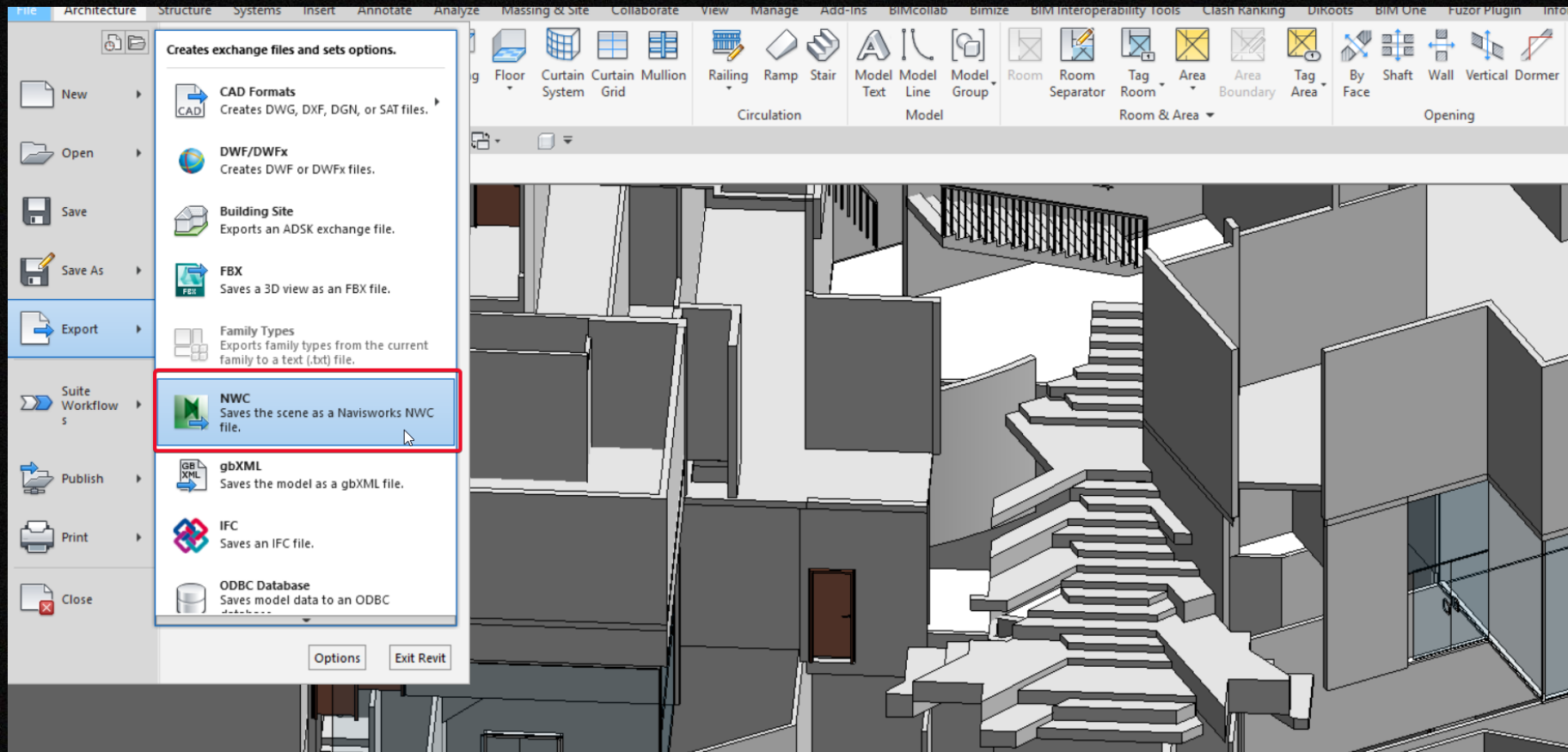# NCID

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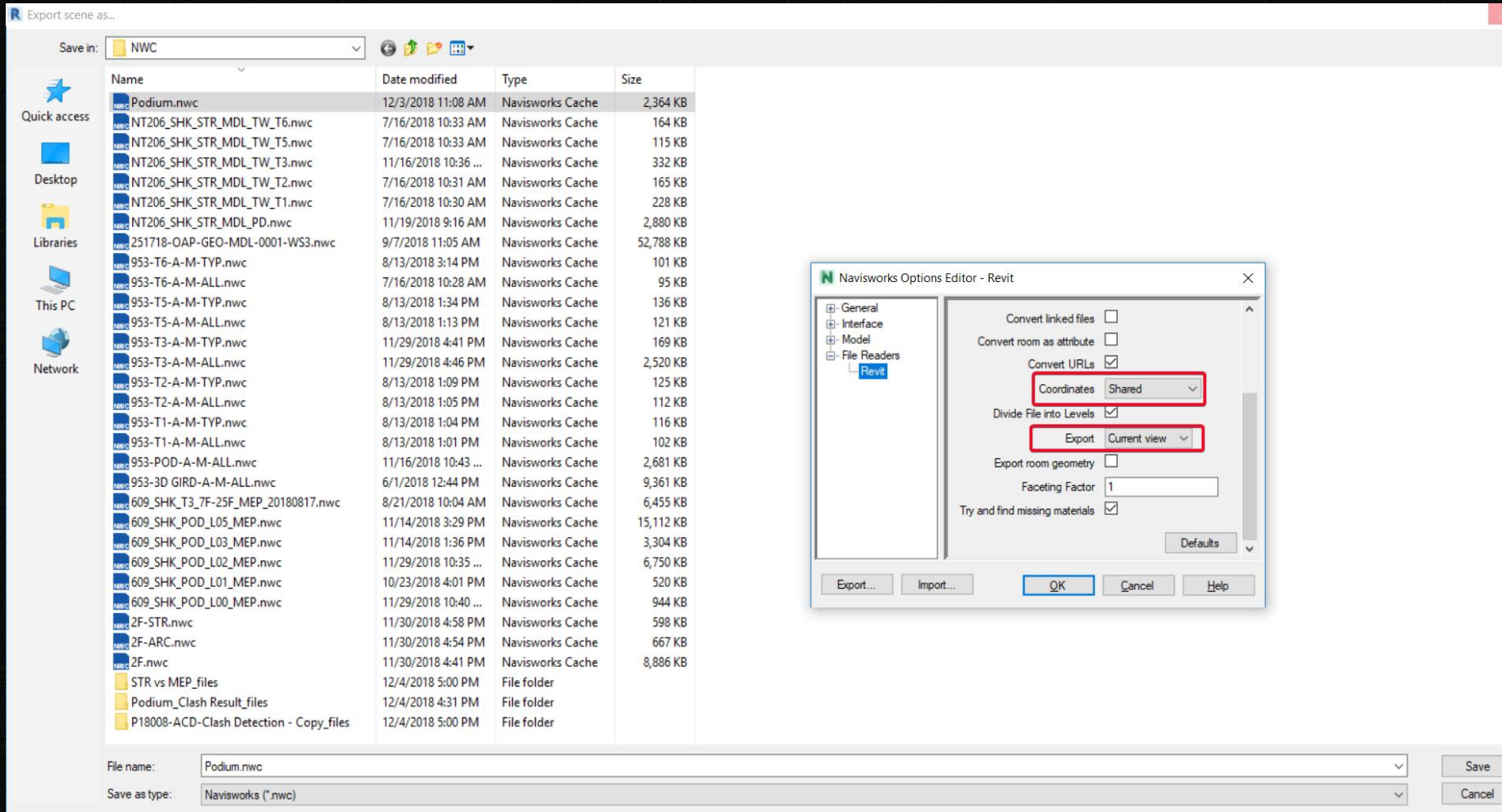Product Feature

