

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



CITY OF FORT LAUDERDALE

OCTOBER 2015

*THIS DOCUMENT WAS PREPARED IN THE CITY OF FORT LAUDERDALE ENGINEERING &
ARCHITECTURAL DEPARTMENT BY THE CADD STANDARDS COMMITTEE*

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CONTENTS

1. Purpose.....	3
2. Version	3
3. Cover Sheets and Title Blocks	3
4. Scales.....	4
5. X-REFS.....	4
6. Base Drawing	5
7. Units	6
8. Symbols & Entities.....	7
9. Paperspace	7
10. Colors and Line weights.....	7
11. Fonts.....	8
12. Layers	8
13. General Issues before Submittal	9
14. Miscellaneous	10
15. DWG File Names	10
16. PDF File names	13
17. Standards Specific to Architectural Projects.....	14
Architectural and Landscaping Text Fonts and Heights	15



1. PURPOSE

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.

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.

2. VERSION

- 2.1. All drawings shall be produced in an AutoCAD® based product and saved in AutoCAD® 2013 format. Software included but, not limited to:
 - 2.1.1. AutoCAD
 - 2.1.2. AutoCAD LT
 - 2.1.3. AutoCAD Civil 3D
 - 2.1.4. AutoCAD Map 3D
 - 2.1.5. Revit

Please see CADD Coordinator prior to creating drawings with software not listed.

- 2.2. Drawing files submitted will be 100% AutoCAD (dwg) format and 100% editable.
- 2.3. The current version of AutoCAD at the time these standards are established is AutoCAD 2016. 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 2013. 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.

3. COVER SHEETS AND TITLE BLOCKS

- 3.1. 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.
- 3.2. 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. The cover sheet shall be inserted at an XYZ scale of 1; and plotted with a final size of 36"X24" at scale 1:1, in PAPERSPACE.
- 3.3. The standard title block/sheet border shall be inserted in "paper space" and shall be inserted at an XYZ scale of 1. The viewports can be zoomed to produce the desired final scale within the viewport and will be plotted with a final size of 36X24 at scale 1:1.
- 3.4. 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.



4. SCALES

- 4.1. 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'.
- 4.2. Details will be drawn 1:1 and then scaled in a paper space window. Certain details need to be drawn with different horizontal and vertical scales for clarity (e.g. typical roadway cross-section). There are however very few instances where it is not practical to draw details to any scale e.g. 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".
- 4.3. 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.
- 4.4. 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.
- 4.5. 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 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.

5. EXTERNAL REFERENCES

- 5.1. Projects shall make use of external reference files (x-refs) to separate different disciplines and sub-consultants or design teams involved.
 - 5.1.1. X-ref files shall be limited to one per discipline. There shall be no more than one consultant's work into a single x-ref file i.e.: no design shall be placed directly on a survey file, or electrical design on an architectural file, etc.
 - 5.1.1.1. 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.
 - 5.1.2. In engineering projects, all civil work (demolition, concrete, asphalt, pavers) may be placed in one x-ref per discipline, per consultant, per building (if project is multi building), or at the discretion of the project manager may be further segregated into several x-refs.
 - 5.1.3. Larger projects that involve multiple buildings and/or sites may make use of more than 1 x-ref per discipline upon approval of x-ref list by the city.
 - 5.1.4. Details, general notes, logos, etc. SHALL not be x-referenced.
 - 5.1.5. 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 x-ref and layer names with x-ref file name prefixes will not be accepted.
- 5.2. Survey information shall be in its own x-ref's (see **Base Drawing** section in these standards).
 - 5.2.1. The base drawing shall be x-referenced into all x-refs drawings.
 - 5.2.2. 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 x-ref.
- 5.3. Underground utilities (more than one in a project) may be placed in a single x-ref, or each in its own.
 - 5.3.1. In underground utilities where a profile is needed, the area shall be in the same x-ref as the plan view for the profiled area.



