

# Graphics Reference Manual

Denver Service Center

Planning / Publications Division

National Park Service  
U.S. Department of the Interior



## Denver Service Center

---

National Park Service

January 2010

# CONTENTS

Scope of work	1
Deliverables	3
Basic important steps	5
Divider pages and samples	6
Front cover	7
samples	8
Maps	9
samples	9
Photos	11
Printing requirements	12
Text	13
Tips and notes	14
Appendices (information from NPS graphic design standards technical series)	15
How to use the standard NPS typefaces	
Basic guidelines to typesetting	
Suitability standards for digital photographic images	
Important details and definitions	
Resolution, color space, and file types	
Graphic identity program (see <a href="http://www.graphics.nps.gov/cfml/template">www.graphics.nps.gov/cfml/template</a> )	



## **SCOPE OF WORK FOR GRAPHICS**

This relates to the Scope of Work for Graphics work when producing printed and digital documents for the National Park Service.

The purpose of this information is for developing and producing newsletters, brochures, documents and other printed materials and items that may be posted on the internet for review, public information, or other uses. The proper software and digital formats must to be provided for production of these items.

NPS requirements may include preliminary roughs, final graphic data from other sources, digital files from Adobe Illustrator, Adobe Photoshop, and production ready files from Quark Xpress or Adobe In Design software programs.

The NPS identity program has instituted the use of Adobe Type, Frutiger Std, and a proprietary font - NPS Rawlinson OT throughout the NPS system. A contractor shall acquire a license from the Adobe Type library for all Frutiger Std. Screen and printer fonts for NPS Rawlinson OT faces will be provided by the government, with guidelines for their use.

Other fonts that may be used on a limited basis are Adobe Type library Helvetica Neue 2; 55 (roman), 56 (italic), 75 (bold), 76 (bold italic); Hevetica Neue 1; 95(black), 96(black italic); Helvetica Neue 3; 45 (light), 46 (light italic), 65 (medium), and 66 (medium italic), or Postscript type-1 Times Ten: roman, italic, bold, and bold italic from ght 62 Linotype-Hell AG source.

Data will be transferred via CD, or DVD disks, or via File Transport Protocol (FTP address will be provided as needed).

If contractor is going to be assisting with review processes and working with the PEPC system, the individual from the contracting firm must complete the proper paperwork for Security. This will be provided by the DSC COTR.



## DELIVERABLES

Deliverables to be provided at different project stages:

1. DSC/Park Review Draft. The contractor shall provide 1 electronic copy in MS Word format for the text to the DSC technical representative for acceptance and approval to produce the document for DSC and park review. Files for any graphics or images must be provided separately or in native file formats. Following approval by the COTR:
  - a. submit 1 electronic copy of MS Word text file and accompanying graphic files, and 1 electronic copy in high quality pdf format on CD-ROM to the DSC COTR.
  - b. provide electronic copies to the DSC COTR.
  - c. provide 6 paper copies to the DSC COTR.
2. NPS Regional Review Draft. Following review and approval of the DSC/park review draft:
  - a. provide 10 bound paper copies and 1 electronic copy of MS Word text file and separate native graphic files, and 1 electronic copy in pdf format (compatible with Acrobat 6.0 and above, and 5 MB or less, broken into separate files as needed) on CD-ROM to the DSC COTR, 12795 West Alameda Parkway, Lakewood, CO 80225.
3. Public Review. Following review and approval of the NPS regional review draft:
  - a. Provide 4 bound paper copies, 1 unbound camera-ready copy printed on one side only, 3 CD-ROM copies of the following for the document 1) all native files for images, maps and layout - i.e., tiff, ai, or eps formats) in MS Word, Quark Xpress, or Adobe In Design formats and 2) a high resolution (300-400 dpi, press ready) PDF , compatible with Acrobat 6.0 and above, and 3) a lower resolution PDF (72 dpi) for publishing on the internet) - 5 MB or less, broken into separate files as needed. Also 1 electronic copy of the text only in MS Word format on CD-ROM to: the DSC COTR, 12795 West Alameda Parkway, Lakewood, CO 80225
  - b. Provide 50 of bound paper copies to individuals on mailing list provided by the park. The park superintendent will provide a transmittal letter to be included in each public review document distributed.
  - c. Provide 25 bound paper copies for distribution by the park to the park superintendent.
  - d. Provide electronic copy in pdf format on CD-ROM to DSC COR (5 MB or less, broken into separate files as needed) for posting on the internet.
4. DSC Review Draft FONSI. The contractor will provide 1 electronic copy in MS Word format to the DSC COTR.
5. NPS Review Draft FONSI. Following review and approval of the DSC review draft FONSI:
  - a. Provide one (1) electronic copy of the entire document (including separate image files or native files - i.e., tiff, ai, or eps formats) in MS Word, Quark Xpress, or Adobe In Design format on CD-ROM to the DSC COTR.
6. Final FONSI. Following review and approval of the NPS review draft FONSI:

- a. Provide 2 paper copies (1 bound and 1 unbound) and 1 electronic copy of the entire document (including separate image files or native graphic files) to: DSC P, 12795 West Alameda Parkway, Lakewood, CO 80225.

#### 7. Administrative Record

- a. Provide original administrative record to the park and 1 copy to the DSC project manager (PM).
- b. The contractor will maintain an organized and complete administrative record for the project and submit this record to the DSC project manager at the conclusion of this task/delivery order. At a minimum, items to be kept include meeting notes, technical data/sources consulted, correspondence, minutes of meetings, records of phone calls, e-mail correspondence, documentation of public involvement efforts, and copies of draft documents prepared under this scope of services.

## BASIC IMPORTANT STEPS

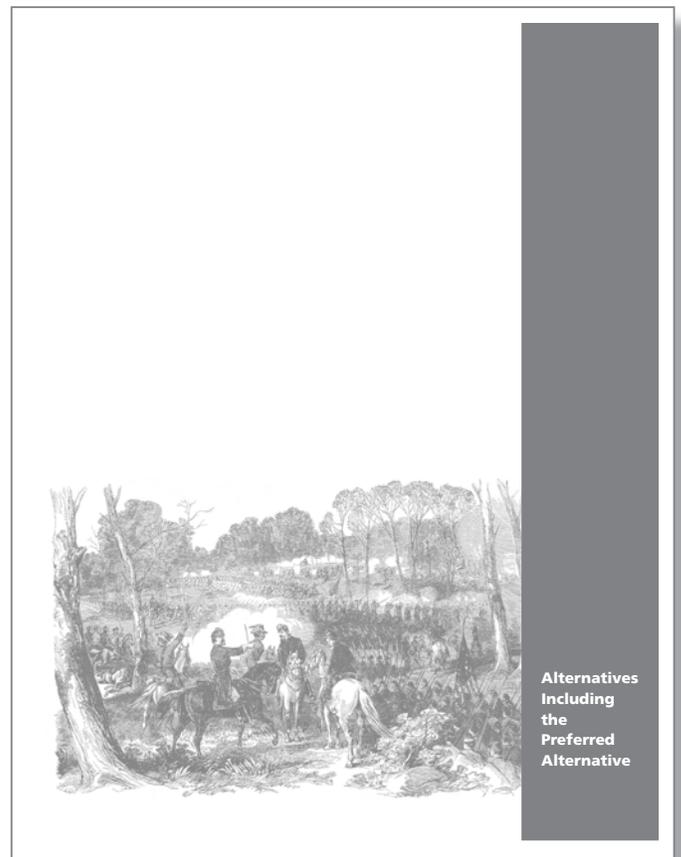
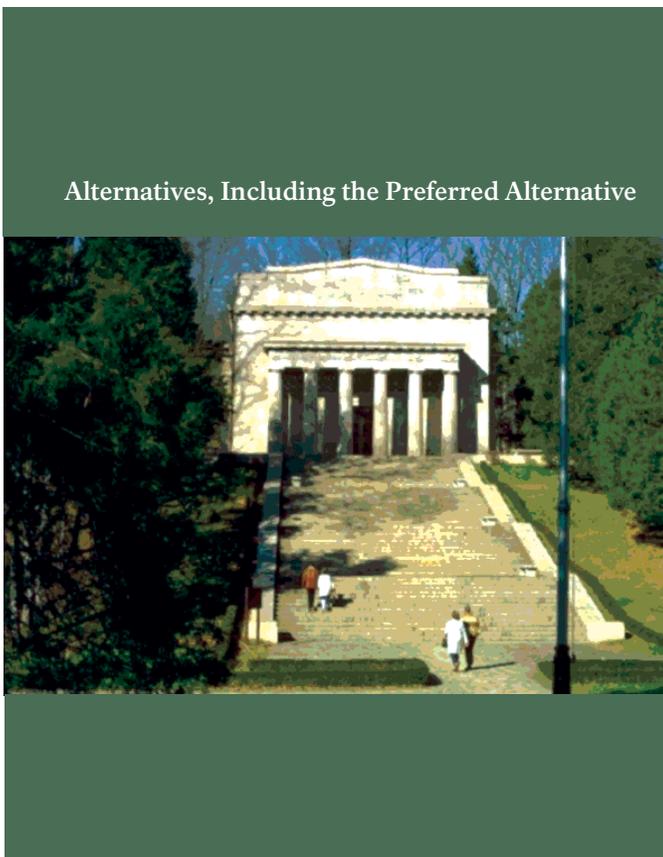
- 1) Documents should be produced in one of the following software programs:
  - Adobe In Design CS3
  - QuarkXpress (no earlier version than 7)
  - Microsoft Word
- 2) The size and shape of documents should be:
  - 8 1/2" X 11" page size (portrait **or** landscape)
  - (rarely used) 11" X 17" (portrait)
- 3) Determine (**by cost**) if document to be printed in (and all files included should be in accordance):
  - black only
  - 2-color (black + one Pantone PMS color)
  - 3-color (black + 2 Pantone PMS colors)
  - 4-color process (CMYK)
  - Full or partial bleeds - When determining bleeds on cover or inside pages, consider cost, as they are more expensive.

