**Engineering Department** 



# Engineering CAD Guidelines

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# TABLE OF CONTENTS

1.0	CAD		LINES	1					
	1.1	PURPO	SE	1					
	1.2 TEAMS ROLES AND RESPONSIBILITIES								
	1.3	COMPL	ANCE CAD STANDARD REPORT	1					
		1.3.1 Pre-Audit							
		1.3.2	PROJECT SETUP	7					
		1.3.3	NAMING CONVENTION	11					
		1.3.4	Model Integrity	12					
		1.3.5	STYLES	13					
		1.3.6	PLAN SET PREPARATION	13					
		1.3.7	CIVIL 3D	21					
	1.4	Revisio	DNS AND ADDENDUMS	21					
	1.5	CONFID	ENTIAL AND CONFIDENTIAL PRIVILEGED (C AND CP) PROJECTS	22					
		1.5.1	Folder Structure	22					
		1.5.2	INSERTING THE C AND CP STAMPS ON THE PLOTSHEETS	22					
		1.5.3	CONFIDENTIAL AND CONFIDENTIAL PRIVILEGED CONTRACT DRAWING SET	26					

# **DOCUMENT CONTROL**

Document H	Document History										
Version	Issue Date	Author	Details of Changes	Approved by							
2022 v1.0	2022-01-01		First published version								

# 1.0 CAD GUIDELINES

# 1.1 PURPOSE

The CAD Guidelines outlined within this document was established to provide guidance for the preparation of the Engineering / Architecture (E/A) Design Division and Construction (CMD) of the Port Authority of New York and New Jersey's (PANYNJ) contract documents. This CAD guideline works together with the CAD Standards Manual and establishes requirements and procedures for the preparation and compliance of CAD based construction drawings.

This document is intended for use by both in-house personnel as well as outside consultants involved in creating or updating PANYNJ facilities CAD data.

# 1.2 TEAMS ROLES AND RESPONSIBILITIES

It is important for the team to adhere to the process as stated on the CAD standards. The VDC group, EAD and CMD teams need to have project integrators and quality controls throughout the life of the project.

The specific roles should be defined as part of the organization structure:

**LEA:** Leader of the project that usually stand up from the project main discipline. Their responsibilities are: Notify VDC support group if changes are required in the project, request the VDC Support Group to review the CAD and PDF files for compliance.

**Task Leader:** Person designated as responsible in charge for each discipline. Responsibilities: Create specific content and responsible for saving files in the correct folders.

**Designers:** Designers are specialists using CAD software. Their responsibility is to develop the project specifications in the Design Stage.

**Consultants/ Contractors:** External project development. They submit the files to be reviewed by VDC support group.

**VDC Support Group:** The VDC Support Group provides templates that must be use and content for design purposes. Also giving orientation in the process. The PA CAD STANDARDS are updated every year to make the process more efficient and help in the different parts involved.

# 1.3 COMPLIANCE CAD STANDARD REPORT

CAD Standard reviews are applicable to all projects, in-house and/or consultant that are issued either for construction contracts or work orders. All items are mandatory to be compliant with the PANYNJ Standards.

# **PROJECT INFORMATION ITEMS**

	CAD - DISCIPLINE COMPL	IANCE REPORT					
ACCEPTED		Reviewed By:					
	PROJECT INFORM	ATION					
Facility Name:	Newark Airport	Review Type:	PA Wide Review				
Contract Number:		Submittal Percentage / Number:	100				
PID Number:		Date Submitted:	1/3/2022				
Project Title:	CAD Report	Date Reviewed:					
Stage:	3	Due Date:					
Lead Discipline:	Civil	Task Leader:					
LEA:		Discipline:	Civil				
Consultant:		File Reviewed:					
Confidentiality Level:	Not Confidential						

#### **MANDATORY ITEMS**

		PRE	-AUDIT		
PRE-AUDIT	YES				
Folder Structure	Yes				
Files Location	Yes				
Files Submitted	Yes				
FilesNaming Convention	Yes				
		PERFORMA	NCE SUMMAI	RY	
PROJECT SETUP	YES	NAMING CONVENTION	YES	MODEL INTEGRITY	YES
Project Coordinates	Yes	Layers	Yes	Duplicates	Yes
External Reference	Yes			Floating Contents	Yes
Layout Tab	Yes			Model Cleanup	Yes
Page Setups	Yes				
		DRAWINGS PERFO	ORMANCE SU	JMMARY	
PLAN SET PREPARATION	YES	STYLES	YES		
Contract Border	Yes	Text	Yes		
Drawing Information	Yes	Dimensions	Yes		
No Linework in Sheet	Yes	Tables	Yes		
Professional Stamps	Yes	СТВ	Yes		
PDFs Setup	Yes				
		<u>cn</u>	VIL 3D		
CIVIL 3D	YES				
Project Coordinates	Yes				
Data Shortcuts	Yes				
Alignments	Yes				
Corridors	Yes				
Pipe Ntworks	Yes				
Surfaces	Yes				

