

## BEST PRACTICES COURSE – WEEK 23 Layout Book Drawing Options, Printing and Publishing - Part 7 - Publishing Your Project

Welcome everyone to the Best Practices Course ArchiCAD training lesson. Today is August 4th, 2014, and we'll be finishing up week 23 with publishing. In these last few lessons, we've been looking in the layout book and looking at all the setups for the layout book and drawings on the sheets and different options for placing the drawings, having grids, etc. And we did go into printing and plotting in the last lesson. [0:00:36]

Today we're going to go beyond printing and plotting to the concept of publishing. Publishing is handled in ArchiCAD by the fourth icon in the upper right of the Navigator called "Publisher Sets" here. let's talk about the concept of it. You will see that it says "Layouts to PDF" here, and I will click the 'Up' button here to see that there are a few publisher sets. If you are before ArchiCAD 15, maybe even before 13, I can't remember, it was slightly different. there was a concept of a Publisher set, but they were listed right at the top level. [0:01:20]

Now I can't remember all of the differences, but basically it was a different way to get the publisher items selected and their properties. So if you need any help and you are in an earlier version, then maybe I will try to do a separate lesson for that, just for that section. It's pretty simple, but it would look a little different. [0:01:43]

Now the concept of publishing is that you are taking stuff that is in your office that you have been designing and sharing it with others. When you print things, you are often going to be carrying those or giving those or submitting those prints. And if you create PDF files, you can of course send those digitally. With publishing sets, we can choose to save out our work in a variety of formats. That even includes printing and plotting. It's sort of a hybrid of what we were going on last time, which was printing, plotting and saving out as PDF. But it's a little bit more general. [0:02:32]

So what does that mean? Let's talk about getting a bunch of your layouts to a consultant. Here we have this publisher set called "Layouts to DWG". When I click on it, you will see there is something that says layout book, and there's plan, sections, elevations here. these right now are empty folders. They don't have anything in them. So you can see there is an option to create a new folder or delete folders here. let's look at how you put stuff in here, and then how you export things to DWG for example. [0:03:08]

The easiest way to manage the publisher is to open up the organizer. If you go to the button in the upper left of the navigator, it's called the "Project Chooser" button, and there is an option to "Show Organizer". There are other ways to get to the organizer. I think it's under Window, Palettes, Organizer. You can turn it on or off there. And there may even be a third place, I am not sure. [0:03:31]

But the organizer, as we have discussed a little bit here and there, is a double-wide version of the navigator. You can move things from the left to the right and choose in many cases to look at different



parts of the project on the left side here and different parts on the right side. You will notice though that the project map only shows up on the left side, it doesn't show up on the right. You can't move things into the project map, but you can move project map elements into the view map to create new views. This is an alternate way to create new views, like a specialized type of plan or 3D view or something like that. [0:04:14]

Let's not spend too much time on the organizer; let's look at the mechanics of creating a publisher set of layouts. So here I have the layout book on the left side. You can see this is my sample project as we've been looking at. And you will notice on the right side it has the same layout book; it's identical. Remember that in some previous lessons, I was able to choose another project. I could browse for a project or a running project and bring things in from the left side to the right side. [0:04:43]

So that would be a different project on the left moving to the right. We can also within the same project open the publisher sets on the right. And let's say that we wanted to take the floor plans and put a copy of them into the plan folder here. you will notice it has a little triangle and here are the floor plans. Here we have elevations. Let's go ahead and instead of using these individual ones in the small project set, let's say we wanted to get several sheets of the building plans in here. [0:05:17]

I will just move these into the plan folder and get rid of the one I put in earlier. And it does warn me if I am getting rid of something from the publisher that I can't undo it here. but that's fine. this is just a version. It closed the triangle up here to close that up when I was deleting it. That's not a problem. You can see here are a series of the same layouts as I have on the left. I can delete individual ones or say I don't really need the demo plan or something like that. again, it will warn me. [0:05:58]

And let's go get some elevations and sections. I will drag these over into the elevations here. here we have the folder for sections like this, and we will put them in here. and we can drag and drop and it's pretty straightforward to do that. you will notice that when it appears on the right side, instead of looking like a layout it has an icon. In this case, it's an icon of PDF. You can see the format option here You can see the format option here is available when I highlight the item in the publisher set. The format here says, "How would you like to save this?" [0:06:36]

PDF is one of the versions. You can see I can also save as DWG or as a variety of different graphic formats over here. now this says "Layouts to DWG". It wasn't smart enough to say that when I drag things over they should be DWG. This is just text. And it just describes my intention or reference. If I highlight this folder here that is the layout book and switch this to DWG, then you will notice that all of the contents switch. Basically, that is the way that I can switch all of these items to be DWG. [0:07:21]

So if I highlight any individual item, you will see that it has a name here that came from the original name of the sheet. It has a number, so the ID number, and it has the properties from what size layout it is. These are things that I can't edit here because they are set in the layout book itself. It just gives me an



indication. Sometimes you might actually have things that are different sized sheets, like small sheets for submittals or things like that. you will notice down below it says "DWG" which is what I had changed it to. And below that it says, "For further editing". [0:08:20]

Then there are several choices here. I will do a separate section of the course later on on DWG collaboration, saving things as DWG and bringing them in as DWG. So I will just do a very quick explanation here, and we will go into much more detail when we get into that section of the course. The main thing is that I am saving it out for use by an engineer or consultant where they need to edit or put stuff on top of the drawings. Their focus is to use it as a background or possibly to send back a revised version for you to see their ideas. [0:09:04]

