

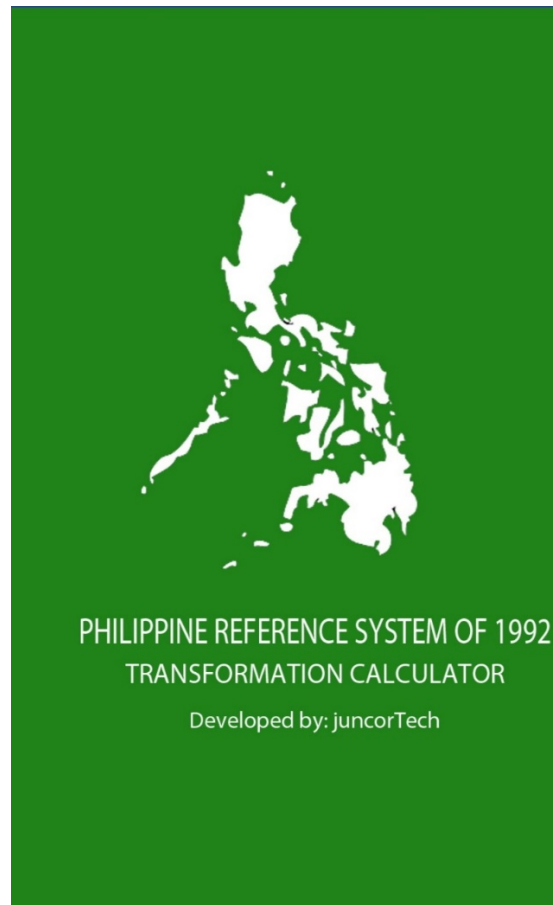
SURVEYING and MAPPING TIPS and TRICKS

ENGR. YERWIN A. CAPUZ

BOD, GEP III

SURVEYING and MAPPING Tricks and Tips

- ▶ CONVERSION OF GRID TO GEOGRAPHIC
GEOGRAPHIC TO GRID and WGS 84(USING SMART PHONES)
- ▶ USING GOOGLE EARTH IN SURVEYING and MAPPING,
GEOREFERENCING GOOGLE EARTH IMAGES TO
AUTOCADD
- ▶ INSERTING GOOGLE MAPS IN YOUR PLAN
VICINITY MAP and LOCATION PLAN



DOWNLOAD PRS 92 APPLICATION
PLAY STORE (ANDROID)
APPS STORE (iphone)

LOT 1005 TARLAC CADASTRE
SAN ROQUE, TARLAC CITY

Tie line: BBM No.13 Tarlac Cadastre
S.19-27 E.299.50 m.

1-2 S.29-17 W. 109.77 m.

2-3 S.84-35W. 57.79 m.

3-4 N.27-56E. 141.06 m.

4-5 S.62-34E. 35.93 m.

5-1 S.62-34E. 14.93 m.

AREA=6,194 Sq.m



BLLM No.1 TARLAC CADASTRE

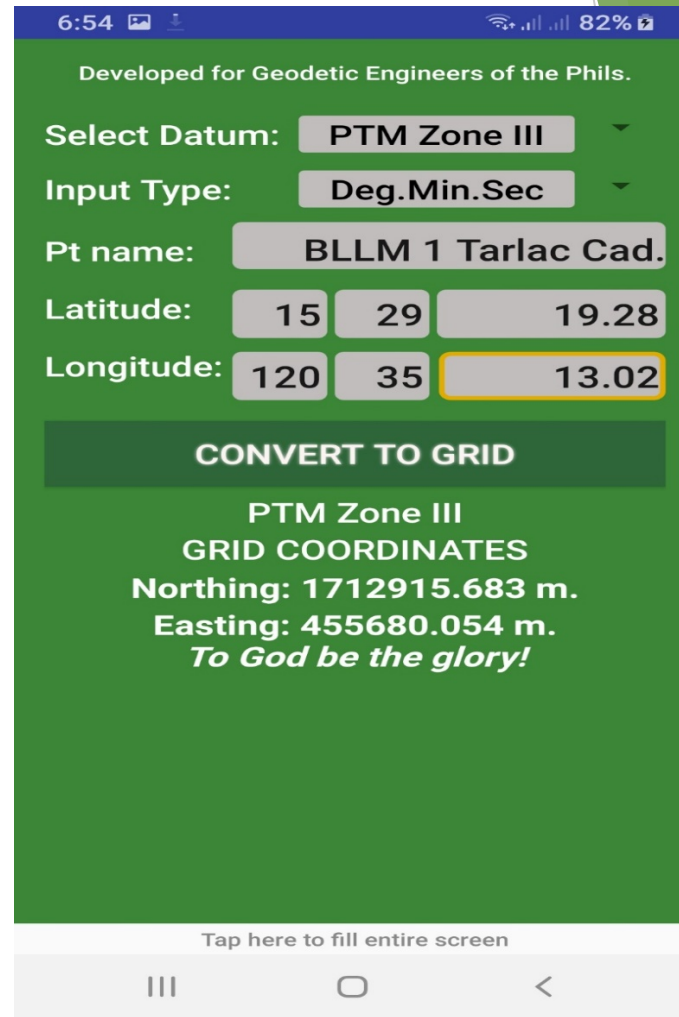
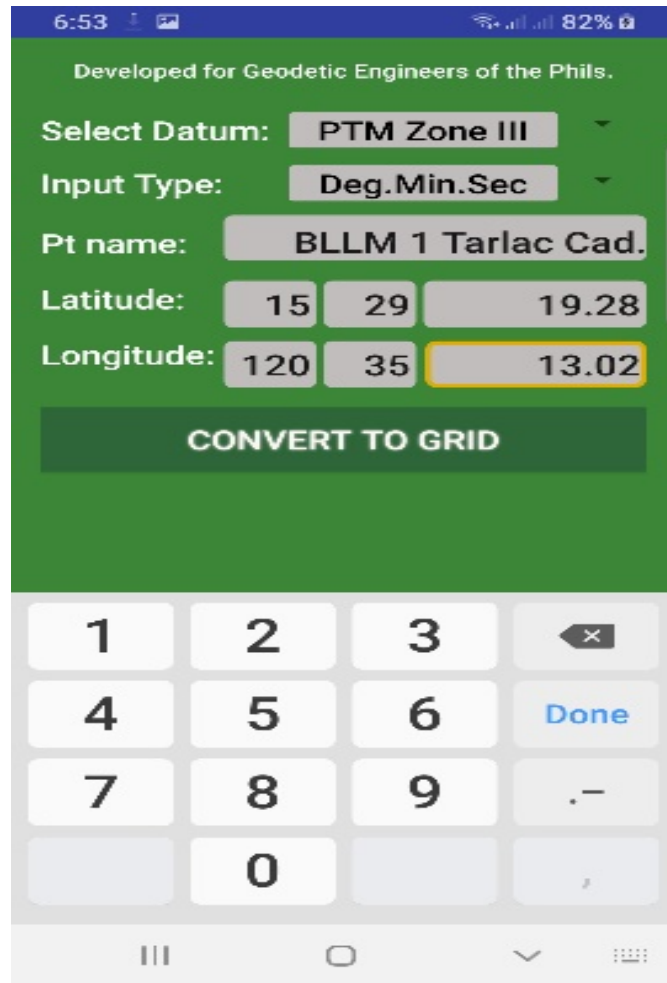
N= 30,000.00 E=30,000.00

LAT. 15-29-19.28 LONG=120-35-13.02

BBM No. 13 TARLAC CADASTRE

N=29839.45 E=30181.81

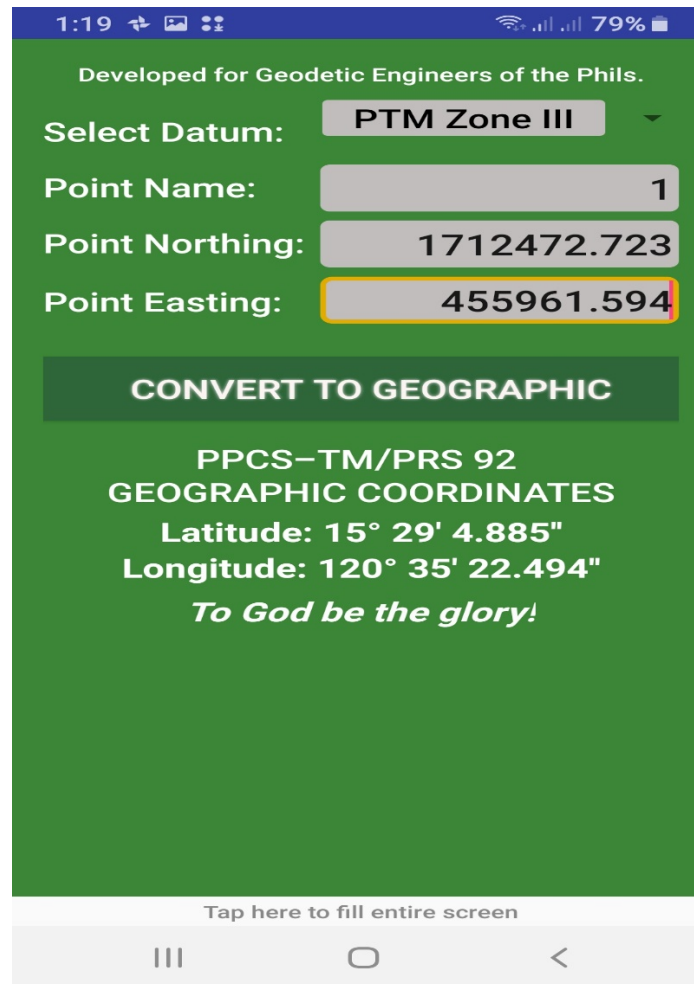
- 1.) CONVERT BLLM No. 1 TO GRID COORDINATES
- 2.) CONVERT THE GRID COORDINATES OF LOT 1005 TO GEOGRAPHIC COORDINATES and TO WGS 84



**ENCODE the Lat. and Long. of BLLM No.1
using GEOGRAPHIC to GRID
N=1712915.683 E=455680.054**

GRID COORDINATES OF LOT 1005 TARLAC CADASTRE
NORTHINGS **EASTINGS**

1	1712472.723	455961.594
2	1712376.983	455907.904
3	1712371.523	455850.374
4	1712496.153	455916.454
5	1712479.603	455948.344

