LYLE JANDA: And so yeah, like I said, it will be informal. If you got questions at any time, feel free to ask. I've got Greg up here. Josh Ashew was supposed to assist me, but he had to fly out. So I got Greg Murphy here from the Murphy company to assist.

GREG MURPHY: I know most of you guys in here. I'm going to sit down and let him do most of the work though. Before we start, I'd like to know how many people-- you're looking at this to implement something.

So who's using CAD right now? So most everybody. Who's looking at EST? So much everybody. And then everybody, about half of them, are probably using CAM too, right? Because maybe they have sheet metal.

AUDIENCE: Don't forget Revit. [INAUDIBLE]

GREG MURPHY: We're in the wrong class if we're not implementing Revit here, buddy.

LYLE JANDA: But no, with that being said, with the database how it is now, as long as you have it set up on the CAD/EST CAM side, I mean, that's going to be your platform when you do take it into Revit. That's a good point. So things that you do now in getting your estimating up to speed and getting it implemented, it's going to be the--

GREG MURPHY: --backbone engine of that design line into Revit. Yeah, you're right.

LYLE JANDA: --and how it's going to go under Revit. And so in turn, if you do receive the Revit model, I did a class the other day and we just had that discussion. We don't have to throw that away. We can bring that into EST. And if your items have all the correct pricing, we can utilize that Revit model.

So we'll go ahead and get started. My name is Lyle Janda. I work for Applied Software. I know a lot of the faces out there, and thank y'all for coming. Like I said, I know this is the last day and last class so I appreciate y'all's time.

And so yeah, this class we're just going to go over some of the things that where do you start with EST? I mean, from my perspective, when we have these conversations and sit down with clients, it can be very overwhelming, and you've got to figure out what your immediate need is. Is it detailing? We've got to get the jobs out. Is that needed? So we've got to start with

CADmep.

We've got a shop, well, we need to get CAM up and running first and because all of y'all have some form of estimating software as it is now, so that can still keep getting your bids out. And then as you're CAD department is setting up services, your shop is getting the standards in, then you can fall behind and start getting all the pricing information.

And really, that right there is-- so here is the objectives we're going to be going over today and take from the class. Really, I'll go through the product information editor, where to start with that, and when you're creating items or getting all this information together, how do you do it and how do you bring it in, bringing in a price update, and so forth.

So like I was saying, where do you start? So with ESTmep, before you can even start drawing or taking off items, we need to get the data and figure out what data that is that you have to get. But right now my estimating bid sheet, when it goes out, this is what I need. Usually it's material cost, labor, weight in pounds. So how does all that work?

GREG MURPHY: Yeah. And traditionally, in a regular estimating system, the components can be generic. When you're dealing with this type of system and you're going to share or be integrated, now we're dealing with a specific manufacturer that you want to use, and that's going to be whatever your company standard is. So you want to start helping develop that if that's not already in place.

LYLE JANDA: So we'll take a look at sheet metal side of things, and I'll go plumbing and piping as well, but the concepts are the same. So on the sheet metal side of things, if you're manufacturing your items, material costs is going to come from wherever you're getting your materials from.

So when I look at an item, if I take this off and I look at the cost breakdown, the cost breakdown is going to show you everything that is tied to the item. If you don't see it in here, it's not on there. The program won't pick it up.

GREG MURPHY: And if any one of those items in the database is 0, it won't even show up in here.

LYLE JANDA: Correct. So you'll notice on some things I've got set to 0.01. That's because--

GREG MURPHY: You want to see it in the list.

LYLE JANDA: I want to see in the list, and then as long as it's there, then I'll show you how we can get that pricing and update it into the program. But again, the cost breakdown is where you want to

look at. And then furthermore, when you look at the item at the property level, costing, there's three parts that make up the costing. You've got the M-Rate, F-Rate. and E-Rate.

If you look at this item, you'll notice that M-Rate is set to None, but it's still pulling a cost. That's because this is a manufactured item that I'm making. And you'll notice that Bought Out is unchecked. When it's unchecked, where that's pulling the cost from is the cost at the material level in the database.

Step one for your sheet metal. Come in here, go through all your materials, and put the current pricing that you're buy that out at.

F-Rate is the fabrication rate. So you'll see here we've got tables, and you'll notice that we've got SMACNA. That's probably everybody on the sheet metal side is a SMACNA member. Those are going to be your starting point. So when I go look at this table, you'll see we have it broken out by pounds per hour, full periphery. So it's taking account all the sides, as well as we broke it out in a way that you got all your pressure classes to pull this data from.

