

## **BENEFITS OF A WORKSPACE**

We all appreciate the importance and benefit of CAD and BIM standards in that they are key to the successful and efficient delivery of any project. While they set expectations for the corporate look of the data, they also provide uniformity and familiarity for all who utilise it and contribute to its development and delivery. With the introduction of CAD and BIM standards there often comes the expectation of compliance with industry standards and consistency of content. While this may well be the outcome, the amount of effort involved in reaching it is sometimes rather excessive. Equally, in cases where users simply don't have the time or knowledge, corporate standards can often be ignored.

### **WHY HAVE A WORKSPACE?**

At Cadventure we firmly believe that in making a corporate standard easier to follow than to bypass, it is more likely to be successfully implemented. Providing users with the necessary tools and resources to comply with the standard not only increases adherence, but also improves productivity. By simplifying some of the day-to-day processes and removing the need to reach for the CAD manual, or refer to the company level table, allows users to focus on the design without getting bogged down in corporate red-tape. Furthermore, organising these standard resources in a well-configured corporate workspace not only makes them more accessible to users, but also makes them easier to maintain and manage.

### **WHAT IS A WORKSPACE?**

Using site and project-level configurations, company standard resources can be deployed to MicroStation and AECOsim Building Designer through a centralised workspace. Furthermore, they can be configured to integrate with other Bentley products, such as ProjectWise and PowerDraft. Resources can include, but are not limited to:

- Seed (template) files
- Dgn Libraries
- Custom interfaces
- Plotter/printer configurations
- Cell Libraries
- Rendering Materials
- Datasets – families, parts, compound parts, components, Datagroup Catalogs (AECOsim Building Designer)

Not all practices have the time or expertise to develop and configure their own workspace. Yet without one, they run the risk of producing inconsistent data that is not compliant with industry standards, problematic to print, and may even require reformatting.

### **WHERE DO WE GO FROM HERE?**

Whether you have corporate resources in place that you feel could be managed more effectively, or you simply haven't had the time to develop them, perhaps now is the time to do so. Whatever your circumstances, it is worth considering the benefits a well-configured workspace can offer you.

# CAD STANDARDS FOR MICROSTATION & POWERDRAFT

## WHAT ARE CAD STANDARDS?

CAD standards are unique standards created specifically by a company to manage how drawings are created and documented. CAD standards define areas such corporate templates include: file naming types, file locations, units line types, text styles, dimension styles, title blocks, drawing organisation and archiving.

## WHY DO I NEED CAD STANDARDS?

While CAD standards at large established companies might be well managed, at smaller companies the management of CAD standards is commonly neglected. This becomes an issue as companies grow and new employees come on board, each with their own unique way of doing things.

## WHAT WILL CAD STANDARDS DELIVER TO MY BUSINESS?

Consistency	The ability to create continuity across design documents that are easy to read and understand. Clear design communication facilitates better design.
Quality	Good design delivered through adequate design definition on drawings in a language which is widely recognised and understood
Accuracy	Clarity in the drawings allows you to perform effective design reviews and reduce your liability.
Speed	Improve efficiency in the production process. Accelerate drawing production and increase volume of output. Make training easier and make outsourcing more efficient.
Collaboration	Defining CAD protocols will ensure consistency, quality, accuracy and speed when collaborating.

## SO WHAT ARE THE TYPICAL COMPONENTS THAT FORM CAD STANDARDS?

As a minimum, CAD standards should include the following:

- Standard project directory structure
- Model file organisation
- Structuring of data/separation of information
- Model file naming
- Drawing file organisation
- Drawing file set-up (e.g. use of sheet models and layouts, referencing etc.)
- Drawing file naming
- Level standards
- Level Naming
- Corporate standard levels (including bylevel colour, style and weight defaults)
- Text and Dimensions

Fonts  
Text Style and Dimension Style names  
Standard drawing scales  
Colours  
Plotting  
Corporate printer drivers/configurations  
Corporate drawing borders  
Data exchange  
Incoming issues  
Outgoing issues  
Archive procedure

Cadventure can provide proven CAD standards to meet your business and project requirements.  
Call us on 0207 436 9004 for more information.

