SANDRA GUADALUPE RUIZ MORALES

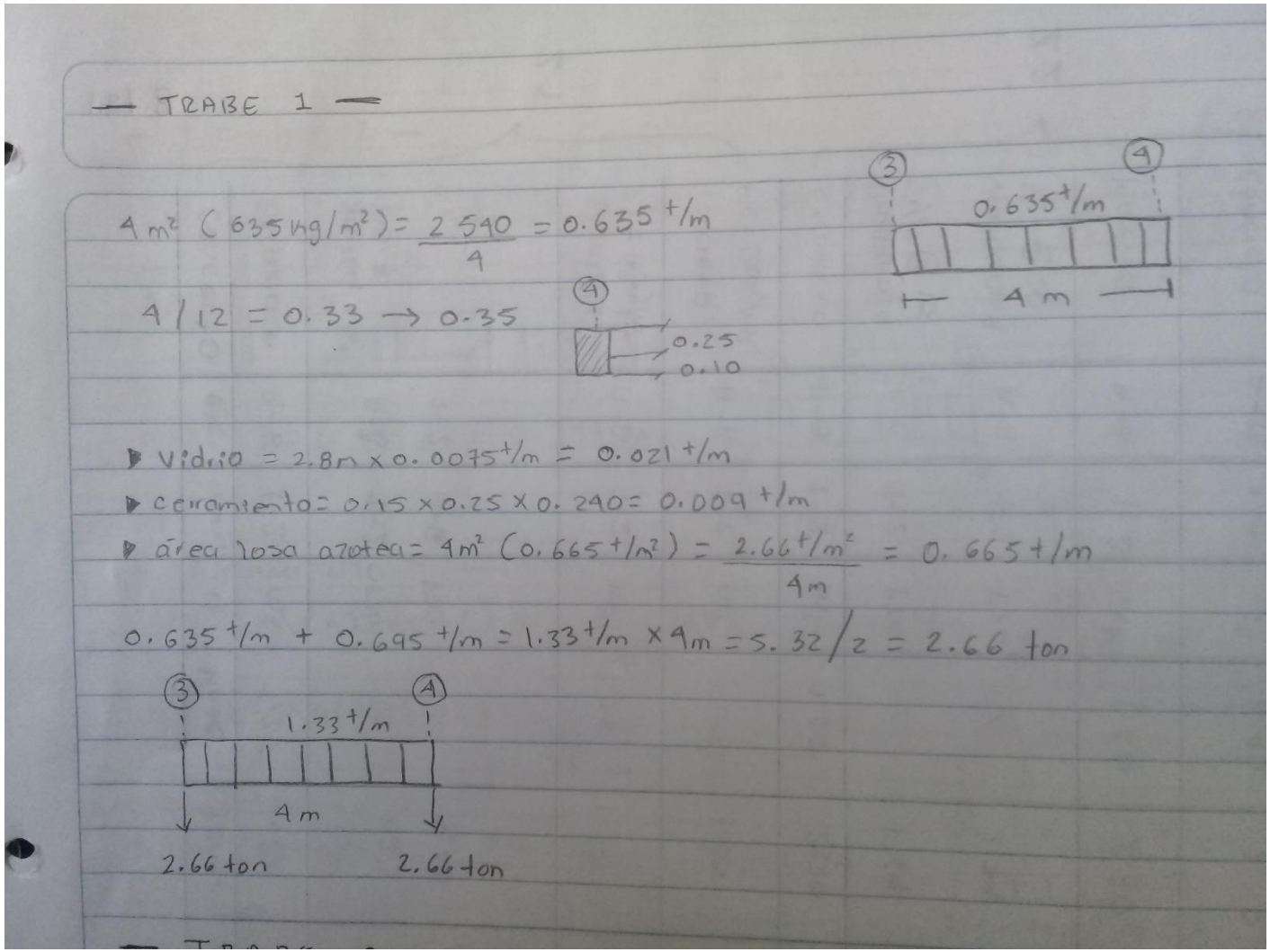
ANALISIS DE ESTRUCTURAS

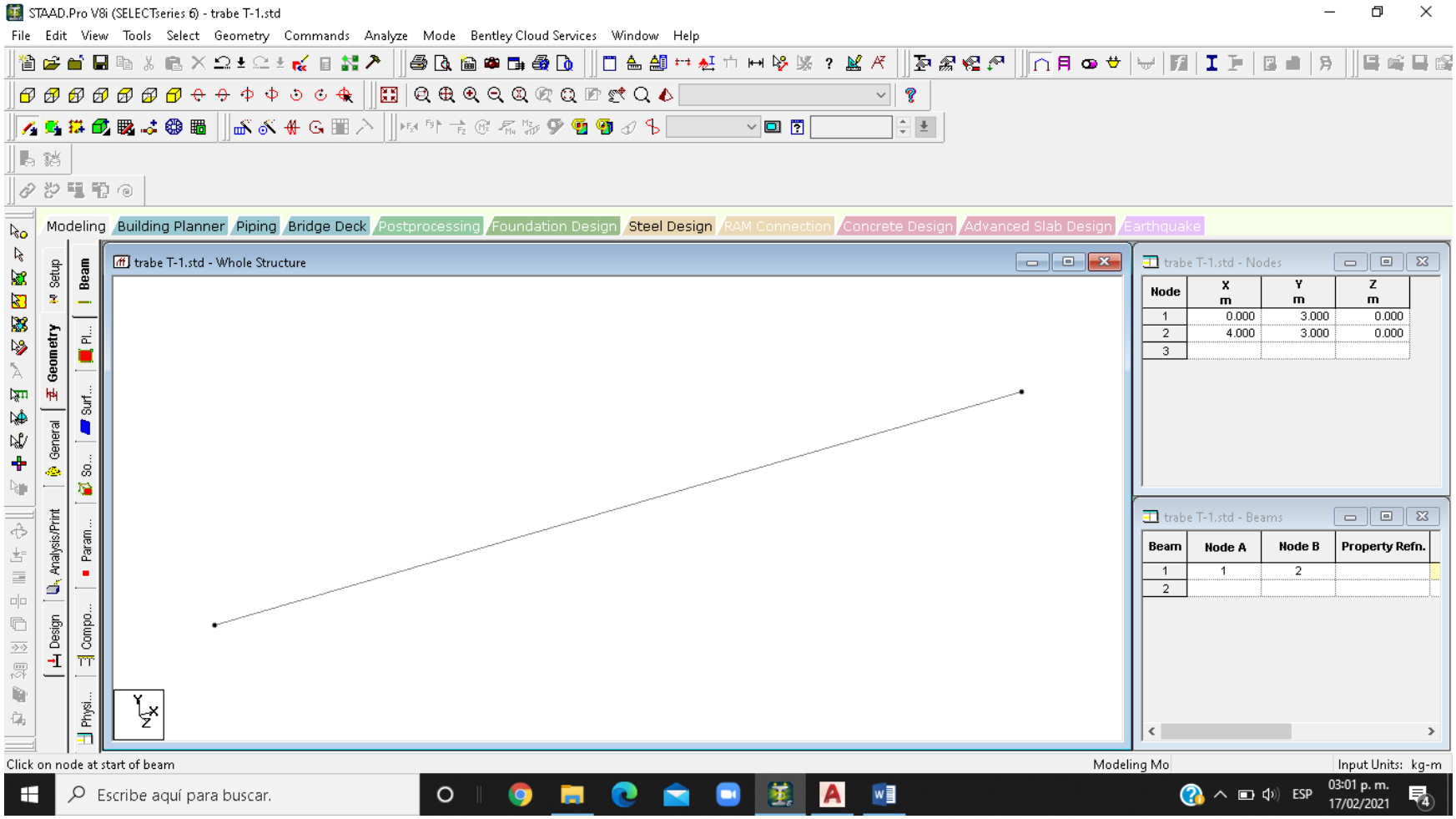
TRABES Y CERRAMEINTOS

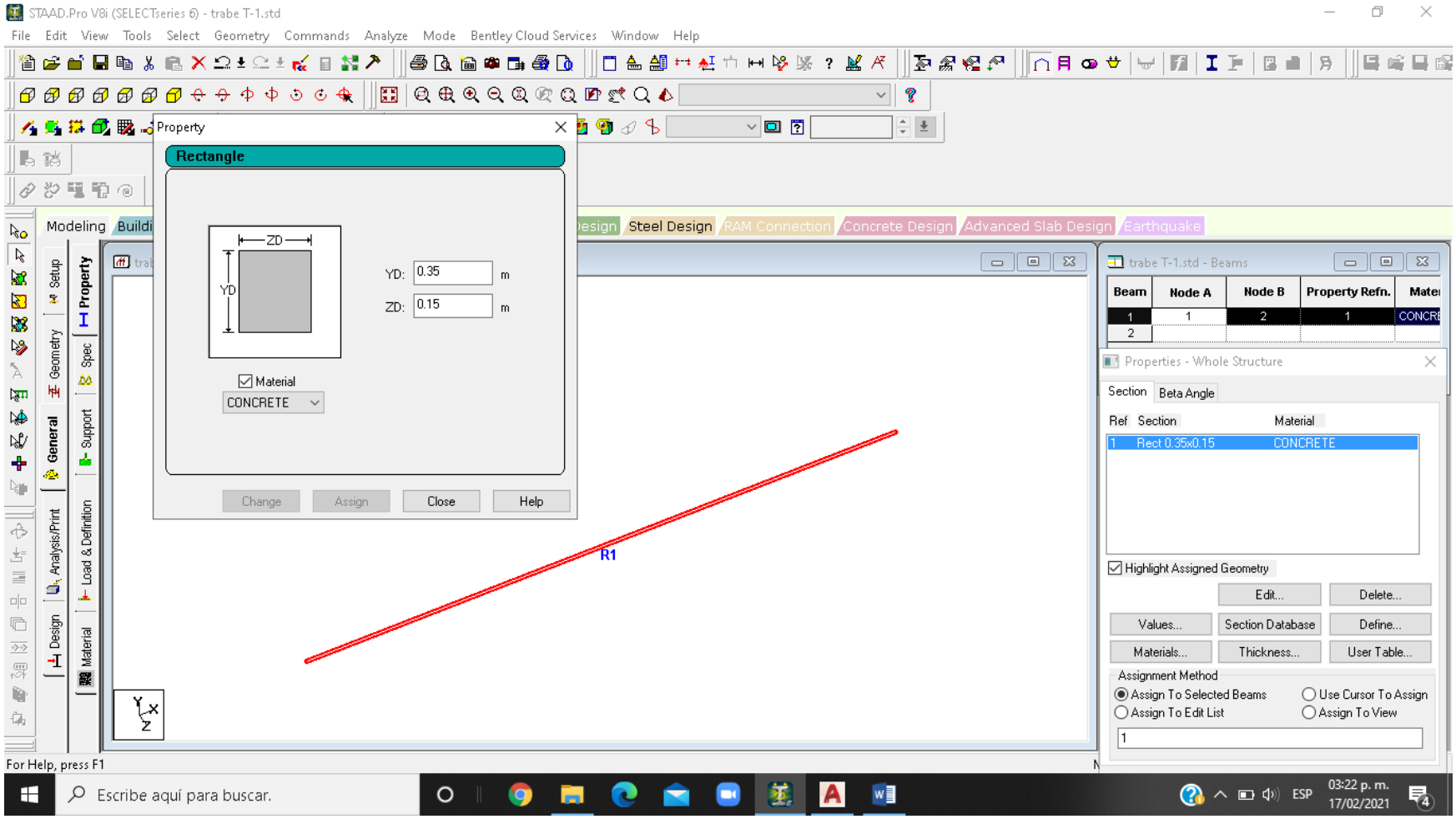
GARCÍA LÓPEZ PEDRO ALBERTO

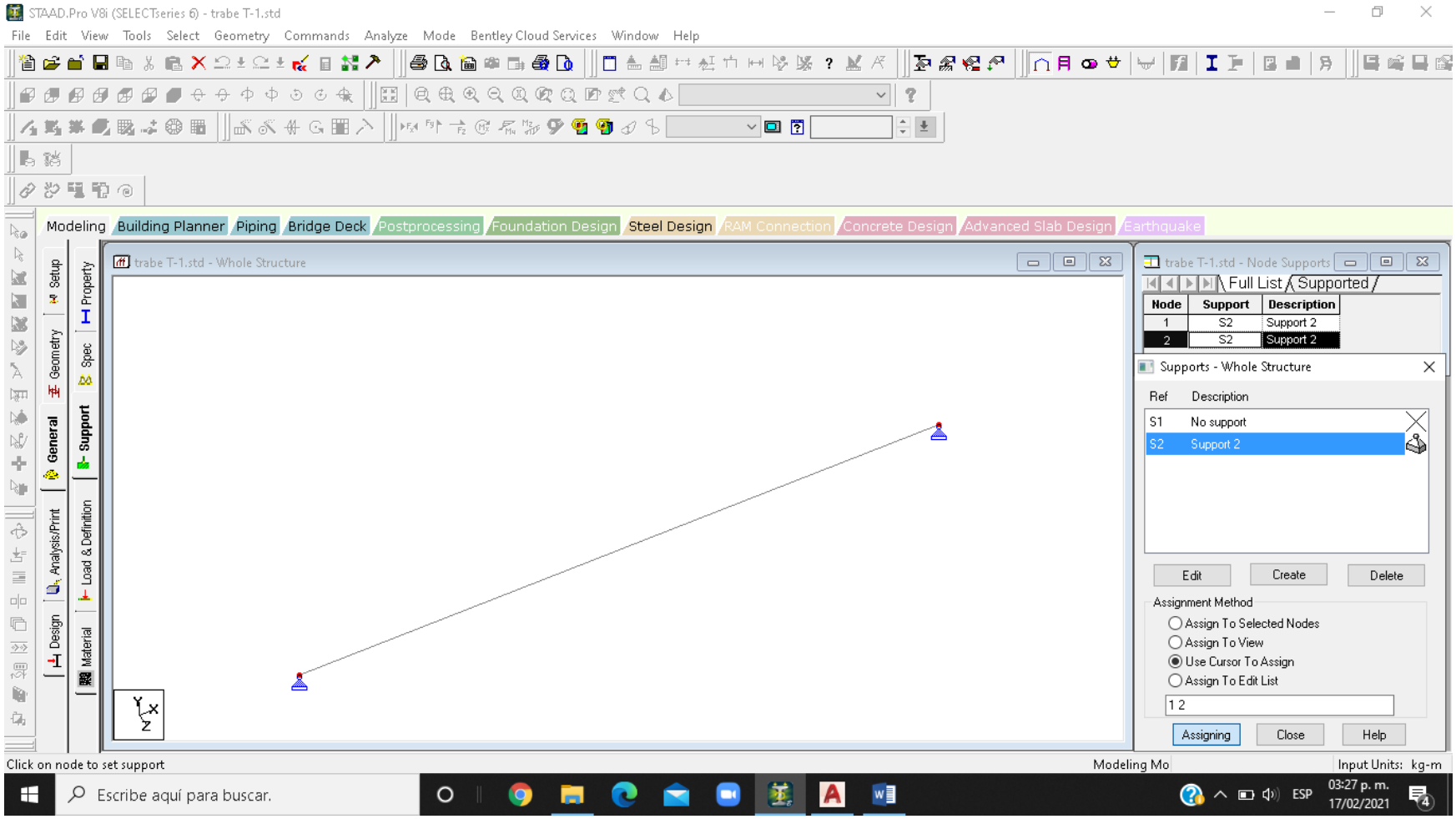
17 DE FEBRERO DEL 2021

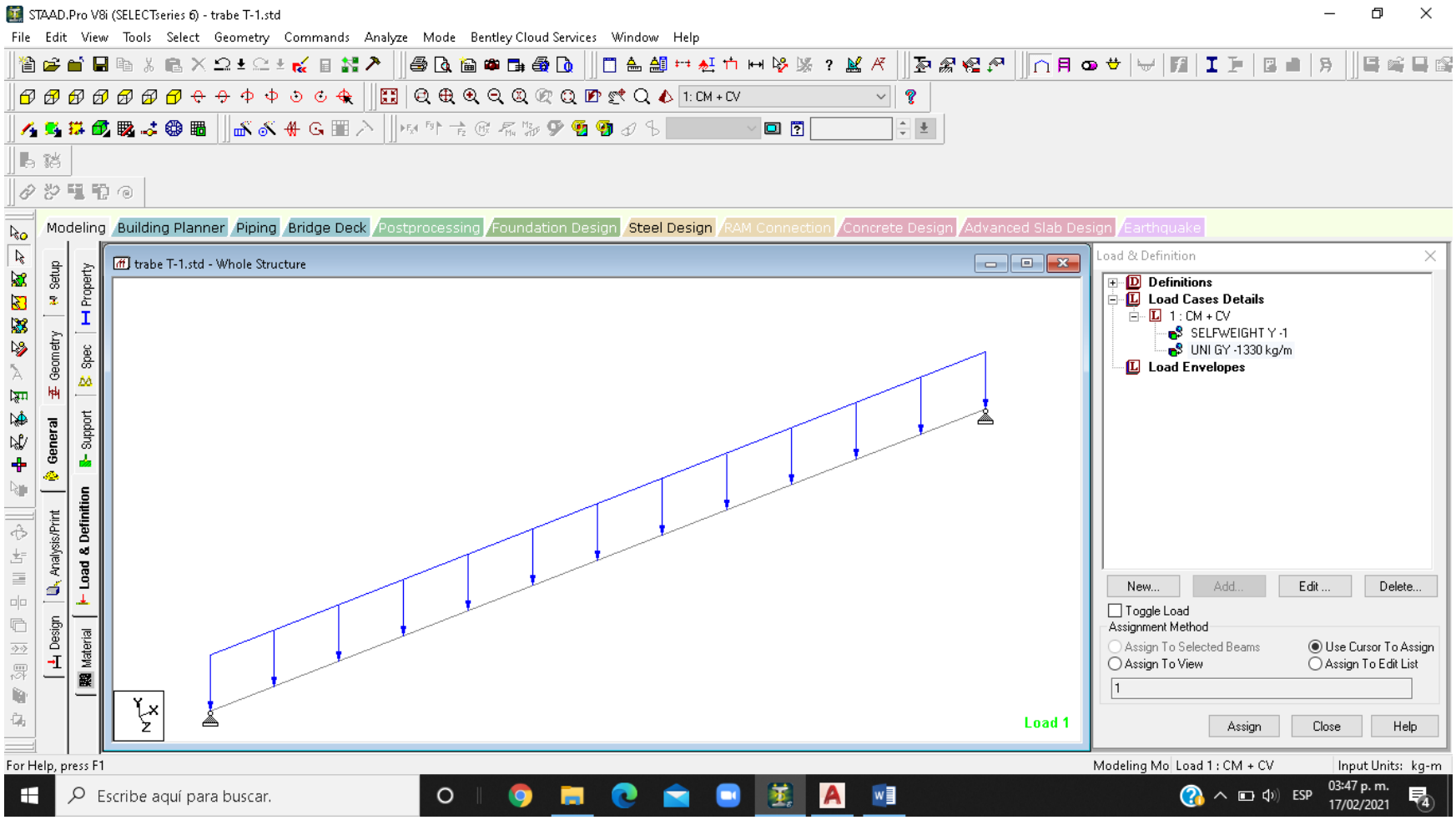
Trabe 1

