United States Department of Agriculture

Animal and Plant Health Inspection Service

Veterinary Services

Centers for Epidemiology And Animal Health

April 2008

Emergency Management Response System's Mapping Module

Site Planner

User Manual

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Scope of This Manual

The Veterinary Services' Emergency Management Response System's Mapping Module consists of three tools:

- Site Planner – helps you to quickly locate premises on maps, using a variety of search criteria.
- Field Responder – lets you import premises data into third-party software applications in order to customize/generate/view/print detailed maps for use by animal disease investigation personnel.
- Incident Analyzer – assists you in performing geographic visualization and analysis work for use in animal disease investigations.

This User Manual documents the procedures for using the Site Planner tool.

Audience for This Manual

Users of the Veterinary Services' Emergency Management Response System's Mapping Module will generally fall into one of the following groups:

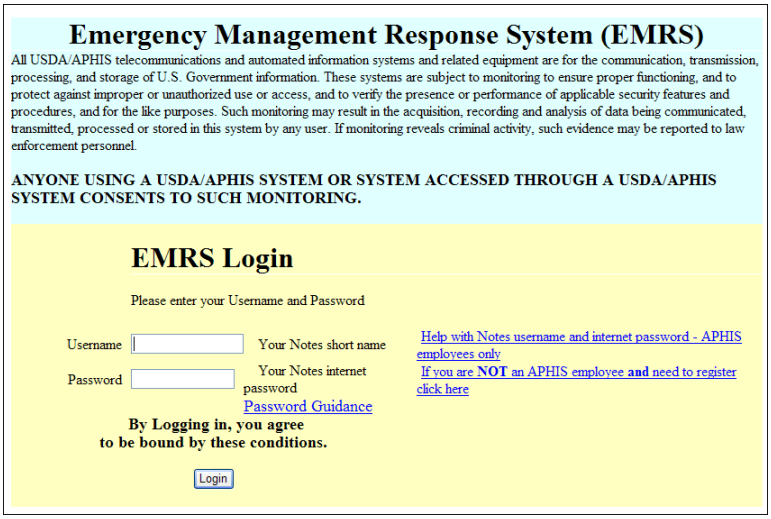
- Management – These are decision-making personnel (such as chiefs and leaders for emergency outbreak incidents and disease investigations) who are in charge of assigning resources and tasks for data-collection and field work. Management staff also generate reports for analysis and end-of-year reporting purposes.
- Data Collectors – These individuals are tasked to collect premises data (both spatial and non-spatial). Such personnel are usually equipped with mobile devices and navigation software to help them in locating premises for field visits.
- Analysts –These individuals perform data exploration/visualization work, generated web-based maps, and conduct spatial analysis/modeling, as needed.

Section 1:
Logging into the EMRS Mapping Module

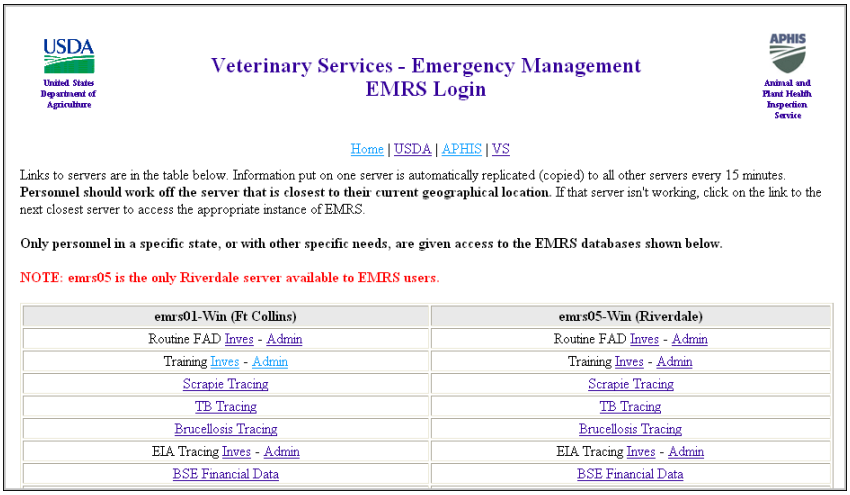
1. Access the EMRS Mapping Module via the following URL:

   https://emrs01.aphis.usda.gov/emrs/training/emrsinves.nsf/mm_webframeset?open

   The EMRS Login Screen appears (shown below).



