

**CITY OF FORT LAUDERDALE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING & ARCHITECTURAL BUREAU  
CADD SPECIFICATIONS FOR PROJECT  
DRAWINGS**

**April 2008**

(Addendum III)

FEB. 2009



**CITY OF FORT LAUDERDALE**

This Document was prepared in the City of Fort Lauderdale Engineering & Architectural Bureau by the CADD Standards Committee

This document may be downloaded from  
<http://www.fortlauderdale.gov/engineering/index.htm>



**City of Fort Lauderdale, Engineering Division  
CAD Specifications for Project Drawings**

**Table of Contents**

<b>Purpose</b> _____	<b>1</b>	<b>Fonts</b> _____	<b>8</b>
<b>Version</b> _____	<b>1</b>	<b>Layers</b> _____	<b>8</b>
<b>Scales</b> _____	<b>2</b>	<b>General Issues Before Submittal</b>	<b>9</b>
<b>X-REFS.</b> _____	<b>3</b>	<b>Miscellaneous</b> _____	<b>10</b>
<b>Base Drawing</b> _____	<b>4</b>	<b>Drawing File Names</b> _____	<b>11</b>
<b>Units</b> _____	<b>5</b>	<b>Standards Specific to</b>	
<b>Cover Sheets and Title Blocks</b> _	<b>6</b>	<b>Architectural Projects</b> _____	<b>15</b>
<b>Symbols &amp; Entities</b> _____	<b>6</b>	<b>Architectural and Landscaping</b>	
<b>Paperspace</b> _____	<b>7</b>	<b>Text Fonts and Heights</b> _____	<b>16</b>
<b>Colors And Lineweights</b> _____	<b>7</b>		

**Purpose**

1. The Engineering division provides engineering, architectural, landscaping and project management services; and has put together a set of drafting standards to be used in all computer-aided drawings. The intent is to standardize the way electronic drawing files are produced and to make all drawing files regardless of who produced them, familiar in look and content to all the production staff in the division.

2. Consultants are encouraged to familiarize themselves with recent existing City project files prior to commencing a project for the City of Fort Lauderdale, in order to achieve true conformity with the way drawing files are to be produced. Below are some of the criteria, which must be followed. This document may not cover all circumstances; therefore it is up to the consultant to secure the pertinent information to any situation that may arise in a particular case that is not covered here. All files submitted to the City shall be free of passwords or any other impediment to their free use. The City of Fort Lauderdale’s Engineering Division reserves the right to direct a consultant as to the desired manner to proceed when a situation is not addressed here.

**Version**

3. All drawings shall be produced in AutoCAD or AutoCAD LT and saved in AutoCAD 2007 format. Drawing files submitted will be 100% AutoCAD DWG format and 100% editable, but at the consultant’s discretion, may be submitted in an un-editable media such as CD-ROM.



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

4. The subsequent standards apply to 2D drawings only. Prior to producing any drawings from 3D modeling software the project manager shall consult with the City's CADD coordinator.

<sup>2</sup>5. The current version of AutoCAD at the time these standards are established is AutoCAD 2007. These standards can only address those issues pertaining to that version of AutoCAD. If a new version of AutoCAD is released prior to revising these standards, projects shall still be submitted in AutoCAD 2007. Once the City upgrades to the newer version of AutoCAD, that version shall be the official version and at the time the City shall determine if submittals in earlier versions are acceptable.

All drawing files in a project shall be saved in the same version of AutoCAD.

### **Scales**

6. All drawing plan-views and horizontal scale of profiles and cross-sections will be drawn in scale 1 : 1 in model space, and drawing accuracy shall be 0.01' or better. That is, on a 'DIST' inquiry between consecutive 100-foot stations on a baseline, the result should be 100.00'.

7. In engineering projects, details will be drawn 1:1 and then scaled in a paperspace window. Certain details need to be drawn with a different horizontal and vertical scales for clarity (e.g. typical roadway cross-section); here all horizontal work must be proportional to itself and vertical work must be proportional to itself. In architectural projects all details will be drawn to scale (1:1). There are however very few instances where it is not practical to draw details to any scale; Where drawings are intended to be diagrammatic or schematic, and for those instances only, a scale will not be required. Such drawings will be noted "NOT TO SCALE" or "NO SCALE".

