#### **ELECTRONIC FILE DELIVERABLES**

### **PART 1 - GENERAL**

#### 1.1 GENERAL

- 1.1.1 <u>Requirement</u>: All drawings, specifications, photos, and other electronic documents submitted to the U.S. Coast Guard (USCG) must adhere to the following specifications. Electronic deliverables not meeting these requirements will be rejected. All electronic deliverables shall be submitted to the Contracting Officer, unless otherwise directed by the Contracting Officer.
- 1.1.2 <u>Electronic Media</u>: Work may be submitted on any of the following electronic media (given in order of USCG preference): CD-ROM disc in JOLIET or ISO 9660 format; 100 MB Iomega Zip disk cartridge; or 1.44MB (3.5") disk. The format of the magnetic disks shall be MS-DOS Extended FAT. FAT-32 format disks are not acceptable. In order to speed contract execution, interim submissions of electronic deliverables via electronic mail may be directed by the Contracting Officer. In all cases submission of final deliverables shall be on physical media.
  - A. Disks shall be submitted with the final hard copy of the drawings and specifications or other documents. No disk shall contain documents from more than one USCG project.
  - B. If 3.5" floppy disks are used, drawing files, specification files, photo files, and other files shall be segregated by submitting them on separate disks. In the case of using Iomega Zip or CD-ROM media, all files shall be contained on the same disk and shall be stored in different folders (i.e. folders named 'drawings' for drawings, 'specifications' for specifications, 'photos' for photos, etc.).
  - C. Physical media shall not contain compressed or "zipped" files.
  - D. If so directed by the Contracting Officer, files shall be delivered via email attachment. Emailed files shall be "zipped" into compressed archive files using the PKWare<sup>TM</sup> .zip file format. No single email may exceed 2 MB in size. If the submission is greater than 2 MB, then it shall be broken into multiple 2MB .zip files and each .zip file shall be mailed in separate a email message. The primary email message shall contain a manifest of the delivered files including all information described in paragraph 1.1.3.
- 1.1.3 <u>Media Labels</u>: All disks submitted to the Coast Guard will be marked with a complete project description, project number, all file names (only on floppy), date of the submission, submittal percentage, disk format capacity.

- 1.1.4 Electronic File Size: All files delivered shall be of a reasonable size. Reasonable size means the size that a file would be if a professional computer user prepared the document applying high standards of workmanship and care. In most cases document files of excessive size are caused by improperly inserted bitmap images or inserting bitmap images with excessive dots per inch (dpi) ratios. Drawing files of excessive size are generally caused by incorrect hatch pattern scaling or by a drawing not being fully purged and then 'wblocked'. Deliverables containing files of unreasonable size will be rejected. To define expected reasonable size each file type covered in this specification is given a normal file size and a maximum file size limit in megabytes (MB). The USCG expects that file sizes will be near normal size in most cases. Files of a size near the maximum size are considered an extreme case and are due to a special situation that cannot be mitigated. In any case, deliverables with a file of a size greater than the given maximum file size limit will be rejected unless prior approval is obtained from the Contracting Officer.
- 1.1.5 <u>Computer Viruses</u>: All delivered files shall be free from known computer viruses. Due diligence must be exercised. Deliverables containing viruses shall be rejected.
- 1.1.6 <u>Copyrighted Material</u>: No delivered files shall contain copyrighted material. Material in delivered files shall be in the public domain and be freely usable and copyable without threat of copyright infringement. If the Contracting Officer specifically directs that copyrighted materials be delivered electronically, the contractor shall 1) pay all license fees for the copies delivered, 2) clearly mark the materials as copyrighted, 3) indicate on the delivery media that it contains copyrighted material, and 4) mark the materials with the limitations of use.
- 1.1.7 <u>Rejection of Deliverables</u>: As stated in paragraph 1.1.1, deliverables not meeting the requirements of this specification section will be rejected. The contractor will be required to correct and resubmit deliverables which meet the requirements of this specification section. Rejection may be in whole or in part at the discretion of the Contracting Officer. The Contracting Officer will provide a punch list of items requiring correction.
- 1.1.8 Government-Furnished Materials: It is the Government's intention to provide electronic materials to the Contractor which meet the specifications stated herein. The Government, however, reserves the right to furnish electronic materials to the Contractor which are not in conformance with these specification if it is in the best interest of the Government. The Contractor shall bring any Government-furnished materials into compliance prior to submitting them as contractually required electronic deliverables. Any effort by the Contractor to bring Government-furnished materials into compliance, must be included in the bid or fee proposal and shown as a separate line item titled 'GFM Compliance Effort'. The Government will notify the Contractor that it intends to furnish materials not meeting this specification at the time the IFB or RFP is issued.

