Facilities Information Services (FIS)

Using the SIMS ATG Active Visual System (AVS)

BUILDING COORDINATOR MEETING

June 17, 2020

About Facilities Information Service (FIS)

→ **FIS** supports the University of Iowa as the steward of information about University's facilities, lands, and infrastructure.

→ **FIS** is comprised of the Space Information Management System (SIMS), FM Geographic Information System (GIS), and Utility and Mapping Services (GPS). Each area of FIS provides information on university spaces through computer-aided design (CAD) drawings and web-based and printable floor plans and maps.

About the Space Information Management System (SIMS)

→ SIMS houses the University's building information, building floor plans, and corresponding space data for all University buildings, owned and leased.

→ Building and room inventory data is made available to authorized users via SIMS and the University Data Warehouse.

→ **Floor plans** are available to authorized users via the cloud-based UI Active Visual System operated by the Advanced Technologies Group (**ATG**).

About the Active Visual System (AVS)

→ The Active Visual System® (AVS) is a centralized Facility Information Platform which houses UI and UIHC floor plans and space information.

→ Authenticated users of the AVS can utilize it to deliver facilities information to computers, tablets, and phones on demand, 24-7, without specialized CAD training.

→ Authenticated users of the AVS can perform a variety of tasks, such as viewing and printing floor plans, and running reports all via web browser.

Registering for a User Account

→ Go To https://www.facilities.uiowa.edu/campus-spaces/facilities-information-services and click on the New User Login Request button.

→ Fill out the AVS registration form completely.

→ You'll receive a confirmation email shortly after submitting your information.

→ Although the Registration form had you enter a Password you will use your University HawkID and Password it to log onto the AVS.

Accessing the AVS

SPACE INFORMATION MANAGEMENT SYSTEM

SIMS is the university's facility information system that tracks all university owned and leased space. University building floor plans are available to view via the SIMS ATG/AVS website.

To access the system as a new user, university employee, or outside contractor, please follow the links below:

New User Login Request	University Employees	Design Professionals and Contractors
Click Here	Click Here	Click Here

Go To https://www.facilities.uiowa.edu/campus-spaces/facilities-information-services and click on the University Employees button.

Accessing the AVS

Navigating the AVS

Upon logging in, you'll be directed to the University of Iowa AVS gateway. This gateway guides you through to all available facility information applications in order to access the specific data you need.

Using either the left-hand menus or the interactive maps, you can navigate to your desired facility location.

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Accessing Specific Applications

Using navigating to building level, the left-hand menus will include a list of applications. Links to applications currently unavailable for the building will be inactive and grayed out.

Accessing Layouts

After the desired application is selected, a menu of floor plan layouts is available. In this example, the '**Architectural Layouts**' application is shown.

Layouts are available in three formats: PDF, DWF, and CAD. While it's likely you will already have a PDF viewer installed, you may need to download and install the required viewers for DWF and CAD.

# Installing the Autodesk DWF/CAD Layout Viewers

The DWF and CAD (.dwg file extension) formats offer several tools for marking up layouts and saving copies locally.

Users who want to take advantage of these tools will need Autodesk® Design Review for viewing DWFs with a web browser and Autodesk® DWG True View for viewing CAD files on your desktop.

These viewers are free of charge and can be downloaded through the AVS. Clicking the icon at the top right of your interface will display a 'Downloads' link. The link will take you to a list of the latest available software.

