



TAX MAP CONVERSION GIS INTERNET SERVICES PROPOSAL FOR THE TOWN OF BRISTOL, VT

Submitted March 26, 2025 by



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LETTER OF TRANSMITTAL

Cartographic Associates, Inc.
dba CAI Technologies
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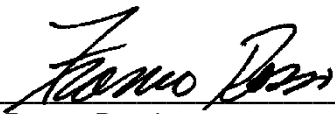


The undersigned proposer acknowledges and accepts that all the terms and conditions set forth in this proposal are mandatory and agrees that they will be included in their entirety in any contract resulting from this proposal.

CAI Technologies warrants and certifies that the individual signing this proposal is a bona fide employee of the firm and has authority to solicit and secure any agreement resulting from this proposal. The proposal has been arrived at independently, without collusion, consultation or communication as to any other proposer or with any competitor. The proposal price was not disclosed by the proposer and was not knowingly discussed prior to the submission, directly or indirectly, to any other proposer or any other competitor. No attempt was made by the proposer to induce any other person, partnership or corporation to submit or not to submit a proposal for the purpose of restricting competition.

No elected official or appointed official or employee of the Town of Bristol, VT shall benefit financially or materially from any contract resulting from this proposal. This proposal shall remain in full force and effect for at least ninety (90) days from the date first shown herein.

PROPOSER:

BY: 

Franco Rossi
President
Contracting Officer

SCOPE OF WORK

TAX MAP CONVERSION SERVICES

1. Using the most current available orthoimagery as a base map, CAI shall digitize the CLIENT's existing tax maps a.k.a. property maps or assessment maps and incorporate said tax map data into the existing GIS parcel data. The results of this task will produce a seamless parcel composite file that includes the tax map data referenced in a real-world coordinate system to serve as a foundation for developing a local government GIS.
2. Data, if shown on the existing maps, to be digitized shall include but not necessarily be limited to map features as follows:

<ul style="list-style-type: none"> ▪ Property Lines ▪ Roads ▪ Right of ways ▪ Railroads ▪ Water lines (streams, ponds, etc.) ▪ Wetlands 	<ul style="list-style-type: none"> ▪ Easements ▪ Town lines ▪ State Plane grid coordinate lines ▪ Common ownership data ▪ Match line references
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3. Text, if shown on the existing maps, to be reproduced shall include all text as follows:

<ul style="list-style-type: none"> ▪ Road names ▪ Water names ▪ Easement names ▪ Parcel numbers ▪ Parcel areas 	<ul style="list-style-type: none"> ▪ Dimensions ▪ Adjacent town names ▪ Exempt parcels ▪ 'Part of text'
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4. Digital Drafting Standards
All text is set to conform to standard cartographic practices. Text will be added to the geodatabase using our standard templates to set the text size, font, color and symbol for each feature. If a text height must be reduced, it will be dropped to accommodate the cartographic need.
5. CAI shall generate new tax maps matching the CLIENT's existing map grid layout.
 - A. The CLIENT's existing tax map Index will be digitized and used for tax map production to ensure that parcels are shown on the correct maps.
 - B. CAI shall configure an ESRI ArcGIS v. 10 x tax map plotting .mxd document using Data Driven Pages. This document will be used to create hard copy and PDF tax maps. The maps will contain standard map features such as a legend, north arrow, town seal, adjacent sheet index, map disclaimer and date of revision.
 - C. CAI shall configure an additional ESRI ArcGIS v. 10 x .mxd document designed for reproducing the CLIENT's index map. The index map will include features and labels for the tax map grid, roads, railroads, water and adjacent municipalities.
6. CAI shall develop a preliminary tax map set in PDF format for review and acceptance prior to final delivery. Changes to the maps should be noted either in the PDF document or the CLIENT could print the PDF maps and note changes on the hard copies prior to sending them back to CAI. CAI staff will incorporate the changes noted by the CLIENT prior to final delivery.

