



CarryMap

for Windows

(c) 2023 Data East, LLC

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About application

CarryMap for Windows is an application provided to view mobile maps in .CMF and .CMF2 formats, as well as data in GeoPackage format on computers with OS Windows. CarryMap app is also available for [Android](#) and [iOS](#) mobile devices.

Mobile maps in .CMF2 format are created with CarryMap Builder, an extension to ArcGIS for Desktop. Learn more about CarryMap Builder [here](#).

System requirements:

Operation system: Microsoft Windows 8/10/11

Requisite software: Microsoft .NET Framework 4.5.2+

Installation

To install CarryMap for Windows, go to [link](#) and press *Download* button.



 CarryMap 

CarryMap for Windows Desktop

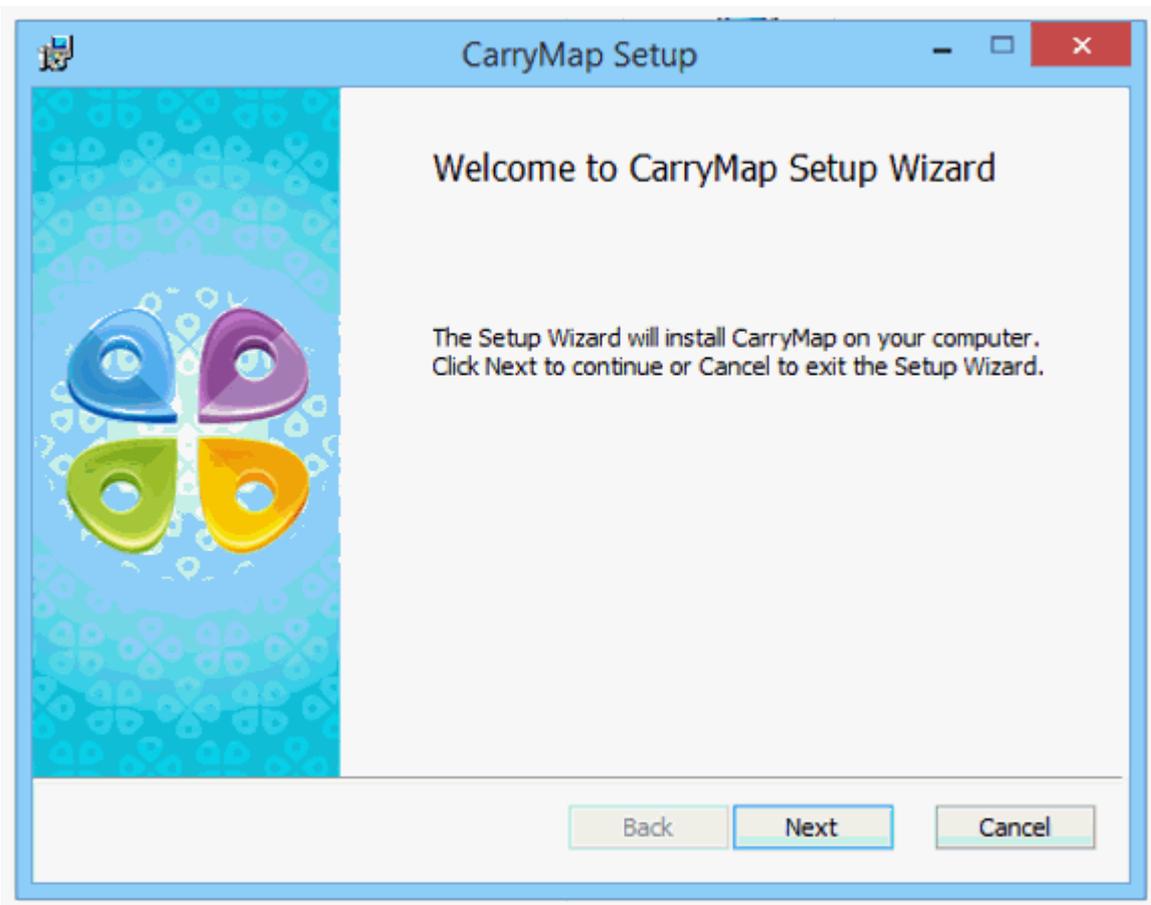
The free app for work with mobile maps in CMF and CMF2 formats on Windows computers.

Current version: 5.6 (2260)
Release date: June 1, 2022

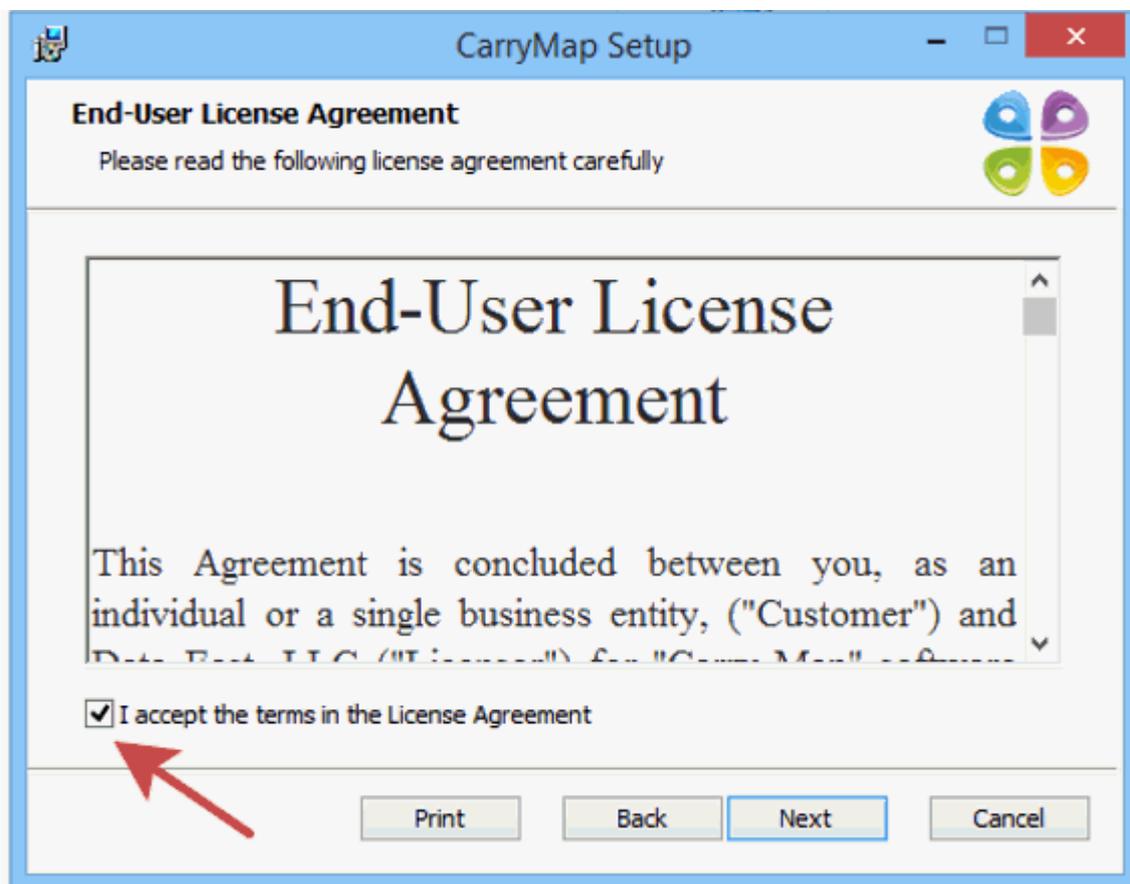
System requirements:
Operation system: Microsoft Windows 8/10
Requisite software: Microsoft .NET Framework 4.5.2+

[Download](#)

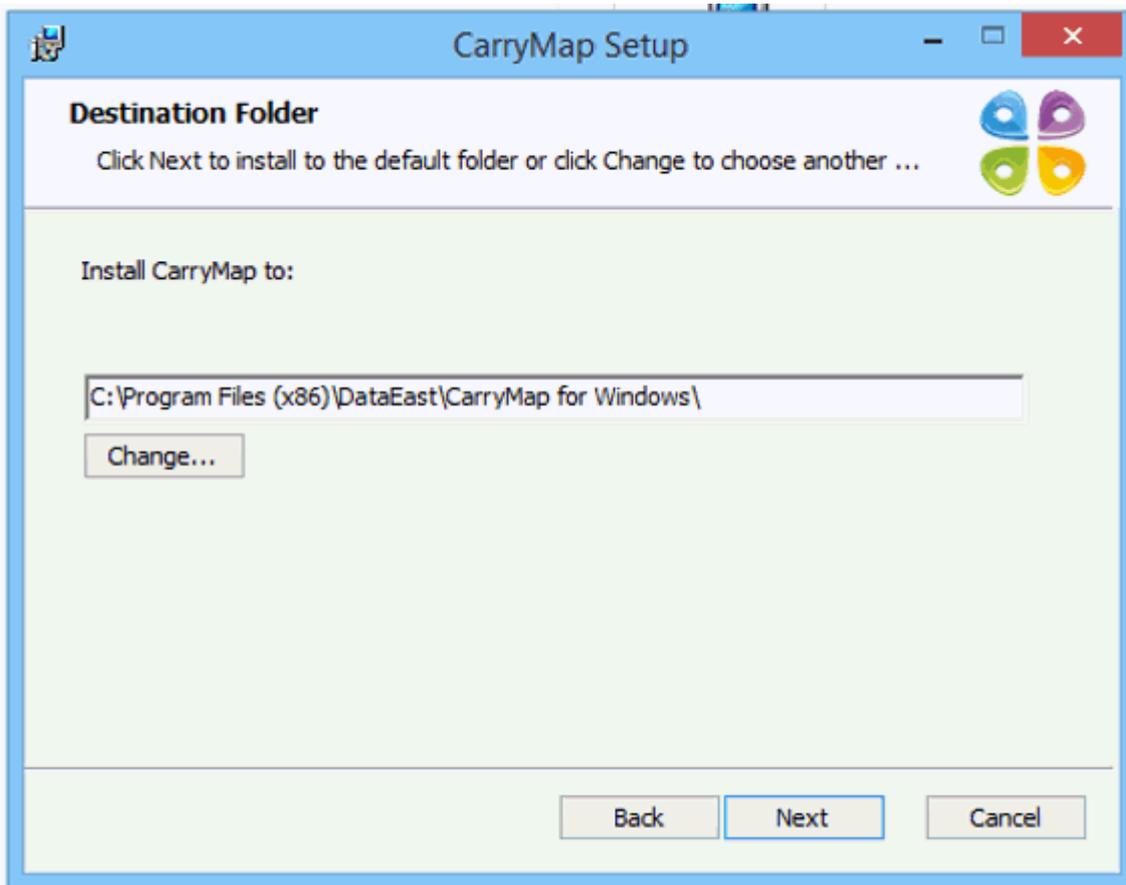
Run the setup file. Press *Next* in the appeared window.



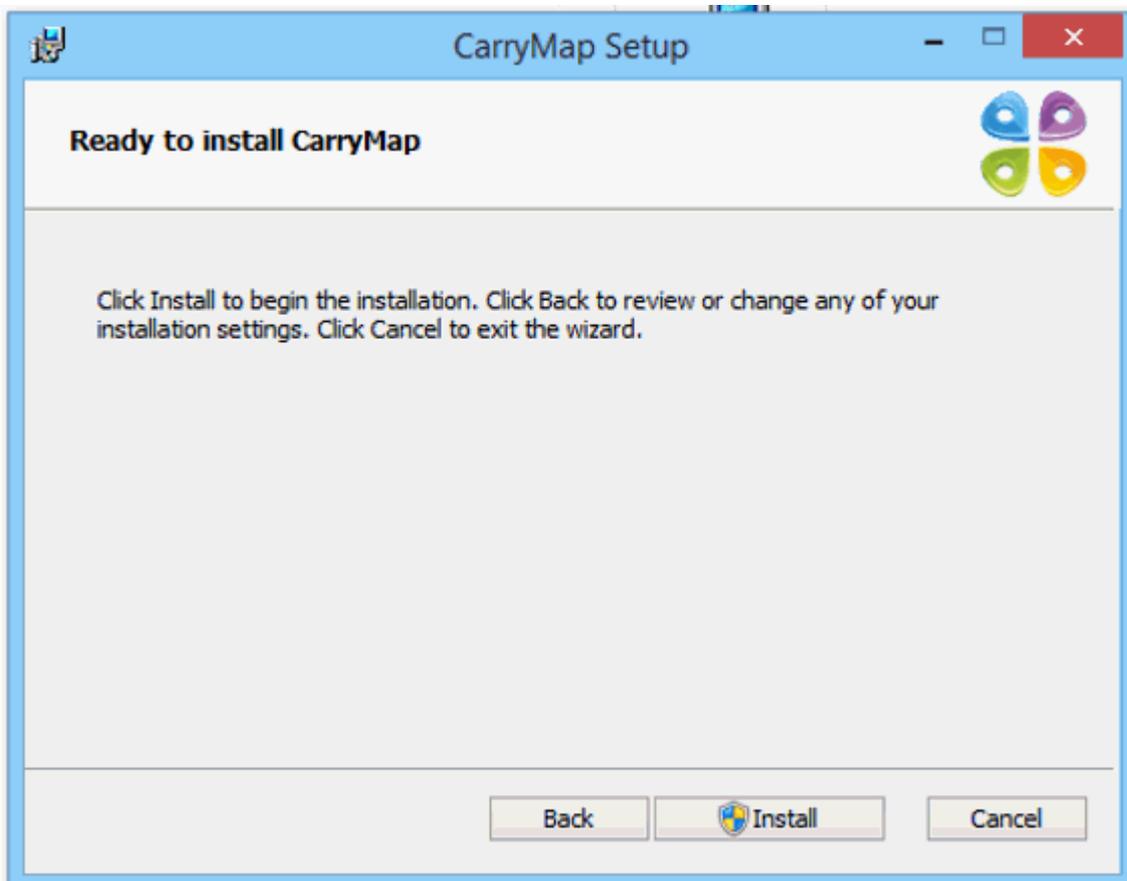
Read the End-user license agreement and check the box accepting its terms, press *Next*.



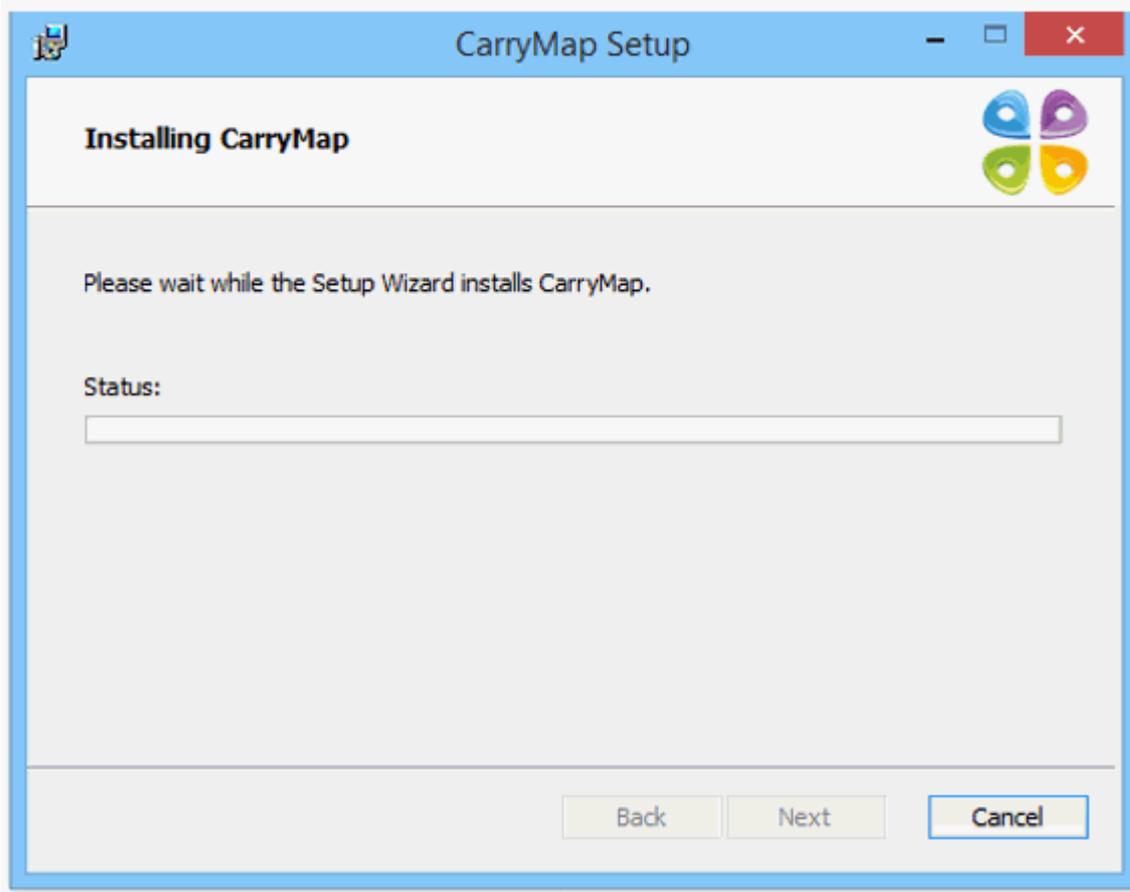
Specify the path to the CarryMap installation file and press *Next*.



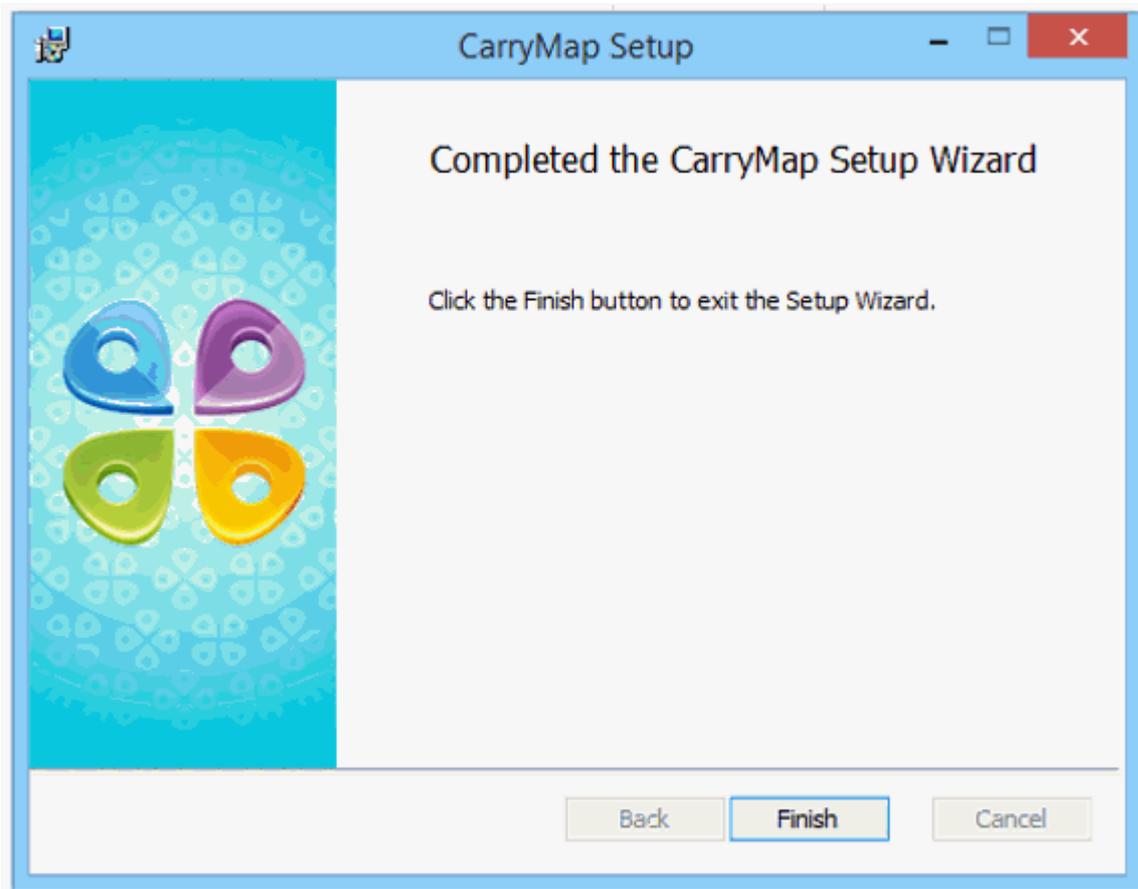
In the appeared window press *Install*.



The process will start.

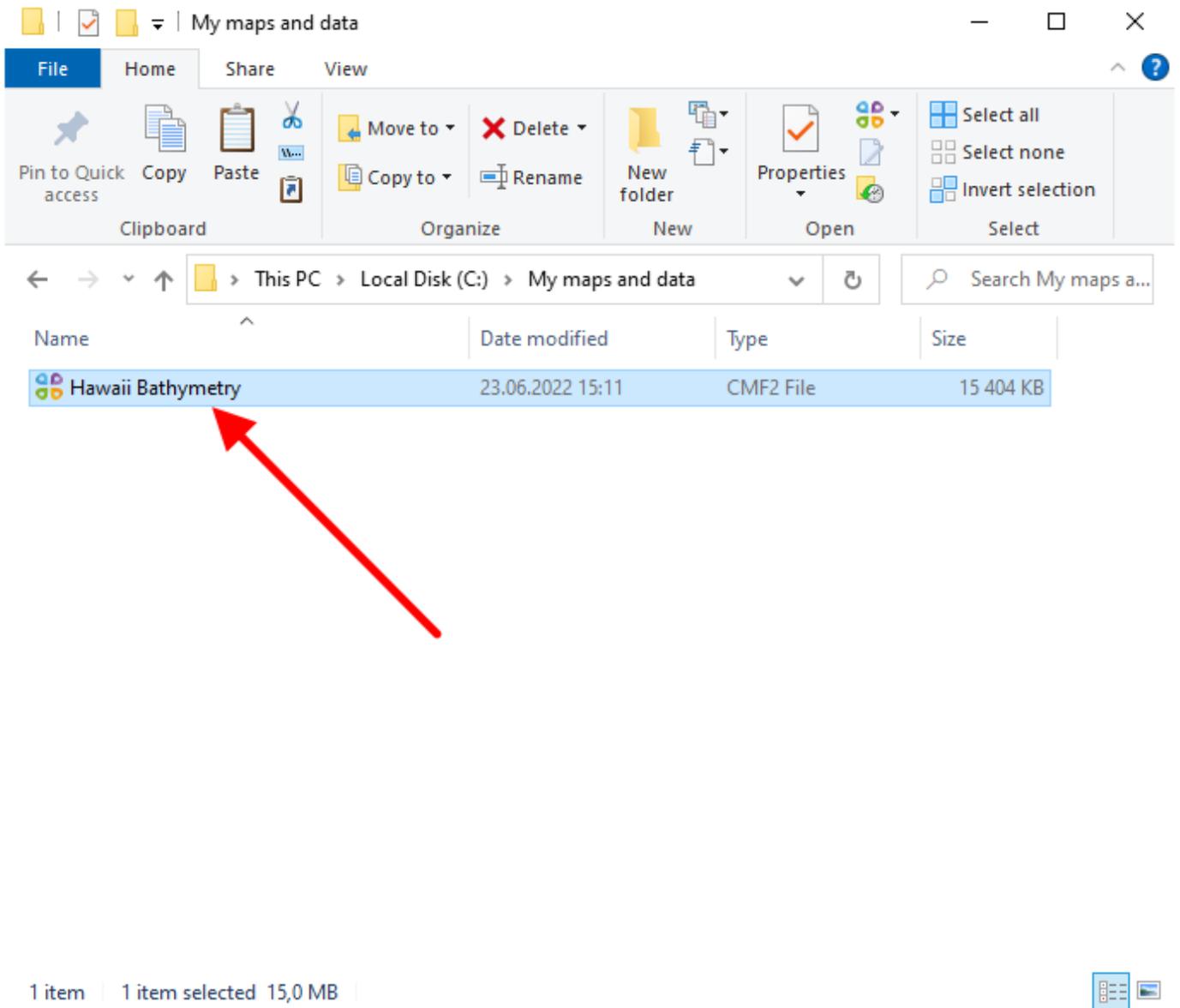


Upon installation completion, press *Finish*.

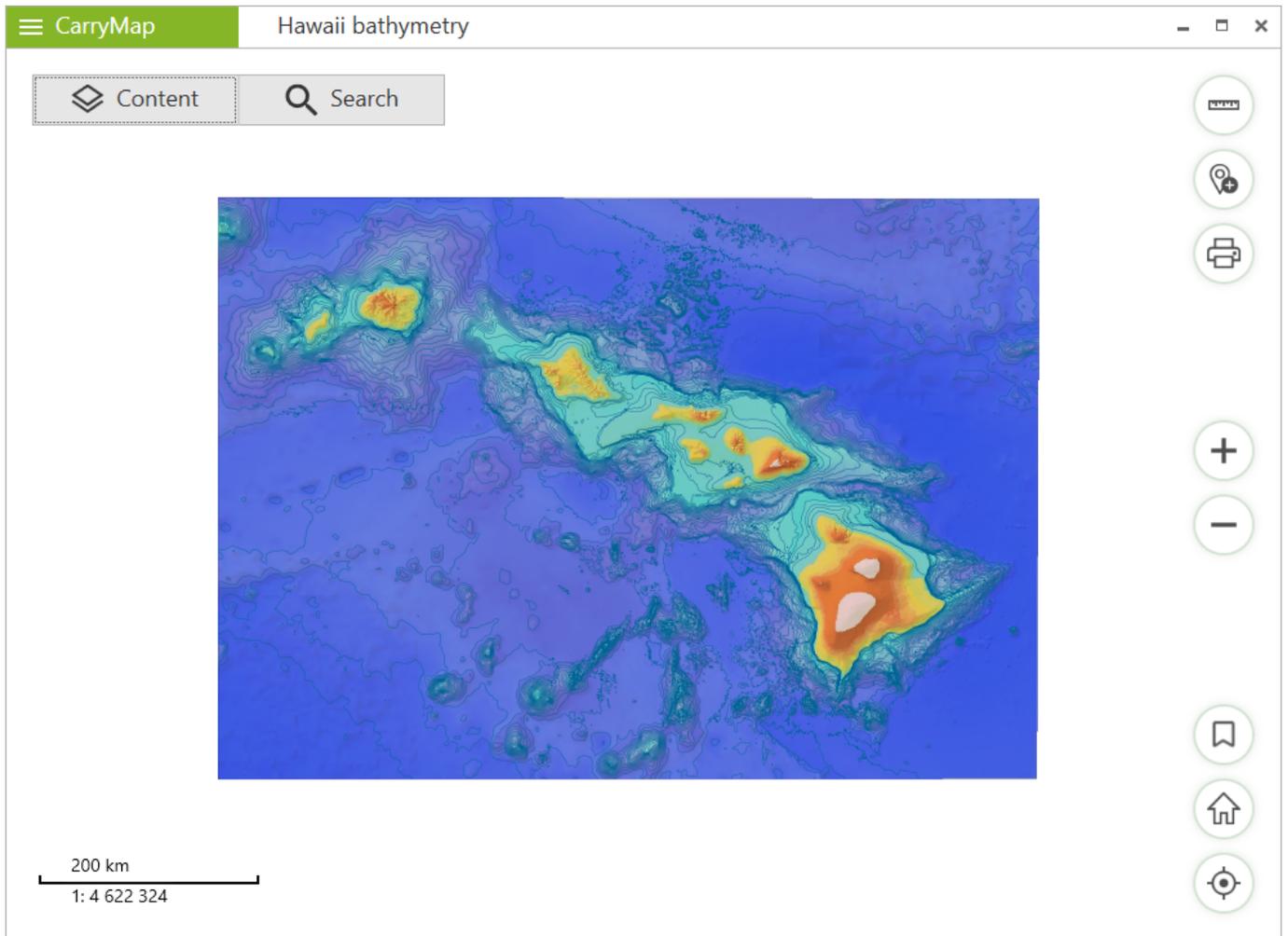


Opening mobile map

To open mobile map created with CarryMap Builder extension, double-click on the required .CMF2 file in the explorer.



The map will be opened in CarryMap application.



Otherwise, run CarryMap via *Start* menu. In the appeared window select the needed mobile map or project, double-clicking on it.

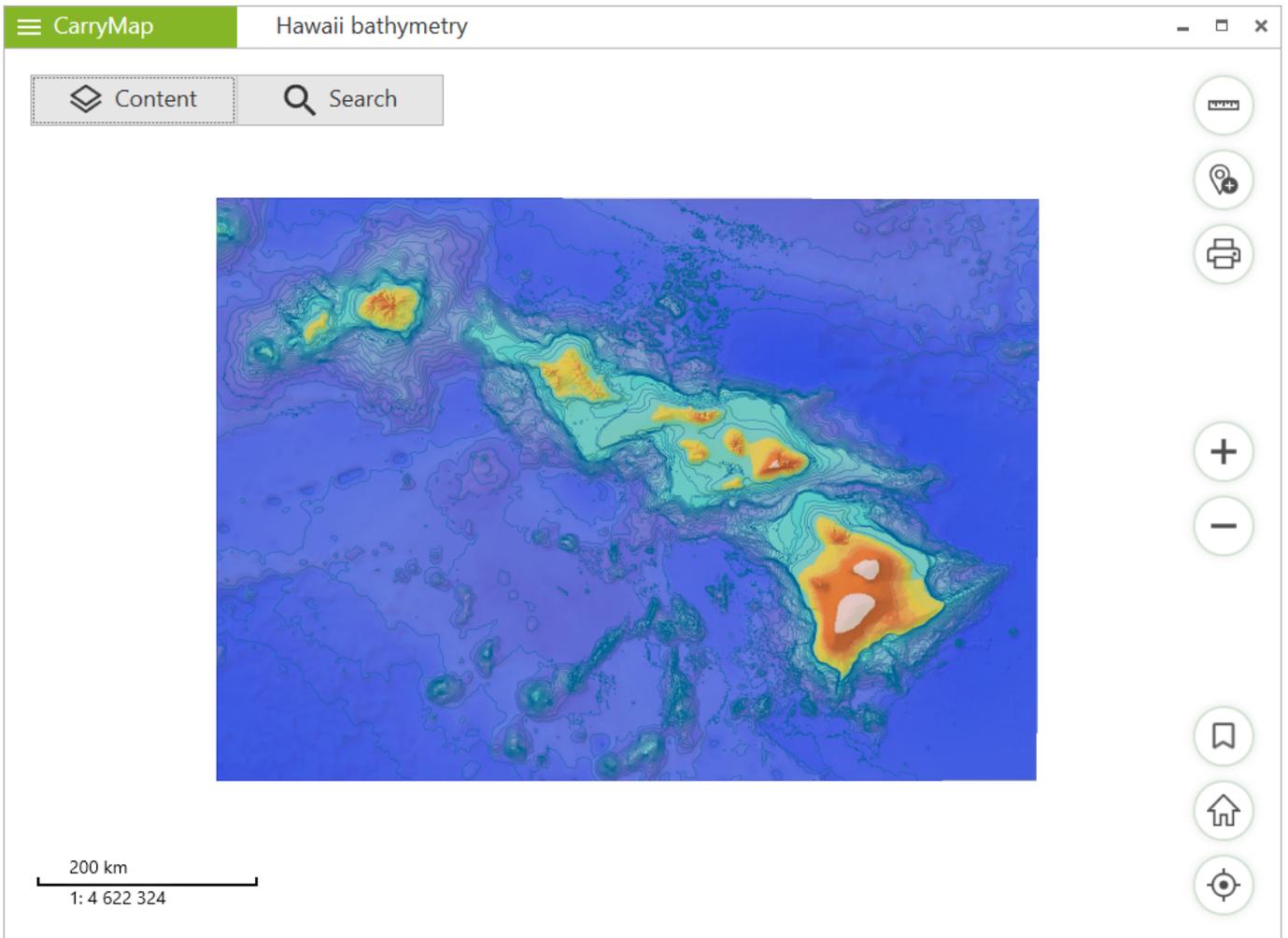
Open

Recent Projects

| Name | Size | Last opened |
|--|------------|-------------|
|  Hawaii Bathymetry.cmf2 \\storage\CarryMapGallery\Maps for outdoor activities\Hawaii Bathymetry.cmf2 | 15,042 MB | Today |
|  Project64 Contains 6 layer(s). World Map.cmf2, Point1, Polyline1, Polygon1, Info_point, OnePoi... | | Yesterday |
|  Vrangel_Conic.cmf2 E:\WORK_2\MyWorkMaps_2\Кыталык и о-в Врангеля\Temp\Vrangel_Conic.cmf2 | 2,925 MB | 26/05 |
|  Conservation areas of Russia.cmf2 \\storage\CarryMapGallery\Thematic maps\Conservation areas of Russia.cmf2 | 115,636 MB | 26/05 |
|  Map_from14122019.cmf2 \\storage\GeoTesting\CarryMap\Data\Desktop_test_cases_full\Открытие_карты_см... | 20,574 MB | 26/05 |
|  Tahoe.cmf2 \\storage\CarryMapGallery\Maps for outdoor activities\Tahoe.cmf2 | 56,688 MB | 15/05 |
|  Owens Lake Area.cmf2 \\storage\CarryMapGallery\Maps for outdoor activities\Owens Lake Area.cmf2 | 74,533 MB | 15/05 |
|  Zion National Park.cmf2 \\storage\CarryMapGallery\Maps for outdoor activities\Zion National Park.cmf2 | 43,443 MB | 15/05 |

Browse

Selected map/project will be opened in CarryMap application.



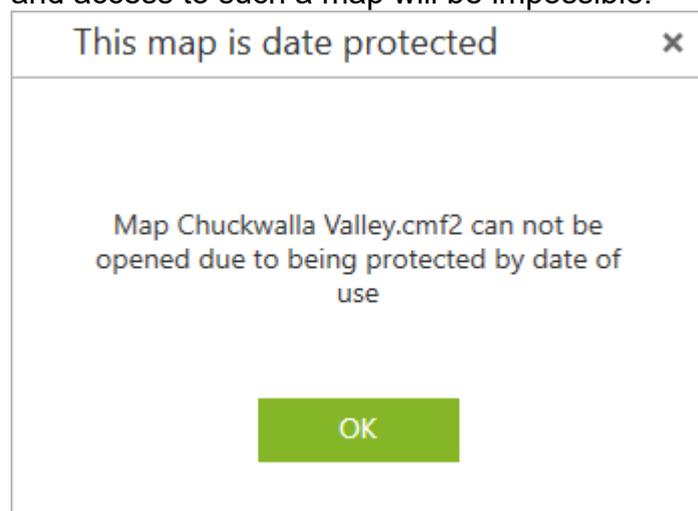
Note that CarryMap app does not allow viewing mobile maps in the old CMF format created with the previous generation of CarryMap 3x extension. That is why when trying to open such old map, the application will automatically convert it to the new CMF2 format.

Working with protected maps

Mobile maps can be accessed without restrictions only if the conditions for opening them correspond to the specified protection methods, otherwise access to the map will be impossible, and the appropriate notification will appear on the screen.

Protection by data of use

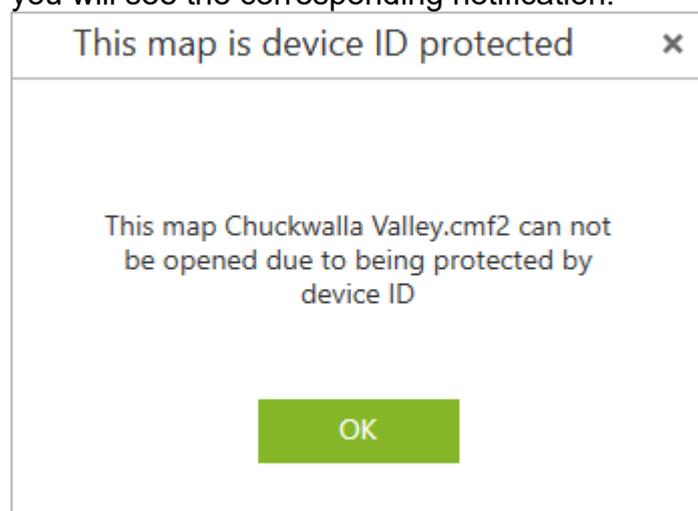
If the mobile map has expired when you try to open it, you will see the corresponding notification and access to such a map will be impossible.



Protection by device ID

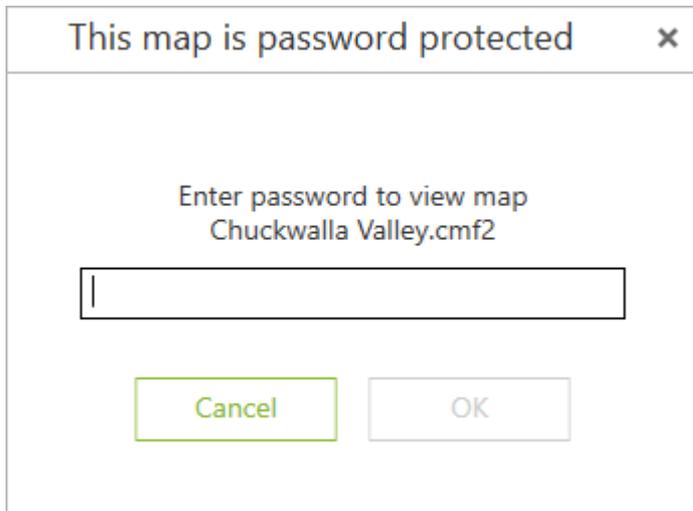
The device ID is a specific number assigned to the device by CarryMap application. The ID of your device can be found in the [Application settings](#).

If access to the mobile map is blocked for the device, then when you try to open such a map, you will see the corresponding notification.

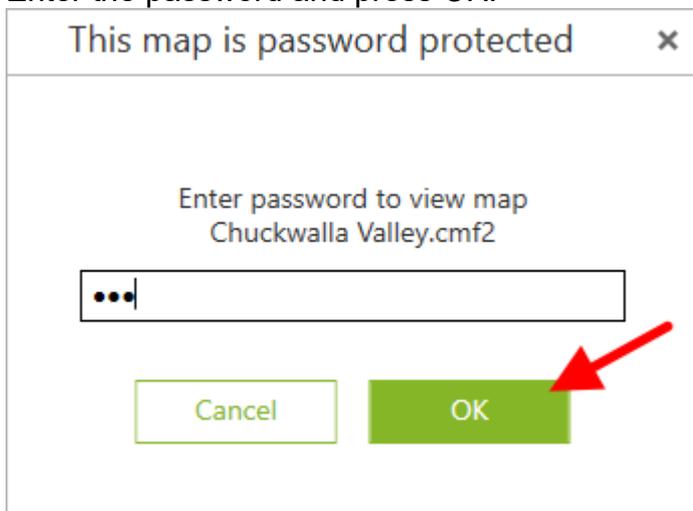


Protection by password

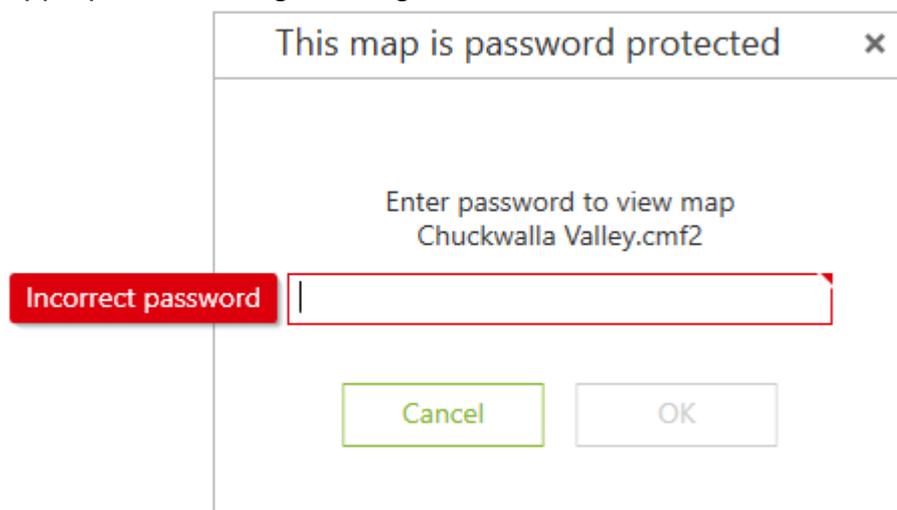
If access to the mobile map is protected by password, then when you try to open such a map, you will see the dialog asking to enter the password.