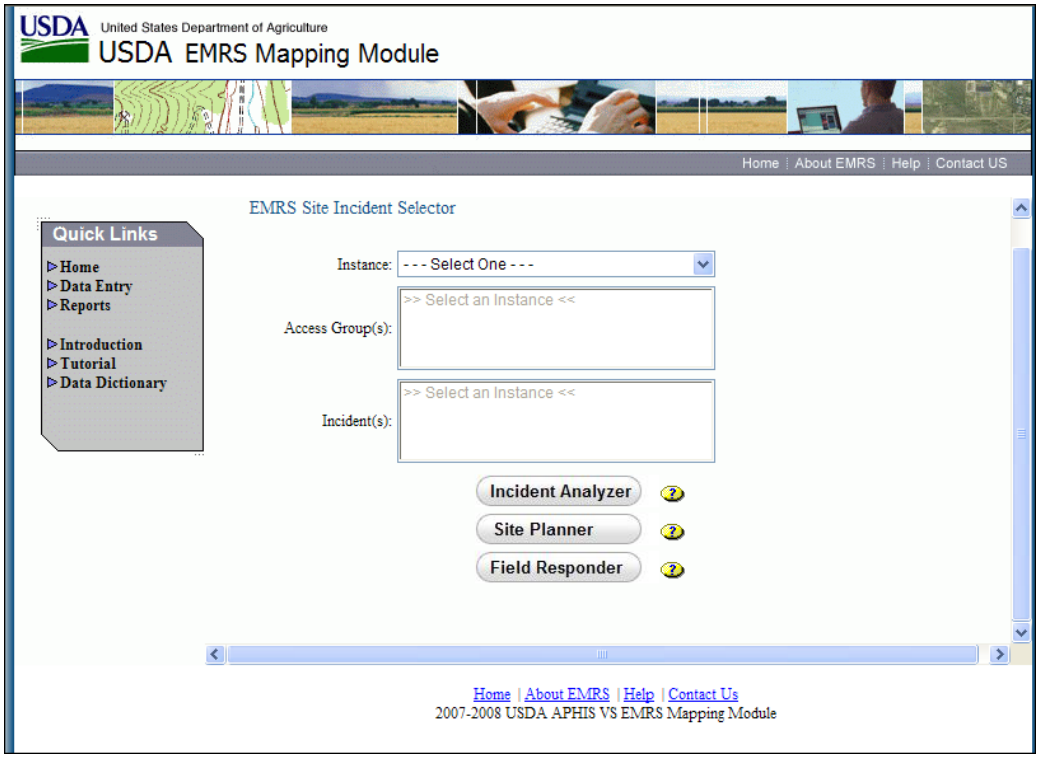
2. On the Emergency Management Response System, do the following:
   a. Enter your username and Internet password.
   b. Click the **Login** button.
   c. The **Veterinary Services – Emergency Management - EMRS Login** Screen appears (see below).



3. Click on the link for the appropriate instance (the database that is being used by your investigation/emergency outbreak). This opens the **EMRS-Investigation Database Main Menu** Screen.

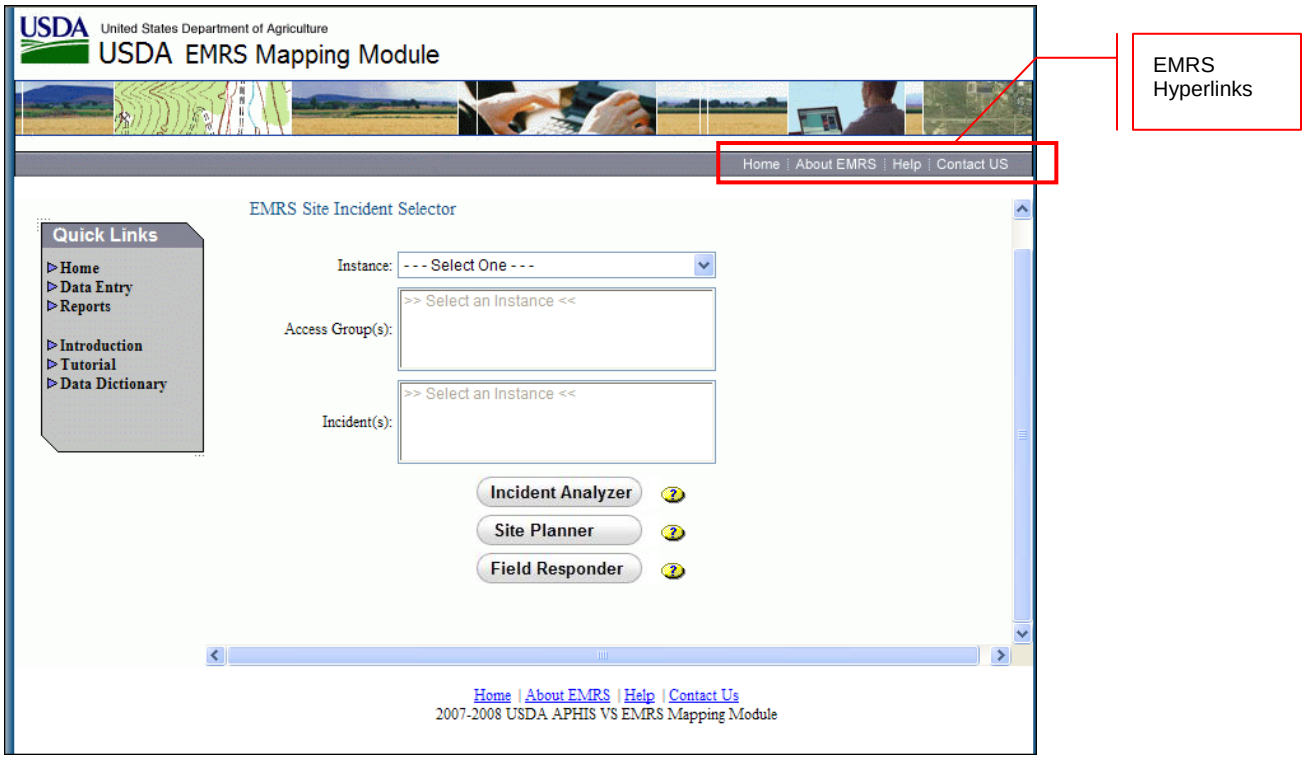
4. On this Main Menu, in the toolbar at the top, click on the 

button. This opens the **USDA EMRS Mapping Module Home Page** (see below).



