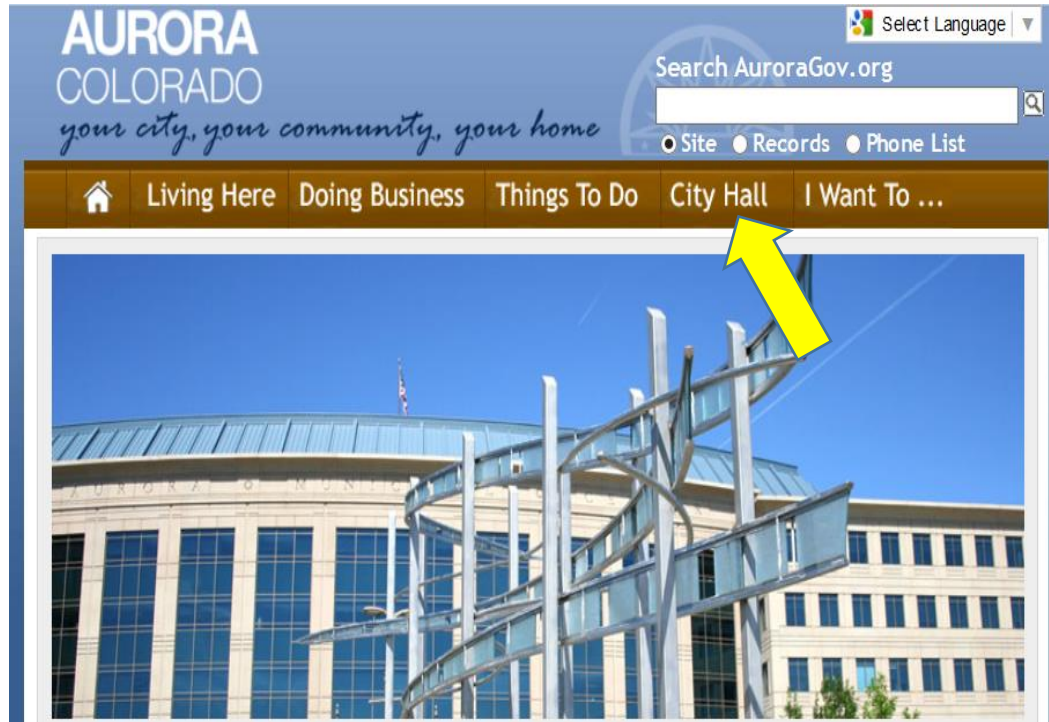


Getting Land Survey Horizontal & Vertical Control via the Internet

<https://www.auroragov.org>

aka: City of Aurora home page



ROLL OVER
City Hall

a
Dropdown will appear

Getting Land Survey Vertical & Horizontal Control via the Internet

The screenshot shows the Aurora Colorado website's navigation menu. At the top left is the logo "AURORA COLORADO" with the tagline "your city, your community, your home" and a sunburst icon. To the right is a search bar labeled "Search AuroraGov.org" and links for "Site", "Records", and "Phone List". Below this is a main navigation bar with tabs: "Living Here", "Doing Business", "Things To Do", "City Hall", and "I Want To ...". A "Select Language" dropdown is on the left. The main menu is organized into four columns: "Leadership", "Responsibility", "Info", and "Projects & Reports". The "Info" column contains a list of links, with a yellow arrow pointing to "Maps".

Leadership	Responsibility	Info	Projects & Reports
<ul style="list-style-type: none">Mayor & City CouncilCity ManagementBoards and CommissionsPolicy CommitteesIntergovernmental Relations	<ul style="list-style-type: none">City Finances & BudgetElectionsFiling a ClaimLanguage AssistancePublic RecordsWorking for the City	<ul style="list-style-type: none">About AuroraA - Z ServicesContact UsCore 4 ValuesDepartment ListingMapsMarijuana RegulationsOil & Gas DrillingPoet Laureate	<ul style="list-style-type: none">Active City ProjectsCity Projects Pending ApprovalStats, Reports and SurveysPrograms, Plans & Studies

**PICK
Maps**
In the Info List

Getting Land Survey Vertical & Horizontal Control via the Internet

Select Language

Living Here Doing Business Things To Do City Hall I Want To ...

Maps

Questions about this Topic? [Tweet](#) 1

The City of Aurora produces a large assortment of geographic data, maps, and applications in support of operations like public safety, utilities, and planning. This site provides a link to the most commonly requested maps and data.

For the availability of other standard map products and GIS data, contact the City of Aurora GIS ([Geographic Information System](#)) at gis@auroragov.org.

Online Services Available:

GIS Mapping

[City Facilities Map](#)
Interactive Aurora facilities map

[Crime Reports Map](#)
Interactive Crime Map

[Mapping Applications](#)
Interactive maps show several topics of interest.

[GIS Data Download](#)
Download our most popular GIS map layers

FEMA
Floodplain Maps

[General City Maps](#)
City street maps, city limits, etc.

[Neighborhood Maps](#)
Neighborhood Associations, School Districts, etc.