Detection

Export Revit. file to NWC
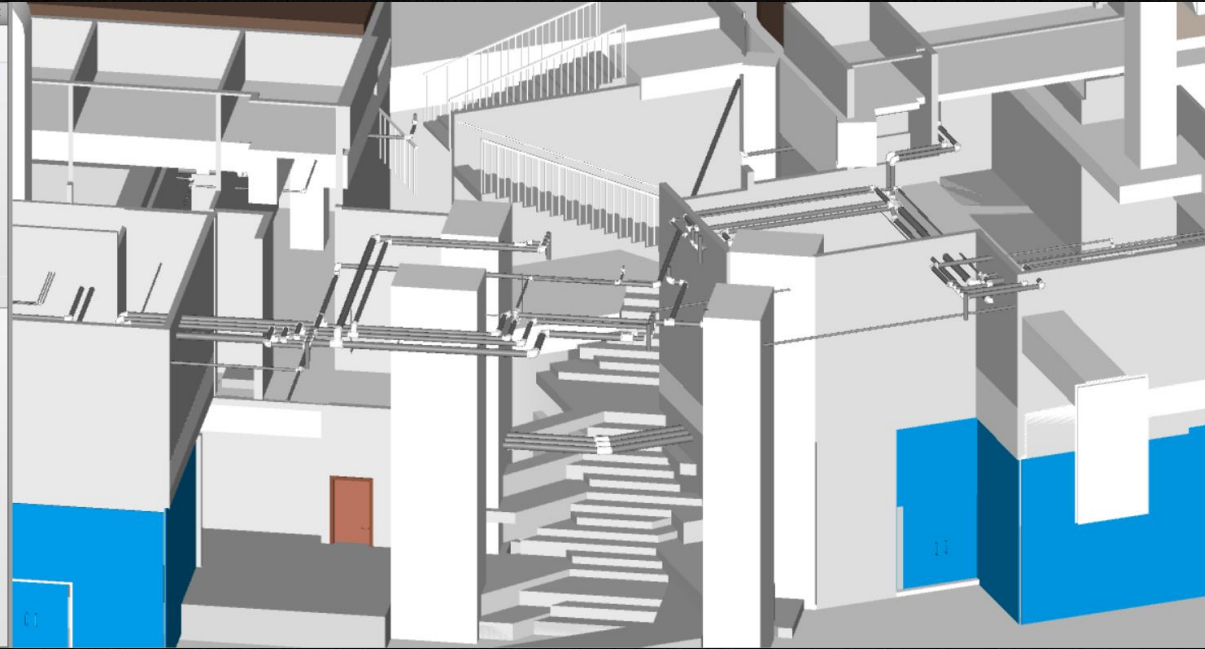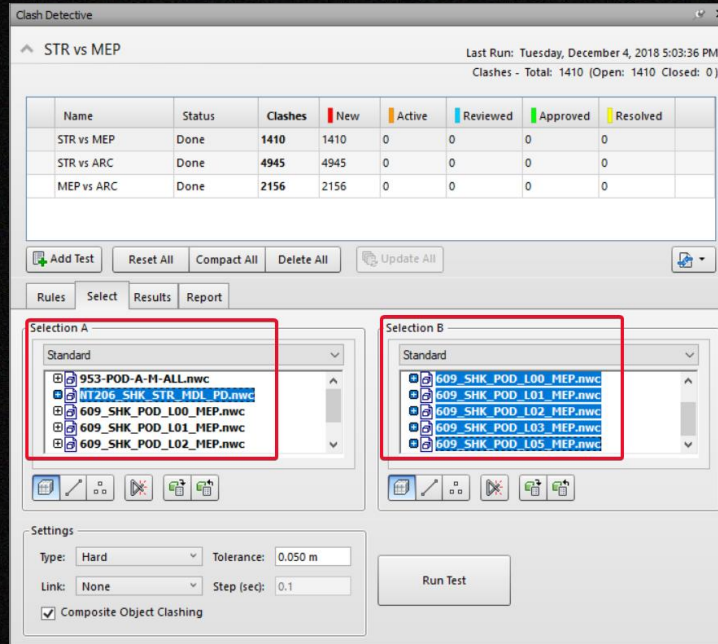**To implement the clash detection in Navisworks, model file export from Revit file to NWC at the beginning.**

Detection

NWC Setting
To export the model from Revit file to NWC, setting like coordinates and view should be set properly.

Detection

Cross Discipline Clash Detection in Navisworks
Implement Clash detection from different discipline model file in Navisworks. Set the tolerance and the type of clash detection before run the test.
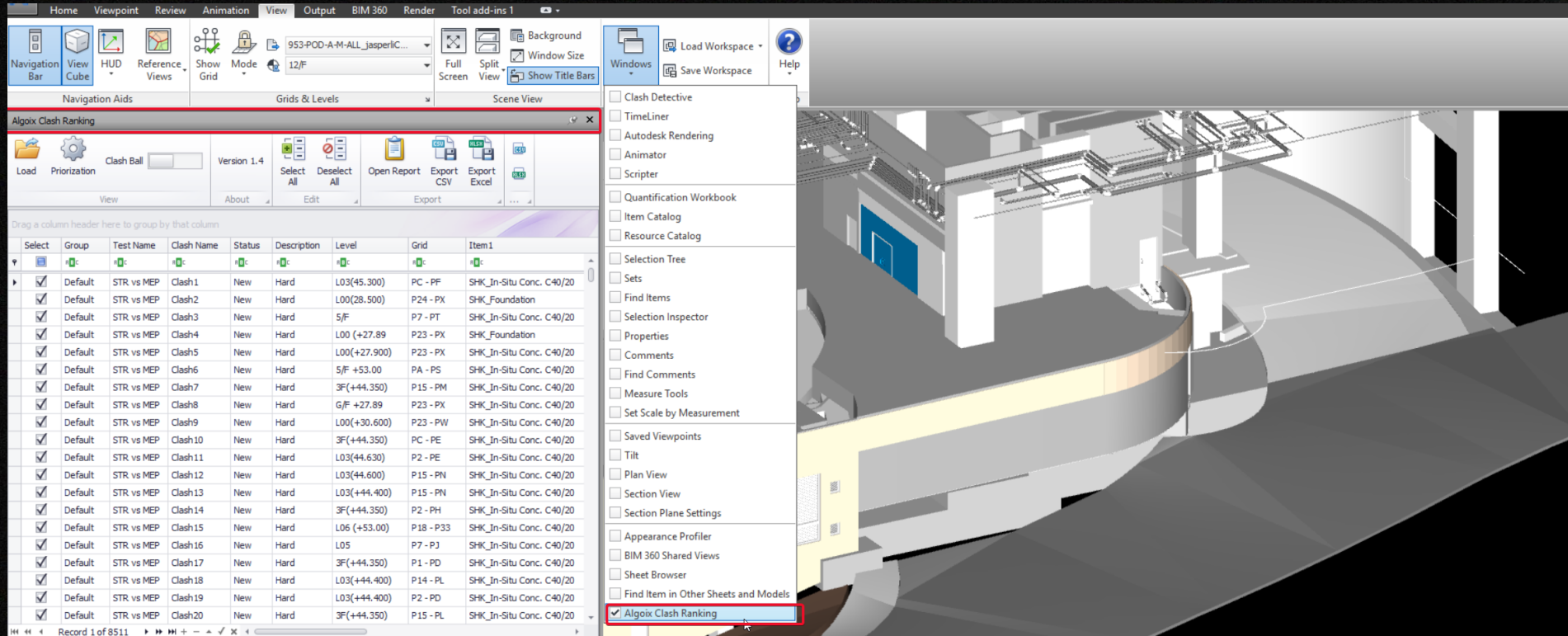
Detection