8. Plots for projects will be produced at a scale commonly used by the engineering/architectural profession; (e.g. 1" = 20', 1" = 30', 1/4"= 1', etc). Following are examples of unacceptable scales: 1" = 27', 1"=70', etc.

9. Vertical scale for cross-sections and profiles will be drawn to a scale in the same ratio as the final plotted product.  
i.e. if the final plot is horizontal 1"= 20', and the vertical 1"= 2', then the vertical scale is 10 times that of the horizontal so it will be drawn 10 times larger than 1 : 1.

10. The practice of drawing at a scale different to 1:1, then making a block with the parts and inserting the block to represent a 1:1 scale will be not be permitted, and such work is unacceptable.

11. Drawing files that are not scale relevant, like index sheet, notes and schedules, shall fill the scale attribute box with the notation "N/A". The

---

<sup>2</sup> Addendum 2



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

notation “NTS” or “NOT TO SCALE” shall be left to those drawing files that are scalable, but are shown in a scale not measurable with a typical engineering or architectural scale, like details, schematics, etc.

### **X-REFS.**

12. Projects shall make use of Xrefs to segregate the different disciplines and sub-consultants or design teams involved. Survey information shall be in its own files (see base drawing). In engineering projects, all civil work (demolition, concrete, asphalt, pavers) may be placed in: 1 file per discipline or per consultant or per building (if project is multi building), or at the discretion of the project manager may be further segregated into several files. Underground utilities (if more than 1 in a project) may be placed in a single file, or each in its own. At no time shall there be more than 1 consultant’s work into a single Xref file. Example: no design shall be placed directly on a survey file, or electrical design on an architectural file, etc. In underground utilities where there will be a profile included, the area to be profiled will be drawn in 1 continuous profile and preferably included in the same xref as the plan view for the profiled area.

Architectural projects shall also be segregated by specialty. All xrefs shall share the base footprint xref’d in. Electrical, mechanical, foundation, plumbing, roof, etc shall be either each be in its own xref file or grouped by sub-consultant or design group at the discretion of the project manager.

13. There shall be no duplicate base information. Footprints to be used as a base for design shall not be duplicated. Example: Two or more footprints of a building drawn side by side in an xref.

14. X-ref files shall have no paths. Project drawing files, which contain x-refs with paths, will not be accepted. Consultants will have to strip all paths from x-refs, or initially x-ref with no paths.

15. X-ref files shall be limited to one per discipline. Larger projects that involve multiple buildings and/or sites may make use of more than 1 xref per discipline upon approval of xref list by the city. Details, general notes, logos, etc. SHALL not be x-refed. If during the course of a project design a consultant decides to make use of x-ref for anything other than background support, the final product shall not contain Xrefs and layer names with x-ref file name prefixes will not be accepted.

16. If an x-ref is “bound” (binded) it shall be “insert” xref and not “bind” xref. That way no extraneous layer names are created.

17. Profiles shall be drawn as a contiguous entity and preferably in the same file as the plan view is located. Under no circumstance shall a profile be drawn in pieces and/or in the final sheets. All entities of a profile shall remain together in the same file. Line work, grid, all text, notes, leaders, etc. shall be all together.



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

18. Within each discipline, all entities shall be drawn in the same file: line work, text, notes, dimensions, leaders, ETC. shall all be placed in the same file and space (MODELSPACE). Exception: Revision clouds and viewport titles in Architectural drawings may be placed in paperspace.

### **Base Drawing**

19. Topographical surveys in AutoCAD format shall not be cut or disseminated into several files in order to create individual sheets.

20. Topographic survey files shall not have parts deleted just because the proposed project does not cover those portions. In that case open a *paperspace* window that will show just the portion of survey needed or use XCLIP.