### 1.2 DRAWINGS

1.2.1 <u>General</u>: All drawings shall be generated electronically using AutoCAD Version 2000i or 2002 or shall be converted from other drawing formats into an AutoCAD binary drawing file (\*.dwg) before being submitted.

### 1.2.2 File Format:

- A. AutoCAD 2000i or 2002 drawing (.dwg) files are the only acceptable drawing file format.
- B. No external references (XREFs) may be included in the completed drawing. Prior to submission all XREFs shall be bound to each drawing file using the 'insert' method.
- C. Drawings which have image files attached shall be delivered with all the attached images. Attached image files shall be named with the drawing name as a prefix and image number as a suffix (e.g. S-1234-A1-001.tif, S-1234-A1-002.jpg, S-1234-A1-003.gif, etc). See paragraph 1.2.3 below for drawing file naming conventions. Attached images shall not have the folder path stored but shall reference the images out of the same folder as the drawing file. Valid image formats and resolutions are shown below in paragraph 1.5.
- D. Color, Lineweight, and Plot Style shall be assigned to drawing elements 'BYLAYER' or 'BYELEMENT'. Using colors to assign lineweights at plot time is not acceptable unless otherwise approved by the Contracting Officer. See paragraph 1.2.11 for using color to assign 'halftone' at plot time.
- E. The number of layers shall be kept to a practical minimum. More than 30 layers are considered excessive in a completed drawing. Layer names shall adhere to the <u>NIBS National CAD Standard</u> version 2.0 or later.
- F. All completed drawings shall be fully purged of unused styles, layers, blocks, etc. All completed drawings shall be 'WBLOCKed' to a new file to remove any and all unused data and to insure a minimum file size.
- G. All files shall be stripped of 3<sup>rd</sup> party application data (including proxy images). Drawings that display error messages on USCG computers about missing applications will be rejected.
- H. Files converted from other formats shall be checked by the contractor or A/E using the AutoCAD program for suitability and completeness prior to delivery to the USCG.
- I. Only one drawing shall be in each drawing file. This restriction can be excepted in the case of floor, site, or other plans that span multiple sheets. In

- this case the full floor or site plan shall reside in model space and each drawing title block shall be in a separate paper space layout.
- J. Submitted drawings shall be final and an exact representation of the submitted hardcopy drawing. When the file is opened up, no manipulations shall be required to plot the finished drawing.
- 1.2.3 <u>Drawing File Names</u>: Drawing files shall be named by the following conventions.

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Example Drawing File Names:
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s-3292-2.dwg
s-8765-c2.dwg
s-8765-c2-rev2.dwg (revision 2)
s-2543-a3-a6.dwg (multiple sheets per file)
s-3456-a2.1.dwg
s-3456-a2.1-asbuilt.dwg (asbuilt)
s-6543-s3.1-s3.4.dwg (multiple sheets per file)
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NOTE: The first letter shall be the drawing sheet size followed by a four-digit drawing number <u>assigned by the Coast Guard</u>, and the last digit shall be the sheet number (either by serial number (e.g. 1, 2, 3, etc) of the sheet or by discipline sheet number (e.g. a1, a2, c1, c2, etc). In the case of multiple sheets per file indicate the range of sheets contained in the file (e.g. 5-9 or a1-a4). See paragraphs 1.2.12 and 1.2.13 for details on revisions and asbuilts. The assigned drawing number will be provided by the Contracting Officer.