GREG MURPHY: Go ahead and showdown the include if as well. And so in this one table, this can be all inclusive of each material for each of those SMACNA tables as well. And it would also include double wall and all of that. So that's what we're setting up here.

LYLE JANDA: Another question I always get is, where do we add the multipliers and/or discounts? So really what I see EST as, let's get our bottom-line number that we need out of there. Typically you'll have an Excel sheet, a bid sheet that we can export this data to. So you'll notice here we have an adjust code of SMACNA.

So we can add our multiplier and/or discount here, and that's going to reflect on all my items in the job, or I can just leave that out 1, get my bottom-line number. When I take it to Excel and the message the data in Excel, it's a lot easier to do that per job. Because if I change it here, it's now changing it for every job after this.

GREG MURPHY: Right. So if you change it here, this is going to be your baseline office. SMACNA, you would want to start from, and then you massage from there, or you always leave it at 1 and then message from there on the job.

LYLE JANDA: So if you are doing it in the program, just remember if I make a change, its a global change, then it's going to be from here on out.

AUDIENCE: If I did it here, would it stick with me for real? So if you were to give that geometry to somebody that has your numbers up?

LYLE JANDA: So there's an option. It would be on the CAD side.

GREG MURPHY: There it is.

LYLE JANDA: Do not save EST tables with DWG database. So with that checked, you can send your CAD drawings out, and it won't send those tables. So that's in the Edit Configuration.

And then if we look here, the same applies for my E-Rate, which erection rate, labor. So if I look here, it's going to be in a similar fashion as my fabrication time. And you'll notice I've also got my labor rate here, or labor, and that's in the database. I'm calling out $85, whatever your shop rates are for installing fabrication.

GREG MURPHY: There's a couple of tricks you can do here that I like to use, is I set all my values the 1. That allows me to report out my hours as hours instead of worrying about my multiplier. Because every job, depending on where you're at, may have a different crew mix. So that way you get your hours, and you let your spreadsheet do the math for you.

LYLE JANDA: And then if I look at a bought-out item, like this [INAUDIBLE] here, you'll notice when I go to it's costing properties, you'll notice that the box is checked for Bought Out, and rate is pointed to whatever-- in this instance, green scene. So when I go look at M-Rate, instead of pulling from the material, it has a cost code that I'm getting from my vendor to populate my number.

The same applies for the piping items and plumbing. So again, don't get stuck on-- I know I'm showing it around a [INAUDIBLE] here, but the same applies.

GREG MURPHY: So we haven't really ever touched on what the different tables are. And so this is called a product listed table. And so what that means that that bought-out item has a unique identifier to it, like a Harrison code. Well, sheet metal can have a similar code, and that's what we're seeing here on the left. And this is a product listed table, so there's unique code for each size of that one item.

So instead of going to a product listed table, we could actually point it to that breakpoint table, which is what we just saw a minute ago on the sheet metal, where you can have a chart that represents the sizes to pick either the labor or the size. And so either method is correct. So it's really come down to what is your method and how you want to do it.

There is an advantage in a price list is that if you have a similar product list and you want to swap out prices, you can use the same ID and then just change the price list. So if you had a generic one for bid purposes versus going to a specific manufacturer, you can switch them back and forth that way.

LYLE JANDA: And we'll see that. When I get to the product information editor, I'll show you where we can add suppliers or different vendor wherever. Again, I mean, I know in these examples I'm using Harrison just because that's what's included with the Autodesk stuff. I could easily add Ferguson, whatever local vendor you're using. Again, the ID is key, and I'll explain that, and that will make a lot more sense here in a second.

So if I take a look, piping item, it's going to be the same thing. I've got my M-Rate. This is looking at a Harrison price list inside the program. And we'll walk through how to update your price list as well.

Now, labor on the piping items, we've got it set up product listed on the price list, but again, we could also set it up and a breakpoint table based off the size versus the actual product list.

GREG MURPHY: Right. So there's advantages and disadvantages there where if you use a breakpoint table, you're going to have one table for that part type. So that's an advantage in itself because now I can have all my 90 copper elbows, no matter what manufacturer they are, I can now point them all to that same table. So that's an advantage.

The disadvantage is that I have to have a table for every one of those different parts. So if I do a product list, I can throw it all in here and be all in one and it would be done. And then I'll have to sign this labor table to all those components. So there's a trade off, and depending on how you want to look at it, you can do it either way.

LYLE JANDA: Any questions so far?