#### 1.3.1 PRE-AUDIT

This section concentrates on the availability of all files required for submission and the correct use of the PANYNJ folder structure on all projects. When submitting files for 100% submission the following files need to be found in the correct folder for both PA Wide and Work Orders:

- All Model files with design intent
- All Plotsheets files
- PDF's following section 1.5.5.5 of the CAD Standard Manual

For more information on the folder structure and rules of each folder go to **section 1.5.3** of the CAD Standards Manual.

#### 1.3.1.1 FOLDER STRUCTURE

#### 1.3.1.1.1 Model Folder Structure

Based on **section 1.5.3.4** of the CAD Standards, sub-folders are not allowed, and the only files permitted in the model folder are drawing and picture files used as external references in the Plotsheets.

#### 1.3.1.1.2 Plotsheet Folder Structure

Based on **section 1.5.3.6** of the CAD Standards Manual, one sub-folder is permitted - the PDF folder. Plotsheet drawing files (.dwg) are the only files permitted. These will be used for future Stage IV projects.

#### 1.3.1.1.3 Publish Folder Structure

The publish folder has one purpose - to share the contract border and model files with other disciplines. When a discipline needs to shared model files with another discipline for coordination, the disciplines will copy those model files and post them in the publish folder. The history folder is the only sub-folder allowed; reference **section 1.5.3.7** of the CAD Standards Manual.

Example: Electrical needs the columns position from structural to place the equipment correctly. Structural will copy the floor plan file into their own publish folder so can electrical can view and externally reference the files to continue their work.

#### 1.3.1.1.4 PDF Folder Structure

The purpose of this folder is to store PDF files. For more information go to **section 1.5.3.6.1** of the CAD Standards Manual.

#### 1.3.1.2 FILE LOCATION

All files need to be saved and located in the proper folder based on the purpose of the file. Please see section **1.3.1.1 Folder Structure** for the rules of the compliance folder and what files can be saved inside the submitted folders.

#### 1.3.1.3 FILE NAMING CONVENTION

A standard naming convention for all submitted files was created for consistency within the agency. Refer to **section 1.5.5** of the CAD Standards for the correct information of each file name convention.

#### 1.3.1.3.1 Model File Name Convention

When working with the model file, using, and saving with the standard naming convention is expected and shall reflect the following:

DPID-FP010-UserDescription.dwg

- M01234567-SPK01-NorthWind.dwg
- A01234567-FP01-FirstFloor.dwg

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Save in:	Di MODEL			×**	¢ 🖏	۵)	C 📮	<u>V</u> iews	▼ Tools	•
Content Content History Documents	Name	This folder	^		Preview					
Desktop	٢			>	Options Upda	ate sheei nbnails n	t and vie ow			
	File name:	S0T23456	7-FP01-FLOC	RPLAN				× [	<u>S</u> ave	
	Files of type:	AutoCAD 2	2018 Drawing	(*.dwg)				~	Cance	1

For more information go to section 1.5.5.3 of the CAD Standards Manual.

Refer to the list of approved model file plan types listed in **Table 1.5.5-2**. Once defined, a model file name should not be changed throughout the life of the project. Any adjustments in the name of the file will result in a disconnect between the host and reference file.

#### 1.3.1.3.2 Plotsheet File Name Convention

When creating and saving files there is a standard naming convention that needs to be followed:

• DPID-PTXX01.dwg for single layout (Ex. M01234567-SP001.dwg)

For multiple layouts in one Plotsheet file, the filename will take form of:

• DPID-PTXX01\_PTXX02.dwg for multiple layouts (Ex. S01234567-S001\_S003.dwg)

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Save in:	📔 PLOTSHI	EETS ~	🖕 📮 🐧 💥 📮 🛛 Views	▼ Tools ▼
Content Content History Documents Desktop	Name	^ This folder is empty. ►	Preview Options Update sheet and view thumbnails now	
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	Files of type:	AutoCAD 2018 Drawing (*.dwg)	~	Cancel

For more information go to section 1.5.5.4 of the CAD Standards Manual.

Refer to the list of approved Plotsheet Types listed in **Table 1.5-F**.