Enter the password and press *OK*.



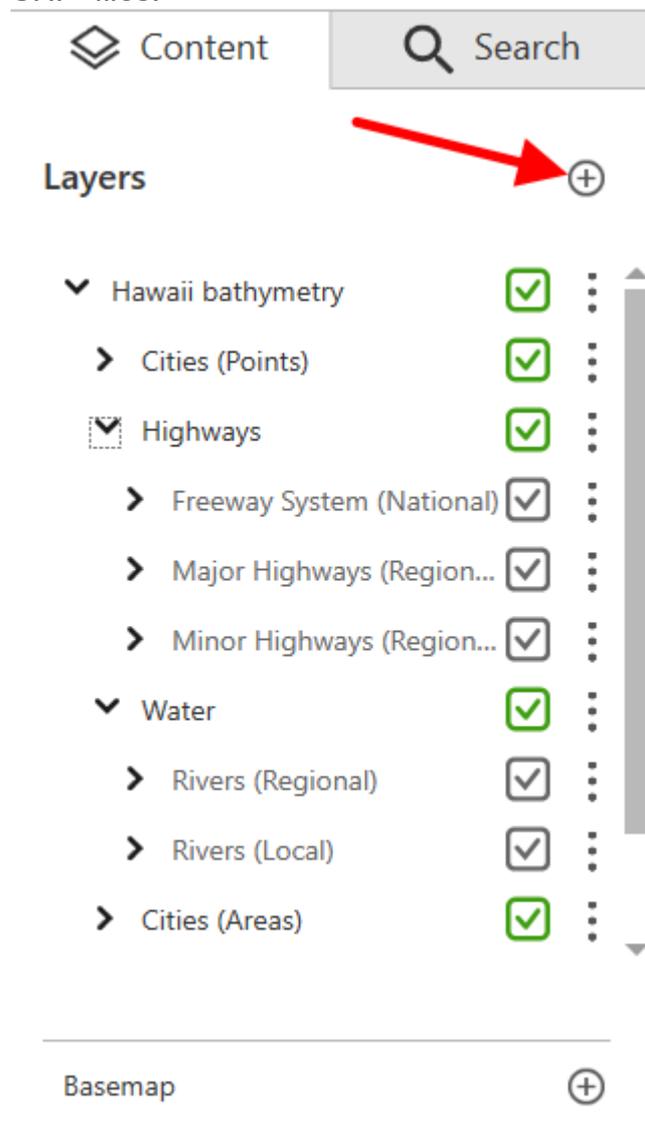
The map will be opened in the application. If the password is incorrect, you will see the appropriate warning message.



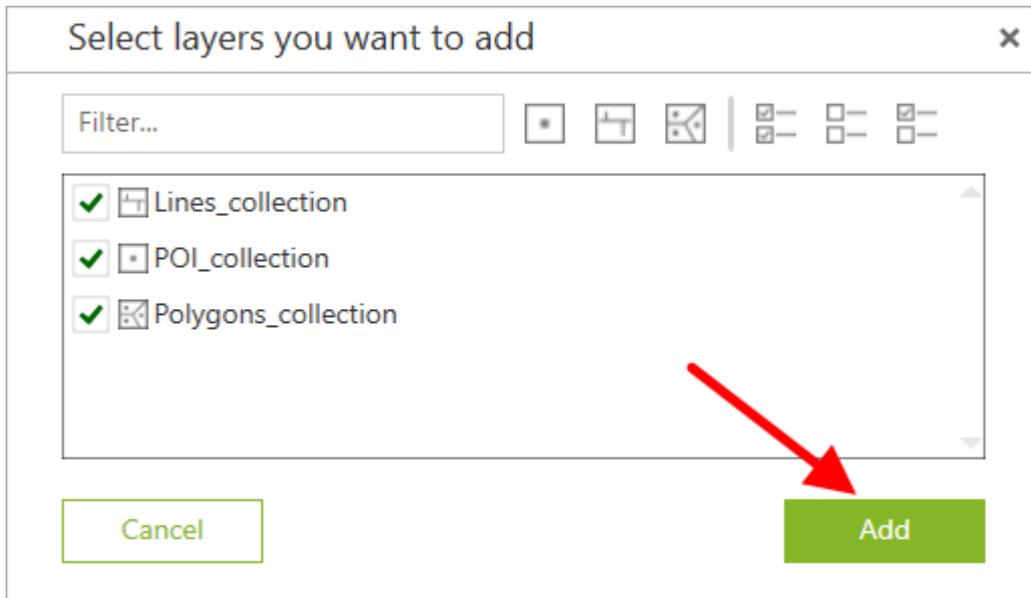
Adding data layers and maps to projects

In terms of CarryMap, projects are sets of maps, data layers, online basemaps and visibility settings. You can create projects by combining several maps or data layers to sets.

To create the project or to open data, press *Add* in the *Content* section and in the appeared window select the map or data layer that needs to be combined with the opened map. You can add maps in .CMF and .CMF2 format or data layers from GeoPackage and KML/KMZ, GPX, SHP files.



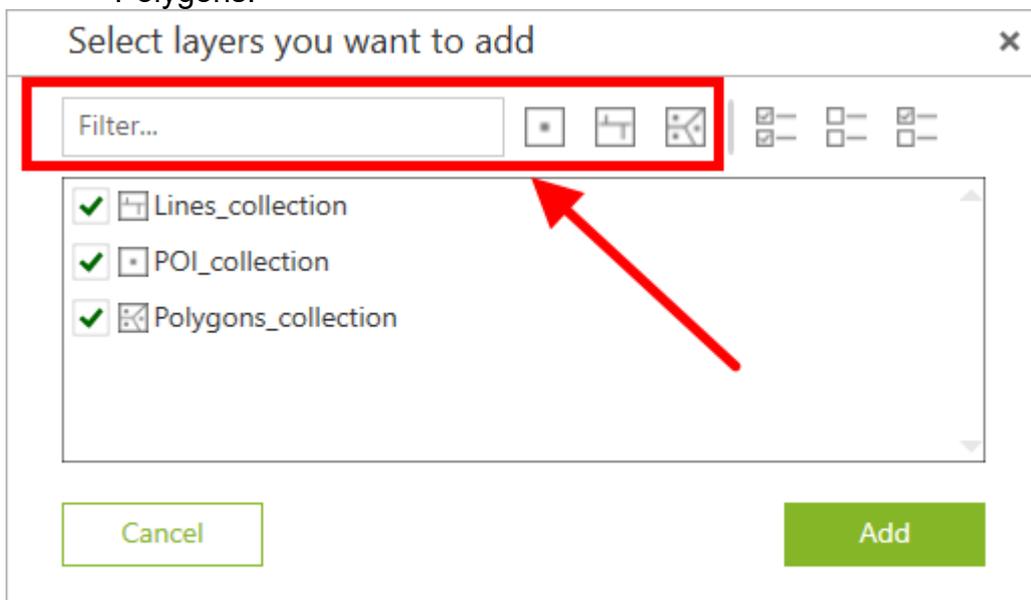
If you want to add data layers from GeoPackage, GPX, KML/KMZ or SHP files, select these layers from the list after selecting the GeoPackage, GPX, KML/KMZ or SHP file. To do so, check the box near the required layers and press *Add*.



The data layers will be added to the map, and the project will be automatically created.

Use the filters to display only required layers in the list. Following filters are available:

- By name (free text) - only layers containing the entered text string in their names will be shown.
- By geometry and data type - only layers of the selected geometry type will be shown:
 - Points,
 - Polylines,
 - Polygons.



Same way, you can select all layers in the list, unselect all layers and invert current selection.

Select layers you want to add



Filter...



- Lines_collection
- POI_collection
- Polygons_collection

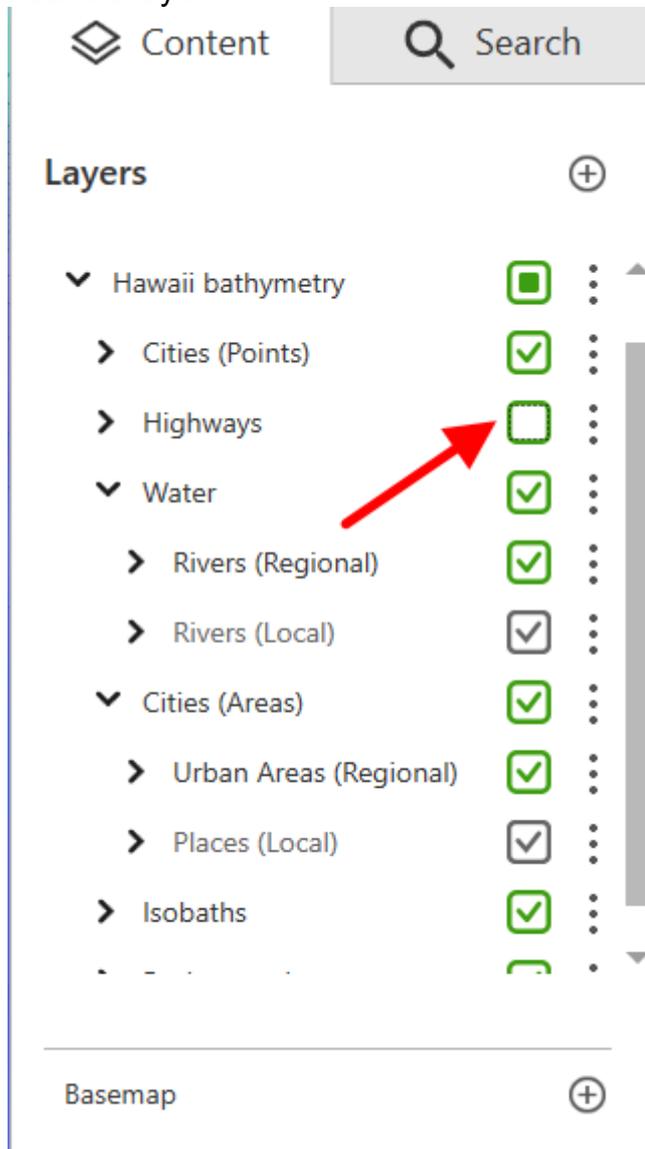
Cancel

Add

Working with layers in project

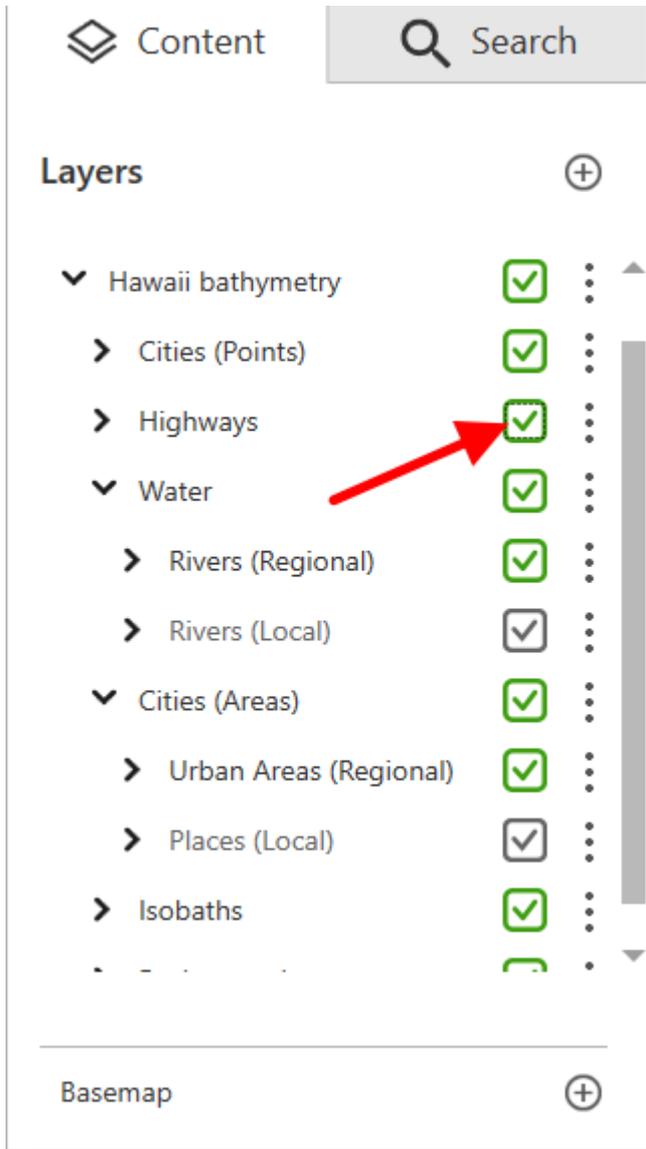
In the project TOC you can manage visibility of data layers and maps.

To turn off visibility of a data or map layer, select one or multiple layers and **uncheck** the box near the layer.

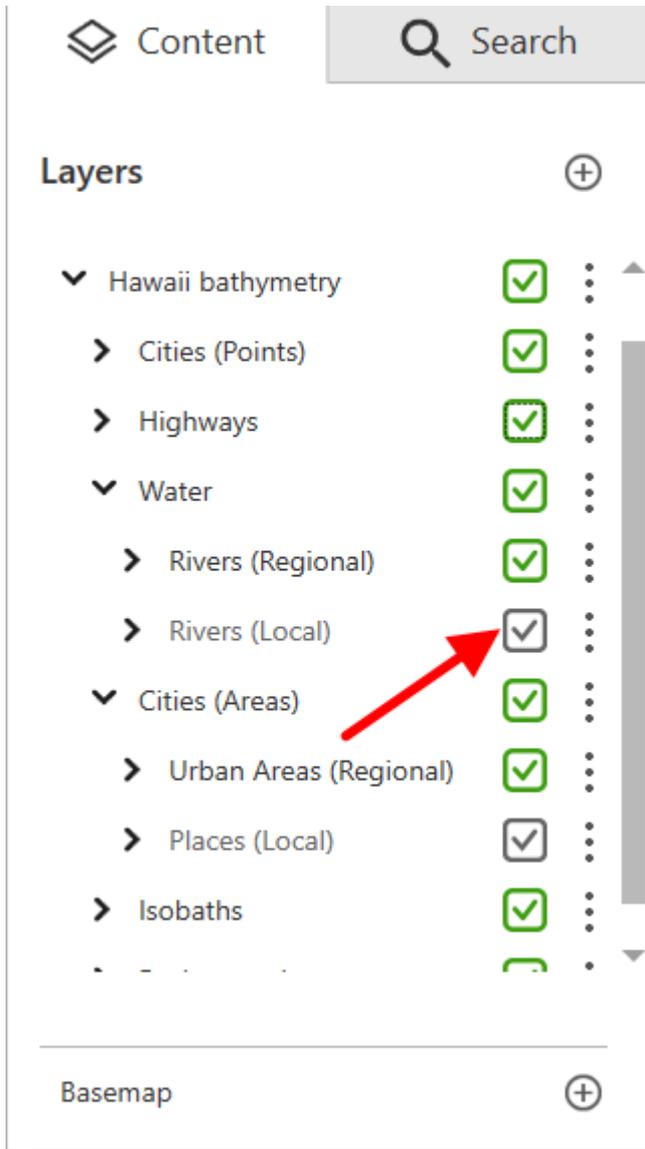


The layers will be hidden on the map.

To turn on visibility of a data or map layer, select one or multiple layers and check the box near the layer.



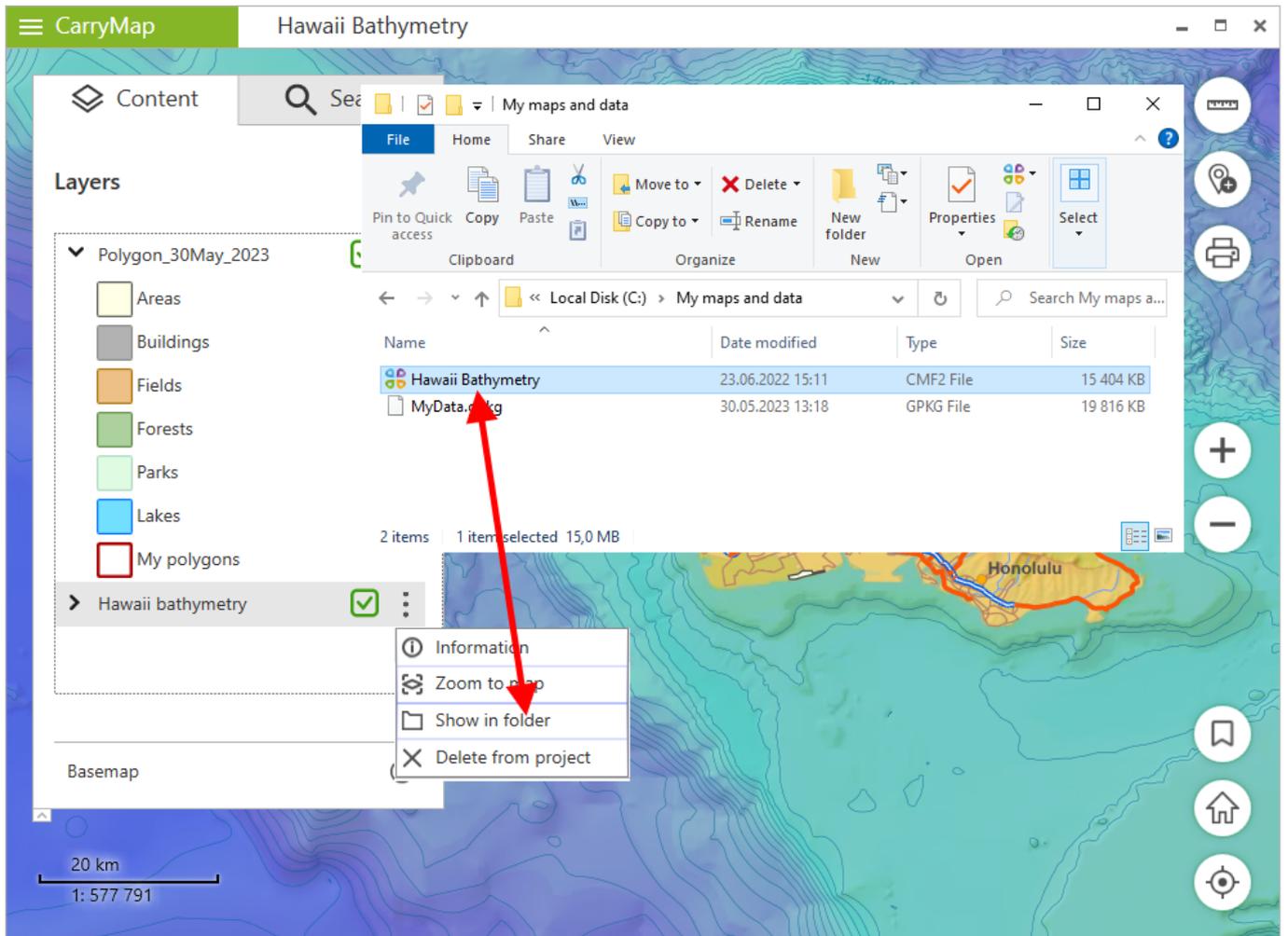
Layers with visibility set for specific scales will be marked with the grey tick in the project TOC.



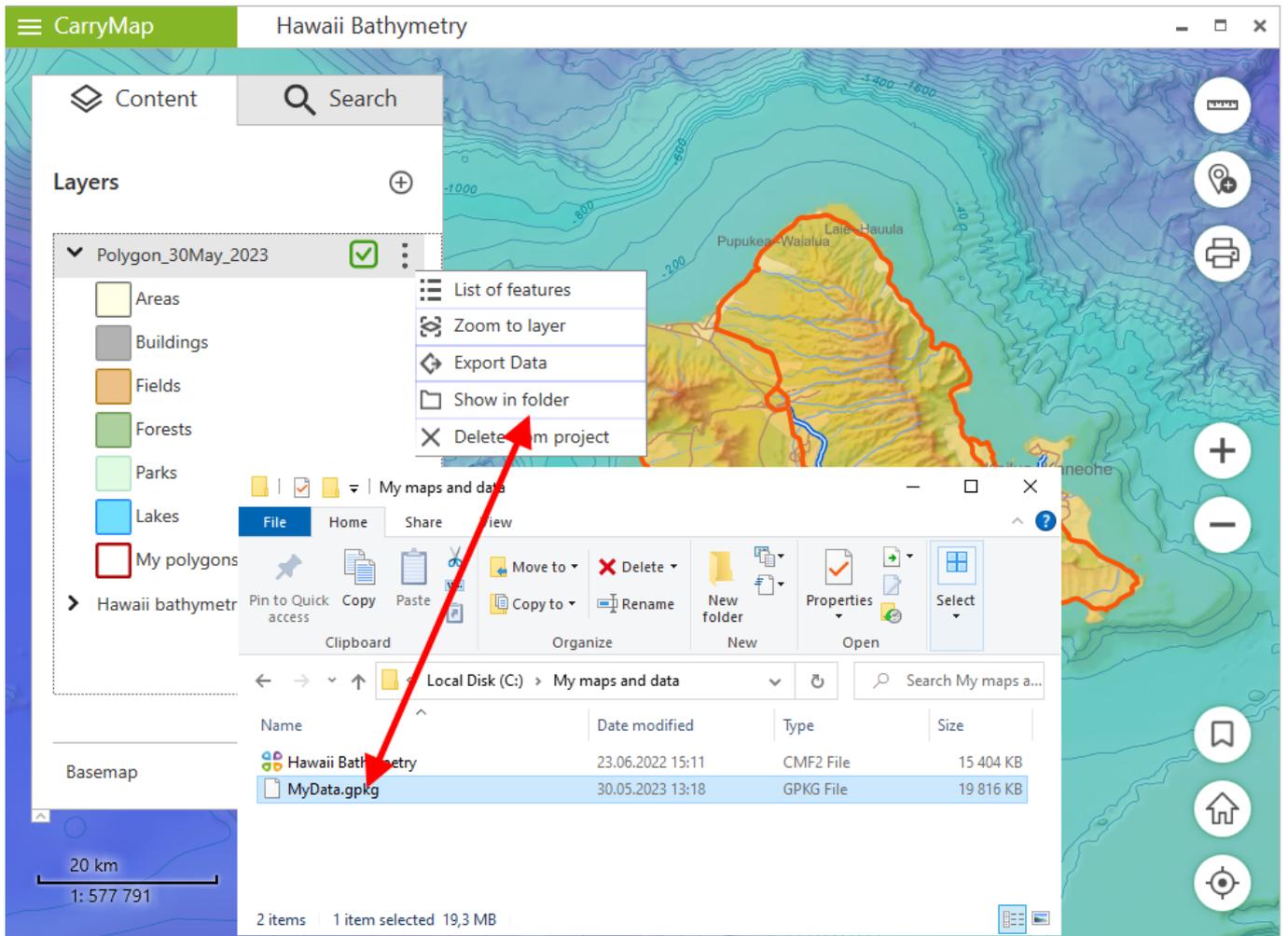
When changing the map scale and falling within visibility scale range, the tick near the layer will become green and the layer will be shown on the map.

To open the sources of the layers selected in the project TOC in File Explorer window, press the three dots icon near the layer name and select *Show in folder*.

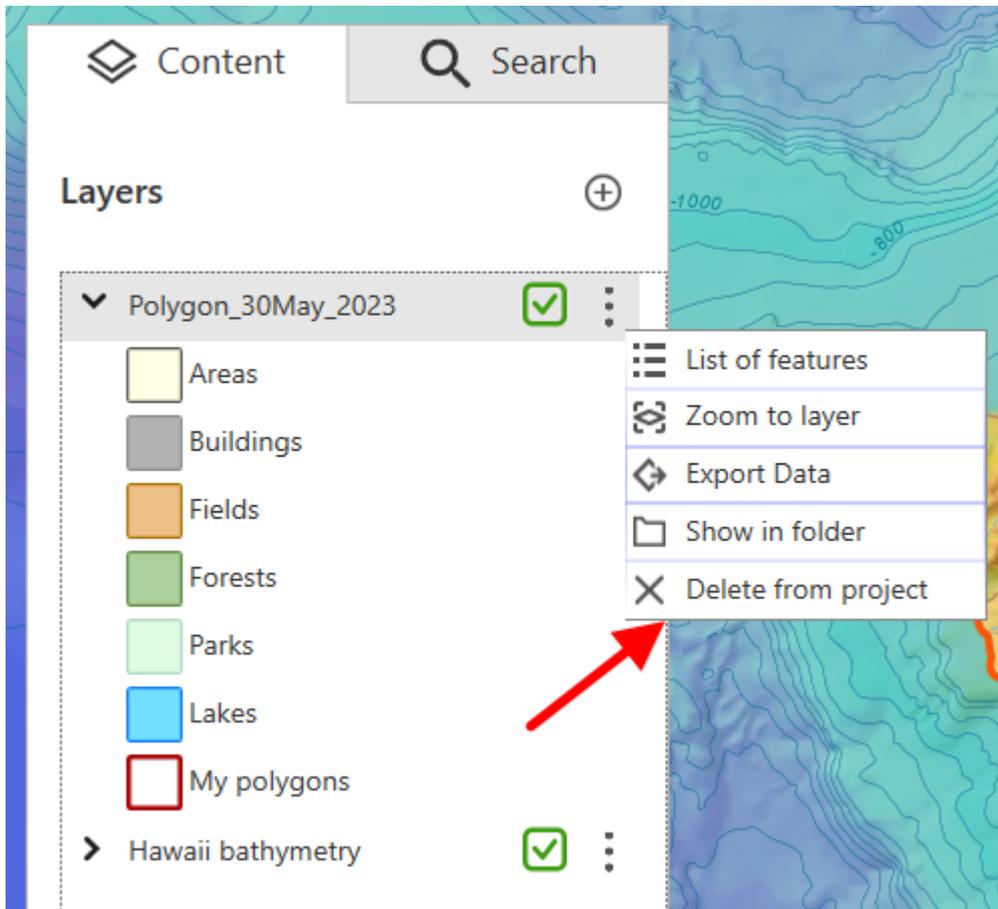
For map layers, the folder containing the layers will be opened and the appropriate file will be selected.



For GeoPackage layers, the folder containing the appropriate .GPKG file will be opened.

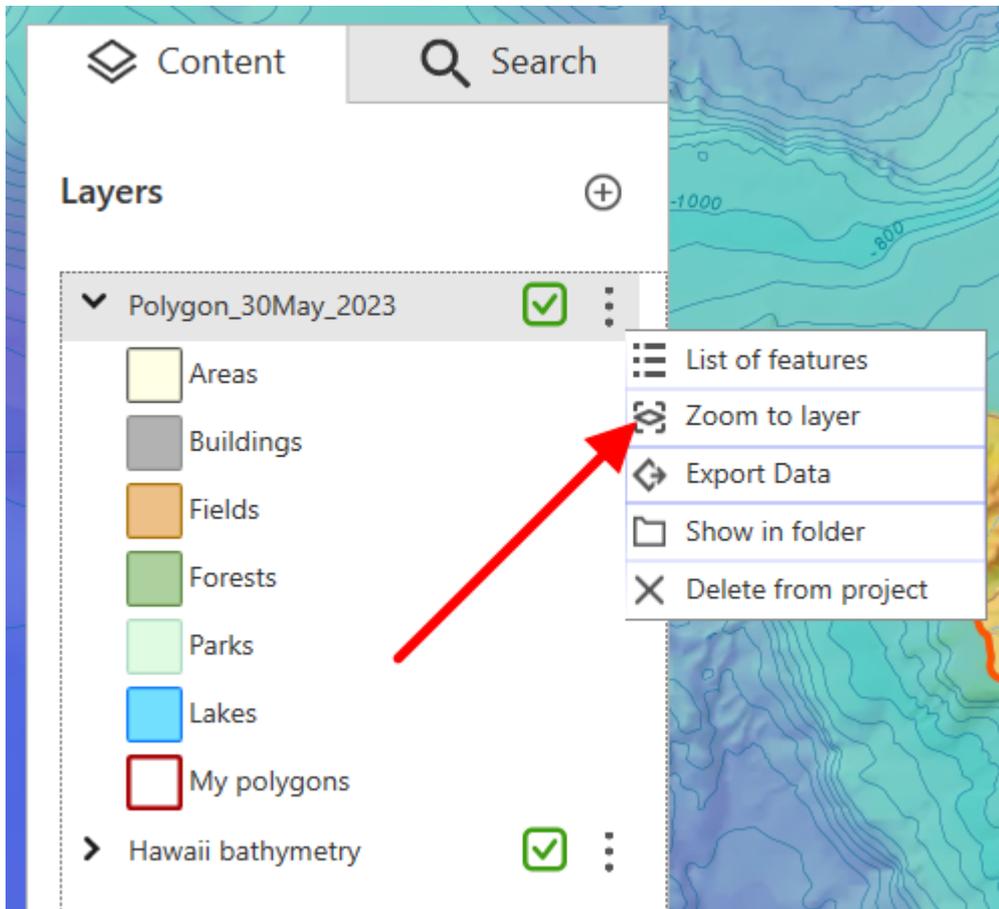


To delete data layers, select one or multiple layers, right-click to expand the layer menu in the table of contents or click the three dots icon near the required layer, and select *Delete from project*.

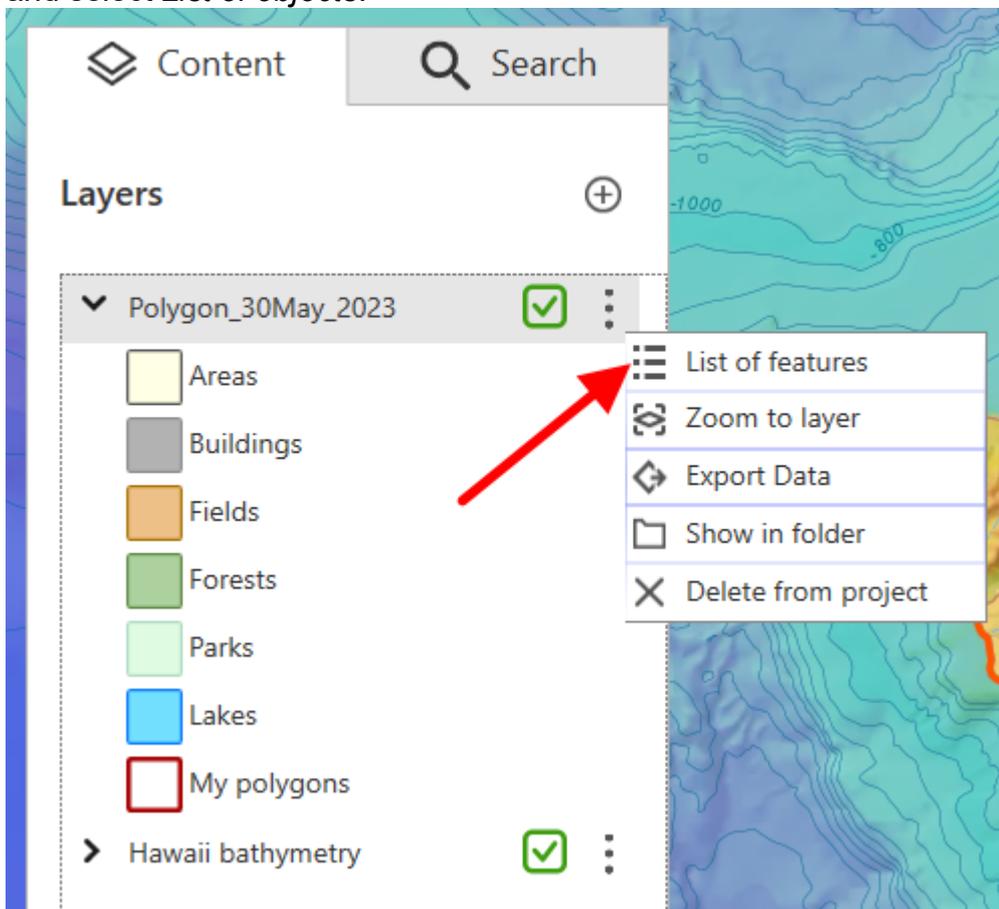


The layer with data will be deleted from the project but not from your computer, so you will be able to add it again, if needed.

In addition, you can zoom to layers on your map. To do this, select one or multiple layers, right-click to expand the layer menu in the table of contents or click the three dots icon near the required layer, and select *Zoom to layer*.



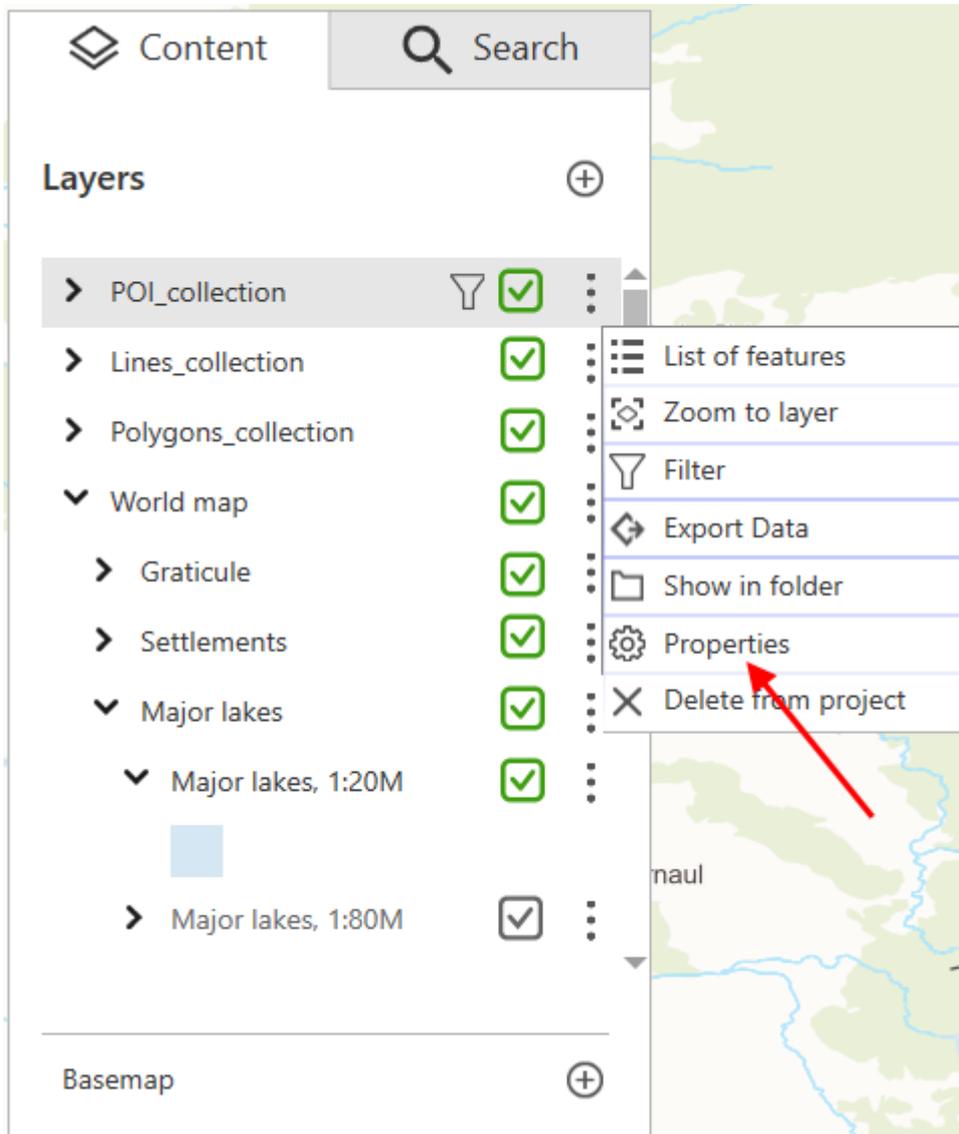
To show list of all objects containing in the layer, press the three dots icon near the layer name and select *List of objects*.



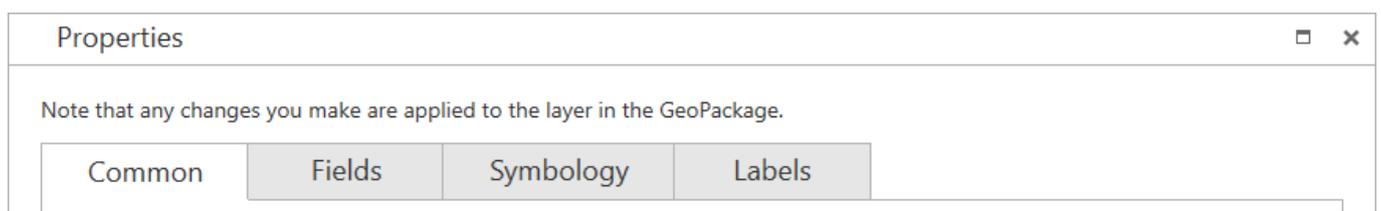
All objects from this layer will be shown in the *Search* tab.

Changing layer properties

To change the GeoPackage layer properties, expand the layer's menu in the table of contents by clicking the three dots, and select *Properties*.



Layer properties window contains the following tabs:



- **Common** - it allows you to define the layer name, specify the display field and set the layer transparency.

Properties

Note that any changes you make are applied to the layer in the GeoPackage.

Common Fields Symbology Labels

Layer Name:
POI_collection

Display field:
Name

Layer transparency:
0 %

GeoPackage:
C:/Program Files/DataEast/CarryMap for Windows/Client/Resources/DefaultGPKG/GPKGTemplate.gpkg

Layer:
POI_collection

Coordinate system:
GCS_WGS_1984 (WKID: 4326)

Cancel Apply OK

- **Fields** - it is used to create new attribute fields and set their characteristics. Here you can set the name of the new field, select its type, specify aliases for the new and existing fields and set the fields visibility.

Properties

Note that any changes you make are applied to the layer in the GeoPackage.