AUDIENCE: This is going to be a question on the graph, but is there a best practice for something [INAUDIBLE] price list for bottom stuff. It's an easy update [INAUDIBLE] pricing on sheet metal [INAUDIBLE] as opposed to just [INAUDIBLE].

LYLE JANDA: Well, sheet metal is a little different animal because there's not an industry standard. But with this method here, whether it be a breakpoint table or this, you can build an Excel spreadsheet or the components that you want to update. And then you can actually come in here and just

either cut and paste them, or you can create your own import file.

So that's probably the best way to do it is to manage a master Excel sheet.

LYLE JANDA: So Yeah, that takes me in-- we're going to take a look at the product information editor, and where do we start with that. So just like Greg said, if I come, I've got a Excel sheet that I've set up. And you'll notice that it looks identical to what the product information looks like.

So what I mean by that, I've already got it open. Here's the Product Information editor. So you'll get through this from start, All Programs ESTmep, Product Information editor. You can drill down if y'all need to see that but, again, that's part of when you install the program.

GREG MURPHY: So one of the main purposes for this is that when you're in your tables, whether it be labor or pricing, is nobody is going to know what this ID number is unless it's specific that you created it, because now you're going to make it specific to the part. But now it's going to have a Harrison number or some other number, and that number doesn't mean anything to you, right? So without the rest of the information and the description information, you're not going to know what that part is.

So you can also use this from a reporting aspect or just use the ITM as most of you may know. But that's why it's critical to have this data.

LYLE JANDA: Yeah. And reporting, I find that this is the best way to report out your items because what's nice is you'll notice I have description here, I've got source description, so I can tie different information, pull different information how I want to see it on a report versus having to name the file name. That way you can just call it an elbow. And in here, you can call it what you want to read out on your report and/or your exports.

So this sheet here, as I'm looking at it, it also has suppliers. These are just the defaults that are set up. So I'm going to come into the Product Information editor, go to Edit, Show Suppliers. You'll notice that I've got these Autodesk IDs, and as I come down, they're linked to the suppliers I've set up in my database. So Harrison has given me a code from their update. It's linked to the Autodesk ID, and so when I bring in, import that update, it's going through, and this is how all that's being linked together.

GREG MURPHY: And you can add additional ones. Let's say you work with Ferguson and you want to put their codes in because you can report that out, you can actually add another supplier and do updating through their code as well.

LYLE JANDA: So let's take a look at what this looks like when you start building it out. So I've got an ancillary price list that I created. And really this is the start of before I can even create the item, there are certain things that have to be done before I can do the Make PAC command or copy an ITM.

I've got to get all the product information. So again, this is going back to what do we do first? When you're getting this stuff, you want to make sure right here is going to be a daunting task just to get all this information, get it in Excel. So now that I have it in here, I could easily add my supplier code. At this point, it's just a highlight.

GREG MURPHY: Can you back up one second? Do you have the chart where you pull that data from that you downloaded from Harrison?

LYLE JANDA: I've got a Harrison one that I'm going to show. This is just an example of creating your ancillaries

GREG MURPHY: Gotcha.

LYLE JANDA: So before I can even put them in the program, I need the product information. So when I copy that, this is the important part. When I'm in the product information editor, you've got to scroll all the way down to the bottom, right click on the screen, Paste. And since I've set it up in a way, I'm going to go, Data contains field names, and everything is now linked.

You'll notice DB is ID and so forth, and I just hit OK. And there's my new entries.

AUDIENCE: Can I get the suppliers in there? Can you just select the suppliers?

LYLE JANDA: Suppliers would be if I come 02, I just come over here.

AUDIENCE: Same thing as doing that view?

LYLE JANDA: Just do it.

GREG MURPHY: Yep. Just make sure they're in the exact same order.

LYLE JANDA: So Supplier, right click Paste. There you go. So having that in Excel is a lot easier than coming in here, hitting New, and typing all this data out. I can easily do it in Excel. And if you're good with Excel, you can get a lot of this stuff done fairly quickly.

Now, the next thing I need to do-- I want to close and save this, close and save this. Or no, I'll leave that open. I'll need to close the program, come back in. You'll see here I've got a price list.

So now that I've got the product information in there with the proper codes, it's going to be the same thing. I want to restart the program. Database, Costing, Price List, and go to the proper table. And I'm just going to-- same thing. Copy. Paste. Seven new entries. And noticed that all my product information is now linked.

So if you've ever done this in the past and you bring this in and you don't see anything in the product information, that's telling you that either your IDs aren't linked right or it's missing from the product information editor.