Section 2:
The EMRS Mapping Module Home Page

Shown below is the **EMRS Mapping Module Home Page**:



Take note of several features on this page:

- A **Quick Links** navigation pane, with the following options in it:
  - Home
  - Data Entry
  - Reports
  - Introduction
  - Tutorial
  - Data Dictionary

- An EMRS Site Incident Selector Form

- An EMRS hyperlinks bar with these links on it:
  - Home
  - About EMRS
  - Help
  - Contact Us

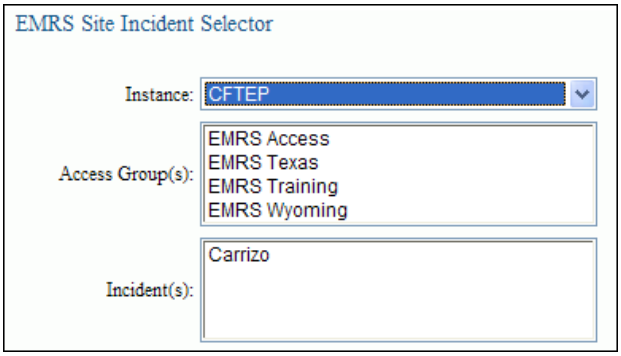
Section 3:
Using the EMRS Site Incident Selector Tool

In the middle of the **EMRS Mapping Module Home Page** is the EMRS Site Incident Selector Form. You will use this form to configure the EMRS Mapping Module so that it can generate and manage data that is specific to the investigation or incident command you are working for.

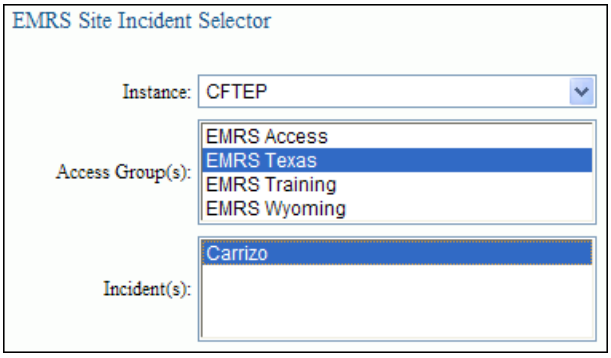
Complete the EMRS Site Incident Selector Form as instructed below:

1. **Instance -** Name of the database that is being used by your incident for collecting, managing, and reporting its data. Use the pull-down menu to make your selection.

2. **Access Group(s)** –Group of user roles which all have the same set of data-entry and data-generation privileges when using the EMRS Mapping Module tools. Specify the group(s) to which your User Role has been assigned.
   - To select one group, open the pull-down menu and click once on the appropriate group name.
   - To select multiple groups, open the pull-down menu, press and hold the **Ctrl** key, then click on each group's name.



3. **Incident(s)** –Name(s) of the emergency outbreak or FAD investigation that you are working for. Use the pull-down menu to make your selection(s).



Section 4:
The EMRS Mapping Module Tools

The EMRS Mapping Module consists of three components, or tools, that you can use to generate and manage your incident or investigation's mapping data in different ways:

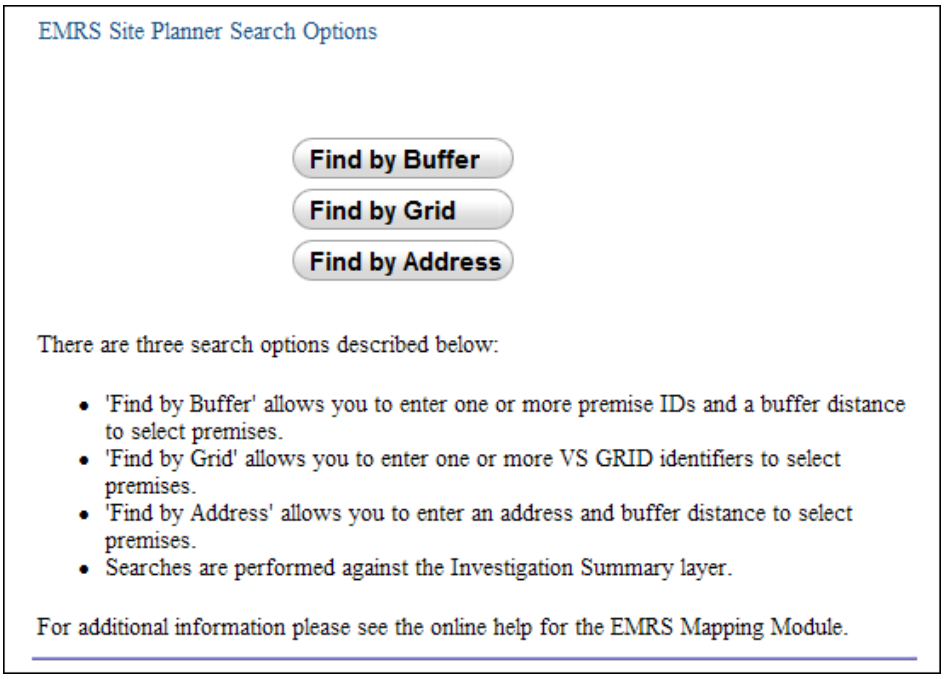
- Incident Analyzer – Provides a strategic view of an incident using a traditional web-based mapping interface.
- Site Planner –Assists in tactical planning by allowing an analyst to quickly find premises using various search criteria (such as a Prem ID and radius, an address and radius, or a VS Grid identifier).
- Field Responder –Allows a user to quickly generate routing directions to one or more premises as well as display detailed satellite imagery as a backdrop to these locations and routes.

