



Bureau of Engineering

# GEOCODER AND SDRF MODULE TRAINING

Los Angeles Bureau of Engineering

Version 2 .0  
2/6/2019

# Contents

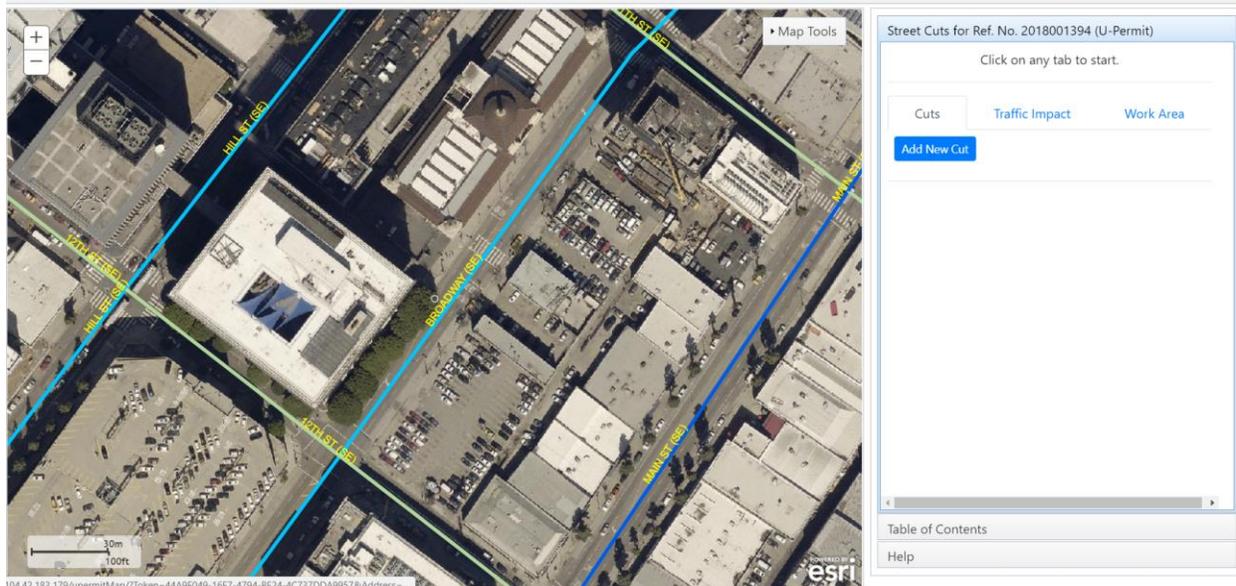
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## Overview

This training is for the new Geocoder interface that will launch from within the existing Online Excavation U-Permit Application System and be available starting December 6th, 2018, the same date the newly adopted *Establishment of a Street Damage Restoration Fee (SDRF) Ordinance* goes into effect. The purpose of the Geocoder Training Session will be to inform attendees about the changes to the Online Excavation U-Permit Application System and how to use the new Geocoder interface for various job applications. It is important to note that any person, corporation or agency, including any Department, Bureau, or Agency of the City of Los Angeles or any other governmental agency or authority required to obtain a permit to excavate in a public street or alley under Sections 62.02, 62.04, 62.105 or 64.17 of this Code must pay a Street Damage Restoration Fee (SDRF) at the time of obtaining the permit."

## Geocoder and SRDF Module Interface

### Landing Page



Top Line: Shows Reference Number for Permit

Horizontal Tabs: How you add data

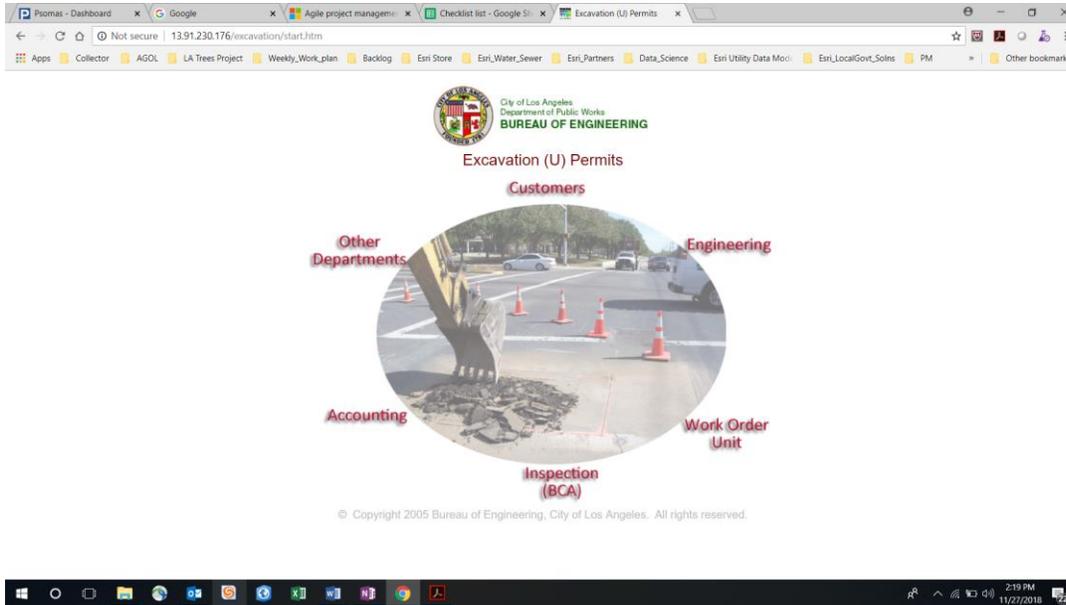
1. Cuts Tab – add cut to street
2. Traffic Impacts Tab – add traffic lane closures
3. Work Area Tab – add area for lay down, staging

## Vertical Tabs: How you find layers and help

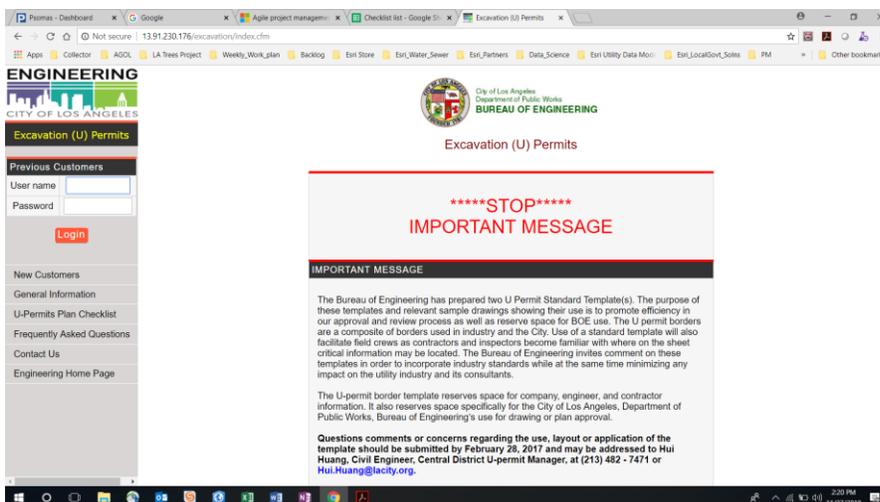
1. Start Tab
2. Table of Contents Tab – Add data to you map
3. Help Tab – Tutorial, Help content

## Launching from the existing U-Permit Application

Starting at the U-Permit Permit Page Click on **Customers** and Log in.



Type in User Name and Password Provided by Instructor.



Click on **Apply For A Permit** and fill in Required Filed with Made Up Data. (Note: All Data Will be Deleted after Class). For the Job Address type in 600 W 9th St, Los Angeles, CA 90015, once all the required fields are filled out click **Submit Application**. The Following Screen will be displayed. Click on **Permit Cuts** to add cuts.

Application Reference Number: 2018000070

Application Status: Received

Record ID	Initial Status	Current Status	Comments
1	Received As of 11/27/2018 2:32 PM		

**THIS IS NOT A PERMIT**  
The following information is for permit with Ref. No. 2018000070  
Submitted on: 11/27/2018

APPLICANT  
**DWP-Water, Central District**

ADDRESS  
**433 E. Temple St.**

CITY ZIP TELEPHONE  
**Los Angeles 90012 213 367-6794**

REQUEST PREPARED BY TELEPHONE  
**me 9513002825**

ALL WORK MUST BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION & SUPPLEMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, THE LATEST REVISION OF THE BROWN BOOK, AND THE WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH MANUAL).

FOR THE PURPOSE OF:  
**Permit Cuts:**

No.	L x W x D (ft)	On Street	Cross Street	SDRF Sq Ft	SDRF Fee	Surface	Backfill

IS THIS WORK RELATED TO A CITY NOTICE OF PROPOSED IMPROVEMENT? **No**

IS STREET NOW UNDER CONSTRUCTION? **No**

ITEM	QUANTITY	UNIT	RATE	FEE \$
PERMIT	0		\$0.00	\$0.00
ENGR.	0		\$0.00	\$0.00
INSPECTION	0		\$0.00	\$0.00
SURCHARGE	0		\$0.00	\$0.00
TOTAL FEE				\$0.00

**INSPECTION REPORT**

CONTRACTOR	
JOB START (P/A*)	12/01/2018
TEMPORARY RESURFACING COMPLETE	
JOB COMPLETE (P/A*)	01/02/2019
APPROVED BY INSPECTOR	
DATE	
INSPECTION REMARKS:	

VALIDATION

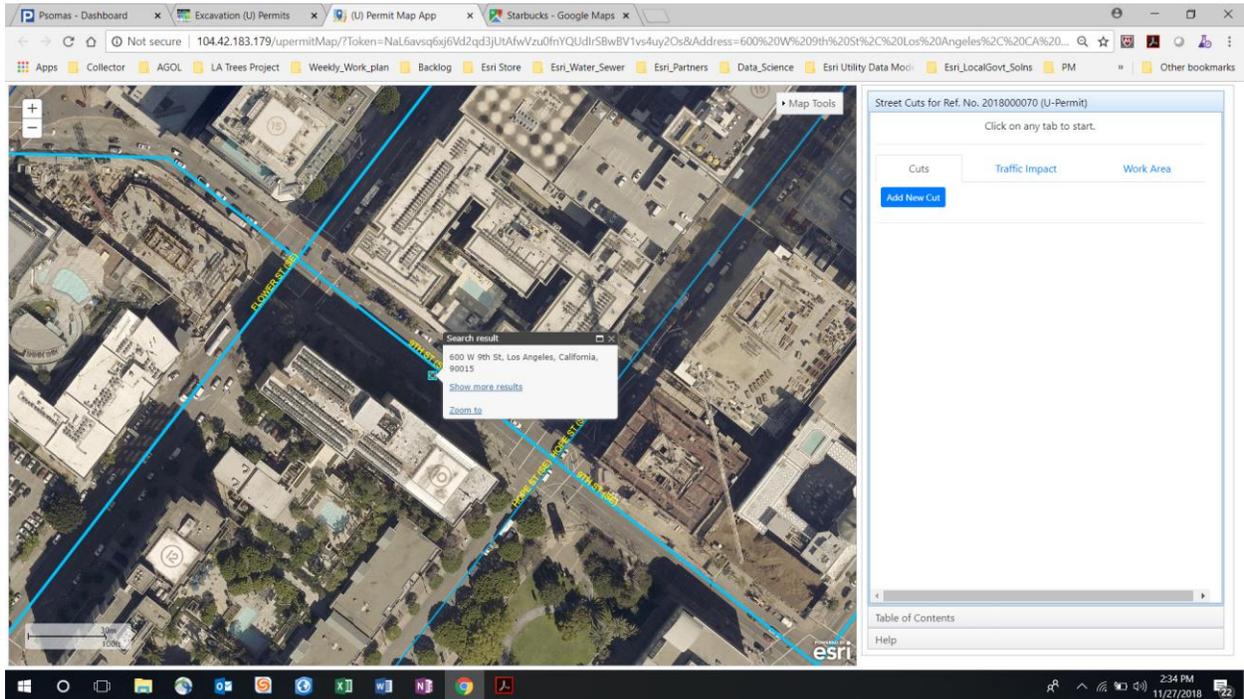
JOB ADDRESS

Once you click Permit Cuts the Following Screen Appears. Click on **Add Cuts(s)**

**Add Cut(s)**

No cuts were added to this permit, please use the "Add Cut(s)" option.

Once the Click on **Add Cut(s)**. This will launch the New Geocoder Application. You should see the following page. Note it takes you to the Job Address.



## Scenario 1) Adding Cuts to a Simple Street

In this exercise you will add simple cuts on the north side of 9th street between Flower and Hope. You will use the auto placement feature to place a parallel and perpendicular cut in the required location. Note: The centerline and cross street selection determines the area the cut is placed. The instructor will cover this in class.

### Auto Placement of a Parallel Cut

Click on **Add New Cuts** and enter the cut details as shown below.

Street Cuts for Ref. No. 2018001394 (U-Permit)

Add details for the cut.

Cuts

Ref No : 2018001394

Cut length : 18.0

Cut width : 2.0

Cut depth : 10.0

Centerline offset : 5.0

Cross street offset : 20.0

Surface Type : Street Asphalt Concre

Backfill Type : None Selected

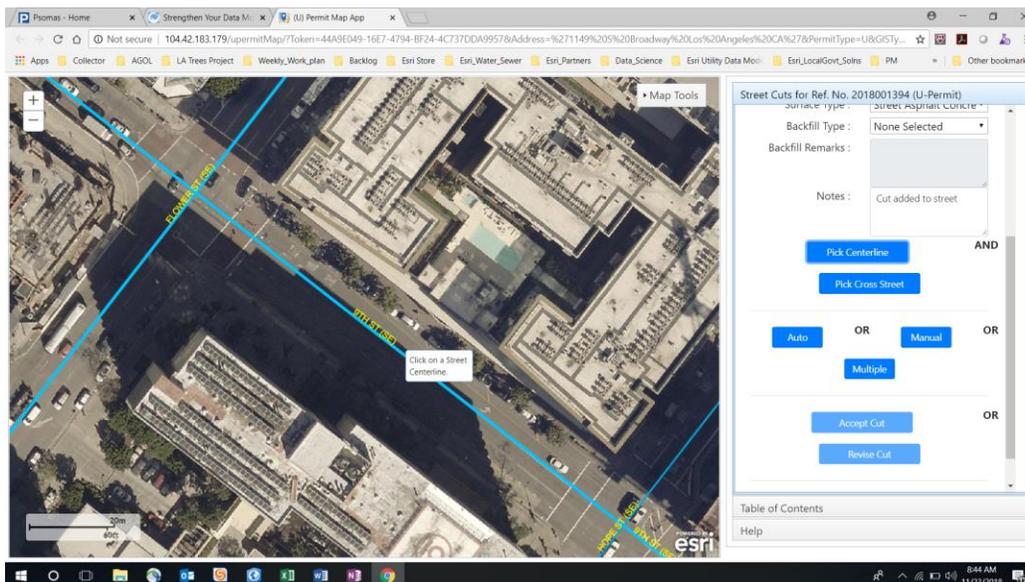
Backfill Remarks :

Notes : Cut added to street

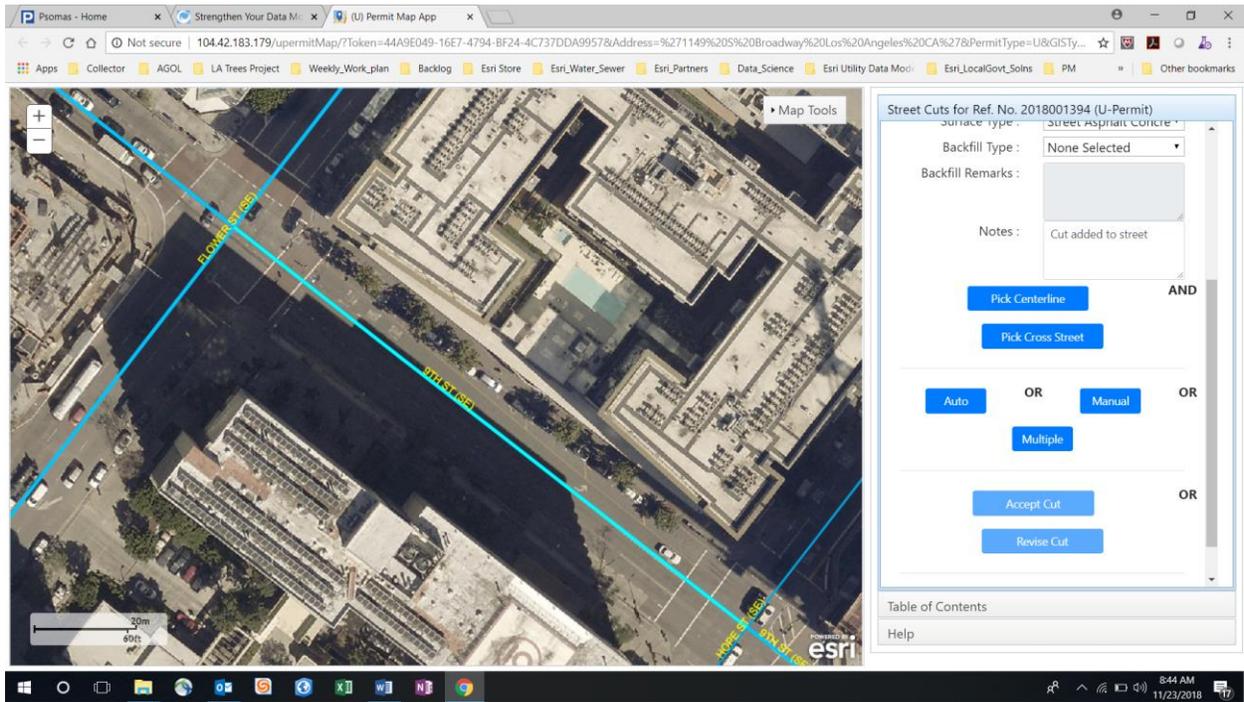
Picking the Centerline and Cross Street for the cut:

Pick Centerline AND Pick Cross Street

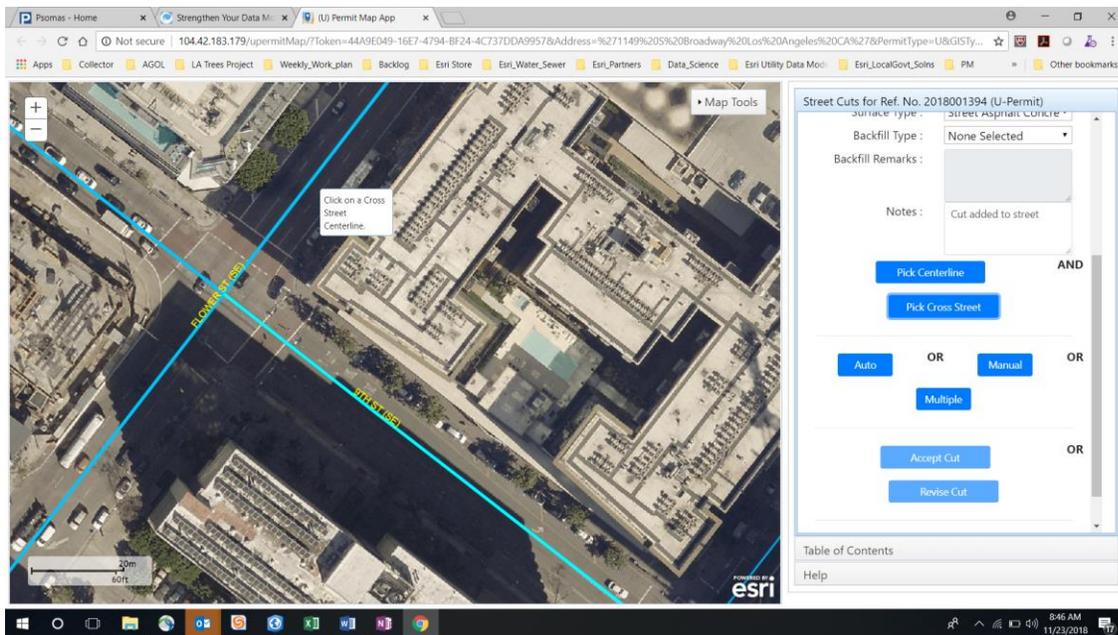
Click on **Pick Centerline** Button and then click near the 9<sup>th</sup> street.



