

Twitter @pete1352 #CCAapps



Matt Petermann

Matt has been with his firm for almost nine years. During that time he previously worked on projects at various stages from conceptual design to project closeout. Now as a Digital Practice Manager he focuses on finding new and creative solutions to help improve a teams performance and heighten the quality of product we are delivering to our clients through the use of technology. This has recently been a look at how the rise of apps has integrated with the knowledge of our network and how those activities away from your desk can become more in tune with the tasks that are trying to be accomplished out on site.

## Agenda

- 01 How can I communicate with those back at their desks
- 02 What should I consider when capturing the activities on the site
- 03 Where and how can I carry information with me
- 04 What is the difference between various apps beyond what you see on the screen

## DEVICES

- Apple iPad or iPad mini
- Android Tablet
- Microsoft Surface
- iPhone
- Windows phone
- Android phone
- Plan with 3G
- Bluetooth headset





## LAPTOP

- Small laptop instead of a tablet?
- Ergonomics (touchscreen)
- Apps (cost)
- Much greater mobility
- Communication on cell networks when WiFi isn't available



## PLANNING

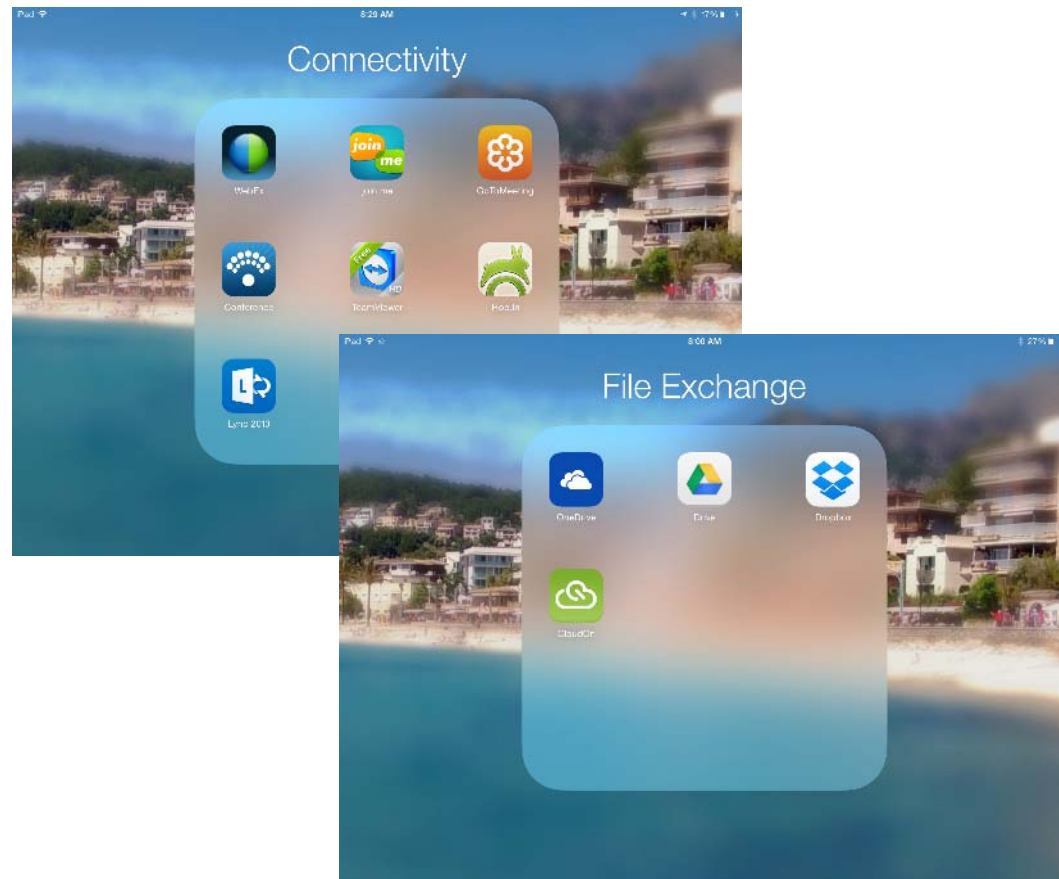
- Talk with the contractor
- Many activities are shared paths of communication between the design and build teams



**COMMUNICATION**

## APPS FOR CONNECTING

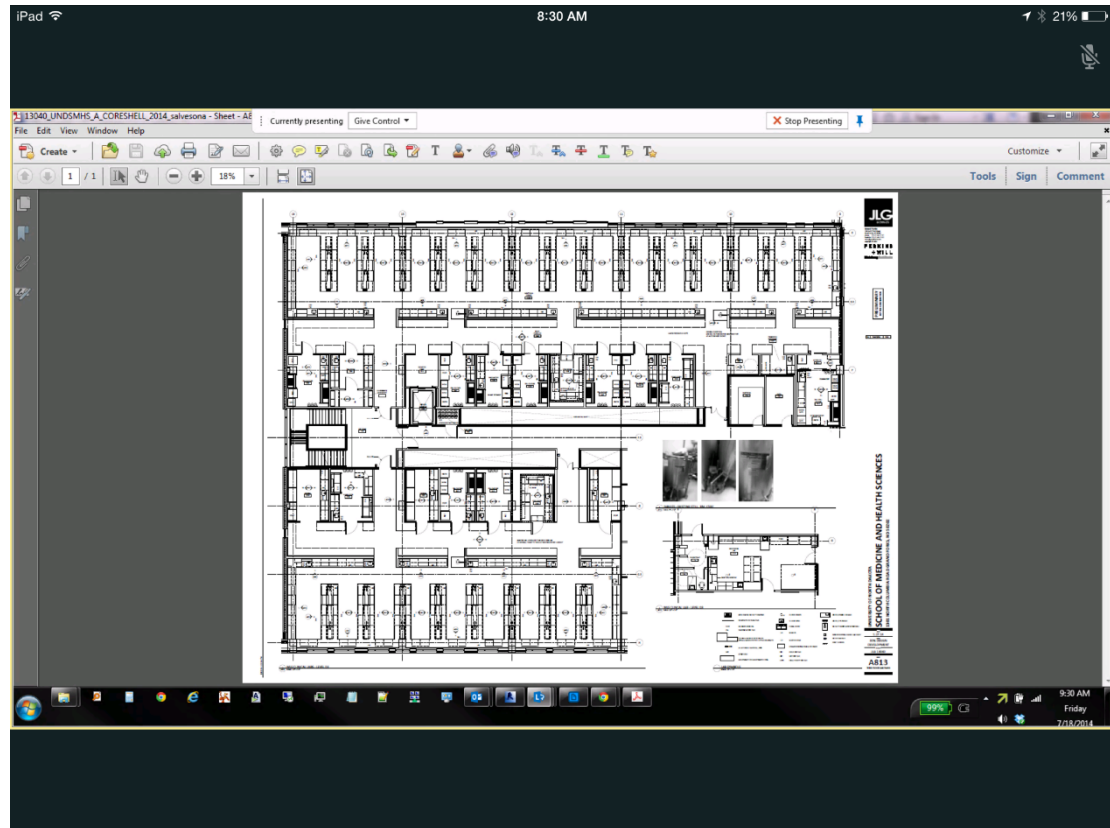
- Microsoft Lync
  - GoToMeeting
  - WebEx
  - FaceTime
  - Skype
  - TeamViewer
- 
- Dropbox
  - OneDrive
  - Google Drive





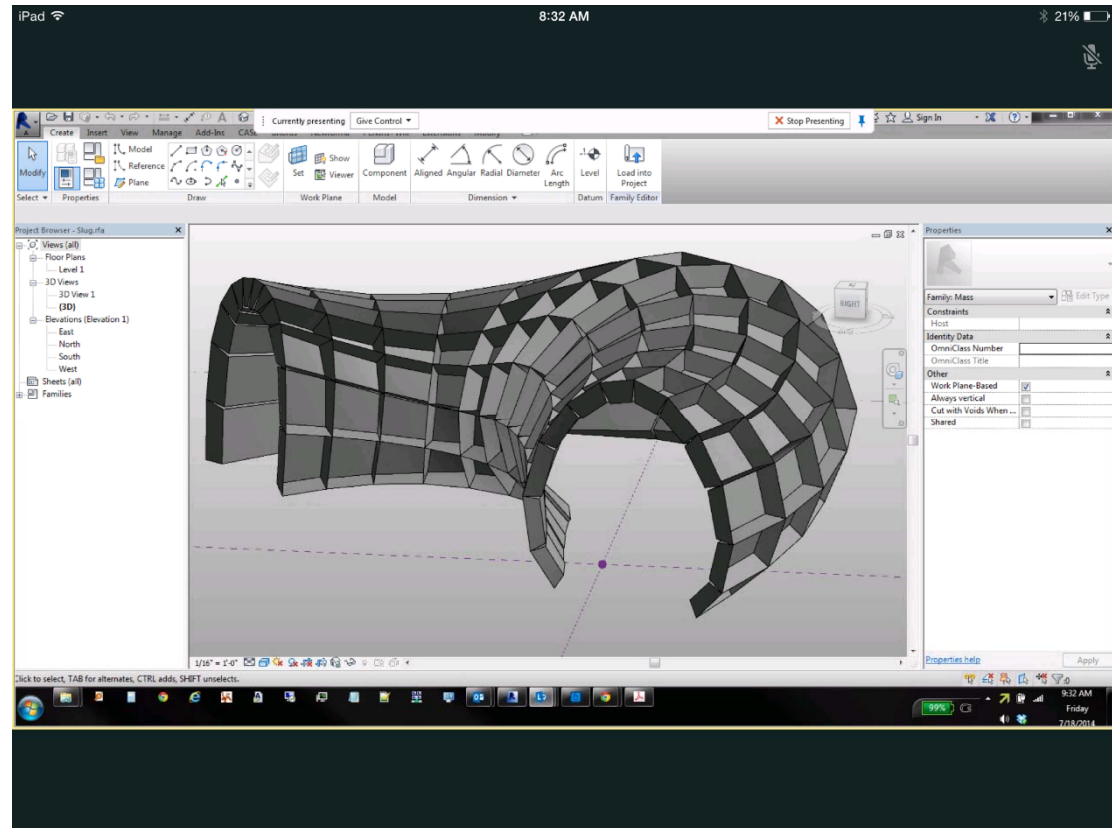
## LYNC

- Look at documents with your team that are back in the office at their desk in real-time



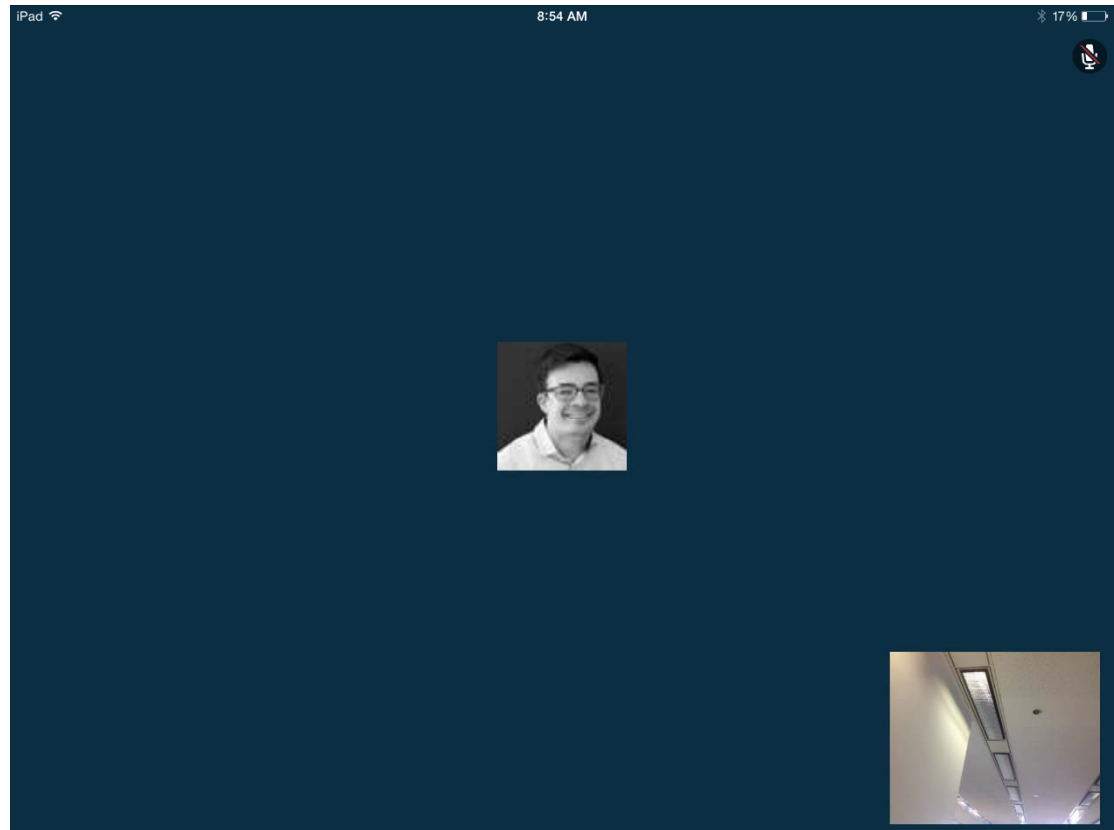
## LYNC

- Explore a model with your team to help understand the design intent vs. what you are seeing in the field



## LYNC

- Use the camera to show someone in the office exactly what you are looking on site live
- Don't wait to explain with emails or conversation later what you are seeing right now
- Make your designers virtually present to decide things immediately

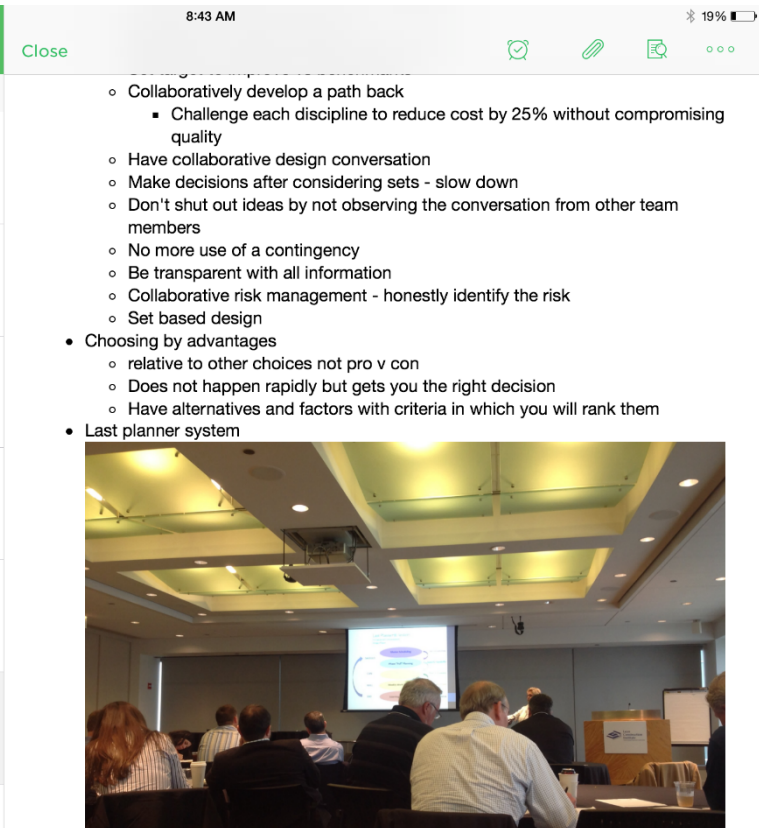
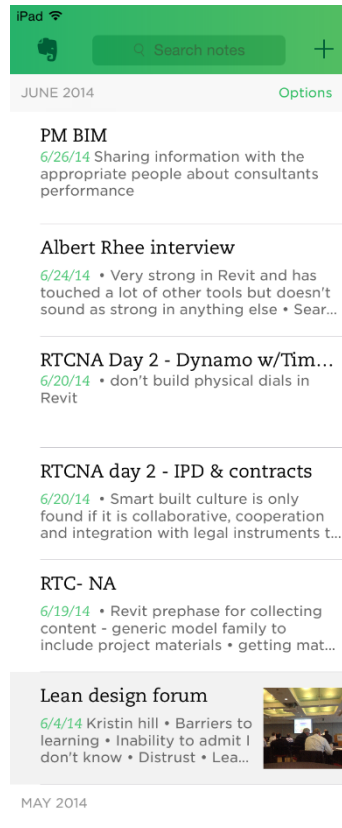


**TRACKING**



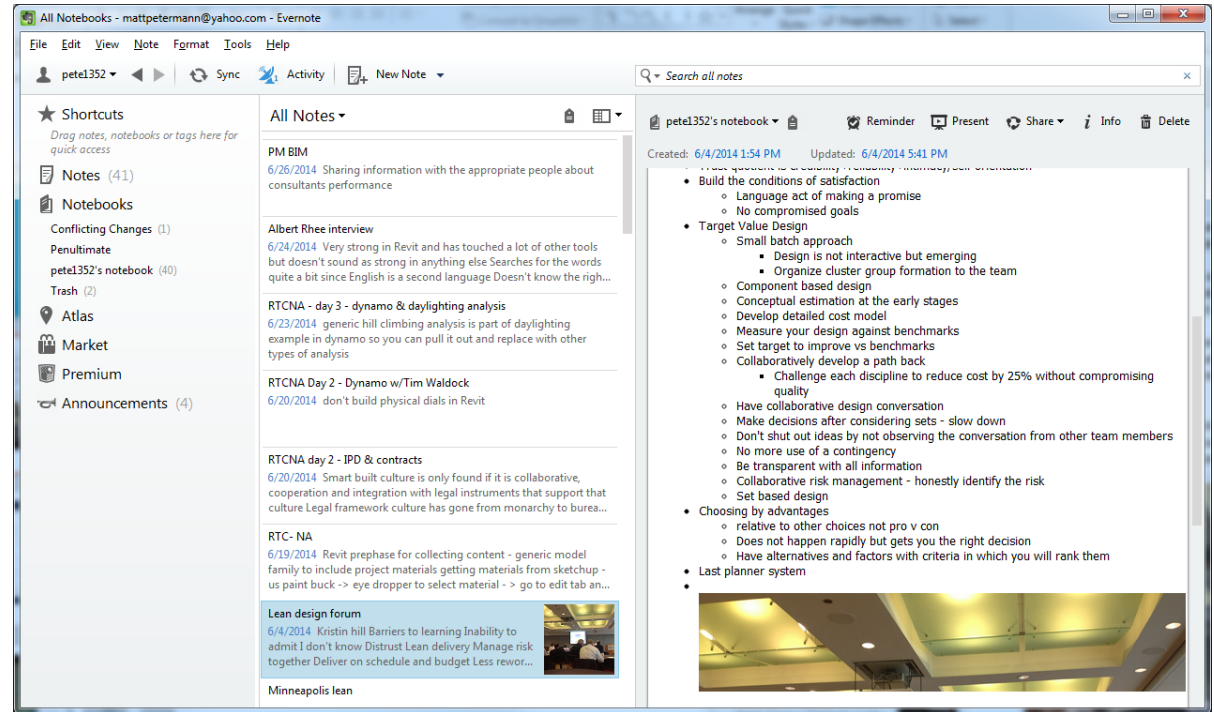
## EVERNOTE

- Have access to notes with images or lists
- Can connect to web version or desktop version