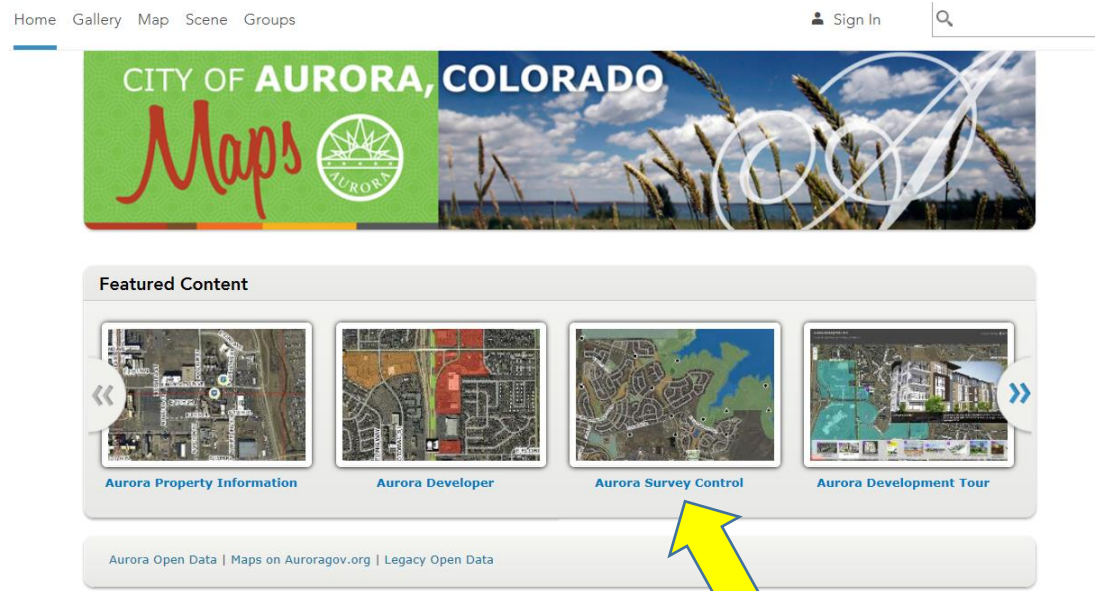
[Police and Fire Maps](#)
Police Area Representatives

PICK
Mapping Applications

BOOKMARK THIS PAGE FOR FUTURE REFERENCE

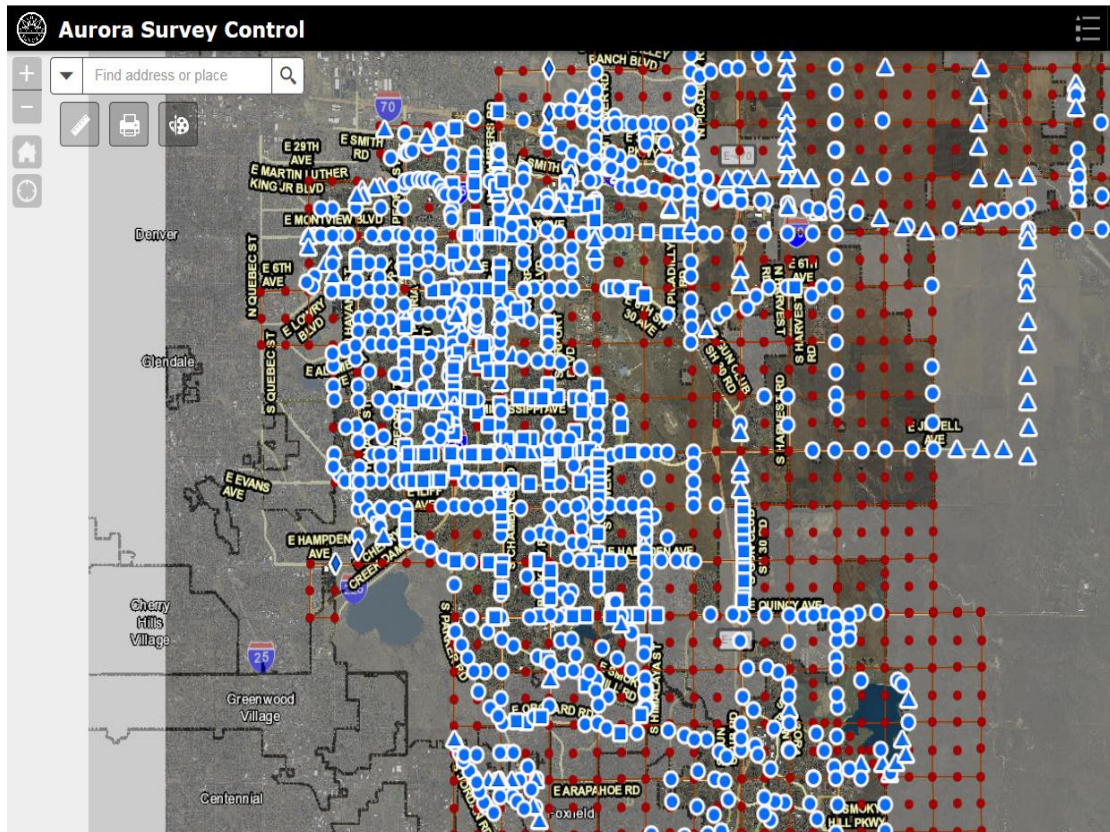
<https://www.auroragov.org/CityHall/Maps/index.htm>

Getting Land Survey Vertical & Horizontal Control via the Internet



PICK
Aurora Survey Control

Getting Land Survey Vertical & Horizontal Control via the Internet



Blue Circles, Squares, and Triangles are Bench Marks

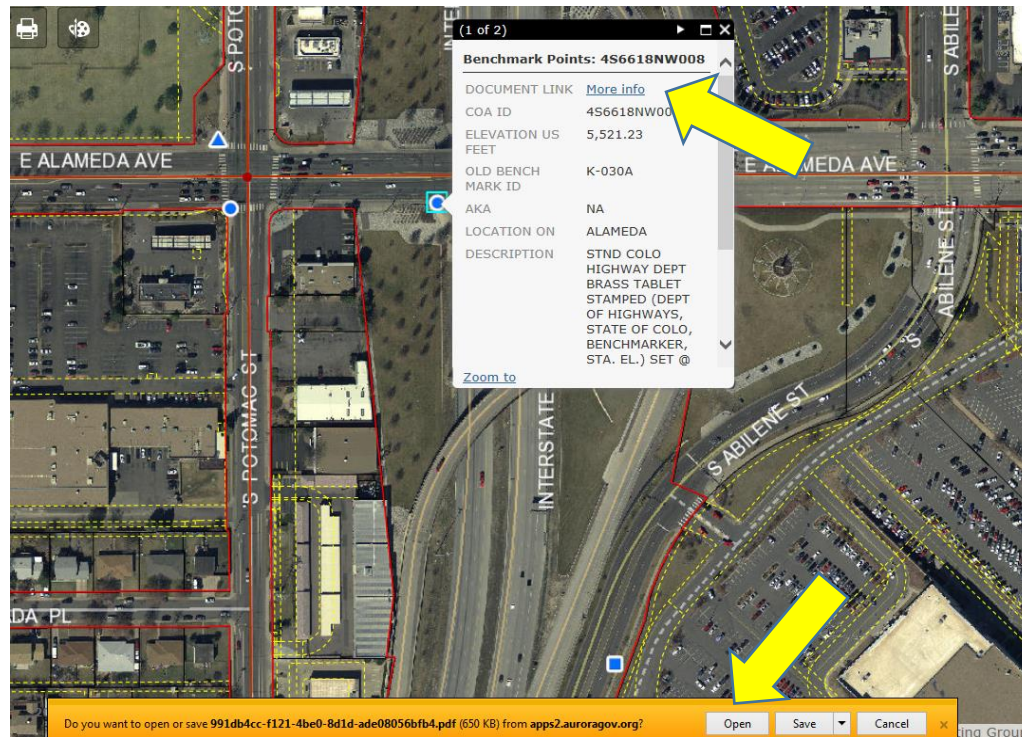
Red Dots are the Public Land Survey System Section and Quarter Section Corners