Then you will want to choose "For further editing". On the other hand, if you were sending it out and all they were going to do was print it, then you might choose "For As-Is Output". So it would be a DWG, it would be precise and clean, but it would be set up mainly as a convenience for just outputting. So that would be another option. Now these five translation options here are editable. You can tweak them by clicking on the "Translators" button. Translators are set up for saving your work in DWG, which would be your main option, or DXF. It's rarely used, but occasionally some programs can't read DWG. [0:09:54]

It literally has the same data, just a slightly different format. Now you can see this one, when I have it highlighted, if I click on "Description" here, it will save the layouts or views in the DXF or DWG format, if you plan to continue editing them after conversion. Then here are some specifics in the settings for selected translator. Again, I am not going to go into all of these settings. Just know that you could tweak these if you want. [0:10:27]

For example, in the save options - this would be one thing you might want to double check - if the firm or the consultant you are sending it to want to have it in a specific AutoCAD version, then you can choose that from among several choices here. now in ArchiCAD 18, we can save it in the latest version of AutoCAD. You can see it says "2013-2014". I believe they may have already had AutoCAD 2015 even though it's actually the calendar year 2014. They typically go in three year cycles for a file format. [0:11:02]

The main thing is if you are saving it out for a consultant, you want to check what format they prefer. If they haven't upgraded their AutoCAD for a long time maybe they need it in the earlier version. But in general, it's best to have it in the latest version they have available. So I would switch this. There are some various options here for the way the layout is saved. If we just leave it as the default, this would be very close to the equivalent of ArchiCAD's environment where our layout becomes what they call "Paper Space". [0:11:39]

So it's measured in how many inches across and how many inches high or cm or whatever. Cropped views content is very similar to when we place a view onto a layout and we crop it possibly a little bit



here or there. It has all of the content in the view, but it's been cropped so you are only seeing the part that you want. There are some other options where you would actually send it over with all of the content of the view. In other words, it's going to include stuff that is maybe not being seen in the crop. This gives more data for them to work with potentially. [0:12:18]

There are some other options here that you may from time to time require. I am not going to change that, I am just going to change to the latest file version of AutoCAD and leave some of these other things alone. I will save the settings and close. The only thing I have changed is the translator setup for this one under "For Further Editing". From now on, at least on my computer, whenever I use "01 - For Further Editing", it will save it in this AutoCAD format with these other settings intact. [0:12:51]

So I don't have to do that for each file; it's just the setting of the translator. Now one other thing that I will mention here that causes some problems is you see it says "Place drawings into..." and there is a popup. "Linked Xref drawings" or "single .dxf, or .dwg file". Now without getting into a lot of detail, and Xref is an external reference file. So it's a separate file that is being referenced in the main file, let's say. So we're talking about a single or multiple layout sheets. And we are talking about the drawings that are placed onto the layout sheet. [0:13:31]

ArchiCAD maintains all of its views in general inside the same file. So this would be the rough equivalent: single .dxf or .dwg file. It will have the drawings in model space, which would be roughly like our plan, sections, elevations, detail drawings, etc. And it will have the paper space roughly the equivalent of our layout book. But some consultants may prefer that each elevation or section or detail drawing is potentially saved out as a separate .dwg file so that they can edit it more freely as a separate entity. [0:14:12]

If you leave this as the default here it's not a problem. Just be aware that you need to send not only the main layout file but also the other files that ArchiCAD drops out there. It will drop out all of the individual - for each sheet, it will drop in one or more drawings as separate .dwg files. I have had people contact me for tech support saying, "I sent it to my consultant. They can see the title block, but they can't see the drawings. What went wrong?" And the answer was, "You had it set for linked .Xref drawings, and you didn't send those other drawings. You just sent essentially the layout shell, but not the contents of it" [0:14:55]

So just be aware of that. I am going to leave this alone and we'll take a look at what happens when you save these. So far the only thing I have changed is the file format to a later version of AutoCAD. Now if you are in ArchiCAD 17, I think it can only go up to 2012 format. This year I think we expanded to include these. It always takes Graphisoft and the other companies a little while to prepare translator for the new AutoCAD format. So depending on what version of ArchiCAD you have, your choices may be slightly different here. [0:15:28]



Now I have a few different drawings here placed into different folders. The folder has a name, it came from - actually, I can edit it here. This is a bit non-intuitive. Most of the time when you click on something in the list and it shows the properties, you can edit it in the properties area. But for some reason in the Publisher, if you want to edit the name of it you actually click in the name here in the item and then you can edit it. In the properties, it's non-editable. I guess that means - can I click here? Yes. I can edit it up in this area. [0:16:08]

So this is where it came from on the left side, and this is the name it's going to have when we output it. Just be aware that you could change this to make it clearer or shorter, whatever you like. Now let's close up the properties for a moment so we can see this list. We see that we have prepared a series of drawings organized into folders. And there are some empty folders here. If I want to create a new folder, I simply click on the "Create New Folder" here. You can see it just shows up somewhere. I can move this folder around. I can drag it around. And you can of course rename it by clicking on it a couple of times in the name here. [0:16:47]