GREG MURPHY: So one more thing you can do here is you can see from the Harrison code line to the right, that's populating from that table. If you right click in the empty space there to the right, you go Customize and you can add or remove those categories that you may or may not want to see in there.

Now, if you do a cut and paste out of here, you don't get any of that other information. So that's the only downside. I wish it would come out that way, but it doesn't

LYLE JANDA: Yeah. So same thing, if you come in here to print, it just gives you that. I wish you could print that out easily, but it is what it is on that.

GREG MURPHY: So there's a couple of other things to note there as well is that the units is critical. You want to make sure that gets assigned right, if it's pipe versus per each item.

LYLE JANDA: Correct.

GREG MURPHY: That's kind of tedious to do it after the fact because you have to go to each unit item and then set that to per foot. But if you put per foot in your table, then it will come in as per foot when you cut and paste it.

LYLE JANDA: Exactly. Whatever I've set in here, you'll notice that we've got it per foot or each. So that example was ancillaries. And really that's the same for anything when I'm creating new items or I'm bringing in a new product line. So this goes into content. So whether you're using a third-party provider for content or you're building it yourself, you've got to make sure that they give you the product information. I know there's some free content out there from some

manufacturers. They've ignored this, and it really makes it a pain if you're trying to use that content in EST.

It's great for CAD. You can use it and draw with it, but it's not going to pull any of the product information that you need for EST.

GREG MURPHY: Right. And then again, depending upon how you report that data on your spool sheets, it could be a problem as well in that case.

LYLE JANDA: So I see that a lot. Customers, they've got an older database. If I look and see that the product information editor is empty and I tell them how long it's going to take to get that stuff in there, sometimes it's just better to start fresh with some new content that already has this available. Again, whether a third party, you do it yourself, AutoDesk content, there's plenty of stuff out there at this point.

So let's take a look at the Harrison updating. So I've got a file that I've set up. And notice that it has no cost. So two ways, Harrison has given me this add-in that's available, and I'm just going to show-- I won't run through it all. I'm not sure what that was about. I love live demos.

GREG MURPHY: Do you have Wi-Fi on?

LYLE JANDA: So hopefully, I can just leave it up long enough. Well, anyhow, I can use this to automate. As they're sending out updates, you'll get an email says new updates available. And if I have the add-in tool, you'll have to map it out, and then it will automatically update for you. Or in this instance, if I go out to Syncs--

So I've pulled a Harrison update for Charlotte, and here's what you'll get from Syncs. So you log in to Syncs. You'll go and request whatever it is that you want to update, or like I said, they'll have a massive update that they'll send out every so often.

And what we're looking at here, what's important is this code, the cost, the availability, and status. All this other stuff, I don't really care about. So when I have it in here and I right click, go to the M-Rate, you'll notice I have it set to 0. So I'll select Update Supplier.

Make sure you've closed out of Excel. If you're in Excel, it won't bring in the import. It will throw up an error. Open. And so this is the important part. Now that I'm here, I've got to make sure this ID maps to-- I switch to Harrison. So what that's going to do is look up that Harrison code, link it to the Autodesk ID or whatever ID you've created. That's the important part.

And then I've also got to come in here. ID, I'm going to match it to HPH code. Again, I'm just looking at these in the order that they're at cost; price; discount, I'm not worried about; units, I'm not worried about; date; the price effective date-- so that way you can look easily in the price list and see just visually if it's up to date or not-- and availability status.

So now I'm going to hit OK. It's going through.

GREG MURPHY: So as you saw in that supplier list, that could be where you create your own part numbers that you want to manage through an Excel sheet like that, and then you hit Update through that way.

LYLE JANDA: Here you go. 1,700 prices matched, 180 modified, 11 failed. The ones that failed, I probably don't have them in the price list, or again, the IDs don't match. I hit OK. Hit OK here. OK. And now my cost that went from 0 is up to date with the current pricing from Harrison.

AUDIENCE: So you don't manage your multipliers in [INAUDIBLE].

GREG MURPHY: You can.

LYLE JANDA: Well, we haven't gotten there yet, but you can. I've been doing this a long time. I don't know anybody that's ever set up Harrison multipliers in Harrison, but it doesn't mean you can't do it.

AUDIENCE: You should get the job and make money.

GREG MURPHY: That's right. You get the job. You make money. It gives you a list price or a new one. So here's where you set up your multipliers in the price list. So it's just like the discount sheet he showed when we looked at the SMACNA on the sheet metal side. So this is all customizable so you can add as many as you want and break them down how you need.

