

Guidelines For Sending

CULTURAL RESOURCE RECORD SEARCHES To ARMS

(Revised 05-04-06)

The screenshot displays the ARMS web application interface. At the top, the text reads "NEW MEXICO Office of Cultural Affairs Historic Preservation Division Archeological Records Management Section Welcome to ARMS!". On the left, a blue navigation bar contains buttons for HOME, NMCRIIS, REOURCES, FEEDBACK, CONTACT, HELP, and MAPS. The main content area features a map titled "ARMS Map Service" with a toolbar on the left and a "Layers" panel on the right. The map shows a topographic view of New Mexico with major highways (10, 25, 40) and various cultural resource layers overlaid. The "Layers" panel includes options for Geographic Names, Archeo Sites, Site Boundaries, Registered Property, Surveys, Quad Index, Public Land Survey System, Interstates, US Highways, State Highways, Towns, Town Boundary, USGS 24K Quad DRGs, and USGS 100K Quad DRGs. A status bar at the bottom indicates "Zoom In" and "Copyright (C) 2001, 2002, 2003 State of NM - ARMS".

CONTENTS

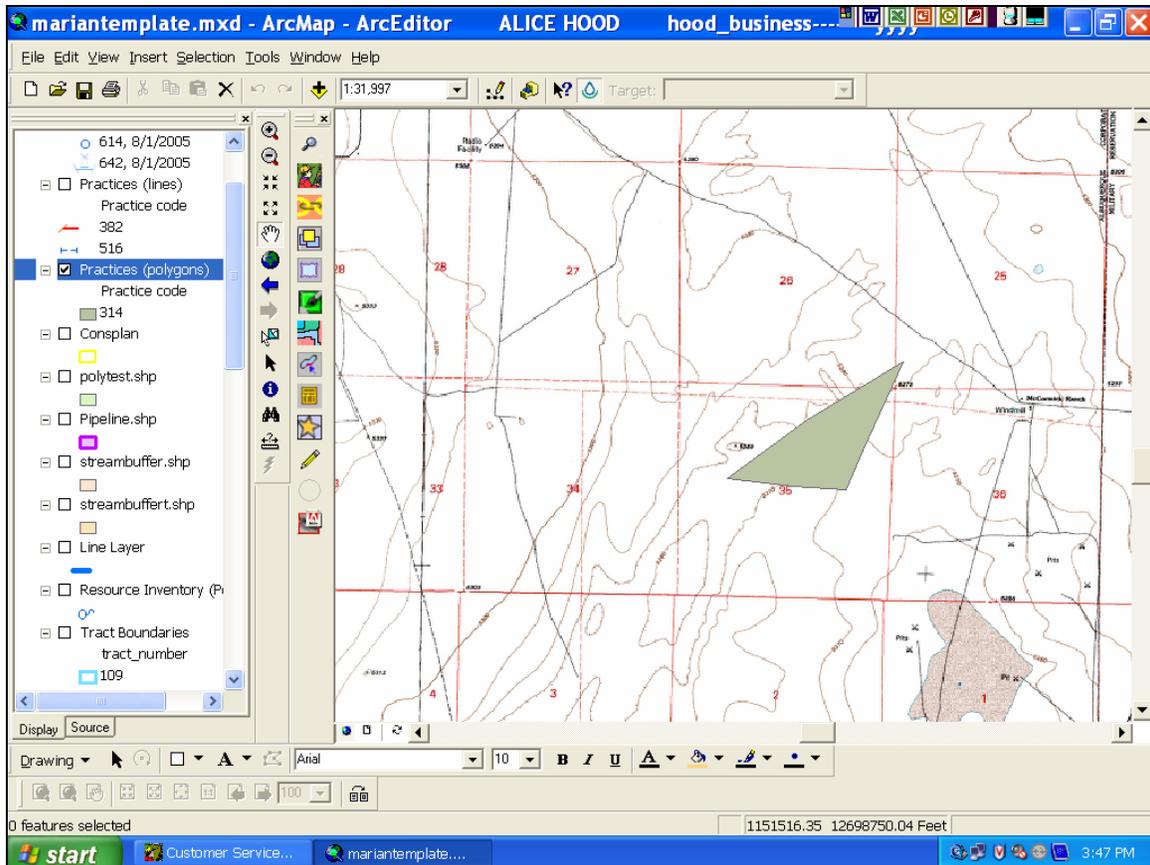
Introduction	page 1
Creating Shapefile Maps	page 2
E-Mailing your Shapefiles to ARMS	page 23
Getting your Records Search back from ARMS	page 26
Positive Records Search	page 29
Negative Records Search	page 34
Completing the Section 106 Form	page 35
Maps needed for SHPO	page 37
<u>Attachment #1 (5-04-06)</u>	
Procedures for sending ARMS shapefile data	page 40

To complete the **records search** process you will need to use Arc-Map to identify the project area and create a shapefile.

1. Identifying the project area or the Area of Potential Effect. You will need to identify within Arc-Map the project area as well as any areas that may be disturbed to facilitate the project's completion. These would include borrow areas for construction projects and/or creating any new access roads to get equipment and materials to the project area. These roads would have to be constructed by the use of ground disturbing equipment.
2. To request a cultural resources records search of the proposed projects area. This will require you to send an Arc-Map shapefile through E-Mail directly to ARMS (Archaeological Records Management Services). In turn you will receive a shapefile back from ARMS that identifies any previously recorded sites within your project's area. This does not mean everything has been recorded in this area, that's up to your on-the-ground survey of the area.

Creating Shapefile Maps:

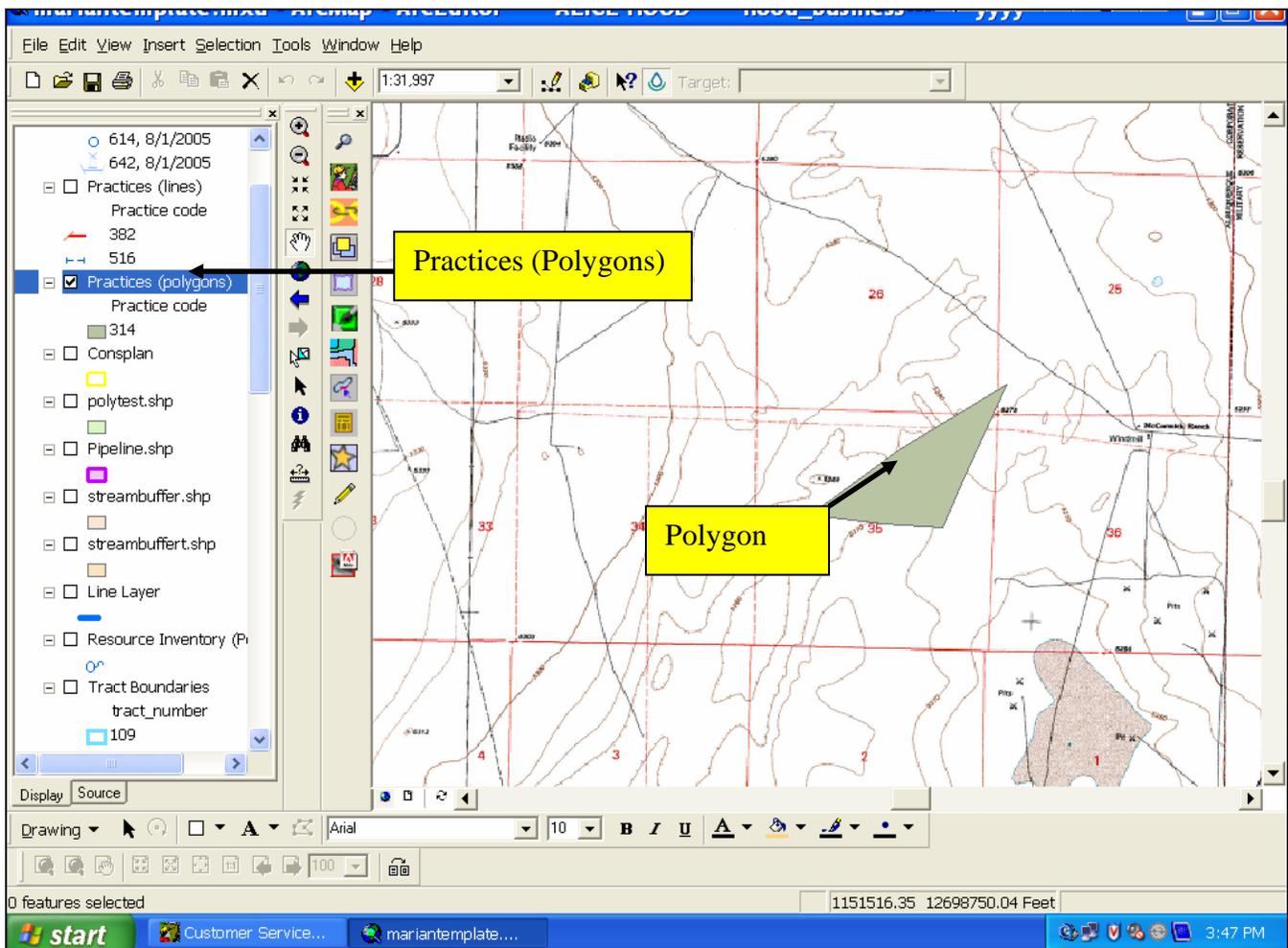
Go into Customer Service Toolkit and check out the file for the producer you wish to work in. Once you have your producer checked out click on the Customer Files tab and select the ArcGIS_Projects folder. To the right you should see your _Template.mxd choices, (Producer Name_Template.mxd). Select the template that includes the consplan. You will now see ArcMap flash on your screen followed by a view similar to the one found below. Below you will find two **options**, 1 – polygons and 2 – lines and points.



At this point you will need to uncheck the **consplan** layer and the **Ortho** layer, they will not be used and only cause confusion and clutter to your map.

You will need the **Topographic** layer so check it on. You will also need to check the **Practices** layer (lines, points or polygons) you want to send.

For this example we want to create a map for a proposed Brush Management project. So we are going to check the layer for Practices (Polygons), you now will see that polygon (colored gray) appear on the below map.



In order to create shapefiles within Arc-Map you will need to use the Buffer Tool . By using the buffer tool you will create a shapefile that is filed under **C:** or **F:** **Customer Service Toolkit / Producers Name / Resource Maps**. depending if it is checked out or not.

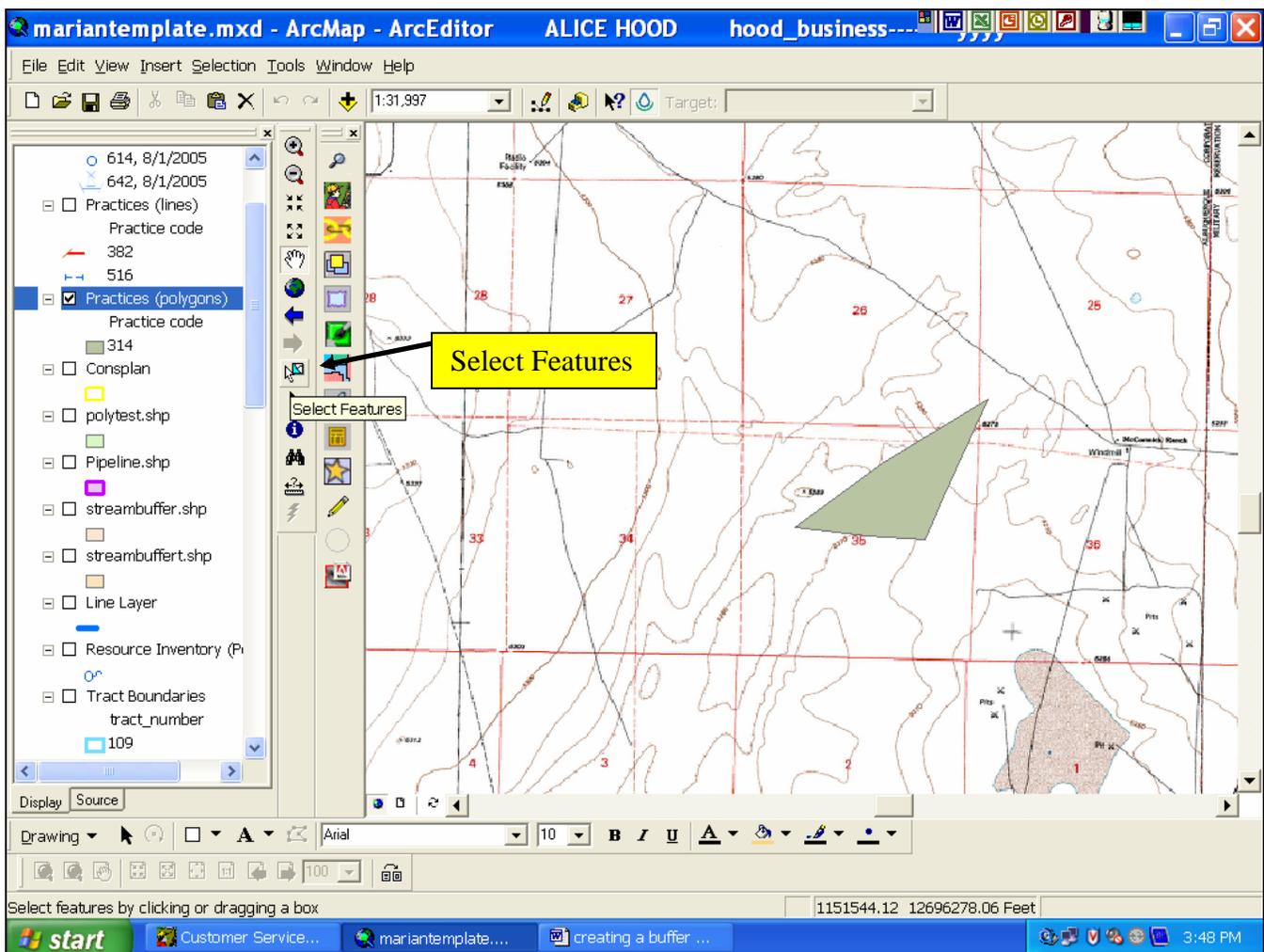
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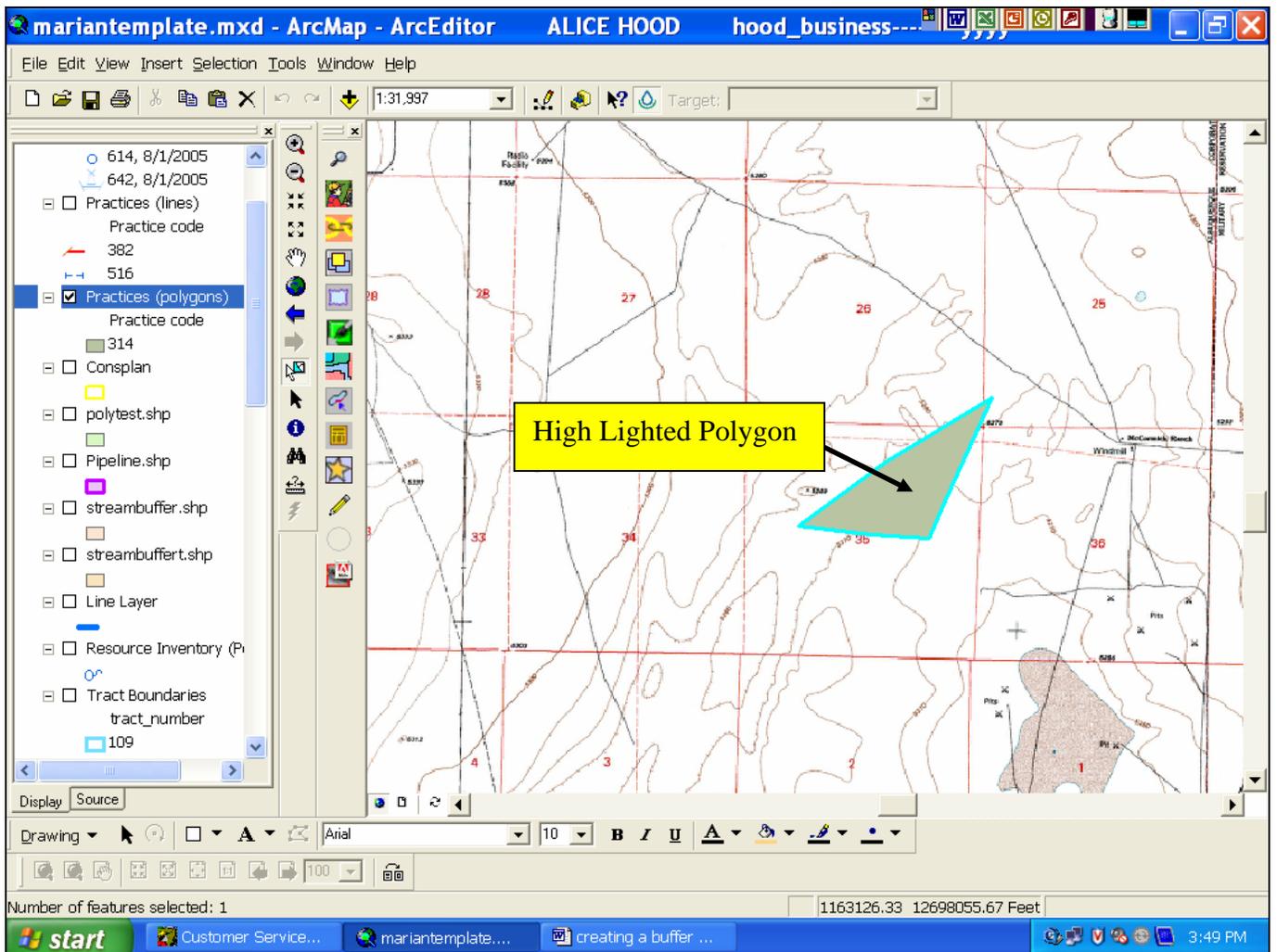
Creating a buffer around a conservation practice:

There are two options when creating a buffer.

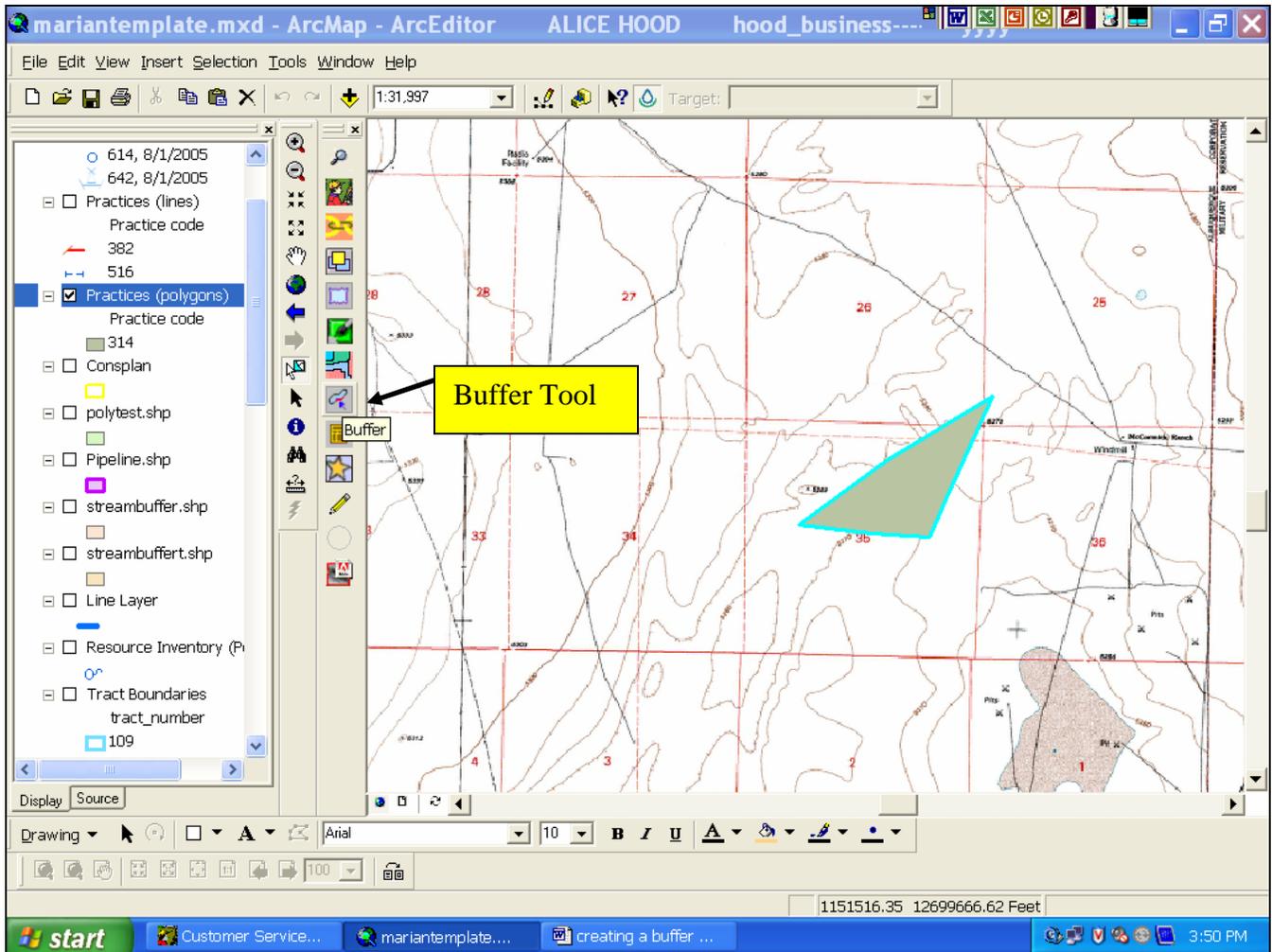
Option #1: This option works best when you are buffering one conservation practice such as the polygon example below. You need to turn off all layer except the Topographic layer and the layer you want to buffer, for this example we are using the Practice (Polygons) layer.