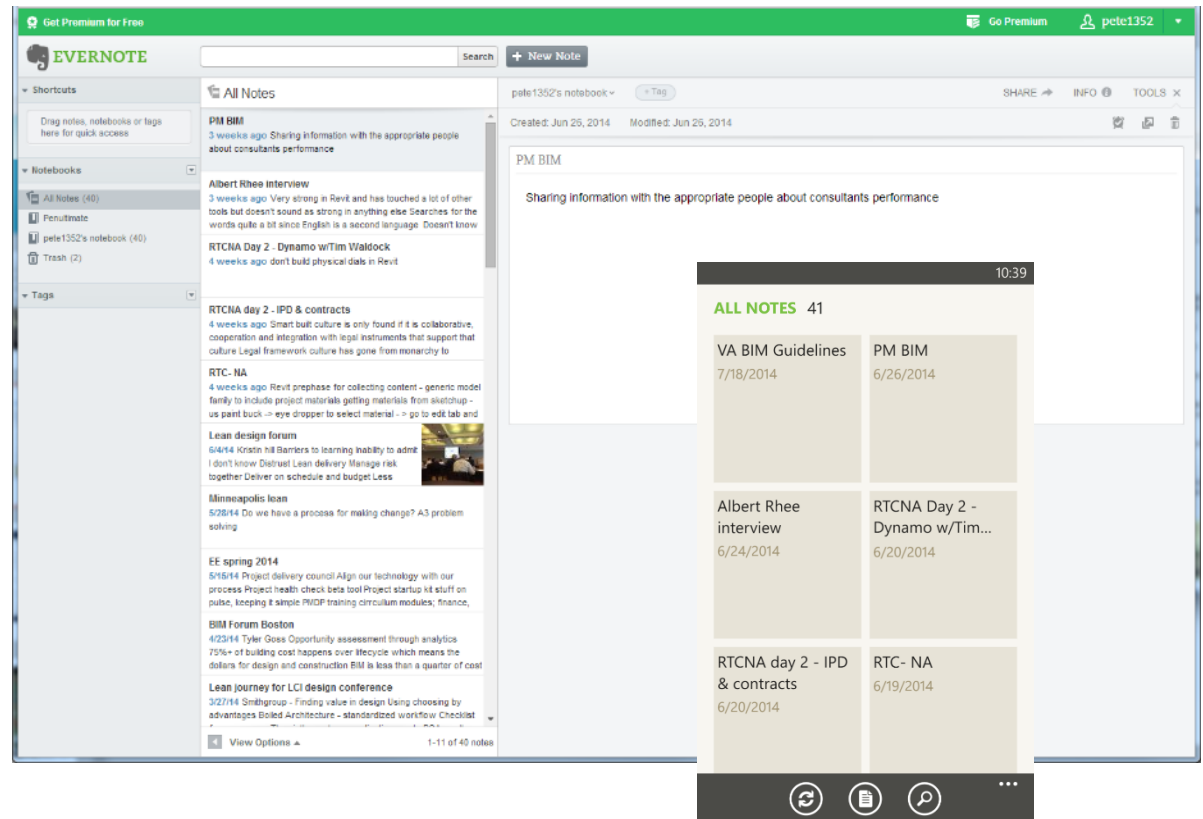
## EVERNOTE

- Have access to notes with images or lists
- Can connect to web version or desktop version
- \$5 a month for the app to have access offline if you are at a site without connectivity



## EVERNOTE

- Have access to notes with images or lists
- Can connect to web version or desktop version or phone



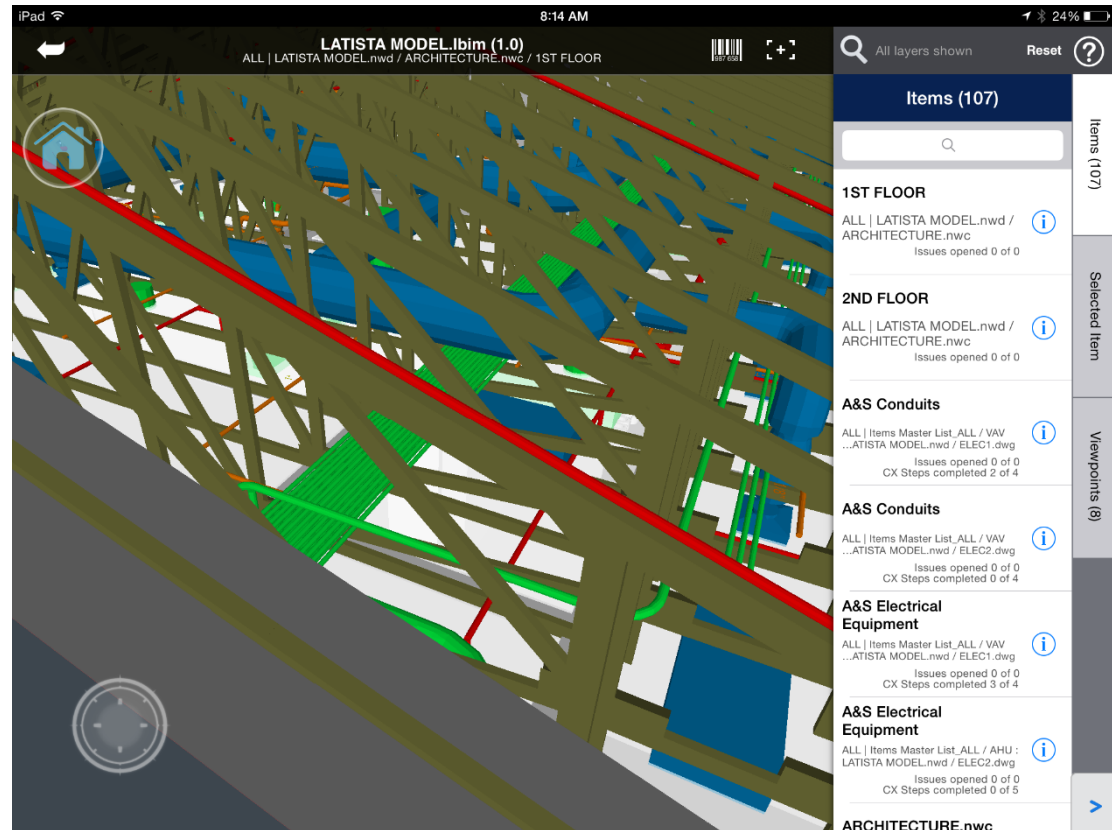
- Can be bought for a project or for your enterprise
- Track issues in the field





## LATISTA

- Pull up your model



## LATISTA

- Track progress on site (more of a contractor feature but useful)

iPad 8:15 AM 24%

▼ All Modules

Issues

Inspections

Items

Areas

BIM

Dashboard

Documents

### Mechanical Ductwork Checklist #2

Mechanical Ductwork Checklist

Started on 7/10/2013 1:46 PM by Andrew Vincent  
Scheduled for 5/31/2013 12:57 PM for Andrew Vincent

ALL Items Master List\_ALL / Coil Pump : Third Floor / AC  
Condensate Return Pump / AC Cond. Pump P-24

Duration: 1 hrs

In Progress Complete Reject

#### Inspection Details

1.1 Contractor

1.2 Note

#### Mechanical Ductwork Checklist

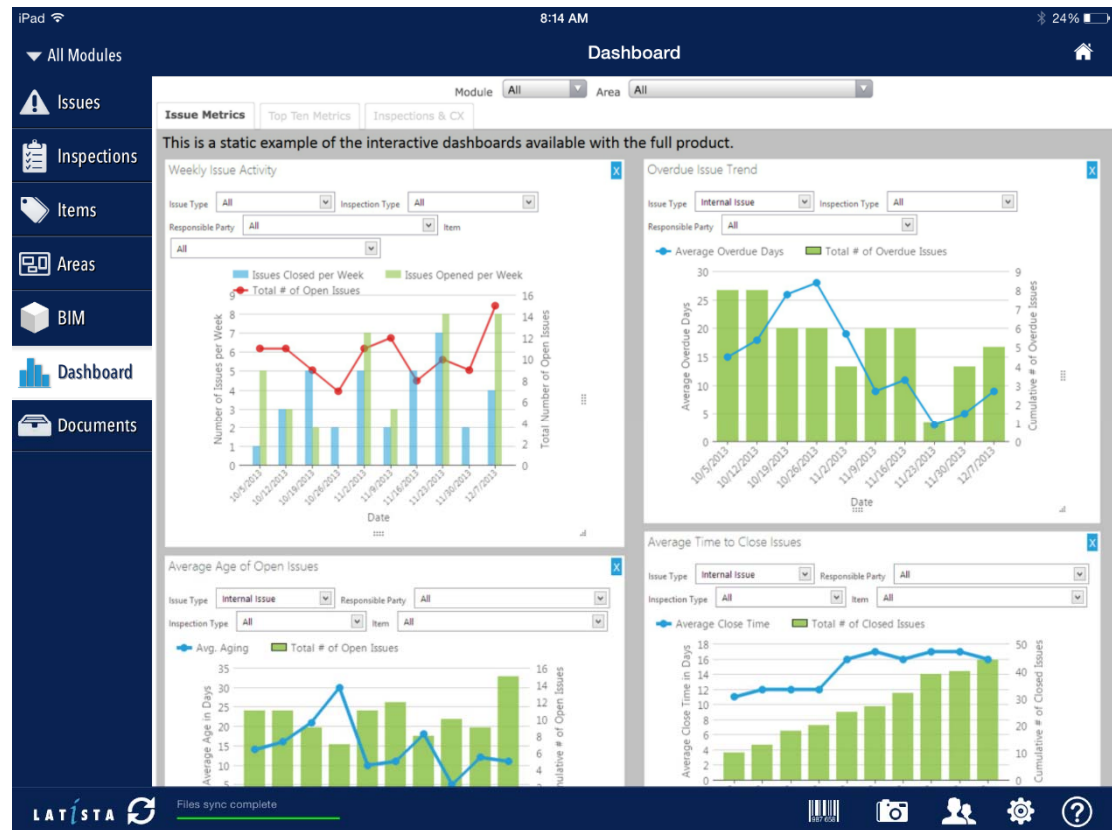
2.1	Casing condition good: no dents, leaks, door gaskets tight?	<input checked="" type="radio"/> not selected	<input type="radio"/> Yes	<input type="radio"/> No	<input type="button" value="+"/> 0 0
2.2	General condition appears good	<input type="radio"/> not selected	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="button" value="+"/> 0 0
2.3	Attached duct work is properly sealed (boot in good condition)	<input type="radio"/> not selected	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="button" value="+"/> 0 0
2.4	Pipe fittings complete and pipes properly supported	<input type="radio"/> not selected	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="button" value="+"/> 0 0
2.5	Condensate drain in place and properly trapped	<input type="radio"/> not selected	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="button" value="+"/> 0 0
2.6	Protective shrouds for belts in place and secure	<input checked="" type="radio"/> not selected	<input type="radio"/> Yes	<input type="radio"/> No	<input type="button" value="+"/> 0 0
2.7	Alignment of motor driven components correct	<input checked="" type="radio"/> not selected	<input type="radio"/> Yes	<input type="radio"/> No	<input type="button" value="+"/> 0 0
2.8					

LATISTA Files sync complete

Details Documents Issues History (12) Item Details

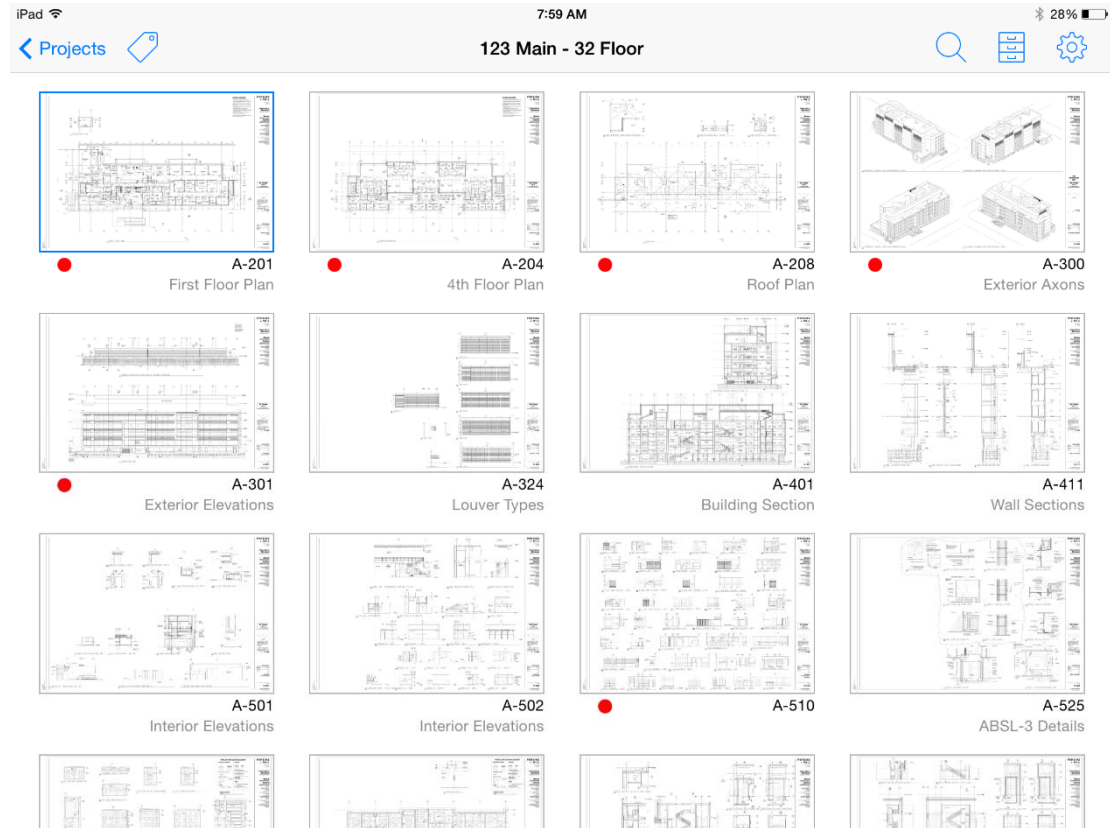
## LATISTA

- Manage project tasks and issues



## PLANGRID

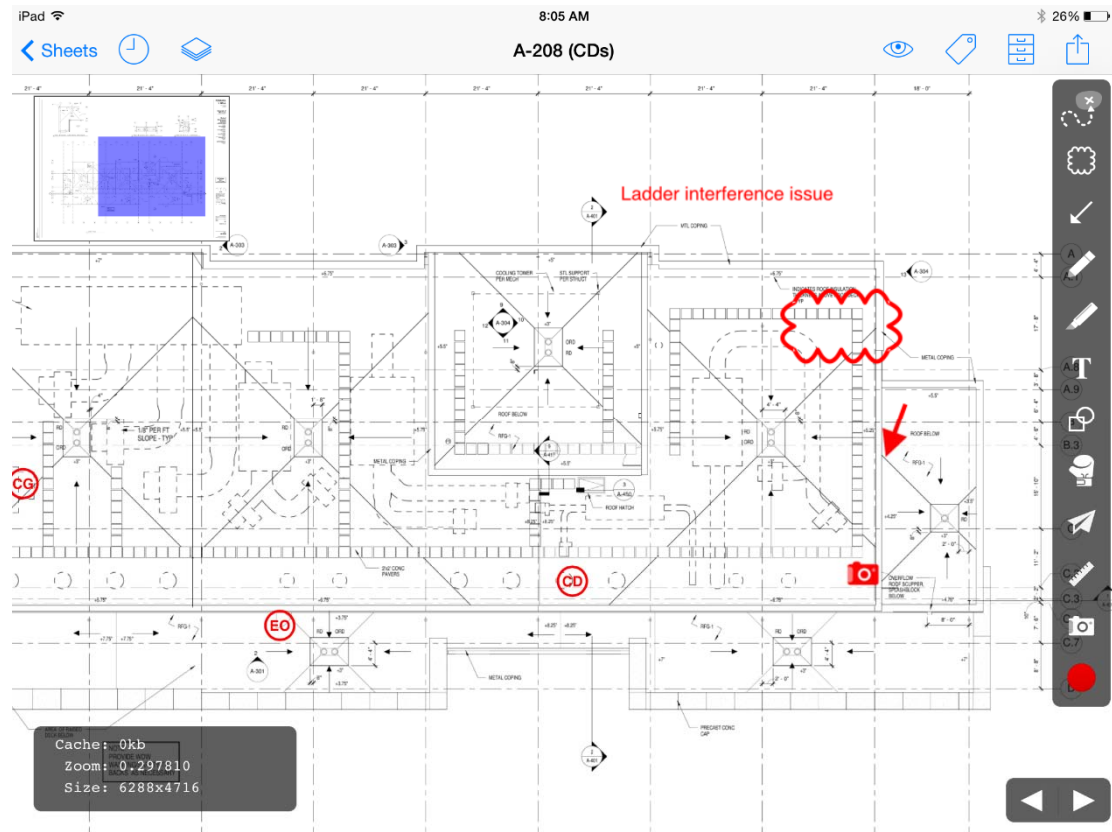
- Load your documents to your project on the web for availability on your iPad