This can be divided in the following 4 ways:

  - entire document in black (Cover, divider pages, maps, and text)
  - maps in 2, 3, or 4-color process and text, cover, and divider pages in black
  - maps, cover, and divider pages in 2, 3, or 4-color process and text in black
  - *entire* document in 2, 3, **or** 4-color process
- 4) Provide all original electronic files separately from the document (this includes photos, maps, charts, tables, diagrams, and logos).
- 5) Provide high resolution pdf file from desktop publishing file at completion.
- 6) Contractor credits are listed in the Preparers section or inside back cover.
- 7) Make sure every document contains:
  - recycled symbol with "Printed on recycled paper" in 7 or 8 pt. type.
  - document number (obtained by calling 303-969-2130 or e-mail to TIC-Request@nps.gov, Technical Information Center at Denver Service Center)
  - numbers on each map (obtained by calling 303-969-2130 or e-mail to TIC-Request@nps.gov, Technical Information Center at Denver Service Center)
- 8) GIS maps
  - all GIS maps should be converted to Adobe Illustrator format
  - before converting, patterns should be changed to solid colors to eliminate size of file
- 9) Use of NPS Arrowhead: To obtain the NPS Arrowhead electronic files and for design standards go to [www.graphics.nps.gov/arrowheads](http://www.graphics.nps.gov/arrowheads) on the web. Information is also located in the Director's Order #52D: Use of the Arrowhead Symbol. This web site contains types and use for the NPS arrowheads. Double-click on one of the 5 styles and follow the instructions to download your specific platform.