- 5.4. Architectural projects shall also be segregated by specialty.
- 5.5. Electrical, mechanical, foundation, plumbing, roof, etc. shall be either in its own x-ref file, or grouped by sub-consultant, or design group at the discretion of the project manager.
- 5.6. 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.
- 5.7. If an x-ref is "bound" it shall be "insert" and not "bind" type of x-ref thereby no extraneous layer names are created.
- 5.8. Profiles shall be drawn in the same file as the plan view and all entities of a profile shall remain together in the same file. Line work, grid, all text, notes, leaders, etc. shall be all together.

6. BASE DRAWING

- 6.1. 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"

- 6.1.1. 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.
 - 6.1.2. 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.
 - 6.1.3. 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.
 - 6.1.4. 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.
 - 6.1.5. 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.
- 6.2. Topographical surveys in AutoCAD format shall not be cut or disseminated into several files in order to create individual sheets.
- 6.3. Topographic survey files shall not have parts deleted because proposed project does not cover those portions. In that case open a paper space window that will show just the portion of survey needed or use XCLIP.



- 6.4. 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 at 12 o'clock.
- 6.5. Files of topographic survey shall only have topographic information. These files shall be x-referenced into a new file where the proposed project will be designed.
- 6.6. The base topographical survey file shall be produced in several files, x-referenced, 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.
- 6.7. 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 x-ref. 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 x-referencing, all permitted changes (layer color, line type, etc.) can be accomplished.

7. UNITS

- 7.1. Engineering projects shall use:
 - 7.1.1. Decimal as linear units at all times.
 - 7.1.2. Angular units shall be surveyor (bearings) units.
 - 7.1.3. Angles shall be measured counter-clockwise and 0 shall be to the east.
- 7.2. Architectural projects shall use:
 - 7.2.1. Architectural units.
 - 7.2.2. Angular units shall be degrees, minutes, seconds.
 - 7.2.3. Angles shall be measured counterclockwise and 0 shall be to the right (east).
 - 7.2.4. 1" grid, and entities snap to the grid.
- 7.3. Dimensions shall:
 - 7.3.1. Have a scale factor of 1
 - 7.3.1.1. The scale factor may be changed to 12 or 1/12 when integrating engineering and architectural line work; example site plans, or architectural details displayed in an engineering drawing with decimal units.
 - 7.3.1.2. 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'.
 - 7.3.2. Precision of 0.01' for decimal units and 1/8 for architectural units, with the default value displayed.



8. SYMBOLS & ENTITIES

- 8.1. *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.
- 8.2. 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.
- 8.3. 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.
- 8.4. Consultants may insert their company logo or identification information in the form of a block (symbol) and left unexploded. This block can be placed in all sheets including the cover sheet within the drawing area of each sheet.
- 8.5. Dimensions shall be associative at all times and left at their default value, and shall NOT be exploded.
- 8.6. Hatch patterns shall NOT be exploded. Hatch patterns and closed polylines forming the hatch boundary shall be the only entities permitted on hatch layers.

9. PAPERSPACE

- 9.1. 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 model space entities (notes with a leader). Exceptions: logos, captions, legends, general notes and revision clouds.
- 9.2. Title block/sheet borders or cover sheets shall NOT be x-refed.
- 9.3. 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.

10. COLORS AND LINE WEIGHTS

- 10.1. The City will provide a line weight chart (CTB) to be used.
- 10.2. Submitted drawings 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).
- 10.3. All entities shall be located in their appropriate layer, and have a color and line type "BYLAYER". The ONLY exception to this rule is a Utility XREF drawing (e.g.: 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.
- 10.4. 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.

- 10.5. 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 line weight chart (CTB) file for color approval by the City.
- 10.6. There are certain entities which make use of custom line types, and that rely on the line type to be identified. If the line type is changed, then the entity loses its identity. Examples are fences: they can make use of a custom line type that identifies them. These entities can be placed in a layer with a different line type and the identity of the fence is preserved. For these cases, it is permissible to make these entities non- ByLayer. There are other examples in electrical drawings.