#### 1.3.1.3.3 Contract Border File Name Convention

The contract border file contains general information and is created by the lead discipline. The supporting file is in the following location:

#### ....\CAD\_Standards\2020\All\_Disciplines\Contract\_Borders

Upon opening, the lead discipline will save a copy of the file in the publish folder of the lead discipline with the following name convention:

• PID-CB.dwg (ex. 01234567-CB)

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	File name:	01234567-CB			<ul> <li>✓ <u>S</u>av</li> </ul>	е
	Files of type:	AutoCAD 2018 Drawi	ing (*.dwg)		~ Cano	:el

#### 1.3.1.3.4 PDF File Name Convention

With multiple Plotsheet Plan Types the task leader or consultant needs to create a set for each plan type. Example following the name convention and dividing them by Plotsheet Plan Type:

- M01234567-G001\_G007.pdf
- M01234567-P001\_P007.dwg

The contract set PDF is required by the LE/A and the lead discipline only for PA Wide Review. This pdf contract set is saved in the lead discipline pdf folder. The order shall follow the drawing index and follow the standards name convention:

• Contract Number.pdf (PAT.123-1234.pdf)

#### 1.3.2 PROJECT SETUP

This section refers for the correct process and settings in the creation of the Plotsheets. These processes are in more detail in **section 1.6 and 1.8** of the CAD Standards Manual.

#### 1.3.2.1 EXTERNAL REFERENCE MODEL FILES AND ALL XREF'S WITHING PID FOLDER STRUCTURE

On the model space the design content on the model files will be referenced from the model folder of the owning discipline using the External Reference Manager. Files that are externally referenced should always use the coordinate 0,0 for two dimensional files and 0,0,0 for three dimensional files as the insertion point and a zero-rotation angle.

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		Status	Size	Туре	Date	Saved Path	
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••• 01234567 •••		Loaded	539 KB	Overlay		\PUBLISH\01234567-CB.dwg	
S0123456	57-FP01-FLOORPLAN	Loaded	198 KB	Overlay	6/17/2020 6:20:4	\MODEL\S01234567-FP01-FLOORPLAN.dwg	
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All external reference drawings will be attached as **Overlays** and the path will be set to **Relative** for both external reference drawings and external reference images. If external references are not in use but still appear in the drawing, detach those drawings before the submission milestone. For more information go to **section 1.6.11** of the CAD Standards Manual.

All xref's in the sheets that completes the Contract Set of drawings needs to be submitted and reference from the proper folder of the folder structure.

# 1.3.2.2 LAYOUT ТАВ

On the plotsheet files, the layouts created shall have the same name as the sheet in the layout.

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	Drawn by	R.DOUGHERTY
	Checked by	S.YADOO
	Date	03/30/2020
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1	Drawing Number	<b>S001</b> PID# 20651000
Model	S001 +	

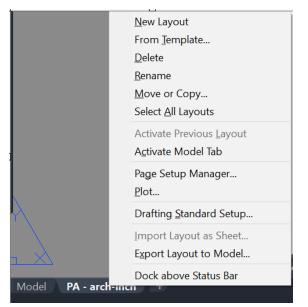


#### 1.3.2.3 PAGE SETUP AND 1:1 SCALE

Page setup needs to be set by going into the page setup manager and selecting the standard page setup PA – PDF (High Quality Print) for in-house users. This page setup can be found in the following location:

K:\Application\EAD\CAD\_Standards\2020\All\_Disciplines\Page\_Setups

On paper space right click on the layout and select page setup manager.



Import the correct page setup and click on select current.

🗛 Page Setup Man	ager		×
Current	layout: PA - arch-inch		
Page setups Current page set	tup: PA - HQ PDF - 34x22		
*PA - arch-inch PA - HQ PDF - 3	(PA - HQ PDF - 34x22)*	Set Current	
TA TIQIDE .	51722	New	
		Modify	
		Import	
Selected page setu	ıp details		
Device name:	PA - PDF (High Quality Print).pc3		
Plotter:	DWG To PDF		
Plot size:	34.00 x 22.00 inches (Landscape)		
Where:	File		
Description:			
Display when cr	eating a new layout Close	Help	

Consultants shall develop page setups using the Authority standards. For more information go to **section 1.7.1** of the CAD Standards Manual.

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#### **1.3.3** NAMING CONVENTION

#### 1.3.3.1 LAYERING SCHEME DEFINITION

The supporting standardized files contain the layers for each discipline and all the general layers are prepared with the linetypes, color and lineweight for the use of content and design creation. They can be inserted using the "Design Center" command.