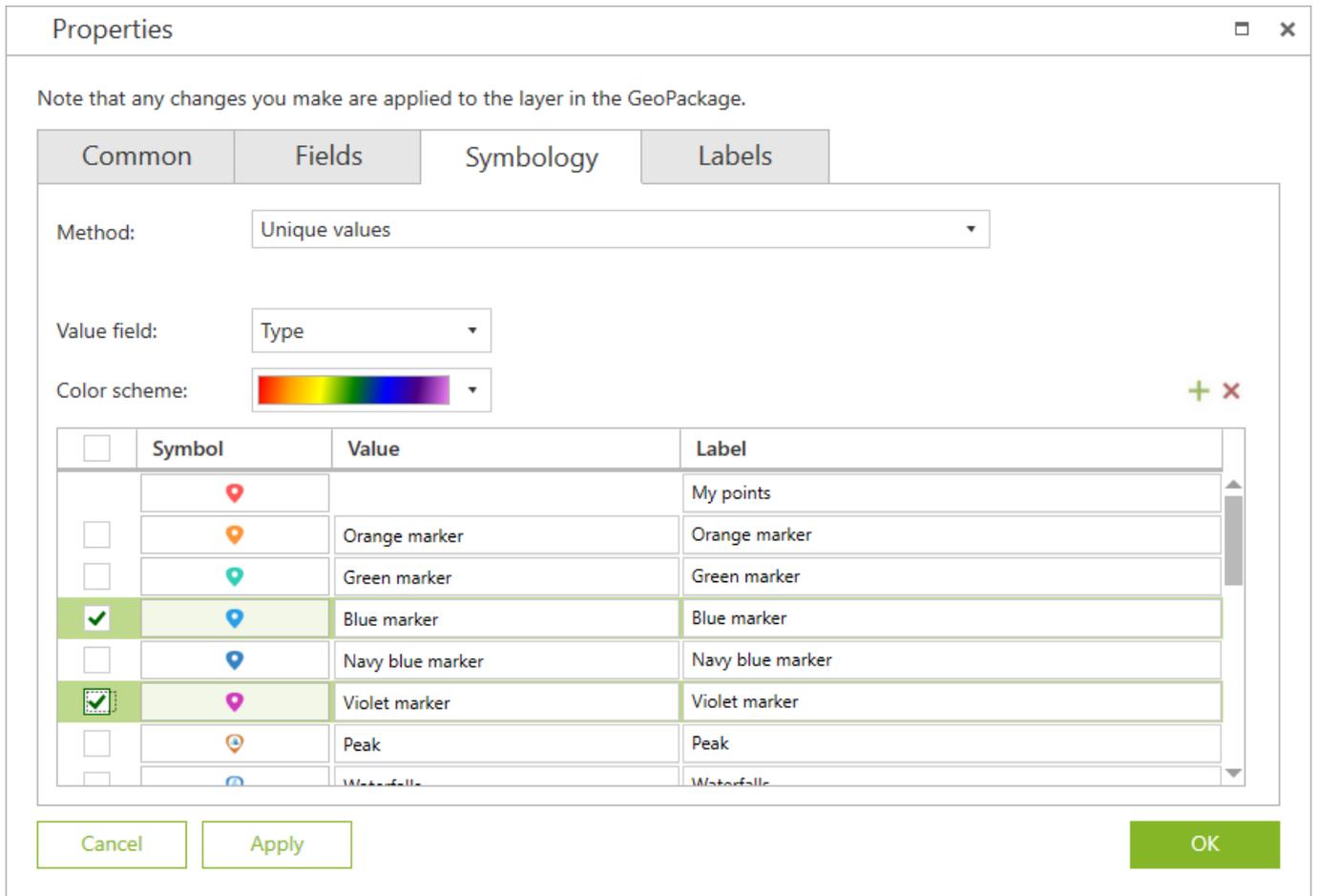
Common Fields Symbology Labels

Add Delete

| <input checked="" type="checkbox"/> | Name | Type | Alias | Visibility |
|-------------------------------------|-------------------|--------|-------------------|-------------------------------------|
| <input checked="" type="checkbox"/> | name | String | Name | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | description | String | Description | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | creation_date | Date | Creation date | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | modification_date | Date | Modification date | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Type | String | Type | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Field | String | Field | <input checked="" type="checkbox"/> |

Cancel Apply OK

- **Symbology** - here you can find the options for specifying the features symbols and the data display methods. The available display options are: to display all features using a single symbol, to set symbol categories based on unique field values, or to apply graduated symbol coloring based on features values.



- **Labels** - it allows you to enable layer labels, to select the label field, and to set the label parameters. The layer labels can be created based on the features symbol categories.

Properties

Note that any changes you make are applied to the layer in the GeoPackage.

Common Fields Symbology Labels

Label features

Method: Label each symbol class separately [Download classes](#)

Class: <all other values>

Label field: Name

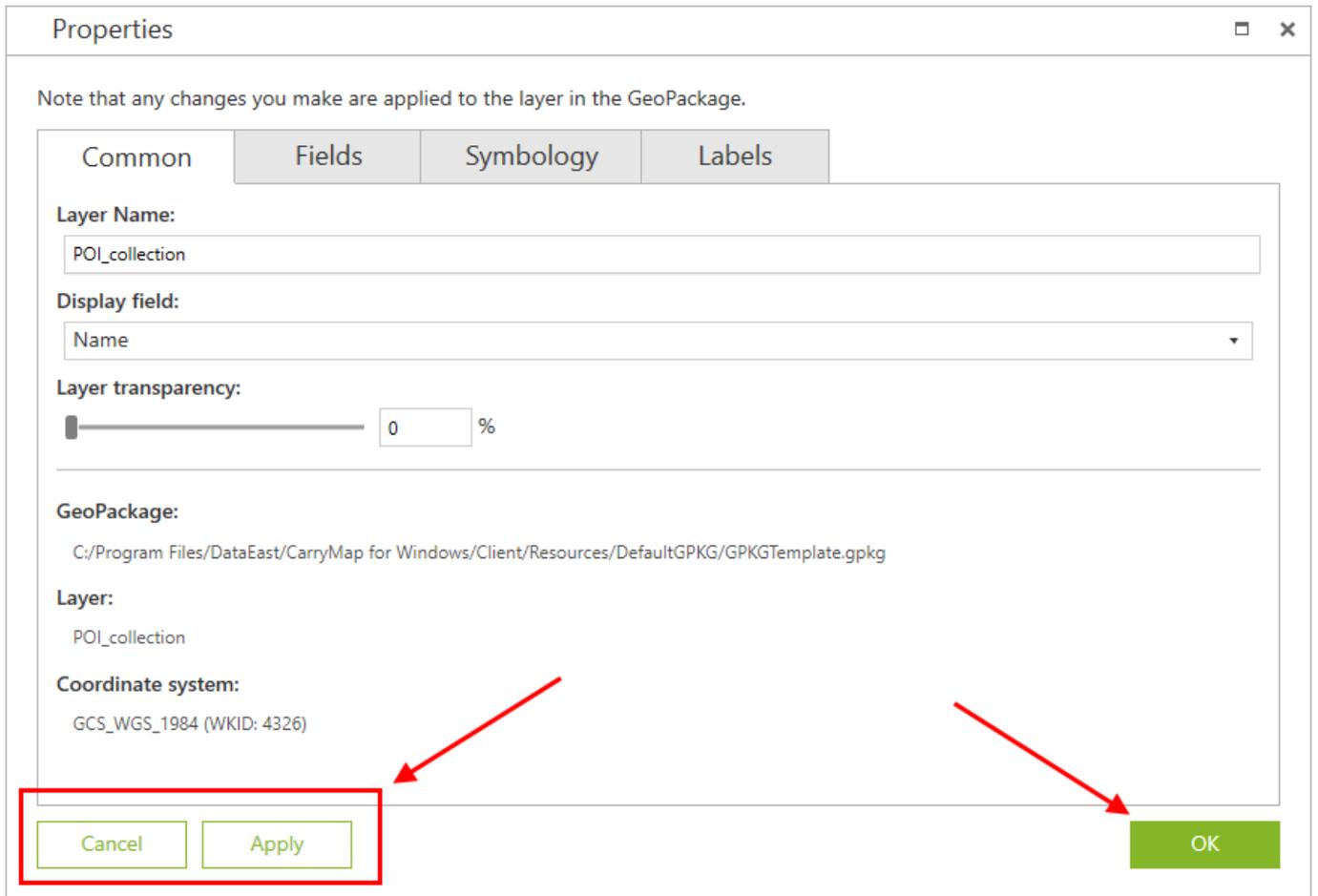
Font color: #425c29  Font size: 8

[Cancel](#) [Apply](#) [OK](#)

To apply made changes and continue working in the *Layer properties* window, click *Apply*. *

To save made changes and return to the map window, click *OK*. *

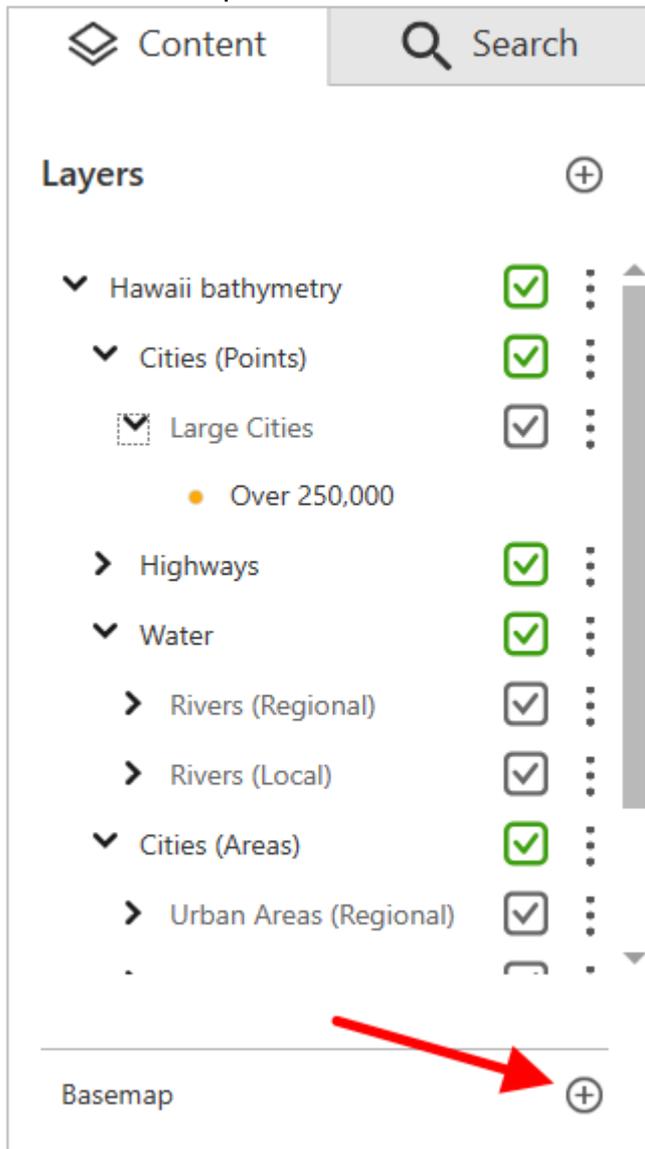
To cancel made changes, click *Cancel*.



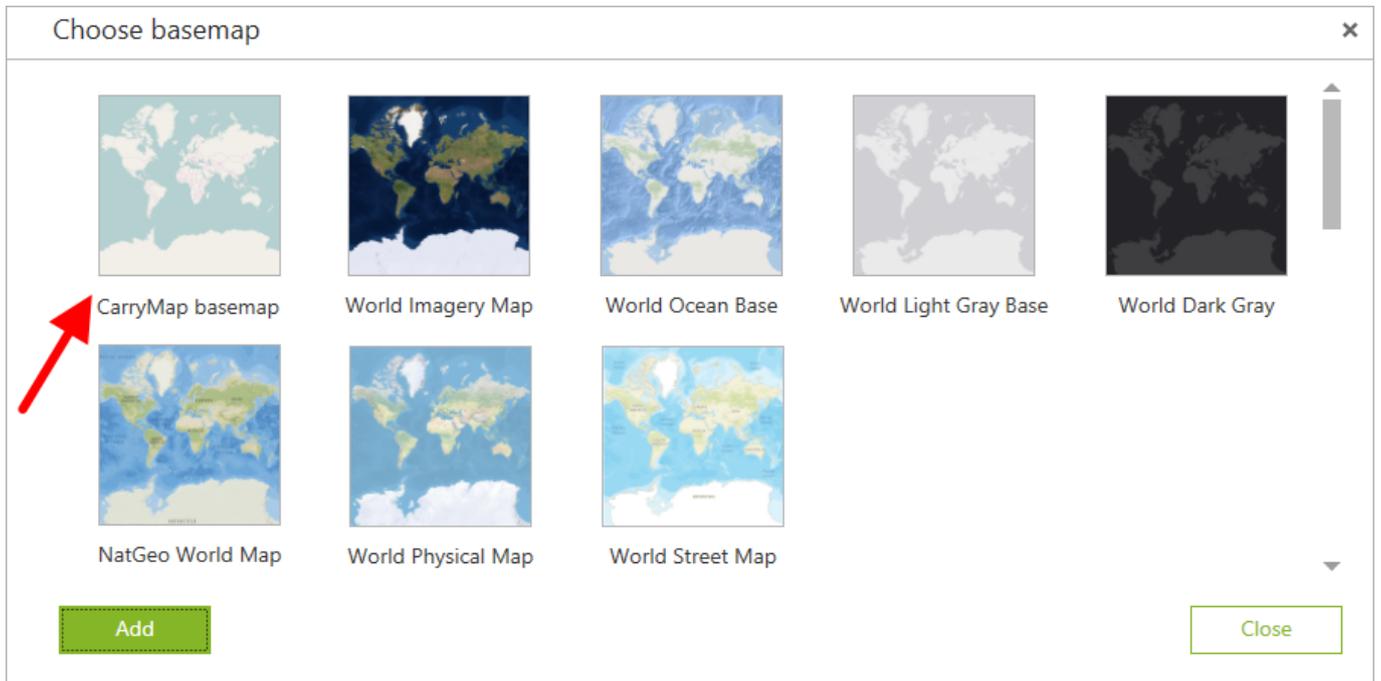
*** Please note** that any changes you make are applied to the layer at the level of the GeoPackage file.

Adding online services and basemaps

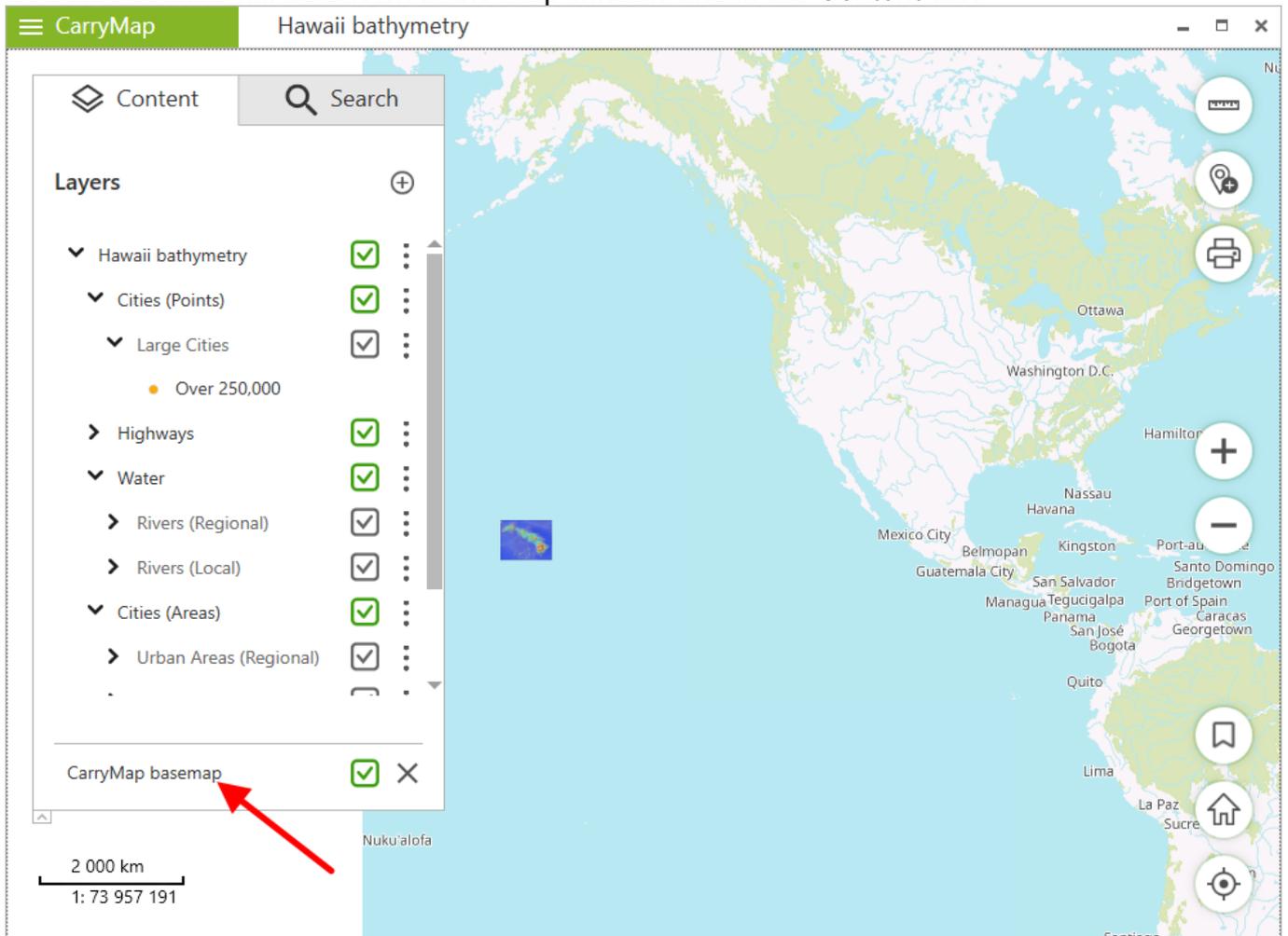
To add basemap from the list of available online services, press *Add*.



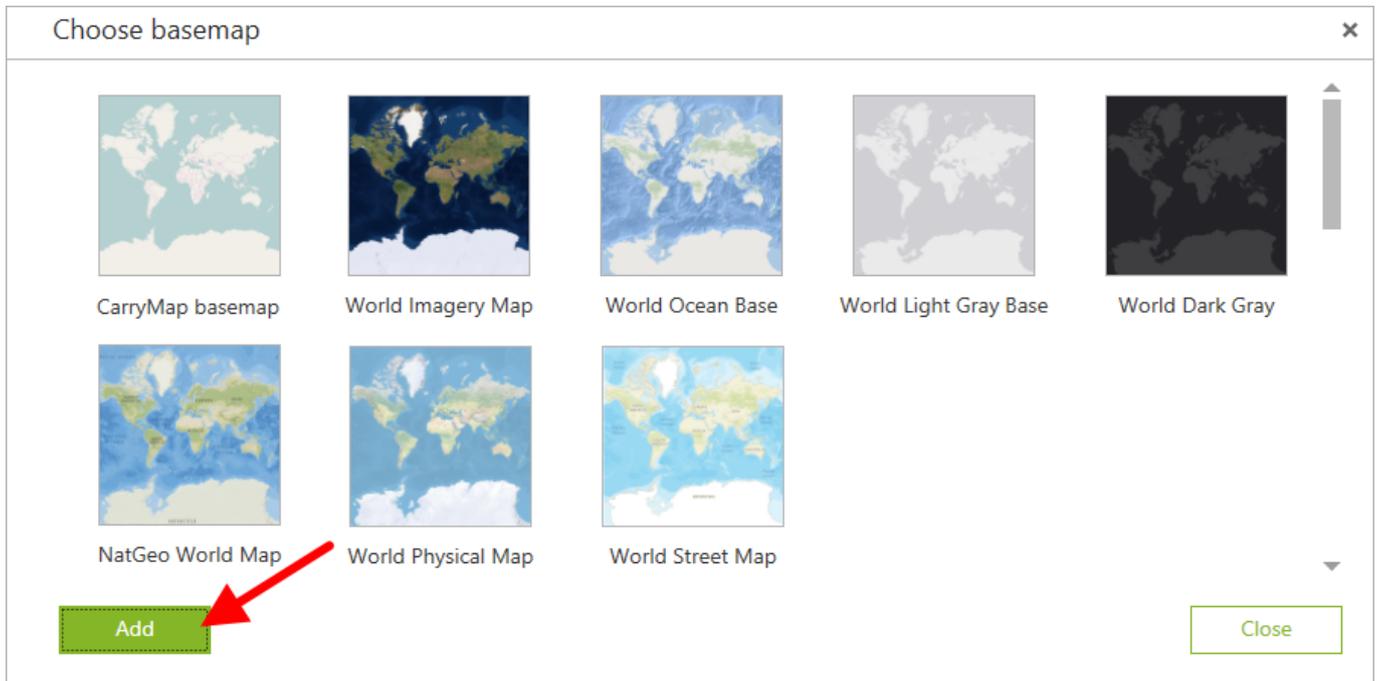
In the appeared list of online services select one that needs to be shown as basemap.



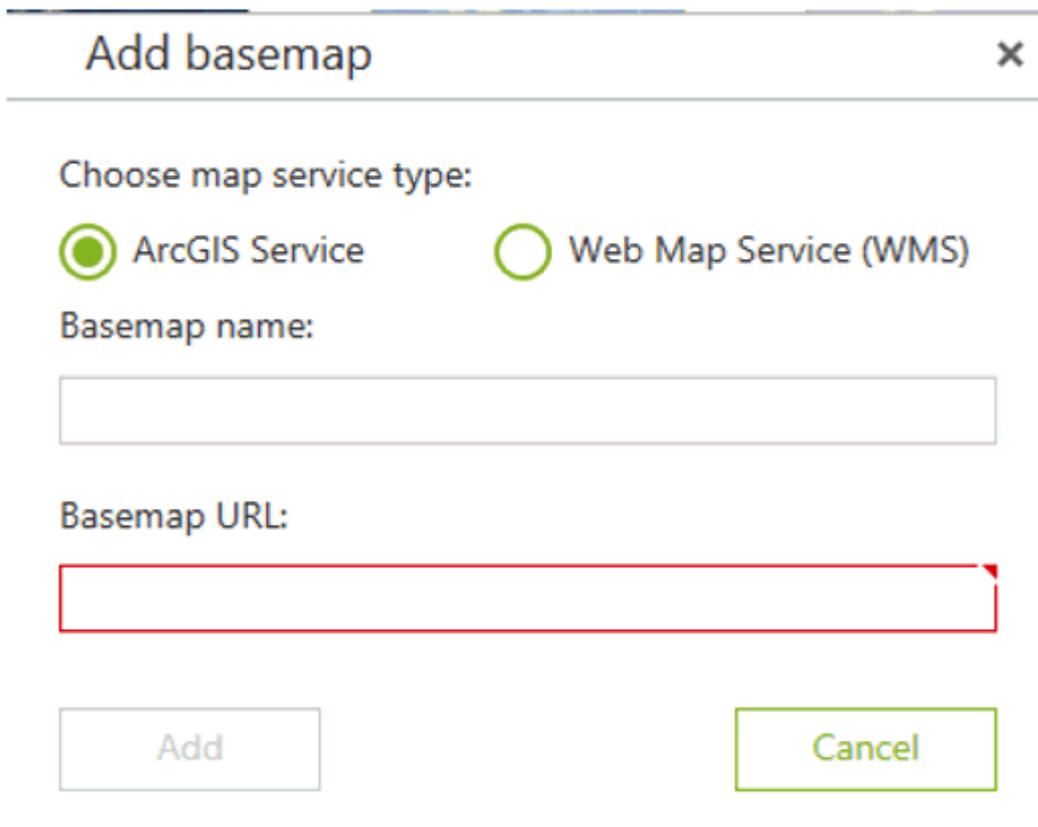
Selected service will be shown in the map window and in the *Content* tab.



To select the map from ArcGIS or WMS online service as basemap, press *Add*.



In the appeared window select the type of online map service, either ArcGIS or WMS.



In the *Basemap name* field enter the name that will be shown in the list of online basemaps. In the *Basemap URL* field enter the path to online service.

Add basemap



Choose map service type:



ArcGIS Service



Web Map Service (WMS)

Basemap name:

Basemap URL:

Add

Cancel

Make sure to fill in all fields and press *Add*.

Add basemap



Choose map service type:



ArcGIS Service



Web Map Service (WMS)

Basemap name:

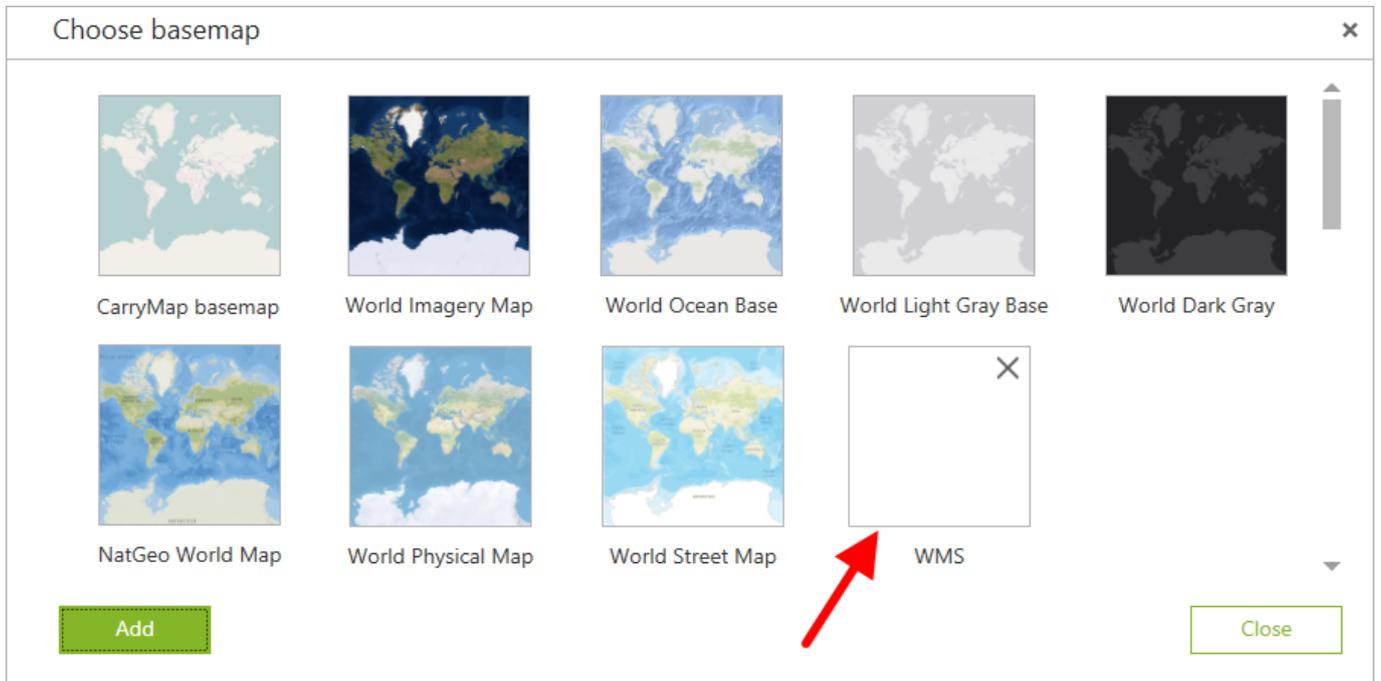
Basemap URL:

Add

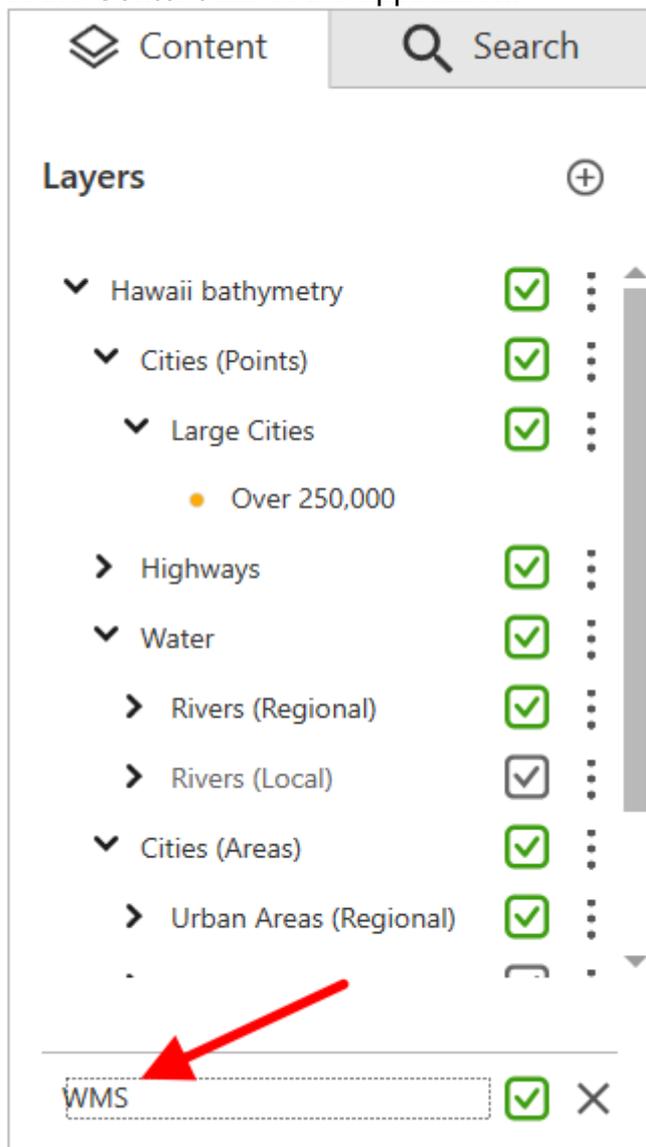


Cancel

The added online service will be shown in the list.

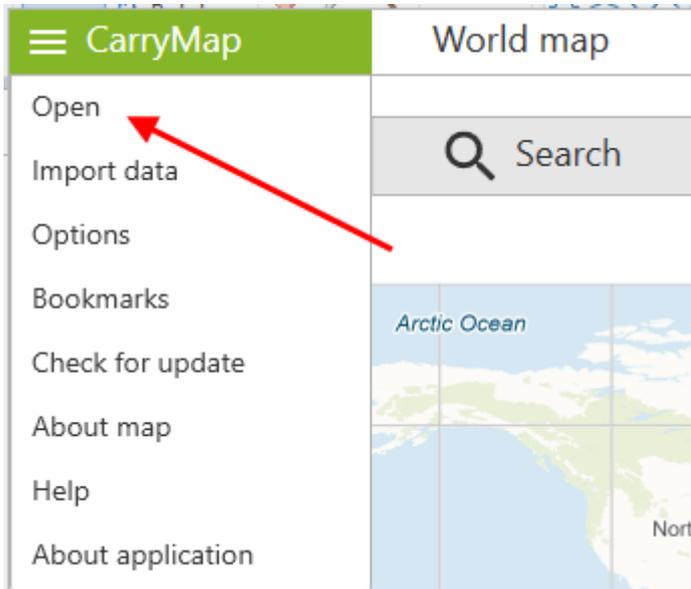


To select map service as online basemap, click on it. The service will be shown on the map and in the *Content* tab of the application.

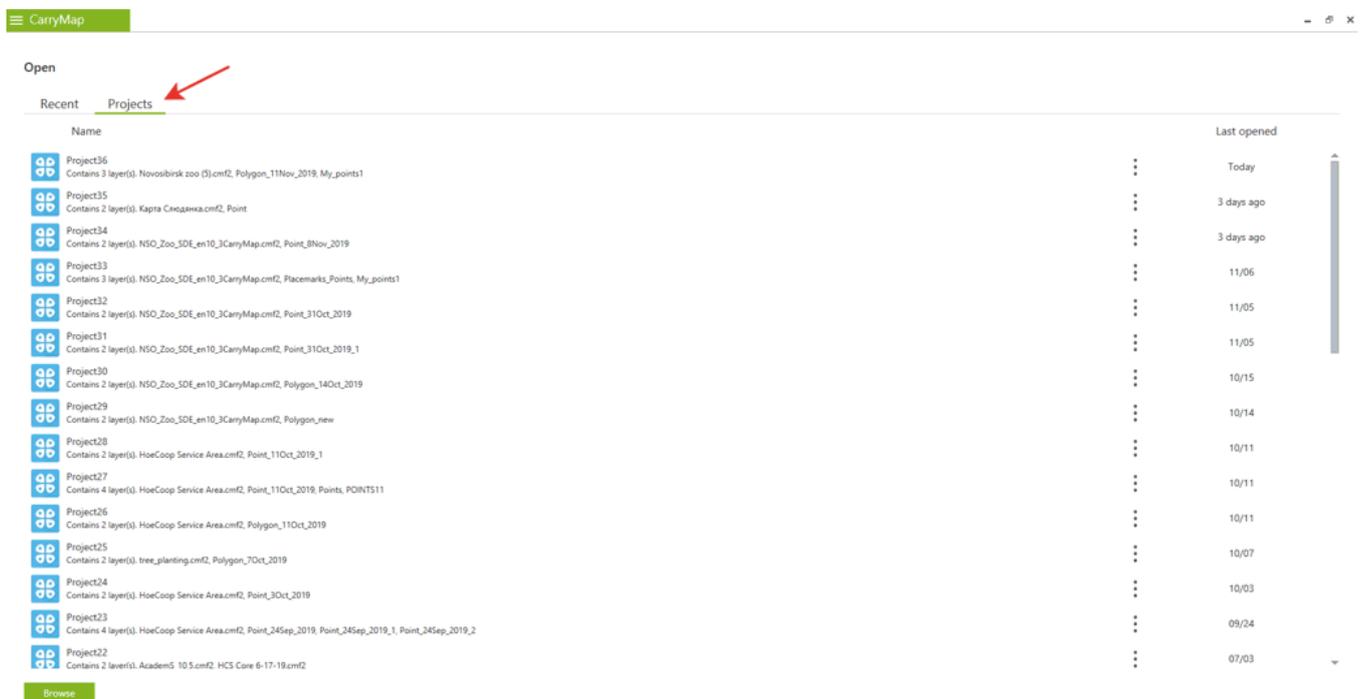


Deleting and renaming projects

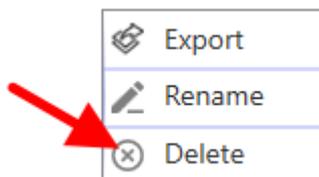
To delete created project, go to *Open* menu item.



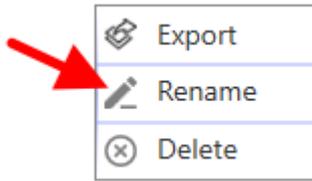
Go to *Projects*.



Press the three dots icon near the project that needs to be deleted and select *Delete*.



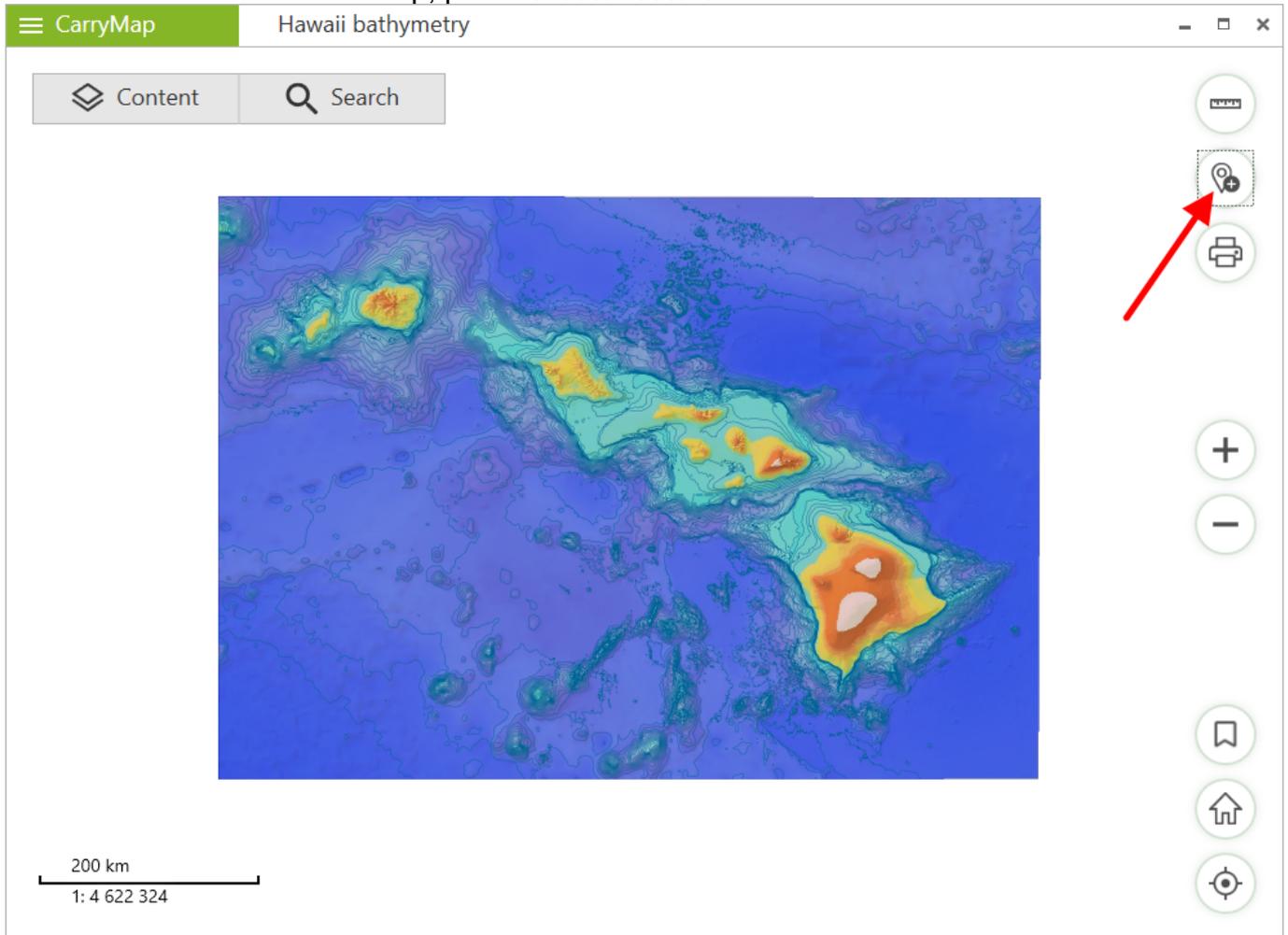
To rename the project, press *Rename* button.



Change the name and press *Enter* on the keyboard. The new project name will be saved.

Creating features

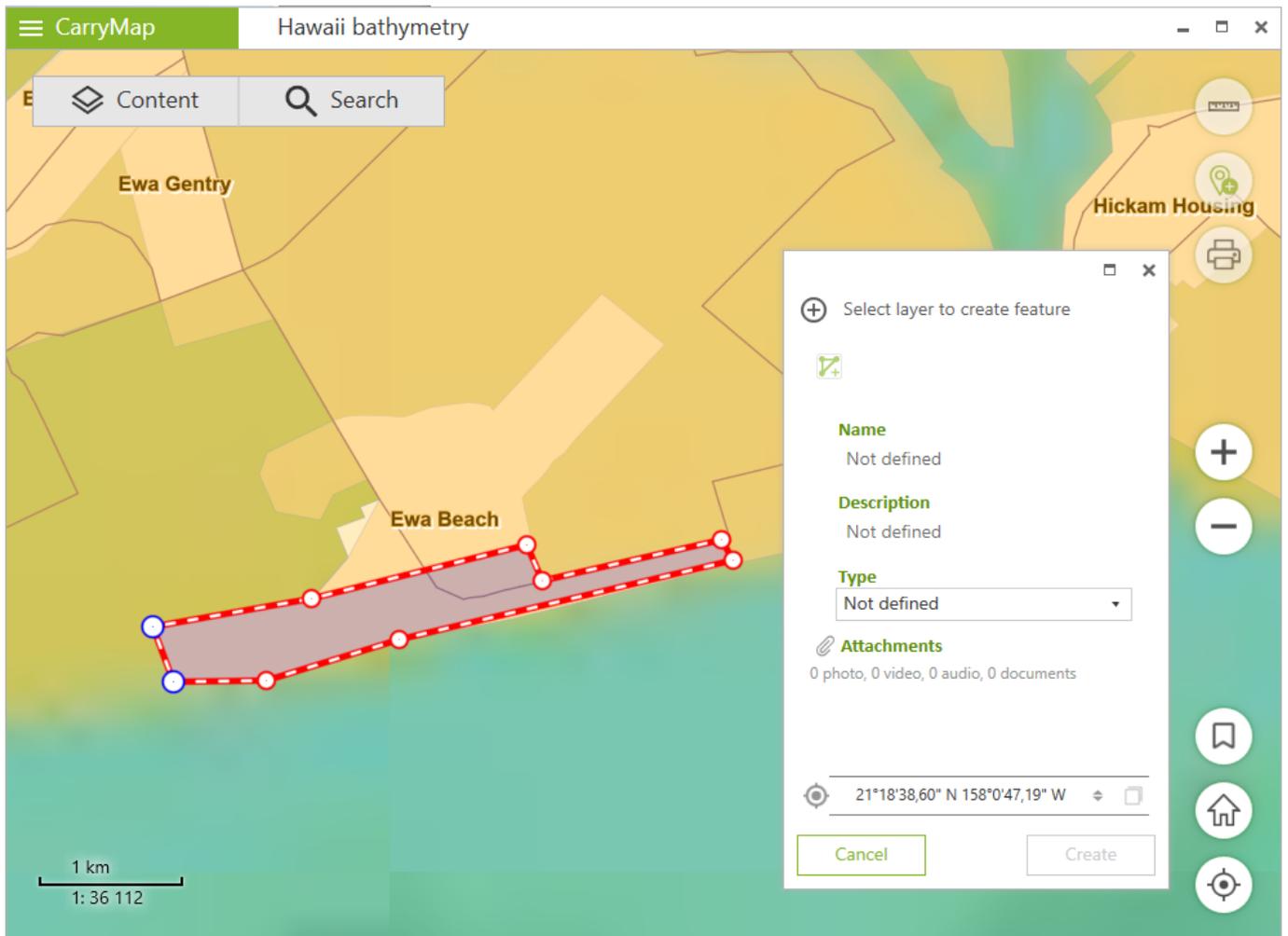
To create a new feature on map, press *Create feature*.



