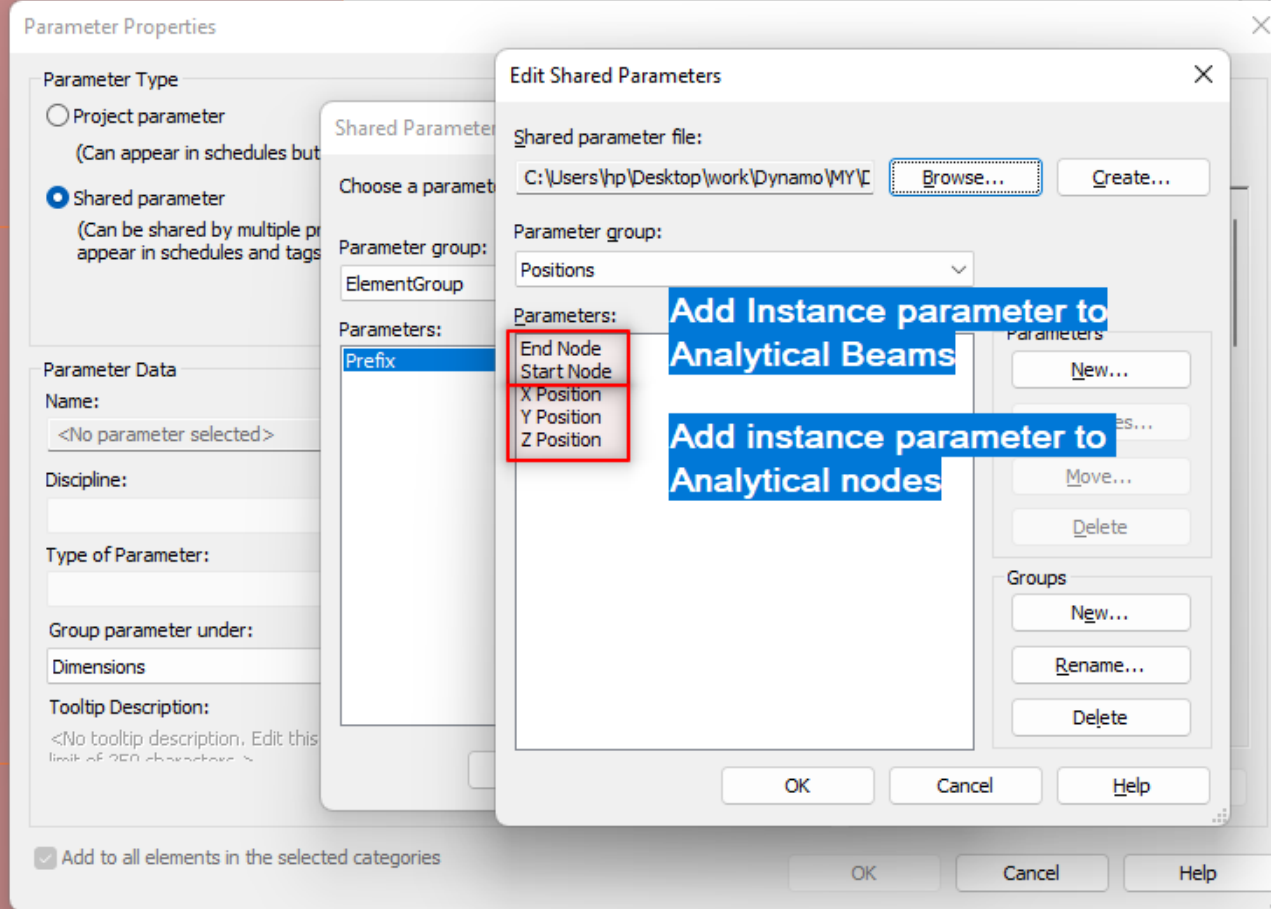
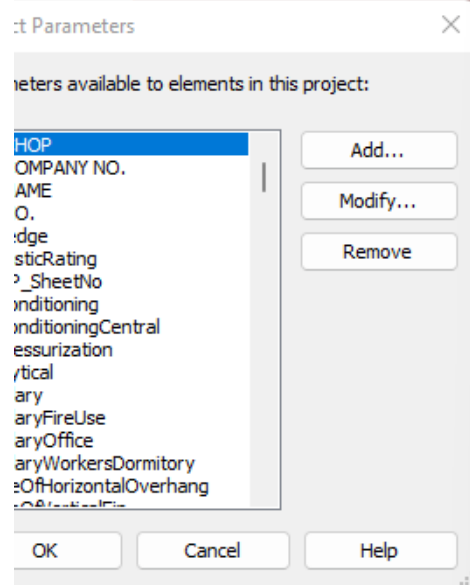


# ANALYTICAL MODEL CHECK



Add "AnalyticalNodePosition and StartEndNodeExtractionOf AnalyticalBeam" as project parameters in Model

Properties

Type

End Node 9  
Start Node 10

STRU\_3D\_Model

3RD STOREY\_Analytical

2ND STOREY\_Analytical

Dynamo Player

Filter...