21. Topographic surveys SHALL NOT BE MOVED SPATIALLY within the drawing file, nor shall the consultant or city staff, change the coordinate system to anything other than what was received from survey, UNDER ANY CIRCUMSTANCE. If a consultant furnished the survey it shall be in 'WCS' and the survey shall have the north towards the top of the screen.

22. Files of topographic survey shall only have topographic information. These files shall be xref'd into a new file where the proposed project will be designed.

23. The base topographical survey file shall be produced in several files, xrefed, one within the other. This will make possible to make adjustments to some aspects of the file without the possibility of making changes to the more critical parts of the survey. The following paragraph is a description of what each file holds and a procedural explanation on how to create such a file. It is not intended directly to the designer, but to the survey personnel responsible for creating the survey base file.

The base survey shall be made of 4 base files:

```
#####SURV.DWG,  
#####BSLN.DWG,  
#####TOPO.DWG,  
#####UTIL.DWG
```

The "#'s" are place-holders for the project number.

If utility markings are gathered at a later date from the original survey, then this information can be added to the "#####UTIL.DWG"

The "#####SURV.DWG" file shall be the main file and the others shall be XREFED into it. This shall contain any notes which are not location sensitive, and may be moved modified, rotated to accommodate clearer design drawings.

The "#####BSLN.DWG" shall contain the baselines of survey, including stationing and descriptions of points set, the lot and block, boundaries and relevant information. All survey markers, found or set.



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

The #####TOPO.DWG shall contain all topography, elevations and other field collected information, not related to horizontal survey control. All survey benchmarks, descriptions and elevations shall be included in this file. Above ground evidence of utilities and any directly measured utility information, such as inverts and pipe sizes shall be included in this file.

The #####UTIL.DWG shall contain the field location of paint marks, stakes or other utility markings, which indicate the presence of an approximate location of underground utilities. Test holes or borings shall also be included. Any other inferred or extrapolated locations shall also be placed in this file.

**SAMPLESURV. DWG  
SAMPLEBSLN. DWG  
SAMPLETOPO. DWG  
SAMPLEUTI L. DWG**

Any issues not clearly covered in this paragraph shall be referred to the city surveyor for clarification prior to the commencement of any survey work.

24. In projects that use a base drawing other than a survey, like an architectural project of plant facility, all disciplines shall make use of a common base drawing, inserted as an xref. If there is an update then it is simple to update drawings from all disciplines. No design group shall take the base drawing and modify it in any manner. Through the use of xreferencing, all permitted changes (layer color, linetype, etc) can be accomplished.

### **Units**

#### **25. Units:**

Engineering projects shall use decimal as linear units at all times, angular units shall be surveyor (bearings) units. Angles shall be measured counter-clockwise and 0 shall be to the east.

Architectural projects will use architectural units. Angular units shall be degrees, minutes, seconds. Angles shall be measured counterclockwise and 0 shall be to the right (east).

26. Dimensions shall be with a scale factor of 1, a precision of 0.01' for decimal units and 1/8" for architectural units, with the default value displayed. The scale factor may be changed to 12 or 1/12 when integrating engineering and architectural linework; example site plans, or architectural details displayed in an engineering drawing with decimal units. The scale factor can also be changed to 1/10 in profiles that are drawn 10 times larger vertically than horizontally. Accuracy for plan view design in water, sewer, storm and site electrical projects can be 0.1'



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

27. Architectural drawings will have a 1" grid, and entities snap to the grid.

### **Cover Sheets and Title Blocks**

28. The City's title block/sheet border symbol shall be used on all drawings except the cover sheet. No modifications shall be made except for values of the attributes present in the block.

29. All projects shall have a cover sheet. For the cover sheet, consultants shall use the City's cover sheet symbol. Consultants shall not make any modifications to the city's cover sheet, including renaming the block. Presently the city has one cover sheet for engineering, architectural and landscape projects, another for airport projects (FXE) and another for the Water/Sewer (Waterworks2011) program. The cover sheet shall be inserted at an XYZ scale of 1; that way it will be plotted with a final size of 36" X 24" at scale 1:1, in PAPERSPACE.

