



# Guidelines for the Production and Submission of NWT Archaeological Permit Reports as PDF Files<sup>1</sup>

## Introduction

The Prince of Wales Northern Heritage Centre now requires submission of Final Permit Reports in electronic form, in addition to the two paper copies required by regulation<sup>2</sup>. Adobe's Portable Document Format (PDF) will be the only accepted format for electronic report submission. PDF has become a common standard for the distribution and exchange of electronic documents. It preserves fonts, images, graphics, and layout of a source document, regardless of the application and platform used to create it. PDF files are compact and self-contained, and, provided some simple rules are followed, they can be shared, viewed, and printed by anyone with Adobe Acrobat or Adobe Reader. Adobe Reader can be downloaded for free at <http://www.adobe.com/products/acrobat/readstep2.html>.

Permit reports housed by the NWT Archives are an important source of information in the study and protection of NWT heritage. However, difficulty and expense of access means they are rarely used. Electronic files will facilitate both the dissemination of permit reports and their use in research and heritage resource management. As many consulting archaeologists working in the NWT reside in the south, PDF versions of the reports will allow us to make them available to authorized users through the Internet.

Access to archaeological information can be restricted through the authority provided by the *Access to Information and the Protection of Privacy Act*. We generally restrict access to archaeological site reports to professional archaeologists pursuing research in the NWT. Section 19 of the Act states:

The head of a public body may refuse to disclose information to an applicant where the disclosure could reasonably be expected to result in damage to or interfere with the conservation of

- (a) fossil sites or natural sites;
- (b) sites having an anthropological or heritage value or aboriginal cultural significance; or
- (c) any rare, endangered, threatened or vulnerable form of life.

This document is intended to provide general guidelines for the production of acceptable electronic reports. Given the diversity of software and hardware used by NWT permit holders in the production of reports and electronic files, these guidelines are necessarily generalized. The guidelines will evolve over time as methods of electronic report production become more

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<sup>1</sup> Those familiar with archaeological research in Alberta will recognize the root of this document, as a much of it mirrors the guidelines produced by the Archaeological Survey of Alberta. We are grateful to the ASA, and to Eric Dankjar, author of the Alberta guidelines, for allowing us to reproduce significant portions of their guidelines here. We are also wish to thank Michael Heine, University of Manitoba, who reviewed the guidelines and provided important and helpful suggestions. Revised 20JUN05.

<sup>2</sup> One paper copy must be sent to the PWNHC, and the other must be sent to the Sites Office at the Canadian Museum of Civilization.

standardized, as technology changes, and as our collective experience with PDF production increases. These guidelines are intended to promote standardization where feasible. From time to time we will make revisions to the guidelines and permit holders are encouraged to forward suggestions for improvement.

## **Recommended Software**

PDF specifications have been made public by Adobe so there is a variety of third-party software capable of producing and reading the PDF format. For example, many scanners now include the ability to produce PDF documents. Any combination of software is acceptable providing the resulting PDF file is, minimally, PDF version 1.5 (the most current version is 1.7). This can be verified by going to File>Document Properties>Description when viewing your document in Acrobat.

Several programs provide direct PDF export capability, including: Adobe InDesign, Adobe Photoshop, Adobe Illustrator, Macromedia Freehand, CorelDraw Graphics Suite, and Corel WordPerfect. For technical reasons, this is the preferred method of PDF production.

Other programs can be used to create PDFs through “distillation” of PostScript files using a program like Adobe Acrobat. Microsoft Word and Excel provide a shortcut to this process through buttons on the menu (if Adobe Acrobat is installed). In other programs, you can choose “Adobe PDF” or “Distiller” in the print setup (again, if Acrobat is installed). Alternatively, you can print to a postscript file and then open that using Acrobat Distiller. You should choose Postscript 3 compatibility, where possible.

PDF creation using “PDFWriter”, is not acceptable as it will only produce PDF 1.2 files.

MacOS X 10.4, or later, Direct PDF Generation (using the Quartz engine) is acceptable as it produces PDF 1.5 files. Note that earlier versions of MacOS X produce unacceptable PDF files.

*Adobe Acrobat* is commonly used to generate PDF documents. The current version 7 comes in two main versions: “Standard” and “Professional”. Either should be acceptable. Version 7 brings a number of enhancements and its use is recommended, although Version 6 is acceptable. Once installed, Acrobat becomes available in the toolbars of Microsoft Word and Excel. If it does not appear in the tool bar of, for example, Microsoft Publisher, you can create a PDF by choosing “Adobe PDF” or “Distiller” in the print setup. Acrobat 7 also offers other simple methods for converting documents—see the program documentation for details.

An integrated PDF document with text, tables, scanned images, and drawings is most easily produced with a page layout program like *Adobe InDesign*, *Adobe PageMaker*, *Microsoft Publisher*, or *Quark Express*. *Microsoft Word* can also be used in this way.

## **Submission Formats**

Discs are to be formatted to ISO 9660 standards at the time the disc is burned. This will minimize any cross-platform conflicts.

Discs and files are to conform to the ISO 9660 naming conventions. Both are to be named by permit number, as follows: “2004\_001” for discs and “2004\_001.PDF” for files.

## **CD-R Media**

Each final permit report is to be submitted on a separate CD at the time the paper copy is submitted. Each CD should have the file name marked on the CD. Use non-alcohol permanent markers to label CDs. Such markers, intended for this purpose, are available at computer stores. Adhesive labels are not to be used. Discs should be submitted in plastic jewel cases.

Good quality CD-R discs are essential to long-term storage. CD-R discs using Phthalocyanine dye are recommended, as these are more stable over time than discs using Cyanine dye. Discs with gold base are preferred over silver.

