



## How to Convert North American Vertical Datum of 1988 to National Geodetic Vertical Datum of 1929

To convert the differences in orthometric height between the North American Vertical Datum of 1988 (NAVD 1988) and the National Geodetic Vertical Datum of 1929 (NGVD 1929) for your development project, please follow this process:

**STEP 1: Use Google Earth to determine the Latitude and Longitude of your proposed development project.**

- On the Internet, go to Google and type in **Google Earth**.
- In the upper left corner of the web page is a long horizontal space bar – type in the address, city and state of your property.
- Use your mouse and click the left-hand side of the mouse to zoom in on your property. The resolution will deteriorate the more you zoom in. Use the mouse to point to the location on the property where you propose to locate your building/ structure.
- As you move the mouse, a hand symbol will appear on the property. As you move the hand symbol around, the latitude and longitude of that location on the property will appear on the bottom left side of the Google Earth web page (example only; Latitude of 34 09' 47.50" N Longitude of 119 13' 40.74" W).
- Once you identify the location on the property where your building/ structure is going to go, write down the latitude and longitude. You will need these numbers in STEP 2, following.

**STEP 2: Use VERTCON to convert the NAVD 1988 datum to NGVD 1929 datum.**

- On the Internet, type in:  
[www.ngs.noaa.gov/cgi-bin/VERTCON/vert\\_con.prl](http://www.ngs.noaa.gov/cgi-bin/VERTCON/vert_con.prl)
- Type in your Latitude that you obtained from Google Earth. Please be sure to insert a space between each number that you enter (example: 34 09 47.50 NOT: 340947.50).
- Type in your Longitude that you obtained from Google Earth. Please be sure to insert a space between each number that you enter.

- For Orthometric Height, type in: ft (for feet).
- Click the circle beside NGVD 1929.
- Click Submit.

The datum (elevation) difference (also referred to as the Datum Shift) between NAVD 1988 and NGVD 1929, has now been generated. Take that generated number and SUBTRACT it from your NAVD 1988 datum (elevation). The resulting number is the NAVD 1988 datum now converted to the NGVD 1929 datum.

Example Only: NAVD 1988 Datum (elevation) is 101.5 feet.

The VERTCON calculated datum difference is 2.45 feet.

The NGVD 1929 datum is:  $101.5 - 2.45 = 99.05$  feet NGVD 1929.