Next you will click on the **Select Features** button and then go click on the brush management polygon. This will high light the polygon in light blue, refer to image on page 4.



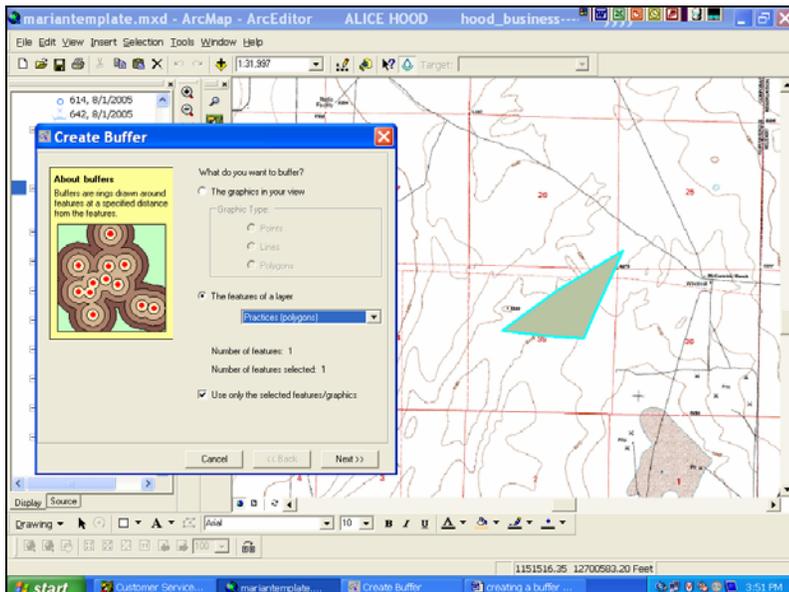


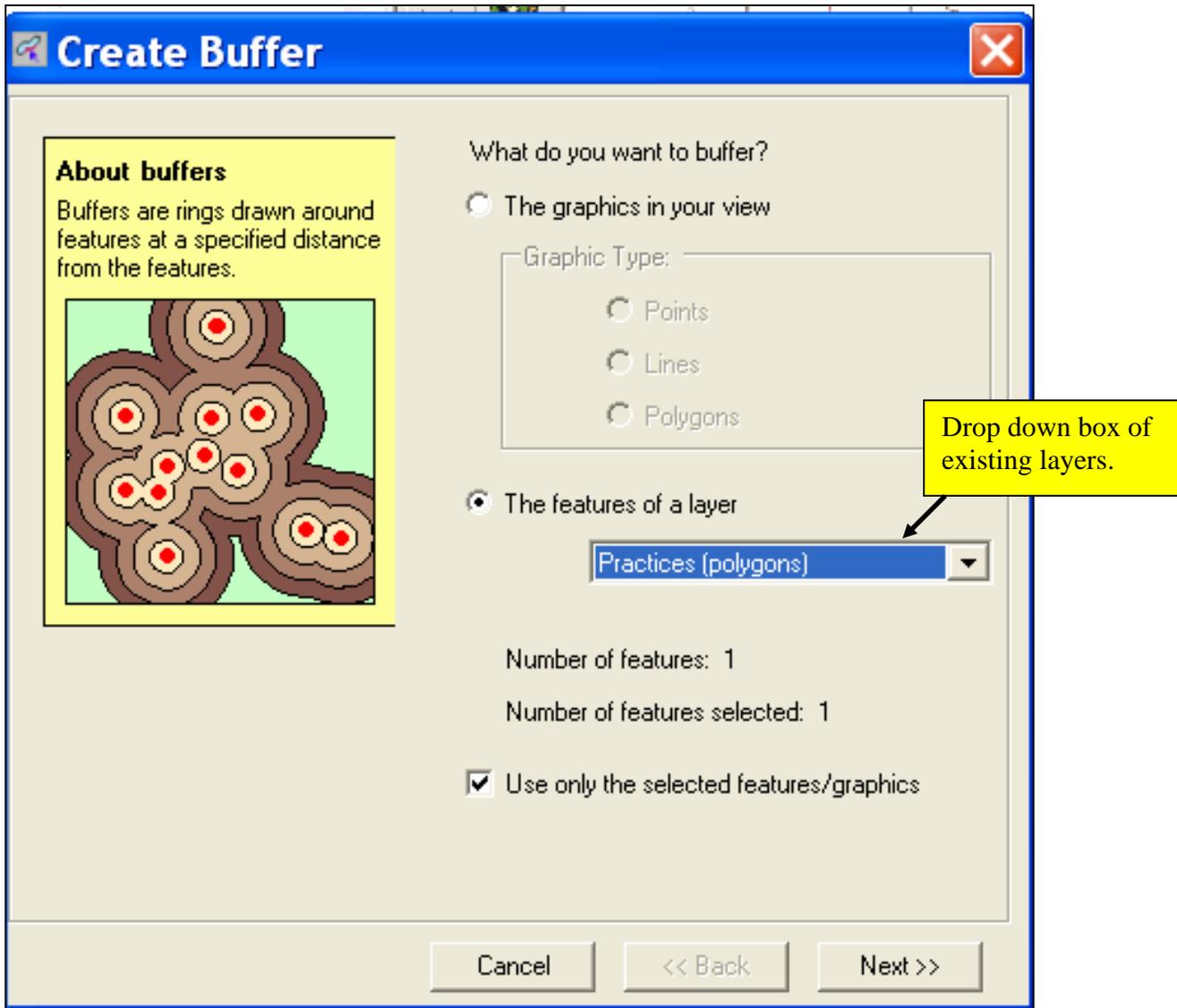
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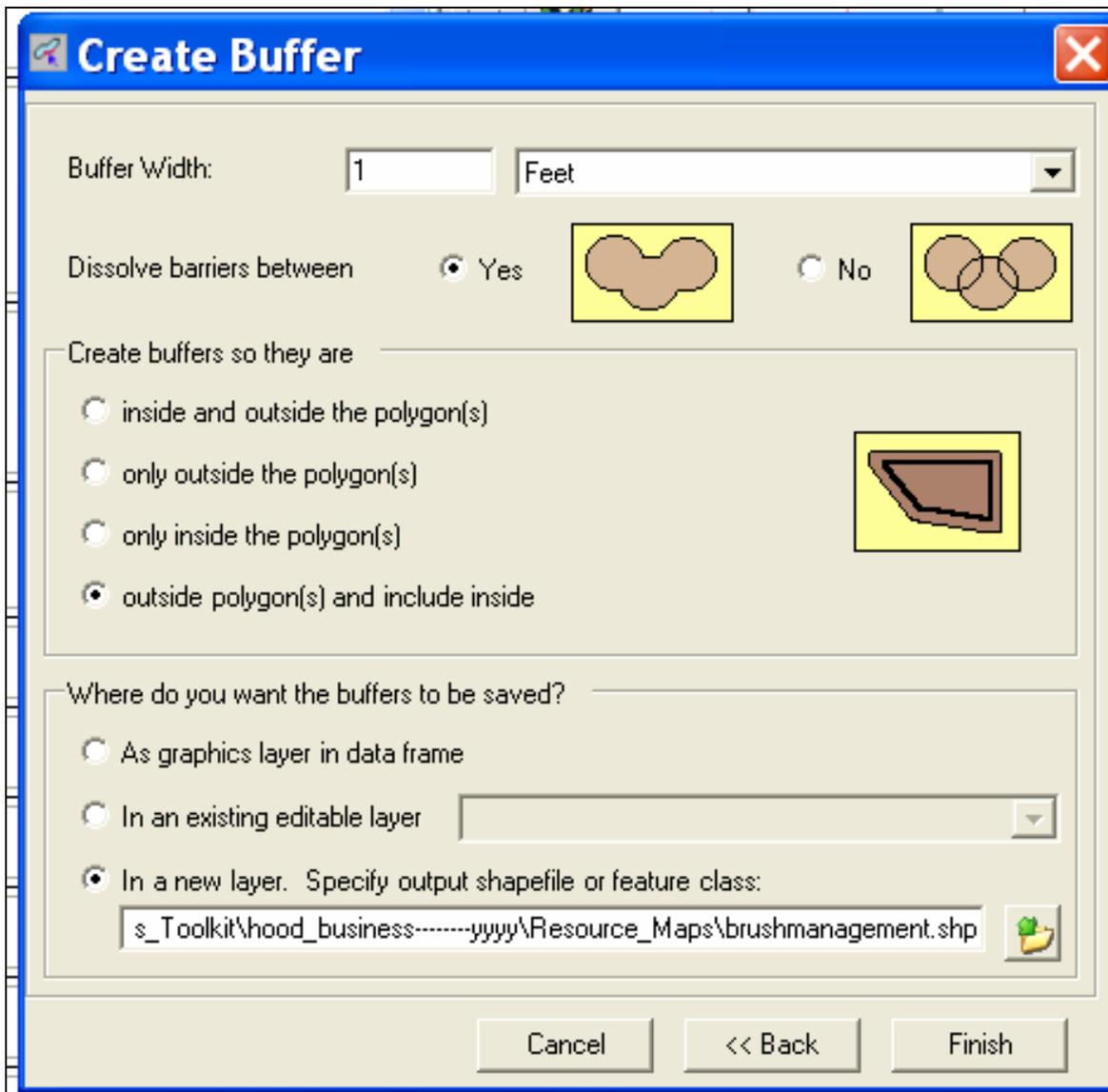
Select the **Buffer** tool button. You will see the Create Buffer Window.

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At the Create Buffer window you will select “The features of a layer” and use the drop down menu to select the layer you are working in. For this example we selected “Practices (polygons)”. Below this drop down box you will see **Number of Features: 1**. This lets you know that within that “Practices (polygons)” layer there is one choice, 314 – Brush Management. You will also see **Number of Features selected: 1**, this is the number of features within that “Practices (polygons)” layer that you selected / high lighted. Look at this area to make sure you are going to get what you want. Now click the **Next>>** button.



In this next window you are going to create the buffer.

Buffer Width: These boxes you will tell it how wide you want the buffer to be and in what measurement units. The measurement units will always be in feet, however for the number with in those units there is two examples.

1. For polygons such as Brush Management you will want to put in the number “1”, making for a one foot buffer around the polygon.
2. For lines and points like Fences, Pipelines, Wells and Tanks you will put the width in feet that you walked on each side of the line during your survey.
Example: You walked a pipeline for cultural resources and your corridor was 50 feet in width. In this box you would put the number “25” , 25 feet on both sides of the line.

Dissolve barriers between: Generally YES is marked.

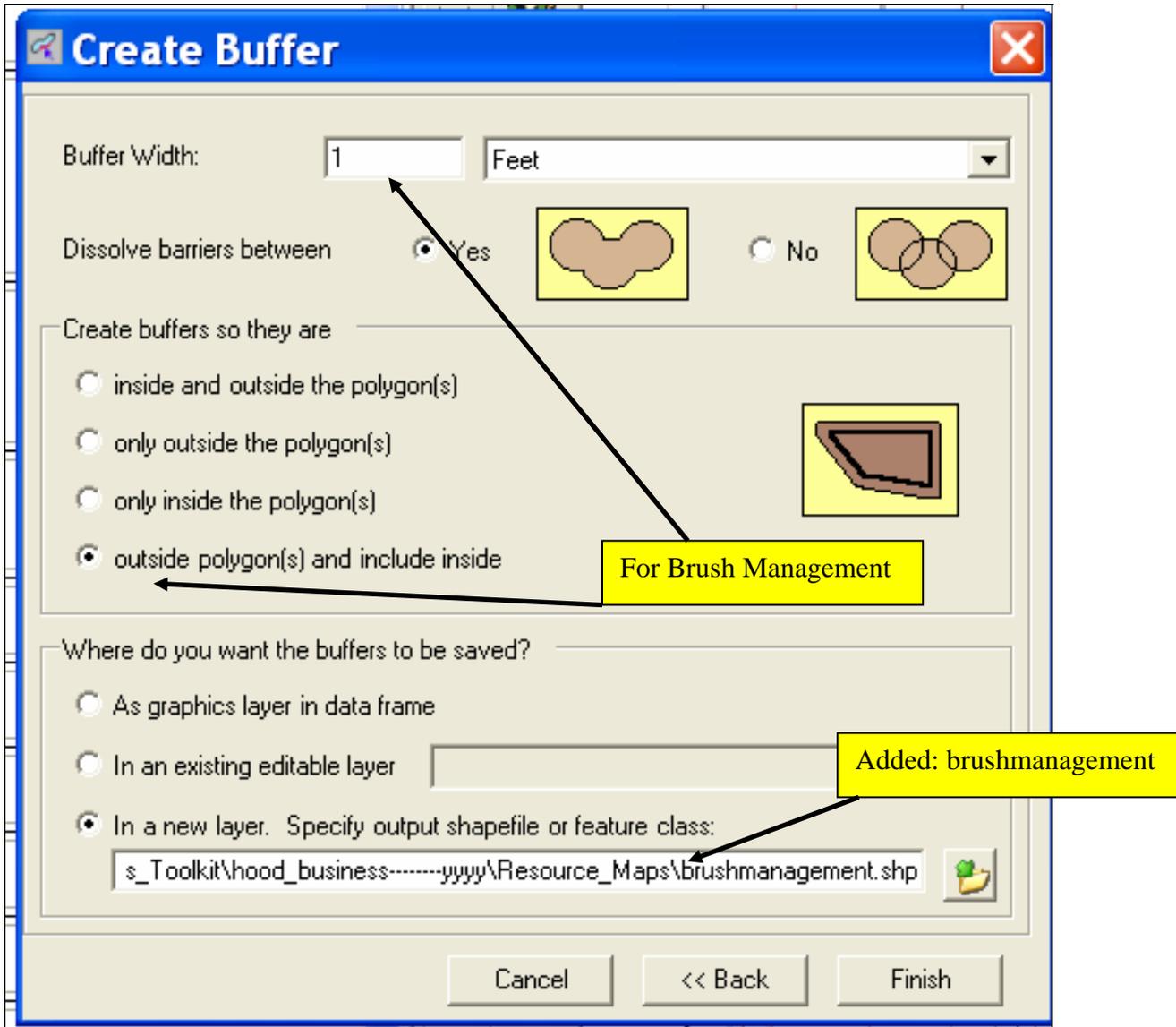
Create buffers so they are: Here you have four choices, listed below.

Inside and outside the polygon(s): Buffer will be projected on both sides of the line.

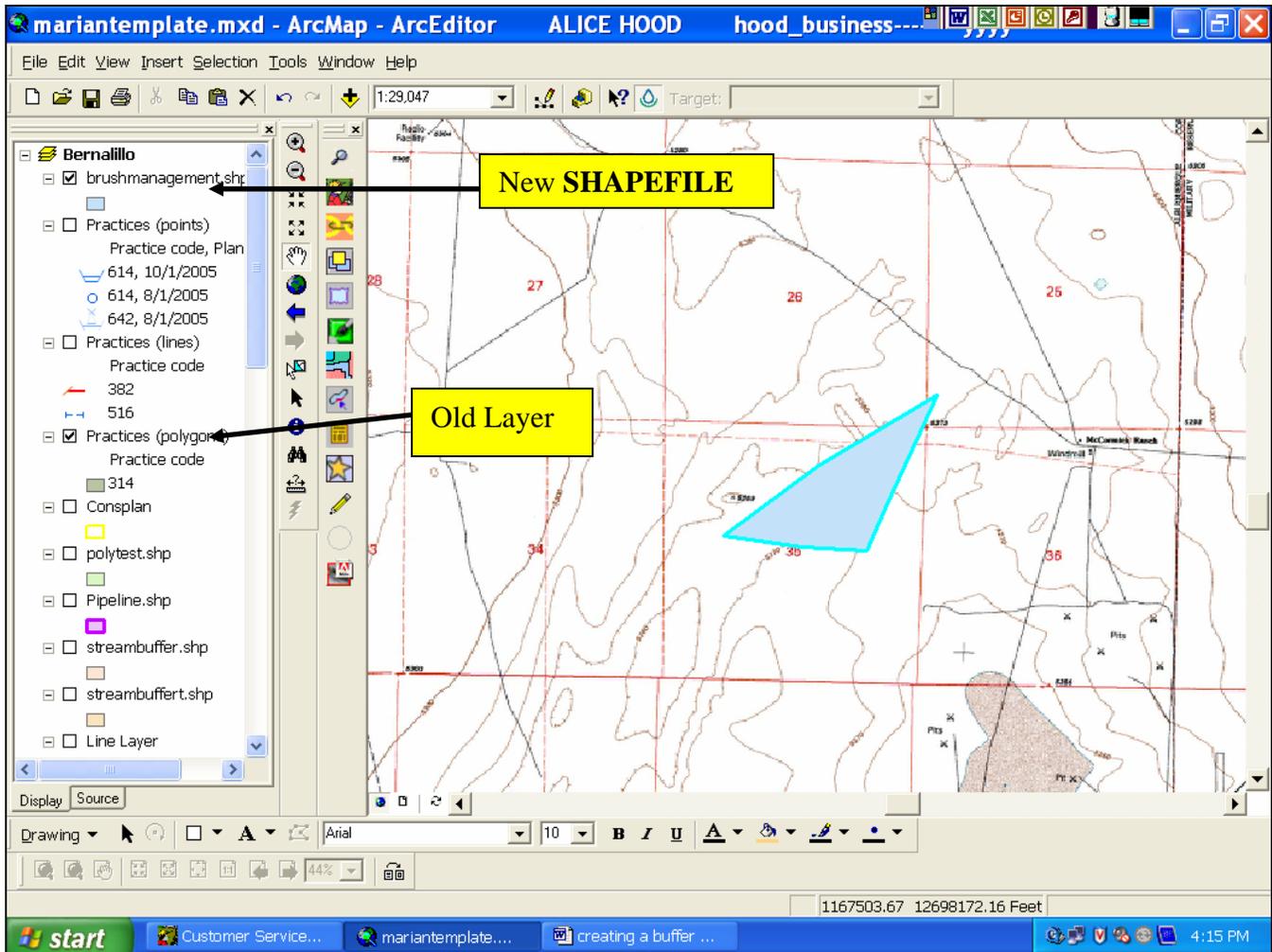
Only outside the polygon(s): Buffer will be projected on the outside of the line.

Only inside the polygon(s): Buffer will be projected on the inside of the line.

Outside polygon(s) and include inside: Buffer will be projected on the outside and the entire inside will also be included. This is the one you will use when working with brush management areas, and that is why you only use 1 foot for the Buffer Width.