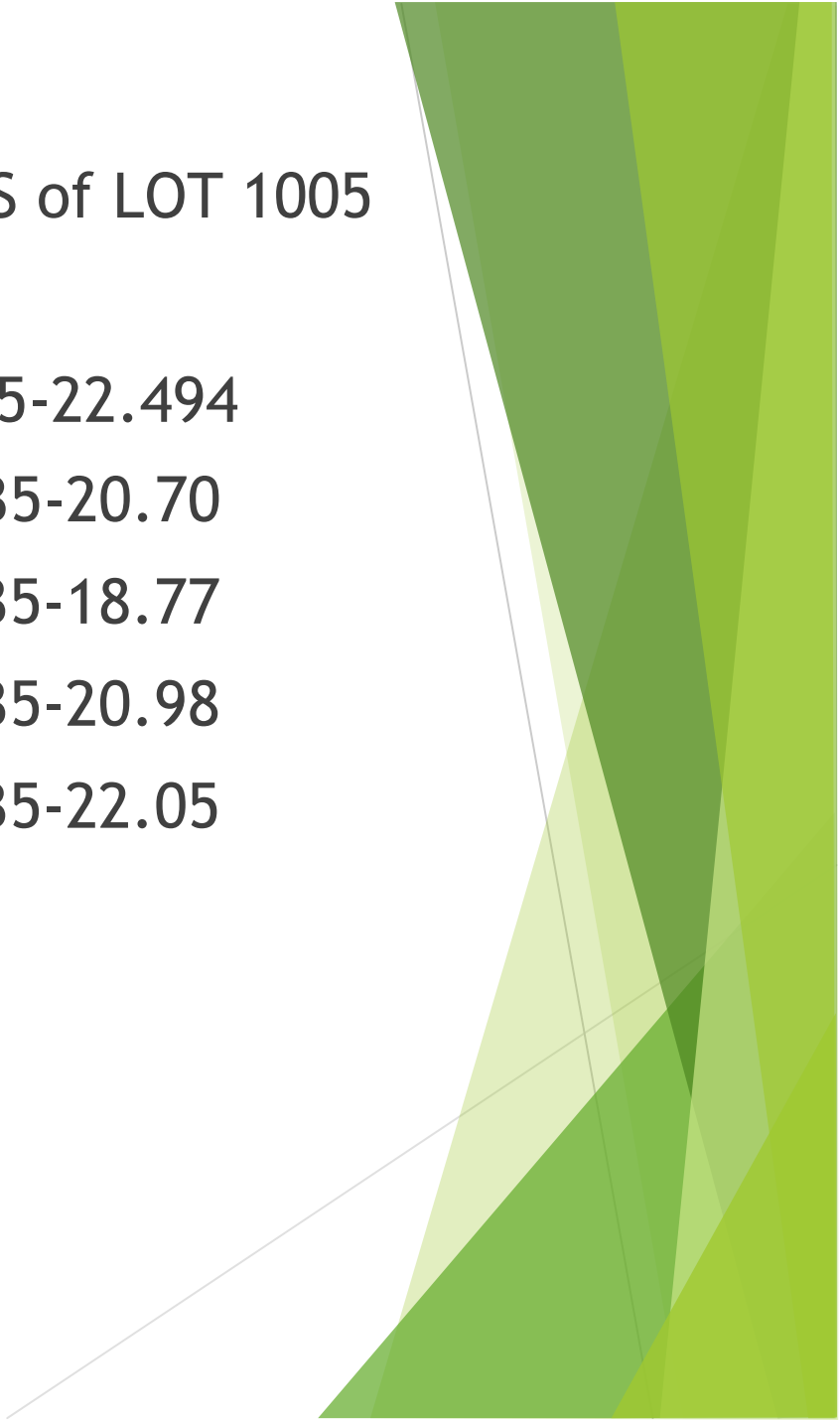


CONVERT the GRID COORDINATES of LOT 1005
to GEOGRAPHIC Coordinates



▶ GEOGRAPHIC COORDINATES of LOT 1005

▶ 1	15-29-4.885	120-35-22.494
▶ 2	15-29-1.77	120-35-20.70
▶ 3	15-29-1.58	120-35-18.77
▶ 4	15-29-5.64	120-35-20.98
▶ 5	15-29-5.11	120-35-22.05



Convert the GEOGRAPHIC COORDINATES of LOT 1005 to WGS 84 using the PRS92 to WGS 84

10:43 89%

Developed for Geodetic Engineers of the Phils.

Input Type: **Deg.Min.Sec**

Pt name: 1

Latitude: 15 29 4.885

Longitude: 120 35 22.494

Height: 20

TRANSFORM TO WGS 84

WGS 84
GEOGRAPHIC COORDINATES
Latitude: 15° 28' 59.23499"
Longitude: 120° 35' 27.31485"
Ellipsoidal Hgt: 60.003 m.

To God be the glory!

Tap here to fill entire screen

10:29 92%

Developed for Geodetic Engineers of the Phils.

Input Type: **Deg.Min.Sec**

Pt name: 2

Latitude: 15 29 1.77

Longitude: 120 35 20.70

Height: 20

TRANSFORM TO WGS 84

WGS 84
GEOGRAPHIC COORDINATES
Latitude: 15° 28' 56.12014"
Longitude: 120° 35' 25.52092"
Ellipsoidal Hgt: 60.004 m.

To God be the glory!

Tap here to fill entire screen

10:44 89%

Developed for Geodetic Engineers of the Phils.

Input Type: **Deg.Min.Sec**

Pt name: 3

Latitude: 15 29 1.58

Longitude: 120 35 18.77

Height: 20

TRANSFORM TO WGS 84

WGS 84
GEOGRAPHIC COORDINATES
Latitude: 15° 28' 55.93011"
Longitude: 120° 35' 23.59093"
Ellipsoidal Hgt: 60.003 m.

To God be the glory!

Tap here to fill entire screen

10:31 92%

Developed for Geodetic Engineers of the Phils.

Input Type: **Deg.Min.Sec**

Pt name: 4

Latitude: 15 29 5.64

Longitude: 120 35 20.98

Height: 20

TRANSFORM TO WGS 84

WGS 84
GEOGRAPHIC COORDINATES
Latitude: 15° 28' 59.98991"
Longitude: 120° 35' 25.80083"
Ellipsoidal Hgt: 60.001 m.

To God be the glory!

Tap here to fill entire screen

10:32 92%

Developed for Geodetic Engineers of the Phils.

Input Type: **Deg.Min.Sec**

Pt name: 5

Latitude: 15 29 5.11

Longitude: 120 35 22.05

Height: 20

TRANSFORM TO WGS 84

WGS 84
GEOGRAPHIC COORDINATES
Latitude: 15° 28' 59.45996"
Longitude: 120° 35' 26.87084"
Ellipsoidal Hgt: 60.002 m.

To God be the glory!

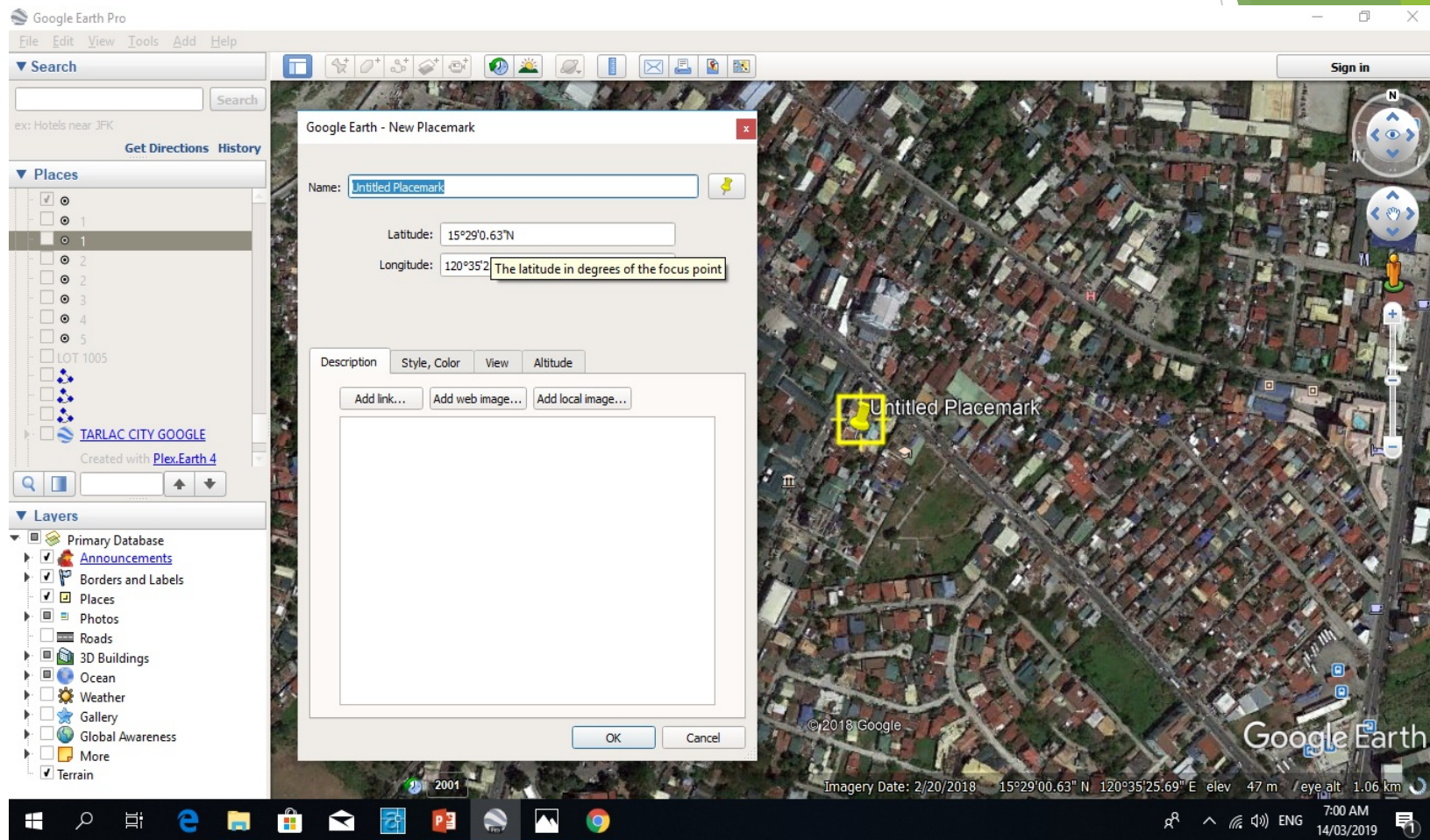
Tap here to fill entire screen

▶ . LOT 1005 (WGS 84)