Pick on the Map and Zoom In to where you want information

Getting Land Survey Vertical & Horizontal Control via the Internet

There are several ways to print out this information on Bench Marks and Section & Quarter Section Corners. This tutorial will show three ways.

**For
Section
Corner
Info go to
page 10**



**For Bench Mark Info
PICK
The BM you want**

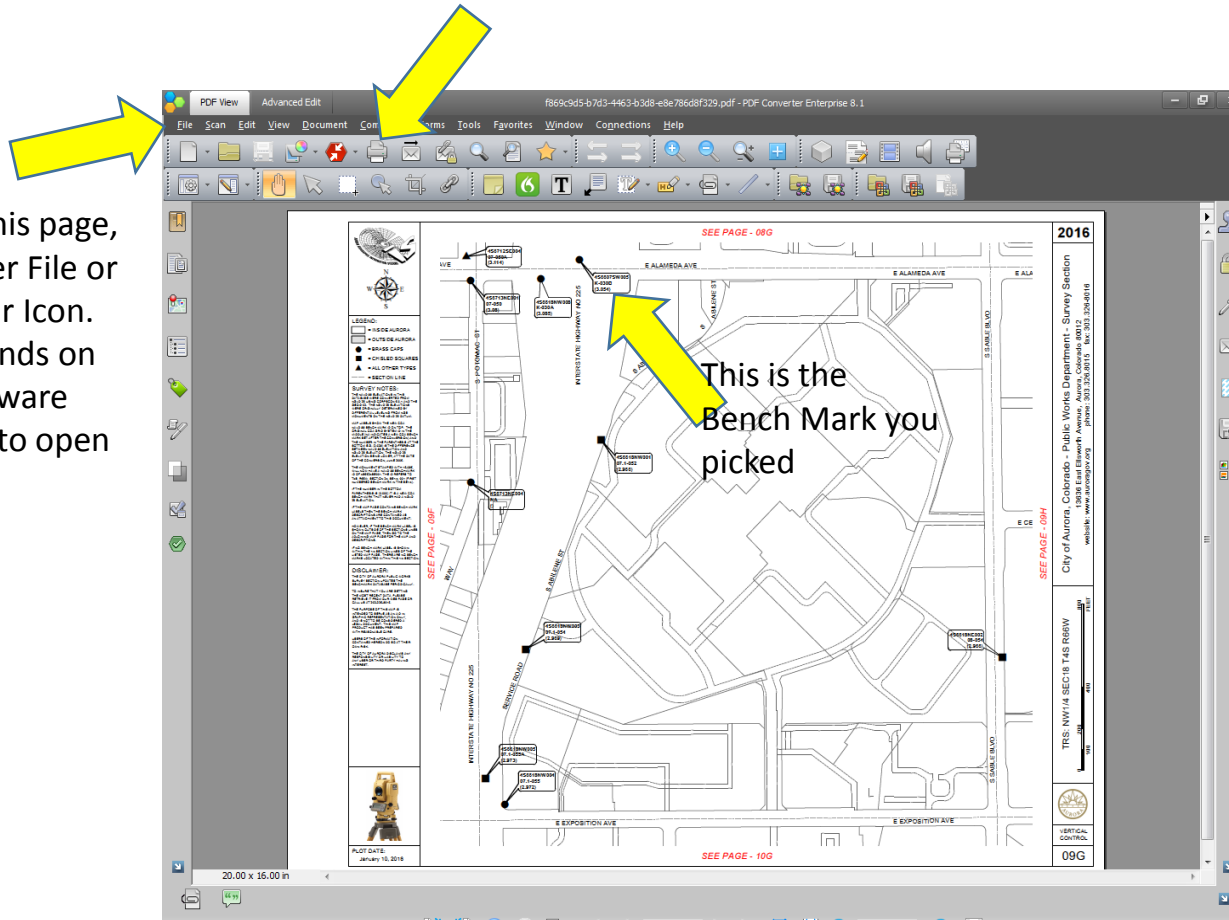
You can Copy and Paste the info in the dialog box to Notepad or Word or

**In the dialog box
PICK
More Info**

**PICK
Open or Save
To open more Info**

Getting Land Survey Vertical & Horizontal Control via the Internet

To print this page, PICK either File or the Printer Icon. This depends on what software you have to open PDFs



This Map Book Page shows all the Bench Marks in or near to this Quarter Section. The Label gives you the NAVD 88 name and the aka: NGVD 29 name. The difference between NAVD 88 and NGVD 29 elevations is also shown. NAVD 88 is higher than NGVD 29 elevation.

Getting Land Survey Vertical & Horizontal Control via the Internet

PICK
The Paper Clip icon

The Paper Clip icon may be on the lower left corner or on the left side tool bar.