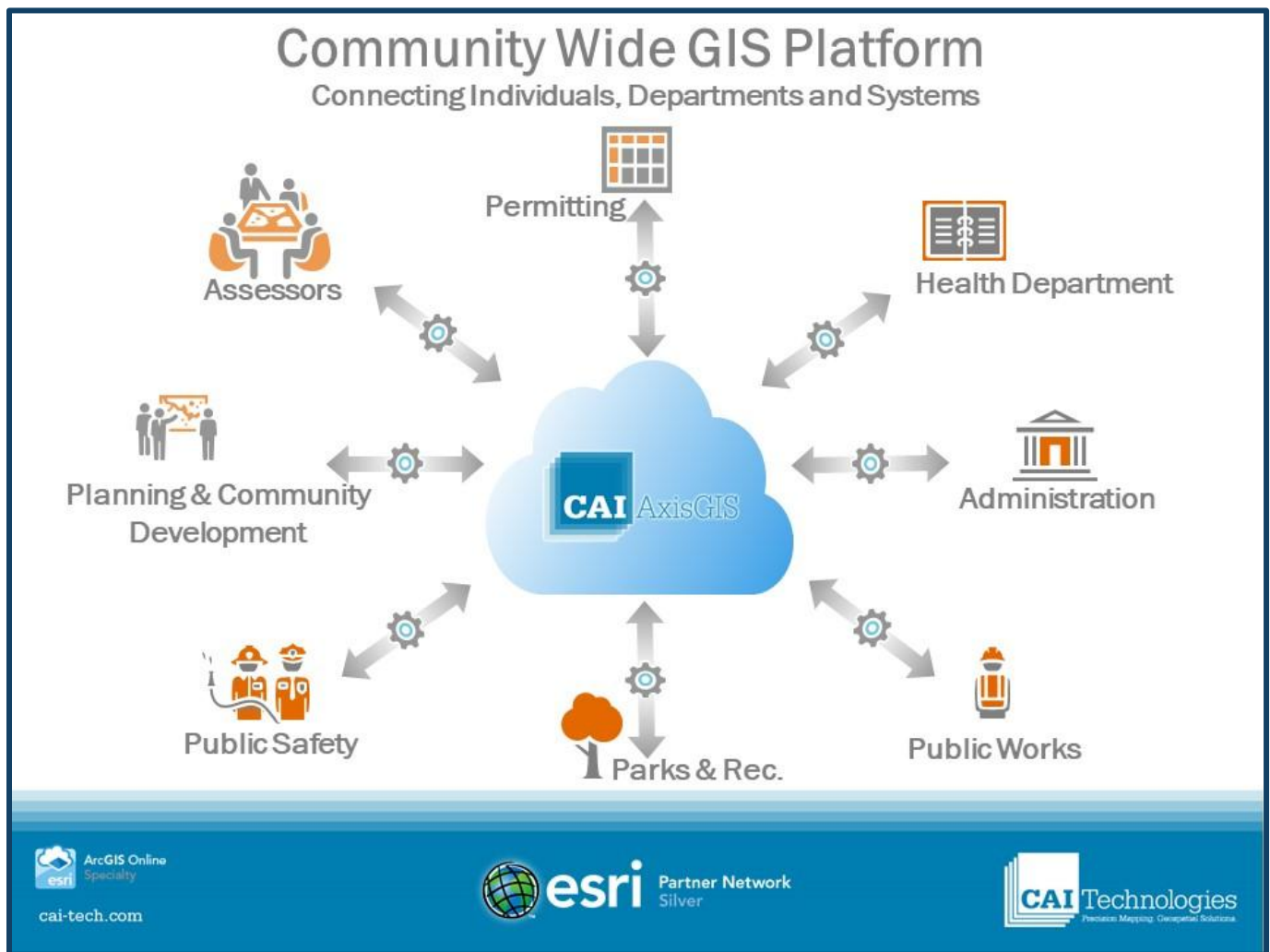
AXISGIS SERVICES

AxisGIS Product Overview:

AxisGIS is an Internet-based service for communities and businesses that want to publish their GIS online. AxisGIS is a cost-effective option to distribute GIS data and utility to multiple staff in multiple physical locations as well as to the general public. AxisGIS is developed using the ESRI JavaScript 4.X API technology which results in a responsive user interface that is cross-browser compatible and functional in a mobile environment.

