



This Flood Map Project will be completed by the following

- Barton County, Kansas;
- R&S Digital Services, Inc. [contractor to Barton County, KS]; and
- The National Service Provider (NSP)

The CTP shall notify FEMA and the NSP by e-mail of all meetings with community officials at least one week prior to the meeting (with as much notice as possible). FEMA and/or the NSP may or may not attend the community meetings. FEMA and/or the NSP may elect to participate by conference call.

The tasks for this Flood Map Project, including required Quality Assurance/Quality Control (QA/QC) reviews, and the Mapping Partners that will complete them are summarized in the table below. The sections of this MAS that follow the table below describe the specific Tasks, responsible Mapping Partner(s), FEMA standards that must be met, and resultant map components.

<b>Tasks</b>	<b>CTP</b>	<b>NSP</b>	<b>FEMA</b>
Task 1 - Scoping	<b>X</b>	<b>X</b>	<b>X</b>
Task 2 - Outreach	<b>X</b>		
Task 3 – Field Surveys and Reconnaissance	<b>N/A</b>		
Task 4 – Topographic Data Development	<b>X</b>		
Task 5 – Independent QA/QC Review of Topographic Data		<b>X</b>	
Task 6 –Hydrologic Analyses	<b>N/A</b>		
Task 7–Independent QA/QC Review of Hydrologic Analyses	<b>N/A</b>		
Task 8 – Hydraulic Analyses	<b>N/A</b>		
Task 9 – Independent QA/QC Review of Hydraulic Analyses	<b>N/A</b>		
Task 10 – Floodplain Mapping (Detailed Riverine Analyses)	<b>N/A</b>		
Task 10A – Floodplain Mapping (Redelineation Using Effective Flood Profiles and Updated Topographic Data)	<b>X</b>		
Task 10B – Floodplain Mapping (Refinement or Creation of Zone A)	<b>N/A</b>		
Task 11 – Independent QA/QC Review of Floodplain Mapping (Revised Areas)		<b>X</b>	
Task 12 – Base Map Acquisition	<b>X</b>		
Task 13 – DFIRM Production (Non-Revised Areas)	<b>X</b>		
Task 13A – Independent QA/QC Review of DFIRM Production (Non-Revised Areas)		<b>X</b>	
Task 14 – DFIRM Production (Merge Revised and Non-Revised Information)	<b>N/A</b>		
Task 14A – Application of DFIRM Graphic and Database Specifications	<b>X</b>		
Task 14B – Independent QA/QC Review of DFIRM Product Meeting FEMA Graphic and Database Specifications		<b>X</b>	
Task 15 – Preliminary DFIRM and FIS Report Distribution		<b>X</b>	
Task 16 – Post-Preliminary Processing		<b>X</b>	

FEMA has developed tools to assist in the development of the flood hazard data studies and the Digital Flood Insurance Rate Maps (DFIRMs) if the mapping partner wishes to use them. FEMA will, through the NSP, provide all mapping partners access to in these tools. The tools available at this time include WISE software and the DFIRM production tools. The use of these tools will improve the Map Modernization and efficiency of all mapping partners.

QA/QC review activities may be performed by the NSP at the discretion of FEMA. Please note the NSP will also be performing periodic audits and overall study/project management to ensure study quality.

FEMA will be providing download/upload capability for intermediate data submittals through the Management Information Portal (MIP). Data submittals uploaded via the MIP, will include the same data required prior to the existence of the MIP.

### **Task 1 – Scoping**

Responsible Mapping Partner: Barton County, Kansas; National Service Provider; FEMA

Scope: This task involves collecting data from a variety of sources including community surveys, other Federal and State Agencies, NFIP State Coordinators, Community Assistance Visits (CAV's) and FEMA archives. Barton County and FEMA will evaluate the effective FIS report and FIRM maps to see if it needs to be updated. Lists of mapping needs will be obtained from the MNUSS database, community surveys and CAV's if available.

Data collection will include obtaining the best available base map materials (corporate limits, roads, orthophotos, etc) along with stream centerline files. The acquired data will be imported into the scoping tool and used during the Scoping Task. In the Scoping Tool all streams should have unique names, the limits of the effective FEMA studies should be identified, LOMC areas should be identified, and community requests should be identified. This task also includes populating the streamlines with existing pipeline and scoped studies currently underway.

In cooperation with the FEMA Region, a Project Management Team will be established consisting of the Barton County, FEMA's regional engineer, the NSP and other appropriate officials. The Project Management Team will be responsible for coordinating the activities of this project and completing all tasks identified in this Statement of Work.

Preliminary Research Activities can be separated into two categories—researching effective information and researching available data for the Flood Map Project. The following tasks shall be completed to research effective information: inventory the FEMA archives for effective FIRM panels, FRFM panels, FIS reports, and other flood hazard data or existing study data; summarize the information in the MNUSS database; summarize contiguous community agreement checks; review CAV and CAC files; and develop a "scoping map" and an overview of the results of the research.

FEMA will co-ordinate, set-up, and hold the Scoping Meeting. This includes identifying a time, place, and all participants. The purpose of this meeting is to present the current information to the local officials (state, county and municipal) and coordinate on prioritization and identification of study areas. FEMA & Barton County shall be responsible for compiling the necessary information for the meeting. These items may include: FIS and FIRM for affected communities; USGS quads for the study area; best available community base map(s); effective FIRM summary; Available Data Inventory; Scoping Map; Scoping Meeting Agenda/Minutes form; Aerial photos/topographic mapping if available; existing drainage studies or other H&H data; Community master plan(s)/Drainage Master Plan(s); Zoning Maps; Street Maps; As-built plans; and Floodplain Ordinance(s).