## **Metadata**

Metadata shall be included within each file. In Acrobat, this can be done by going to File>Document Properties>Description. Information to be provided includes: Report Title; Report Author; Subject (i.e., Developer name); and Keywords. Keywords should include: development type (e.g., wellsites, mineral exploration, transportation); relevant cultural affiliations (e.g., Athapaskan, Siglit, ASTt); important artifacts (e.g., microblade, metal projectile point), or significant features (stone ring, driftwood house). Terms should be comma delimited.

Metadata will prove useful for subsequent indexing and searching purposes. The Prince of Wales Northern Heritage Centre will develop more specific metadata standards at a later time, including a controlled vocabulary for keywords.

## **Bookmarks**

Bookmarks are used in PDF documents as an *ad hoc* table of contents and as a means of quickly navigating within a document. Typically, headings and, sometimes, figures, and tables are included as bookmarks. The use of bookmarks is encouraged. Bookmarks can be automatically generated if you use style sheets appropriately in Word or any page layout program.

## **Pagination**

Pages should appear in the same order as in the paper copies. This means that PDF page numbers and the original formatted page numbers may not be the same. It is simple to synchronize the two with Acrobat, and we encourage you to do so.

## **Fonts**

Any Type 1 (i.e., postscript) or TrueType (called OpenType in Windows) fonts may be used but they must be embedded within the PDF file. A subset, rather than the entire font, can be used.

## **Display conventions**

Page sizes and orientations should conform with those in the printed version of the report.

## **External Links**

The use of external links to websites, etc., is not encouraged, as such links tend to be ephemeral.

## **Image Compression/resampling**

Image quality is dependent on both the original image and on any post processing done during the production of a PDF file.

### ***Original Image Quality***

If digital images must be of high quality and in a format likely to be supported for the foreseeable future. As PDFs will be used primarily to recreate paper versions of permit reports, it is important that quality not be compromised through the use of low image resolution.

- JPEG is a widely used digital format. However, there is a loss of information, compared with what the camera captures, and the image is altered every time it is saved. Moreover, JPEG is an evolving compression technology (the latest version is known as JPEG2000). Use of JPEG is discouraged.
- TIFF is the preferred raster format since it retains information for every pixel and the image does not change with use. If you obtain high quality JPEG images with a digital camera, they should be converted to TIFF for insertion into PDFs. Even better is the use of original TIFF images.
- Greyscale or colour images (e.g., photos) are not to be below 300 dpi. Higher resolutions are welcome, within reason.
- Monochrome images (e.g., scanned line art) should be at least 600 dpi and, preferably, 1200 dpi.
- Raster images (photos and scanned line art) are to be in uncompressed TIFF format.
- This will require changes to default settings when PDFs are produced to ensure that TIFFs are not converted to JPEGs, compression methods are not used, and images are not downsampled beyond the above limits. In some cases, this will result in large PDF files. These are intended to be high quality masters from which the PWNHC will produce smaller, compressed copies for distribution.

## **Colour**

Colour management is an important but potentially complex issue. One of the main areas of concern lies with device-specific rendering of colour on a monitor (RGB colourspace) as opposed to printed media (CMYK colourspace). An image with well-balanced colour on a monitor may print with unsuitable colour on a laser printer. Also, if colour specifications are device-dependent, they will appear different on various monitors or printers.

Colourspace should be specified in a device-independent manner. ICC colourspaces must not be used, or embedded. We will endeavour to provide more detailed instructions in future updates to these guidelines.

## **Conformity**

PDF submissions will be reviewed for compliance with these guidelines. It is therefore important that the report author retains the original documents from which the PDF was created, at least until the final report is accepted.



## **Guidelines for the Production and Submission of NWT Archaeological Permit Reports as PDF Files**

### **All PDF submissions should meet the following specifications:**

- Files should be PDF version 1.5, 1.6 or 1.7.
- CDs should be formatted to ISO 9660 standards.
- CD name should be in the following format: 2004\_001.
- File name should be in the following format: 2004\_001.PDF.
- High quality CD-R media using Phthalocyanine dye should be used.
- Non-alcohol permanent markers should be used to label discs, rather than adhesive labels.
- Metadata should include: report title, report author(s), developer's company name (under "Subject"), and keywords (development type, cultural affiliation, significant artifacts).
- Bookmarks are encouraged but not mandatory.
- Pages must appear in the same order as in the text copy.
- Type 1, TrueType, and OpenType fonts may be used and must be embedded in the file.
- Page sizes should be the same as in the printed copy.
- No external hyperlinks.
- Photograph resolution must not be less than 300 dpi.
- Monochrome raster images (line art) must not be less than 600 dpi.
- Uncompressed TIFF images are required.
- Colourspaces should be device-independent and ICC profiles should not be embedded.
- PDFs are to be submitted at the time paper copies of final reports are submitted.

These guidelines are intended to ensure interoperability, predictability and quality control for purposes of printing copies of reports, and with a view to archival requirements. International standards are being developed for archival PDF files and the Prince of Wales Northern Heritage Centre will meet those standards through future updates to these guidelines.

If you have any questions regarding PDF submission standards, please contact Tom Andrews at 867-873-7688, or [tom\\_andrews@gov.nt.ca](mailto:tom_andrews@gov.nt.ca).

Some useful PDF resource sites include:

<http://www.adobe.com/products/acrobat/adobepdf.html>

<http://www.pdfzone.com/>

<http://www.planetpdf.com/>

[http://www.planetpdf.com/planetpdf/pdfs/pdf2k/03w/isaacs\\_reliablepdf1103.pdf](http://www.planetpdf.com/planetpdf/pdfs/pdf2k/03w/isaacs_reliablepdf1103.pdf)