OKUP
Oklahoma Utility Permits

User Guide

September 7, 2017

Background: This system was built in 2017 to provide a new way for Utility Owners and/or agents to submit applications for Utility Permits. The goal of the system is to create a more efficient mechanism for utility owners and the department to manage the entire process.

The purpose of this guide is to focus on the issues faced by the utility owner / agent as the user works with OKUP.

In order for a user to be able to work in OKUP, the user must register with the system and create a userid. The first person to do so for the organization name will become the administrator for that organization profile. Additional users can register with that organization, and the administrator must grant access to those new users to work on behalf of the organization.

Main steps to use the system:

1) Register as a user – specify your company
2) Retrieve your temporary password from your email
3) Log in and change the password
4) Verify your user account and company profile
5) Create Project Groups and Subgroups (if needed)
6) Create Email Groups (if needed)
7) Enter application data and submit it for processing
    a. Create a new Application Record
    b. Upload Attachments to support the application
    c. Drag a marker on a map to show the “central location” of the permit asset
    d. Create Map Segments (lines on a map) that show the linear asset location
    e. Submit the application

Table of Contents

System Processing and flow of data through the permit process

This diagram shows the typical flow of data through the system. The utility owner begins the process by creating a record for the application. All of the textual information on the permit must be entered. And, documents can be attached (such as project plans) to the record. There is no need to attach the document for the Cultural Resources review – all of the data can be entered into the system, and there is a link for everyone to use that can generate that document when needed. Then, the owner should use the page that allows you to drag a map marker to the geographical location of the project. This central coordinate is used by the map pages to center the map on the location of the utility asset. And, the owner can use the map pages to draw the physical location of the linear (or a single point) asset on a map so the system can collect the lat/long coordinates. These map segments will allow users to see the physical location characteristics of the planned asset. Also, the user can use the annotation mechanism to provide specific information about the segment spans.

Once all of the data is ready, the owner uses the Submit button. This changes the status of the application record from “Started” to “Submitted” and emails go out to the owner contact and representatives of the Cultural Resources office.

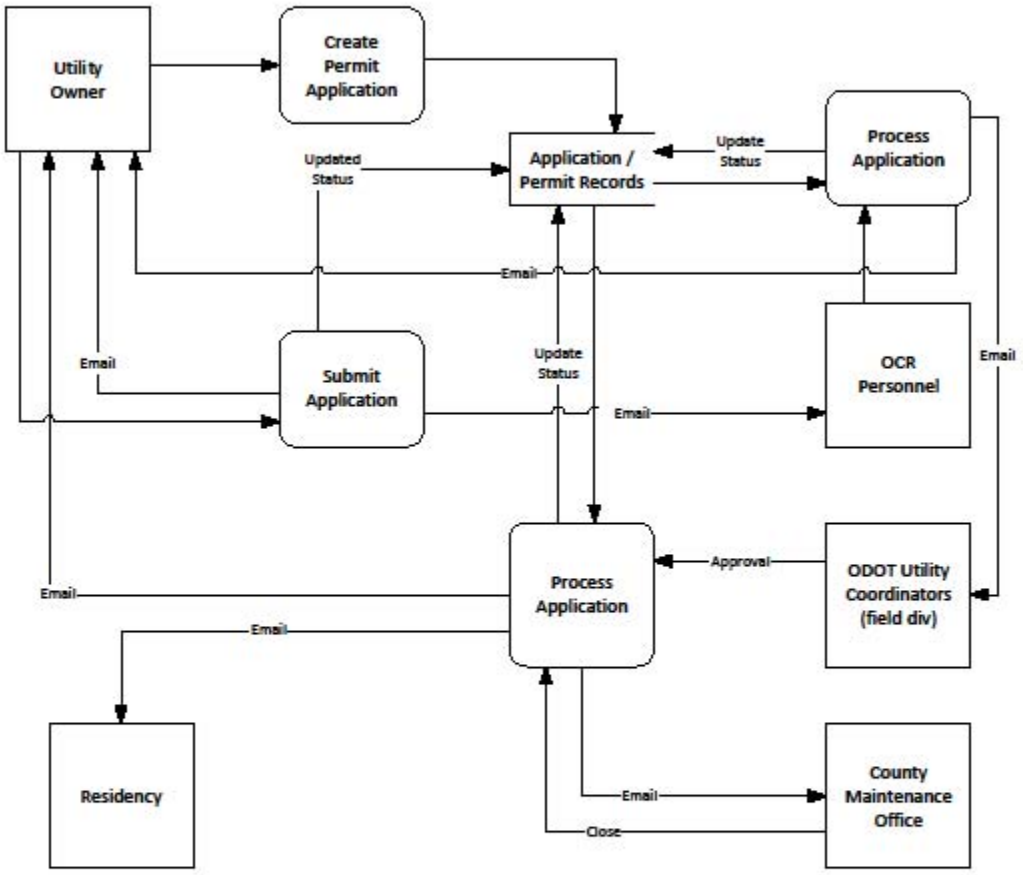
Next, the Cultural Resources office personnel will work the application and make a determination as to the status of the request. Once it is approved by this office, they have a button on their page that will mark the application as “Reviewed by OCR” and emails will be sent to the Owner contact and the ODOT Division Utility Coordinator.

Once the ODOT Division office has the application, they will work the request and will take actions that might notify a Residency office that an application has been received. Also, they may determine that additional info might be needed, and they have the ability to return the application to the Owner. A text message field can be entered and then a button will perform a process that will change the status and send email to the Owner contact letting them know that the application is being returned. When doing this, the Utility Coordinator should make a determination as to the route the application takes as it comes back – either it goes to Cultural Resources again, or it can skip that step and come back to the Utility Coordinator for processing.

When the Utility Coordinator approves the request, the system will capture the Division Engineer name, date, Division Engineer Proxy name. It also generates the Division Permit No. And, it will update the status to show that it has been “Approved” for moving forward. Emails will be sent to the Owner contact, County Maintenance office, Residency office (if identified), and the field division Utility Coordinator.

