MASTERTEMPLATE ARCHICAD TRAINING – Using MasterTemplate - View Map Part Three

Welcome to this training on MasterTemplate.

[Training starts at 1:07]

In the earlier sessions, we looked at MasterTemplate view map. We looked briefly at the imported reference documents, which are just some empty folders for where you can put worksheets with information. We spent a lot of time in modeling design legends, where we can see the categories you spend time in doing your initial model and working on design and supporting views for interactive legends and various 3D projections and specialized view for exporting the entire building of the module. [0:01:57]

So we've looked at this thoroughly, and we have looked at most of the construction document views as well. So the construction document views are what we will be using to create working drawings and we have gone through this quite extensively. But I believe the area of architectural detail is one that I did not spend much time on, because we were running late on the last call. And detail creation is tied in with that. We will look at that and spend some time looking at presentation document views. These are fairly straightforward, but there are some things to learn about. And then we will switch gears and look at the layout book. [0:02:46]

In terms of the layout book, the way that we have it structured with two different sets, the small project set and the hierarchical groupings that are used for larger projects. Along the way, I will talk about the layer structure for MasterTemplate to give you some more orientation on that. Hopefully this will conclude the basic training on the use of MasterTemplate, and then the next session which is scheduled in a couple of weeks will focus on customization. Taking MasterTemplate and customizing it to suit your needs better. [0:03:46]

So let me get going. So we were looking at the construction document views and all of the clone folders that are a common part of the construction document views where, for example, when we create a section, it gets added to this list. So there are four section markers right now, and if we added a fifth it would show up in the view map, each with a particular layer combination already set up to work. Now let's jump down to the architectural detail clone folder. When you create a detail drawing, it will show up, as in any clone folder, as an additional view of that particular detail. So this little symbol here with the pictures indicates that it's a clone folder, and you can see all of the different types of pictures that we have. [0:04:35]

They are different than the plain folders. Now if we look in the view map, this particular one is the same one as the detail folder here. So let's look at how we create a detail and how it shows up in this area, and then how we can actually start working on a detail using some of the extra tools that are included in MasterTemplate. So I am going to switch over to the sample project right now so that we have the building that we can apply this to. And I will take a section view. So certainly a common place that we would have a detail callout would be an eave treatment, where the roof and the walls meet. [0:05:22]

I will zoom in on this area here. So this right now is a true model in this section. So all of the things that we are seeing here are actual 3D. You can see what I've highlighted is the roof. And if you're wondering how that roof actually has a complex shape and not just a simple form, is because it's been carved out. There is an actual piece removed so that the extension beyond the base of the wall is thinner. And that represents that the plywood and shingles would extent, but the actual framing volume would not. And of course we do have this rafter tail, this ornate rafter tail which was created from a standard library part, which is just a very simple shape. It's basically an extrusion of a simple piece of lumber, but it too has been carved using solid element operation to create that ornate shape. [0:06:32]

That's not what I want to focus on right now. I do want to point out those things that we may look at in the 3D model just as part of our tips and tricks for how you model things more accurately. But I will point out that this element here is actually a 2D element. This is not real framing; this is a 2D object that is representing the framing at the top of the wall. Now let's say that I wanted to create a detail of this. I'll go to detail marker tool and select it and make sure that I'm creating a new detail viewpoint. So that is set up in the info box. That means that when I draw this, it will create a new detail window. [0:07:23]

Now I really don't want it say footing, because this is going to be an eave detail. So I will change this and give it a name before I create it. And I could work on the ID; if you are really organized, you will know what ID you want to call it to begin with. But you can also modify it afterwards. And this is an internal reference, because often you're going to be focused in terms of the marker on what drawing and sheet the marker ends up on. The detail drawing gets placed on a sheet, so we may not care about the ID, but the ID is a way of seeing the details listed in the project map in alphabetical order. [0:08:09]

Now having said that, I'm going to create a new detail here, rather than a marker that is linked to an existing detail or a placeholder. That would be a marker that is awaiting a link. Since I'm creating a new detail, I have the choice of creating a boundary for it, which may be a polygon, a rectangle or a rotated rectangle. The rectangle would be the most common use. And then if we really were doing a linked marker, then we might want to use the option on the far left here that puts in a graphic. But we'll take the rectangle and go and draw a box outlining this area. And two clicks, one on each corner, will determine that. And a third clicked for the hammer will determine where the call out is. And I'll just move it over a little bit. [0:09:02]

And you can see if I zoom out a little bit that this call out now has a name D10 and eve detail which is what I had up above. Now later on after we have created it, worked on it, and placed it on a sheet, then we would expect and want to set the information in this call out to be the drawing number and the sheet number; that would be the most common thing. Now if I go into the view map here and scroll down to the architectural details clone folder, we'll see that the eve detail has now shown up with the ID and the name. I'm going to double click on it and we'll see something rather strange. [0:09:45]

Now in terms of the way this clone folder is set up, it looks like there is something that is a little bit amiss. We are only seeing one element here which is the 2D framing. We're not seeing the rest of the building. And that is because in this file, the assumption is that when you create a detail drawing you put everything onto the ArchiCAD layer so it will always be visible. So what I'm going to do now is temporarily change and say "Show and Unlock All Layers". Let me go to the layer dialog, and we now have all the layers showing, except for the walls. So I'll say Select All, Show and Unlock. And I'm still not seeing the information that I expected. So oops! I will have to backtrack and see what is going on with that, because this is not what I expected. [0:11:00]

So let me go back to this here. Let me go into the View menu and refresh this and say Rebuild from Source View. And there we go. So I'm not sure what happened there, perhaps the layer combination was incorrectly set. So that did not come through properly. So that is a good command to know that if you haven't worked on a detail and are just starting out, if the call out information is out of date, you can use the Refresh, Rebuild From Source View, and this will bring the information in again. You will want to use that very carefully, because if you have deleted or stretched lines, changed fills, or done other things that came from the source view, you are going to lose that work when you rebuild it. [0:11:58]