In the appeared panel select the feature type: point, polyline or polygon.



Specify feature geometry on the map.



In the appeared dialog select the layer, where to the feature geometry should be saved. If there is no GeoPackage layers added to the current project, press *Create layer*.

+ Select layer to create feature



Name
Not defined

Description
Not defined

Type
Not defined

 **Attachments**
0 photo, 0 video, 0 audio, 0 documents

 21°18'38,60" N 158°0'47,19" W

The new layer will be shown in the feature card.

☐ ✕

+ Select layer to create feature

● Polygon_30May_2023



Name
Not defined

Description
Not defined

Type

 **Attachments**
0 photo, 0 video, 0 audio, 0 documents

 21°18'38,60" N 158°0'47,19" W ↕ ☐

CancelCreate

If there are some GeoPackage layers added to the current project, they will be shown as a list in the feature card and you will be able to select any of these layers to create the new feature. To change the new layer name, click on it in the feature card and type the new name.

☐ ✕

+ Select layer to create feature

● Polygon_30May_2023



Name
Not defined

Description
Not defined

Type

 **Attachments**
0 photo, 0 video, 0 audio, 0 documents

 21°18'38,60" N 158°0'47,19" W ↕ 📄

CancelCreate

Note that only numbers and Latin letters can be used.
To set name for the new feature, click on the *Name* field. After you enter the name, this field will be marked with an asterisk.

+ Select layer to create feature

● Polygon_30May_2023



Name *
Sandy beach

Description
Not defined

Type
Not defined

 **Attachments**
0 photo, 0 video, 0 audio, 0 documents

 21°18'38,60" N 158°0'47,19" W

Cancel Create

To add description to the new feature, click on the *Description* field and enter the required info.

+

Select layer to create feature

Polygon_30May_2023

Name *

Sandy beach

Description *

Good resting place

Type

Not defined

Attachments

0 photo, 0 video, 0 audio, 0 documents

21°18'38,60" N 158°0'47,19" W

Cancel Create

To set the symbol for the feature, click on the *Type* field and select the category from the list. The feature will be displayed on the map with the selected symbol after the changes are saved.

+

Select layer to create feature

Polygon_30May_2023

Name *
Sandy beach

Description *
Good resting place

Type

Not defined

Areas

Buildings

Fields

Forests

Parks

Lakes

Not defined

Cancel

Create

To finish the feature creation process, press *Create*.

☐ ✕

+ Select layer to create feature

● Polygon_30May_2023



Name *
Sandy beach

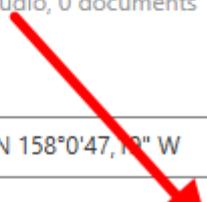
Description *
Good resting place

Type *
Areas

 **Attachments**
0 photo, 0 video, 0 audio, 0 documents

 21°18'38,60" N 158°0'47,10" W ↕ 🗺

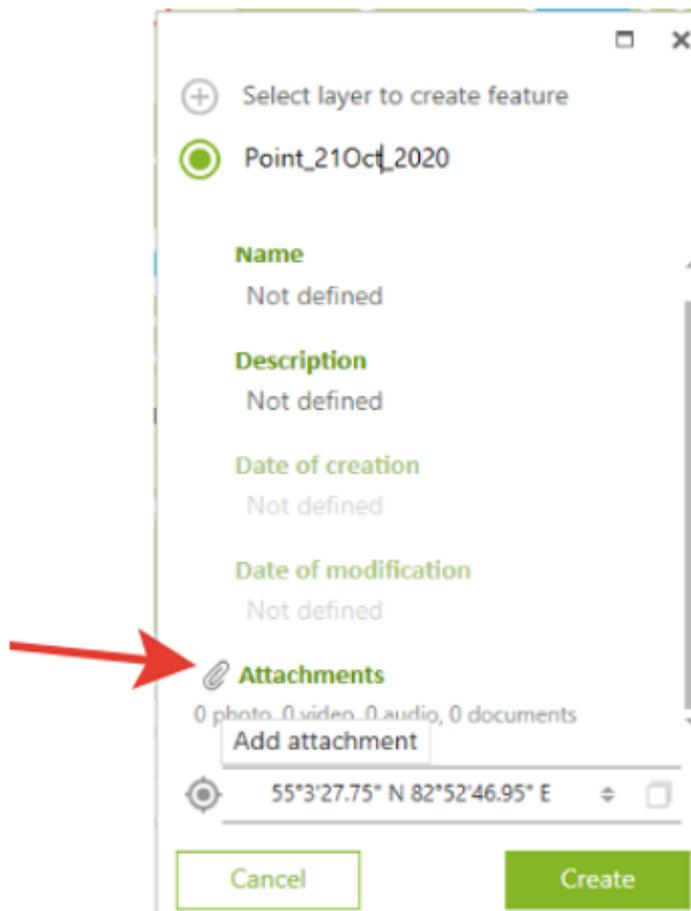
Cancel Create



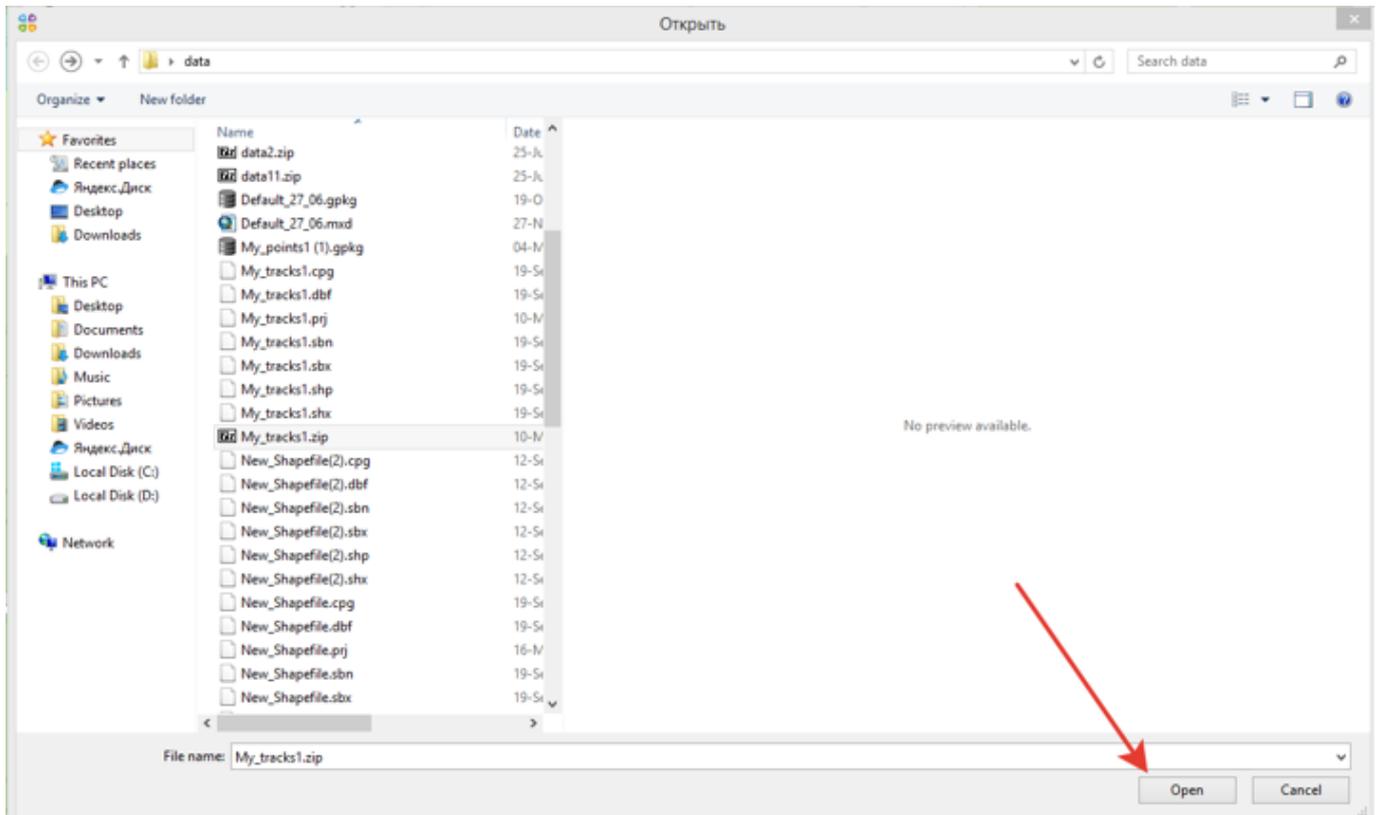
Adding attachments to features

You can add attachments in jpeg, png, doc, pdf, txt, mp3, avi and other formats to your GeoPackage features.

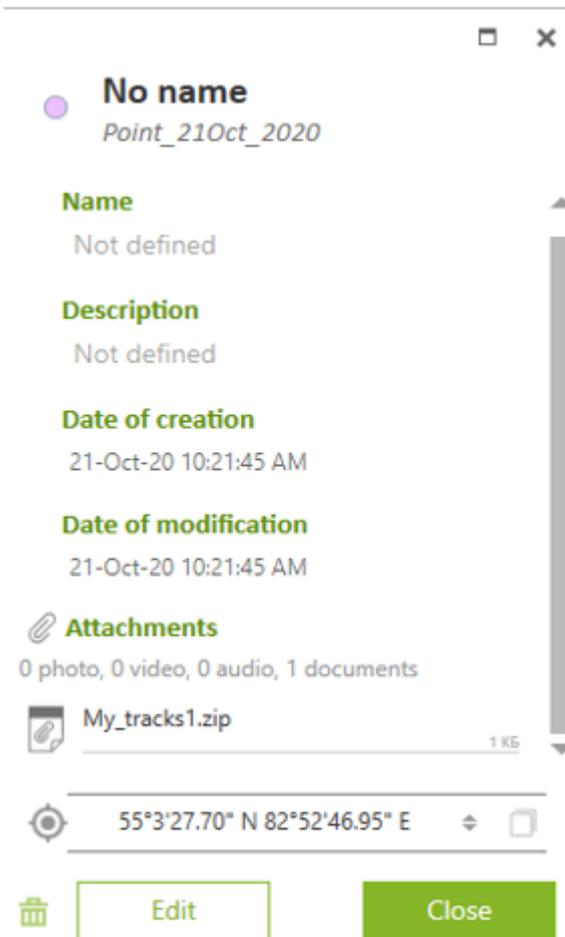
To add attachment to feature, click on this feature on your map. In the appeared identification card press *Add attachment* button.



In the appeared window select the file that needs to be attached and press *Open*.



The file will be attached to the feature.



To delete added attachment, enable the feature editing mode and press *Delete* button.

□ ×

No name
Point_21Oct_2020

Name
Not defined

Description
Not defined

Date of creation
21-Oct-20 10:21:45 AM

Date of modification
21-Oct-20 10:21:45 AM

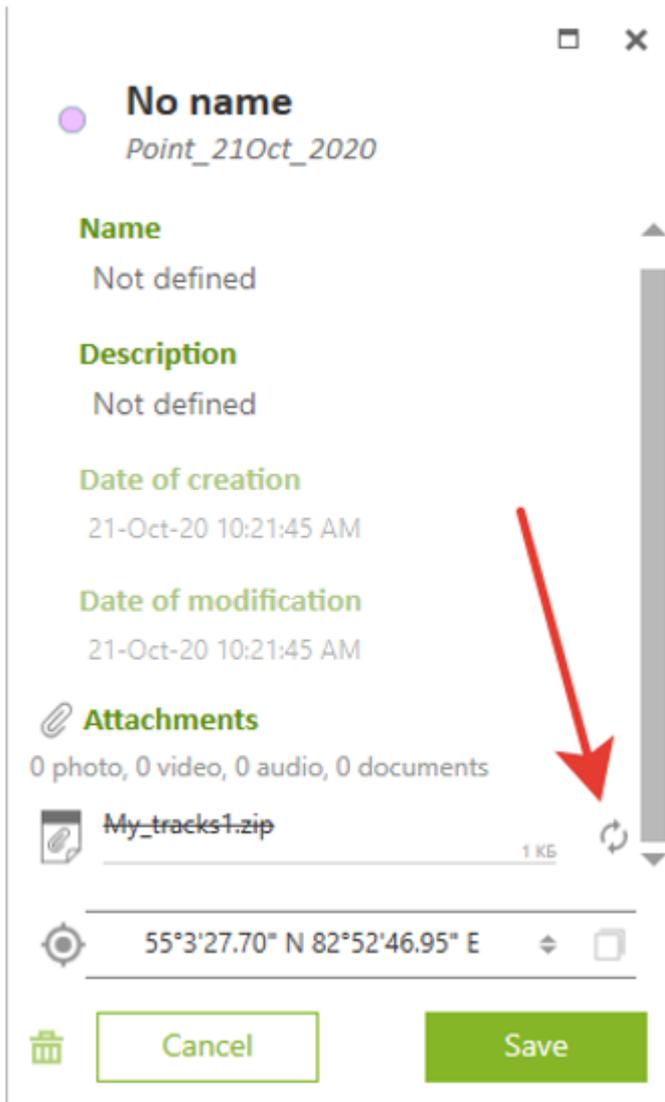
 **Attachments**
0 photo, 0 video, 0 audio, 1 documents

 My_tracks1.zip 1 KB 

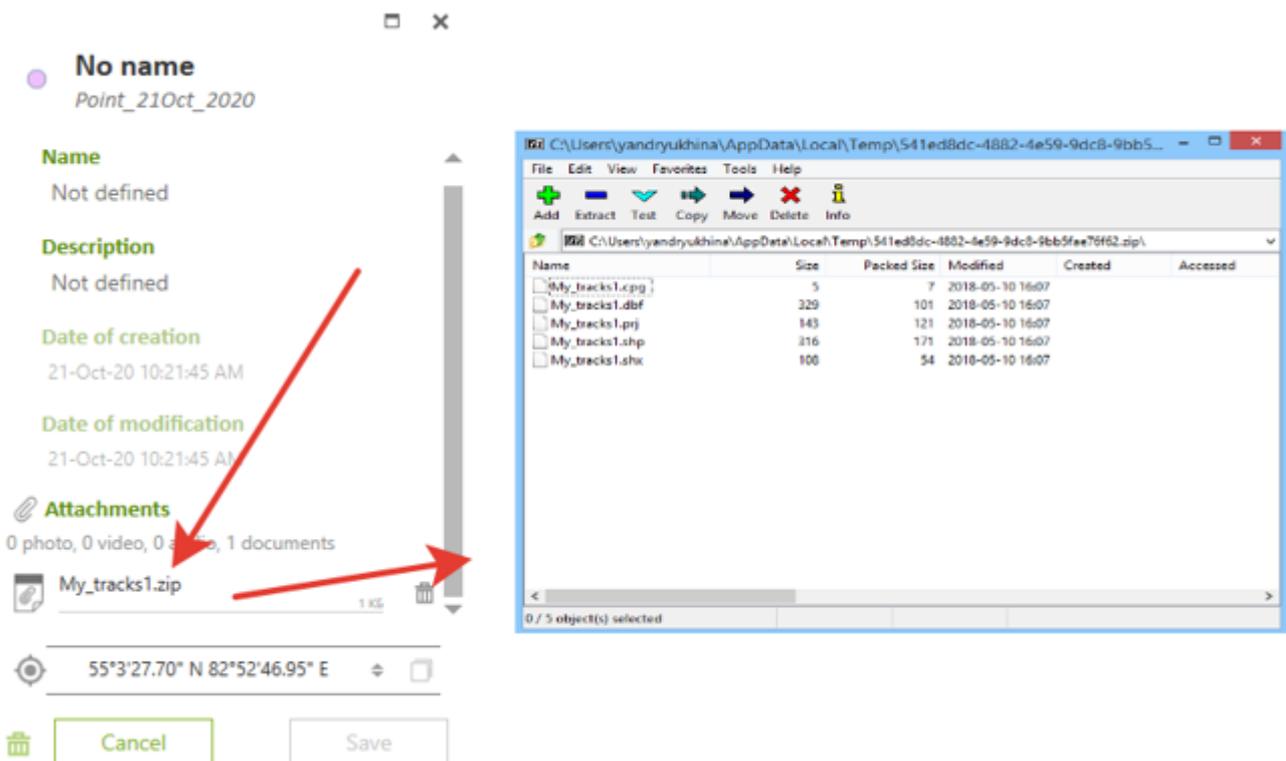
 55°3'27.70" N 82°52'46.95" E 



The attachment will be deleted but until the feature editing process is not finished you can undo deletion by pressing *Restore attachment* button.



To view the file added to feature as attachment, click on the required file name in the list.

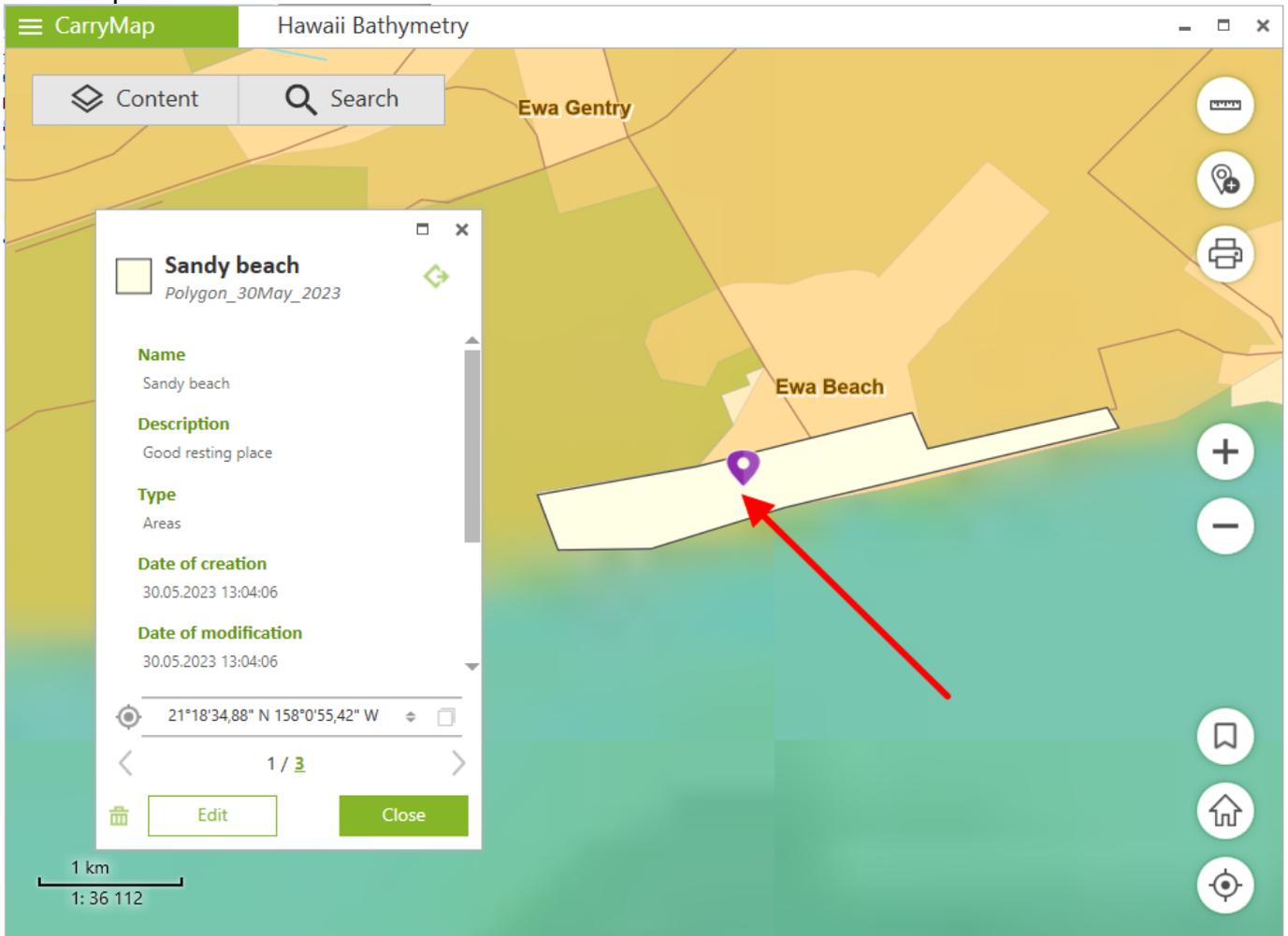


Note!

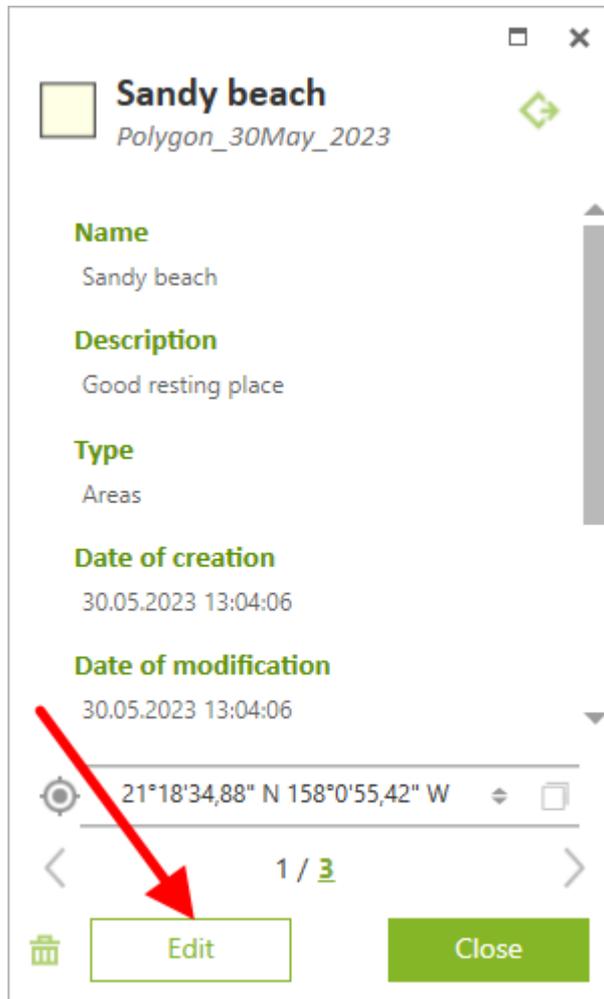
By importing GeoPackage file to ArcGIS using the CarryMap Builder Import GeoPackage tool all added attachments are also imported to ArcGIS.

Editing and deleting features

To edit created GeoPackage feature, click on it. It will be marked with the pushpin and its card will be opened.

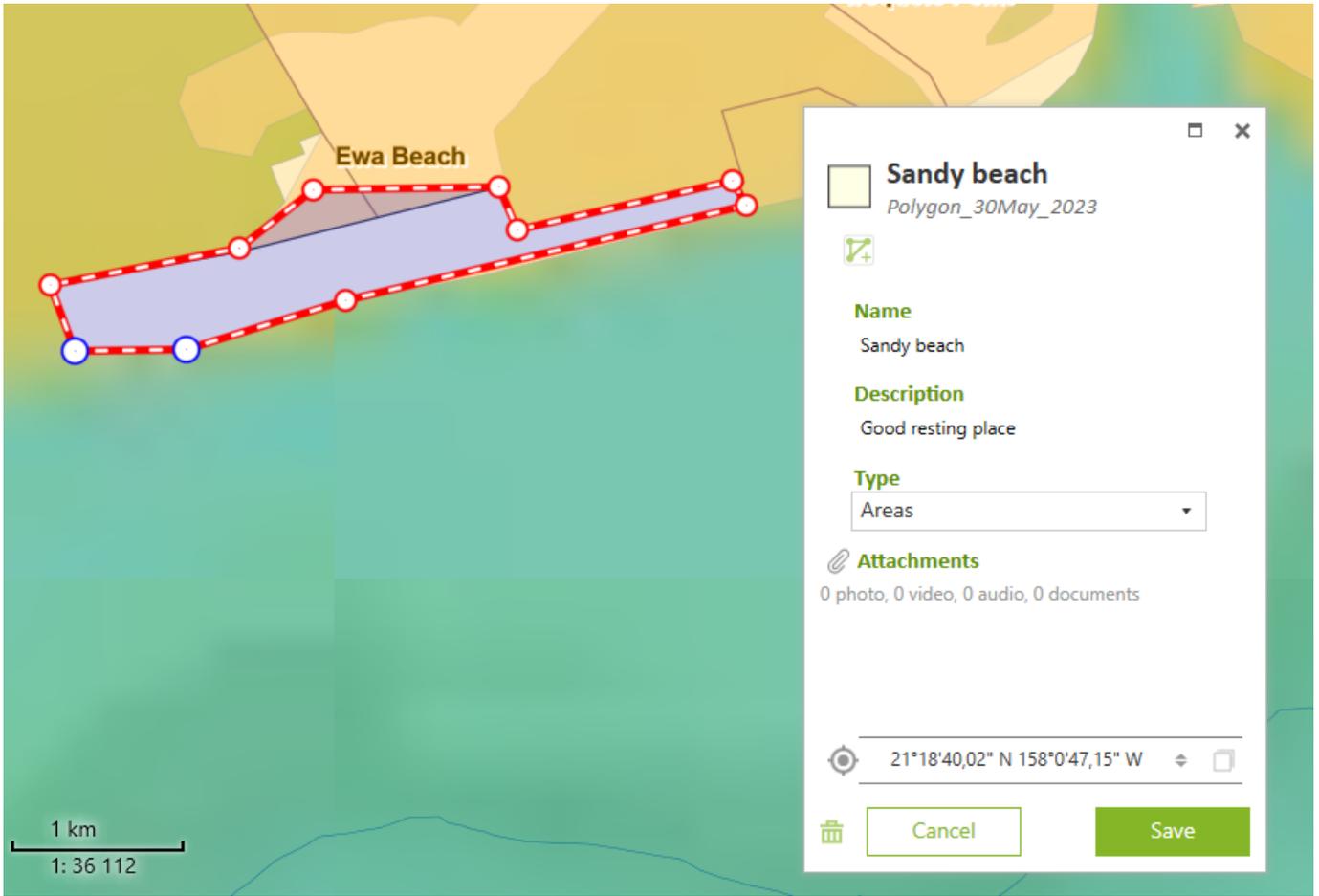


To start editing feature, press *Edit*.



In the editing mode you can change feature geometry:

- To delete the point, click on it.
- To add the new point, click on the required place of the map.
- To replace the point, select it on the map, then hold and drag it to the needed place.



To save made changes, press Save.

The image shows a software window for editing a feature. At the top, there is a title bar with a close button. Below it, a yellow square icon is followed by the text "Sandy beach" and "Polygon_30May_2023". A green pencil icon indicates editing mode. The form contains several sections: "Name" with the value "Sandy beach", "Description" with the value "Good resting place", and "Type" with a dropdown menu set to "Areas". Below this is an "Attachments" section showing "0 photo, 0 video, 0 audio, 0 documents". At the bottom, there is a coordinate field displaying "21°18'40,02" N 158°0'47,15" W" and two buttons: "Cancel" and "Save". A red arrow points to the "Save" button.

In the editing mode you can also change name and description of feature. To change feature name, press *Edit* in the feature card and click on the *Name* field.

The image shows a software interface for editing a feature. At the top, there is a yellow square icon and the text "Sandy beach" followed by "Polygon_30May_2023". Below this is an edit icon (a pencil and a plus sign). The "Name" field contains "Sandy beach" and is highlighted with a red arrow. The "Description" field contains "Good resting place". The "Type" field is a dropdown menu currently set to "Areas". Below the fields is an "Attachments" section with a paperclip icon and the text "0 photo, 0 video, 0 audio, 0 documents". At the bottom, there is a coordinate field showing "21°18'40,02" N 158°0'47,15" W" and a trash icon. Two buttons, "Cancel" and "Save", are at the bottom right.

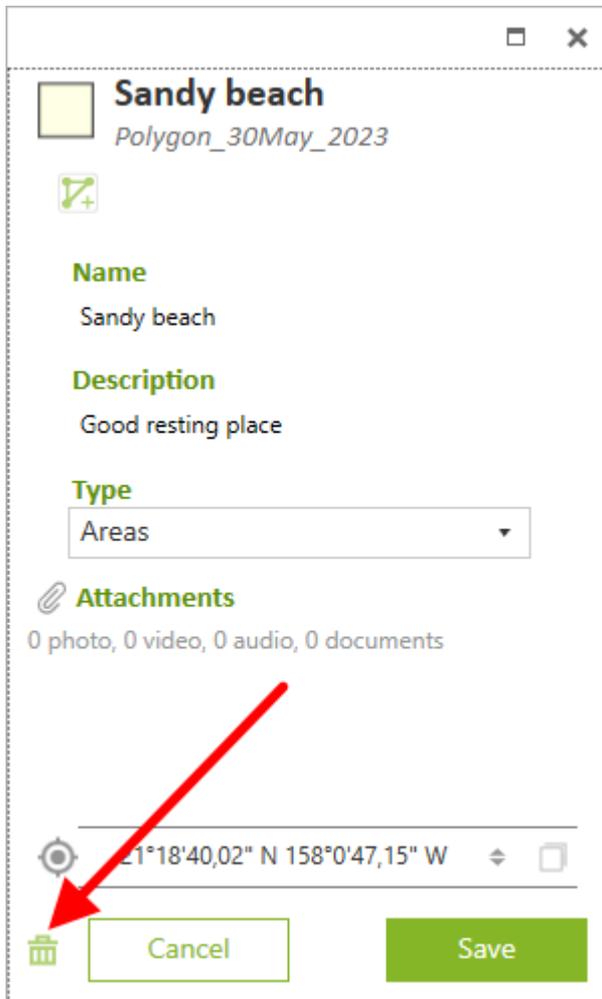
Enter the new name and press *Save*.

To change feature description, press *Edit* in the feature card and click on the *Description* field.

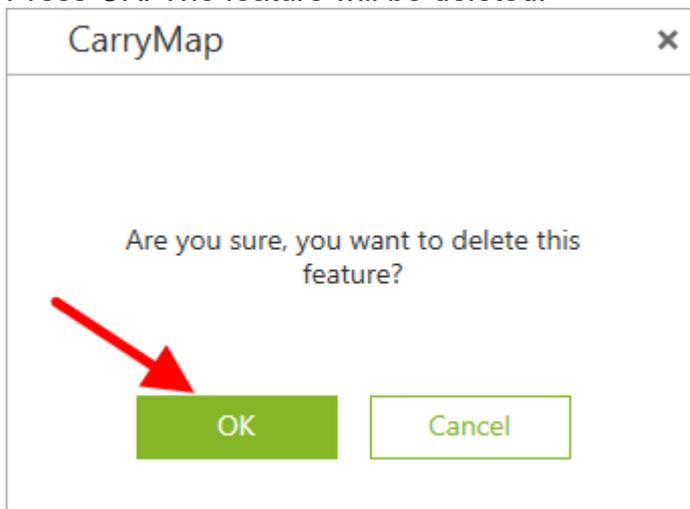
The image shows a software interface for editing a feature. At the top, there is a title 'Sandy beach' next to a yellow square icon, with the text 'Polygon_30May_2023' below it. A green edit icon is visible. The 'Name' field contains 'Sandy beach'. The 'Description' field contains 'Good resting place', and a red arrow points to this field. The 'Type' field is a dropdown menu currently set to 'Areas'. Below this is an 'Attachments' section with a paperclip icon and the text '0 photo, 0 video, 0 audio, 0 documents'. At the bottom, there is a coordinate field showing '21°18'40,02" N 158°0'47,15" W' with a location icon and a copy icon. At the very bottom are a trash icon, a 'Cancel' button, and a 'Save' button.

Enter the info and press *Save*.

To delete feature, select it on the map and press *Delete* in the appeared feature card.

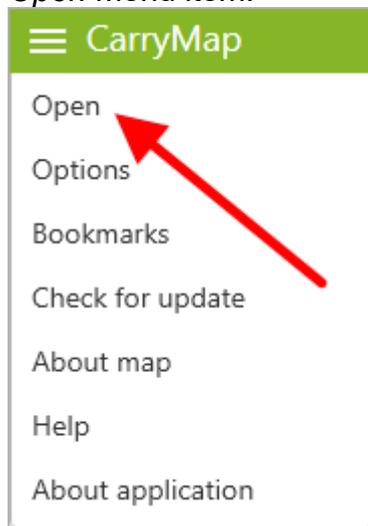


Press **OK**. The feature will be deleted.

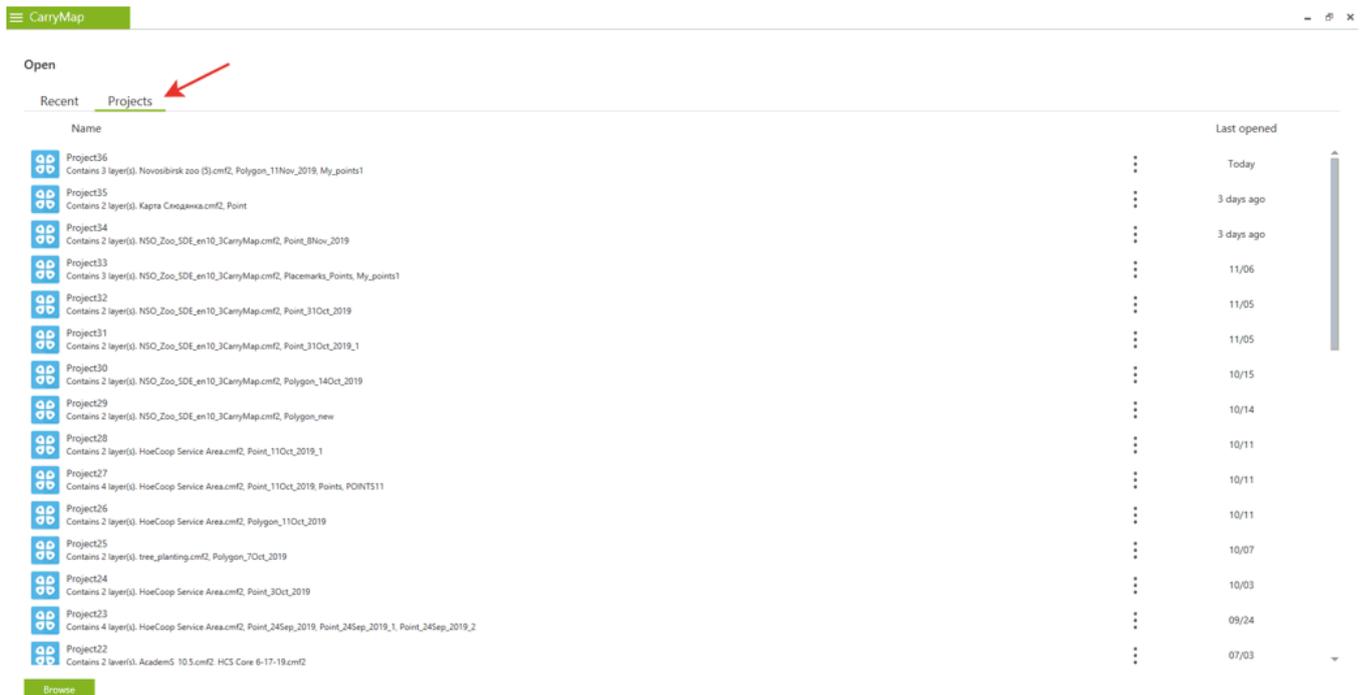


Export project

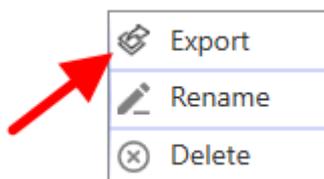
You can export a set of project layers to a common archive file .CMPRJ. To do so, go to the *Open* menu item.



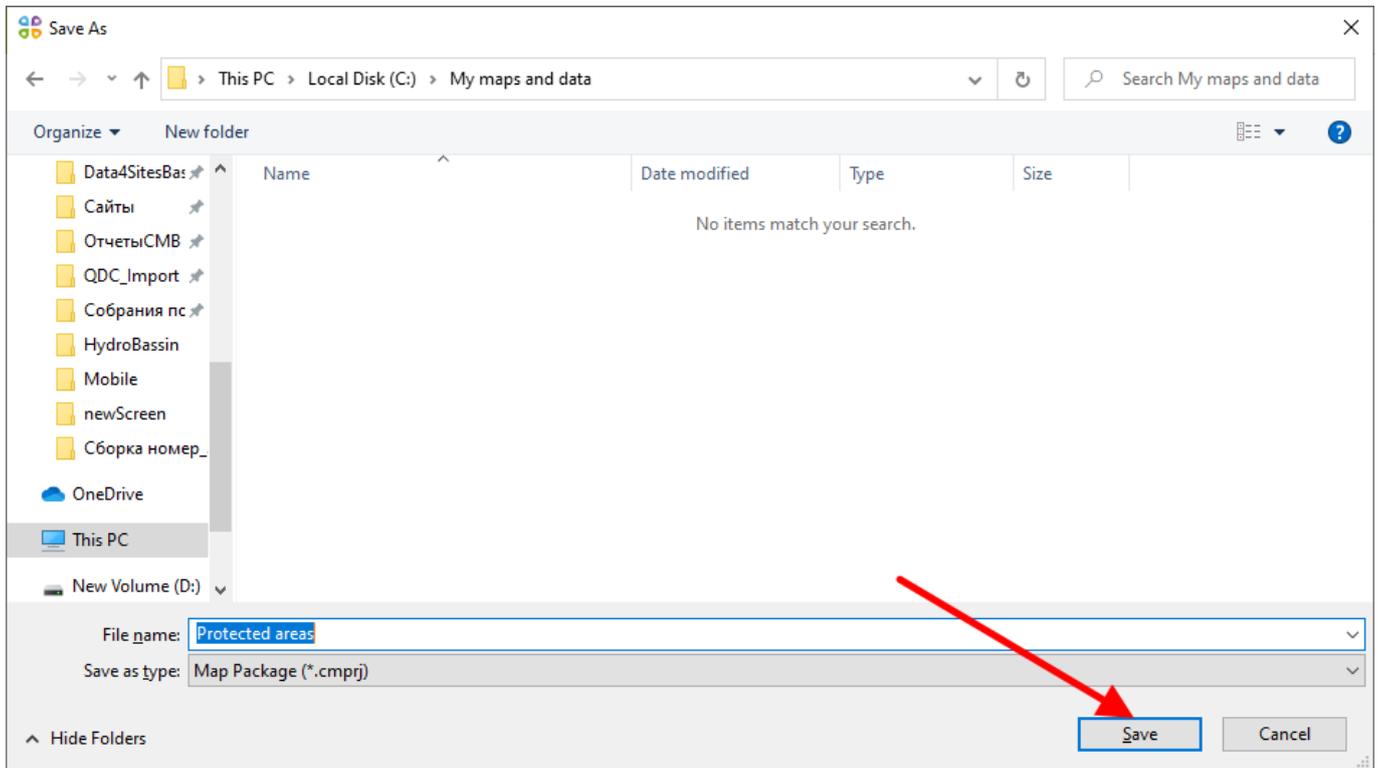
Go to *Projects*.