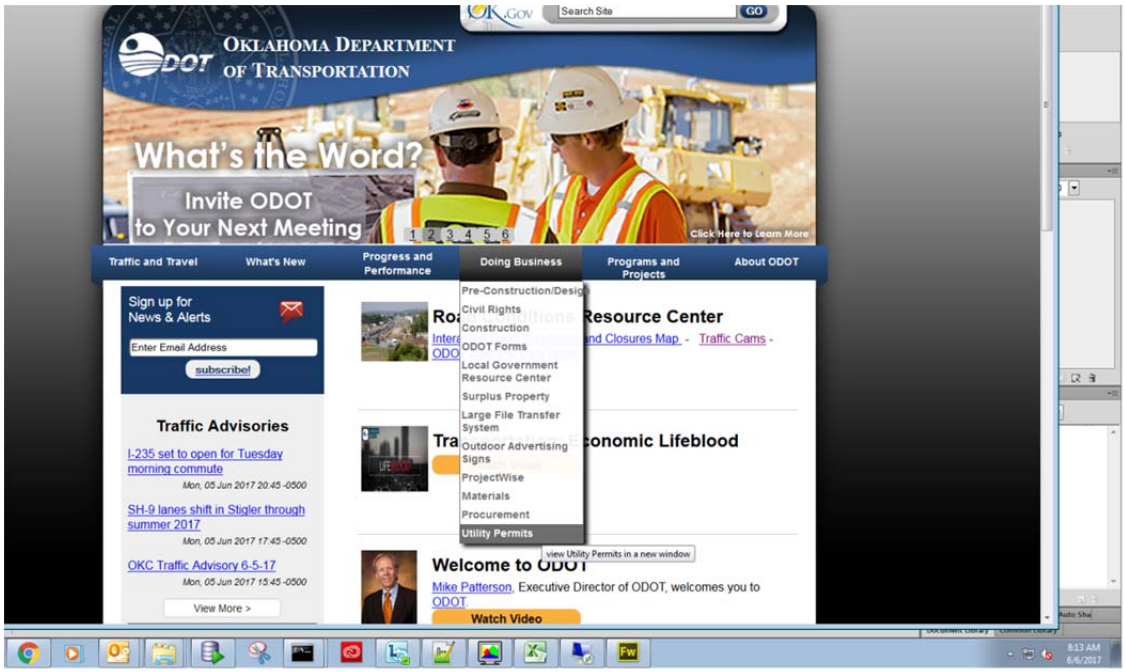
Oklahoma Department of Transportation

Utility Permit Application Processing

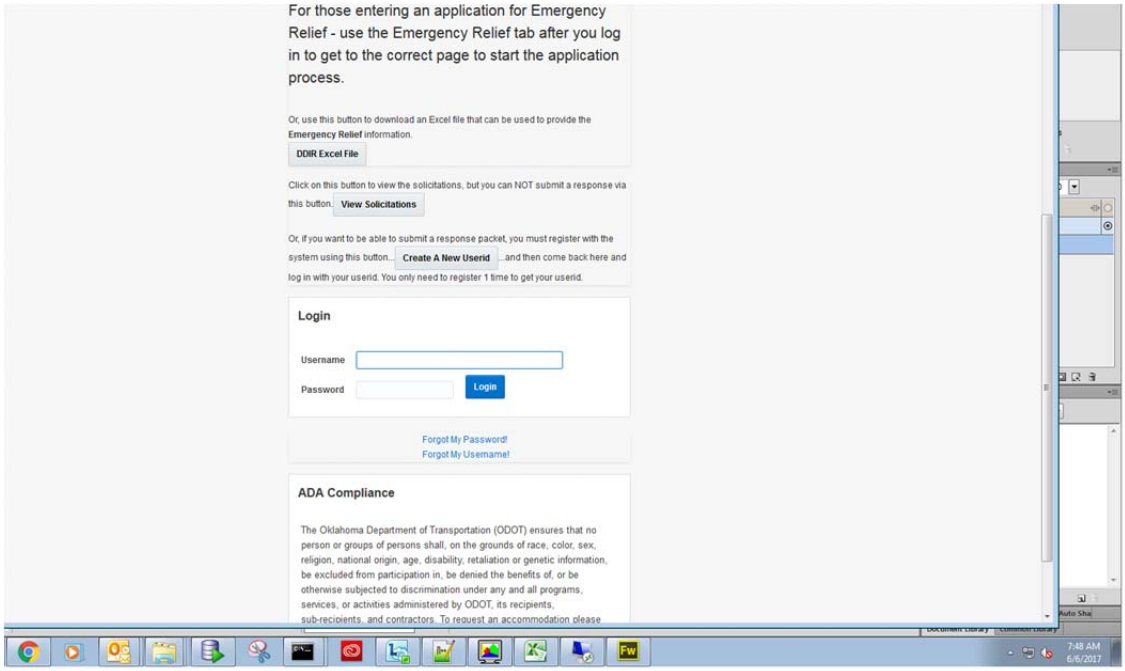


Getting Started – Create a userid and Log in to OKUP

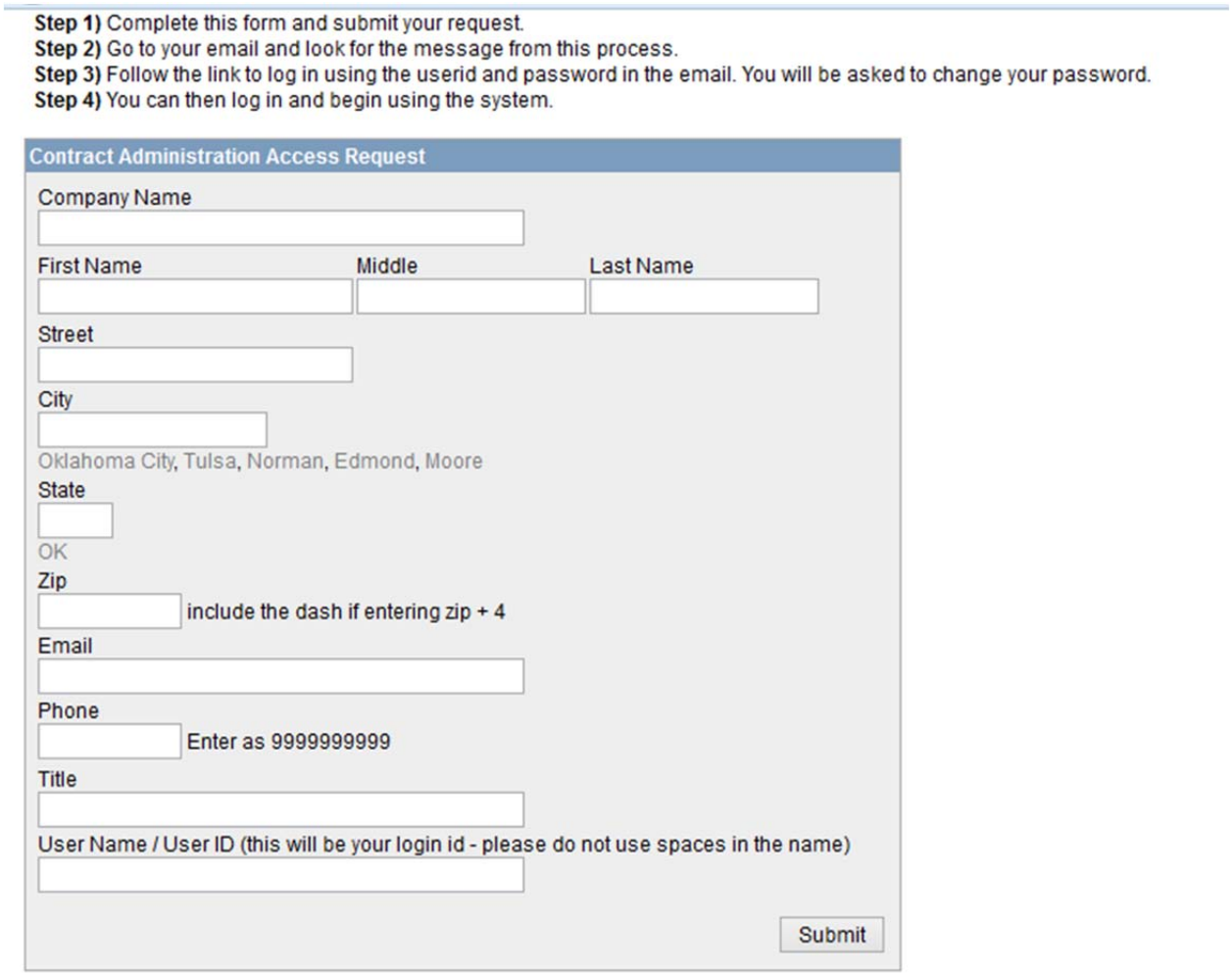
Connect to the ODOT web site at http://odot.ok.gov and look for the Doing Business menu item. Hover the mouse over it and it extends a list. Click on the Utility Permits link.



This brings you to the login screen for OKUP. If you don't have a userid, then you must register with the system and have your account registered to do business for the company. If you are a new user, use the Create A New Userid button and go through the process to get your account established. Once you have it set up, return to this screen and enter your credentials to log in to the system.

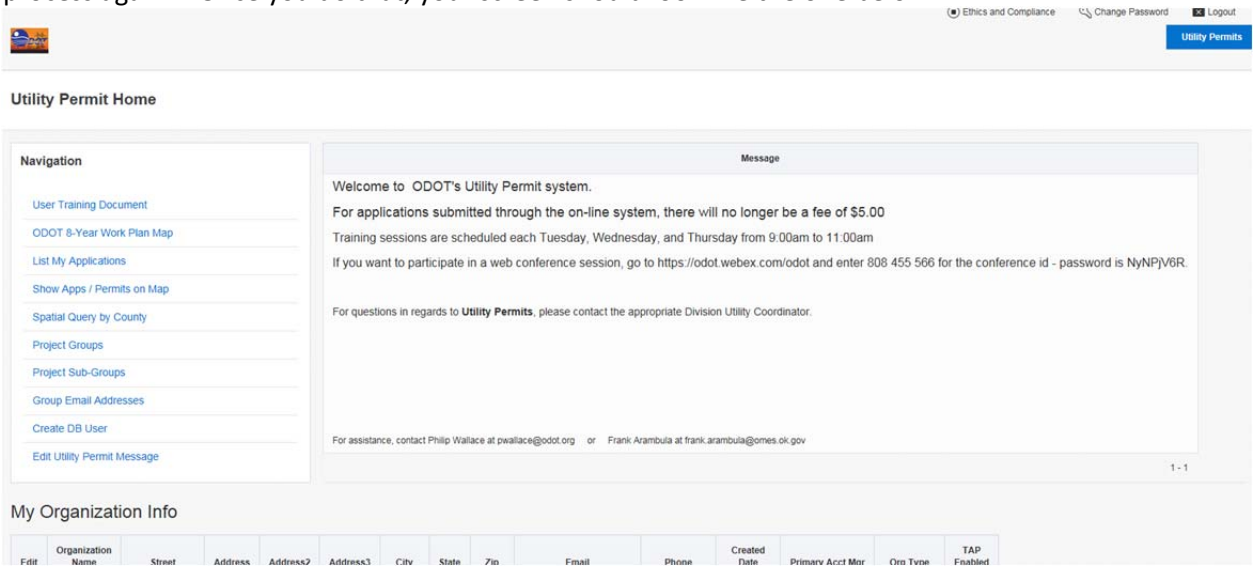


If you need to create your new userid, the page will appear similar to the following image:



After you click the submit button, the system will create your user account, and then it will send a message to your email address that contains a temporary password. Go and retrieve that email message and then come back to the initial screen so you can log in with your userid and that temporary password. You will be prompted to change the password.

After you change your password to one that you create, you will have to come back through the logon process again. Once you do that, your screen should look like the one below:

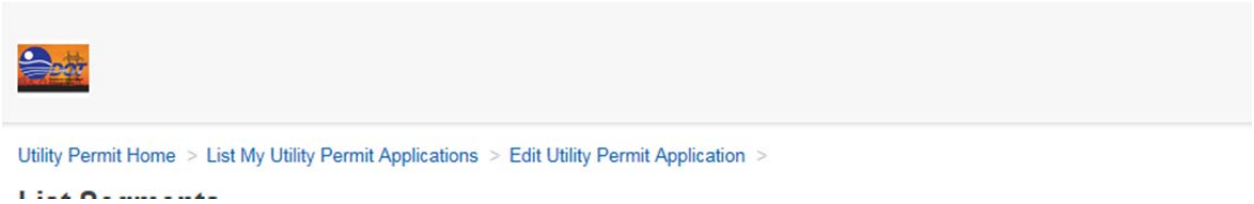


Getting around in the system – navigation elements

Key features that will make the user experience less frustrating begin with understanding the navigation elements.

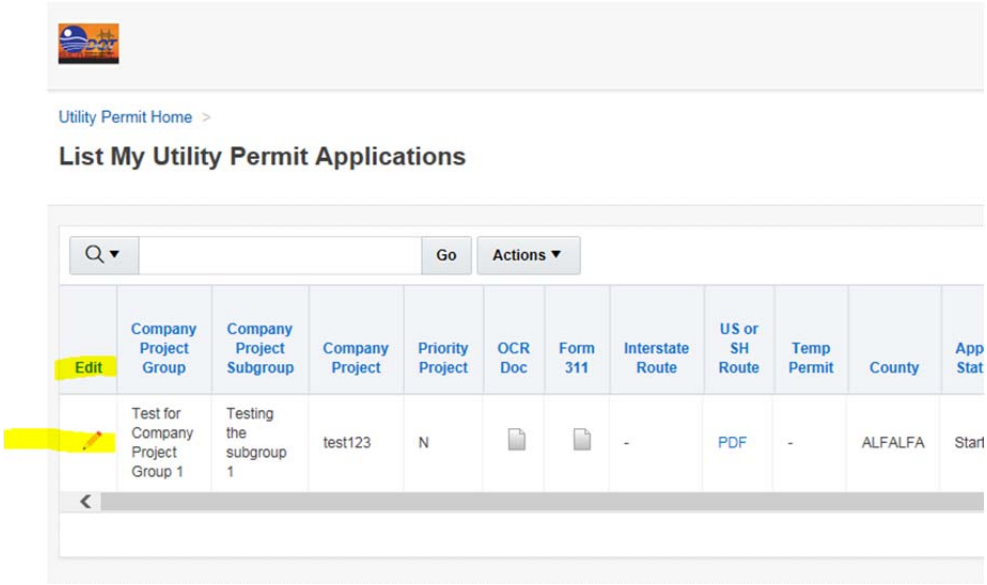
Your home page has a menu navigation block in the upper left corner of the screen. Links in this block take you to various pages that help you manage your data. Each of those links will be covered in more detail in this document. Other features are identified here so that you get an understanding of where to look for those components that make the web site easier to work with.

A very important area is the **breadcrumb** region of the page. That is the portion where links appear as you move deeper into the web site structure that will help you get back to where you started (or anywhere along the way). Here is an image of what this region might contain:



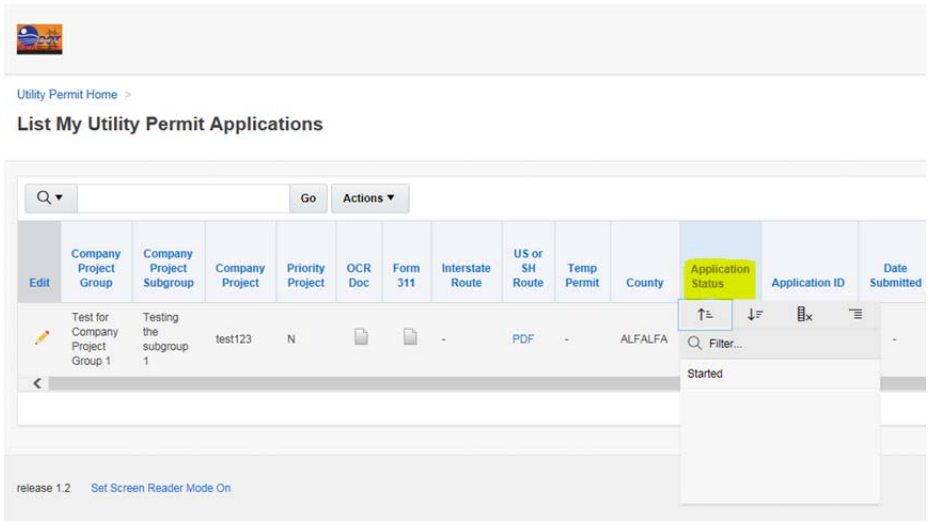
As you can see, the current page breadcrumb entry is at the end of the string, with the greater than sign between the entries. Each portion of the breadcrumb is a link that will take you back to a specific page that you visited.