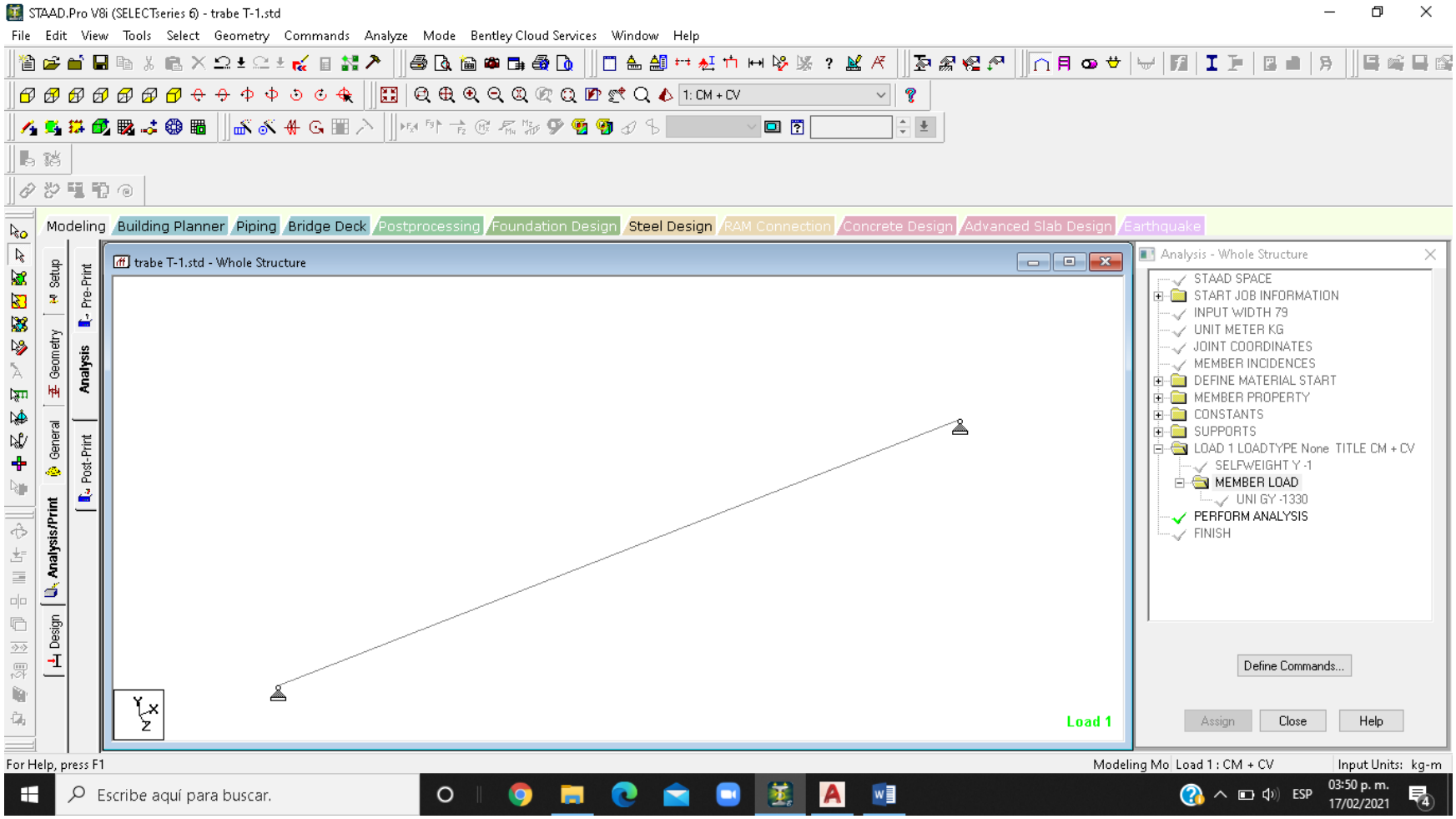

TRABE 1
4 m² (635 kg/m²) = 2 540 / 4 = 0.635 t/m
4/12 = 0.33 → 0.35
0.25
0.10
Vidrio = 2.8m x 0.0075 t/m = 0.021 t/m
cerramiento = 0.15 x 0.25 x 0.240 = 0.009 t/m
área losa azotea = 4m² (0.665 t/m²) = 2.66 t/m² / 4m = 0.665 t/m
0.635 t/m + 0.695 t/m = 1.33 t/m x 4m = 5.32/2 = 2.66 ton
3
4
1.33 t/m
4 m
2.66 ton
2.66 ton
3
4
0.635 t/m
4 m