If I don't want it then I can get rid of it here. So that's pretty intuitive, you shouldn't have any problem figuring that out. So we are now ready potentially to publish this entire set of drawings; a whole bunch of .dwgs in a single step. There is one issue. When I click on "Publish", it will say that - actually there are two issues. It says that the drawings content in the model space may differ from its source view. What does that mean? It means that this has been modified here, and it hasn't been updated. So in other words, I am about to send off some drawings, and these have not been updated. [0:17:29]

So how can you update these? Well, in the layout book here, we could right click on this. There is update. I could select that, or I could actually select multiple sheets. That would update all the drawings on the sheets. If I switch temporarily back here to the layout book, and I go to the top level, maybe we can do the top level up here. Yes, we can. I could go to the top level and say "Update". So what this would do is it would update the entire book. Now this wouldn't take all that long. Maybe I will just do it right now. [0:18:15]

Here it says some things cannot be updated because they are missing. Like for example, there are some things in here that it can't find, so it's warning me. In general, we would want to clean this up here. But for now, I am going to say that these ones are not an issue. I will skip all the ones that are indentified as issues. You can see there is - if I open this up wider - the logo here; it doesn't know where that is. But I know the logo hasn't changed. So I am going to skip all the ones that don't have a problem. And now, it's going to update. [0:18:56]

You can see in the upper right, it's generating all the interior elevations and sections. It's just making sure they are up to date. It's at 15 out of 143; 17, 18. So it will probably take a couple of minutes to update. Generally a good idea before you print or plot a set to update either the entire layout book or at least the layouts that you are outputting. Certainly the same thing when you are publishing, because you



don't want to send DWG files or PDF that are out of date. So this will certainly make sure that they are all updated here. You can see now it's at 61, so it will take another minute or so. [0:19:36]

So while it's doing that, if I click on "Publish" here, I think it's probably not going to pay attention because it's in the middle of the update process, so let me tell you that we do have some other options here. Where it says "Entire Set", instead of doing the entire set, you can highlight individual sheets on here. There will be an option available in the popup that says, "Publish Selected Entities". [0:20:04]

In other words, just these three sheets or twenty sheets out of 100 sheet set. So you could go and select just the sections or details or just one by one pick the ones that you know are needed. In ArchiCAD 18, we now have some technology for keeping track of revisions or changes in the project. If you use that, then it will also highlight the layouts that have been changed since the last issue. So let's say that you published a set that was for submission to the city, and then you got some markups for things that needed to be changed. [0:20:42]

So you went through and started to change those, and now you are ready to resubmit. Or you need to send things to your consultants if you have changed certain things since you sent it last. So they will highlight in a different color here, and then you can fairly easily - or there may be a button that says, "Just publish changed items" or something. So instead of manually having to track which ones you want, you will be able to do that. [0:21:09]

So I have finished that process. It probably took about four minutes I am guessing. If I were to select several of these and shift-click, it will select all the ones in a row. If I use the Command or Ctrl key, I can click on individual ones one at a time and it will leave out intervening ones. Notice that I can now say "Selected Items" here. And here is that option that I mentioned. "Layouts in the current issue". So we are going to be looking at the change manager and revision manager for ArchiCAD 18 sometime this month in August and the concept of an issue set of drawings. You can easily say only the ones that I am issuing right now are the ones that I want to print. [0:21:55]

But let's say in general, you can say you want to do the whole set or selected items. Let's just do the whole set. It won't take that long. When I do this, it's going to say there are some things that are not up to date. It was updating all the drawings, but I have some hotlinked modules that are missing, because I haven't connected them up in this particular project. Again, I can say go ahead and continue. Now it says "Failed". Why did it fail? [0:22:27]

I will double click on an item here. It failed due to an incorrect definition or a path or drive or insufficient access rights. What does that mean? The path where it was going to be saved didn't work. So how do you set the path for where you are going to save these? Let's close this up. That is set in the properties for this particular publisher set. So I will go up one level here, with this highlighted, I will click on "Publishing Properties". Notice that it says "C://Documents and Settings", etc. This was set up for a



Windows machine to go to the desktop. Not the greatest place, because it would actually save all the files loose on the desktop. And besides, I am on a Mac, so we don't have a C drive. [0:23:22]

So basically this path was not accessible. So what I need to do is save it somewhere else. I will go to the Browse button here and choose a folder on the desktop. We will call this "Publisher Test 1". I have created the folder, and I am inside that folder. I say "Choose". So this is going to choose the path where these files are. There may be some files within it already. Right now I created a new folder, so there is nothing. Now it has the correct path. So when I say OK and I do "Publish Selected Sets" - and I can do it from this level or from within the set - now it's going to give me the same warning about the hotlinked modules. And now it's going ahead and saving. [0:24:11]

You will notice it's flipping to the layout. And it's going ahead and saving it. It says it's 18kb. And now it's saving the next one. Within a minute or two, it will have these ten layouts all saved. So that is the power of Publisher is instead of having to save each sheet at a time, it's going to save out all of them at once. So part of the workflow efficiency here is that I can set up a publisher set for a specific purpose; let's say a set of drawings that I need to send to the interiors consultant or the structural consultant. And they don't need all of the drawings, they just need certain ones. [0:25:02]

So I can set up a set for them, and then later, when I want to send another revision up to date for them to look at, I can just go back to the publisher set and publish it. Each time I should look at the path to confirm where I am saving it and check that I am not overwriting the original files. I think if you choose a path that already has files in it; it will overwrite those files if they have the same name. So that is something you want to be careful about. Generally, I would say the simplest thing is to just have a new folder each time you do a publishing operation. [0:25:40]