Clash result in Navisworks
Run the clash result in Naviswork before loading into the Algoix Clash Ranking Plugin.
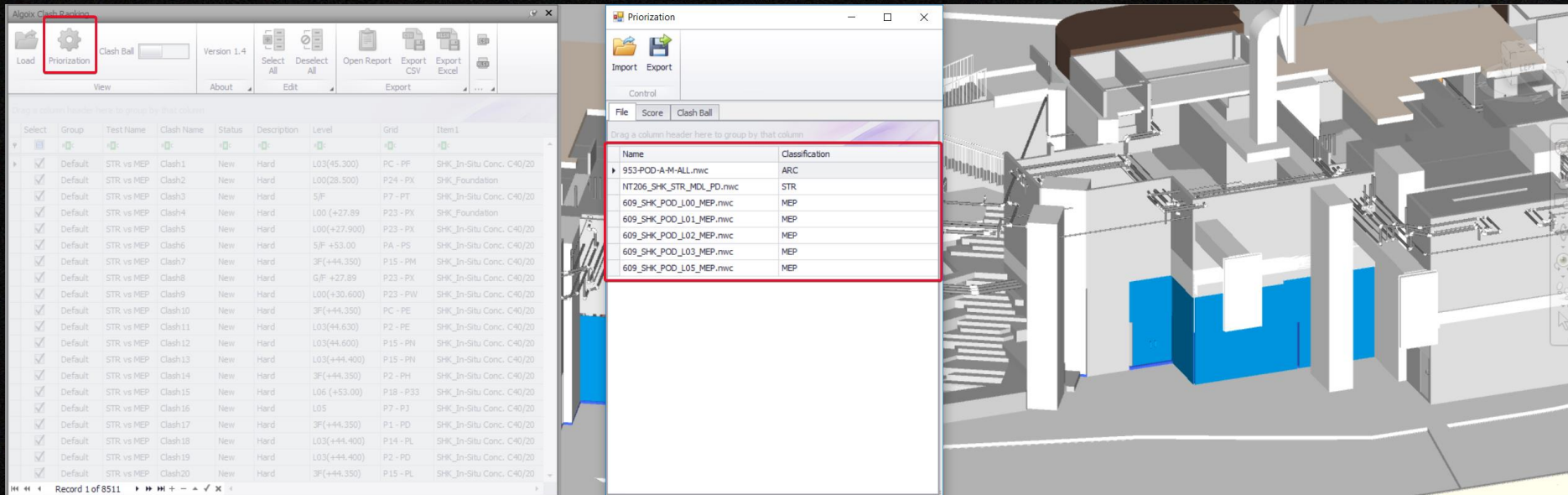
Detection

Algoix Clash Ranking Plugin
Load the Clash Result from Naviswork Clash Detection to Algoix Clash Ranking Plugin to do prioritization and create clash marker.
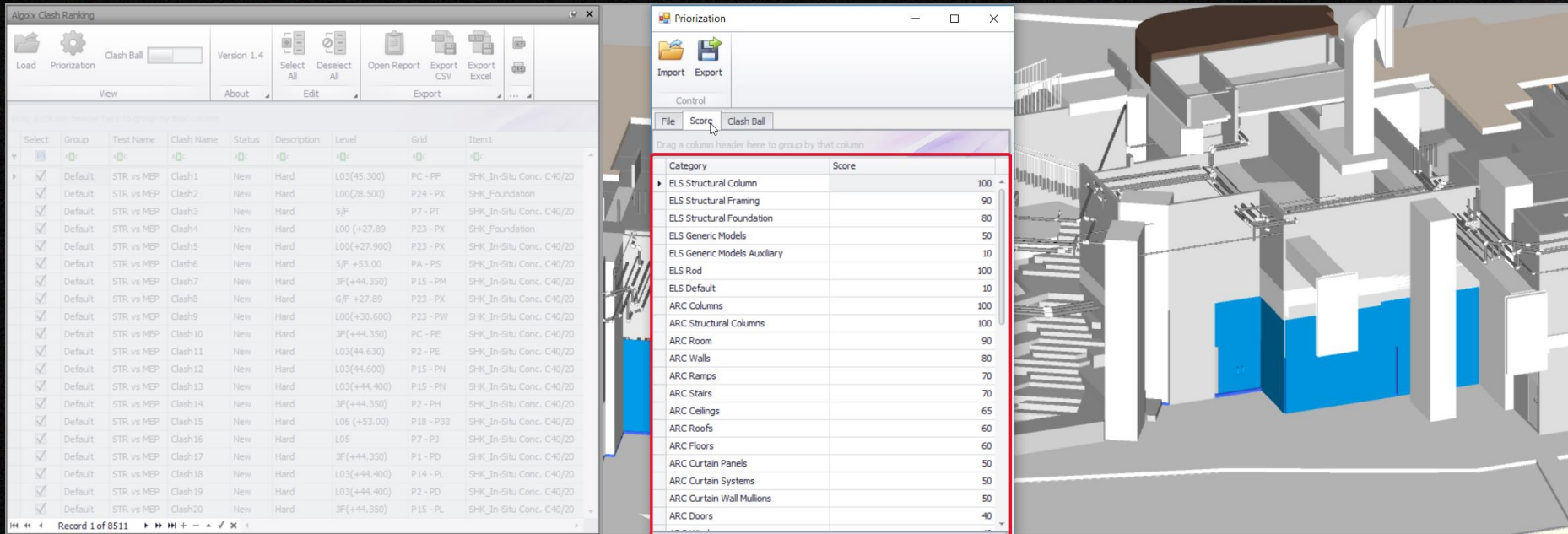
Detection

File Identification
Identify the file for mapping the elements in different model file from different discipline within plugin in Navisworks.

Prioritization

Scoring
Define the score of element to define the significant of the elements within plugin in Navisworks. The elements of two different element clash each other, the score of the test will become high.

Prioritization

Display the Clash Matrix Result in Clash Ranking
Clash matrix result in the plugin shows test name, clash no., status, location of clash, category and element ID of clash items and total score of clash matrix.

ADVANCED CONSTRUCTION INFORMATION DEVELOPMENT

Visualization

CLASH MARKER generated by Algoix Clash Ranking
Clash Marker generated by Clash matrix result and displayed in model that indicated the location of the clash items. Clash Marker in red represented the major clash items in high score. Clash Marker in blue or green ball represented minor clash items.