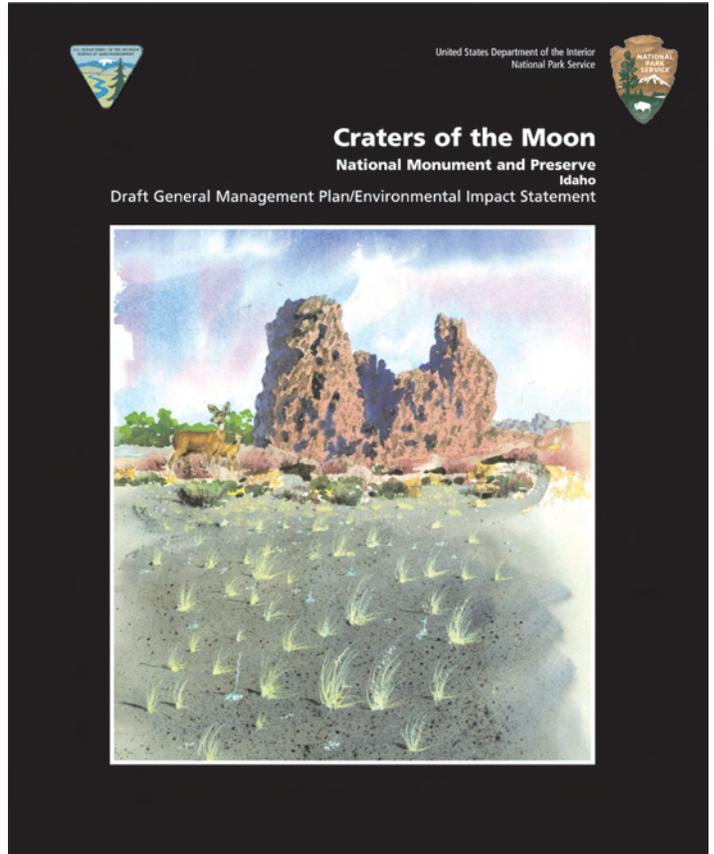
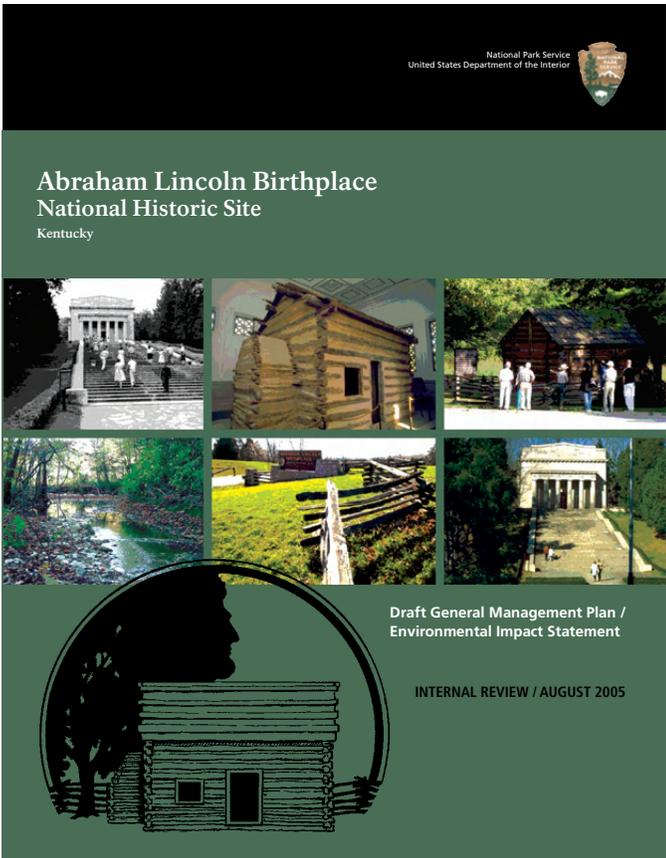
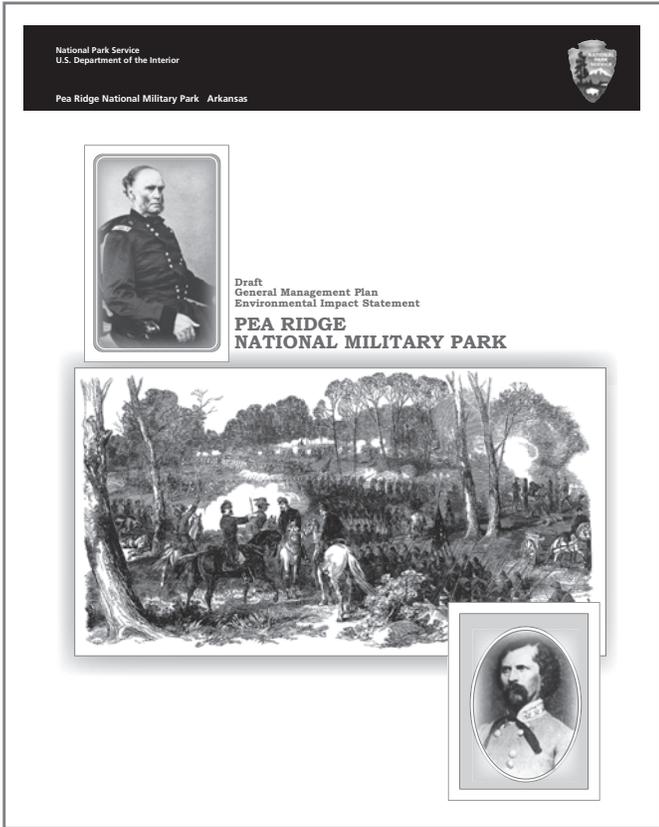
## DIVIDER PAGES