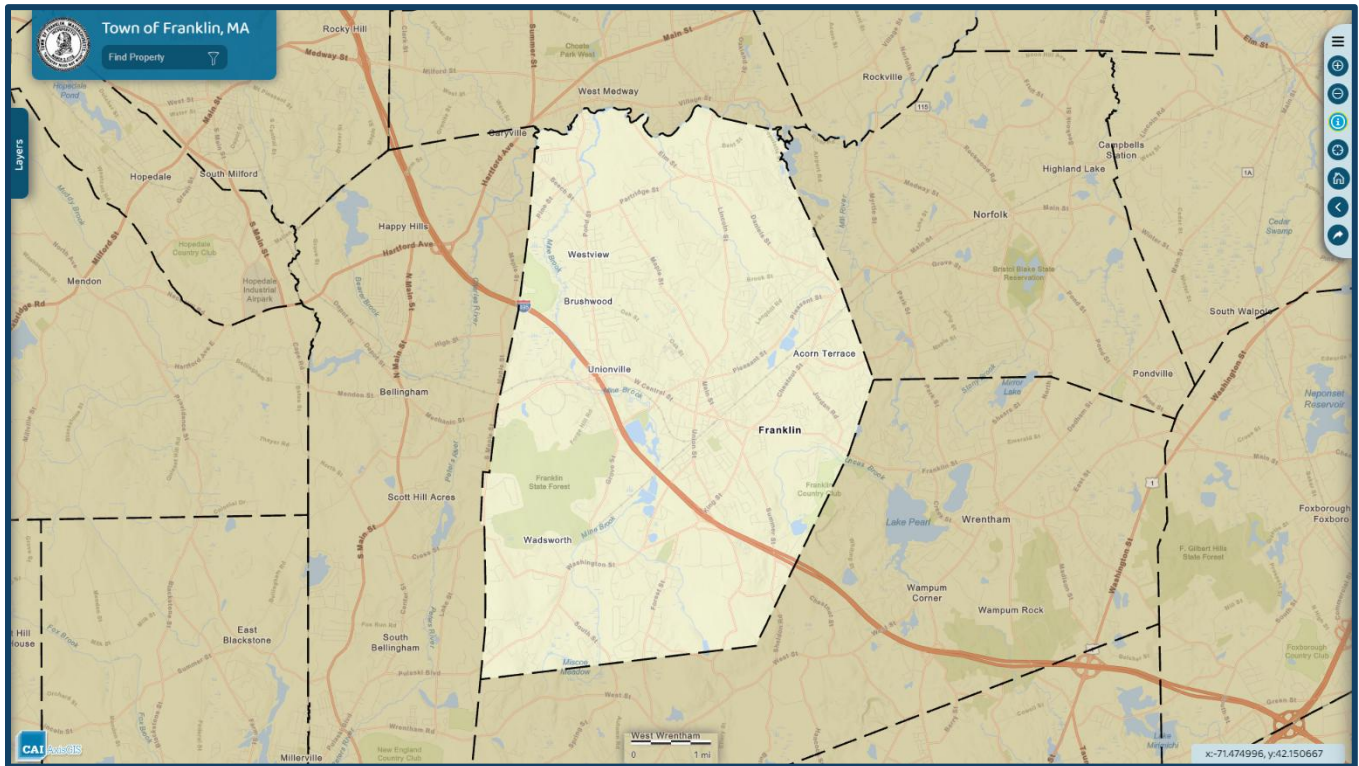
AxisGIS clients pay no software fees, no annual software maintenance fees and very low setup costs. AxisGIS even provides the web server. By relieving most of the expense, AxisGIS enables the people behind the data to focus on why their GIS is on the Internet in the first place.

AxisGIS is helping communities publish their parcel data online, enabling homeowners and real estate professionals to print maps from their own computers, supporting economic development projects, providing a platform for police and school collaboration and creating a connection between local government, businesses and communities.




















Functionality Overview:

The image displays the typical interface that Internet users would initially see in their web browser. This interface provides easy access to all available tools and functions.