Now you will notice this one says there is a little warning. The other one had a green. Let's double click on it. It says it's been renamed. Okay. So why is that? Well, on a Mac, you can use the forward slash character as part of names for files. But since this is going to DWG, it changed that to an underscore character. So it's just a little warning, because that had a character that couldn't be used in a filename, so it changed that. [0:26:20]

No big problem, just for your information here. We can open this up wider and you can see the slash there. And here is the name. So I guess if we open it up wider we can see it better. So that's what's going on there. That is the basics of using publisher, is you have a publisher set, and you open it up here in the organizer you drag layouts into it. You can have folders within it. You choose what format you want either for individual files - most of the time these are all going to be the same. But occasionally you could save out DWGs and PDFs. It would be a little bit of a funny workflow, but you could do that in the same operation. [0:27:11]



Now there are some options that expand this in terms of flexibility. This is a folder here. you will notice that if we go up to the publisher set here and go to the publishing properties - which by the way I can get from this icon here, publishing properties - it says, "Create a real folder structure". So let's see what that means. I will go to my files and folders here. We will open this up and go the desktop and open "Publisher Test 1". [0:27:56]

So this is the folder here that we have and I double click on it. Here it says "Layout Books". Actually let's go back here and open this up here. Layout Book is the top folder. If I open this up you can see here is the plans folder and here is the DWGs for each one of these. So these DWGs now are organized in this folder. Remember the thing about the Xref. Since I was using a translator that says, "Here is the shell of the sheet. Here is the title block and anything that is directly on the sheet, probably the titles as well, and here are the ArchiCAD views that are used here." So you need to send these over. You need to send this folder over. [0:28:56]

If you just send the entire folder over, everything will work fine. But if you just send this one DWG, it wouldn't have that data. In fact, that's why this file is so tiny, because it's really just the title block whereas the first floor plan is certainly a lot larger. It has the actual drawing on it. So be aware of that. It's in a folder structure exactly like what I had here, and it has Xrefs. Let's look at a different style here. So if I go and let's go to the publisher sets and let's clone this. So here is an option for duplicating a publisher set. [0:29:39]

So I am going to duplicate this and it says "Layouts to DWG 1". By the way, I can't edit the name up here; I have to edit it down here. I don't know why these are different. But let's just say "Layouts to DWG" and we are going to do 'no Xref' and oh, I just changed the name here. "Layouts to DWG", and say "Flat file structure, no Xref". So I am just giving it a name that will allow me to see what it is, and then we can make some changes. So this one we are going to browse and put it in a different location. [0:30:40]

So I am going to go to the desktop and create a new folder and call this "Publisher Test 2" here. I am going to change it to a flat file structure here. And let's go into this and highlight the book as a whole, and we are going to go to the Translators. Here is a translator for further editing. You will notice there were some options here. Let me go and duplicate this for further editing here. Let's see - we will rename it. So "For further editing", and then we'll say "Model and Paper Space". [0:31:33]

I will say "For further editing single file". I am creating a variation of this translator. Right now it's exactly the same because I just duplicated it and renamed it. But this one I am going to say let's do a single dxf or dwg file here. And by the way there are all sorts of settings and options here if you do have Xrefs. Remember that was the subfolder next to the host file. So there are all sorts of options here that we won't get into. I am just going to show a couple of variations. [0:32:14]



So this is a single file translator that now exists in the list. You will notice the list has gotten bigger. I could change the number here, but I will leave the "01". That is set for the layout book. So each one of these individually is also going to inherit that. So I have now said that I won't want Xrefs, I just want each one of them to be a self-contained file. And I have also said that in this publisher set properties that it's going to be a flat file structure. [0:32:47]

So let's just see what happens when we publish this set. Again, the hotlinked module; now it's just going to save this. Remember it was 18k plus it had the separate files. Now it's 123, so it's all one file. So we will see how this works. I'll switch over while it's doing that. I am just going to go to the finder and open up my desktop to that here. So you can see here are all the DWGs. There are no folders, and no Xrefs. They are all contained. [0:33:25]

Now there is a .shx file, which is something for fonts. It can potentially make the fonts match a little bit better. I am not sure why it was only created for this one drawing here. I am not really sure. But we will deal with more of these details in the section on DWGs.

There is a question from Len, "When will we have that session?" I think it's week 28, so we are at week 23. It's going to be a few months. It will be sometime in early fall is my guess. I do address questions in the coaching program. So if you do have a specific need for clarification I can help you there.

Alright. So this is the variation that I have here. Some consultants may prefer it in a single file. We are not going to open it up, but this is model space and paper space, single file per layout here. So we'll close this up.