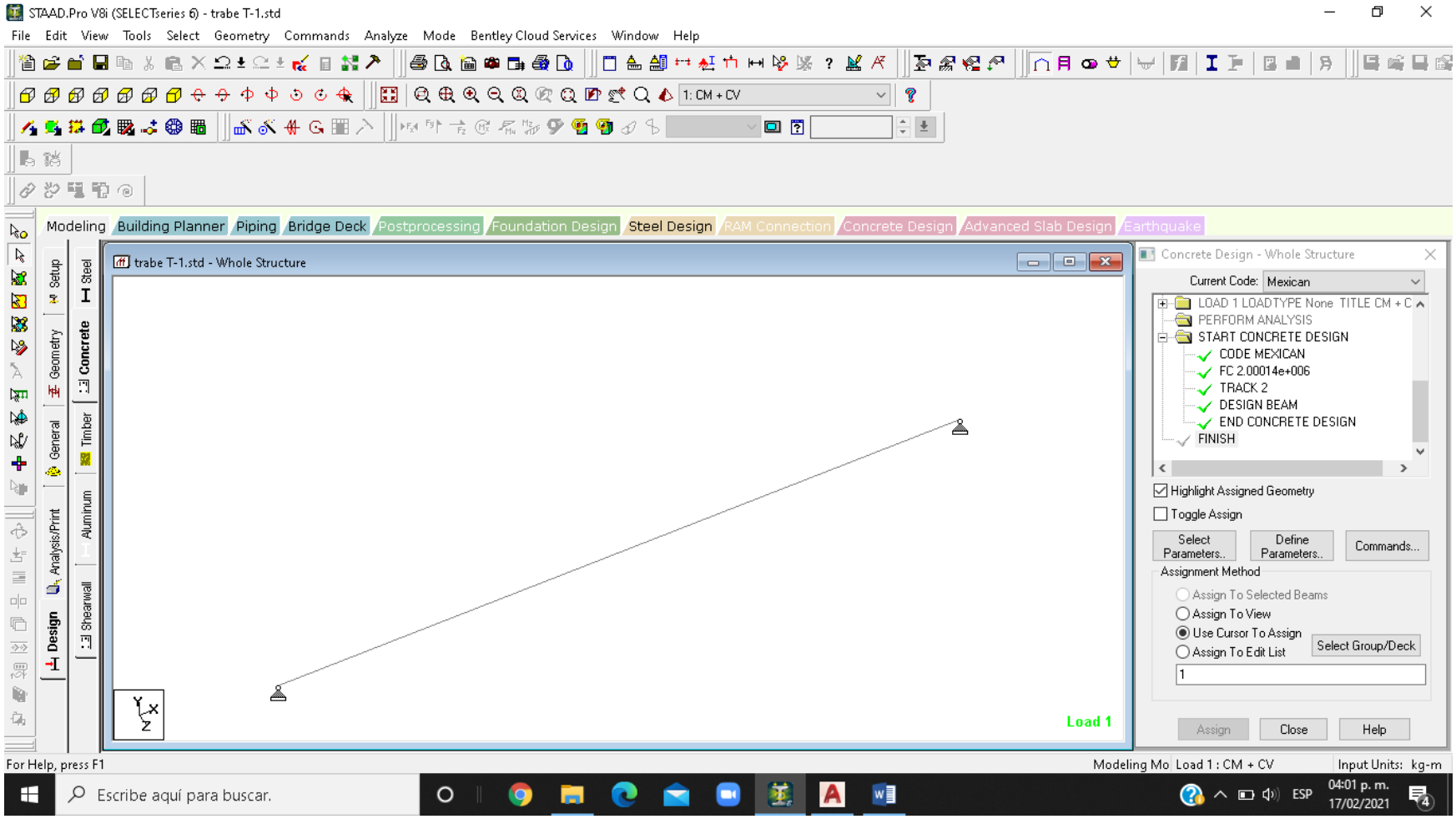

STAAD.Pro V8i (SELECTseries 6) - trabe T-1.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-1.std - Whole Structure
trabe T-1.std - Nodes
Node X m Y m Z m
1 0.000 3.000 0.000
2 4.000 3.000 0.000
3
trabe T-1.std - Beams
Beam Node A Node B Property Refn.
1 1 2
2
Click on node at start of beam
Modeling Mo
Input Units: kg-m
Escribe aquí para buscar.
ESP
03:01 p. m.
17/02/2021

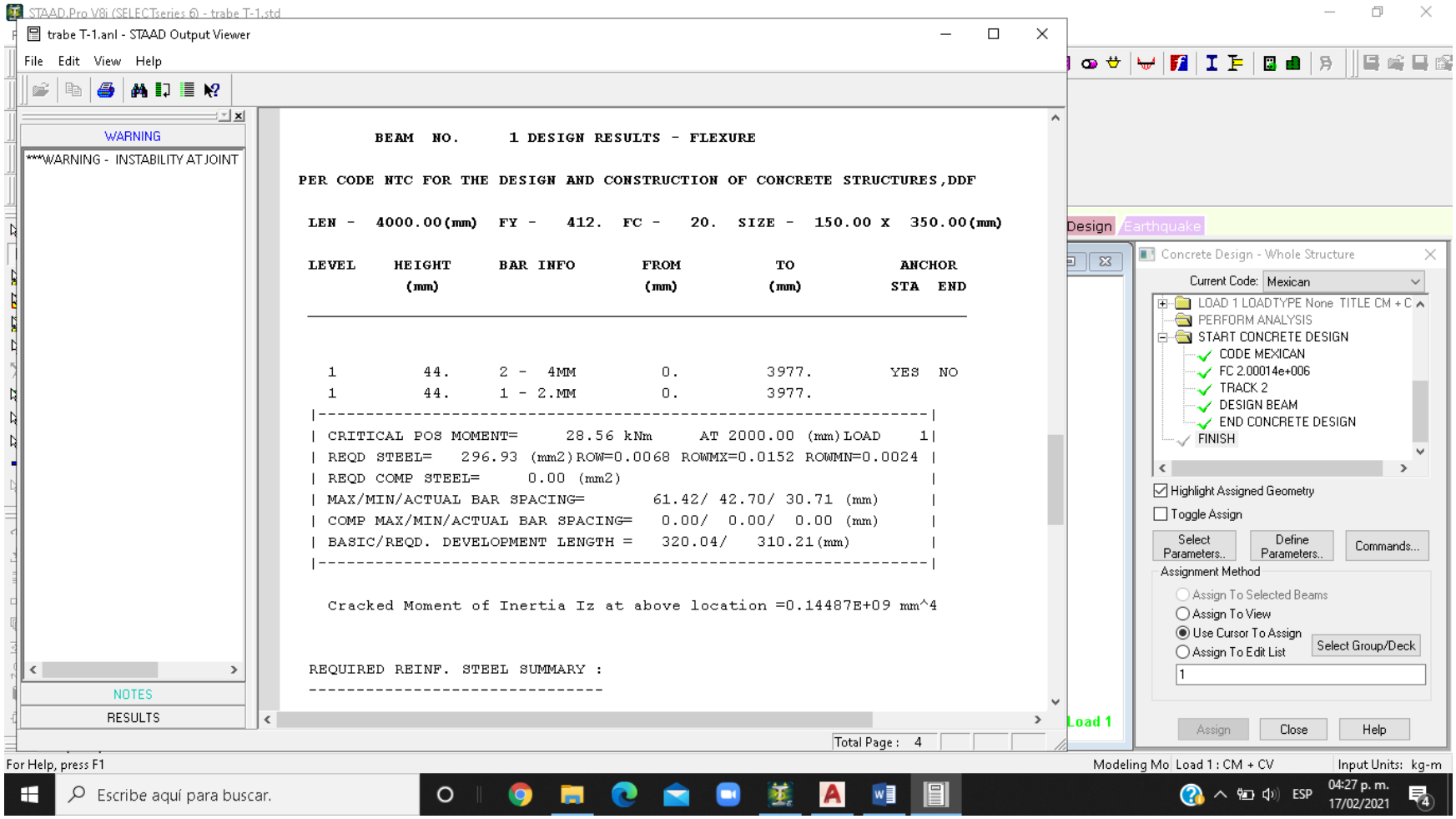

STAAD.Pro V8i (SELECTseries 6) - trabe T-1.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Property
Rectangle
ZD
YD
YD: 0.35 m
ZD: 0.15 m
Material
CONCRETE
Change Assign Close Help
Modeling
Steel Design
RAM Connection
Concrete Design
Advanced Slab Design
Earthquake
Setup Geometry General Analysis/Print Design
Property Spec Support Load & Definition Material
R1
trabe T-1.std - Beams
Beam Node A Node B Property Refn.
1 1 2 1 CONCRE
2
Properties - Whole Structure
Section Beta Angle
Ref Section Material
1 Rect 0.35x0.15 CONCRETE
Highlight Assigned Geometry
Edit... Delete...
Values... Section Database Define...
Materials... Thickness... User Table...
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To Edit List
Assign To View
For Help, press F1
Escribe aquí para buscar.
ESP
03:22 p. m.
17/02/2021

