

## CNA e-Tool Release Notes

Updated: 4/14/2023

**Version: v3.1.2.0**

**Effective (release) Date: 04/14/2023**

### Enhancements

1. This release includes an improved validation status message which will indicate if validation is needed when data has been modified.
2. This release includes improved printing capabilities for the Future Needs page. Now, users can easily generate a user-friendly PDF version of the page for printing.

### Bug Fix

1. In this release, we've addressed the issue where users would encounter an error message when creating a new version of CNA (cloned CNA) that failed to trigger flag validation.

Service Integration Updates (tentative schedule – Deployment to Staging Date: 4/10/2023)

N/A

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## CNA e-Tool Release Notes

Updated: 4/2/2023

**Version: v3.1.1.1**

**Effective (release) Date: 04/02/2023**

### Enhancements

1. Post 3.1 cleanup of flag validation, which includes the following updates and changes:
  - We will be adding 2 new flags to the 3.1 Flags engine:
    - OC-002 will ensure Occupancy Permit Date cannot be earlier than Building Permit Date
    - OC-003 will ensure Building Permit Date cannot be later than Year Built
  - We will be updating the flags criteria for DU-001 to ensure it doesn't trigger if there are no Units assigned to a Building where the Unit count in that Building is '0'
  - We will be retiring the flag DA-009

### Bug Fixes

1. Fix code to upload image files (JPEG) to UCM

2. Re-engineer backend logic to process attachments upload to UCM and delete attachments from the staging table for duplicated CNAs
3. Allow CNAs with No-Flags to be successfully submitted
4. Add logic to trigger 3.1 Flag validation only when data change
5. Update 'Validation Status' box on the UI to reflect the latest accurate status (e.g. Re-validation Needed)

Service Integration Updates (tentative schedule – Deployment to Staging Date: 3/30/2023)

N/A

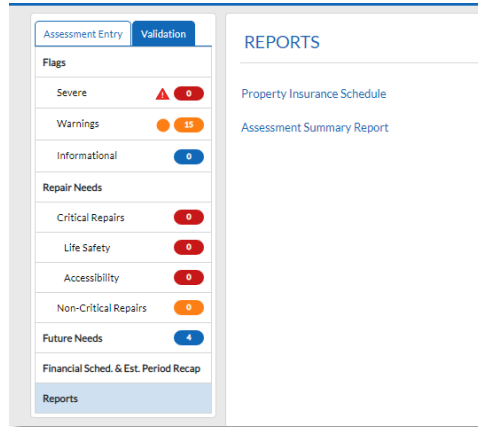
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**Version: v3.1.1.0**

**Effective (release) Date: 03/17/2023**

### **Enhancements**

1. Refactored the legacy SOAP service to move to Azure cloud environment: This refactoring will enable the CNA eTool to directly connect with Oracle UCM file content management from Azure. As a result of this migration effort, the UI will be able to perform download, upload, and delete file operations more efficiently. Additionally, the migration has made it possible for us to retire the legacy service, thereby streamlining our technology stack and reducing maintenance costs.
2. Post 3.1 cleanup of flag validation, which includes the following updates and changes:
  - We will be updating the flag validation FN-002 to trigger a warning flag for CNA type 'Asset Management' whenever the Ending Balance field is less than the Required Minimum RfR Balance field in the Financial Schedule.
  - We will be adding a new flag validation FN-003, which will trigger a warning flag for CNA type 'Asset Development' and 'Asset Recapitalization' when the Ending Balance field is less than the Required Minimum RfR Balance field in years 3 to 10 of the Financial Schedule.
  - We will be updating the flag description for OC-001.
  - We will be retiring the flag DV-273.
3. Retired Financial Schedule and Estimate Period Recap report links: We will retire Financial Schedule and Estimate Period Recap report that is generated from the Oracle database. This change has been made to prevent data redundancy and ensure that data is maintained solely on Azure cloud environment.
  - a. The original links to the Financial Schedule and Estimate Period Recap reports under the 'Reports' tab will be removed. After 3/17, the only two links visible under the Reports tab will be the Property Insurance Schedule and Assessment Summary Reports.



- b. Moving forward, the users can **print** the Financial Schedule and Estimate Period Recap reports from the designated “Financial Schedule & Estimate Period Recap” tab under the ‘Validation’ screen.
- c. By clicking the “Print” button in the upper right corner, both tables can be saved as a single PDF document file.