30. The standard title block/sheet border shall be inserted in "paper space", it shall be inserted at an XYZ scale of 1. Then the viewports can be zoomed at the appropriate XP scale, to produce the desired final scale within the viewport, (*several scales in various viewports are then possible*) and that way it will be plotted with a final size of 36X24 at scale 1:1.

31. All projects will be made to plot in a standard "ARCH D 36" X 24" sheet. The City's standard title block/sheet border SHALL NOT be inserted with dissimilar 'x' and 'y' scales in order to plot in a final size other than the standard.

### **Symbols & Entities**

32. Blocks will be issued with the most common symbols used in City projects. From time to time these symbols will be revised and/or new symbols will be added. If for any reason there is a need to create a block either for local use or to keep for future projects, that block shall comply with all City CAD standards.

33. Standard issue symbols shall **NOT** be exploded, renamed or changed in any way. Objects that are repeated throughout and/or that are depicted in an exaggerated scale for clarity (fire hydrants, power poles, catch basins, street lamps, etc) shall be represented by a symbol. If a symbol **CAN** be used it **SHALL** be used.

34. Whenever possible, make use of the City's standard symbols and blocks. If a new symbol or block is created, it shall be submitted to the City for approval. Approved symbols and blocks will be made part of the City's symbols library, royalty free. North arrows, graphical scales, logos, location maps and other similar symbols shall be inserted as blocks and left unexploded.

35. Consultants can insert their company logo or identification information in the form of a block (symbol) and left unexploded. This block can be placed



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

in all sheets including the cover sheet within the drawing area of each sheet.

36. Dimensions shall be associative at all times and left at their default value, and shall **NOT** be exploded.

37. Hatch patterns shall **NOT** be exploded. Hatch patterns and closed polylines forming the hatch boundary shall be the only entities permitted on hatch layers.

### **Paperspace**

38. Paper space shall be used for title block/sheet border and viewports. No other entities shall be placed there, especially notes that describe parts of modelspace entities (notes with a leader);(exceptions: logos, captions, legends, general notes, etc.).

39. Title block/sheet borders or cover sheets shall **NOT** be x-refed.

40. All drawing entities will be confined within the sheet border. Extents of the drawing files shall be to the edge of title block/sheet border. Multiple layouts are permitted, however only one sheet border per layout is allowed.

### **Colors And Lineweights**

41. The City will provide a lineweight chart (CTB) to be used.

42. Drawing files submitted, shall make use of one of the city's templates, which have the "Layout" page setup, configured with the city's configuration files (PC3, CTB and PMP).

43. All entities shall be located in their appropriate layer, and have a color and linetype "BYLAYER". The **ONLY** exception to this rule is a Utility XREF drawing (i.e. 10272XREFUTIL) where the color of the layers continues to be "BYLAYER", but different line types may be used in the same layer to identify different utility types and sizes.

44. Colors are not fixed to layers; they are dependent on the discipline. When entities for a particular discipline need to be displayed in drawing files for other disciplines, colors may be setup differently in order for features to stand out. E.g. Survey drawings will show survey features solid and stand-out. The same survey features will look dimmed in landscape drawings.

45. The project manager shall be the final judge of the plotted appearance of the drawings. Consultant shall furnish a printed copy of all drawing files using the City's lineweight chart file for color approval by the City.



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

46. There are certain entities which make use of custom linetypes, and that rely on the linetype to be identified. If the linetype is changed, then the entity loses its identity. Examples are fences: they can make use of a custom linetype that identifies them. These entities can be placed in a layer with a different linetype and the identity of the fence is preserved. For these cases, it is permissible to make these entities non-by-layer. There are other examples in electrical drawings.

### **Fonts**

47. Since fonts are not carried with the drawing files and depend on the computer that is running AutoCAD to find and use these font files. No third party or proprietary fonts shall be used. Drawing files shall not make use of SHAPE files.