STEP 1\_EXTRACT COORDINATES OF ALL ANALYTICAL NODES\_SAME ORDER  
 Run completed

STEP 2\_EXTRACT BEAM START AND END NODES  
 Run completed

Run both scripts.

revit2021\_to etabs\_SWAMI\_VISHWA.rvt

Project Browser - revit2021\_to etabs\_SWAMI\_VISHWA.rvt

Views (ECAS\_Submission\_C...)


???


Structural Plans


STRU\_FE\_South

We get the start and end node number for all analytical Beams


Properties



Analytical Nodes (1)  Edit Type

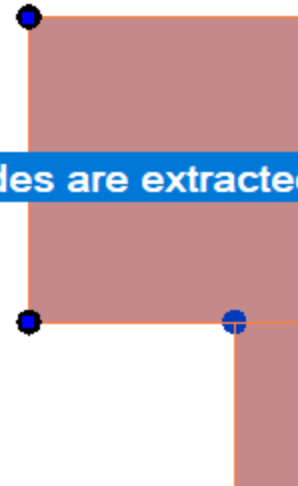
Structural 

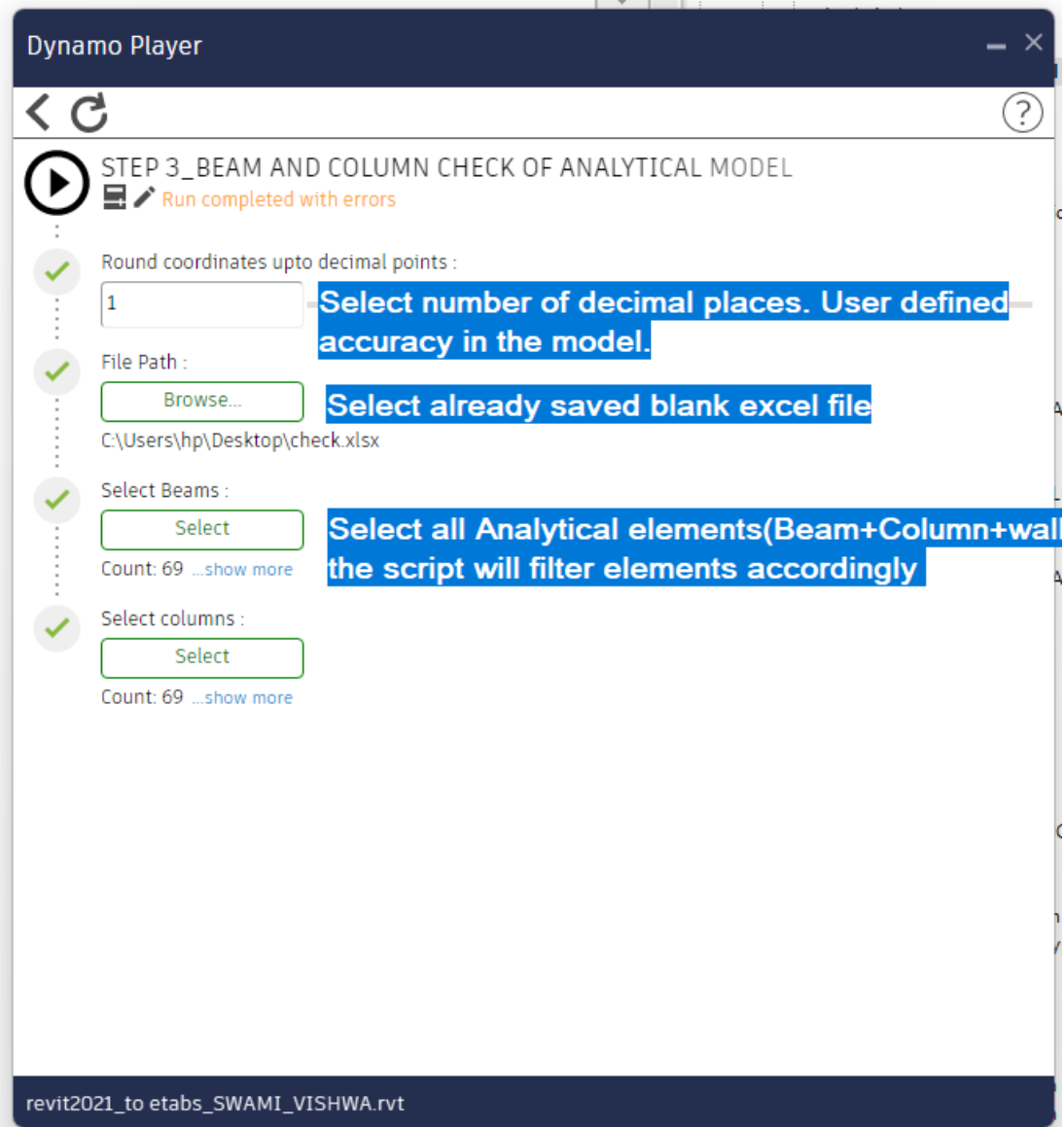
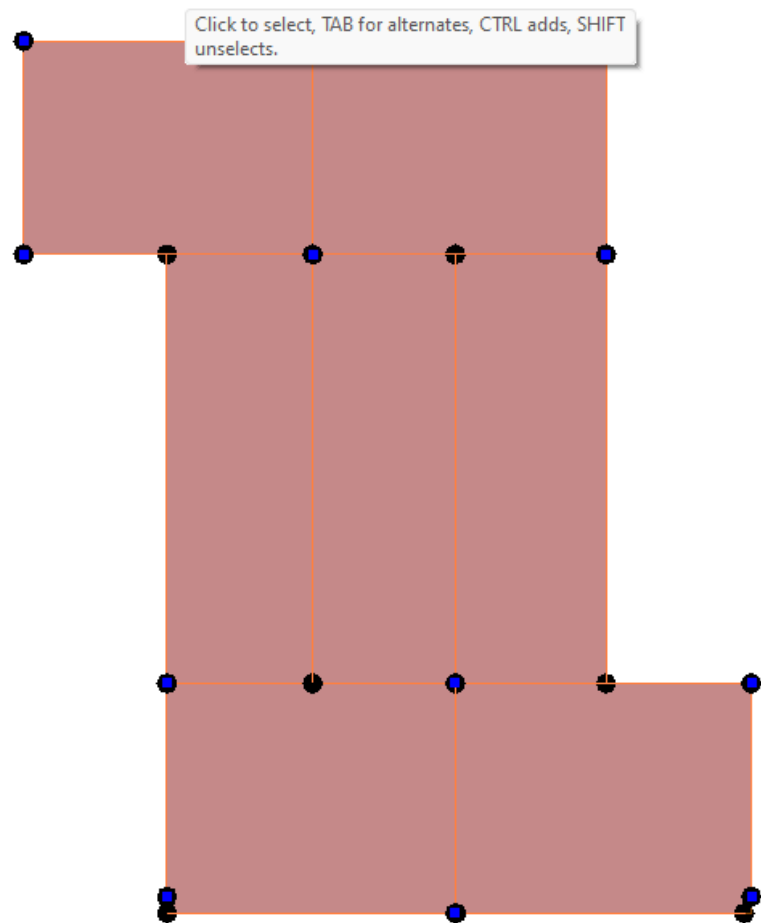
Connection Sta... Connected - Aut...