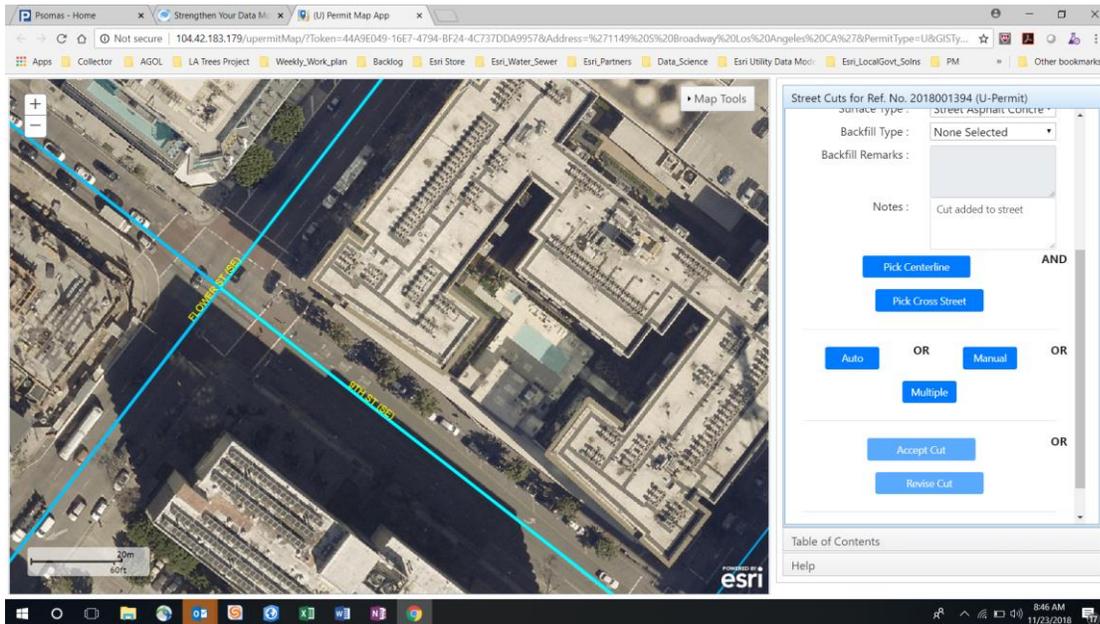
9<sup>th</sup> street will be highlighted when its picked



Click on **Pick Cross Street** Button and then select



## Both the Centerline and Cross Street are Highlighted

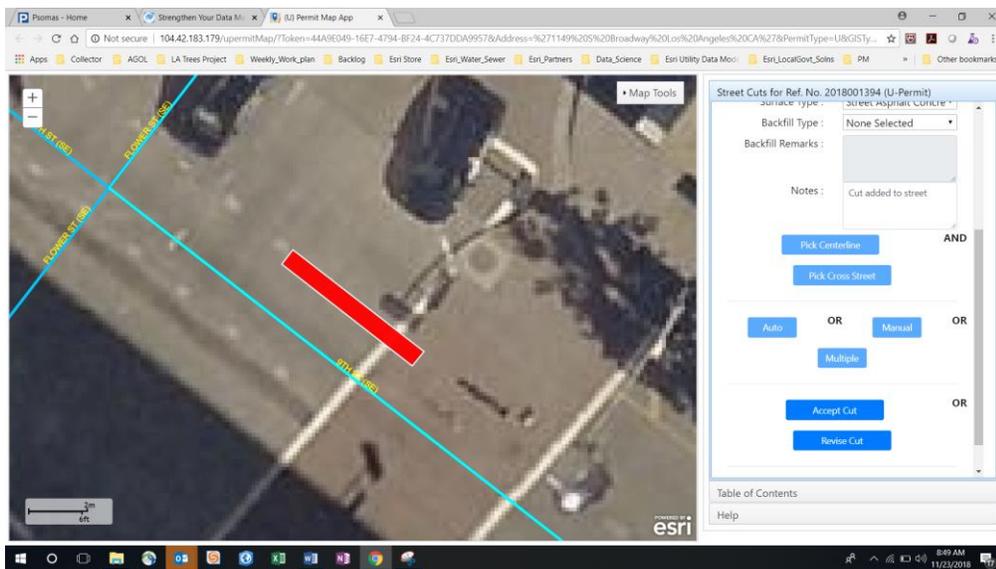


Now that you have the centerline and cross streets selected you will auto place the cut by clicking on the **Auto** Button

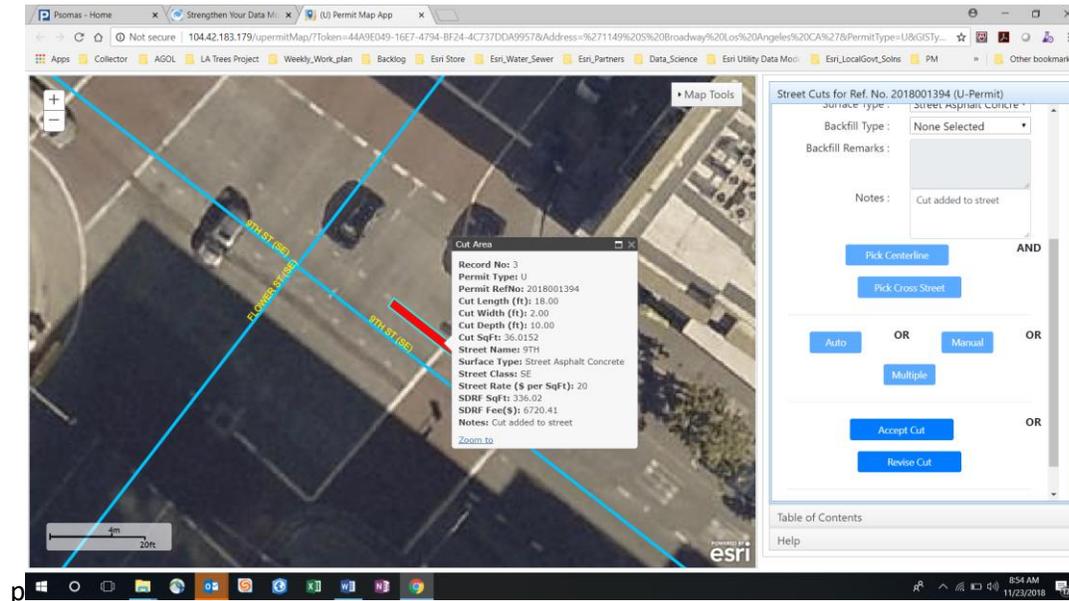


Click on Auto button

**Auto Placement Results:** Cut placed in correct location



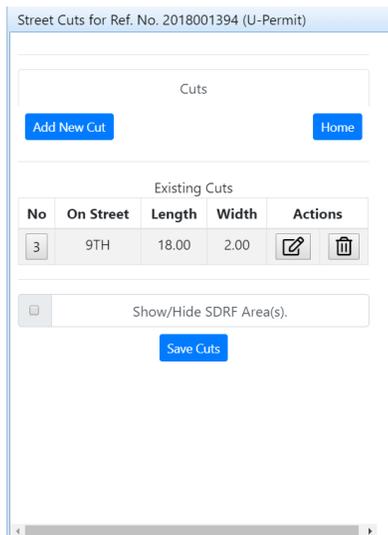
Click on Cut to see Details stored with cut



Click **Accept Cut Button** to accept



The Below tab appears in the right pane. We still need to add the perpendicular cut so click on Add New Cut button



## Auto Placement of a Perpendicular Cut

You are back to the **Add Details for the Cut** Tab. Input the below cut details. To make a perpendicular cut you make the Length less than the Width.

Street Cuts for Ref. No. 2018001394 (U-Permit)

Clicked on the street : FLOWER (2014900)

Cuts

Ref No : 2018001394

Cut length : 2.0

Cut width : 18.0

Cut depth : 10.00

Centerline offset : 5

Cross street offset : 50.0

Surface Type : Street Asphalt Concre

Backfill Type : None Selected

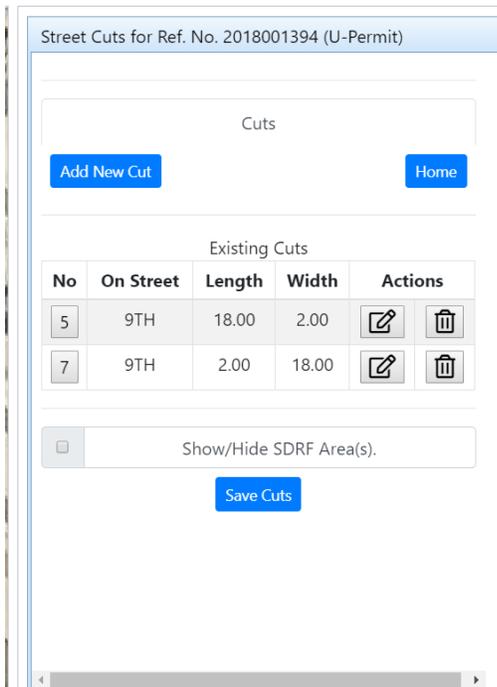
Backfill Remarks :

Notes : Cut added to street perpendicular

Select the centerline and cross street as the last exercise. Click on **Auto**

The screenshot shows the ESRI Permit Map App interface. On the left, an aerial map displays a street intersection with a red line representing a cut and a blue line representing the centerline. On the right, the 'Street Cuts for Ref. No. 2018001394 (U-Permit)' sidebar is visible. The sidebar contains the same form as shown in the previous image, but with the 'Notes' field containing 'Perpendicular Cut'. Below the form, there are several buttons: 'Pick Centerline', 'Pick Cross Street', 'Auto', 'Manual', 'Multiple', 'Accept Cut', and 'Reviso Cut'. The 'Auto' button is highlighted, indicating it has been selected.

Click **Accept Cut**. The accepted cuts appear in the table as shown below



## Manual Placement of a Cut

You have to add a cut that will be manually placed and rotated counter clockwise by 45 degrees

Click on **Add New Cuts** and enter the data below for *Add details for the cut*

Street Cuts for Ref. No. 2018001394 (U-Permit)

Clicked on the street : FLOWER (2014900)

Cuts

Ref No : 2018001394

Cut length : 10.0

Cut width : 2.0

Cut depth : 10.0

Centerline offset : 5.0

Cross street offset : 100.0

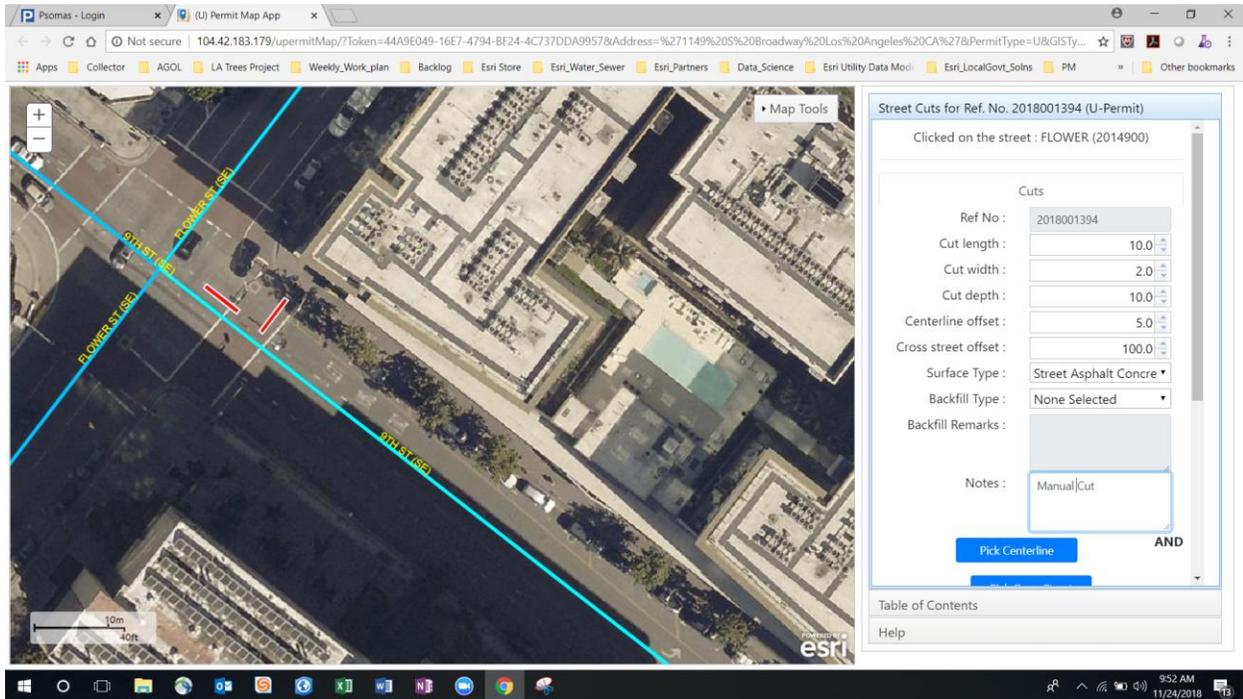
Surface Type : Street Asphalt Concre

Backfill Type : None Selected

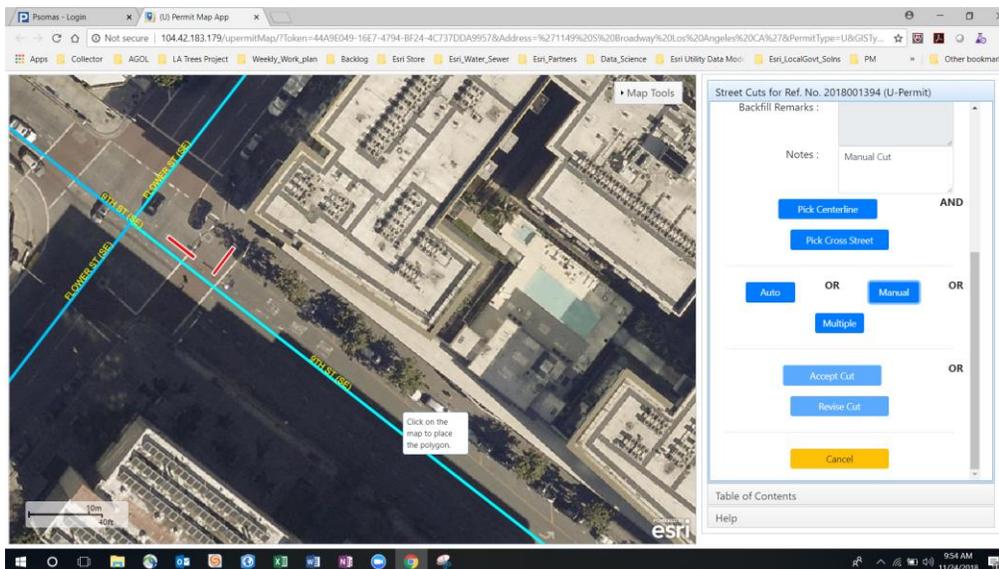
Backfill Remarks :

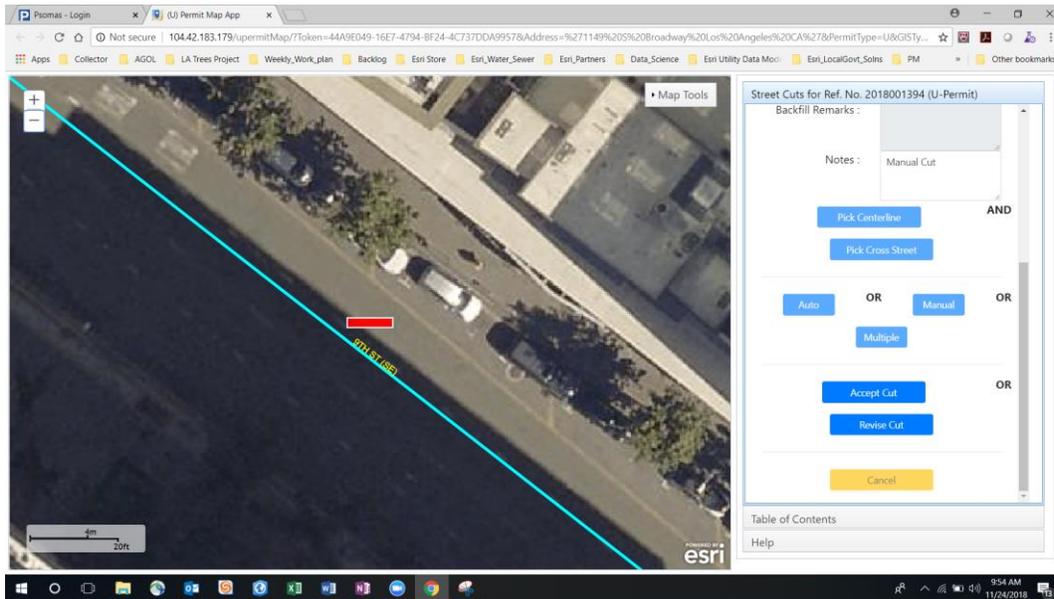
Notes : Manual|Cut

Select the centerline and cross street as before



Click Manual button





Select Revise Cut



The following table will appear

Street Cuts for Ref. No. 2018001394 (U-Permit)

Click on the cut to move or rotate.

Cuts	
Ref No :	2018001394
Cut depth :	10.0
Surface Type :	Street Asphalt Concre
Backfill Type :	None Selected
Backfill Remarks :	
Notes :	Manual Cut
Rotation Angle :	0.00

Hide Guides

View Changes Save Cancel

Type in -45 in Rotation Angle Text Box and select the cut, click View Changes. The View Changes button allows you to view the change prior to saving.

Street Cuts for Ref. No. 2018001394 (U-Permit)

Click on the cut to move or rotate.