And then you can see in this discount list on the left where he's got copper tubing in 0, those are his categories. And you can multi-select and group it and just apply the discount to it.

So yes, this is how you want to manage it. You can cut and paste the setup discounts into Excel. The one thing I will tell you is it doesn't automatically sort. For whatever reason, they still haven't fixed that yet. So you have to basically take it out of Excel, add whatever I want, and then I sort it in Excel so it's in alphabetical order, and then I bring it back in.

I like to use the Description field to identify even more so what that's for because if I say

Apollo, that can be bronze, it can be bronze and iron, it can be pro-press. So be very specific on your multipliers. I like to keep them as short as I can on the code and then fill out the description, but the code needs to be something easily identified.

LYLE JANDA: Any questions on that? So far we've looked at bringing in new items, bringing in a Harrison update or supplier update from Excel. We've also showed how we can manually update the price list through copy, paste. So again, there's several different ways we can do this to make it easier, and the common thing we've seen so far is it's all been in Excel.

Again, don't try to do all this click and pick inside the price list. Let Excel be a lot of the heavy lifting for you.

AUDIENCE: What's your list of discounts? Can you show how you apply the specific discounts in parts?

LYLE JANDA: So it's a good question. So here's my discounts, and if I were--

AUDIENCE: Sorry.

LYLE JANDA: No. I can right click, Set Discounts, and there's my list of discounts that I can easily switch to those items. Any questions?

GREG MURPHY: I have a question. I had some. They may not know that.

LYLE JANDA: And then too while we're looking at some of these pr labor tables, I can copy this out of here and paste it into Excel as well. So again, really I can't import anything into the labor tables, but I can export it out and copy it in Excel and then bring it back, manually do it. There's no import from Excel.

AUDIENCE: Lyle?

LYLE JANDA: Yes.

AUDIENCE: Is it plotted yet when you can see when you have a discount plotted to the item? Like when you just added [INAUDIBLE] showed that you put the Apollo discount on it. Is there any way to show that you have the Apollo discounts onto that item?

GREG MURPHY: Yes, you can. So you've got to go back into Takeoff, and you can also report that value. So in the Takeoff where you're customizing for showing what that value is, so in your item list, if you right click, and Customize, I can't remember which one, I think it's under Product Discount or is

it Cost? Yeah.

So you add that, and that's just the name. And then right click and go to the properties of it. So right click at the bottom there. You go to properties of that. When you add it, you can say Display real values for data.

LYLE JANDA: There it is.

GREG MURPHY: And it's the other one? Is it under Cost or-- so it's under Cost.

AUDIENCE: I think that one's under Cost.

GREG MURPHY: Price list cost.

AUDIENCE: That's discounted though?

AUDIENCE: On the left.

AUDIENCE: On the left.

GREG MURPHY: Yeah.

AUDIENCE: There's another one.

GREG MURPHY: Yeah. Right there without-- is that the one?

AUDIENCE: The modulus cost list.

AUDIENCE: Is it a multiplier?

GREG MURPHY: It's under Cost, I think.

AUDIENCE: I should remember all of them.

LYLE JANDA: But yeah. I mean, I can come in here.

GREG MURPHY: Watch this cost.

LYLE JANDA: I mean, I can get it on there. It's just a matter of finding the proper term.

GREG MURPHY: Yes. So you can do it, and you have a checkbox in the Properties that says show that value or show it in parentheses next to the actual discount name.

AUDIENCE: I also have the last name too to figure it out.

LYLE JANDA: It's in there. I have it on all of mine. Absolutely.

AUDIENCE: [INAUDIBLE]

LYLE JANDA: All right. So that's the content part of it. Next thing I want to look at is how we manage EST now that we have it in here. So when we close and just come into a blank job, I'm sure y'all have heard throughout the week, profiles. So again, you're going to hear it and here, profiles.

I've got a list of services here, and notice I've got duct pipe. I even have some set for CAM and for EST. So what's nice about profiles is my plumbing estimator, he doesn't want to see sheet metal stuff. The Sheet metal guys, they don't want to see the plumbing or piping. So with Profiles, I can easily manage that and create job-specific [INAUDIBLE].

And this, maybe for your duct guys, because you'll see here we break it down by pressure class. Maybe I just do a low, medium, high-pressure service, and that's what I'm doing my Takeoff with. So that way, again, you're limiting the amount of clicks and data that your estimator sees because it's all about time, get the stuff out quick. So the more stuff that's in there, it's easier to click on something that's wrong.