11. FONTS

- 11.1. Since fonts are not carried with the drawing files and depends 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.
- 11.2. 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.

12. LAYERS

- 12.1. 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.
- 12.2. The list of layer names used in all City of Fort Lauderdale projects are set up in "Layer Manager" of the template drawing and, includes layer filters by discipline.
- 12.3. 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.

- 12.4. 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.
- 12.5. 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".



- 12.6. Layering:**
- 12.6.1.** All text, labels, mtext, etc. that is placed in paper space shall be in layers: #-SHBD-TEXT and/or #-SHBD-NOTE;
 - 12.6.2.** Consultants' logo shall be placed in layer #-SHBD-LOGO;
 - 12.6.3.** Viewports shall be placed in layer: #-SHBD-VPRT;
 - 12.6.4.** General line work in paper space like lines to separate areas or viewports, etc. shall be placed in layer: #-SHBD.
 - 12.6.5.** All general text shall be placed in a single layer, unless there is a justification for the contrary.
 - 12.6.6.** North arrows and graphic scales shall be placed in layer: #-SHBD-NARW.
 - 12.6.7.** Leaders shall be placed in a "TEXT" or "NOTE" layer together with the accompanying text.
- 12.7.** Layer names that duplicate the discipline and the major group shall not be used. Examples are: E-ELEC, D-DEMO, H-HVAC, 1-INST, F-FIRE, Q-EQPM.
- 12.8.** Details, sections elevations, do not in general need layer management. Since there is seldom layer manipulation (on, off), the minor group names that distinguish line weight 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 line weight. The minor group names are: XFIN, FINE, MEDM, HEVY AND XHEV.

13. GENERAL ISSUES BEFORE SUBMITTAL

- 13.1.** 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. 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".
- 13.2.** 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.
- 13.3.** Consultants shall fill in total number of sheets in the title block, prior to final submittal of drawing files.
- 13.4.** 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.
- 13.5.** 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).



- 13.6.** Submittals via FTP sites are not official submittals; and optical media (CD, DVD) is required.
- 13.7.** 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.

14. MISCELLANEOUS

- 14.1.** "MTEXT" (multiline text) shall be used in all cases where more than one line of text occurs and where leaders are used.
- 14.2.** 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.
- 14.3.** This document does not address layer colors or line weights. The consultant shall coordinate with the City's project manager on how these items are treated.

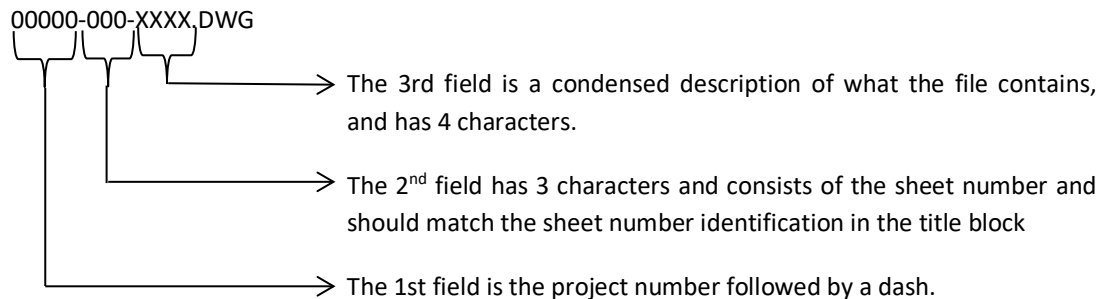
15. DWG FILE NAMES

- 15.1.** 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.

- 15.2.** The City of Fort Lauderdale Engineering Division has adopted the following file naming convention for project drawings:

15.2.1. The format for single layout drawing files looks like this:

00000-000-XXXX.DWG



15.2.2. The first field represents the project number.

15.2.3. 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).