Cuts

Ref No : 2018001394

Cut depth : 10

Surface Type : Street Asphalt Concre

Backfill Type : None Selected

Backfill Remarks :

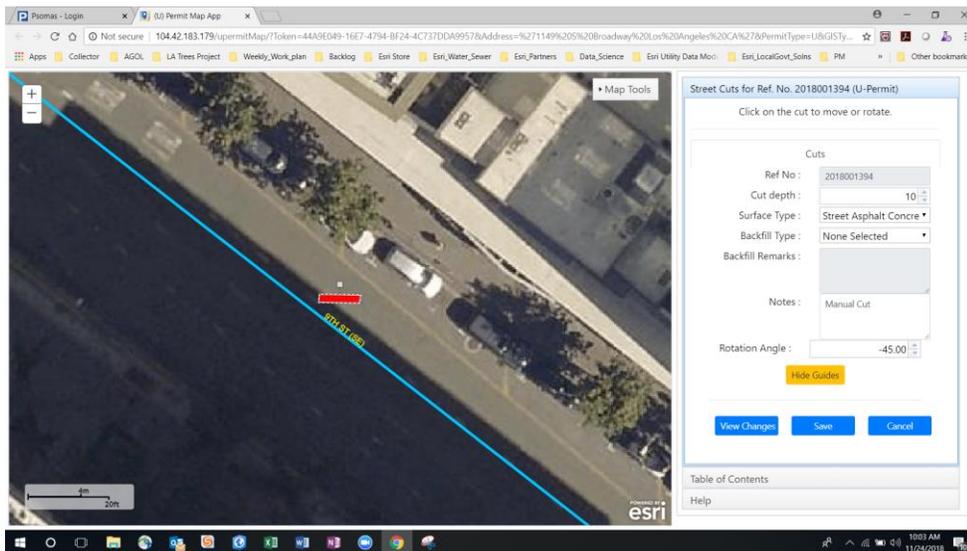
Notes : Manual Cut

Rotation Angle : -45.00

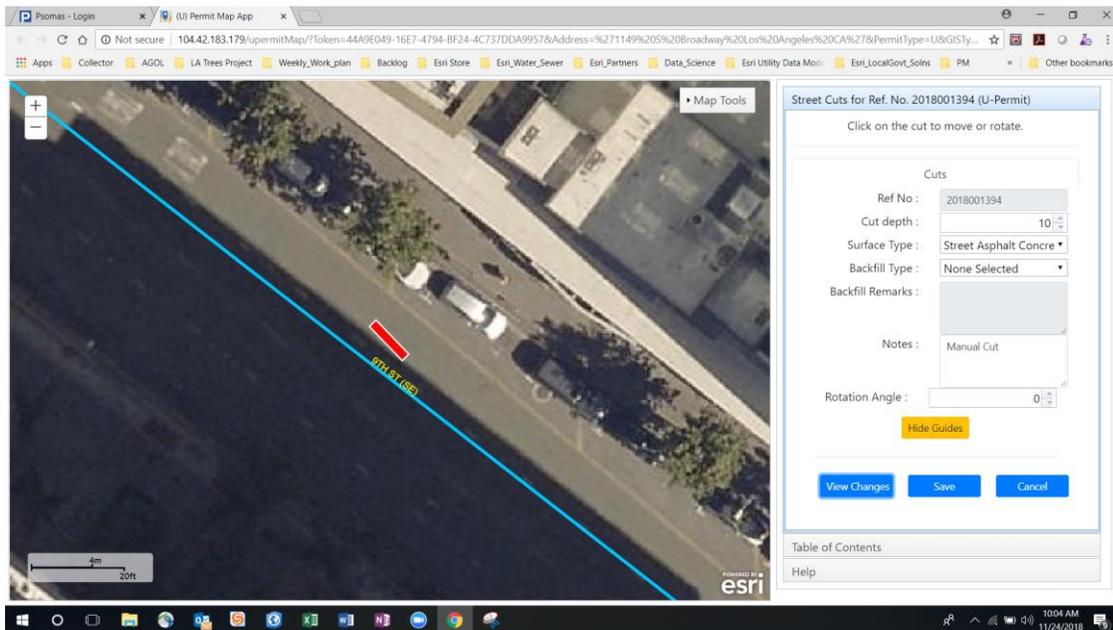
Hide Guides

View Changes Save Cancel

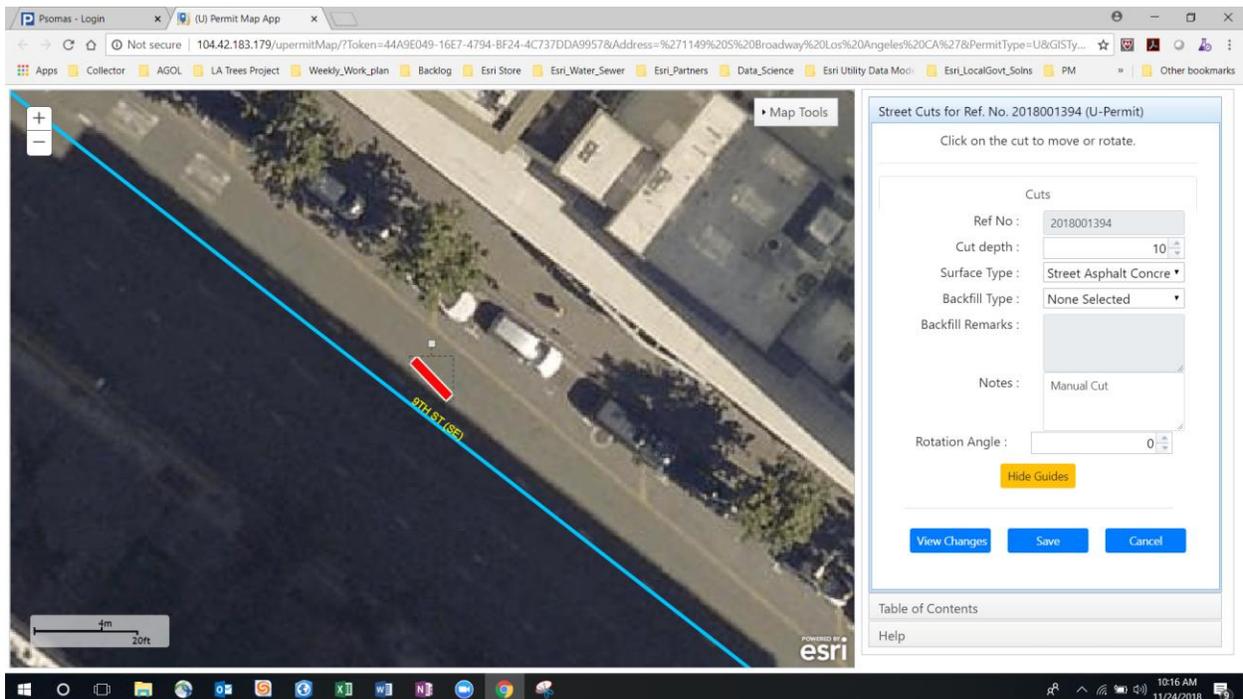
Select the cut & rotated by -45 degrees by type -45 in the Rotation Angle Test Box and click **View Changes**



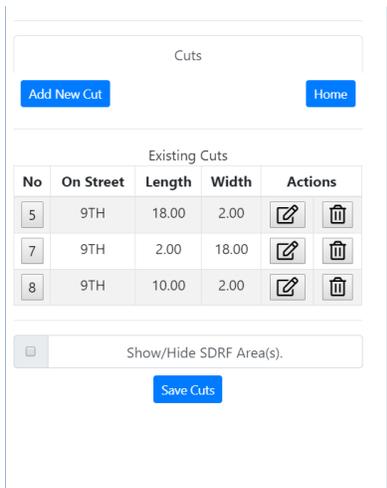
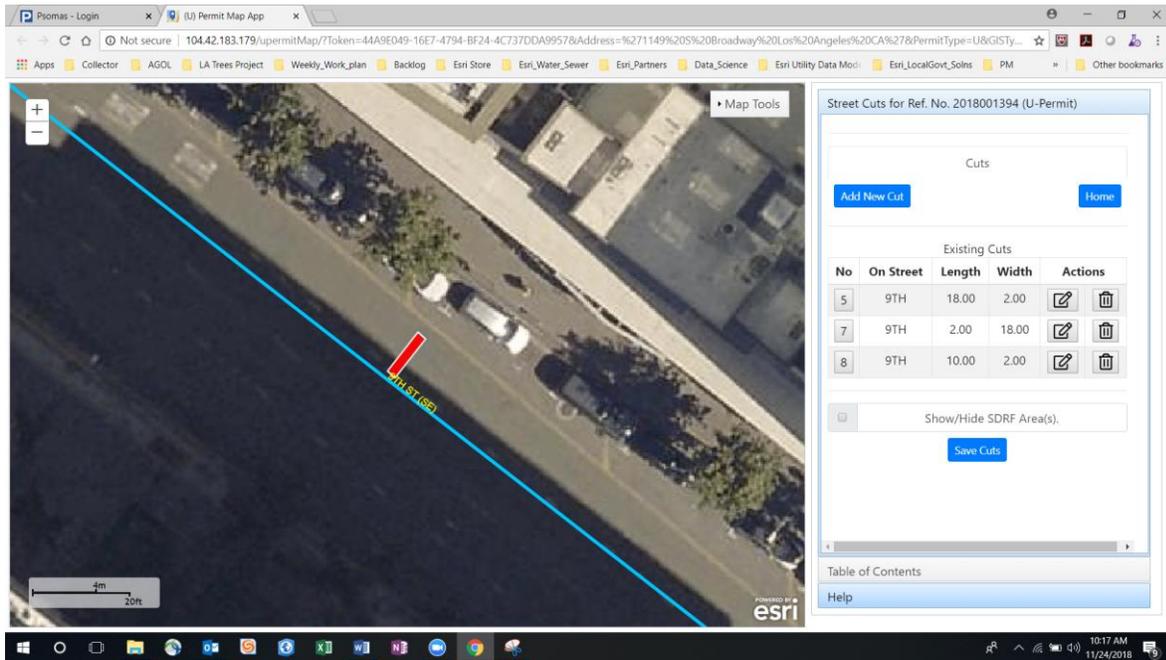
The cut is rotated by -45 degrees



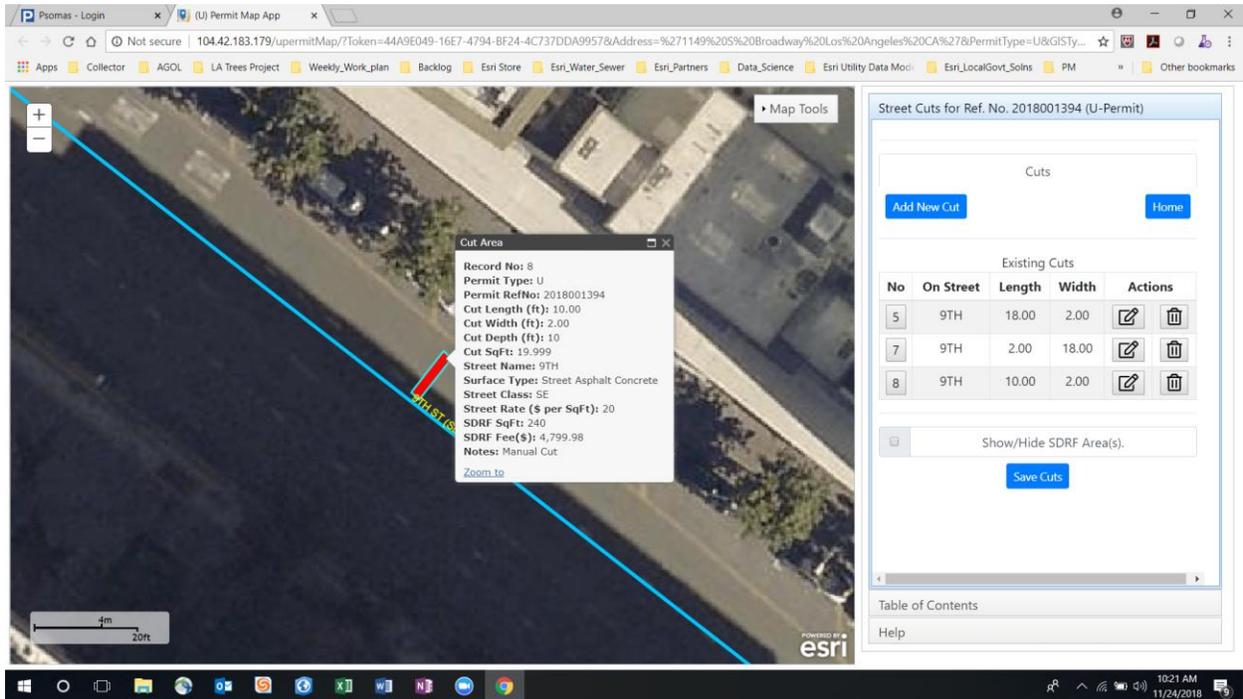
The Cut angle is not correct. You can rotate the cut by selecting the cut and using the cursor to rotate. Play around with rotating the cut. When you are done click save. See below for example.



After click Save the following cut table appears on the right will all the cuts



View the cut attributes by right clicking on the cut



View the SDRF Area by clicking the check box next to Show/Hide SDRF Area

Street Cuts for Ref. No. 2018001394 (U-Permit)

Cuts

[Add New Cut](#) [Home](#)

Existing Cuts

No	On Street	Length	Width	Actions
5	9TH	18.00	2.00	
7	9TH	2.00	18.00	
8	9TH	10.00	2.00	

Show/Hide SDRF Area(s).

[Save Cuts](#)

The SDRF Areas for each cut are shown as below.

Street Cuts for Ref. No. 2018001394 (U-Permit)

Cuts

[Add New Cut](#) [Home](#)

Existing Cuts

No	On Street	Length	Width	Actions
5	9TH	18.00	2.00	
7	9TH	2.00	18.00	
8	9TH	10.00	2.00	

Show/Hide SDRF Area(s).

[Save Cuts](#)

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Help

## Revise A Cut

You need to revise Cut no 5. Click on the **Revise** icon under the Actions column

### Revise Button:



Cuts

[Add New Cut](#) [Home](#)

Existing Cuts

No	On Street	Length	Width	Actions
5	9TH	18.00	2.00	
7	9TH	2.00	18.00	
8	9TH	10.00	2.00	

Show/Hide SDRF Area(s).

[Save Cuts](#)

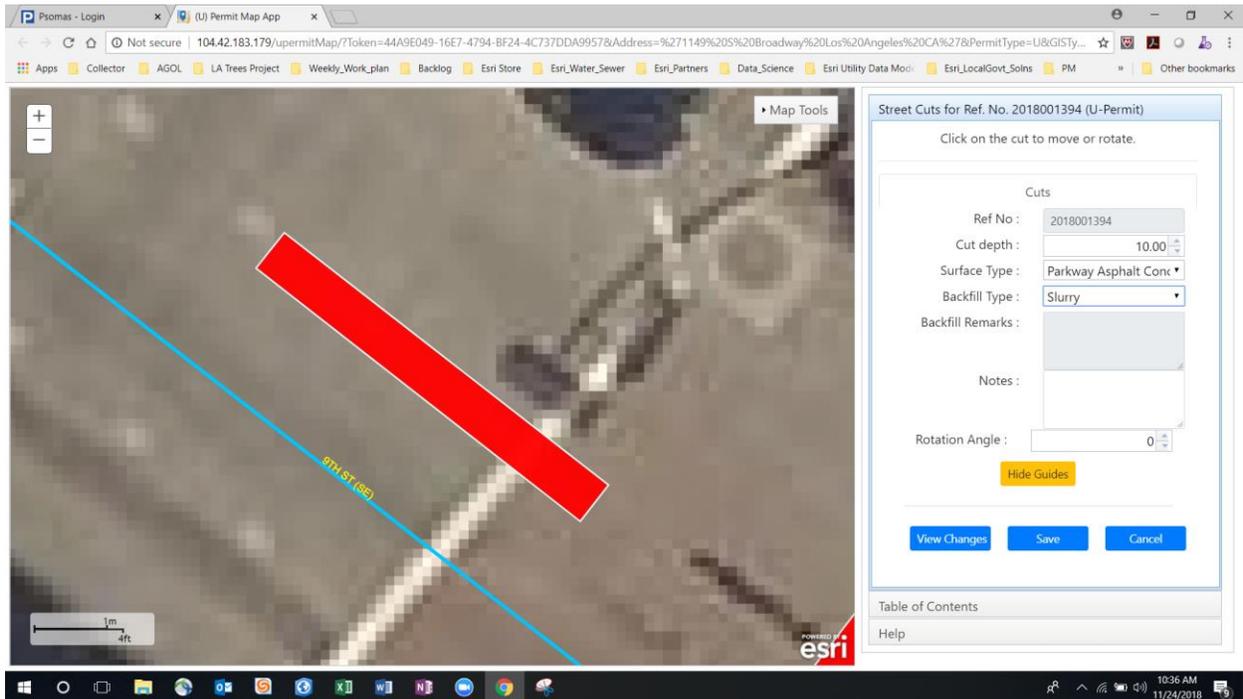
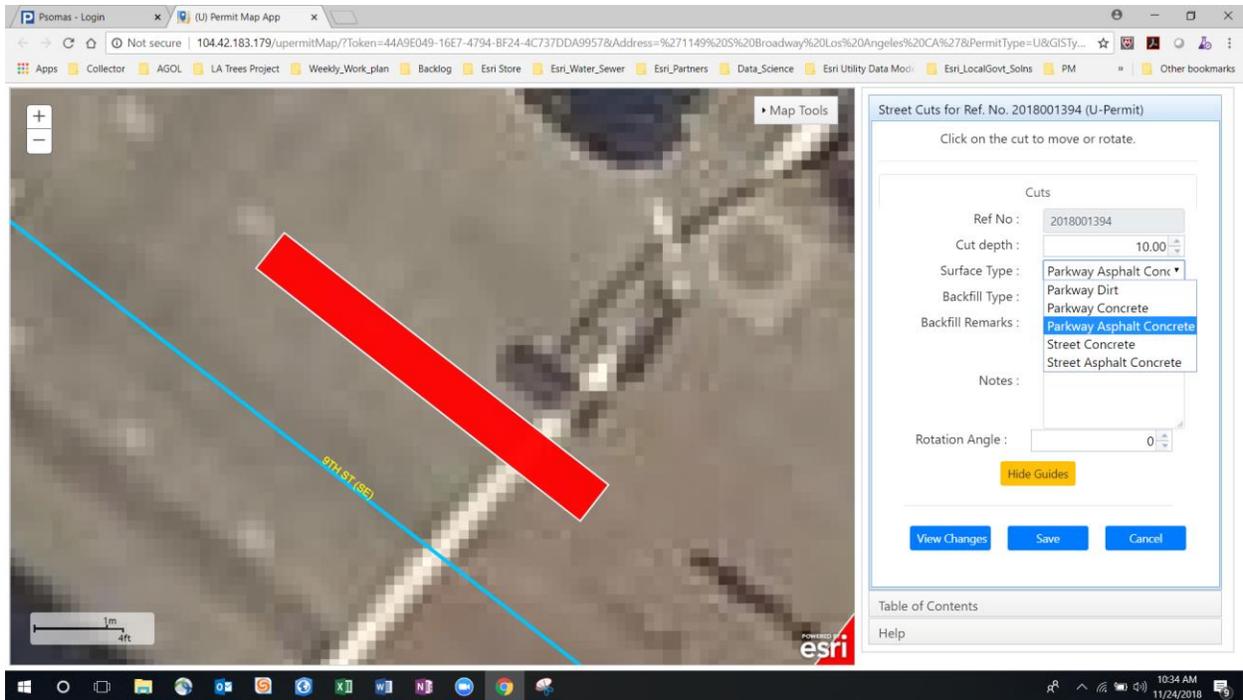
After you click the revise button the following screen appears. The system zooms to the cut 5.