So you would use this only when you are about to start, if you created the callout earlier but hadn't started working on the detail, and the design has changed, this will bring it up to date. But don't do it if you have already been working on the detail significantly, because you will have to redo some of the changes. I am going to go ahead and say "Show and Unlock All Layers" here. I would like to change the settings of this particular detail drawing here. So I apologize for the misstep there, but if I change it manually - I can go to the layer combination and change that, or get current window settings, which will then automatically pick up the change in layer combination. [0:12:58]

Now the scale right now is set to be 1:12. If you are working in metric, it would be 1:10. And this may be a good scale, but if you wanted to change the scale - let's go to 1:8 or in metric 1:5 - you will notice that the drawing gets bigger onscreen. And this will vary depending on your requirements for that particular detail at that scale. So in a clone folder, the item is always linked to the original viewpoint in the project map and cannot be deleted from the clone folder without deleting the whole clone folder. However, we can modify any of its view settings to make it custom so that some details would be at one scale and some at others. As many different scales as you need. [0:14:11]

So I will go here and say "Get Current Window Settings" to change it, or I can manually change the scale. The important thing when creating a detail is that after you do the callout and copy the information is that you set the scale to whatever this particular detail would require and change the settings for that view in the clone folder. That is a standard part of ArchiCAD's methodology. Now in terms of working on a detail, I will give you a few quick tips that don't really have to do with MasterTemplate per say, but will help you as you work with details. This outer line is an option that gets turned on by default. And you can turn it off in the settings for the detail callout, or you can just delete it if you don't want to have that boundary. [0:15:11]

The line here in this case would be part of a grid line. That may or may not be useful, and you could delete it. But at this point, we have lines and fills. You can see when I select it that this says fill, this other one says fill, and there are different ways to approach this. You may find that these fills get awkward because they overlap each other. For example, this particular fill you will notice goes behind the framing. So it would be a little hard to edit. If I grab it and move it, it's a straight line; it does not notch itself around. So let me undo moving it. So one thing you might want to do is consolidate fills. We can go to the Fill tool here and select all the fills. This will select all of them that are currently drawn. And there are some that you might not even know about. [0:16:14]

For example, in the bottom right area, there is a fill that is part of the wall being seen beyond the section. So instead of that being empty, it has a fill showing potentially where the wall was. Having selected all of these things, some people prefer to start over and delete these fills. Perhaps just delete them and now I just have lines. This is a legitimate way to do it; you can then just work with the lines as lines and put in fills where you want. I will just undo that. Another thing you may want to do is delete some of the fills. Maybe you want one that represents the surface of the roof. So you can deselect some of them that you find useful, like this one for ceiling here. I will leave this one. [0:17:11]

Let's see if I can zoom in on it. Now I left two deselected, and when I delete them, you can see that they are the only fills still available. When I do Command+A with the fill tool there are only these two. So this is a legitimate way to simplify the drawing of the detail and work on it. But another possibility is to go to the Edit menu, and under Reshape, there is a command that says "Linework Consolidation" and a separate one that says "Fill Consolidation". So I will choose fill consolidation. And it allows ArchiCAD to go through all the fills selected and trim them so that they don't overlap. And perhaps merge things that are identical, so that instead of being a bunch of little pieces, it becomes one larger one. [0:18:18]

So there are various settings that you can do. Let's just say OK. We have 19 fills active, and I say OK, and there are now 17. You can see in the upper left corner that it combined two of them. In some cases, you will have a much more dramatic effect. If I select this particular fill, you can see that it now goes and stops above the framing. So it would be a little easier to manipulate. That is an approach you can use. You can also do a similar thing with the lines. If I activate the line tool and select all lines, it says we have

58 lines. And we might find that some of these are overlapping each other and it's going to be hard to edit. [0:19:08]

So we can go under the Edit menu, Reshape, Linework Consolidation. And there are various things in this wizard that you can adjust. I am going to leave the default settings and just click through them briefly. So as I click through it, it asks me if I want to pay attention to things like the lines that are on different layers being merged, and how to connect different lines. I will just use the default settings and click next a few times and then say Consolidate. And it says there were four duplicates that were removed and it merged five different lines. And when I close it, instead of there being 58, there are now 42 lines. So sometimes you will see very dramatic effects here, and sometimes it will be more modest. [0:19:53]

But it will definitely make it easier to edit those lines. I would recommend using Consolidate Lines before you work on this. And frankly, I think really it's a matter of preference. I am going to go to the Fill tool and delete most of these fills, except for the two that I know are graphically useful. Now I have just the lines simplified and only two fills. I am going to go and clean up a few things here. I will select this line and shorten it back. I will get this a little cleaner than it was and then show you some of the unique features of MasterTemplate. So I have now cleaned this up. I don't know, in terms of construction, how this is supposed to be laid out, but I will just show you the simplest way to clean it up and how to bring in some additional elements in 2D that might be appropriate. [0:21:07]

Before I do that, let me place this onto a sheet. Unlike the sections and elevations, we don't have details pre-placed on sheets. Obviously, every project is going to have unique details, and it wouldn't work to set up a lot of preset details on sheets to work with. So whenever you create a new detail, you do need to at some point add it to a sheet. So I will go to the Layout book and go to the sheet for architectural details. You can see in this project that there are a few sample details already placed. We didn't try to create an entire project worth of detail sheets. Let's go to the view map and grab this eave detail and I will put it down here. [0:22:03]

So I just drag it in, and you can see how it appears. This particular drawing right now is set up without a title. Let's just change this to the preferred drawing title here. And you can see that it now automatically has the name. Let me crop it a little bit. So I will go and press down on the edge and use the polygon editing tool so that it doesn't extend any further than it needs to. Now it's fitting nicely in here. And I will drag this into position and crop it a little further. So you can see now it has the number 3A, and it is in this particular grid bubble. And let's go back to the section where this came from. [0:23:05]

If I go to the Window menu and look at the windows that are currently open, I can see that section C was the last one I was in. so having this selected, I will go and change the callout.