Calendar Year	Year 01 2022	Year 02 2023	Year 03 2024	Year 04 2025	Year 05 2026	Year 06 2027	Year 07 2028
Beginning Balance	\$1,000,000	\$993,485	\$987,160.44	\$980,912.32	\$970,803.89	\$964,766.34	\$970,335.69
Interest Income	\$400	\$397.39	\$11,747.21	\$11,672.86	\$11,552.57	\$11,480.72	\$11,546.99
Annual Deposit	\$9,900	\$10,093.05	\$10,289.86	\$10,490.52	\$10,695.08	\$10,903.64	\$11,116.26
Uninflated Needs (Withdrawal)	\$16,815	\$16,815	\$28,285.2	\$32,271.8	\$28,285.2	\$16,815	\$16,815
Inflated Needs (Withdrawal)	\$16,815	\$16,815	\$28,285.2	\$32,271.8	\$28,285.2	\$16,815	\$16,815
<b>Ending Balance</b>	<b>\$993,485</b>	<b>\$987,160.44</b>	<b>\$980,912.32</b>	<b>\$970,803.89</b>	<b>\$964,766.34</b>	<b>\$970,335.69</b>	<b>\$976,183.95</b>
Required Minimum Balance	\$9,525.64	\$9,525.64	\$9,525.64	\$9,525.64	\$9,525.64	\$9,525.64	\$9,525.64
Interest Rate on Balance	0.04%	0.04%	1.19%	1.19%	1.19%	1.19%	1.19%
Inflation Rate on Deposit	0%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%
Inflation Rate on Capital Needs	0%	0%	0%	0%	0%	0%	0%
RFRR Deposit / Unit / Year	\$300	\$305.85	\$311.81	\$317.89	\$324.09	\$330.41	\$336.86
Inflated Needs / Unit / Year	\$509.55	\$509.55	\$857.13	\$977.93	\$857.13	\$509.55	\$509.55

Estimate Period Recap	Total	\$/Unit
Total Deposits [all sources] to RFR Escrow	\$1,471,238	\$44,583
Years in Estimate Period	20	

### Bug Fixes

1. Fix the oops error when returning CNA to need assessor.

### Service Integration Updates (tentative schedule – Deployment to Staging Date: 3/8/2023)

N/A

**Version: v3.1.0.0**

**Effective (release) Date: 02/17/2023**

**Enhancements**

1. Flags validation: Decommission 3.0 legacy flags validation engine and introduce 3.1 flags validation. Automatically generate flags validation results based on the new 3.1 flags rules. Users can see flags validation results under the Validation tab, and no longer need to click 'Validate' button to trigger flags validation. The new 3.1 flags validation improves flags validation performance; provide more descriptive cause notes and retire component type column in validation flags view.
2. Financial Schedule and Estimate Period Recap:
  - a. Add print button gives easier access.
  - b. Provide printer friendly PDF version of Financial Schedule & Estimated Period Recap tables.
  - c. Make the UI Financial Schedule table more readable.
  - d. Users can no longer access Financial Schedule and Estimate Period Recap from Reports tab.
3. Property Insurance Schedule and Assessment Summary Reports: Generate Property Insurance Schedule and Assessment Summary Reports from Azure server and decommission all legacy Oracle reports.
4. Increase the max file upload size to 50MB for the Narratives & Attachments upload

**Bug Fixes**

1. Fix the oops error when sending CNA to partner.

**Service Integration Updates** (*tentative schedule – Deployment to Staging Date: 2/8/2023*)

N/A

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**Version: v3.0.50.0**

**Effective (release) Date: 09/16/2022**

**Bug Fixes**

1. Refactoring – Participants to address the tech. bugs from the Copy-Paste functionality on the Participants tab.
2. Refactoring – Units Inspected to address the tech. bugs from the Copy-Paste functionality on the Participants tab.
3. 'Below Grade' category in refactored Units Inspected tab; specific combination of options between Buildings, Sites, and Unit Types creating error.
4. Discrepancy completing Narrative Topic and Attachment Type steps while uploading attachments in a particular CNA (Notes & Attachment Section)

**Service Integration Updates** (*Deployment to Staging Date: 09/8/2022*)

N/A

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**Version: v3.0.49.0**

**Effective (release) Date: 06/17/2022**

**Enhancements**

1. Angular upgrade from version 7 to version 13.
2. Implemented a generic base component for the copy-paste feature.
3. Implemented Copy-Paste Feature on Sites and Unit Types components to enhance visual of the copy-pasted table with header and update font and color for improved text clarity
4. Increased the frequency of the backend batch jobs transferring uploaded documents to UCM.
5. Re-enabled csrf to prevent cross site request forgery attack.
6. Removed updateAssessmentForConvertedCna from current code. This will help with CNA e-Tool's performance when loading dashboards or searches.