The screenshot shows a web browser window with the URL `104.42.183.179/upermitMap/?Token=44A9E049-16E7-4794-BF24-4C73DDA9957&Address=%271149%20S%20Broadway%20Los%20Angeles%20CA%27&PermitType=U&GISSty...`. The main map area shows a satellite view with a red rectangular cut line and a blue line labeled "9TH ST (SB)". A configuration panel titled "Street Cuts for Ref. No. 2018001394 (U-Permit)" is open on the right. The panel contains the following fields:

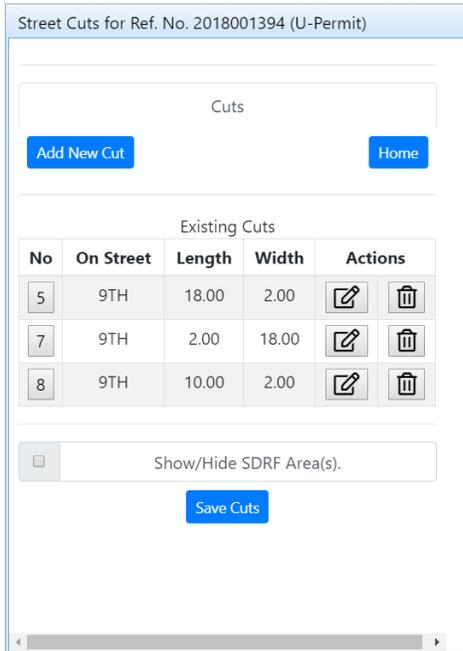
- Ref No: 2018001394
- Cut depth: 10.00
- Surface Type: Street Asphalt Concre
- Backfill Type: None Selected
- Backfill Remarks:
- Notes: Parallel Cut
- Rotation Angle: 0

Buttons at the bottom of the panel include "View Changes", "Save", "Cancel", and "Hide Guides". The bottom of the screen shows a Windows taskbar with the time 10:33 AM on 11/24/2018.

Change the Surface Type to Parkway Asphalt Concrete. The Backfill type will automatically default to Slurry



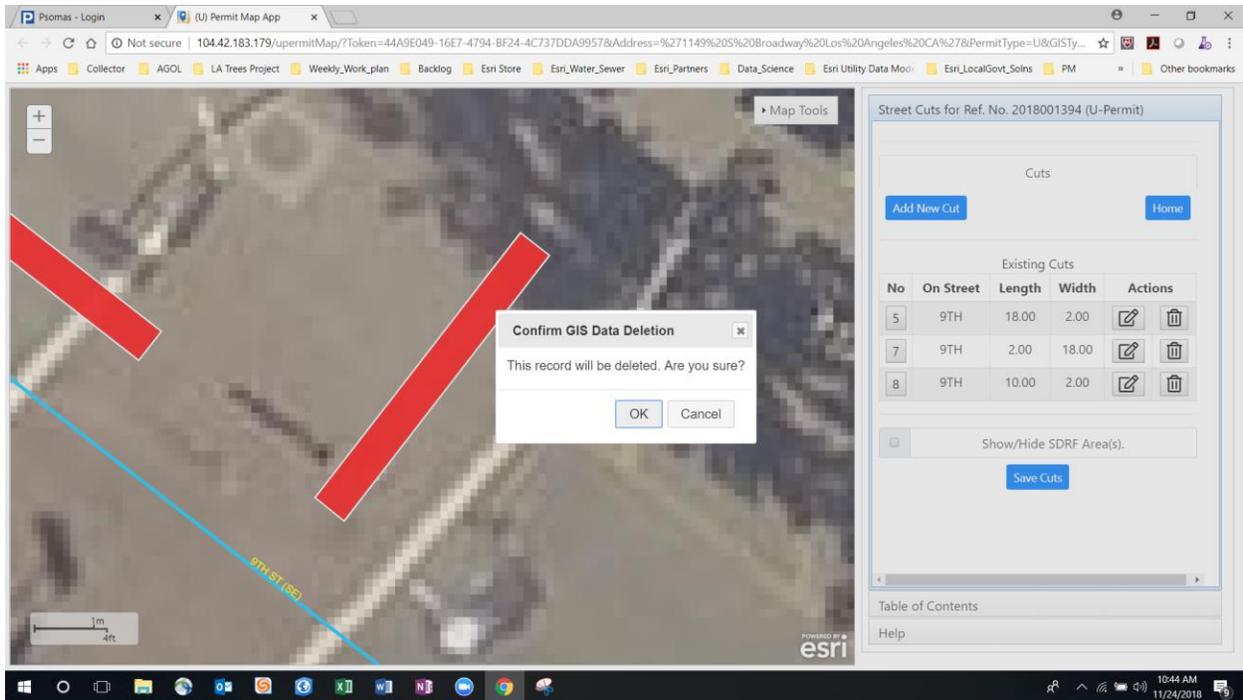
Click Save. You go back to the following right screen.



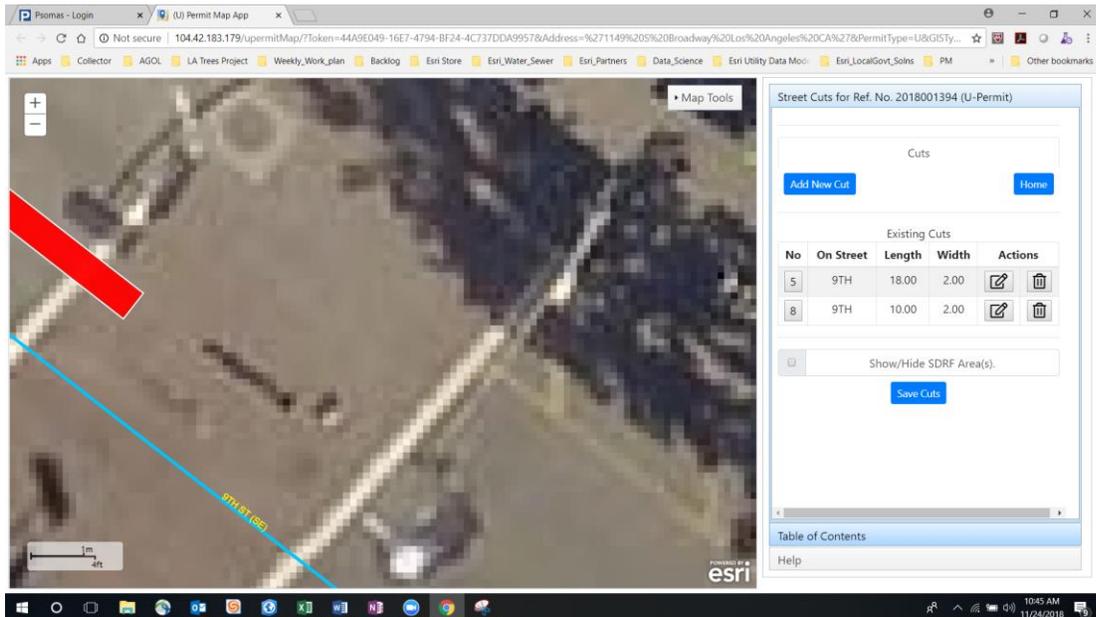
### How to Revise Cut Dimensions

You made a mistake on cut 7. The with should be 15 feet not 18 feet. To make the correction you need to delete the cut and add a new one.

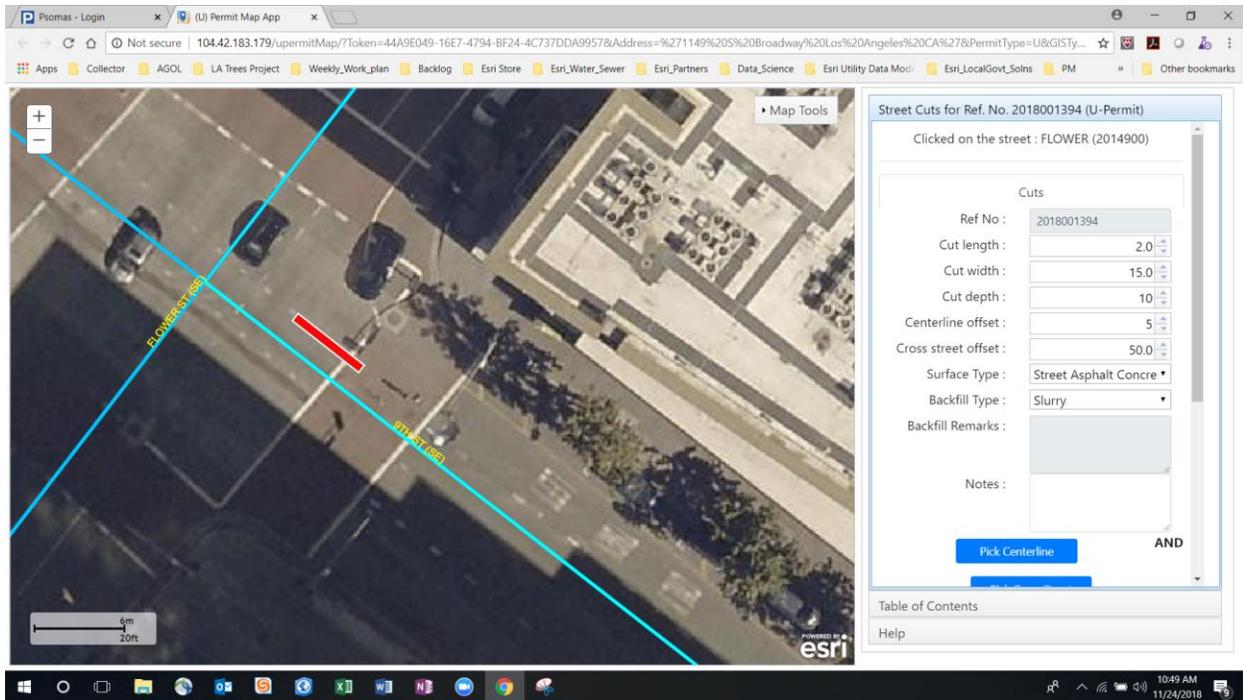
Click on the Trash button under Actions on cut number 7. The application zooms to the cut and highlights it. Click OK to Confirm deletion.



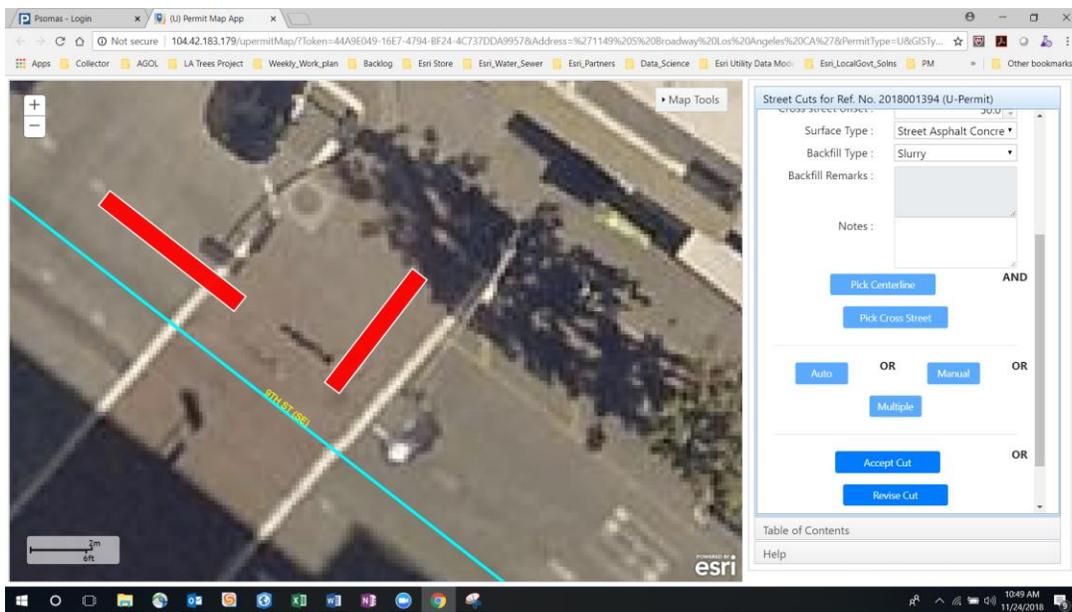
The Cut is removed.



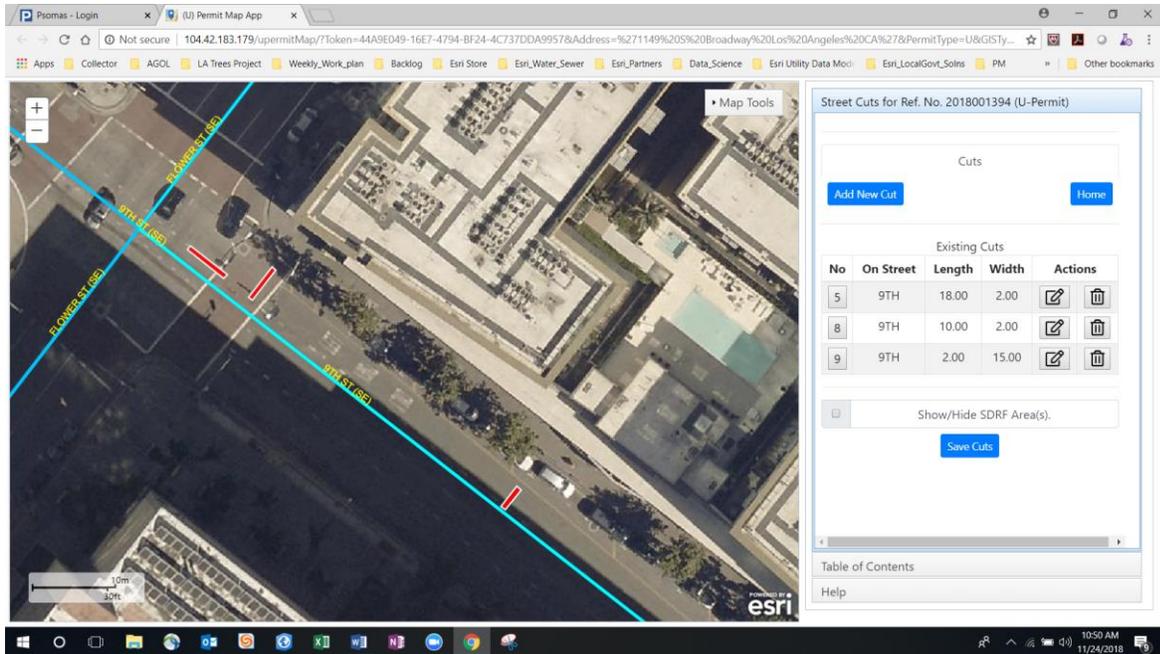
Zoom out a bit then Click on Add New Cut button. Add details for the cut as shown below. Pick the centerline and cross street as below



Click Auto



Click Accept Cut Button. The new cut appears in the Table and is number no 9.

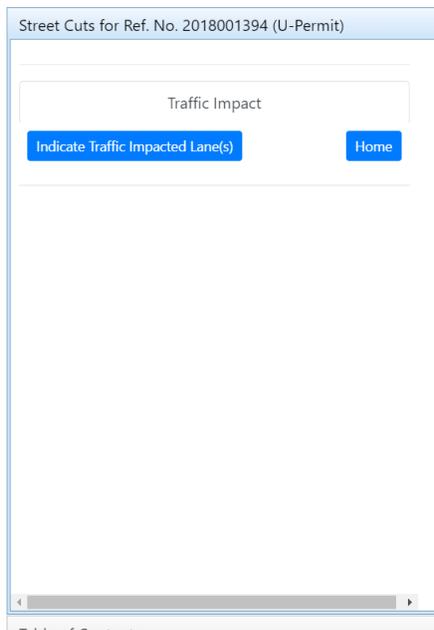


Click **Save Cuts** to save all the cuts to the system.

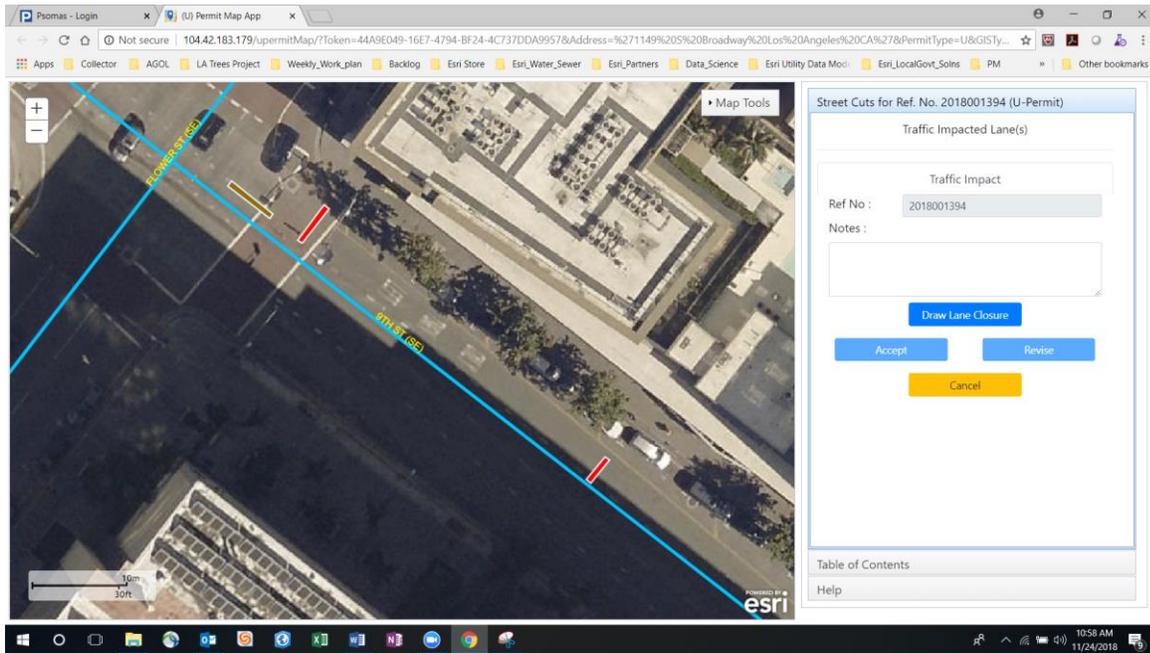
### Add Traffic Impact and Work Areas

Once all the cuts are added you want to show the potential traffic impacts and work areas that will be used on the project. You will now add the traffic impact and work areas to your permit data.