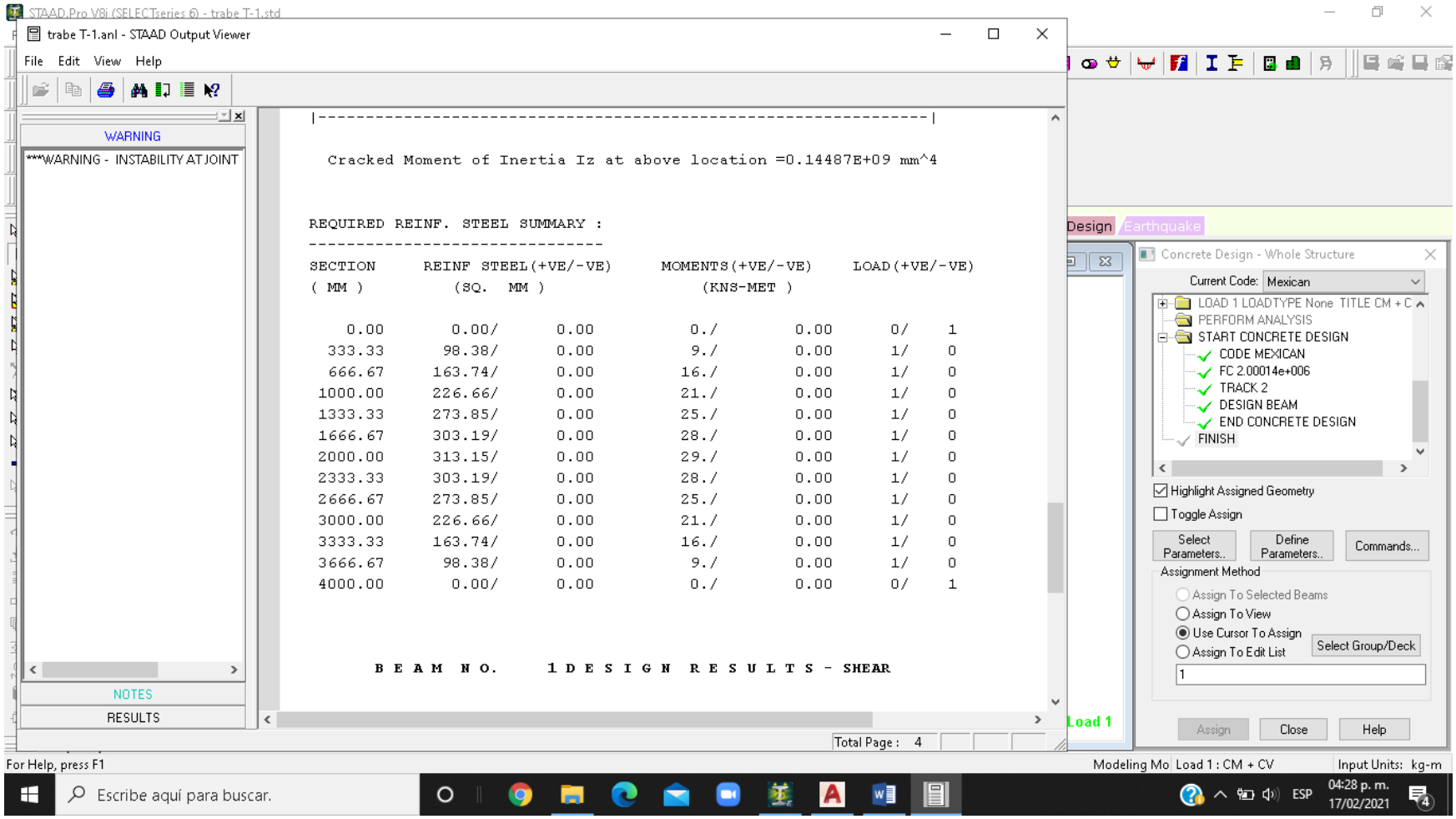

STAAD.Pro V8i (SELECTseries 6) - trabe T-1.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Property Spec Support Load & Definition Material
trabe T-1.std - Whole Structure
trabe T-1.std - Node Supports
Full List Supported
Node Support Description
1 S2 Support 2
2 S2 Support 2
Supports - Whole Structure
Ref Description
S1 No support
S2 Support 2
Edit Create Delete
Assignment Method
Assign To Selected Nodes
Assign To View
Use Cursor To Assign
Assign To Edit List
1 2
Assigning Close Help
Click on node to set support
Modeling Mo
Input Units: kg-m
Escribe aquí para buscar.
ESP
03:27 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - trabe T-1.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM + CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Property Spec Support Load & Definition Material
trabe T-1.std - Whole Structure
Load 1
Load & Definition
Definitions
Load Cases Details
1 : CM + CV
SELFWEIGHT Y -1
UNI GY -1330 kg/m
Load Envelopes
New... Add... Edit ... Delete...
Toggle Load
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To View
Assign To Edit List
1
Assign Close Help
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
03:47 p. m.
17/02/2021

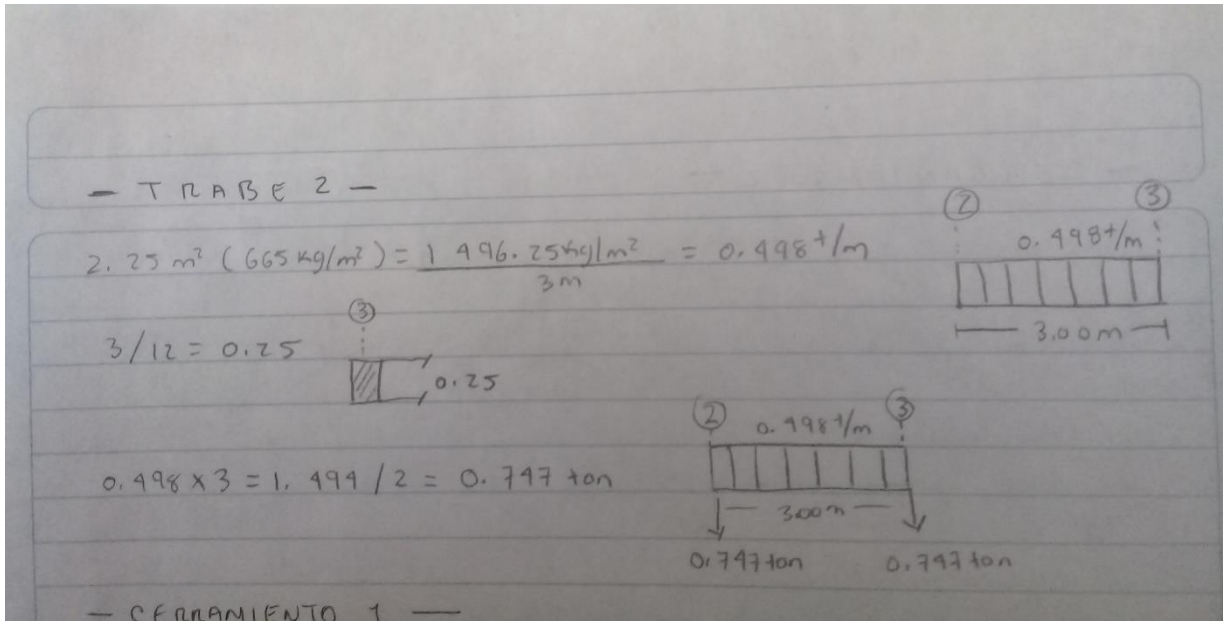

STAAD.Pro V8i (SELECTseries 6) - trabe T-1.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM + CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Pre-Print Analysis Post-Print
trabe T-1.std - Whole Structure
Load 1
Analysis - Whole Structure
STAAD SPACE
START JOB INFORMATION
INPUT WIDTH 79
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM + CV
SELFWEIGHT Y -1
MEMBER LOAD
UNI GY -1330
PERFORM ANALYSIS
FINISH
Define Commands...
Assign
Close
Help
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
03:50 p. m.
17/02/2021

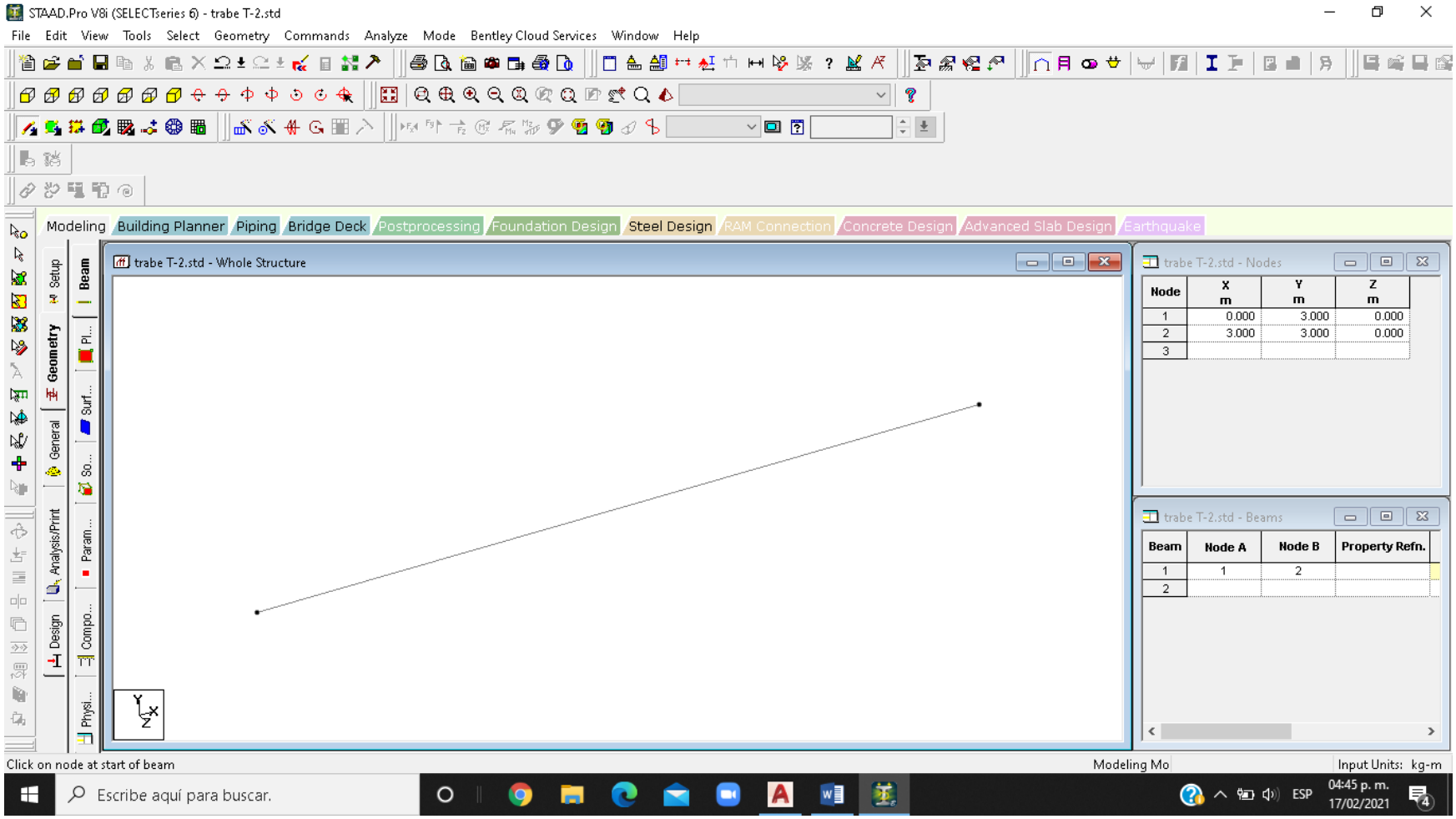

STAAD.Pro V8i (SELECTseries 6) - trabe T-1.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM + CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Steel Concrete Timber Aluminum Shearwall
trabe T-1.std - Whole Structure
Load 1
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM + C
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
04:01 p. m.
17/02/2021