A little side note: when I go to the window menu and switch from one window to another, it will bring up that viewpoint but it won't automatically remember the last layers that we were working with. So right now, it's showing these extra things here that are normally on hidden layers. This is a quick background:

this particular element that I have just selected is a profiled component that is used to cut the end off the beam. So that's why the beam has an ornate end. It's because this profiled component is drawn along all of the edge of the roof, cutting through or intersecting a bunch of these rafters. And then a solid element operation is trimming it away. This is a 3D trick to get the rafters trimmed. [0:24:23]

And likewise, this component here is trimming off the roof to make that roof have a thinner extension rather than the full body of the roof. So these things are normally turned off. I can see that it's section C. and if I double click on section C in the clone folder, we are going to see that it turns off those layers. So now we are back to the correct layers for that. Whenever you have a detail callout, there is an initial setting that gives you the name and ID of the detail. But we generally want to go into the detail selection settings for the detail marker, we want to go in and change the first text row from "Custom" here to - we want to say, "Show Reference ID, Show Name". We want to actually say - why is that not - okay, marker reference to the viewpoint. [0:25:40]

So, having selected the marker, we would like to have it refer in terms of its text information to the first place drawing of the viewpoint instead of the viewpoint. That would be the most common one. If you are putting this detail drawing only once on a layout, then the first place drawing is the only drawing that is used for that viewpoint. If you have it multiple times, then this will pick up the first time. So we were saying the first one here, and then instantly it allows us to choose the first text row as the referred drawing, and we can also do the second text row as the referred drawing here. [0:26:21]

But we will need to turn off the name. The default name was "Eave Detail". Turn that off, and now you can see in the preview that it is just showing the number and sheet. And say OK. You can do that immediately after you work and place the detail or you can do it later when you are cleaning things up. You will need to find each detail callout and change it so that the marker reference is pointing to the drawing, the first place drawing of the viewpoint. And then you may need to adjust this setting for the text in the first and second row. So that is a standard part of ArchiCAD detail callouts. Nothing particular different in terms of MasterTemplate here. [0:27:16]

Now let's go back to the detail that we were working on. And say we wanted to put in some more information. Going to the label tool and putting in a label here would be useful. What you see here is that as soon as I click the label tool, it put in some preset text, which is not appropriate. Let me undo this label and go into the label tool settings. This is an odd thing about labels. You can eyedrop any label that has already been drawn and it will pick up all of the settings, just like anytime you use the eyedropper. But in particular, there is a special effect that is useful if you know about it and can be very annoying or puzzling if you don't. [0:28:21]

When I eyedrop a label that has text, it will pick up the text that was already placed, and it will put it into default text. So that means that when I put in that label again, it will have this text. If I don't want that, I can just delete the default text. And I believe in this case the text styles had a color background here.

And we may just want to use the opaque background. In this sample project, the last thing that was clicked on or that was set for the label tool that was eyedropped was this annotation or special information label that we had for the template. So it had that yellow background. And it had some text that was explanatory. Now having turned this into a normal background that would be opaque and deleting the text, now as I start to label, I can go in and either draw a box of a certain width or just freeform. [0:29:34]

And I will just type in some text here and call this "Rafter Tail". So all of the settings could be adjusted. In fact, there appears to be a frame around this. So I will turn that off and now we will have something simple to look at. So we can go into any detail and annotate this. This is all standard ArchiCAD stuff. But what is special about MasterTemplate in terms of details? We have a set of views specifically to help you work on details. And these are in the Detail Creation folder. You will notice it has the words "Non-Clone". These are special views that have been placed in the template for you to use. They are not typically placed onto a layout sheet, because they are not actual drawings; they are tools or reference materials. [0:30:40]

So let's take a look at "DT-01 Detailing Library Parts". When I double click on that it opens a window, and that window happens to be an independent worksheet. So you can see DT-01 up at the top, Detailing Library Parts. And let's see if I go to the Project Map, it is a worksheet. And you can see in bold "DT-01". So this is a set of components like the interactive legends on the floor plan, but these are ones intended to be used specifically for details. Now they come from a set of tools that were created years and years ago back in ArchiCAD 5 or 6 by Michael Sotero, an architect who is currently based in the Santa Cruz, California area. [0:31:30]

He sold the tools as MSA Detailer. Around the time of ArchiCAD 7, Graphisoft bought the rights and the license to these tools and included them in ArchiCAD from then on. So for many years, it has been a part of ArchiCAD as the standard distribution in the U.S. Now I'm not sure if these things exist in the international version at all. I imagine that there are some things like this, maybe quite a few. But what I have done in MasterTemplate is include this in the international version as an extra component. The international version of the template does have these in a custom embedded library that does allow you to have access. [0:32:27]

Now let's just take a look at these components. They are categorized: connectors, bolts, joist hangers, installation and masonry. Because they were created in the U.S., they are U.S. standard sizes and there may be some limitations using it in metric use. I think some of the parts can be changed to any size you want, but others may force you to use U.S. standards. Let's say that I wanted to put in a piece of steel here. So I am going to eyedrop this. Let me go back to my detail drawing and go to the "Eave Detail" and click. When I click, it shows up in this particular view. That was tedious in terms of going to that particular view and back. So what I am going to show you is a way that we can get access instantly and within the same window. [0:35:50]

You can use the virtual trace. So if I highlight the detail library parts and right click and say "Show as Trace Reference", we'll now see when I zoom out all of the things in the same window. And I can eyedrop from any of these. So if I pick up a different piece of framing and click, it has placed that. So we can find elements that we want and eyedrop them and put them in. now as we put in the elements before or after can be reconfigured. So for example, this piece of steel has different sizes based on standard U.S. sizes. [0:34:38]

They may be a little less than useful directly in the international use. I think the steel ones are based on the standard U.S. steel library. I will rotate this around to 180° and say OK. And maybe mirror it like that. Now I can go and drag this up here. It's not necessarily the right construction, but the idea is that you have access to components that are 2D much more quickly than if you went to the library. We can go to the object library, and we'll see that here is a lumber piece. We can go into wood casings, and in the U.S. standard library we have a lot of 2D symbols in the category for detailer library. [0:35:44]

Sometimes you will need to manually find these, but for the common ones, you can eyedrop the ones that we have in the template change their size and orientation as you need. So the idea here is that instead of drawing a bunch of lines, you can, in many cases, select components and just adjust the size and orientation as needed. So it will make it quicker because you're working with elements rather than the lines that represent those elements. So if I zoom out, you can see this is available as a trace reference. The other option, instead of having it as a trace reference, is that if I open it in a separate window, this window doesn't have to take up the full screen. [0:36:35]