1. For details about each tool, click on the yellow question mark icon next to it.
2. When ready, click on the **Site Planner** button.

Section 5:
Using the Site Planner Tool

1. On the EMRS Site Incident Selector Screen, click the **Site Planner** button.

   An **EMRS Site Planner Search Options Screen** then appears (shown below). On it are three search options that you can choose from: **Find by Buffer**, **Find by Grid**, and **Find by Address**.



2. If you chose:
   - **Find by Buffer**, go directly to Section 5A now.
   - **Find by Grid**, go directly to Section 5B now.
   - **Find by Address**, go directly to Section 5C now.
     *Note: As of April 2008, the **Find by Address** functionality is currently not available in Site Planner, and you should not see its button onscreen.*

5A Find by Buffer

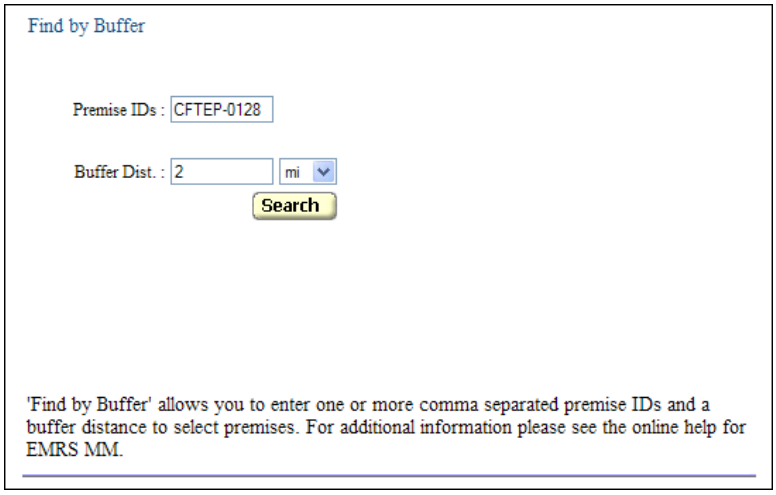
On the **Find by Buffer Screen**, do the following procedure:

1. In the **Premise IDs** data field, enter one or more Prem IDs (separated by a comma).

   Enter each Prem ID using the following format: NNNN-xxxx where NNNN are capitalized alphabetical characters, a hyphen (not an underscore), and xxxx are numerals.
   Example: CFTEP-0021

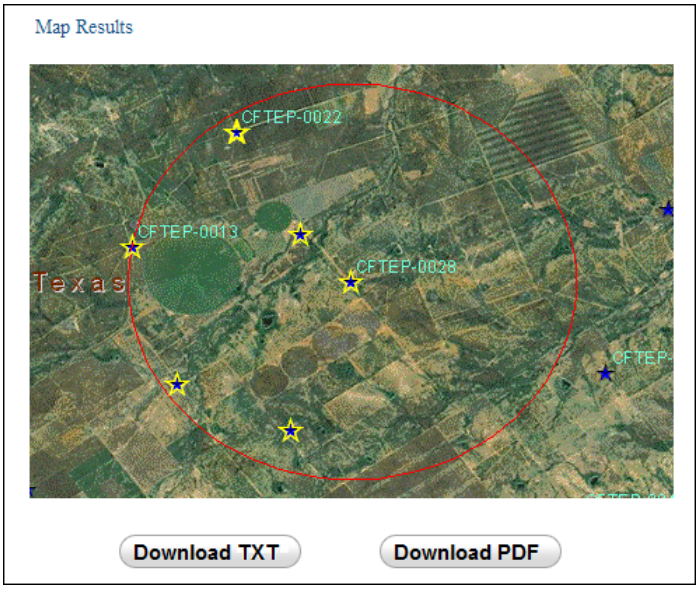
2. In the **Buffer Dist** data field, do the following:
   a. Manually enter this value. It can be either a whole number (such as 3, 12, or 144) or a decimal value (i.e., .5, 2.6, or 98.1).
   b. Use the pull-down menu to select the distance **Units** (**Miles** or **Kilometers**).