Visualization
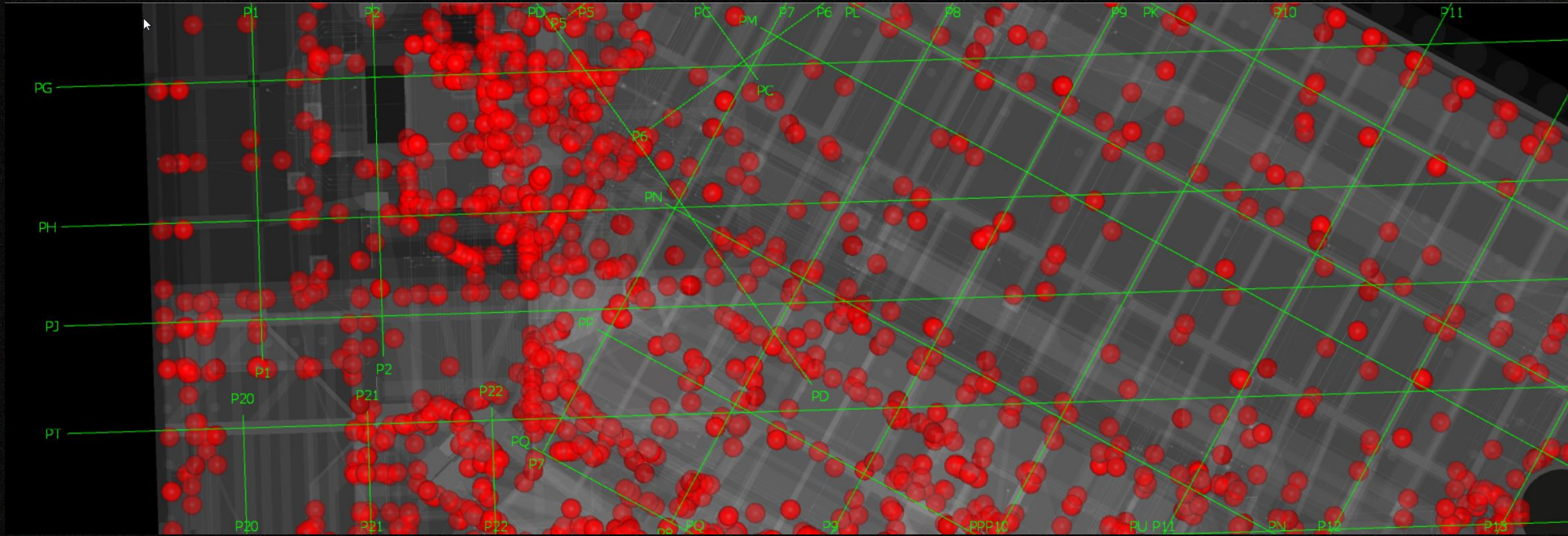
Model in Transparency

Set the model into transparency in Navisworks so that the user can clear identify which level or gridline contains most major clash.

Visualization

Export Clash Result to CSV Format

Transfer the clash result from Navisworks to Revit model file, the clash result generated to CSV File from Algoix Clash Ranking to Revit's plugin.

Visualization

Export Clash Result to Excel Format
Besides CSV. File, clash result can be export to excel format for analysis as well.

Visualization
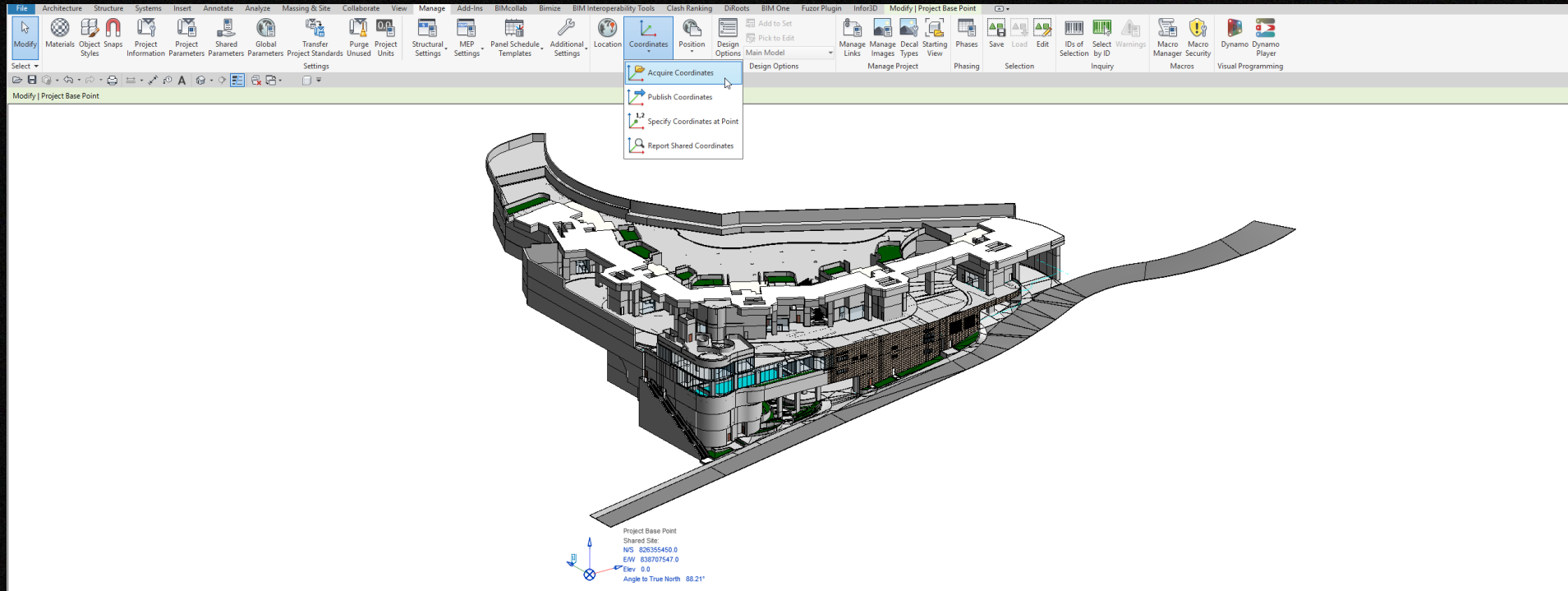
Set up Correct Coordinate in New Revit file

Before generating the clash ball to Revit file, a new file should be set up with correct coordinate for the model. Link the model into new file, coordinate of new file acquired the coordinate of that model file.

Visualization
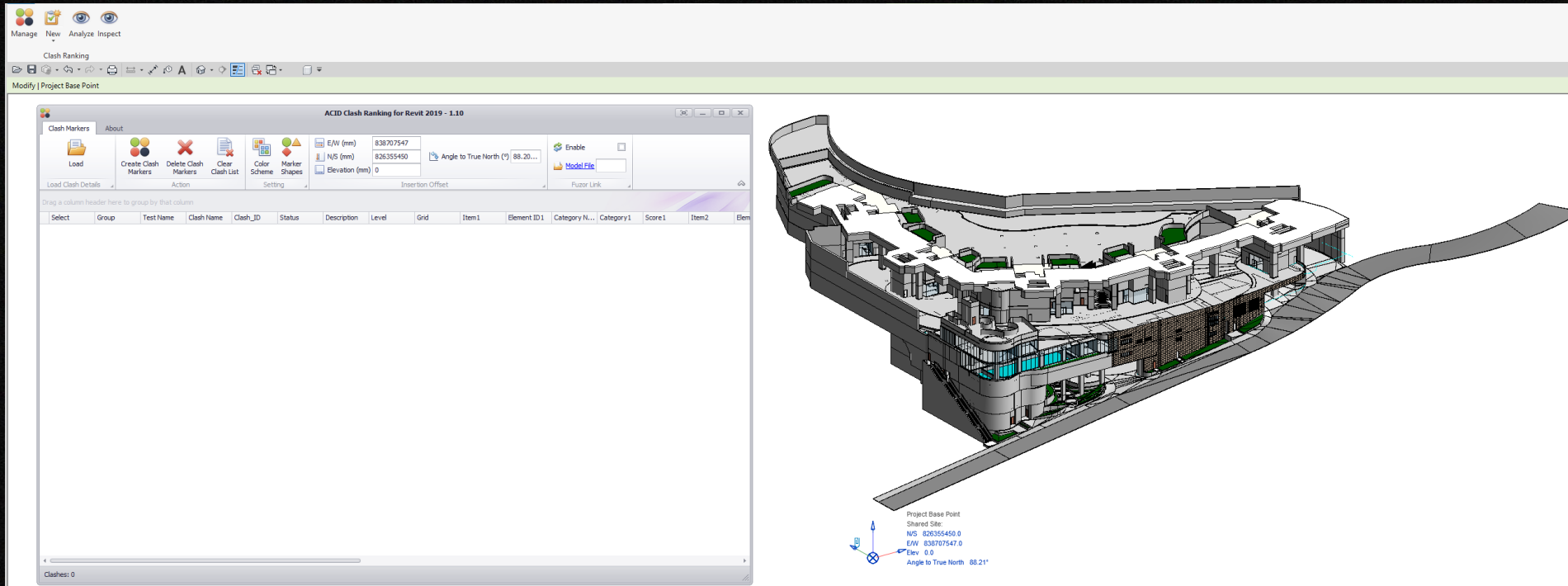
Set up Correct Coordinate in New Revit file