I see another question from Len: "We use Dropbox, making everything available to the consultants." Yes, you could save these directly to your Dropbox folder on your computer or move them into the Dropbox folder, and then it would get mirrored up into the cloud. If you share a folder on Dropbox with a consultant, they would then have access to it. Very good way to do that. [0:35:02]

Alright, so we've looked at two variations of the publisher sets in terms of the flat file structure, choosing the path. There is an option to create a single file here, and that option is only available for BimX hyper models or PDFs. You can have a PDF file that has multiple drawings, and multiple sheets. So that would be a pretty straightforward thing. And BimX, for those of you who aren't familiar, is a 3D file that you can use for presentation or to send to clients or consultants to show the 3D model of your building. [0:35:49]

The hyper model variation is one that Graphisoft introduced more recently that allows you to have drawings plus the model, and they are linked with hyperlinks, much like when you click a link on a webpage, it is hyperlinked to another webpage. In the hyper model, you can click, for example, a section marker, and it will open up that section in 3D. In other words, it's not just going to the 2D section in the



sheet set, it's going to a 3D view of the model cut where that section is. It's really cool. If you haven't seen the demonstrations, check out Graphisoft's website. [0:36:29]

So we are not going to look at this right now, we will return to it. But for DWG, obviously it's not available for that. Now we've looked at DWG, the main options here. There is one more option, if we go and open this up here. "Merge to one DWG file". So this is a different place where we might create a single file. So if I have this highlighted, and I say "Merge to one DWG file", I don't know exactly how this works in terms of AutoCAD's environment, but I believe that it will give you something sort of like your ArchiCAD project file. [0:37:15]

In one file, you can navigate around to different model views, plans, sections, elevations, details; and in the paper space, you can navigate around to the layouts. And there is linking between those model views and the paper space view. So this is really something that if you know AutoCAD well, you know what I'm talking about. If you don't, you will just need to check with your consultant. They may ask you to send it in a single file and instruct you on how to do that. [0:37:49]

So if I were to do that, and say "Publish the entire set", it's going to do this. And we can double check. It says "Save" over and over. I am not quite sure what it's doing since we're not seeing any size. In a moment, we will see what it does at the end. You can see it's publishing to "Layoutbook.dwg". So this is the entire layout book. It's still finishing up. Maybe it's putting it all together. Let me switch over as soon as it saves. Hopefully it finishes up before too long. [0:38:31]

It's going to be all in this one file here. We will see if that ever finishes here. So those are some variations for sending things out as DWG. We are going to switch to the actual files. Here is the "Layoutbook.dwg". So that is the overall, these are the individual sheets. And remember, I didn't have it set for Xrefs, but apparently it's doing Xrefs for that DWG. So this is now a book of paper spaces with each one in here. I am not quite sure how all this works. So you will have to experiment. If you need help working with a consultant, certainly I can try to help you in a coaching program. [0:39:37]

It does say that it saved. We will close this up. So we have now looked in the publisher on how you can set up a publisher set. If I go here, there is an option to create a new publisher set from scratch. Give it a name, "New PDFs". So I have just created a new description. What is it going to have in it? Let me go to Publishing Properties. I will say that I would like it to create a single file that is going to be PDF. The name here gets inherited from the name of the project that goes up at the top of the layout book and the name of the particular path or publisher set. [0:40:31]

But I believe this is editable, so I could change it. But it does pick that up, so you could edit it. Here is the path. I do need to set that up. Let's go to this desktop here. We'll go to "Publisher Test PDF 1". So I am creating a new folder for that to go in. it's in PDF and it's going to be a single file here. We say OK, and



then go and open that up. Now it's blank. Of course, I could drag things over and in fact, I could drag over a folder like this. It will then drag over all of the contents. [0:41:15]

But there is an interesting option that I haven't shown you, which is that I can highlight a folder or these are called subsets, because they are folders with numbering or naming rules. So remember in the layout book, in each one of these organizational tools, the subsets have an identifier and a system for how all the individual items are going to be named. So these are called subsets. They are essentially folders with a little more information. [0:41:45]

Now if I highlight this, you'll notice there's a button here that says "Add Shortcut". Very important, very useful. Click on that. You will notice that the symbol looks a little different. It has the tiny little arrow that indicates that it's a shortcut or alias is sometimes what it's called. Open this up and it shows all the same thing. If I were to add more sheets, or take away some sheets from this particular subset, this would update. Very powerful. I can do that for individual subsets, or guess what? I could take the entire project here and let's change this from project - I guess I can't edit it here. [0:42:28]

This project name, this is set up in the File, Info. So the name of the project is set up for auto text use in multiple places in the File menu, Info section. Let's see if I go to the File menu, Info, Project Info. This is where a lot of things are set up for auto text reference. And here it says "Project Name". So let me just call this "Smith House". Now you can see it says "Smith House". So that's a little bit better than that. Well guess what? If I add a shortcut for that, then this contains the entire layout book. [0:43:11]

All of the stuff is in there. And if I reorganize the sheets, add more sheets, etc. it will all go out. Obviously it will take longer, it will have more sheets. I don't want to demonstrate all that in terms of the next step. And I also want to emphasize that sometimes you don't want the whole layout book. For example, right now in this sample project, we have a set of drawings for a small project organized one way and then we have the subsets for larger project types of sets organized in different ways, so there is a lot of duplication between all of the stuff up here and these lower ones. [0:43:56]

We wouldn't want to send both. And also there is some stuff down below like ArchiCAD file information in PDF forms and presentation plans. You might not want to include all of these. So what you might want to do, a more general rule would be to highlight - let me just get rid of this one here. Delete the shortcut to the entire layout book - is just highlight the elevations and the sections, interior elevations, and the details. Something like that. Then I can add shortcut, and you can see it picked all of these. [0:44:33]

So you just pick your categories of sheets. The A400 series, the A500 series, send over the shortcuts. So that works very nicely here. Now if I were to export this right now, each of these would be - I am not quite sure whether all of these would go into separate files, because remember my publishing properties were to go into a single PDF file. I believe that is what the case is. I know if I create a new



folder to contain it - and let's call it "PDF Output File" here - and then I take all these files and drag them into it. So now they are a part of it. I will drag this one in and leave this one out. I will just delete it here. [0:45:24]

So now I have my PDF output file, and you will notice that I can't actually change the format here because it's set - oh I see what it is. It's set at the top level. It's set at the publisher properties level where I said single file, PDF. So because it's going that way, I don't have the options within it to change individual things. It's going to put all of this into one file. So let's just remove these. I am going to simplify it down because I want to simply do a similar type of output in PDF form. [0:46:11]

So I can do "Publish the entire set", or I could say I only need the plans, or I only need these two plans, and I could do that. But let's again say "Publish the entire set." We'll publish it here, and it's going to go through this.