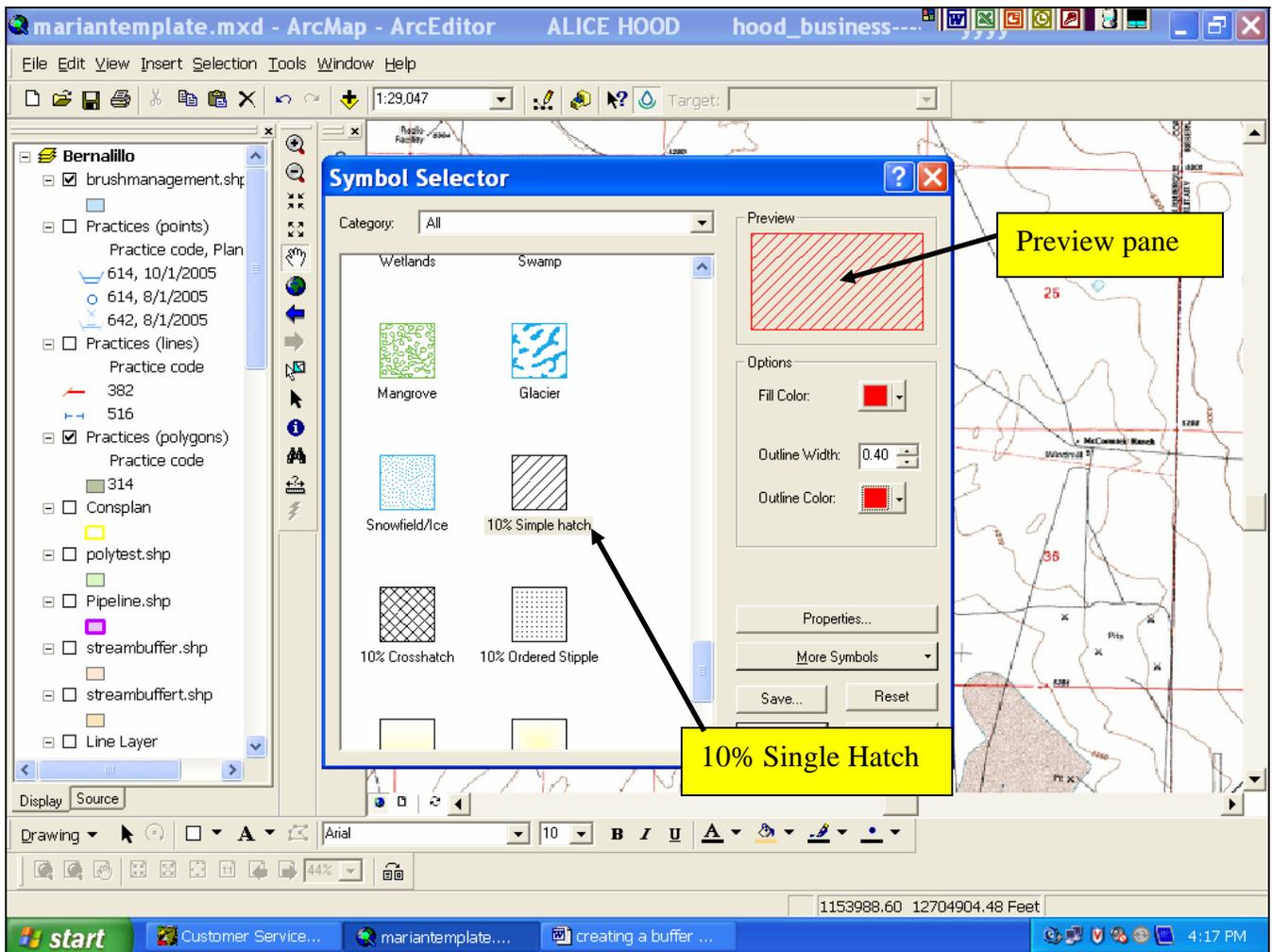
Where do you want the buffers to be saved? This will automatically save to **Customer Service Toolkit / Producers Name / Resource Maps**. However you may want to add a unique name, like the example above **brushmanagement** was typed over Buffer_output. When you have finished click the **Finish** button. Note if you have not checked the folder back in it will be in **C: Customer Service Toolkit / Producers Name / Resource Maps**. Until you check it in, then it will be under F:.



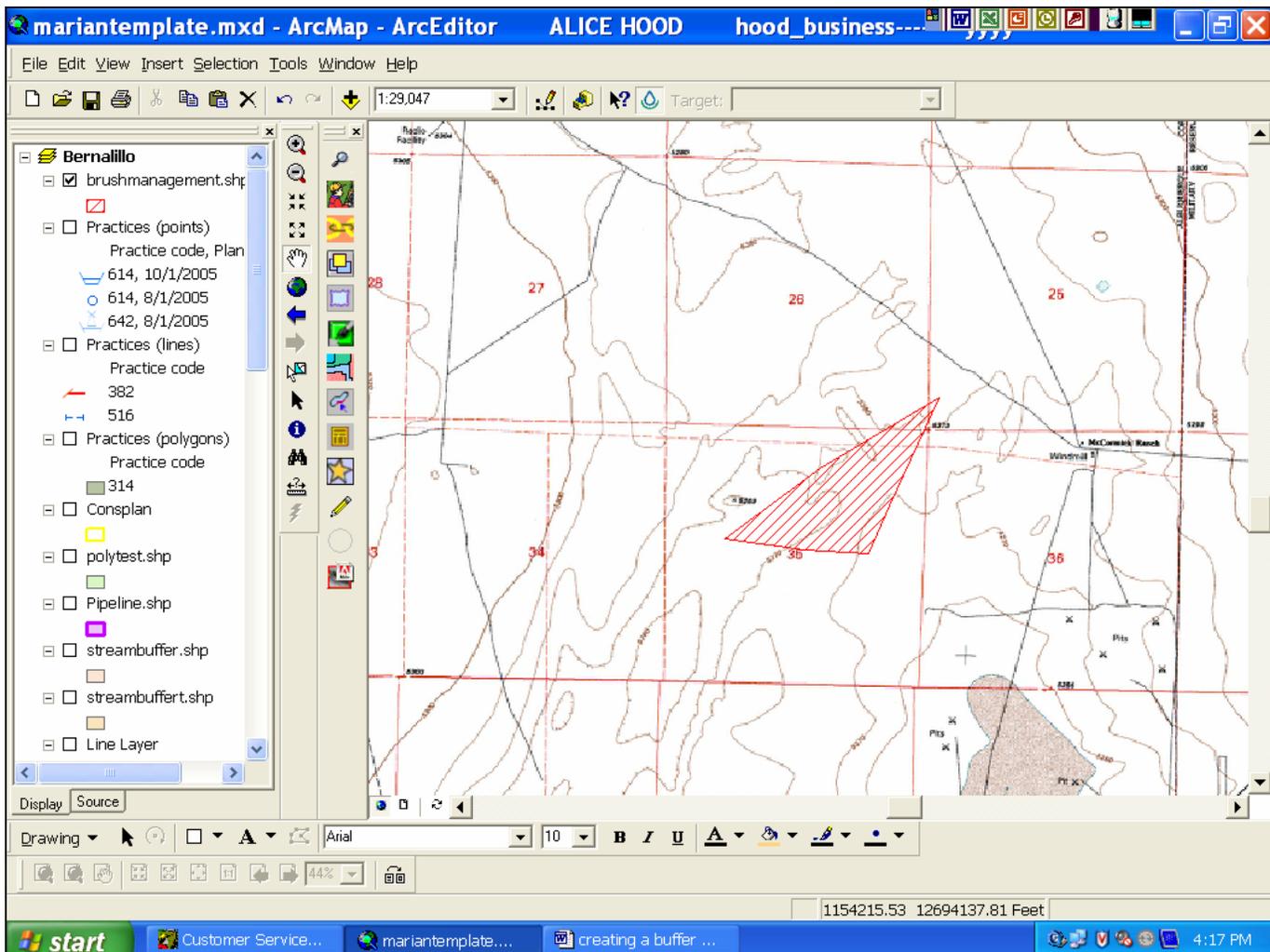
You now have a shapefile capable of being E-Mailed, but we're going to clean it up so it will look more professional.

Now you need to un-check the Practices (polygon) layer, so that you have only the Topographical layer and your new shapefile brushmanagement checked on.

You are going to left click on your shapefile icon. This will bring up the Symbol Selector window. In this example you will see in the upper right hand corner a Preview header with the color of the existing icon. Use the scroll down window and on the right side almost at the bottom you will see a **10% single hatch** click on it. It will turn your Preview pane to black hatched. Below the preview is the Options pane, choose a bright color and click **OK** button.

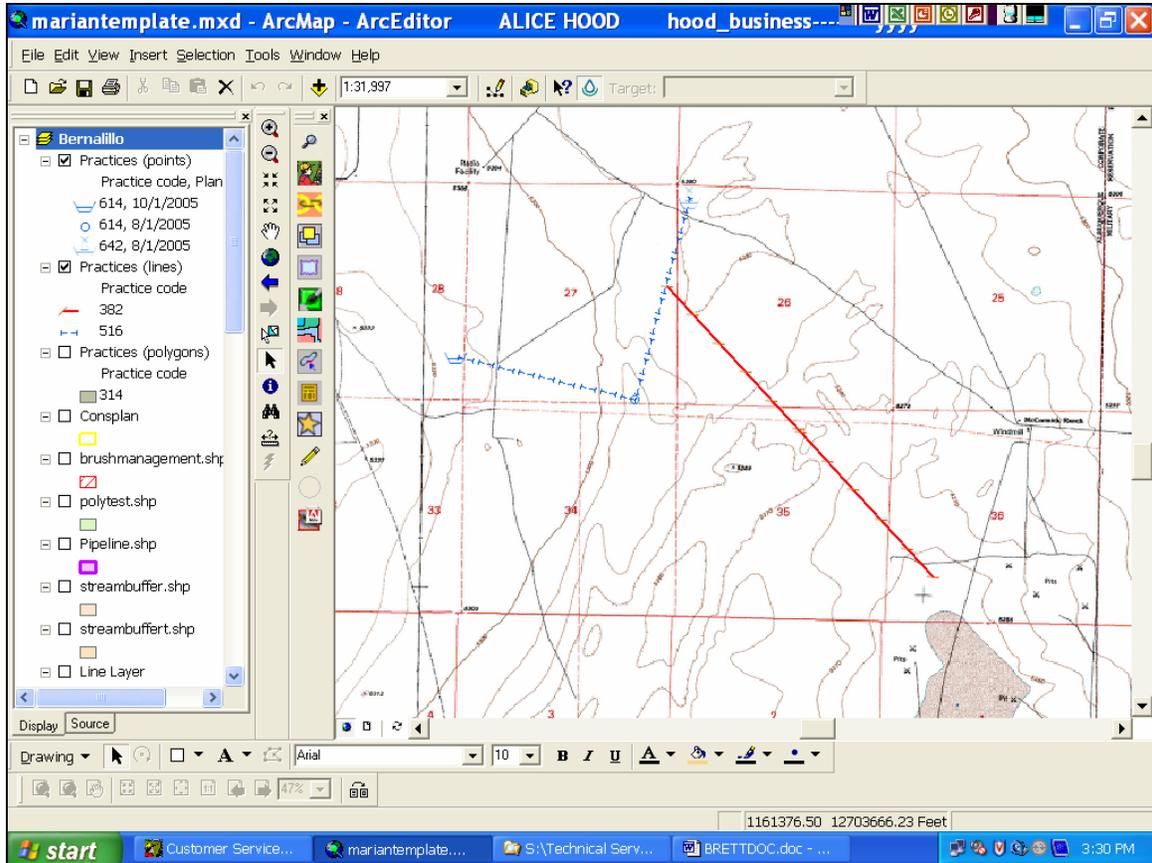


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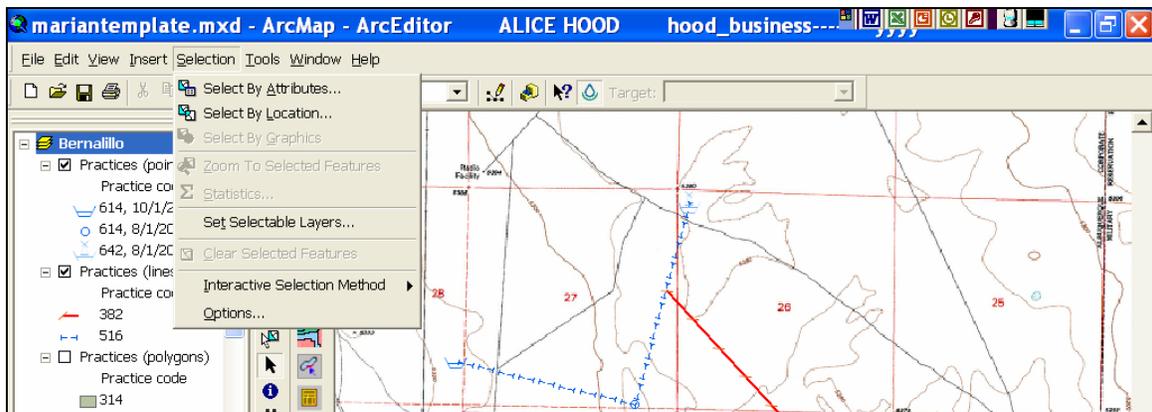


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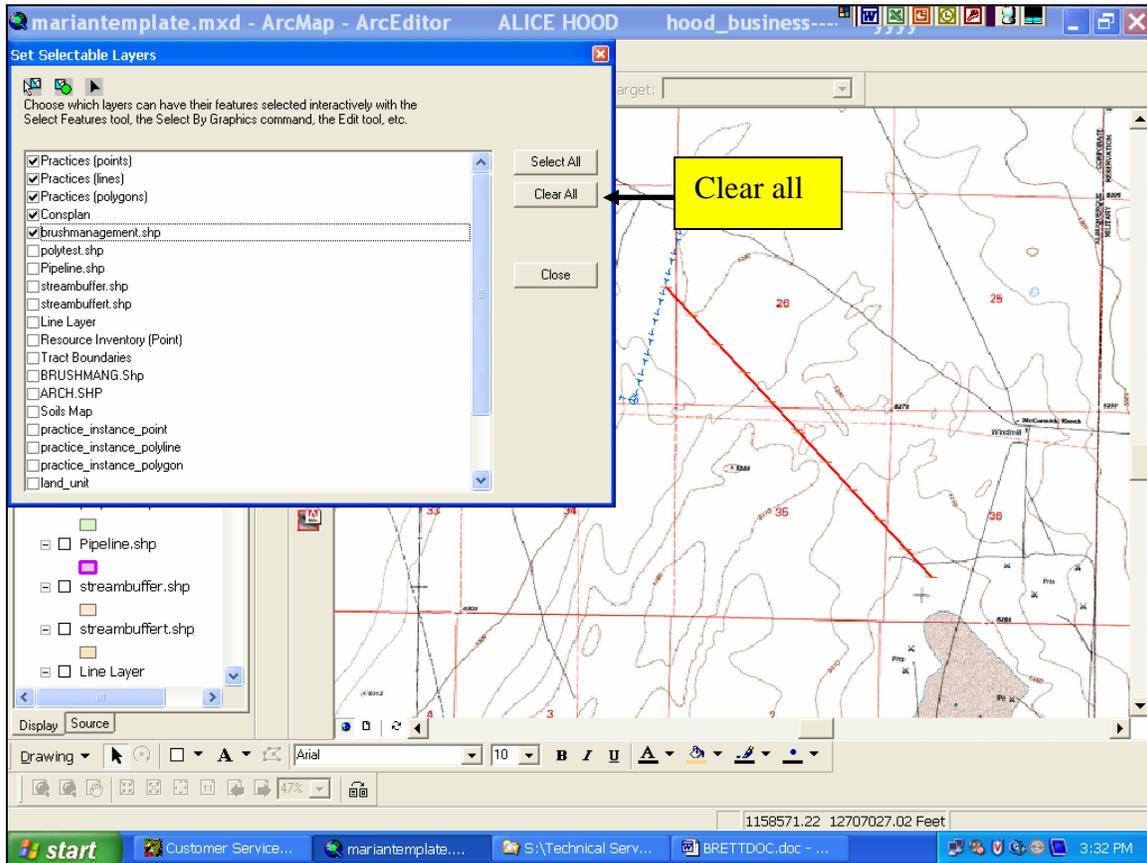
Option #2: This option works best when you are buffering two or more conservation practice such as the Practices (lines) and (points) example below. You need to turn off all layers except the Topographic layer and the layers you want to buffer, for this example we are using the Practice (lines) and (Points) layers.



You want to go to the **Selection** button on the Menu Bar and select **Get Selectable Layers**.

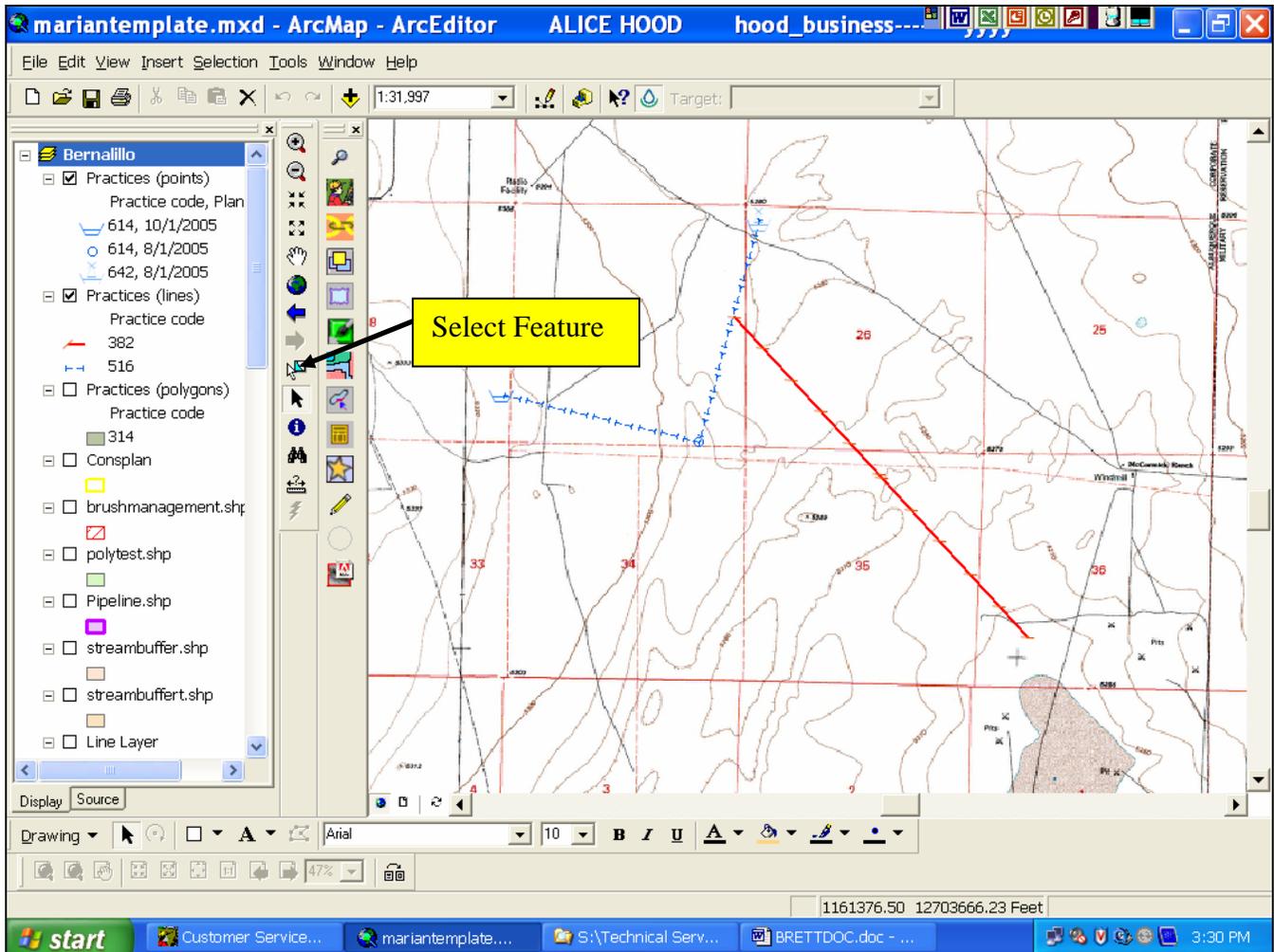


You will see the **Get Selectable Layers** window with several layers selected, click the **Clear all** button.