## PLANGRID

- Add markups, images, or punchlist items right on your sheet



## NEWFORMA MOBILE APPS

Apps for iPad

- Plans



- Project Team



- Field Notes



- Punch List



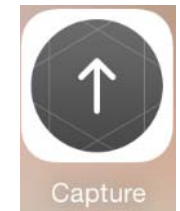
- Make an Info Exchange App for iOS



- Project Email



- Capture

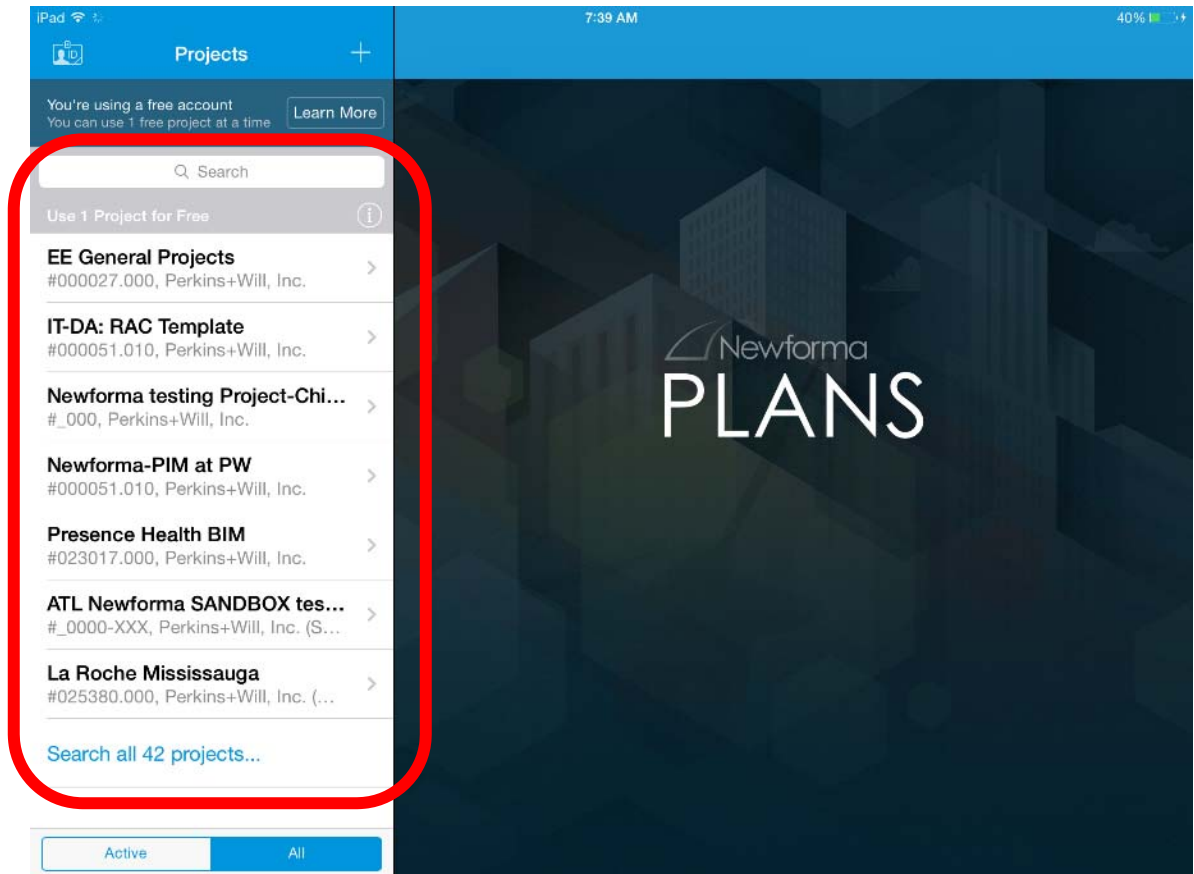


- Tasks



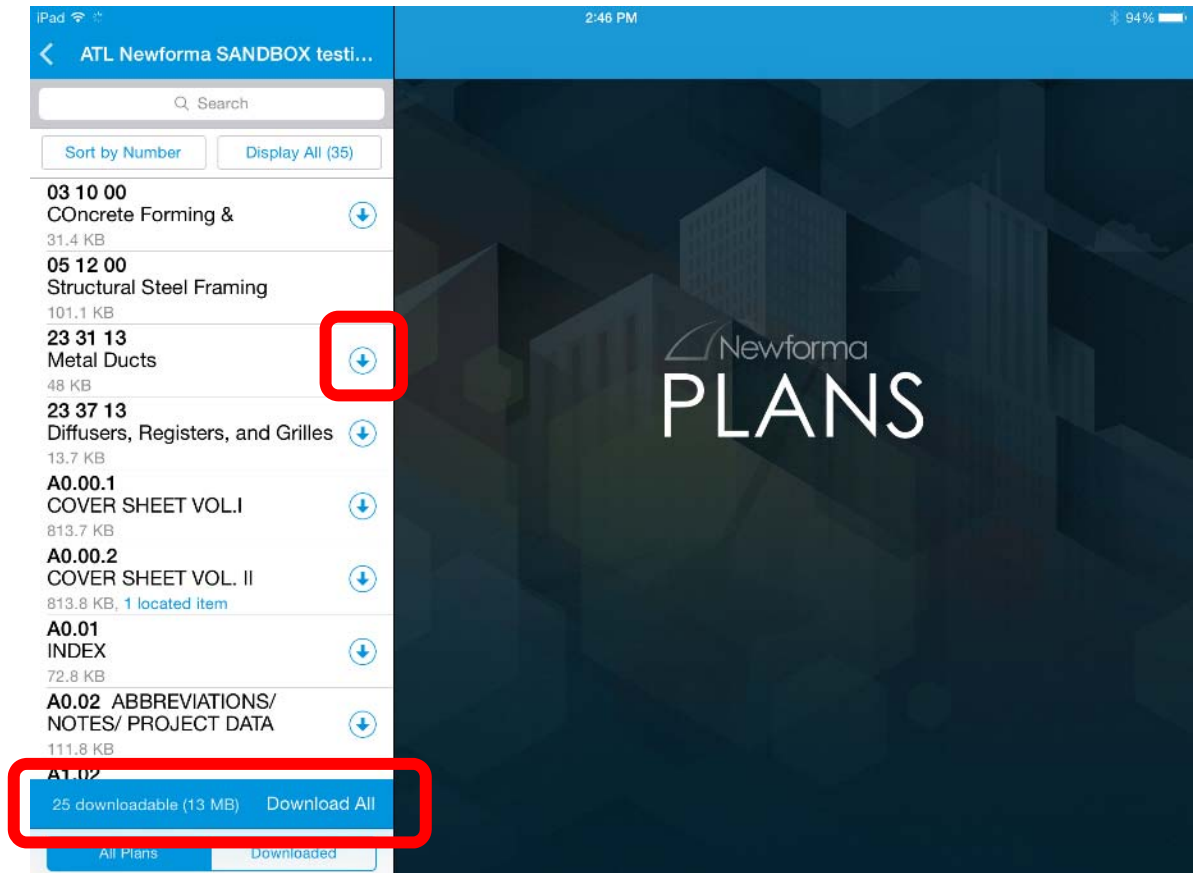
## NEWFORMA PLANS

- Choose your project first
- You see the projects you are a team member on and have info exchange access for



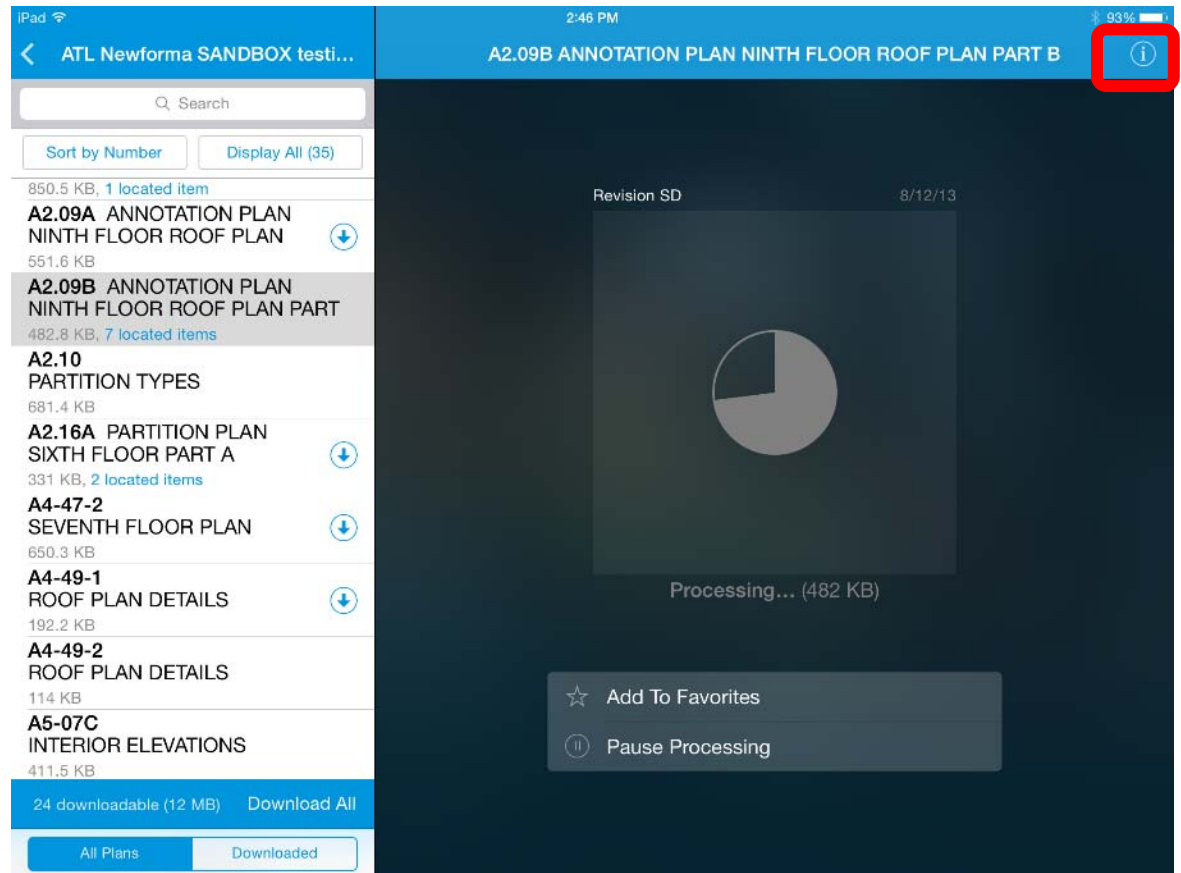
## PLANS

- Synchronize your data to the device
- Download all items for the project at the bottom or choose selected documents with the down arrow to the right of them



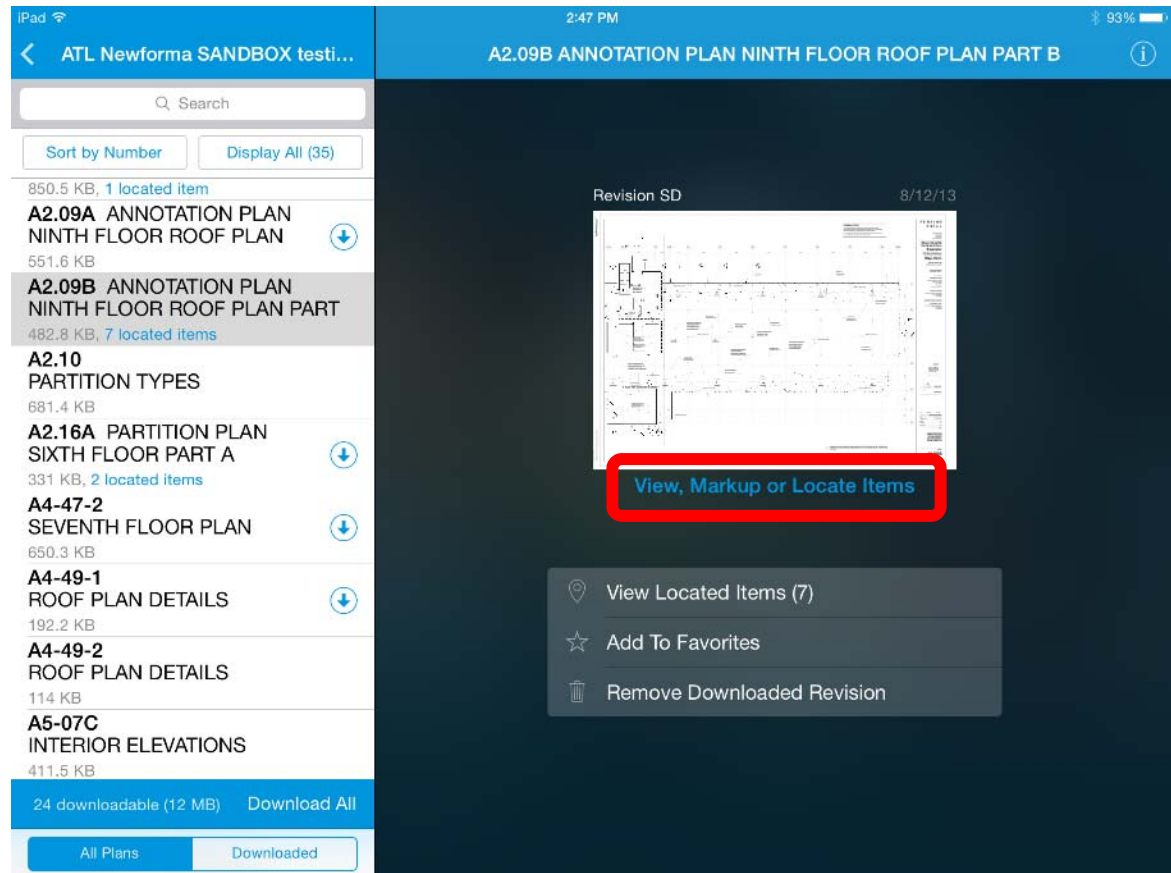
## PLANS

- Select the item that you want to view and the first time only it will need to process it on the device
- You will always see your project in the upper left and document name at the top
- Metadata about the document can be found in the 'i' in the upper right



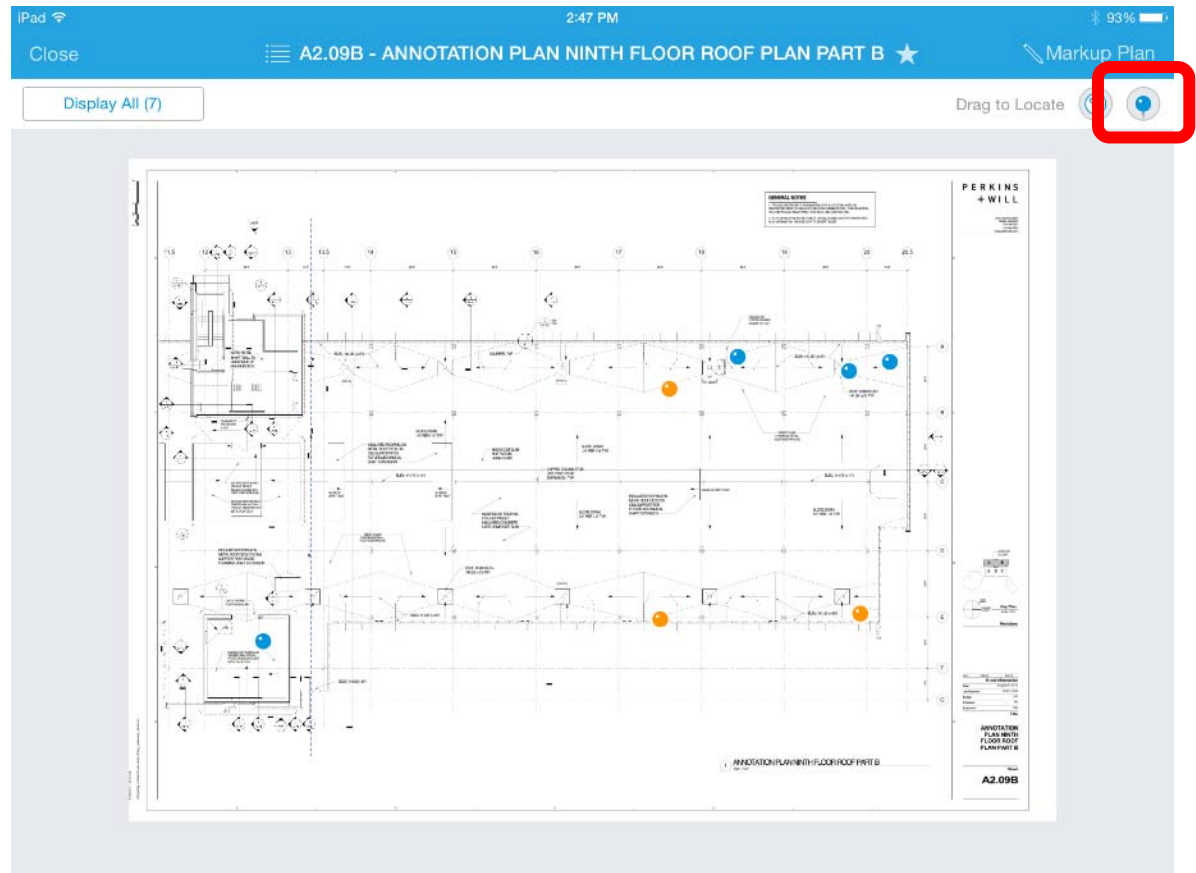
## PLANS

- Just as before you can do a markup of a document, you can place items in the plans like field notes or punchlist
- You can also now add action items as a located item on a plan



## PLANS

- You just simply grab a pin and choose the location on your plan



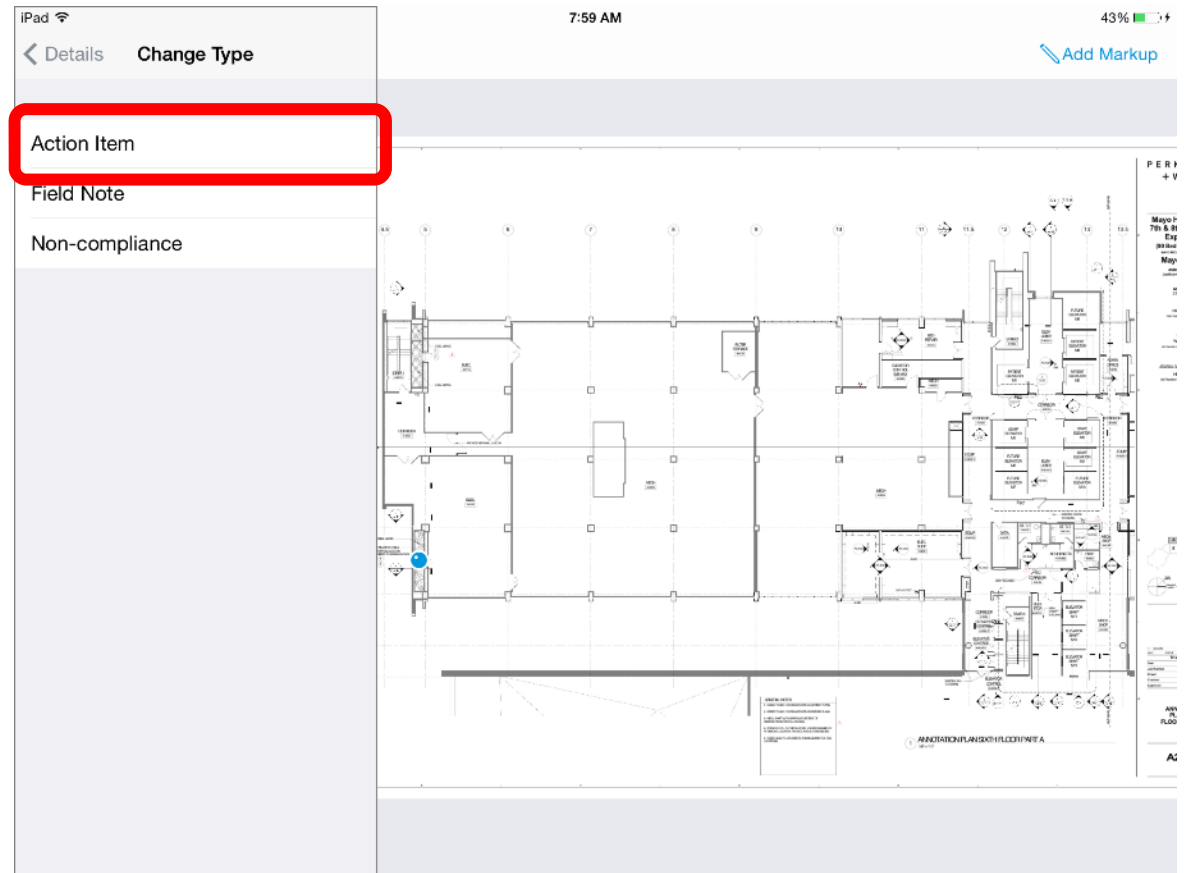


- Like before you choose the type and fill in the information required and known
- Add pictures to this item being created like before
- You also have the ability to create **action items** from this app under the type of item