- 1) Positioned always on right side of document (odd number page)
  - back is usually blank, unless caption or credit of image of front of divider is needed
- 2) Determine **(by cost)** if document to be printed in (and all files included should be in accordance):
  - black only
  - 2-color (black + one Pantone PMS color)
  - 3-color (black + 2 Pantone PMS colors)
  - 4-color process (CYMK)
- 3) Can be full or partial bleed / or white space
- 4) Consist of photo(s) or illustration(s) or combination
- 5) Text
  - no page numbers
  - chapter number and heading  
(determine longest heading and keep font size the same throughout the document)



Samples of divider pages  
reduced from 8 1/2" X 11"





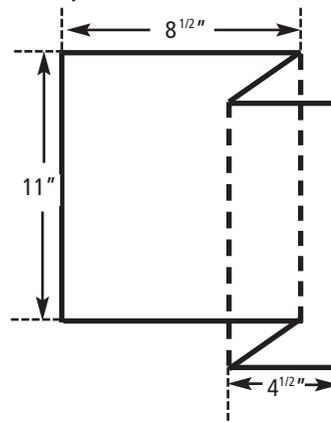
Samples of covers  
reduced from 8 1/2" X 11"

## MAPS

- 1) Maps should be produced in Adobe Illustrator CS3, unless too complex to re-create as a vector file. (ex: several patterns, textured, or colored areas that would be too time consuming to convert). If possible, these maps should have the title, legend, and scale standardized (see page 7 in this section).
- 2) If an image is placed in Adobe Illustrator file (such as a topographic relief), provide this file with finished materials.
- 3) Format:
  - Size should be 8 1/2" X 11" page size (portrait or landscape, but read with same positioning as text pages) and rarely bleeds (white border around edge)

**or**

  - 11" X 17" foldout (for placement in 8 1/2" X 11" portrait document, accordian fold to 8 1/2" X 11" X 4 1/2" X 4 1/2" (see sample below).



- 4) Determine size, color, and weight by importance. This includes roads and highways, text, symbols, boundary lines, etc.
- 5) Leaders from text to object should not cross one another.
- 6) Text:
  - Use NPS RawlinsonOT or Frutiger Std. fonts in different sizes. Larger size should emphasize importance, but font size should not be smaller than 7 pt.
  - All text should be spaced or grouped in readable manner (do not crowd). If long descriptions are needed and there is not enough space available within the map, consider numbering map with coordinating description on facing page.