48. It is possible to automatically substitute fonts not found in the AutoCAD path. The City may (at their discretion) substitute odd fonts with ROMANS.SHX.

### **Layers**

49. The City of Fort Lauderdale Engineering Division adheres for the most part (but not totally) to the CAD Layer Guidelines and has adopted the long format; it has up to 16 alphanumeric characters, and is divided in fields or groups.

X-XXXX-XXXX-XXXX

Above is an example of the format, also known as the 1-4-4-4.

50. The City will provide a list of layer names to be used. If there is a project for which there are no layer names (which pertain to that discipline), the consultant shall provide a list of proposed layer names based on the layer guidelines, for the City's approval, prior to their use. Once approved by the City, those layer names will become part of the City's list of layer names for all projects thereon or until revised.

51. No layer names, other than those in the City's layer name list, will be present in drawing files. Exceptions are those layer names automatically created by AutoCAD; "0", "DEFPOINTS", "ASHADE".

52. NOT ACCEPTED are layer names created by third party software or add-ons, including Autodesk add-ons.



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

53. All text, labels, Mtext, etc. that is placed in paperspace shall be in layers: #-SHBD-TEXT and/or #-SHBD-NOTE; consultants' logo shall be placed in layer #-SHBD-LOGO; viewports shall be placed in layer: #-SHBD-VPRT; general line work in paperspace like lines to separate areas or viewports, etc. shall be placed in layer: #-SHBD. All general text shall be placed in a single layer, unless there is a justification for the contrary. North arrows and graphic scales shall be placed in layer: #-SHBD-NARW. Leaders shall be placed in a "TEXT" or "NOTE" layer together with the accompanying text.

54. Layer names that duplicate the discipline and the major group shall not be used. Examples are: E-ELEC, D-DEMO, H-HVAC, I-INST, F-FIRE, Q-EQPM.

55. Details, sections elevations, do not in general need layer management. Since there is seldom layer manipulation (on, off), the minor group names that distinguish lineweight were created. The City uses the discipline, major group designating the object to draw (DETL, SECT, ELEV, etc) and then the minor group designating the lineweight. The minor group names are: XFIN, FINE, MEDM, HEVY AND XHEV.

56. The engineer or technician working on the project must determine what color to use from the "LINE WEIGHTS AND GREY SCALE CHART" supplied by the City, in order to get the desired effect, and the City will give the final approval.

57. The list of layer names used in all City of Fort Lauderdale projects is a separate document in the form of a MS Excel spreadsheet.

### **General Issues Before Submittal**

<sup>3</sup>58a. Complete drawing set (DWG) shall be submitted no later than the 60% project submittal for design review, and fully compliant with the City's CAD standards' drawing set shall be submitted prior to submittal to the building department for permit.

58. All drawing files shall have all tabs (layouts) zoomed to EXTENTS, prior to any submittal to the City, whether it is the final or a working submittal; XREF drawing files shall be saved with the model tab active and zoomed to EXTENTS. All other drawing files shall be saved with the first paper space layout tab active. All final files shall be fully purged prior to submittal. All files shall be saved and submitted with the current layer set to "0".

59. Consultants shall obtain a file number for the project and make sure that the appropriate information is completed in the title block. File numbers can be obtained from the Project Engineer.

60. Consultants shall fill in total number of sheets in the title block, prior to final submittal of drawing files.

---

<sup>3</sup> Addendum 3



## **City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings**

<sup>3</sup>61. Consultants shall submit a hardcopy (bond, 36" X 24"), DWG and PDF files of the project drawings together with any submittal in electronic format (CD, etc), when making partial and final submittal of drawing files. Prior to all submittals, consultants shall coordinate with the City's file room as to the method of creating PDF files, which will make prints satisfactory to the City. All files submitted to the City shall be free of passwords or any other impediment to their free use. PDFs shall be combined into a single file. Sheets shall be oriented landscape with the title block to the right of the screen, arranged in the order that they are to be printed and the set assembled matching the drawing index order. The PDF binder shall contain bookmarks for all of the sheets, displaying the name of each plot file as described in paragraph 70.