Identity Data 

Node Number	72
Comments	
X Position	3179.220000
Y Position	15832.200000
Z Position	6000.000000

X, Y and Z coordnates of all nodes are extracted  
(units in mm)





	A	B	C	D	E	F	G	H	I	J
1	Element id		-	Start_X	Start_Y	Start_Z	End_X	End_Y	End_Z	
2	214137		-	150	20332.2	-100	150	20332.2	6000	
3	216599		-	6254.2	20332.2	-100	6254.2	20332.2	6000	
4	216995		-	12450	20332.2	-100	12450	20332.2	6000	
5	221577		-	150	15832.2	0	150	15832.2	6000	
6	221696		-	6254.2	15832.2	0	6254.2	15832.2	6000	
7	221726		-	12450	15832.2	0	12450	15832.2	6000	
8	223489		-	3179.2	6782.2	-100	3179.2	6782.2	6000	
9	223626		-	15516.7	6782.2	-100	15516.7	6782.2	6000	
10	224976		-	3179.2	2282.2	-100	3179.2	2282.2	6000	
11	225077		-	9266.7	1932.2	-100	9266.7	1932.2	6000	
12	225140		-	15516.7	2282.2	-100	15516.7	2282.2	6000	
13	235493		-	150	20332.2	6000	150	20332.2	9750	
14	235495		-	6254.2	20332.2	6000	6254.2	20332.2	9750	
15	235497		-	12450	20332.2	6000	12450	20332.2	9750	
16	235501		-	3179.2	2282.2	6000	3179.2	2282.2	9750	
17	235503		-	15516.7	2282.2	6000	15516.7	2282.2	9750	
18	235736		-	3179.2	6782.2	6000	3179.2	6782.2	9750	
19	235738		-	15516.7	6782.2	6000	15516.7	6782.2	9750	
20	235788		-	9266.7	1932.2	6000	9266.7	1932.2	9750	
21	235826		-	150	15832.2	6000	150	15832.2	9750	
22	235828		-	6254.2	15832.2	6000	6254.2	15832.2	9750	
23	235830		-	12450	15832.2	6000	12450	15832.2	9750	
24	244645			9266.7	6782.2	6000	9266.7	6782.2	9750	
25										
26										
27										

All data is transfered to selected excel workweek. It has following sheets

- a) problem\_column -> Indicate column that are not straight and need modelling correction
- b) column -> Give list of all columns with start and end coordinates
- b) Beam parallel to x-axis -> Give list of all beams parallel to x-axis with start and end coordinates
- c) Beam parallel to y-axis -> Give list of all beams parallel to y-axis with start and end coordinates
- d) Problematic beams -> Beam that are not staright and need modelling correction
- e) Beams all -> Provide List of all Beams with start and end coordinates