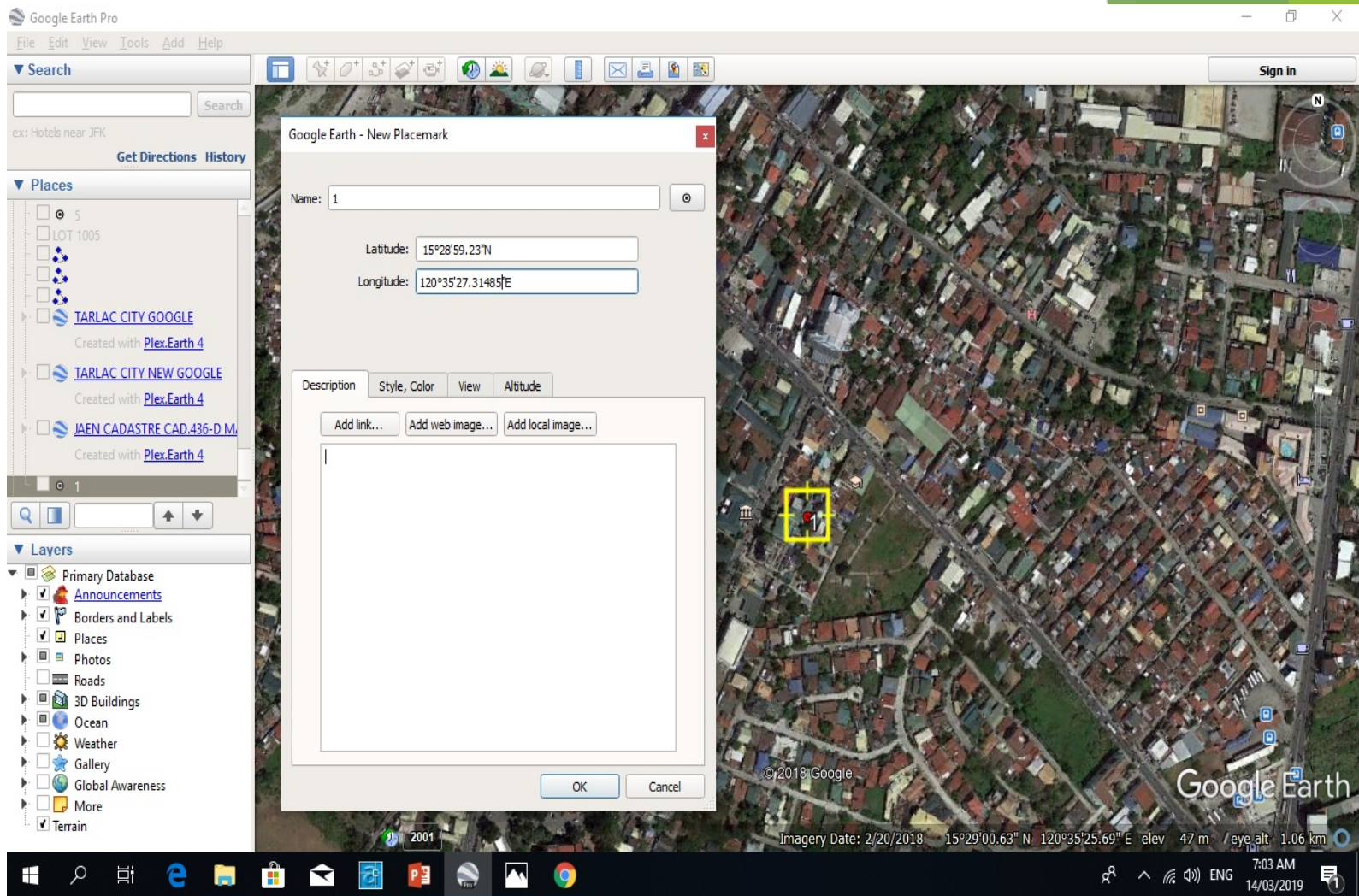
▶ 1	15-28-59.23499	120-35-27.31485
▶ 2	15-28-56.12014	120-35-25.52092
▶ 3	15-28-55.93011	120-35-23.59093
▶ 4	15-28-59.98991	120-35-25.80083
▶ 5	15-28-59.45996	120-35-26.87084

- ▶ Encode the Geographic Coordinates Using Google Earth Application

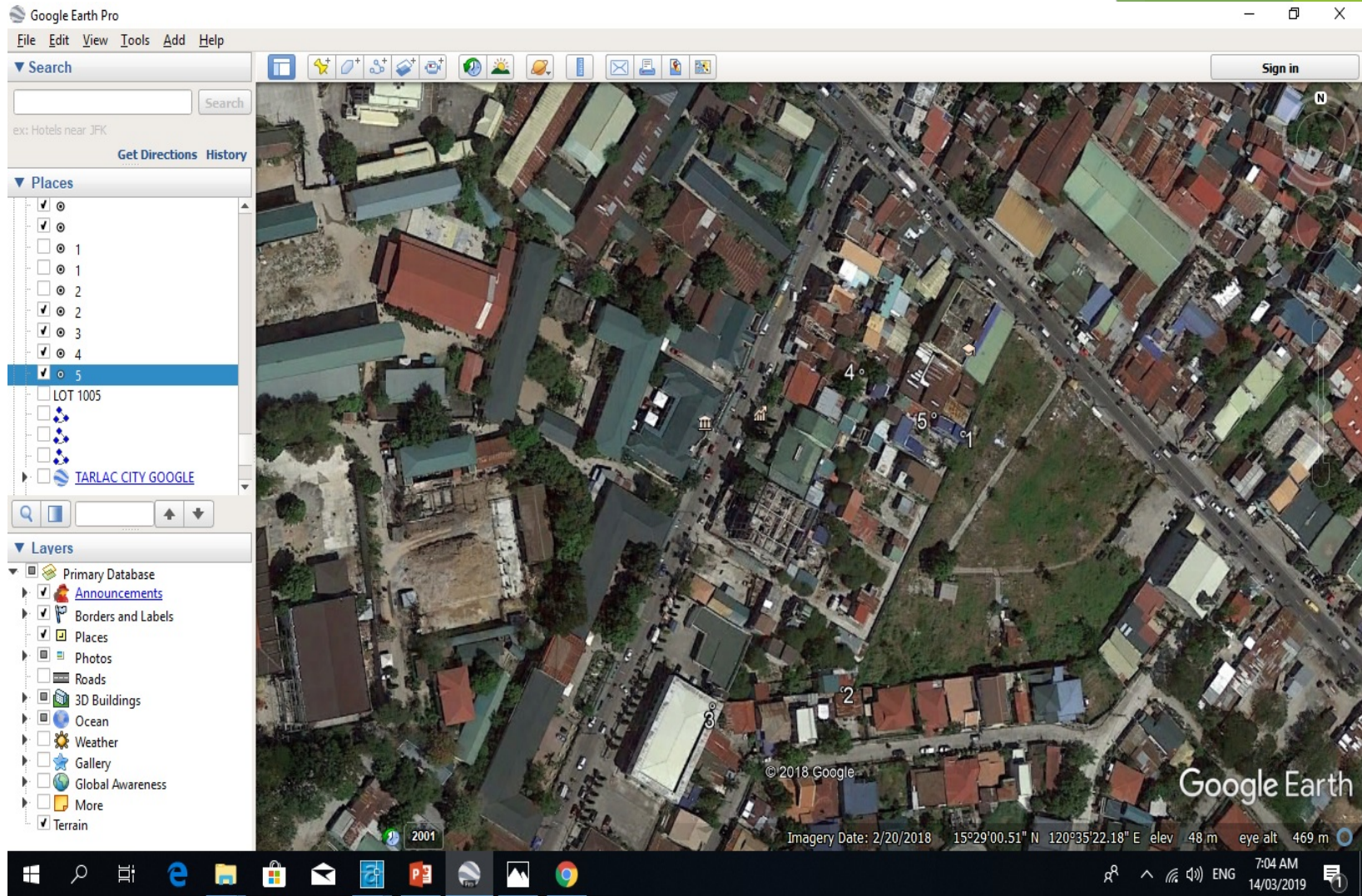
2. USING GOOGLE EARTH IN SURVEYING and MAPPING ADD PLACEMARK COMMANDS



ENCODE WGS 84 COORDINATES LAT. and LONG.
OF CORNER 1 TO 5 OF LOT 1005 TARLAC CADASTRE

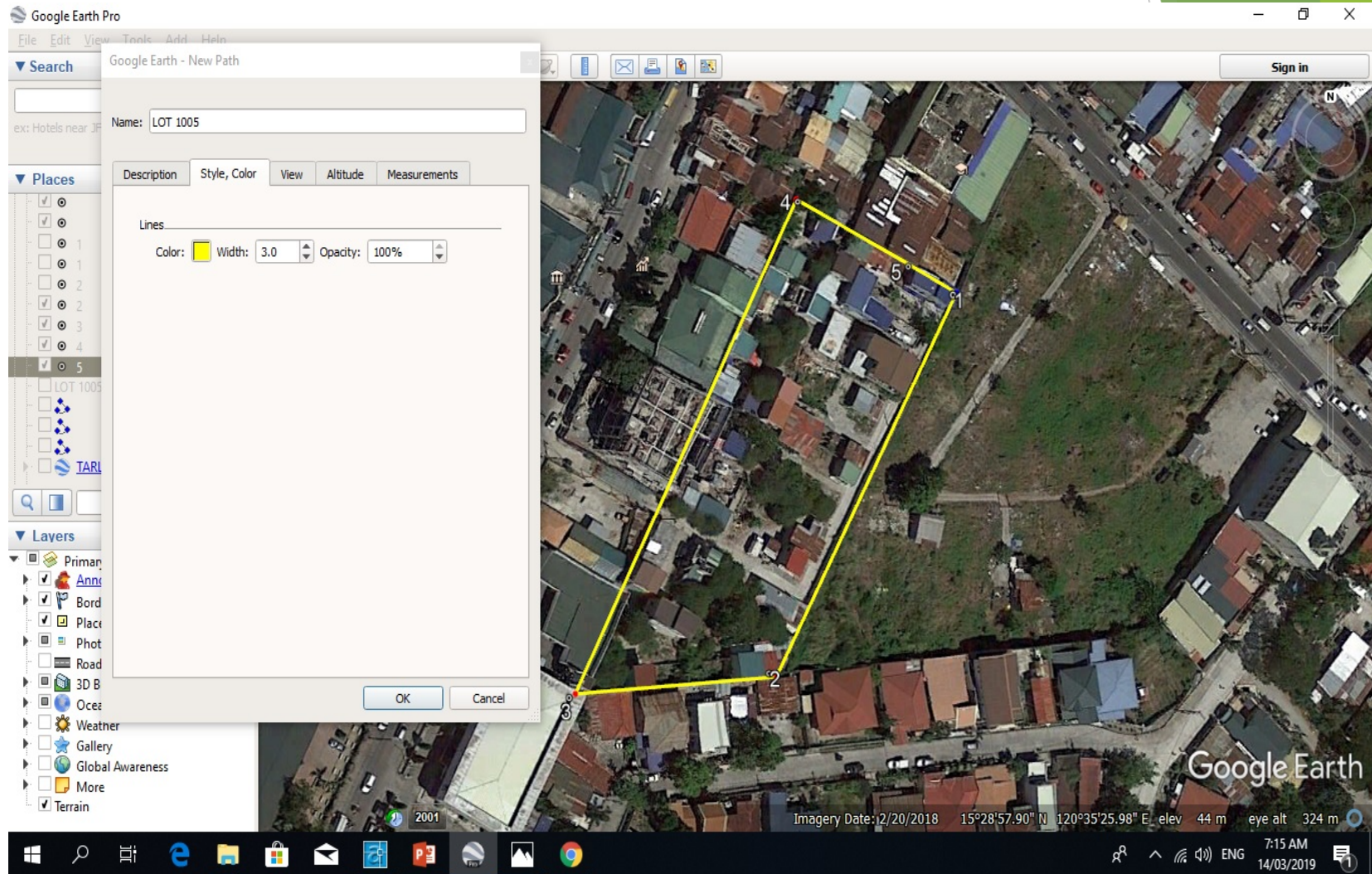


CORNER 1 LAT. 15-28-59.23499 LONG. 120-35-27.31485
Click ok..