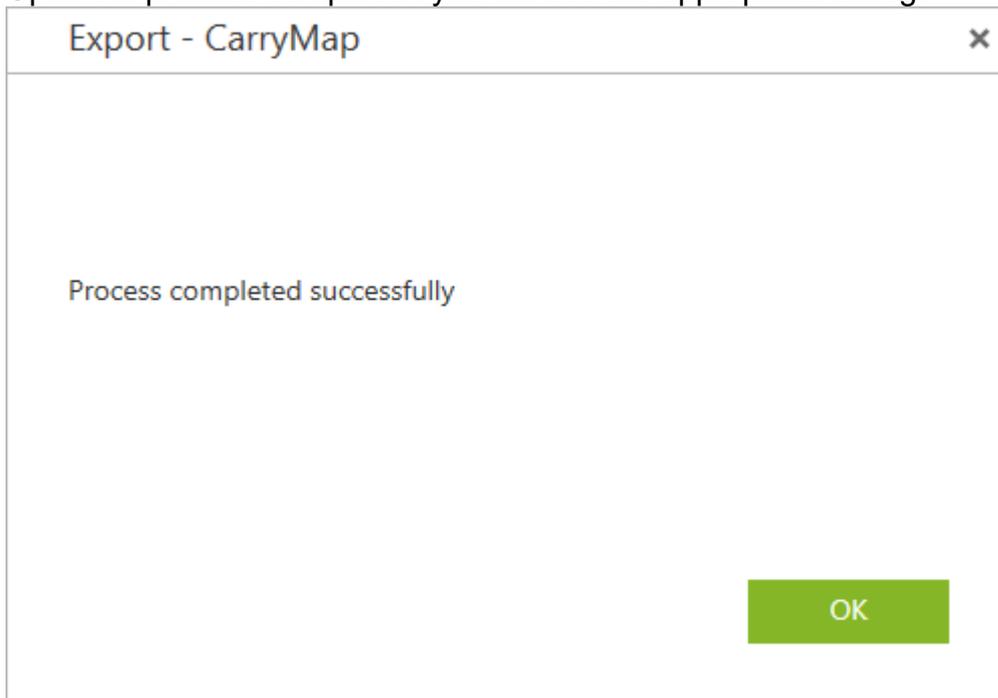
Press the three dots icon near the project that needs to be exported and select *Export*.



In the appeared window specify the output file location and name and click *Save*.



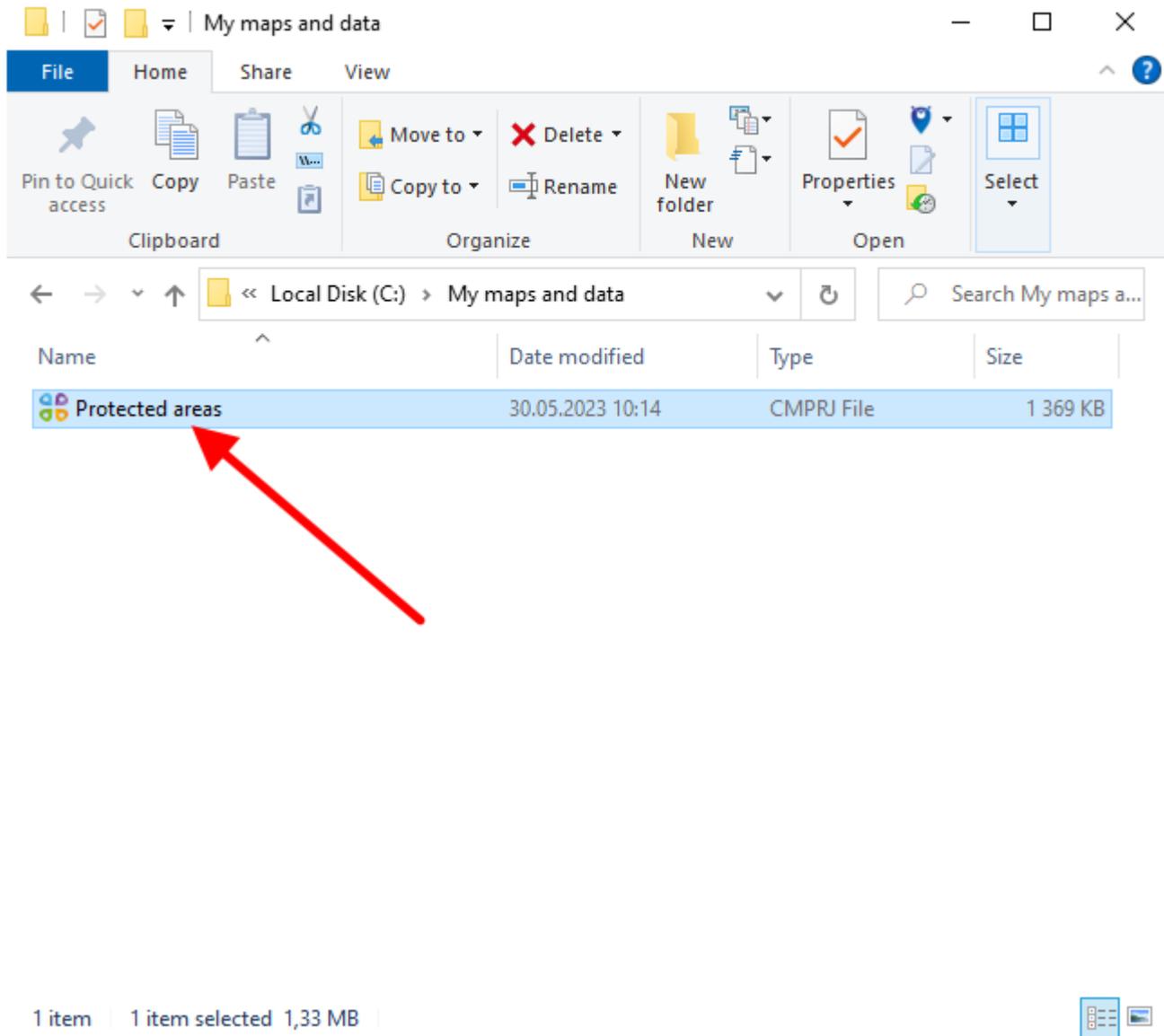
Upon the process completion you will see the appropriate dialog.



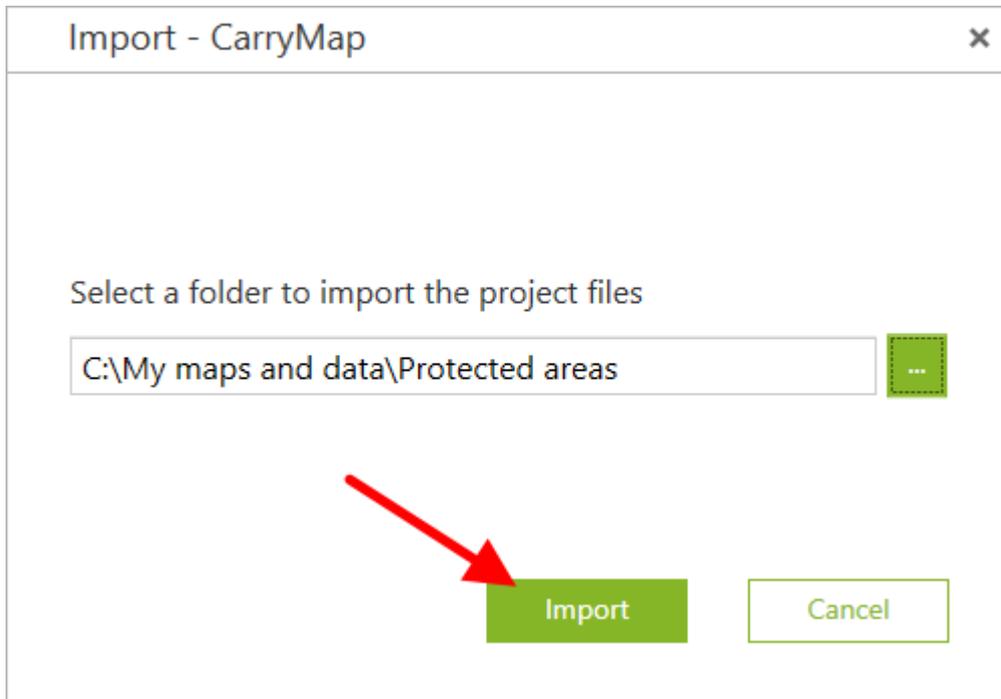
Make sure that the output file has been saved to specified folder.

Import project

To open the project archive file created with CarryMap app, double-click on the required .CMPRJ file in the explorer.



In the appeared window specify the output folder location for importing project files and click *Import*.

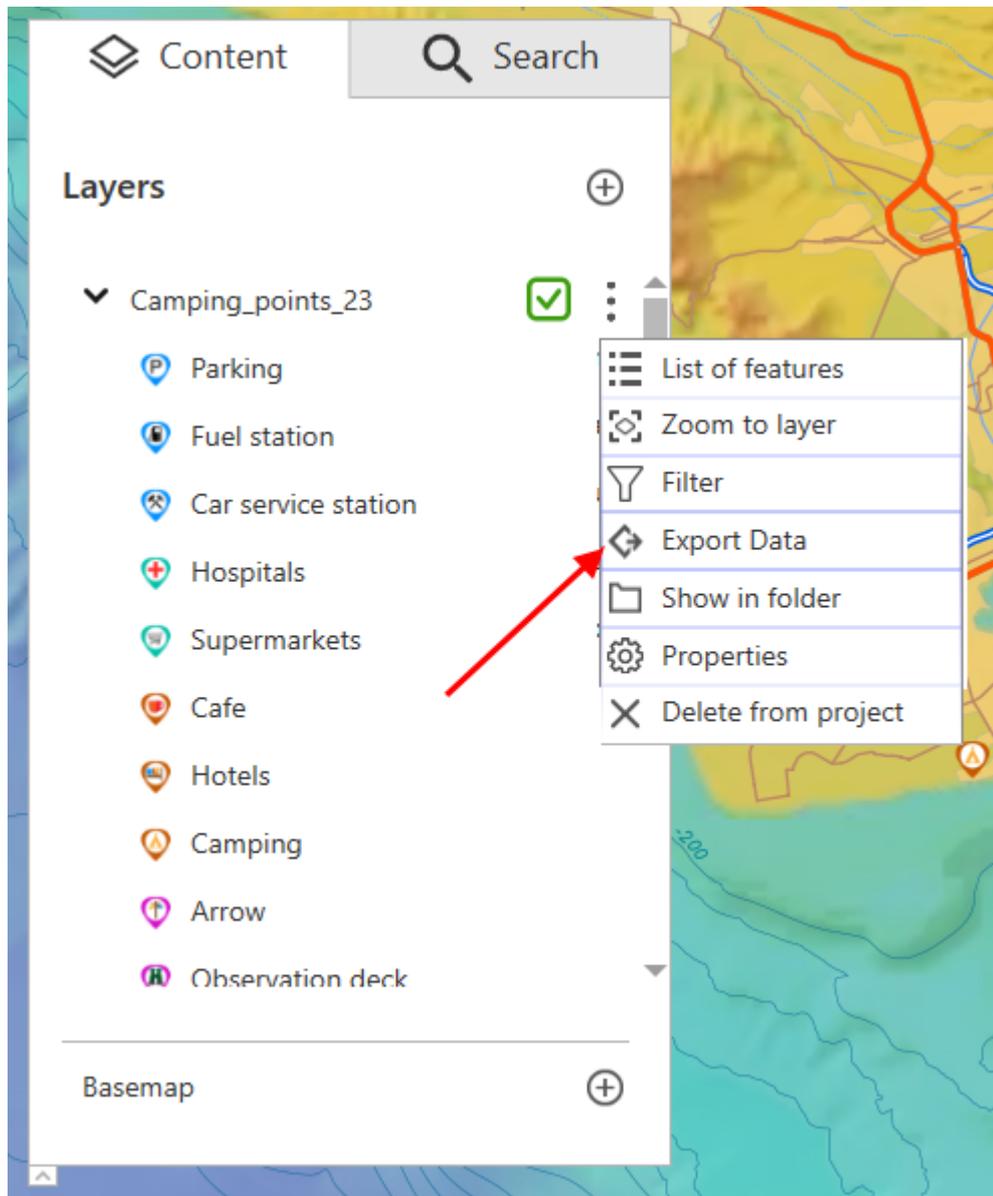


The project will be automatically opened upon the process completion.

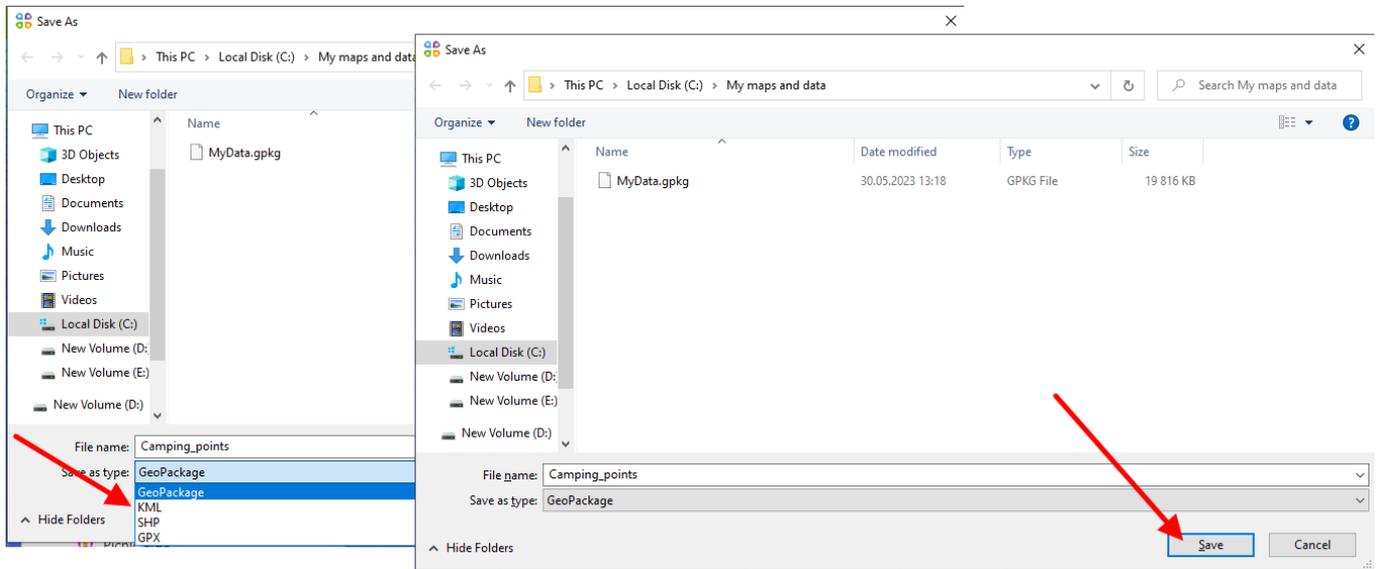
Export layers and features

You can export GeoPackage layers to GeoPackage, SHP, KML/KMZ or GPX formats.

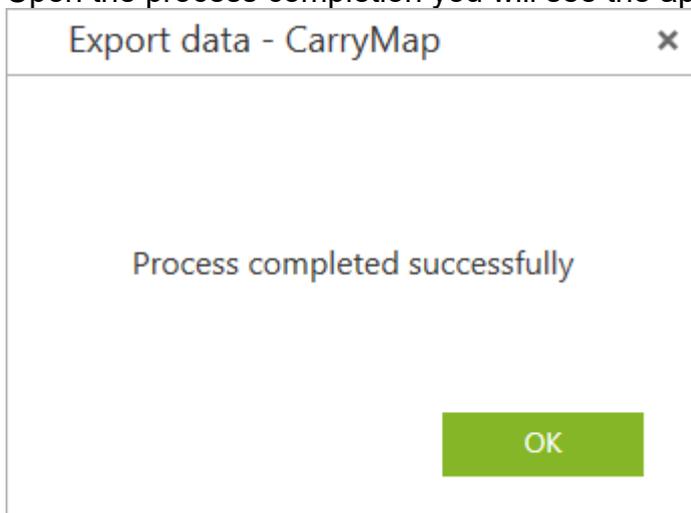
To do this, select one or multiple GeoPackage layers, right-click to expand the layer menu in the table of contents or click the three dots icon near the required layer, and select *Export Data*.



In the appeared window specify the output file location and name, select the required format and click **Save**.

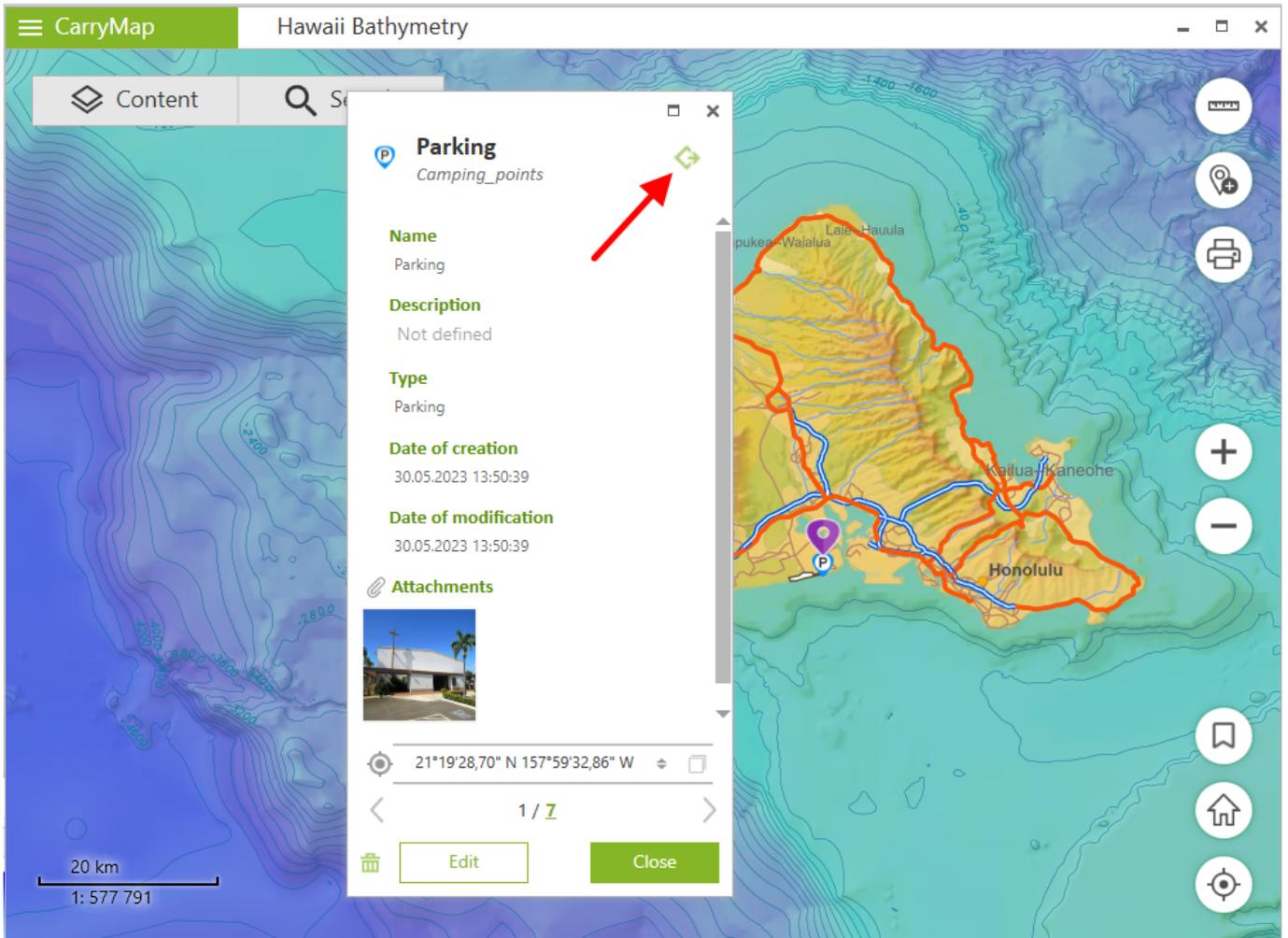


Upon the process completion you will see the appropriate dialog.

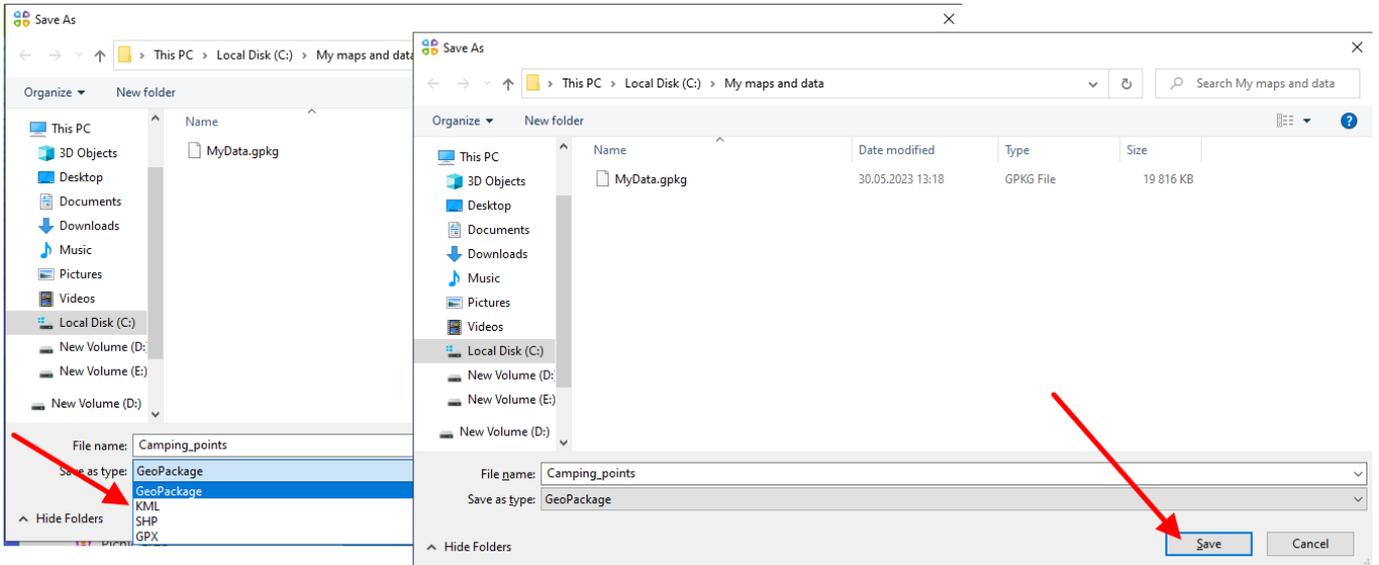


Make sure that the output file has been saved to specified folder.

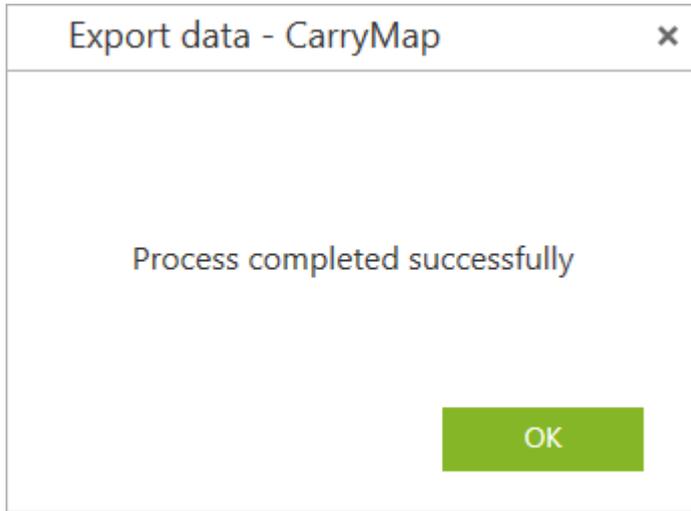
In addition, you can export a single feature from the GeoPackage layer, to do this, click on this feature and click *Export* in the appeared identification card.



In the appeared window specify the output file location and name, select the required format and click **Save**.



Upon the process completion you will see the appropriate dialog.

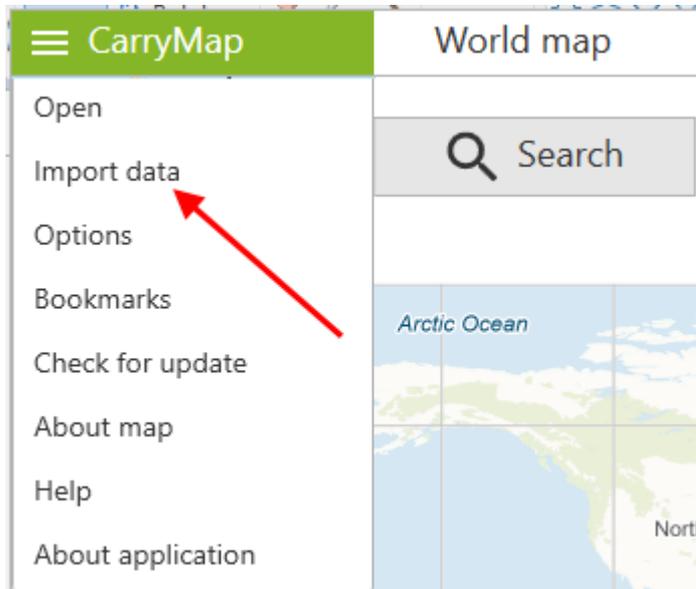


Make sure that the output file has been saved to specified folder.

Importing layers and features

The GeoPackage layer data can be imported to an existing GeoPackage file.

To import a GeoPackage file, click *Import data* in the main menu.



The *Import data* tool window will appear.

Import data - CarryMap

Input GeoPackage

Input GeoPackage ...

Output GeoPackage

Output GeoPackage ...

| <input type="checkbox"/> | Layer | Number of features | Create new | Select from GeoPackage |
|--------------------------|-------|--------------------|------------|------------------------|
| | | | | |

Add data to map

Import

In the *Input GeoPackage* section press *Browse* button and select the required GeoPackage file.

Input GeoPackage

Input GeoPackage ...

Now select the output GeoPackage file.

To do so, in the *Output GeoPackage* section press *Browse* button and select the required file.

Output GeoPackage

Output GeoPackage ...

Now you need to select layers for import from the input GeoPackage file. The layers will be displayed in the window.

Import data - CarryMap

Input GeoPackage
 C:\My maps and data\Import data\Update data 2023.gpkg

Output GeoPackage
 C:\My maps and data\Import data\Main data collection.gpkg

| <input type="checkbox"/> | Layer | Number of features | Create new | Select from GeoPackage |
|--------------------------|--|--------------------|--------------------------|------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> POI_collection | 5 | <input type="checkbox"/> | Camping_points |
| <input type="checkbox"/> | <input type="checkbox"/> Lines_collection | 2 | <input type="checkbox"/> | Polyline_14Nov_2022 |
| <input type="checkbox"/> | <input type="checkbox"/> Polygons_collection | 1 | <input type="checkbox"/> | Fields_update_2022 |

Add data to map

Import

Check the boxes near the layers that need to be selected.

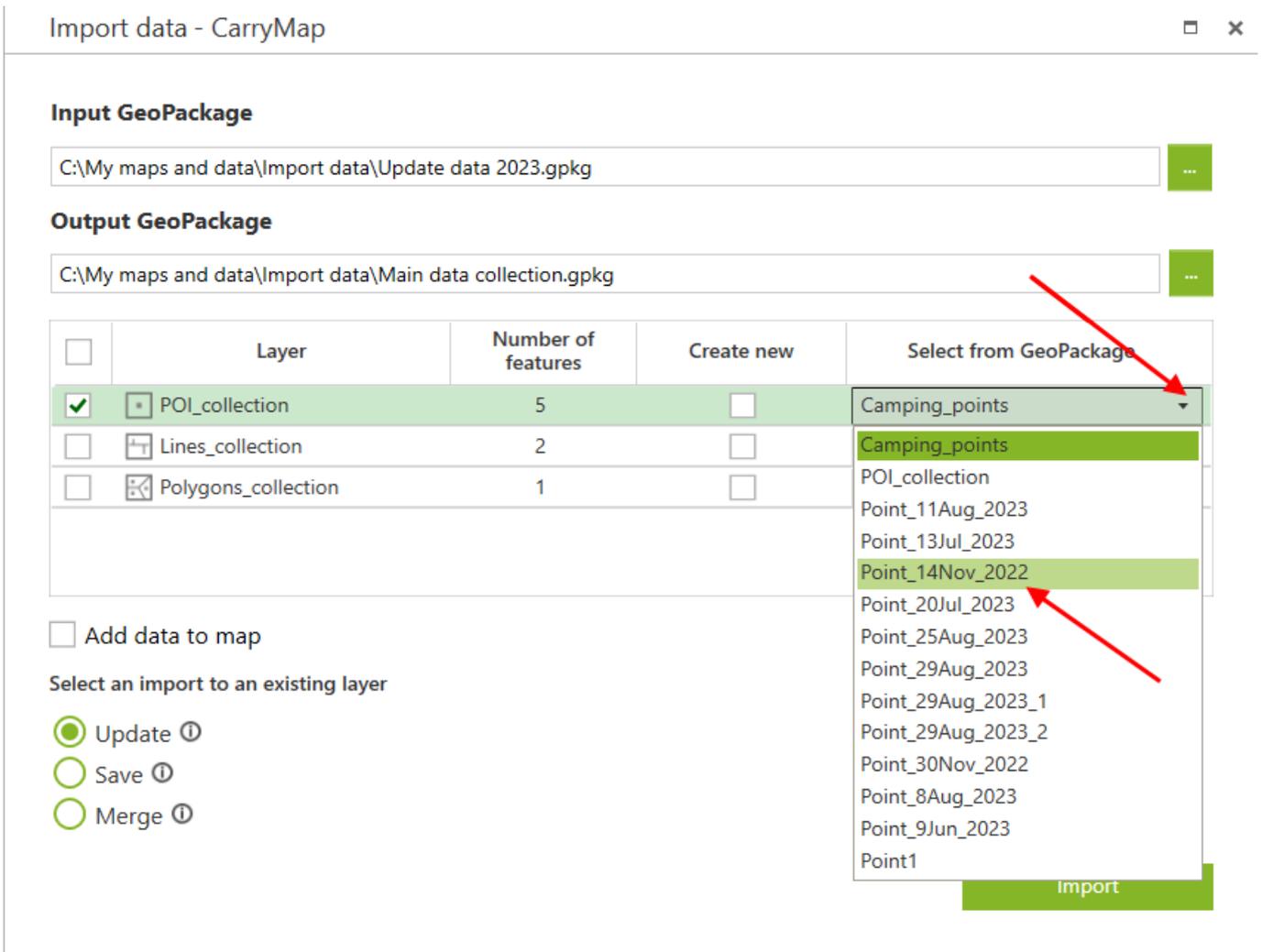
| <input type="checkbox"/> | Layer | Number of features | Create new | Select from GeoPackage |
|-------------------------------------|--|--------------------|--------------------------|------------------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> POI_collection | 5 | <input type="checkbox"/> | Camping_points |
| <input type="checkbox"/> | <input type="checkbox"/> Lines_collection | 2 | <input type="checkbox"/> | Polyline_14Nov_2022 |
| <input type="checkbox"/> | <input type="checkbox"/> Polygons_collection | 1 | <input type="checkbox"/> | Fields_update_2022 |

To select all layers at a time, check *Select all* option.

| <input checked="" type="checkbox"/> | Layer | Number of features | Create new | Select from GeoPackage |
|-------------------------------------|--|--------------------|--------------------------|------------------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> POI_collection | 5 | <input type="checkbox"/> | Camping_points |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> Lines_collection | 2 | <input type="checkbox"/> | Polyline_14Nov_2022 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> Polygons_collection | 1 | <input type="checkbox"/> | Fields_update_2022 |

Now select layers for importing from the output GeoPackage file or create the new layers.

To import layer to the previously created layer of the GeoPackage file, check the box near the layer and select the required layer from the drop-down list.



The selected layer will be shown in the layer string.

| <input type="checkbox"/> | Layer | Number of features | Create new | Select from GeoPackage |
|-------------------------------------|---------------------|--------------------|--------------------------|------------------------|
| <input checked="" type="checkbox"/> | POI_collection | 5 | <input type="checkbox"/> | Point_14Nov_2022 |
| <input type="checkbox"/> | Lines_collection | 2 | <input type="checkbox"/> | Polyline_14Nov_2022 |
| <input type="checkbox"/> | Polygons_collection | 1 | <input type="checkbox"/> | Fields_update_2022 |

Please note that attribute table of the output layers, where to import will be done, will be changed according to the attribute table of the imported GeoPackage files.

To import GeoPackage layer to the new layer, check the box near this layer.

| <input type="checkbox"/> | Layer | Number of features | Create new | Select from GeoPackage |
|-------------------------------------|---------------------|--------------------|-------------------------------------|------------------------|
| <input checked="" type="checkbox"/> | POI_collection | 5 | <input checked="" type="checkbox"/> | |
| <input type="checkbox"/> | Lines_collection | 2 | <input type="checkbox"/> | Polyline_14Nov_2022 |
| <input type="checkbox"/> | Polygons_collection | 1 | <input type="checkbox"/> | Fields_update_2022 |

The layer with the name of the input GeoPackage layer will be saved in the output GeoPackage file.

To add imported data to the current map, check *Add data to map* option.

Upon the tool work completion all selected layers will be added to the current project.

Import to the existing layer can be done using the following importing options:

- **Update** - only changed and new features are imported. Note that by using this option, the data fields *feature_guid* (Feature GUID) and *modification_date* (Modification date) must be filled in.
- **Save** – all features are imported and the source features in the selected layer of the output GeoPackage file are deleted.
- **Merge** – all features are imported and the source features in the selected layer of the output GeoPackage file are saved.

By default, the *Update* option is used for importing GeoPackage files.

To change the import option, check the box near the needed option.

Import data - CarryMap

Input GeoPackage
C:\My maps and data\Import data\Update data 2023.gpkg

Output GeoPackage
C:\My maps and data\Import data\Main data collection.gpkg

| <input type="checkbox"/> | Layer | Number of features | Create new | Select from GeoPackage |
|-------------------------------------|---------------------|--------------------|--------------------------|------------------------|
| <input checked="" type="checkbox"/> | POI_collection | 5 | <input type="checkbox"/> | Point_14Nov_2022 |
| <input type="checkbox"/> | Lines_collection | 2 | <input type="checkbox"/> | Polyline_14Nov_2022 |
| <input type="checkbox"/> | Polygons_collection | 1 | <input type="checkbox"/> | Fields_update_2022 |

Add data to map

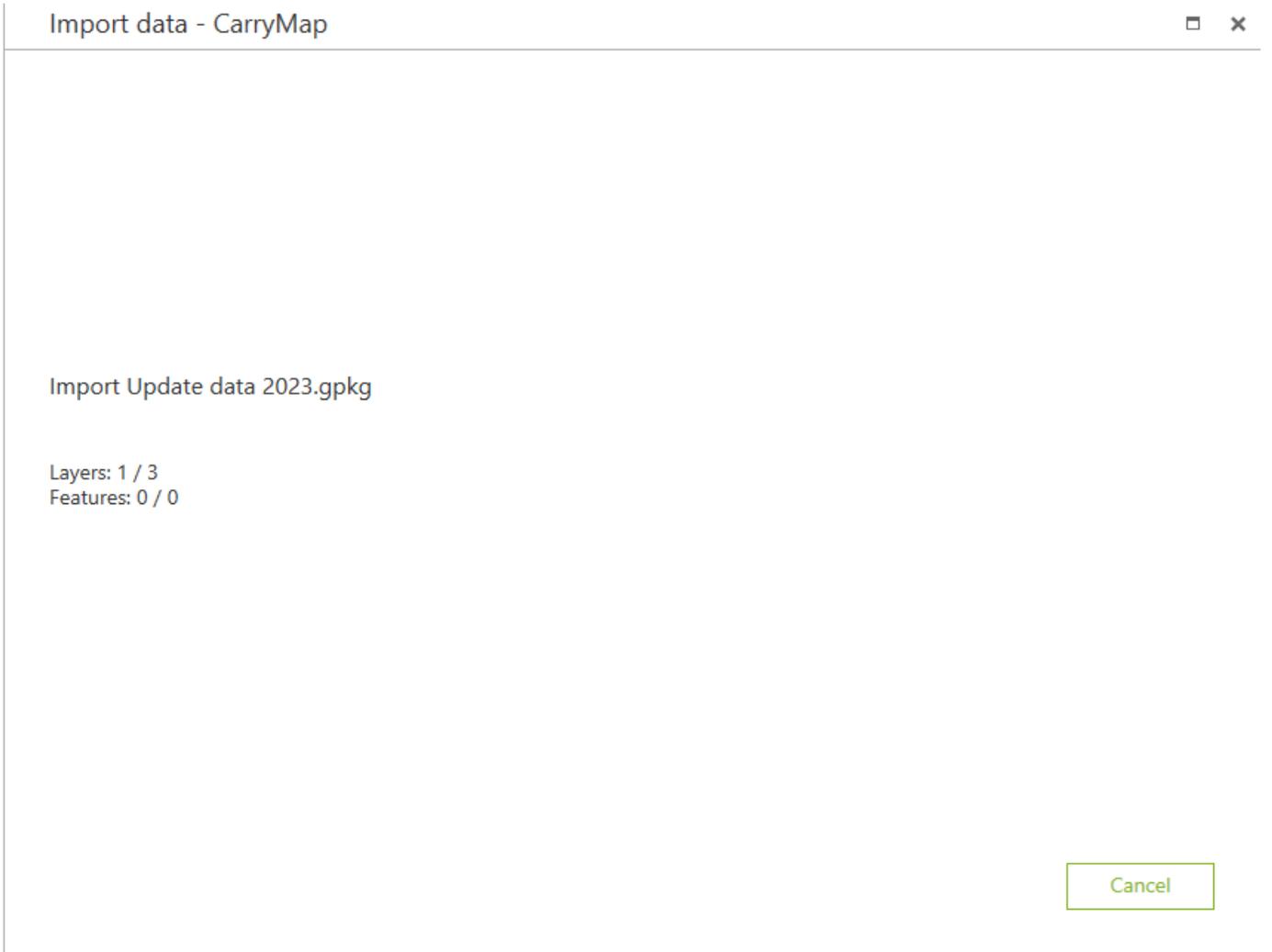
Select an import to an existing layer

- Update ⓘ
- Save ⓘ
- Merge ⓘ

Import

After making all importing settings press *Import* button.

The *Import from GeoPackage* window will open.



To cancel importing process, press *Cancel* button.

