



Preparing your Address File for Batch Geocoding September 6, 2015

Document Version 2.0

The *Address List Editor* can handle a list of up to one thousand addresses. For larger lists, use the *Batch Geocoder*.

Preparing You Address File for the Address List Editor

The Address List Editor has a text box that you paste addresses into. Each pasted line should contain only one address, with or without double quotes. For best matching performance, each address should be in single-line address format as described in the Single-Line Address Format section below. The first line must be a list of commaseparated column names. Here is a screenshot of a list of addresses copied from a csv file and pasted into the address list editor:

Geocoder Address List Editor Instructions Step 1 - Select all of the addresses that you wish to geocode from your spreadsheet, and copy/paste them into the text area below. You must include the column headings in your copy/paste, and you must have one column named addressString which must contain the input address. Step 2 - Press "Geocode Data". More Info/Glossary addressString "2317 MOODY AVE Kamloops, BC" "APT 1 1207 Douglas St, Victoria, BC" "525 Superior St, Victoria,BC" "4251A ROCKBANK PL, WEST VANCOUVER,BC" "4450 HAPPY VALLEY RD, METCHOSIN, BC "2050 SW MARINE DR, VANCOUVER, BC" "420 GORGE RD E, VICTORIA, BC" "130A HALL ST, NELSON, BC" "UNIT 1, 7467 ASPEN BLVD, PEMBERTON, BC" "PAD 2, 2097 WILDFLOWER RD, SHAWNIGAN LAKE, BC" "PORT ALICE HEALTH CENTRE -- 1090 MARINE DRIVE, PORT ALICE, BC" "ROYAL JUBILEE HOSPITAL -- 1952 BAY ST, VICTORIA, BC" "CENTENNIAL CANDLE -- VICTORIA, BC" Geocode Data

Physical Address Geocoder (v1.7.0) COPYRIGHT DISCLAIMER PRIVACY ACCESSIBILITY





All input columns are written out when you export results to a file or the clipboard. If your data includes a Notes column, it will be editable in the address list editor so you can annotate addresses as needed.

If you are a data provider using the Address List Editor to validate and standardize your addresses for use as reference data by the geocoder, consider providing three columns: addressString, parcelPoint, and Notes. Here is an example file:

addressString,parcelPoint,Notes

"BIG BARN -- HWY 3, Rock Creek,BC",SRID=4326;POINT(-123.3715424 48.4180423),"Added 2015/03/11" "CENTENNIAL CANDLE -- Victoria, BC",SRID=4326;POINT(-123.336306 48.423109),"Added 2015/05/17"

parcelPoint is given in Extended Well Known Text format which is defined as follows:

SRID=<EPSG code>; POINT(x y)

where

<EPSG code> is the projection code (e.g., 4326 is geographics, 3005 is BC Albers, etc.)

x is longitude in decimal degrees for SRID=4326, Easting otherwise y is latitude in decimal degrees for SRID=4326, Northing otherwise

Preparing You Address File for the Batch Geocoder

The batch geocoder accepts a csv file containing one or more addresses in one of two schemas: unstructured address and structured address.

Put your address data into an unstructured address file if you haven't batch geocoded your address data with the Physical Address Geocoder before. It gives the geocoder more latitude in exploring alternate interpretations of an address to find the best match.

Use the structured address file only if you want to know if your address data strictly conforms to the geocoder's structured address schema. If your source data is managed in a different schema, you may not get very good matches. For example, if you have an address element called *street* that includes street name, street type, and street directional; and you assign it to streetName in the structured address file, the geocoder won't find any good matches.





Unstructured Address File

A file of unstructured addresses looks like this:

addressString
"2317 MOODY AVE Kamloops, BC"
"APT 1 1207 Douglas St, Victoria, BC" "525
Superior St, Victoria,BC"
"4251A ROCKBANK PL, WEST VANCOUVER,BC"
"4450 HAPPY VALLEY RD, METCHOSIN,BC" "2050
SW MARINE DR,VANCOUVER,BC"
"420 GORGE RD E,VICTORIA,BC" "130A
HALL ST,NELSON,BC"
"UNIT 1, 7467 ASPEN BLVD,PEMBERTON,BC"
"PAD 2, 2097 WILDFLOWER RD,SHAWNIGAN LAKE,BC"
"PORT ALICE HEALTH CENTRE -- 1090 MARINE DRIVE,PORT ALICE,BC" "ROYAL
JUBILEE HOSPITAL -- 1952 BAY ST,VICTORIA,BC" "CENTENNIAL CANDLE -VICTORIA, BC"

The first line tells the geocoder that each record contains a single column called addressString. Note that column names in CSV format are case-sensitive. Each line after the first contains an address as a single string in double quotes. Be sure each record has no trailing blanks or you will get a mysterious *Network or Server Error*. For best matching performance, the address should be in single-line format as described in the Single-Line Address Format section below.