We also use icons that represent “edit a specific record”



That icon (the pencil and paper) is typically on the left side of the screen on each record when you are allowed to edit it. It is the method we use to navigate to the page used for data entry.

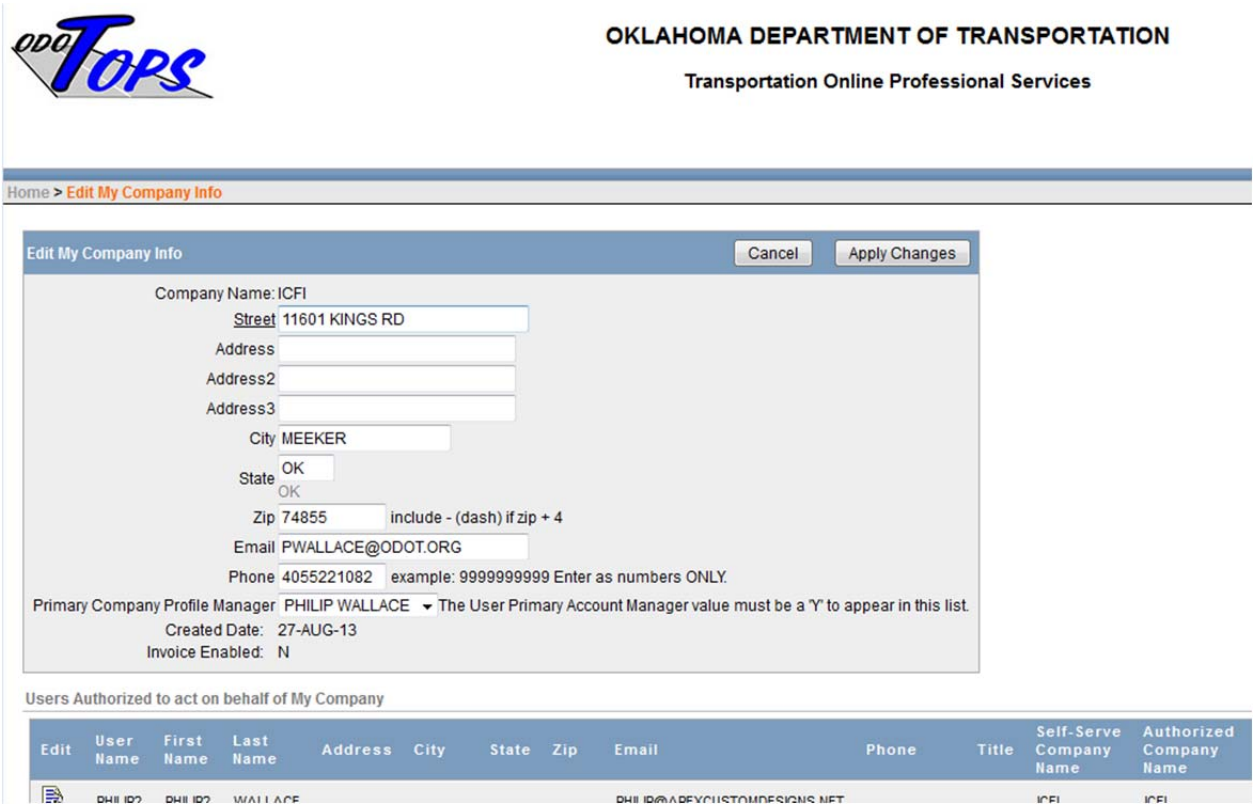
Filter and sorting Options: Another feature you need to be aware of is the ability to filter the report section of some of the pages so you only see specific records. That feature lives in the “gray bar” that holds links for specific things. Any time you see this bar, you should know how to help limit the amount of data that is being displayed:



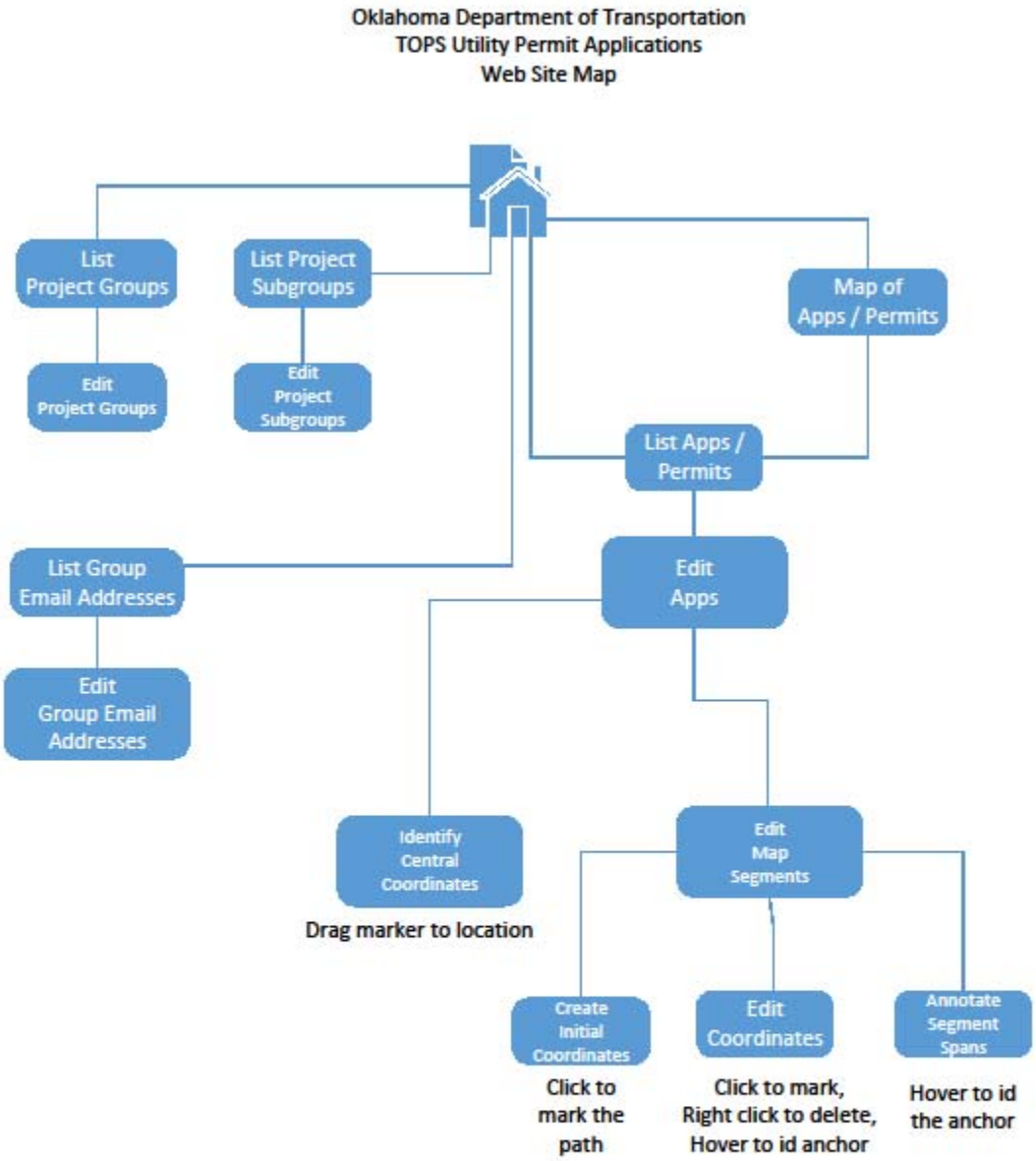
If you click on the column headings in that bar, a small window will open that allows you to filter the data based on the value you select in the list. Also, you can sort the data as well as create control breaks for the data values in this column. Once you work with this user interface a bit, it will be very easy for you to operate.

Your organization profile

The company profile specifies which user accounts are authorized to submit files and invoices on behalf of the company. From your home page, you can click on the edit icon for the organization (if you are the company profile manager, you will be allowed to edit the data). That will take you into a page similar to the one shown below.

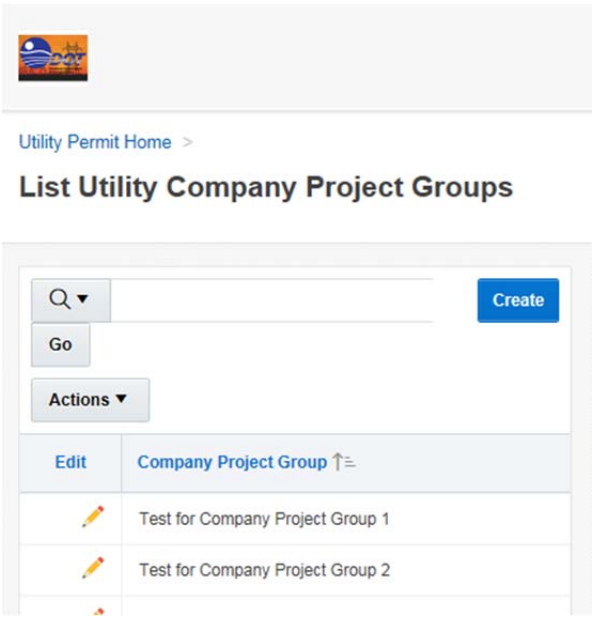


Website Page Structure

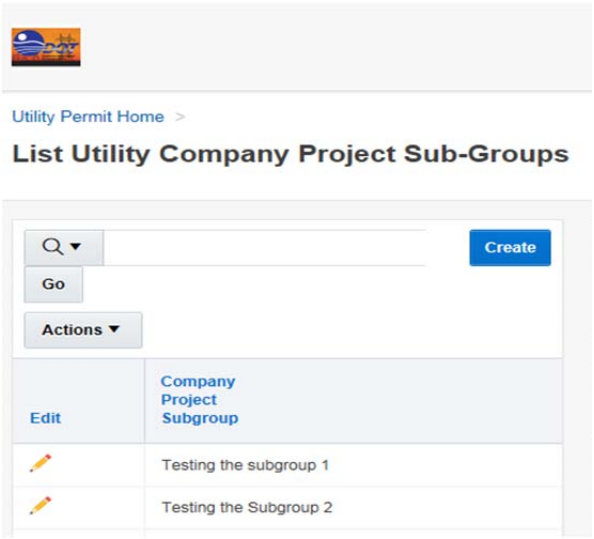


Project Groups

The system provides a way for a company to organize their permit applications in a way that facilitates the search / filter functions available to the user. There are 3 levels of project grouping: 1) Project Group, 2) Project Subgroup, and 3) Project Id. By using this set of data elements, you should be able to keep the applications set up in ways that let the natural filter and search capabilities help find specific records. Menu options for Project Group allow you to create your own values such as these:



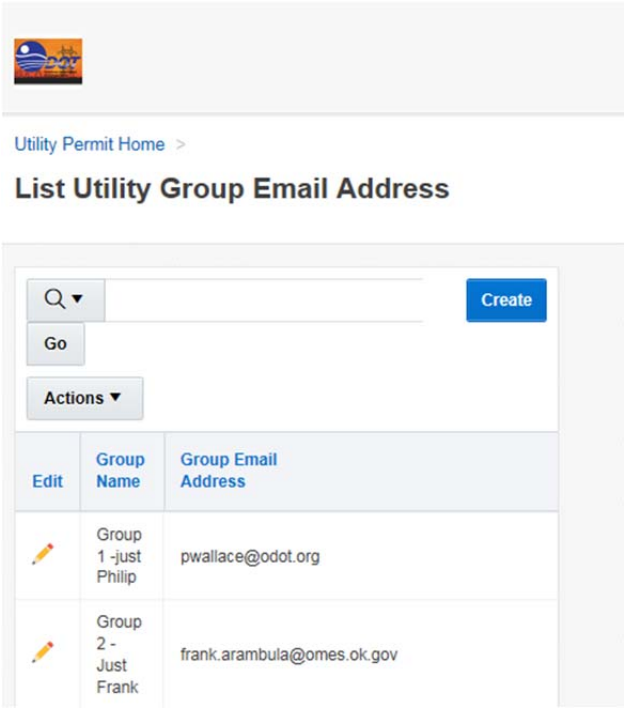
Project Subgroups provide another data element that can be used to help filter the records. You have the ability to create those records in the same way you do groups:



And, each application record can be identified with a Project Identifier.

Email Groups

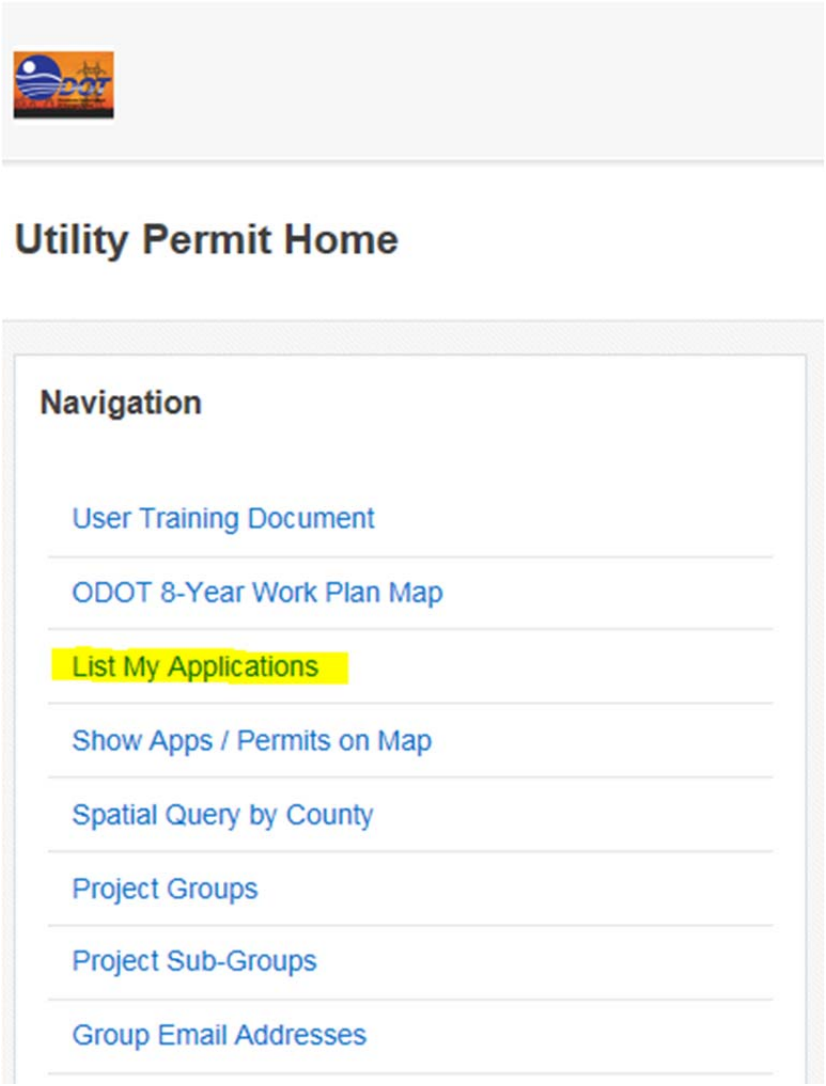
The system provides a way for a company to create group email addresses. If you want to notify multiple people when events happen to your application, use this capability to manage who is associated with a group, and then use that group on the application record.



Remember to use the appropriate group email address when you create your application record.

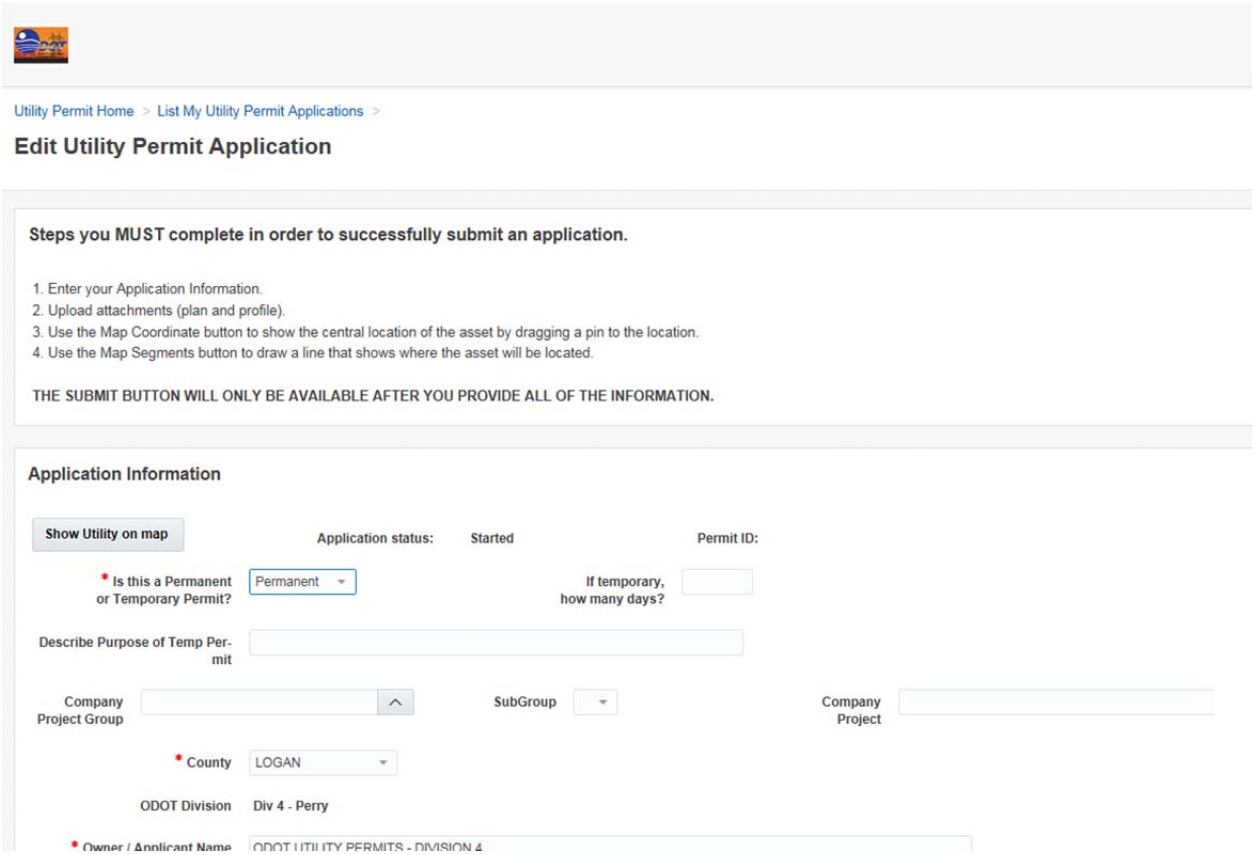
Create Permit Applications

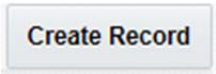
The user will normally start the process of creating an application request by using the “List My Applications” from the main page.



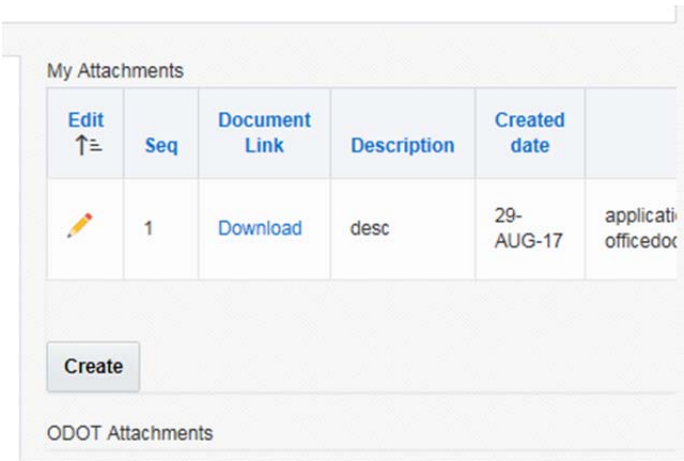
This list will show all existing records, and will allow you to Create a new application record. Look to the far right side of the screen to find the button.

Once you click on it, you are presented with the page to edit the data. You will notice that the system will pre-fill a portion of the fields with your organization and user information. If that data isn’t correct, simply type over it to provide the correct information.



Fill out all of the fields and options, and then you will find a  button at the bottom of the page. If all of the data passes the edit checks, the record will be created.