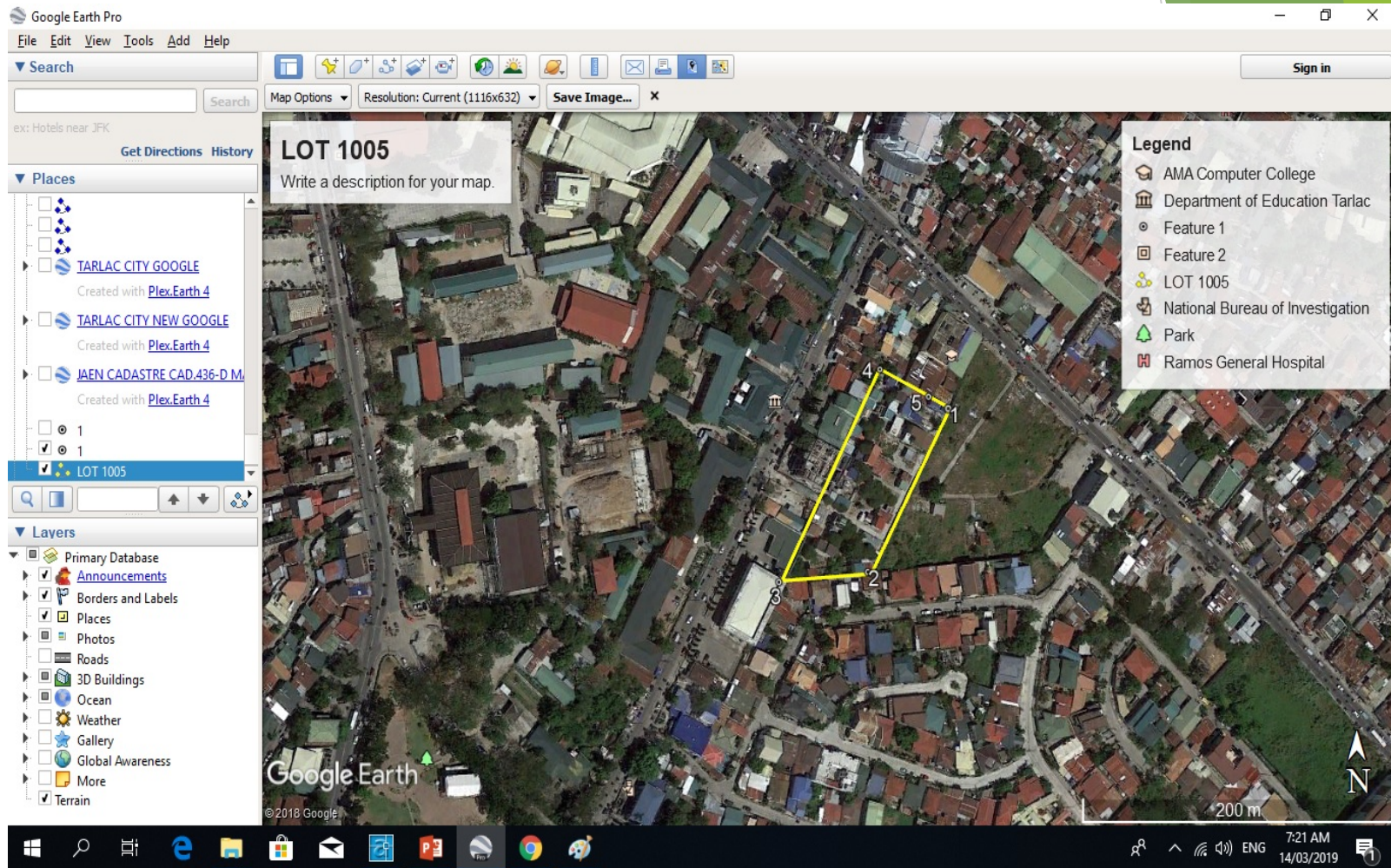


Lot 1005 Tarlac Cadastre WGS 84 COORDINATES encoded

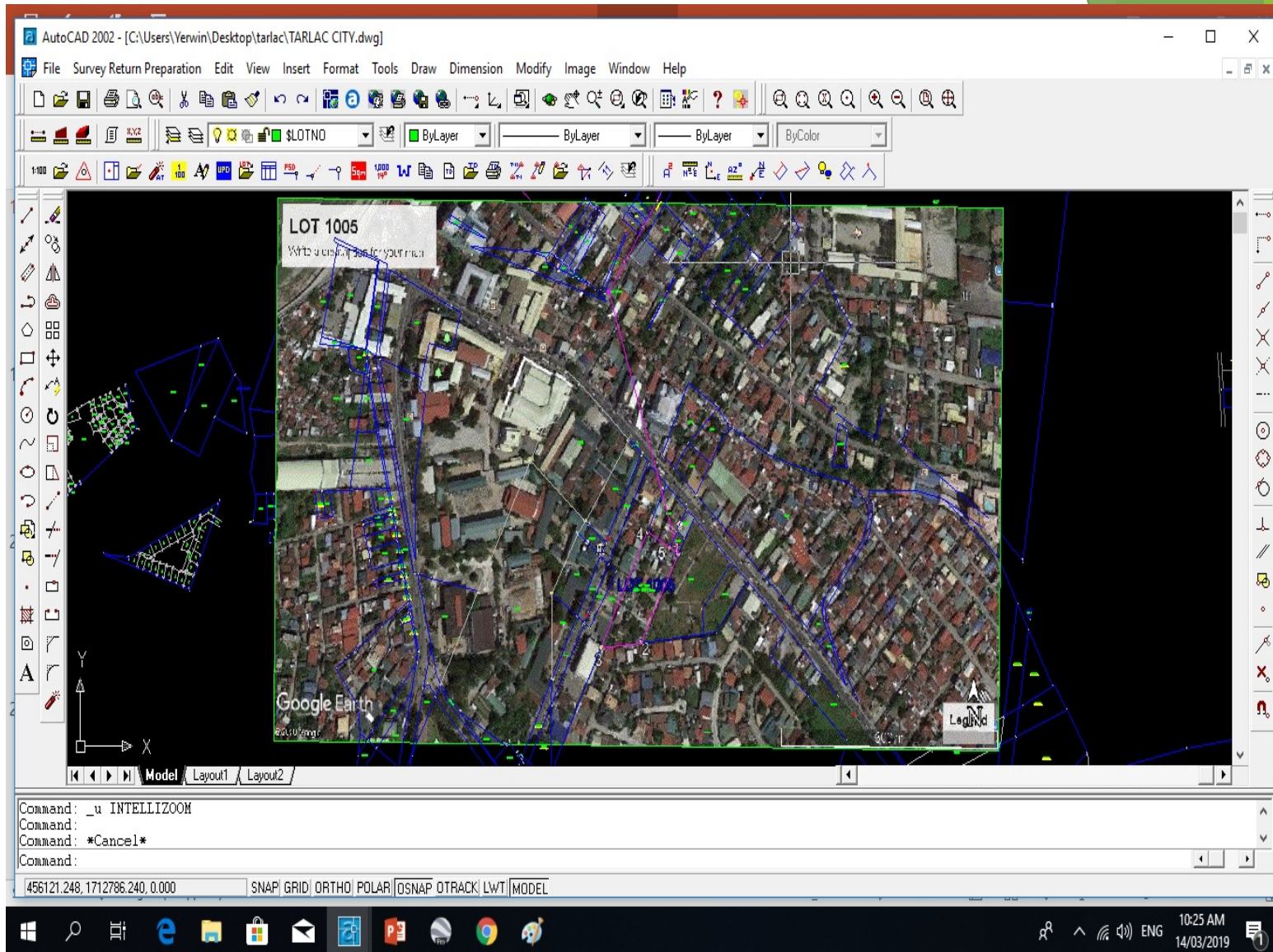
ADD PATH



PICK THE CORNERS OF THE LOT TO DRAW A LINE

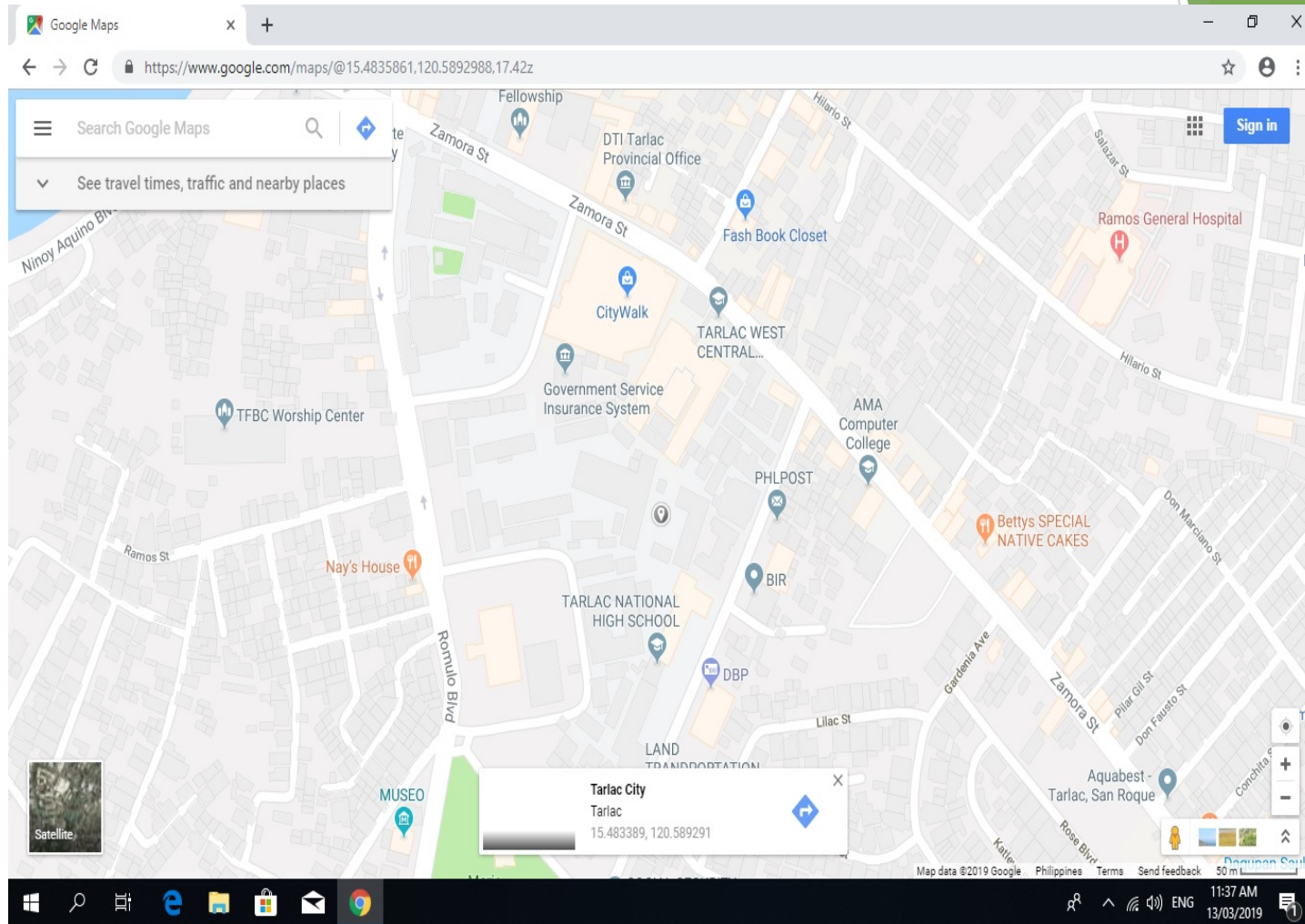


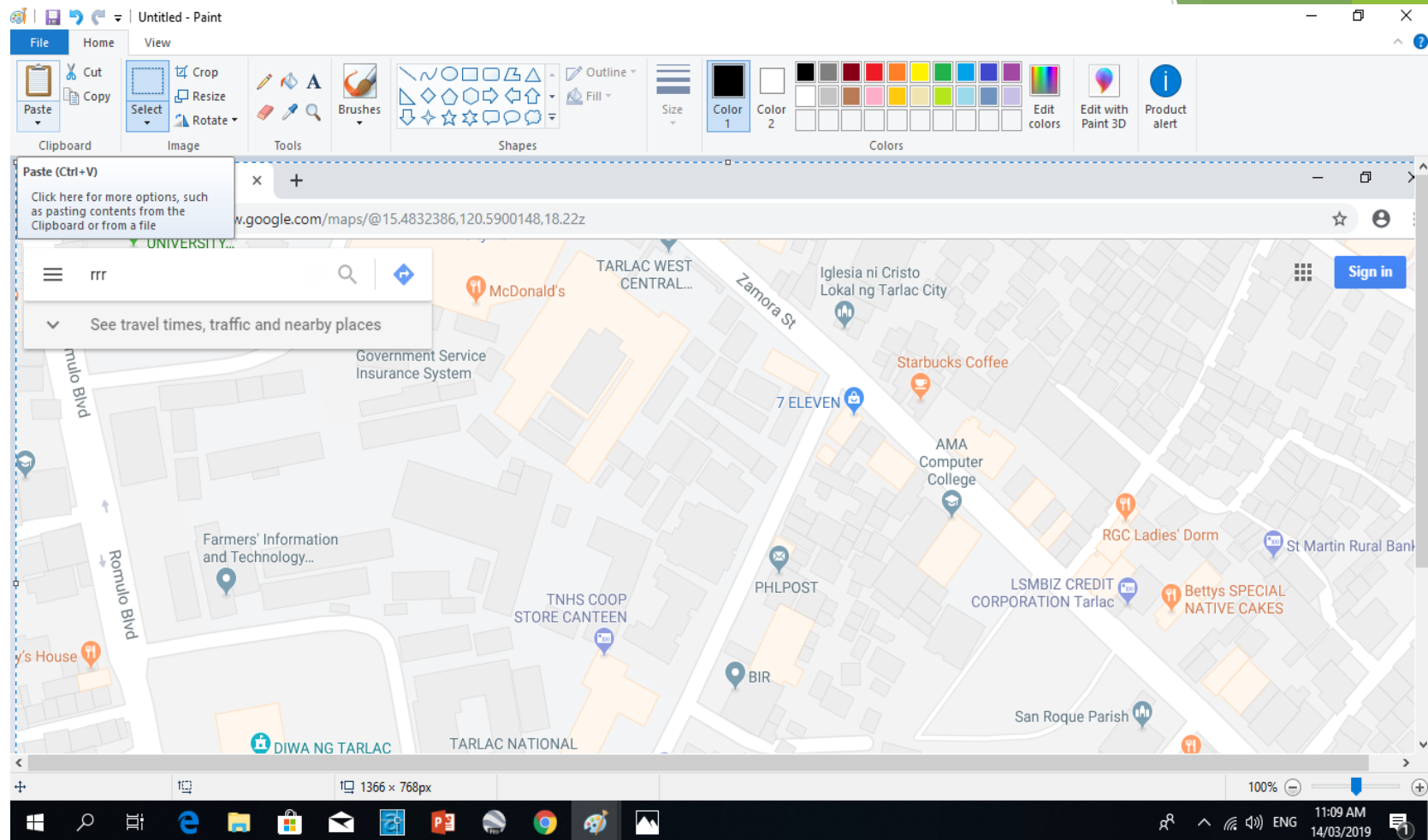
SAVING IMAGE



ZOOM OUT IMAGES

Inserting Google Maps/ Sketch Plan/Vicinity Map

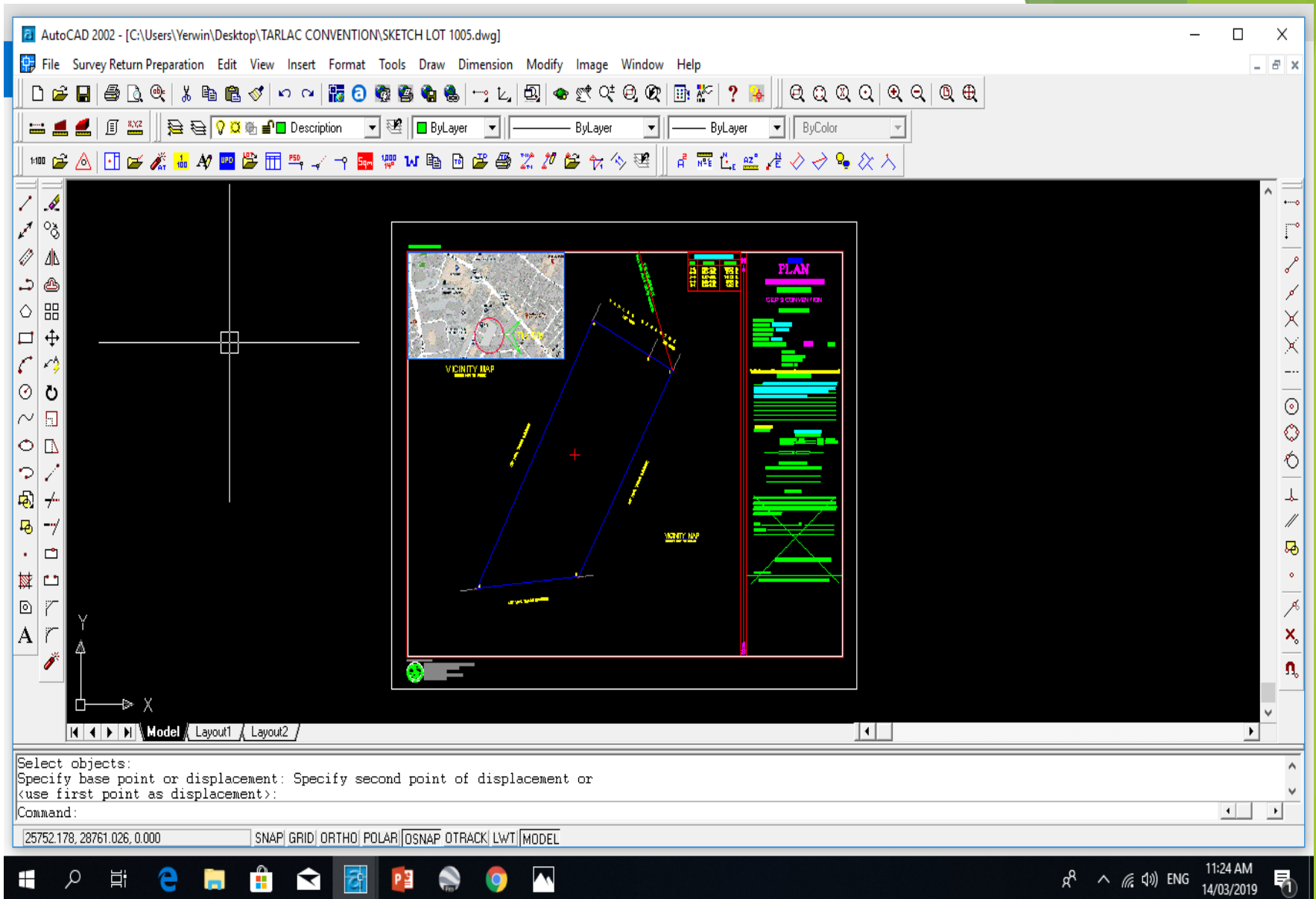




PRINT SCREEN THE IMAGES/ OPEN PAINT APPLICATION and PASTE, SAVE AS JPEG IMAGES/ OPEN THE IMAGES AND CROP



INSERT THE GOOGLE MAPS IMAGES TO AUTOCAD DRAWING



Command Insert/Raster Images/Scale

AutoCAD 2002 - [C:\Users\Yerwin\Desktop\TARLAC CONVENTION\SKETCH LOT 1005.dwg]

File Survey Return Preparation Edit View Insert Format Tools Draw Dimension Modify Image Window Help