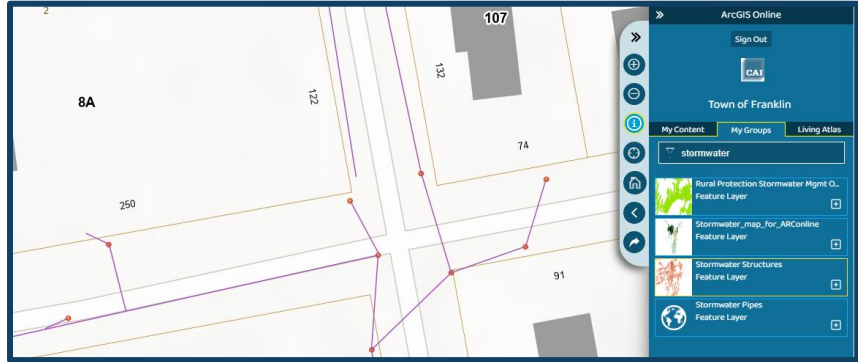


The CLIENT's AxisGIS website will include the following tools:

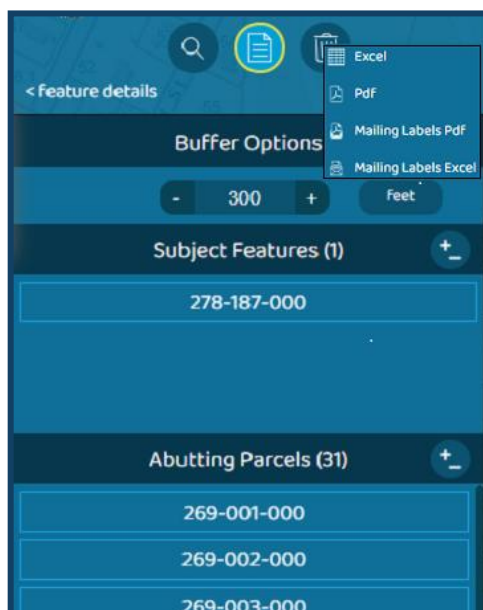
-  **Zoom-In Tool** allows the user to focus on a specific, smaller area on the map.
-  **Zoom-Out Tool** allows the user to focus on a larger area on the map.
-  **Zoom to My Location Tool** zooms the map to the current location of the user.
-  **Zoom to Full Extents Tool** allows the user to quickly reset the map view to the original map extent.
-  **Zoom Next Tool** allows the user to quickly zoom to the next map extent.
-  **Zoom Previous Tool** allows the user to quickly zoom to the previous map extent.
-  **Street View Tool** allows the user to click on the map to see Street View for that location.
-  **Bird's Eye Tool** allows the user to click on the map to see Bird's Eye view for that location.
-  **Print Map Tool** allows the user to generate a printable PDF map and to include a map legend.
-  **Drawing Tool** allows the user to draw points, lines, shapes and text on the map. When adding text, the user can add "Free Text" or "Label Parcel" with Owner Name, Address or CAMA ID. Once included on the map, the user can edit the graphics too.
-  **Measure Tool** allows the user to click on the map to measure distance, area and coordinate locations.
-  **Base Map Selector Tool** allows the user to browse and select from a variety of local, Esri and Google base maps.
-  **Areas of Interest Tool** allows the user to quickly zoom to a predefined area of the map, including street intersections.
-  **Share Map Tool** allows the user to copy a link to share a map.
-  **Identify Tool** allows the user to click on any GIS feature and receive the related attribute information. This tool is useful in receiving ownership information and documents linked to a parcel. The tool also allows the user to pan the map in any direction.
-  **Clear Selection Tool** allows the user to clear the selected map features(s).
-  **Draw to Search** allows the user to add multiple parcels to the search results list by simply drawing on the map.



ArcGIS Online Login - AxisGIS tightly integrates with the Municipality's ArcGIS Online (AGOL) account. Users have the ability to login to their AGOL account, search for and import AGOL feature content, including Web Maps and Feature Layers into their AxisGIS map session. Once imported, the data will be displayed in the AxisGIS Table of Contents for map visualization, analysis and a variety of AxisGIS user functionality.