On the 'Downloads' page, select either the Design Review or True View link. A dialogue box will appear and prompt you to run or save the file. Choose Run.* Follow the prompts until the software is installed.
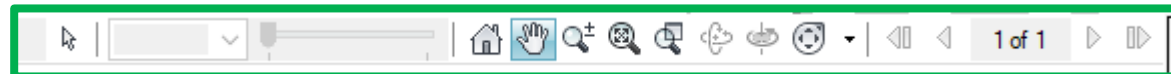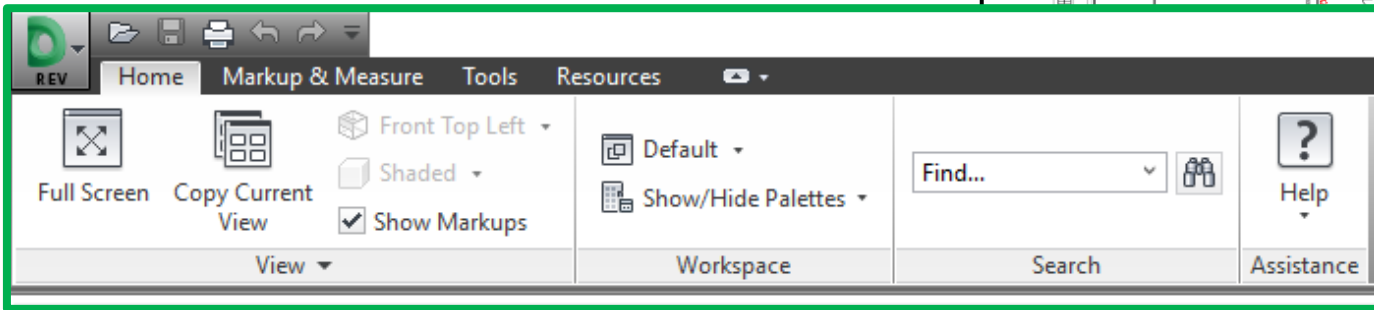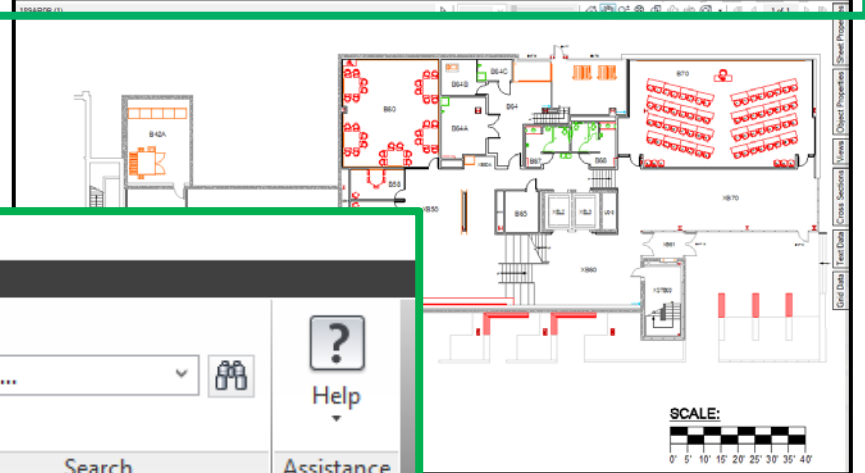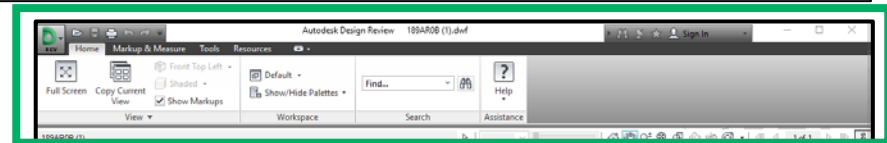
*If you don't have administrator rights to install software on your computer, please check with your IT department to install the viewer.
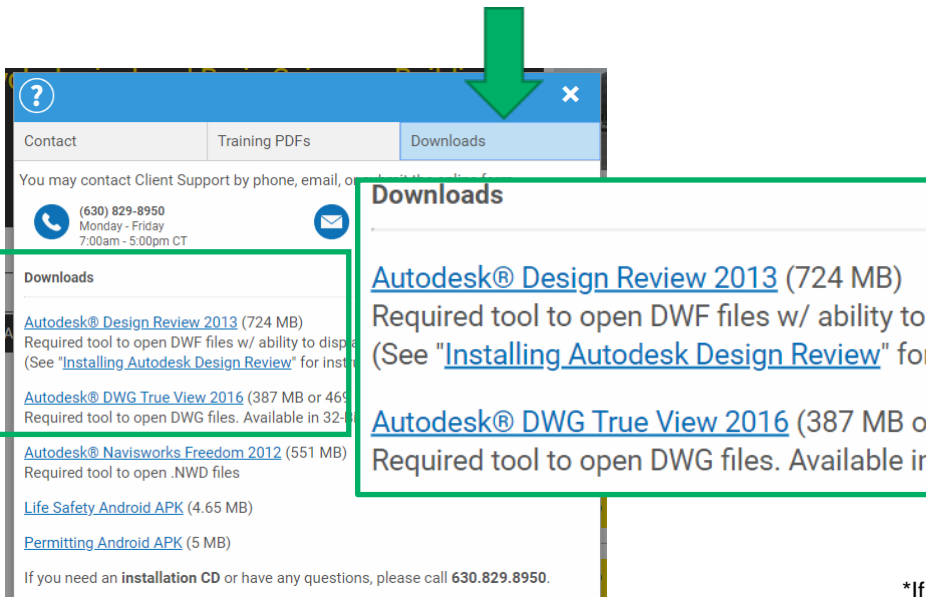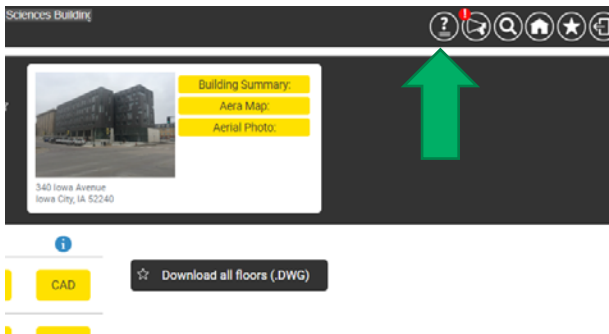
DWF Layout Viewer Basics