The project management team shall review the initial mapping needs list, review the research findings, and make selections of proposed methods for obtaining/producing flood data. Any additions or changes to the needs list shall be discussed with all members. All needs shall also be prioritized. In general, highest priority shall be given to the following areas: areas of dense existing or anticipated development, including areas where new road crossings have been constructed over stream(s); areas affected by flood-control structures and/or channelization; areas where natural physical changes in the floodplain have been significant (due to subsidence or extreme erosion, for example); areas that were studied by approximate methods and unmapped areas, especially those with development pressure; areas where the community has experienced flooding outside mapped floodplains, with severe damage to buildings and/or infrastructure; areas where mapped flood hazards do not match those shown on contiguous FIRMs (unless those FIRMs are not considered to be accurate); and areas where flood data (BFEs, floodplains, and regulatory floodways) are likely to be changed the most by a restudy.

Based on the discussion of mapping needs, Barton County and FEMA Project Officer will finalize the areas to be included in the project (based on recommendations provided by the Project Team). Areas to be studied by detailed and approximate methods shall be identified. The following issues will be discussed and refined: Review and Refinement of Flood Hazard Identification Methodologies, Review of Proposed Paneling Scheme, Review and Refinement of Base and Topographic Map Source, and Finalization of Map Production and Database Options.

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

## **Task 2 – Outreach**

Responsible Mapping Partner: Barton County, Kansas

Scope: The outreach activities for a Flood Map Project can best be understood as a process that begins during the Project Scoping phase and continues through the Map Production and Post-preliminary phases. A regulatory overview of required activities is followed by a description of tools that can be used in working with stakeholders to keep them informed and to solicit their input.

The overarching goal for conducting outreach is to create a climate of understanding and ownership of the mapping process at the State and local levels. Well-planned outreach activities can reduce political stress, confrontation in the media, and public controversy, which can arise from lack of information, misunderstanding, or misinformation. These outreach activities also can assist FEMA and other members of the Project Team in responding to congressional inquiries.

All communication with local governments will be done in accordance with Title 44 Code of Federal Regulations Part 66.

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

Deliverables: Upon Completion of Outreach and Coordination the Barton County, Kansas shall deliver the following to the FEMA Regional Project Officer in accordance with the schedule outlined in Section 6 for this Task:

- A report detailing outreach and coordination activities
- Backup or supplemental information used in writing this report

### **Task 3 - Field Surveys and Reconnaissance**

The task is not applicable to this project.

### **Task 4 - Topographic Data Development**

Responsible Mapping Partner: Barton County, Kansas

Scope: To supplement the field surveys conducted under Task 3, Barton County, Kansas shall obtain additional topographic data of the overbank areas of the flooding sources studied to delineate floodplain boundaries. Specifically, Barton County, Kansas shall generate new topographic data for Shop Creek in Hosington using new aerial photography. Contour interval and/or accuracy for the topographic data shall be selected based on the current FEMA requirements as documented in *Guidelines and Specifications for Flood Hazard Mapping Partners*.

The products developed for Task 4 will be in NAVD 88. .

Standards: All work under Task 4 shall be performed in accordance with the standards specified in Section 4 of this MAS.

Deliverables: Upon completion of topographic data collection and processing for Shop Creek, Barton County, Kansas shall submit these data to the National Service Provider for an independent QA/QC review under Task 5 in accordance with the schedule outlined in Section 6 for this Task.

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

- Report summarizing methodology and results;
- Mass points and breaklines data on CD-ROM;
- Digital work maps with contours;
- Checkpoint analyses to assess the accuracy of data, including Root Mean Square Error calculations to support vertical accuracy;
- Identification of remote-sensing data voids and methods used to supplement data voids;
- National Geodetic Survey data sheets for Network Control Points used to control remote- sensing and ground surveys; and
- Metadata compliant with Federal Geographic Data Committee standards.
- NSP Format Terrain Database or Intermediate Data Delivery consistent with the NSP Data Capture Standards – Appendix N of the Guidelines and Specifications for Flood Mapping Partners

Appendix M & N may be downloaded from the FEMA Flood Hazard Mapping Web site at [http://www.fema.gov/pdf/fhm/frm\\_gsam.pdf](http://www.fema.gov/pdf/fhm/frm_gsam.pdf).

### **Task 5 - Independent QA/QC Review of Topographic Data**

Responsible Mapping Partner: National Service Provider

Scope: National Service Provider shall review the mapping data generated by Barton County, Kansas under Task 4 to ensure that these data are consistent with FEMA standards and standard engineering practice and are sufficient to prepare the DFIRM.

Standards: All work under Task 5 shall be performed in accordance with the standards specified in Section 4 of this MAS.

Deliverables: In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, National Service Provider shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- A Summary Report that describes the findings of the independent QA/QC review; and
- Recommendations to resolve any problems that are identified during the independent QA/QC review.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at [http://www.fema.gov/pdf/fhm/frm\\_gsam.pdf](http://www.fema.gov/pdf/fhm/frm_gsam.pdf).

### **Task 6 – Hydrologic Analyses**

The task is not applicable to this project.

### **Task 7 - Independent QA/QC Review of Hydrologic Analyses**

The task is not applicable to this project.

### **Task 8 – Hydraulic Analyses**

The task is not applicable to this project.

### **Task 9 - Independent QA/QC Review of Hydraulic Analyses**

The task is not applicable to this project.

### **Task 10 - Floodplain Mapping (Detailed Riverine Analysis)**

The task is not applicable to this project..

