So let's look at a variation of this for detail drawings that we've got set up in MasterTemplate, but you could easily do something similar in your template or in any project. So I'm going to look at a set of components that are intended to be used as a virtual trace for detailing parts. So if I double click on this detailing library parts, what we're going to see is here are a bunch of 2D elements that are different types of components. So for example, here are some structural steel components, or there we have other types of tracks and studs. If I zoom in here, we have connectors and insulation. [:57]

All of these of course, I can use the eyedropper for, so I can get the eyedropper and say I'd like to put in this type of an element here. And then I can go back to any detail that I'm working on and put that in. So if I go to a particular detail that I'm working on, I could go in and I'll just pop it into the side, and you can see how that is. So again, we can go back and forth between a detail and this library of detailed components. Now, that library of detailed components is an Interactive Legend that one can create oneself, but this particular one is actually available from Graphisoft. It's standard components, at least in the U.S. library, that are called the detail library. [1:45]

If I look at the settings for this particular object, you'll see that it is in a folder called "Heavy Duty Hangers", which are "Joist Hangers", which are in Detail Library, which are in General, in the ArchiCAD Library 14. So basically, this is just one of an example of many 2D parts that are standard in the ArchiCAD library. At least in the USA. So this is something that you can add. You can pick out the components that you feel are most useful for your purposes for 2D, and use this as a concept for developing a kit of parts for working on details. [2:36]

Now in addition to library components, in any interactive legend, you can also have just purely 2D elements. In other words, line types. So in other words, if I eyedrop this line, I'm going to be drawing a line, I'm going to be switching to the line tool with, in this case, with pen five activated. Or if I drop this, I'm going to be switching to the line tool, but with the arrow activated here. If I eyedrop it, I'll be eyedropping it, and it will be switching to a dashed line. So in other words, the interactive legend doesn't have to be walls or objects, it can also be purely 2D graphics. And I can eyedrop for example, a fill here. And then it'll switch to a particular fill with certain settings. [3:25]

So, all of the kit of parts concept is very an extensible in a way similar to favorites, the favorites list. But of course, because you can arrange these visually, it's easier to select them, and you can have essentially as many as you find convenient, organized in a way that are at least reasonably quick to navigate and access. I'm going to switch gears a little bit and talk about what happens if you're in the Start edition. Briefly, the Start edition is a lower end version of ArchiCAD that does not have the ability to do hotlinked modules. And it has some other limitations. So, if we go to the project here, Building With Legend, the option here of hiding these elements does not exist. At least we don't have the option of using the hotlinked module master layer to hide that. [4:34]

So, while you can do the original concept, which was just placing it beside your project and using the marquee to control visibility in 3D and limits of depth for sections and elevations, there is a variation that is potentially a little bit more convenient if you have the Start edition. And it actually can be used even if you have a full version of ArchiCAD in certain context, it may have some advantages. So I'm going to go and select all of these

legend components here, and let's ignore the fact that there actually a hotlinked module. And let's just stay what happens if I were to cut these? [5:19]

So now I'm going to switch in my project map, and add an extra story. So of course, some projects may have several stories to begin with. I'm going to create a story below this one, and I'm going to call it "Legends". So basically, we can create a story that's not for real construction components, but in fact as a placeholder for these elements that we'd like to eyedrop. And I might drop its height down a substantial amount, like 100 feet or 30 meters. Really this is a little bit arbitrary, as long as it's below the actual real elements. Because when I create this, I'm going to now paste the components. And now, these are sitting in the story below. [6:15]

So if I go up to the first floor, or the main floor, the ground floor, you can see that those elements do not show. However, if I'd like to use the eyedropper - so in fact if I - now there are some of them that look like there's a staircase that's showing partly up above. So it's going to be a little bit funky right at the moment. But let's say I said "Fit In Window", in most cases, this would be what I would see. So in other words, I would not see the legends. Now, when I go to 3D, I don't need to use a marquee to restrict the focus. Because I can actually use an option under the View menu, under Elements In 3D View, Filter Elements in 3D. This is a command that's actually very generally useful for a lot of different things. [7:08]