Before generating the clash ball to Revit file, a new file should be set up with correct coordinate for the model. Link the model into new file, coordinate of new file acquired the coordinate of that model file.
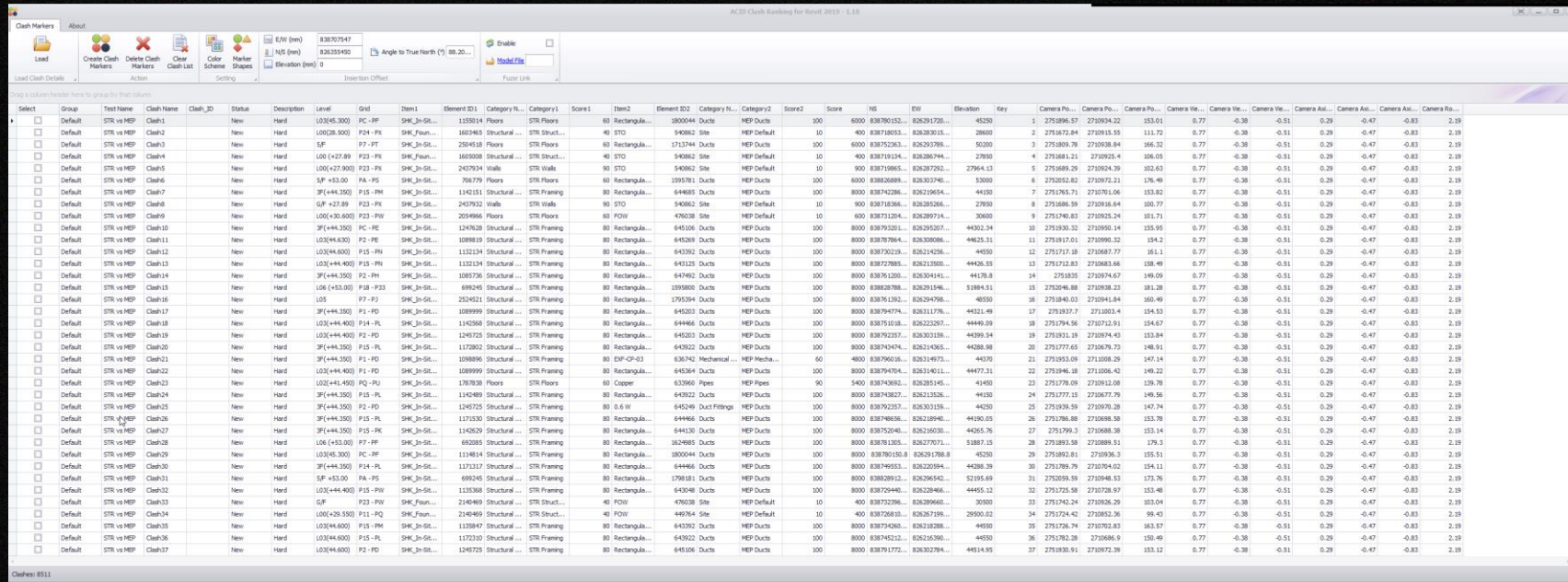
Visualization

Clash result from Navisworks to Revit file
Load the clash result by CSV that generated from Navisworks, clash result can be displayed in Revit clash ranking plugin as well.

ADVANCED CONSTRUCTION INFORMATION DEVELOPMENT
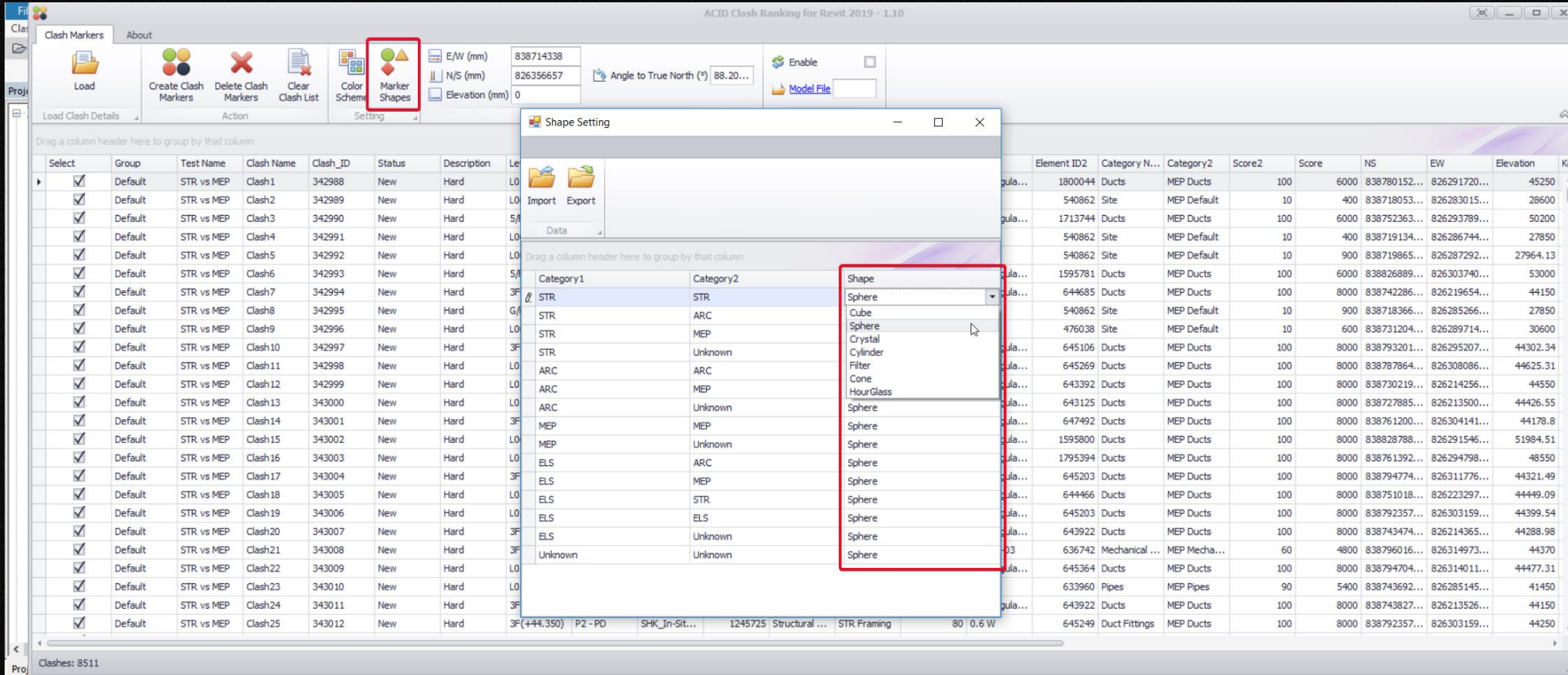
Visualization

Clash Marker Shape Setting

Shape setting can be set as different shape including sphere, cube, crystal, cylinder, filter, cone and hourglass. Different clash matrix can be represented by different shape.