- 15.3.** 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.



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

15.5. Examples for this naming format are the following:

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

15.6. 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.**

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

15.7.1. The 1st 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.

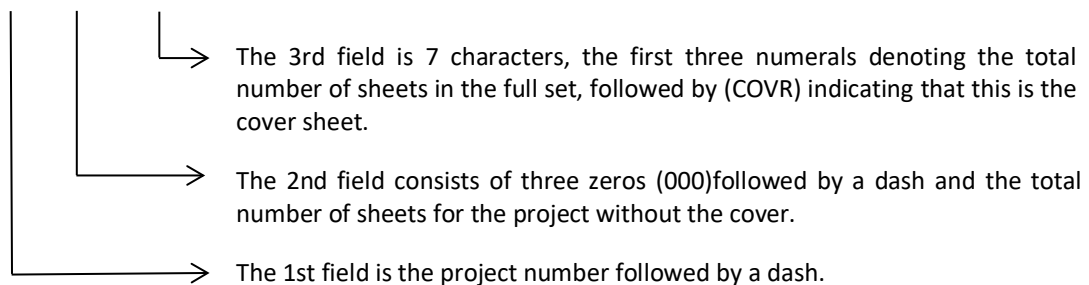
15.7.2. Sheets shall be numbered in a sequential manner and there shall not be any voids in the numbering for any given discipline. All numbering shall start with "1", regardless of the numbering system used, except for the cover sheet which is "0". Example: 1,2,3,4, or A01, A02, A03, BUT NEVER A01, A02, A05.

15.8. 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.

15.9. The total number of sheets shall NOT include the cover sheet.

15.10. The format for the coversheet drawing files looks like this:

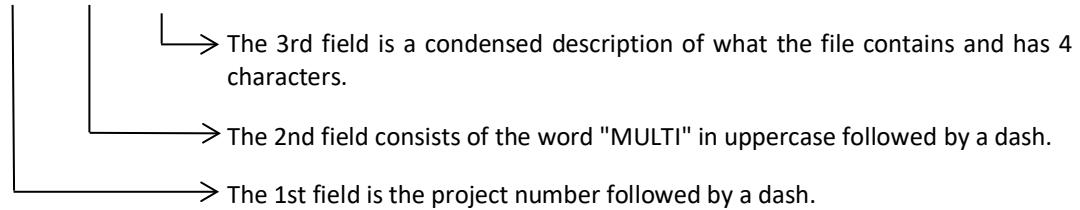
00000-000-000COVR.DWG





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

00000-MULTI-XXXX.DWG



Examples for this naming format are the following:

- **XXXXX-MULTI-DETL.DWG: detail sheets.**
- **XXXXX-MULTI-ELEC.DWG: Electrical sheets.**

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

15.12. 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.

15.13. 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 projects
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



16. PDF FILE NAMES

Note: Project Manager: Please refer to Memo No. 11-06 for the new procedure for submitting electronic drawings and documents to the Plans Room. The date format YYYYMMDD shall be used when needed.

XXXXX <- Project number

PERMIT <- Sub Folder

16.1. **Permit drawing PDF naming:**

- 16.1.1. XXXXX-DRC-BINDER-date.PDF
- XXXXX-P&Z-BINDER-date.PDF
- XXXXX-PERMIT-BINDER-date.PDF

16.2. **Bid drawing PDF naming:**

- 16.2.1. XXXXX-BID-SPEC-date.PDF
- XXXXX-BID PLANS-BINDER-date.PDF
- XXXXX-BID ADDENDUM1-SPEC-date.PDF
- XXXXX-BID ADDENDUM1-BINDER-date.PDF
- File as many addendums as needed

16.3. **Final Permit Construction plan naming:**

- 16.3.1. XXXXX-CONSTRUCTION-BINDER-date.PDF
- XXXXX-REV1-CONSTRUCTION-BINDER-date.PDF
- File as many revisions as needed*
- XXXXX-FIELD CHANGE-BINDER-date.PDF
- File as many changes as needed*