28

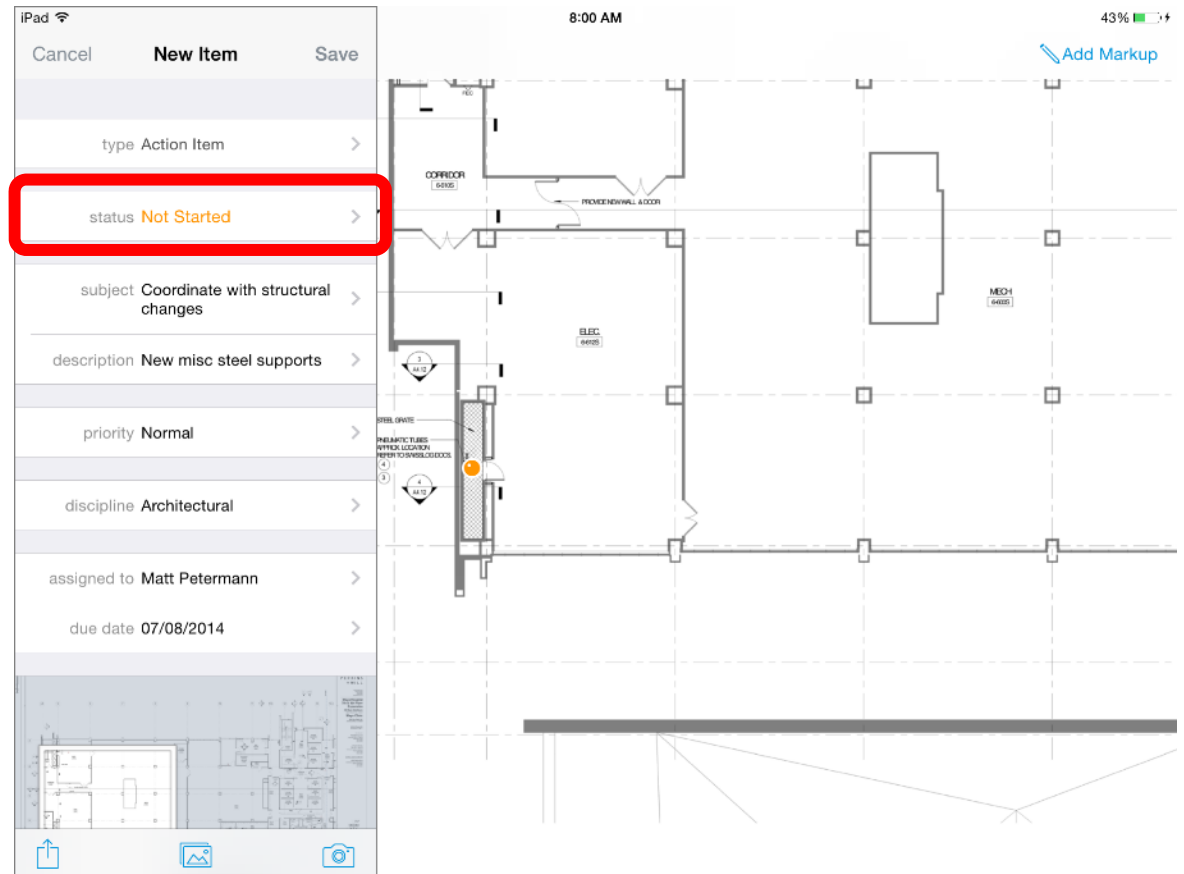
## PLANS

- You also have the ability to create **action items** from this app under the type of item
- This will sync back to that activity included any attachments and the image of the location in plan



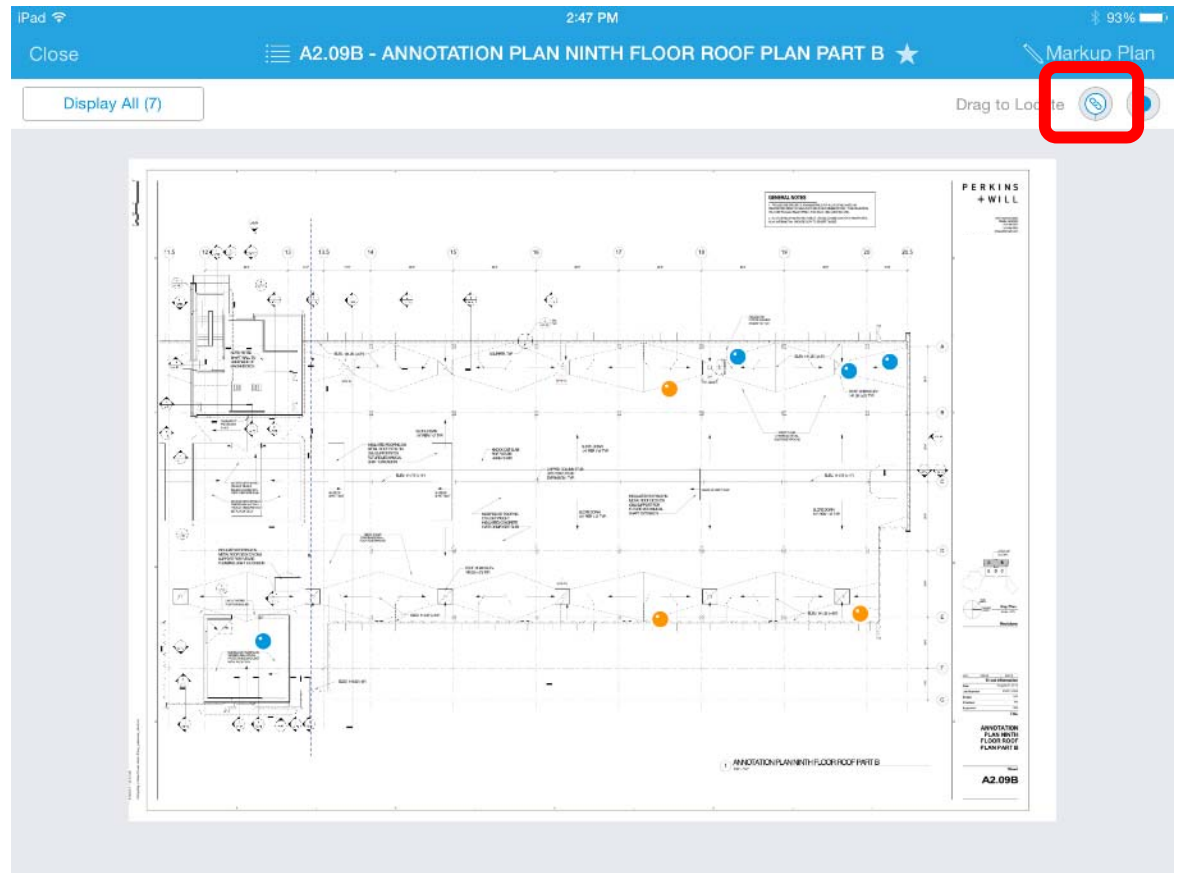
## PLANS

- Note the color of the pin is determined by the status of the item
- You can zoom in to include a smaller portion of the plan to be attached as an image to the item being created



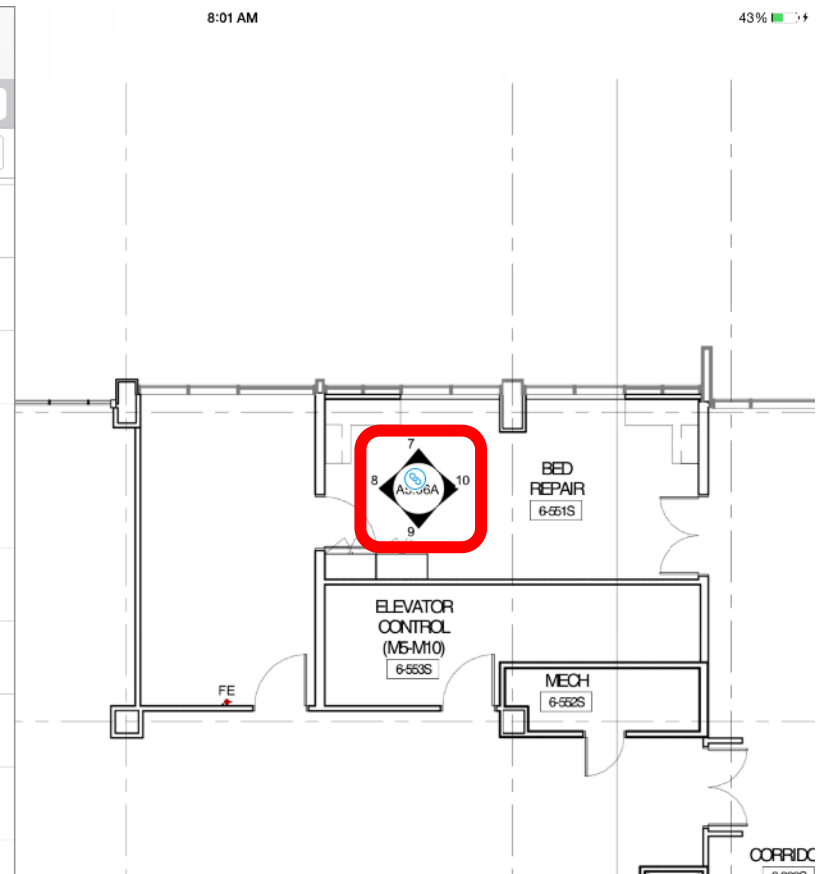
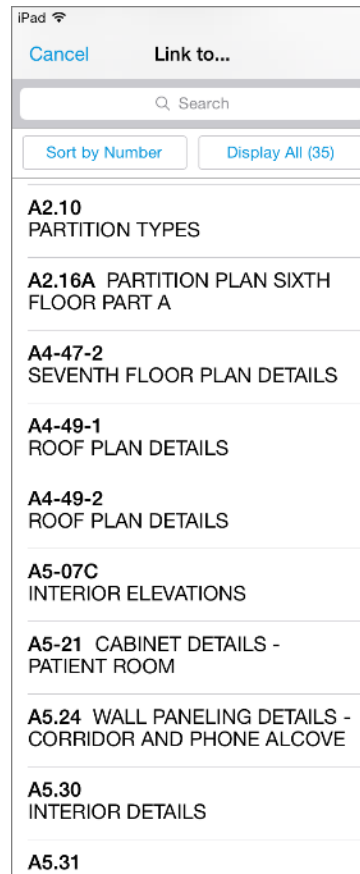
## PLANS

- Another new feature is the ability to hyperlink documents for faster navigation



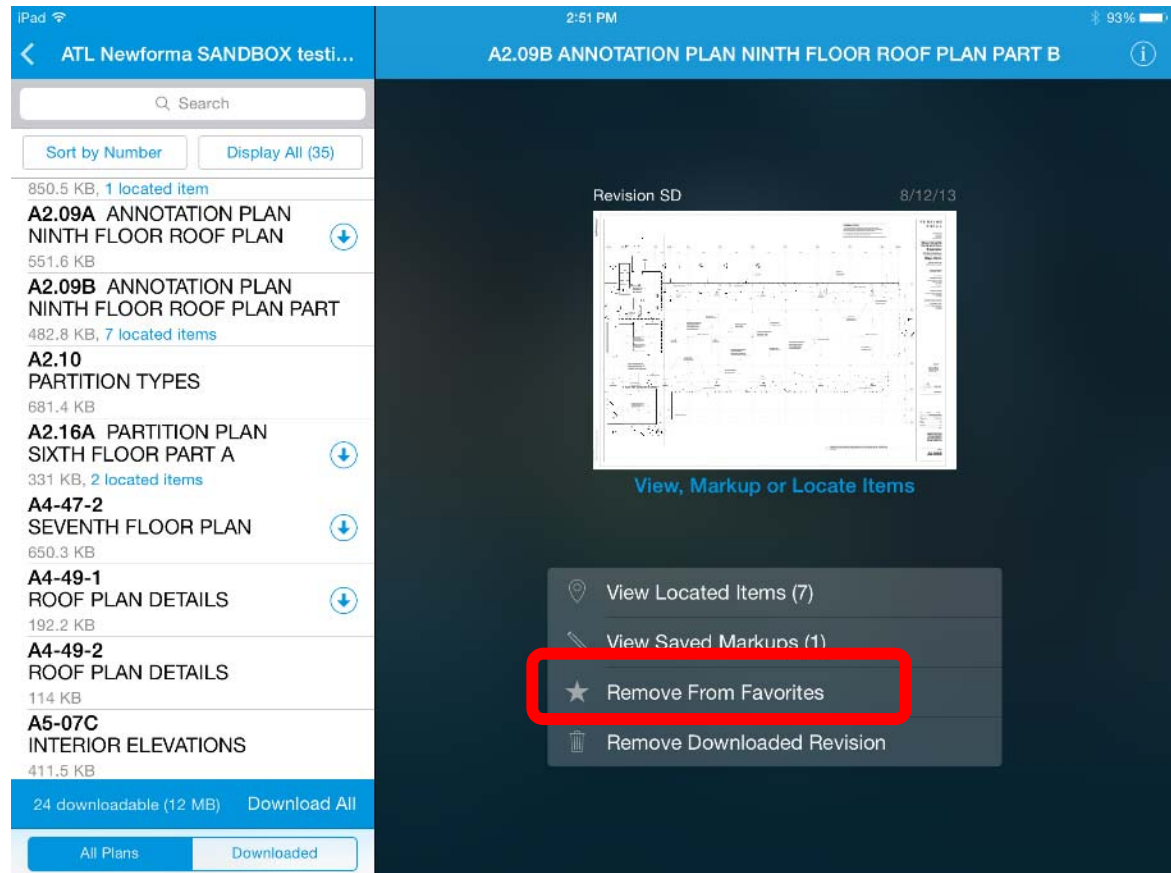
## PLANS

- Another new feature is the ability to hyperlink documents for faster navigation
- Drag the link out onto a section, elevation, or callout and then select the document you want that pin to link to
- This is now a link available for the entire team using these documents



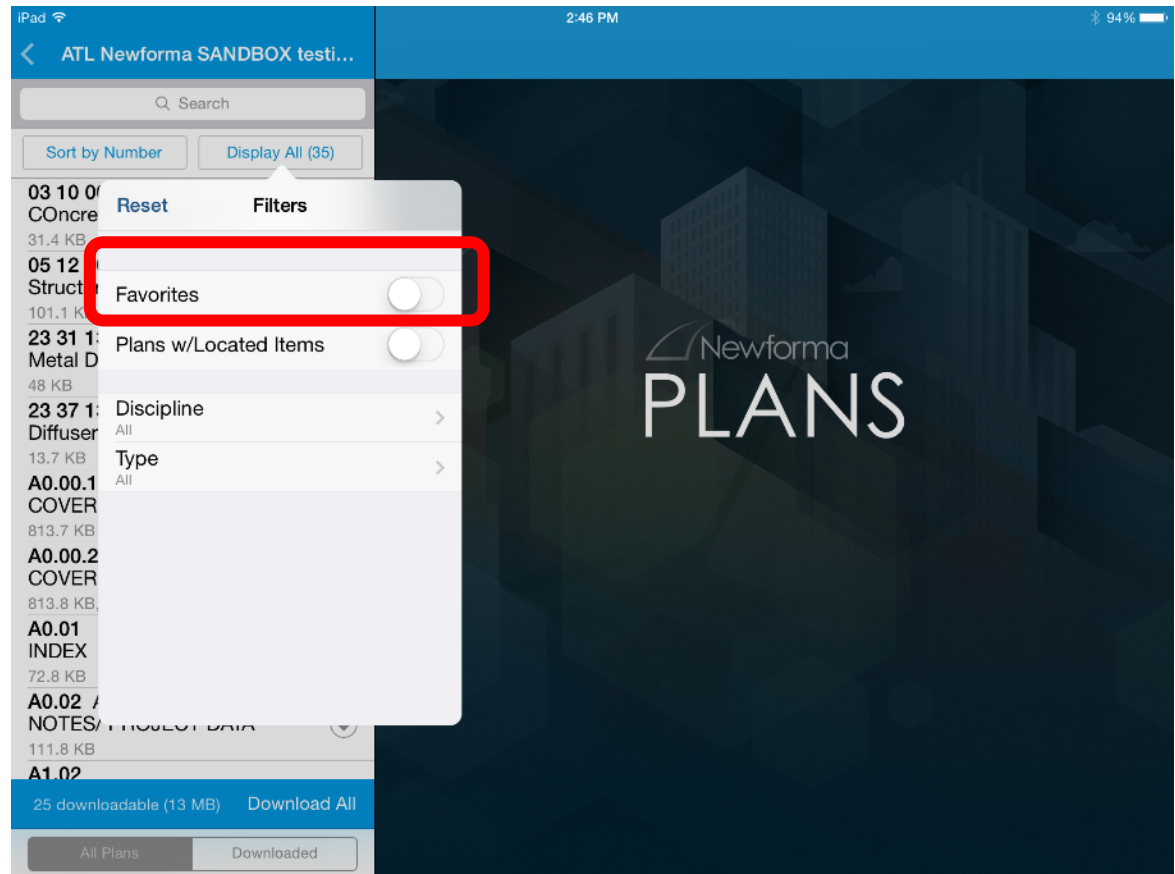
## PLANS

- Also for faster navigation you can favorite any document
- This allows you to filter your project list by favorites



## NEWFORMA PLANS

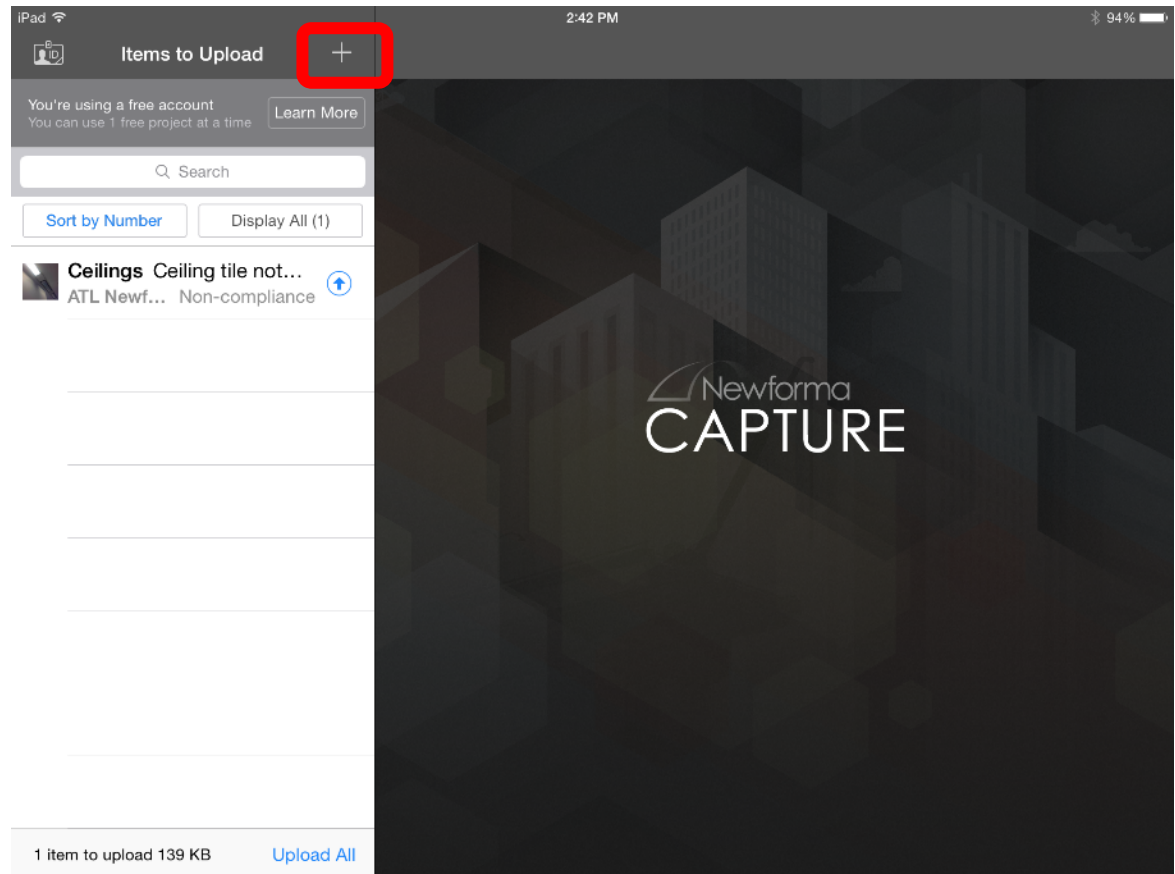
- Also for faster navigation you can favorite any document
- This allows you to filter your project list by favorites
- You also still have the ability to filter the list by discipline or type as before
- You can also still search for documents from the box above the document list