GREG MURPHY: Yes. So this is a good way to separate estimating services from CAD services because a lot of times you might make job-specific CAD services. So otherwise, this list continues to grow and get large. So you could potentially make a profile that is just your estimating services and then that list doesn't continue to grow on you.

LYLE JANDA: And that will be under File, Profiles, Setup. I won't go through it all unless y'all want to see it. I'm sure there's plenty of classes this week. Do y'all want to see how to create the profile? OK.

AUDIENCE: [INAUDIBLE]

GREG MURPHY: What's that?

AUDIENCE: [INAUDIBLE]

LYLE JANDA: And then also under Takeoff, I have Services. So I can import and export services just like I do in CAD. So if I do create something that is job specific or CAD guys, they got it already set up and it's not in your profile, then I can import that service into my profile and manage it that way.

AUDIENCE: So if you set up profiles in CAD, they're going to be there already.

LYLE JANDA: Correct. If you're on the same database, those profiles that you see on the CAD side or the CAM side will be available on the EST side as well.

AUDIENCE: If you create a profile sync [INAUDIBLE]. If you update their database with the new update, are those profiles [INAUDIBLE]?

LYLE JANDA: So that's a good question. Let me, real quick, set one up so we can look at that.

GREG MURPHY: So there are certain files that get replicated in the database. And we've always said that's a no-no, right? Don't duplicate your files. But this is a way to strip it down. And when you set up a profile, it basically creates a separate folder and puts a certain number of project files, if you will. So it just puts a few files in there, and these are now unique to this profile.

So yes. So the estimating, your pricing, and those kind of things are now unique once you create that profile. So if you want to update this profile, you will have to update this profile and your master database. So that can be an issue.

LYLE JANDA: Or through Windows, we can link these files, basically, this will just be a placeholder, have it mapped to your master database or your global profile so that way when you do make an update to your global-- and again, we're just looking at probably F times cost. Again, we can pick and choose what files we want to basically link that to the global so when you do make that update, it will filter it through all your profiles.

GREG MURPHY: Right. Because the service.map file there is the main one that sets up the view of what services you see. So if you link all the rest of them, because you always want them to be alive since it's just an estimating database, and that's a perfect way to map them back to the global. And then you never have to update it only if you added an additional estimating service.

LYLE JANDA: There is a question over there.

AUDIENCE: I'm good.

LYLE JANDA: OK. So that's Profiles and I just created one quickly. And there, now you see only the services that I created in that profile. And I can easily switch back to my global. And what's nice too when I do create a job in a profile, it will pop up to say you're in this profile or you're missing this profile.

So again, there's a safety net there that you can't access. Well, you can, but just hit Yes. You use the profile that the job was created on. Because if you're in the global but the job was created in the AU profile, when I got to open up that job, it's going to ask do you want to switch to the profile that's linked to this job.

So let me open that job again. So reporting. So you've got to estimating summary, and in 2017 they've added these tabs in the estimating summary. And I can easily see where I'm missing pricing on the items in this job.

So what's nice is I can update it in here, and it's going to be job specific. This won't be a global change, or you look at it and say, no, I don't want to price that here. I'm going to export it out to Excel, and I'll capture whatever I need to. So again, you'll see here Review Fabrication Times, Installation Times and Item Cost.

GREG MURPHY: There's a couple of other additional things you can do in this feature now. You can see right now at the top there are some checkboxes looking for items with no cost. So why is that critical? Well, because if it's just a one-off bought item and you want to throw a number in there for a plug, it will ask you the question, do you want this to be alive? Once you say yes, it will actually make that the permanent cost in your database.

So if you have all these holes now, you can go through there and in plug in Ethernet numbers or whatever and be able to add those back to the database without having to go back into the database to add them. So now you know which ones you have holes on.

AUDIENCE: And that's based on permissions [INAUDIBLE]?

GREG MURPHY: What's that?

AUDIENCE: That's based on user's permission?

GREG MURPHY: User's permissions. Perfect. Yep. Because you don't want everybody doing that, right? Again, it is global, so you make a change there, it's global.

LYLE JANDA: And then let's look at a report real quick. So again, you'll notice that this is pulling from that product information that we set up in the Product Information editor. So notice how I can give it the correct names here, but again, keep the file name separate so that way I'm not pulling-- it's a whole lot easier to manage the reports using the product information.

GREG MURPHY: Yeah. It makes them cleaner for me. I'll have my ITM name be enough to say specifically what it is by material. But at report time, depending on the type of work we do, if you're doing high-purity work or you've got to do some tracking, you want your description information to report a specific way. And so that's the best way to make that happen.