<sup>3</sup>61a. DWG AutoCAD files shall not be compressed using zip or rar or any other compression scheme when submitting files in an optical media (CD, DVD).

<sup>3</sup>61b. Submittals via FTP sites are not official submittals; and optical media (CD, DVD) is required.

<sup>3</sup>61c. When a project is assigned to a consultant who utilizes the collaboration of other sub-consultants, said prime-consultant shall be responsible for all submittals of drawing files and plot files. Said submittals shall be in the form of a single media (1 CD/DVD) to include the entire project.

### **Miscellaneous**

62. "MTEXT" (multiline text) shall be used in all cases where more than one line of text occurs and where leaders are used.

63. These standards are a detailed description of aspects in the creation of drawing files within Engineering. It is by no means the complete description of all the methods used, and it is the consultant's responsibility to alert the City of any point or situation which is not described in these specifications, and which should be addressed. Also if a consultant, after reading these standards and prior to commencing any drafting work, feels that there are points or items in these standards which are not logical, or are onerous to abide by, they should notify the City's Engineering Division at their earliest convenience and their views will be open to discussion.

64. This document does not address layer colors or lineweights. The consultant shall coordinate with the City's project manager on how these items are treated.

---

<sup>3</sup> Addendum 3

3  
3  
3



## City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings

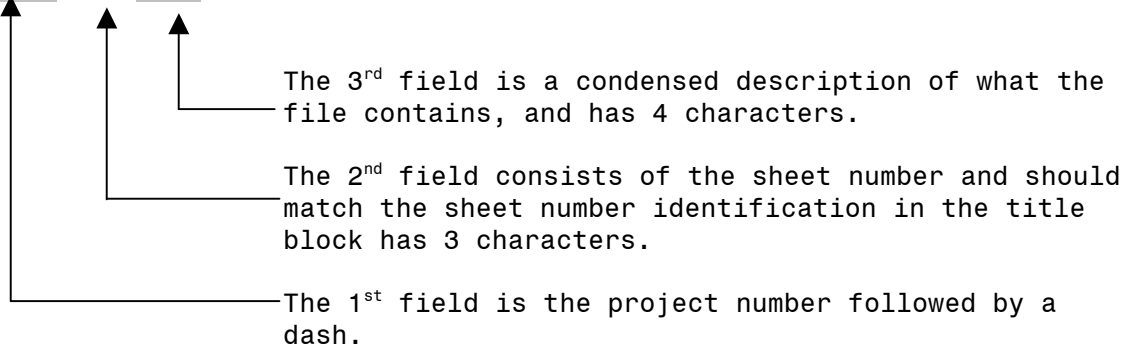
### Drawing File Names

65. All drawing files shall conform to the City of Fort Lauderdale's File naming convention, as described in the following pages. The names shall be accurate to reflect the desired information as per the naming convention. All file names shall be CAPITALIZED.

66. The City of Fort Lauderdale Engineering Division has adopted the following file naming convention for project drawing:

The format for single layout drawing files looks like this:

00000-000-XXXX.DWG



67. The first field represents the project number.

<sup>2</sup>68. The second field represents the sheet number and reflects the sheet number as shown in the title block. If sheet numbers have dashes or dots, they shall be stripped: example for C-11, use C11. Drawing sheets shall not be numbered using the ConDoc system (i.e. A1.01, A1.02, A2.01, A2.02).

69. The third field is a 4-letter description of what the project drawing file depicts. There is a list of descriptions used in previous projects. Consultant shall check the list prior to creating a new description. The City will need to approve descriptions prior to their use.