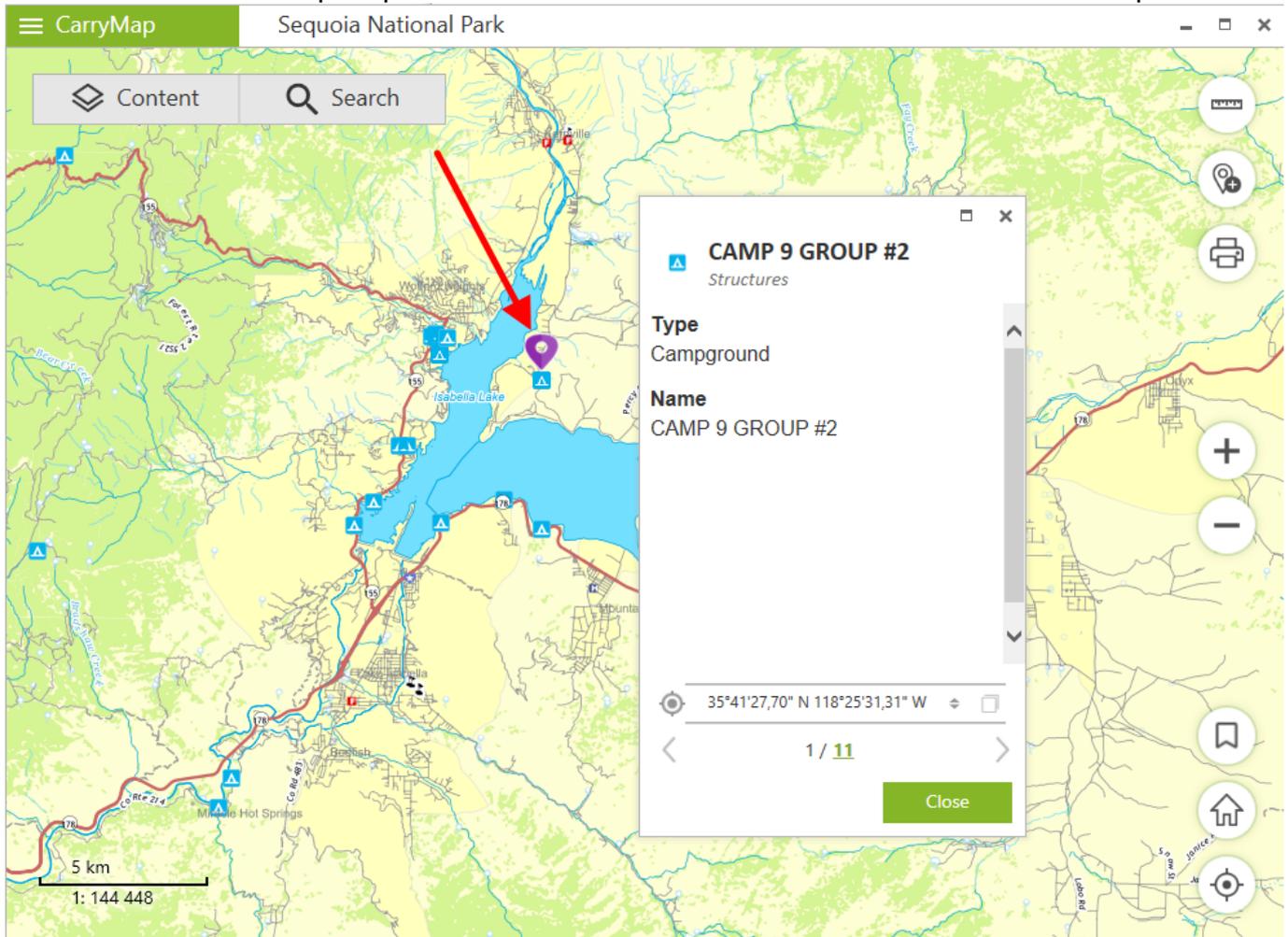
Upon import completion, the corresponding message will appear.

Process completed successfully

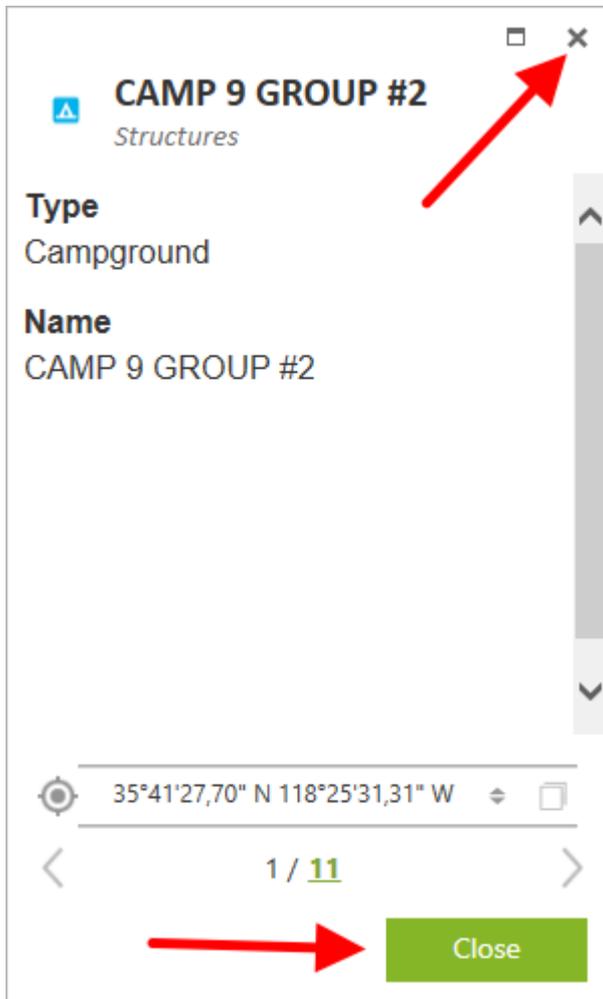
OK

Identifying map data

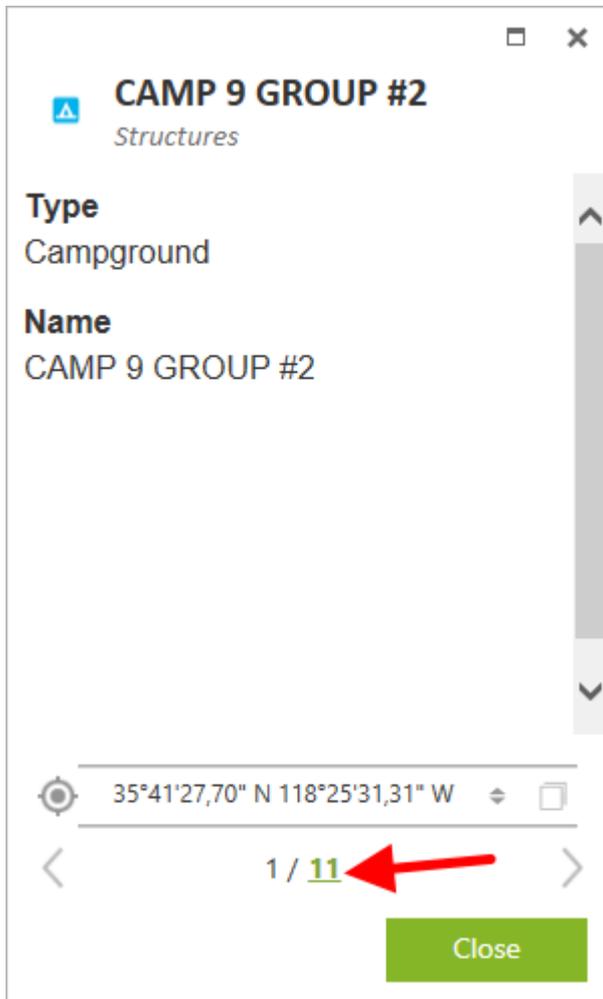
To view information about specific feature from the dataset or the map, click on this feature, it will be marked with the pushpin and its identification card with all information will be opened.



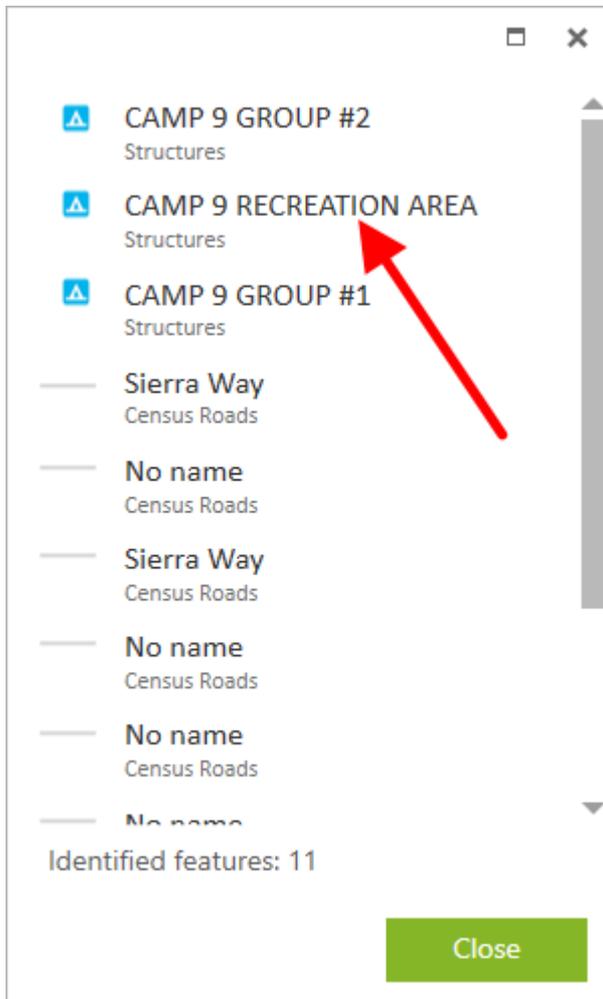
To close the identification card, press *Close* button or cross icon in the upper right corner.



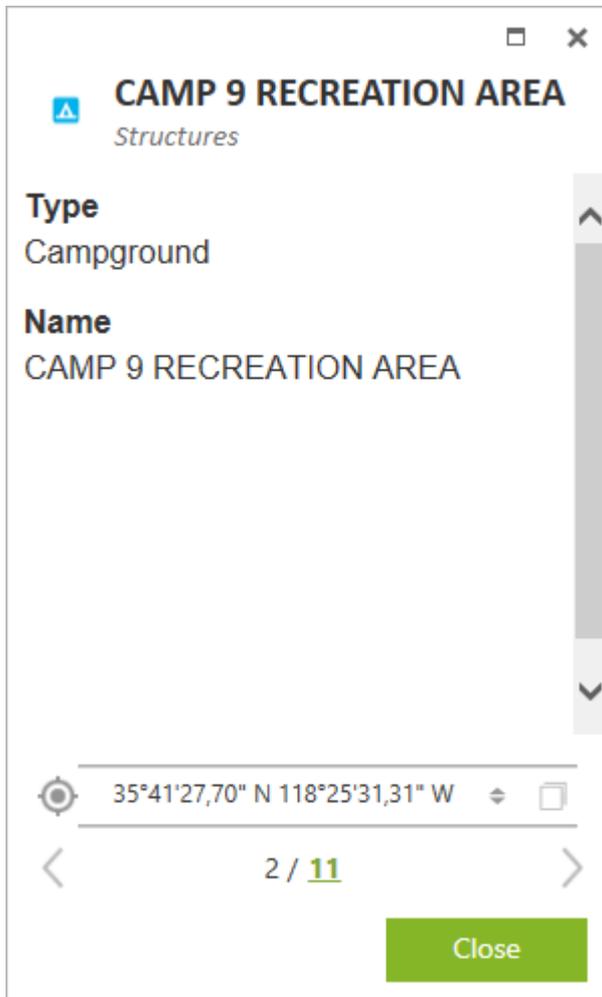
To view all features fallen to the click area on the map, press the number in the identification card showing their total quantity.



The list of features will be shown. To open identification card of one of the features and to show it on the map, click on this feature.



It will be marked with the pushpin  on the map and its identification card will be opened near.



For your convenience, the additional virtual fields with geometry information are now displayed in the identification cards of polygon or polyline GeoPackage features:

- *Length* - for polyline features,
- *Area and Perimeter* - for polygon features.

The units selected in the [Application settings](#) are used as the measurement units.

New road
Polyline_31Oct_2022

Name
New road

Description
Not defined

Type
Temporary roads

Date of creation
07.11.2022 12:42:37

Date of modification
07.11.2022 12:42:37

Length
208 m

Attachments
0 photo, 0 video, 0 audio, 0 documents

55°3'20,68" N 82°52'58,94" E

Edit Close

Covered pavilion
Polygon_7Nov_2022

Name
Covered pavilion

Description
Not defined

Type
Buildings

Date of creation
07.11.2022 12:43:56

Date of modification
07.11.2022 12:43:56

Area
534 m²

Perimeter
101 m

Attachments
0 photo, 0 video, 0 audio, 0 documents

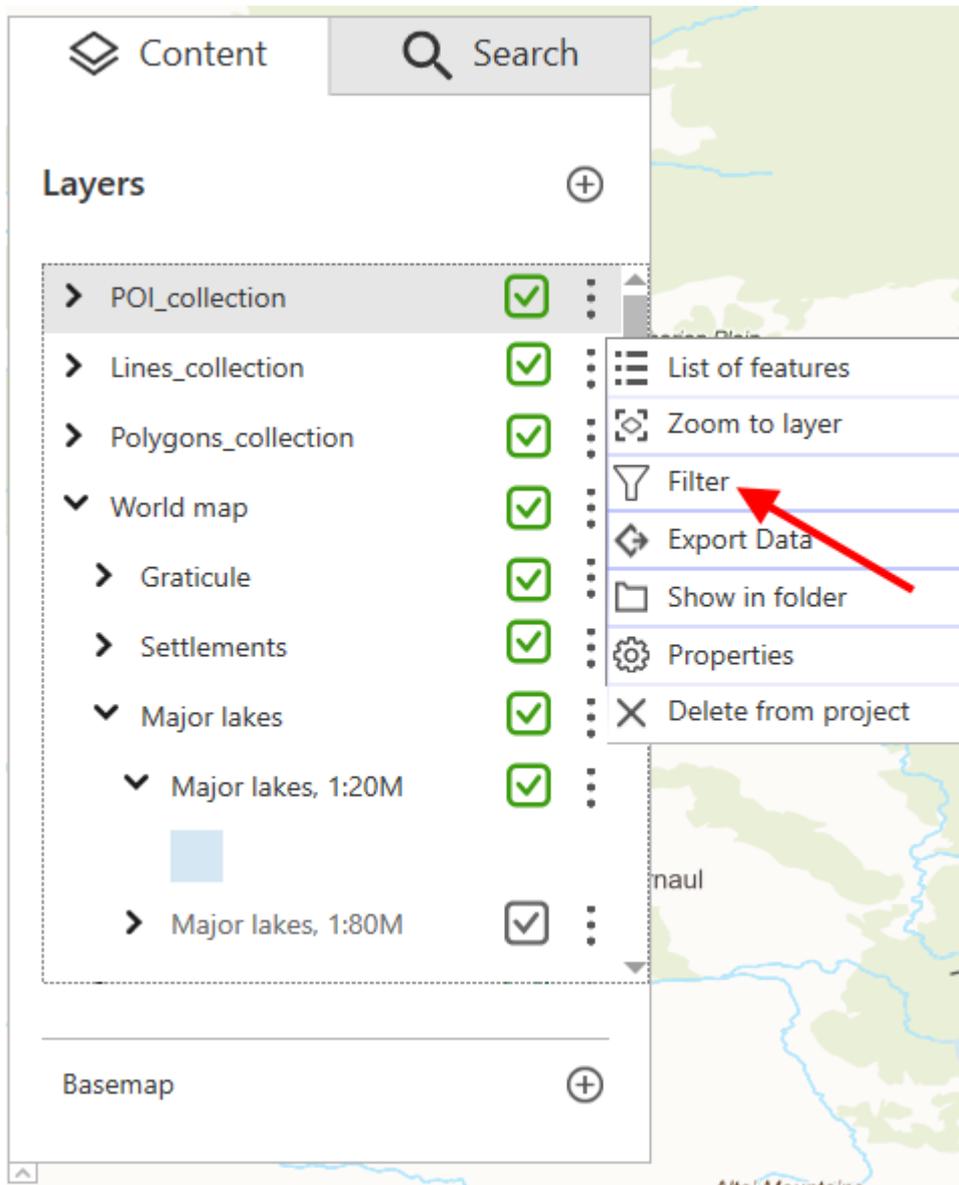
55°3'24,03" N 82°53'0,11" E

Edit Close

Filter features

The features in GeoPackage layers can be filtered based on one or multiple parameters.

To do this, expand the layer's menu in the table of contents by clicking the three dots and select *Filter*.



In the appeared window specify the necessary filtration parameters and click *Apply*. *

Filter □ ×

Complex filtration conditions consisting of multiple elements are combined using "and" operator.

Add Delete

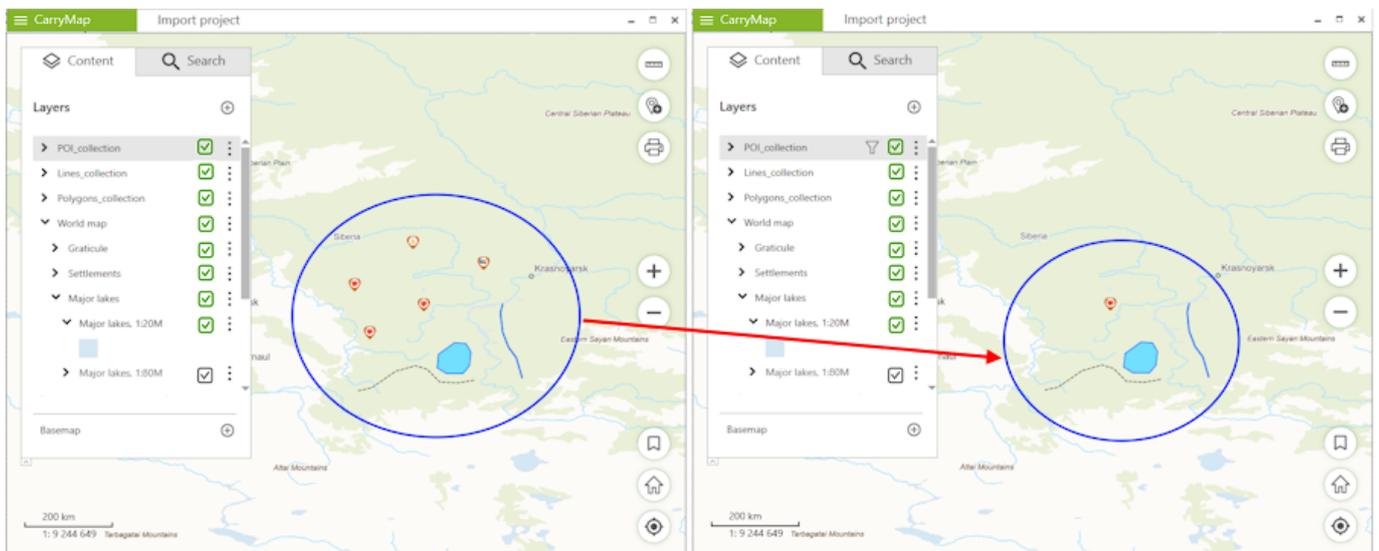
| <input type="checkbox"/> | Field | Operator | Value |
|--------------------------|--------|-------------------|--------|
| <input type="checkbox"/> | Type ▾ | Equal ▾ | Cafe ▾ |
| <input type="checkbox"/> | Name ▾ | Includes values ▾ | Daily |

↗

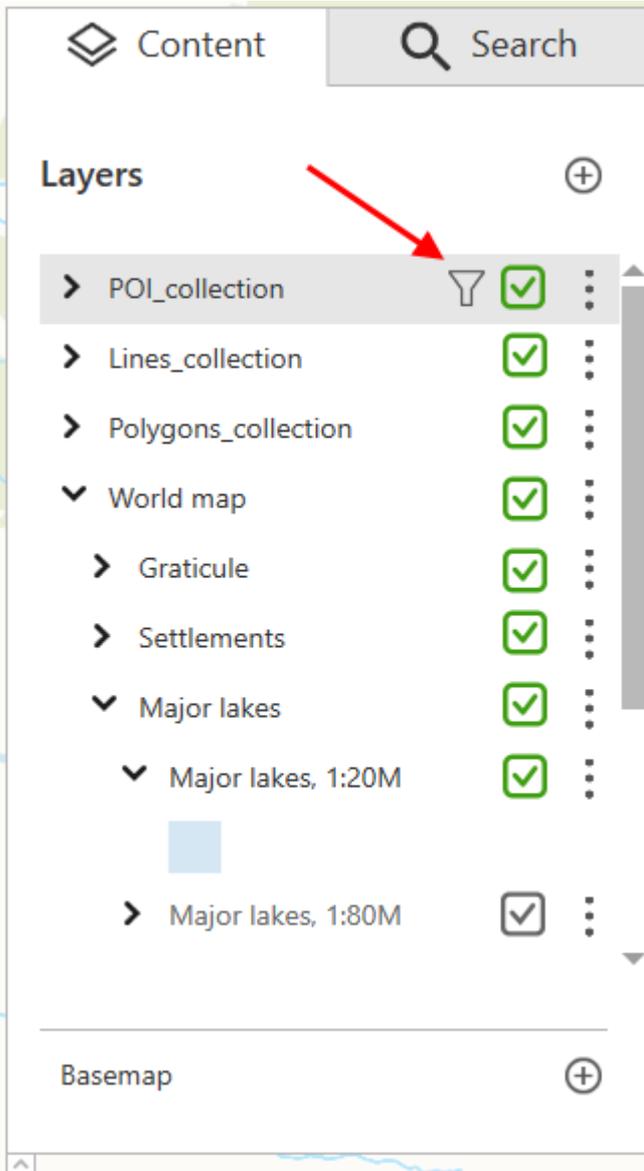
↘

Cancel Apply

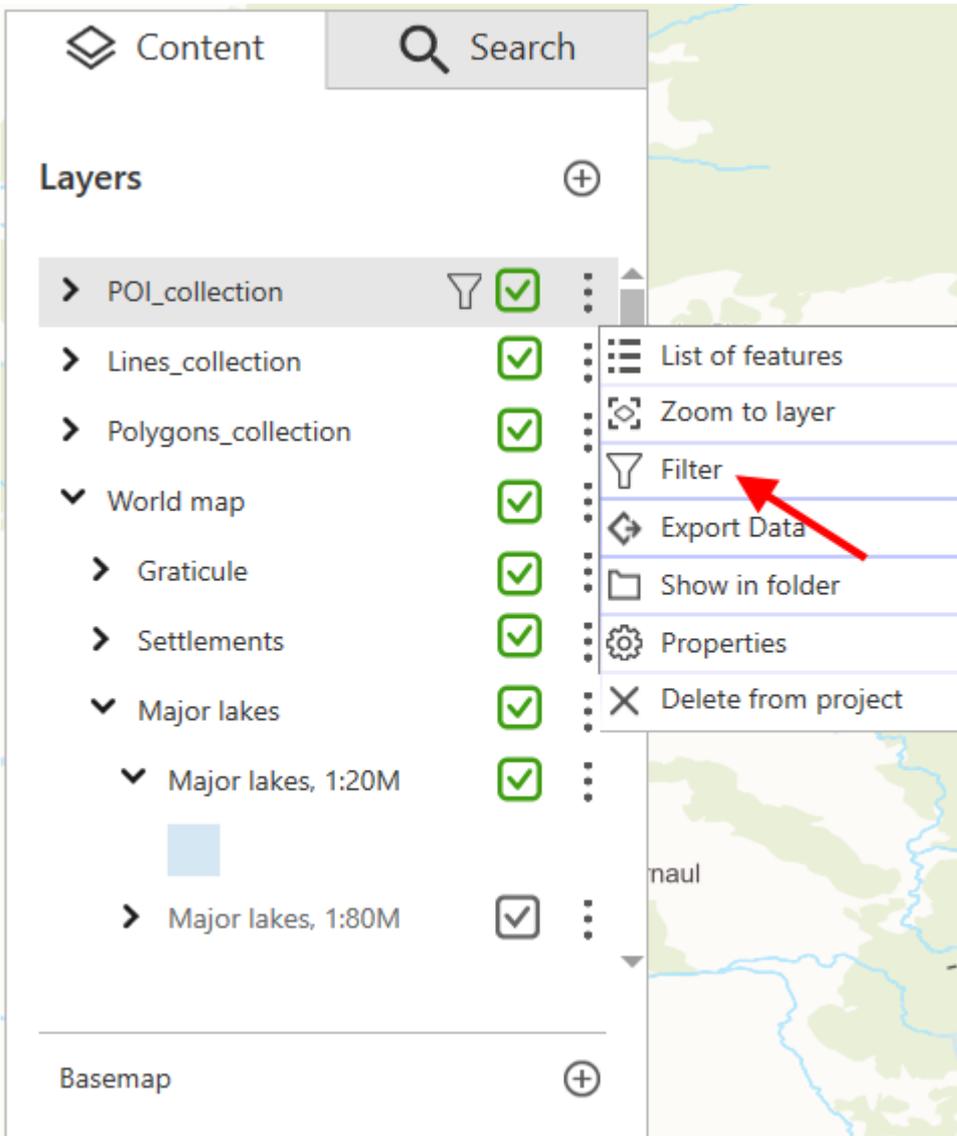
The features in the selected layer will be filtered based on specified parameters. The map will display only those layer features that match the filtration conditions.



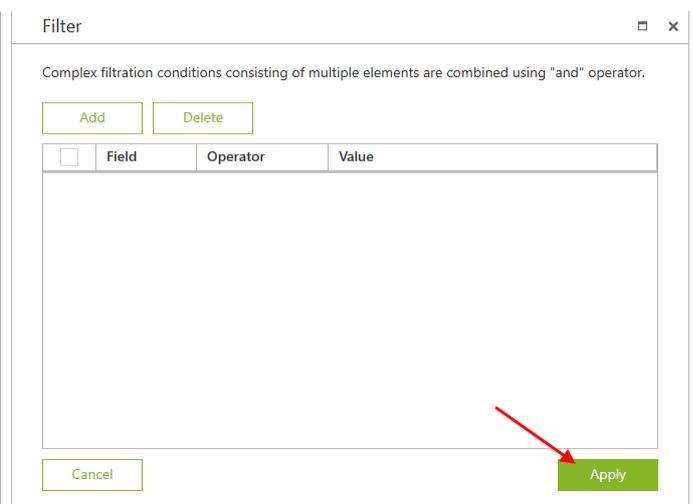
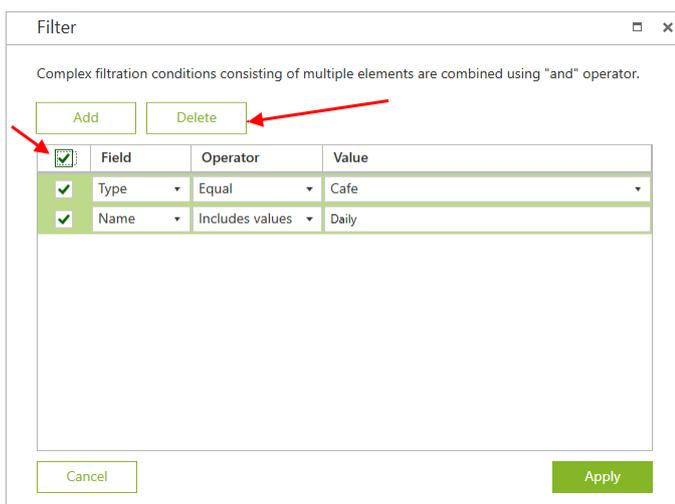
The layers to which the filtration has been applied, will be marked with a special symbol in the table of contents.



To reset the features filtration conditions specified for the layer, expand the layer's menu in the table of contents by clicking the three dots and select *Filter*.



Select and remove all specified filters in the list and click *Apply*.



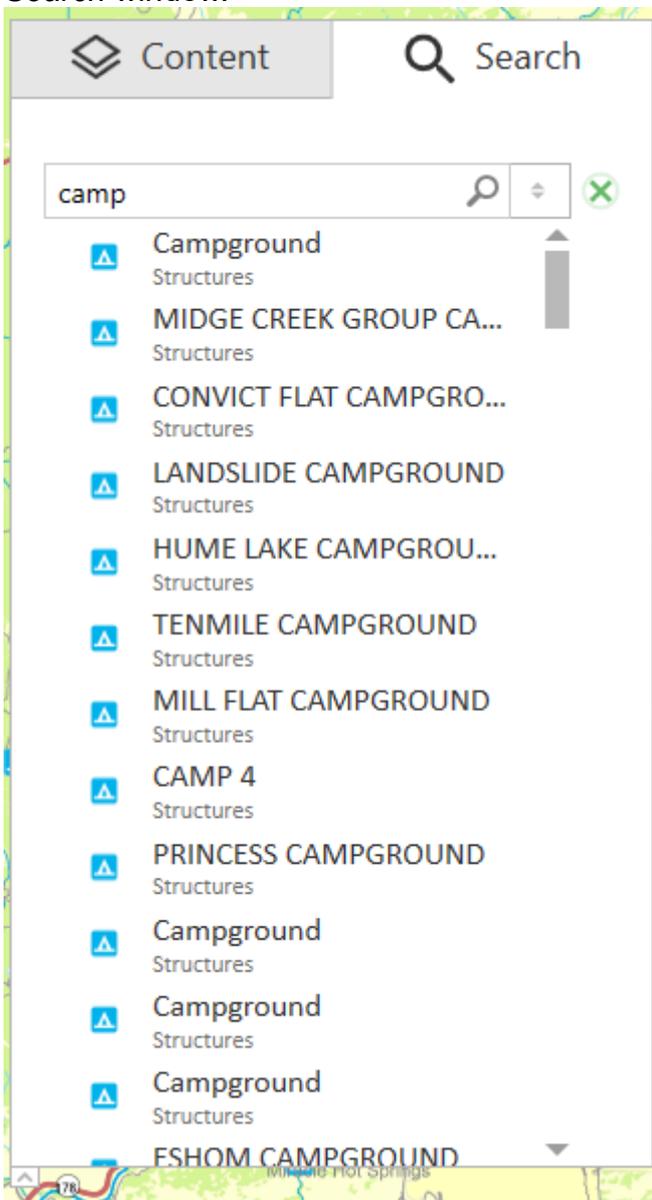
* **Please note** that the specified filtration conditions are applied to the features of the selected layer based on the padding rule. If there are multiple filter conditions, they are combined using the logical operator "and".

Searching for features. Going to coordinates

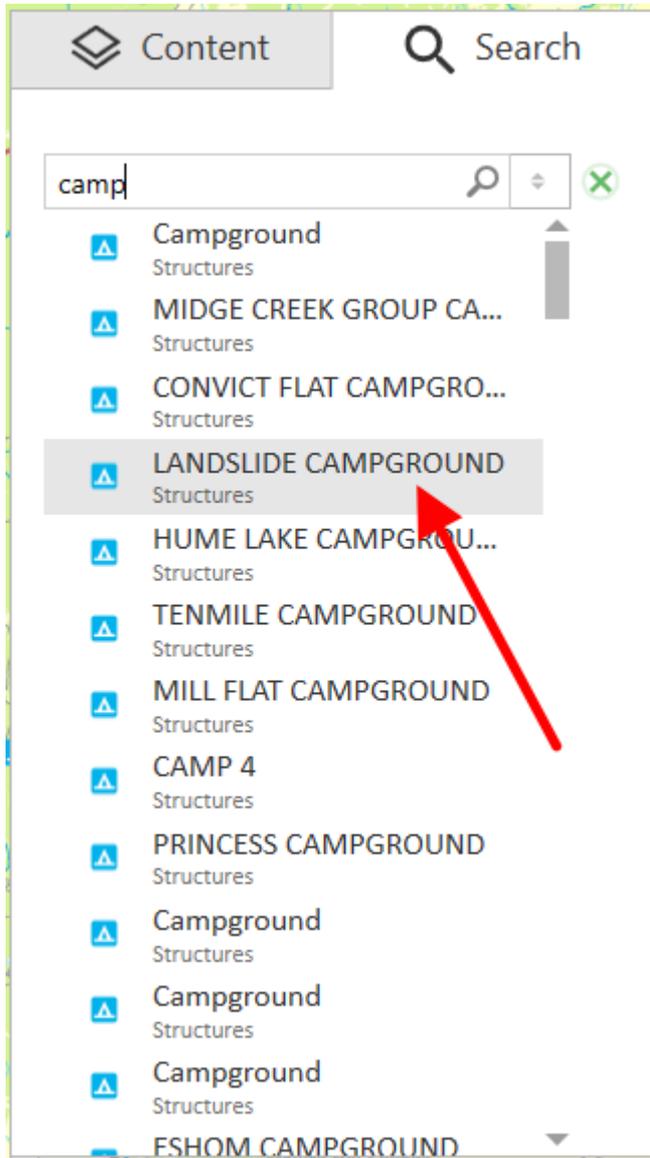
To search for features or to go to specific coordinates on the map, select *Search* tab in the upper left corner.



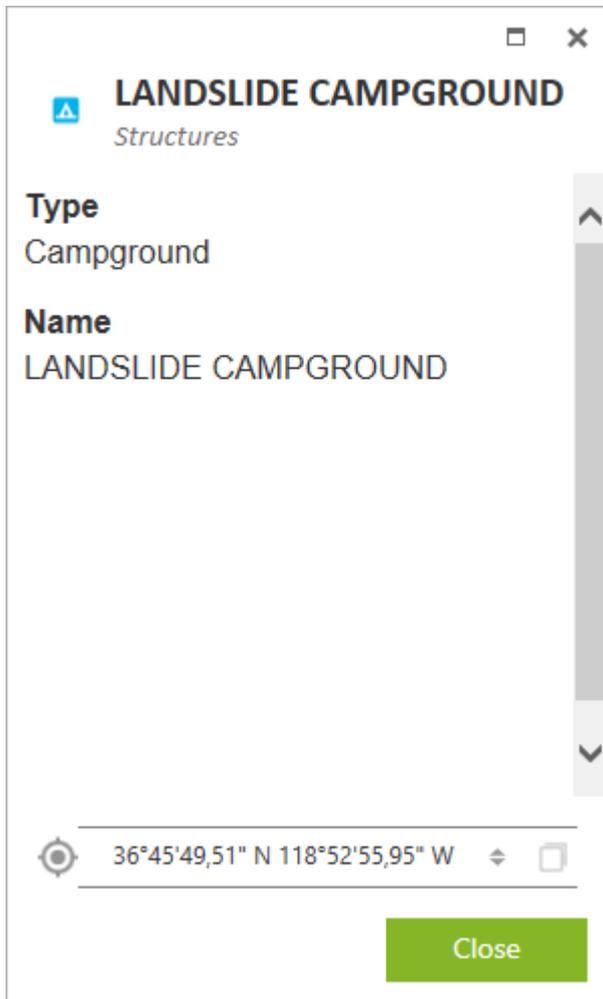
Enter your search request in the search field and press *Enter* on the keyboard or press the search icon. The search results will be shown in the *Search* window.



To zoom to the feature on the map and to identify it, select this feature clicking on it in the search results list.



Selected feature will be marked with the pushpin on the map and its identification card will be shown near.



To perform accurate search, enter the '!' sign in the beginning of your search query. Unlike with simple search, with the accurate search option you can search not only for the separate word, but also for the whole phrase. This new option will simplify searching through big arrays of numerical and text data.

To go to coordinates, press *Switch button* in the search field.



The field for entering coordinates in DD format will appear.



Enter Y (latitude) and X (longitude) coordinates and press *Search*  . The entered coordinates will be marked on the map with the pushpin icon  .

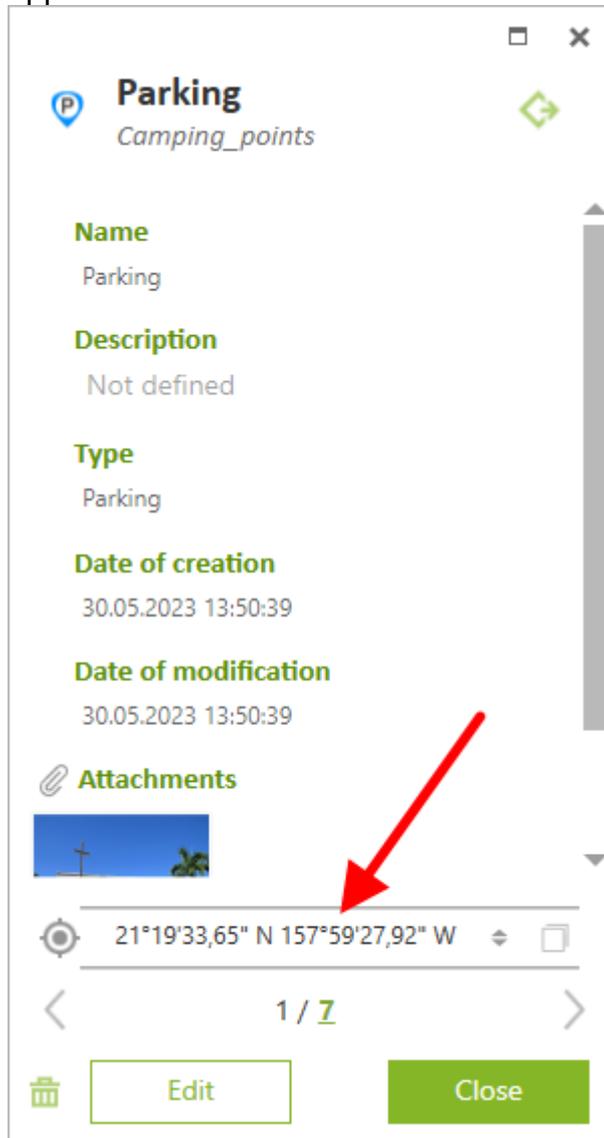
To go to coordinates in DMS format, press *Switch* button in the search field again.

00° 00' 00" N 000° 00' 00" E  

Enter the coordinates values and press *Search*  . The entered coordinates will be marked on the map with the pushpin icon  .

Changing coordinates format

Coordinates format of features can be modified, to do so, select the required feature and in the appeared card click on the field with coordinates and enter the needed format.



Note that selected coordinates format will be saved for the current project.

Available coordinates format representations:

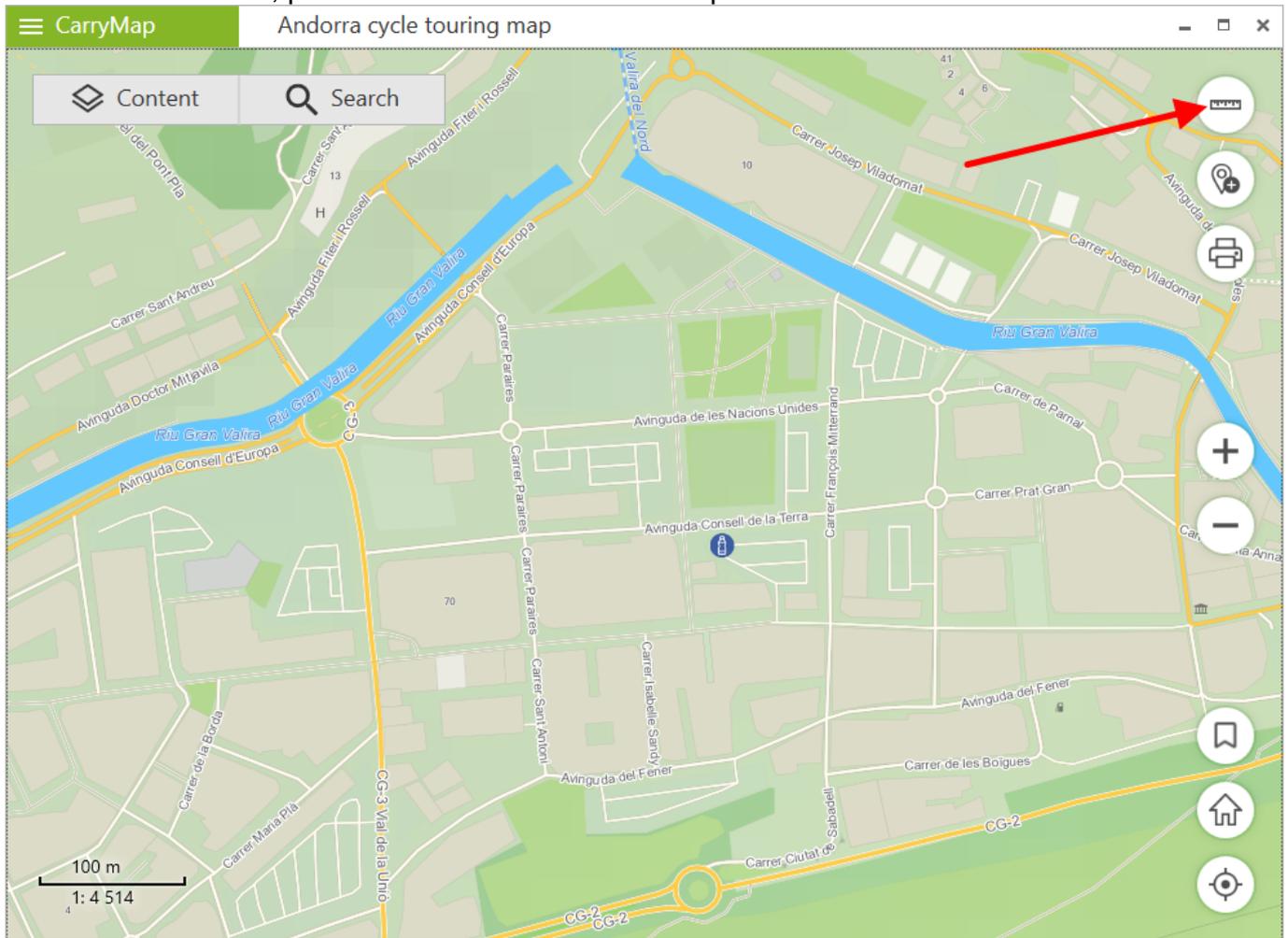
- DMS
- DD

To copy feature coordinates, press *Copy coordinates*.