**Bug Fixes**

1. Display appropriate error messages for duplicate sites and unit types, incorrect formatting, read-only feature for 'Total Buildings' field

**Service Integration Updates** (*Deployment to Staging Date: 06/09/2022*)

N/A

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**Version: v3.0.48.0**

**Effective (release) Date: 03/18/2022**

**Enhancements**

1. *CNA cleanup*: This release includes permanent deletion of soft deleted CNA after 60 days
2. *Security Enhancements*: This release includes an upgrade to the LOG4J utility to address known vulnerabilities.

**Bug Fixes**

1. Auto trimming of extra space at the end or before a text string
2. Not allow users enter repetitive data for unique columns such as (identical Unit Number, Site Name and Building Name) in Units Inspected tab when utilizing "Paste Data in" feature
3. Allow users access to reports tab of a new version of a CNA if it has not been validated
4. Email validation
5. Detection of invalid columns when users utilize "Paste Data in" feature
6. Require users to use common space comments if user selects "other" as Common Space Type

7. Allow users can enter new component without issue, with no error messages popping up until the user enters an Alternative with a different Unit of Measure than the original Component
8. Warn users "Site Name, Building Name and Unit Type" are required fields when these columns are omitted during "Paste Data in" feature.
9. Not allow warning or error messages pertaining to a unique tab to bleed over to an unrelated tab
10. Number sequence correction for Need Item of Component
11. Fix of OBIEE Nightly Report to address the incorrectly display of the submitted timestamp

**Service Integration Updates** (*Deployment to Staging Date: 03/09/2022*)

N/A

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**Version: v3.0.47.0**

**Effective (release) Date: 12/17/2021**

**Enhancements**

1. Updates to the application so that when a user creates an alternative with a different unit of measure than the original a message is displayed warning the user of a possible flag.
2. The following fields are now editable for the Assessor:
  - a. % Inflation of Capital Needs
  - b. % interest earned on R4R Balance

**Bug Fixes**

1. Fix the issue with copy and paste into the Sq Ft field. This fix allows for commas to be entered into the Sq Ft field, making it easier to copy the data from excel and other formats.

**Service Integration Updates** (*Deployment to Staging Date: 12/13/2021*)

N/A

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**Version: v3.0.46.0**

**Effective (release) Date: 12/3/2021**

**Enhancements**

1. N/A

**Bug Fixes**

1. Fixed an issue that occurs the first time a user runs a report because the application is caching information, which causes an Oooops error as it times out. Application will now automatically complete a 2<sup>nd</sup> attempt.
2. Fixed a copy/paste error that occurs when a user attempts to copy/paste non-UTC-8 characters within CNA.

**Service Integration Updates** (*Deployment to Staging Date: 11/29/2021*)

N/A

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**Version: v3.0.44.1**

**Effective (release) Date: 6/4/2021**

**Enhancements**

1. Repair Needs updates (additional columns) to replace old Legacy report
2. Repair Needs updates for quality printing
3. Printing now allows user to choose Portrait or Landscape (Helps with wide pages like Repair Needs)

**Bug Fixes**

1. Fixed Validation Ooops error when Capital Needs RY change was set to 1 (from converted Legacy eTools) and at least one component lands on the Future Needs schedule
2. Fixed existing Edited EULs on alternatives that were set to zero and causing another Validation Oooops error
3. Updated rule in Alternative form for editing Remaining Useful Life: No longer allowed to set to zero
4. Removed problematic Legacy Repair Needs report links
5. Fixed issue with Decision not “sticking” when changing from a Future Need to a Repair Need