Next, you should see a section toward the top-right side of the page where you can upload attachments. These should be plans, profiles, and any other associated documentation that will be needed to process the request:



Use the Create button to open a page where you browse to the file you want to upload, provide a description of what is in the document, and then Upload the Attachment:

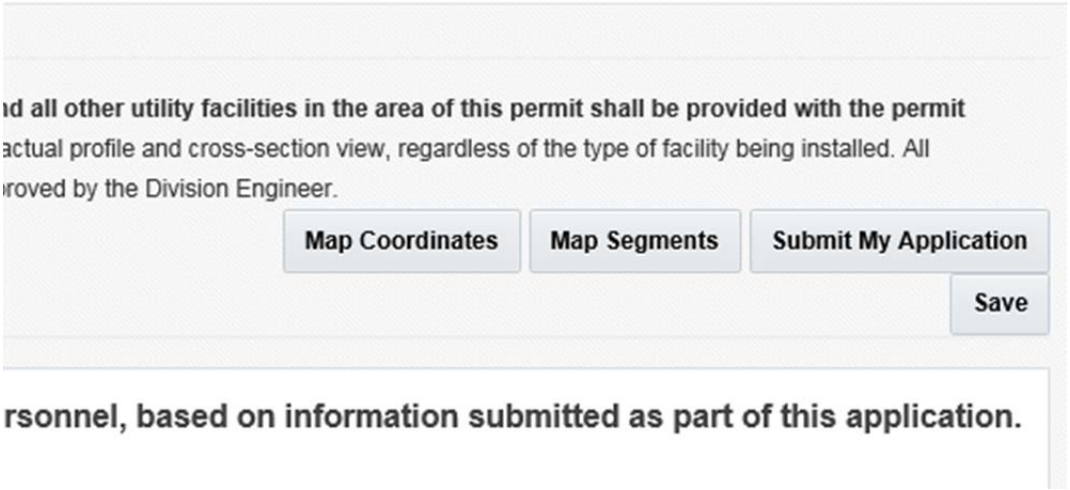
Create as many attachment records as you need.

Central Map Coordinates for an application request

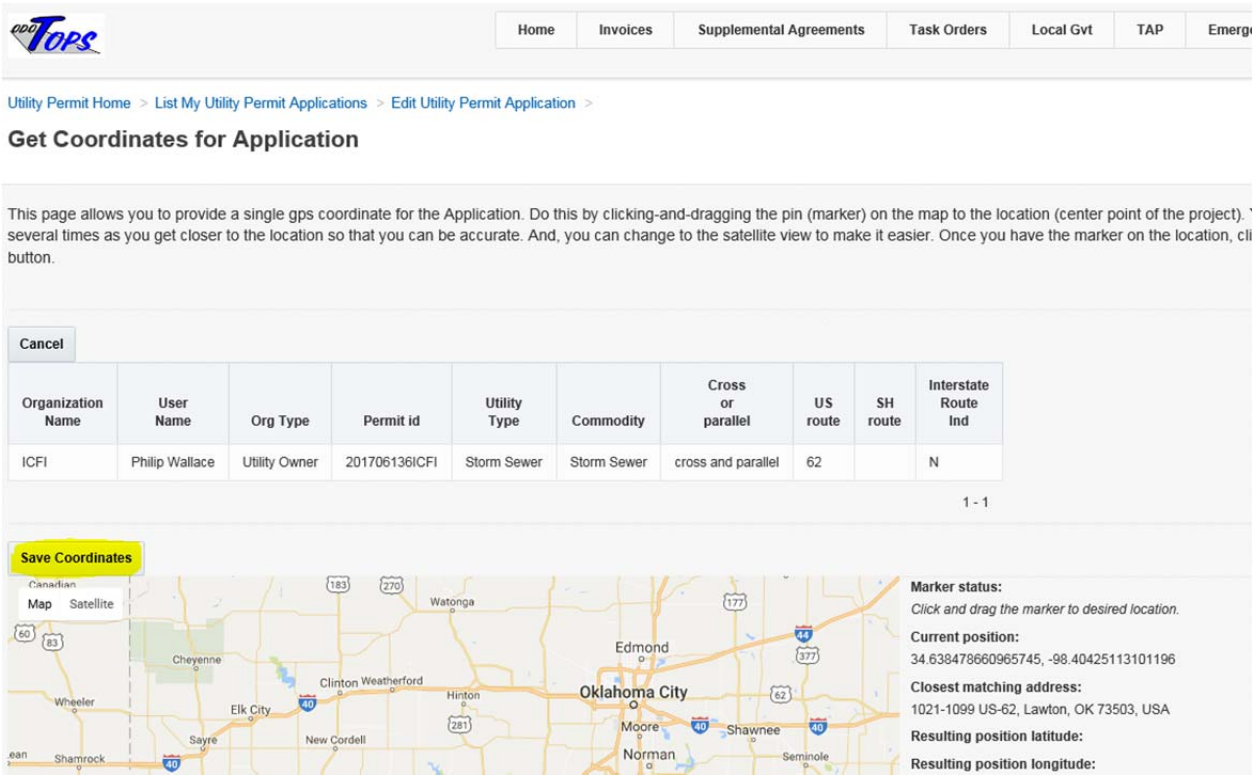
The ability to show the location of the linear assets is one of the features of the system that is needed to make it easier to identify and quickly communicate information about those assets. There are 2 levels of georeferenced data – one is a single lat/long coordinate that is used to show the existence of a record on a map, and it is used as the center point of a map that provides a linear representation of the asset. This single coordinate is created when a user drags a marker on a map and drops it in the exact location that is to be georeferenced. The instructions that follow assume that the left and right mouse buttons are the traditional default values. However, if you have switched your configuration so that your mouse buttons have been switched, then just be aware of that issue.

The default location of the marker when you first begin the process of encoding that single coordinate is in Oklahoma City (on the Skydance Bridge). Put the pointer on the marker and then click and drag the marker to move it. Zoom in on the map (a wheel mouse makes this very easy, but you can use the zoom buttons on the map too) so that you can be accurate in the placement of the marker. Select a location that represents the central portion of your asset location (remember that this will be the center of a map where the actual polyline shows later) and place the marker there. Then click on the button to save the coordinates.

To get to the page for encoding the single lat/long coordinates, edit the specific application record and scroll to the bottom of the page. Toward the right side, you should see a group of buttons like these:



Click on the Map Coordinates button to go to the page to encode that single location:



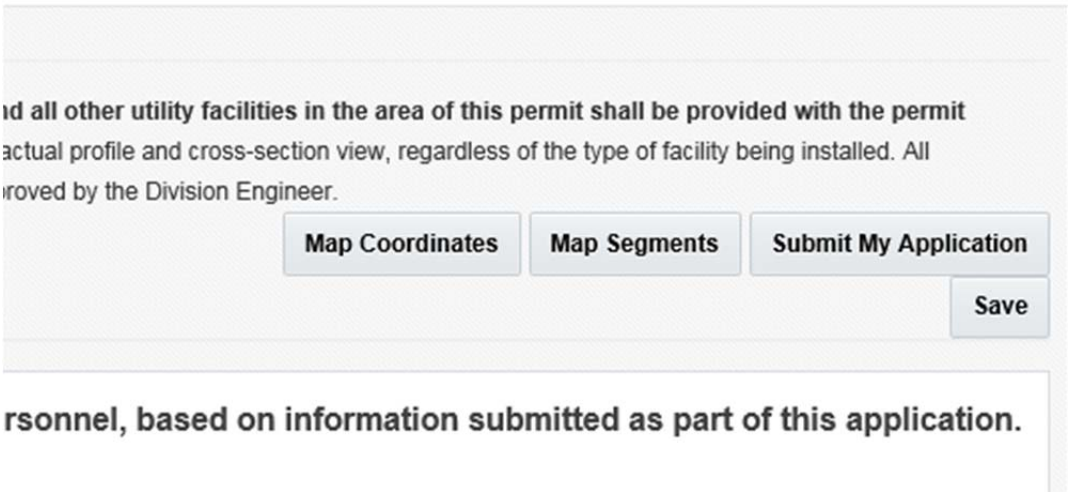
By saving this single coordinate, the high-level map that is available from the menu will show a marker for the application / permit record. And, if you click on the marker on that map, an InfoWindow will open that provides data about the record as well as a link that opens the page that will let you edit the data. Also, there are a number of filter elements on that map page that are useful in helping you find specific record markers. You are encouraged to use that map page to find out which data elements help you query the database and find your information.

Map Segments – drawing lines on a map

"Map segments" is a term used in this system to refer to a line that represents the linear asset on a map. It can be as simple as a beginning point and an ending point. This would be represented by 2 geographical locations – each with a lat/long coordinate. While a single coordinate can also be a valid map segment, we normally are going to be referring to a line that has at least a begin and an end. In order to use the maps to show the existence of a linear asset, these segments will be collected using the concept of opening a map and simply clicking the mouse (normally the left mouse button if using defaults) once for each location where there might be a change in direction (even very slight). This allows us to store lat/long coordinates that represent the linear asset on the map.

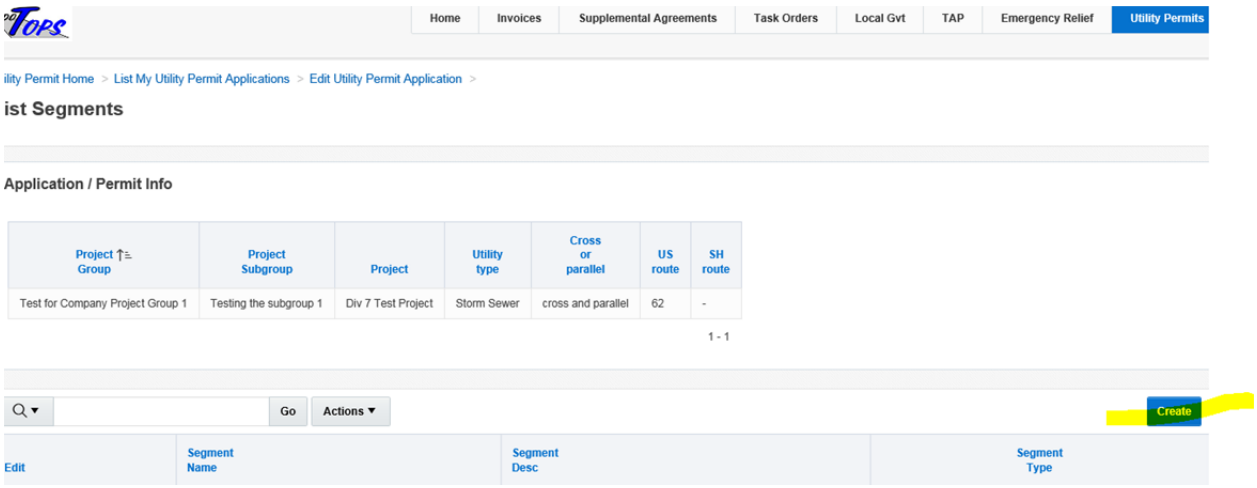
Once you understand this concept, you should be able to provide the coordinates needed for what you might see referred to as a polyline. The goal of this capability in the system is NOT to provide survey-grade 3 dimensional geometry. We are simply trying to show the existence of an asset on a map that is at best in the range of 1-meter accuracy. With that in mind, you can use the functions to create the polyline that has a starting point, and an ending point at a minimum.

