RASCL: A Survey Method
Remote Assessment & Survey of Cultural Landscapes

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WHAT IS A REMOTE ASSESSMENT & SURVEY OF CULTURAL LANDSCAPES (RASCL)?
A RASCL is a type of reconnaissance survey. The RASCL method provides a standardized framework within which surveyors can remotely document and assess cultural landscapes.

SURVEYS
Both the Secretary of the Interior's Guidelines for Identification and common practice distinguish between two general levels of surveys: reconnaissance and intensive. Each of these survey methods involve documentary research, as well as field work, but they are different in terms of the level of effort involved.

RASCL METHOD
The RASCL method and process allows for a cursory assessment of a property or a group of properties. It is an adaptation of two methods: the windshield survey that is typically used to inventory historic buildings, and the aerial survey used by archaeologists and natural resource managers to assess sites. A RASCL is conducted remotely, and involves the comparison of historical plans to contemporary aerial imagery. A remote survey can cover a large geographic area in a short time, and is tailored to the scale and orientation of landscape-based resources. This can overcome hurdles to cultural landscape preservation, which include a lack of available staff, resources, and time. A RASCL requires little investment, yet creates a foundational point of departure for future work. It can be used to plan for more detailed surveys, but, for some inventory or planning purposes, a RASCL alone may suffice.

The RASCL method has many benefits, including that it:

- Provides a standardized framework for remote documentation and assessment
- Utilizes free and publicly-accessible tools (e.g. digitized historical plans, Google Earth Pro)
- Overcomes hurdles to cultural landscape documentation and preservation
- Covers a large geographic area in a short time
- Requires little investment
- Results in broad knowledge of location and condition of landscape-based resources

Tools and resources necessary to complete a RASCL:

- Computer
- Connection to the internet
- Adobe Acrobat Reader
- Google Earth Pro
- Historical Plans of Landscape(s)*
  *If the plans have not already been digitized, then a flatbed scanner or digital camera is necessary to digitize them.

MORE ABOUT RASCL
While land uses change, the patterns of streets in an area remain fairly stable through time, and topographic features are generally constant. It can reasonably be expected, then, that most historic properties and cultural landscapes can be identified from an aerial view, if their general location is known. A RASCL is an efficient method for locating, identifying, documenting, and assessing cultural landscapes.
RASCL Instructions

The RASCL method is only useful for observing areas that have been photographed aerially in recent years, and that are not blocked by tree canopies. It is most suitable for the assessment of designed landscapes. If the properties to be surveyed are in rural areas, it would be prudent to conduct a preliminary sample RASCL. Do this to be sure that aerial photographs are available in advance of planning the full scope of work, or compiling historical plans.

At least one involved party should have an understanding of cultural landscape documentation and of the type of resource being surveyed. A RASCL can be conducted by nonprofessionals, as long as training and guidance are provided by the agency that is directing the survey. It can be helpful to make a connection within a state historic preservation office (SHPO), a local preservation group, or other preservation agency (e.g. The National Association for Olmsted Parks).

DOCUMENTATION
The Secretary of the Interior's Standards and Guidelines for Identification specify the kinds of information that should be collected as a result of field survey.

In consideration of these specifications, a RASCL documents:

- The scope of the survey
- The location and boundaries of the properties surveyed
- The types of cultural landscapes (properties) present in the survey
- Specific properties that were identified
- Properties within the scope of work that are no longer extant
- The condition of each property
- Images and sources that support the condition assessment

This section was adapted in part from NR Bulletin 24, which can be accessed here: https://www.nps.gov/nr/publications/bulletins/nrb24/chapter1.htm
AND
https://www.nps.gov/nr/publications/bulletins/nrb24/chapter2.htm
RASCL PROCESS OVERVIEW
1) Create scope of work; determine which properties will be included in the survey
2) Create master list of properties, assign project numbers, and enter this data into a table
3) Using project numbers from step 2; create an organizational system of folders
4) Select and organize historical plans for each property;
   a) name image(s) using the associated project number
   b) save image(s) in a dedicated folder
5) Locate a property using Google Earth Pro;
   a) save aerial image(s) in a dedicated folder
   b) name image(s) using the associated project number
   Do not exit property view in Google Earth Pro.
6) Begin a survey form for a property (refer to RASCL Survey Form Guide for instructions)
   a) Using Google Earth Pro, obtain geospatial coordinates and property boundaries, and document them on the survey form
   b) Insert images into the survey form (pull images from dedicated folders)
   c) Compare the images, assess the property, and complete the description and condition sections
7) Update master list with information for each property
8) Repeat step 5-7 for each project until scope of work is complete