70. This proposed 3-field format is only for files that contain final drawing with 1 title block/sheet border.

Examples for this naming format are the following:

09585-001-WATR.DWG  
10256-021-SEWR.DWG  
10855-M10-HVAC.DWG  
10325-A01-PLAN.DWG  
10325-E01-LITE.DWG

---

<sup>2</sup> Addendum 2



**City of Fort Lauderdale, Engineering Division**  
**CAD Specifications for Project Drawings**

71. A drawing index should appear on the cover sheet. If there are too many sheets in the set of drawings to fit on the cover sheet, a separate index sheet or sheets shall be included immediately following the cover sheet. When index sheets are utilized the drawing file name shall be 00000-001-INDX.DWG. The first five digits shall be the project number and the next three digits shall be (001), (002), etc. An example is:

10325-001-INDX.DWG indicating the first index sheet.  
10325-002-INDX.DWG indicating the second index sheet.

72. X-ref files will have a slightly different format. It will have 3 fields, and will look like this:

00000XREFXXXX.DWG

The 1<sup>st</sup> field (5 characters) will be the project number; the second field shall be the word "XREF". The third field shall be a 4-character description for the file or discipline found in the file. This convention is valid for all XREFS except for the survey XREFS. These shall remain as received by the survey department.

<sup>1</sup>73. Sheets shall be numbered in a sequential manner and there shall not be any voids in the numbering for any given discipline. All numbering shall start with "1", regardless of the numbering system used, except for the cover sheet which is "0".

Example: 1,2,3,4, or A01, A02, A03, BUT NEVER A01, A02, A05.

<sup>2</sup>74. The Cover Sheet will follow this drawing naming convention with one small exception. The drawing files will contain additional characters denoting the total number of sheets in a project set, including all disciplines. The total number of sheets shall NOT include the cover sheet.

---

<sup>1</sup> Addendum 1.

<sup>2</sup> Addendum 2



## City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings

The format for the coversheet drawing files looks like this:

00000-000-000COVR.DWG

The 3<sup>rd</sup> field is 7 characters, the first three numerals denoting the total number of sheets in the full set, followed by (COVR) indicating that this is the cover sheet.

The 2<sup>nd</sup> field consists of three zeros (000) followed by a dash and the total number of sheets for the project without the cover.

The 1<sup>st</sup> field is the project number followed by a dash.

75. For drawing files that contain multiple layouts, the files shall be named as follows:

00000-MULTI-XXXX.DWG

The 3<sup>rd</sup> field is a condensed description of what the file contains and has 4 characters.

The 2<sup>nd</sup> field consists of the word "MULTI" in uppercase followed by a dash.

The 1<sup>st</sup> field is the project number followed by a dash.

Examples for this naming format are the following:

XXXXX-MULTI-DETL.DWG: detail sheets.

XXXXX-MULTI-ELEC.DWG: Electrical sheets.

NOTE: PDF FILES SHALL STILL BE NAMED FOLLOWING THE INSTRUCTIONS FOR SINGLE LAYOUT DRAWING FILES.

76. Layout Tab names shall be named with the sheet number and an optional description for the sheet content.

77. Additional drawing descriptive information may be placed in comments section of the file "properties" of the drawing file. Access this by right-clicking the file and selecting properties then the "summary" tab.



**City of Fort Lauderdale, Engineering Division**  
**CAD Specifications for Project Drawings**

78. Possible names for sheet description to be used as the third field for file names:

BSRV	Boundary Surveys
COVR	Cover Sheets
DEMO	Demolition
DETL	Details
ELEV	Elevations
EQPM	Equipment
FLOR	Floor Plans
GRAD	Paving and grading
INST	Instrumentation
IRRG	Irrigation
KMAP	Key map
LEGN	Legend, symbols and schedule sheets
LITE	Lighting plans
MOTP	Maintenance of traffic plans
NAID	Navigational Aids
NOTE	General Notes
PILE	Piles
PLAN	Plan and profile sheets
PLNT	Plant material
PLUM	Plumbing
POWR	Power
RISR	Riser diagrams
RNWX	Runway
ROAD	Roadway projects incl. Widening, narrowing, special projs
SECT	Cross Sections
SSWR	Sanitary sewer lines
SGNL	Signalization
SIGN	Sign project files
SITE	Site plans
STRM	Storm water (drainage)
STRP	Pavement Striping
TSRV	Topographic Surveys
TXWY	Taxiway
WALK	Sidewalk project file (asphalt or concrete or other)
WATR	Potable water lines