- 1.2.4 <u>Text</u>: The primary font shall be "**ROMANS**". The TrueType<sup>TM</sup> font Arial may be used for detail, section, elevation and plan titles. No third party or other Windows<sup>TM</sup> fonts are acceptable. Drawings delivered with fonts other than those described herein will be rejected
  - A. Minimum actual plotted text size on full size sheets shall be 1/10" in order for the text to be readable on half size drawings. Minimum text size for dimensions shall be 1/10".
  - B. Text shall be set to either a thin or medium lineweight. See paragraph 1.2.9 below for lineweight designations.
- 1.2.5 <u>Final Hard Copy</u>: The final hard copy drawings shall be plotted on 20 lb white bond or double matte, 4 mil mylar as directed by the contracting officer. Drawing sizes are as follows:
  - "L" size 8 ½" x 11" (ANSI A)
  - "H" size 11" x 17" (ANSI B)
  - "M" size 17" x 22" (ANSI C)
  - "S" size 22" x 34" (ANSI D)

- "F" size 28" x 40" (ANSI F)
- "E" size 34" x 44" (ANSI E)

NOTE: The S size drawing shall be used for all full-size engineering and architectural drawings, unless otherwise approved by the Contracting Officer. The drawing number provided by the Contracting Officer will indicate the size of the drawings.

- 1.2.6 <u>Title Block</u>: An electronic copy of a title block and paper space layout will be <u>supplied by the Coast Guard</u> (via internet download). Title blocks in the form of AutoCAD drawing templates may be downloaded from the CEU Juneau web site (http://www.uscg.mil/mlcpac/ceujuneau). The title block is supplied as a block with associated attributes. <u>The title block shall be used as is, and not modified in any way</u>. The title block will always reside in paper space. The information in the title block shall be entered using the AutoCAD attribute editing routines or by using the USCG CECADD Title Block Assistant program which can be downloaded from the CETC web site (http://www.uscg.mil/mlclant/cetc). Drawings submitted with modified, renamed, exploded, or model space title blocks are unacceptable and will be rejected. The title block contains the USCG project number. <u>The USCG project number will be provided by the Contracting Officer</u>. See Figure 1 at the end of this specification for a sample of a completed title block.
- 1.2.7 <u>Scale</u>: All site plans, plot plans, floor plans, contour maps and other drawings of this type shall be drawn to actual size in model space. The actual drawing scale will be determined by an exact setting of the paper space viewport scale. Use standard engineering/architectural scales in all cases.
  - A. The exception to the 'standard scale' rule is state and vicinity maps.
  - B. Site and plot plans shall be plotted at the largest engineering scale possible to fit on the desired sheet.
  - C. Each sheet shall contain a graphic scale for each different scale used on that sheet.
  - D. If any portion of a drawing is not drawn to scale, that drawing shall be marked 'NOT TO SCALE'.
- 1.2.8 <u>Model Space/Paper Space</u>: All submitted drawings shall be drawn to actual size and shall reside in AutoCAD 'model space'. All title blocks, sheet borders, general notes, and other general annotation will reside in 'paper space'. Drawings that are schematic in nature or state and vicinity maps may also reside in paper space.
- 1.2.9 <u>Lineweights</u>: Only the following lineweights, which are according to the <u>NIBS</u> National CAD Standard version 2.0 and the Tri-Services CAD Standard, will be used.

Lineweight Description	Pen Width (in.)	Pen Width (mm.)	
Fine	0.007	0.18	
Thin	0.010	0.25	
Medium	0.014	0.35	
Wide	0.020	0.50	
Extra Wide	0.028	0.70	
Option 1	0.040	1.00	
Option 2	0.055	1.40	
Option 3	0.079	2.00	