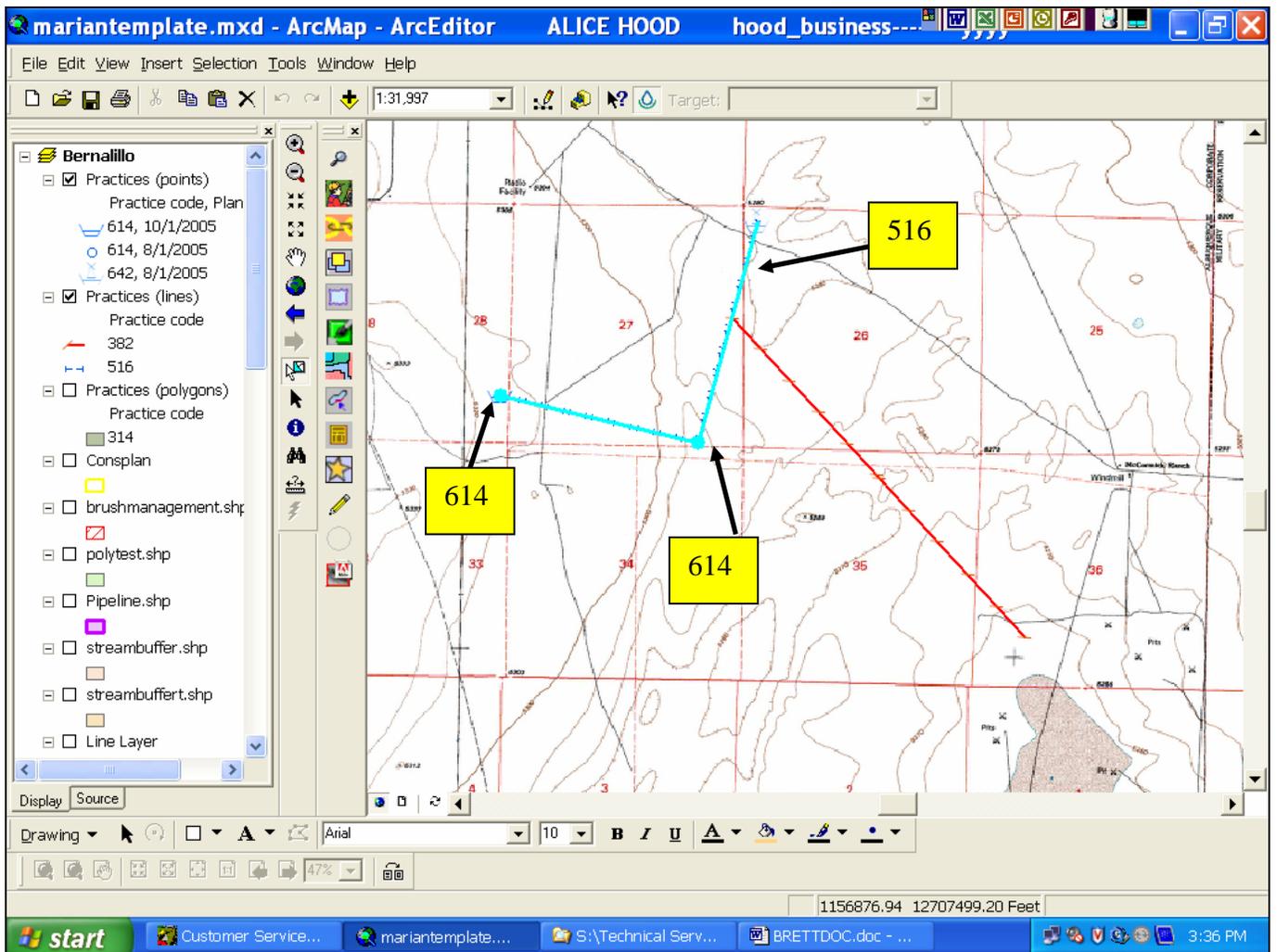
Now put a check in the boxes for Practices (points) and Practices (lines) and click on the **Close** button.



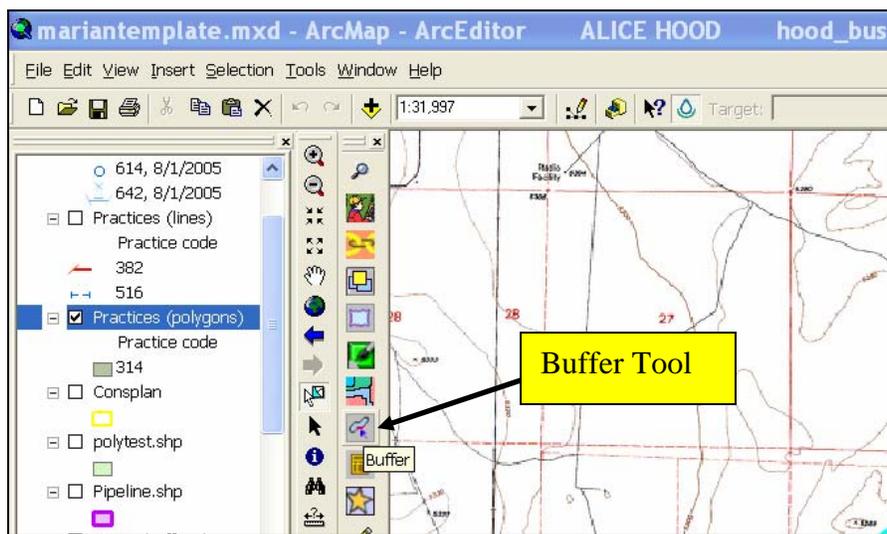


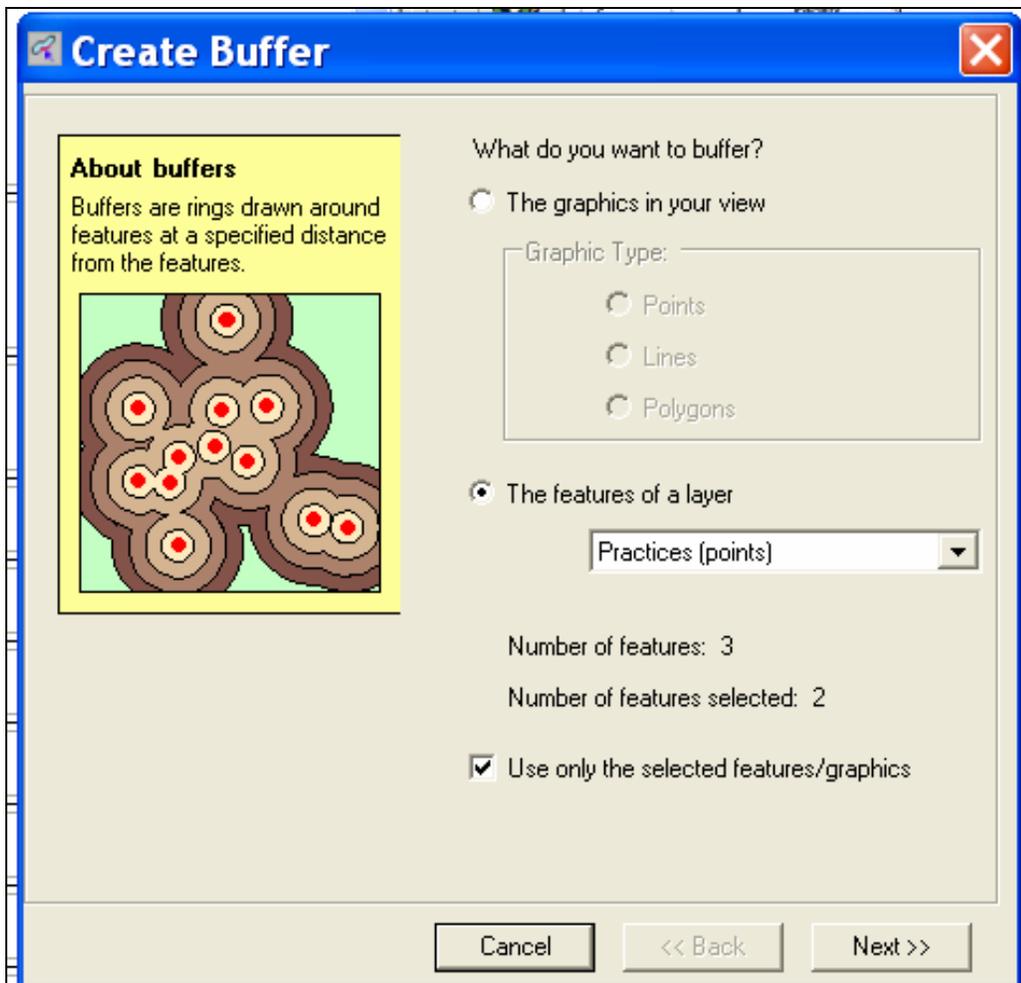
For this example we want to include in our map the practices (points) 614 – Trough, and there are two separate items and we want them both. We also want to include under Practices (lines) 516 – Pipeline. Next you will click on the **Select Features** button and then go to the map and click on the first practice you want to include. The first practice is 614, 10/1/2005, you will see it high lighted in blue. For the second item 614, 8/1/2005 you will hold down the **Shift** key and click on its location on the map, now you have two high lighted items on your map. For the third and final item 516 you will continue to hold down the **Shift** key and locate it on your map and click on it. Now you have all three items high lighted in blue, refer to page 15.

Note when making maps **do not** include polygon practices such as Brush Management on the same maps as pipelines, troughs, fences and wells. You will need to make two separate maps, that means two separate **Section 106 Forms** as well.



Select the **Buffer** tool button. You will see the Create Buffer Window appear.



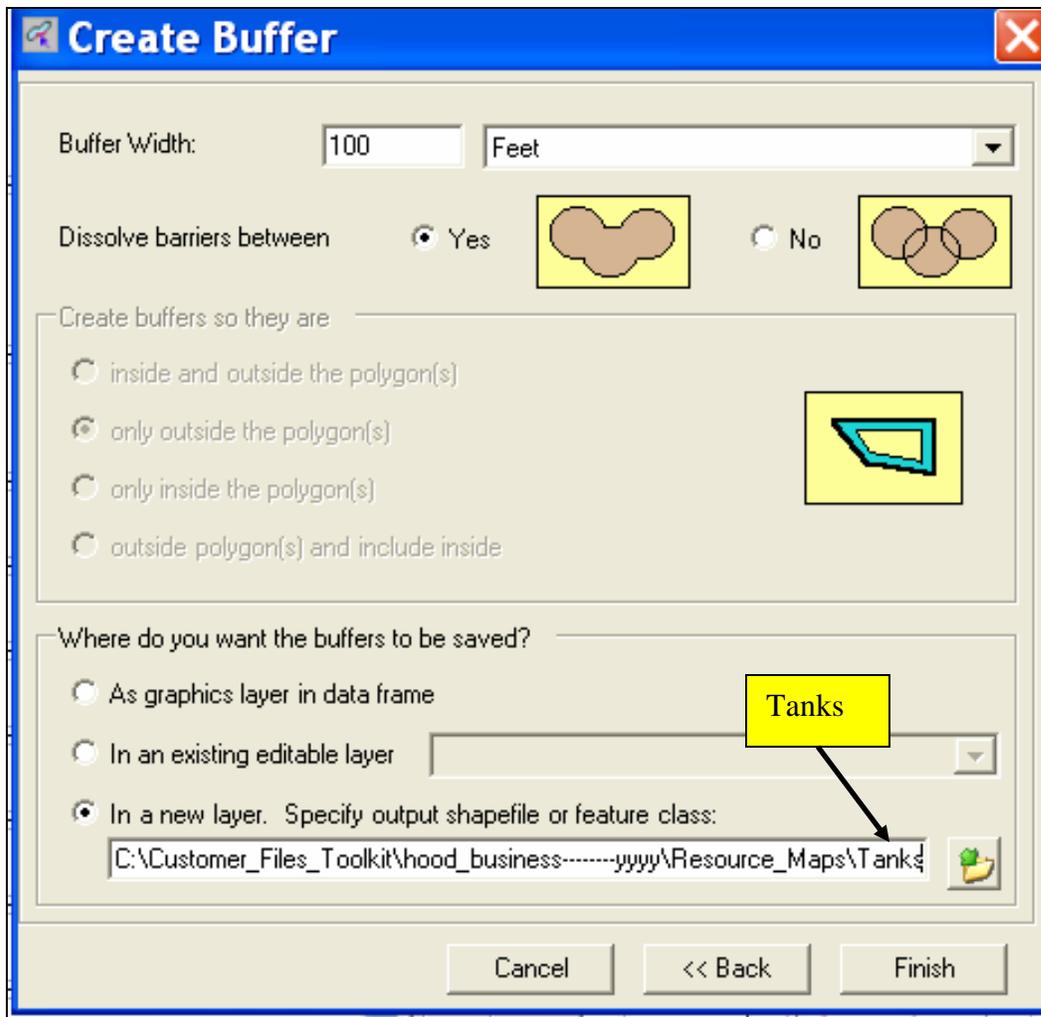


At the Create Buffer window you will select “The features of a layer” and use the drop down menu to select the layer you are working in. For this example we selected “Practices (points)”. Below this drop down box you will see **Number of Features: 3**. This lets you know that within that “Practices (points)” layer there is three choices; 614, 10/1/2005 – Trough, 614, 8/1/2005 – Trough and 642, 8/1/2005 - Well. You will also see **Number of Features selected: 2**, this is the number of features within that “Practices (points)” layer that you selected / high lighted. Look at these areas to make sure you are going to get what you want. Now click the **Next>>** button.

In this next window you are going to create the buffer.

Buffer Width: These boxes you will tell it how wide you want the buffer to be and in what measurement units. The measurement units will always be in feet, for the number put the number of feet you surveyed around the point. Example 100 feet was walked on all sides of the point.

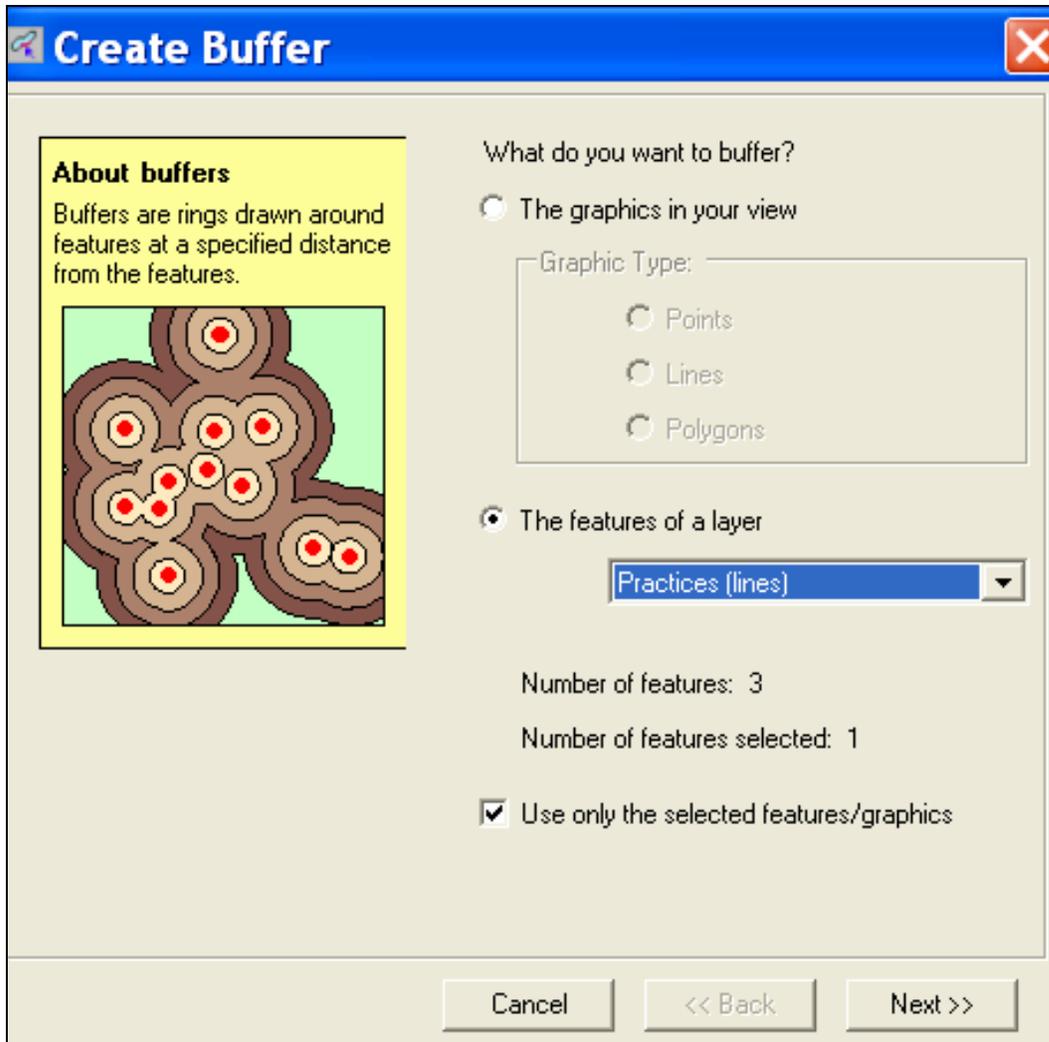
Dissolve barriers between: Generally YES is marked.



Where do you want the buffers to be saved? This will automatically save to [Customer Service Toolkit / Producers Name / Resource Maps](#). However you may want to add a unique name, like the example above **Tanks** was typed over Buffer_output. When you have finished click the **Finish** button. Note if you have not checked the folder back in it will be in [C: Customer Service Toolkit / Producers Name / Resource Maps](#). Until you check it in.

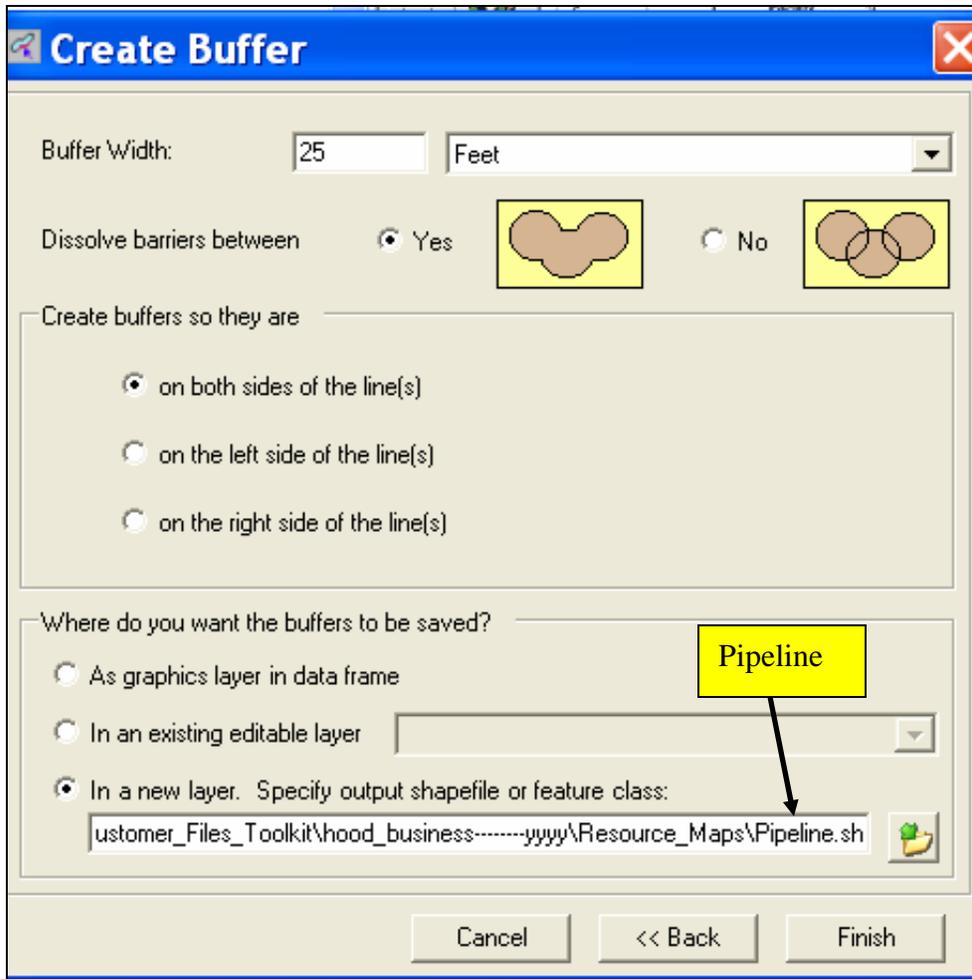
Now you want to select the **Buffer** tool button again to create a buffer for the pipeline. You will see the Create Buffer Window appear.