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	🖶 🔚 Structural_Layer.dwg								
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If new layers are to be created, a layer name convention needs to be applied:

Discipline-Major-Minor-description-Phase

- S-BEAM-STL-\_-EXST
- C-UTIL-STRM-SYMB-RMVL

On the home tab by going into the layer properties manager the layers can be found.

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For more information go to section 1.5.7 of the CAD Standards Manual.

# 1.3.4 MODEL INTEGRITY

Its is standard process to cleanup the files before submittal in order to minimize the corruption of data in the files and have the best content when it comes to the design intent. Before each submittal the proper steps need to be taken in order to be in compliance.

#### 1.3.4.1 DUPLICATES

Overlapping or duplicated objects like, Polylines, blocks, text, dimensions, etc. needs to be either deleted or corrected for the purpose to have a cleaner visualization of what the designer wants to express in the design. Is ok for objects to overlap if the situation needs to be drafted in order to represent the design intent. Example to draft on top of the background file for coordination between existing and new construction.

#### 1.3.4.2 FLOATING CONTENT

Delete all content that is not part of the design intent in the model files. If content is found that has no purpose in what the designer is modeling it needs to be deleted.

Example like text or callouts that are not connected in any way to the rest of the design content of the model files needs to be deleted before the files are submitted.

#### 1.3.4.3 MODEL CLEANUP

Before submitting the milestone content for review all files needs to be purged. This is for the purpose of having a lower size of each file, delete unwanted or unused content on the files like blocks and to delete any styles that are not part of the annotation styles, please see section **1.3.5 Styles** for more information.

This is accomplished by writing purge in the command line in AutoCAD and AutoCAD tools and selecting purge all until the option of purge all is gray out.

# 1.3.5 STYLES

For consistency throughout drawing files, particular fonts and sizes are specified. The standard annotation styles are created and will be used throughout design and construction documents. These standards styles are found on **section 1.6.8**, **1.6.9 and 1.6.10** of the CAD Standards Manual.

#### 1.3.5.1 TEXT STYLES

The following are the text styles that will be used in both model and plotsheets files. If other text styles are found in the files, **purge** those styles prior to submission by using the purge command. For more information go to **section 1.6.8** of the CAD Standards Manual.

Text Style	Plotted Height	Annotative	Font	Description of Usage	Usable by Disciplines
PA - 0.10	0.10"	Yes	ARIAL.TTF	Normal Text	Yes
PA – 0.15	0.15"	Yes	ARIAL.TTF	Headings	Yes
PA - 0.20	0.20"	Yes	ARIAL.TTF	Titles	Yes
PA – 0.25	0.25"	Yes	ARIAL.TTF	Alternate Titles	Yes
Linefont	0.10"	No	RomanS.shx	Linetype Definitions	No
ARIAL	Varies	No	ARIAL.TTF	Contract Border and Drawing Info	No

#### 1.3.5.2 DIMENSION STYLES

The following are the dimension styles allowed to be used in the model files. If other dimension styles are found in the files, **purge** them before submission by using the purge command. For more information go to **section 1.6.9** of the CAD Standards Manual.

Dimension Style	Arrow Head	Content	Unit Type
PA-Arrow	Closed Filled Arrow	0.10" Mtext	Inches
PA-Arrow-Deci	Closed Filled Arrow	0.10" Mtext	Feet
PA-Tick	Tick	0.10" Mtext	Inches

#### 1.3.5.3 TABLE STYLES

The following table styles are to be used in the model files. If other table styles are found in the files, **purge** those styles before submission by using the purge command. For more information go to **section 1.6.10** of the CAD Standards Manual.

Table Style	Description of Usage
PA-Table	General Tables

#### 1.3.6 PLAN SET PREPARATION

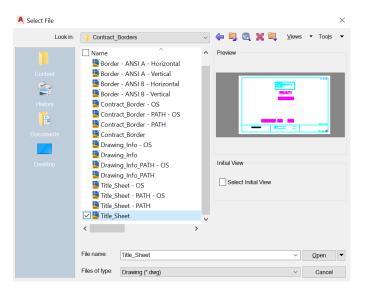
In order to comply with the standard information on the contract border of each Plotsheet, stamps are created and have to be inserted in each sheet. In addition, the general information within the border will also be updated by the lead discipline.

#### 1.3.6.1 TITLE SHEET

The title sheet is the topmost sheet of the plan set. The use of attributes shall ensure consistency between contracts and improve the appearance of all contract sets.

