

GAEA SYSTEMS PVT LTD SYSTEMS PVT LTD will create feature linked annotation within the GIS for the following annotation classes:

- Lot-Dimensions
- Subdivision Names
- Block Numbers

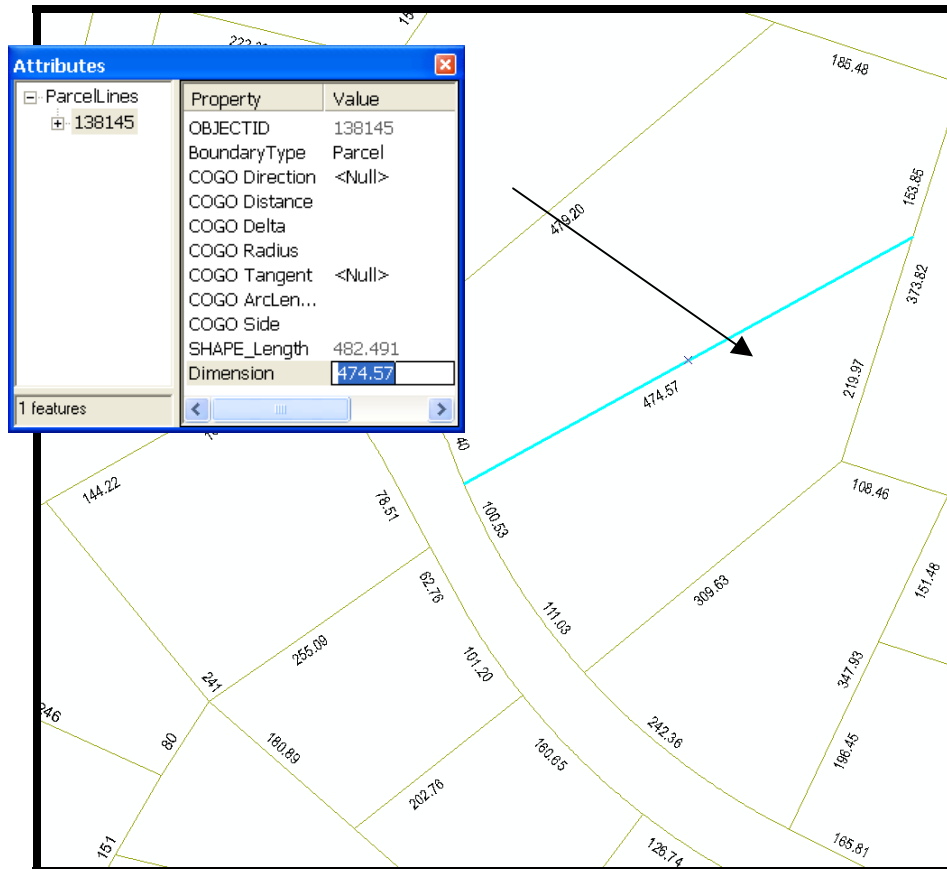


Figure 1 – Line Dimension Annotation

The annotation value will be transferred from the CAD environment to its corresponding feature and stored as an attribute in the GIS database (Figure 1). The attribute information will be contained in the respective feature class. The annotation will then be generated and placed with an approximate representation of the location, rotation and scale as found in the original CAD environment.

It is understood that some features do not currently exist in the parcel database and must be created to support the feature-linked annotation. The following GIS layers will be created during the annotation process outlined below:

- Subdivision Boundaries
- Block Boundaries
- Historic Lot Lines

- Land Hooks
- Easements

For all boundary features the technician will utilize the lines as represented on the CAD maps to select parcels that create each boundary. The selected parcels will then be used to generate the respective boundary feature.

For the historic lot lines the technician will calculate the historic lot line origin and termination points by extrapolating the percentage distance based on deeded length. For example, if the deeded dimension outlines the distance between the historic lot line node and property boundaries as 50 feet from each side the line will be totaled at 100 feet. A node will be placed on the parcel line at 50% of the total distance. This will determine the origin of the lot-line. The same process will be repeated for the termination point of the lot line. The two nodes will be connected and the lot-line will be stored in a subtype of the parcel-line feature class.

The historic lot lines, land hooks and easements will be designed and stored as line features represented as subtypes within the parcel line feature class. The easement line class will contain the following types of easements:

- Utility
- Road Right of Way

GAEA SYSTEMS PVT LTD SYSTEMS PVT LTD will make every effort to construct the easements from any clearly defined AutoCAD map representations. The city will be responsible for the construction of the polygon geometry and the final classification of these easement lines.