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At the Create Buffer window you will select “The features of a layer” and use the drop down menu to select the layer you are working in. For this example we selected “Practices (lines)”. Below this drop down box you will see **Number of Features: 3**. This lets you know that within that “Practices (lines)” layer there is three choices; 382 – Fence, (Note: the fence was added in two segments and is counted as two features on this example generally it would be just one segment and count as one feature), and 516 – Pipeline. You will also see **Number of Features selected: 1**, this is the number of features within that “Practices (lines)” layer that you selected / high lighted. Look at this area to make sure you are going to get what you want. Now click the **Next>>** button.

In this next window you are going to create the buffer.



Buffer Width: These boxes you will tell it how wide you want the buffer to be and in what measurement units. The measurement units will always be in feet, for the number put the number of feet you surveyed on each side of the proposed pipeline. Example 25 feet was walked on all sides of the pipeline, totaling a 50 foot wide surveyed corridor.

Dissolve barriers between: Generally YES is marked.

Create buffers so they are: Here you have three choices, listed below.

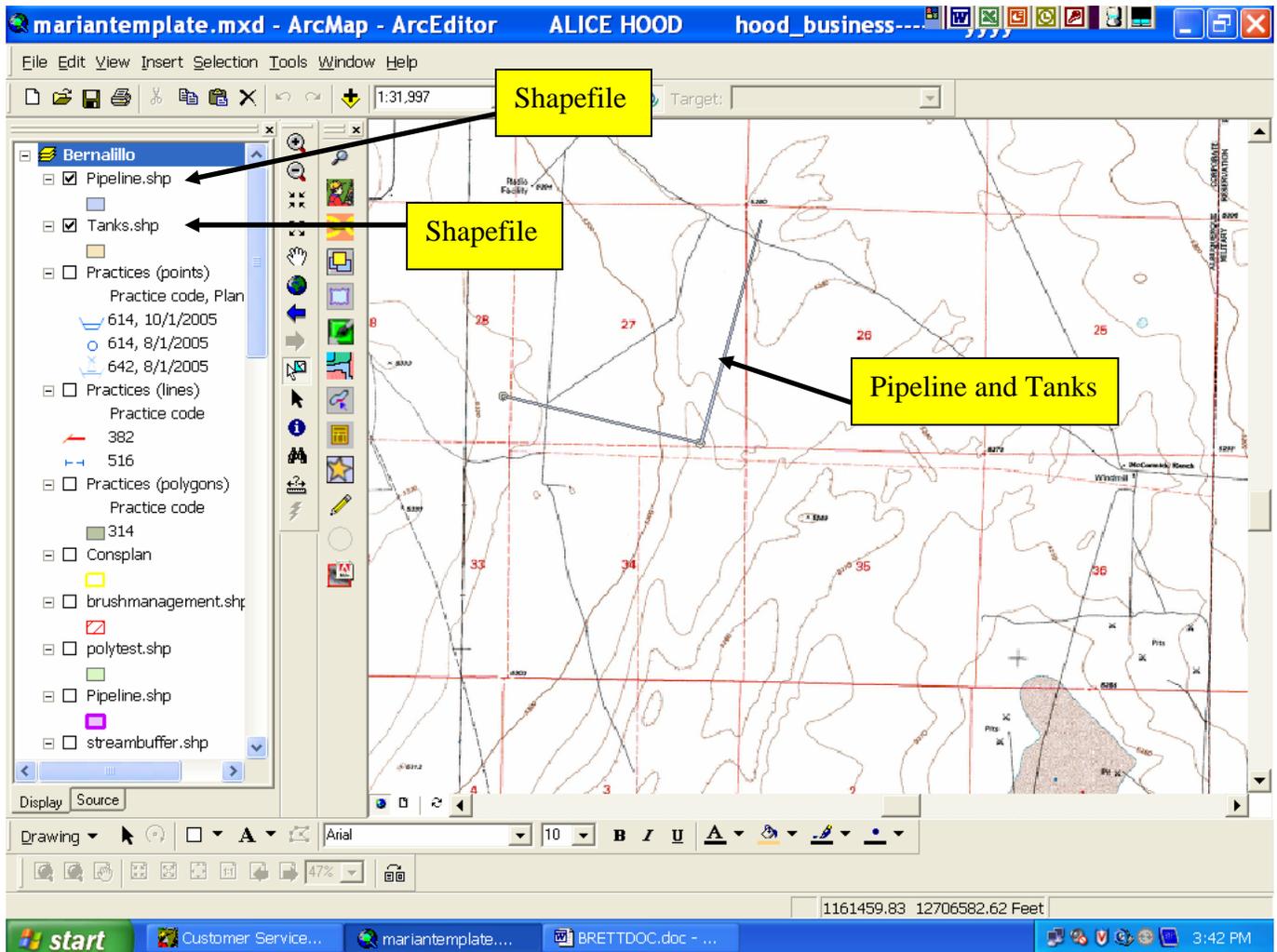
On both sides of the line(s): Buffer will be projected on both sides of the line. This is the one you will use when working with line practices like pipelines and fences.

On the left side of the line(s): Buffer will be projected on the left side of the line.

On the right side of the line(s): Buffer will be projected on the right side of the line.

Where do you want the buffers to be saved? This will automatically save to **Customer Service Toolkit / Producers Name / Resource Maps**. However you may want to add a unique name, like the example above **Pipeline** was typed over Buffer_output. When you have finished click the **Finish** button. Note if you have not checked the folder back in it will be in **C: Customer Service Toolkit / Producers Name / Resource Maps**. Until you check it in.

Now you have a view that looks like the one displayed below. In the layers bar on the left of your screen you will see the two new shapefiles, Pipeline.shp and Tanks.shp. In the view itself you will see your new shapefiles displayed and to scale in width.

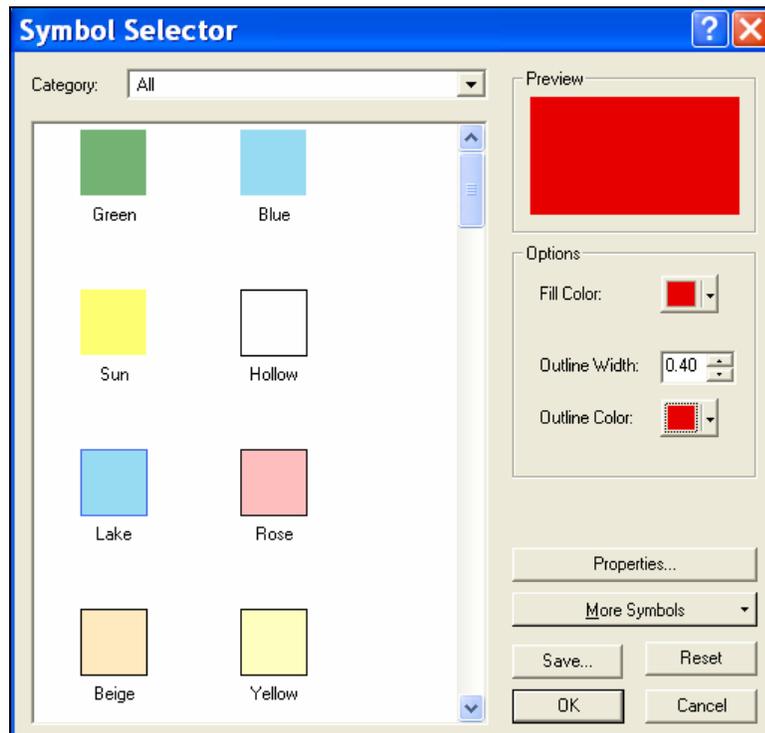
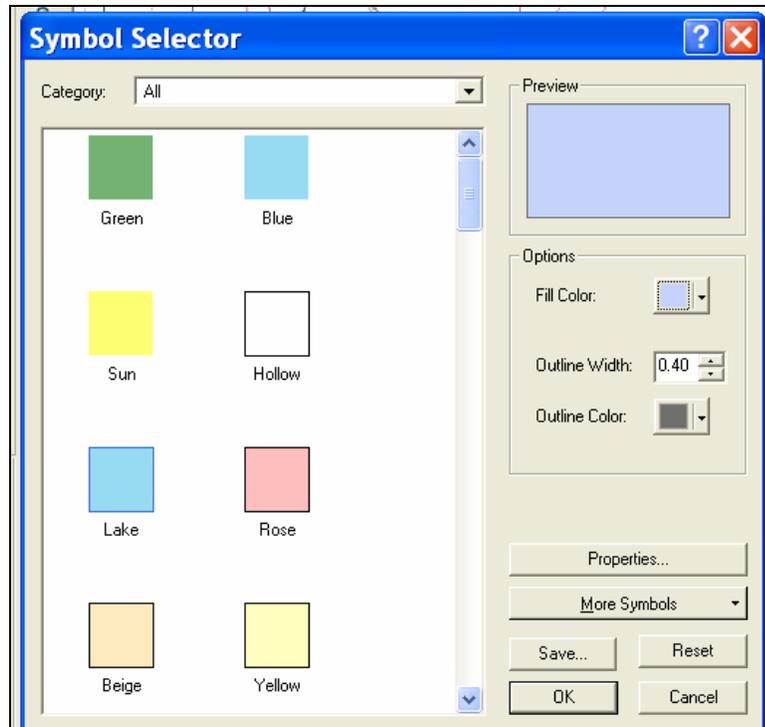


You now have a shapefiles capable of being E-Mailed, but you will need to include information for the ARMS personal to complete a records search.

Now you need to un-check the Practices (points) and (lines) layers, so that you have only the Topographical layer and your new shapefiles Pipeline and Tanks checked on.

NOTES

You are going to left click on your shapefile icons, one at a time. This will bring up the Symbol Selector window. In this example you will see in the upper right hand corner a Preview header with the color of the existing icon. Below the Preview Pane is the Options pane, choose a bright color and click **OK** button.



E-Mailing your Shapefiles to ARMS:

Make sure that you have saved your new shapefiles in Resource Maps with in the customers' name you are working with in Toolkit. Now exit out of Customer Service Toolkit and go into Microsoft Outlook.

The information you will need to include for ARMS:

1. Legal Description – Section 20 and 27 – Township 20N; Range 9E
2. Quadrangle Name – Ortiz Mountain – USGS 7.5' Quad.
3. UTM Zone – Zone 13

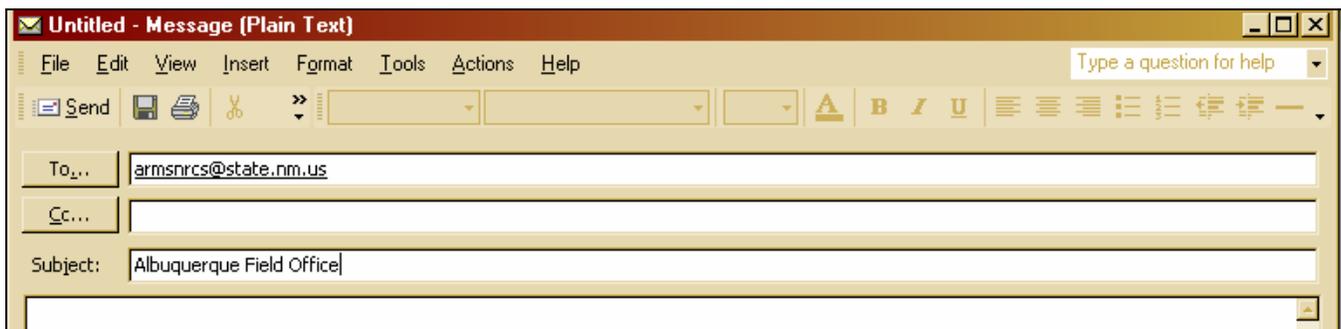
(If Unplatted Land you will include the UTM Zone and Northings and Eastings for the start and stopping point of the project.)

4. Projects Name and description – Joe Johnson's Livestock Pipeline.
5. Project Acres – 9 acres
6. Field Office Name – Albuquerque Field Office

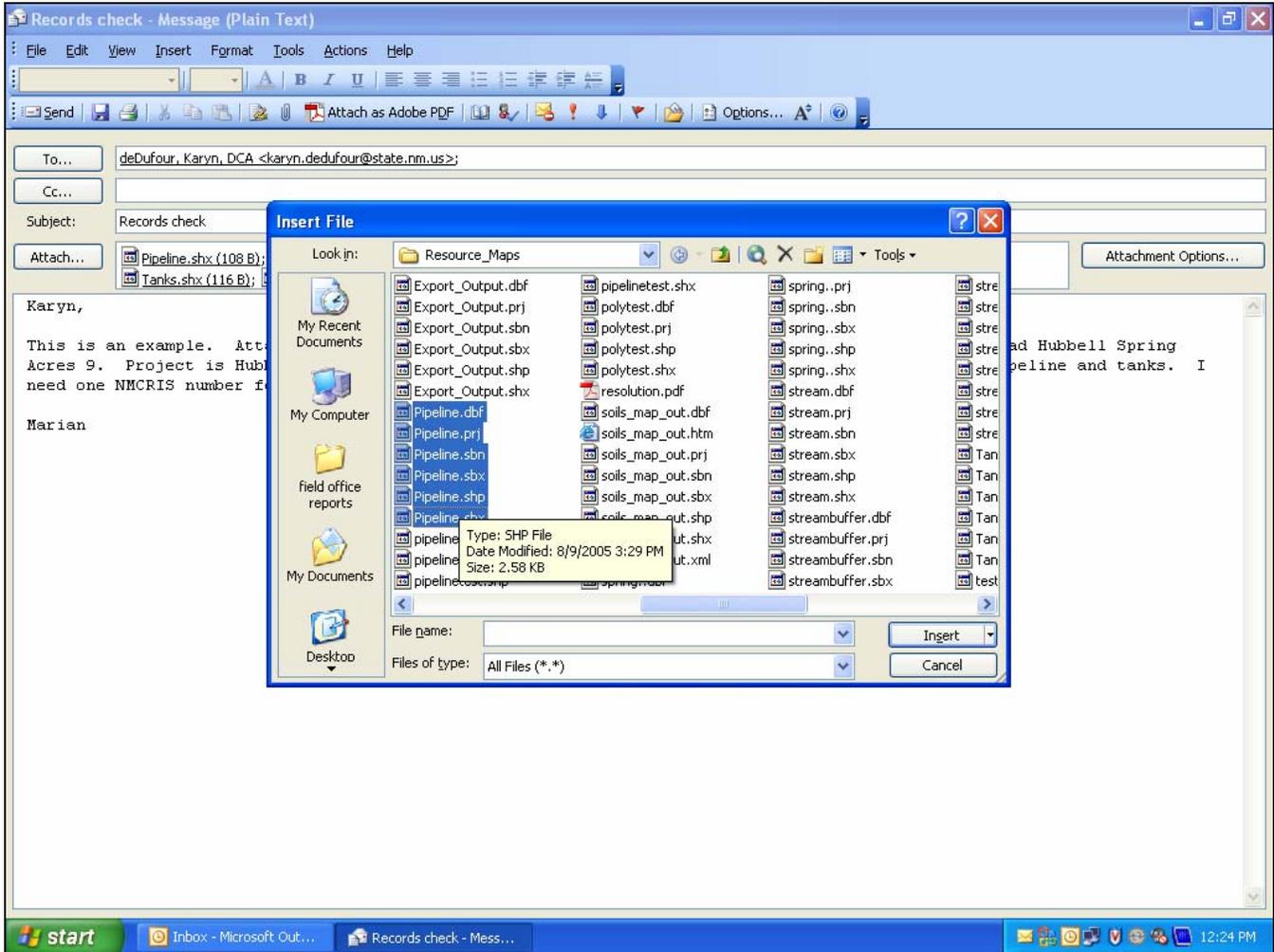
Only send one E-Mail per undertaking/activity. A pipeline system that includes a well, tanks and pipelines is considered one undertaking. However, if there is a separate well plus the above mentioned example it will be treated as two undertakings and will need two separate E-Mail records checks. **Do Not Zip Files.**

Microsoft Outlook:

Open Outlook and select **New**. In To... type armsnracs@state.nm.us; in Subject: Field Office name. To insert shapefiles **Insert, Files** and go to where you saved the shapefiles. Normally saved to **F: Customer Service Toolkit / Producers Name / Resource Maps**. Note if you have not checked the folder back in it will be in **C: Customer Service Toolkit / Producers Name / Resource Maps**. Until you check it in.



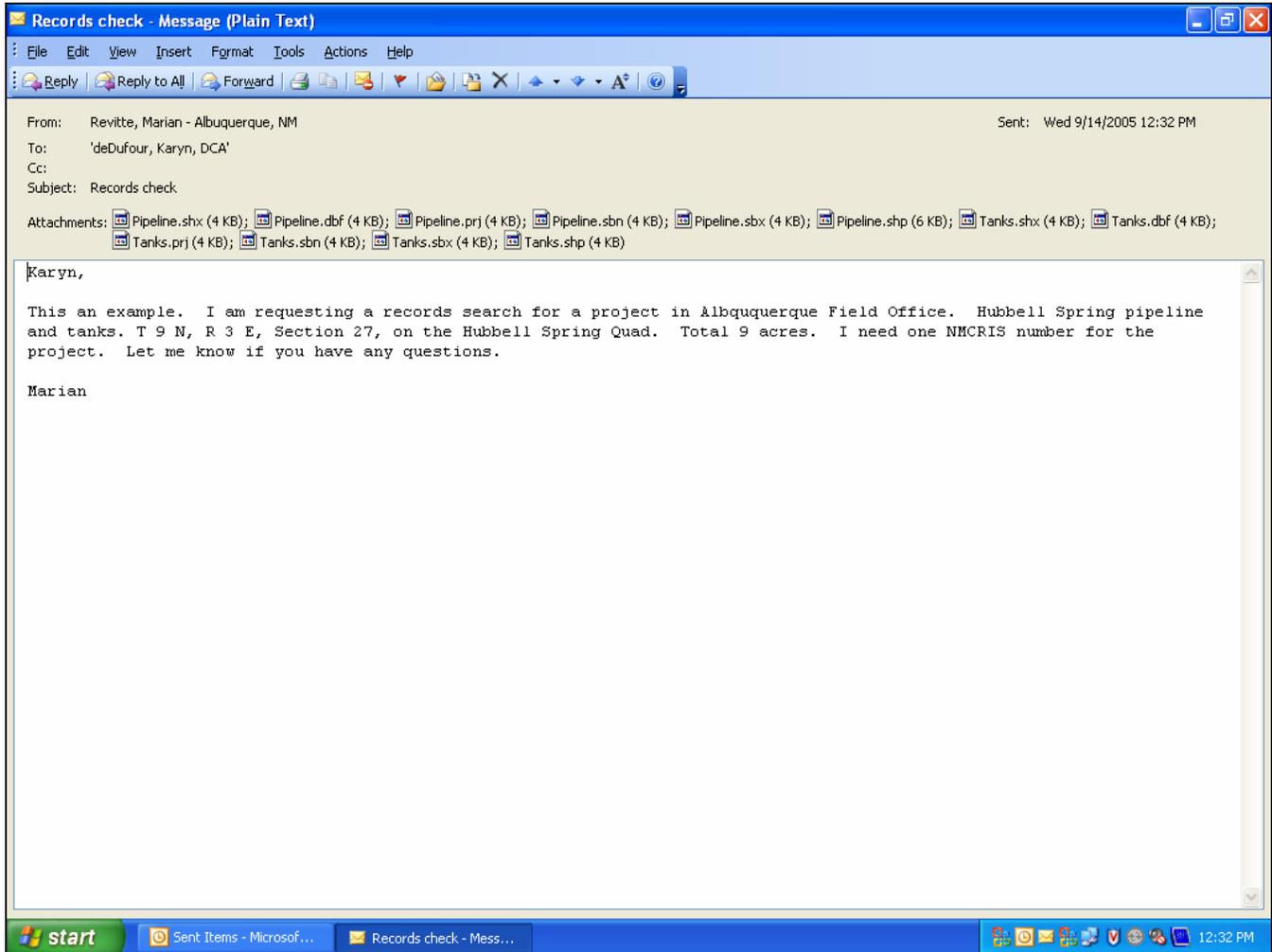
Inserting shapefiles: hold **Shift** key and insert all files tied to that particular shapefile.
There is usually six files associated with each shapefile.



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Under the body portion of the E-Mail you will need to include the information listed above on page 23. After you have this information all included in the E-Mail you can hit **Send**.