**Service Integration Updates** (*Deployment to Staging Date: 5/31/2021*)

1. Added the following properties to the object returned from [GET /assessments/{assessmentId}/repairNeeds](#) (objects found in repairNeeds collection)
    - a. quantityUnitOfMeasure: string
    - b. unitCost: number
    - c. detailedDescription: string
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**Version: v3.0.43.1**

**Effective (release) Date: 5/14/2021**

**Enhancements**

1. Better error login messages:
  - a. "Trouble loading application and/or configuration"
    - i. If the application is broken in some way (server down, DB connection issues, etc.)
  - b. "Trouble loading user information (Roles and/or Organization Assignments)"
    - i. If the user does not have CNA eTool 3.0 roles assigned, or
    - ii. If the user does not have a CNA eTool 3.0 organization assigned (e.g. Participant Assignment)

#### **Bug Fixes**

1. Correction for Future Needs financial calculation of total cost per recommended component
  - a. Old calculation used: Component Quantity x Alternative Unit Cost
  - b. Corrected calculation: Alternative Quantity x Alternative Unit Cost
  - c. Corrected screens:
    - i. Future Needs
    - ii. Financial Schedule
    - iii. Estimate Period Recap

#### **Service Integration Updates** (*Deployment to Staging Date: 5/12/2021*)

1. If a user is not authorized (either no roles in wass, or no organization assignment), service request **will throw a proper 401** now **instead of a 500**

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#### **Version: v3.0.42.0**

**Effective (release) Date: 4/30/2021**

#### **Enhancements**

1. Financial Calculations moved from legacy system to CNA 3.0 (no material changes)
2. Creating New Version now allows copying attachments (if any)

#### **Bug Fixes**

1. None

#### **Service Integration Updates** (*Deployment to Staging Date: 4/26/2021*)

1. Added URL query param to **POST /assessments/{assessmentId}/createNewVersion**
  - Query param name: "includeAttachments"
  - Type: Boolean
  - Description: (Optional) Send true to copy attachments to the new version
  - Examples:
    - POST  
/assessments/{assessmentId}/createNewVersion?includeAttachments=true  
(attachments will be copied)



- POST  
/assessments/{assessmentId}/createNewVersion?includeAttachments=false  
(attachments will not be copied)
  - POST /assessments/{assessmentId}/createNewVersion (original POST  
unchanged, attachments will not be copied)
2. Added property to result of [GET /assessments/{assessmentId}/overview](#)
    - Property name: “hasAttachments”
    - Type: Boolean
    - Description: Will be set to true if the Assessment has at least 1 attachment.
    - Can be used when to determine to send “include attachments” when calling POST  
/assessments/{assessmentId}/createNewVersion
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**Version: v3.0.39.0**

**Effective (release) Date: 3/19/2021**

**Enhancements –External users**

1. Added Pinning and Hiding features for the Dashboard.
2. Dashboard now loads only Assessments last updated in the past 3 months (unless hidden), or pinned.
3. Initial load of the Search view will now load all Assessments exactly as the dashboard view does:
  - a. Performing a search will search across all Assessments in the user’s firm as usual.
  - b. The search result will replace the initial load of Assessments.

**Enhancements – HUD users**

4. Added Pinning feature for Search.
5. Added full name and middle initial to dropdown when assigning/reassigning Assessments (to help with users that have similar first and last names).

**Enhancements – All users**

6. Enhanced search types that use multiple keywords to better search and rank results:
  - a. Also enhanced handling of special characters (e.g., dash and comma).
  - b. Results are now initially ordered by rank.
7. Create New Version now copies flags to the new Assessment:
  - a. Flag responses/comments will also be preserved (when appropriate)

**Bug Fixes**

1. Buildings: Ensure Fair Housing Act displays correctly in read-only mode (previously showed as “No” while in read-only mode)