1:100

Locate Point

LMP Form No. OSD - C - 2

VICINITY MAP
DRAWN NOT TO SCALE

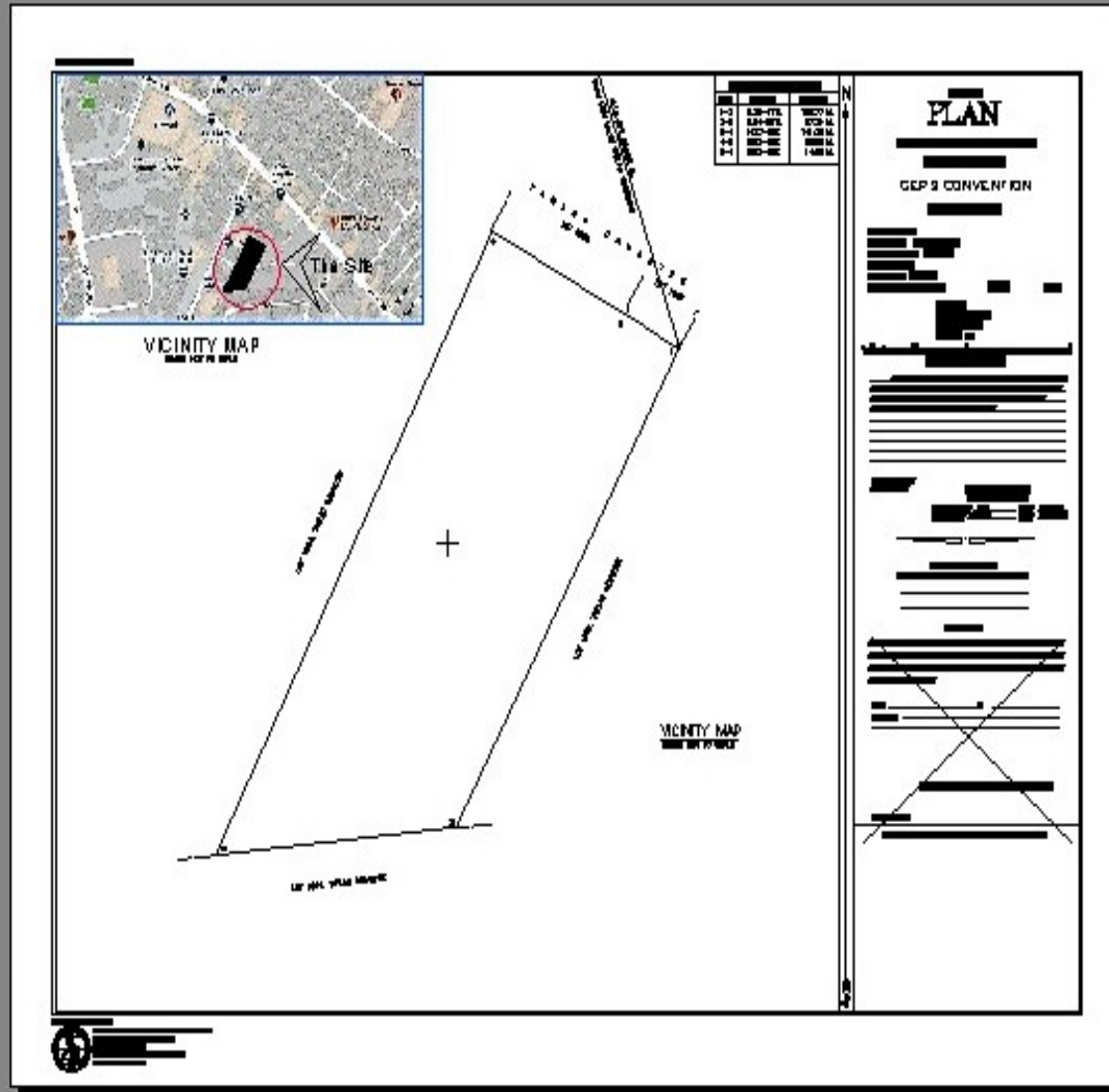
TARLAC CADASTRE LOT 1006

Model Layout1 Layout2

Specify window for printing
Specify first corner: Specify opposite corner:
Press ESC or ENTER to exit, or right-click to display shortcut menu.

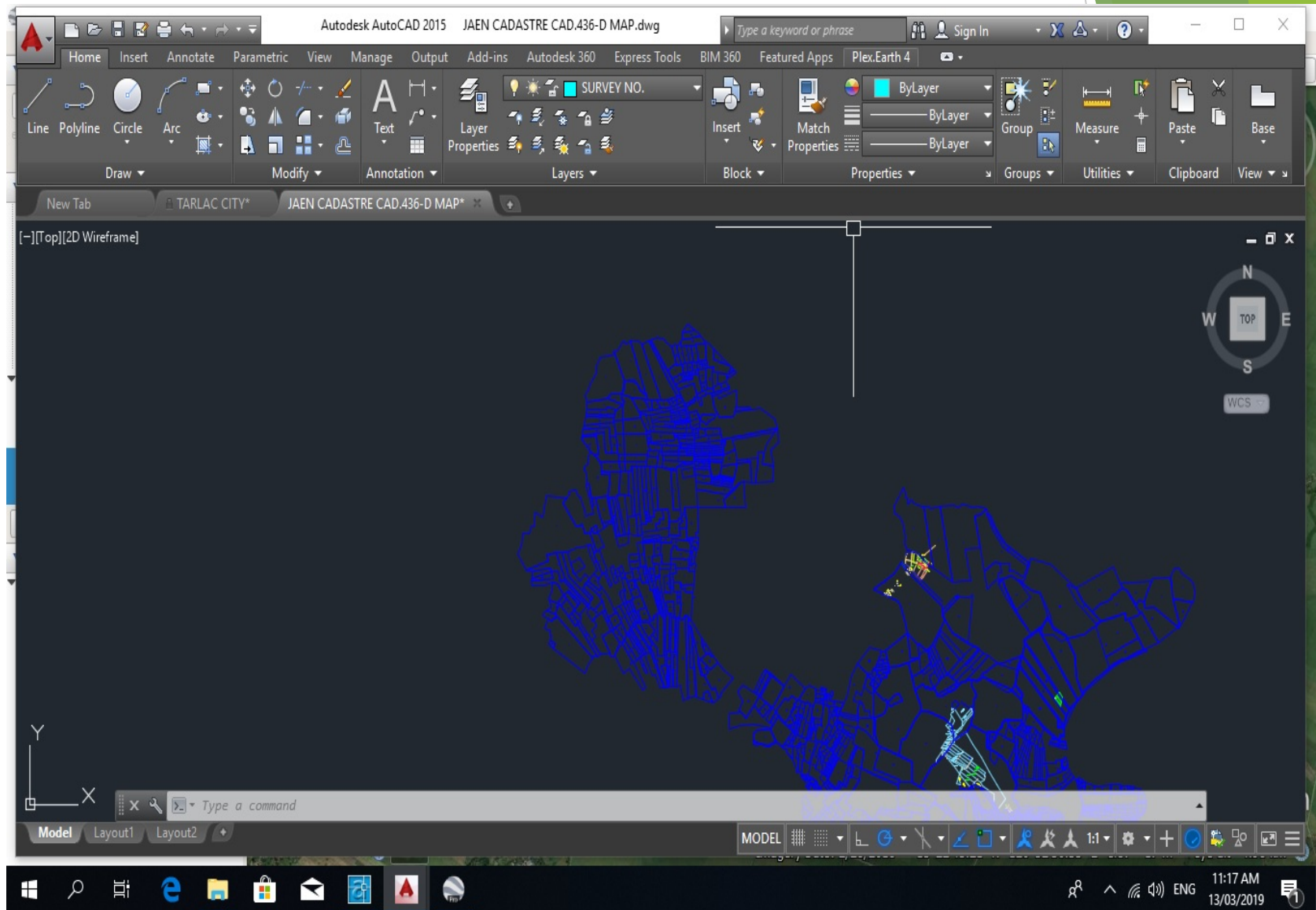
Displays the coordinate values of a location: ID