1) CREATING A SCOPE OF WORK
Set the parameters of the survey and define a scope of work. Review the availability of the historical materials required to complete the survey, as determined by the scope of work.

For a RASCL, unlike other survey methods, the scope of work is determined in part by the availability of historical plans and aerial imagery. Historical and contemporary images are necessary for a RASCL to be completed. It can be helpful to title the scope of work (e.g. RASCL for all Olmsted Jobs in Connecticut).

For more information on determining a scope of work, refer to Appendix A.

2) CREATING A MASTER LIST AND ASSIGNING PROJECT NUMBERS
It is necessary to have a master list of project numbers. The master list will provide a sequential index to the properties assigned within each scope of work. The project numbers assigned here must correlate with image file names and with the file name of the survey form. The master list should be created soon after the scope of work has been determined, and before any other survey work begins. Here is an example of a master list template, organized as a chart:
RASCL Instructions

3) CREATING AN ORGANIZATIONAL SYSTEM
After project numbers have been assigned to each property that will be included in the survey, create a dedicated folder for each property. Here is an example of a group of folders, labeled by project numbers. At a minimum, each folder will contain the survey form and the two digital images (historical plan and contemporary aerial photo) that were used to complete the assessment.

4) SELECTING AND ORGANIZING HISTORICAL PLANS OR IMAGES
Select an image that clearly shows the original or early condition of the landscape from an aerial view, scan or download a medium to high resolution image, and incorporate the project number into the file name when saving. If saving more than one historical plan, add a, b, etc. to the end of the file name.

Surveyors should work with overseeing agency to define scope of work and assign project numbers before undertaking the survey and assessments. It is the responsibility of the surveyor to be sure that this chart is completed prior to submitting the completed survey forms.

<table>
<thead>
<tr>
<th>Project #</th>
<th>Title</th>
<th>Date</th>
<th>Designer</th>
<th>Type</th>
<th>Condition</th>
<th>Location</th>
<th>Coordinates</th>
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</table>

NCPTT Revised July 2018
RASCL Instructions

The same project number will be used as part of the filename for the associated survey form and the image from Google Earth Pro. Save the images in their dedicated project folder.

Here is an example of what the contents of a dedicated project folder might look like: a RASCL survey form, one image from Google Earth Pro, and three historical plans for the property.

5) LOCATING PROPERTIES IN GOOGLE EARTH PRO

Download and open Google Earth Pro.

If the property name or location is obvious, simply search for it. The search field is in the top left corner of Google Earth Pro. Refer to Appendix D for more information on viewing past photos of a property in Google Earth Pro.

After the property has been located, use the tools in the top right corner of Google Earth Pro to orient the aerial view to match that of the plan. This will make it easier to compare the images, and then assess the condition of the property.

The tool on the top right will reorient the view, the tool just below it will pan the view, and the tool below that will zoom the view in and out.
The example below shows an aerial view that has been adjusted to the same scale and orientation as the historical plan for the property.

If the property location is not obvious, review the historical plan for any information that could aid in locating the property, particularly street names, intersections, and landmarks.
• When a property is difficult to locate:
  • Look for landmarks that usually change slowly, such as railroad tracks and bodies of water.
  • Remember that there may be errors on historical plans.
  • Remember that road names or property names may have been changed.
  • Invest more time searching for resources that are most likely to be extant (e.g. churches, athletic fields, parks, subdivisions).