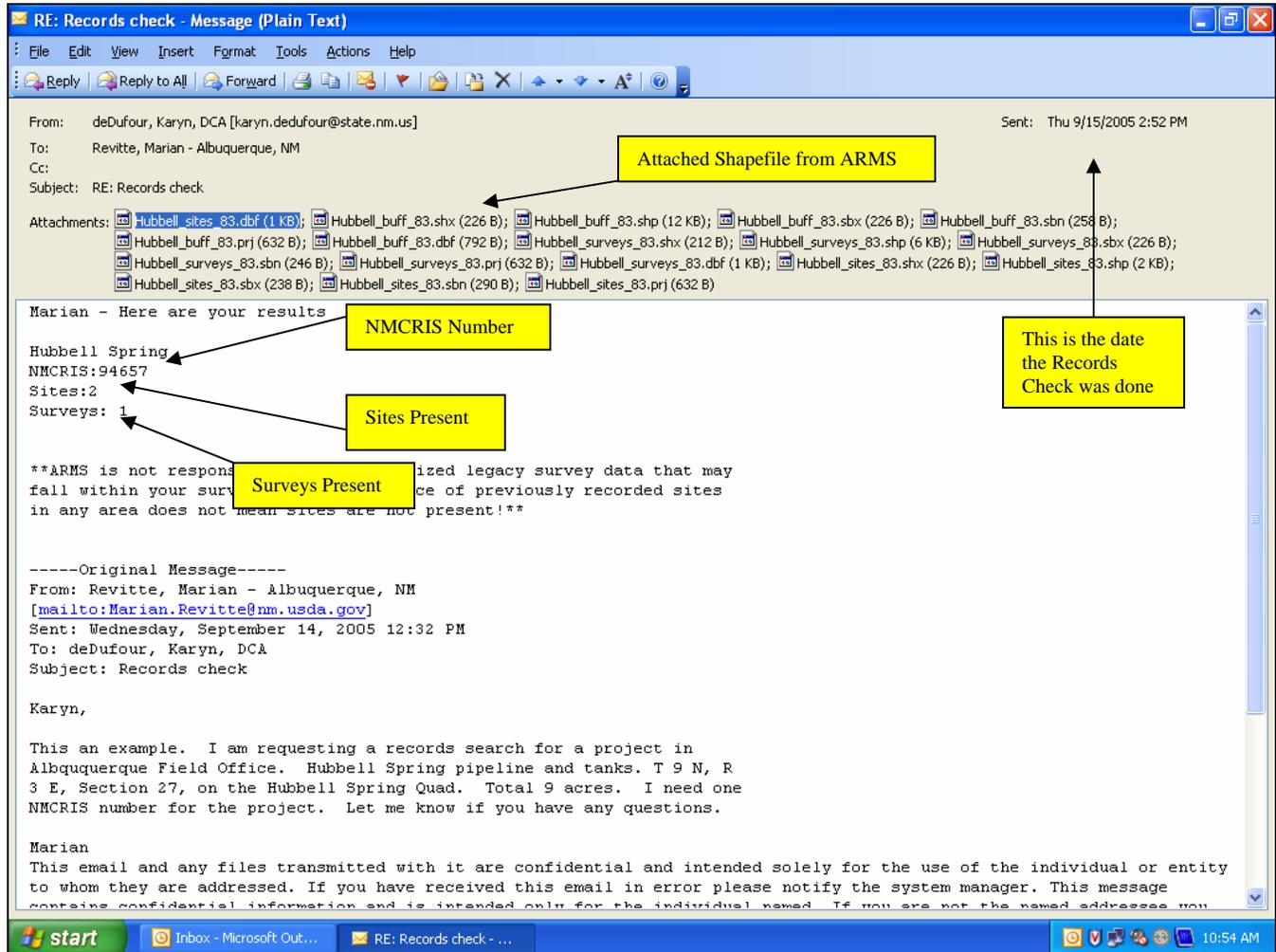
You should have your reply for the records search with in 48 Hours.



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Getting your Records Search back from ARMS:

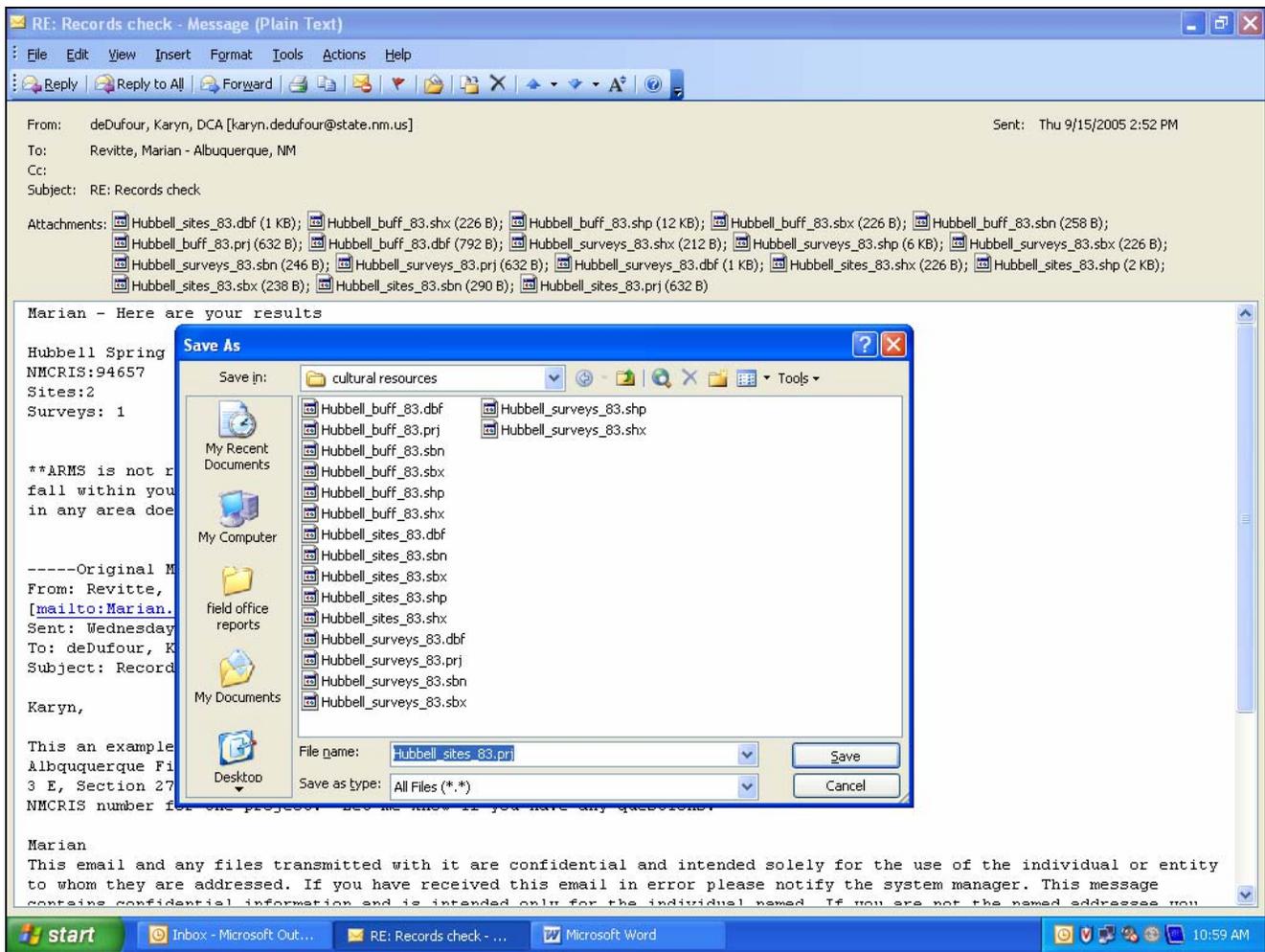
When you get the Records Search back from ARMS it will look similar to the example shown below. You will either have a records search that contains previously recorded sites and surveys or a negative records search that has no previously recorded sites and surveys. The first example discussed is that of a positive record search.



You will need to save the shapefiles to Customer Service Toolkit. Here again normally saved to **F: Customer Service Toolkit / Producers Name / Resource Maps**. Note if you have not checked the folder back in it will be in **C: Customer Service Toolkit / Producers Name / Resource Maps**. Until you check it in.

Suggestion – Within Resource Maps create a file named Cultural Resources to store these returned records searches.

Highlighted information you will need to complete the Section 106 Form.



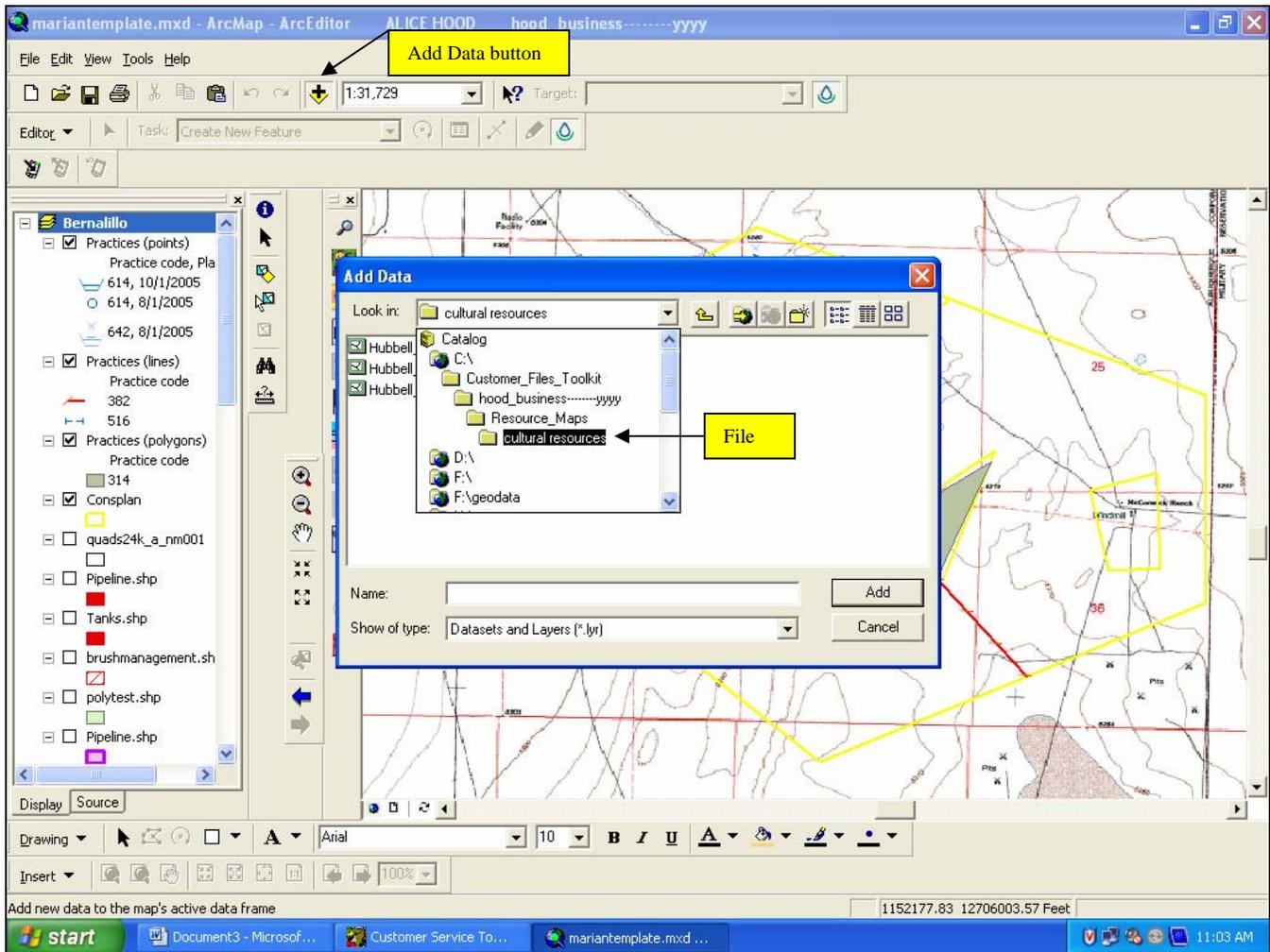
Note: All the Files are saved to one location.

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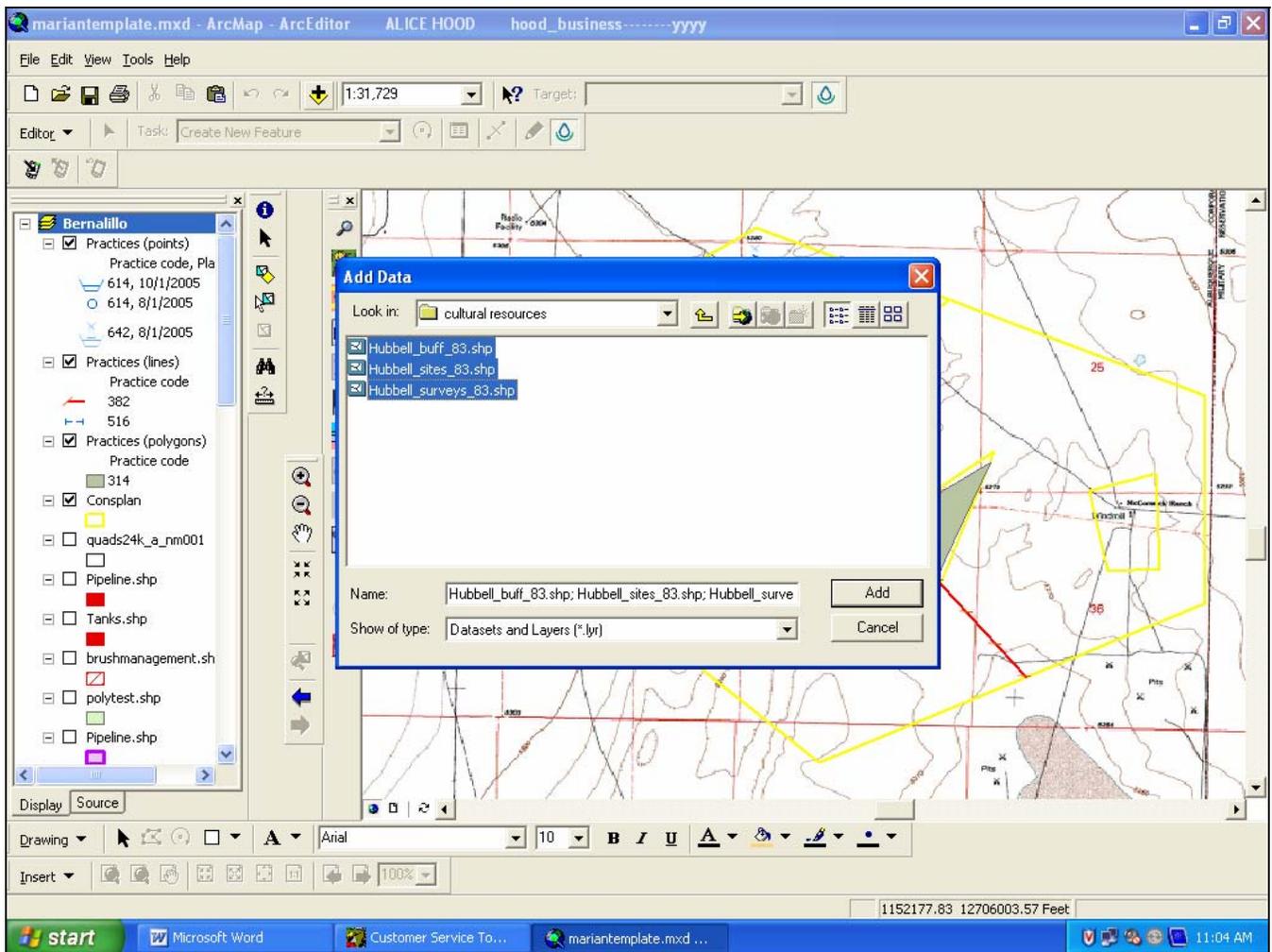
Positive Records Search:

Once you have saved the ARMS shapefiles to the producers Toolkit Resource Maps you can get out of Outlook and go into Customer Service Toolkit and bring up Arc Map. Go to the **Add Data** button (+) and navigate to where you saved the ARMS shapefiles and add them to the view.

You will need to make a map and print the attribute tables before you go into the field to conduct the cultural resource survey. If there are sites located within the buffered area you will be notifying the State Cultural Resource Specialist so we can assist you in the survey.



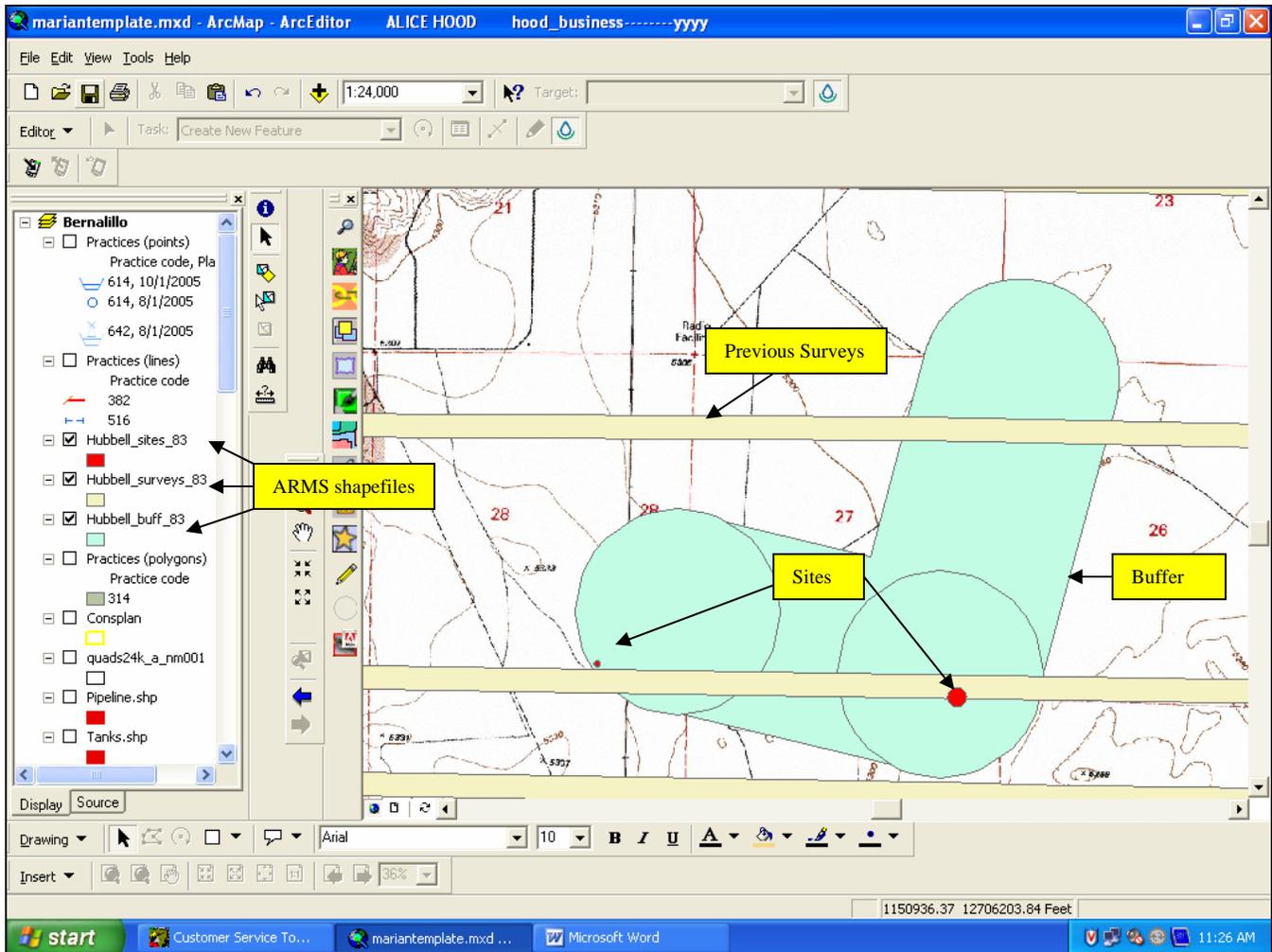
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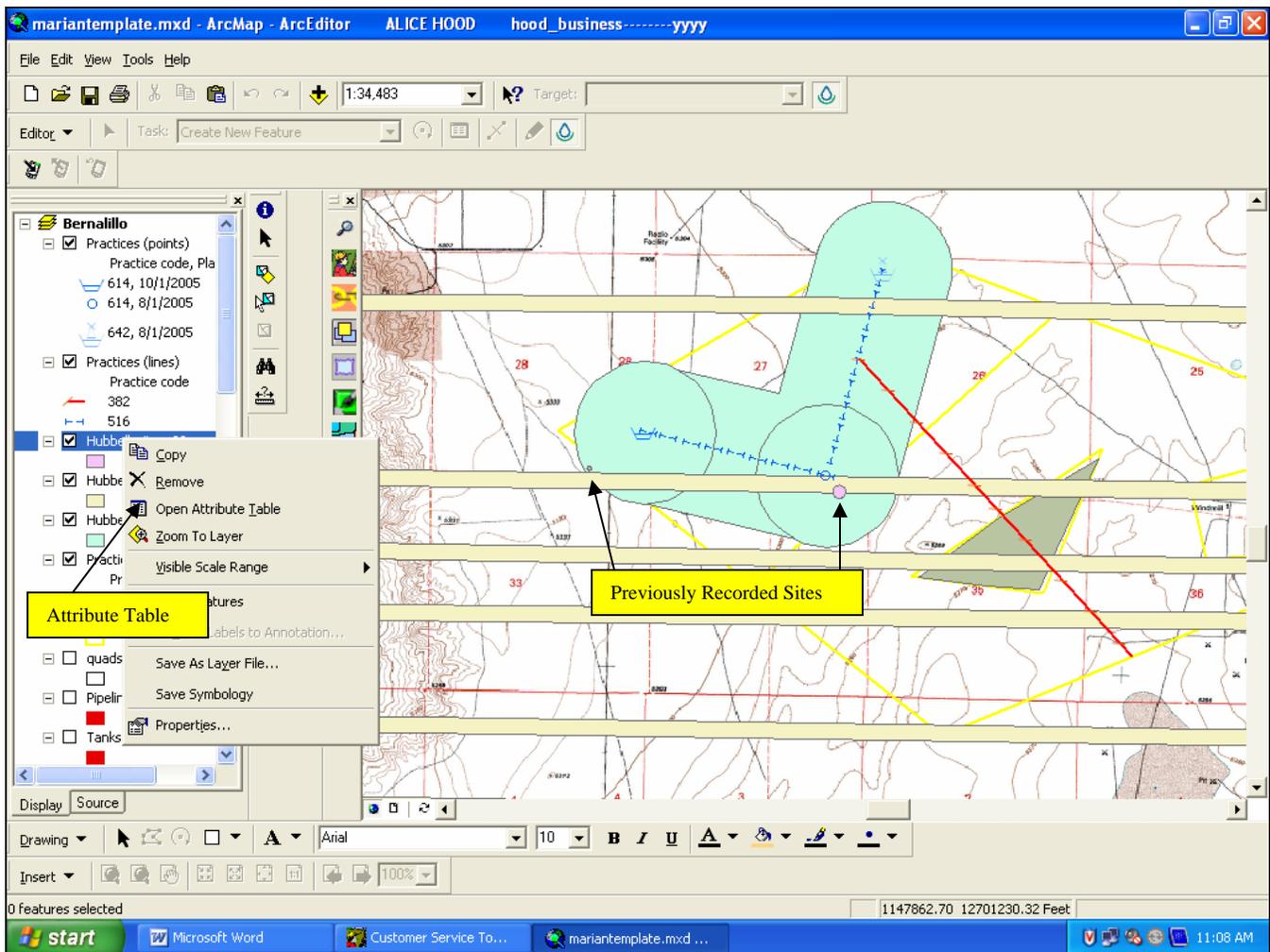
Note: All you will see are Shapefiles, No other files appear.