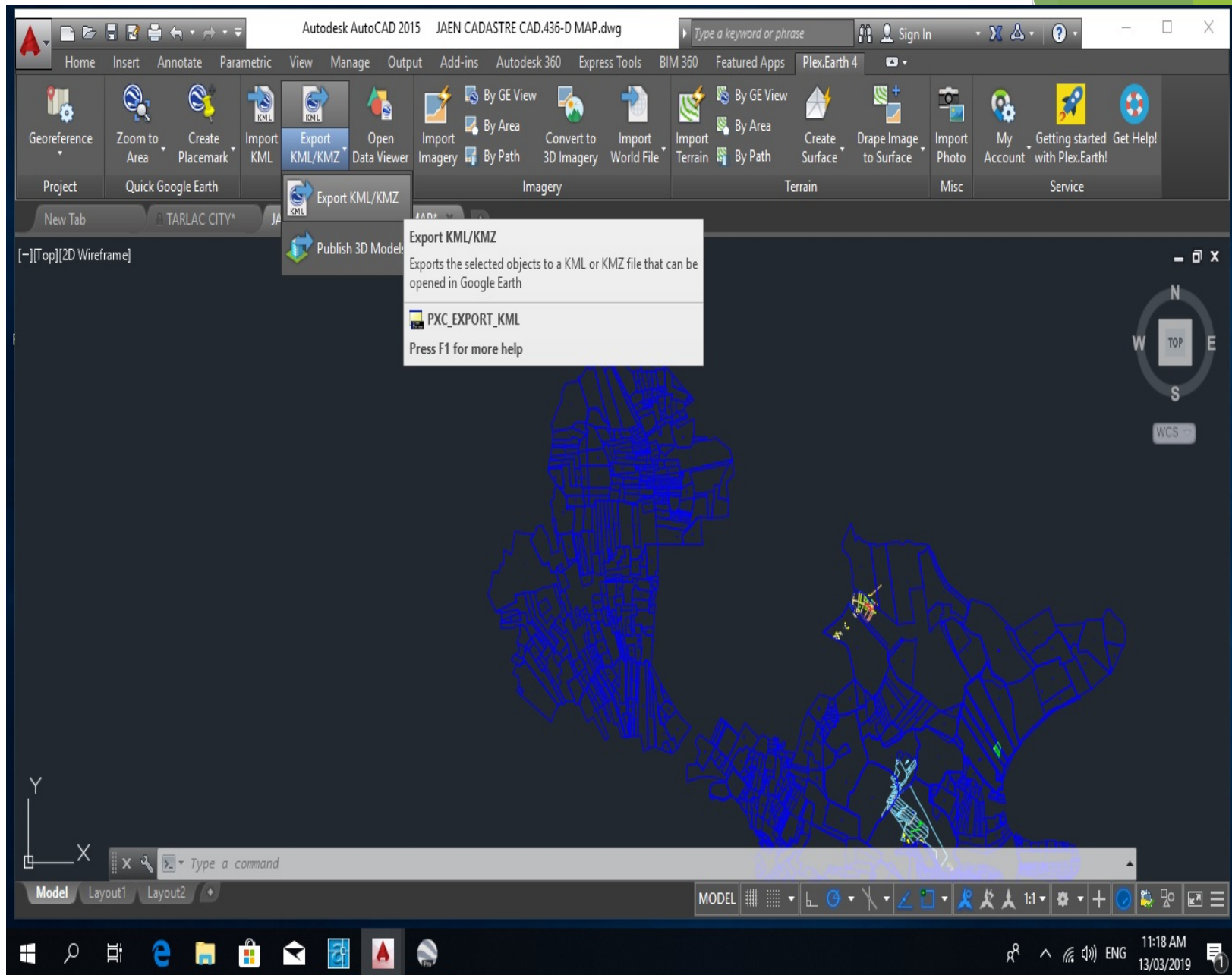
11:28 AM
14/03/2019

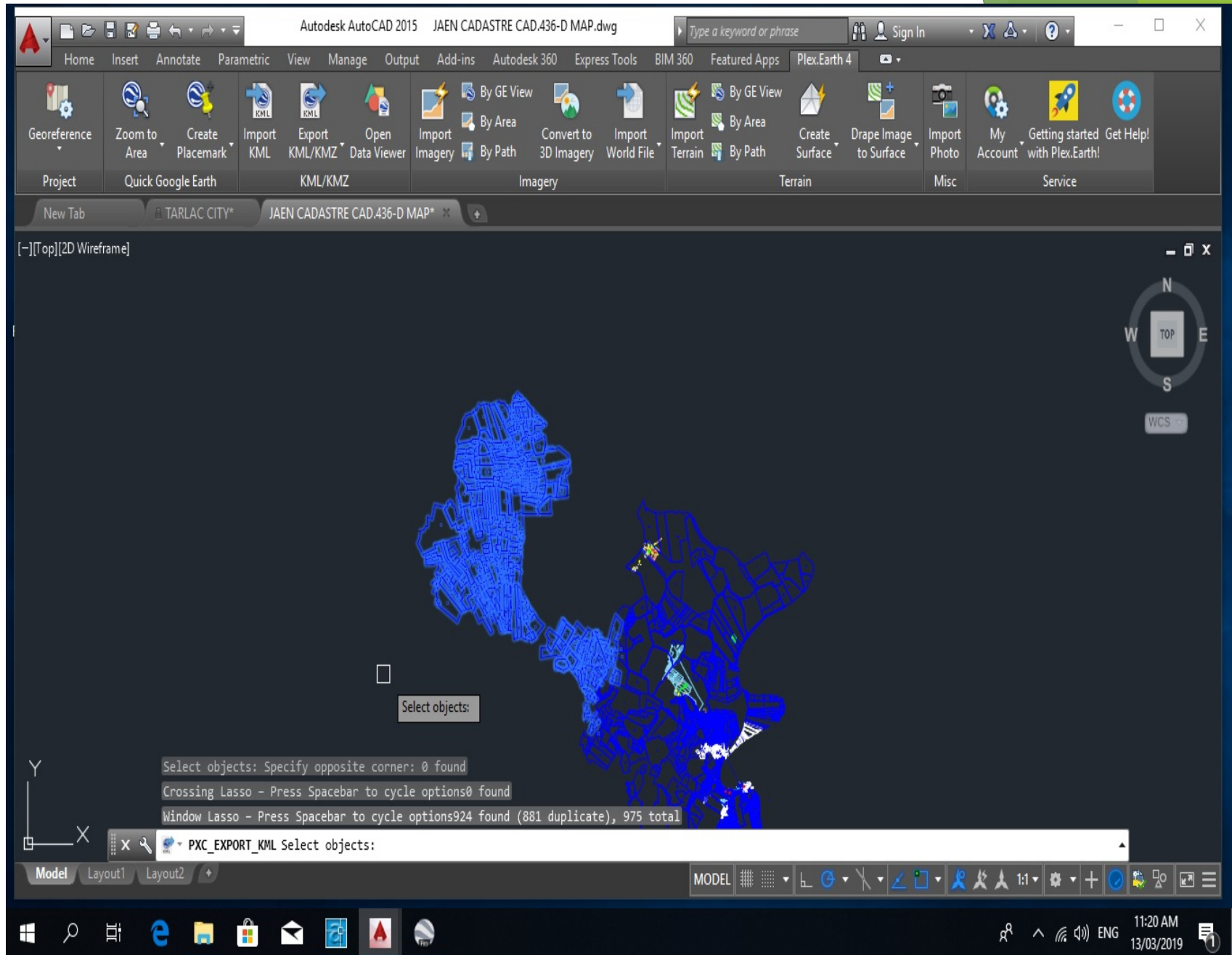


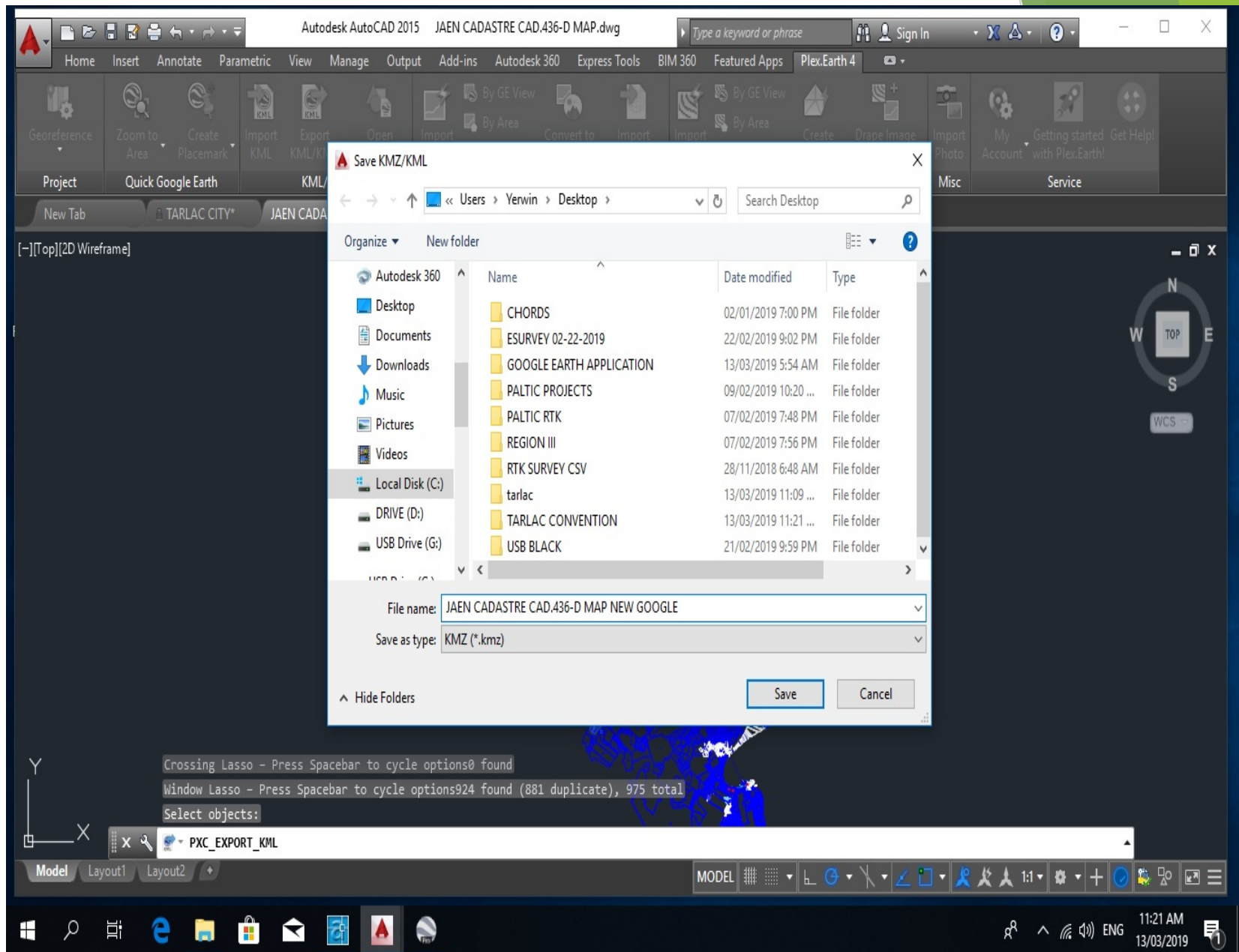
FINAL SKETCH PLAN

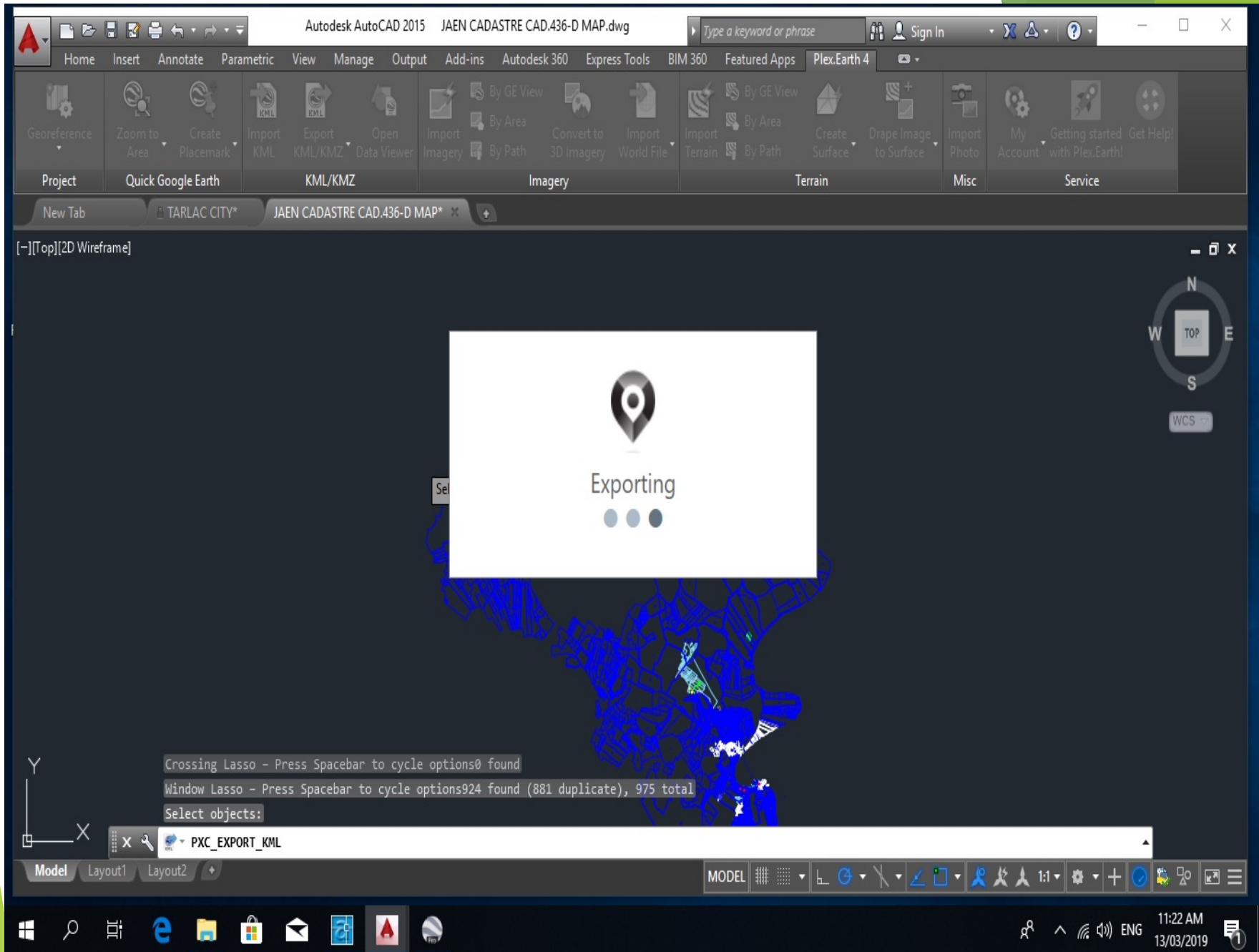
PLEX EARTH tools for autocad











Autodesk AutoCAD 2015 JAEN CADASTRE CAD.436-D MAP.dwg

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Georeference Zoom to Area Create Placemark Import KML Export KML/KMZ Open Data Viewer Import Imagery By GE View By Area Convert to 3D Imagery Import World File Import Terrain By GE View By Area Create Surface Drape Image to Surface Import Photo My Account Getting started with Plex.Earth! Get Help!

New Tab TARLAC CITY* JAEN CADASTRE CAD.436-D MAP* x

[-][Top][2D Wireframe]

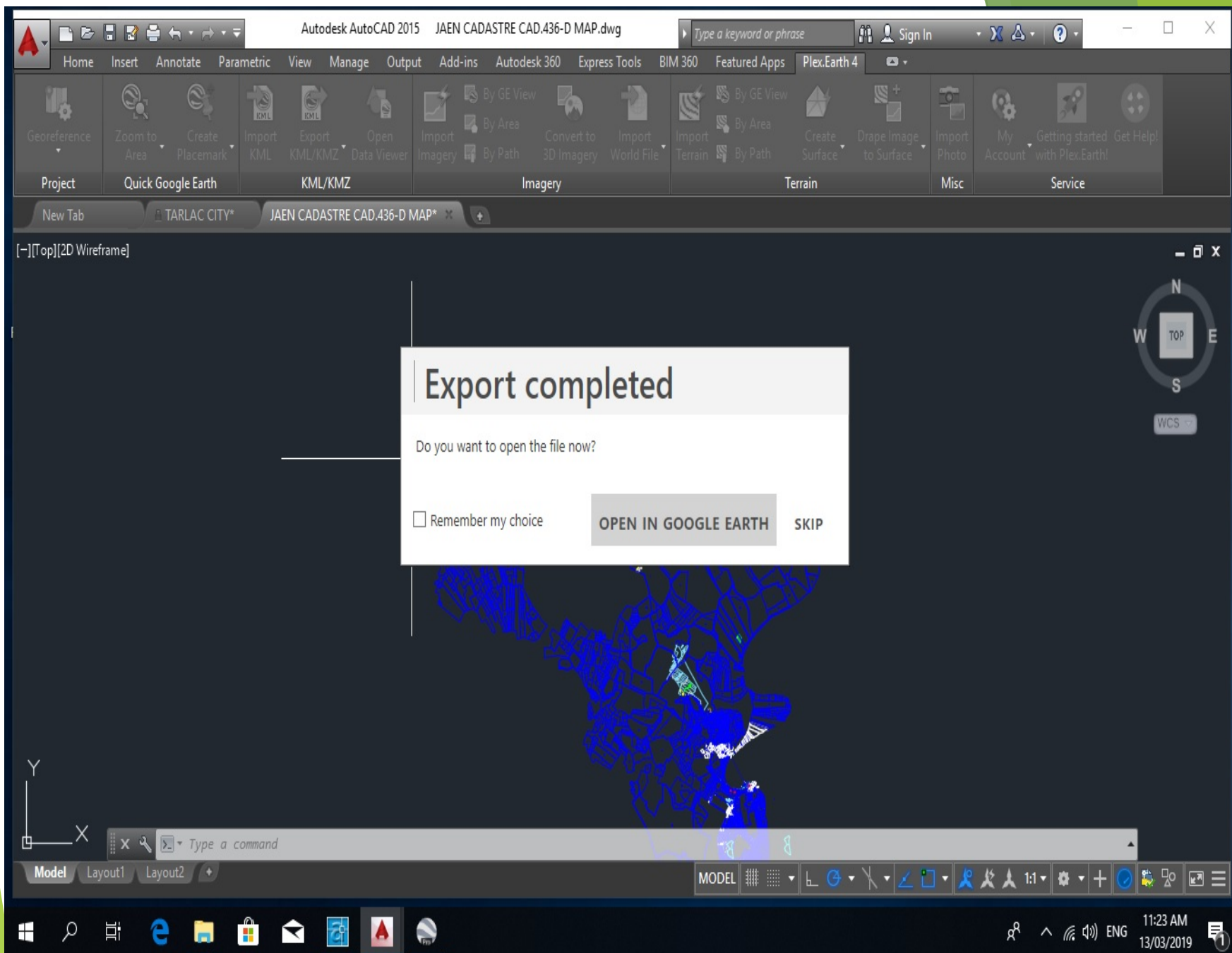


Exporting

Crossing Lasso - Press Spacebar to cycle options0 found