- 1.2.10 <u>Line types</u>: Only line types as defined by the <u>NIBS National CAD Standard</u> version 2.0 or later shall be used. The LTSCALE factor shall be set to one (1). The PSLTSCALE factor shall be set to one (1). This allows the line type scale to be set automatically by the paper space viewport scale.
- 1.2.11 <u>Halftone</u>: Until the USCG adopts a Named Plot Style standard, halftoned or screened elements shall be assigned a specific color to allow halftoning of elements at plot time using a Color-Dependent Plot Style table. The following colors are reserved and to be used exclusively for halftone purposes: 8, 17, 18, 37, 38, 57, 58, 77, 78, 97, 98, 117, 118, 137, 138, 157, 158, 177, 178, 197, 198, 217, 218, 237, 238, 250, 251, 252, 253, 254, 255. Colors shall be assigned as specified in paragraph 1.2.2.D.
- 1.2.12 Revisions: Revisions made to approved drawings shall be noted using revision marks, revision clouds, and heavy lines as defined in the NIBS National CAD Standard version 2.0 or later. In general changes shall be indicated by crossing out the original drawing elements and drawing in the change. For each revision the issue block in the title block shall record the revision mark number, revision date, revision description, and reviser initials. Revisions shall also record handwritten USCG approval signatures, initials, approval signature date, and any reviser initials in the title block or issue block using block lettering. See Figure 1 at the end of this specification for a sample of a revision cloud, revision mark, and a completed issue block. Revisions shall only be made to a copy of the original or previously revised electronic CAD file. The revised file shall be named using the original file name appended with "-rev1", "-rev2", etc to indicate the number of the revision (e.g. s-8765-c2-rev1.dwg). Due care shall be taken to insure that no changes are made to the electronic files between the original or revised issue and the next revision. No revisions shall be made to hardcopy drawings. Revised drawings shall be initialed in the issue block in blue indelible ink by a registered professional.
- 1.2.13 <u>Asbuilt drawings</u>: If required by contract or task order, asbuilt changes shall be recorded to the drawings. Redline drawings, as recorded by the construction contractor, will be provided by the USCG. Asbuilt changes shall be recorded as a standard revision as specified in paragraph 1.2.12 with the following exceptions: the issue block description shall be titled "ASBUILT"; the drawing shall be marked in a prominent place near the lower right of the drawing with the word "ASBUILT" in ½" high "ROMANS" font with an 'Option 3' lineweight; all sheets in the drawing set will be marked as above

along with the issue block entry to record the date of the asbuilt issue (even if no changes are required to the sheet). See Figure 1 at the end of this specification for a sample of a completed asbuilt issue block and asbuilt marking. The asbuilt file shall be named using the original file name appended with "-asbuilt" (e.g. s-8765-c2-asbuilt.dwg). Any asbuilt drawing production effort by the contractor shall be included in the bid or fee proposal as a separate line item titled 'Asbuilt Drawing Production Effort'.

- 1.2.14 <u>Professional Registration Seal</u>: In order to accommodate creation of drawing revisions and asbuilts using solely electronic CAD techniques the professional registration seal sans signature of the original drawing approver(s) shall be recorded in the electronic CAD file.
- 1.2.15 <u>File Size Normal/Limit</u>: Architectural, Structural, Mechanical, Electrical, or other drawings 250 KB/2 MB. Civil and Survey Drawings 500 KB/5MB. Survey Drawings with contours 2 MB/15 MB.

### 1.3 SPECIFICATIONS

- 1.3.1 <u>General</u>: Specifications shall be organized according to the CSI 16 division specification classification system. Specifications shall be delivered both as editable word processing files and as printable Adobe PDF files.
  - A. All specification sections shall be submitted in both Microsoft Word 2000 binary format document (.doc) files and in Adobe PDF files. The .doc and PDF files shall be segregated into separate sub-folders.
  - B. Do not use Microsoft Word's 'fast save' option on delivered files.
  - C. Microsoft Rich Text Format (RTF) format is acceptable only upon approval by the Contracting Officer.
  - D. Each specification section shall be included in a separate .doc file and .pdf file. The corresponding .doc files and .pdf files shall have the same name.
  - E. The entire technical specification shall be consolidated and properly ordered into a single Adobe PDF file. The consolidated technical specification PDF file shall be named '17-Jyyxxx Technical Specification' where '17-Jyyxxx' is the USCG project number. The USCG project number will be provided by the Contracting Officer.

### 1.3.2 Microsoft Word Document Format:

- A. The specifications shall use the 'Times New Roman' font at a text size of 12 points. An entire specification shall be of one font and text size.
- B. General paragraph formatting shall be single space within and have a 12-point spacing following the paragraph. Specifications with additional paragraph marks to achieve spacing between paragraphs will not be acceptable.

- C. All text and styles shall be formatted with 'English (US)' or 'English (United States)' language. Specifications formatted with a language other than stated or formatted with '**no proofing**' will not be acceptable.
- 1.3.3 <u>Specification File Names</u>: Specification files shall be named by the following conventions.

Example File Names:

01010 (Summary of Work) MRJV.doc 01312 (Prog & Pmt Sched) JYL.doc

07920 (Sealants) DE.doc

NOTE: Specification files shall be named using the CSI section number, the title of the section in parenthesis, and **the initials of the contractor company name**. Use standard abbreviations w/o periods (.) in title to keep name less than 40 characters.