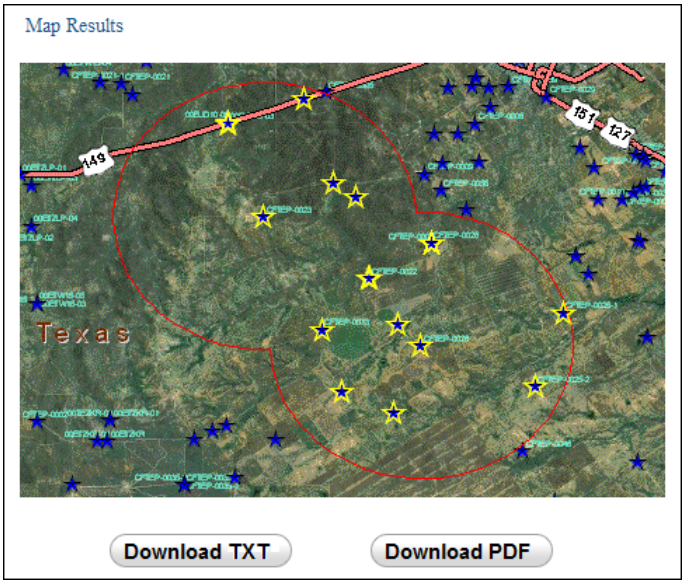
   When done, your should look similar to the example shown below.



3. Click the **Search** button.

4. Site Planner then generates a map according to the criteria you specified.
   - If you entered a single Prem ID, the generated map should look like the example below at left.
   - If you entered multiple Prem IDs, your map should look more like the example below at right.





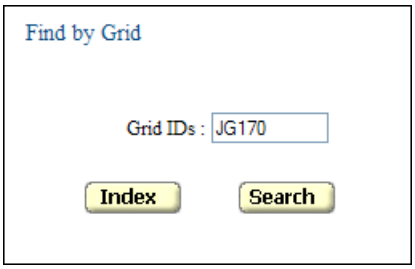
	Left Map – Displays a **Single Prem ID**	**Right Map –** Displays **Multiple Prem IDs**
Center Point(s) =	Prem ID CFTEP-0028	Prem ID CFTEP-0023 and Prem ID CFTEP-0028
Buffer =	A 2-mile buffer radius as a red circle.	A 3-mile buffer radius as a red circle. Where buffers from two or more centerpoints intersect, Site Planner eliminates the overlap to show a single buffer boundary. If multiple centerpoint buffers do not intersect, they will be shown as separate circles.
Selected Prem IDs =	All that fall within or touch the buffer radius are highlighted by Site Planner.	All that fall within or touch the buffer radius are highlighted by Site Planner.
Image Base Backdrop =	USGS 7.5 min. natural color 1 meter Digital Ortho Quarter Quads (DOQQ's).	USGS 7.5 min. natural color 1 meter Digital Ortho Quarter Quads (DOQQ's).

5. To learn how to download the generated map, go directly to Section 5 now.

5B Find by VS Grid ID

On the **Find by Grid Screen**, do the following procedure:

1. In the **Grid IDs** data field, enter one VS Grid ID value (see example at right).



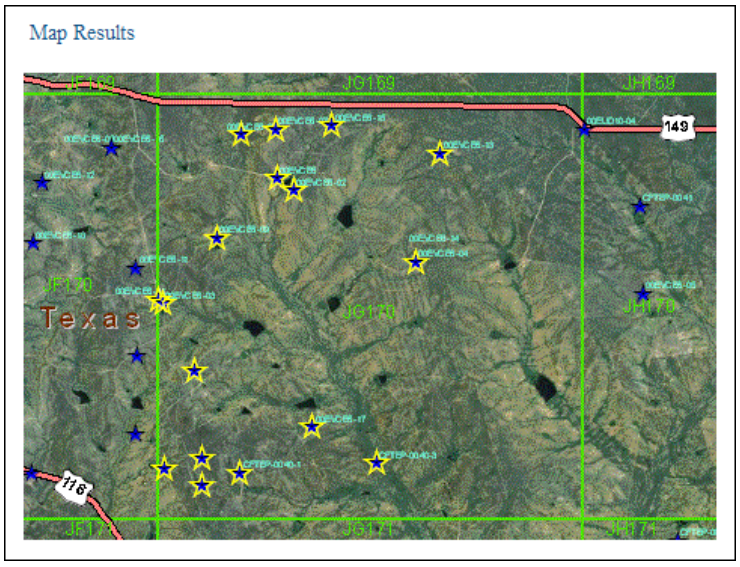
   Your Grid ID value must be capitalized with no spaces. Site Planner allows only one VS Grid ID to be entered at a time.

   Example: **AB123**

   Note: The Find by Grid function does not allow for buffering from the Grid ID.

   Note: If you do not know the exact VS Grid ID value to use, you can first display an regional map that shows every VS Grid ID available. To do this task, see Step 3 on the next page.