Window Lasso - Press Spacebar to cycle options924 found (881 duplicate), 975 total
Select objects:

PXC_EXPORT_KML

Model Layout1 Layout2 MODEL MODEL



Google Earth Pro

— □ ×

File Edit View Tools Add Help

▼ Search

Search

ex: Tokyo, Japan

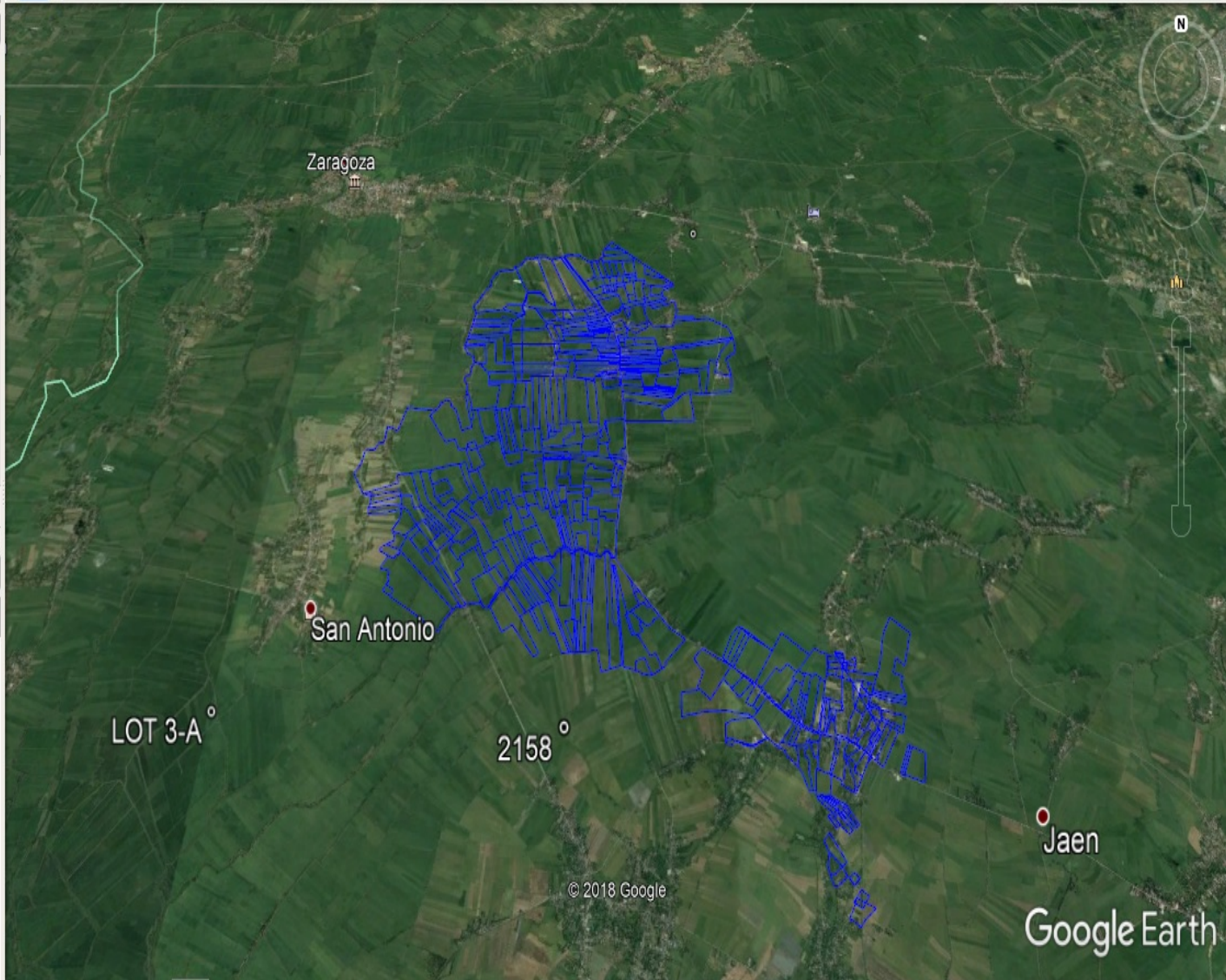
Get Directions History

▼ Places

- 5
- LOT 1005
-
-
-
- ▼ Temporary Places
 - TARLAC CITY GOOGLE
Created with [Plex.Earth 4](#)
 - TARLAC CITY NEW GOOGLE
Created with [Plex.Earth 4](#)
 - JAEN CADASTRE CAD.436-D M
Created with [Plex.Earth 4](#)

▼ Layers

- ▼ Primary Database
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 - Ocean
 - Weather
 - Gallery
 - Global Awareness
 - More
- Terrain



Imagery Date: 2/28/2018 15°25'21.90" N 120°49'50.02" E elev 19 m eye alt 10.63 km



11:23 AM 13/03/2019 ENG



THANK YOU!!!!

gepnechapter.blogspot.com