Edit your application/permit record and scroll down to find the button for map segments:

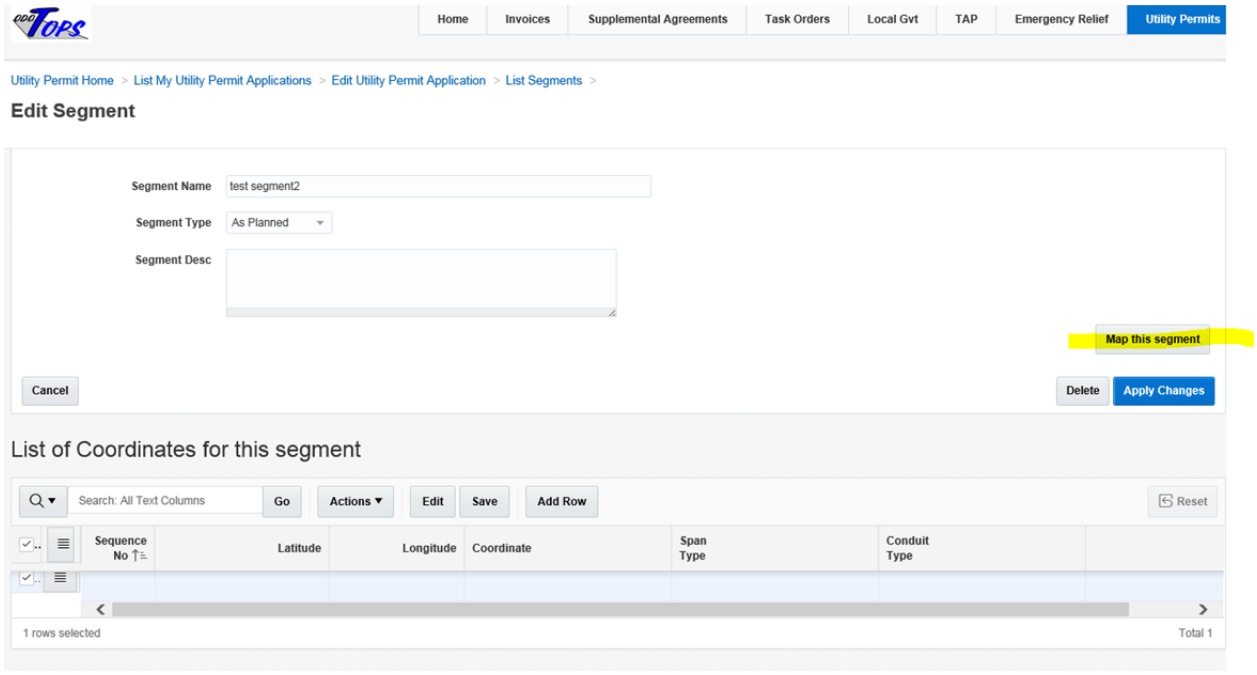


Clicking on that button takes you to a page that lists the map segments for this record. Remember that there can be multiple segments for a single record – and we are providing a distinction between the route that is planned for the asset as well as one that can show the actual route that gets installed. This is not a mandatory function for the system, but does provide a way to show the distinction between the 2 routes. Also, there are data elements that help to further identify the segment (such as the name of it and a description).

To get started, there is a create button that is used:



Enter the descriptive data for the segment and create the record. Once you have done that, you return to the list of map segments. Use the edit icon to begin the process for creating the map coordinates. As long as there are no coordinates, you will see a button that will let you Map this segment:

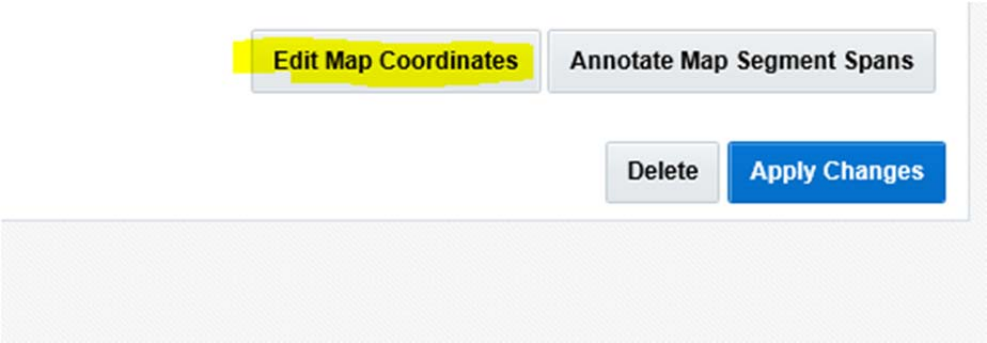


This will put the system into a mode where you locate the mouse pointer at a coordinate and simply click the left mouse button to save that coordinate. Then, move to the next location and click again. Zoom in to be accurate, and continue clicking on the map to save the location. As you store these coordinates, they are saved with a sequence number that will identify the order in which the points are saved. This is what allows us to show the line on the map. Try to be as accurate as you can – zoom in and position the cursor for accuracy. By clicking and dragging, you move the map without saving a

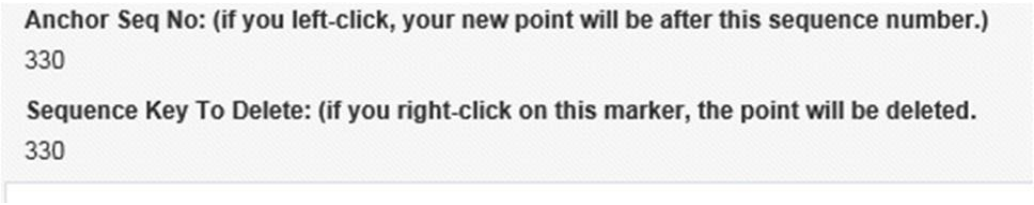
coordinate. If you can save the entire length of the line in this initial attempt at encoding the coordinates, you are doing a good job. But, there is a way to come back in and extend the line, insert a coordinate between 2 others, remove a coordinate, and move a coordinate to a new location. Those functions will be covered in the next section. Each time you click, you are saving a location in the database that represents an extension of the line as you move across the map.

Editing Map Coordinates

Editing map coordinates for a map segment is provided via a map interface. Go to the edit page for the segment and scroll down. On the right side of the screen you should see these buttons:



Click on the Edit Map Coordinates button to bring up the map. Remember that the system uses a sequence number for each coordinate – when the map opens, the maximum sequence used is shown.

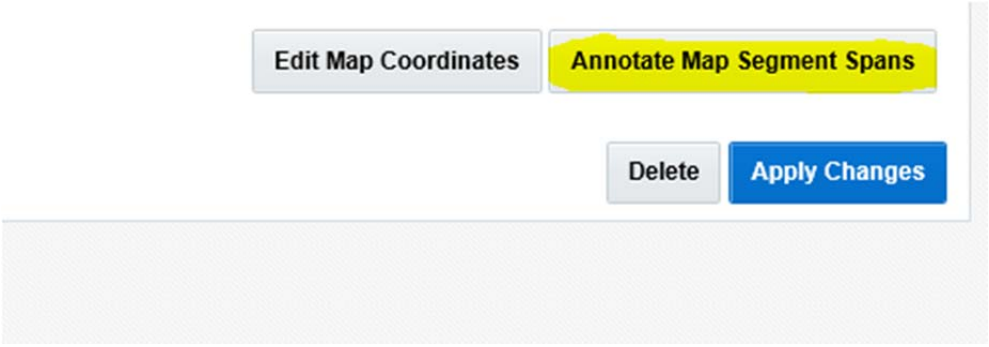


This becomes the anchor sequence that will be used to add new coordinates if you need to extend the line. If you click on the map, it will automatically add a coordinate after the max sequence. But, if you need to add a new point between 2 existing coordinates (points), then hover the mouse pointer over the point with the lowest sequence number of the 2 and the system changes the anchor point coordinate. Then, if you click on the map, a new point will be added to the segment between the anchor and the next one in the sequence chain. Also, you can move an existing coordinate by clicking and dragging the marker to a new location. When you release the mouse button the system replaces the lat/long coordinate for that sequence number. And, if you right click on a marker, that coordinate will be deleted. Think of the markers as “handles” that let you control the shape and length of the line (map segment).

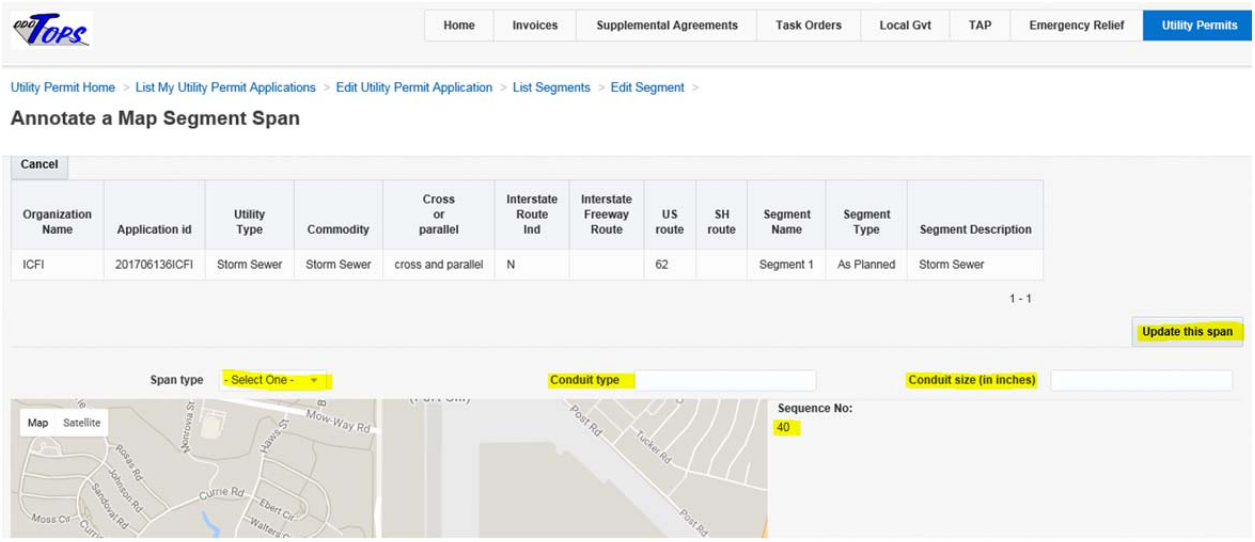
In order to make the system faster, the line will not be redrawn until you refresh the page (the map will be redrawn with the new line). This may be changed in the future to redraw each time a coordinate is saved, but for now you must refresh the map manually.