For example, I can say, when I'm working on a large project that I don't want to see certain things, because I want to look at the shell of the building, I can turn off the windows and doors, and just see holes in the walls. So it makes it much quicker to go into 3D. Now, that's not what I want to do right now. But instead, I'm going to say I'd like to go to 3D, I'd only like to look at story one. Now if it was a three story building, I could say I want to go from 1 to 3 or whatever these are. But you can definitely restrict your view to only certain stories. So what that means that is if I choose this as a filter, and then say "Show All in 3D", or just hit F5 or F3, it will be filtered. Which means it will not show the things down below. [7:56]

So here, you can see I'm looking at just the building here. Because the legend, if I go back to the floor plan, the legend is on a different story. Now on the other hand, if I select these, if I go down to the story and Fit in Window, we'll see all of these parts here. So just to show you that these are still actually in the project as live 3D elements. If I suspend groups, and use the Arrow tool, and select these elements here, and then say "Show the Selection in 3D", we'll see that all of those components still are in the project as 3D, they're just on a remote story. In this case the Legend story that I created. And the filter is saying, don't show them unless I explicitly select them, they won't show in 3D. [8:53]

So that is a way of allowing me, the on the floor plan here, and I say Fit in Window, you can see that I'm not seeing all of a kit of parts when I am working. And when I go to 3D, if I say Show All in 3D Filtered again, those elements will disappear and all I will see as the project. So, if you're in the Start edition, you can certainly place your legends down on a lower story. And you can then have in the worksheet, if you're in start edition - I can't remember maybe 2009 they introduced worksheets. So if you have a worksheet like this, I could - say I'd like to show - let's see the Legend story as a Trace Reference. As opposed to the other one. [9:44]

And now you can see that here is the Legend story being shown as a Trace Reference. If I turn off Trace

Reference by clicking this icon here the top, it disappears. If I turn it on, you can see that I'm seeing it just the way that I did before. So, in most ways it will be quite similar in functionality. You can also even work with a story. In other words, I'm in the story, and I can right click and say "Show the Lower Story" that has a Legends as a Trace Reference. And you can see now again, they are visible off to the side. But the main reason why I don't do this as the routine one, in other words, having them visible from the remote story, is that I still have the issue of being in navigation. So in other words, I'm working on this here, and I need to go get something from the kit of parts, so I have to zoom out to Fit in Window, and then I have to zoom in on the area that I want, and go eyedrop things. So that's the main reason why I don't have the kit of parts off to the side on the floor plan. [10:54]

Because generally I have a very extensive kit of parts, and navigation can be a little bit cumbersome going back and forth. With the worksheet option, and makes it so much easier. Because when I jump to the worksheet, it will actually have the last view. So when I jump to this worksheet here - actually I'll just go back to the previous view. And now when I go back to the story, I can be — again, as a quick review - I can be working in this area here. And I can jump to the worksheet and be at the same place. So I don't have to navigate back and forth, and I can use keyboard shortcuts to go back and forth between my working area and the kit of parts. [11:38]

Now, when you have the Interactive Legend or the kit of parts on a remote story, we've seen how you can use the filter elements in 3D option under the View menu, Elements in 3D View, to record that perhaps you only want specific stories to be included. This preference here is recorded when you create a view, so that if I do create a new view here - and let's just say "3D Without Legend", just to be very specific for training purposes. You'll see that it says 3D only down here. Let me just raise this up a little bit. That it's going to remember these settings of the 3D filtering. So it's including filter elements in 3D. [12:31]

So actually let me just create a 3D view right now. And now I'm in the 3D window and I'll say "Save This Current View". And at this point, it's going to say generate it in the 3D window, it will remember the filter elements in 3D. Now I can just say that I don't really care about the zoom, I just want to be able to go back to 3D with this filter. So when I create this, now of course, I could give it a name such as "Building in 3D Without Legend". So now I've got a name here. [13:10]