I can have this window in a smaller space, and then switch back to that eave detail here. So what's happening is the eave detail and the detailing library parts are sharing the same window. In order to have them side by side, we need to change an option in our work environment. I haven't looked at this for a while. By the way, here is where you can turn off the boundary. If you don't want to have that box around the detail when it's created, you can turn on or off here, "Create detail worksheet boundary". And let's see, "When opening view or layout by double clicking, prefer to open in an existing window or prefer to open in a new window." So let's try this and say OK. And now I can perhaps go and open the eave detail and I can see these are by side. [0:37:50]

Now I can have this window and be working on this detail after, and I can have the detailer parts here and I can zoom in on any part of that. And I can go back and forth and eyedrop anything I want. So if I want to get a different type of framing, I can go and click in this window, eyedrop that, and then go and click back in here and place and move it around. So having these windows side by side will allow you much quicker access and you can be zoomed in on any particular window, wherever you want, and start picking components and going back and forth. That's the first part of the customization in terms of MasterTemplate of having quick access to this whole kit of parts. [0:38:44]

Now in this particular library here, one could set up some views that would jump you to a particular area. Just to show you how that would work, and if you want to do this - and we may actually put this into the template at some point - I zoom in on an area and say "Save Current Zoom". And I will call this "Connectors". Let me move over to this insulation area, and I will save current view and call it "Insulation". And we'll move this over to masonry and call it "Masonry". As I have done that, I have accumulated these and I can switch. So I can tell ArchiCAD to show me the connectors or insulation. So you can see how that works. [0:39:55]

If I make this window smaller, it will still function. This little triangle here is the name views. So I can go and say "Give me the insulation". And that takes us to that area. It may not be the exact zoom that I wanted. You can see how it's centered, but I would need to zoom in on it. You may or may not find that useful. It's also quick to fit in window and zoom in on something. But the ability to create saved views in any particular window is certainly one worth knowing about. You will notice that when we are in other windows those saved views don't apply. It's because they are stored with the particular window that you've got such as a worksheet or detail. [0:40:52]

So that is the first part of customization of MasterTemplate in terms of components is that we can put in components here from that library. We can also go and eyedrop lines. If I wanted to switch to the spline tool to do some labeling, I can eyedrop that. And when I go back here I can go and create that. You can see how it has created the spline like that shape, so just by eyedropping it I have switched to that tool. You'll notice the one on the left has a solid fill. The one on the right has an empty arrowhead. This is an interesting side note. When we have a virtual trace on, and you can see that we have the trace turned on here, one of the options in trace and reference is this little icon in the bottom right that says "Make fills and zones transparent". [0:42:01]

It does allow you to overlay one drawing on top of another, particularly one story on top of another. And these are see-through, they are not opaque. This is something that is useful, but in this case, it's confusing because I'm not seeing any fills that are opaque. If I uncheck this, you can see how the spline actually has a solid arrowhead. So this little command here is useful, but can get confusing. It's just a standard part of ArchiCAD's interface with virtual trace that can trip you up if you don't know why the fills are not doing what you expect. Let me just close the trace and reference here. [0:42:58]

We have now looked at most of the creation of details, but there is one very special part that is important to understand that can help you to lay out details properly or cleanly in a grid. There's one question here from John Burcell who asked, "Are these saved zooms saved after the project is closed?" The answer is yes. They are saved with the particular window. For example, the plan window has certain views. Any particular section or detail would have its own views, and they are saved. And when you reopen the project they will still be there. [0:43:43]

Let's look at detail creation. And I get started with this? This is a rather intricate training question; and I realize that I've taken half the time of today's hour and a half just on creating details. So I'm going to need to find a way to do this quickly and then move on. But I hope that what I've done with details so far has been of interest and perhaps opened your eyes to some possibilities in MasterTemplate. So let's take a look at this component here that I've just selected. It would be this element. You can see there's this thing here that has lots and lots of handles. And when we look at it, it says it's an object that is selected and it has the name "DET Detailer Template". [0:45:16]

If I open up the settings, it's basically a bunch of lines and hotspots, these little X's that you see are the snap points, handles that show up. Now if I go and change the drawing within grid cells to a number two for example, you will see it gets wider. The preview got shorter but it's actually going to get wider, it's going to be too wide. Right now it says "Canceled" because apparently this is on a layer that is locked. So although I can preview this, I can't change it. Let me go and look at "Detail Change Module". So I'll double click on that one and you can see when I switch to that view, the particular layer that it's on, which is specifically for working on details, is now unlocked. And the handles are black, meaning that it's editable. [0:46:20]

So if I change this drawing with the two, and say OK, you'll see that this thing has expanded to be twice as wide. The template guide is intended to help you lay out details in standard modular units. So when you place them on a sheet, they will nicely align up from one to another in either one by one - so a small detail would fit in one grid space - a larger detail might be two or three wide or two or three high or any combination that you would need. So the idea here is that you have a guide that will help you to structure or place your detail information in a particular configuration. [0:47:16]

The change module you can see has a little warning or advice saying the change template is enabled. So you don't want to actually work on the detail when this is setup. What you want to do is be working in the detail creation here, or working in the print detail. Let me turn off the virtual trace. So this was actually being turned on and off based on the views, but virtual trace was confusing a little bit of what we were seeing. So now with virtual trace turned off, in this particular case, let's look at the "Detail Change" module. And we are seeing the original line work of the detail drawing in this space, but the module is extending twice as wide. If we look at "Detail Creation" and zoom out, it looks similar, except that warning about changing modules has disappeared. [0:48:23]

If I look at "Print Detail", you can see that the actual template guide has disappeared. So the idea here is that you would use one of these views to set up the size of the detail drawing. And then when you're ready to place it or work with it as a final drawing, you would switch to the print detail. For today's session I'm going to have to leave this as an introduction, and I will make an effort to create a separate tutorial on the use of Detailer Template. On the MasterTemplate website, I think there are some links to the manual for the Detailer Template that was created by Karl Ottenstein. Karl is a well known ArchiCAD

expert based in the cold north part of the United States. And he is very active on ArchiCAD Talk and extremely well respected internationally. [0:49:45]