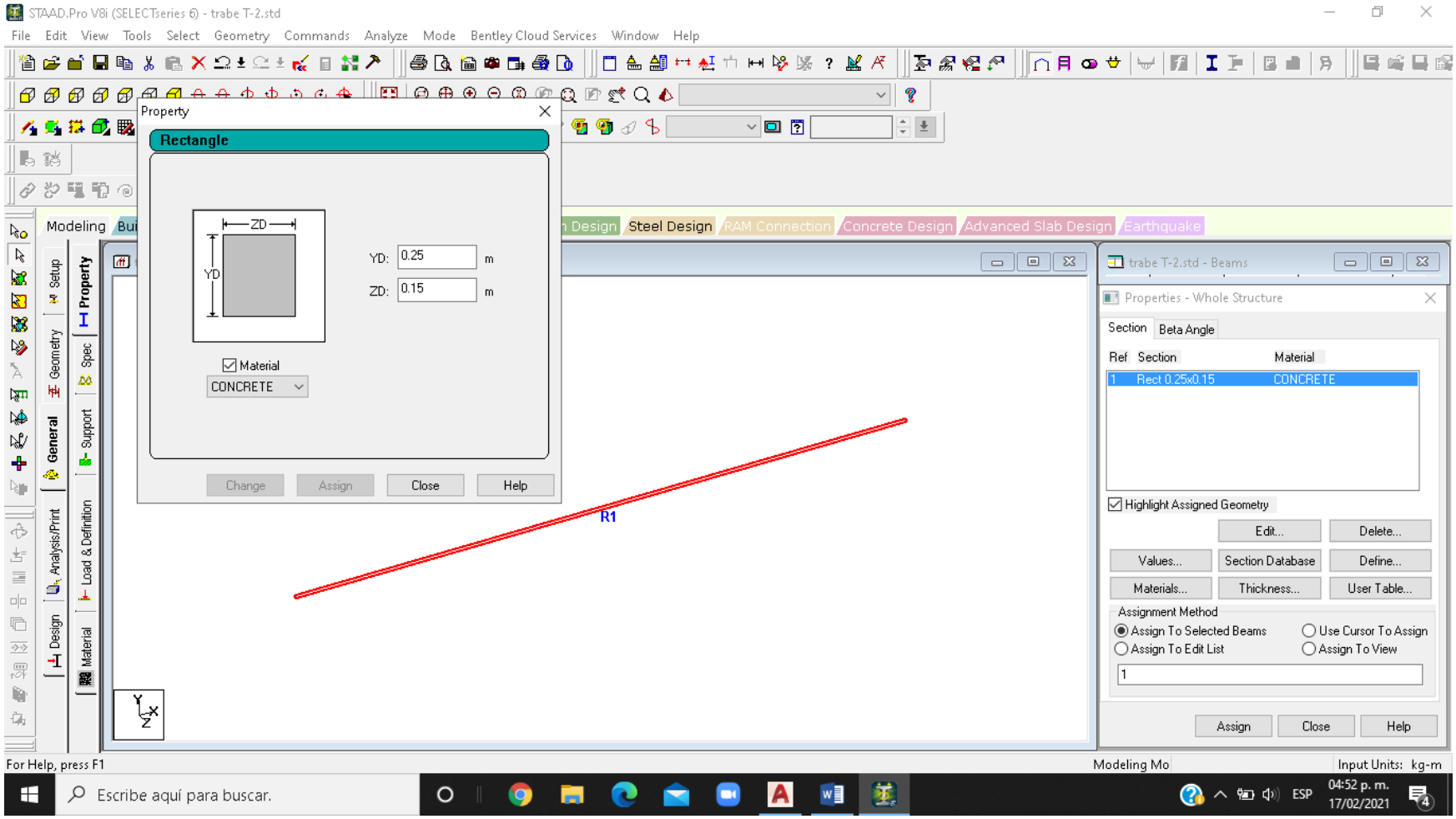

STAAD.Pro V8i (SELECTseries 6) - trabe T-1.std
trabe T-1.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
BEAM NO. 1 DESIGN RESULTS - FLEXURE
PER CODE NTC FOR THE DESIGN AND CONSTRUCTION OF CONCRETE STRUCTURES,DDF
LEN - 4000.00(mm) FY - 412. FC - 20. SIZE - 150.00 X 350.00(mm)
LEVEL HEIGHT BAR INFO FROM TO ANCHOR
(mm) (mm) (mm) STA END
1 44. 2 - 4MM 0. 3977. YES NO
1 44. 1 - 2.MM 0. 3977.
| CRITICAL POS MOMENT= 28.56 kNm AT 2000.00 (mm) LOAD 1|
| REQD STEEL= 296.93 (mm2) ROW=0.0068 ROWMX=0.0152 ROWMN=0.0024 |
| REQD COMP STEEL= 0.00 (mm2) |
| MAX/MIN/ACTUAL BAR SPACING= 61.42/ 42.70/ 30.71 (mm) |
| COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm) |
| BASIC/REQD. DEVELOPMENT LENGTH = 320.04/ 310.21(mm) |
Cracked Moment of Inertia Iz at above location =0.14487E+09 mm^4
REQUIRED REINF. STEEL SUMMARY :
Total Page : 4
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM + C
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
04:27 p. m.
17/02/2021

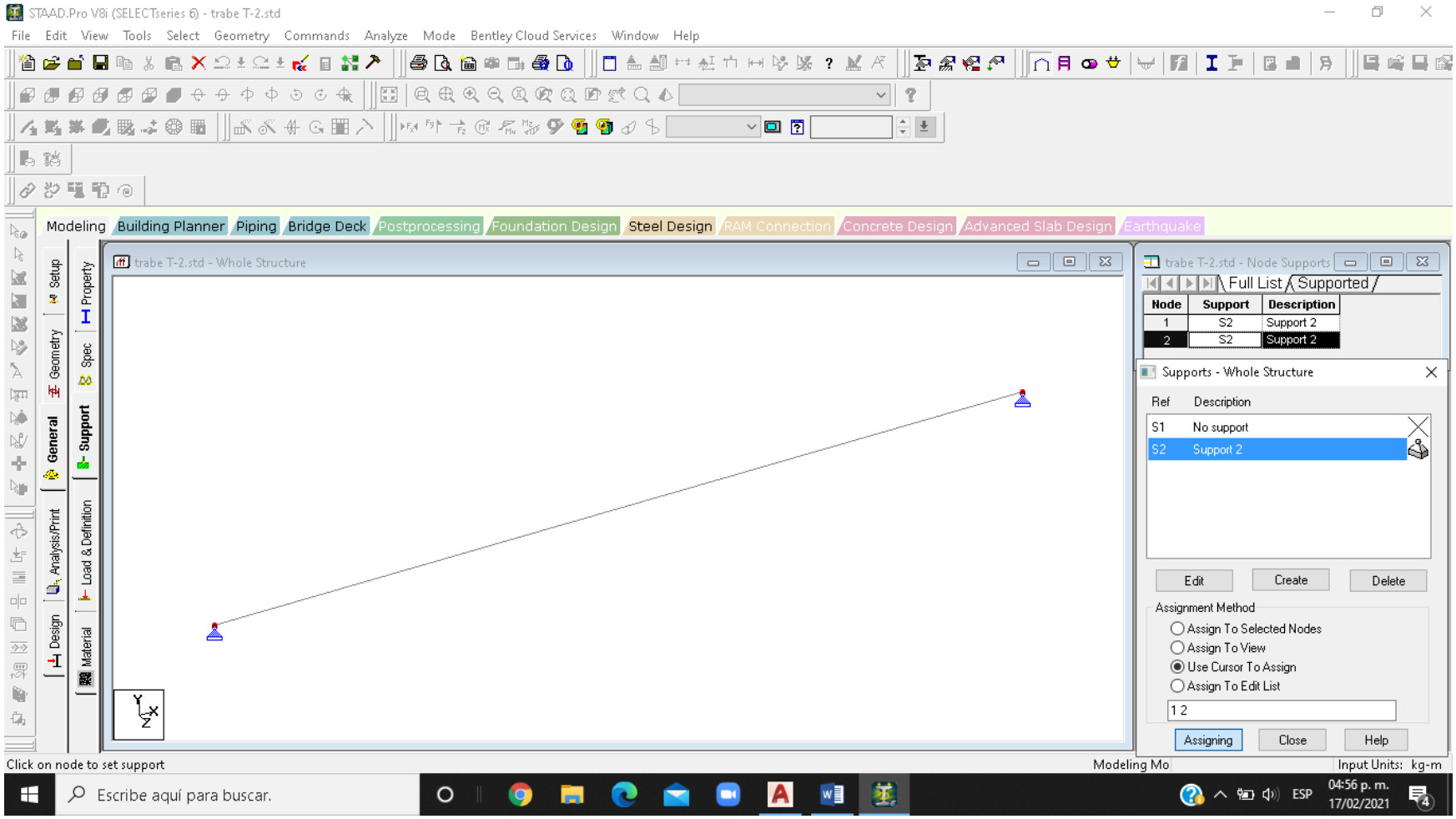

STAAD.Pro V8i (SELECTseries 6) - trabe T-1.std
trabe T-1.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
Cracked Moment of Inertia Iz at above location =0.14487E+09 mm^4
REQUIRED REINF. STEEL SUMMARY :
SECTION (MM) REINF STEEL(+VE/-VE) (SQ. MM) MOMENTS(+VE/-VE) (KNS-MET) LOAD(+VE/-VE)
0.00 0.00/ 0.00 0./ 0.00 0/ 1
333.33 98.38/ 0.00 9./ 0.00 1/ 0
666.67 163.74/ 0.00 16./ 0.00 1/ 0
1000.00 226.66/ 0.00 21./ 0.00 1/ 0
1333.33 273.85/ 0.00 25./ 0.00 1/ 0
1666.67 303.19/ 0.00 28./ 0.00 1/ 0
2000.00 313.15/ 0.00 29./ 0.00 1/ 0
2333.33 303.19/ 0.00 28./ 0.00 1/ 0
2666.67 273.85/ 0.00 25./ 0.00 1/ 0
3000.00 226.66/ 0.00 21./ 0.00 1/ 0
3333.33 163.74/ 0.00 16./ 0.00 1/ 0
3666.67 98.38/ 0.00 9./ 0.00 1/ 0
4000.00 0.00/ 0.00 0./ 0.00 0/ 1
B E A M N O. 1 D E S I G N R E S U L T S - SHEAR
Total Page : 4
Design Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM + C
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
04:28 p. m.
17/02/2021