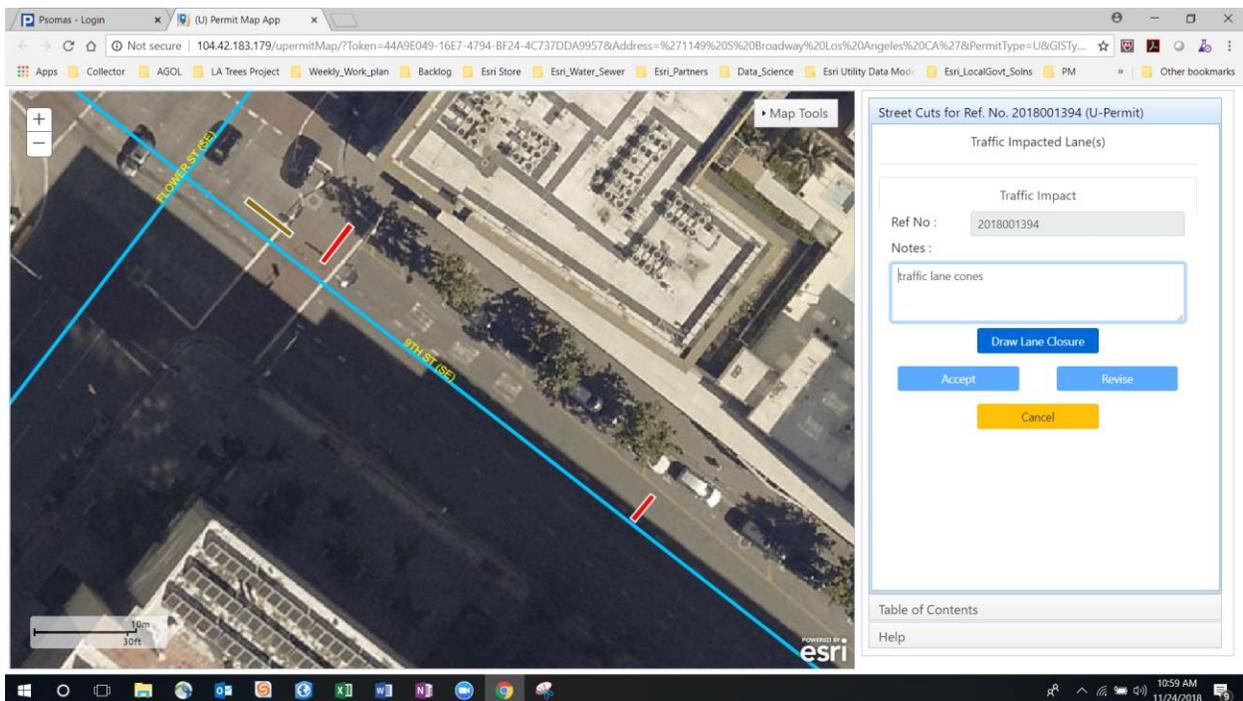
Click on the Traffic Impact Tab and the following appears



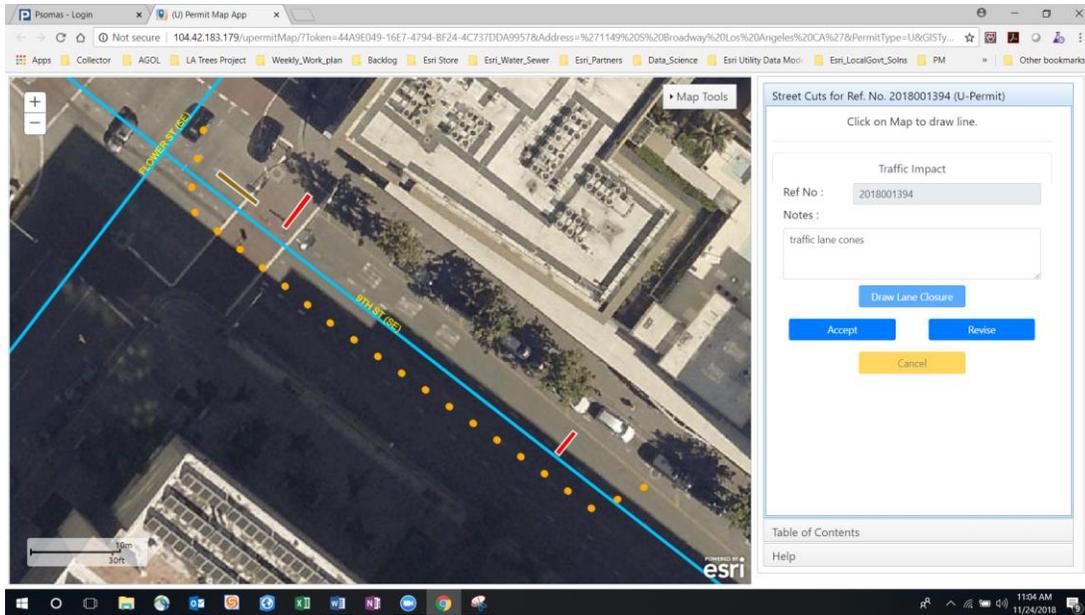
Click on Indicate Traffic Impacted Lane(s) button. The following screen appears.



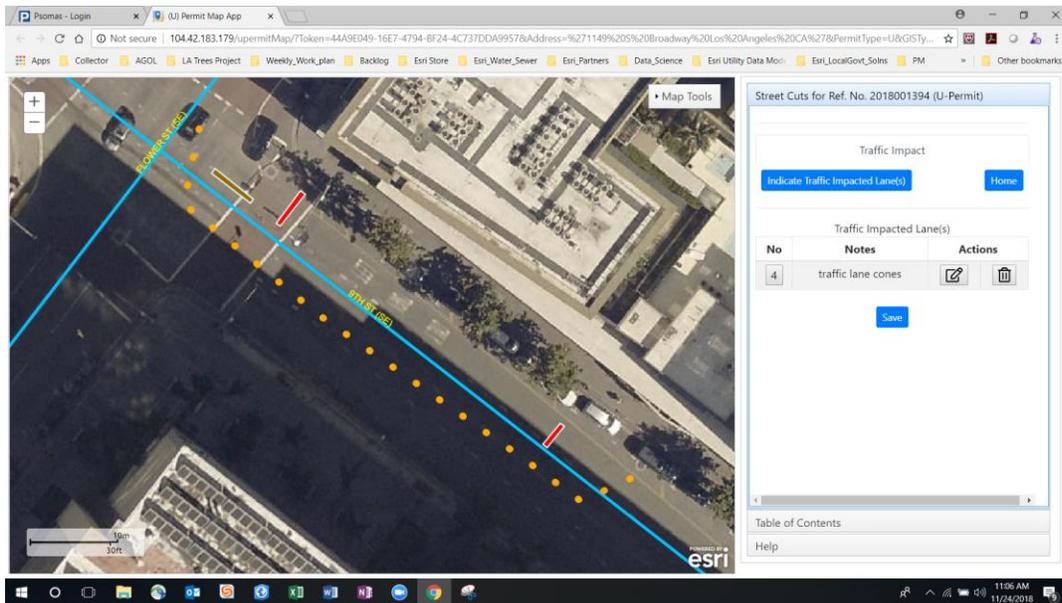
In the Notes area type: Traffic lane cones and click **Draw Lane Closure** button.



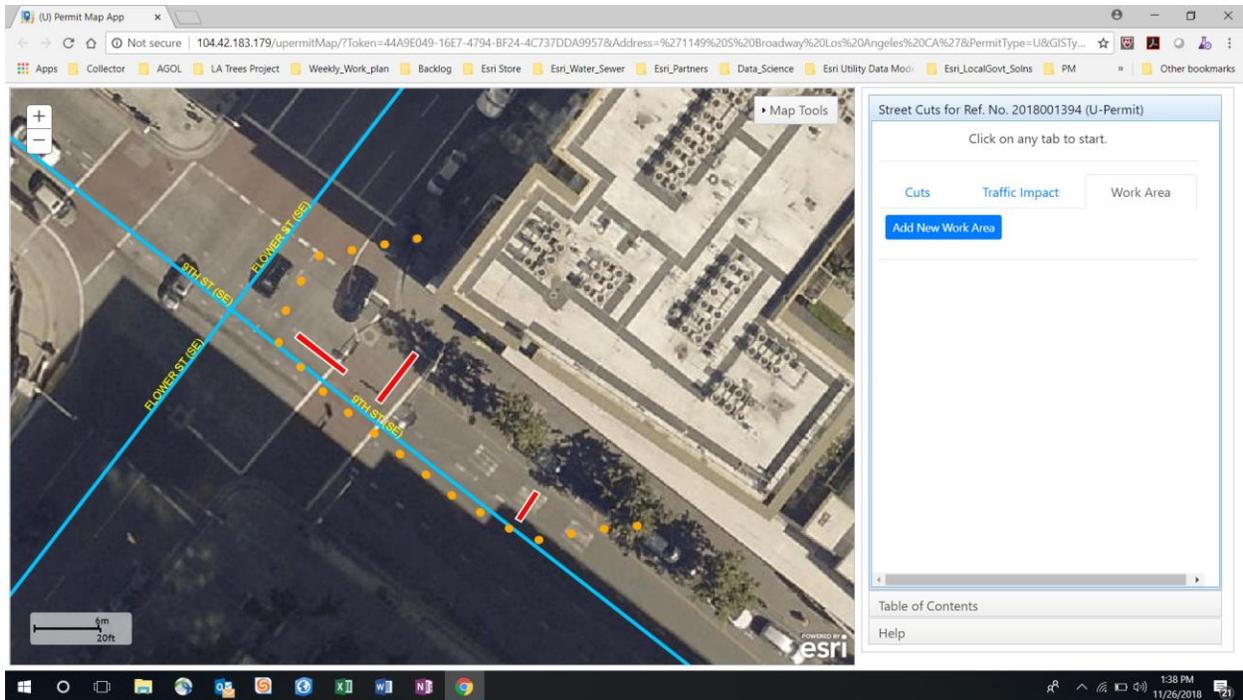
Draw the Traffic Impacted Lane on the map by right clicking and follow the on-screen instructions. When you are done you should have the following on your screen. Click **Accept** when done.



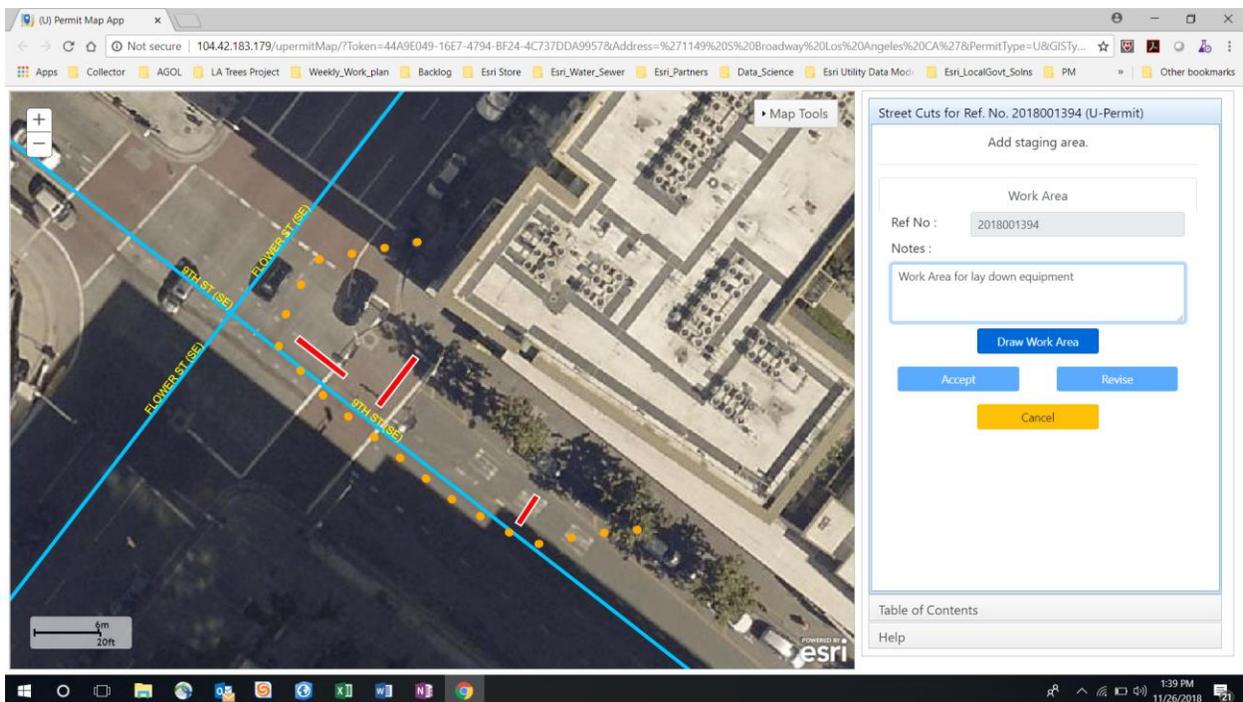
Click **Save**.



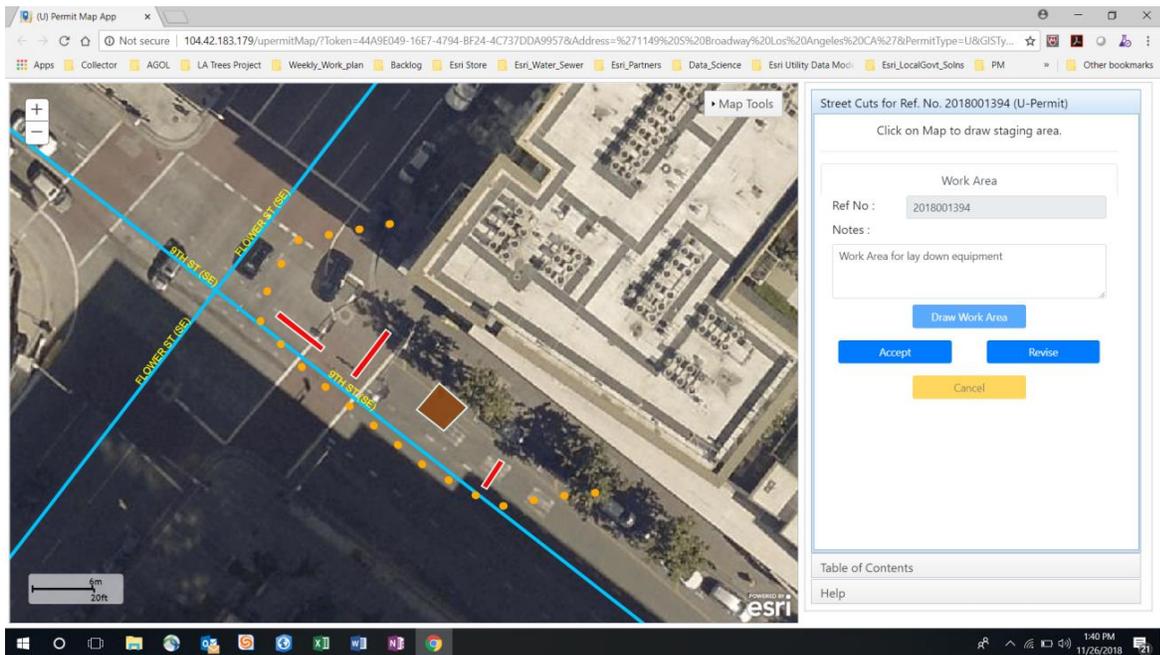
Now you will add a Work Area. Click the *Add Work Area Tab* and then click **Add New Work Area Button**.



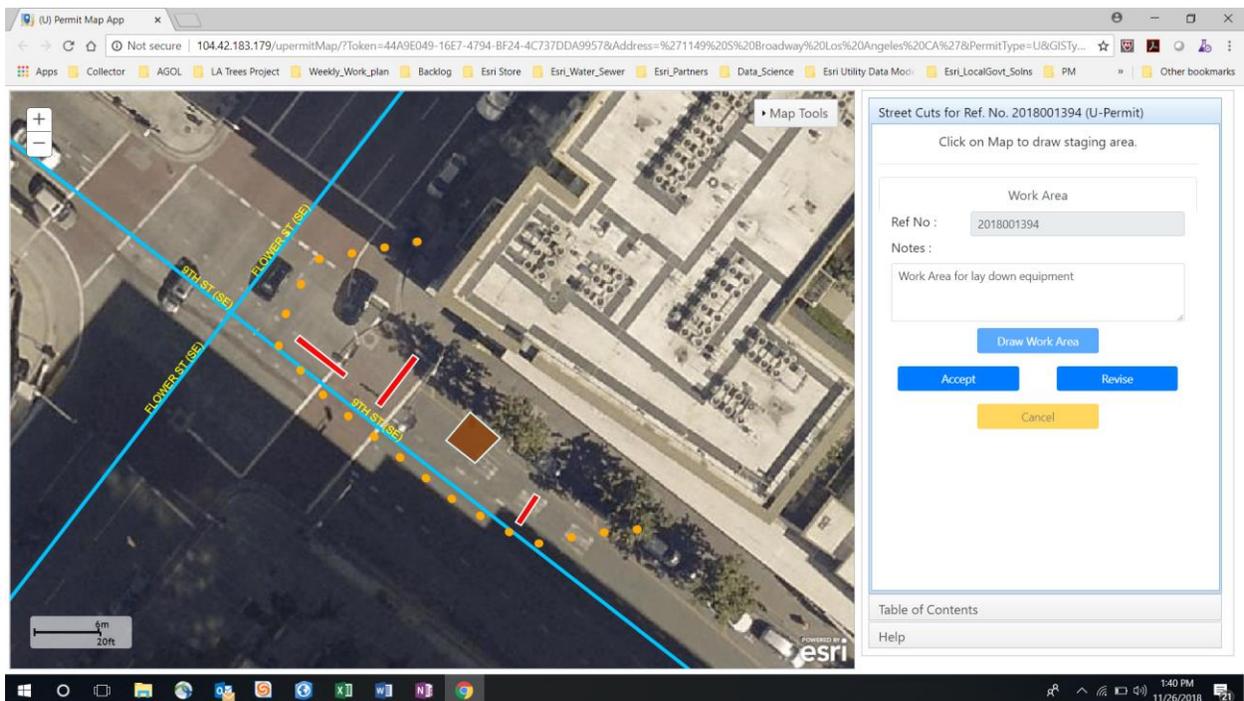
Add a work area to the project area. Add the Note: *Work Area for lay down equipment* as shown.



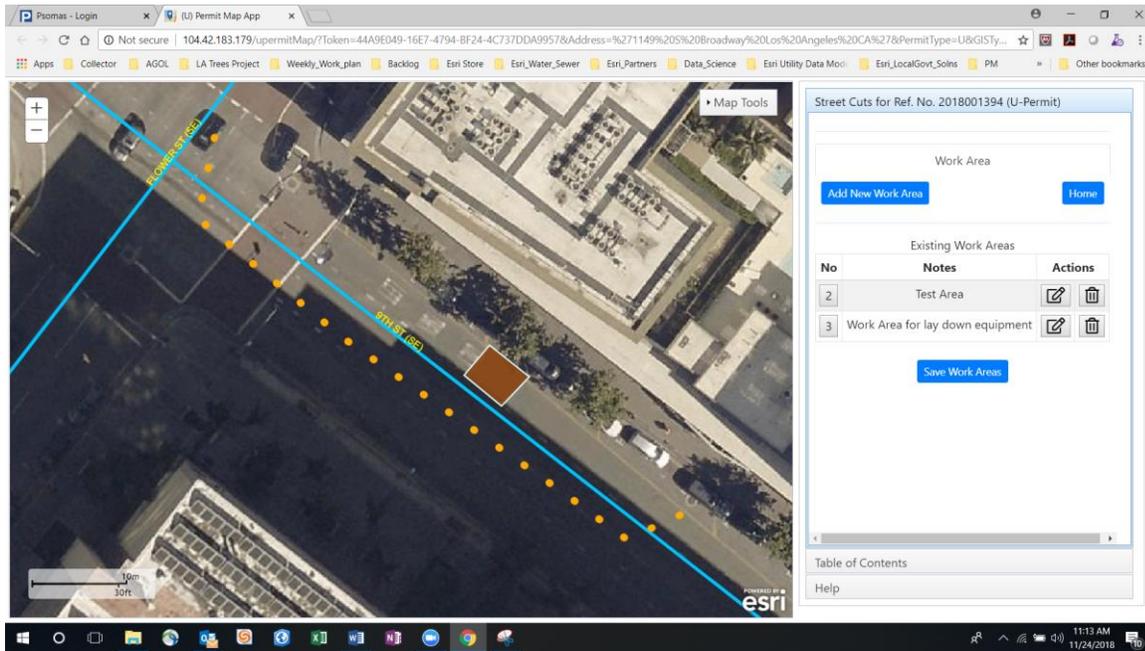
Click **Draw Work Area**. Following the instructions on the screen.