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Once you have added ARMS shapefiles you will see information similar to the example below. There will be shapefiles for previously recorded **Sites**, **Surveys** and the **Buffered Area**. The buffer extends 500 meters or approximately 1650 feet out from the project area.



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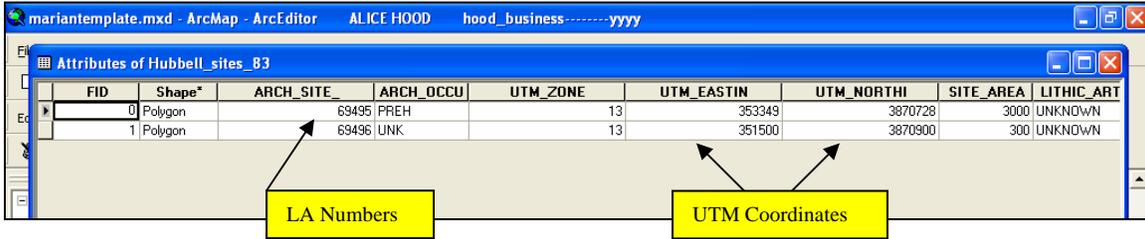
After you have added the ARMS data shapefiles to the view you can go ahead and check your practice layers. This will show your proposed project in relation to the previously recorded sites.

You will now need to print out the Attribute Table for both the ARMS Sites and Surveys. The Attribute Table will give you information regarding the previously recorded sites and surveys. These printed out pages will be needed for your field survey as well as to accompany the Section 106 Form to SHPO. You will also need to print out a map to take to the field.

In the field you will use this information in an attempt to relocate these previously recorded sites that are located within the projects area. You will also use this information to note where the previous surveys were in relation to the project area.

To make a hard copy of these two screens use the **Print Screen** key to paste these tables into a new **Word** document. You will have to do each attribute table individually. You will also need to make two copies, one for the field and one to accompany the Section 106 form to SHPO.

Right click on the ARMS site shapefile, click on **Open Attribute Table**.



Now you will do the same for the ARMS survey shapefile, right click on it, then click on **Open Attribute Table**.



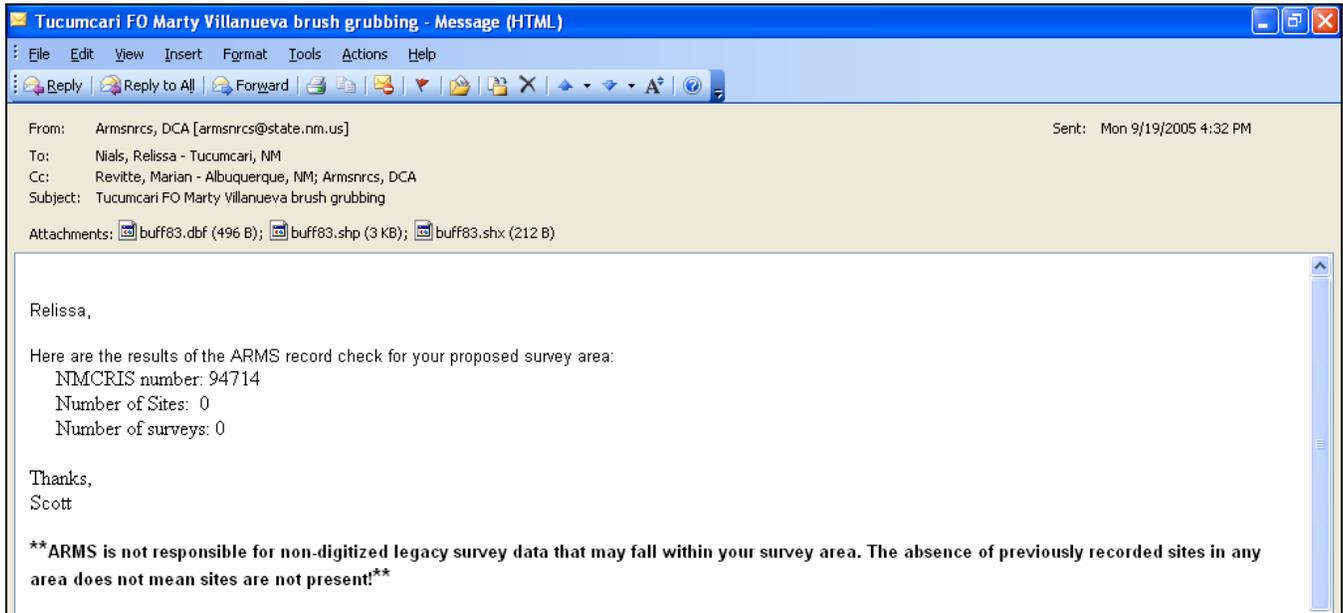
You may have to squish together the text cells so you can print this table on one page. As mentioned above you will need to include these tables with the Section 106 Form for SHPO’s review.

On the **Section 106 Form** you will need to type on the form; the **NMCRIS number, Date of the Records Search and the Number of sites located within the buffer area**. This information is located on the record search E-Mail from ARMS, refer to page 26 as to where you can locate this information.

On the 1: 24,000 Map that accompanies the 106 form to SHPO you will need to **Label the Sites** with the LA Numbers that are found within the Attribute Table, refer to page 32 as to where you can locate these numbers.

Now you are ready to conduct the cultural resource survey out in the field. As mentioned prior with a positive records search you need to be talking with the state cultural resource specialists.

Negative Records Search:



Here again you will add the ARMS data shapefiles to the view and check your practice layers. This will show your proposed project and the ARMS buffered area.

You will not need to print out the Attribute Table because there is not one.

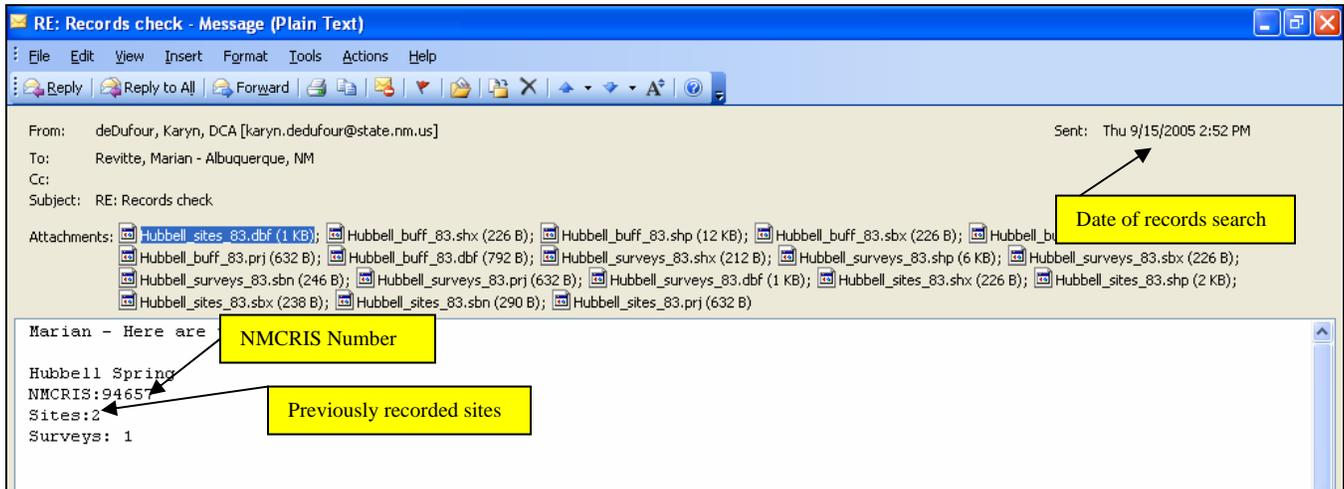
On the **Section 106 Form** you will still need to type on the form; the **NMCRIS number**, **Date of the Records Search** and the **Number of sites located within the buffer area**. This information is located on the record search E-Mail from ARMS, refer to page 26 as to where you can locate this information.

Now you are ready to conduct the cultural resource survey out in the field.

NOTES

Completing the Section 106 Form:

After the field survey has been completed. Where does the ARMS record search information go within the Section 106 Form and what information is needed? You will need from the record search; The NMCRIS Number, Date of the record search, Number of previously recorded sites, their descriptions and, number of previous surveys and their number.



SECTION 106 FORM

NMCRIS NO: 94657 NRCS REPORT NO: (optional)

Name of Project (landowner/project/location):

Form Completed by: Brett A. Cockrell Form Date:

Position: Archaeological Technician

NRCS Field Office:

On page one of the Section 106 Form you will type in the NMCRIS Number in the upper left hand corner. Once you type this number in it will automatically be duplicated on to all pages of the form. If it does not automatically show up on the other pages you forgot to lock the form. **LOCK THE FORM.**

NMCRIS NO: 94657

NRCS REPORT NO: (optional) 0

Name of Project (landowner/project/location): _____

Date of Records Search goes here

RECORD SEARCH:
(to be filled out by NRCS Cultural Resource Specialist)

Location of Data Base: ARMS

Date: 9-15-2005

Number of previously recorded sites: 2
(list by LA number all previously recorded sites in the project area and plot them on 7 1/2" topo map)*

Previously Recorded Sites (LA Site Numbers and Descriptions):

Previously recorded sites go here

Site No: _____

Location: _____

Description: _____

Eligible

Non-eligible

Undetermined

Site No. _____

Location: _____

Description: _____

Eligible

Non-eligible

Undetermined

Site No.: _____

Location: _____

Description: _____

Eligible

Non-eligible

Undetermined

Needed statement

Additional Comments (Include other sources of information such as landowner comments): Refer to Attached Attribute Tables

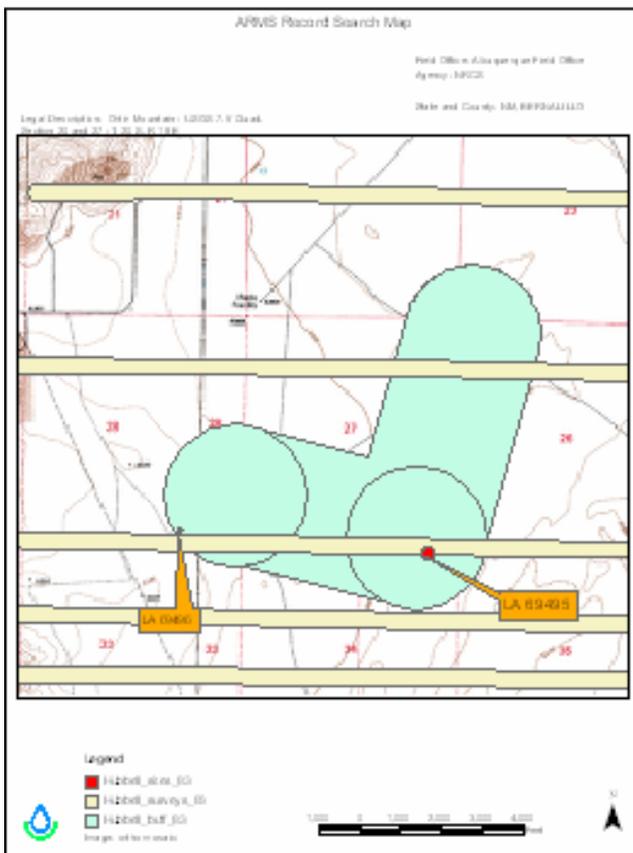
ENVIRONMENTAL SETTING:

NOTES

Maps needed for SHPO:

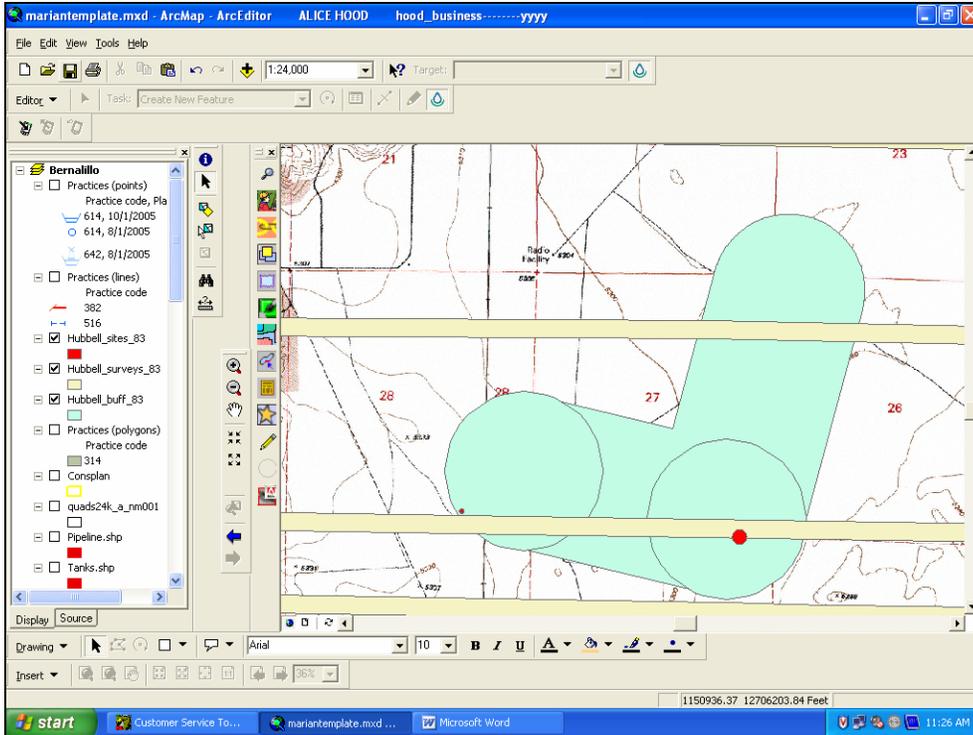
If you have a positive records search you will need to create two maps. The first map will be titled [ARMS Record Search Map](#) and will include the information ARMS sent to you as the records search; plus the Quad. Name, Legal description or UTM information and the Field Office name. The second map will be titled [Project Map](#) or [Cultural Resource Inventory](#) and will include the information required by SHPO, refer to “[Guidelines For Sending ARC-GIS MAPS and SHAPEFILES Within Toolkit](#)” located on page 23. Both of these maps will be sent to SHPO and should be done to professional standards.

On the [ARMS Record Search Map](#) you will need to label the sites as shown below in the example.