- Begin by opening the Title\_Sheet.dwg file located at:
  - K:\Application\EAD\CAD\_Standards\2020\All\_Disciplines\Contract\_Borders (In-house)
  - <u>All\_Discipline\_Support\_File\Template</u> (Consultant)





• Once opened, save the drawing to the plotsheets folder

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• Enter the appropriate values for each attribute provided in the Title sheet.

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	DWG_	NUM D	wg Number	##			~
		Value: ####	4				
	Appl	y	ОК		Cancel	Help	

• Save the file following the name standard. D01234567-G001 - Ex. S01234567-G001

For more information go to section 1.8.2 of the CAD Standards Manual.

#### 1.3.6.2 CONTRACT BORDER FILE

All disciplines in the project will reference the Contract Border (CB) in the lead publish folder. For more information go to **section 1.5.5.2** of the CAD Standards Manual. The lead discipline completely fills in the attributes and saves the contract border file. The PID, Facility name and contract Number are items that need to be completed.

				No. Date Revision		Approved
				ENGINEERING DE	PARTME	
A Enhanced Att	ribute Editor		×	#########		
	-				+	
Block: TITLE			Select block +		+	
	IECT_NAME					
Attribute Text Opt	tions Properties					
Tag	Prompt	Value	~	Title		
wo	Work Order Number	##	·	1047474		
CONTRACT	Contract Date (MM/D	####				
FACILITY	Facility Name (Multilin	########				
PROJECT_N	Project Title (Multiline	#############				
TOT_SHT	Total Sheet Number	####	~			
Value: #	############					
Apply	ОК	Canaal	Liele			
Apply	ÜK	Cancel	Help			
					- <u></u>	
				Designed by		
				Drawn by Checked by		
				Date		
				Contract Number		#####
				Drawing Number		
					P <b>D</b> ∰	



Once the contract border is saved it can be externally referenced from the lead publish folder using the External Reference Manager. The border will be referenced into the paper space layout with an insertion point of 0,0. Under no circumstances will the contract border be exploded, renamed, or modified. For more information go to **section 1.8.3.1** of the CAD Standards Manual.

In paper space, open the XREF manager by typing xref on the command line and click on attached dwg.

File References					
Reference Name	Status	Size	Туре	Date	Saved Path
S01234567-S001*	Opened	197 KB	Current	6/17/2020 7:00:4	
Details					
<b>B</b> Call <b>B</b>					

Select the contract border found on the lead discipline publish folder and select Overlay and Relative path.

Attach External Reference		×
Name: 01234567-CB	<ul> <li>✓ Browse</li> </ul>	
Preview	Scale Specify On-screen X: 1.00 Y: 1.00 Z: 1.00 Uniform Scale	Path type Relative path Rotation Specify On-screen
	Insertion point	Angle: 0.00
	X: 0.00	Block Unit
Reference Type	Y: 0.00	Unit: Unitless
Locate using Geographic Data	Z: 0.00	Factor: 1.000000
Show Details	ОК	Cancel Help



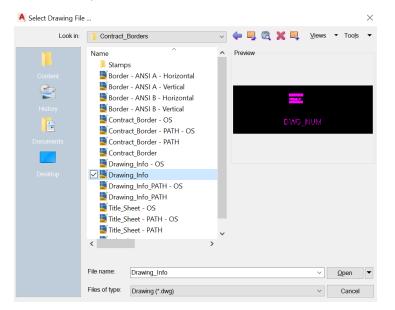
#### **1.3.6.3** INSERTING THE DRAWING INFORMATION

Once the contract border has been externally referenced, the Drawing\_Info block needs to be inserted in each sheet. This block will be inserted with an insertion point of 0,0 and all attributes information shall be filled out. For more information go to **section 1.8.3.2** of the CAD Standards Manual.

Go to the insert tab and select Block from other drawings.

<b>*</b>	Home In	sert Annotate R	ender View	Manage 📒
0	<b>-</b>	Inderlay Layers	Ē	
Attach	ı Clip Adjust	Page 2 Snap to Underla		-View Insert
ė			_DotE _No	slank
Recen	it Blocks			
Block	s from Other D	rawings		
Insert	Block			
		ving into the current o	rawing	
A goo library or it ca which	d practice is to can be a drawii n be a folder th can be inserted	insert a block from a ng file that stores relat nat contains related dr as a block. With eithe essible to multiple use	block library. A b ed block definit awing files, each r method, block	ions of
🔜 IN:	SERT			
Press I	1 for more he	lp		

The file is inside the contract border folder of the supporting files, select the drawing\_info file and uncheck the insertion point.



Double clicking each attribute will allow you the ability to fill out the plotsheet information.

