

THOMAS FIRE REBUILD
THOMAS FIRE LIDAR DATA REQUEST

Release and Waiver Related to City Provided Lidar Data

For value received, the City has provided, at no cost to you, Lidar data in the City's possession for your use calculating building height as a part of the reconstruction process in the aftermath of the Thomas Fire. The LiDAR data will be provided in the form of a .las file that will require 3D imaging software to open. You will need a GIS software that supports 3D imaging to manipulate the data. There is free software available online called the *QT Reader* (www.appliedimagery.com/download/) that will allow you to view the images, but not edit or manipulate the data. This information will be sent electronically within two business days of request. While the City believes that the Lidar data is complete and accurate, the City has not thoroughly evaluated or characterized all data at this point. The City offers no representation or warranties pertaining to the data. The undersigned accepts the Lidar data "as is" and "with all faults." City makes no warranties, disclaims any express warranty, and any implied warranties of fitness for a particular purpose, use and merchantability. Any and all risks regarding the fitness, use, quality, or performance of the data is on the undersigned. Should the data prove to have any defect, it is the undersigned and not the City that is responsible for and assumes that liability costs of any such defect.

The undersigned shall use the data for personal use only and not for resale. As a result, the undersigned waives, releases, discharges, indemnifies, defends, and holds harmless the City, its officers, employees, agents from and against any and all liability (for attorney's fees,) personal property damage, claims, causes of action whatever type or nature which shall be caused by or arising out of or in any manner be connected with the data the undersigned, or any other person related to the data and issues. The undersigned has read and voluntarily signed the release and waiver and further agrees that no oral representations, statements, or inducement apart from the foregoing have been made. In addition, undersigned acknowledges and agrees to comply with and be bound by all covenants herein.

Please return form to mgil@cityofventura.ca.gov.

LiDAR Data Request for: _____
(address)

Architect: _____ **Surveyor:** _____

Mailing Address: _____ Mailing Address: _____

Phone Number: _____ Fax: _____ Phone Number: _____ Fax: _____

E-mail: _____ E-mail: _____

Owner Certification

Property Owner: _____

Mailing Address: _____

Phone Number: _____ Fax: _____

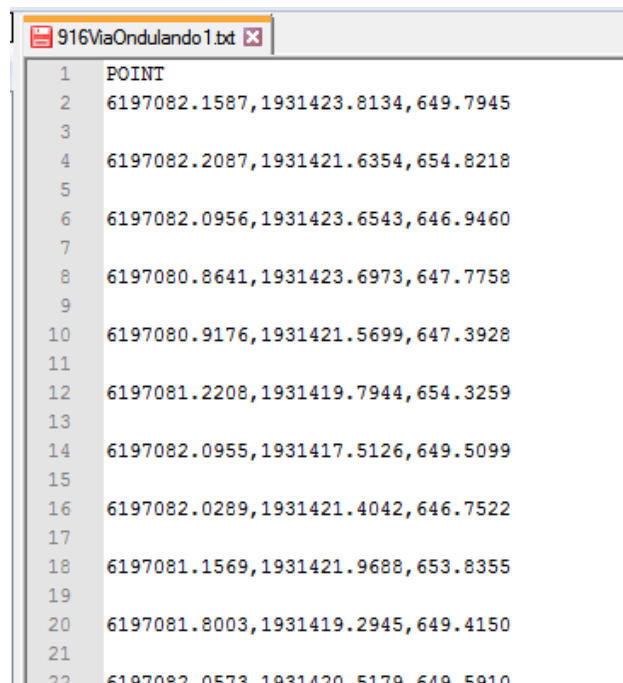
E-mail: _____

I hereby certify that the information furnished above, and in the attached exhibits, is the data and information required for the project's evaluation, and the facts, statements, and information presented are true and correct to the best of my knowledge.