16.4. **AS BUILT –SETS**

- XXXXX-ASBUILT-BINDER-date.PDF

16.5. **DRAWING-SETS**

- File all the CADD drawings

16.6. **ARCHIVES**

- File all project files from the Z: drive (Project manager to coordinate with CAD Manager)



17. STANDARDS SPECIFIC TO ARCHITECTURAL PROJECTS

17.1. Drawings scales are to be as follows:

17.1.1. LTScale=1

17.1.2. PSLTScale=1=on

17.1.3. Precision=1/8"

17.2. Snap Grid settings:

17.2.1. 1/16"=1'-0" scale to 3/8"=1'-0" scale drawings to be drawn with a maximum snap of 1".

17.2.2. 1/2"=1'-0" scale to 3"=1'-0" scale drawings to be drawn with a maximum snap of 1/8".

17.2.3. All drawings shall be created with SNAP ON.

17.3. Dimensions:

17.3.1. Associative DIMASSOC=1.

17.3.2. Dimensions shall not be forced without prior approval from the CAD Administrator.

17.3.3. 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.

17.3.4. Dimension Round-off:

17.3.4.1. 3/8" scale and less round off to 1/2"

17.3.4.2. 1/2" scale to 3" scale round off to 1/8"

17.3.4.3. Fractions to be diagonal stacked when used in conjunction with a whole number (i.e. 3") and not stacked when used as a stand-alone fraction (3/4"). The text sizes of diagonal stacked fractions are to be 75%. The text sizes of non-stacked fractions are to be 100%.

17.4. Drawings sheets shall be:

17.4.1. Numbered sequentially using the traditional numbering system (i.e. A-1, A-2, A-3).

17.4.2. 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.

17.5. Text heights – see next page:



ARCHITECTURAL AND LANDSCAPING TEXT FONTS AND HEIGHTS

DRAWING SCALE	TEXT HEIGHT					DIMSTYLE
	Notes (Romans)	Room Names (Romans)	Small Title's (Swis721BT)	Large Title's (Swis721BT)	Title Polyline	
1/16"	16"	24"	48"	64"	8"	ARCH 192
3/32"	10 2/3"	16"	32"	42 2/3"	5 1/3"	ARCH 128
1/8"	8"	12"	24"	32"	4"	ARCH 96
3/16"	5 1/3"	8"	16"	21 1/3"	2 2/3"	ARCH 64
1/4"	4"	6"	12"	16"	2"	ARCH 48
3/8"	2 2/3"	4"	8"	10 2/3"	1 1/3"	ARCH 32
1/2"	2"	3"	6"	8"	1"	ARCH 24
3/4"	1 1/3"	2"	4"	5 1/3"	2/3"	ARCH 16
1"	1"	1 1/2"	3"	4"	1/2"	ARCH 12
1 1/2"	2/3"	1"	2"	2 2/3"	1/3"	ARCH 8
3"	1/3"	1/2"	1"	1 1/3"	1/6"	ARCH 4
Paper Space	1/12"	1/8"	1/4"	1/3"	1/24"	ARCH 1

DRAWING SCALE	TEXT HEIGHT					DIMSTYLE
	Notes (Romans)	Room Names (Romans)	Small Title's (Swis721BT)	Large Title's (Swis721BT)	Title Polyline	
1"=10'	10"	15"	30"	40"	5"	ARCH 120
1"=20'	20"	30"	60"	80"	10"	ARCH 240
1"=30'	30"	45"	90"	120"	25"	ARCH 360
1"=40'	40"	60"	120"	160"	20"	ARCH 480
1"=50'	50"	75"	150"	200"	25"	ARCH 600
1"=60'	60"	90"	180"	240"	30"	ARCH 720
Paper Space	1/12"	1/8"	1/4"	1/3"	1/24"	ARCH 1