Clicking buttons in the DWF column of your layouts menu open layouts for specific floors in your browser via the Design Review viewer.
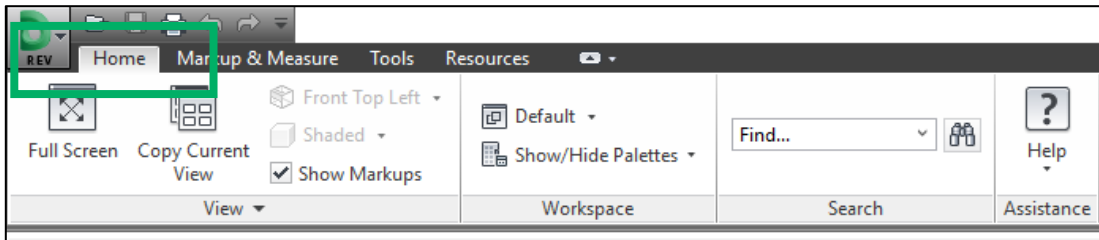
The viewer comes with a set of tools available in the toolbars located above the layouts
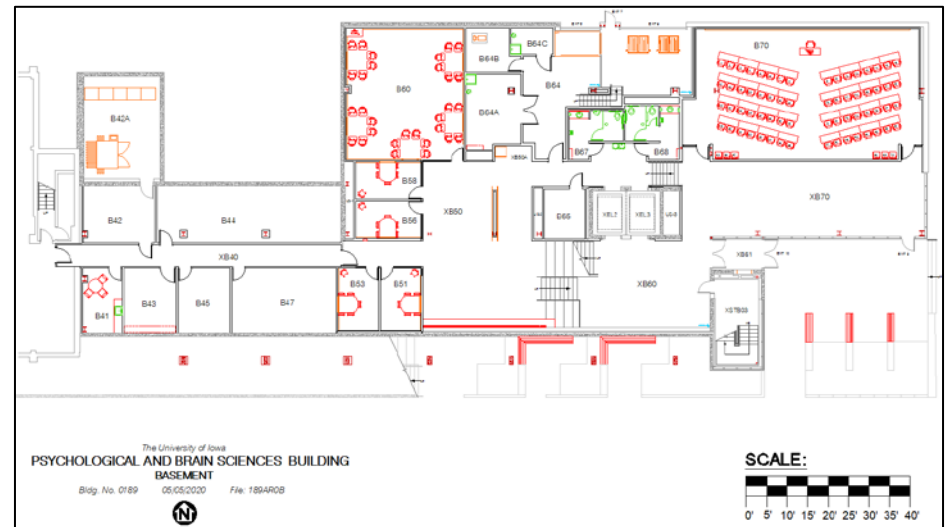
DWF Layout Viewer Basics

Basic Toolbar

Toolbar Ribbon

To move DWF layouts, click, hold, and drag your mouse in any white or inactive area of the drawing while the 'Pan' icon (hand) is selected in the basic toolbar.

To zoom in or out of an area, use the middle scroller on your mouse or use the 'Zoom' icons included in the basic toolbar.

The 'Home' tab in the toolbar ribbon contains some basic features, such as Save, Print, Find, and Help.

Accessing Room Attributes via Layouts

Information for each room of a building is available by clicking on that room attribute within a floor layout.

This and the following exampled focus on '**Space Utilization**' application which you should click on to open the menu of floor plan layouts

Once on the '**Space Utilization**' page, you will find a menu of floor layout options. This and the following examples focus again on viewing DWF layouts, however it should be noted that the same basic principles apply to PDF layouts.

Basic Room Attributes

Room Name

Room Number

Org-Dept Code

Room Sq. Ft.
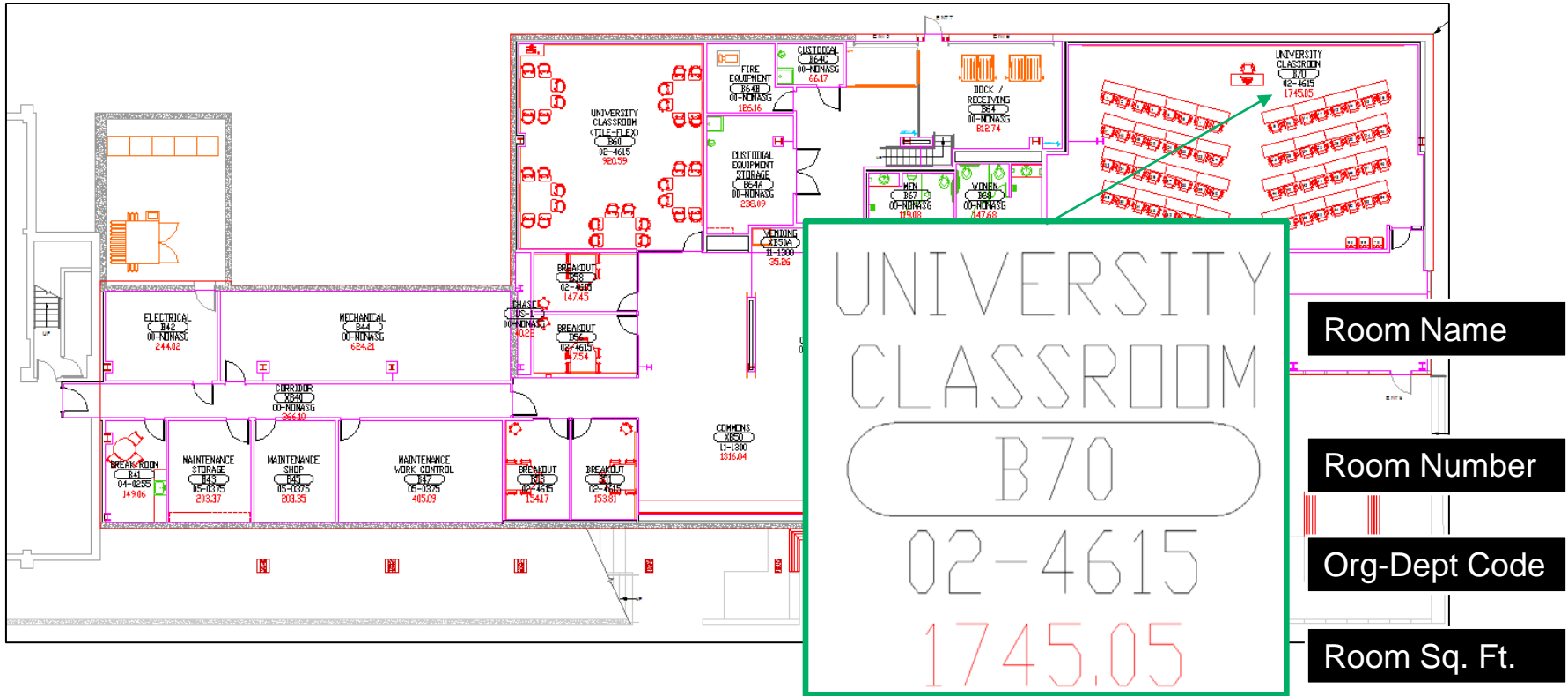
Each room in a layout displays several basic attributes. The guide (above right) explains what each attribute represents. These basic attributes also act as a link to more detailed information for that particular room.