You should have the following. Click **Accept**.



Click **Save Work Areas** button then click **ok** in the popup box.



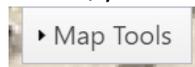
## Scenario 2) Adding Cuts to an Intersection

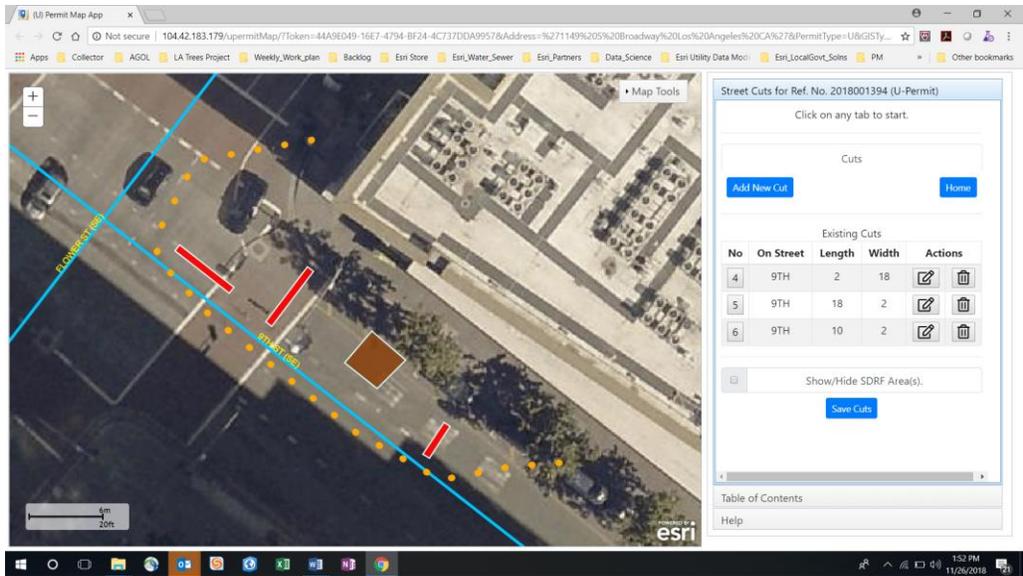
### Intersection Cuts and the SDRF Buffer

In this scenario you will add two cuts at the DTLA intersection of Figueroa St and 8<sup>th</sup> Place.

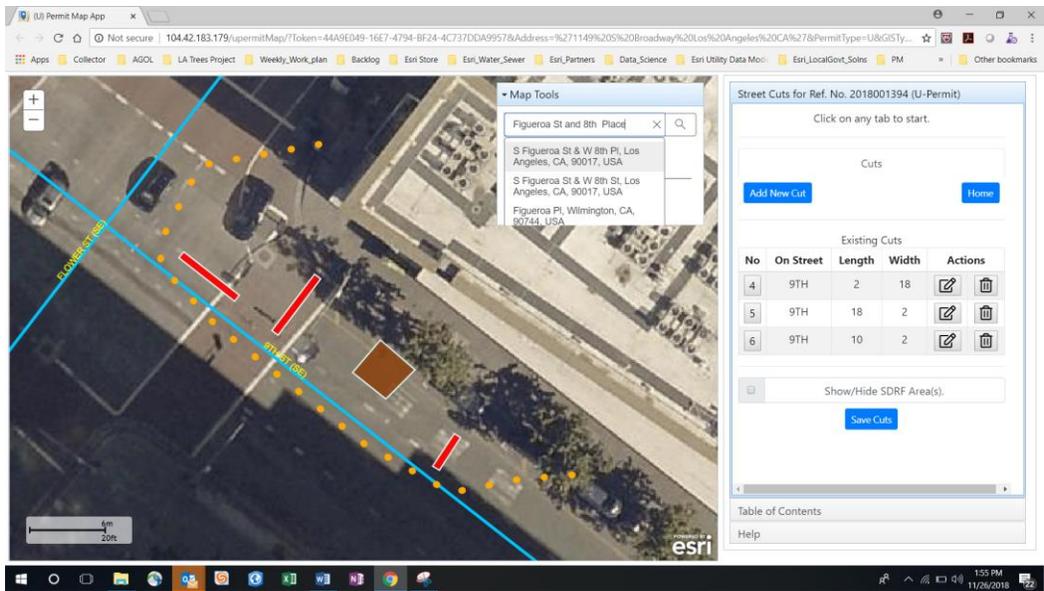
To easily navigate to the location, you will use the **Map Tools** located at the Top Right corner of the map

window as shown below.

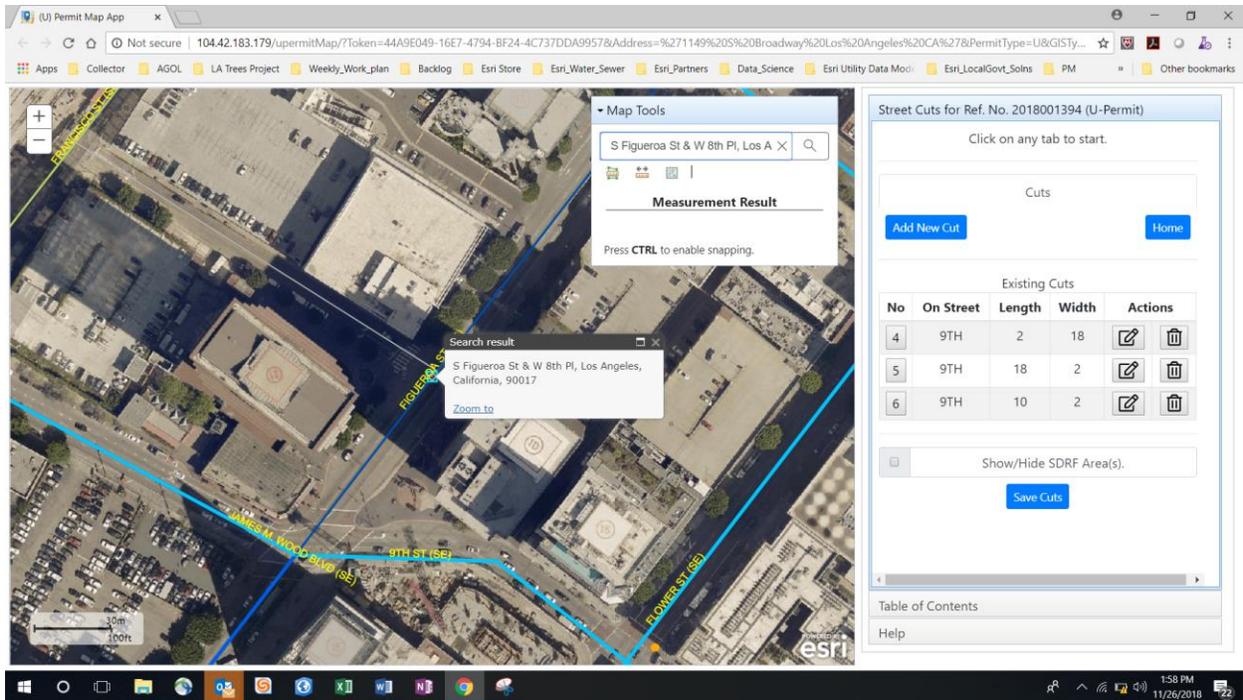




Click on the arrow and expand the tools. Type in Figueroa St and 8<sup>th</sup> Place , a drop down will appear select the first one and click the search icon.

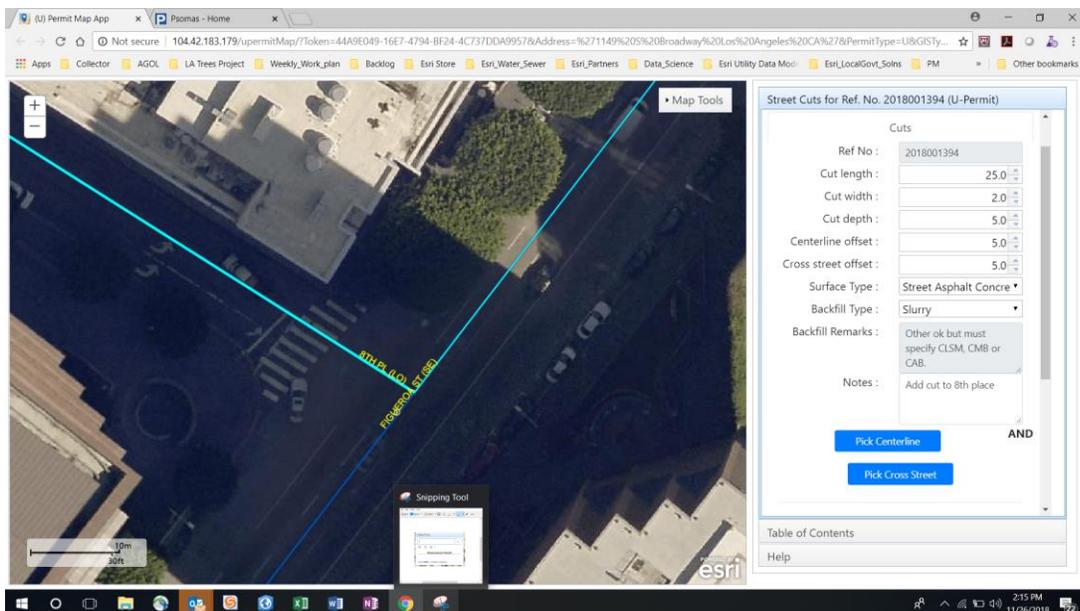


The map will zoom to the location.

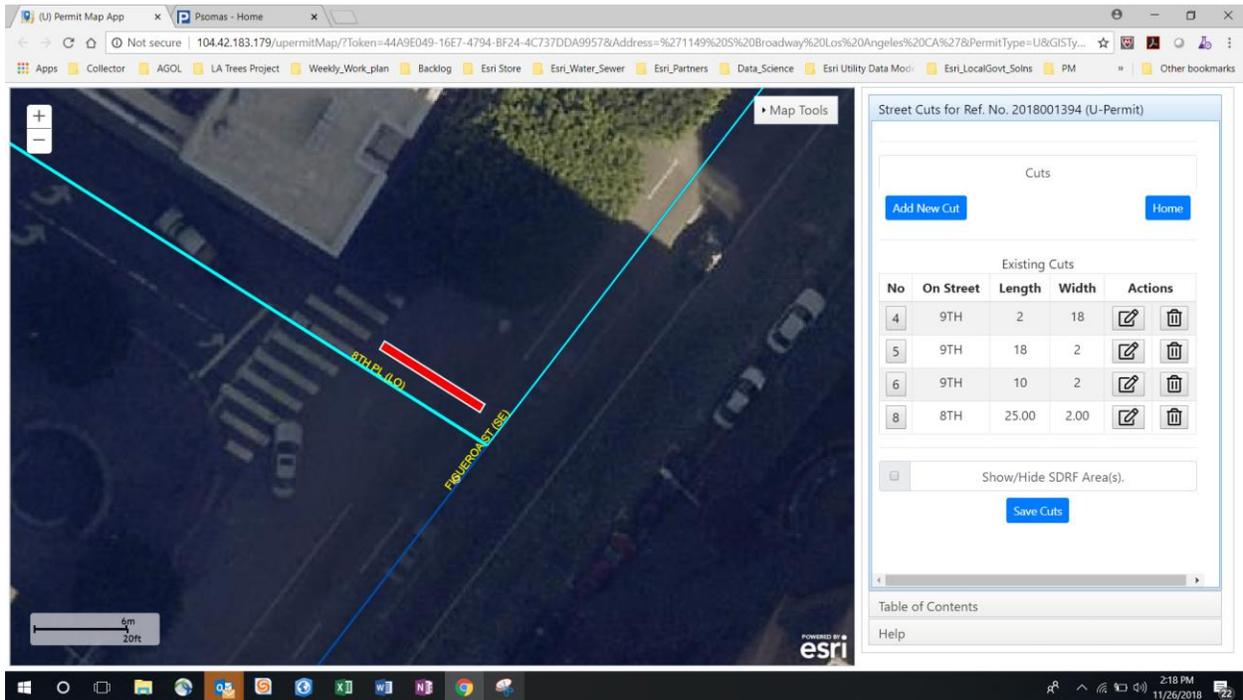


Click on the plus sign location on the upper left corner of the map window to zoom into the location. Then pan to the intersection. Close the Search Result popup and click on the Map Tools arrow to collapse the Map Tools window. You are now ready to add cuts.

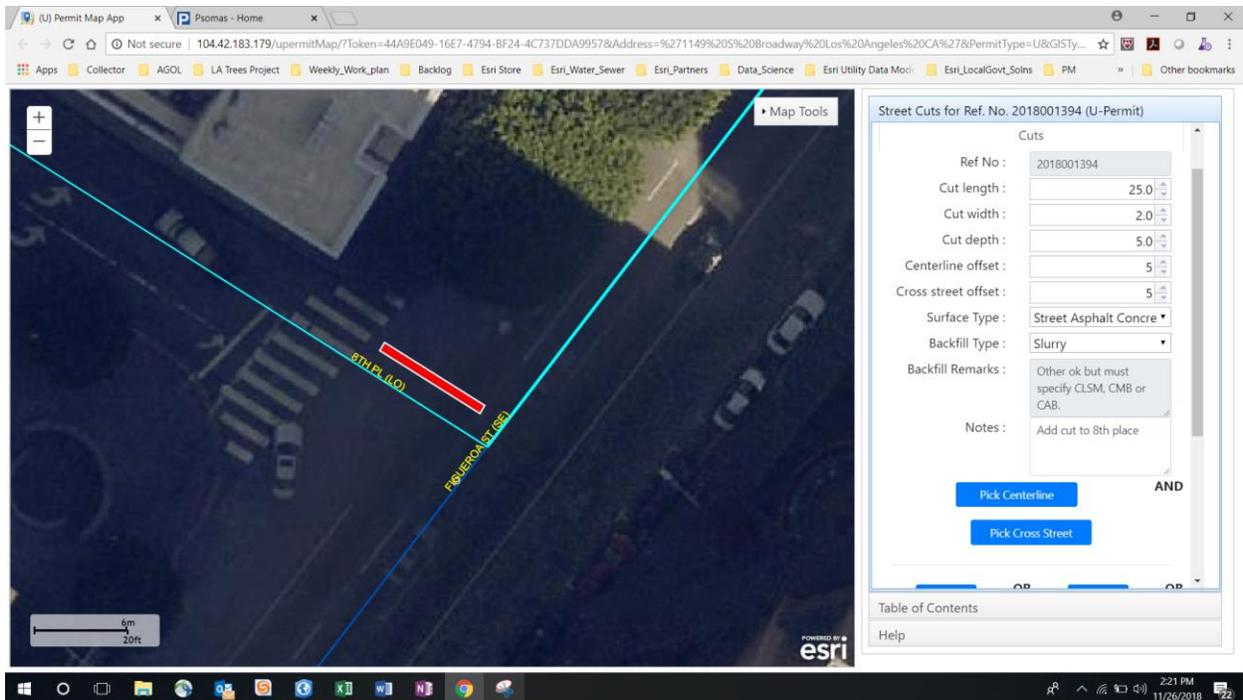
Click on **Add New Cut** and input cut details as shown below. Pick 8<sup>th</sup> place as centerline and Figueroa St as cross street. This will place a cut on 8<sup>th</sup> Place.



Click **Auto** then **Accept Cut**. You will see the new cut. Now add a cut on Figueroa St.



Click **Add New Cut** and input cut details as shown below. Pick Figueroa St as the Centerline and Pick 8<sup>th</sup> Place as the cross street. Click **Auto** to place the cut. Click **Accept Cut**



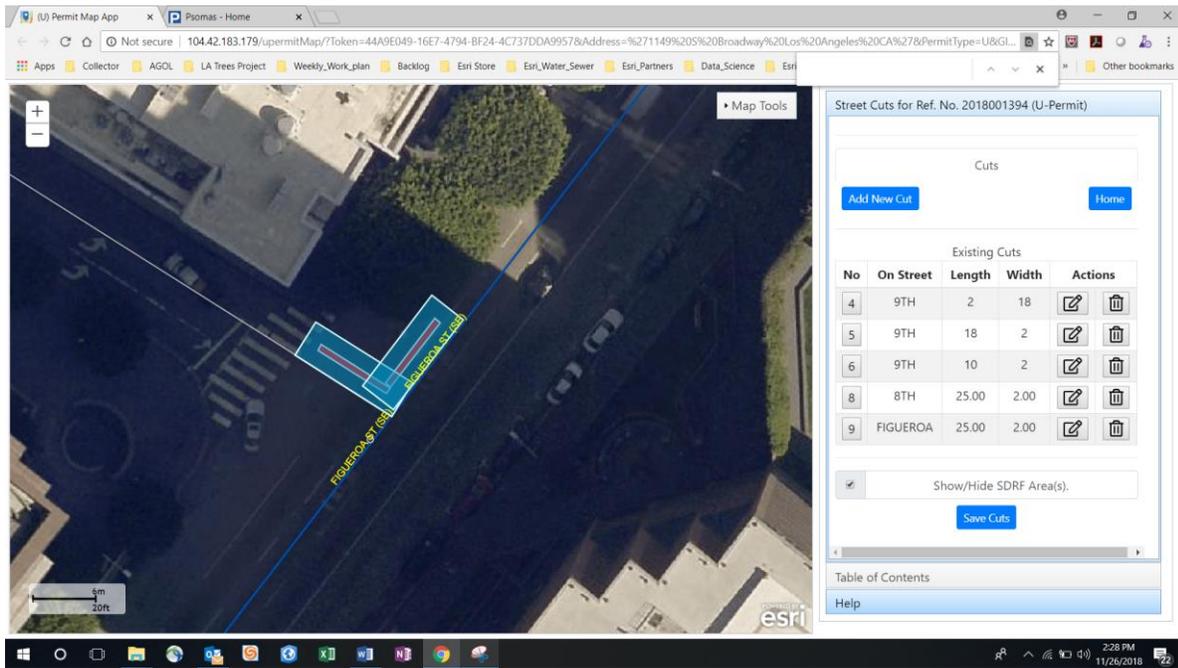
The result below is shown.