A Enhanced A	ttribute Editor			$\times$	
	ving_Info WING_TITLE ptions Properties		Select block	÷	III BE Britan Ayrved ENGNEERINGDEFARTHEIT FACILITY
Tag	Prompt	Value		^	<u> </u>
	Dwg Title (Multiline - A	. ################			PROMOT TITLE
DISCIPLINE	Discipline	####			I <del>IKUSSRUSSRUSSRUSSRUSSRUSSRUS</del> I
	Discipline Sub-Group	####			
DRAWN_BY	Drawn By	####			
	Y Checked By	####		<u> </u>	
DESIGNED	Designed By	####		*	
Value:	*****	****			Designed by Provide the Provid
Apply	OK	Cancel	Help		Oste will Coning XXX-123.123 Dessing ###

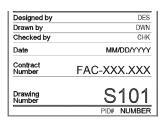
#### 1.3.6.4 DRAWING NUMBER CONVENTION

There are three options for the drawing number convention for the plotsheets. This is decided by the LEA and all disciplines will follow the drawing convention.



Example for each option:

Designed by	DES
Drawn by	DWN
Checked by	CHK
Date	MM/DD/YYYY
Contract	FAC-XXX_XXX
	170700.7000
Drawing Number	S101



Designed by	DES		
Drawn by	DWN		
Checked by	CHK		
Date	MM/DD/YYYY		
Contract	FAC-XXX.XXX		
Number	FAC-XXX.XXX		
Number Drawing Number	S001		

For more information go to section 1.5.6 of the CAD Standards Manual.

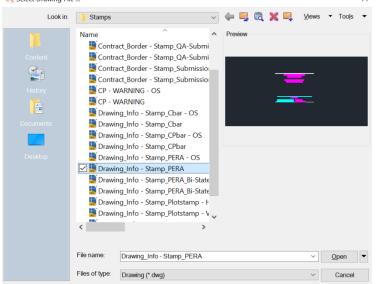
#### 1.3.6.5 INSERTING THE SIGNATURE (PERA) STAMP

Signature stamps are provided for both the New York and New Jersey Professional Engineer and Registered Architect and are to be used by consultants, only. Logos are not allowed. The professional stamp will be inserted as a block in each sheet with an insertion point of 0,0 and have all appropriate attributes completed. The stamp is not to be edited or exploded. The signature stamp is located at the following location:

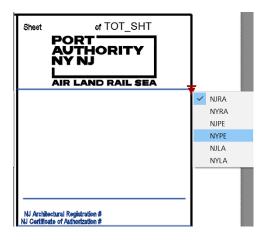
All Discipline Support File\Contract Border\Stamp

When consultants from both NY and NJ work on the design then the Bi-state PERA Stamp shall be used. For more information go to **section 1.8.3.7** of the CAD Standards Manual.

Inside the stamp folder of the supporting files, select the Drawing\_info-stamp\_PERA file and uncheck the A Select Drawing File ... ×



Click on the inserted stamp and the downturn arrow to select between NYPE, NYRA, NJPE and NJRA.



By double clicking the attributes, the fields for the plotsheet information are able to be edited.

A Edit Attributes		
Block name: Drawing_Info - Stamp_PERA		
Enter Name of NJ Architect of		
Enter NJ Registration Number		
Enter NJ Consultant Firm Narr		
Enter NJ Consultant Firm Add	-	
Enter NJ Certificate of Authori		
Enter NJ Sub Consultant Firm		
Enter NJ Sub Consultant Firm		

The following figure demonstrates three examples of using the stamp on the sheets.

Shert SHT_NUMor TOT_SHT PORT AUTHORITY NY NJ AIR LAND RAIL SEA NY CONSULTING FIRM NY CONSULTING FIRM ADDRESS	Steet SHT_NUMd TOT_SHT PORT AUTHORITY NY NJ AIR LAND RAIL SEA NJ CONSULTING FIRM NJ CONSULTING FIRM ADDRESS
 NYPE NAME NY Purkasing England # NY Curtinels of Administrate #	NJ Portacional Engineer # NJ Cardinal of Autocalization # NY CONSULTING FIRM NY CONSULTING FIRM ADDRESS NY CONSULTING FIRM ADDRESS WT Portacional Engineer #

#### 1.3.6.6 CONTENT ON THE PLOTSHEET PAPER SPACE

Plotsheet files are drawings that consist external reference files, **only**. Additional linework is not permitted within Plotsheet drawings in either model or paper space with the following exceptions:

- North Arrows
- Graphic Scales
- Revision Clouds and Revision Cloud Text
- Match Lines and Match Line Text
- View Titles
- Block with the prefix "Drawing\_info"
- Architectural Plotsheets

#### 1.3.6.7 **PDF SETUP**

There are requirements when printing the contract drawings in PDF format. On **section 1.5.5.5** of the CAD Standards Manual there is information for standard procedures for the creation of the pdf's when submitting for compliance.