# 1.3.4 Specification Format:

- A. The three part CSI format shall be followed for each specification section and labeled as follows: **PART 1 GENERAL**, **PART 2 MATERIALS**, and **PART 3 EXECUTION**. See Figure 2 at the end of this specification for a sample specification.
- B. Paragraph numbering shall be as demonstrated in this section of specification. The use of automatically numbered paragraphs is highly encouraged.
- C. On each page of the specification the footer shall contain the USCG project number, specification section number, the page number, specification section name. The USCG project number will be provided by the Contracting Officer.

Example Page Footer:

Project NO. 17-Jyyxxx 01010-1 Scope of Work

- 1.3.5 <u>Division 1 -General Requirements:</u> Except as otherwise noted the Division 1 specifications will be <u>supplied by the Coast Guard</u>, except that the contractor shall supply section number 01010 titled "Scope of Work", section number 01012 titled "Special Requirements", and a completed and accurate "Submittal Status Log." <u>The Division 1 specification sections will be provided by the Contracting Officer.</u>
- 1.3.6 <u>File Size Normal/Limit</u>: Specification Section 200 KB/1 MB.

## 1.4 REPORTS

1.4.1 <u>General</u>: Reports shall be submitted in Microsoft Word 2000 binary format document (.doc) files and conform to the following requirements.

- A. Do not use Microsoft Word's 'fast save' option on delivered files.
- B. Microsoft Rich Text Format (RTF) format is acceptable only upon approval by the Contracting Officer.
- C. General paragraph formatting shall be single space within and have a 12-point spacing following the paragraph. Specifications with additional paragraph marks to achieve spacing between paragraphs will not be acceptable.
- D. All text and styles shall be formatted with 'English (US)' or 'English (United States)' language. Specifications formatted with a language other than stated or formatted with '**no proofing**' will not be acceptable.
- 1.4.2 <u>File Naming conventions:</u> Files shall have reasonable and consistent names. The name shall accurately reflect the contents of the file. Use MS Windows<sup>TM</sup> file naming rules subject to the following limitations: When naming a file use title case and spaces. Do not use periods for abbreviations, acronyms, or initials. Do not use the underscore character or period as a substitute for a space. Keep file names (excluding extensions) 40 characters or less in length. Use only common registered file name extensions (i.e. .doc, .rtf, .pdf, etc.).
- 1.4.3 <u>File Organization:</u> Files shall be organized in a logical fashion such as by phase, chapter, and/or other distinct division, or as specifically required by the Contracting Officer. The number of files shall be kept to a reasonable minimum while keeping the file sizes within required limits. The complete report may be consolidated into a PDF file but the source .doc files are required to be delivered. If the consolidated report PDF files contain images, they shall be 'Print Optimized' using Adobe Distiller.
- 1.4.4 <u>Digital Images</u>: Images shall be inserted wholly into the report file and not attached. Prior to insertion, bitmap images shall be down sampled to a resolution suitable for the size of the image in the report. Suitability of inserted image files is governed by the requirements of paragraph 1.5. Images shall be inserted using the 'Insert-Picture-From File..' method as described in paragraph 1.5.8.
- 1.4.5 <u>Index Tabs and Binding:</u> Reports shall be tabbed with labeled index tabs at major division points as described in paragraph 1.4.3. Index tabs shall be durable paper with plastic laminate at wear and stress points or other Contracting Officer approved system. Reports shall be bound in comb bindings, 3 ring binders, or other Contracting Officer approved methods. In the case where the report front and back covers are exposed paper the paper shall be laminated in plastic on both sides of the paper.
- 1.4.6 Quality: Reports shall be professionally prepared and use high quality materials and techniques.
- 1.4.7 <u>Use of Color and Copies:</u> Use color is encouraged if it enhances the readability and quality of the information presented. Use color schemes the have high contrast which can be photocopied in black and white and retain readability and information

integrity. Original report copies shall be in color and subsequent copies may be in black and white.

1.4.8 <u>File Size Normal/Limit</u>: Report Section File – 2 MB/15 MB. Consolidated Report PDF file – 10 MB/50 MB. Total for all files of the entire report – 20 MB/100 MB.