An addressString for a non-civic address must contain values for site name, locality name, and province code (see last example above). If you include a sitename in an address, it must be followed by the front gate delimiter (e.g., "--") as in the following examples:

Royal Jubilee Hospital -- 1952 Bay St, Victoria, BC Kilometre Post 620 -- HWY 3, Rock Creek, BC

If you include a unit in an address with a site name, the unit must appear before the site name as in:

RM 102, Port Alice Health Centre -- 1090 Marine Dr, Port Alice, BC





You can optionally include a column called yourId which should contain the identifier you use to uniquely identify each row. For example, you may have a list of ten clients and their addresses where three clients live at the same address. By providing a unique client id for each row, every client gets their own geocoded address. The yourId column will be output with each geocoded address so you can match each address up with a source client record.

yourId,addressString
A23E4,"2317 MOODY AVE Kamloops, BC"
BXe33,"APT 1 1207 Douglas St, Victoria, BC" AA2w3,"525
Superior St, Victoria,BC" Q2S3E,"4251A ROCKBANK PL,
WEST VANCOUVER,BC" E22Q3,"4450 HAPPY VALLEY RD,
METCHOSIN,BC" E2f2e,"2050 SW MARINE
DR,VANCOUVER,BC" E8f4k,"420 GORGE RD
E,VICTORIA,BC" J4fkk,"130A HALL ST,NELSON,BC"
U6t4m,"UNIT 1, 7467 ASPEN BLVD,PEMBERTON,BC"

D4f76,"PAD 2, 2097 WILDFLOWER RD,SHAWNIGAN LAKE,BC"
V8hj5,"PORT ALICE HEALTH CENTRE -- 1090 MARINE DRIVE,PORT ALICE,BC" P3u4j,"ROYAL
ATHLETIC PARK -- 1014 CALEDONIA AVE,VICTORIA,BC"

addressString is not included in the geocoded results file, only fullAddress which is the standardized and corrected address. To avoid having to use yourId to match up each address with the original address in a source client record, you can copy the value of addressString into yourId as well. Here is an example:

yourId,addressString

"2317 MOODY AVE Kamloops, BC", "2317 MOODY AVE Kamloops, BC"

"APT 1 1207 Douglas St, Victoria, BC","APT 1 1207 Douglas St, Victoria, BC" "525 Superior St, Victoria,BC","525 Superior St, Victoria,BC"

"4251A ROCKBANK PL, WEST VANCOUVER,BC","4251A ROCKBANK PL, WEST VANCOUVER,BC" "4450 HAPPY VALLEY RD, METCHOSIN,BC","4450 HAPPY VALLEY RD, METCHOSIN,BC" "2050 SW MARINE DR,VANCOUVER,BC","2050 SW MARINE DR,VANCOUVER,BC"

"420 GORGE RD E,VICTORIA,BC","420 GORGE RD E,VICTORIA,BC" "130A HALL ST,NELSON,BC","130A HALL ST,NELSON,BC"

"UNIT 1, 7467 ASPEN BLVD, PEMBERTON, BC", "UNIT 1, 7467 ASPEN BLVD, PEMBERTON, BC"





Structured Address File

A file of structured addresses looks like this:

yourId,siteName,unitDesignator,unitNumber,unitNumberSuffix,civicNumber,civicNumberS uffix, streetName,streetType,isStreetTypePrefix,streetDirection,isStreetDirectionPre fix, streetQualifier,localityName,provinceCode
myId1,,,,2317,,MOODY,AVE,,,,Kamloops,BC
myId2,,APT,1,,1207,,Douglas,St,,,,Victoria,BC
myId3,,,,525,,Superior,St,,,Victoria,BC
myId4,,,,4251,A,ROCKBANK,PL,,,,WESTVANCOUVER,BC
myId5,,,,4450,,HAPPY VALLEY,RD,,,METCHOSIN,BC
myId6,,,,2050,MARINE,DR,SW,true,,,VANCOUVER,BC
myId7,,,,420,,GORGE,RD,E,,,,VICTORIA,BC
myId8,,,,130,A,HALL,ST,,,,NELSON,BC myId9,,UNIT,1,,7467,,ASPEN,BLVD,,,,PEMBERTON,BC
myId10,,PAD,2,,2097,,WILDFLOWER,RD,,,,SHAWNIGAN LAKE,BC
myId11,PORT ALICE HEALTH CENTRE,,,,1090,,MARINE,DRIVE,,,PORT ALICE,BC myId12,ROYAL
ATHLETIC PARK,,,,1014,,CALEDONIA,AVE,,,,,VICTORIA,BC

The first line tells the geocoder what the name and order of the columns that define a structured address are. Column names are case-sensitive and explained in the table below. Only streetName or localityName column names are required but the more column names, the better the address match. Column names may appear in any order and all columns are of type String.