# 1.3.6.7.1 PDF Files

PDF files will be created at full size, directly from the AutoCAD drawing files. Two forms of PDF files can exist, Single and Multi-sheets.

The requirements for the PDF creation are:

- From the current set of Plotsheet files
- Full Size (either 22x34 or 34x56)
- In black and white (exception: graphic signage type sheet)
- In consecutive order
- Grouped together by **Discipline Plotsheet Plan Type** and drawing type

#### 1.3.7 CIVIL 3D

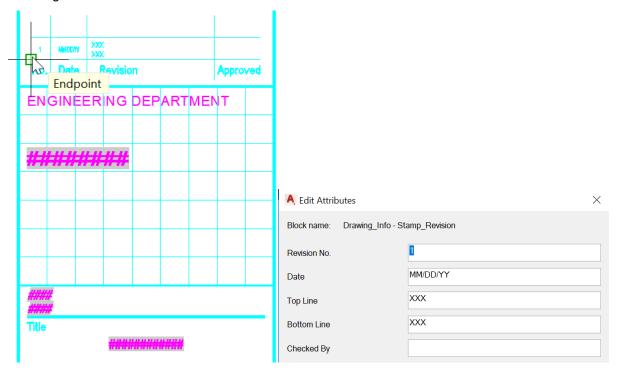
This section is only for the disciplines that use deci-ft template on all project for the PANYNJ. The use of 3D objects and civil tools are mandatory for the production of data.

#### 1.4 **REVISIONS AND ADDENDUMS**

When revisions and addendums on contract drawings happen. the revision stamp and revision triangle need to be used for both occasions. These stamps can be found:

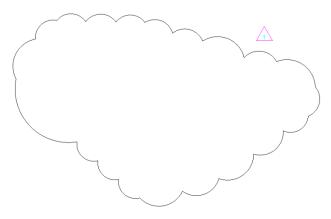
#### All\_Discipline\_Support\_File\Contract Border\Stamp

The revision stamp needs to be inserted both in the title sheet and on each sheet where the revision has been applied. When inserting the stamp, edit the attributes and use insertion point according to the following:





On the Plotsheet, a cloud will mark the change in the sheet by choosing the revision command and the revision triangle stamp found on the supporting files with the revision or addendum number shall be placed near the cloud.



When is a brand-new sheet then it will be added to the index of drawing and be bubble in the index with the revision triangle while the new sheet shall have the revision stamp with the proper information. For more information go to **section 1.8.2.3 and 1.8.3.4** of the CAD Standards Manual.

# 1.5 CONFIDENTIAL AND CONFIDENTIAL PRIVILEGED (C AND CP) PROJECTS

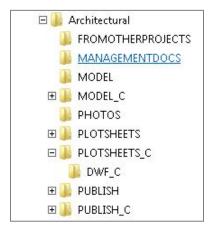
Confidential and Confidential Privileged projects are those in which circumstances may require different guidelines be followed in order to comply with the standard.

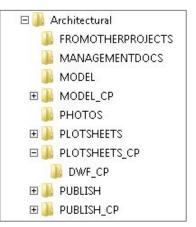
For more information on practices and procedures on protected information projects can be found on

Engineering Department Protected Information Practices and Procedures

#### **1.5.1 FOLDER STRUCTURE**

A following folder structure shall be used when working with confidential and confidential privileged files. The model, plotsheets and publish folder are name with C and CP respectively.





#### 1.5.2 INSERTING THE C AND CP STAMPS ON THE PLOTSHEETS

The stamps are to be inserted as blocks with an insertion point of 0,0 on each individual sheet for C and CP files. For CP files a new border is created and save in the proper location, the stamps can be placed within the Contract Border. Both C and CP stamps are provided with this standard are located at:

K:\Application\EAD\CAD\_Standards\2020\All\_Disciplines\Contract\_Borders\Stamps

<u>All\_Discipline\_Support\_File\Contract Border\Stamp</u> (Consultant)