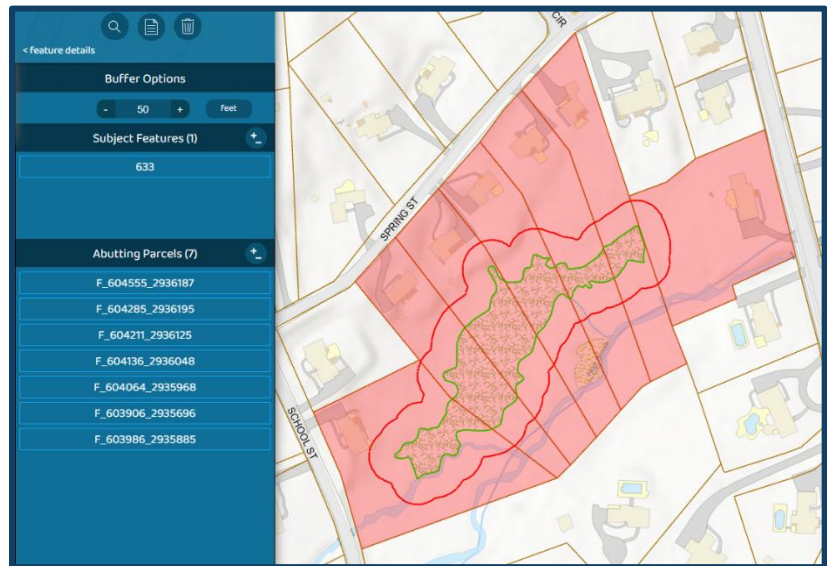


The **Search Function** enables the user to find properties by owner name, address or parcel identifier, depending on the data available. As the user types the information in the Search dialog, matching results begin to show. The search results list allows the users to view the property Building Image, Parcel #, Address, Owner and linked documents. The user can then create a Results Report, Mailing Labels, Add/Remove records from the results or select and zoom to a particular property.

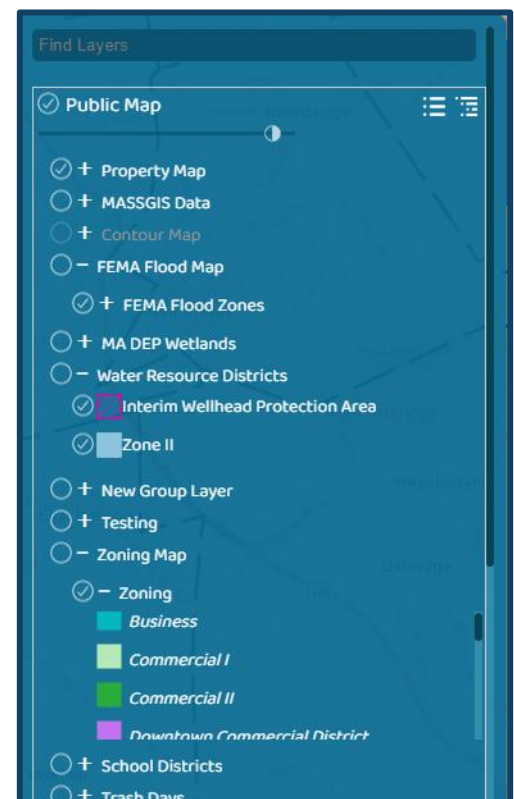


Parcel Abutters Function enables the user to select properties that are located within a specific distance to a particular property. To perform the Abutters search, the user selects the subject property and then enters the search distance. The search distance will be set to default at 200 feet. This distance remains “sticky” in the application and will be saved from the last buffer search distance performed in the interface. The map will automatically show the selected properties and the user can generate an Abutter Report, Mailing Labels formatted to Avery 5160 labels and export the results to a PDF report or an Excel file by clicking the appropriate button.

Feature Abutters Function operates similar to the Parcel Abutters Function, however it allows for selecting properties within a specific distance of a GIS feature other than a parcel. To perform the Feature Buffer search, the user selects an existing GIS feature (i.e. fire hydrant, water body, building, wetland, etc.) and then enters the search distance and clicks the select button. The map will show the selected properties and the user can generate a PDF Abutter Report, Mailing Labels formatted to Avery 5160 labels and export the results to an Excel file by clicking the appropriate button.

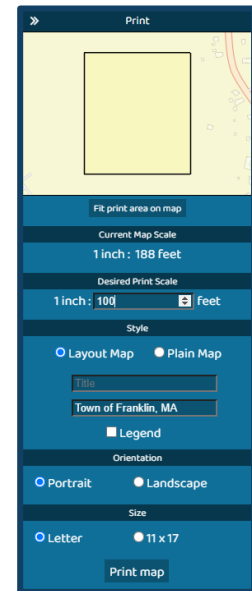


The map **Layers** tab allows the user to turn on and off certain layers as needed. The user selects the checkbox next to individual layers to turn them on/off. The Layers tab also includes the ability to “**Find Layers**”. Layer groups within the legend can be moved up/down to change their drawing order and each group has a Transparency slider that allows the user to set the transparency for map layers to “see through” onto rich base map content. “**Collapse and Expand**” buttons allow the user to either quickly minimize the Table of Contents or expand it to display legend symbology.