7) Title:

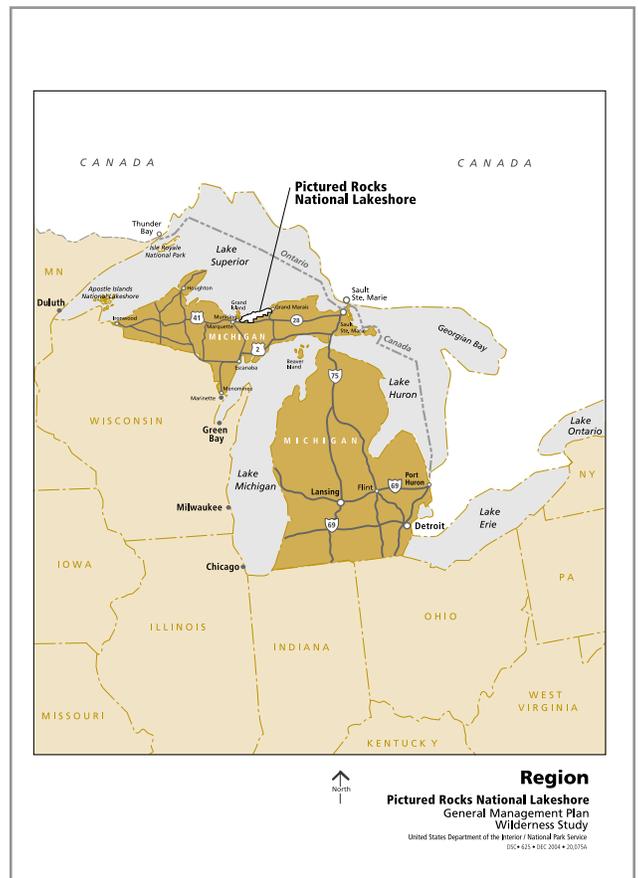
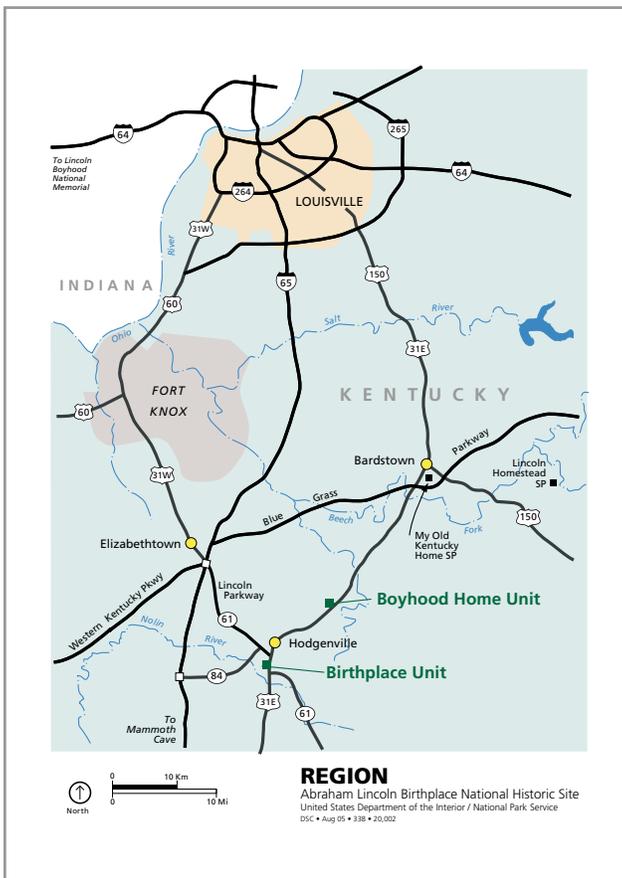
- Positioning - preferably at the lower right corner (at least 1/2" from right and bottom edge). (If foldout, title should show after folded on 4 1/4" right end (see diagram on previous page).
- Work with longest title for length to determine size of font, then make all other titles of maps in document the same size
- Should consist of 4 lines (in all caps **or** upper and lower case):
  - Line 1, map name: (ex: *Alternative 1* or *Region*) 18- to 24- point size
  - Line 2, park full name: 14 to 16 point size
  - Line 3: *National Park Service / U.S. Department of the Interior* 10 to 12 point size
  - Line 4, map number and date: 8 point size

SAMPLES BELOW:



## ALTERNATIVE B

Abraham Lincoln Birthplace National Historic Site  
United States Department of the Interior / National Park Service  
DSC • Aug 05 • 338 • 20,005