### **Task 10A - Floodplain Mapping (Redelineation of Detailed Floodplain Boundaries Using Updated Topographic Data)**

Responsible Mapping Partner: Barton County, Kansas

Scope: Barton County, Kansas shall delineate the 1- and 0.2-percent-annual-chance floodplain boundaries and the regulatory floodway boundaries (if required) for the flooding sources listed earlier in this MAS. Barton County, Kansas shall use the topographic data acquired under Task 4 to delineate the floodplain and regulatory floodway boundaries as appropriate on a digital work map. If the new topographic data do not reflect the same hydraulic characteristics as in effective study, Barton County,

Kansas shall evaluate the topographic data to determine if changes are significant enough to invalidate the floodplain boundary and regulatory floodway boundary redelineations. If so, Barton County, Kansas shall contact the FEMA Regional Project Officer identified in Section 12 of this MAS with a recommendation. In addition, Barton County, Kansas shall address all concerns or questions regarding Task 10A that are raised by National Service Provider during the independent QA/QC review under Task 11.

The topographic data acquired in Task 4 will be in NAVD 88.

**Standards:** All work under Task 10A shall be performed in accordance with the standards specified in Section 4 of this MAS.

**Deliverables:** Upon completion of floodplain mapping for Shop Creek, Barton County, Kansas shall submit the results to National Service Provider for an independent QA/QC review under Task 11.

In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, Barton County, Kansas shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- Digital 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, prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*;
- 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;
- Any backup or supplemental information used in the mapping required for the independent QA/QC review outlined under Task 11; and
- An explanation for the use of existing topography for the studied reaches, if appropriate.
- NSP Format Mapping Database or Intermediate Data Delivery consistent with the NSP Data Capture Standards– Appendix N of the Guidelines and Specifications for Flood Mapping Partners.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at [http://www.fema.gov/pdf/fhm/frm\\_gsam.pdf](http://www.fema.gov/pdf/fhm/frm_gsam.pdf).

### **Task 10B - Floodplain Mapping (Refinement or Creation of Zone A)**

The task is not applicable to this project.

### **Task 11 - Independent QA/QC Review of Floodplain Mapping (Revised Areas)**

**Responsible Mapping Partner:** National Service Provider

**Scope:** National Service Provider shall review the floodplain mapping submitted by Barton County, Kansas under Tasks 10, 10A, and 10B to ensure that the results of the analyses performed are accurately represented. This work shall include, at a minimum, the activities listed below.

- Review the cross sections for proper location and orientation on the work map and agreement with the Floodway Data Table.
- Review the BFEs shown on the work map for proper location and agreement with the results of the hydraulic modeling.
- Review the regulatory floodway widths for agreement with the widths shown in the Floodway Data Table and the results of the hydraulic modeling.
- Review the floodplain boundaries for agreement with the flood elevations shown in the Floodway Data Table and the contour lines and other topographic information shown on the work maps.
- Review the floodplain widths at cross sections as shown on the work maps to ensure they match the Floodway Data Table.
- Review the floodplain boundaries as shown on the work maps to ensure they match the Flood Profiles.
- Review the flood insurance risk zones as shown on the work maps to ensure they are labeled properly.
- Review the DFIRM mapping files to ensure they were prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*.
- Review the metadata files to ensure they include all required information shown in *Guidelines and Specifications for Flood Hazard Mapping Partners*.

**Standards:** All work under Task 11 shall be performed in accordance with the standards specified in Section 4 of this MAS.

**Deliverables:** In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, National Service Provider shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- A Summary Report that describes the findings of the QA/QC review, noting any deficiencies in or agreeing with the mapping results;
- Recommendations to resolve any problems that are identified during the independent QA/QC review; and
- An annotated work map with all questions and/or concerns indicated, if necessary.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at [http://www.fema.gov/pdf/fhm/frm\\_qsam.pdf](http://www.fema.gov/pdf/fhm/frm_qsam.pdf).

## **Task 12 - Base Map Acquisition**

**Responsible Mapping Partner:** Barton County, Kansas

**Scope:** Task 12 consists of obtaining the digital base map, Digital Orthophoto Quarter Quads from the USGS, for the project. Barton County, Kansas will provide vector coverage of for current corporate limits. In addition, Barton County will provide files suitable for to obtain street names for labels in the FIRMs. Barton County, Kansas shall provide the digital base map. The required activities are as follows:

- Obtain digital files (raster and 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 Task 12 shall be performed in accordance with the standards specified in Section 4 of this MAS.

Deliverables: In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, Barton County, Kansas shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- 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](http://www.fema.gov/pdf/fhm/frm_gsam.pdf).

### **Task 13 – DFIRM Production (Non-Revised Areas)**

Responsible Mapping Partner: Barton County, Kansas

Scope: For all flooding sources except those segments for which updated flood data will be developed under Tasks 1 through 11, Barton County, Kansas shall convert the information shown on the effective FIRM and Flood Boundary Floodway Map (FBFM) panels for all incorporated and unincorporated areas of Barton County to digital format in conformance with FEMA DFIRM specifications. Barton County, Kansas shall use the base map acquired under Task 12 for the conversion. Barton County, Kansas shall digitize 51 FIRM panels and 3 FBFM panels. Barton County, Kansas also shall incorporate the results of LOMCs issued by FEMA since the date of the current effective FIRM for each affected community.

All elevations shown will be converted to NAVD 88.

Also, Barton County, Kansas shall address all comments and questions regarding Task 13 that are raised by National Service Provider during the independent QA/QC review under Task 13A.