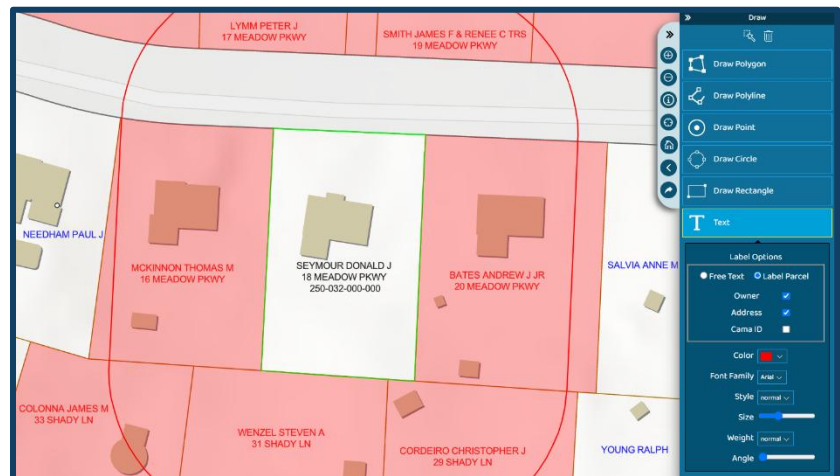
There are several other notable features to AxisGIS. These include:

- **Map Printing Utility:** This utility allows the user to design and layout custom maps prior to generating a PDF to print, save or send via email. The user can enter a custom map title and define the printed map scale. The user has the ability to select the map template to generate the map size of 8 1/2" X 11" or 11" x 17" with either portrait or landscape orientation. This powerful utility also includes the option to include a map legend showing the symbology for the various map layers on the custom map.



- **Help System:** The help system is designed to provide assistance to users while accessing the AxisGIS website. The system includes an interactive PDF document that can be viewed in a web browser or downloaded and printed for future reference.
- **Building Photos & Associated Documents:** This function allows users the ability to access building photos and/or documents related to particular properties and/or features on the map. This functionality depends on the available data for the CLIENT, how it is stored and the data format. CAI can work with the CLIENT to determine if and how this functionality can be used within the AxisGIS application.

- **Drawing and Labeling Tools:** In addition to standard drawing tools, users can add free text or label parcels with Owner Name, Address and/or CAMA ID. Users have the ability to set the Color and Font size as well as create Bold, Italic or Underlined text.



- **Staff Login Access:** This function allows for password-protected access to a specific set of geographic data layer(s) and/or attribute data within the community, as well as additional Staff Only functionality. The annual hosting fees associated with serving one (1) secure ArcGIS Server Map Service configured for access through encrypted username & password authentication are included with the base annual hosting fees for AxisGIS. Staff logins are administered by CAI. Initial setup and configuration fees for this functionality may apply.
- **Google Street View and Bing Streetside:** AxisGIS includes access to Google Street View and Bing Streetside which allows a user to click on the map to access the street view data for a particular area. This function is subject to Street View and Bing Streetside data being available within the community.

- Microsoft Bird's Eye: AxisGIS includes access to Microsoft Bird's Eye which allows a user to click on the map to access the Bird's Eye data for a particular area. This function is subject to Bird's Eye data being available within the community.
- Zoom to My Location: This function zooms the map to the current location of the user. This is particularly useful in the field and leverages the GPS technology in the user's mobile device.
- Zoom to Street Intersections: This function allows the user to quickly zoom to a specific street intersection. The user first selects a street name from the drop down list, then AxisGIS will provide a list of intersecting streets and allow the user to zoom directly to the desired intersection.
- Zoom to Coordinates: This function allows the user to enter geographic coordinates zoom to that location and place a pin on the map.

Publish the CLIENT's GIS to the Internet

CAI shall publish the CLIENT's GIS data to the Internet.

CAI shall notify the CLIENT of the Internet Address (URL) for AxisGIS. This address can be added to the CLIENT's web page.

After the CLIENT has been notified that the AxisGIS application is on-line, the CLIENT has thirty (30) days from the date of notification to examine the site and to request changes.