Map Segment Spans

This term refers to the individual pieces of the map segment. For example, a utility might parallel a road for a length, then turn and cross that road. For the piece that crosses the road, this "span" can be annotated to identify if it is overhead or underground. This function is not a required feature within the system, but can be used to provide a way to store more descriptive information about the utility.
To get to this data, use the Annotate button:

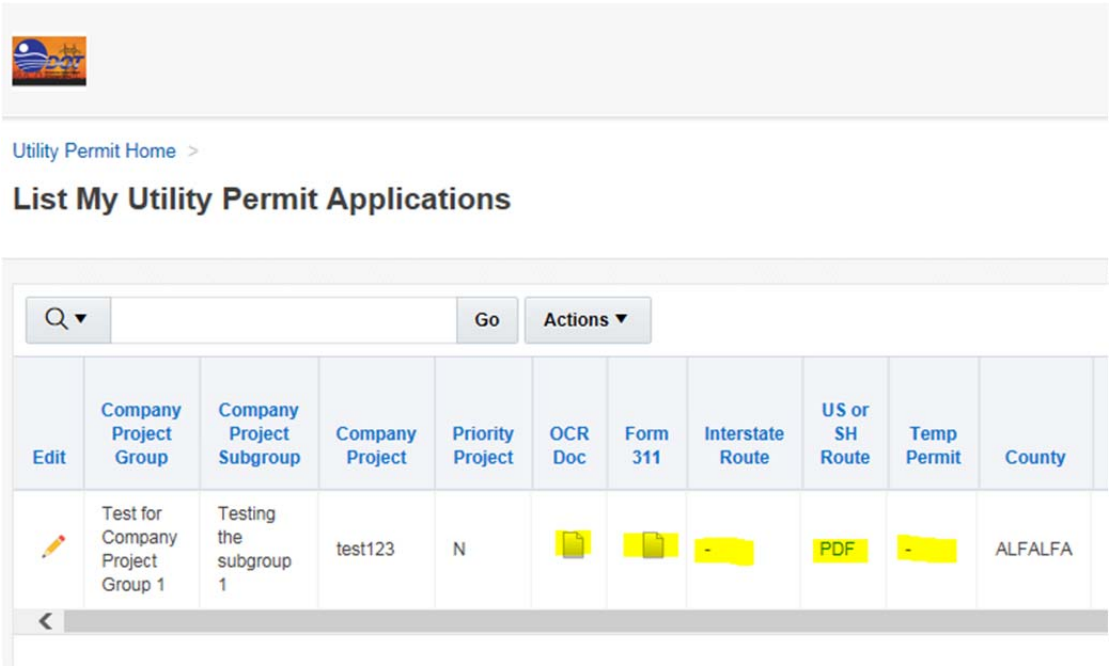


This brings up a page similar to the one that is used to edit the coordinates. But, the markers that show on the map are positioned on the central point of the span. This allows the user to make sure they are associating the data with the correct span. By hovering the mouse over the marker, the anchor point sequence no is identified. Then you can key the data into the text entry boxes and save the annotated data.



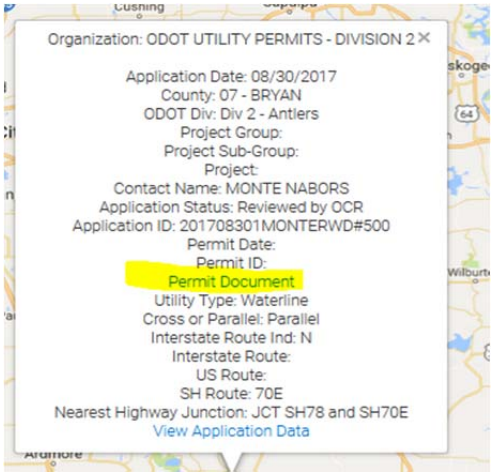
Printing My Permit (and other documents)

Documents are generated out of the data that is stored in the system. The actual Permit document, 311 Form, and Archeological document can be generated by clicking on links that exist on the list of application records:



When an application is approved, an email will be sent to the contact email address, and there is a link in that message that provides a way to open the pdf file. Either method can be used to obtain the document so you can print it to have it on-site when work is being done.

And, you can use the map interface to find the application record, and use the link in the infowindow to generate your document:



Searching for Records – How to find my permit

The ability to find specific records is one of the capabilities of the system that each user must understand. As noted above, when you go to the List My Applications page, all of the headings of the columns of data provide a way to filter and sort the data presented to the user. By simply clicking on the heading, you can control the record set that shows on the screen. Be aware that the application status field will identify where in the process your record is – the values and descriptions here should help you.

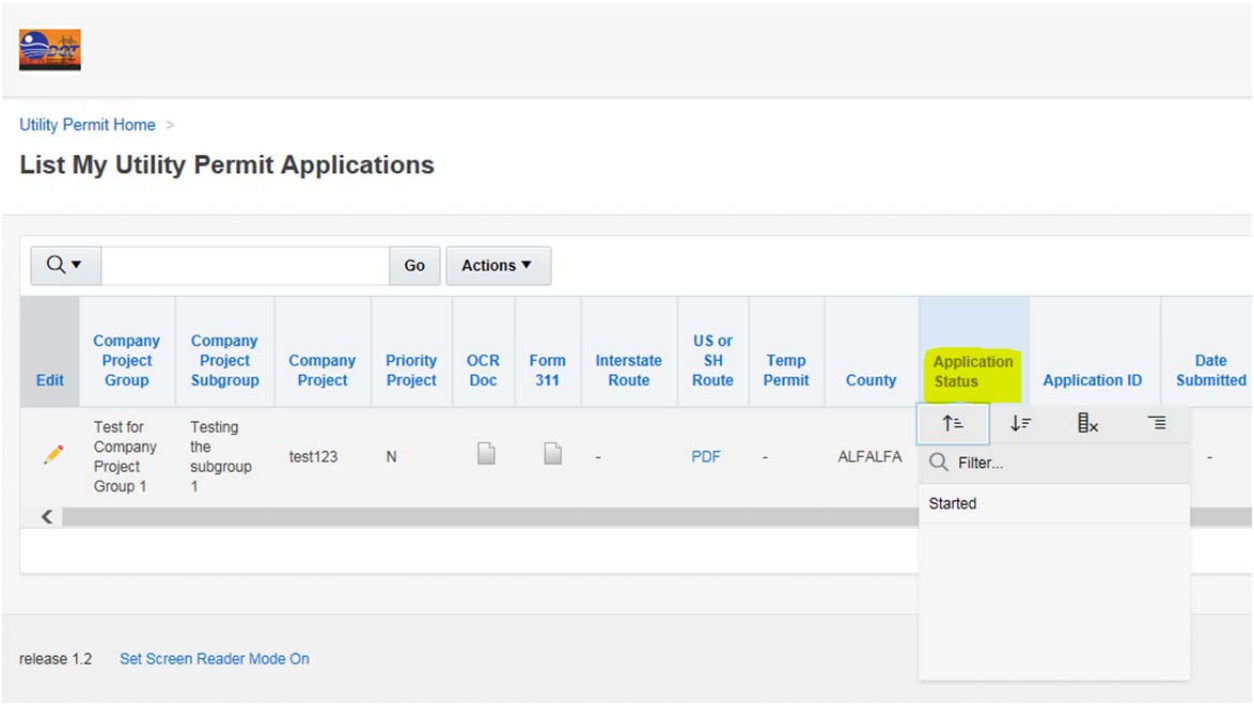
Application Status Value and Meaning:

Started – The user has started the application, but has not submitted it for consideration.
Submitted – The user has provided the minimum required data and OCR is reviewing the info.
Reviewed by OCR – OCR is finished with their review and ODOT personnel are working on the request.
Recommend to DE – The Utility Coordinator has recommended approval to the Division Engineer.
Approved – The application has been approved and you have a valid Permit.

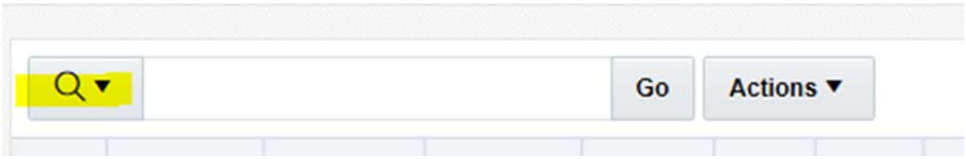
Returned by OCR – OCR personnel need additional info in order to review the request.
Returned by ODOT – ODOT personnel have returned the application for more info.

Deny – The request has been denied.
Cancel – The request has been cancelled.

By using the filter mechanism for the application status, you should be able to see where each request is in the process cycle.



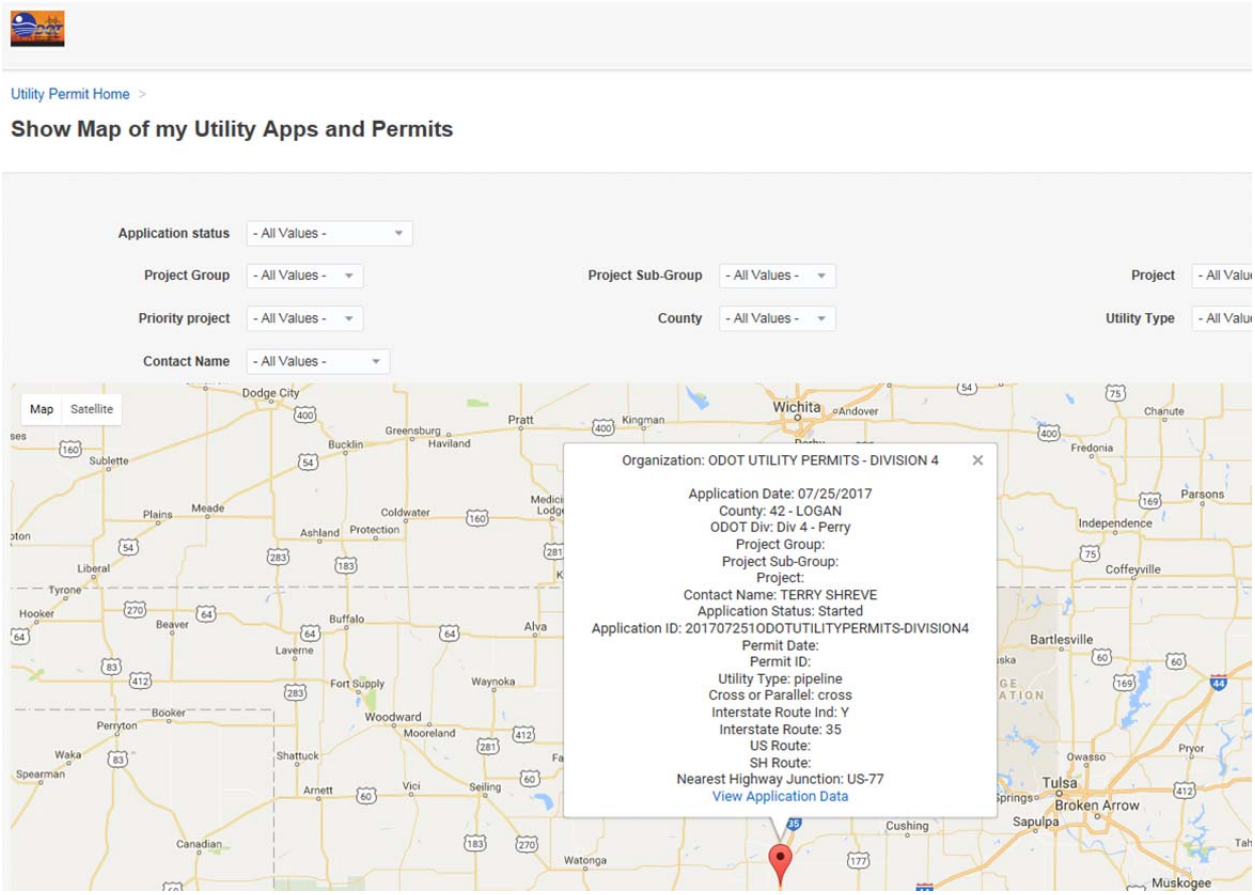
You can also use the search bar to select which column you want to search along with the value you are looking for. Then use the Go button to perform the query.