## NEWFORMA CAPTURE

- Record information while on the move
- This can be done at any phase of a project for any reason
- Categorize your items by field notes, punchlist, non-compliance, or now action items
- Hit the plus button to start the process



## CAPTURE

- Start by taking a picture
- If you don't need to capture an image with the information just hit the keyboard symbol to go straight to the data input
- If you want to attach an image already on your device choose the 'mountain picture' symbol



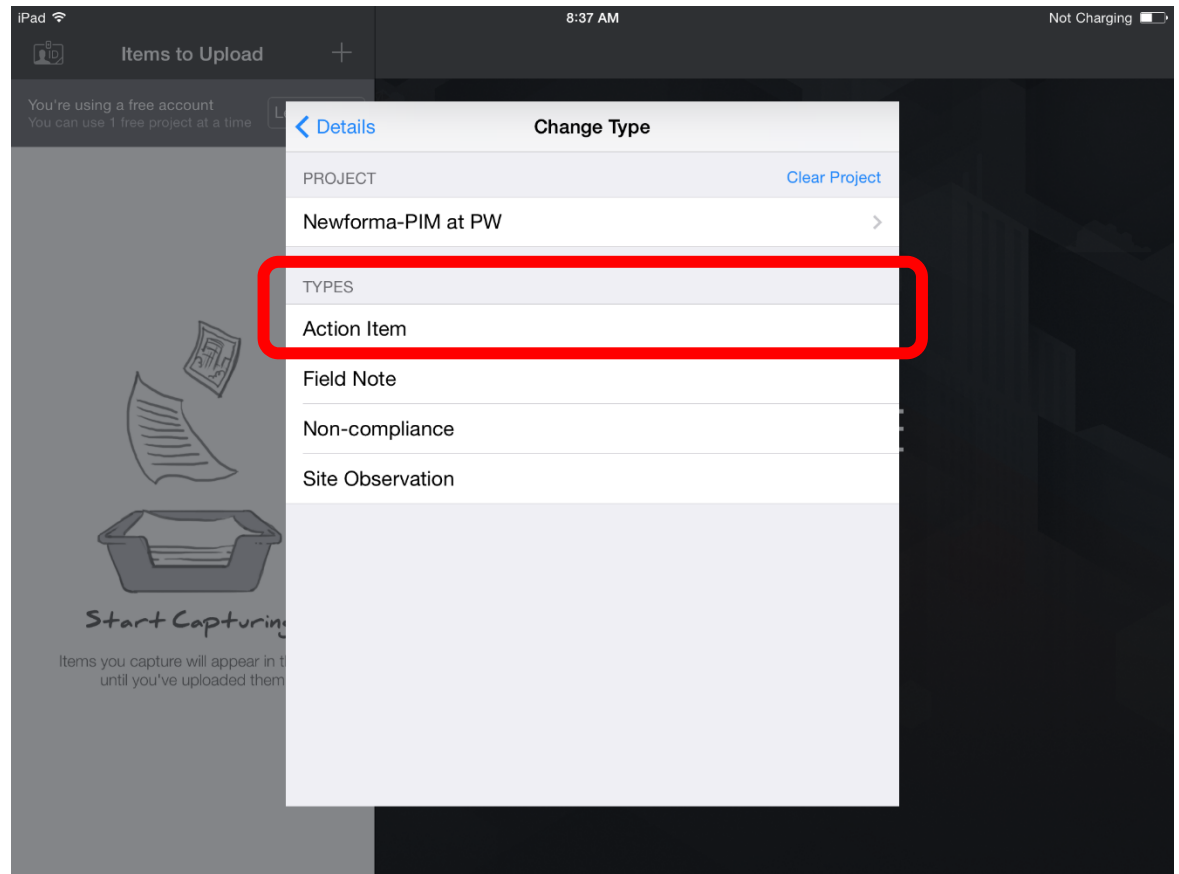
## CAPTURE

- Select the item type and project at the top

The screenshot shows an iPad interface for a mobile application. At the top, the status bar displays 'iPad', signal strength, '8:37 AM', and 'Not Charging'. Below the status bar, the app header shows 'Items to Upload' with a plus icon. A modal window titled 'New Item' is open, featuring a 'Cancel' button on the left and a 'Save' button on the right. The form contains several fields: 'type' (set to 'Punch List' with a right arrow), 'status' (set to 'Draft' with a comment icon), 'subject' (labeled 'Subject (required)' with a right arrow), 'description' (labeled 'Description (required)' with a right arrow), 'space' (set to 'Room/Space' with a right arrow), 'assigned to' (set to 'Project Member(s)' with a right arrow), and 'due date' (set to '07/08/2014' with a right arrow). A red rectangle highlights the 'type' field. At the bottom of the modal, there is a camera icon, a gallery icon, and a photo icon. The background of the app shows a 'Start Capturing' screen with a trash bin icon and text indicating that captured items will only appear after upload.

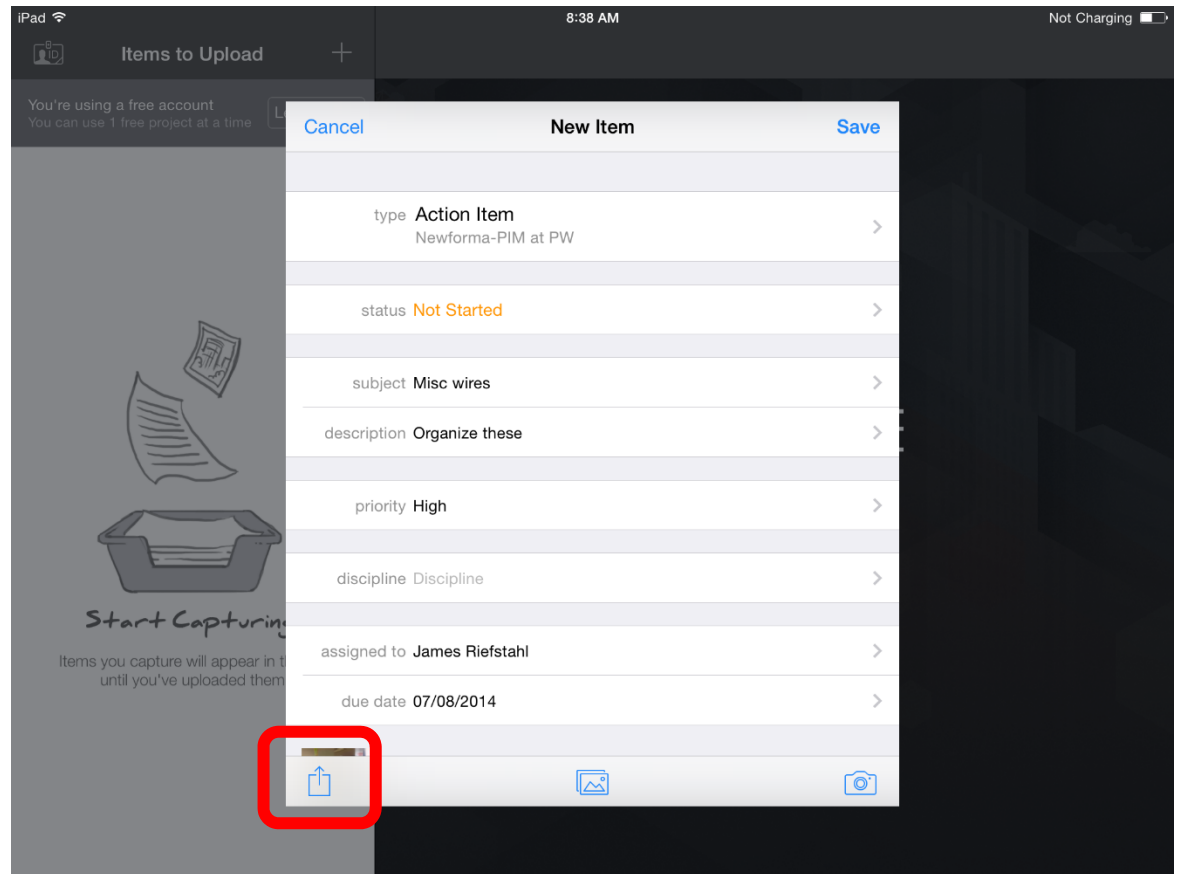
## CAPTURE

- Action items/tasks can now be generated from anywhere
- Action items only require a subject to begin them, you do not need to include a due date or assignee at this point



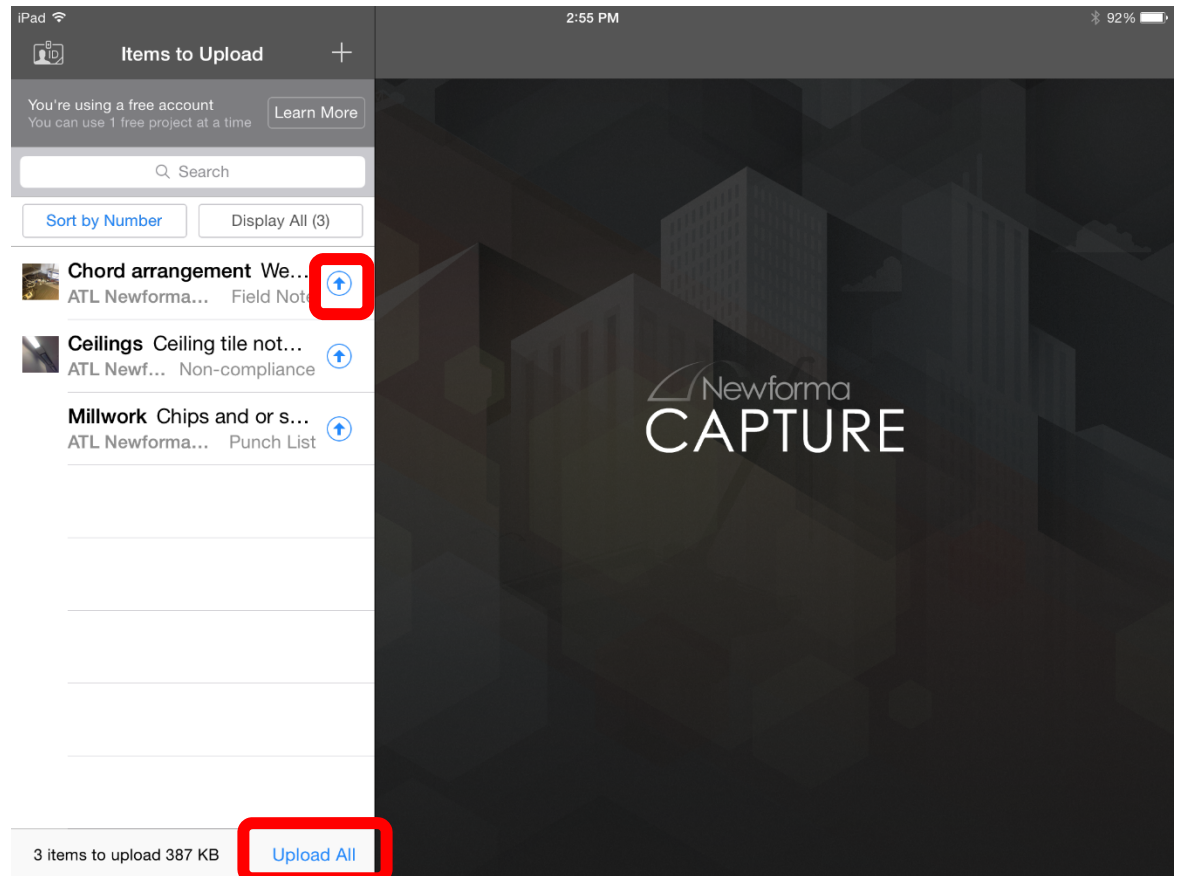
## CAPTURE

- Fill in as much information as you know or want at this point
- You can attach another photo or image from the device
- If you want to you can immediately email this item to someone if your email client is setup on the device



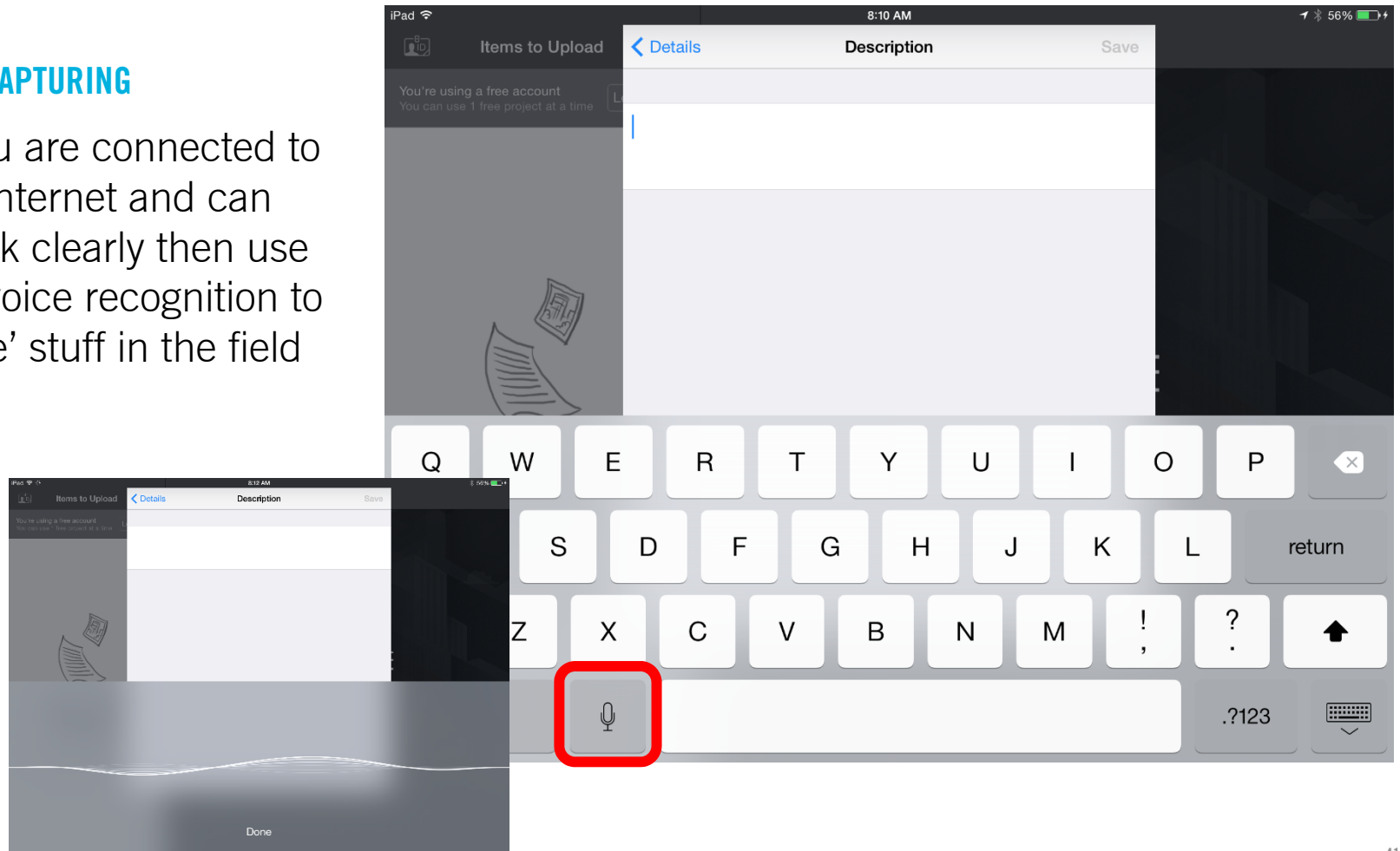
## NEWFORMA CAPTURE

- As you capture items they are only saved to your device
- You can go back and edit anything by selecting it
- Once you are connected to the internet you can choose to hit upload all or select the arrow next to an item to sync it with our Newforma network in the appropriate activity



## TABLET CAPTURING

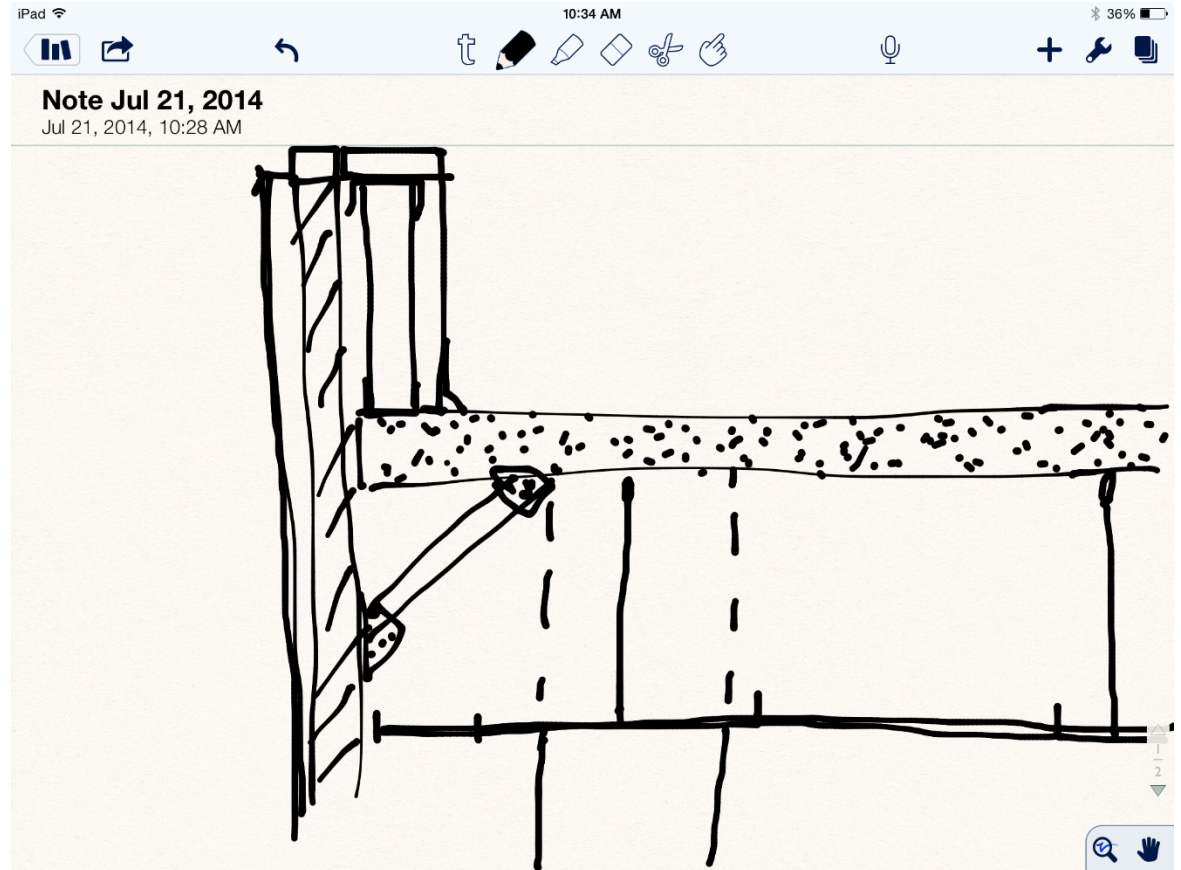
- If you are connected to the internet and can speak clearly then use the voice recognition to 'write' stuff in the field