# CUSTOMISING BENTLEY APPLICATIONS

## FOREWORD

Following on from our previous two articles entitled 'Workspaces' and 'CAD Standards' respectively, we can now consider bringing these two elements together to provide benefit via additional menus, tools and shortcuts.

**"A workspace** is a custom MicroStation environment or configuration invoked when starting MicroStation. By selecting a workspace, you customise MicroStation for a specific discipline, job, project or task. There is always a workspace operating when you run MicroStation and this can be defined to work locally and/or on a server to your benefit."

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## WHAT IS CUSTOMISATION?

To modify or build tasks, menus and shortcuts according to individual, personal or company specifications or preference.

## WHY CUSTOMISE?

Do you sometimes find yourself searching around trying to locate resources (such as fonts, text styles, line styles, macros, seed files and dimension styles)? MicroStation customised workspaces can greatly improve productivity and help ensure that the correct resources are being used for each project. In the last article, we discussed CAD standards and their benefits. A workspace will assist in the automatic distribution of your CAD standards and customised tools.

The time spent at the front-end to set up workspaces is more than recovered later when using these workspaces and taking advantage of the ability to customise more of its interface. The right-click menu, introduced long ago in MicroStation V8 XM Edition, is now more powerful with customisable context-sensitive tools. We can create a list of tools that automatically populate with exactly what you need. Using these tools along with position mapping and the PopSet tool setting display, you achieve more screen dedicated to drawing, and your tools are more easily accessible than ever before.

In addition we can create bespoke drop-down menus adjacent to the standard menus to enable easy access to the tools of your choice.

## **WHAT ARE THE BENEFITS OF CUSTOMISING?**

- Improved productivity through fast task access
- Easy access to bespoke tools and repetitive tasks
- Front line entry and access to your CAD standards
- Consistency of standards across drawings
- Centralised tool management

To help you achieve all of the above and more, Cadventure provide services to build and deliver custom menus and tools within the Bentley AECOSim Building Designer, MicroStation and PowerDraft applications.

**Cadventure can provide customisation to meet your business and project requirements.**

# CAD/BIM MANAGEMENT

## FOREWORD

Following on from our previous three articles entitled 'Workspaces', 'CAD Standards' and finally 'Customisation', it is time to turn our attention to managing your CAD and BIM environment.

A quick recap:

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**"Customisation** is to modify or build tasks, menus and shortcuts according to individual, personal or company specifications or preference".

## WHAT IS CAD/BIM MANAGEMENT?

*'To be responsible for controlling or organising, to have charge and to direct or administer'*

The scope and level of CAD/BIM management encompasses CAD applications, workspace, CAD standards, customisation, project delivery, CAD/BIM Project management and protocols.

## DO YOU NEED TO MANAGE?

With the necessary components in place and your CAD/BIM software ready to go, your CAD authoring tool now requires effective 'control' to enable the delivery of consistent, accurate and professional production information.

*'Do you understand all aspects of your digital CAD system and feel confident to manage your projects through your digital CAD system confidently?'*

Nobody can ever know all there is to know about a high-end CAD package but the CAD Manager has to know where to find answers in a short space of time. Workload scheduling is a term we are all familiar with. Cadventure have the resources and industry experts to assist you.

## WHAT HELP IS AVAILABLE?

From a simple project management process organising 2D and 3D CAD data, to the more complex BIM data organisation and management, Cadventure can deliver the appropriate consulting, mentoring and training.

To help you achieve all of the above and more, Cadventure provide the services you require to build and maintain your CAD/BIM systems.

**Cadventure provide CAD/BIM management services to meet your business and project requirements.**