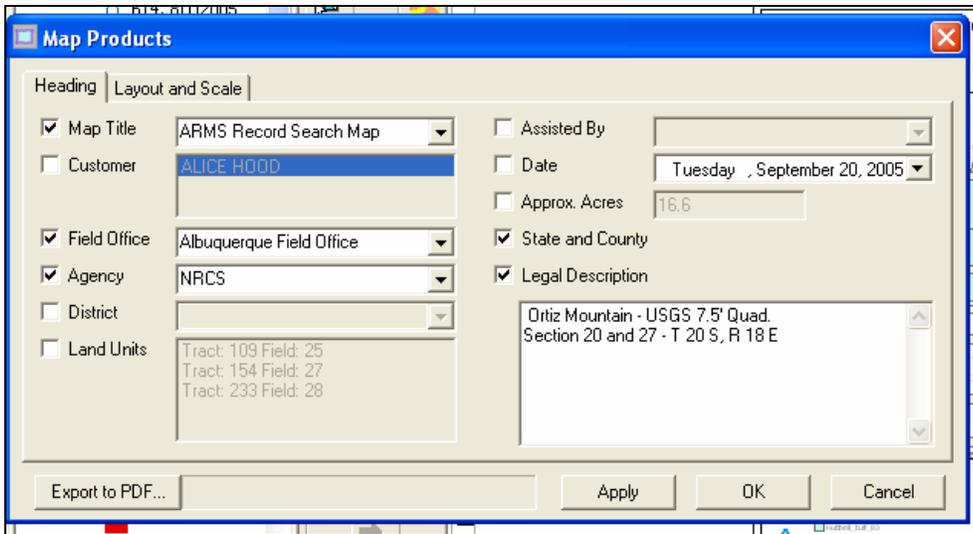


NOTES

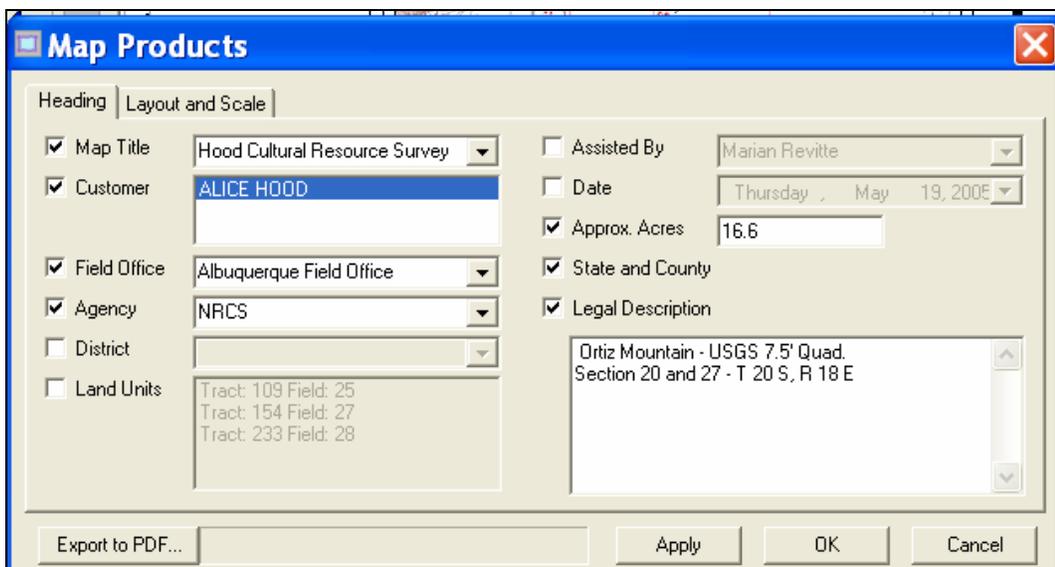
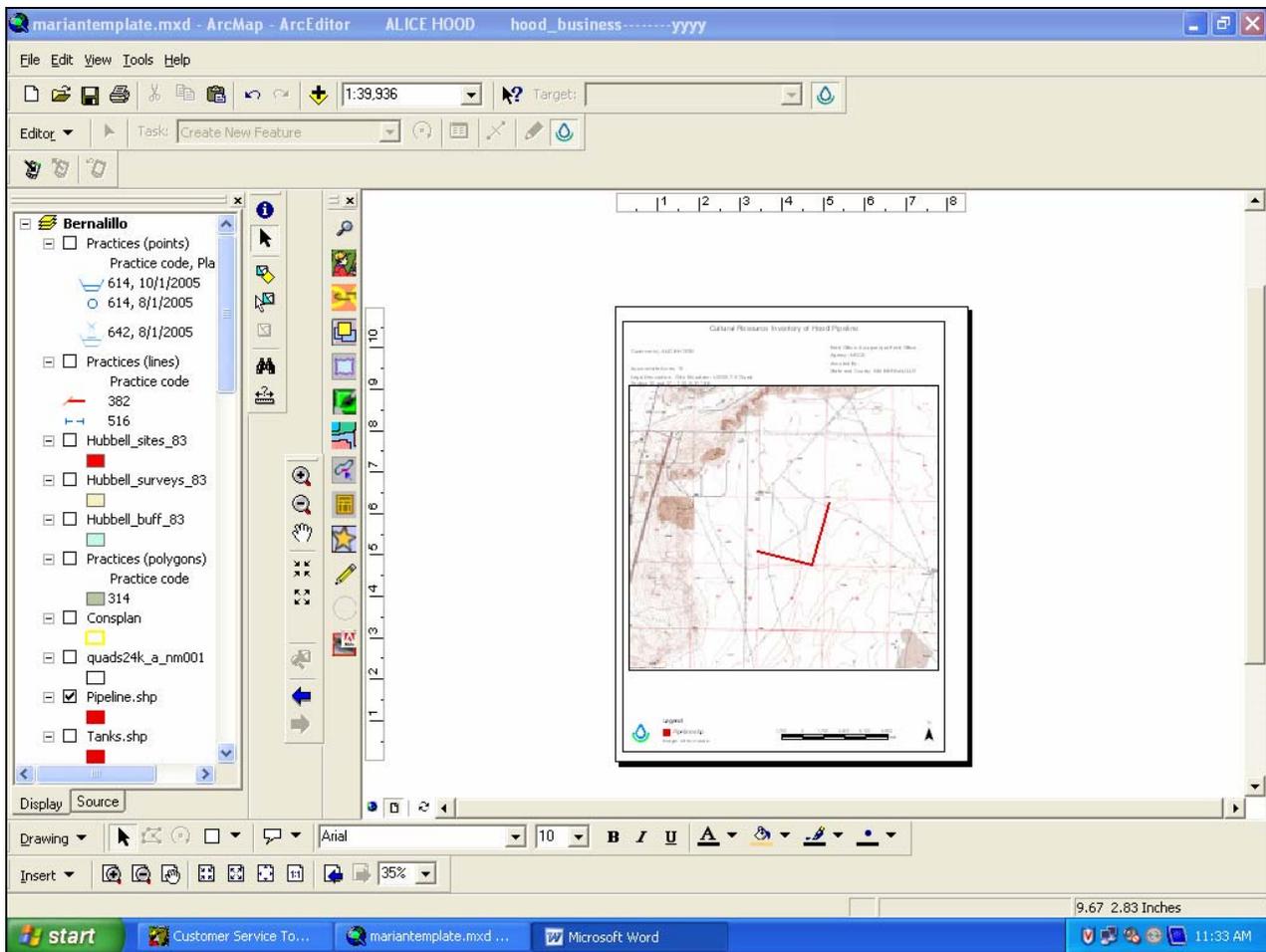
Turn off all other layers except the shapefiles from ARMS.



Go to the Map Product Button to insert what information is needed.



On the [Project Map](#) or [Cultural Resource Inventory](#) refer to “**Guidelines For Sending ARC-GIS MAPS and SHAPEFILES Within Toolkit**” located on page 23.



When you have your maps the way you want it, and they have all the information that is needed you are ready to E-Mail it to the State Cultural Resource Specialist.

Attachment #1

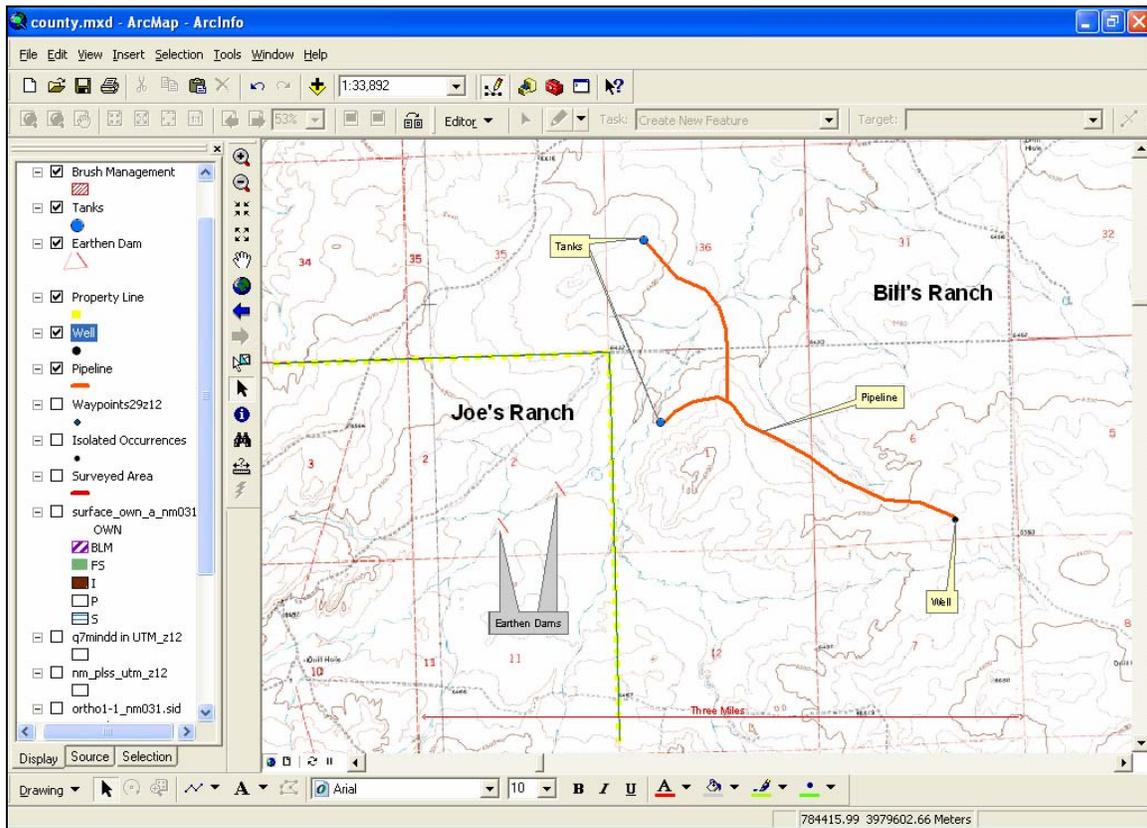
Procedures for sending ARMS shapefile data

Each ARMS records search that you request is billed to the NRCS, therefore you need to combine these searches when possible. Below is a list to assist you when requesting an ARMS records search.

- 1) Requests are for one (1) cooperator/landowner only. You can not combine two landowners even when their projects are close together.
- 2) Projects that require an ARMS records search can be combined when the projects are within a three (3) mile radius of each other. In other words when you make the map at 1:24,000 scale all the projects are shown on an 8 ½ by 11 printed map. There are exceptions to this, such as a pipeline that runs for 4 or more miles and it would take two (2) maps produced at the 1:24,000 scale. Use common sense.
- 3) It is alright to combine projects even if they will be completed in separate calendar years. However, remember these ARMS record searches get one (1) NMCRIS number. So if you combine multiple year projects on one (1) ARMS record search you will also need to conduct and complete that cultural resource survey.

Examples of these can be found on the following pages.

Example #1



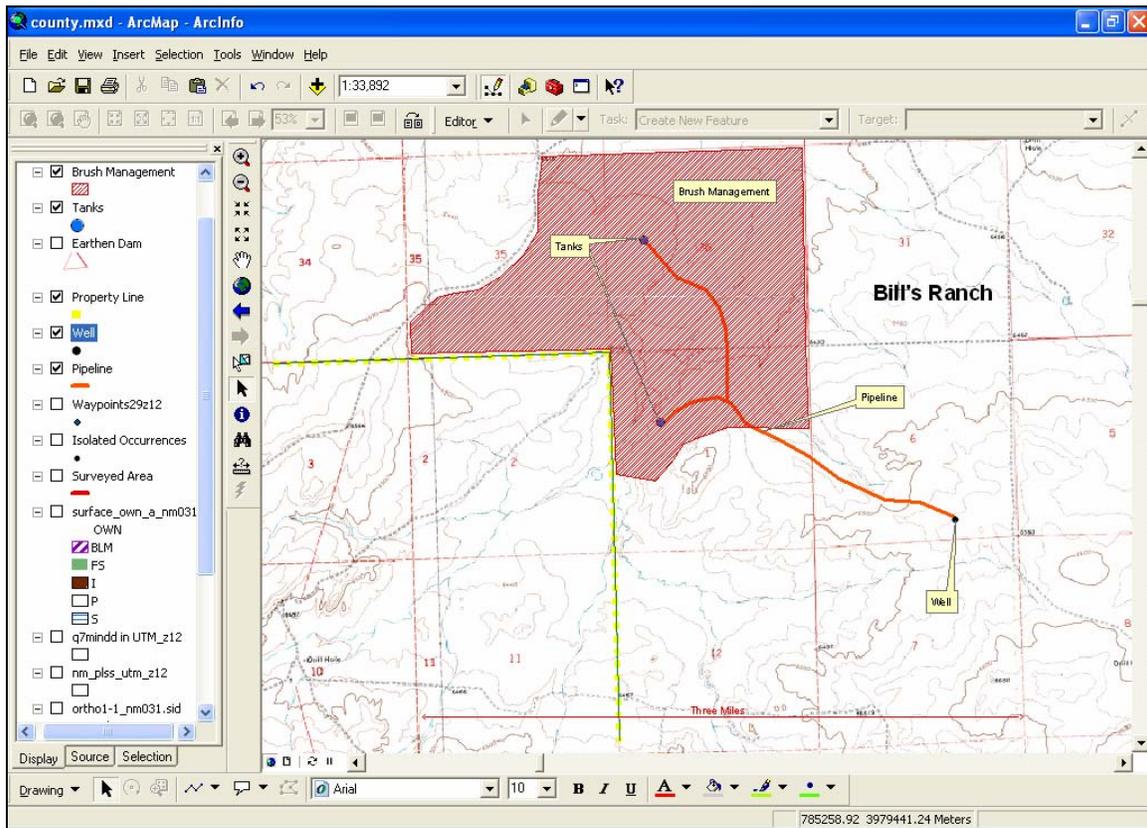
For this example: There are two separate landowners (Joe's Ranch and Bill's Ranch) both having proposed projects that are within three mile of each other. Can you combine these two as one ARMS record search? The answer is No. Each landowner will need to be sent to ARMS separately.

Joe's Ranch - Requesting an ARMS record search for the two earthen dams.

Bill's Ranch - Requesting an ARMS records search for a livestock pipeline system, which includes a pipeline, two tanks and one well.

Two NMCRIS number will be given to you by ARMS. One for Joe's Ranch and one for Bill's Ranch.

Example #2



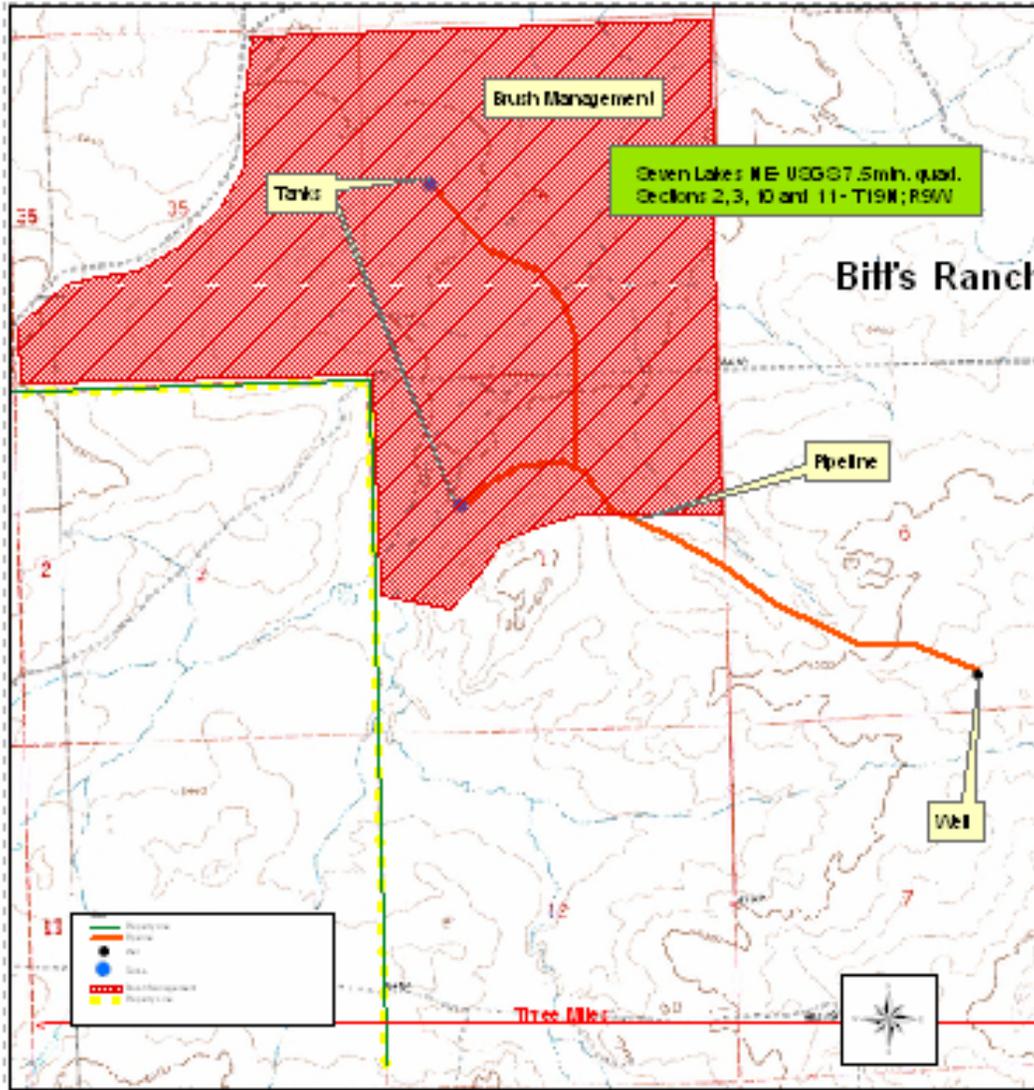
For this example: There is one landowner (Bill's Ranch) which has several proposed projects that are within three mile of each other. All of these proposed projects are planned to be completed in one year. Can you combine all of these projects as one ARMS record search? The answer is Yes. They will all fit on one 8 ½ by 11 map.

However, the cultural resource survey must be completed for both the brush management and pipeline system prior to sending the Section 106 consultation form in to SHPO.

Bill's Ranch - Requesting an ARMS records search for brush management and a livestock pipeline system, which includes a pipeline, two tanks and one well.

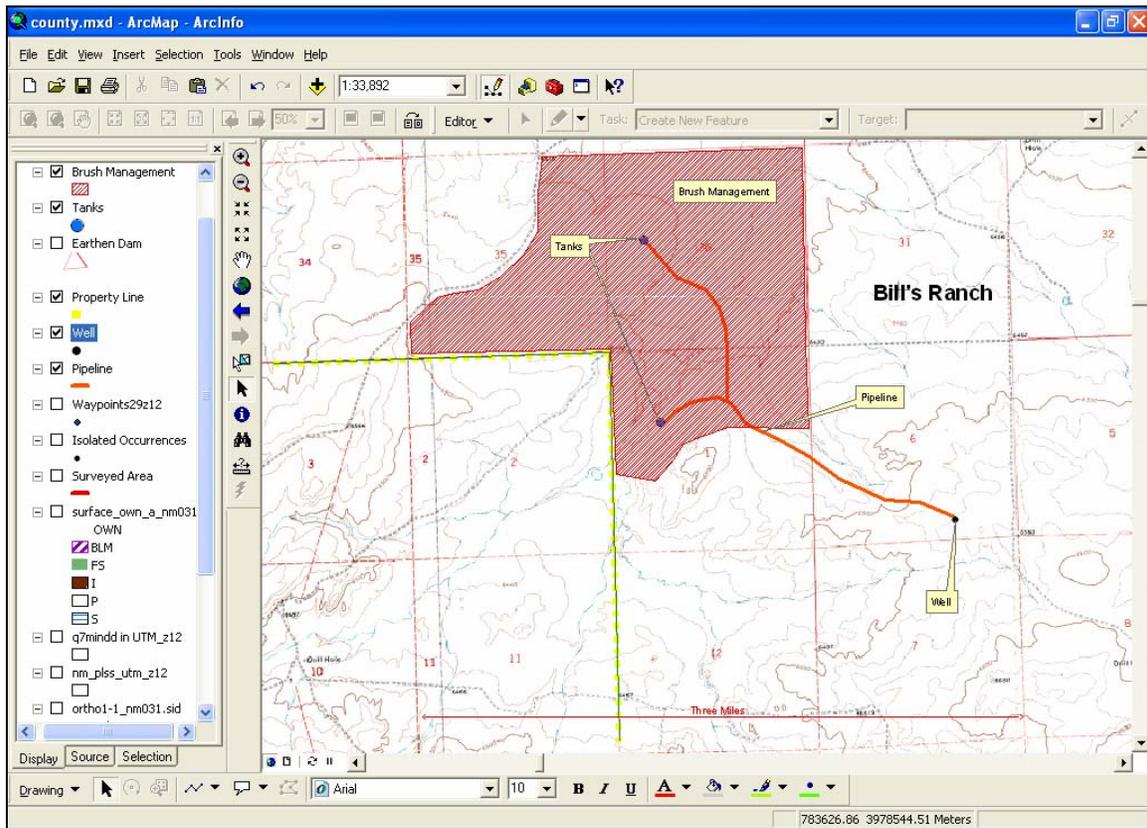
One NMCRIS number will be given to you by ARMS.

Cultural Resource Inventory; 2006



Clark - Livestock Pipeline & Fences and brush management.

Example #3



For this example: There is one landowner (Bill's Ranch) which has several proposed projects that are within three mile of each other. Not all of these proposed projects are planned to be completed in one year. Can you combine all of these projects as one ARMS record search? The answer is Yes. They will all fit on one 8 ½ by 11 map.

However, you need to keep in mind that these projects will be installed over several years. One NMCRIS number will be given to you by ARMS, so all of the proposed projects will need to be cultural resource surveyed at the same time in order to be able to send a Section 106 consultation form to SHPO.

Bill's Ranch - Requesting an ARMS records search for brush management and a livestock pipeline system, which includes a pipeline, two tanks and one well.

One NMCRIS number will be given to you by ARMS.