shall use the base map acquired under Activity 1 for the conversion. The scope of Activity 2 covers the digitization of approximately 560 source documents. **Baker** also shall incorporate the results of Letters of Map Change (LOMCs) issued by FEMA since the date of the current effective FIRM for each affected community and resolve any tie-in discrepancies with the effective FIRMs for contiguous communities. **Baker** will incorporate a BFE change documented in a Best Available Data letter dated 09/23/1991, that had been issued for the Potomac River by FEMA.

Standards: All work under Activity 2 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: In accordance with the TSDN format described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, **Baker** shall make the following products available to FEMA:

- Hardcopy work maps showing the 1- and 0.2-percent-annual-chance floodplain boundary delineations, regulatory floodway boundary delineations, cross sections, BFEs, flood insurance risk zone labels, and all applicable base map features.
- DFIRM mapping files in ESRI Shapefile format and ESRI Personal GeoDatabase format, prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*; Horizontal Datum of NAD83, Vertical Datum of NGVD29.
- Metadata files describing the DFIRM data, including all required information shown in *Guidelines and Specifications for Flood Hazard Mapping Partners*;
- A Summary Report that describes and provides the results of all automated or manual QA/QC review steps taken during the preparation of the DFIRM, including a check that the road and floodplain relationship is maintained for all non-revised areas.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at http://www.fema.gov/pdf/fhm/firm_gsam.pdf.

SECTION 2—TECHNICAL AND ADMINISTRATIVE SUPPORT DATA SUBMITTALS AND SPECIAL PROBLEM REPORTS

The Project Team members for this Flood Map Project that have responsibilities for activities included in this MAS shall comply with the data submittal requirements summarized below.

All supporting documentation for the activities in this MAS shall be submitted in the TSDN format in accordance with Appendix M of the FEMA *Guidelines and Specifications for Flood Hazard Mapping Partners*, dated April 2003. Appendix M is available for viewing or download on the FEMA Web site at http://www.fema.gov/pdf/fhm/frm_gsam.pdf. Table 2-1 indicates the sections of the TSDN that apply to each mapping activity.

Table 2-1. Mapping Activities and Applicable TSDN Sections

TSDN Section	Mapping Activities				
	1	2, 2A	3, 3A	4	5
General Documentation					
Special Problem Reports	X	X	X	X	X
Telephone Conversation Reports	X	X	X	X	X
Meeting Minutes/Reports	X	X	X	X	X
General Correspondence	X	X	X	X	X
Draft FIS Report	N/A	N/A	N/A	X	N/A
Mapping Information	X	X	X	X	X
Miscellaneous Reference Information	X	X	X	X	X

If any issues arise that could affect the completion of an activity within the proposed scope or budget, the responsible Mapping Partner shall complete a Special Problem Report (SPR) as soon as possible after the issue is identified and submitted to FEMA. The SPR is to describe the issue and propose possible resolutions. (For additional information on SPRs, refer to Appendix M, Subsection M.2.1.1 of *Guidelines and Specifications for Flood Hazard Mapping Partners*.)

Additionally, FEMA MCC shall collect and maintain a set of products for all activities and shall compile a comprehensive TSDN for the entire project.

SECTION 3—PERIOD OF PERFORMANCE

The mapping activities outlined in this MAS will begin on 10/03/2003, and will be completed no later than 09/30/2004. The mapping activities may be terminated at the option of FEMA or **Fairfax County, VA** in accordance with the provisions of the Partnership Agreement dated 10/02/2003.

SECTION 4—FUNDING/COST-SHARING

FEMA is providing funding, in the amount of \$50,000.00, to **Fairfax County, VA** towards the completion of this Flood Map Project.

SECTION 5—STANDARDS

The standards relevant to this MAS are provided in Tables 5-1 and 5-2. Information on the correct volume, appendix, section, or subsection of the FEMA *Guidelines and Specifications for Flood Hazard Mapping Partners* to be referenced for each mapping activity are summarized in Table 5-2.

These Guidelines are available for viewing or download from the FEMA Flood Hazard Mapping Web site at http://www.fema.gov/fhm/dl_cgs.shtm.