No	On Street	Length	Width	Actions
4	9TH	2	18	
5	9TH	18	2	
6	9TH	10	2	
8	8TH	25.00	2.00	
9	FIGUEROA	25.00	2.00	

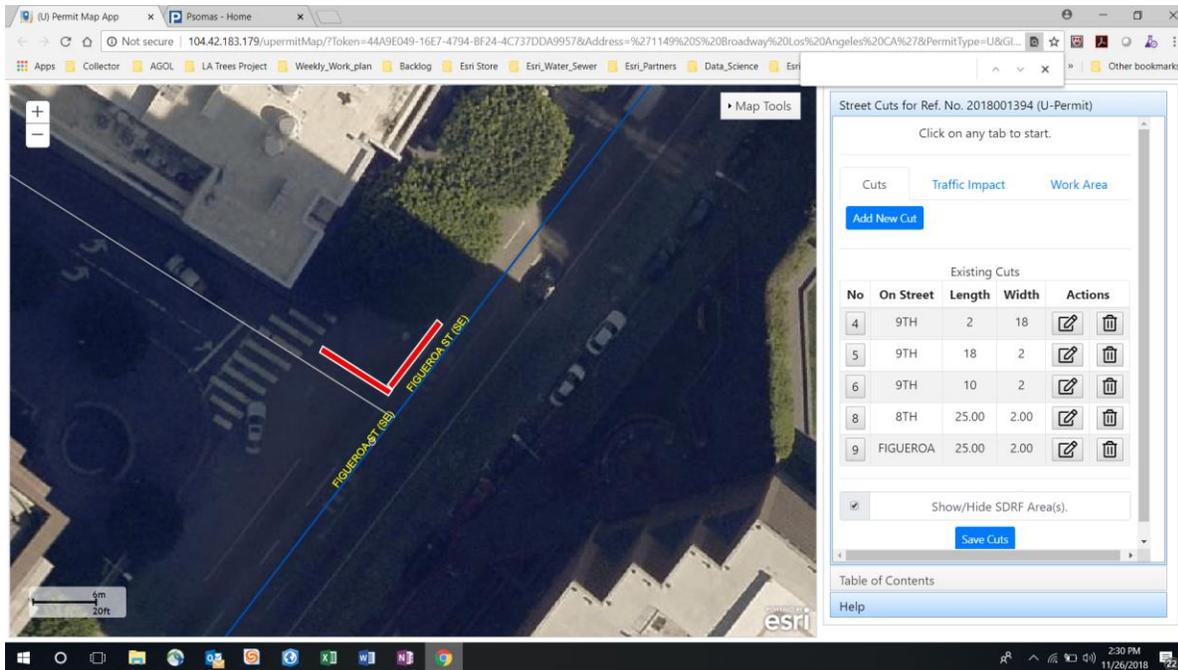
Revise the cut by Moving one of them so they don't overlap. You should have something like the following. Click **Save** when done.

No	On Street	Length	Width	Actions
4	9TH	2	18	
5	9TH	18	2	
6	9TH	10	2	
8	8TH	25.00	2.00	
9	FIGUEROA	25.00	2.00	

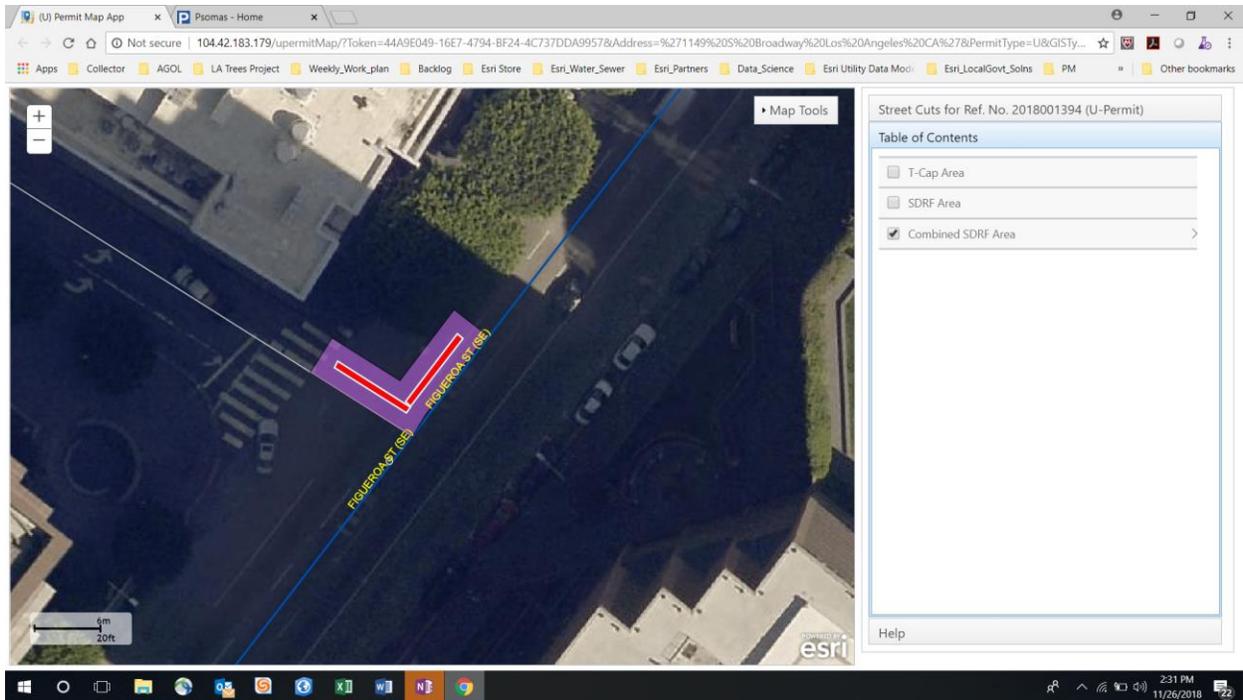
Click Show/Hide SDRF Areas to see the buffer. Notice each cut has an individual buffer Click **Save Cuts** to save all cuts to the database.



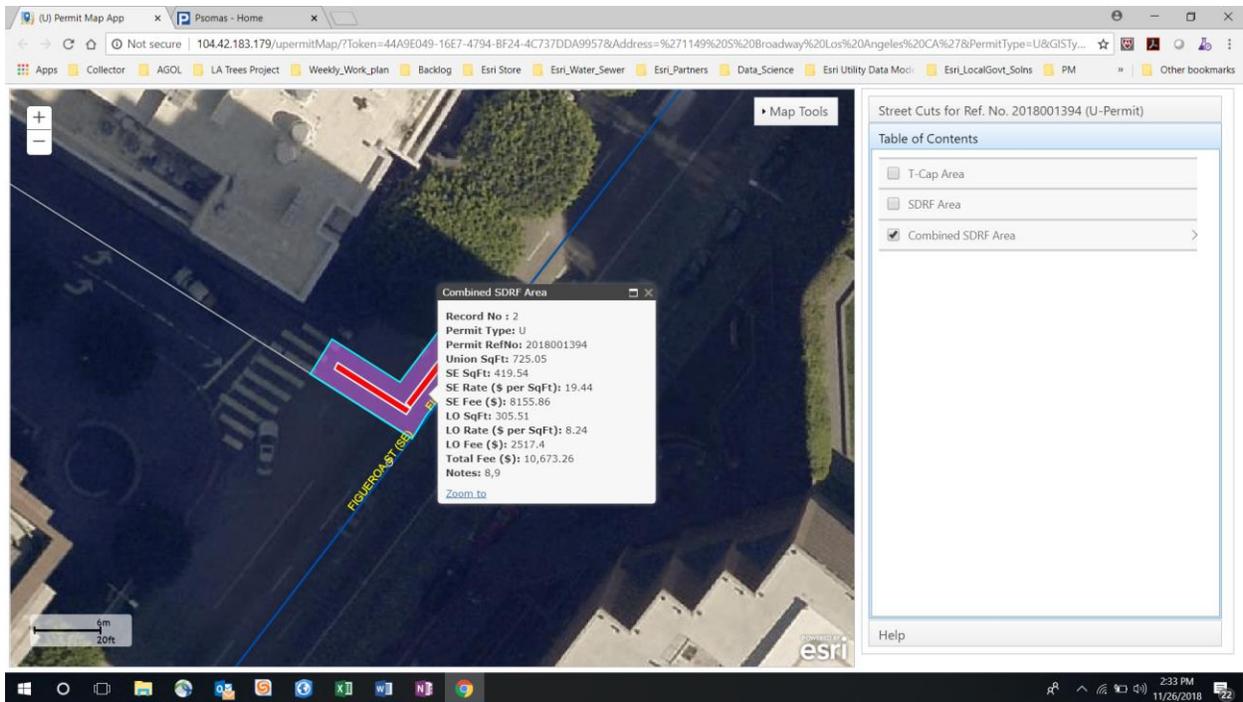
Click Ok to save the data. Notice the buffers are gone.



Click on the Table of Contents Tab and select Combined SDRF Area. The system calculates combines the SDRF buffers into one SDRF Buffer.

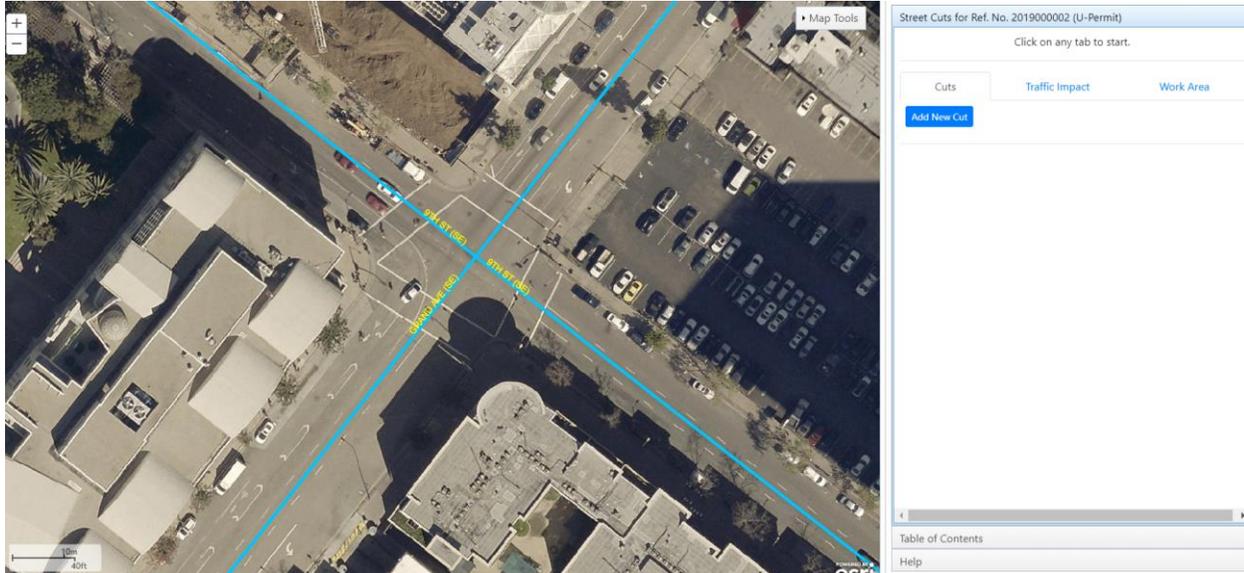


Click on the SDRF buffer to view the SDRF data. The system calculates the amount of SE an LO area for each cut and remove the overlap.



## Scenario 3) Adding a Curved (Radial) Conduit Cut to a Street

One of the Cuts on the permit you are working on is to place a curved (radial) conduit. You will use the Multiple cuts feature to do this. Add the cut on the intersection of Grand and 9th Street As shown below.



In this scenario you need to place conduit along a section of 9<sup>th</sup> street, then radially around the curved sidewalk then along a section of Grand Ave. The Cut will be done in three sections, two straight cuts and one curved cut as follows:

- 1) Cut 1 - A 25 feet by 1 foot by 5 depth straight cut along 9<sup>th</sup>
- 2) Cut 2 - A 25 feet by 1 foot by 5 depth straight cut along Grand.
- 3) Cut 3 - A Curved 1-foot wide by 5 depth radial cut from 9<sup>th</sup> to grand following the sidewalk curve.

Input for Cut 1 data as shown:

Street Cuts for Ref. No. 2019000002 (U-Permit)

Add details for the cut.

Cuts

Ref No :	2019000002
Cut length :	25.0
Cut width :	1.0
Cut depth :	5.0
Centerline offset :	16.0
Cross street offset :	50.0
Surface Type :	Street Concrete
Backfill Type :	Slurry
Backfill Remarks :	
Notes :	

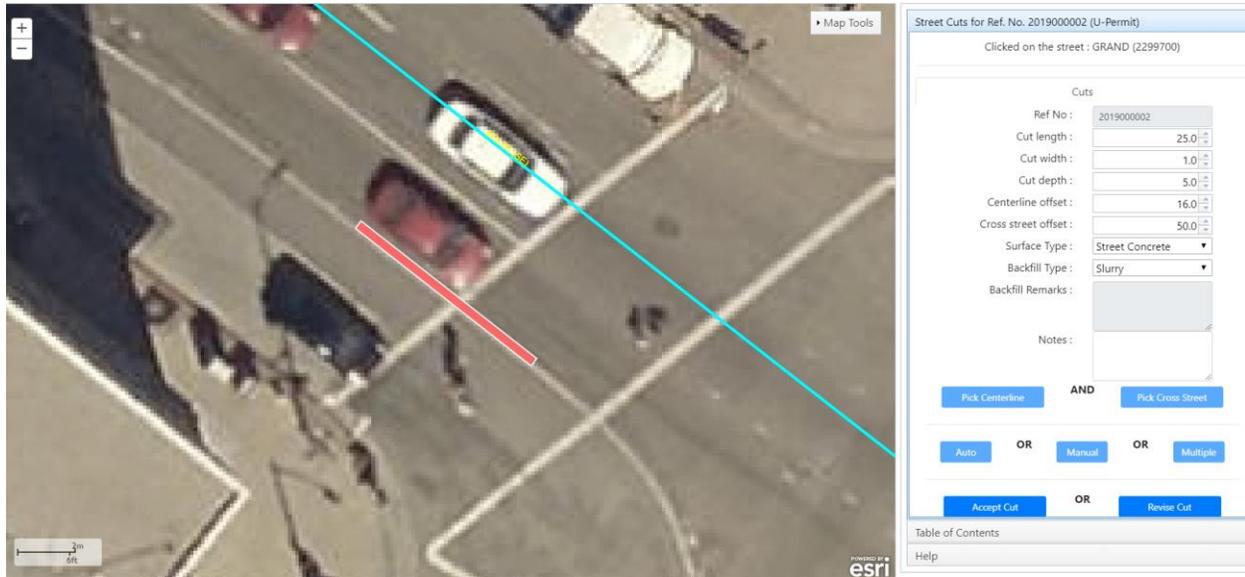
Pick Centerline: 9<sup>th</sup>

Pick Cross street; Grand Ave

Click: **Auto** button to add cut

Click **Accept Cut**

Cut 1 is placed



Click **Add New Cut**

Street Cuts for Ref. No. 2019000002 (U-Permit)

Cuts

Add New Cut
Home

---

Existing Cuts

No	On Street	Length	Width	Actions
1	9TH	25.00	1.00	<span style="border: 1px solid #ccc; padding: 2px 5px;">✎</span> <span style="border: 1px solid #ccc; padding: 2px 5px;">🗑</span>

---

Show/Hide SDRF Area(s).

Save Cuts

Now add Cut 2

Input for Cut 2 data as shown:

Street Cuts for Ref. No. 2019000002 (U-Permit)

Clicked on the street : GRAND (2299700)

Cuts

Ref No :

Cut length :

Cut width :

Cut depth :

Centerline offset :

Cross street offset :

Surface Type :

Backfill Type :

Backfill Remarks :

Notes :

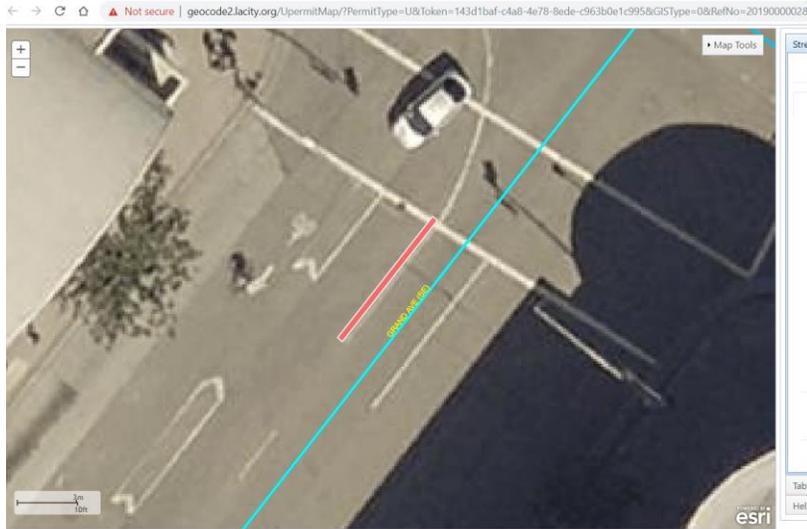
Pick Centerline
AND
Pick Cross Street

Pick Centerline: Grand Ave

Pick Cross street: 9<sup>th</sup>

Click **Auto**

Cut 2 location below:



Click **Accept Cut(s)**

Street Cuts for Ref. No. 2019000002 (U-Permit)

Cuts

[Add New Cut](#) [Home](#)

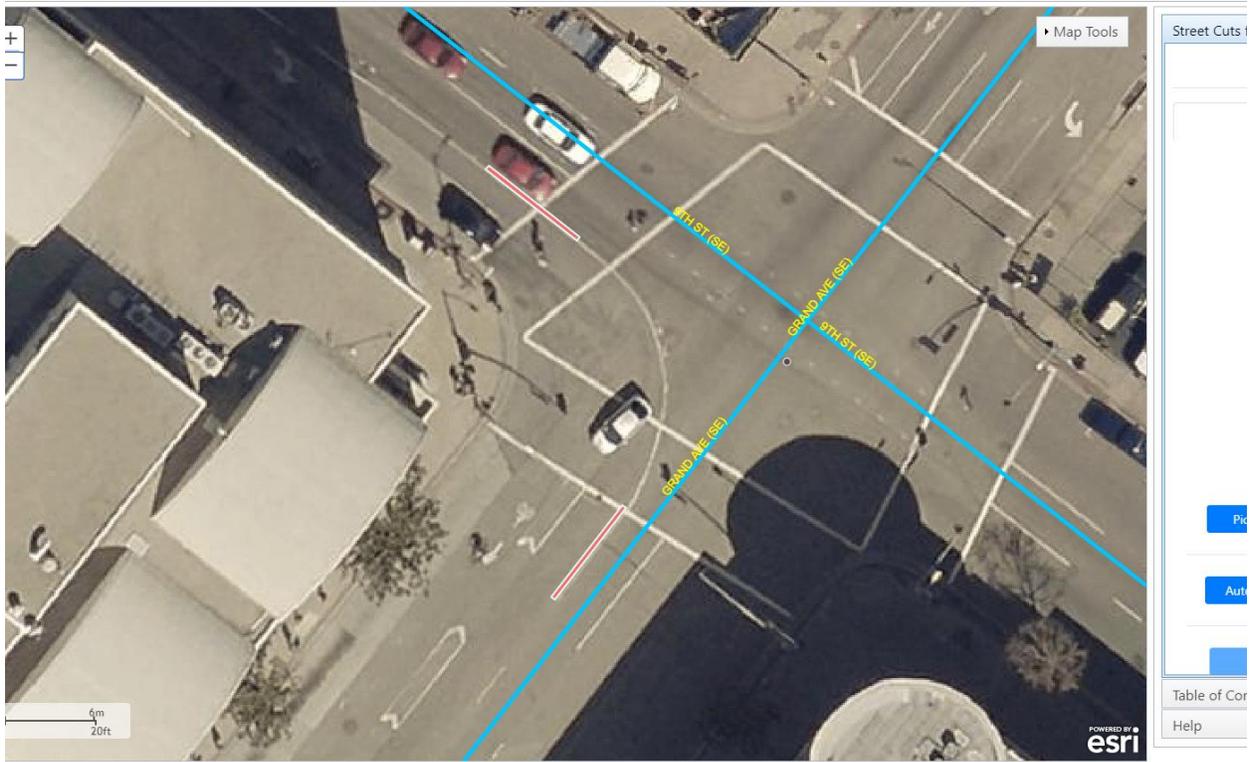
Existing Cuts				
No	On Street	Length	Width	Actions
1	9TH	25.00	1.00	<a href="#">✎</a> <a href="#">🗑</a>
2	GRAND	25.00	1.00	<a href="#">✎</a> <a href="#">🗑</a>

Show/Hide SDRF Area(s).