Visualization

Clash Marker Size, Color and Score in Revit (Default –red clash ball and sphere)
Size, material color and score range of Clash Marker can be defined again in Clash Ranking for Revit.

Visualization

Clash Marker production process

Press "Create Clash Marker" button, Clash marker will be generated.

Visualization
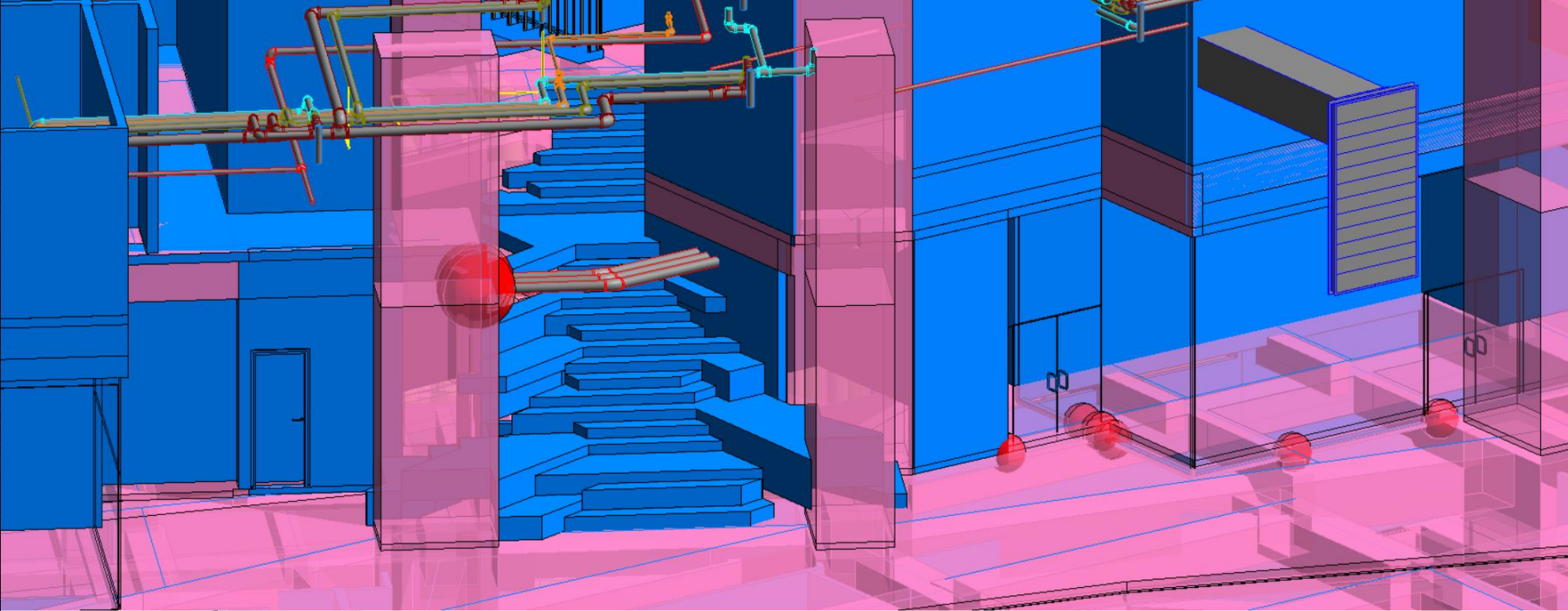
Model identified by color
After generated all the clash marker, link all discipline Revit Model into the new file including ARC, STR, MEP and ELS model file and use different color to identify the model.

Visualization

Sushi drawing and clash tagging (automate 360 degree tagging around the clash ball in the white area)
To separate the model by different view, sushi drawing is produced by separating the model into different level. Tagging the clash marker so that the clash items can be show immediately.

Reporting

Clash196

STR Columns
MEP Pipes

Clash204

STR Columns
MEP Pipes
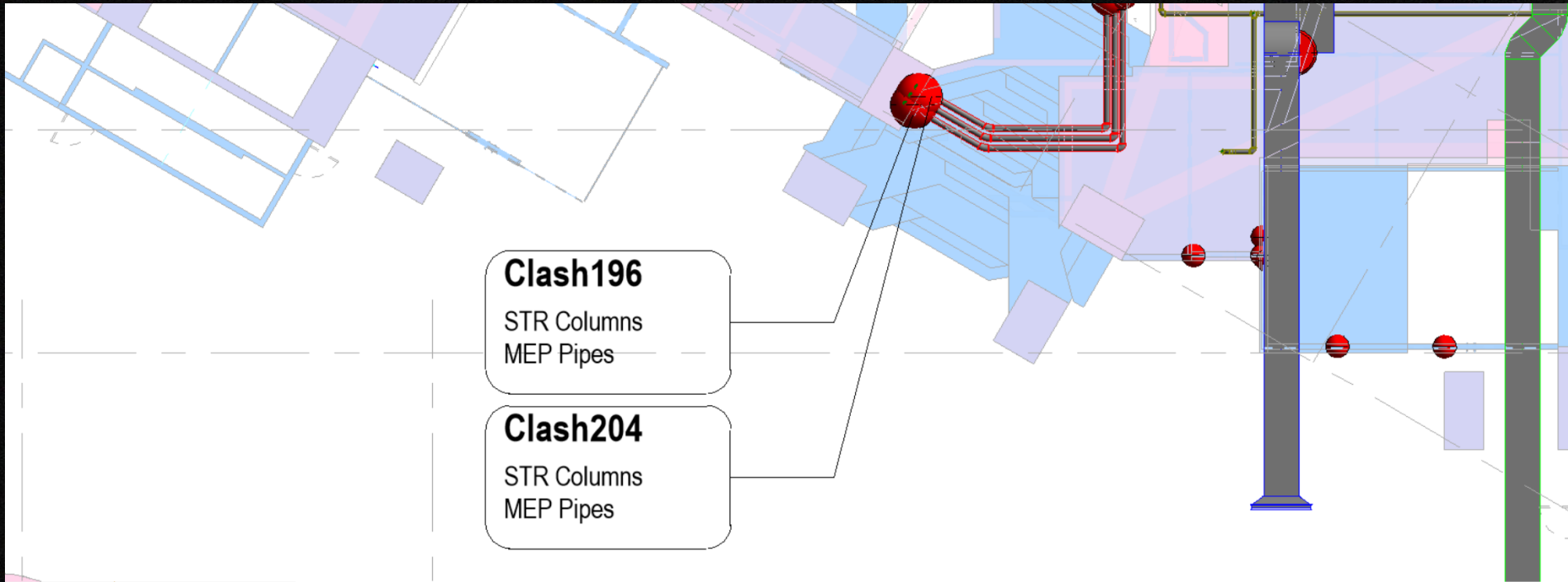
Floor Plan
In order to let all the parties know the location of clash, floor plan with gridline can be shown the location of clash.