I see a question from Elton, "Could we later move the publisher file from desktop to a project folder?" Absolutely. And probably it's better to just have a folder within your project folder for the publisher set. The only reason I am using the desktop is just for simplicity and demonstration. In general, I would publish to the project folder. [0:46:55]

Okay, so I have closed that up. Let me go back to the finder here and go to "Publisher Test PDF 1". So here is a PDF file. It's 1.2 mb. Let me open it up. How do I go from one page to the next? I am in preview, and I don't see it. Let's do thumbnails. Here are the thumbnails. So I can flip between these, and you can see all of the drawings here, they are all there. Depending on what tool you are in, there would be a button to flip forward and back or go up down, etc. [0:47:49]

So what is this? Previous item up arrow. So I can do Option key plus up arrow or down arrow to flip between these from the keyboard. In any event, you can see how it's output to PDF. If we zoom in on this - I don't have the tool. I will drag the zoom up to the tool bar. I don't use this, and I can't zoom in or out with this, can I? Regardless, I just wanted to point out that if I do get in here and zoom in, that it does have the true line weights for these. You can see some slight differences here in the line weights. [0:49:11]

So that's a PDF with multiple sheets. And is it linked? Right now I am not seeing a hyperlink here. Let's just quit out of this and open this up with Acrobat instead of Apple's little preview tool. I believe that if I hover over this - no. Maybe I am in the wrong tool. This is a text tool. I wonder if someone can help me, because I know there should be a way for these to be linked to the sections. So you basically would be able to see a hand and go to it. So that is something I will have to double check. I know it's possible. [0:50:21]

And it is a nice convenience in the PDF to be able to just go click on something and go to that particular section drawing. So we are going to go back to ArchiCAD here. And we've looked at how you can create



a new publisher set, how you can drag things in and use the shortcut. We've looked at some of the options for PDF. Let's look at the other PDF one here that was already set up. I will double click on it. You can see here is the one that had some folders, and we could drag individual things into those folders so they start to exist here. [0:51:04]

Now let's say that this is not going to be one PDF file. And I will say 'Don't merge it' here. Let's make sure that we have a proper path for it. That is a PC desktop. Let's go and create a new folder called "Publisher Test PDF 2" here. That's where I am going to drop it in. we will have a real folder structure here and say OK. Layouts to PDF - the path. What happened there? The path didn't - publishing properties. Here it is. That's interesting, it didn't update. Now it is. Okay. So now it's showing the proper path. And let's drag in a couple of these elevations here into this elevation one. [0:52:05]

So now if I publish that set here, you can see I have these four things there. And we will go out to the finder and go to the "Publisher Set PDF 2". Here is the layout book, here are the two folders. Here is individual PDFs. So you can see that these are options. Sometimes people might prefer having an individual PDF; sometimes they may prefer to have a single PDF with multiple sheets. And of course, if you had a flat file structure, these would all be in a row, rather than in a subfolder. So those are two options there. [0:52:52]

Okay, so we've looked at the main things that people do with publisher in terms of saving with DWG and PDF. Now let's look at some other things that you could do for saving, and that is you could - let's go here and you could create a new publisher set here. We will save it as "DWF". Now what is DWF? DWF is a file format created by Autodesk as a lightweight version of DWG for web usage. I think it might be "Drawing Web Format" or something like that. It's not that widely used anymore, but it still has some potential use, and it's nice to know that you could do this. [0:53:48]

So in the old days, if you wanted to send a set of drawings for review by a client or consultant who didn't have a CAD program, you might use this. And it's still could potentially be used. So let's see what happens. I go to Publishing Properties. We are saying "Save File" - by the way, there are some other options here that we are going to look at. But we are going to save these files and leave this here. We will create another folder. "Publisher Test.dwf". And say OK. [0:54:33]

And now I am going to go in this DWF set, and let's drag these three in here. Now initially, they are all set to be the Acrobat format, the PDF icon. But let's just change it to DWF. So DWF is the alternate format. There are some options here in terms of other stuff. I will leave it at the default settings here. Now the other thing that I need to do to demonstrate the power of this is to go up and in the DWF publisher set properties, I want to include the Project Reviewer Web Environment. So what this does is it creates a context where these DWF files can be viewed in a web browser without having a CAD program. [0:55:32]



And even, believe it or not, marked up in a way that can be sent back to you. Now under options here, there are some styles. We are not going to look at that. But basically there are ways that you can make it have some different graphic looks. We will leave it in the plain style. There was a naming one. I guess the "Index name.html". This is going to be a web file with a certain name. We will call it "Project Set for Markup". [0:56:10]