**Service Integration Updates (Deployment to Staging Date: 3/17/2021)**

1. New endpoints for pinning/unpinning CNAs for the currently logged in user:

- a. **PUT /dashboards/pinAssessments**
      - i. Takes a body with string Array of Assessment ID GUIDS
      - ii. Returns 204 No Content
    - b. **PUT /dashboards/unpinAssessments**
      - i. Takes a body with string Array of Assessment ID GUIDS
      - ii. Returns 204 No Content
  2. New endpoints for hiding/unhiding CNAs for the currently logged in user:
    - a. **PUT /dashboards/hideAssessments**
      - i. Takes a body with string Array of Assessment ID GUIDS
      - ii. Returns 204 No Content
    - b. **PUT /dashboards/unhideAssessments**
      - i. Takes a body with string Array of Assessment ID GUIDS
      - ii. Returns 204 No Content
  3. The results of calling **GET /dashboards/my** and **POST /dashboards/search** includes these new properties:
    - a. **searchScore** (number) The search ranking score based on search terms. Results are now returned in rank order
    - b. **isPinned** (boolean) If this Assessment is pinned to the dashboard
    - c. **isHidden** (boolean) if this Assessment is hidden from the dashboard

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**Version: v3.0.38.0**

**Effective (release) Date: 03/05/2021**

### **Enhancements**

1. Copy and Paste updates:
  - a. Copy and Paste has been added to Unit Types
  - b. Alternatives now has the Alternative Name column as the first column (also updated in Export Excel file)
2. Flag updates:
  - a. DV-284 is now a warning
  - b. DV-017, DV-018, and DV-019 have been retired
3. Email receipts now contain the name of the property
4. Friendly message for user when attempting to run reports if there are no Sites, Buildings, and Units in the Assessment
5. No longer allowing an Assessment to be submitted to HUD if it has any unused Unit Types
6. Recommendation/Decision: Added "Other" option for "Relevant Accessibility Statue" dropdown menu, in addition to the existing ADA, Fair Housing Act and UFAS choices.

### **Bug Fixes**

1. Cleaned up some copy/paste bugs for Narratives.
2. Updated existing ill-formed RAD-PIC numbers to allow Create New Version and Submit to HUD.

3. Parking: Fixed Oooops error when adding accessible carport spaces without an accessible open space value.

### **Service Integration Updates** *(Deployment to Staging Date: 2/26/2021)*

1. Downloading the Property Insurance and Assessment Summary Reports will now throw a bad request (400) if there are no Units in the Assessment
2. New /batch endpoints for Unit Types:
  - a. **GET /assessments/{assessmentId}/unitTypes/batch**
    - i. Returns **UnitTypeDetailList** object:
      1. canEdit: Boolean
      2. list: Array of **UnitTypeDetail** objects, the same as **GET /assessments/{assessmentId}/unitTypes/{unitTypeId}**
  - b. **POST /assessments/{assessmentId}/unitTypes/batch**
    - i. Takes a body with Array of **UnitTypeDetail** objects, the same as **GET /assessments/{assessmentId}/unitTypes/{unitTypeId}**
    - ii. Returns 200 OK (no body)

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**Version: v3.0.37.0**

**Effective (release) Date: 2/19/2021**

### **Enhancements**

1. When using the “Import from CNA” feature, any items being re-imported from the same CNA will now overwrite the existing item (as opposed to before when it would ignore any already imported items)
2. For Needs Assessors acting as a partner, they will now be able to edit the CNA Summary section when they are in possession.
3. The search screen will now remember your search criteria and/or filters when navigating back and forth to CNAs
4. A Refresh button has been added to the Dashboard and Search screens which will re-retrieve your most up-to-date CNAs (works faster than refreshing the browser window).
5. Needs Assessors that have created a new version of a CNA originated by a Lender, can now delete that CNA (as long as they are in possession) (this is also retro-active, meaning if they have done this in the past, they can now delete)
6. Parking screen has been simplified to remove confusion about where to adding/removing unit types. All parking info is added in the Units & Common spaces screen now, and can be viewed and updated on the parking screen.

### **Bug Fixes**

1. Updating a utility rate will now re-calculate any Component and Alternative TCOs that were only incorrect in the Excel export (i.e. the UI has always showed the correct TCO)

### **Service Integration Updates**

None

*Staging Deployment Date for Testing: 2/15/2021*

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**Version: v3.0.36.0**

**Effective (release) Date: 2/8/2021**

### **Enhancements**

1. If required, validation is now automatically performed when opening Financial Schedule, Future Needs, Reports, or requesting to export to Excel.
2. In Utility Types and Rates, the utility Rate per unit was upgraded to 5 decimal places
3. Enhanced confirmation message when deleting a CNA
4. Decisions have been added to the Excel export
5. Dropdowns have been adjusted to better show all text if values are long (e.g. Site dropdown in Buildings)
6. Future Needs: The inflated needs total row has been moved above uninflated to better match the data
7. Search: The "Legacy Assessment ID" search type has been removed
8. Assessment Summary Report now lets users know to view Narratives in the CNA 3.0 application