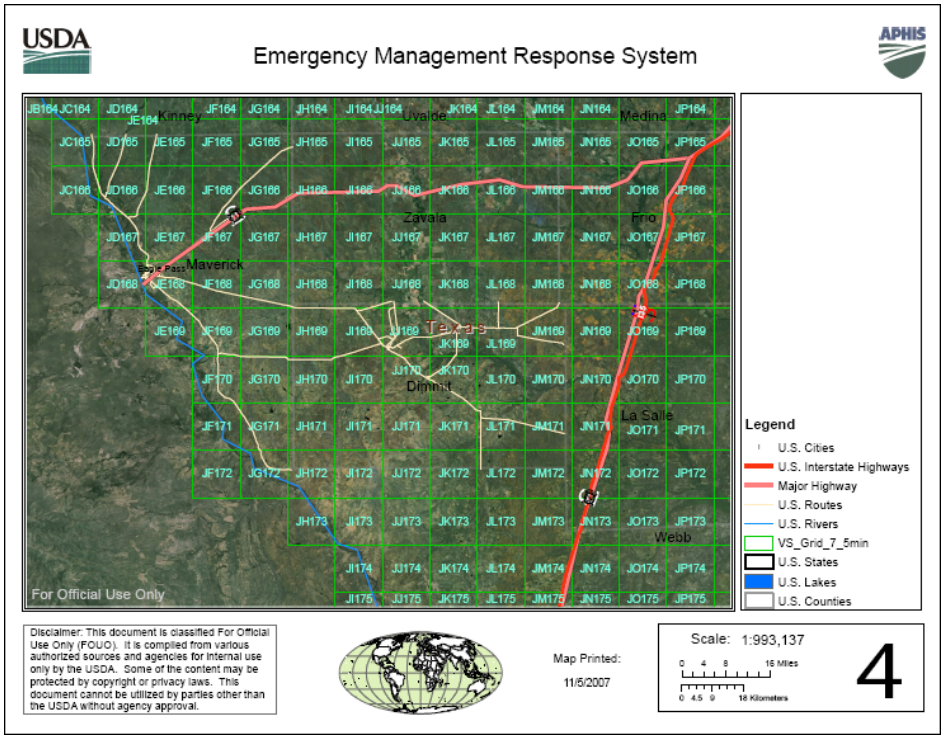
2. Click the **Search** button. Site Planner then generates a map using the VS Grid ID you specified as shown below.



	Map – Displays a **VS Grid ID**
Center Point(s) =	VS Grid JG170
Buffer =	No Buffer.
Selected Prem IDs =	All that fall within or touch the Grid boundary are highlighted by Site Planner.
Image Base Backdrop =	USGS 7.5 min. natural color 1 meter Digital Ortho Quarter Quads (DOQQ's).

3. If you do not know which VS Grid ID value to enter in the **Grid IDs** data field, do the following:

   a. Click the **Index** button. This will display a regional map of the area of interest with an overlay VS Grid and the corresponding Grid IDs displayed as annotation (as shown below).



   b. Select the appropriate VS Grid ID that covers the Incident area you are interested in.

   c. Return to Step 1 above (under Section 5B) and enter this Grid ID value.

5C Find by Address

*Note: As of April 2008, the **Find by Address** functionality is currently not available in Site Planner, and you should not see its button onscreen.*

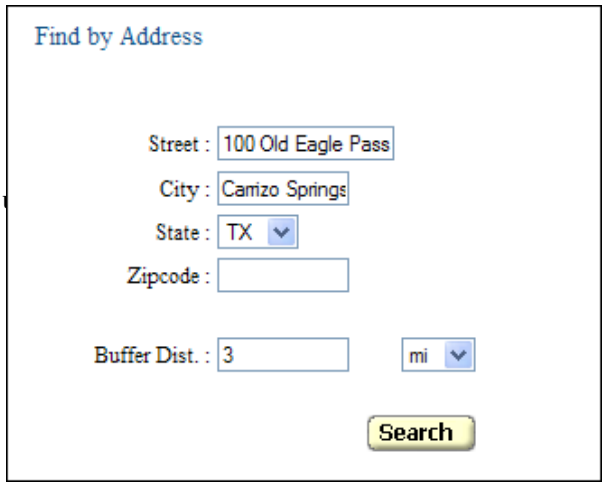
On the **Find by Address** screen do the following:

1. Enter Address information using one of the methods described below:
   - Enter Street address, City, State, Buffer Distance and Buffer Units in the appropriate fields.
   - Enter Street address, State, Zip Code (5-digit), Buffer Distance and Buffer Units in the appropriate fields.

   Note: Address and City information are not case sensitive. State information must be selected from the pull-down list.