Reporting

Part Plan
Part plan with room tag can carry out the clash in which room.

Reporting

3D View of clash

In the 3D view of clash, 3D gridline can show the location of clash. Tag can show the clash number and clash items in the view.

Reporting

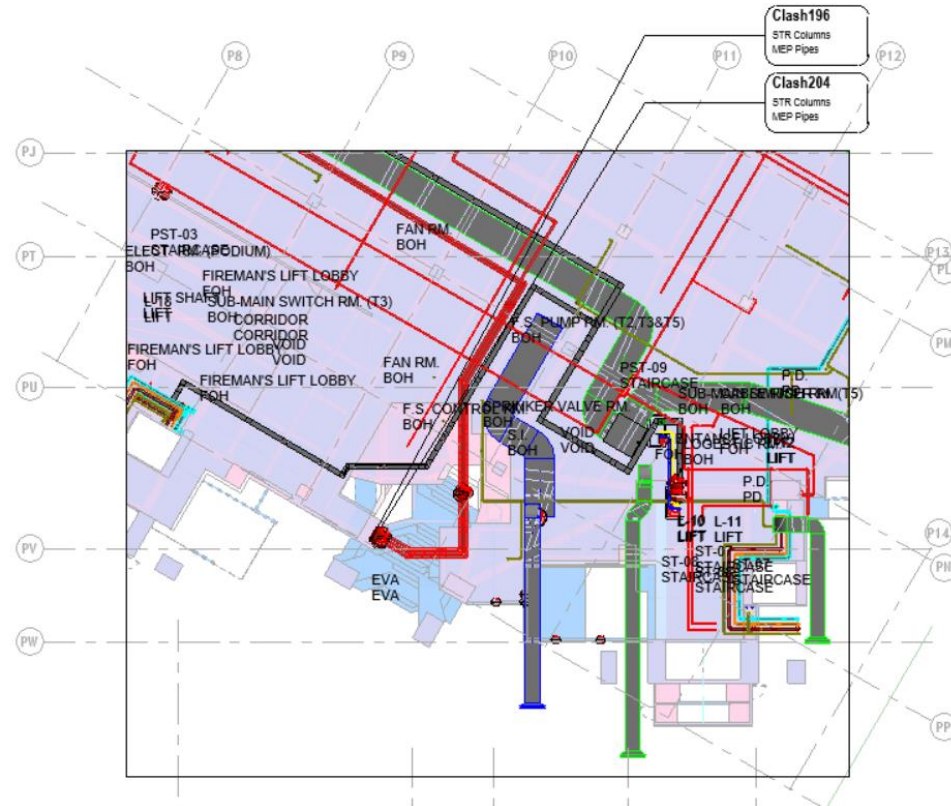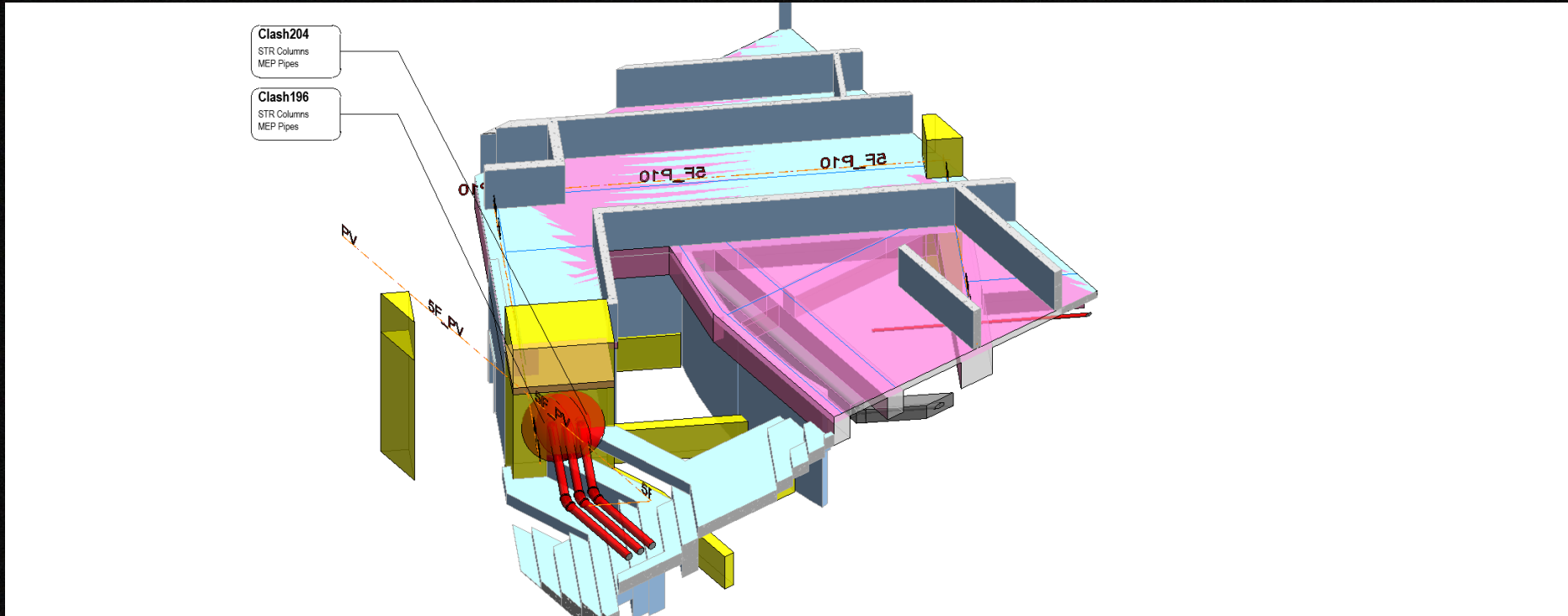|												
				BCM18 - STR vs MEP								
Test Name	Clash Name	Category 1	Category 2	Category Name 1	Category Name 2	Level	Grid	Designer Attention	Issue	Designer Follow Up Action	Action Party to Amend	
STR vs MEP	Clash2	STR Framing	MEP Ducts	Structural Framing	Ducts	5/F +53.00	T2.F - T2.3	Y				
STR vs MEP	Clash3	STR Framing	MEP Ducts	Structural Framing	Ducts	L03(45.300)	PC - PF	Y				
STR vs MEP	Clash4	STR Framing	MEP Ducts	Structural Framing	Ducts	L05	P12 - PN	Y				
STR vs MEP	Clash5	STR Framing	MEP Ducts	Structural Framing	Ducts	5/F	P7 - PP	Y				
STR vs MEP	Clash6	STR Framing	MEP Ducts	Structural Framing	Duct Fittings	L05	P17 - P33	Y				
STR vs MEP	Clash7	STR Framing	MEP Ducts	Structural Framing	Ducts	5/F	T1.E - T1.1	Y				
STR vs MEP	Clash9	STR Framing	MEP Ducts	Structural Framing	Ducts	5/F	T1.D - T1.3	Y				
STR vs MEP	Clash10	STR Framing	MEP Ducts	Structural Framing	Ducts	L05	PN - PV	Y				
STR vs MEP	Clash14	STR Floors	MEP Ducts	Floors	Ducts	5/F	P7 - PP	Y				
STR vs MEP	Clash55	STR Framing	MEP Ducts	Structural Framing	Ducts	L05	P2 - PG	Y				
STR vs MEP	Clash100	STR Framing	MEP Ducts	Structural Framing	Duct Fittings	5/F	P7 - PP	Y				
STR vs MEP	Clash111	STR Framing	MEP Ducts	Structural Framing	Ducts	L05	P12 - PV	Y				
STR vs MEP	Clash159	STR Framing	MEP Ducts	Structural Framing	Duct Fittings	L05	PP - PV	Y				
STR vs MEP	Clash196	STR Columns	MEP Pipes	Structural Columns	Pipes	L05	PQ - PV	Y				
STR vs MEP	Clash204	STR Columns	MEP Pipes	Structural Columns	Pipes	L05	PQ - PV	Y				
STR vs MEP	Clash209	STR Framing	MEP Ducts	Structural Framing	Ducts	5/F	PD - PG	Y				