Barton County, Kansas shall not digitize the flood theme for those segments of flooding sources for which updated flood data will be developed. Rather, Barton County, Kansas shall leave these as "holes" in the digital flood theme that will be filled in as part of Task 14 using the digital flood data developed under Tasks 10, 10A, and 10B.

Standards: All work under Task 13 shall be performed in accordance with the standards specified in Section 4 of this MAS.

Deliverables: Upon completion of 92 DFIRM panels (82 @ 1"=1000' and 10 @ 1"=500'), Barton County, Kansas shall submit the panels to National Service Provider for an independent QA/QC review under Task 11. In accordance with the TSDN format described in described in Appendix M of *Guidelines and*

*Specifications for Flood Hazard Mapping Partners*, Barton County, Kansas shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- Digital 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, prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*;
- 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.
- NSP Format Mapping Database or Intermediate Data Delivery consistent with the NSP Data Capture Standards– Appendix N of the Guidelines and Specifications for Flood Mapping Partners.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at [http://www.fema.gov/pdf/fhm/frm\\_qsam.pdf](http://www.fema.gov/pdf/fhm/frm_qsam.pdf).

### **Task 13A – Independent QA/QC Review of DFIRM Production (Non-Revised Areas)**

Responsible Mapping Partner: National Service Provider

Scope: National Service Provider shall review the DFIRM panels submitted by Barton County, Kansas under Task 13 to ensure that the new DFIRM panels accurately represent the information shown on the effective FIRMs and FBFMs for the area mapped. This work shall include, at a minimum, checking the following:

- Cross sections were properly located and oriented as shown on the FIRM or FBFM.
- BFEs are properly located and agree with the BFEs shown on the FIRM.
- Regulatory floodway widths agree with the widths shown on the FIRM or FBFM.
- The 1 and 0.2-percent-annual-chance floodplain boundaries agree with the floodplain boundaries shown on the FIRM and the contour lines, other topographic information, and planimetric information shown on the DFIRM base.
- Flood insurance risk zone designations are indicated properly.
- Road and floodplain relationships are maintained for all unrevised areas.
- DFIRM mapping files meet the GIS file and database format requirements specified in FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners* and conform to those requirements for content and attribution.
- Metadata files describing the DFIRM data include the required information.

Standards: All work under Task 13A shall be performed in accordance with the standards specified in Section 4 of this MAS.

Deliverables: In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, National Service Provider shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- A Summary Report that describes the findings of the QA/QC review noting any deficiencies in or agreeing with the mapping results;
- Recommendations to resolve any problems that are identified during the independent QA/QC review; and
- An annotated copy of the DFIRM with all questions and/or concerns indicated, if necessary.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at [http://www.fema.gov/pdf/fhm/frm\\_gsam.pdf](http://www.fema.gov/pdf/fhm/frm_gsam.pdf).

#### **Task 14 –DFIRM Production (Merging Revised and Non-Revised Information)**

The task is not applicable to this project.

#### **Task 14A – DFIRM Production (Application of DFIRM Graphics and Database Specifications)**

Responsible Mapping Partner: Barton County, KS

Scope: Barton County, KS shall apply the final FEMA DFIRM graphic and database specifications to the DFIRM files produced under Task 14. This work shall include adding all required annotation, line pattern, area shading, and map collar information (e.g., map borders, title blocks, legends, notes to user). Barton County, KS shall coordinate with those Mapping Partners responsible for Tasks 10, 10A, 10B, 13, and 14, as necessary, to resolve any problems that are identified during Task 14A.

Standards: All work under Task 14A shall be performed in accordance with the standards specified in Section 4 of this MAS.

Deliverables: In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, Barton County, KS shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- Digital 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, prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*;
- 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.

- The FIS report in the FEMA County-wide Format as documented in Appendix J of *Guidelines and Specifications for Flood Hazard Mapping Partners*.
- NSP Format DFIRM Database or Intermediate Data Delivery consistent with the NSP Data Capture Standards– Appendix N of the Guidelines and Specifications for Flood Mapping Partners

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at [http://www.fema.gov/pdf/fhm/frm\\_gsam.pdf](http://www.fema.gov/pdf/fhm/frm_gsam.pdf).

### **Task 14B – Independent QA/QC Review of DFIRM Product Meeting FEMA Graphics and Database Specifications**

Responsible Mapping Partner: National Service Provider

Scope: Upon completion of the floodplain mapping activities (Tasks 10, 10A, and/or 10B) and DFIRM production activities (Tasks 13, 14, and 14A), National Service Provider shall review the DFIRM to ensure it meets current FEMA graphic specifications. In addition, National Service Provider shall review the DFIRM spatial database to determine if it meets current FEMA database specifications. National Service Provider shall coordinate with other Mapping Partners, as necessary, to resolve any problems identified during this QA/QC review. This work shall ensure that the requirements below are met.

- All required DFIRM features are accurately and legibly labeled and follow the examples shown in the FEMA DFIRM specifications. This includes all flood insurance risk zones, BFEs, cross sections, studied streams, mapped political entities, and all roads within and adjacent to the 1-percent-annual-chance floodplains.
- All DFIRM features are correctly symbolized with the appropriate symbol, line pattern, or area shading and follow the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*.
- All map collar information is complete, correct, and follows the requirements specified in *Guidelines and Specifications for Flood Hazard Mapping Partners*.
- DFIRM mapping files are in one of the GIS file and database formats specified in FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners* and conform to those specifications for content and attribution.
- DFIRM database files are in one of the database formats specified in FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners* and conform to those specifications for content and attribution.
- Metadata files describing the DFIRM data include all required information shown in *Guidelines and Specifications for Flood Hazard Mapping Partners*.
- The FIS report is prepared in the FEMA County-wide Format as documented in Appendix J of *Guidelines and Specifications for Flood Hazard Mapping Partners*.