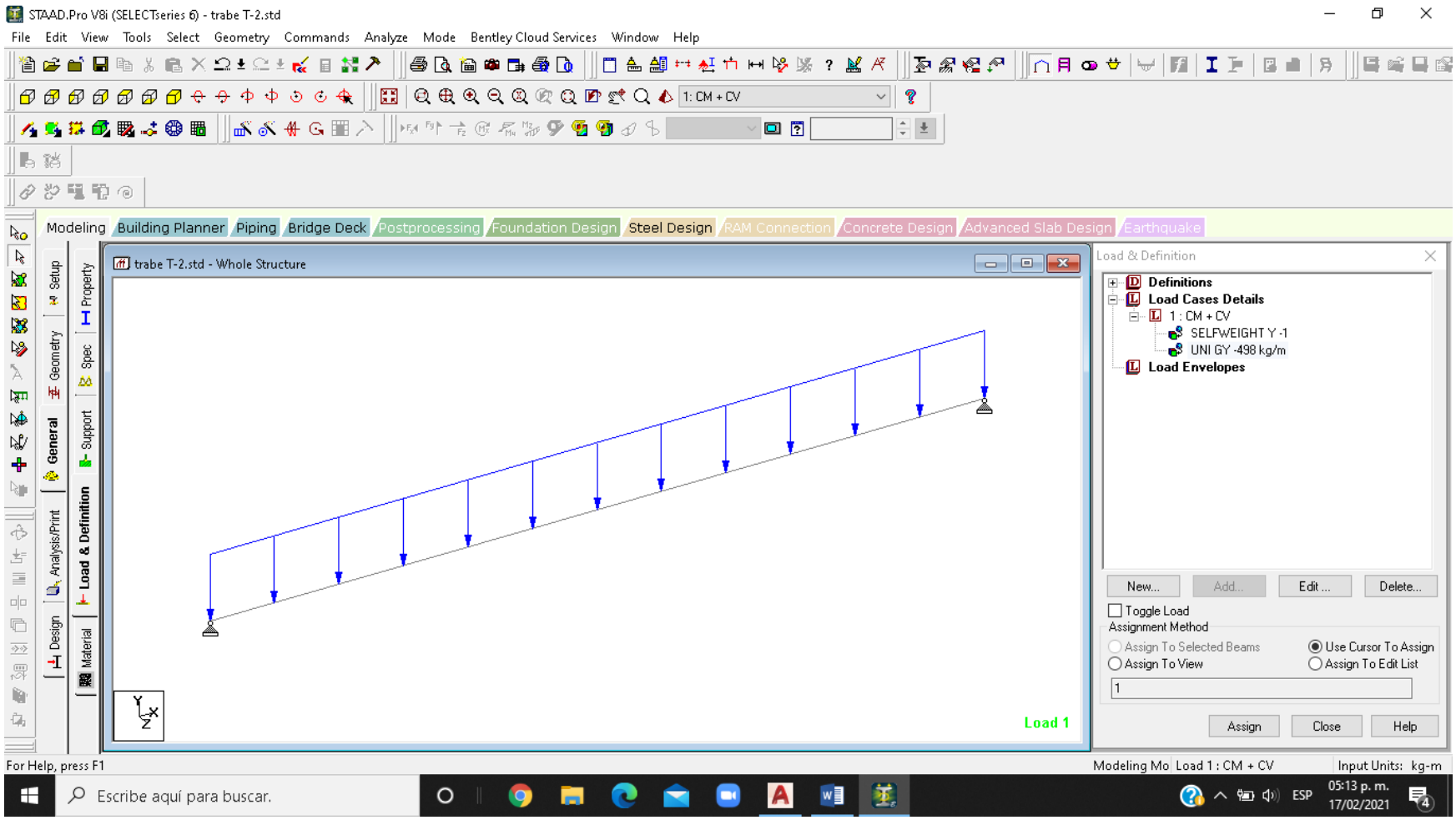
Trabe 2

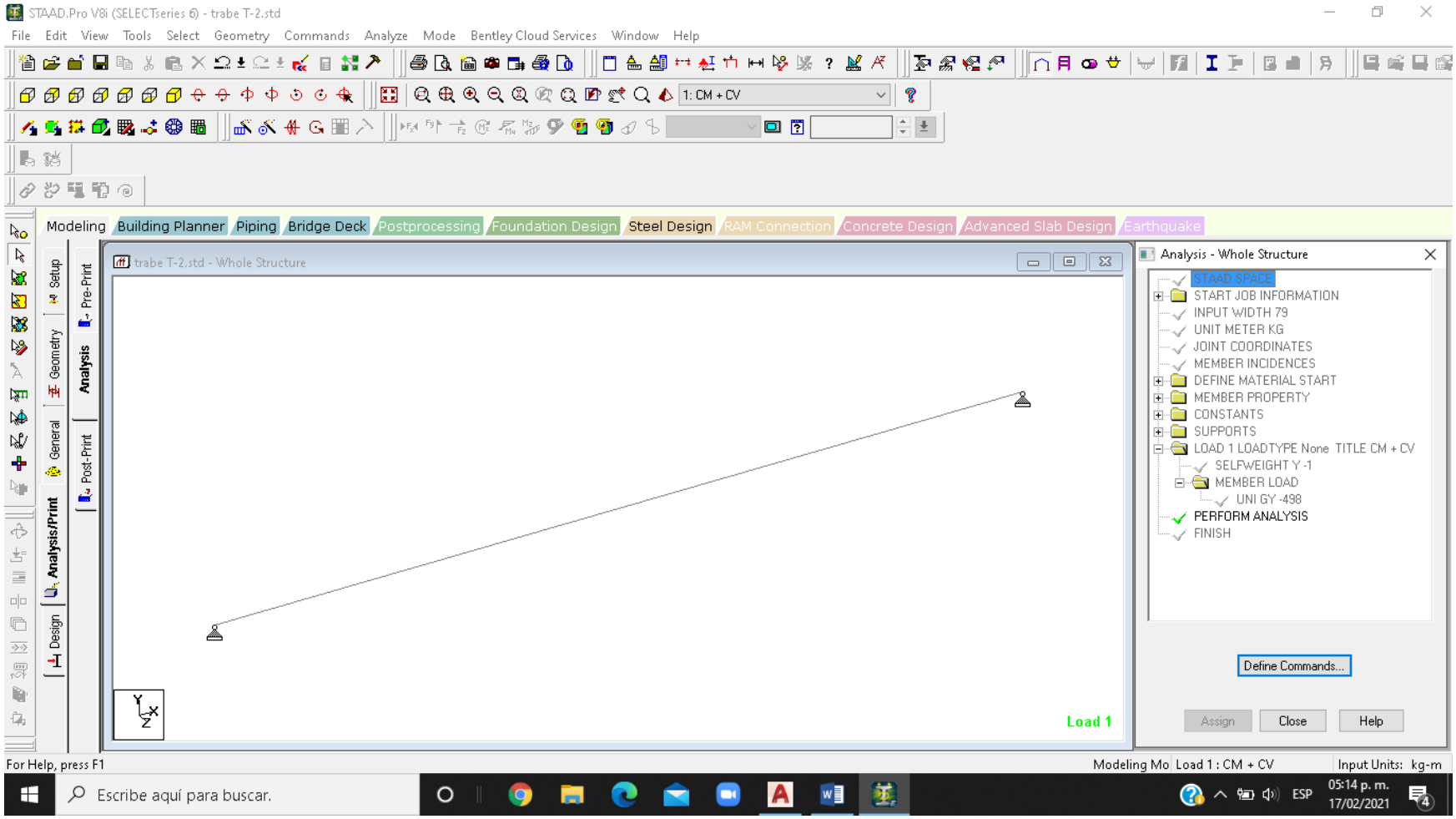

— TRABE 2 —
2.25 m² (665 kg/m²) = 1 496.25 kg/m² / 3m = 0.498 t/m
3/12 = 0.25
0.25
0.498 x 3 = 1.494 / 2 = 0.747 ton
2
3
0.498 t/m
3.00 m
0.747 ton
0.747 ton
— CERRAMIENTO 1 —

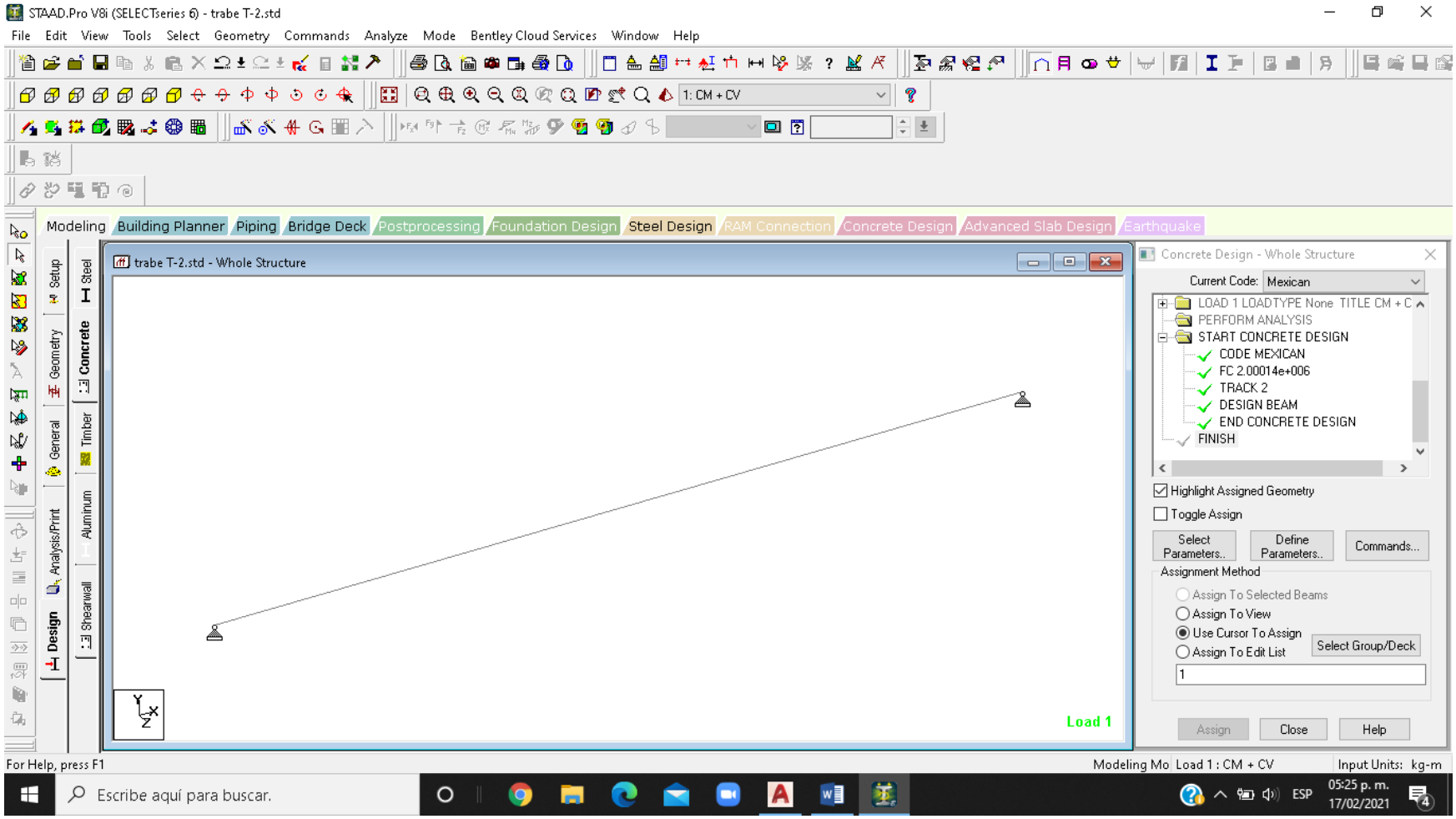

STAAD.Pro V8i (SELECTseries 6) - trabe T-2.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-2.std - Whole Structure
trabe T-2.std - Nodes
Node X m Y m Z m
1 0.000 3.000 0.000
2 3.000 3.000 0.000
3
trabe T-2.std - Beams
Beam Node A Node B Property Refn.
1 1 2
2
Click on node at start of beam
Input Units: kg-m
Escribe aquí para buscar.
ESP
04:45 p. m.
17/02/2021

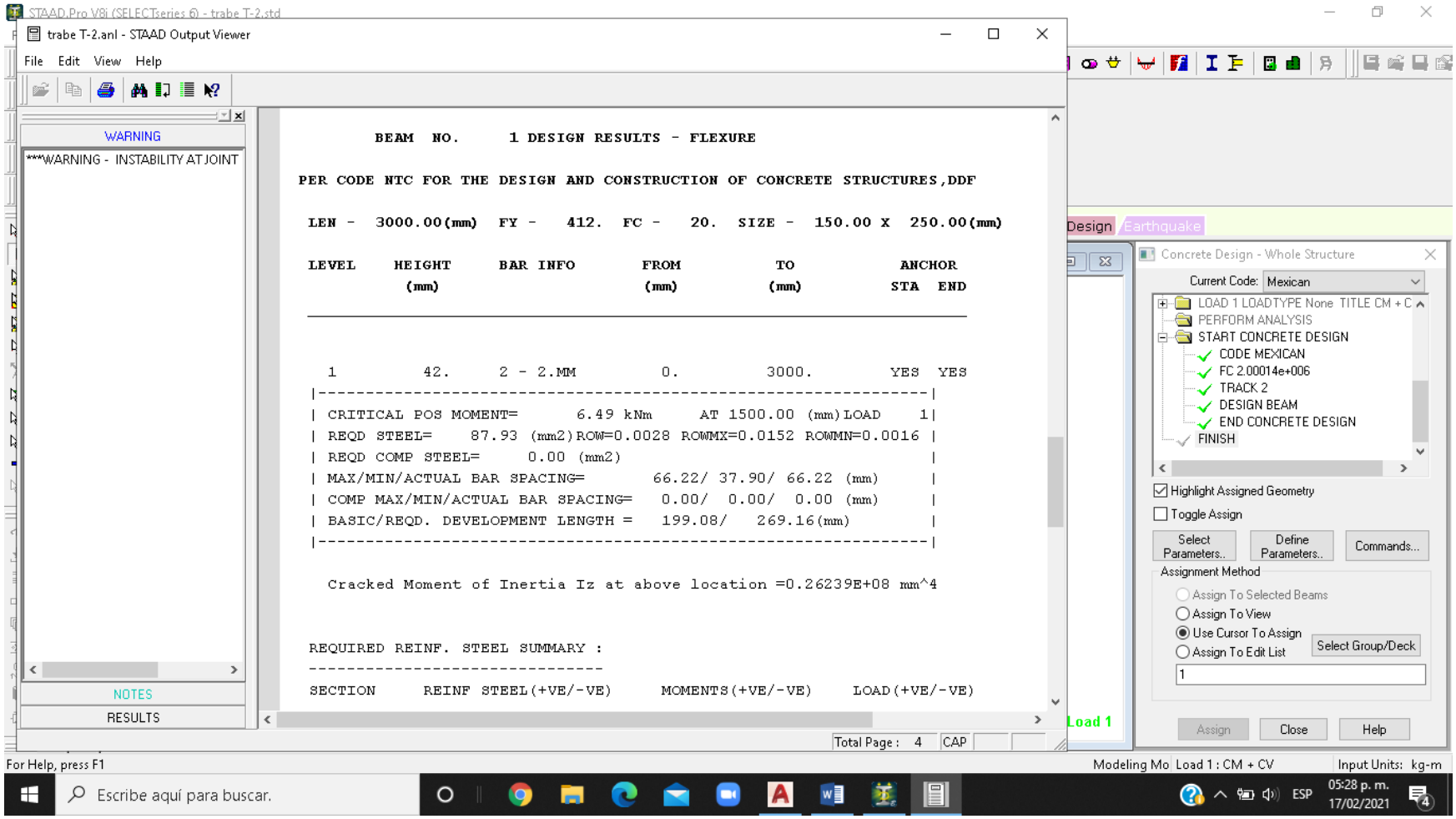

STAAD.Pro V8i (SELECTseries 6) - trabe T-2.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Property
Rectangle
ZD
YD
YD: 0.25 m
ZD: 0.15 m
Material
CONCRETE
Change Assign Close Help
Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
R1
trabe T-2.std - Beams
Properties - Whole Structure
Section Beta Angle
Ref Section Material
1 Rect 0.25x0.15 CONCRETE
Highlight Assigned Geometry
Edit... Delete...
Values... Section Database Define...
Materials... Thickness... User Table...
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To Edit List
Assign To View
Assign Close Help
For Help, press F1
Input Units: kg-m
Escribe aquí para buscar.
ESP
04:52 p. m.
17/02/2021