A non-civic address must contain values for siteName, localityName, and provinceCode. A non-civic address may also contain values for street elements (e.g., streetName, streetType)

yourId should contain an identifier you use to uniquely identify each row. For example, you may have a list of ten clients and their addresses where three clients live at the same address. By providing a unique client id for each row, every client gets their own geocoded address. The yourId column will be output with each geocoded address so you can match each address up with a source client record.





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Each line after the first contains a single structured address. Here are a few tips about the syntax of these lines:

- 1. There must be one address per line.
- 2. Each address must contain all columns specified in the header record and in the same order.
- 3. If a field has no value, a single comma must be present to represent that column.
- 4. A field value that contains a comma should be delimited with double quotes.
- 5. Extra spaces between commas are included in the value of that column (e.g. , *WILDFLOWER*, is not the same as, *WILDFLOWER*,
- 6. The character encoding of the file must be ANSI, not Unicode as per Microsoftgenerated csv files.
- 7. You may add extra columns by adding column names to the end of the first line in the file. If you do, every address record must contain values or commas for each extra column. The extra columns will not be copied to the address results file. Do not add columns containing private or sensitive data.
- 8. Be sure each record has no trailing blanks or you will get a mysterious *Network or Server Error*.

The following table defines the meaning of each address element:

Element Name	Туре	Required	Description
unitDesignator	String	No	The type of unit within a house or building. Valid values are APT, BLDG, BSMT, FLR, LOBBY, LWR, PAD, PH, REAR, RM, SIDE, SITE, SUITE, TH, UNIT, and UPPR. The geocoder will try to match variations of these values on input (e.g., UPR) and output the standardized value (e.g., UPPR).
unitNumber	String	No	The number of the unit within a house or building.
unitNumberSuffix	String	No	A letter that follows the unit number as in Unit 1A or Suite 302B.
civicNumber	String	No	The official number assigned to a site on a street by an address authority.
civicNumberSuffix	String	No	A letter or fraction that follows the civic number. There should be no space between a civic number and a letter (e.g., Unit 1A) and one space between a civic number and a fraction (e.g., Suite 3 ½)





siteName	String	No for civic address, Yes for non-civic address	A string containing the name of the building, facility, or institution (e.g., Duck Building, Casa Del Mar, Crystal Garden, Bluebird House). A business name should only be used if it is permanently affixed to the site and the site has no other, more generic name. If a site is a unit within a complex, it may have a sitename in addition to a unitNumber and unitSuffix. siteName is optional for civic addresses but required for non-civic addresses.
streetName	String	No	The official name of the street recognized by a municipality (e.g., Douglas in 1175 Douglas Street). A streetName that starts with a directional is not abbreviated (e.g., North Park, not N Park).
streetType	String	No	The type of street as assigned by a municipality (e.g., the ST in 1175 DOUGLAS ST) and is abbreviated if such an abbreviation exists. The set of all street types is defined by the provincial Integrated Transportation Network Program.
streetDirection	String	No	The abbreviated compass direction as defined by Canada Post and B.C. civic addressing authorities. The complete list is C, E, N, NE, NW, S, SE, SW, and W. All street directions except C are defined by Canada Post.
streetQualifier	String	No	The qualifier of a street name (e.g., the Bridge in Johnson St Bridge)
localityName	String	No	The name of the municipality, community, Indian reservation, subdivision, regional district, aboriginal lands, or natural feature the site is located in. Since this is a physical address geocoder, not a mailing address geocoder, the locality of a civic address is that defined by the civic address authority, not Canada Post. A locality name that starts with a directional is not abbreviated (e.g., North Vancouver, not N Vancouver). Spelling of localities that are place names or natural feature names MUST match that published by the BC Geographical Names Information System.
provinceCode	String	No	The ISO 3166-2 Sub-Country Code for British Columbia, which is BC.

For address element examples, see the next section.