Standards: All work under Task 14B shall be performed in accordance with the standards specified in Section 4 of this MAS.

Deliverables: In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, National Service Provider shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- A Summary Report that describes the findings of the QA/QC review noting any deficiencies in or agreeing with the mapping results and the results of all automated or manual QA/QC steps taken during the independent QA/QC review;
- Recommendations to resolve any problems that are identified during the independent QA/QC review; and
- An annotated copy of the DFIRM with all questions and/or concerns indicated, if necessary.

Appendix M may be downloaded from the FEMA Flood Hazard Mapping Web site at [http://www.fema.gov/pdf/fhm/frm\\_gsam.pdf](http://www.fema.gov/pdf/fhm/frm_gsam.pdf).

### **Task 15 - Preliminary DFIRM and FIS Report Distribution**

Responsible Mapping Partners: National Service Provider

Scope: Task 15 consists of the final preparation, review, and distribution of the Preliminary copies of the DFIRM and FIS report for community official and general public review and comment. The activities to be performed are summarized below.

*Preliminary Transmittal Letter Preparation.* National Service Provider shall prepare letters to transmit the Preliminary copies of the DFIRM and FIS report and related enclosures to all affected communities, all other Project Team members, the State NFIP Coordinator, the FEMA Regional Office, and others as directed by FEMA.

*Final QA/QC Review of Preliminary DFIRM and FIS Report:* National Service Provider shall perform a final QA/QC review of the Preliminary DFIRM and FIS report, including all data tables, Flood Profiles, and other components of the FIS report. The QA/QC review procedures shall be consistent with the *Guidelines and Specifications for Flood Hazard Mapping Partners*.

*Discrepancy Resolution:* The National Service Provider shall work with Barton County, Kansas and FEMA as appropriate to resolve discrepancies identified during the final QA/QC review.

*Distribution of Preliminary DFIRM and FIS Report:* The National Service Provider shall distribute the Preliminary copies of the DFIRM and FIS report to all affected communities, all other Project Team members, the State NFIP Coordinator, the FEMA Regional Office, and others as directed by FEMA.

*News Release Preparation:* The National Service Provider shall prepare news release notifications of BFE changes for all affected communities if appropriate and perform QA/QC reviews of the notices for accuracy and compliance with FEMA format requirements. The National Service Provider shall file the notifications for later submittal to FEMA for review.

*Preliminary Summary of Map Actions (SOMA) Preparation:* The National Service Provider shall prepare Preliminary SOMAs for all affected communities if appropriate. The SOMA shall list pertinent information regarding LOMCs that will be affected by the issuance of the DFIRM (i.e., superseded, incorporated, revalidated).

**Standards:** All work under Task 15 shall be performed in accordance with the standards specified in Section 4 of this MAS.

**Deliverables:** In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners* and the requirements documented in Section 1 and Appendix A of the *FEMA Document Control Procedures Manual*. The National Service Provider shall make the products listed below available to FEMA in accordance with the schedule outlined in Section 6 for this Task.

- Preliminary transmittal letters shall be prepared. These letters and any additional letters requested by FEMA shall be prepared in accordance with the current version of the *FEMA Document Control Procedures Manual*.
- Preliminary copies of the DFIRM and FIS report, including all updated data tables and Flood Profiles shall be mailed to the Chief Executive Officer (CEO) and floodplain administrator of each affected community, all other Project Team members, the State NFIP Coordinator, the FEMA Regional Office, and others as directed by FEMA.
- Preliminary SOMAs, prepared in accordance with FEMA requirements, shall be provided as appropriate.
- Revised DFIRM mapping files, prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*, shall be provided on CD-ROM.
- Revised DFIRM database files, prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*, shall be provided on CD-ROM.
- Revised metadata files describing the DFIRM data, including all required information shown in *Guidelines and Specifications for Flood Hazard Mapping Partners*, shall be provided on CD-ROM.
- 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 shall be provided.

### **Task 16 - Post-Preliminary Processing**

**Responsible Mapping Partners:** National Service Provider and FEMA

**Scope:** Task 16 consists of finalizing the DFIRM and FIS report after the Preliminary copies of the DFIRM and FIS report have been issued to community officials and the public for review and comment. The activities to be performed are summarized below.

**Initiation of Statutory 90-Day Appeal Period:** When required, upon completion of a 30-day community comment period and/or final coordination meeting with the affected communities, National Service Provider shall arrange for and verify that the following activities are completed in accordance with the current version of the *FEMA Guidelines and Specifications for Flood Hazard Mapping Partners* and *Document Control Procedures Manual*.

- Proposed BFE determination letters are sent to the community CEOs and floodplain administrators.
- News release notifications of BFE changes are published in prominent newspapers with local circulation.

- The appropriate notices (Proposed Rules) are published in the *Federal Register*.
- When Barton County, Kansas holds public meetings to present and discuss the results of this Flood Map Project, FEMA will attend the meetings and assist where possible if requested.

*Resolution of Appeals and Protests:* National Service Provider shall support FEMA in reviewing and resolving appeals and protests received during the 90-day appeal period. For each appeal and protest, the following activities shall be conducted as appropriate:

- Initial processing and acknowledgment of submittal;
- Technical review of submittal;
- Preparation of letter(s) requesting additional supporting data;
- Performance of revised analyses; and
- Preparation of a draft resolution letter and revised DFIRM and FIS report materials for FEMA review.