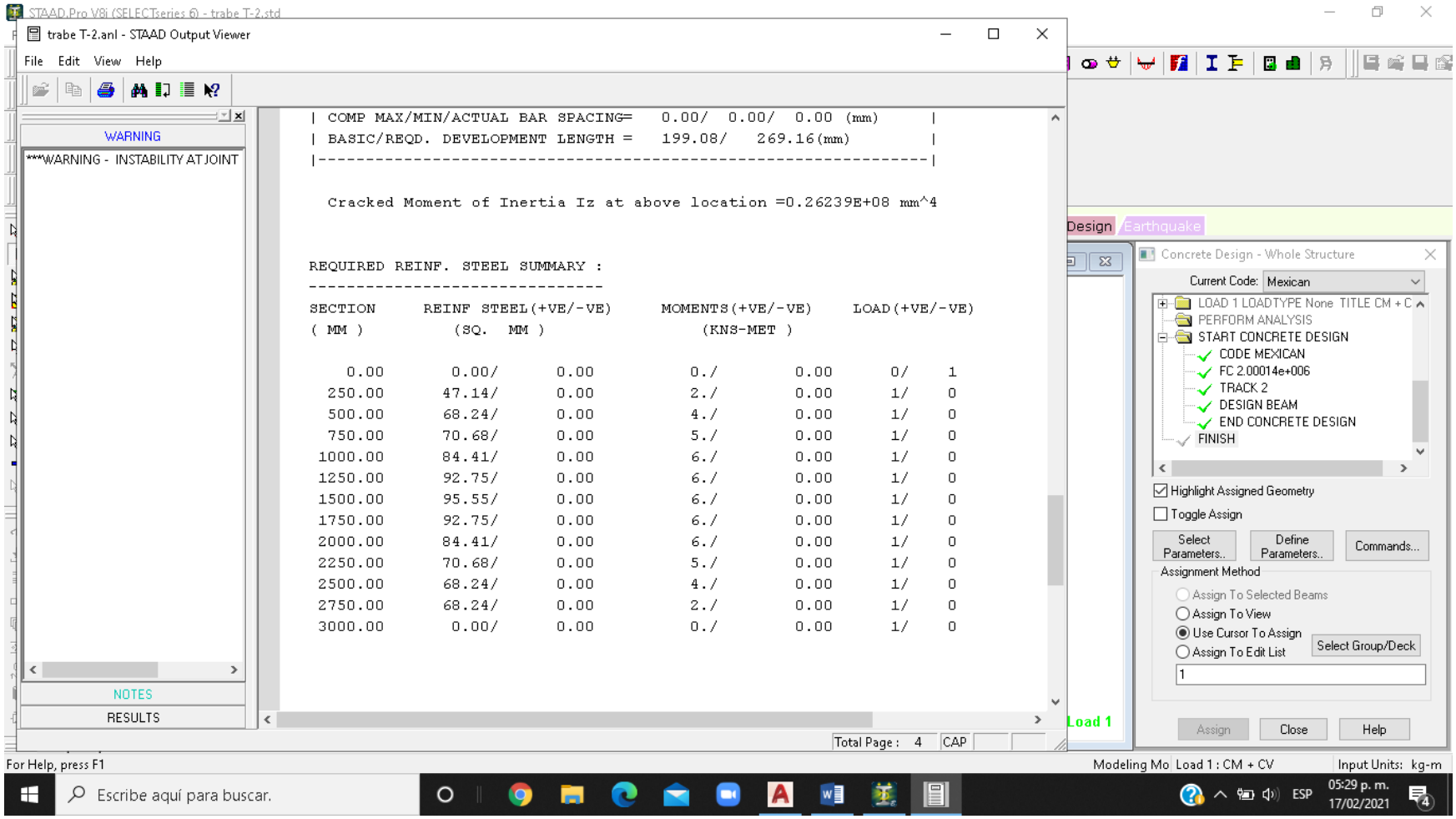

STAAD.Pro V8i (SELECTseries 6) - trabe T-2.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-2.std - Whole Structure
trabe T-2.std - Node Supports
Full List Supported
Node Support Description
1 S2 Support 2
2 S2 Support 2
Supports - Whole Structure
Ref Description
S1 No support
S2 Support 2
Edit Create Delete
Assignment Method
Assign To Selected Nodes
Assign To View
Use Cursor To Assign
Assign To Edit List
1 2
Assigning Close Help
Click on node to set support
Input Units: kg-m
Escribe aquí para buscar.
ESP
04:56 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - trabe T-2.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM + CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Property Spec Support Load & Definition Material
trabe T-2.std - Whole Structure
Load 1
Load & Definition
Definitions
Load Cases Details
1 : CM + CV
SELFWEIGHT Y -1
UNI GY -498 kg/m
Load Envelopes
New... Add... Edit ... Delete...
Toggle Load
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To View
Assign To Edit List
1
Assign Close Help
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
05:13 p. m.
17/02/2021

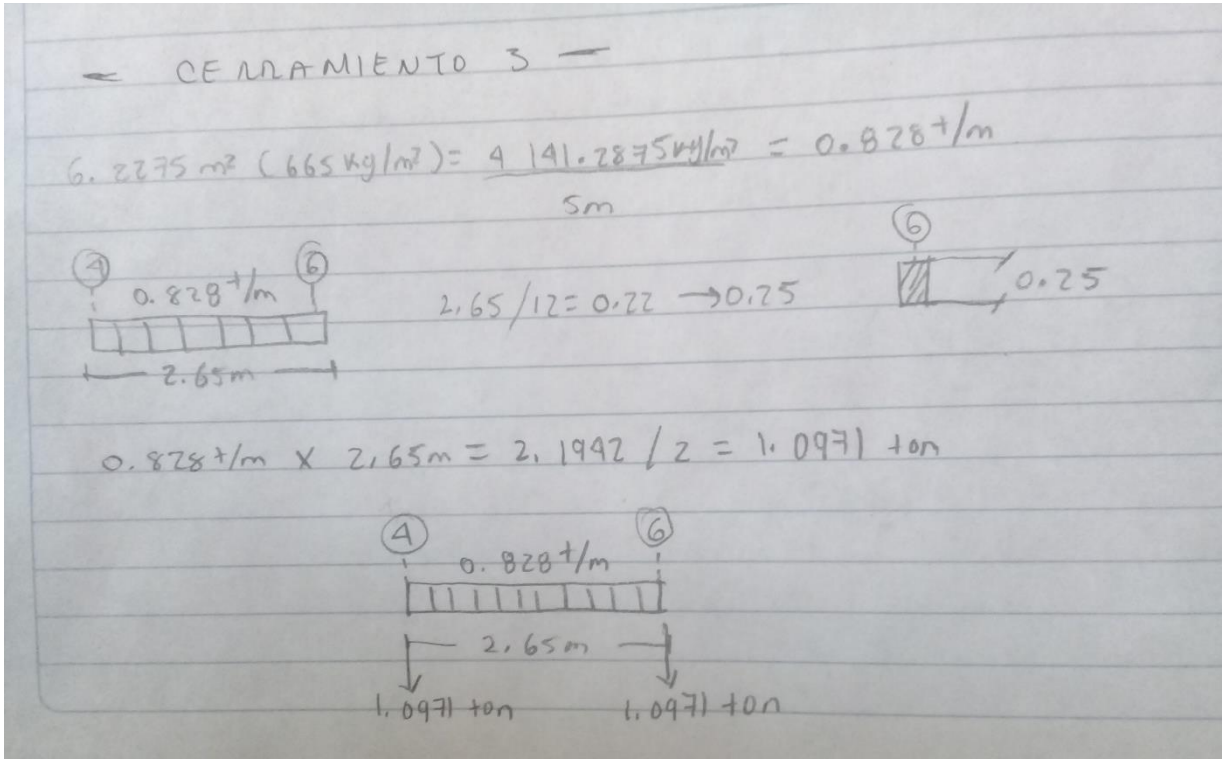

STAAD.Pro V8i (SELECTseries 6) - trabe T-2.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM + CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Pre-Print Analysis Post-Print
trabe T-2.std - Whole Structure
Load 1
Analysis - Whole Structure
STAAD SPACE
START JOB INFORMATION
INPUT WIDTH 79
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM + CV
SELFWEIGHT Y -1
MEMBER LOAD
UNI GY -498
PERFORM ANALYSIS
FINISH
Define Commands...
Assign
Close
Help
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
05:14 p. m.
17/02/2021

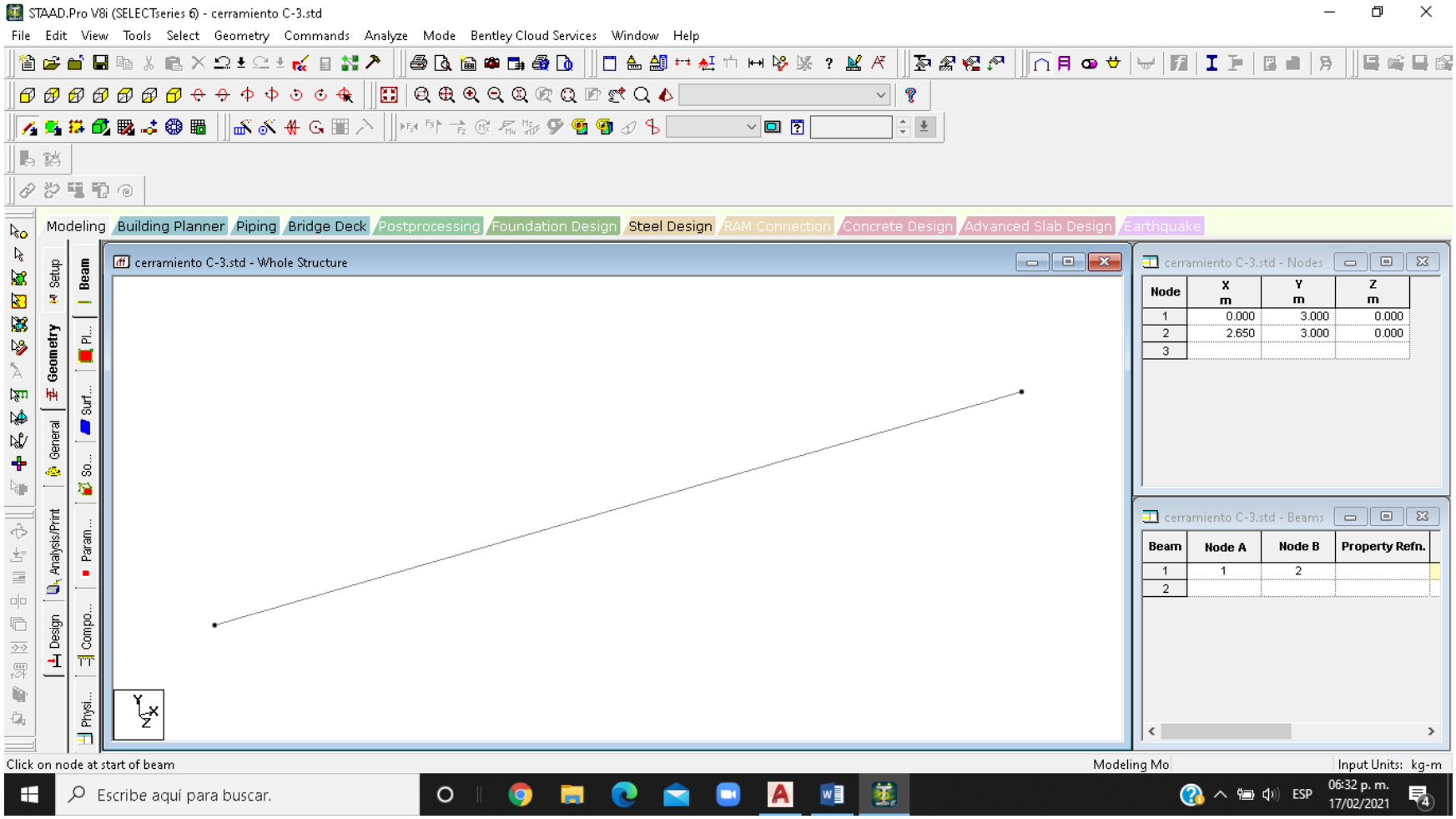

STAAD.Pro V8i (SELECTseries 6) - trabe T-2.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM + CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Steel Concrete Timber Aluminum Shearwall
trabe T-2.std - Whole Structure
Load 1
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM + C
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
05:25 p. m.
17/02/2021