Advanced Room Attributes
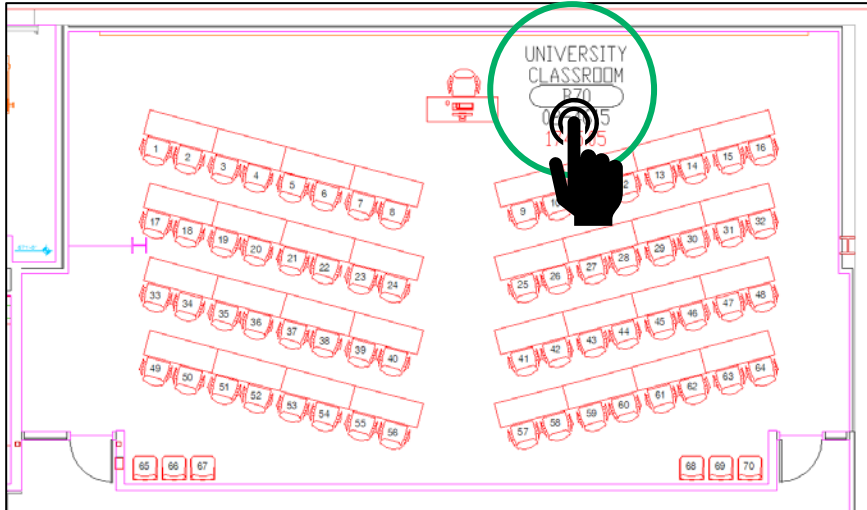
To view a more detailed listing of room attributes, click on the area in the layout showing the room's basic attributes.

Field	Values
Site	MAIN CAMPUS (EAST)
Building	0189 PBSB
Floor	B
Room Number	B70
Room Name	UNIVERSITY CLASSROOM
Responsibility Center	4615-40000
Responsibility Center Description	ROOM SCHEDULING
Department	02-4615
Department Description	REGISTRAR
Room Description	ASSIGNABLE
Space Definition	110 - CLASSROOM
Use Code	110002
Use Description	CLASSROOM - MULTIPURPOSE
Function Code	1.1
Function Description	AA - INSTRUCTION
Division	UNIVERSITY CLASSROOM
Occupancy	60
Date Modified	05/26/2020
Floor Finish	VCT - VINYL COMPOSITION TILE
Floor Type	VINYL COMPOSITION TILE (VCT)
Floor Condition	
Wall Finish	PT - PAINT
Wall Type	GWB - GYPSUM WALL BOARD
Wall Condition	
Wall Base	NONE
Custodial Service Level	
Recent Project	UI PROJECT 0303801 - PBSB CONSTRUCT FACILITY
Suite/Zone	UNIVERSITY CLASSROOM
Net S.F.	1745.05
DRAWING	189SP0B.dwg