SAVING IMAGES FROM GOOGLE EARTH PRO
In the toolbar, click on the place icon to save the current view as an image:
Clicking on the place icon will open a text field in which a title and description of the image can be typed. Because the text box will overlay the saved image, it is better to caption the image in the space provided in the survey form, and not to use this feature of Google Earth Pro.
Click on the *Save Image* button to name the file, and to select file location:

Save the aerial image and name it using the same number as the historic plan or image, while adding \_GE to the end. Include the year the image was created in both the file name and the image caption in the survey form. If saving more than one image from Google Earth Pro, add a 1, 2, etc. after \_GE. For example, a jpg of project number 09635 that shows an aerial view of the property in 2016 could be named: 09365\_GE2016\_1.

This specific naming convention is just a suggestion. However, using a clear and consistent naming convention is crucial in order to keep the files and images associated with each property organized. Be careful not to conflate the file names of the historical and contemporary aerial images.

**After saving the aerial images, do not exit the property view or close Google Earth Pro.** It is most efficient to obtain and document the geospatial coordinates and boundaries of the property now, rather than having to search for the property using Google Earth Pro again at a later time. Refer to Appendix C for more information on how to obtain geospatial coordinates.

6) **COMPLETING THE RASCL SURVEY FORM**

The information herein is supplemental to the RASCL Survey Form Guide. Refer to the RASCL Survey Form Guide while completing the form.
RASCL Instructions

Tips for using the survey form:

- Within the PDF, hover the cursor over text fields to reveal instructions and tips.
- Fill out the survey form completely. Enter “N/A” if a field is not applicable, and enter “unknown” if the requested information is unknown.
- With the exceptions of “N/A”, “ca.”, or cardinal directions (N,S,E,W), do not use abbreviations.
- Keep in mind that the steps of the RASCL process are not necessarily completed in the same order as the fields on the survey form.

DOCUMENTING GEOSPATIAL COORDINATES AND BOUNDARIES

Refer to Appendix C for more information on how to complete this section.

GEOSPATIAL COORDINATES: Obtain and document geospatial coordinates using decimal degrees.

BOUNDARIES: Only document property boundaries. For a RASCL, there is no need to justify these boundaries. Just approximate the location and area of a property. Boundaries may be obtained from both the historical plan and from Google Earth Pro. In Google Earth Pro, activate the Roads layer to reveal street names.

A NOTE ON PROPERTY ASSESSMENT

The Property Assessment section appears before the Image Log section in the survey form. This is the most logical and useful order for the information to appear on the form. However, because the images must be reviewed before the condition of the property can be assessed, it is suggested to the surveyor to insert images in Section III before completing the Property Assessment section.

INSERTING IMAGE FILES INTO THE SURVEY FORM

At this point, images of historical plans and from Google Earth Pro should have been obtained, named using the associated project number, and saved in a dedicated folder. This process makes it easy to locate the images that will now be inserted into the survey form.

INSERTING AN IMAGE FILE

In the survey form, insert the images that were used to complete the assessment.

- Click inside a dashed field
- Click Browse
- Search for and select image
- Click Open
RASCL Instructions

Include a minimum of: 1) an historical image and 2) a contemporary aerial photo. Each caption should include both descriptive information and the image source.

Again, cite all image sources.

Refer to Appendix E for more information on captioning images.
Refer to Appendix F for information on how to alter the Image Log section of the survey form, if necessary.

ASSESSING THE CONDITION OF THE PROPERTY
Assess condition and describe all evident changes and threats to the property. Note changes in landforms, circulation routes, spatial organization, absence or addition of buildings or features, and loss or addition of major plantings, if obvious. If the property is on or near a body of water, or appears to be threatened by encroaching development, please also note that.

Determine the condition of the property, using the following parameters from the survey form:

**Good:** Most historic features extant; none or very few changes or new additions
**Fair:** Some historic features extant; some changes and/or additions
**Poor:** Few historic features extant; many changes and/or additions

A RASCL involves only a cursory assessment of location, design, setting, and, in some cases, materials. Refer to page 22 of National Register Bulletin 30 for further explanation of the qualities of integrity as applied to landscapes: [https://www.nps.gov.nr/publications/bulletins/nrb30/](https://www.nps.gov.nr/publications/bulletins/nrb30/).

Note: When I was testing this method, I compared the two images side by side on one monitor, while I completed the survey form on a separate monitor. This is one efficient way to complete the assessment, if the surveyor has access to two monitors.