National Service Provider shall mail all associated correspondence upon authorization by FEMA.

*Preparation of Special Correspondence:* National Service Provider shall support FEMA in responding to comments not received within the 90-day appeal period (referred to as "special correspondence"), including drafting responses for FEMA review when appropriate and finalizing responses when requested by FEMA. National Service Provider also shall mail the final correspondence (and enclosures if appropriate) and distribute appropriate copies of the correspondence and enclosures upon receipt of authorization from FEMA.

*Revision of FIRM and FIS Report:* If necessary, National Service Provider shall work together to revise the DFIRM and FIS report at the direction of the FEMA Regional Project Officer and distribute Revised Preliminary copies of the DFIRM and FIS report to the CEO and floodplain administrator of each affected community, all other Project Team members, the State NFIP Coordinator, the FEMA Regional Office, and others as directed by FEMA.

*Final SOMA Preparation:* National Service Provider shall prepare Final SOMAs for the affected communities as appropriate.

*Processing of Letter of Final Determination:* National Service Provider shall work with FEMA to establish the effective date for the DFIRM and FIS report, and shall prepare a Letter of Final Determination (LFDs) for each affected community for FEMA review in accordance with the FEMA *Document Control Procedures Manual*. They also shall mail the final signed LFDs and enclosures and distribute appropriate copies of the signed LFDs and enclosures upon receipt of authorization from FEMA.

*Processing of Final DFIRM and FIS Report for Printing:* National Service Provider shall prepare final reproduction materials for the DFIRM and FIS report and provide these materials to the FEMA Map Service Center for printing by the U.S. Government Printing Office. The MCC also shall prepare the appropriate paperwork to accompany the DFIRM and FIS report (including Print Processing Worksheet, Printing Requisition Forms, and Community Map Actions Form) and transmittal letters to the community CEOs.

*Revalidation Letter Processing.* National Service Provider shall prepare and distribute letters to the community CEOs and floodplain administrators to notify the affected communities about LOMCs for which determinations will remain in effect after the DFIRM and FIS report become effective.

*Archiving Data:* National Service Provider shall ensure that technical and administrative support data are packaged in the FEMA required format and stored properly in the library archives until they are transmitted to the FEMA Engineering Study Data Package Facility. In addition, the National Service Provider will maintain copies of all data for a period of no less than 3 years.

**Standards:** All work under Task 16 shall be performed in accordance with the standards specified in Section 4 of this MAS.

**Deliverables:** In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners* and the requirements documented in Section 1 and Appendix A of the *FEMA Document Control Procedures Manual*, National Service Provider shall make the following products available to FEMA in accordance with the schedule outlined in Section 6 for this Task:

- Documentation that the news releases were published in accordance with FEMA requirements;
- Documentation that the appropriate *Federal Register* notices (Proposed and Final Rules) were published in accordance with FEMA requirements;
- Draft and final Special Correspondence (and all associated enclosures, backup data, and other related information) for FEMA review and signature as appropriate;
- Draft and final Appeal and Protest acknowledgment, additional data, and resolution letters (and all associated enclosures, backup data, and other related information) for FEMA review and signature as appropriate;
- Draft and final LFDs (and all associated enclosures, backup data, and other related information) for FEMA review and signature;
- DFIRM negatives and final FIS report materials, including all updated data tables and Flood Profiles;
- Paperwork for the final DFIRM and FIS report materials;
- Transmittal letters for the printed DFIRM and FIS report;
- LOMC Revalidation Letters if appropriate; and
- Complete, organized archived technical and administrative support data

## **SECTION 2—TECHNICAL AND ADMINISTRATIVE SUPPORT DATA SUBMITTAL**

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](http://www.fema.gov/pdf/fhm/frm_gsam.pdf). Table 2-1 indicates the sections of the TSDN that apply to each Task.

If any issues arise that could affect the completion of a Task 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*.)

**Table 2-1. Mapping Tasks and Applicable TSDN Sections**

TSDN Section	Mapping Tasks														
	2	3	4	5	6	7	8	9	10, 10A, 10B	11	12	13, 13 A	14, 14A	15	16
<b>General Documentation</b>															
Special Problem Reports	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Telephone Conversation Reports	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Meeting Minutes/Reports	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
General Correspondence	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Engineering Analyses</b>															
Hydrologic Analyses		X			X	X	X	X	X	X					
Hydraulic Analyses		X			X	X	X	X	X	X					
Key to Cross-Section Labeling		X			X	X	X	X	X	X					
<b>Draft FIS Report</b>					X	X	X	X							
<b>Mapping Information</b>	X		X	X					X	X	X	X	X	X	X
<b>Miscellaneous Reference Information</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

### **SECTION 3—PERIOD OF PERFORMANCE**

The mapping activities assigned to Barton County, Kansas in this MAS will be completed as specified in the Agreement Articles of the Cooperative Agreement. The Mapping Activities may be terminated at the option of FEMA or Barton County, Kansas in accordance with the provisions of the June 14, 2004 CTP Partnership Agreement.

The mapping activities assigned to National Service Provider in this MAS will be completed as specified in the Task Order.

### **SECTION 4—FUNDING/COST-SHARING**

Funds will be provided by FEMA through cooperative agreement \_\_\_\_\_ for the completion for this Flood Map Project. The cooperative agreement budget identifies the amount to be provided by each party. Barton County, Kansas shall provide any additional resources required to complete the assigned activities for 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](http://www.fema.gov/fhm/dl_cgs.shtm).