Simple Map Interface – Finding My Permit

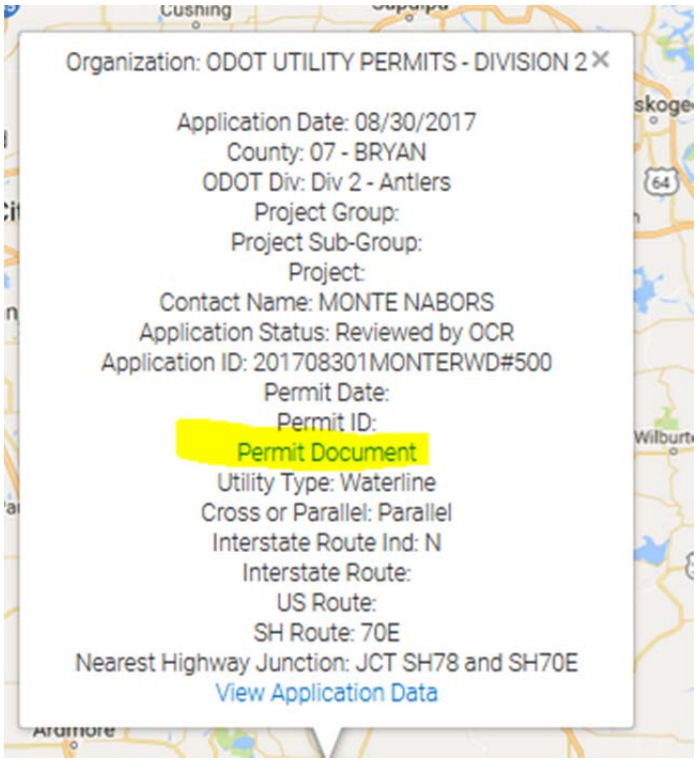
Being able to use a simple map interface to locate your records is another way that makes the user more effective with getting to the correct information. Since the system requires the user to create a "Central Coordinate" for the request, it provides a way to use that coordinate to display the presence of an application on a map. Use the Show Apps / Permits on Map option from your navigation menu to open a page that represents a state-wide view of your records. Each record is identified by a pin (marker). This map interface allows you to zoom in to a specific area and to also switch between a terrain map and satellite view.

If you click on a marker, an infowindow will open that shows you some of the information about the request. And, there is a link at the bottom of the infowindow that you can click on to open the application record – which provides you a way to get to the attachments as well as all of the data pertaining to your request.



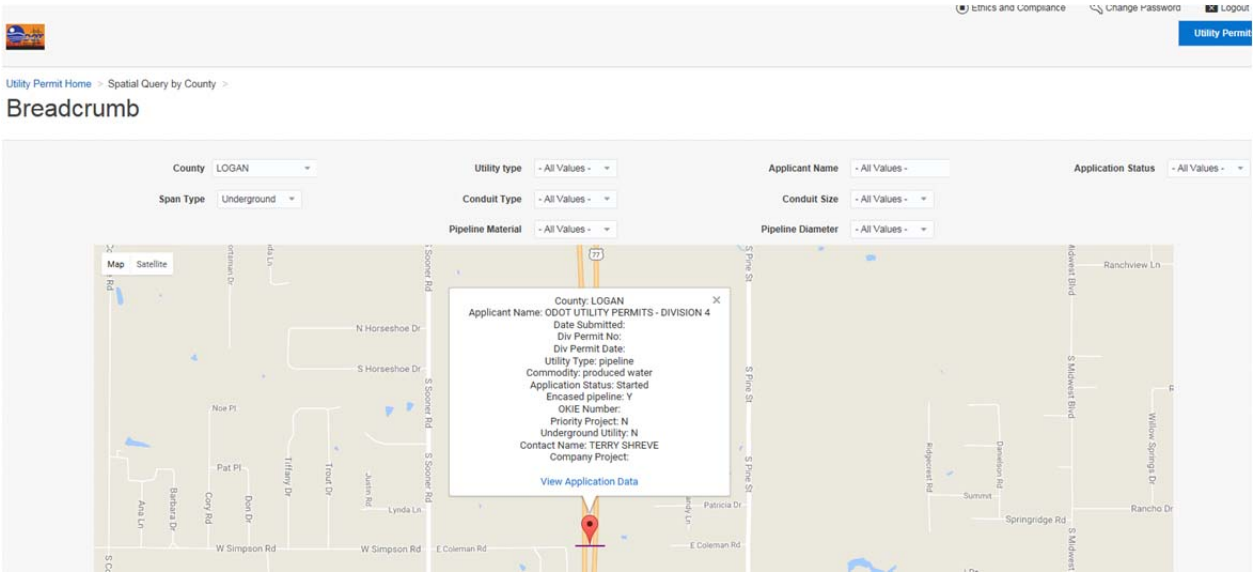
Also, there are filter data items that you can use at the top of the map that help to narrow your search. Simply click on the drop-down list to select the value for that specific data item and the map will automatically refresh.

You can also use the map interface to generate the permit document. Simply click on the link in the infowindow:



Spatial Query – Finding records in a county

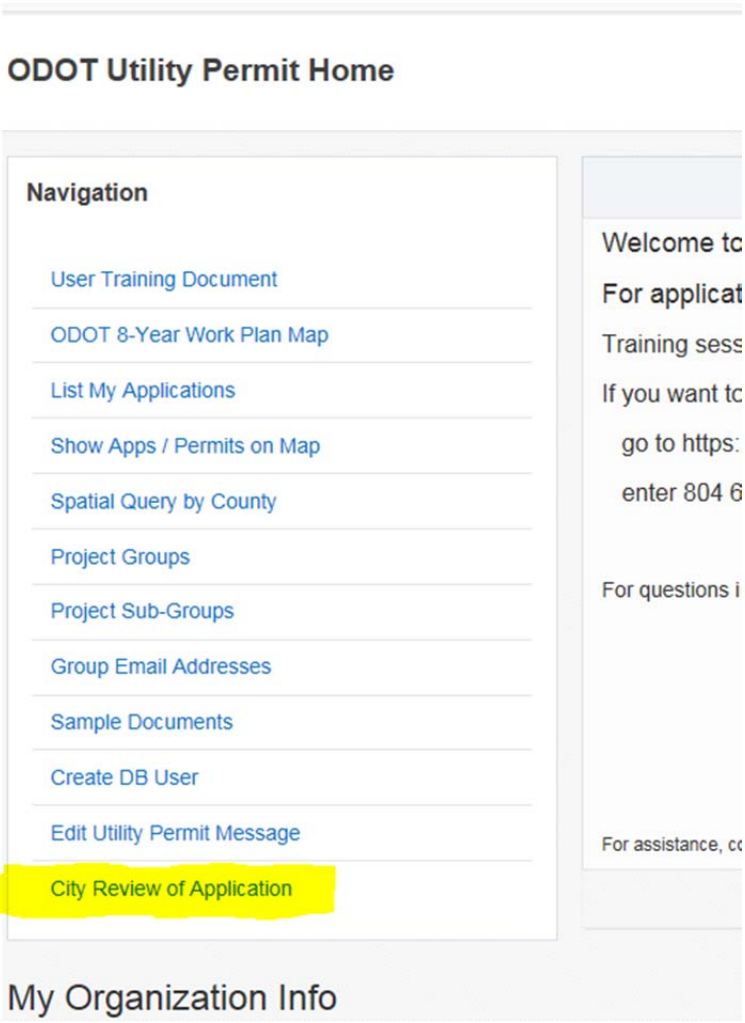
This map query is useful for looking at the records after you have gone through the step of annotation for the segment spans. The top portion of the page has a number of drop-down lists that can be used to select values of data for the query. Simply click on the list and select one of the values, and the map will be redrawn automatically. It allows an organization to track pipeline sizes, conduit sizes, and other data items that keep track of the assets they are placing. The link from the main navigation page will bring up a page that resembles this image:



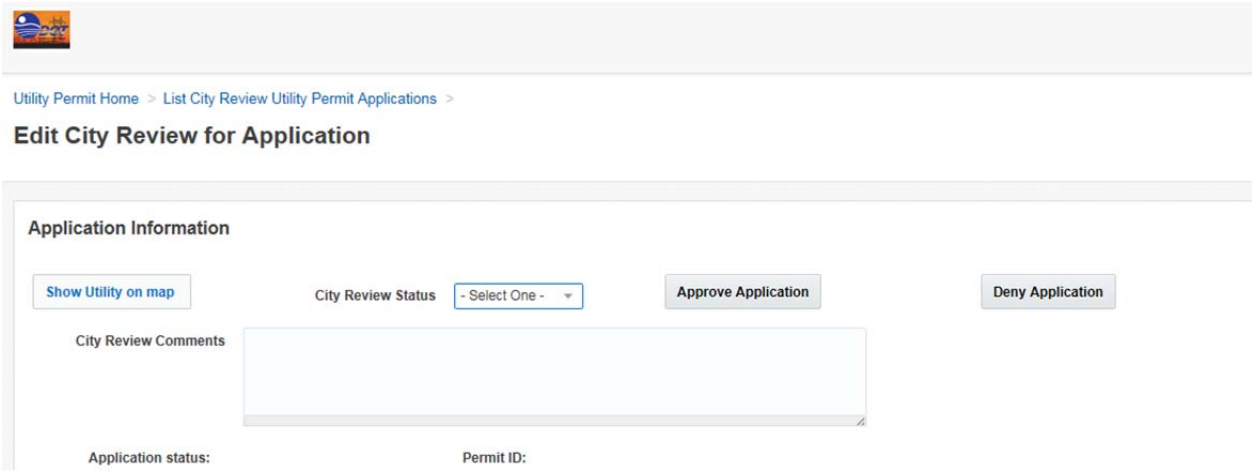
The map marker is active like other maps – simply click on the marker to open an infowindow that shows information about the record. And, the link at the bottom of the infowindow will take you to the record so you can see the detail information and attachments.

City Review of Permit Applications

Certain cities in the state review applications prior to them being approved. The system supports this requirement by allowing the Utility Coordinator to assign an application record to a city. Once that is done, an authorized user working for that city can log in and review the information for the request. The link to get to this review page is accessed from the navigation menu:



Click on that link to bring up a list of application records that have been assigned to your city. Use the edit icon (left end of the record) to open the page where you can enter comments and indicate if you are going to Approve or Deny the application from the City's perspective. Simply enter your comments that let ODOT know information that needs to be communicated, and then click on the button to either Approve or Deny the request.



When you click the button, an email will be sent to the ODOT Utility Coordinator for the division to let them know that you have reviewed the application.