UPDATING THE MASTER LIST
Update the master list with the information that was gathered or created during the survey process, including property condition and geospatial coordinates.

Before the survey forms are submitted to the surveying agency, review them for completeness, and be sure that all image sources are cited.
APPENDICES

APPENDIX A: SCOPE OF WORK

A scope of work is determined by:

- The kinds of properties sought (i.e. properties designed by a specific landscape architect)
- the geographic area(s) of concern
- the historic context(s) of concern
- research questions or issues to be addressed with respect to each historic context
- previous research known to have been done
- the types of sources to be used (e.g. archival and aerial images of a property)
- the types of methods to be used (e.g. RASCL)
- the types of personnel likely to be needed
- where possible, expectations about what will be learned, or hypothetical answers

This was borrowed from: https://www.nps.gov/nr/publications/bulletins/nrb24/chapter2.htm

APPENDIX B: LANDSCAPE TYPOLOGY

For guidelines on how to categorize and describe landscape types, consult either National Register Bulletin 16A https://www.nps.gov/nr/publications/bulletins/nrb16a/nrb16a_III.htm, or adopt a standardized list similar to the examples provided below. The scope of work will determine what kind of list is appropriate. The lists below were borrowed then adapted from the National Association for Olmsted Parks Master List of Olmsted Jobs, and the Survey Form Addendum from the Georgia State Historic Preservation Office (SHPO).

**National Association for Olmsted Parks**

Suggested classifications of landscape types and subtypes based on job descriptions used by the Olmsted firm:

- Parks, Parkways, Recreation Areas, and Scenic Reservations (**park**)
- City and Regional Planning and Improvement Projects (**planning project**)
- Subdivisions and Suburban Communities (**subdivision**)
- College and School Campuses (**campus**)
- Grounds of Residential Institutions (**institutional grounds**)
- Grounds of Public Buildings (**public grounds**)
- Private Estates and Homesteads (**estate**)
- Cemeteries, Burial Lots, Memorials and Monuments (**cemetery/lot**)
- Grounds of Commercial and Industrial Buildings (**commercial grounds**)
- Country Clubs, Resorts, Hotels and Clubs (**club**)
- Grounds of Churches (**church grounds**)
- Arboreta and Gardens (**garden**)
- Exhibition and Fairs (**fair grounds**)

This text is a part of the National Center for Parks, Recreation, and Tourism (NCPTT) and was revised in July 2018.
Miscellaneous Projects (misc.)

**Georgia State Historic Preservation Office**

Suggested classifications of landscape types and subtypes as determined by association or use:

**Agriculture/ Subsistence**
- Fields - Crops, Fallow, Pasture, Tree farm
- Processing and Storage Facilities - Barn/Shed/Coop
- Greenhouse

**Commerce & Trade (commercial)**
- Office, Store, Hotel, Food Services (restaurant/bar/caféd)

**Education**
- College/University, Research Facility, School, Library

**Funerary**
- Burial (cemetery, grave, mausoleum, tomb)

**Government & Civic**
- Capitol, Courthouse
- Correctional Facility
- Diplomatic/Embassy
- Fire or Police Station
- Post Office
- Public Works (sewage, waterworks, etc.)

**Health Care**
- Clinic or Hospital
- Sanatorium (nursing home, rest home)

**Industry**
- Corporate (business park)
- Communications
- Energy, Mining, Mill, Waterworks

**Military & Defense**
- Armory, Battle Site, Fortification

**Natural Resource Area or Public Space**
- Conservation Area, Forest, Garden, Park, Plaza/Square

**Recreation, Culture, Entertainment**
- Auditorium, Sports Facility, Theater
- Museum, Fair
- Amphitheater, Bandstand
- Outdoor Recreation Site
- Work of Art in the Landscape

**Religious**
- Ceremonial Site, Religious Facility

**Residential**
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- Camp, Dwelling (single or multiple units), Public Housing, Residential Suburban
- Housing Associated w/ an Educational, Health Care, Military, or Other Institution

Transportation
- Air (ground operations, etc.)
- Pedestrian (path, trail, sidewalk)
- Rail, Road/Vehicular

APPENDIX C: GEOSPATIAL COORDINATES

When the property has been found in Google Earth Pro, document the geospatial coordinates and boundaries so that the property can be easily located and viewed in the future. In the interest of simplicity, clarity and consistency, document the geospatial coordinates of the property in decimal degrees. The default datum in Google Earth Pro is WGS84. Do not alter the default datum.