## NOTABILITY

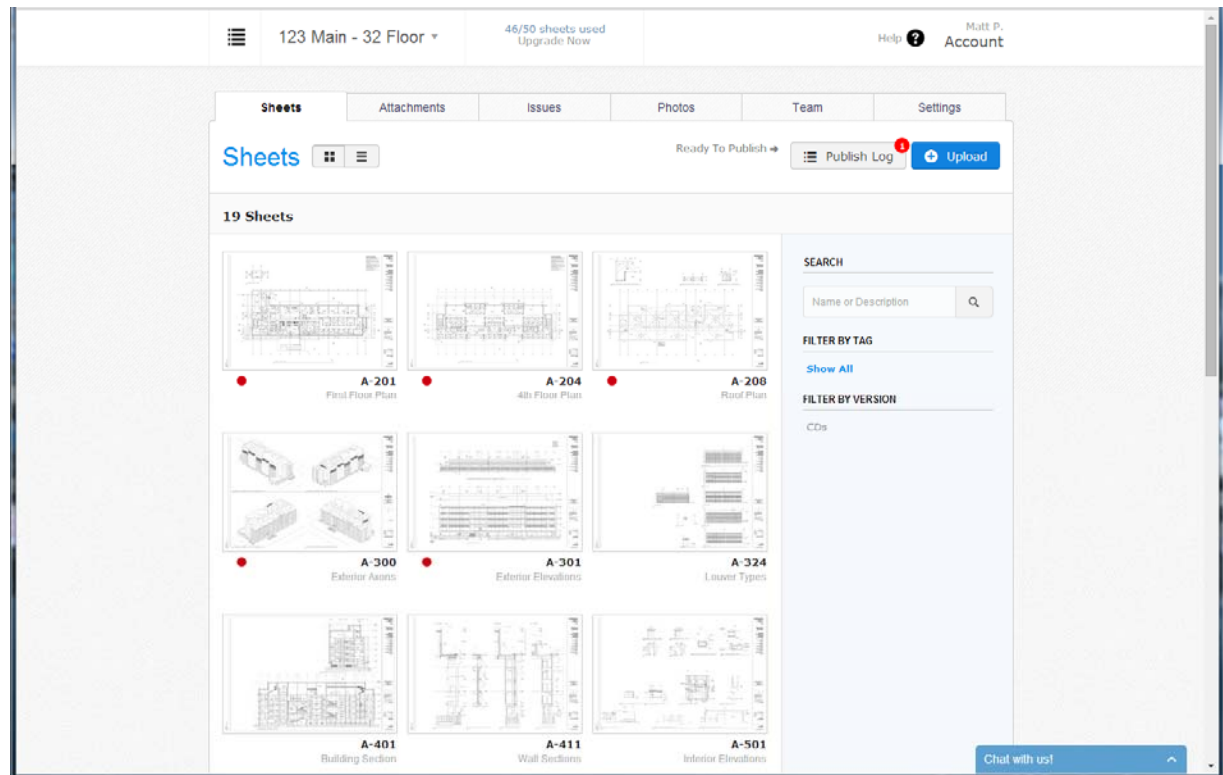
- Simple drawing app
- Can work with a finger on a tablet but much better if you have a stylus
- One stylus option that is relatively inexpensive is the Wacom bamboo line



**DISCOVERY**

## PLANGRID

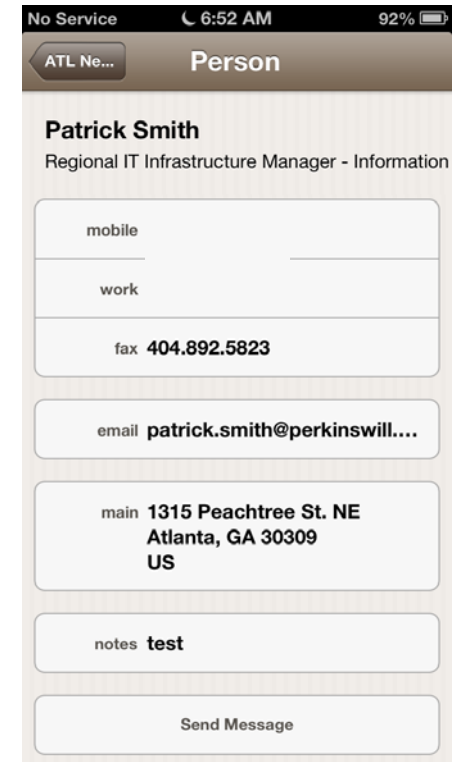
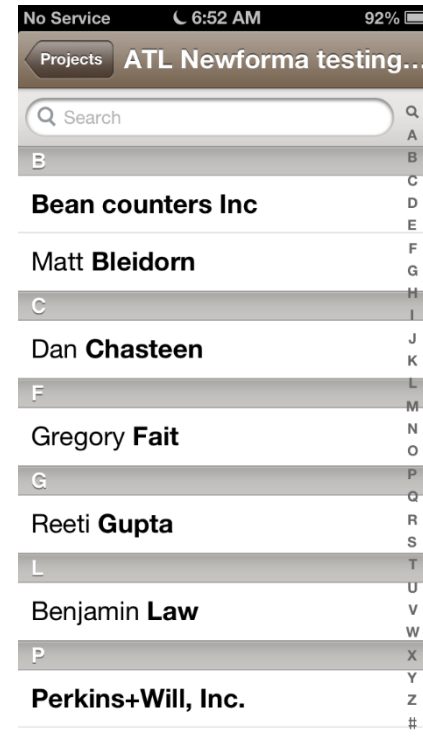
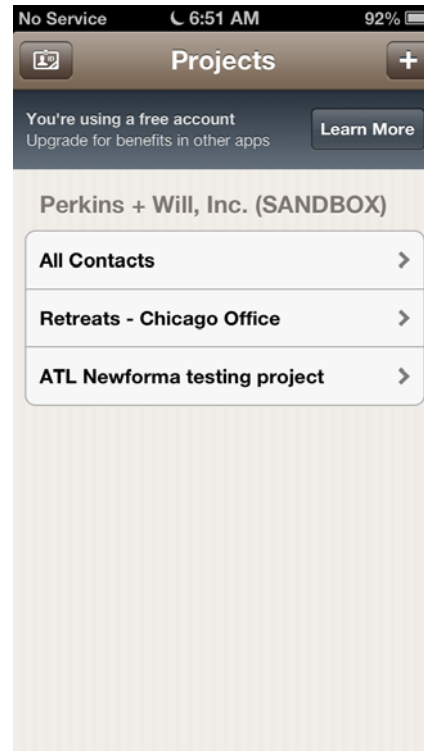
- Pull up the data captured in the field through their website



## NEWFORMA PROJECT TEAM

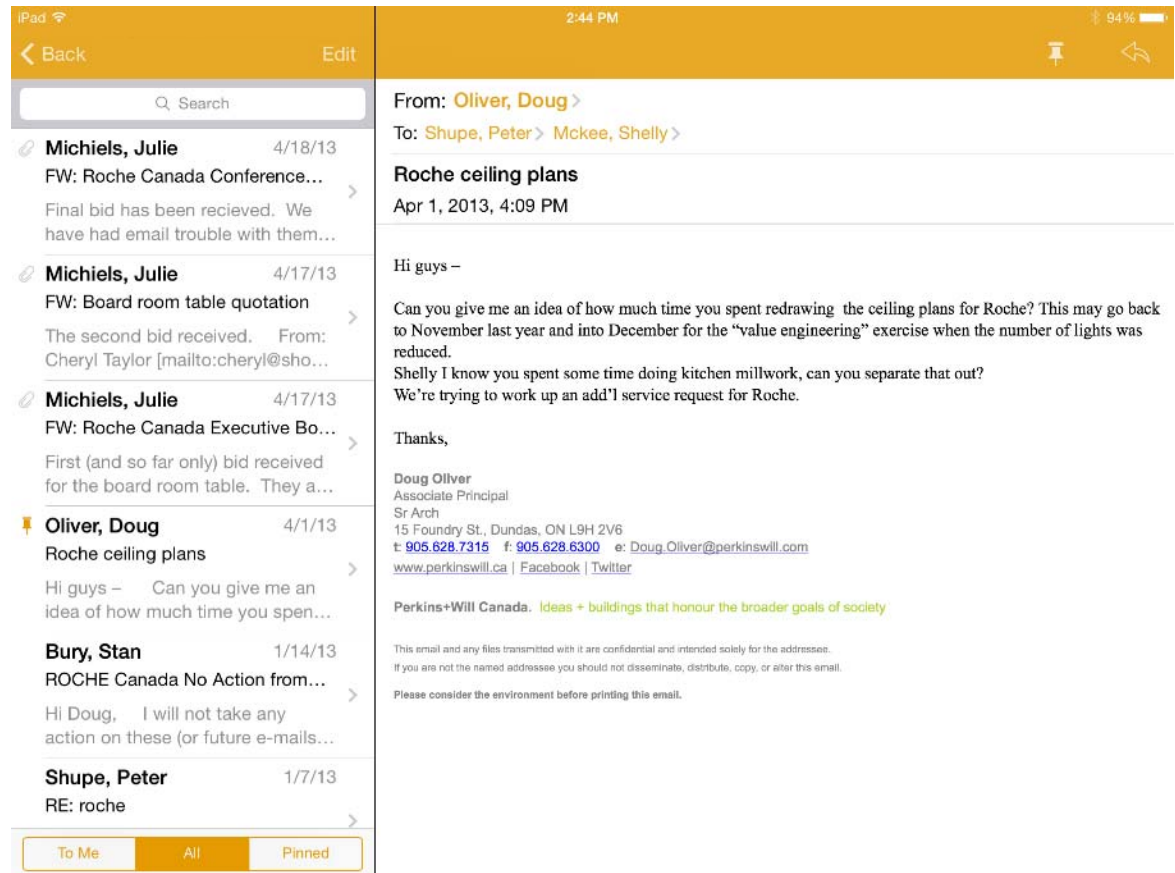


- Browse for Contact
- Call
- E-mail
- Send text message
- Browse for other contacts or companies



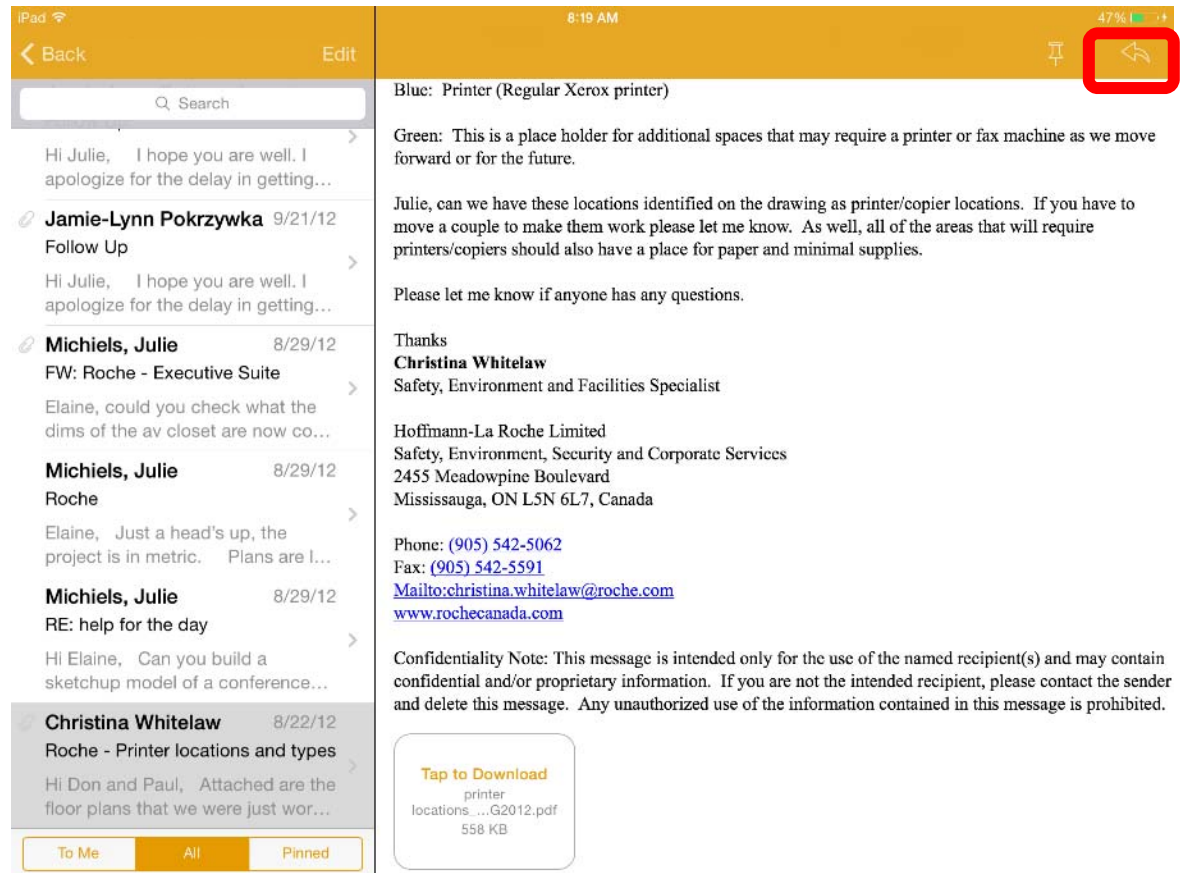
## NEWFORMA PROJECT EMAIL

- Search is found at the top since emails are organized by default by date
- Once selected you can view the email
- This is all done while connected to the internet
- Not all content is being loaded to your device
- If email client setup you can click on a name to start a new email



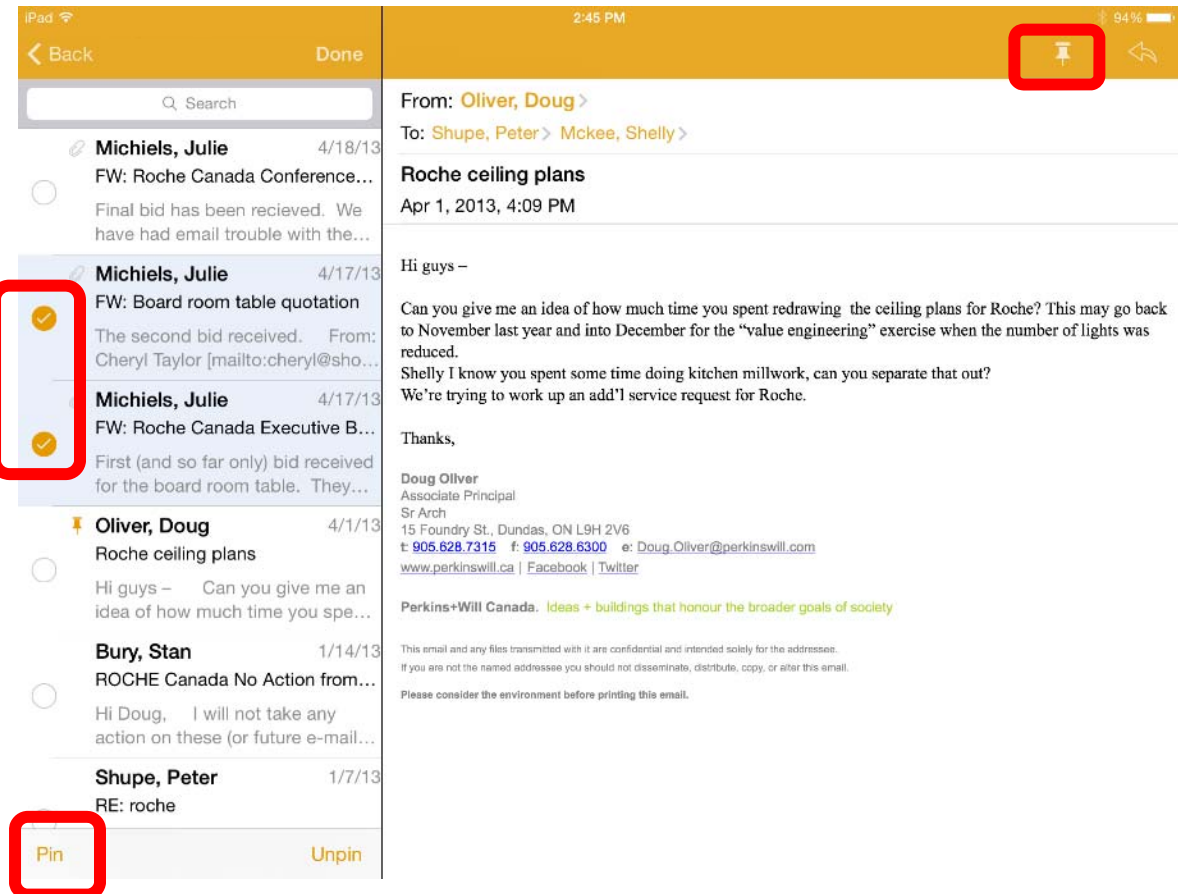
## PROJECT EMAIL

- Not all content is being loaded to your device
- It will load the email once you have selected it
- You can also choose to download any attachments (need appropriate apps for viewing)
- Reply to the email in the upper right if your email client is setup on the device



## NEWFORMA PROJECT EMAIL

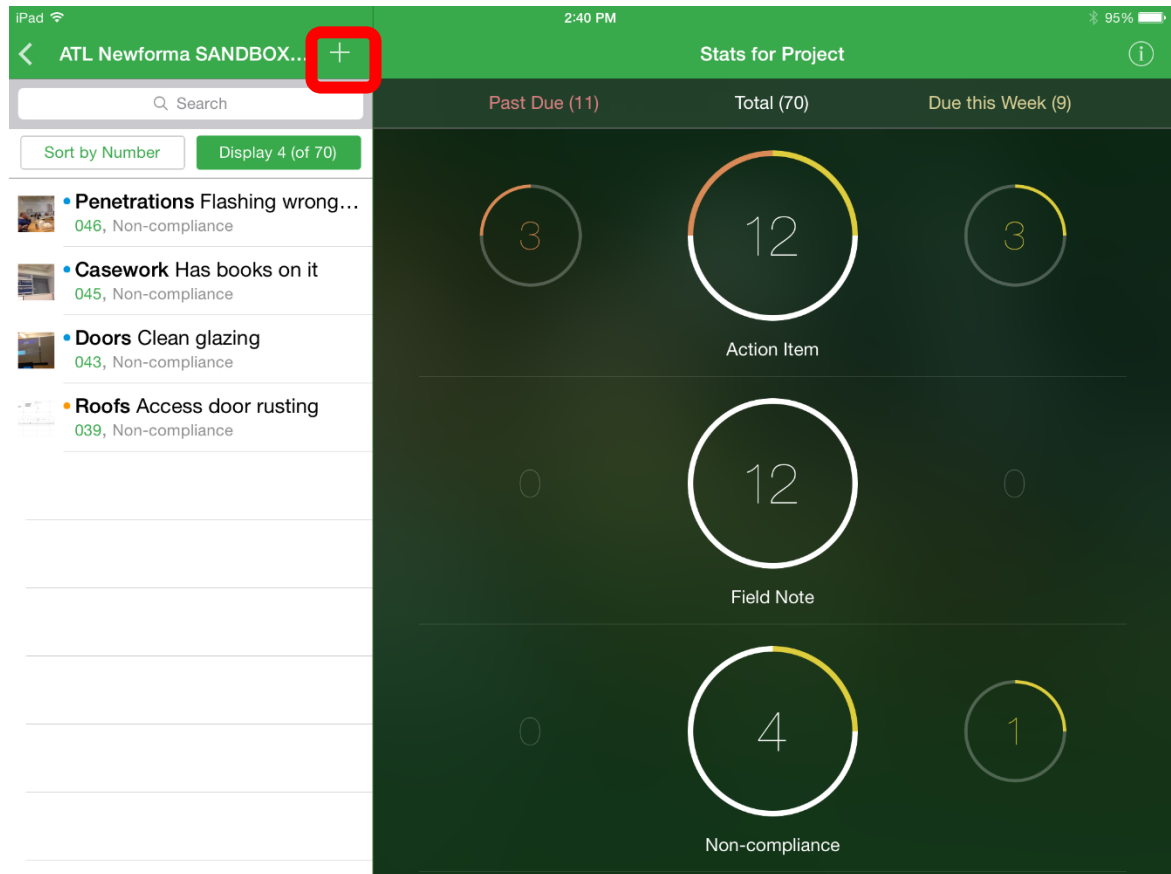
- Pin emails for offline viewing on the device
- Hit the edit button above the email list to select multiple emails at once to pin (downloaded to the device)
- You can choose to unpin emails in the future to remove them
- All are removed if you are using the free version and switch projects