Signature: _____ **Date:** _____

LAS to AutoCAD points using LAsTools, Notepad++ and AutoCAD

1. Download the LAsTools software from their website: <https://rapidlasso.com/lastools/>
2. Use the las2txt utility to convert the .las file to a .txt file.
 - a. Select the .las file on the left side of the utility.
 - b. Leave the defaults for everything else.
 - c. Click "RUN" at the bottom right.
3. Download Notepad++ from their website: <https://notepad-plus-plus.org/download/v7.5.6.html>
4. Open the newly created .txt file in Notepad++.
5. Press ctrl+f to bring up the "Find" utility. Go to the "Replace" tab.
 - a. In the "Search Mode" settings in the bottom right, make sure "Extended" is selected.
 - b. Replace all spaces with commas (may take a few moments to complete)
 - c. Replace "\r\n" with "\r\n\r\n" (may take a few moments to complete)
 - d. Close the "Find" Utility
 - e. Go to the beginning of the file and add a new with the text "POINT"
 - f. Your file should look like this:



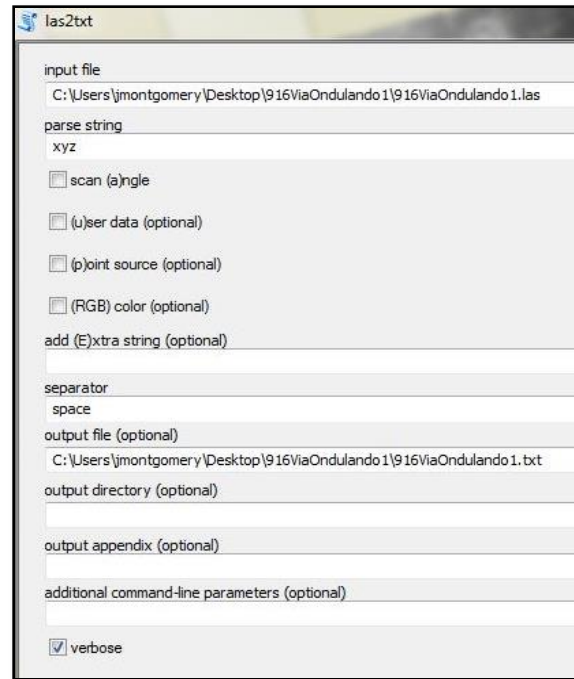
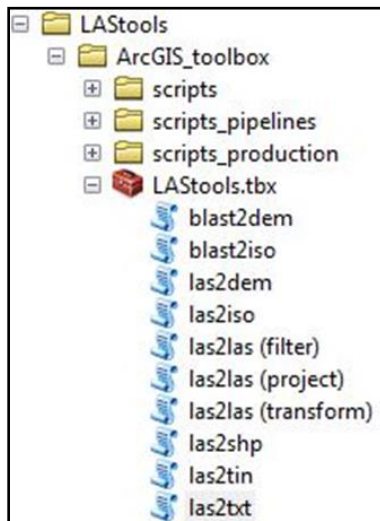
```
1 POINT
2 6197082.1587,1931423.8134,649.7945
3
4 6197082.2087,1931421.6354,654.8218
5
6 6197082.0956,1931423.6543,646.9460
7
8 6197080.8641,1931423.6973,647.7758
9
10 6197080.9176,1931421.5699,647.3928
11
12 6197081.2208,1931419.7944,654.3259
13
14 6197082.0955,1931417.5126,649.5099
15
16 6197082.0289,1931421.4042,646.7522
17
18 6197081.1569,1931421.9688,653.8355
19
20 6197081.8003,1931419.2945,649.4150
21
22 6197082.0573,1931420.5178,648.5810
```

6. Save the file as a .scr ending.
7. Run the script in AutoCAD (instructions vary by version). This may take several minutes.
8. Zoom to extents.
9. Done! You now have an AutoCAD file with all of the original .las data.

LAS to Raster using LAStools and ArcMap

Note that LAS datasets can also be viewed via ArcMap with a 3D Analyst License. More information [here](#).

- Using the [LAStools software suite](#), there are several free open-source features including **las2txt**. Other tools including **las2shp** and **las2dem** are available when a license is purchased. More information on the LAStools license can be found [here](#).
 - Use the ArcToolbox **las2txt** tool to convert the *las* file to a *txt* file



- Open *txt* file in ArcMap and display the data using the **display XY** functionality. More information [here](#).
- Export the displayed XY of the *txt* file can as a point shapefile.
- Use the point shapefile as the input in the **Point to Raster** tool (*this tool requires an Advanced license*). More information [here](#).