Samples of maps  
reduced from 8 1/2" X 11"

# PHOTOS

## COLOR:

- 1) Black only
  - mode should be grayscale
  - resolution should be at least 225 dpi at printed size (no enlargements made from original)
- 2) 2-color process (duotones)
  - mode should be duotone (black + one Pantone PMS color)  
**Note: the same PMS color needs to be used for the entire document.**
  - resolution should be at least 225 dpi at printed size (no enlargements)
- 3) 4-color process (CYMK)
  - mode should be CYMK
  - resolution should be 300 dpi at printed size (no enlargements made from original)

## LAYOUT:

- Positioning with text:

When using this format, all photos should be positioned with related text if possible. If photo does not fit within the page, page number should be referenced. (Ex: see the following page or see page 55 in Editing Reference Manual.)

**Note: never position a photo before it is referenced in the text.**
- Positioning with individual pages:

All photos should be placed with good composition and layout (consider balance, size, style of document, captions, coordinating images and spacing).

## PRINTING REQUIREMENTS

When job is completed and prepared for printing, distribute entire job to your Project Manager (PM) and the assigned COTR (Glenda Heronema, Graphics Dept., DSC).

All printing jobs are required by the Joint Committee on Printing, Congress of the United States, US Code Title 44, to be processed through the Government Printing Office. Contact Glenda Heronema (glenda\_heronema@nps.gov) to process the required GPO forms and provide all materials required to publish the job.

All proofs need to be approved by the PM and the assigned COTR (Glenda Heronema, graphics dept. at the DSC).

- 1) Provide to Publications Division:
  - All electronic files, positioned in the desktop publishing file **and** provide each file separately (this includes tif, jpegs, eps, and pdf files)
  - All fonts used\* (includes fonts used in every image; i.e., maps, charts, diagrams)
  - Printer's dummy (a printed copy from original files) is used for positioning of pages and marked or indicated for color used on each page
  - instructions and description of programs and name of files and fonts used (forms can be obtained from Glenda Heronema (glenda\_heronema@nps.gov))

**Below are the specifications for weight of paper and binding requirements, to be determined by COTR of the Publications Division:**

- 2) Weight of paper for documents:
  - for cover and divider pages: 65 lb. white matte coated cover, recycled paper stock
  - for text pages: 70 lb. white matte coated recycled paper stock
  - for maps: 70 lb. white matte coated recycled paper stock
- 3) Bind:
  - Saddle-stitch
  - Perfect bind (provide spine art if width of spine allows)
  - Wire spiral bind

*\*NOTE: Some font software may have specific restrictions for copying and distribution. Please consult the license agreement for each font vendor. If you provide fonts for the printer, you are in compliance with and take full responsibility for complying with the requirements of such third-party agreements.*

## TEXT

- 1) Font styles\* and sizes: see *Editing Reference Manual*, page 57
- 2) Page numbers: see *Editing Reference Manual*, page 68
- 3) Columns: see *Editing Reference Manual*, page 79
- 4) Tables: see *Editing Reference Manual*, page
- 5) Captions: see *Editing Reference Manual*, page
- 6) Headings: see *Editing Reference Manual*, page

### LAYOUT:

- 7) Images:
  - Positioning with text:  
When using this format, all images should be positioned with related text if possible. If image does not fit within the page, page number should be referenced. (Ex: see the following page or see page 55 in *Editing Reference Manual*.)  
Note: never position an image **before** it is referenced in the text!
  - Positioning with individual pages:  
All images should be placed with good composition and layout (consider balance, size, style of document, captions, coordinating images and spacing).

*\*Note: Contact Glenda Heronema, (glenda\_heronema@nps.gov) to provide NPS Rawlinson OT font, but contractor will need to purchase Frutiger fonts.*

*Frutiger fonts may be purchased from the web site by searching for "Adobe Frutiger Std fonts". The full range of weights, italics, and condensed versions of Frutiger may be used.*

*The full range of NPS Rawlinson OT can be used.*

## TIPS AND NOTES

- 1) Resolution should be at the original scan. DPI (dots per inch) **cannot** be increased beyond original.