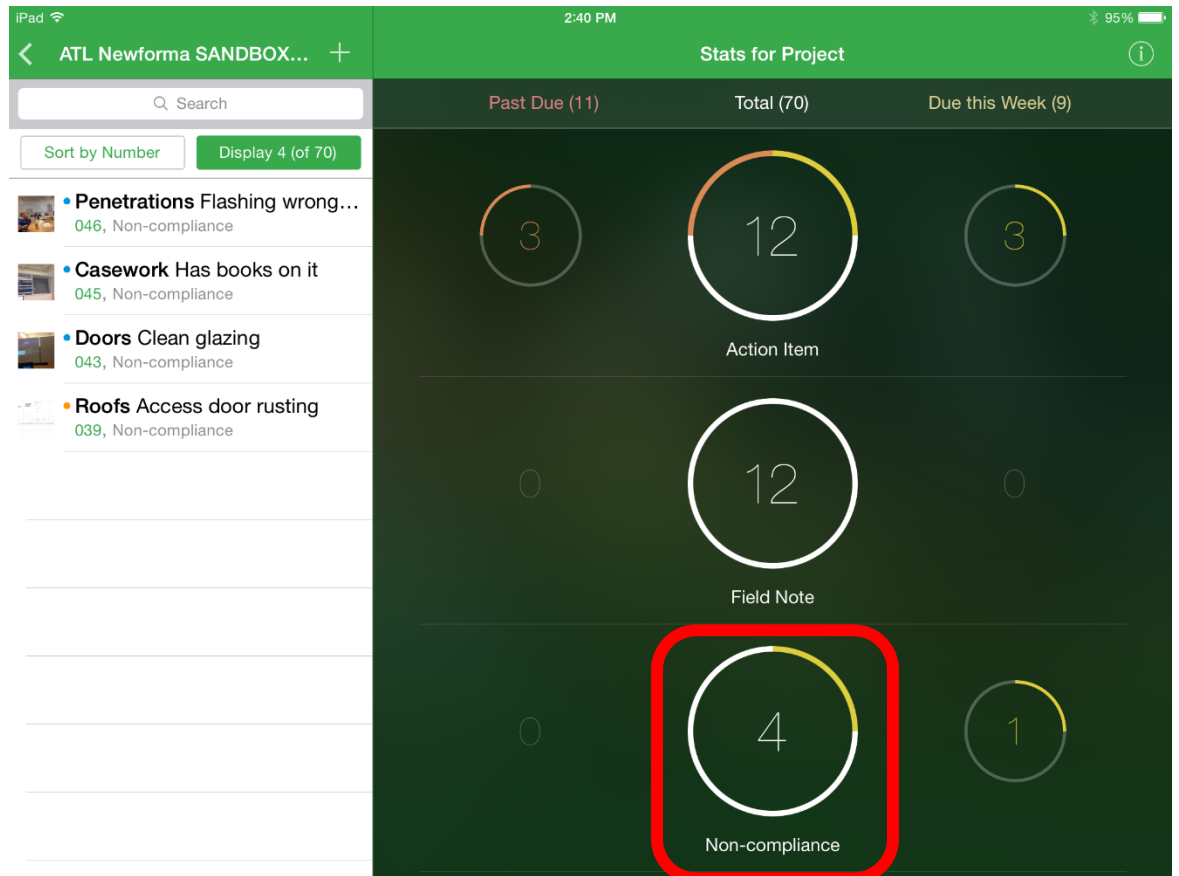
## NEWFORMA TASKS

- Sign in and select your project
- From here we can see any action items, field notes, non-compliance, punchlist, or site observation for the project (based on your permission levels)
- If you want to add an item hitting the plus button takes you back to the capture app



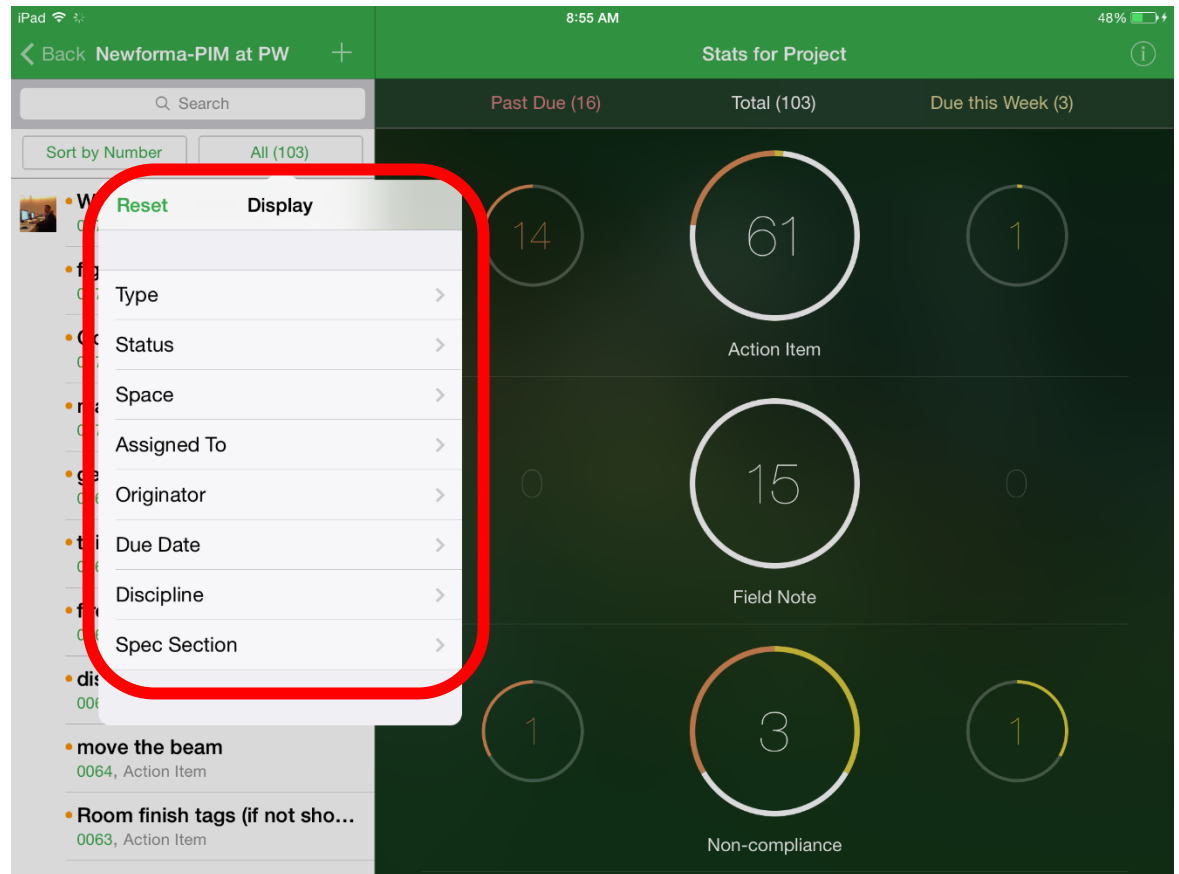
## TASKS

- Hitting any circle will automatically filter your list to those specific items and their status