STR vs MEP: 16
Grand total: 16

Generic model Schedule
As Clash Marker is generic model, generic model schedule shows the clash number, category and locations of the clash. The schedule can be uploaded to the platform for parties to fill in feed bask as well.

Reporting

Clash Reporting
Sheet is divided into four parts including floor plan, part plan, 3D view and generic model schedule. Clash location can be shown clearly in the report.
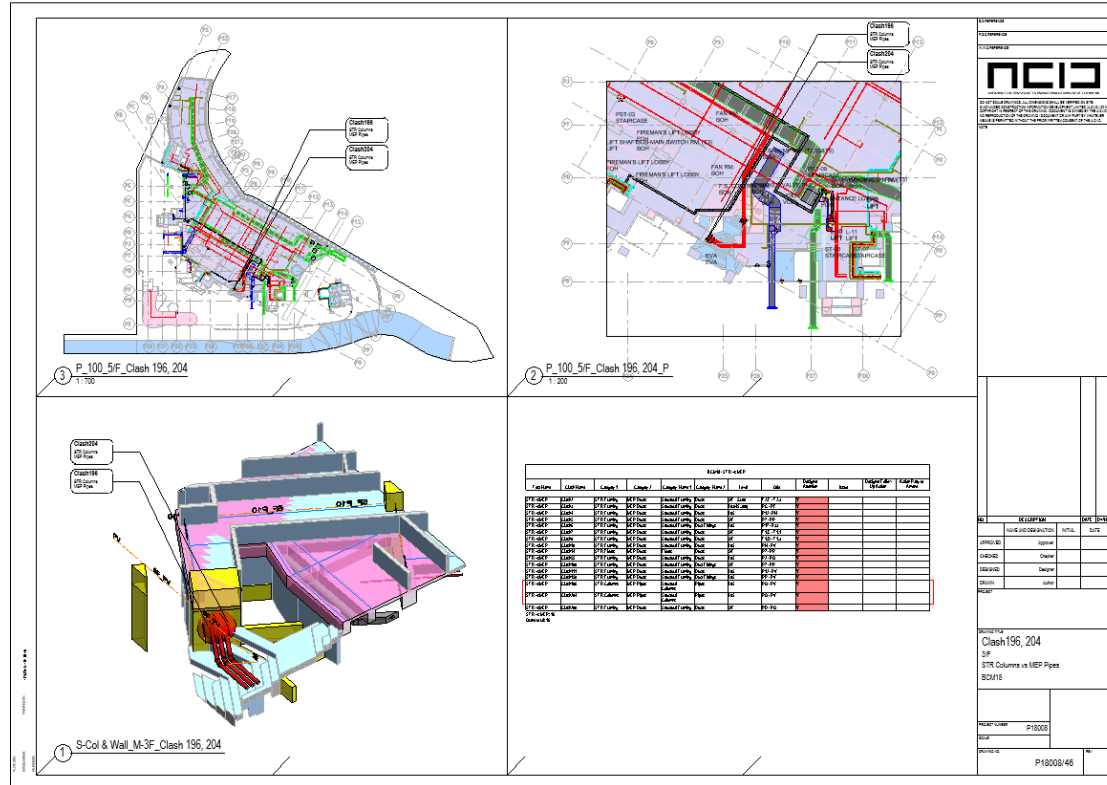
Elimination
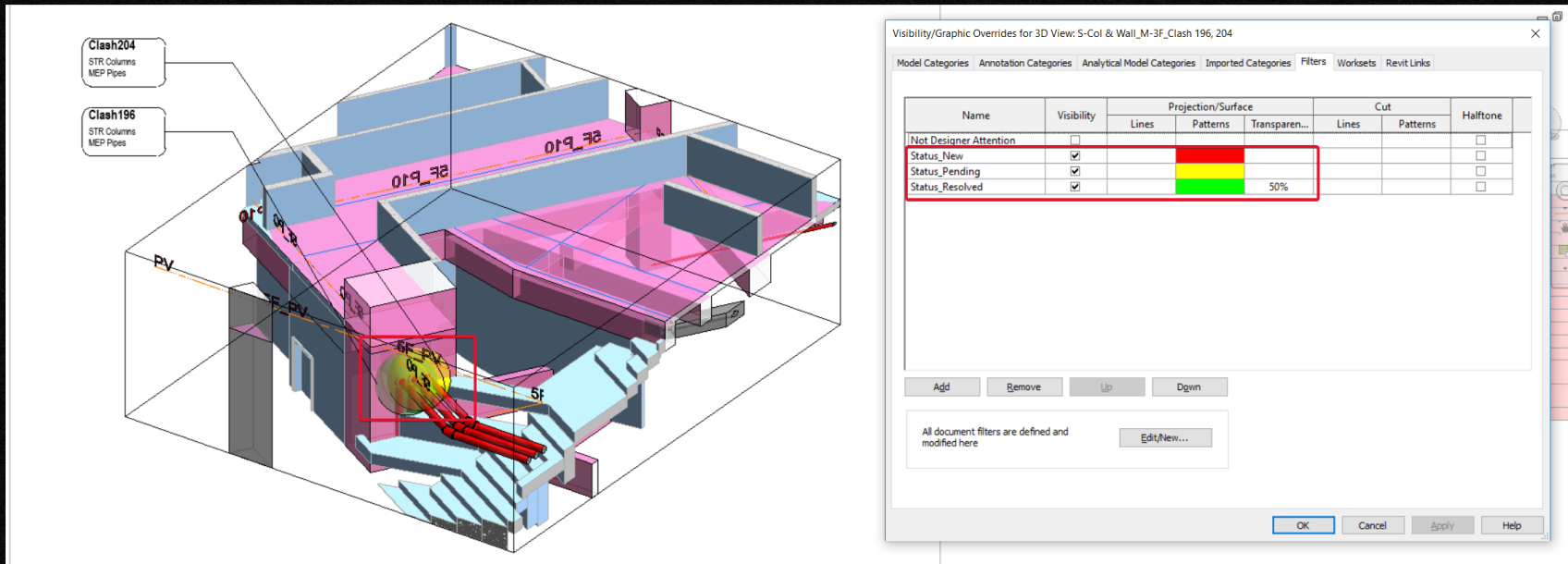
Clash Elimination
Change the status of clash and resolved the clash

THANK YOU !