Measuring distances and areas

To do measurement, press *Measure* button in the map window.



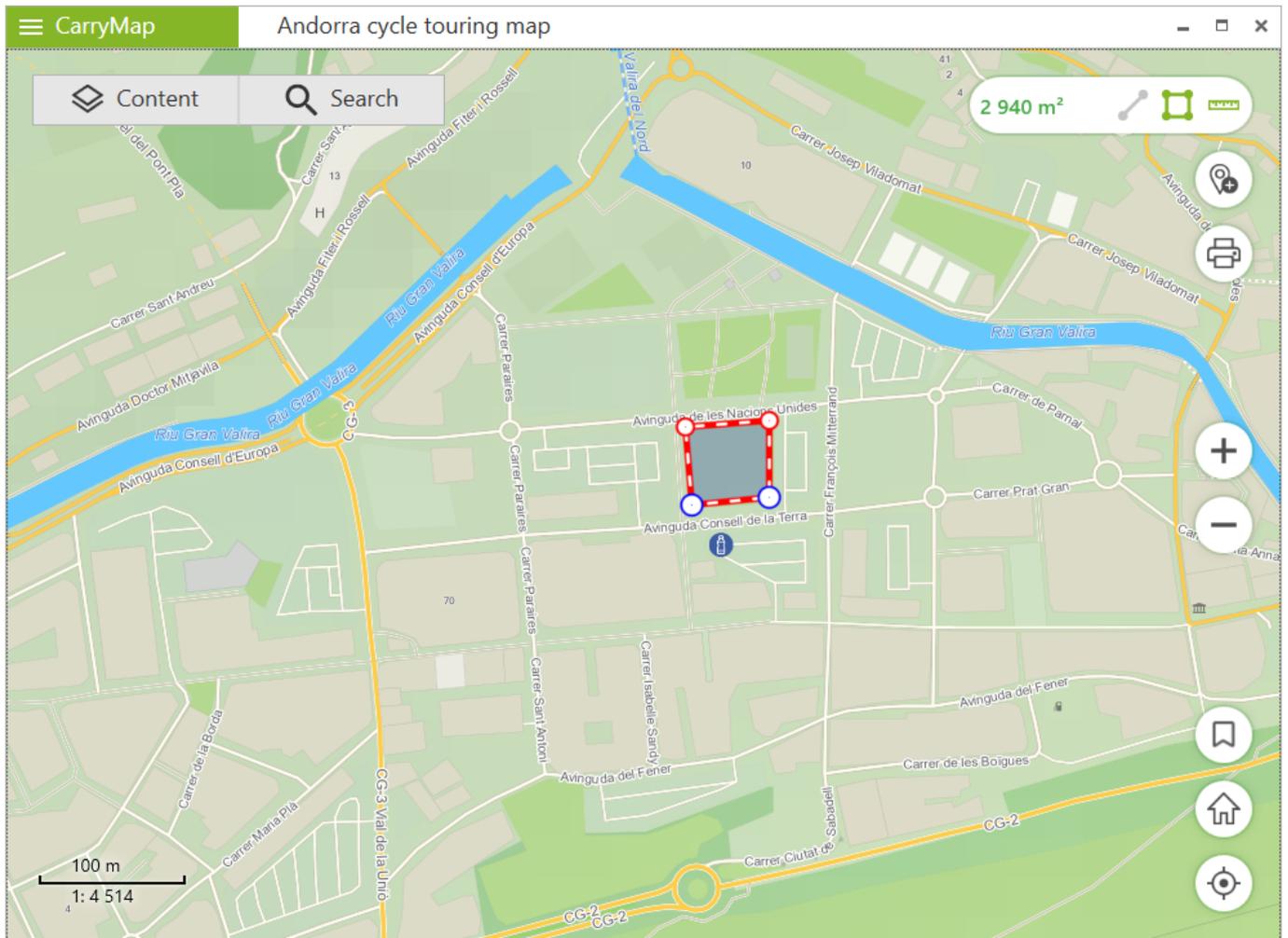
The tool button will change its color and the tool dialog will appear. If you need to measure distance, press *Distance measurement*.



If you need to measure area, press *Area measurement*.



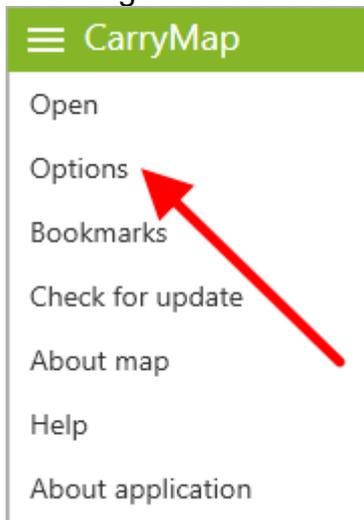
To start the measurement process, consequentially specify points on your map.



To delete the needlessly added point, click on it again. The calculated distance or area will be shown in the upper part on the map.



To change measurement units, go to *Options* section of the application menu.



In the *Measurement units* section select the required units:

- Meters, kilometers
- Feet, miles, acres

Options



Measurement units

Feets, Miles, Acres



Language

English (United States)



Device ID

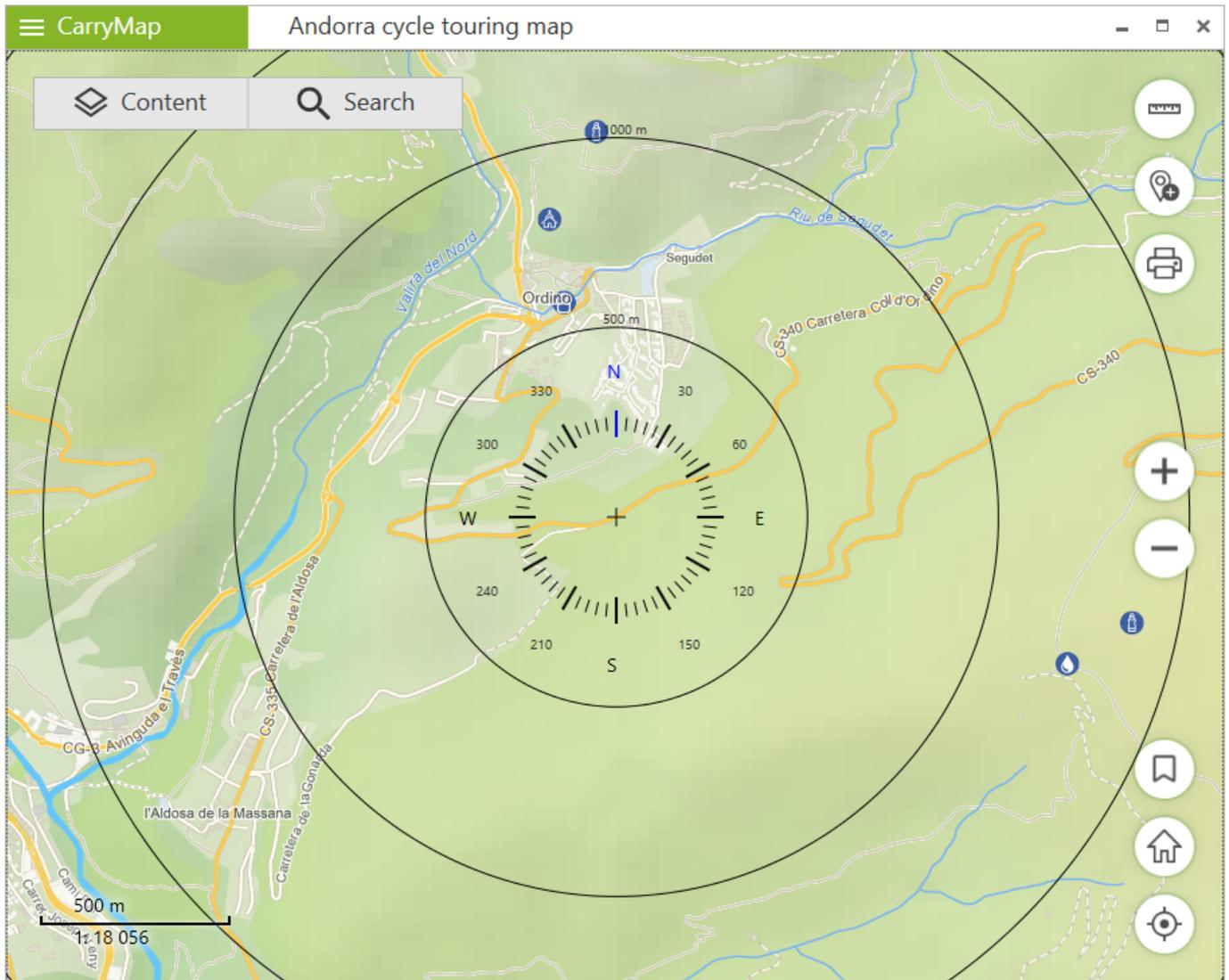
DBA48004-90BF-1C7F-02D1-83DF0A3BED44

Determining distance and direction using a circular ruler

The circle ruler is used to determine distances and directions on a map in real time.

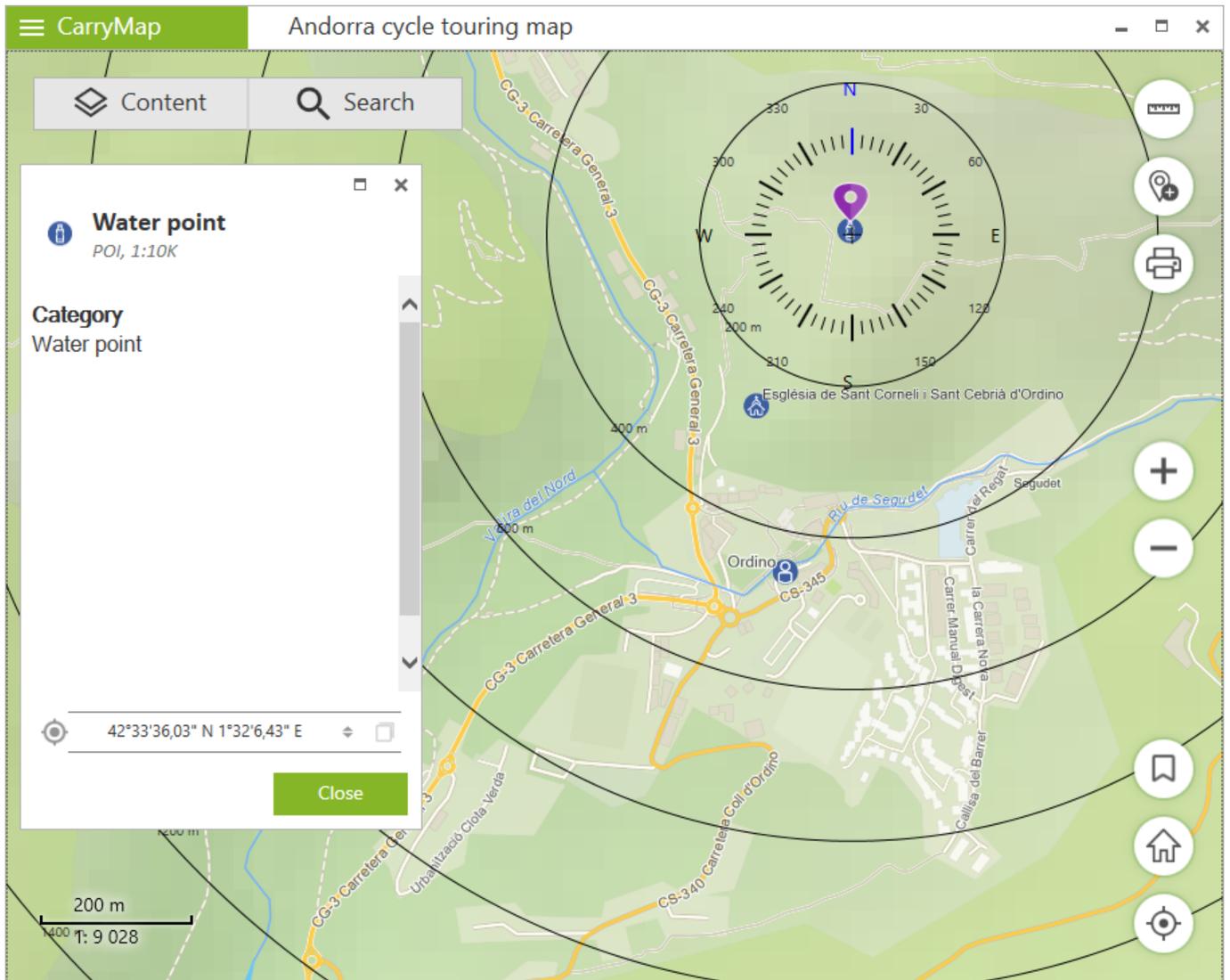
The circular ruler consists of:

- Limbus used to determine direction of the sides of the horizon on the map;
- Set of circular zones showing the distance from the center of the screen. *

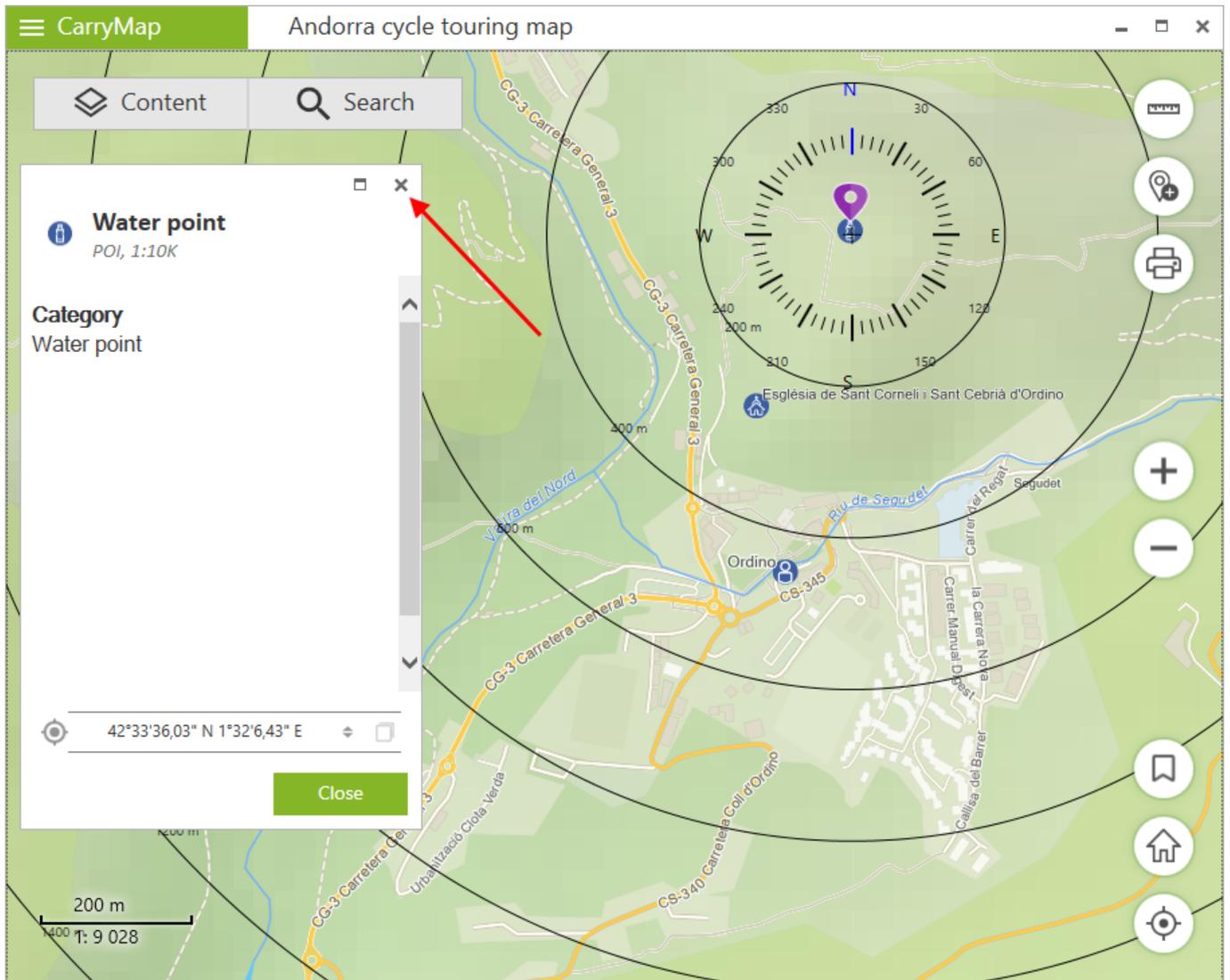


* **Please note** that the zones sizes are calculated automatically depending on the map scale. The distances are displayed in the units specified in the [Application settings](#) section.

The elements of the circular ruler are linked to the identification pushpin. When objects are identified, the map automatically positions to the identification pushpin, and the center of the circular ruler does not change its position when map is panned, or map scale is changed.



To display the circular ruler in the center of the screen again, close the identification card.



The display of the circular ruler in the map is disabled by default.

To enable the display of the circular ruler in the map, go to [Application settings](#) section and in **Circular ruler** section select *Show circular ruler*.

Options



Language

English (United States) ▼

Device ID

DE8C76B0-94FB-5476-9408-901437047602

Measurement units

Meters, Kilometers ▼

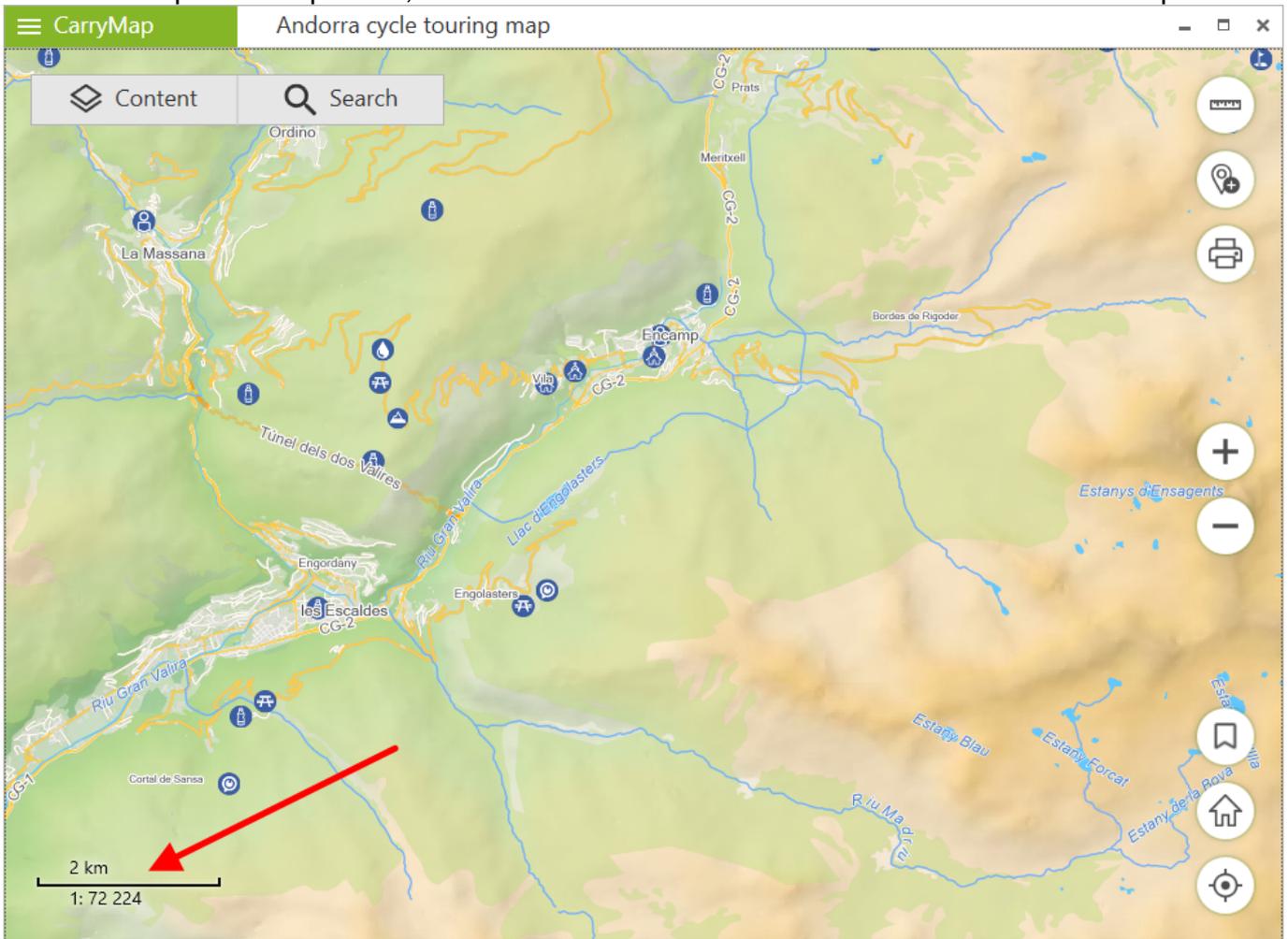
Circular ruler

Show circular ruler

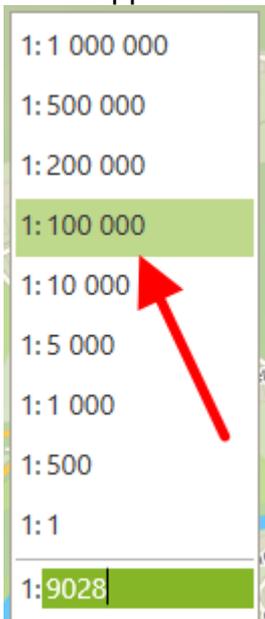


Zooming to specified scale

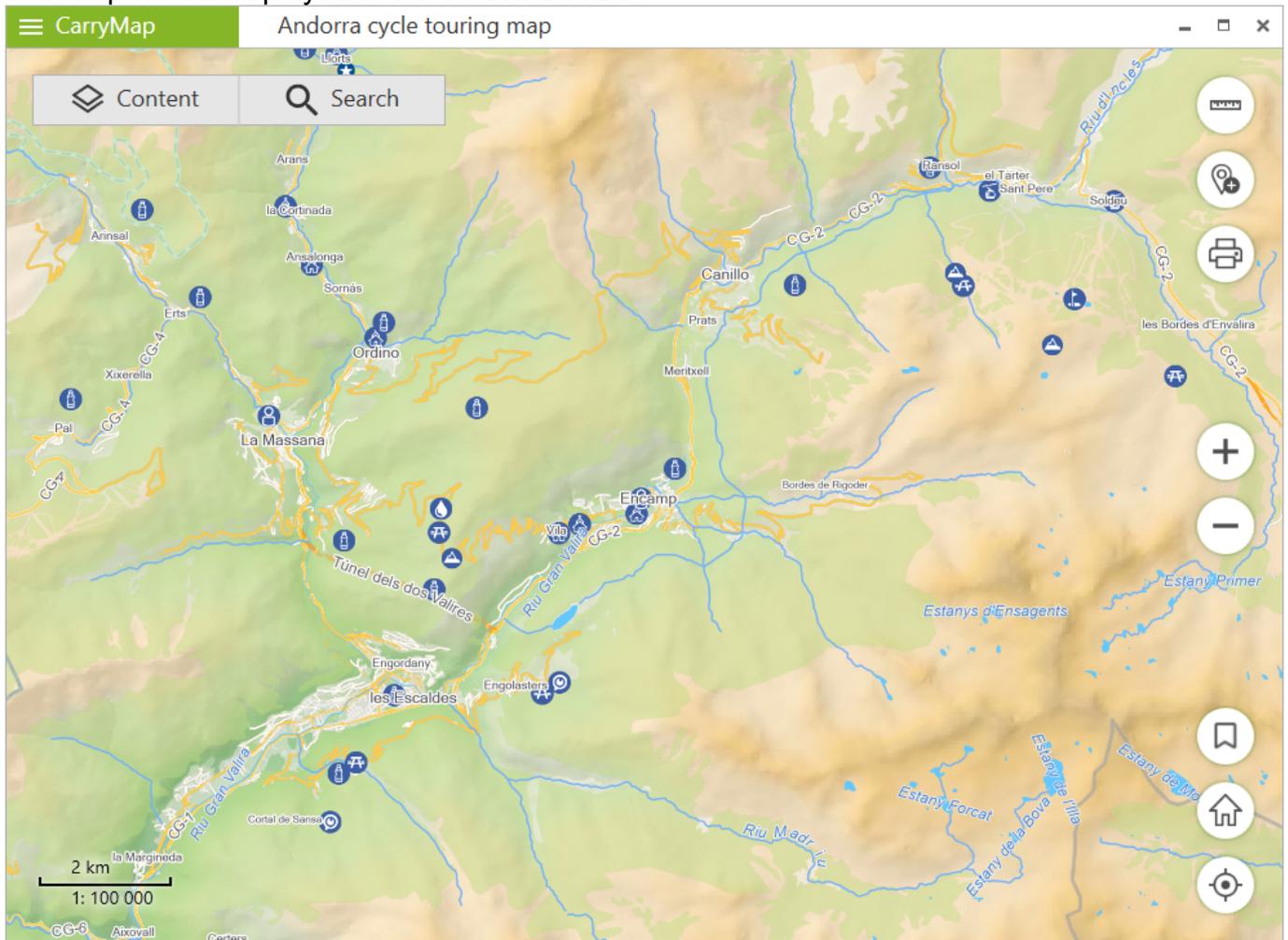
To zoom to specific map scale, click on the scale bar in the bottom left corner of the map.



In the appeared window select the scale value from the list.



The map will be displayed in the selected scale.



To add your own scale value, click on the scale input line.
Enter the value and press *Enter* on the keyboard.



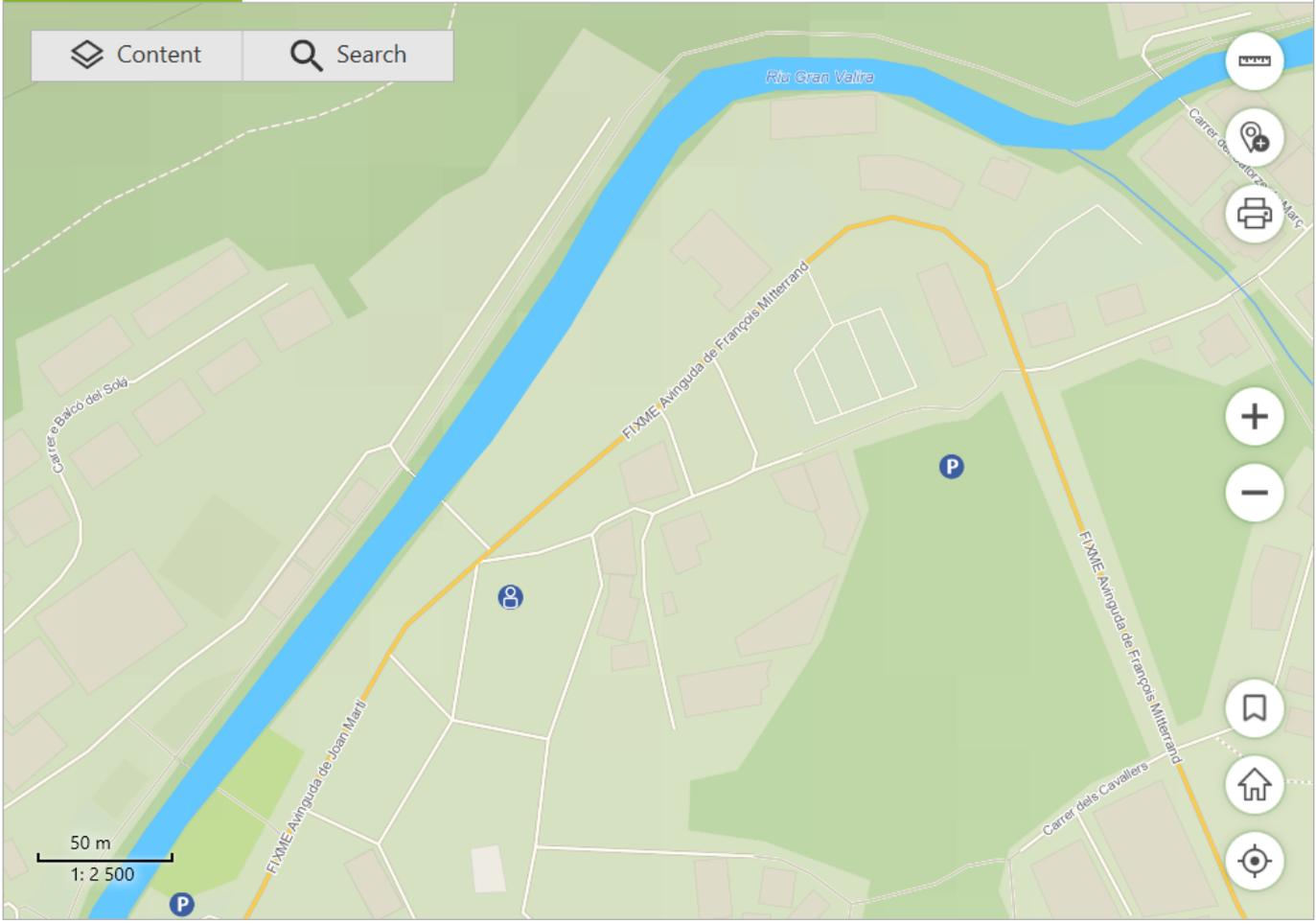
The map will be displayed in the specified scale.

Content

Search

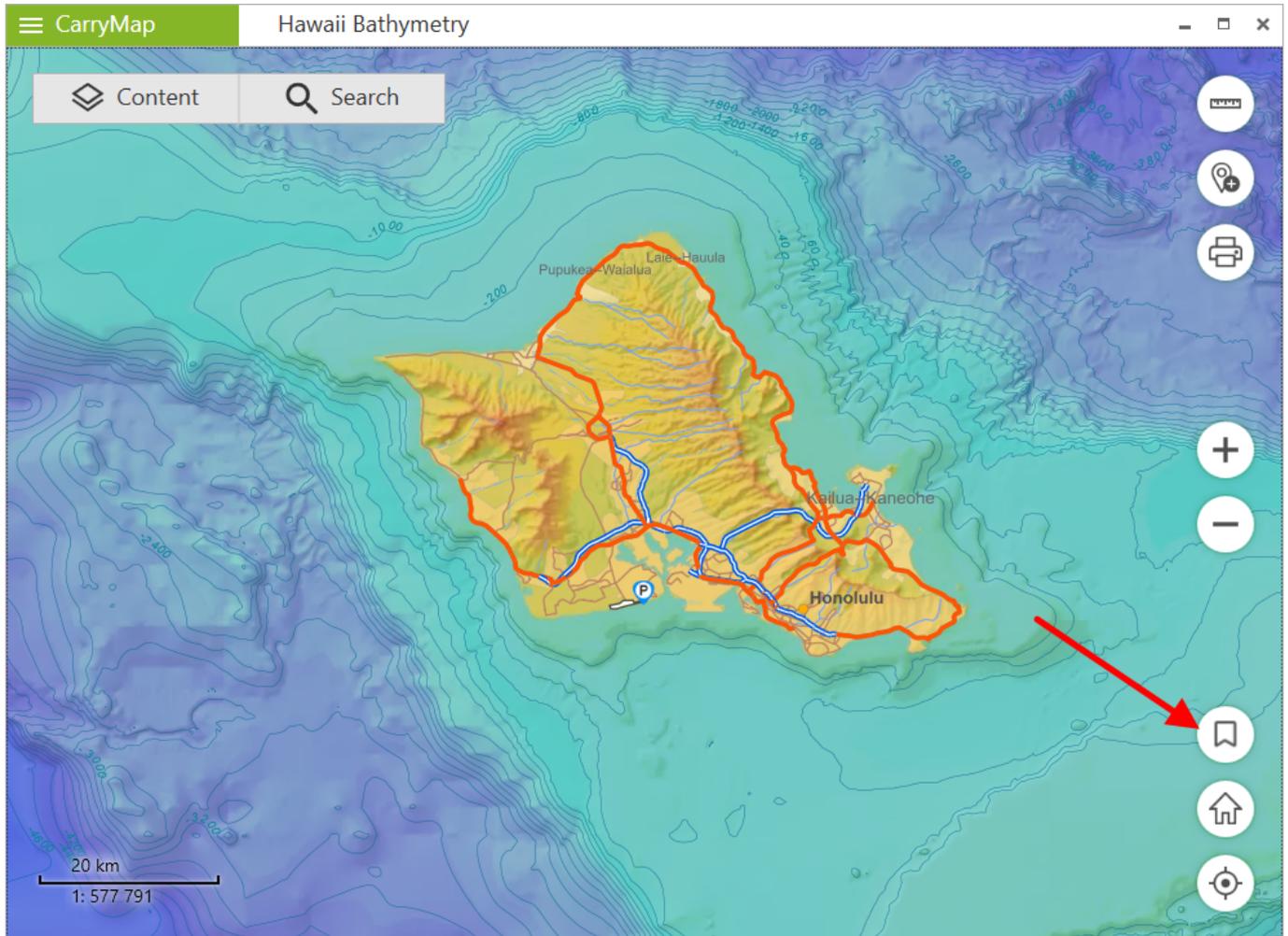


50 m
1: 2 500



Creating bookmarks on map

The bookmarks are provided for storing selected map areas and data for quicker access. To create the bookmark, set the required map extent boundaries, go to map window and press *Create bookmark* button.



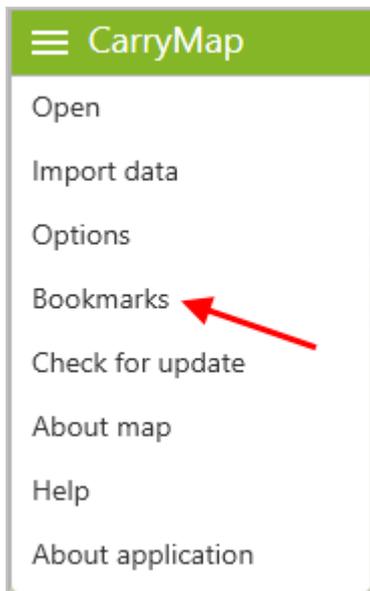
In the appeared window enter the bookmark name or leave the default one.

✕

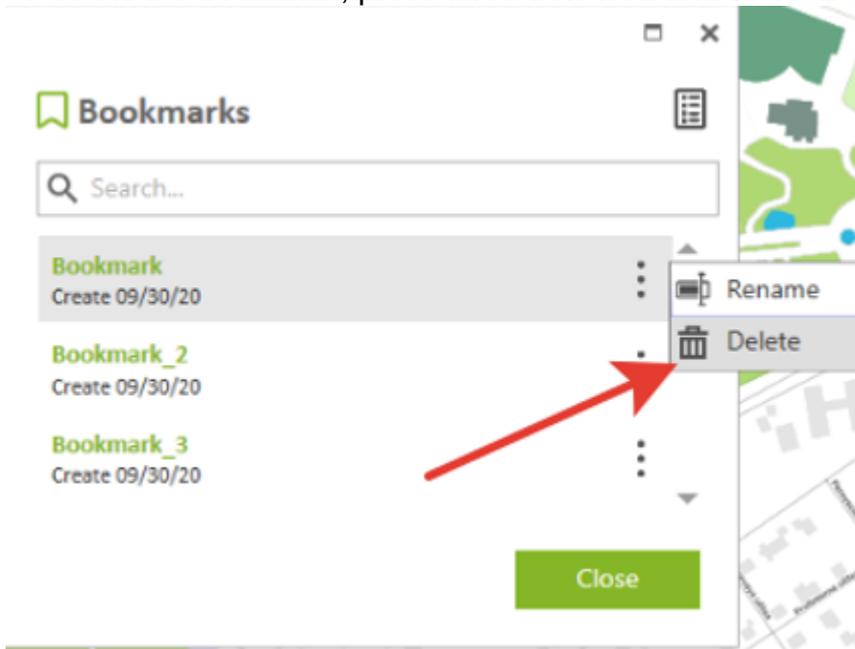
Enter new bookmark name

To save the created bookmark, press *OK*.

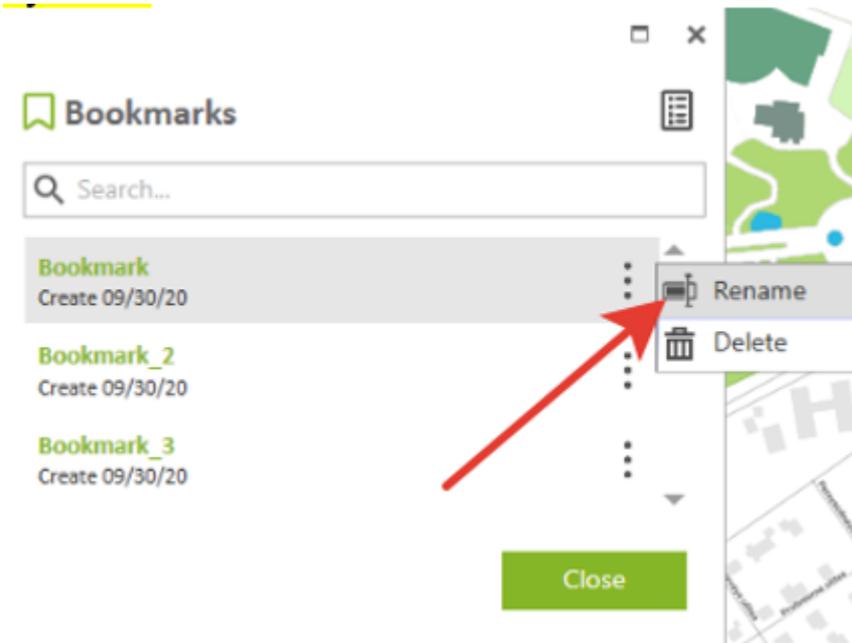
To view the created bookmarks, go to *Bookmarks* section in the project's menu.