**Table 5-1. Applicable Standards for Project Tasks**

Applicable Standards	Tasks														
	2	3	4	5	6	7	8	9	10, 10 A, 10 B	11	12	13, 13A	14, 14A	15	16
<i>Guidelines and Specifications for Flood Hazard Mapping Partners</i> , April 2003	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
American Congress on Surveying and Mapping Procedures		X	X	X											
Global Positioning System (GPS) Surveys: National Geodetic Survey (NGS-510), "Guidelines for Establishing GPS-Derived Ellipsoid Heights," November 1997		X	X	X											
Engineer Manual 1110-1-1000, <i>Photogrammetric Mapping</i> (USACE), July 1, 2002		X	X	X											
Engineer Manual 1110-2-1003, <i>Hydrographic Surveys</i> (USACE), January 1, 2002		X													
"Numerical Models Accepted by FEMA for NFIP Usage," Updated April 2003					X	X	X	X							
<i>Content Standard for Digital Geospatial Metadata</i> (Federal Geographic Data Committee), 1998	X		X	X					X	X	X	X	X	X	X
<i>Document Control Procedures Manual</i> , December 2000	X													X	X
44 Code of Federal Regulations Part 66 and 67	X														

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

Task Number	Task Description	Applicable Volume, Section/Subsection, and Appendix
2	Outreach	44 Code of Federal Regulations Part 66 and 67
3	Field Surveys and Reconnaissance	Volume 1, Section 1.4 (specifically Subsection 1.4.2.1) Appendix A, Sections A.4, A.5, A.6, A.7, and A.8 Appendix F, Section F.3 Appendices B, C, and M
4	Topographic Data Development	Volume 1, Section 1.4 (specifically Subsection 1.4.2.1) Appendix A, Sections A.2, A.3, A.7, and A.8 Appendix M
5	Independent QA/QC Review of Topographic Data	Volume 1, Section 1.4 (specifically Subsections 1.4.1 and 1.4.2.1) Appendix A, Sections A.2, A.3, A.7 (specifically Subsection A.7.5), and A.8 (specifically Subsection A.8.6) Appendix M
6	Hydrologic Analyses	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.4) Appendix A, Section A.4 Appendix C, Sections C.1 and C.7 Appendices E, F, G, H, and M

**Table 5-2. Project Tasks and Applicable Portions of FEMA Guidelines and Specifications (Cont'd)**

Task Number	Task Description	Applicable Volume, Section/Subsection, and Appendix
7	Independent QA/QC Review of Hydrologic Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix A, Section A.4 Appendix C, Section C.2 Appendices E, F, G, H, and M
8	Hydraulic Analyses	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.4) Appendix A, Section A.4 (specifically Subsection A.4.7) Appendix C, Sections C.3 and C.7 Appendices B, E, F, G, H, and M
9	Independent QA/QC Review of Hydraulic Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix A, Section A.4 (specifically Subsection A.4.7) Appendix C, Section C.5 Appendices B, E, F, G, H, and M
10	Floodplain Mapping (Detailed Riverine Analyses)	Volume 1, Section 1.4 (specifically Subsection 1.4.2.3) Appendix C, Sections C. 4 and C.6 Appendix D, Sections D.2 (specifically Subsection D.2.7) and D.3 (specifically Subsection D.3.7) Appendices E, F, G, H, K, L, and M
10A	Floodplain Mapping (Redelineation Using Effective Flood Profiles and Updated Topographic Data)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.3) Appendix C, Section C.6 (specifically Subsection C.6.1.3) Appendices K, L, and M

**Table 5-2. Project Tasks and Applicable Portions of FEMA Guidelines and Specifications (Cont'd)**

<b>10B</b>	Floodplain Mapping (Refinement or Creation of Zone A)	Volume 1, Section 1.4 (specifically Subsection 1.4.2.3) Appendix C, Sections C.4 and C.6 Appendices K, L, and M
<b>11</b>	Independent QA/QC Review of Floodplain Mapping (Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.1 and 1.4.2.3) Appendix C, Sections C.4 and C.6 Appendix D, Sections D.2 (specifically Subsection D.2.7) and D.3 (specifically Subsection D.3.7) Appendices E, F, G, H, K, L, and M
<b>12</b>	Base Map Acquisition and Preparation	Volume 1, Section 1.3 (specifically Subsection 1.3.1.8) and 1.4 (specifically Subsections 1.4.3.1 and 1.4.3.2) Appendix A, Section A.1 (specifically Subsection A.1.1)
<b>13</b>	DFIRM Production (Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2, 1.4.2.3, and 1.4.3.2) Appendices K, L, and M
<b>13A</b>	Independent QA/QC Review of DFIRM Production (Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2, 1.4.2.3, and 1.4.3.2) Appendices K, L, and M
<b>14</b>	DFIRM Production (Merging Revised and Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3 and 1.4.3.3) Appendices K, L, and M
<b>14A</b>	DFIRM Production (Application of FEMA Graphics and Database Specifications)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3, 1.4.3.3, 1.4.3.9, and 1.4.3.10) Appendices K, L, and M
<b>14B</b>	Independent QA/QC Review of DFIRM Product Meeting FEMA Graphics and Database Specifications	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3, 1.4.3.3, 1.4.3.9, and 1.4.3.10) Appendices K, L, and M