Okay, now in general, if you are going to be doing it on the web, you don't want to have spaces in here. Even though it looks fine right now, it won't look fine when it's seen in a web browser. So generally, you want to use dashes or underscores for that. So that is the name of the file. We will understand that more in a moment. I have now defined that this is going to be using DWF, it's going to have these three sheets, and we are going to publish it to that particular folder. It will go very quickly and you will notice it's also going to create what's called the "index" file. [0:56:47]

It will share some additional information here. I don't know what the warnings are. It says it's been published but it's been renamed. I guess because it can't have spaces. It truncated it here. Maybe you also can't have more than eight characters. Remember how the old DWG files couldn't have that. So now it's been renamed here. Let's close it and go to that place here. So this is DWF. Now here you see the DWF folder, it has the sheets, which have certain names. We don't have to worry about that. It also has some other files here. These files support and are referred to by this one. [0:57:50]

Remember, this is what I typed in, "Project Set for Markup". Guess what? I am going to double click it, it's going to open up in Firefox or whatever is your default web browser. It will use a Java applet, so I need to give it permission for it. And I am going to allow and remember it here. And let's see if it actually works. I am going to skip updating Java. "Do I want to run this?" it asks. I will say yes, and it says, "Error, click for details." Okay, let's try refreshing this. Let's see if - okay. I don't know why this is not working. [0:58:40]

So this is unfortunate, because it was pretty cool in its time. And I haven't tested it for ages. But in a web browser, it would allow you to look at the drawings, navigate from one sheet to another. And there's a little markup palette that allows you to put notes and things. So this is something that w will look at. It is something that I intended to cover in another section of the course. I will bring up our course outline and we will see where this is going to be covered in more detail. And I make sure I get it working or at least have a more up to date sense of it. [0:59:25]

So under the course outline, we will see there are some tools in ArchiCAD for marking up a project. So if we go scroll down, we are now in week 23 in Publishing. We are going to have Detail Drawings, Schedules and other data. And here is Red Line and Markup. In this section, we are going to be looking at tools for that. And if I can get this to work properly, we will see how this Project Reviewer allows markup by other people to be sent back to you. And here is where we have the DWG information. And here is Project Reviewer. That is the tool that I was just starting to show. [1:00:19]



I imagine I am going to reorganize some of these lessons, because things will take more time to cover than just a single module. Alright. So we've looked at DWG and PDF and some variations, and we tried to look at DWF. Let's go up to the Publisher Sets here and look at one option that we can cover, which is very powerful, and that is where we create a new publisher set here, and "print full set of drawings". Based on the name, what do you think it's going to do? If I go the Publishing Properties, I am going to say I don't want to save the files, I want to print them. [1:01:08]

I have no choices here because it's going to use the standard print controls that we are used to. But if you tell it to publish this set, it will use the printer. And of course, there is a variation for plotting as well that would be available. So let's go to "Print" here. So now that is what it's going to do. I will open it up, and it asks what I want to print. Alright, so let me go and say I want to get these four ones. I just drag them over. Highlight any one of them, and here is where you can do your page settings, print options or if I create a folder, and print set, and I put these guys in here, then I can highlight this and control the settings for all of the items within it. [1:02:04]

I will go to Page Setup. It's not going to be letter sized; it's going to be your normal size for your printer. Print settings here, these are the dialogs that we look at for printing. It has to do with what size paper and scaling, and all of the stuff. And the print options would be the things that we would see in ArchiCAD when you bring up the print dialog. right now I have it set up for little pieces of paper, so each one of those layouts would take up a bunch of sheets but in normal settings, if you were printing to a plotter, then it would work properly. If I said "Fit to Page" and have the page set up horizontally it would print a reduced size. [1:02:56]

So basically, these things are essentially the same as what we would use in normal printing. You set it up to go and publish the entire set or publish the drawings that I select. And guess what, you can get an entire set printed. Or if you chose do it with plotting, you could get an entire set plotted out. So the ultimate workflow here, in terms of timesaving here. And think about it. You have just done a massive amount of work, its ready to go out the door. You have a set of DWGs that you have set up to go to the structural. You have another set that's going to go to the interior consultant. You have PDFs that are going to the owner. [1:03:50]

You are printing out a set to submit to the city. You have a bunch of these selected, and guess what? You can hit the Publish button and ArchiCAD will go and save, in the locations that each one of these specifies, the DWGs for one consultant, the DWGs for another consultant, the PDFs in this other location that are going to go out to the contractor for review, and a set of drawings or possibly more than one set, possibly a smaller set for one bid, etc. so you can do all of these things. You hit "Publish Selected Sets" and go get a coffee and go to lunch, and all the files get saved or printed or plotted. [1:04:38]

And you can go home for the day. So that' really the power of Publisher is setting up something that you are going to do multiple times, and it will save you a lot of effort. The one thing that I didn't show here



in terms of options here. If I go to this one here, Publishing Properties. There is the option to upload BimX Hyper model. And there was the other option that I said if we saved a single file, there is BimX Hyper model. So this one would save a BimX file somewhere on your computer, whereas this upload one would look to see if you have registered with Graphisoft, if you have the right to upload this, and it will create a BimX file and upload it directly to Graphisoft's service. [1:05:39]

I have not worked with this. I have seen the basic description. And when I cover BimX in a later lesson, I will have all these things that I can explain. So if you do want to share this "Interactive Exploration" file, there is a possibility of putting it up on the web through Graphisoft's auspices or their online services, or you can save files and choose "BimX Hyper model" as the option for a single file. And you would save it somewhere on your computer and it could be shared by emailing it or putting it up on your own web server or Dropbox I assume as well. [1:06:28]

We have gone through printing and plotting very briefly. Saving, we went through all the different options that I think are very important, and very briefly mentioned the BimX Hyper model. So let's see if there are any questions.