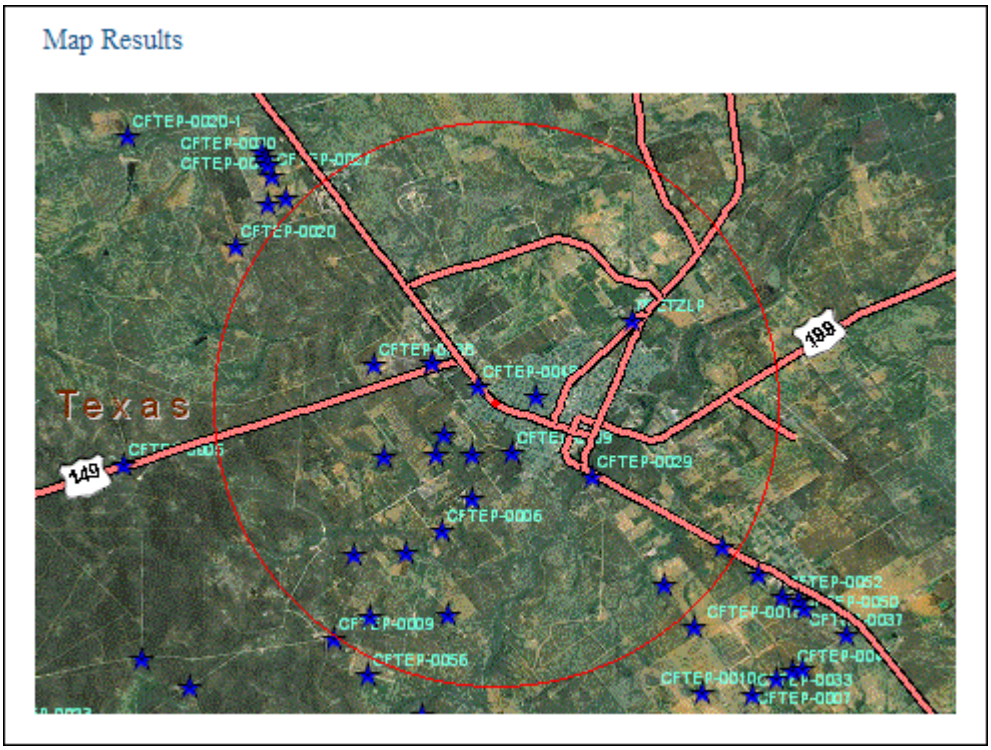
2. In the **Buffer Dist** data field, do the following:
   a. Manually enter this value. It can be either a whole number (such as 3, 12, or 144) or a decimal value (i.e., .5, 2.6, or 98.1).
   b. Use the pull-down menu to select the distance **Units** (**Miles** or **Kilometers**).

   Your screen should now look similar to the following example:



3. Click the **Search** button.

Site Planner then generates a map using the address and buffer you specified as shown below.



	Map – Displays **Multiple Prem IDs**
Center Point(s) =	100 Old Eagle Pass Rd. (red dot in center)
Buffer =	A 3-mile buffer radius as a red circle.
Selected Prem IDs =	All that fall within or touch the buffer radius are highlighted by Site Planner.
Image Base Backdrop =	USGS 7.5 min. natural color 1 meter Digital Ortho Quarter Quads (DOQQ's).

Section 6:
Downloading a Map or Selected Prem ID Data Generated by Site Planner

You can download either the textual data associated with the Prem ID locations you selected within the buffer areas or VS Grid and/or the map that was generated by Site Planner.

6A Tabular Data Format

The map is converted into a tab-delimited file.

- As shown below, the file is organized as a table. Each table column contains a specific type of data that describes one aspect of all the Prem IDs inside the buffer zone. And each row contains all the data for a single Prem ID.
- A tab-delimited file is a special kind of plain text file with a tab character between each column in the text. When imported into Field Responder + Street Atlas or Field Responder + ArcGIS Explorer, the tabs allow the columns to line up neatly.
- The advantage of choosing this format is that you can open the file using a third-party text editor or the Excel spreadsheet application. Once opened, you can then customize the file's contents and appearance to meet your needs.

Below is an example of a tab-delimited file:

"SHAPE"	"OBJECTID"	"INVSUM_UNID"	"LAT"	"LON"	"ACCESS_GROUP"	"INCIDENT"	"INCIDENTSITE"	"REF_CTRL_NR"
null	"234"	"FA4DA3B287036029872573BE0058D6C7"			.45551"		"EMRS Texas"	"Carrizo"
null	"241"	"872DA84F221BEF28872573D0006C62A4"			.48663999999		62999999999"	"EMRS Texas"
null	"182"	"D15722512F5872CE872573A70069A89C"			.51402999999		55"	"EMRS Texas" "Carrizo
null	"184"	"D25A5BE8FA5FD09B8725736000049F842"			.47575999999		67"	"EMRS Texas" "Carrizo
null	"201"	"E061E774E5FEFFB68725735F005B5F31"			.50611"		"EMRS Texas"	"Carrizo"
null	"6"	"03378175E35B62B5872573600069976A"			.44430999999		.68"	"EMRS Texas" "Carrizo
null	"34"	"2376D459DDF61531872573980062A514"			.41849"		"EMRS Texas"	"Carrizo"
null	"50"	"35E2F1E4EA1A9B1887257360006A4B21"			.42013"		"EMRS Texas"	"Carrizo"
null	"66"	"488FD299B363F0F58725735F005AC45A"			.50660000000		.27"	"EMRS Texas" "Carrizo
null	"86"	"5B7C07FA46A1146F8725735F00510F7C"			.43875"		"EMRS Texas"	"Carrizo"
null	"91"	"5EA99098E53262D5872573600049529C"			.45564"		"EMRS Texas"	"Carrizo"
null	"102"	"66396A2D896448BD8725736100529AD9"			.43359"		"EMRS Texas"	"Carrizo"
null	"116"	"7491804EBEC1C13587257360006B1476"			.46712999999		71999999999"	"EMRS Texas"
null	"119"	"7BC3F6F8510A5C738725735E00585735"			.46692999999		52"	"EMRS Texas" "Carrizo
null	"125"	"8097CB5B929B8290872573B1005A276C"			.41180000000		15"	"EMRS Texas" "Carrizo
null	"160"	"B07F4D9DB1A2147F87257398005A1E67"			.44068"		999"	"EMRS Texas" "Carrizo
null	"173"	"C0AFB83462A0A5688725739D00592F4E"			.48228"		"EMRS Texas"	"Carrizo"
null	"179"	"CBC00687F8A4C6F3872573AF00741F8F"			.46712999999		71999999999"	"EMRS Texas"

6B Map Format

Maps are downloaded in PDF (Portable Document File) format. The map is saved in its original graphic format and then pasted inside a map template.