LYLE JANDA: An then through File, Export, you'll see here the different type of information I can export to Excel and/or text files. So if I go on Data Fields, Save this as a CSV. I want to put it on my desktop. Just call it Export.

GREG MURPHY: Now, before you hit Finished there, one of the things I like to do too, instead of just exporting it as an export CSV, you'll notice the next radio button below it says Use the name and extension. So it will automatically add the extension, but it will use the actual file name you're in as the name of the export unless you want it to be the same name because you have a custom spreadsheet and you wanted to look for that name. So you have a couple of options there.

LYLE JANDA: Click Finish. Go to my desktop. Export. And there's that data. The report that I created is now in Excel and at this point, dump it into my Excel bid sheet.

GREG MURPHY: And add a little trick here if you do a Build Materials and you're trying to order it, Ferguson can match that Harrison number. So I always send them this CSV file because it saves them a ton of time if you've got to get that. So if you're trying to get pricing and other things for a job, this is a great way to send it to them. They would rather have this than a PDF file all day long.

LYLE JANDA: All right. We've got about 15 more minutes here. I'll get y'all out for the happy hour. So last thing I want to show is batching jobs together. So I explained this in class earlier this week. ESTmep is great, but it does have limitations as far as how many items you can get into a job. So we want to make sure that we break out our jobs, whether it be floors or even if it's a big floor, then sections of that floor because we can create as many MAJ files that we need.

GREG MURPHY: Right. So I mean, once we start bringing these drawings in his backgrounds, these large drawings are a meg a meg a piece. So you get too many drawings in estimating, you start slowing it down, and that defeats the purpose of what we're trying to do with estimators anyway is we want it fast. So by bringing it down and doing each sheet as a Takeoff, we can then merge them after the fact to bring them together and run one report from there.

AUDIENCE: What's your recommendation on [INAUDIBLE]?

GREG MURPHY: I traditionally try to stay around four or less.

AUDIENCE: How many items?

GREG MURPHY: Well, they up the limit.

LYLE JANDA: They've upped it, and I haven't--

GREG MURPHY: I haven't hit that threshold yet, but I don't know what the max is anymore.

LYLE JANDA: I forgot. I knew the number at one point. But yeah, they've upped it, but again, when I see it start bogging down is when you have like Greg said you've got an underlay in there and you've got multiple design lines. That's really where you start seeing it just slow down and become real cumbersome.

AUDIENCE: What about the 30-meg file, that's when it really [INAUDIBLE].

GREG MURPHY: So Chris is saying about a 30-meg estimating file, it starts bargained it down quite a bit. That's a pretty good size Takeoff anyway.

LYLE JANDA: So when I come into this new job wizard, I can also get it through Create Bling Job. You'll see this Existing Jobs tab, and I've got Batch Process Jobs together. So when I go next, you'll see my MAJs, and you'll have to do MAJs.

GREG MURPHY: So before you actually hit the final Next button, notice the process down there. I ran into this when I first came on and the process was actually set to print. And I was bringing the job in, and it was automatically printing it. And I went over to the printer and they're like, hey, your print job is over there. Frigging stack of paper like this.

So make sure you don't have a profile process set up in there to print once you hit this merge and go through this process.

LYLE JANDA: And that's a good point. And notice that by default, it went to the first process in my list. So I've got to make sure-- put that to None. Or if you do want to print it out, then set it to the proper process, hit Next, then I can Finish. And I brought in a plumbing and sheet metal into one job. So now I can, from a estimating summary, run my reports on multiple jobs or multiple files within that job to give me my build materials or whatever I needing to get out.

GREG MURPHY: So a little tip here. Whenever you do this, if you've got multiple floors, estimating always works off of 0 as that floor. Sections are not used in estimating. Why that is, I don't know. We tried to get that added many times for estimating to take on the levels in sections like CAD uses.

So if you want to merge these and see a model, if you will, for a dog and pony show or whatever, you have to go into each of those floors, go into Section View, and physically move them to an elevation of that floor. Then come back and batch process them and you'll have the model built out and estimated.

AUDIENCE: [INAUDIBLE]

GREG MURPHY: At that point, no. I mean, if I'm bringing them all in that way, I just want to run the report. But I might want to see what it looks like and see how--

AUDIENCE: [INAUDIBLE]

GREG MURPHY: Yeah. So first any underlays you're bringing in, you want them to be on global. And then you're going to create a new tab at the bottom to separate each page from there. And then you can go even further by breaking our supply return, exhaust, and do hot water, chill water, whatever, so that keeps just what you see in that sheet for those systems, so it helps the Takeoff. And you can have as many tabs as you want. I don't think there's any limitation to the tabs.