Table 5-1. Applicable Standards for Project Activities

Applicable Standards	Activities				
	1	2, 2A	3, 3A	4	5
<i>Guidelines and Specifications for Flood Hazard Mapping Partners, April 2003</i>	X	X	X	X	X
<i>Content Standard for Digital Geospatial Metadata (Federal Geographic Data Committee), 1998</i>	X	X	X	X	X
<i>Document Control Procedures Manual, December 2000</i>			X	X	X

Table 5-2. Project Activities and Applicable Portions of FEMA Guidelines and Specifications

Activity Number	Activity Description	Applicable Volume, Section/Subsection, and Appendix
1	Base Map Acquisition and Preparation	Volume 1, Section 1.3 (specifically Subsection 1.3.1.8) and 1.4 (specifically Subsection 1.4.3) Appendices A and B
2	DFIRM Production (Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3 and 1.4.3.2) Appendices K, L, and M
2A	Independent QA/QC Review of DFIRM Production (Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsection 1.4.3) Appendices K, L, and M
3	DFIRM Production (Application of DFIRM Graphics and Database Specifications)	Volume 1, Section 1.4 (specifically Subsection 1.4.3) Appendices K, L, and M
3A	Independent QA/QC Review of DFIRM Product Meeting FEMA Graphics and Database Specifications	Volume 1, Section 1.4 (specifically Subsections 1.4.3) Appendices K, L, and M
4	Preliminary DFIRM and FIS Report Distribution	Volume 1, Section 1.4 (specifically Subsections 1.4.2 and 1.4.3) and Section 1.5 (specifically Subsection 1.5.1) Appendices J, K, L, and M
5	Post-Preliminary Processing	Volume 1, Section 1.5 Appendices J, K, L, and M

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FEMA is providing funding, in the amount of _____, to Fairfax County, VA towards the completion of this Flood Map Project.

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	1	2, 2A	3, 3A	4	5
<i>Guidelines and Specifications for Flood Hazard Mapping Partners</i> , April 2003	X	X	X	X	X
<i>Content Standard for Digital Geospatial Metadata</i> (Federal Geographic Data Committee), 1998	X	X	X	X	X
<i>Document Control Procedures Manual</i> , December 2000			X	X	X

SECTION 9—CONTRACTORS

Fairfax County, VA intends to use the services of **Michael Baker Jr., Inc.** as a contractor for this Flood Map Project. **Fairfax County** shall ensure that the procurement for all contractors used for this Flood Map Project complies with the requirements of 44 CFR 13.36.

Part 13 may be downloaded in PDF or text format from the U.S. Government Printing Office Web site at http://www.access.gpo.gov/nara/cfr/waisidx_02/44cfr13_02.html.

SECTION 10—FINANCIAL REPORTING

Because funding has been provided to **Fairfax County, VA** by FEMA for this Flood Map Project, financial reporting requirements for **Fairfax County** will be in accordance with CTP Agreement Articles V and VI.

SECTION 11—POINTS OF CONTACT

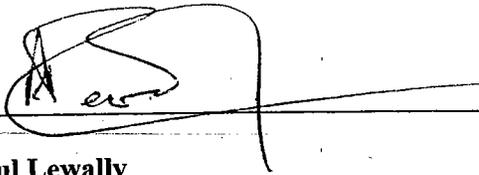
The points of contact for this Flood Map Project are **Nikki Roberts**, the FEMA Regional Project Officer; **Abdul Lewally**, the Project Manager for **Fairfax County**; **Jeff Tornatore**, the Project Manager for **Michael Baker Jr., Inc.**; or subsequent personnel of comparable experience who are appointed to fulfill these responsibilities. When necessary, the assistance of the MCC should be requested through the FEMA Project Officer, **Doug Bellomo**.

SECTION 12—PROJECT COORDINATION

Throughout the project, all members of the Project Team will coordinate, as necessary, to ensure the products meet the technical and format specifications required and contain accurate, up-to-date information. Coordination activities shall include:

- Meetings, teleconferences, and videoconferences with FEMA and other Project Team members
Once every two months;
- Telephone conversations with FEMA and other Project Team members on a scheduled basis
Every other week and an ad hoc basis, as required;
- Updates to the Monitoring Information on Contracted Studies system, Mapping Needs Update Support System database, and other FEMA status information systems in accordance with requirements in Volumes 1 and 3 of *Guidelines and Specifications for Flood Hazard Mapping Partners*; and
- E-mail, facsimile transmissions, and letters, as required.

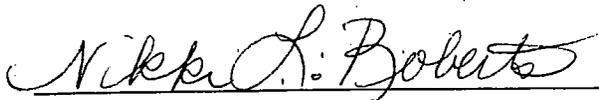
Each party has caused this MAS to be executed by its duly authorized representative.



Abdul Lewally
Project Manager
Fairfax County, VA

03/08/04

Date



Nikki Roberts
Regional Project Officer
Federal Emergency Management Agency, Region III

03/12/09

Date