Printing Layouts - DWF

To print either a full or selected view* of your layouts, first click on the 'Print' icon in the toolbar ribbon.
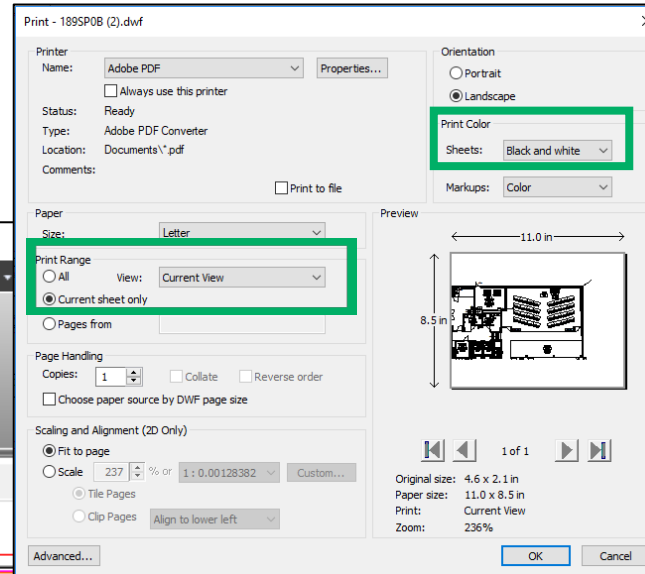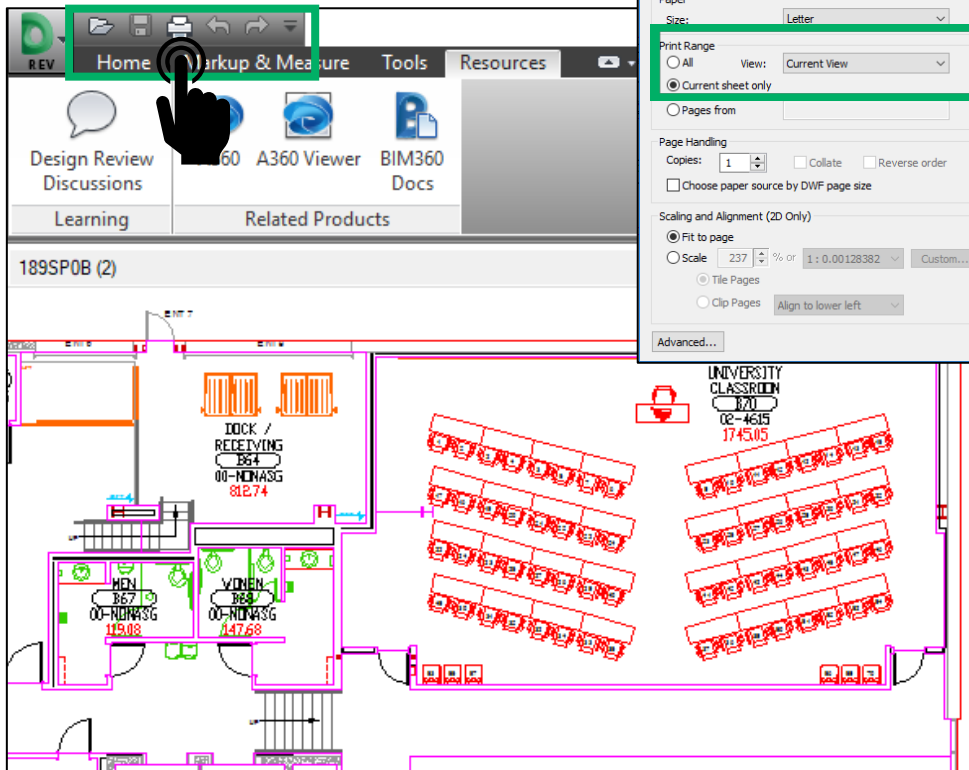
A dialog box will appear. Under the 'Print Range' section, either select 'Full Page' or 'Current View' (as shown left). Adjust any other settings according to preference and click 'OK'.

Note: For best results when printing to a black & white printer, be sure to choose the 'Black and white' options from the 'Print Color' drop down menus.

*To print a specific area of a floor plan, simply zoom to that area.

Printing Layouts - PDF
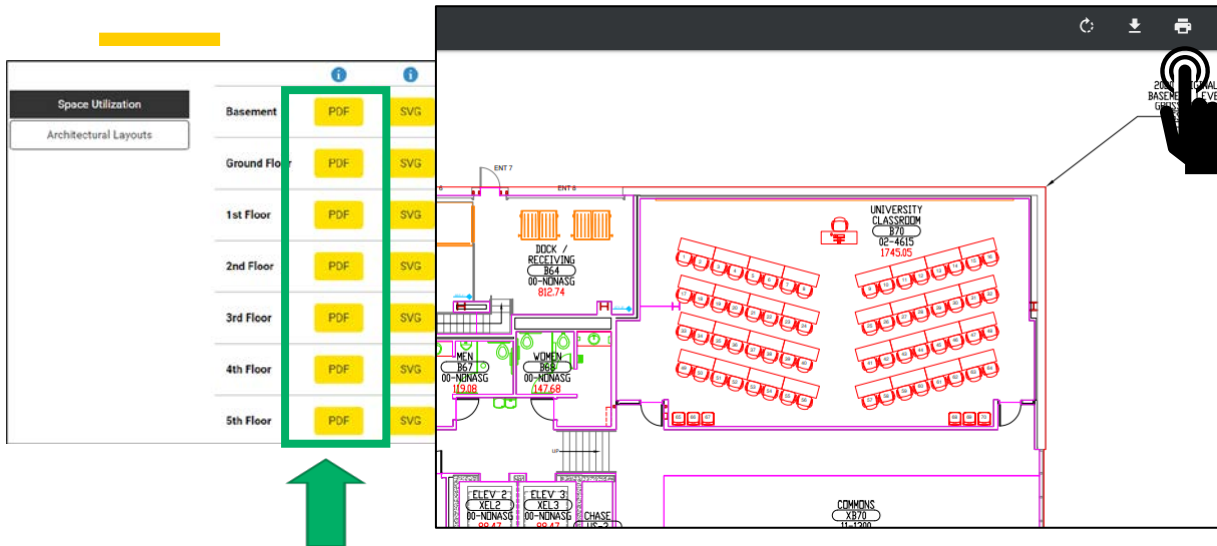
On the '**Space Utilization**' page you can open the PDF a floor layout via the menu.

A dialog box will appear which allows you to save the PDF or print the layout.

Note: For best results when printing to a black & white printer, be sure to choose the 'Black and white' options from the 'Color' drop down menus.