AUDIENCE: [INAUDIBLE]

LYLE JANDA: Yes and no. You still don't want to get crazy and just create 20, 30 tabs in your files. So just keep that in mind. Well, that takes us through all the material. Are there any questions? We got about 10, 12 minutes here to fill some questions. Yes, sir.

AUDIENCE: Is there an easy way in a job-- you were talking about pricing before. So then you recognize a certain size [INAUDIBLE] pricing is incorrect, to go in and just job specific take all those 90s that are incorrect, change the pricing, not globally, just for that job.

LYLE JANDA: ESJ.

AUDIENCE: [INAUDIBLE]

LYLE JANDA: ESJ.

AUDIENCE: You can do it through that--

LYLE JANDA: Yeah. You can do it to the estimating summary now.

AUDIENCE: Use Summary or you can do it there now too.

LYLE JANDA: Right. When I change it here, it's not changing it globally. It's just changing it in that job.

GREG MURPHY: If you're in the ESJ.

LYLE JANDA: If you're in the ESJ.

AUDIENCE: Yeah, but you can't batch GSS.

LYLE JANDA: Correct.

GREG MURPHY: What he say?

AUDIENCE: [INAUDIBLE]

GREG MURPHY: You could export it to an Excel sheet and then update it.

LYLE JANDA: But I see. So you're updating it without updating the database, and in MAJ, if you go in, if you update the price list, then an MAJ is going to be a global change.

GREG MURPHY: Right. So I mean, to me, the main reason you're going to do an ESJ, to me is if you have to lock down prices for the duration of that job. Otherwise, always doing an MAJ as far as I'm concerned.

LYLE JANDA: Any other questions?

AUDIENCE: Do you use ESJs to archive the jobs too?

GREG MURPHY: Good point. He uses them to archive the jobs. Why? Because now I can pull it back up and see what my cost was then, save that file back out as an MAJ, pick up today's prices, rerun your estimate. How many times we had a job go south and it comes back alive six months later? That's a perfect way of checking the price from previous.

AUDIENCE: Another way you can update pricing just on a job is if you export it out to an Excel file, the CSV, and have a macro or something that looks for missing price labor. And then you can update it, right?

LYLE JANDA: Right.

AUDIENCE: And that's an outer program [INAUDIBLE].

LYLE JANDA: Good point.

GREG MURPHY: Any other questions?

AUDIENCE: What if [INAUDIBLE] show how to map the profiles to global [INAUDIBLE].

LYLE JANDA: No, going through all that.

AUDIENCE: [INAUDIBLE]

LYLE JANDA: Get with me. We can--

GREG MURPHY: It's called applied software.

LYLE JANDA: Shoot me an email. But yes, sir.

AUDIENCE: How about some know-how about your Revit information. The information I'm still confusing with the [INAUDIBLE]

LYLE JANDA: So are you asking about getting the design model into EST?

AUDIENCE: [INAUDIBLE].

LYLE JANDA: Yeah, I can do that.

AUDIENCE: Yeah, but can you give some good examples what to do when [INAUDIBLE]

LYLE JANDA: Oh. Well, again, whether it's using a Revit family, your conversion is only going to be as good as what they've modeled it in Revit. So yeah, that's a good point. If they go in there and they start putting all sorts of weird fittings, I mean, you'll clearly see that it's not going to fill in when you bring it into EST.

And so yeah, I mean, there are things that you can do to help. What we have seen is just going in and tweaking some of those generic families, the parameters, to match. Again, you don't have to make it product specific, but just keep it generic and tweak it to where it will help the conversion come over better. So that way when they're drawing it, they're drawing it with more accurate data so that conversion comes over a whole lot cleaner.

And so you can control that in the Revit template and have them start with that. We've seen quite a bit a success rate on companies doing design assist.

GREG MURPHY: Yeah. My comment there is the biggest thing that you're going to see is when you fill a design line and using this technology, if you get parts too close together what happens? They don't fill in. So the same rule applies that if you're pulling something from Revit and you're trying to fill it, it's only going to be as good as the content that uses it. Is it what we could buy? Is it real world? Is it constructable?

And so that's the missing piece that you're going to get when you do the conversion, but if you know where those holes are, you can go back and add additional Takeoff pieces to fill in the gaps. But yeah, it's definitely very doable.

Any other questions? I guess we call it closed. Wrap it up.

LYLE JANDA: Time for happy hour. Well, thank y'all for coming, guys. I appreciate it.