Graphisoft contacted with him to create a manual for how to use the detailer. So that is actually going to be the best way to understand this, because what we've done is taken the detailer templates that were originally created by Michael Sotero and then documented and explained beautifully by Karl Ottenstein and we've just incorporated them into the template. So I have given you just a little bit of an introduction here, and I'll definitely post below this video a link to the manual for that. And I will try to do a video tutorial specifically for working with this modular system. [0:50:29]

The modular system allows you to see and arrange your detail to fit a nice space on the sheet. So if I look at the detail sheet, it would help it for details that are stacked on top of each other in a grid to line up neatly and fit within an even number of grid module spaces. And if I go back to the detail creation, the lineup includes snap points to make sure that the - and let me change this module back to a single width so we can see. By the way, when you are in the change module, you can select it and stretch this - if we go to the hotspot, you can see the purple diamond hotspot and I can say I just want to move that spot and I can jump. And you can see how it jumps to one wide or two wide or three wide or four wide or different modular numbers. [0:51:42]

So it's quite a clever part. I will put it back to one by one here, and you will see it actually has a bunch of guides for making the text evenly spaced. And also some guides on the left side for lining up the dimensions. You can see the little tic marks that you can line up so that these dimensions stack nicely. You can see how they are evenly spaced. So there are some really interesting tools to make your drawing look neater and more consistent using this as a template or guide. So I am going to leave that for now, and as I said, post some more information on it to follow up. [0:52:35]

So that is as much as I am going to cover for detail drawing right now. Let's look at the miscellaneous views to finish up the construction document folder. I think I may have mentioned this in the last training. These are a series of folders that you can put anything you want in. so there may be some views for example this misc plan view kitchen detail. If I double click on it, you can see that it is a zoomed view of the kitchen. So this could be any particular view that you create. It could be placed into this folder. So it's really available for you as an organizing system for extra views that aren't clones, but are based on some part of the project that you want to be able to quickly access and have in a filing system. [0:53:34]

Let's look at the presentation document views now. So presentation document views, as I go to "Present Plans", you will see that there is one "Present Presentation Site Plan" that in this sample files shows one example. We are seeing a view of the floor plan of the house with the fixtures, but more notably, we are seeing site information including some nice fills. If I hit the tab key and select the lawn - what is this here? It is just a fill. And you can see that is has a texture. And if I open up the settings of the fill, you will see it has a particular texture here in the fill type that is an image fill. So the image fills were added into

ArchiCAD back in I think version 12 as an option to have some textures, much like materials in 3D, that you can manually place anywhere you like. [0:54:18]

So having it in the lawn makes it look more natural. And the same thing with the floor boards, this is an image of the floor. So these are just some fills, and this is an example of a particular view. Now for the site plan, you wouldn't have them on every story, you would have them on one site plan. And this one has the layer combination for presentations, rather than a landscape construction or working drawing. And it says "Building and Site" so it has certain walls turned on and certain information. You may notice that the doors and windows are hidden right now. That is because the model view option for presentation site plans is set up to hide the doors and windows to make it simpler. [0:55:45]

Typically this would be done at a smaller scale. Right now in this sample project, it's set at 1/8 inch to a foot, which would be roughly 1:100. If we select this tree, the actual symbol is like that. But let's just see the 2D representation. The fill type is empty, so let me use the Tab key and cycle through this. There is a slab that is the mesh terrain, the slab that is the lawn, and here is fill triangles. And let's see - an object - let me drag this object - no it's not that. So there must be a separate element here. I am trying to see what is causing that. Okay, there are actually two different objects here. So if we look at this, this is an object that has a different pattern, it's not empty. [0:57:15]

And for the 2D symbol, it's using one of these image fills for the foliage. So we actually had two different objects overlaid on top of each other. And the reason for this is one might be used in a certain type of drawing for construction purposes, and the other would be used for presentation. And they are both in the same place. So I will undo and move them back into position. So anyway, this is one particular view for presentation. Let's take a look at presentation furniture plan. So I will go to the ground floor/first floor furniture plan. And you can see that it's a variation of a construction document. [0:57:58]

This has a layer combination that turns on the furniture and does not show dimensions and other technical information. And we have a model view option that is set up for presentation where the walls are shown in a poché as opposed to showing all the complex details. And you could also not turn on door and window markers. So this is a clone folder with all of those settings so that if you did have a ten story building you would have ten stories in here. You might not use the roof story for that but you would have all of those available. [0:58:37]

And in a similar way, if I double click on the presentation floor plan, this has some other settings. It turns off the furniture and turns on some of the fills that we already saw. So these are different layer combinations that we have set up here. You can modify any of these settings if you want to get a different effect, but basically these will very quickly give you certain types of plan drawings for presentation. The section ones here - we only have one set up in the sample project. When I double click on it, it will open up the view for this drawing. [0:59:19]

Let me set up for a much bigger screen. I will clean that up and switch to sample project. Here is the presentation section. What makes this a presentation view is that the settings for the section marker have a different model view saying, "Please use shaded with shadows". So this particular marker, if I say that I want to look at the section settings as opposed to the view settings, the section settings would be this particular section marker on the plan. You can see here is the actual marker. And if we look under model display, we will see as I scroll down, it has sun and shadows turned on. [1:00:39]

There is a little check box next to that. And it has the uncut elements which would be the elements that we were seeing. It says "Own Material Color Shaded". So this is what is making it have color as opposed to being just linework. This particular presentation section is one example, and we also have the elevations that are similar. If I open up any one of these and perhaps just arrange the window more conveniently. Each of these - as I had noted earlier in my introduction, if we go to the canvas limits on the floor plan - this would be the view plan that shows the footprint of the building and all of the markers. You can see that there are two different markers for the elevations in each orientation. [1:01:42]

One of them is set for the presentation style; the other is set for the working drawing style. And in the clone folder for elevations, we'll see that we have eight. For that are CD or construction documents, four that are presentation, but in the presentation elevations, this is not a clone folder. This is just manually placed. When you create a folder in the view map, as a normal folder you can create any views that you want and put them in there, whereas when you have a clone folder it will automatically put in all views of a certain type or views of all viewpoints of a certain type in the project map. [1:02:29]