AxisGIS shall be accessible using the current versions of Microsoft's Edge, Chrome, Firefox or Safari web browsers over cable, DSL or T1 (or greater) internet connections.

GIS Data Update:

CAI shall refresh the GIS data on the AxisGIS website annually. Should the CLIENT be using CAI's annual parcel map maintenance services, this refresh of the GIS data shall be performed upon delivery of the annual map update data. Additional GIS data refresh may be provided for \$250 per event.

Attribute Data Update

CAI shall design and create a Data Processing Utility for the CLIENT to use for periodic uploading of an export file(s) from the CAMA system to an online database accessed by the AxisGIS website.

It is the CLIENT's responsibility to maintain the Tabular attribute data, including a database table for any records to be excluded, for use by the AxisGIS website.

General Conditions

CAI shall provide the AxisGIS service to the CLIENT with commercially reasonable access to an Internet-based mapping application service provider (ASP) environment through which the CLIENT can access the CLIENT data.

In order to provide the CLIENT with commercially reasonable access to the ASP environment, CAI shall periodically schedule the complete or partial shutdown of the ASP Environment for maintenance, bug fixes, updates or other reasons. CAI will make commercially reasonable efforts to perform Scheduled Maintenance during off-peak hours.

CLIENT Support

CAI shall provide telephone, fax and email support services concerning AxisGIS to the CLIENT. These services can be used to answer usage and technical questions.

CAI shall respond to any CLIENT alerts concerning poor performance or lack of performance of the site and provide verbal advisories as to how and when the site shall be corrected, (if it is determined that the website and/or publication service is not performing properly).

CLIENT RESPONSIBILITIES

- A. The CLIENT shall designate a project liaison who will be CAI's main contact during the course of the project and who will be responsible for all CLIENT related obligations in this project.
- B. The CLIENT shall provide a current set of Tax Maps.
- C. The CLIENT shall provide comments and/or changes to the preliminary tax maps within thirty (30) days of receipt.
- D. The CLIENT shall provide CAI with an ASCII text or DBF formatted export file from the CLIENT's CAMA system containing the attribute information for inclusion into the site.
- E. The CLIENT shall provide and authorize CAI to acquire all necessary data for the successful completion of the project. In order to ensure the project timetable, authorization shall be provided within fifteen (15) days of CAI's request.
- F. The CLIENT shall provide CAI with any custom GIS data layers for inclusion into the site.
- G. After the CLIENT has been notified that the site is on-line, it must advise CAI of any changes, modification and enhancements to the data available within thirty (30) days.
- H. The CLIENT shall maintain the tabular attribute data for the AxisGIS website.

SCHEDULE

TAX MAP CONVERSION

CAI shall complete the Tax Map Conversion services within sixty (60) days of receipt of an executed contract and all source materials.

AXISGIS SERVICE

All CAI AxisGIS setup work and initial publishing of data to the Internet, except the on-going support and Internet availability of the CLIENT's GIS data, shall be completed within sixty (60) days of completion of Tax Map Conversion service.

Internet access to the CLIENT's AxisGIS Public site will begin within sixty (60) days of completion of the Tax Map Conversion service and shall conclude on the last day of the twelfth month following.

COST AND PAYMENT TERMS

TAX MAP CONVERSION \$ 11,000.00

AXISGIS SERVICE

- Setup (\$3000.00 setup fee waived if done with Tax Map Conversion) \$ 0.00
- AxisGIS Annual Hosting Service \$ 3,000.00

TOTAL \$ 14,000.00

Payment shall be due within 30 days of invoicing. Said invoicing to be done as follows:

- \$3,000.00 (portion of Tax Map Conversion) to be invoiced upon receipt of an executed contract.
- \$3,000.00 (portion of Tax Map Conversion) upon completion of the Tax Map Conversion.
- \$3,000.00 (Annual Hosting Service) upon notification of availability of the AxisGIS site for CLIENT review.
- \$5,000.00 (balance of Tax Map Conversion) upon notification of availability of the AxisGIS site for CLIENT review or after July 1, 2025, whichever is later.

Note: The Annual Hosting/Support will automatically renew at the above shown fee twelve (12) months after the service is made available. Said renewal can be canceled at any time with 30 days notification.