Elton says, "Can't markups happen in PDF?" So, if you think about PDF, it's primarily an archival format. You send it out. People can look at it with Acrobat Reader, which is free, and they can print it out. And it's a record. It has a date. It can't be modified. It's a record copy of the state of the project or submission that you sent to the city, etc. That's a nice legal thing to use from time to time, a digital version of what you sent. Now can you mark it up? If you have Acrobat Professional, then it has tools for markup. So you can open up any PDF and save a copy of it with markup on top of it. [1:07:44]

So that would be an option if you or your clients want to use PDF tools for that. I haven't done much of that, so I am sure many of you have a much more extensive knowledge of the workflow there. So that certainly would be possible, but it does require having a version of Acrobat Professional, which used to be fairly expensive. Here is a quick tip. I bet you might not even know about this. There is a service from Adobe called "Creative Cloud". Creative Cloud has different options, but you can literally get applications like Photoshop here, for a small amount on a monthly basis. [1:08:43]

And do we have Acrobat Pro? So I can say "Try this". Basically, Adobe has some things that you can try for 30 days and then pay for. If we say "Creative Cloud" here, you will see some options there. You can start a trial, choose a plan. We will look very briefly at "Choose a Plan" here. You can get individual applications for a certain amount or get their whole package. So if you just wanted Photoshop for ten bucks a month, you could have that. If you want their complete package of all sorts of stuff, for about fifty dollars a month or six hundred dollars a year, you can get everything they have and more cloud features. [1:09:44]



It's six hundred dollars a year, a one-time cost, but it's always kept up to date. If you already owned some version of Creative Suite, then you can get it even cheaper, for three hundred and sixty a year. So a nice little tip there.

Okay, so Rick Skorick asked, "There are markup capabilities with normal PDF." Okay, I am going to have to learn about that. Maybe Rick you can give me a little tip.

Elton says, "I should say I have some consultants that have that capability to markup and send back to me." Great, so just send your PDF.

Wendy says, "I have sent PDF sets to a blueprint company after setting up the page for 24x36, but when they get it, they say it's only 8x10. Am I missing a step?"

Okay. When you are saving a PDF or printing to PDF, there will be some options for setting the page size. You must be missing a step. We can look at that in one of the coaching program calls. [1:10:51]

Rick Skorick says, "Markup capabilities at the top of the PDF. Just open a PDF and it's on the top." So when you say, "Just open it", you would have to define how I am opening it. Am I opening it in Apple's Preview, which is the default on a Mac, which can be changed, then it doesn't have that. If I am opening it up in Acrobat Reader, then maybe that has that. But we will have to take a look. So thank you for giving me the tip. I will do a little more research. I certainly know a lot about a lot of things, but I don't know everything about everything. And marking up PDFs happens to be one of those areas that I just haven't had much reason to go for. I guess I will learn a few more things in the next few days or weeks. [1:11:47]

Rick says, "Double click on a PDF from your desktop."

When I double click on a PDF from my desktop, it opens up in Apple's "Preview" instead of Acrobat. So that is because of the default settings. On your computer, double click opens it up in a tool that gives you that capability. I will double check and be able to demonstrate and explain for people like me, who don't know about it. Since you already know about it, I guess you are in good shape. But there are some others who could learn, along with me, how to mark up a PDF. So I will become an expert very soon. [1:12:33]

Alright, Rick says, "You can markup in preview." So hey, let's just see what that means. Okay, I am going to go here. Let's go and open up in MasterTemplate here. I have a linked file here. Here is a PDF file. This is a set of specifications in MasterTemplate that are actually a dummy set. I am going to double click on it. It's going to go into the Preview. And you say there is a markup tool in Preview. Tools, Annotate. Text. Okay. Thought bubble. Signature. Okay, so I could go in and put in a rectangle. I can annotate something here. And here is some text. I can go. How do I do a text block? Note. So I am going to learn about this. Thank you for pointing out something that was sitting right there in front of me. [1:13:48]



I have just created a note. This is text tools. And now there are text tools, with color. I am going to say, "Thanks Rick, you rock." So I think this is a good place to finish up. You can see that your favorite ArchiCAD teacher doesn't know everything. Thanks for making me even smarter. Okay.

Elton says, "Certain printers or plotters are limited in their ability to adjust to print at any size. One of my vendors can adjust to print any size, the other cannot." Okay. So I am going to learn more about that there. Basically, we have talked about printing and plotting in a previous lesson, where you set it up for the page size you want and you send it off to the printer. If you need some adjustment, like their page size is different or you want to put it on your desktop, then I suppose it will depend on what tools are being used. [1:15:16]

Lynn says, "The more you know, the more you don't know." Thank you Lynn. That is true. Now I know there are some things in preview that were right there that I didn't know about. Thank you all for enlightening me. Please add your comments and follow up questions and suggestions to the page down below this recorded video. This has been Eric Bobrow, thanks for watching.

[END OF AUDIO 1:15:52]