So there are advantages to each. The best use for the clone folder is for things like sections where most or all sections will have the same settings. And you just want to have them all show up in the list so that you can place them onto sheets. And the same thing with interior elevations. You might have 5, 10, or 100 rooms and they will show up automatically with the clone folders. The best use for regular folders is to hide or organize details within it. So in the construction document views, we can make it very compact and only open the ones that we want to see. Or the presentation document views. [1:03:25]

For a folder like this, we can have manual views. And similarly, a folder like this can have sub folders several levels deep if you want. So the final part of the presentation document views are the renderings. As I double click on "Generic Axo" in this particular one you will see the layers switch and the view updates to show the proper information that you would expect in a 3D window. Now it says rendering, but this is a view that of course I can move around. We are in the 3D window so I can orbit around and change it. And I can edit things; I can select elements and work on them. But this folder is intended for you to save viewpoints that you would like to render more than once, at least that's a potential use for it. [1:04:23]

So if I double click on "Generic Perspective", it's returning me to the perspective view that was set for this project as a useful reference. Now having brought this up, we could adjust where we were standing, but we might just want to go to the Document menu, Creative Imaging, Photo Render the Projection. And this will create a rendered view from that same orientation. So the "Present Renderings" folder is a way of compiling any viewpoints that you want to return to again and again. Certainly when you are developing the project and you show the clients some views, and make changes or develop it further, it's nice to be able to share the same view with an updated model. [1:05:12]

So this would be a place where you can put whatever views you want. And some could be special purpose, like this axo wire frame roof. It's one of the special purpose views in the template where it's using a layer combination called "model see through roofs". And as you may recall, when I open up the layer dialog box, this particular layer combination has for the roof layer here; you can see they are set up with wire frame. You can see it and I will click and it makes it solid. I will click again and it makes it wire frame. So this is just using that particular layer combination. [1:06:00]

These particular presentation renderings can be an axonometric or perspective, and they can have some special effects, cutaways or certain layer combinations that are useful. We are now done with looking at presentation document views, and we are pretty much finished with the view map, except for this one folder called "Trash/Recycle Bin". Let me explain this. Sometimes there are some things that aren't relevant for a particular project. There are views that you created that are no longer needed, but you may not be quite ready to delete the views. When you delete a view, you can't undo it later. Let's go to floor plan views clone. [1:06:54]

Let's say that in this new project, demo and existing plans is something that we aren't going to use. So I will drag it down and put it into the "Trash/Recycle Bin". When I do that, just like in the operating system, it disappears from your working area. If you change your mind or needed it again, it's still there. It's a filing place for things you don't want to see, that you might want to delete, but aren't 100% ready. If you are not using key plans - those are the small drawings that show where the sections and elevations are being projected from. Perhaps they aren't relevant to your project. So just drag it to the Trash/Recycle Bin and put it in. [1:07:54]

By the way, to select things that are separate on the list and pick only the ones that you click on, you can Command or Ctrl + click. You can do a Shift+ click and it will select all the ones in between. So now when I close that up I have a shorter list here. So I encourage you to use that folder if you find it useful. Of course you can just delete. If I go into Trash/Recycle Bin I can take any of these like the fire separation plan and hit the "X" here. It will warn me that I can't undo it. That's not a problem. I am going to go ahead and delete it. But if you aren't ready to delete, just put it in there. [1:08:58]

So we are going to spend a little time now with the layout book. I have a question from Ken Andrews. "Does that delete the clone folder stuff if dragged to the Trash folder?" No. if you drag it to the trash

folder it's just simply re-filing it. As far as ArchiCAD is concerned, there is no such thing as a trash folder, or at least there is nothing special about a folder that has the word "Trash" on it. It's just another filing place. You can't move individual views out of a clone folder or delete them, but you can move entire folders like that. You can move normal views around freely. [1:09:44]

Moving on to the layout book. Here we are an hour and ten minutes into our call. I will try to cover most of the stuff in the layout book, but again, we may need to expand this training further, because there is so much useful information to learn. Let's take a look at the layout book as it comes normally in MasterTemplate, which is where the small project set is open and the other ones are closed. If I double click on "Title Sheet General Info", you can see that this is a sheet intended for your initial title sheet of the set. All of this though can be moved around. [1:10:38]

So you can certainly move this, but you will notice when I select it that the handles are grey. Some of the things on the title sheet and a few of the other sheets in MasterTemplate are locked. If I select it, it has grey handles. Let me select both of these text elements and you'll notice they both have handles. I can go to the Edit menu, Locking, and Unlock. They are locked simply to prevent accidental movement. Unlocking them is just fine; you can do that any time. I can drag them to the side. Perhaps I want to put a rendering over to the side, so it may make better sense to have it this way. [1:11:25]

Now as I zoom in on it, let's take a look at the use of project info data. When I [audio cuts out] - it becomes highlighted, and I can edit this. When I go to edit it, it has this entire block of text selected. So let me explain for those who are less clear. I am going to type in a few letters here, and I can select individual letters to edit them. When I go to this thing on the left it selects the whole thing at one time, because this is what is called an auto text entry. And if I click on insert auto text, we will see that it highlights it as the project name. [1:12:12]

So this is a field of data or information that is intended to be the project name. Right now, the project name is "*** Project Name ***". Now you will notice down below the client has a similar format and these other ones have a lot of asterisks or stars. Let's go look where this is set. Under the File menu, Info, there is a command called Project Info. Many of you are familiar with this. You use it for a variety of purposes. But in MasterTemplate, we've gone further than you may be familiar with. You will notice that there are a lot of fields; close to 40 fields currently. If I look where it says project name, here is the name of the field reference and here is the value. Let's call this "Smith Residence". [1:13:07]

So I have just changed that text and I will say OK. As soon as I do that, it will change to "Smith Residence"; however, I had manually put in the extra text here, so I just want to get rid of that. If I hadn't done that then it would have instantly looked appropriate. Now the ones that have asterisks here, these are intended to catch your eye so that you know that you haven't filled in the information in the project info yet. So all you have to do is go into File, Info, Project Info and go fill in all the stuff here. When it's things like "Street", this is a single line, but there is another one. I think in some cases you will find things

like for consultants. If I click on this, and click on the triangle to the right, you can see that it's multiple lines of text. [1:14:05]