SETTING FORMAT FOR GEOSPATIAL COORDINATES IN GOOGLE EARTH PRO

To change settings in Google Earth Pro to show geospatial coordinates in decimal degrees:

In Google Earth Pro:
- In the toolbar, select Tools
- Click Options…
- In Show Lat/Long, select Decimal Degrees
- Click Apply
- Click OK
OBTAINING GEOSPATIAL COORDINATES IN GOOGLE EARTH PRO

In Google Earth Pro, select the *Add Placemark* tool, which is represented by a pushpin icon. Move the crosshairs/pin to the desired location. Document the location of the point within the landscape, and then document the latitudinal and longitudinal coordinates, which populate automatically.

Note: In decimal form, northern latitudes are positive, and southern latitudes are negative. Eastern longitudes are positive, and western longitudes are negative.
APPENDIX D: VIEWING PAST IMAGES IN GOOGLE EARTH PRO

The aerial views of some properties can be blocked by tree canopies or shadows. Google Earth Pro keeps a cache of past images that are accessible. As a tip, photos taken during the winter and early spring months provide the clearest views.

To view past photos, click on the icon of a clock face with a counter-clockwise arrow:
APPENDIX E: CAPTIONING IMAGES AND IMAGE ATTRIBUTION GUIDELINES

IMAGES FROM GOOGLE EARTH PRO
All uses of Google Earth content must provide attribution to both Google and Google’s data providers. Attribution information will appear automatically on a high-resolution image file that is exported from Google Earth Pro. The attribution text must be legible to the average viewer or reader. In Google Earth, data providers are listed in the bottom center of the 3D view. In the following example, DigitalGlobe is the data provider:
When an image is saved from Google Earth Pro, the citation will appear by default in the bottom left corner of the image. If the saved image is cropped, thus removing the embedded logo, the surveyor should be sure to properly attribute the image to Google Earth Pro in the image caption section of the RASCL survey form.

For more information, refer to: https://www.google.com/permissions/geoguidelines/attr-guide.html

If source or attribution information for an online image is not obvious, record the URL and the date the image was accessed and saved.

HISTORICAL IMAGES
Most historical material obtained from an archive will be accompanied by information about image use permissions or restrictions, copyright (if any), and attribution. Simply include this information in the image caption section of the RASCL survey form.
In the example below, the attribution is clear: “Please Credit: Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site”.
If the surveyor is uncertain, simply ask someone at the institution that owns the material for guidance on how to correctly attribute the image source.

APPENDIX F: MANAGING IMAGE FILES IN THE SURVEY FORM

REPLACING AN INSERTED IMAGE IN SECTION III
The simplest way to replace an inserted image is just to insert a new image in the field. An inserted image can only be deleted using Adobe Acrobat Pro. To delete an image:

- In the toolbar, click *Tools* to open the Content Panel
- Click *Prepare Form*
- Double click in the image field
- Open the *Options* tab
- Under *Icon and Label Icon:*, click *Clear*
- Click *Close*

CREATING AN ADDITIONAL IMAGE FIELD IN THE FORM
The PDF can be altered in Adobe Acrobat Pro to meet the needs of the agency conducting a RASCL. To create additional fields in which to embed images:

- In the toolbar, click *Tools* to open the Content Panel
- Click *Prepare Form*
- Click *Add Button*
- Using the *Add a Button* tool, draw a button to the desired size the image field
- Double or right click the button to edit the button’s properties
- Open the *Actions* tab
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- From the Select Action drop-down menu, select Run a JavaScript
- Click Add
- Copy & Paste the following JavaScript in the window: event.target.buttonImportIcon();
- Click OK
- Open the Options tab
- Under Layout, select Icon Only
- Click Close

Note: Make sure that the buttons and fields each have different titles, otherwise the inserted image file will populate in all fields that have the same title.