The screenshot displays a PDF viewer interface. The main content is a land survey map of a residential area with streets like E Alameda Ave and W 1st St. The map includes a legend, survey notes, and a disclaimer. A yellow arrow points to the paper clip icon in the top-left toolbar. Another yellow arrow points to the paper clip icon in the bottom-left corner of the viewer. Below the map is an 'Attachments' table with the following data:

Name	Description	Modified	Location in Document	Size
Vertical_Control_Descriptio...		2016/01/10 22:18:33	Attachment tab	3 KB

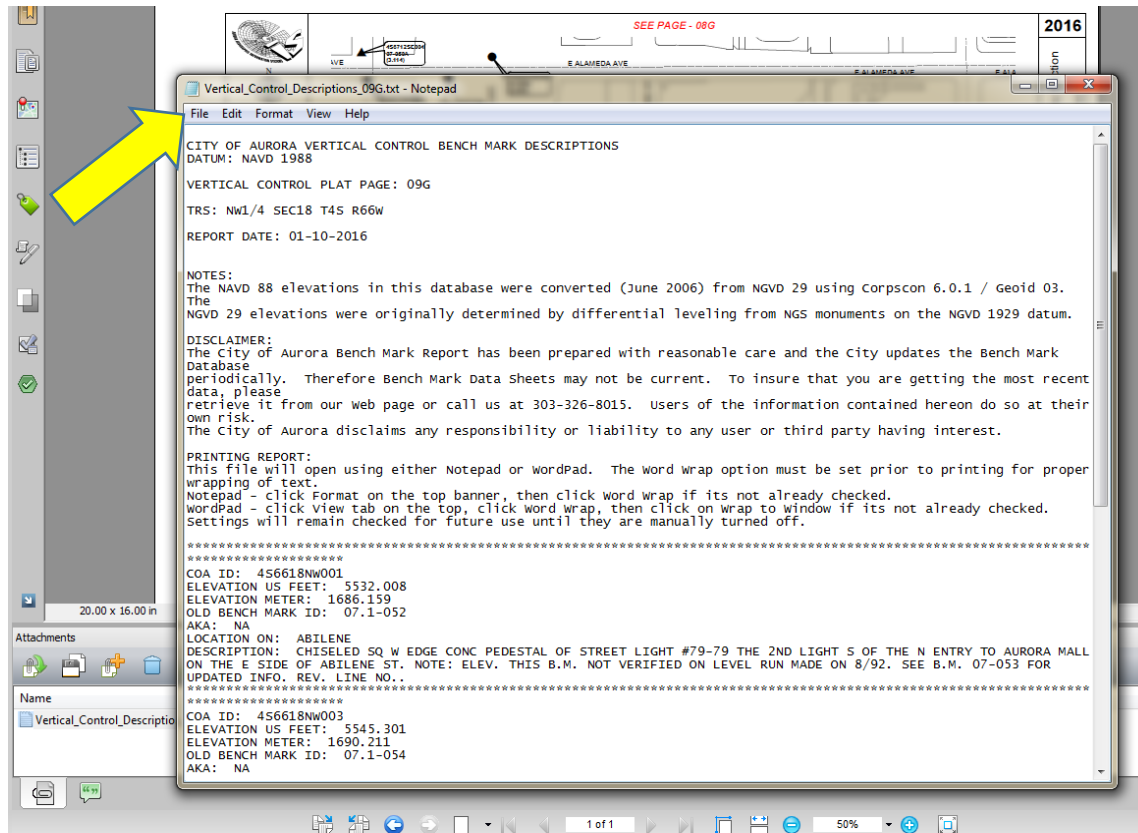
At the bottom of the viewer, there is a status bar showing '1 of 1' pages and a 50% zoom level.

Double
PICK
Vertical Control
Description

Getting Land Survey Vertical & Horizontal Control via the Internet

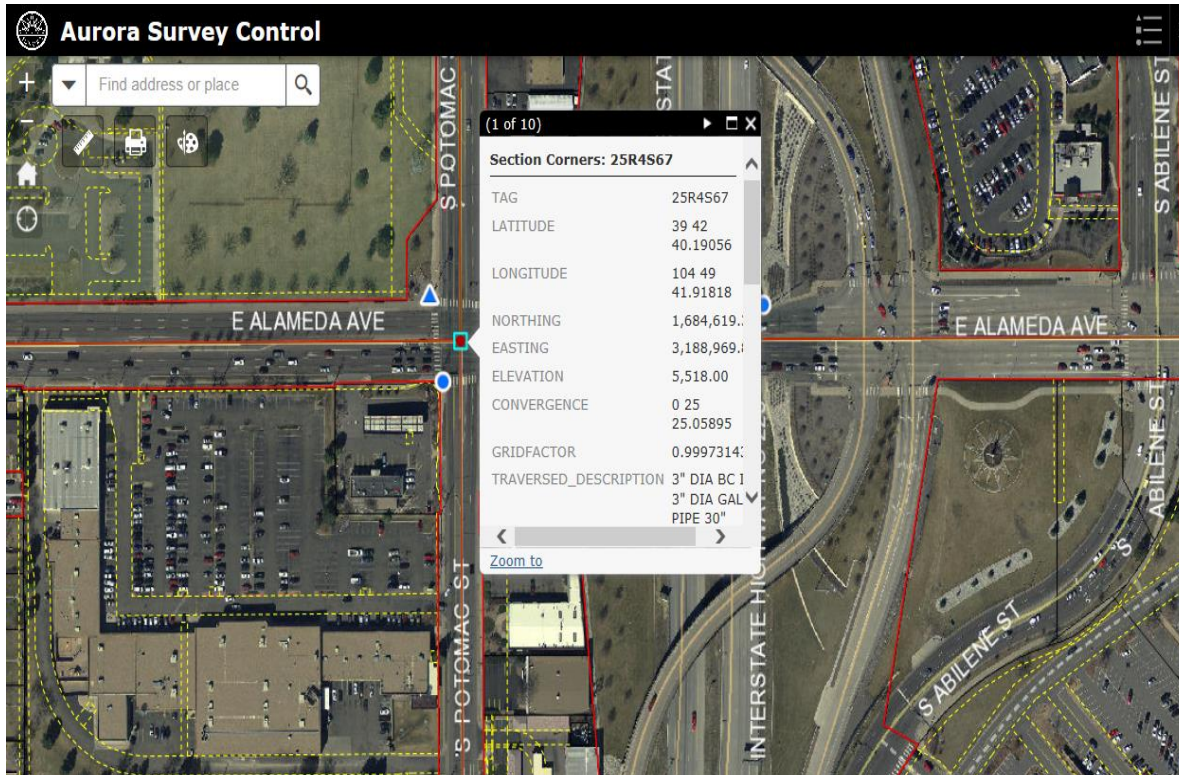
**PICK
File
To print**

This text document will print out all the Bench Marks that are within the section lines of the quarter section.