So actually, we can have multiple lines in a data field in the project info, or just single lines. So if it's multiple lines, you will see a triangle, if it's a single line - well, actually, I guess we can use this triangle anyway, but it is just a single line. So the triangle allows you to edit multiple lines. The basic idea is that all of the ones that we have put in have these asterisks. And they will stand out. If I fit in window and zoom in to this, they will stand out so that you know what you haven't filled in. we chose this particular graphic invention because it doesn't look to awkward if you were to print with some of these things not filled in, but it does allow you to see easily that this information has not been used. [1:15:01]

If you don't need to specify the site APN, parcel number, building use, or something else, feel free to delete them. As with all of MasterTemplate, this is something that will have you time if it is customized for your use. It's easy to get rid of things you never need or that you don't need on a particular project. Now when I click on this and select and double click to edit, these text areas are normal text and things that I can edit. But this here is a data field. So it's a combination. If I scroll through this it's a combination of plain text and data fields here. So in the legal description, if I hit the Tab key to go over to the area, I could go in and put in an auto text thing. [1:16:04]

Perhaps we might have a legal description in here. Let me put in something like "Info Title 24". This is some information related to California's energy analysis called Title 24 Regulations. So you can see this puts in a bunch of stuff in here. This is all one field. I am going to delete it and get rid of it. So in any text box, we can have a combination of normal and auto text entries. The basic thing is that if you are going to select or edit this you will need to edit the info and auto text. In older versions of MasterTemplate, we actually had two overlaying sets of text. We had ones that had the fixed text, which said perhaps "Building Code", and then we had the auto text as separate little pieces of text. [1:17:05]

It was a little awkward, it was something that I think Scott Boehmer, who created a lot of the components of the template, was using what he knew which was you could put in a separate auto text box, and he wasn't combining it. So what you will find before version 14 of the template is that if you select this you may find one batch locked and another batch editable. So just unlock things and move them around as needed to edit it. So feel free to do what you need. Now moving on, in terms of other conventions in MasterTemplate, you will notice that this text has a gray background and when I double click on it and edit it, it's just regular text. So it's intended that you would put in some text as the legal description here. And it can be as long as you need. [1:18:03]

If we scroll over a bit, there is text that says "Applicable Codes". You can change that name. There is a disclaimer saying, "All codes referenced are to be used as amended." And then there is this one with gray. The idea here is that if you need to you can edit these, but in general they are ready to go. They are set up nicely. But this, you should put in some stuff. You should put in some information. So anything

that has a gray background is your visual cue to say, "There is nothing here that is useful. You haven't put in the real stuff. Please put in the real stuff." And when I select this and double click I can go in and put in general notes or whatever here. And it then edits it. So this would have useful information I could paste in. I will also probably want to take off the gray background so that it prints properly and doesn't stand out as not being filled in. [1:19:08]

[*Clicking around looking for a window*] Where is my info box? All of the sudden I have lost the info box here. So let me go to the Palettes, Info Box. For some reason that was hidden when I was having problems. So let me make sure that there are no other comments. So the info box is selected, and we can look at the settings for this. There is a check mark here saying that the background fill is turned on and I can just turn it off here, with this little check mark. Or if I want it to be opaque for some reason I can go and make it a simple opaque fill. So either way would work. After you edit these things you can put in some useful information, and then you are going to go and turn off background fill there. [1:20:31]

So that is the basic methodology in terms of text, combinations of auto text and regular text and a clue that anything with a gray background has not been filled in so far. As I look further on this title sheet, there is a text block here. I think this is the one that actually was set up with two overlaying sets of text by Scott originally. So it can be awkward to edit in the earlier versions. But in this version, if I double click on it, we can see that it's relatively easy to fix. I can change text that I want here and also change the data field reference that I have. And let me hit the Esc key and get out of that. [1:21:25]

Now other text or other graphics on this sheet are coming from schedules or indexes. You can see "Sheet Index". In terms of indexes, this is set up in MasterTemplate to reflect certain layouts. So an index in ArchiCAD will list the layouts of a certain type, drawings, or views. So this index is for sheets, or layouts. Right now you can see that it's showing the same information that we are seeing in the small project example set. It has all of them listed. It's not showing the ones that are in this other one. There are a whole bunch of other layouts, and they are not listed. So how does this happen? I may have covered this a little bit in the introduction. But let's quickly open the source view of this index. [1:22:16]

And we will see that the source view allows me to change the format of this and look at the settings of it. So if I look at the index settings for the small project sheet index, it has a criteria. The criteria is that the sub set is - well it's showing "Architectural Details" incorrectly. This is showing the wrong one, but it clearly is showing the criteria only of the things that are in the small project example set. I am not sure why this is or was showing the wrong one. I remember this being an odd glitch in ArchiCAD that when you open up the index, it might show an incorrect setting. But basically it's saying, "Only show the ones there." [1:23:05]

You can modify this if you want. You can change the format by dragging this around. You can change this to just say "Sheet Index" or things like that. Whatever you want. And if I do change the title, this changes the name of the layout. So if I go to the right here, it says "Title Sheet General Info". If I change this to

just put in a word here you can see it now shows up on the right. Or vice versa, if I change it here in the sheet and delete that, you can see the index update. They are linked to each other, and the numbering is linked as well. [1:23:51]

So let me go back to the sheet. That is what is going on in this case. Let's take a look at the other set that is for a more complex project, at the title sheet that has been set up there. So if I just open this navigator out a little wider, we can see this better. I will scroll down and we will see that in addition to the small project example set here, there are these series of subsets which are a special type of folder that have hierarchical structure. This particular subset, if I look at the settings, it says it's going to have a custom ID like A, and it's going to number these 01, 02, etc. [1:24:55]

The ones below here, like general items or site plan, if I open the settings; these have, for example, A-2. And it is going to number the drawings that are in the site plan group. So we have site plans, utility plans, soil borings, drainage, etc. So in a larger project, it may be very appropriate to have these hierarchically organized instead of just a simple sequence. So it's intended that you would use one or the other in a project. So you would either use the simple sequence, or you could use the hierarchical sequence. Here is a perfect example to say, you know, I am working on a project where I want to use this whole hierarchical sequence, so I am going to take the small project example set and drag it to the Trash/Recycle Bin. [1:25:57]