So at this point, whenever I activate that view, whether even if I moved around and changed my position, whenever I activate that view, it's going to remember the filtering of that particular command to leave out the legend story. Now in a similar way, or in a related way, we can have sections and elevations with limits for what stories and elevations they should include. So if I draw a section, let's see. If I zoom out to Fit in Window here, if I draw a section through this building here, looking in this direction. Now of course the section can have some settings that relate to whether it's going to be a horizontal range that is limited or not. So one way you can prevent this section from seeing the legend off to the side is by saying that it's only going to go a certain distance horizontally. [14:25]

Another way that you can do it is you can also say that you want to limit it vertically. So I can say I want to take it down below the ground floor a certain distance, 5 feet or 2 meters or something like that. Whatever is appropriate, as long as that is above all of those elements on the remote story, you won't see them. And of

course, we would have to say the upper one, let's say is 30 feet or 10 meters, whatever that height is. Now this could be in relation to project zero or to the home story. So the option here for the vertical range can be expressed in whatever system you are most comfortable with for describing the position in space. [15:09]

So these options are specific to an individual section or an elevation. And they do allow you to say, "Hey, I'd like you to look in this direction. But don't look far enough that you'd see all of those kit of parts, or don't look down low enough that you would see that kit of parts". So this would be something that you would set up in each of the sections and each of the elevations to avoid having ArchiCAD take the time and draw that kit of parts, when it's really not relevant to the particular drawing that you're trying to create. [15:45]

So now I have some final thoughts on the concept of Interactive Legends and hotlinked modules. So let's just go back to the story where I've placed these. And imagine that you're in a full version of ArchiCAD where you do have this hotlinked. Which is, at this point, if I select any element and I have groups active, it will select the whole batch of them. Now one side benefit of the hotlinked module concept that we can take advantage of is that this is linked to the external file. And that means that if the legend gets updated or extended, added to, or improved, that this can be updated easily. [16:30]

So, if I right click on a hotlinked module that's selected as a whole, where groups are active, I can possibly go edit this module in a separate ArchiCAD. This allows me to open up a separate instance of ArchiCAD and make changes in the source file. Then after I've received it, I can go to Hotlink Manager and see that the file has been modified and updated. And this will affect any project file or template that refers to that hotlink. So in other words, in an office, whether it's just a one person office or a multi person office, you can improve and extend your legend, your kit of parts, in the hotlinked file, and know that every project will update. [17:21]

Now if you don't want it to update, in other words, if you want to have another version of the Legend, but you don't want to update the ones that were in particular projects, then you would have to save it under a new name or a different location, rather than overwriting and updating the file. But most of the time, I'm foreseeing the idea that you would update the hotlink and actively prefer to make sure that all files are seeing and accessing the latest version of it. We'll be having a section of the course on hotlinked modules at a later lesson. So we'll be spending some more time on this concept as well. [18:03]

Now, the other thing that I'll just mention here, is that this is a kit of parts. It's very general, and so I'm bringing all of this into a project at the same time. But it's very possible that have multiple hotlinked modules or multiple sets of legends. So instead of bringing in all of these, imagine that I brought in just one batch, or a few of them. And then at another time, I brought in a different one. See you can certainly bring in a legend for a specific purpose. Perhaps you have a kit of parts just for working on kitchens, or just for working on landscaping, that you don't want to bring in an all the time. So you can easily have - you can also do this with favorites. Because you can have a set of favorites that are just for landscaping or for a particular purpose. But here it's very visual, you can bring in that batch of things, lay them next to your project, go eyedrop the elements, and place a bunch of related components in at the same time. [19:10]

So, that concludes my presentation on interactive legends using hotlinked modules and other variations to

maintain them over time. And if you have questions, please post them down below, and your comments, of course I always am very interested in reading your comments. If you feel that this really opened up your eyes to some new possibilities, I would love to hear that. For me, this whole concept of Interactive Legends I think is just a gem, that really, anyone who has used ArchiCAD for more than a little while can easily adapt and setup for yourself, and speed up your work quite a bit. So thanks for watching, I look forward to reading your comments.