There is another way to print this information, see page 15.

Getting Land Survey Vertical & Horizontal Control via the Internet



**For Section Corner
Info**

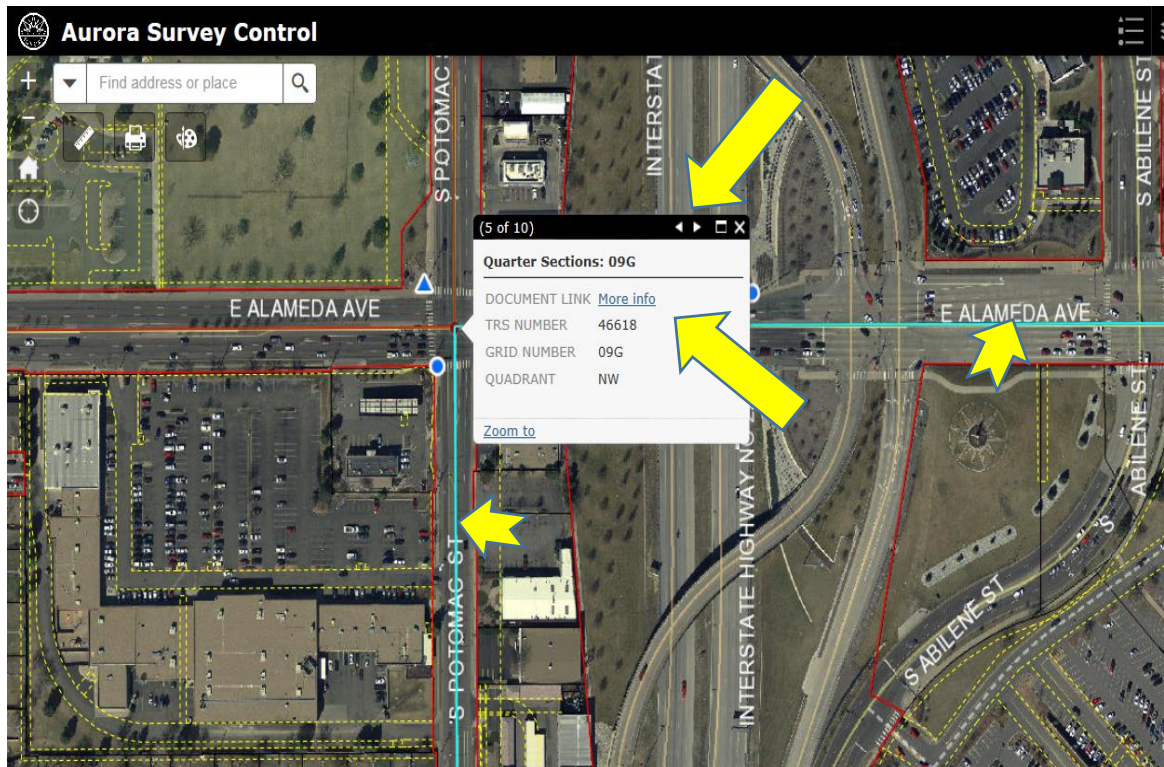
**Pick
The Section Corner
you want**

You can Copy and
Paste the info into
Notepad or Word

Or

There is another
way. See next page

Getting Land Survey Vertical & Horizontal Control via the Internet



Pick
On the arrows at
the top of section
corner dialog box
until you reach
the quarter
section your work
is in. (See cyan
line bordering the
quarter section).

Pick
More Info

Getting Land Survey Vertical & Horizontal Control via the Internet

Aurora, Colorado

Home | Return | Contact Us | Version: 2.2.1

Public Record Search Results For
Quarter Section: 09G

Show Records For Quarter Section

Number of documents found: 700

Category: All...

ID	Release Date	Size (MB)	Ext.
Annexa			
A78439	4/1/2014	0.16	PDF View
A78247	3/28/2014	0.13	PDF View
A78247	3/28/2014	0.14	PDF View
A78248	3/28/2014	0.05	PDF View
Building			
A10421	7/9/2015	0.88	PDF View
A85477	10/4/2014	3.62	PDF View
A854769	10/4/2014	1.77	PDF View
529037	12/5/2011	1.00	PDF View
565695	12/5/2011	7.84	PDF View

Pick
Under Category:
Map Books

Getting Land Survey Vertical & Horizontal Control via the Internet

Public Record Search Results For
Quarter Section: 09G

Number of documents found: 9

Category:

ID	Title	Release Date	Size (MB)	Ext.	
Map Books - All utility map pages (Water, Storm and Sanitary) must be requested in person through the Aurora Water Department					
087022	GIS Address Map Book 09G	2/4/2016	0.59	PDF	View
087070	GIS Address Map Book 09G Aurora Mall Lower Level	4/4/2013	0.82	PDF	View
087049	GIS Address Map Book 09G Aurora Mall Upper Level	4/4/2013	0.82	PDF	View
209436	GIS Horizontal Control Map Book 09G	1/14/2016	0.46	PDF	View
093054	GIS Plat Map Book 09G	2/8/2016	0.65	PDF	View
095349	GIS Quarterly Address Report Map Book 09G	1/10/2016	0.74	PDF	View
155602	GIS Vertical Control Map Book 09G	1/13/2016	0.64	PDF	View
079324	GIS Zoning Map Book 09G	2/1/2016	1.09	PDF	View
209461	Horizontal Control Notes Keywords: GIS Horizontal Control Notes	10/3/2006	0.02	PDF	View

**Pick
View**

**opposite
GIS Horizontal
Control Map
Book**

**Pick
Open or Save**

The City of Aurora website enhances public access to City information that is continually under development. Although our goal is to keep timely and accurate information, we can make no guarantees. It is our effort to correct errors brought to our attention. Information available on this site may not be official and users agree by its use that the City of Aurora, its officials and employees are not liable for any injury caused by the disclosure of this information, whether by security breach, accident, inadvertence, or any other act resulting in disclosure.