So now this Trash/Recycle Bin has the entire small project example set hidden away. And I won't be bothered with it up above here. You can see now I am seeing only general items. Conversely, you could select these going down to the bottom of the hierarchical groups and put those in the Trash/Recycle Bin and not be bothered by them, but still have them available if you wanted to change it. Now let's look at the site plan for the title sheet here and then the drawing window I have to adjust so we can see it. We will see that this particular sheet is similar to what we are looking at. The main difference is here we have a much more extensive sheet index. And I will zoom in on it. [1:26:59]

We have the sheets in this set, the A-100 series, the A-200 series, etc. Let's open up source view for this which would be the index compiling the list of sheets that are in here. If I click on the index settings this is the architectural index, as opposed to the one earlier, which was the small project sheet index. The small project sheet index was looking for one subset, which is now in the trash. But if I go to the architectural index, it's going to list everything that is in the general items, site items, building plan, all of these ones. [1:27:46]

It goes from 1 through 8. That's perfectly appropriate. We could add and say I want to do a different subset, change that. And you can pick any of the other subsets. In fact, there is one here called "Presentation Plans" that is currently not included. So if you want to include that, you can. You can have more subsets as you like. So this is the same sequence here that is included. But let's look at how we have some additional ones in addition to the architectural drawings. For the structural, mechanical or

electrical drawings, we can manually place a text list. We can put in a graphic or some text that looks similar but is manually compiled. [1:28:48]

Or you can create dummy layout sheets of a consultant set and use the ArchiCAD indexes. So if I go to these subsets, I can create a subset here. We have one for structural. Let me create a structural subset. So I will go and create a new subset, and we'll call this, "Structural". I will give it a specific custom ID of "S.", and perhaps double digits. So now it will have this format. You can make it any format you want. This is just standard ArchiCAD. I will create that subset and this here got inserted right in the middle of the general items. Let's move it. I will put it above. If I right click now and say "New Layout", it will automatically use the numbering in here. Let's call this "Ground Floor Structural Plan". [1:30:15]

I will create it manually, and there is now a sheet S.01 Ground Floor Structural Plan. It has nothing on it, but we could create an index that reports on everything in the structural set. So therefore we could create the 5, 10 or 20 drawings in the structural set and have an index automatically compiled with that. So if we go back to the title sheet here, the idea here is that you could manually type in and have the structural sheets compiled by typing, or you can have an index that is similar to the small project one that is just picking up whatever is in this structural subset. [1:31:04]

The final thing here is that you can have these sheets blank. When I created this, it had nothing on it. But a possibility is to put a PDF version of the structural engineer's information. That way you could, when you are working, flip to those drawings to see them. You could also print it out and have a nice representation of the structural sheets if you wanted to print out a whole set. So this is an option where you expand your ArchiCAD project file to include PDF versions of the actual structural engineer's or other consultant's drawings. You can bring in DWG, and sometimes that is useful because you want a reference to the DWG structural drawings. [1:32:08]

But you may find that it's hard to get it to look exactly right. When you print out a DWG, it doesn't look exactly the way it does when they print it out. So PDF would give you a more guaranteed print out but DWG would give you something that you could trace over and snap and coordinate using virtual trace. So in terms of the layout book, I want to finish up soon, because we are going over. In the hierarchical structures, you will see that there are a lot of sheets created, but some of them are blank. Sheets like the soil geologic report, or title 24 mandatory measures, or materials specifications. They have nothing on them, just a text field that is gray, waiting for you to put in some notes and drawings. [1:33:04]

If you aren't going to do a material specifications sheet, delete or put it in the Trash/Recycling. The general notes and specifications here, this is a general approach that we set up in MasterTemplate for having a Word document of your general notes placed onto a sheet using PDF. I have created a video tutorial that is available on my YouTube channel and a more expanded version that is available on the Best Practices Course website that focuses on the mechanics of this. So check out the training that I have on YouTube if you are not a Best Practices Course member. Or if you are a BPC member, check out the

The idea very briefly is that you, in Word, will create an image of this sheet. You don't need to have the title block. It's going to be broken up into multiple columns and then in Word you would save out as a PDF version of it and place it on the sheet. The advantage is that Word has automatic numbering; it has a nice ability to format things. And you can continue from page to page and column to column. Text just wraps automatically. It's much more powerful than ArchiCAD's built-in text tools. Even though ArchiCAD can create the same graphic look, having a large batch of text is much harder to manipulate and manage directly inside ArchiCAD. [1:35:02]

And you will notice here as I highlight this that it says that it's a drawing that's at 67%. Basically, Word has a limit of the page size that it will work on. It will only go up to 22", which would be about 60cm or something like that. So you can't actually make a Word image of the whole page at full size. What you can do is have it at a reduced size, maybe make the font size smaller than you would want it to be and then reduce or change the size of the image on the page. So that is all discussed in that training material, so I won't go any further. The idea here is that you can manage it in Word and then simply update it in your project file. [1:36:03]

So that is a brief summary of the layout sheets that you will find in the additional layouts, for example, the site plan. There are drawings here and this is the sample project. Let me switch over to the blank template, and we'll go to the site items and site plan. And you can see this is a drawing that is a worksheet that has been pre-placed. Where does this live? If I go to the site plan and site info - it's not this one. I guess it's the worksheet. So this particular one is a worksheet that is set up in the template for the site plan. So it's this one here, when I double click on it, this is the worksheet. I have gone through these before. These are basically pre-placed. [1:37:04]

I am going to finish up for now. It's been an hour and forty minutes. There are a few miscellaneous things to talk about on the layout book. I will make sure to cover those in the next call. I still have yet to discuss in some detail the structure of the layers, when we open up the layer dialog. All of this is explained in the MasterTemplate manual, but the whole idea of these recorded sessions is to give you a more visual explanation than I could possibly write. Thank you for your time today and for those of you who are watching the recorded version, I am glad you are taking the time to learn MasterTemplate and how to take full advantage of what we have in there. I look forward to your comments and feedback. If you want to type something in and let me know right now, that's great, or send me an email with comments or questions or post something below this video. Thank you all, I will be back in touch soon. [END OF AUDIO 1:38:41]