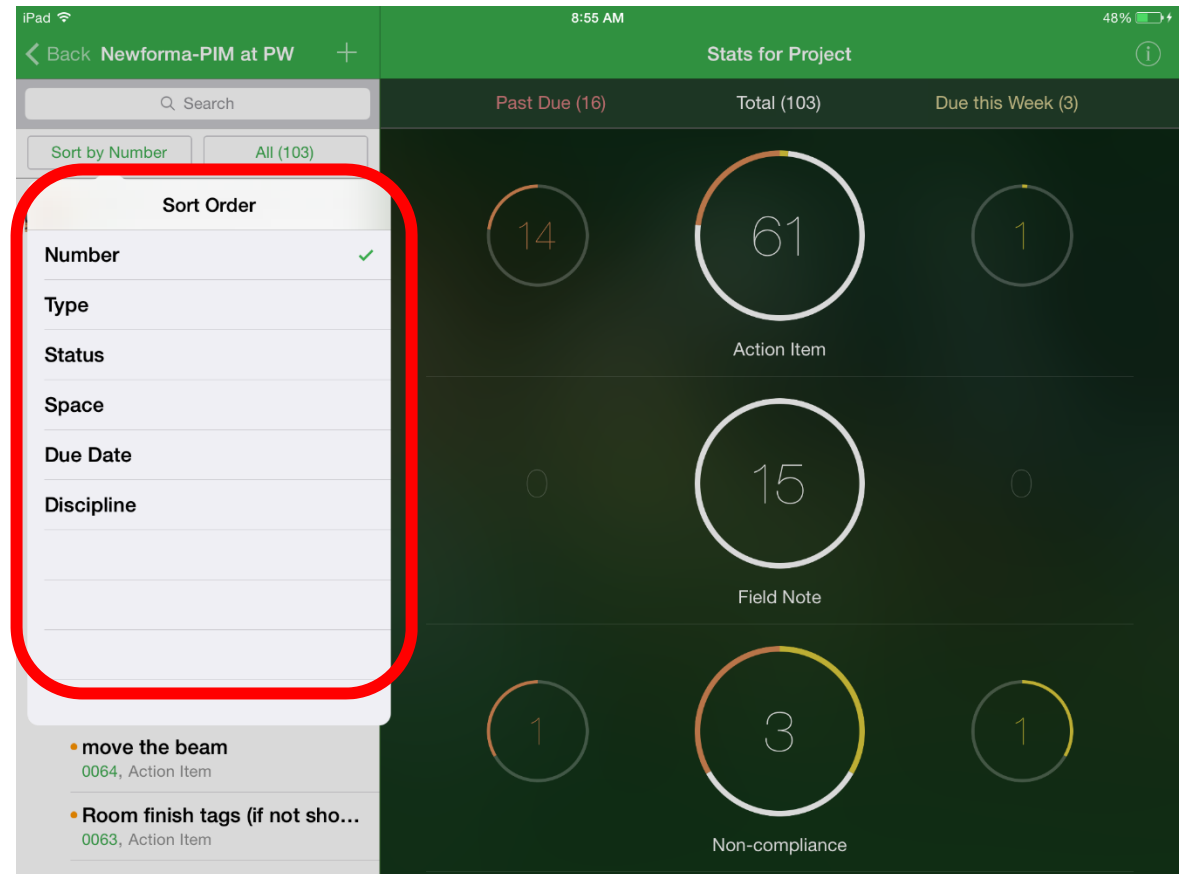
## TASKS

- Use the search to find your item
- Use any field to filter your list



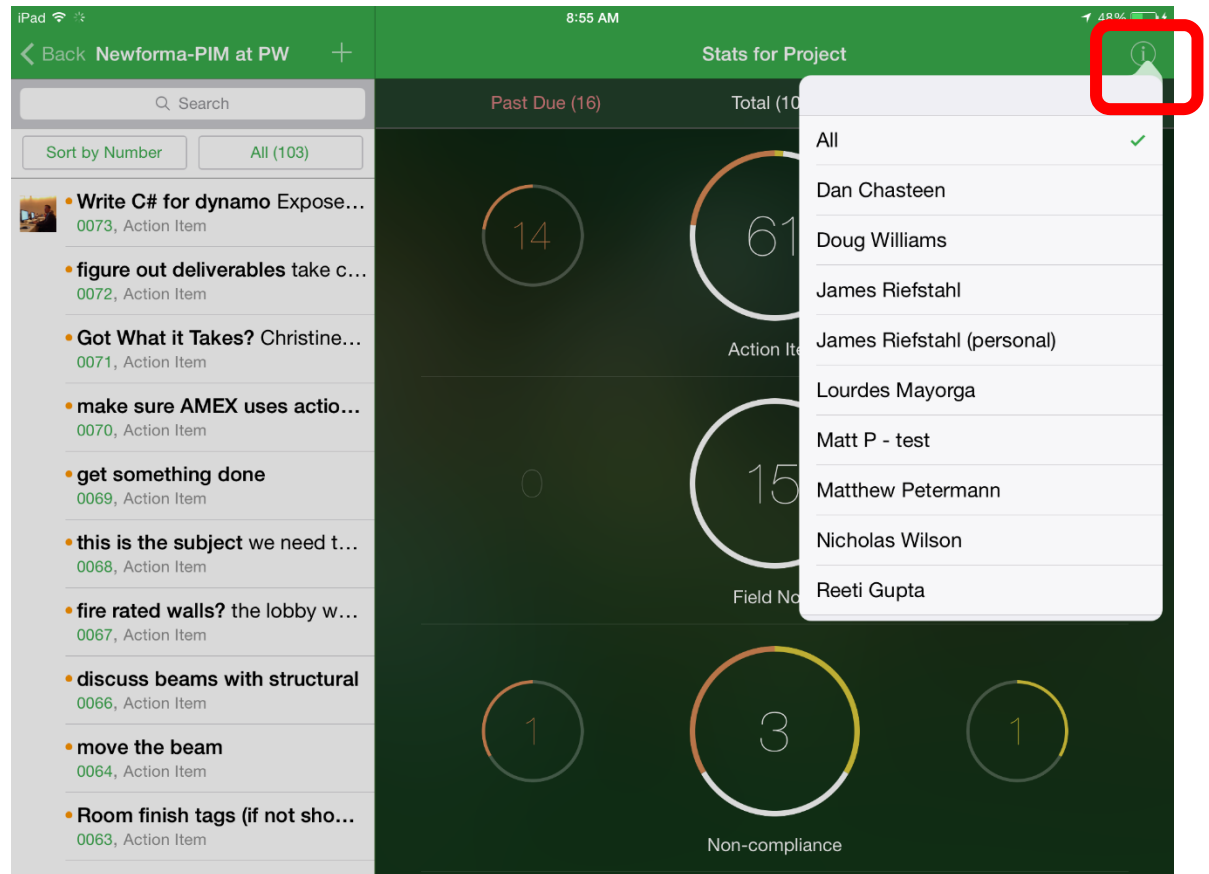
## TASKS

- Sort the list by any other field



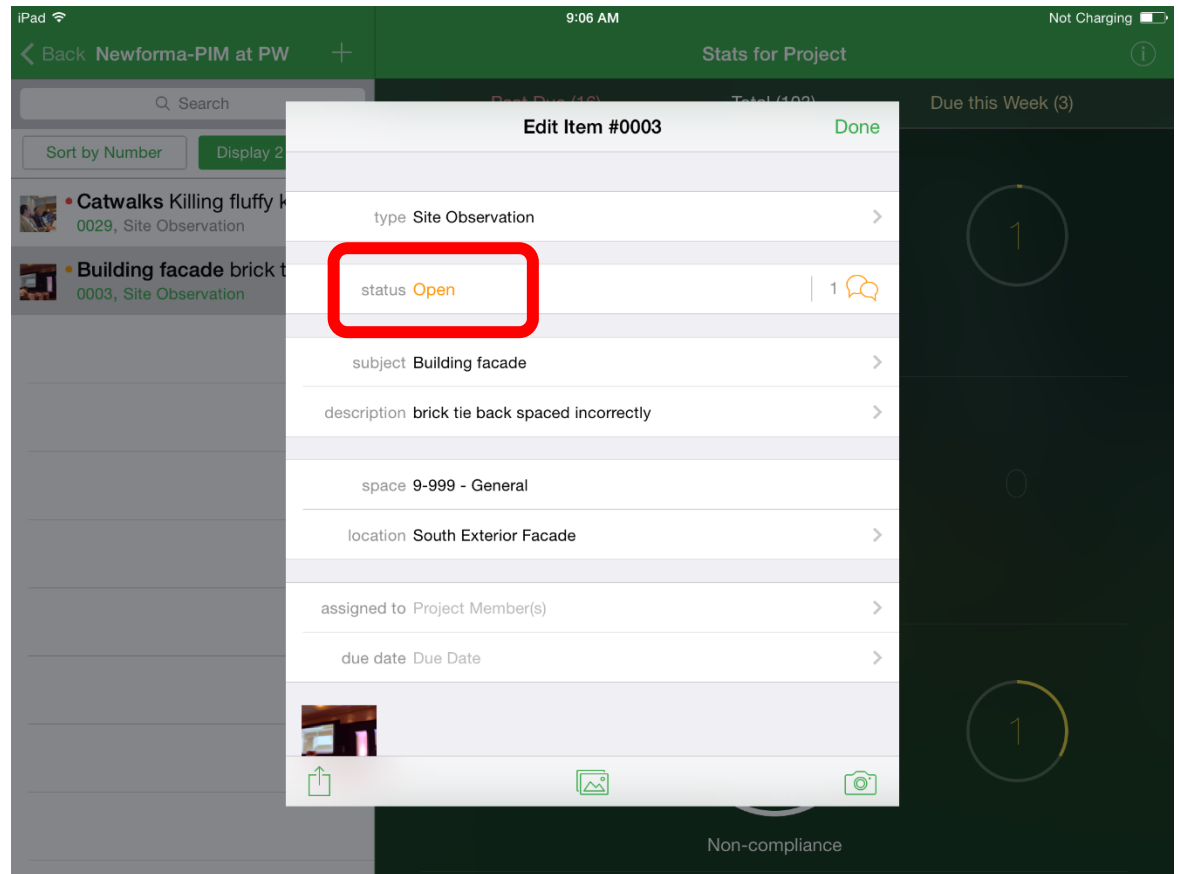
## TASKS

- Filter to specific team member to further limit the list and view



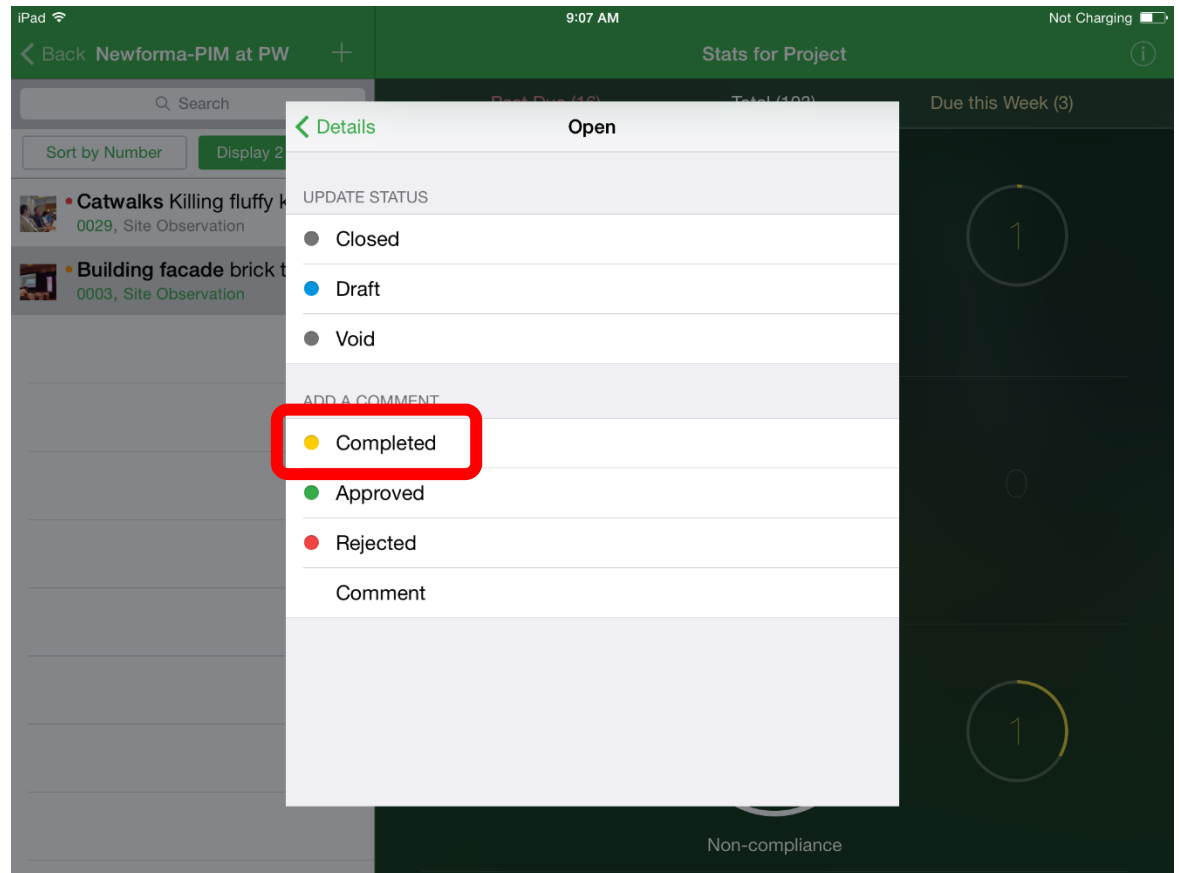
## TASKS

- Add more information or attachments to any item
- Update the status of an item



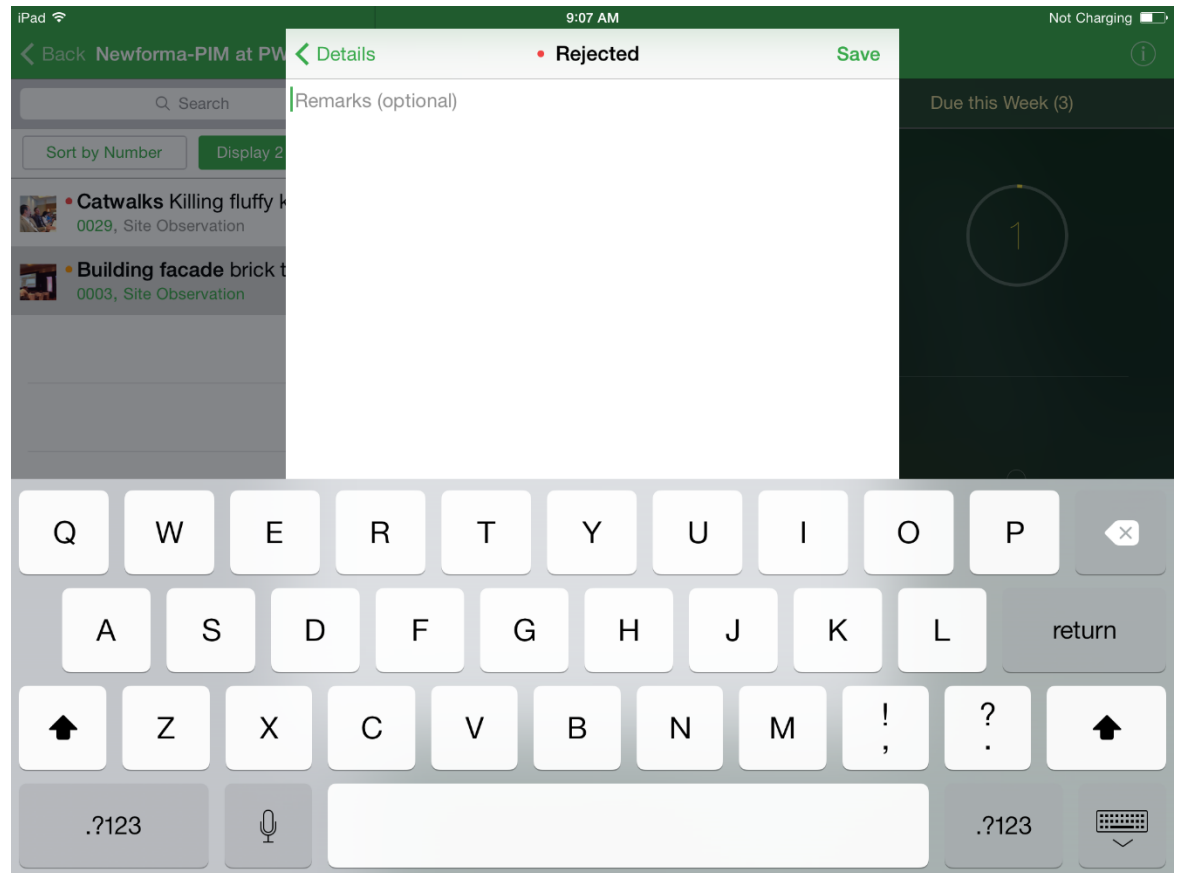
## TASKS

- Choose the new status and then add any discussion items to that status change
- This will make the entire punchlist process possible through the apps



## TASKS

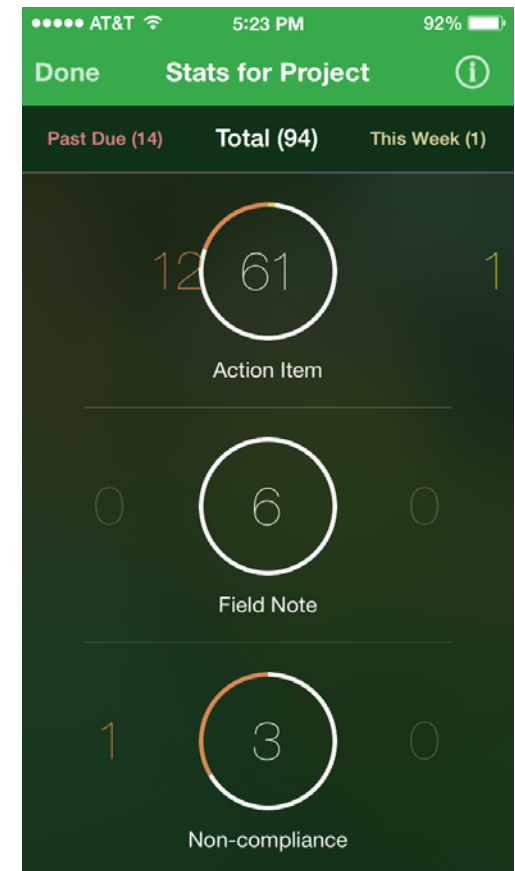
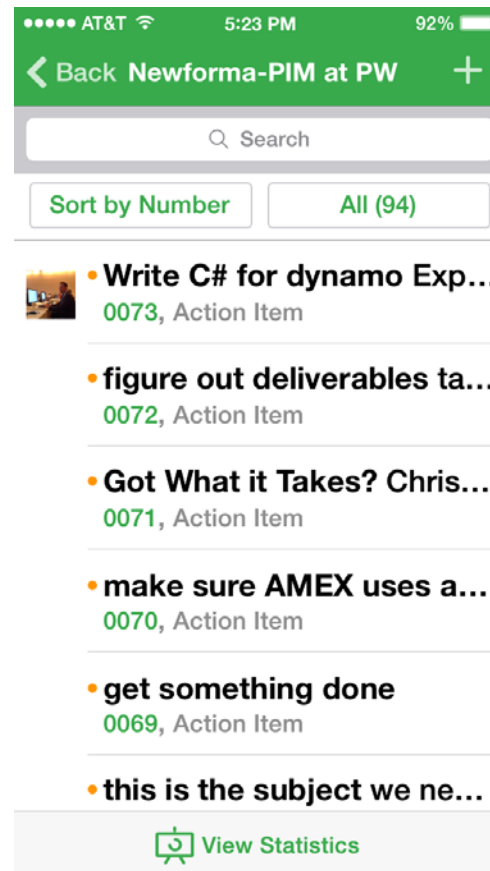
- Choose the new status and then add any discussion items (if desired) to that status change
- This will make the entire punchlist process possible through the apps





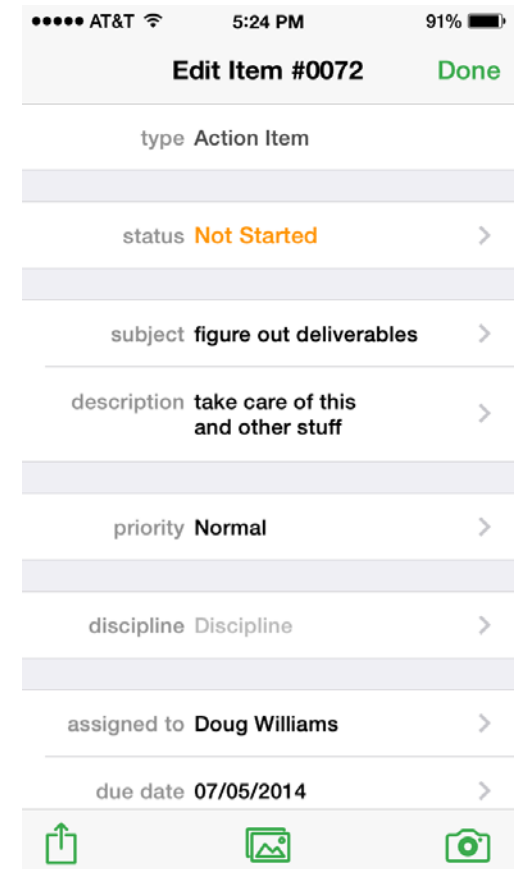
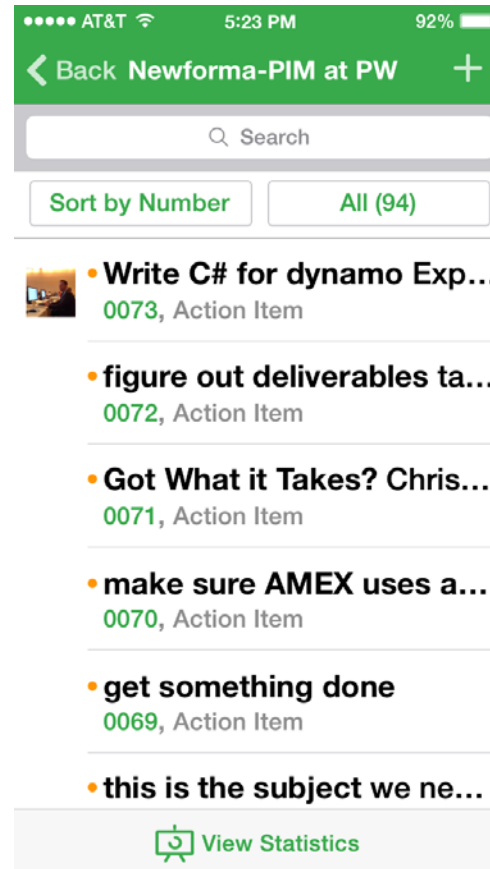
## TASKS

- iPhone is the exact same for these apps (Email, Capture, Tasks)
- The only difference is the left and the right side of the screen that has been shown from the iPad is split into 2 screens



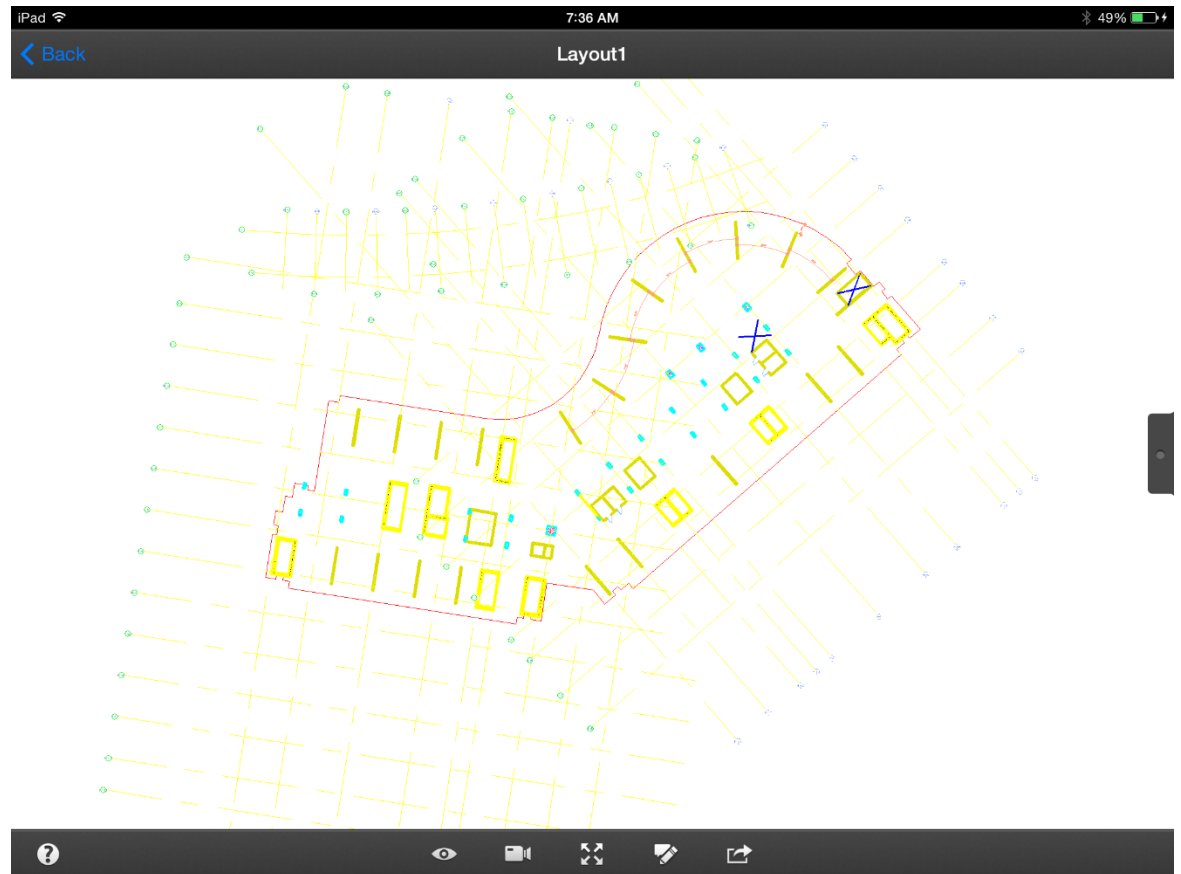
## NEWFORMA TASKS

- iPhone is the exact same for these apps (Email, Capture, Tasks)
- Once an item is selected that is the screen view on a phone
- You will just be swiping left and right with the interface on the smaller screen



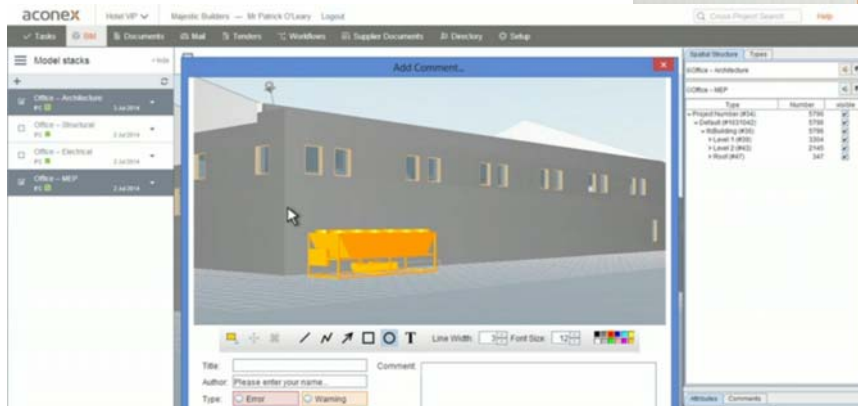
## AUTODESK 360

- Pull up native cad or dwf files
- Part of an Autodesk subscription package



## ACONEX

- Other offerings – Software as a Service
- Full sweet of construction activities
- All cloud based so accessible through the web or mobile app



# CONSIDERATIONS

## WHAT YOU DON'T SEE

- Infrastructure in your office
- Additional servers & server room capacity
- Cloud - Online
- Software as a Service (SaaS)
- Administration of entire project team



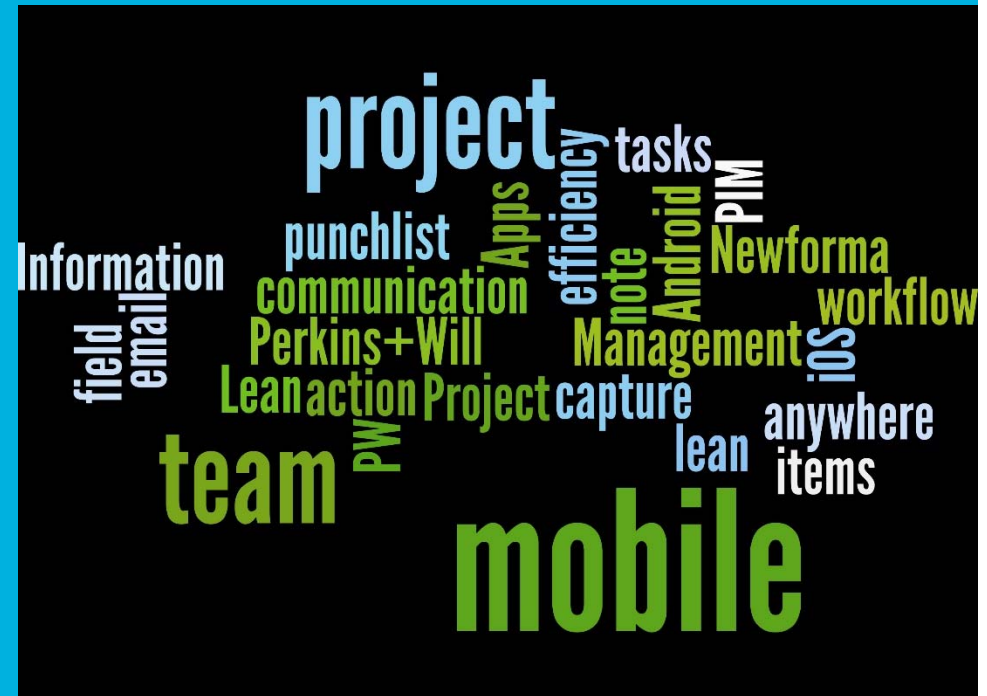
## PRICING STRUCTURE

- Enterprise agreement
- Per project cost based on cost, area, or team members
- Shared with other project parties



# MOBILITY

- Improved communication & productivity
- Capturing information on site and filing it correctly for future retrieval
- Educated choices made on site
- Quicker responses to reduce miscommunication and errors in construction







Matt Petermann

Twitter: @pete1352 #CCAapps

Type a Question in the chat box