*To print a specific area of a floor plan, simply zoom to that area.

Marking Up Layouts
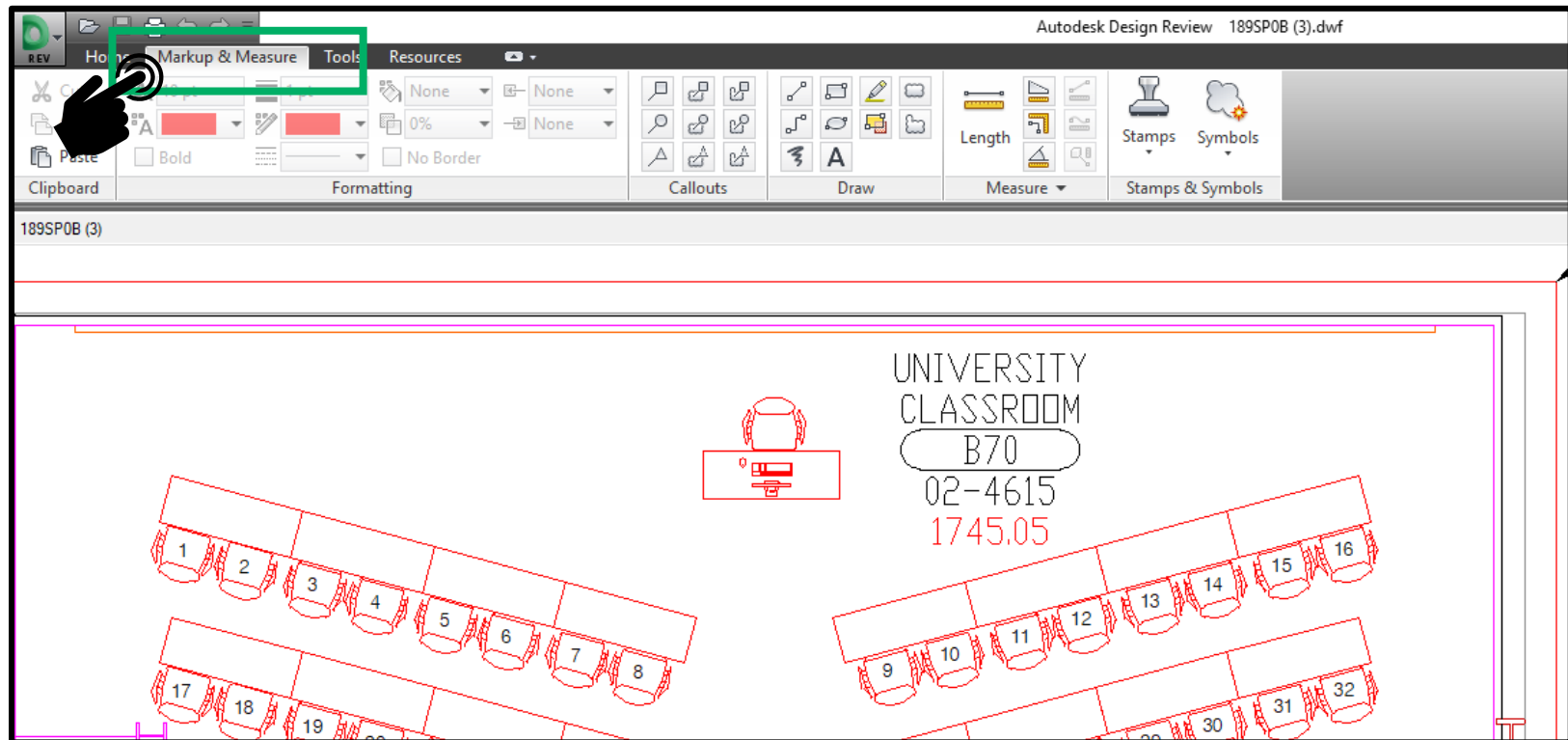
The '**Markup & Measure**' tab on the toolbar ribbon provides a toolbar for making notations and measuring areas of your layouts. Marked up copies of the layouts can then be saved locally to your computer. All drawings are read-only, so the original copies will remain unchanged.
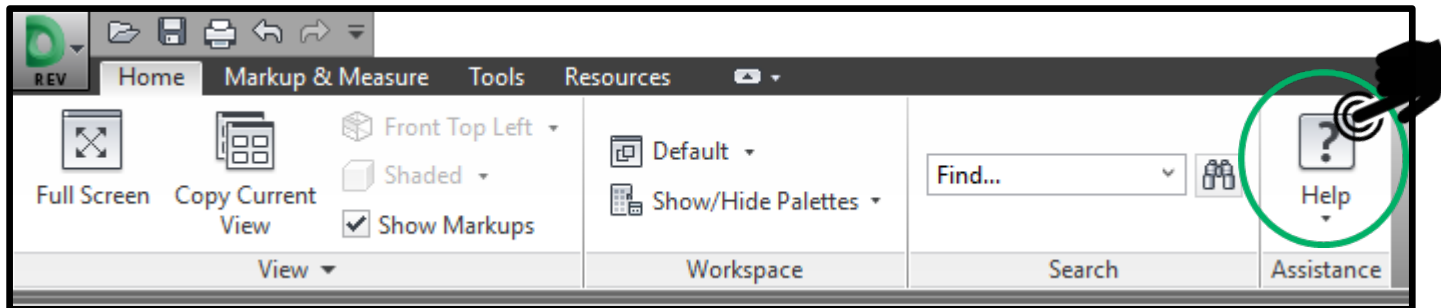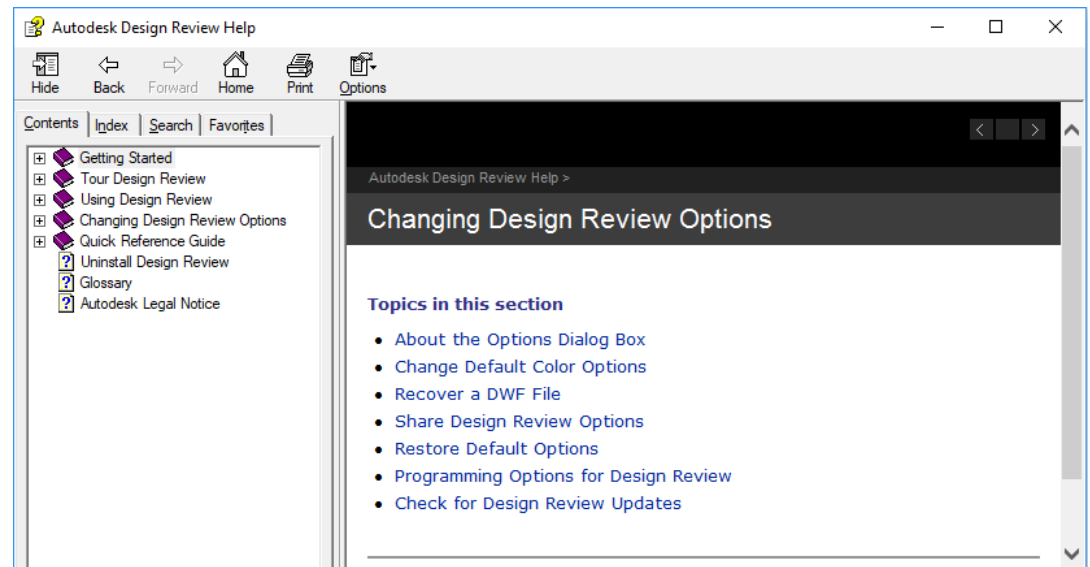
Markup Tools
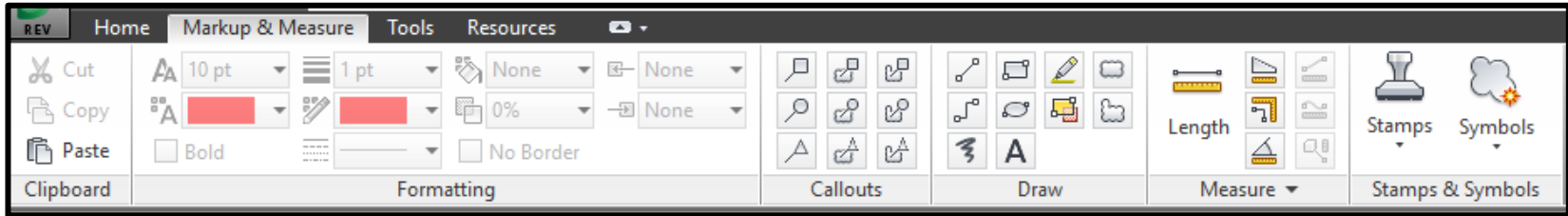
The '**Markup & Measure**' provides a variety of useful features:

Text Markup – Allows text to be added anywhere on the drawing by clicking and dragging in an area of the layout where you want the text or label to appear.

Freehand Markup – Allows you to draw circles, squares, lines, and other various shapes on areas of the drawing by clicking and dragging over the layout.

Measure Length Between Two Points – Allows measurement of the distance between two points in a drawing. When done, hit the 'Esc' key on your keyboard and the length measurements will be displayed. Hold the 'Shift' key when measuring to lock the orientation.

Measure Area – Allows measurement of an area in a drawing by clicking on points of any chosen area. When done, hit the 'Esc' key on your keyboard and the total area will be displayed.

Rectangle Callout – Allows you to enter text into a markup box in order to notate specific information for an element in the drawing.

Markup Tools Help (F1)

For more information on utilizing Markup & Measurement tools click on Help or use the F1 key.

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Hatching Layouts

For many applications, a menu of available queries is provided for that specific application ('**Space Utilization**' in this example). This menu is located to the right of the layouts menu.

A hatch query provides an easy way to visually locate areas of your layouts based on various criteria.

First click on the '**Hatch Query**' link in the menu and follow the instructions on the next page.

Building a Hatch Query

Building a hatch query consists of 4 simple steps:

1. Choose either '**Auto Hatch**' or '**Query Hatch**'.* Then choose the field that you would like represented in color within your floor layout.
2. The selected query from step 1 automatically displays the floors in which the selected fields are available. Select the floor(s) you want to view.
3. Choose the specific field data that you want to visualize on the layout.
4. Click on '**Confirm Selection of Hatch Parameters**' - this will enable the link 'Create Hatch Results'.

*'Auto Hatch' lets you create a quick, simple query based on a single data field that automatically assigns a single color to the corresponding area in the layout. 'Query Hatch' allows for multiple fields, as well as multiple color options.