**Table 5-2. Project Tasks and Applicable Portions of FEMA Guidelines and Specifications (Cont'd)**

<p><b>15</b></p>	<p>Preliminary DFIRM and FIS Report Distribution</p>	<p>Volume 1, Sections 1.4 (specifically Subsections 1.4.2 and 1.4.3) and 1.5 (specifically Subsection 1.5.1)                  Appendices J, K, L, and M</p>
<p><b>16</b></p>	<p>Post-Preliminary Processing</p>	<p>Volume 1, Section 1.5 (specifically Subsection 1.5.2)                  Appendices J, K, L, and M</p>

## **SECTION 6—SCHEDULE**

The tasks documented in this Mapping Activity Statement shall be completed in accordance with the project schedule. Monitoring Information for Contracted Studies (MICS) will be used to report progress for this Mapping Activity Statement. The initial schedule will be entered into MICS by Barton County, Kansas and the National Service Provider within two weeks of funds award, and the schedule progress will be updated no later than 30 days after the end of each quarter as specified in the agreement articles. Barton County, Kansas will be identified as the MICS Lead. Upon MICS being transitioned to the MIP, reporting will include the same data required prior to the existence of the MIP.

If changes to the schedule are required, the responsible Mapping Partner shall coordinate with FEMA and the other Mapping Partners in a timely manner.

## **SECTION 7—CERTIFICATIONS**

### **Task 3 (Field Surveys and Reconnaissance) and Task 4 (Topographic Data Development)**

A Registered Professional Engineer or Licensed Land Surveyor shall certify topographic data, in accordance with 44 CFR 65.5(c). Certification of topographic data by the American Society for Photogrammetry and Remote Sensing is also acceptable.

### **Task 6 (Hydrologic Analyses), Task 8 (Hydraulic Analyses), Task 10 (Floodplain Mapping—Detailed Riverine Analysis), Task 10A (Floodplain Mapping {Redelineation Using Effective Flood Profiles and Updated Topographic Data}), and Task 10B (Floodplain Mapping {Refinement or Creation of Zone A})**

- A Registered Professional Engineer shall certify hydrologic and hydraulic analyses and data in accordance with 44 CFR 65.6(f).
- A Registered Professional Engineer or Licensed Land Surveyor shall certify topographic information in accordance with 44 CFR 65.5(c).
- Any levee systems to be accredited will be certified in accordance with 44 CFR 65.10(e).

### **Task 10 (Floodplain Mapping— Detailed Riverine Analysis), Task 10A (Floodplain Mapping {Redelineation Using Effective Flood Profiles and Updated Topographic Data}), and Task 10B (Floodplain Mapping {Refinement or Creation of Zone A}), Task 11 (Independent QA/QC Review of Floodplain Mapping {Revised Areas}), Task 13 (DFIRM Production {Non-Revised Areas}), Task 14 (DFIRM Production {Merging Revised and Non-Revised Information}), and Task 14A (DFIRM Production {Application of FEMA Graphics and Database Specifications})**

The DFIRM metadata files shall include a description of the horizontal and vertical accuracy of the DFIRM base map and floodplain information.

### **Task 12 (Base Map Acquisition and Preparation)**

- A community official or responsible party shall provide written certification that the digital data meet FEMA minimum standards and specifications.
- The responsible Mapping Partner shall provide documentation that the digital base map can be used by FEMA. Please note that uploading base map data to the MIP does not constitute agreement that the digital base map can be used by FEMA. Documentation that the digital base map can be used by FEMA will still be required.

Certifications must be made at the time the intermediate data is submitted. For example, if hydrologic data is submitted, certification will be required at the time it is submitted.

## **SECTION 8—TECHNICAL ASSISTANCE AND RESOURCES**

Project Team members may obtain copies of FEMA-issued LOMCs, archived engineering backup data, and data collected as part of the Mapping Needs Assessment Process from the NSP.

General technical and programmatic information, such as FEMA 265 and the Quick-2 computer program, can be downloaded from the FEMA Web site (<http://www.fema.gov./fhm/>). Specific technical and programmatic support may be provided through the NSP; such assistance should be requested through the FEMA Project Officer specified in Section 12 of this MAS.

Project Team members also may consult with the FEMA Regional Project Officer to request support in the areas of selection of data sources, digital data accuracy standards, assessment of vertical data accuracy, data collection methods or subcontractors, and GIS-based engineering and modeling training.

## **SECTION 9—CONTRACTORS**

Barton County, Kansas intends to use the services of R&S Digital Services for this Flood Map Project. If federal funds are used Barton County, Kansas 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\\_01/44cfr13\\_01.html](http://www.access.gpo.gov/nara/cfr/waisidx_01/44cfr13_01.html).

## **SECTION 10—REPORTING**

Barton County, Kansas shall provide progress and financial reports to the FEMA Regional Project Officer and Contracting Officer in accordance with Cooperative Agreement Articles V & VI.

## **Section 11—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 video conferences with FEMA and other Project Team members on a ad-hoc basis;
- Telephone conversations with FEMA and other Project Team members on an ad hoc basis, as required;
- Updates to the MICS, 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.

**SECTION 12—POINTS OF CONTACT**

The points of contact for this Flood Map Project are Bob Franke, the FEMA Regional Project Officer; Clark Rusco, the Project Manager for Barton County, Kansas; or subsequent personnel of comparable experience who are appointed to fulfill these responsibilities. When necessary, any additional assistance of FEMA should be requested through the FEMA Regional Project Officer.

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

Clark Rusco

Clark Rusco, County Engineer  
Barton County, KS

8/9/2004

Date

Robert G. Bissell

Robert G. Bissell, Director  
Federal Insurance and Mitigation Division  
Federal Emergency Management Agency

8/17/04

Date