### **Bug Fixes**

1. Dates now work properly (with many common formats) when pasting using the copy/paste feature (e.g. Building Permit Date in Buildings)
2. Fixed issue with Units Inspected causing Oooops error if Building had .5 floors
3. Fixing Validation error when Assessment had a PHA Participant
4. Fixed issue with multiples of the same Participant getting imported when using "Import from CNA" feature over and over again
5. In Components, now ensuring we require notes if Assessed RUL is changed
6. No longer allowing negative parking values in Units and Common Spaces
7. Ensuring that default values are reset when changing specific program types in CNA Summary

### **Service Integration Updates**

1. Created new endpoint: **GET /assessments/{assessmentId}/isValidationRequired**
  - a. This returns a Boolean indicating if the CNA has been altered enough to require re-validating
  - b. Recommended to check before pulling:
    - i. Financial Schedule
    - ii. Future Needs
    - iii. Reports
    - iv. Excel Export
2. Added **decision** boolean to the request object when exporting to Excel: **POST /assessments/{assessmentId}/export**

- a. Use this to request that Decisions get added to the Excel output
3. Added **componentName** and **alternativeName** to the Decision Detail object when **GET/PUT/POST** with **/assessments/{assessmentId}/decisions\***
4. **buildingStories** changed from int to number (now includes decimals) for **GET /assessments/{assessmentId}/unitsAndCommonSpaces**

*Staging Deployment Date for Testing: 2/1/2021*

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**Version: v3.0.35.0**

**Effective (release) Date: 1/25/2021**

### **Enhancements**

1. Common Spaces: Update to ensure parking fields are more clearly marked
2. Enhanced speed of loading the Validation Tab and various sections (Flags, Repair Needs, Future Needs, Financial Schedule)
3. The Excel export for Future Needs & Repair Needs now includes comments from the Recommendation/Decision

### **Bug Fixes**

1. Better warnings in Copy/Paste
  - a. Buildings when Site Name is not recognized
  - b. Recommendations when Component or Alternative names are not recognized
2. Rule updates/fixes
  - a. Ensure no unacceptable filename characters in file attachment uploads
  - b. Decision: If "When" = "End of Cycle", Location is now optional (matches Recommendation now)
  - c. Unit: User not allowed to enter 0 (zero) for number of units (was causing downstream issues)
  - d. Better protection in Participants for the CNA Summary Current Owner/Purchaser (not allowed to delete or change role from Participants. Please edit this user from the CNA Summary page)
3. UI cleanup
  - a. "Import From a CNA" pop-up cleanup
  - b. Repair Needs now has better management of extra wide data and vertical scrolling
  - c. Counts on the Validation tab sidebar always show correctly now
  - d. User names displayed throughout the app now will display as "LastName, F."
  - e. Names listed in the Assign Reviewer pop-up are now alphabetized
  - f. Wider dropdown in Unit section to allow full view of Unit Type
  - g. Dashboard/Search results header sorting fixes (Dates, lower case vs upper case)
4. Printing
  - a. Printing of Repair Needs has been enhanced
5. Miscellaneous
  - a. Apostrophe (and other special characters) now allowed in search
  - b. Repair Needs: "Location" in both the UI and Excel export now shows from the Recommendations/Decision instead of the Component

- c. The warning for a missing FHA # or Property ID now shows correctly (was swapped)

### **Service Integration Updates**

1. The Validation Tab now uses a faster and more enhanced validation overview to display all counts in the side bar (see GET /assessments/<ID>/validationOverview)
2. Request for getting Flags is faster
3. Request for getting Repair Needs is faster
  - a. Repair Needs detail objects now contain comments from Requirement/Decision
4. Request for getting Future Needs is faster
  - a. Future Needs detail objects now contain comments from Requirement/Decision
5. Units are no longer allowed to have 0 (zero) number of units (was causing downstream issues)
6. Search now uses a POST call instead of a GET (instead of using URL params, we now use a body payload that contains an object with searchType, parameterOne, and parameterTwo)

*Staging Deployment Date for Testing: 1/18/2021*