### 1.5 RASTER/BITMAP IMAGES AND OTHER DOCUMENTS

- 1.5.1 <u>General</u>: Raster, bitmap, and other format files shall be submitted according to the following specifications unless otherwise directed by the Contracting Officer. Requirements for raster and bitmap files pertain to individual files as well as files inserted into MS Word, Excel, PowerPoint, and other documents. For example, do not insert TIFF or BMP format photographs into Word documents, use JPEG format as required below.
- 1.5.2 <u>File Naming Conventions:</u> Files shall have reasonable and consistent names. The name shall accurately reflect the contents of the file. Use MS Windows<sup>TM</sup> file naming rules subject to the following limitations: When naming a file use title case and spaces. Do not use periods for abbreviations, acronyms, or initials. Do not use the underscore character or period as a substitute for a space. Keep file names (excluding extensions) 40 characters or less in length. Use only common registered file name extensions (i.e. .jpg, .gif, .tif, etc.). Note that names for files attached to drawings are different than specified here (see paragraph 1.2.2.C)

## 1.5.3 <u>Photographs</u>:

- A. All electronic photos and rendered images shall be submitted in JPEG (.jpg) binary formatted files.
- B. Color depth shall be true color (24 bit).
- C. The photos shall be saved at a JPEG quality factor between 70 and 95.
- D. The resolution of the photos shall be between 100 and 150 pixels per inch.
- E. File Size Normal/Limit: 100 KB/5 MB.

### 1.5.4 Original Aerial Photographs:

- A. All original aerial electronic photos shall be submitted in TIFF (.tif) binary formatted files. Crops of aerial photographs used for drawing backgrounds or report photos should be saved in JPEG format as described in paragraph 1.5.3 above.
- B. Color depth shall be true color (24 bit).
- C. The photos shall be saved using lossless RLE compression. Do not use lossy JPEG compression.
- D. The resolution of the photos shall be approximately 1 pixel per foot on the ground.

E. File Size Normal/Limit: 40 MB/120 MB.

# 1.5.5 Color Images:

- A. All cartoon style (limited color pallete) electronic color images shall be submitted in GIF (.gif) or BMP (.bmp) binary formatted files.
- B. Color depth shall be a maximum of 256 colors (8 bit).
- C. The resolution of the images shall be between 100 and 150 pixels per inch.
- D. File Size Normal/Limit: 100 KB/5 MB.

# 1.5.6 <u>Drawings and Documents</u>:

- A. All electronic black and white images shall be submitted in TIFF (.tif) binary formatted files.
- B. The color depth shall be set to monochrome (1 bit).
- C. The resolution of the images shall be 300 pixels per inch.
- D. All TIFF files of this type shall use 'CCITT Group 4' compression.
- E. For legal, letter, and smaller sized multi-page documents all pages for a single document shall be stored in a single TIFF file using the multi-page-formatting feature of TIFF.
- F. For documents sized 11x17 and larger store one page per file. Multi-page TIFF formatted files not acceptable in this case.
- G. File Size Normal/Limit: Drawings 250 KB/4 MB. Documents 500 KB/10 MB.

### 1.5.7 Other Documents:

- A. The following formats are acceptable for other types of electronic documents:

  - 2. Microsoft Excel 2000 (.xls) ......Normal/Limit 200 KB/5 MB
  - 3. Microsoft Project 98 (.mpp)......Normal/Limit 250 KB/5 MB
  - 4. Microsoft PowerPoint 2000 (.ppt or .pps) Normal/Limit 1 MB/15 MB
  - 5. Microsoft Access 2000 (.mdb)......Normal/Limit 4 MB/25 MB
  - 6. DBase/FoxPro (.dbf)......Normal/Limit 1 MB/10 MB
  - 7. Adobe Page Description Format (.pdf).....Normal/Limit 1 MB/50 MB

  - 9. DOS/Windows ASCII Text (.txt) ............ Normal/Limit 100 KB/2 MB
- B. All other file formats submitted require prior Contracting Officer approval.
- 1.5.8 <u>Inserting Bitmap Images into Microsoft Format Files</u>: When inserting bitmap photos or drawings (JPEG, GIF, or TIFF) into Microsoft format files, use the 'Insert-Picture-From File..' command. Do not use drag-and-drop or the cut-and-paste method of

inserting because the Microsoft format file will not maintain the compression of the inserted file or pasted image. This will cause the Microsoft format file to balloon in size. Only when the 'Insert-Picture-From File..' method is used will the Microsoft format file retain the compression of the inserted bitmap file. When copying images from another program, create the JPEG, GIF, or TIFF file first using Microsoft Photo Editor's 'Edit-Paste as New Image' command. Then insert the newly created image file with the 'Insert-Picture-From File..' command. Although this procedure will take extra time, the space saved will be substantial. Files deemed by the Contracting Officer to be improperly formed using drag-and drop or cut-and paste to insert images will be rejected even if they do not exceed the file size limitation (paragraph 1.1.4).