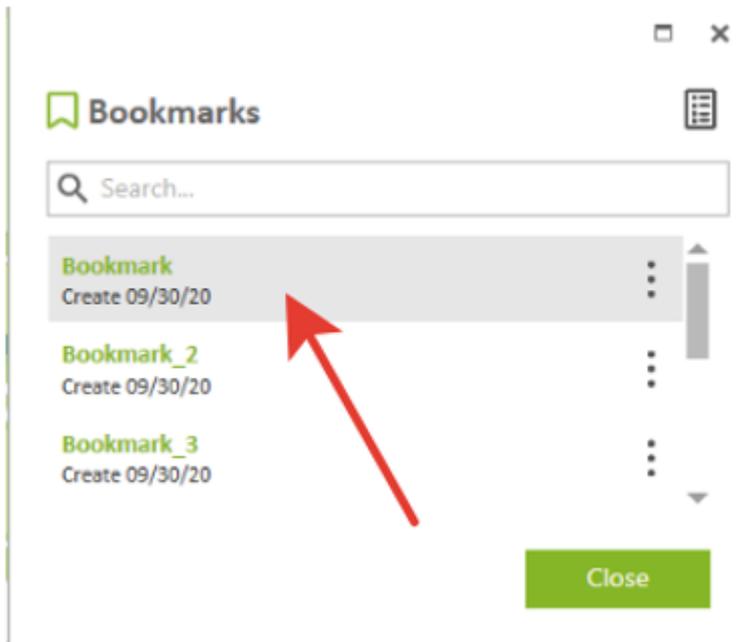
To delete the bookmark, press three dots icon and select *Delete*.



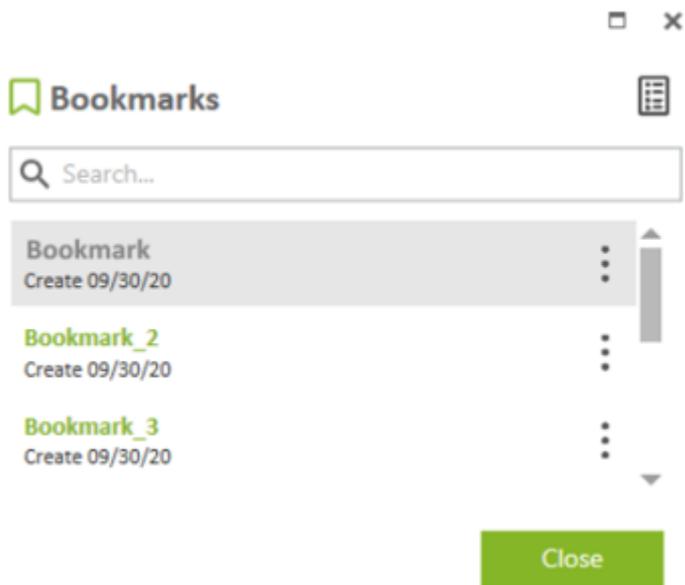
To rename the created bookmark, press *Rename*, enter the new name and press Enter on the keyboard.



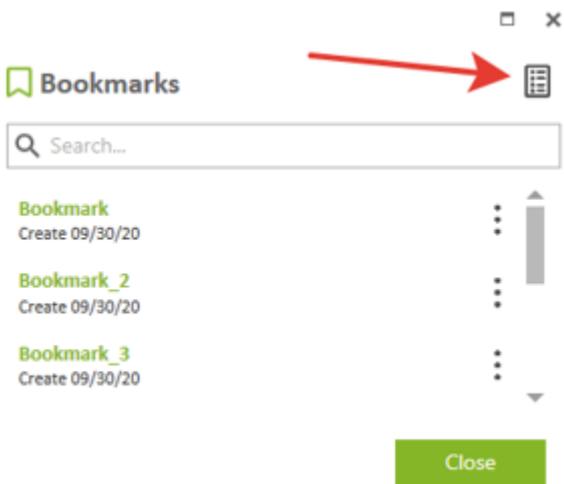
To open the map saved as the bookmark, click on the required name in the bookmarks list.



If the created bookmark does not get to the current map extent borders, it will be highlighted with grey color and you will not be able to view it.

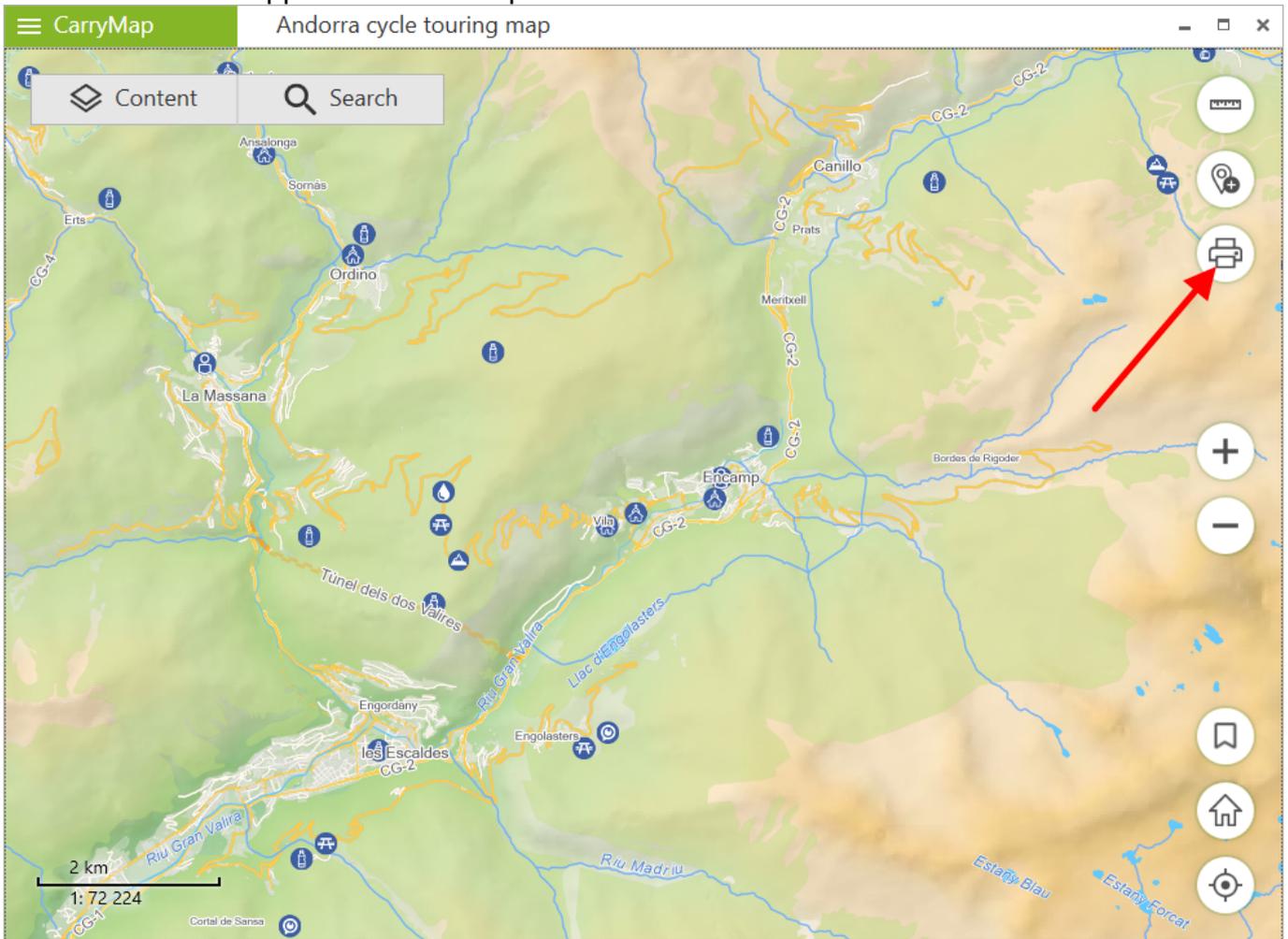


To show all active bookmarks for the current map, press *Show active bookmarks* button.

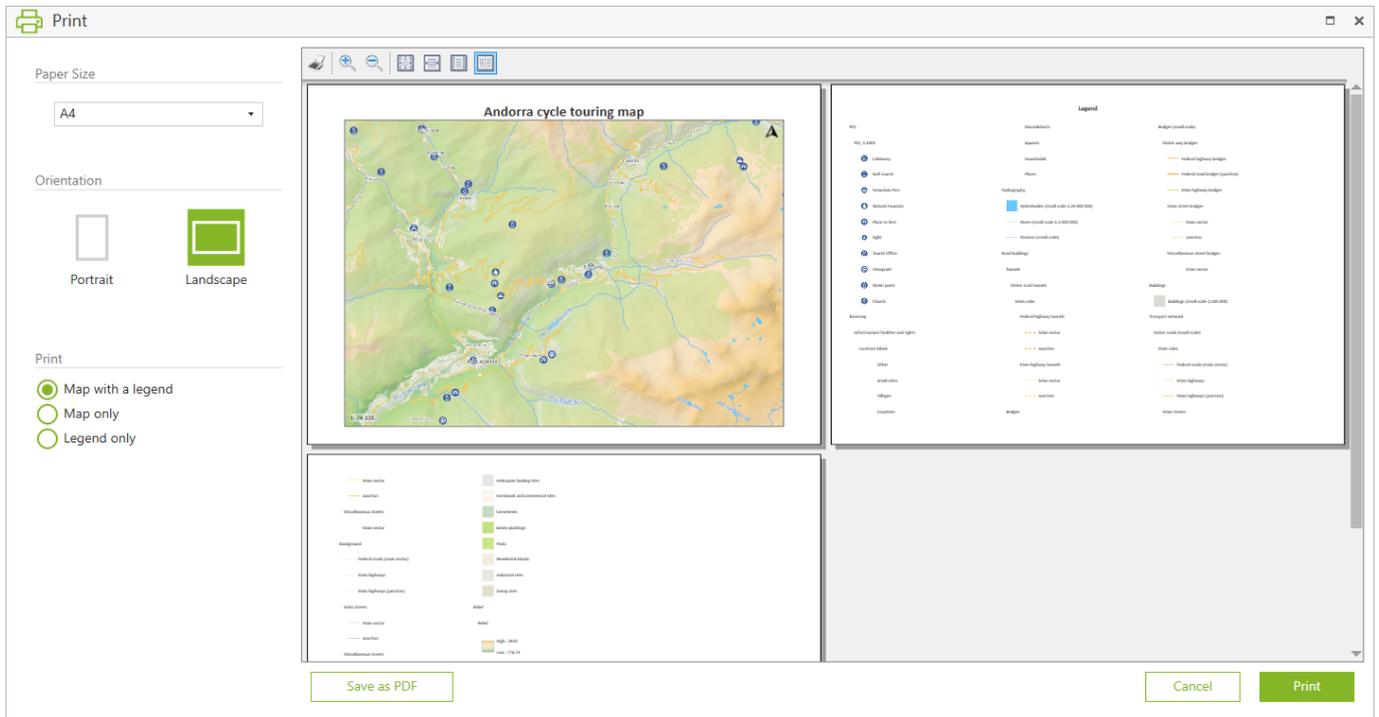


Printing map. Saving selected map area as PDF

To print map opened in CarryMap application, press *Print map* button. Note that current map area shown in the app window will be printed.

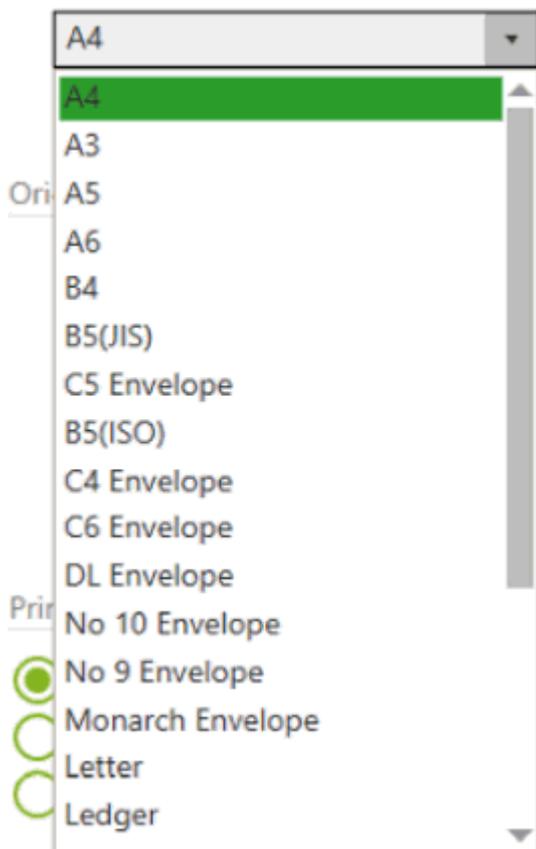


The window with printing settings will appear.



Press *Paper size* and select the required paper format for printed map form the drop-down list.

Paper Size



Select *Portrait* or *Landscape* in the *Orientation* section.

Orientation



Portrait



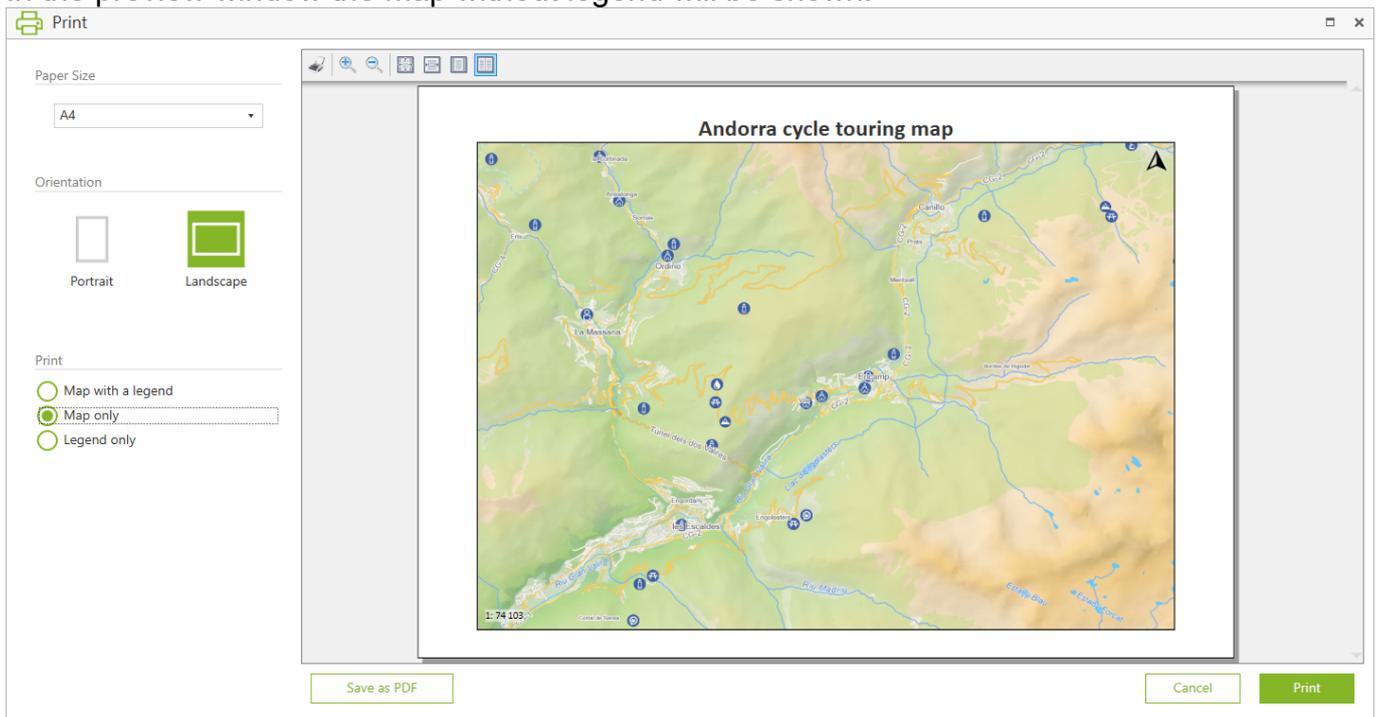
Landscape

By default, the map will be printed with the legend, but you can select other printing options. To print your map without legend, select *Map only* in the *Print* section.

Print

- Map with a legend
- Map only
- Legend only

In the preview window the map without legend will be shown.

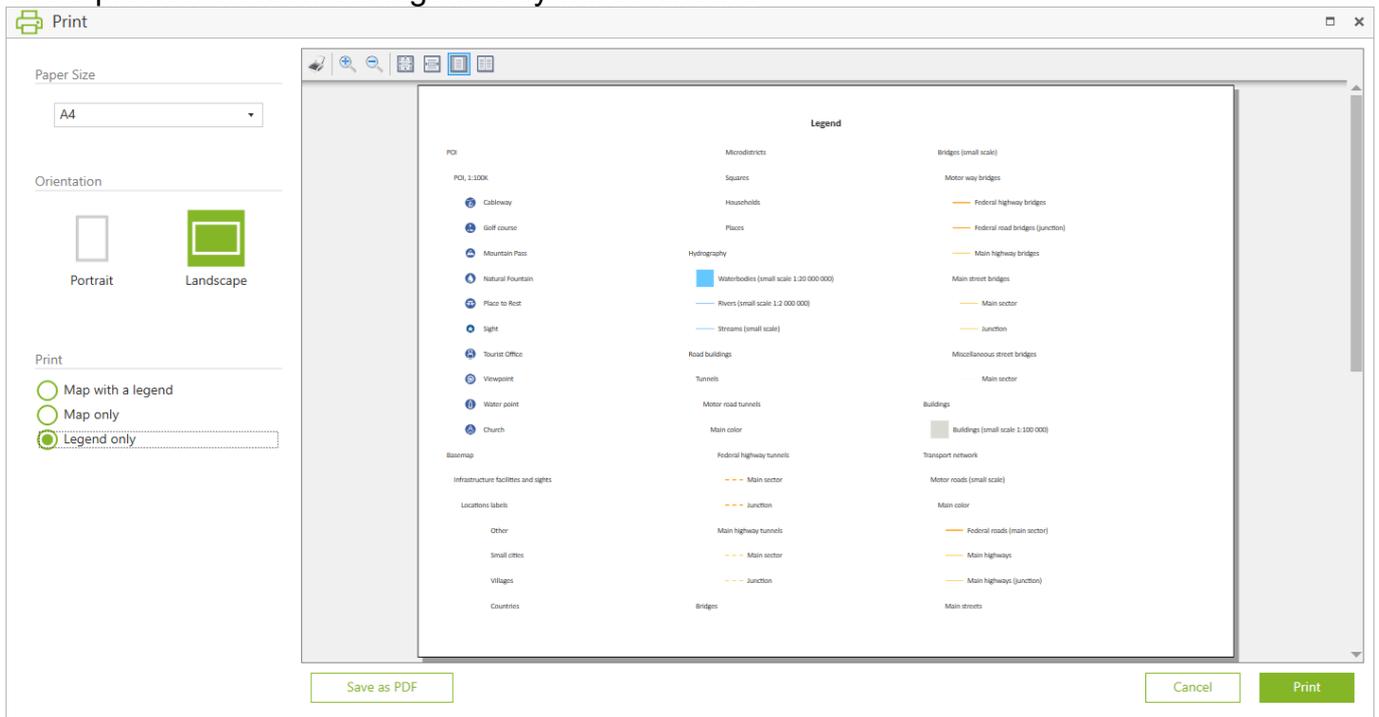


To print only map legend, select *Legend only* in the *Print* section.

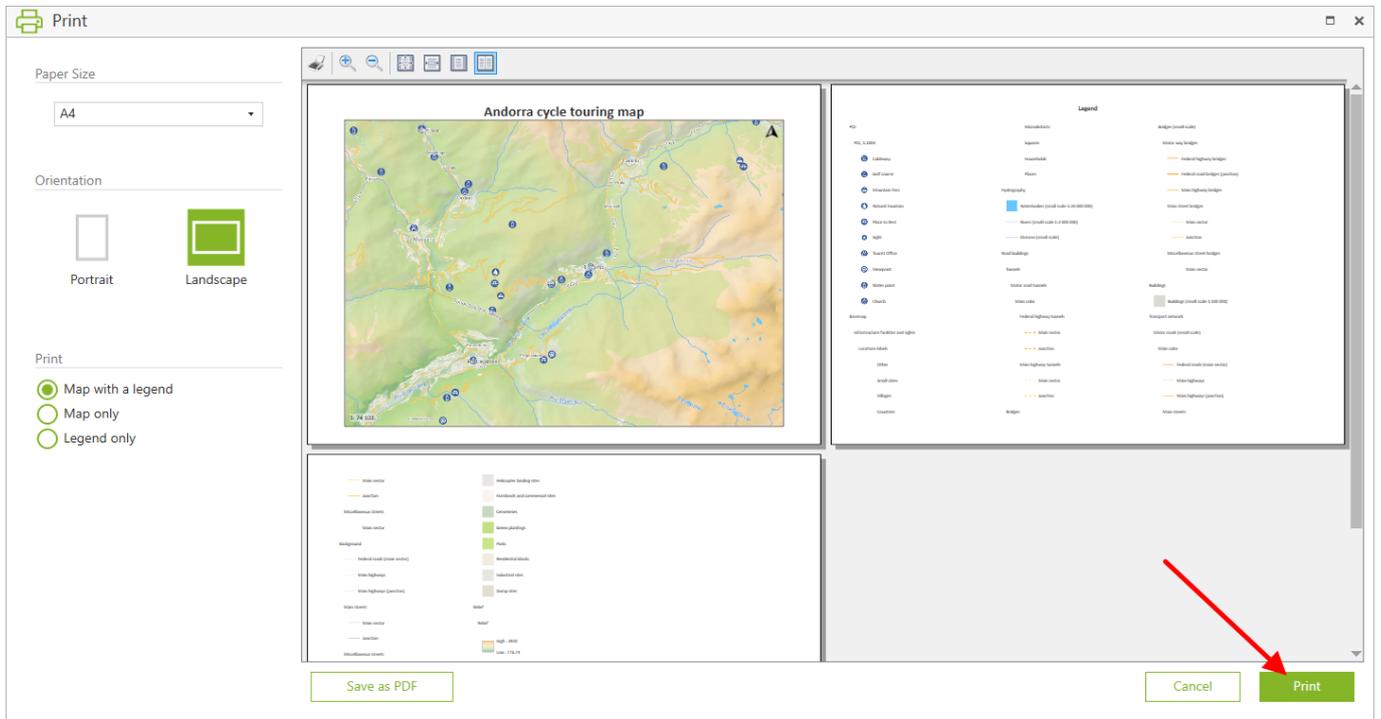
Print

- Map with a legend
- Map only
- Legend only

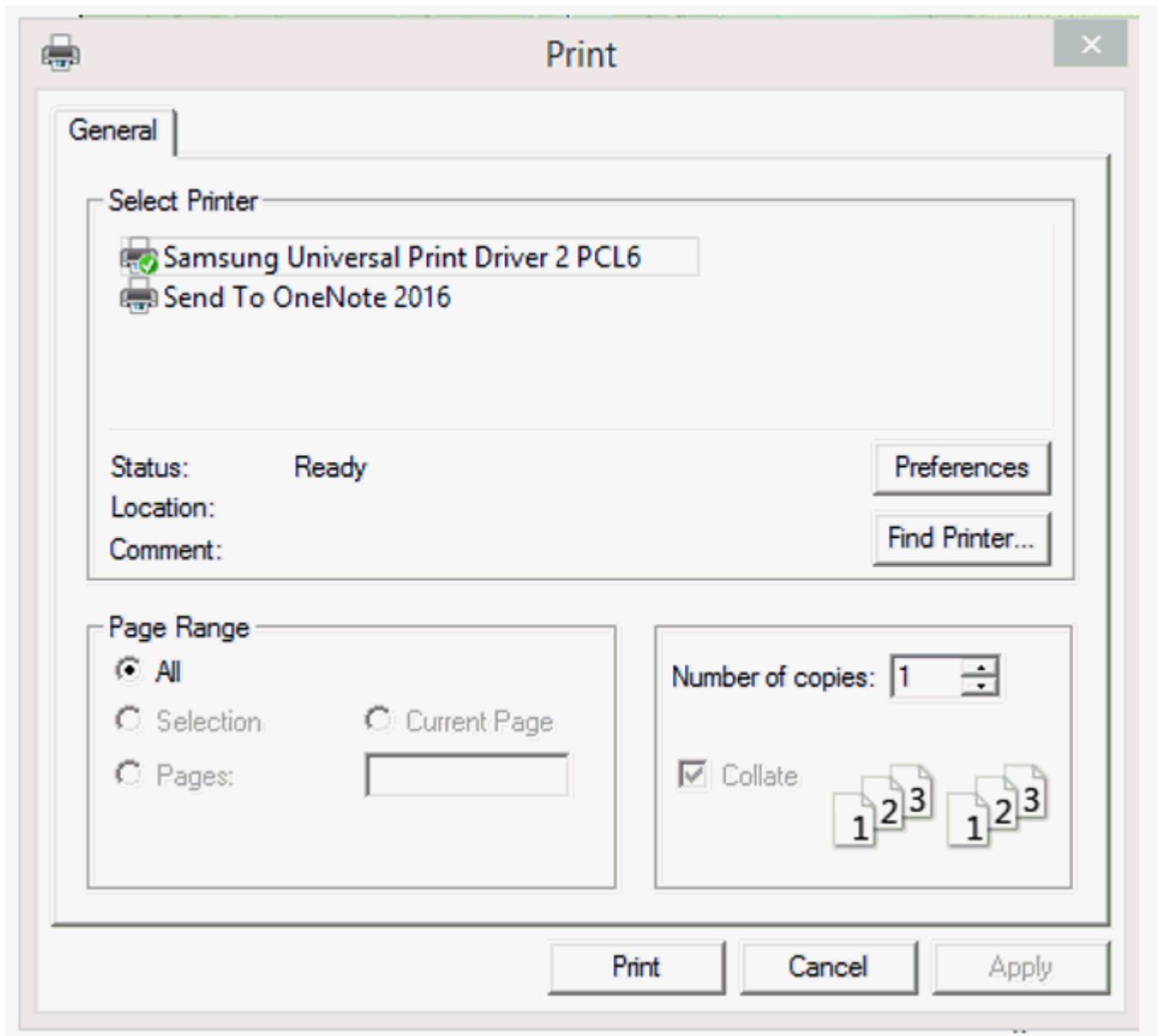
In the preview window the legend only will be shown.



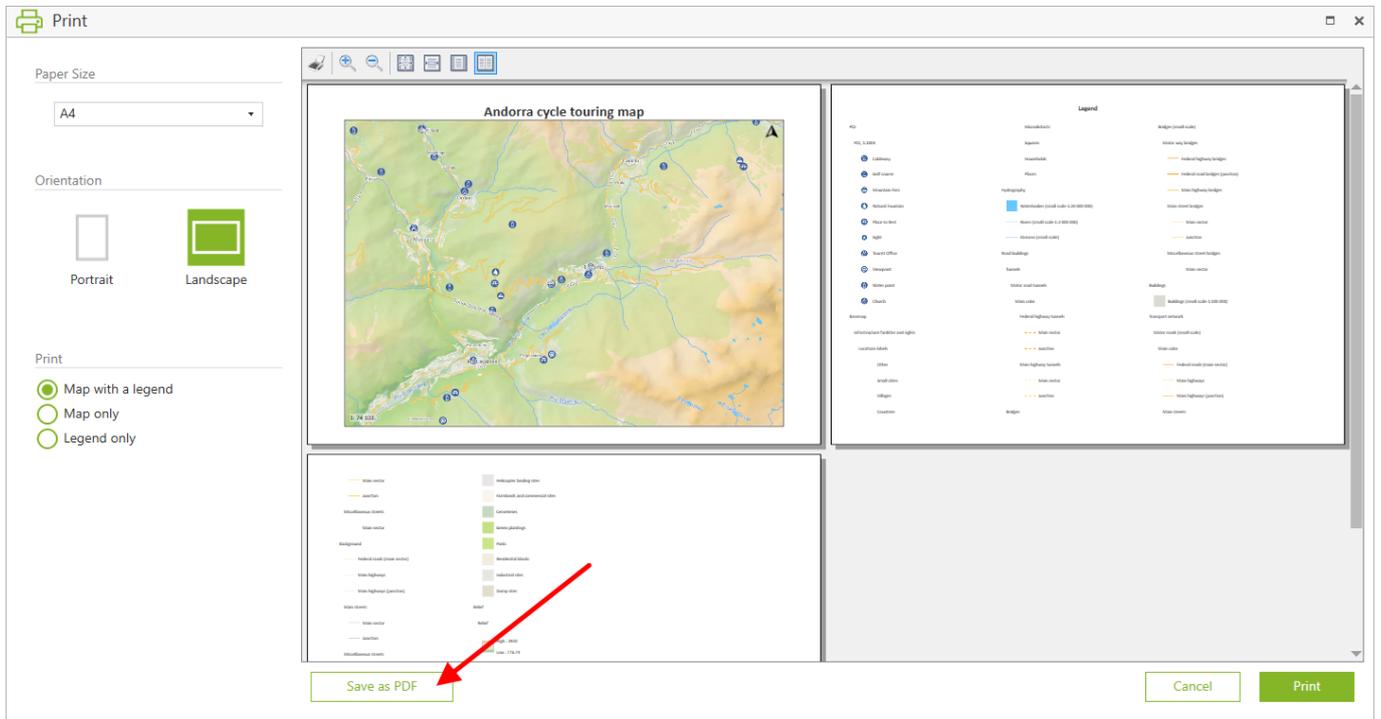
After setting all printing options, press *Print*.



In the appeared window select printer and press *Print*.



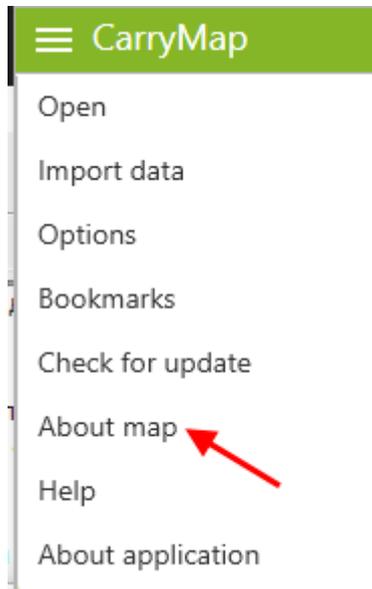
To save selected map area as PDF file, press *Save as PDF*.



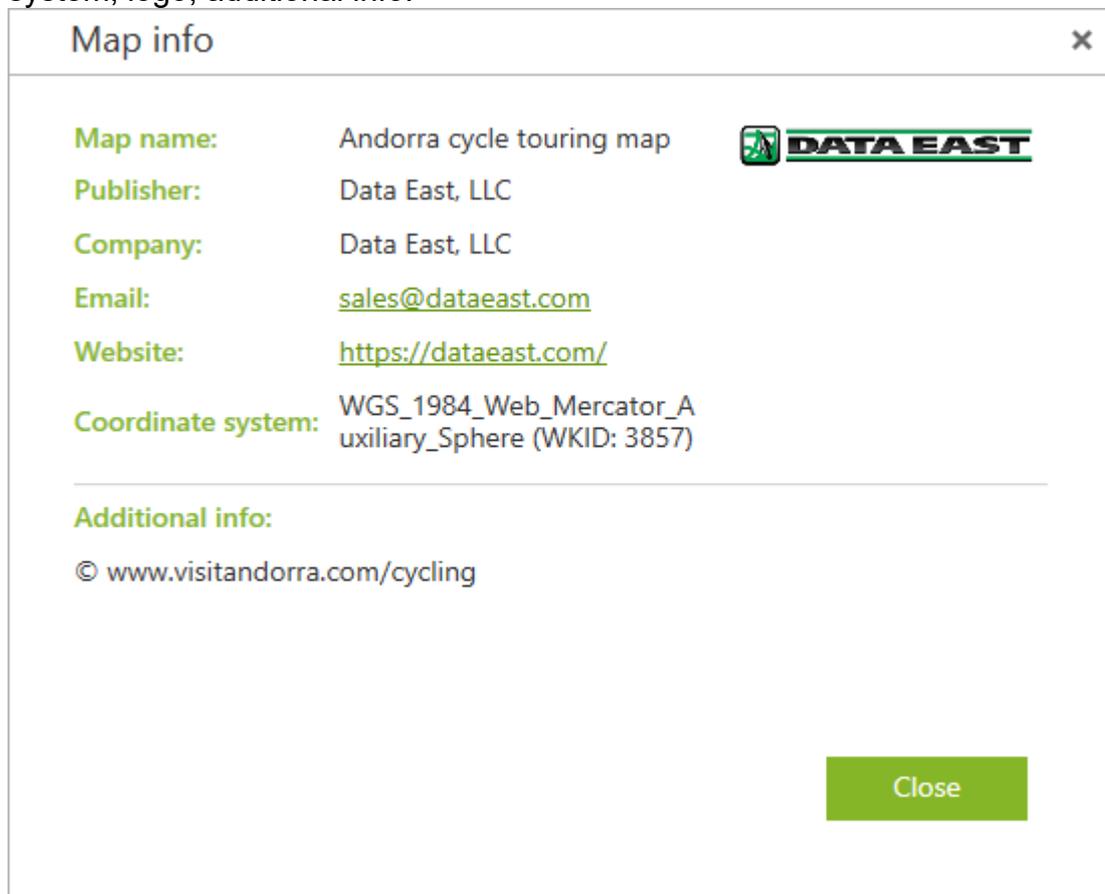
In the appeared window select location and name of the output PDF file and press **Save**.

Map information

To view information about the map, go to the app main menu. Select *About map*.



The window showing information about the map specified during its creation using [CarryMap Builder](#) extension will appear: map name, publisher, company, email, website, coordinate system, logo, additional info.



Finding current location

To find your current location, press . Your current location will be marked on the map with the arrow icon , and the tool button will change its color .

To enable the tracking mode with map rotation, press  again. The button appearance will change .

To disable finding current location option, press  again.

When working with the desktop CarryMap app make sure that the finding current location option is enabled on your computer.

Using external GPS receivers

Besides the embedded GPS receiver of your device, CarryMap app supports external GPS receivers from Bad Elf. Using these GPS receivers allows to specify coordinates of your current location more accurately.

Note that making all settings for Bad Elf GPS option is done outside CarryMap app. To connect Bad Elf receiver, enable Bluetooth on your device and all available receivers will be shown in the appeared list. Select the required GPS hardware and confirm that you want to pair devices. After that go to CarryMap app.

If Bad Elf GPS receiver has been connected, you would see the appropriate message:
Bad Elf GPS receiver has been connected.

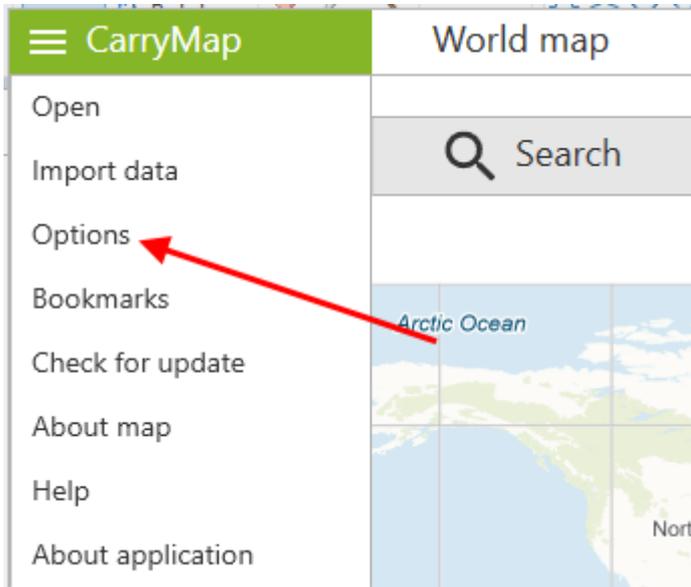
If by some reason Bad Elf receiver works inappropriately, CarryMap app will automatically use the embedded GPS receiver of your device (if geolocation option is enabled), and the appropriate message will appear:
Connection with Bad Elf GPS receiver has been lost. Temporarily the embedded GPS receiver of your device is being used.

If geolocation option is disabled on your device and Bad Elf receiver works inappropriately, you will see the warning message:
Connection with Bad Elf GPS receiver has been lost. Reconnect Bad Elf device or enable GPS location option to use the embedded GPS receiver of your device.

To be able to find your current location and to record tracks, make sure to enable the geolocation option on your device or check the Bad Elf receiver connection.

Application settings

You can access the application *Settings* from the menu on the start page of the application or from the main menu in the map window.



In this window, you can change the general settings of the application and find out information about the device ID:

Language – changing the app UI language, the currently available language options are Russian or English.

Device ID – viewing and copying information about the device ID based on which the availability of maps protected by device ID is determined (see [Working with protected maps](#)).

Measurement units – changing the measurement system, the available options are Metric system (meters, kilometers) or British system (feet, miles, acres).

Curcular ruler – changing the display of elements of the circular ruler in the map window.

Options



Language

English (United States) ▼

Device ID

DE8C76B0-94FB-5476-9408-901437047602

Measurement units

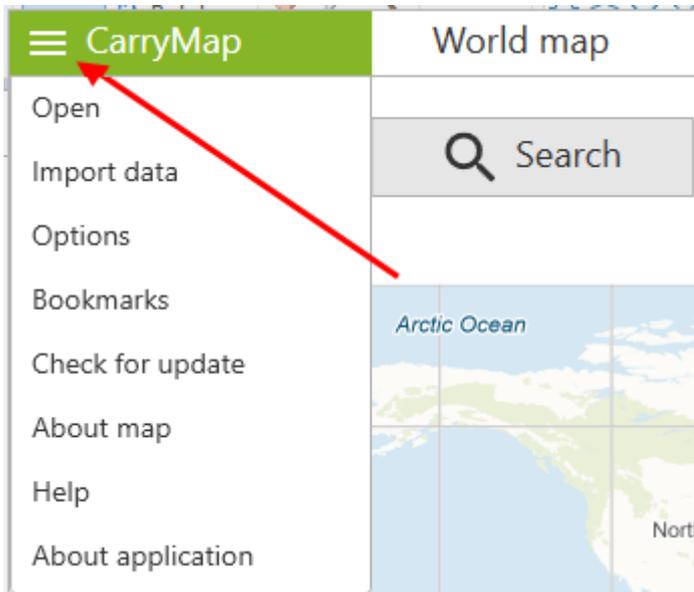
Meters, Kilometers ▼

Circular ruler

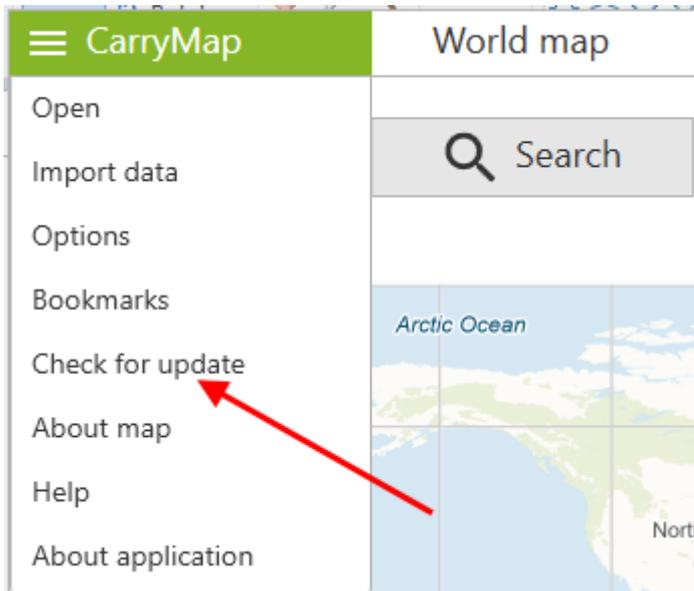
Show circular ruler

Checking for updates

Press *Menu* on the CarryMap panel in the upper left corner.



In the appeared menu press *Check for update*.



The application will check availability of CarryMap updates. In case of finding any newer CarryMap version you will see the appropriate dialog suggesting downloading it.

Support

If you have any questions or comments regarding the CarryMap for Windows use, contact us at support@dataeast.com