Selecting a Hatched Layout

Once hatch parameters have been set and the '**Confirm Selection of Hatch Parameters**' link has been enabled, click on that link.

Your query will be processed, and you will be directed to a page listing your hatched layout(s). Click on a link to view the desired drawing.

Understanding Hatched Layouts
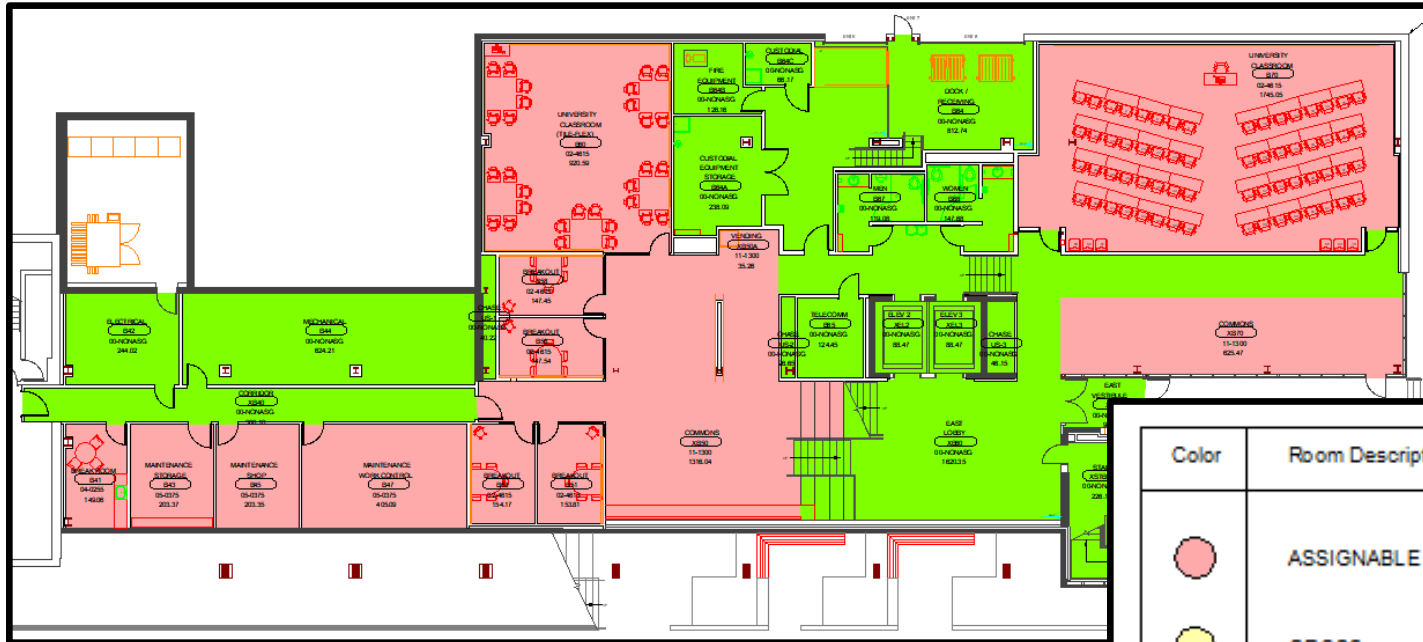
A legend provides color definitions represented in the hatch as well as the square footage summary.

Color	Room Description	Net Area (S.F.)
(pink)	ASSIGNABLE	6,206.25
(yellow)	GROSS	0.00
(green)	NONASSIGNABLE	5,101.71

Each field selected in the hatch query is represented by a color that provides a visual representation of the values in your floor layouts.

Accessing Reports

Going back to the '**Space Utilization**' application, there are other queries you can use to generate a variety of reports.

For this and the following example, select the '**Location Query**' from the menu on the far right.

Building a Report Query

To build a query, first choose from list of pre-defined templates and select the Report Format. ①

For a single string, click "and". For multiple strings choose the proper argument.
[And] [Or] [Delete]
[FLR] ='01' AND ③

Location Query
Select Report Type: Comprehensive Location Report (Condensed)
Select Report Format: HTML

ATG — a JLL company
Return to AVS

Location Query
Select Report Type: Select A Valid Report * Report Type is required
Select Report Format: Crystal Report Viewer

Build a Custom Query
Customize Query to Narrow Search:

1. Select Field [Floor]
3. Select Value [01]
OR Enter Value [____]

Build a Custom Query
Customize Query to Narrow Search:

1. Select Field [ ]   2. Select Operator [=]
3. Select Value [ ]

OR Enter Value [____]

For a single string, click "and". For multiple strings choose the proper argument.
[And] [Or]   [Delete]

②

Narrow your search by choosing a field.

Click 'And' to insert your search criteria.

If you want to search for more than one value, click 'Or'. e.g., adding floors 01 Or 02 Or 03 will give you the location information for floors 01 through 03.

[Create Report]

④

Once query is complete, click 'Create Report'.

Understanding Reports

After clicking 'Create Report' in the previous step, a report opens in a new window (or tab), displaying information based on your selected criteria.

The report displays a square footage summary for each floor, as well as the entire building if all floors are included in the selected criteria.

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Facilities Information Services (FIS) – Using the Active Visual System (SIMS Floor Plans)

Questions?

Contact Kirk Banks (kirk-banks@uiowa.edu)