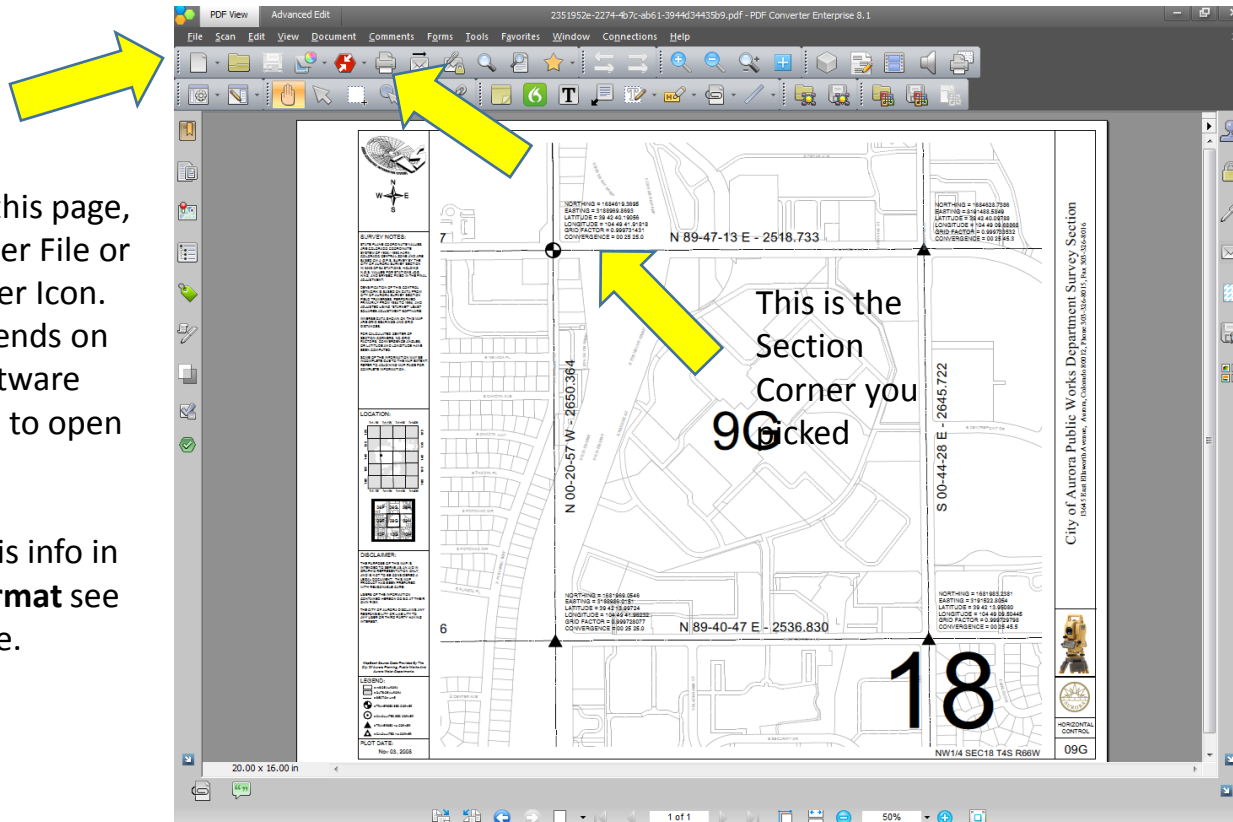
Do you want to open or save 2351952e-2274-4b7c-ab61-3944d34435b9.pdf (466 KB) from apps2.auroragov.org?

Open Save Cancel

Getting Land Survey Vertical & Horizontal Control via the Internet

To print this page, PICK either File or the Printer Icon. This depends on what software you have to open PDFs

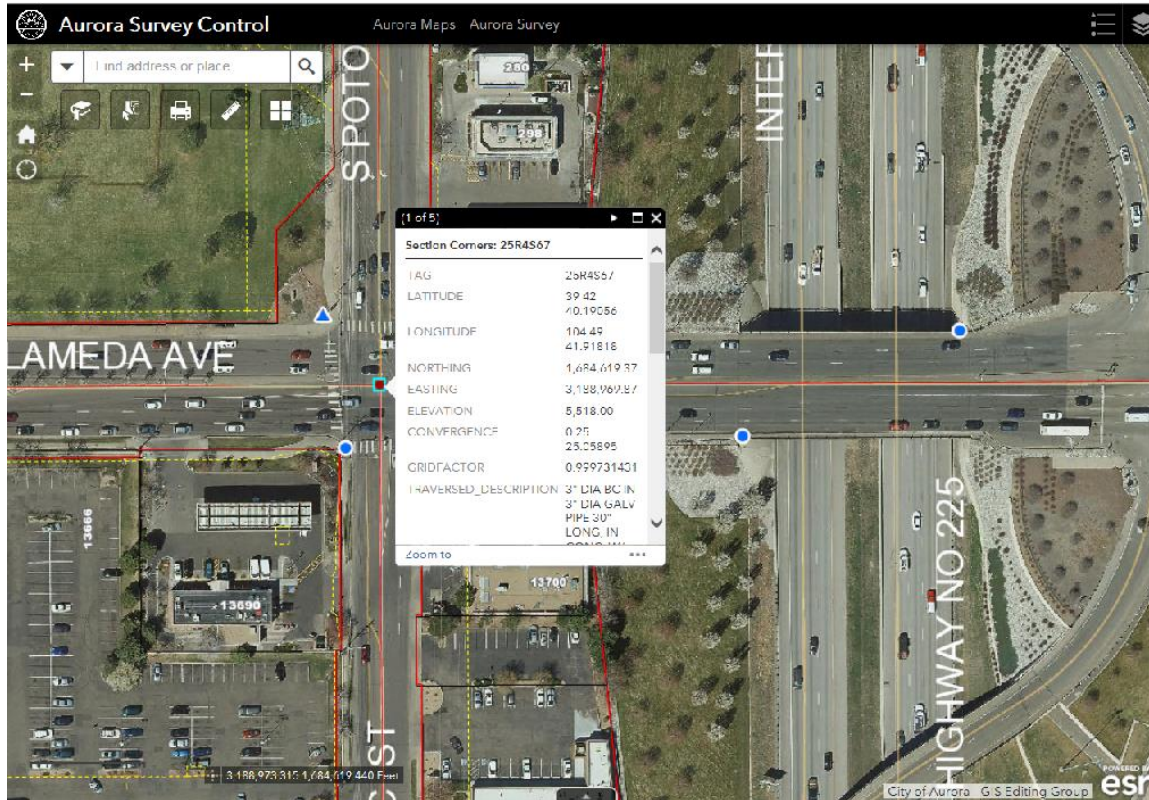
To get this info in a **CSV format** see next page.