It is expected that there will be slight discrepancies between the location and representation within the CAD and the resulting GIS environments. GAEA SYSTEMS PVT LTD SYSTEMS PVT LTD will utilize all available technology to minimize positional discrepancies.

A GAEA SYSTEMS PVT LTD Technician will manually review the data to ensure that annotation values have been transferred to the correct feature. This will be a necessary step because some annotation is offset and reference features using leader lines. The technician will access the individual property maps from the following sources:

GAEA SYSTEMS PVT LTD will work with the City to decide on the appropriate size for each annotation class. It is understood that all annotation within each class will maintain a uniformed annotation size. The sizes for each annotation class must be agreed upon before the manual placement process begins. For example, the dimension annotation will be sized at *Arial Narrow 7* font for the entire map. In circumstances such as the size of a parcel preventing the approved annotation size from being created the technician may adjust the size to most accurately reflect the original CAD drawing.

Step 2: Convert other CAD Annotation

Once the Dimension annotation has been converted, GAEA SYSTEMS PVT LTD will perform a migration of other selected CAD annotations. The annotation elements

will be set up in the new geodatabase in logical classes and can be structured to meet the specific needs of the City (Figure 2). These annotation classes will be standalone annotation feature classes. This includes the following:

- Lot Numbers
- Easements

It is understood that this list is not comprehensive to all the annotation located in the CAD environment. The following annotation classes will be maintained by the City as dynamic labels:

- Owner Name
- House Numbers
- Parcel Numbers

It is expected that the City will use the standard ArcMap interface to create the labels. GAEA SYSTEMS PVT LTD can provide general consultation on the creation of the labels however; the scope of work does not include the creation, manipulation or custom coding of the feature labels.

Standard and feature-linked geodatabase annotation feature classes contain one or more annotation classes. Each annotation class contains properties that determine how a subset of annotation in the feature class displays. For standard annotation, these include default symbology applied when creating new annotation, in addition to the visible scale range. For feature-linked annotation, these also include:

- How the annotation text strings will be defined based on attributes in the linked feature class
- Which features in the linked feature class will be annotated by the annotation class
- How to place new annotation

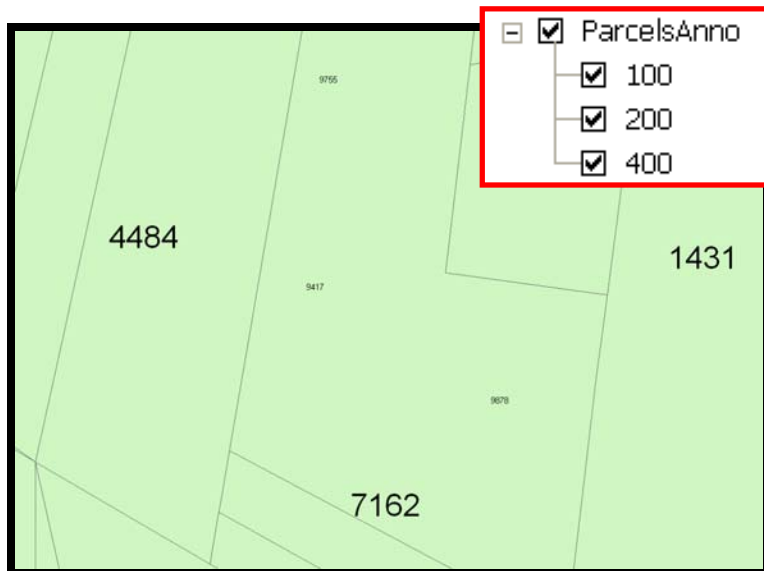


Figure 2 – Annotation Feature Class and Subclasses

It is understood that the City has several handwritten updates recorded on the hard-copy maps located within the City offices. Inclusion of these handwritten edits is not part of the existing scope of work and will remain the responsibility of the City. GAEA SYSTEMS PVT LTD will make every effort to outline the process necessary for the City to make these edits during the training phase of the project.

Deliverables

Deliverable #1 Parcel line feature class with dimensions as attributes

Deliverable #2 Feature linked annotation as previously identified

Deliverable #3 Stand alone annotation classes as previously identified

Deliverable #4 Creation of historic lot line features

Deliverable #5 Creations of block boundary features

Deliverable #6 Creations of subdivision boundary lines