[Save Cuts](#)

Click **Save Cuts(s)**

The two straight cuts are shown as follows:



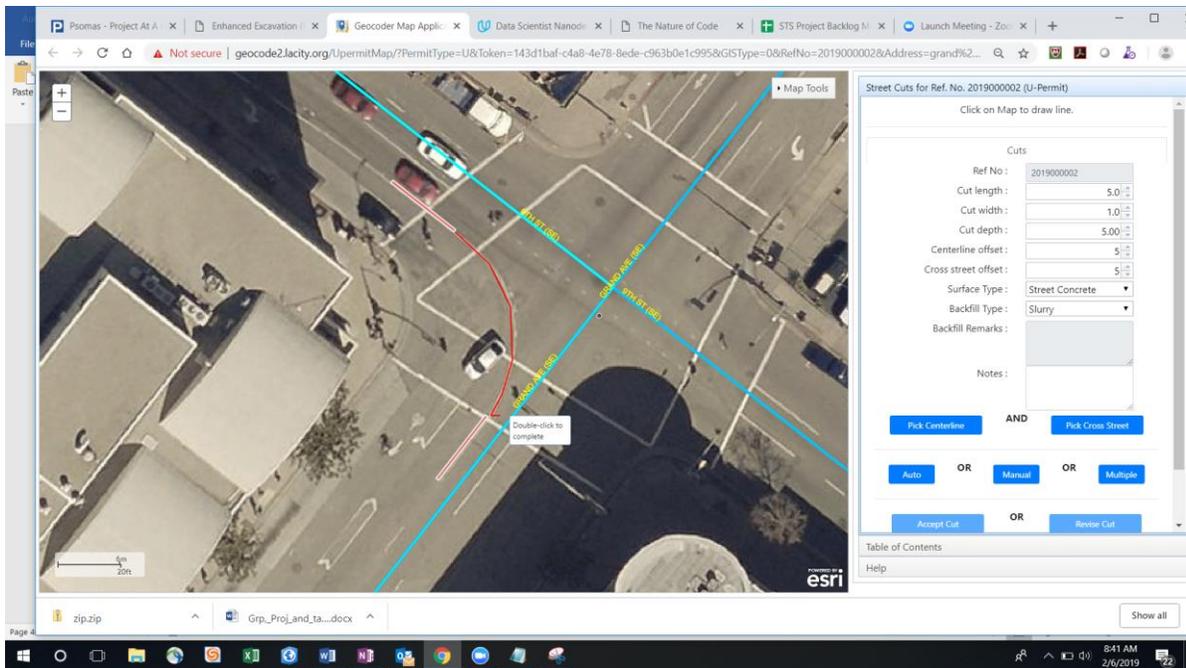
Now we will connect the two straight cuts with a curved cut.

To do this we will use the Multiple cuts button to draw a line between the two straight cuts. Draw the line as shown below. Make sure you space out the “clicks” to get 5 to 6 cuts along the curve. Follow the screen instructions. At the end of the drawing you will have something like below. Now you need to manually place the cuts to approximate the curve. Click on **Revise** command button.

Pick Centerline: Grand Ave

Pick Cross street: 9<sup>th</sup>

Click **Multiple Cuts** button



You should have the below cuts. Click **Accept Cut**



The below table will appear. Click **Show/Hide SDRF Area(s)**

Cuts

Add New CutHome

Existing Cuts

No	On Street	Length	Width	Actions	
1	9TH	25	1		
2	GRAND	25	1		
3	9TH	19.12	1.00		
4	9TH	18.32	1.00		
5	9TH	14.62	1.00		
6	9TH	11.90	1.00		

Show/Hide SDRF Area(s).

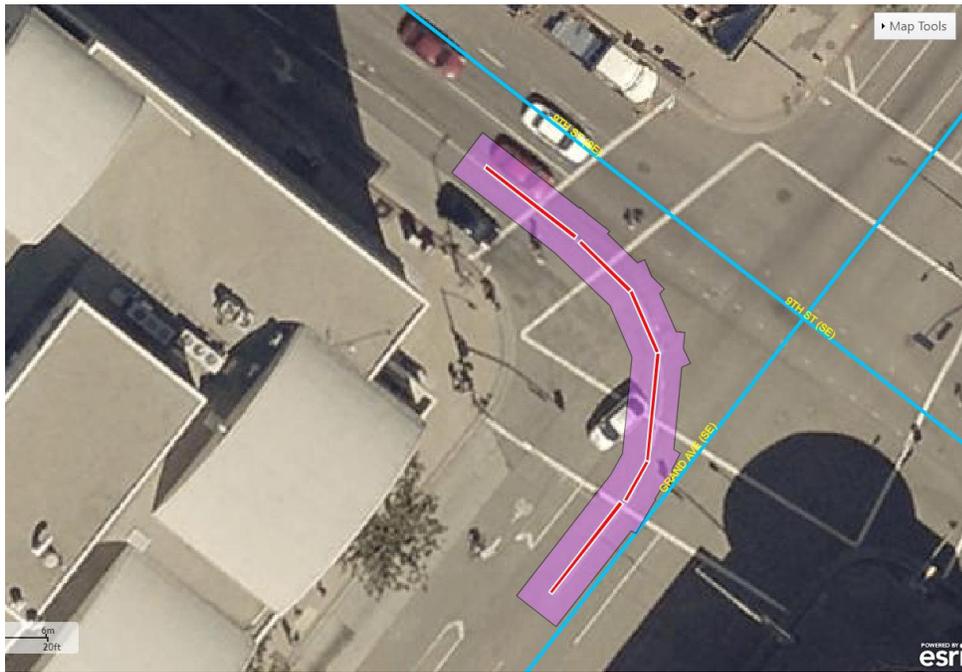
Save Cuts

You will see the screen below. The SDRF Areas will appear in blue



Click **Save Cut(s)**. This will save the cut data to the system.

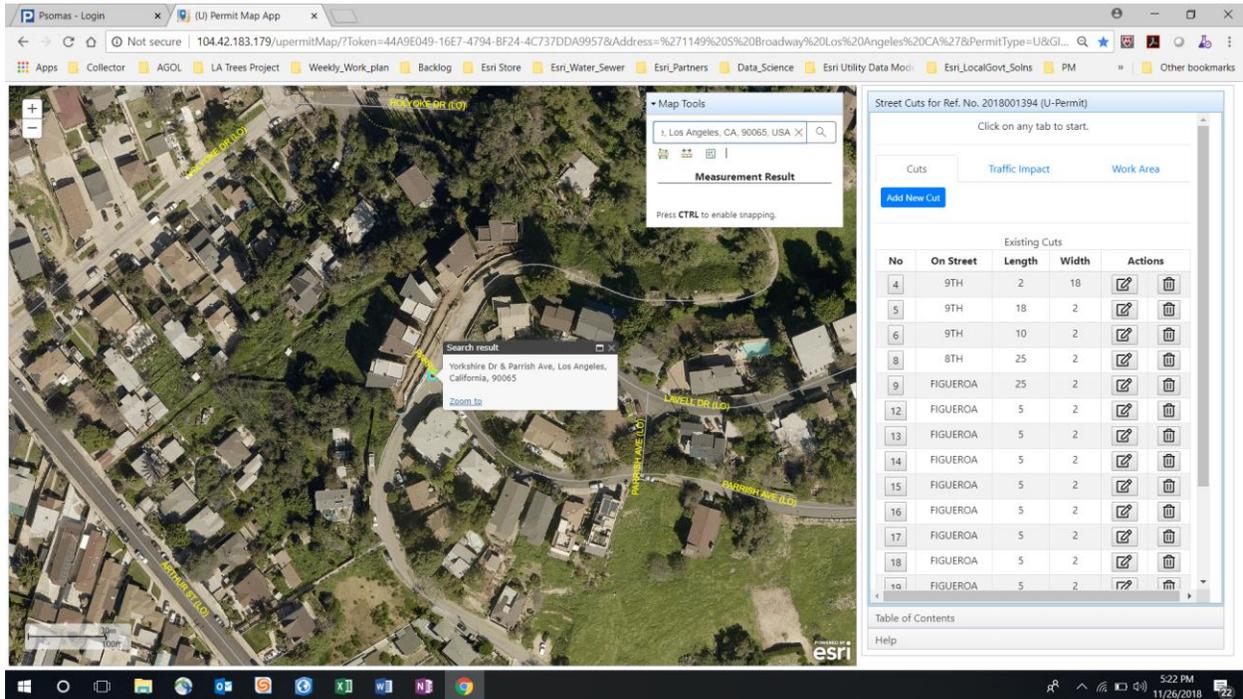
Now Click on the *Table of Contents* tab and click on the Combined SDRF Area to see the combined SDRF Area. We have completed adding a Curved (Radial) Cut



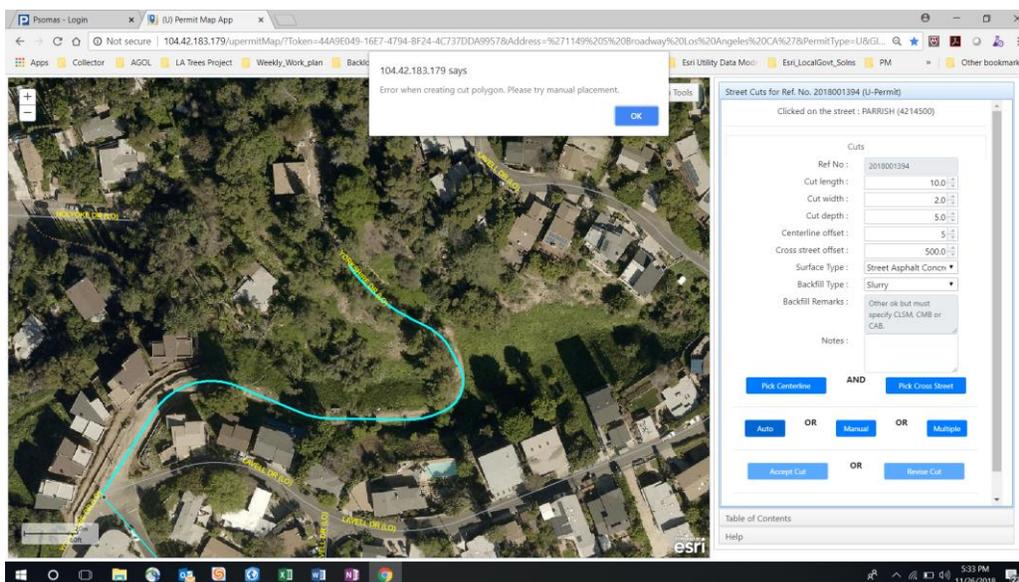
## Scenario 4) Adding a Cut to a Curved Street.

You need to add a cut to a residential street that is curved. You will add a cut on Yorkshire Drive.

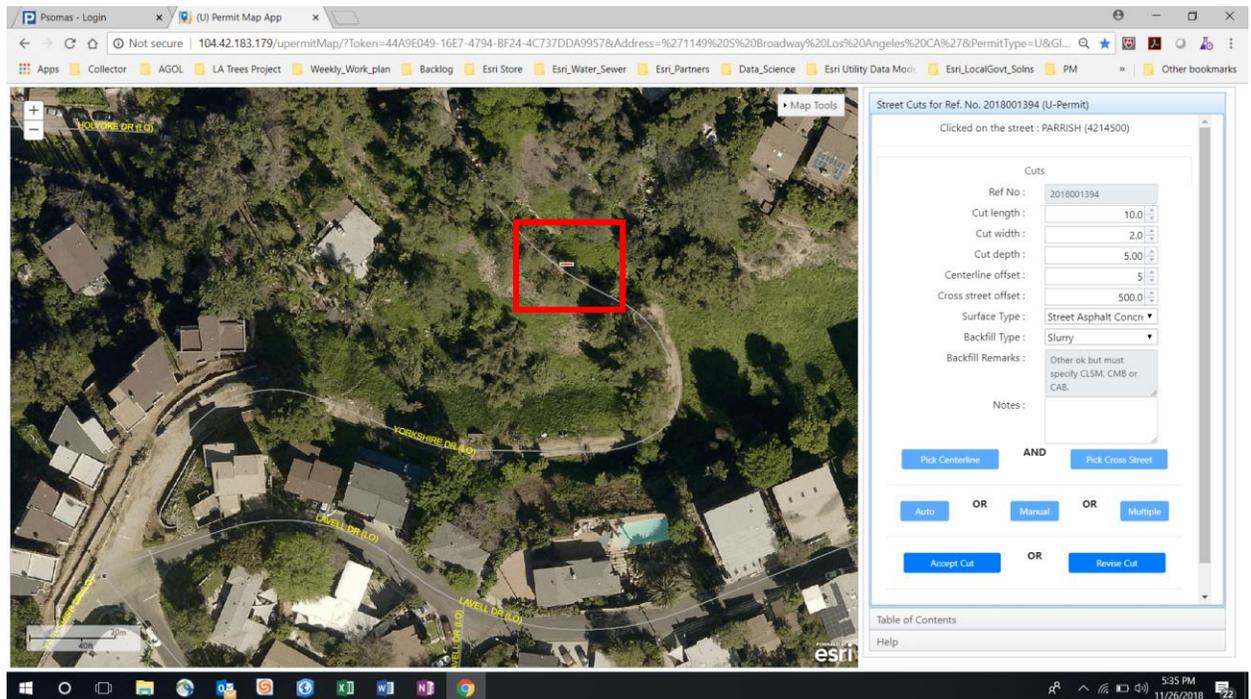
Using the Map Tool go to Yorkshire Drive and Parrish Ave



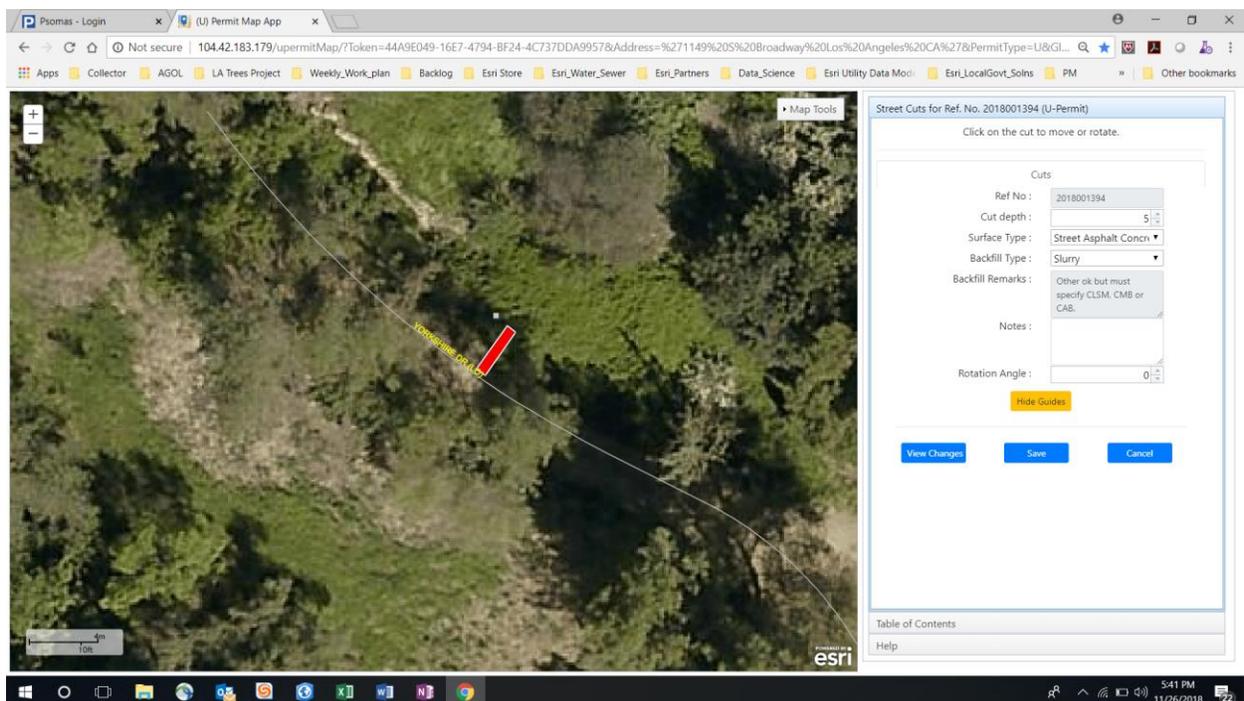
Zoom in a bit. You will place the cut on Yorkshire Drive. Click **Add New Cut** and input the cut details as shown. Pick Centerline is Yorkshire and the Cross Street is Parrish. Click **Auto**. You will get a message to Manual Place the Cut.



Click on Manual and place the cut approximately where shown in the red box.



Zoom in and Click on **Revise**. You will now revise the cut and align it perpendicularly to the centerline. Click **Save**.



Click **Save Cuts**. Click **OK** on Save to Server message.

The screenshot shows a web browser window with the following details:

- Browser tabs: Psomas - Login, (U) Permit Map App
- Address bar: Not secure | 104.42.183.179/upermitMap/?Token=44A9E049-16E7-4794-BF24-4C737DDA9957&Address=%271149%20S%20Broadway%20Los%20Angeles%20CA%27&PermitType=U&GI...
- Browser bookmarks: Apps, Collector, AGOL, LA Trees Project, Weekly\_Work\_plan, Backlog, Esri Store, Esri\_Water\_Sewer, Esri\_Partners, Data\_Science, Esri\_Utility\_Data\_Mo..., Esri\_LocalGovt\_Solns, PM, Other bookmarks
- Map interface: Aerial view of a wooded area with a red rectangle highlighting a specific location. A yellow label "Yosemite Dr" is visible near the red rectangle.
- Right-hand panel: "Street Cuts for Ref. No. 2018001394 (U-Permit)"

The right-hand panel contains the following table:

Existing Cuts				
No	On Street	Length	Width	Actions
4	9TH	2	18	[Edit] [Delete]
5	9TH	18	2	[Edit] [Delete]
6	9TH	10	2	[Edit] [Delete]
8	8TH	25	2	[Edit] [Delete]
9	FIGUEROA	25	2	[Edit] [Delete]
12	FIGUEROA	5	2	[Edit] [Delete]
13	FIGUEROA	5	2	[Edit] [Delete]
14	FIGUEROA	5	2	[Edit] [Delete]
15	FIGUEROA	5	2	[Edit] [Delete]
16	FIGUEROA	5	2	[Edit] [Delete]
17	FIGUEROA	5	2	[Edit] [Delete]
18	FIGUEROA	5	2	[Edit] [Delete]
19	FIGUEROA	5	2	[Edit] [Delete]

Below the table are links for "Table of Contents" and "Help".