This Horizontal Map Book Page show the Colorado State Plane Coordinates, NAD 83 / 92 Central Zone, Northings & Eastings, Latitude & Longitude, Grid Factor, & Convergence.

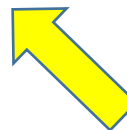
It also shows the State Plane Bearings and Distances between corners.

Getting Land Survey Vertical & Horizontal Control via the Internet



To see the Section
Corner info in a
CSV format

**Pick
The arrow tab at the
bottom of the
software screen**



Getting Land Survey Vertical & Horizontal Control via the Internet

The screenshot shows the Aurora Survey Control web application interface. At the top, there is a search bar with the text "Find address or place" and a search icon. Below the search bar are several navigation icons. The main area is an aerial map showing an intersection of LAMEDA AVE and SPOTO. A red line outlines a section corner. A popup window titled "(1 of 5) Section Corners: 25R4S67" is open, displaying the following data:

Property	Value
TAG	25R4S67
LATITUDE	39 42 40.19056
LONGITUDE	104 49 41.91818
NORTHING	1,684,619.37
EASTING	3,188,969.87
ELEVATION	5,518.00
CONVERGENCE	0 25 25.05895
GRIDFACTOR	0.999731431
TRAVERSED_DESCRIPTION	3" DIA BC IN 3" 3" DIA GALV PIPE 30" LONG, IN CONC, W/ RB @ SURFACE "CITY

At the bottom of the application, there is a navigation bar with tabs for "Benchmark Points", "Section Corners", "Right of Way", "Easements", and "Quarter Sections". The "Section Corners" tab is selected. Below the navigation bar, there is a table with columns for TAG, LATITUDE, LONGITUDE, NORTHING, EASTING, ELEVATION, CONVERGENCE, GRIDFACTOR, TRAVERSED_DESCRIPTION, TYPE, CALC, and DATA. A yellow arrow points to the "Filter by map" button in the table's header area.

**Pick
Section Corners
Tab**

Now you can
view the info
about the
Section Corner

Getting Land Survey Vertical & Horizontal Control via the Internet

The screenshot shows the Aurora Survey Control interface. A yellow arrow points to the 'Print' icon in the top toolbar. A data popup window is open over a survey point, displaying the following information:

(1 of 5)
Section Corners: 25R4567

TAG	25R4567
LATITUDE	39.42
LONGITUDE	40.19056
NORTHING	1,684,619.37
EASTING	3,188,969.87
ELEVATION	5,518.00
CONVERGENCE	0.25
GRIDFACTOR	0.999731431
TRAVERSED_DESCRIPTION	3" DIA BC IN 3" DIA GALV PIPE 30" LONG, IN CONC, W/ RB @ SURFACE 'CITY

Below the map, there is a table with the following columns: TAG, LATITUDE, LONGITUDE, NORTHING, EASTING, ELEVATION, CONVERGENCE, GRIDFACTOR, TRAVERSED_DESCRIPTION, TYPE, and CALC. The data row for TAG 25R4567 is as follows:

TAG	LATITUDE	LONGITUDE	NORTHING	EASTING	ELEVATION	CONVERGENCE	GRIDFACTOR	TRAVERSED_DESCRIPTION	TYPE	CALC
25R4567	39.42	40.19056	1,684,619.37	3,188,969.87	5,518.00	0.25	0.999731431	3" DIA BC IN 3" DIA GALV PIPE 30" LONG, IN CONC, W/ RB @ SURFACE 'CITY	SEC	

To print out the info and have it in a digital format

Go to the **Select** Tab

Getting Land Survey Vertical & Horizontal Control via the Internet

Select

- Address Points 0 ...
- Benchmark Points 0 ...
- Section Corners 0 ...
- Section Lines 0 ...
- Right of Way 0 ...
- Easements 0 ...
- Annexations 0 ...
- Subdivisions 0 ...

Press down to start and let go to finish

TAG	LATITUDE	LONGITUDE	NORTHING	EASTING	ELEVATION	CONVERGENCE	GRIDFACTOR	TRAVERSED_DES	TYPE	CALC	DA
25R4S67	39 42 40.19056	104 49 41.91818	1,684,619.37	3,188,969.87	5,518.00	0.25 25.05895	0.999731431	3" DIA BC IN 3" DIA GALV PIPE 30" LONG, IN CONC, W/ RB @ SURFACE *CITY	SEC		

Drag across the Section Corner or Corners you want info on

In this example the one Section Corner

Getting Land Survey Vertical & Horizontal Control via the Internet

Select

- Address Points 0 ...
- Benchmark Points 0 ...
- Section Corners 1 ...
- Section Lines 0 ...
- Right of Way 0 ...
- Easements 0 ...
- Annexations 0 ...
- Subdivisions 0 ...