## City of Fort Lauderdale, Engineering Division CAD Specifications for Project Drawings

### Standards Specific to Architectural Projects

1. Drawings scales are to be as follows:
  - a. LTScale=1
  - b. PSLTScale=1=on
  - c. Precision=1/8"
2. Snap Grid settings - 1/16"=1'-0" scale to 3/8"=1'-0" scale drawings to be drawn with a maximum snap of 1". 1/2"=1'-0" scale to 3"=1'-0" scale drawings to be drawn with a maximum snap of 1/8". All drawings shall be created with SNAP ON.
3. Dimensions shall be associative DIMASSOC=1. Dimensions shall not be forced without prior approval from the CAD Administrator
4. Dimstyles have been established in the "CFLSTDARCH2007.dwt" file. Dimstyles are to be used as defined and are not to be modified under any circumstances.
5. Dimension Round-off:
  - a. 3/8" scale and less round off to 1/2"
  - b. 1/2" scale to 3" scale round off to 1/8"
6. Fractions to be diagonal stacked when used in conjunction with a whole number (ie. 3 $\frac{1}{2}$ "") and not stacked when used as a stand alone fraction (3/4"). The text size of diagonal stacked fractions are to be 75%. The text size of non stacked fractions are to be 100%.
7. Text heights to be as defined in the attached tables.
8. Drawings sheets shall be numbered sequentially using the traditional numbering system (i.e. A-1, A-2, A-3). Drawing sheets shall not be numbered using the ConDoc system (i.e. A1.01, A1.02, A2.01, A2.02). This applies to all engineering disciplines within a set of drawings.



**City of Fort Lauderdale, Engineering Division  
CAD Specifications for Project Drawings**

**Architectural and Landscaping Text Fonts and Heights**

**TEXT HEIGHTS**

<b>Drawing Scale</b>	1/16"	3/32"	1/8"	3/16"	1/4"	3/8"	1/2"	3/4"	1"	1 1/2"	3"	Paper Space
<b>Notes (Romans)</b>	16"	10 2/3"	8"	5 1/3"	4"	2 2/3"	2"	1 1/3"	1"	2/3"	1/3"	1/12"
<b>Room Names (Romans)</b>	24"	16"	12"	8"	6"	4"	3"	2"	1 1/2"	1"	1/2"	1/8"
<b>Small Titles (Swis721BT)</b>	48"	32"	24"	16"	12"	8"	6"	4"	3"	2"	1"	1/4"
<b>Large Titles (Swis721BT)</b>	64"	42 2/3"	32"	21 1/3"	16"	10 2/3"	8"	5 1/3"	4"	2 2/3"	1 1/3"	1/3"
<b>Title Polyline</b>	8"	5 1/3"	4"	2 2/3"	2"	1 1/3"	1"	2/3"	1/2"	1/3"	1/6"	1/24"
<b>Dimstyle</b>	ARCH 192	ARCH 128	ARCH 96	ARCH 64	ARCH 48	ARCH 32	ARCH 24	ARCH 16	ARCH 12	ARCH 8	ARCH 4	ARCH 1

**TEXT HEIGHTS**

<b>Drawing Scale</b>	1"=10'	1"=20'	1"=30'	1"=40'	1"=50'	1"=60'						Paper Space
<b>Notes (Romans)</b>	10"	20"	30"	40"	50"	60"						1/12"
<b>Room Names (Romans)</b>	15"	30"	45"	60"	75"	90"						1/8"
<b>Small Titles (Swis721BT)</b>	30"	60"	90"	120"	150"	180"						1/4"
<b>Large Titles (Swis721BT)</b>	40"	80"	120"	160"	200"	240"						1/3"
<b>Title Polyline</b>	5"	10"	25"	20"	25"	30"						1/24"
<b>Dimstyle</b>	ARCH 120	ARCH 240	ARCH 360	ARCH 480	ARCH 600	ARCH 720						ARCH 1