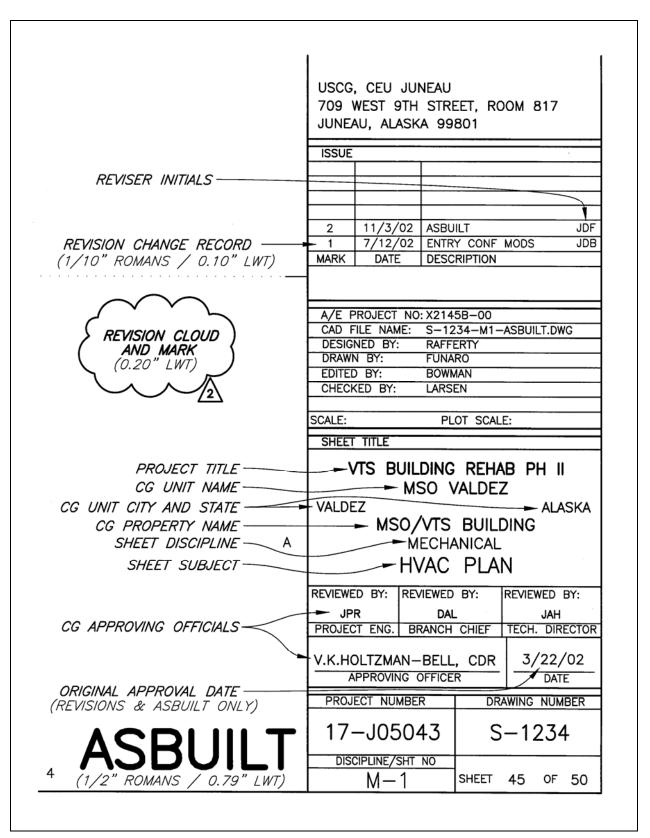


Figure 1. Sample Completed Title Block

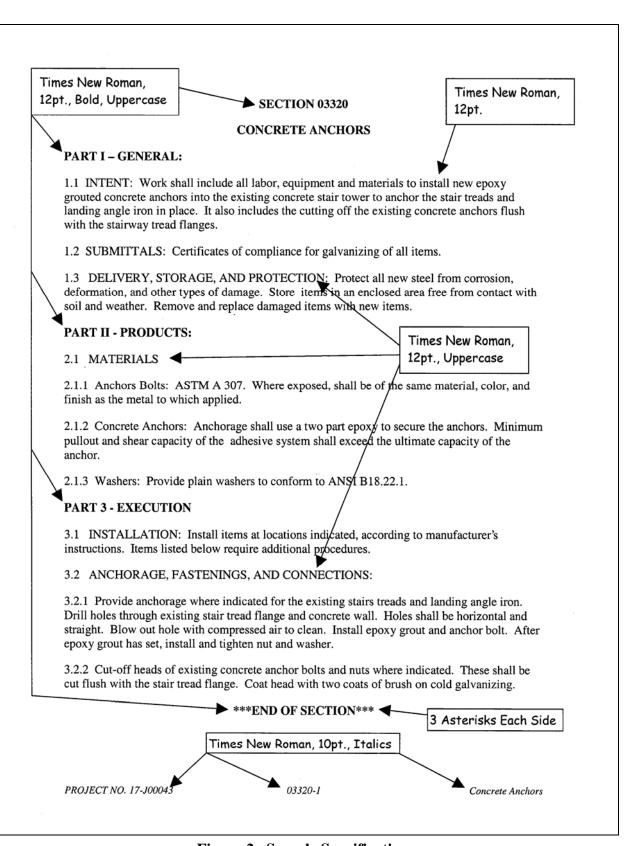


Figure 2. Sample Specification

PART 2 - MATERIALS: Not Used.

PART 3 - EXECUTION: Not Used.

\*\*\* END OF SECTION \*\*\*