TAG	LATITUDE	LONGITUDE	NORTHING	EASTING	ELEVATION	CONVERGENCE	GRIDFACTOR	TRAVERSED_DES' TYPE	CALC	DA
25R4567	39 42 40.19056	104 49 41.91818	1,684,619.37	3,188,969.87	5,518.00	0 25 25.05895	0.999731431	3" DIA BC IN 3" DIA GALV PIPE 30" LONG, IN CONC, W/ RB @ SURFACE *CITY		

The Section Corner was selected, and everything was highlighted (Selected)

Now click on The **Overflow**

☰
Dots

Opposite of Section Corners

Getting Land Survey Vertical & Horizontal Control via the Internet

Select

- Select
- Clear
- Address Points 0
- Benchmark Points 0
- Section Corners 1
- Section Lines
- Right of Way
- Easements
- Annexations
- Subdivisions

Selection actions

- Zoom to
- Pan to
- Flash
- Show pop-up
- Export to CSV file
- Export to feature collection
- Export to GeoJSON
- Add a marker

TAG	LATITUDE	LONGITUDE	ELEVATION	CONVERGENCE	GRIDFACTOR	TRAVERSED_DES	TYPE	CALC	DATA
25R4567	39 42 40.19056	104 4	5,518.00	0 25 25.05895	0.999731431	3" DIA BC IN 3"	SEC		
						DIA GALV PIPE			
						30" LONG, IN			
						CONG, W/ RB @			
						SURFACE CITY			

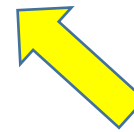
Do you want to open or save **features.csv** (766 bytes) from **auraco.maps.arcgis.com**?

Open Save Cancel

Pick
Export to CSV file

Another dialog
box will open.

Getting Land Survey Vertical & Horizontal Control via the Internet



Pick Open

OBJECTID	TAG	LATITUDE	LONGITUDE	NORTHING	EASTING	ELEVATION	CONVERGENCE	GRIDFACT	TRAVERSE TYPE	CALC	DATE_RECV	ACCURACY	ELEVATION
1	104 25R4S67	39 42 40.1	104 49 41.1	1,684,619.37	3,188,969.87	5,518.00	0 25 25.05	0.999731	3" DIA BC SEC				
2													
3													
4													
5													

The Section Corner info is listed in an Excel Spreadsheet.

Now is in a Digital Format to be used where you want.

Getting Land Survey Vertical & Horizontal Control via the Internet

The screenshot displays the Aurora Survey Control interface. At the top, there's a search bar and navigation icons. The map shows an aerial view of a residential area with streets like E Alameda Ave and S Potomac St. Below the map, there are several tabs: Benchmark Points, Section Corners, Right of Way, Easements, and Quarter Sections. The 'Benchmark Points' tab is selected, and a yellow arrow points to it. Below the tabs is a table with the following data:

DOI	BENCH	COA ID	ELEVATION US FEET	OLD BENCH MARK ID	AKA	LOCATION ON	DESCRIPTION	GIS_PLATPAGE	MONUMENT_TYPE
https://app.aurora.gov/gis/456712SE004			5,519.51	07-050A	** K-030C	POTOMAC	CHISELED "V" ON W EDGE OF SW ANCHOR BOLT @ BASE OF TRAFFIC SIGNAL STANDARD ON NW COR OF S	08F	OT

Bench Mark information can be exported to a digital format too.

Click Bench Mark Tab

To view the Bench Mark information

Getting Land Survey Vertical & Horizontal Control via the Internet

Select

Address Points 0 ...

Benchmark Points 0 ...

Section Corners 0 ...

Section Lines 0 ...

Right of Way 0 ...

Easements 0 ...

Annexations 0 ...

Subdivisions 0 ...

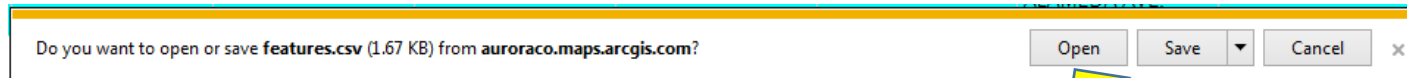
Press down to start and let go to finish

DOCUMENT LINK	COA ID	ELEVATION US FEET	OLD BENCH MARK ID	AKA	LOCATION ON	DESCRIPTION	GIS_PLATPAGE	MONUMENT_TYPE
https://apps2.aurora.gov/c/En9t7IAk2VM%3d	4S6712SE004	5,519.51	07-050A	** K-030C	POTOMAC	CHISELED "V" ON W EDGE OF SW ANCHOR BOLT @ BASE OF TRAFFIC SIGNAL STANDARD	08F	OT

Drag across all the Bench Marks you want info on.

In this example four Bench Marks were selected.

Getting Land Survey Vertical & Horizontal Control via the Internet



**Pick
Open**

features.csv - Excel

DOCUMENT LINK	OBJECTID	COA ID	ELEVATIO	OLD BENC	AKA	LOCATION DESCRIPTI	GIS_PLATF	MONUME	Shape	x	y	wkid	x	y	wkid
https://ap	9806	4S6712SEC	5,519.51	07-050A	** K-030C	POTOMAC CHISELED	08F	OT		3188920	1684680	102654	3188920	1684680	102654
https://ap	9810	4S6607SW	5,520.35	K-030B	NA	ALAMEDA STND COL	08G	BC		3189473	1684667	102654	3189473	1684667	102654
https://ap	9899	4S6618NW	5,521.23	K-030A	NA	ALAMEDA STND COL	09G	BC		3189285	1684575	102654	3189285	1684575	102654
https://ap	10262	4S6713NEI	5,518.72	07-050	** K-030D	POTOMAC COA BC ST	09F	BC		3188941	1684565	102654	3188941	1684565	102654

The Bench
Mark info is
listed in an
Excel
Spreadsheet

Now is in a
Digital
Format to
be used
where you
want.