Single-Line Address Format

An address may be represented by a single line (string) in one of the formats listed below.

In each format, a term in square brackets is optional, a term in square brackets followed by an asterisk means the term may appear zero or more times, and a term in square brackets followed by a plus sign means the term may appear one or more times. A term in brace brackets (e.g., {streetDirection}) may appear in none or one of the multiple places indicated (e.g., Central St, N Central St, or Central St N, but not N Central St NE)

Format 1 – Civic address

[[unitDesignator unitNumber[unitNumberSuffix]] [siteName],]* frontGate civicNumber[civicNumberSuffix] {streetDirection} {streetType} streetName {streetType} {streetDirection} [streetQualifier], localityName, provinceCode

Format 2 – Non-civic address

[[unitDesignator unitNumber[unitNumberSuffix]] [siteName],]* frontGate [{streetDirection} {streetType} streetName {streetType} {streetDirection} [streetQualifier],] localityName, provinceCode

Format 3 – Intersection address

{streetDirection} {streetType} streetName {streetType} {streetDirection} [streetQualifier] [and {streetDirection} {streetType} streetName {streetType} {streetDirection} [streetQualifier]]+ , localityName, provinceCode





frontGate is the double dash delimiter (e.g., "--").

Here is an example of a civic address:

420A GORGE RD E, VICTORIA, BC

which contains the following address elements:

Address Element	Value
civicNumber	420
civicNumberSuffi	Α
X	
streetName	GORGE
streetType	RD
streetDirection	E
localityName	VICTORIA
provinceCode	BC

Here is an example of a civic address with a unit:

UNIT 1A -- 433 CEDAR RAPIDS BLVD, PEMBERTON, BC

which contains the following address elements:

Address Element	Value
unitDesignator	UNIT
unitNumber	1
unitNumberSuffi	A
X	
civicNumber	433
streetName	CEDAR RAPIDS
streetType	BLVD
localityName	PEMBERTON
provinceCode	BC





Here is an example of a non-civic address with a street qualifier:

JOHNSON ST BRIDGE, VICTORIA, BC

which contains the following address elements:

Address Element	Value
streetName	JOHNSON
streetType	ST
streetQualifier	BRIDGE
localityName	VICTORIA
provinceCode	BC

Here are some more examples:

1. Civic addresses without a unit:

1025 HAPPY VALLEY RD, METCHOSIN, BC 130A HILL ST, NELSON, BC

2. A civic address with a unit:

PAD 2 -- 1200 NORTH PARK RD, SHAWNIGAN LAKE, BC

3. Civic addresses with a simple site name:

PORT ALICE HEALTH CENTRE -- 1090 MARINE DRIVE, PORT ALICE, BC ROYAL ATHLETIC PARK -- 1014 CALEDONIA AVE, VICTORIA, BC

4. Civic addresses with a unit within a named complex:

PAD 2, HAPPY MOBILE HOME PARK -- 1200 NORTH PARK RD, SHAWNIGAN LAKE, BC ROOM 103A, CLEARIHUE BUILDING, UNIVERSITY OF VICTORIA -- 3800 FINNERTY RD, VICTORIA, BC ROOM 230, WEST BLOCK, ROYAL JUBILEE HOSPITAL -- 1952 BAY ST, VICTORIA, BC





5. Non-civic addresses with a unit within a named complex:

PAD 2, HAPPY MOBILE HOME PARK -- NIMPO LAKE, BC
PAD 2, HAPPY MOBILE HOME PARK -- REMOTE RD, NIMPO LAKE, BC

6. Non-civic address containing a street, locality, and province:

KILOPOST 330 -- WILLOW DRIVE, 70 MILE HOUSE, BC BIKE STAND 134 -- JOHNSON ST BRIDGE, VICTORIA, BC

- 7. Non-civic address without a street: CENTENNIAL CANDLE -- VICTORIA, BC
- 8. Intersection addresses:

Douglas St and Johnson St, Victoria, BC Douglas St and Gorge Rd E and Hillside Ave, Victoria, BC





Alternative Address Formats

On input, the geocoder can also handle the following alternatives to Single-Line Address Format:

- 1. Unit without a frontGate:
 - PAD 2, 1200 NORTH PARK RD, SHAWNIGAN LAKE, BC
- 2. Unit number without a frontGate and unitDesignator (as per Canada Post):
 - 2-1200 NORTH PARK RD, SHAWNIGAN LAKE, BC
- 3. Unit following street (as per Canada Post):
 - 1200 NORTH PARK RD PAD 2, SHAWNIGAN LAKE, BC