📓 Drawing\_Info - Stamp\_Cbar - OS

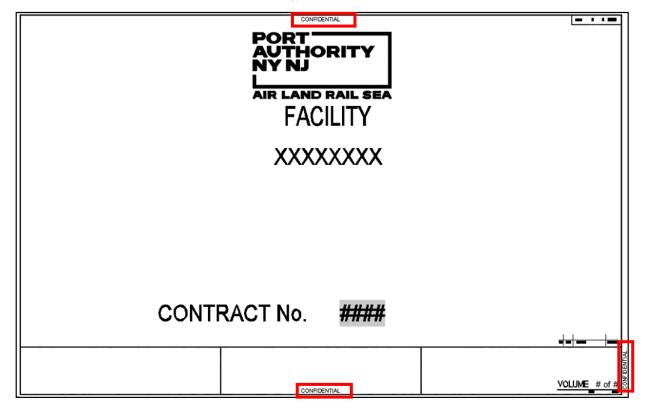
📓 Drawing\_Info - Stamp\_Cbar

📓 Drawing\_Info - Stamp\_CPbar - OS

📓 Drawing\_Info - Stamp\_CPbar

### 1.5.2.1 CONFIDENTIAL PLOTSHEETS

In creating confidential (C) sheets, the process of **section 1.3** of this document shall be followed. Projects containing C content must be separated from the set into its own set with its own Cover sheet After creating the sheets, the confidential stamps will be inserted by:



• On paper space inserting them as a block



	CONFIDENTIAL		SHT_NUM TOT_SHT
-			AUTHORITY
			AIR LAND RAIL SHA
			In. Das Restar. Apprend
			ENGINEERING DEPARTMENT
			FACILITY
			NAME
			ARGONICAL PRI PROTECTION
			PROJECT ITTLE
			DRAWING TITLE
			Designed by Crawn By Chacked by
			Provide a second
			Contract Number XXX-123.123
		1	
	CONFIDENTIAL		Number FOOT

- Save the sheet in the Plotsheets Confidential folder
- On the index of drawings, the sheet will be marked as protected information

INDEX OF DRAWINGS		
DRAWING NO. SHEET TITLE		
	GENERAL	_
TS001	TITLE SHEET	
IX001	INDEX OF DRAWINGS	_
	CIVIL	-
C001	NOTES, LEGEND AND ABBREVIATION	
C002	SITE PLAN (PROTECTED INFORMATION VOL. 2)	
	ELECTRICAL	-
E001	NOTES, LEGEND AND ABBREVIATION	_
E002	ELECTRICAL DETAILS (PROTECTED INFORMATION VOL. 3)	
		-

#### 1.5.2.2 CONFIDENTIAL PRIVILEGED PLOTSHEETS

When creating Confidential Privileged (CP) sheets, the process in **section 1.3** of this document shall be followed. Projects containing CP content must be separated from the set into their own set with its own Cover sheet. All CP content shall be placed in the CP folder structure.

After creating the sheets, the warning sign (only on the Cover sheet) and confidential privileged stamps will be inserted by:

• Inserting both Stamps as a block in paper space.



	AIR LAND RAIL SEA FACILITY XXXXXXXXX	
And a latit design of the second seco	CONFIDENTIAL PRVILEGED	Note: 100 100 100 100 100 100 100 100 100 10
	CONFIDENTIAL PRIVILEGED	Set
	CONFIDENTIAL PRIVILEGED	

• Input the CP document Control Number by filling the attributes by double clicking on the stamp.

A Enhanced	Attribute Editor		×
	rawing_Info - Stamp_CPI <cp_number>&gt;</cp_number>	bar	Select block
Attribute Tex	t Options Properties		
Tag < <cp_nun &lt;<cp_nun &lt;<cp_nun &lt;<cp_nun< td=""><td>4В 4В</td><td>Value</td><td></td></cp_nun<></cp_nun </cp_nun </cp_nun 	4В 4В	Value	
Valu	e:		
Apply	OK	Cancel	Help

- Save the sheet in the Plotsheets CP folder
- On the index of drawings, the sheet will be marked as protected information

	INDEX OF DRAWINGS	
DRAWING NO.	SHEET TITLE	
	GENERAL	
TS001	TITLE SHEET	
IX001	INDEX OF DRAWINGS	
	CIVIL	
C001	NOTES, LEGEND AND ABBREVIATION	
C002	SITE PLAN (PROTECTED INFORMATION VOL. 2)	
	ELECTRICAL	
E001	NOTES, LEGEND AND ABBREVIATION	
E002	ELECTRICAL DETAILS (PROTECTED INFORMATION VOL. 3)	

#### 1.5.3 CONFIDENTIAL AND CONFIDENTIAL PRIVILEGED CONTRACT DRAWING SET

If a project contains both Confidential and Confidential Privileged drawings, follow **section 1.9.4** of the CAD Standards Manual.