The template adds other elements, which are described below:

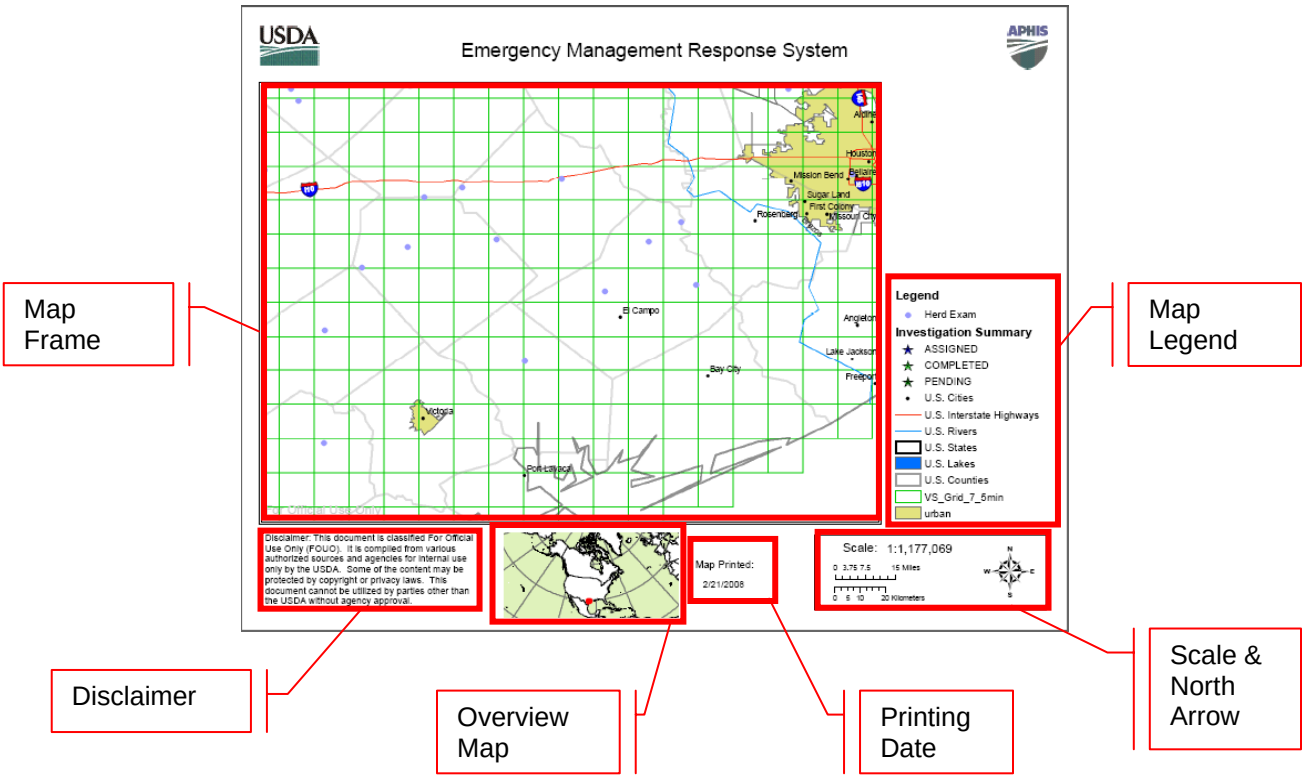
- Legend – Displays each active layer in the map table of contents.
- Scale/North Arrow – Shows both a scale ratio is shown as well as a graphical scale in miles and kilometers. A north arrow is included and is always up.

- Printing date – Displays the current date is printed in MM/DD/YYYY format.
- Overview map – Shows a smaller map of North America with the map area shown as a red rectangle.
- Disclaimer – Describes map/data sources and usage restrictions. The disclaimer states the following:

  This document is classified For Official Use Only (FOUO). It is compiled from various authorized sources and agencies for internal use only by the USDA. Some of the content may be protected by copyright or privacy laws. This document cannot be utilized by parties other than the USDA without agency approval.

- Map Frame Area – Displays the map extent and active layers in the electronic map frame.

The example below shows a map that has been pasted into the map template:



To download either your tabular data as a Prem ID file or the graphical map, do the following procedure:

1. On the generated map screen, select either Download TXT or Download PDF . The tab-delimited file or map PDF then appears in a separate browser window.
2. Use the browser window's **File>Save** or **File>Print** command to create an electronic or hardcopy version of the downloaded item.