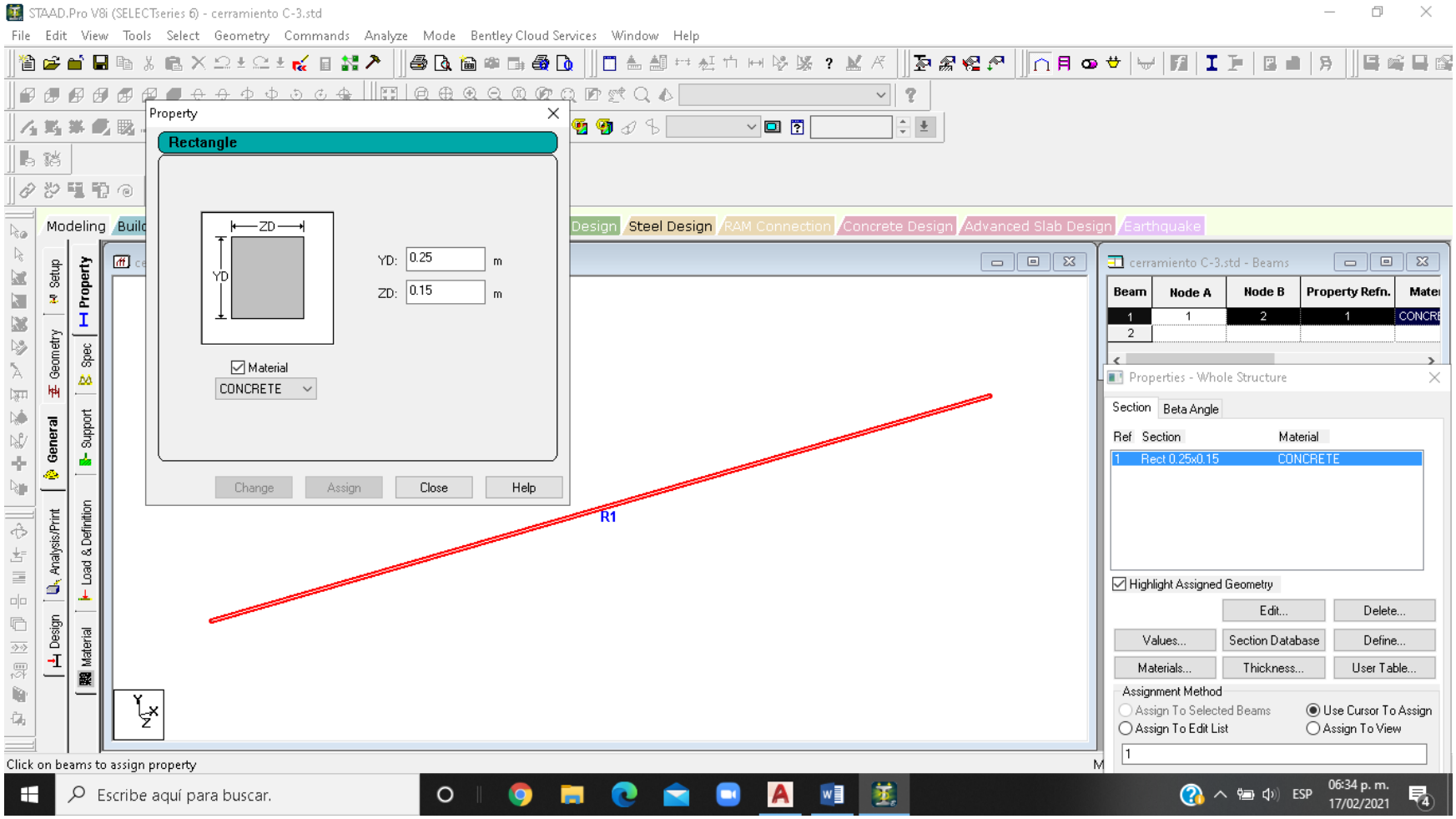

STAAD.Pro V8i (SELECTseries 6) - trabe T-2.std
trabe T-2.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
BEAM NO. 1 DESIGN RESULTS - FLEXURE
PER CODE NTC FOR THE DESIGN AND CONSTRUCTION OF CONCRETE STRUCTURES,DDF
LEN - 3000.00(mm) FY - 412. FC - 20. SIZE - 150.00 X 250.00(mm)
LEVEL HEIGHT (mm) BAR INFO FROM (mm) TO (mm) ANCHOR STA END
1 42. 2 - 2.MM 0. 3000. YES YES
CRITICAL POS MOMENT= 6.49 kNm AT 1500.00 (mm) LOAD 1
REQD STEEL= 87.93 (mm2) ROW=0.0028 ROWMX=0.0152 ROWMN=0.0016
REQD COMP STEEL= 0.00 (mm2)
MAX/MIN/ACTUAL BAR SPACING= 66.22/ 37.90/ 66.22 (mm)
COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm)
BASIC/REQD. DEVELOPMENT LENGTH = 199.08/ 269.16(mm)
Cracked Moment of Inertia Iz at above location =0.26239E+08 mm^4
REQUIRED REINF. STEEL SUMMARY :
SECTION REINF STEEL(+VE/-VE) MOMENTS(+VE/-VE) LOAD(+VE/-VE)
Total Page : 4
CAP
Design
Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM + C
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
05:28 p. m.
17/02/2021

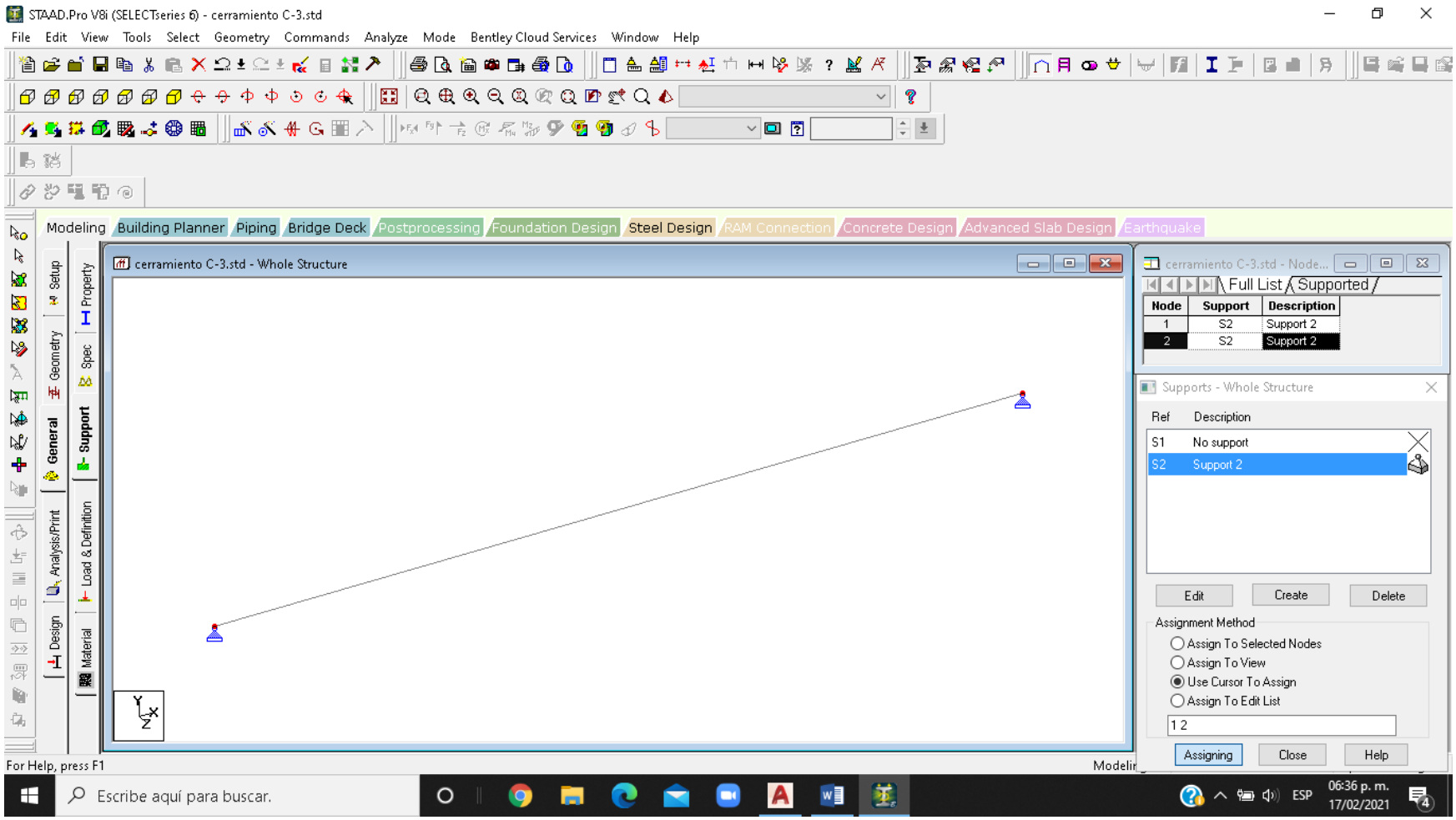

STAAD.Pro V8i (SELECTseries 6) - trabe T-2.std
trabe T-2.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
| COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm) |
| BASIC/REQD. DEVELOPMENT LENGTH = 199.08/ 269.16(mm) |
Cracked Moment of Inertia Iz at above location =0.26239E+08 mm^4
REQUIRED REINF. STEEL SUMMARY :
SECTION (MM) REINF STEEL(+VE/-VE) (SQ. MM) MOMENTS(+VE/-VE) (KNS-MET) LOAD(+VE/-VE)
0.00 0.00/ 0.00 0./ 0.00 0/ 1
250.00 47.14/ 0.00 2./ 0.00 1/ 0
500.00 68.24/ 0.00 4./ 0.00 1/ 0
750.00 70.68/ 0.00 5./ 0.00 1/ 0
1000.00 84.41/ 0.00 6./ 0.00 1/ 0
1250.00 92.75/ 0.00 6./ 0.00 1/ 0
1500.00 95.55/ 0.00 6./ 0.00 1/ 0
1750.00 92.75/ 0.00 6./ 0.00 1/ 0
2000.00 84.41/ 0.00 6./ 0.00 1/ 0
2250.00 70.68/ 0.00 5./ 0.00 1/ 0
2500.00 68.24/ 0.00 4./ 0.00 1/ 0
2750.00 68.24/ 0.00 2./ 0.00 1/ 0
3000.00 0.00/ 0.00 0./ 0.00 1/ 0
Total Page : 4
CAP
Design
Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM + C
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM + CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
05:29 p. m.
17/02/2021

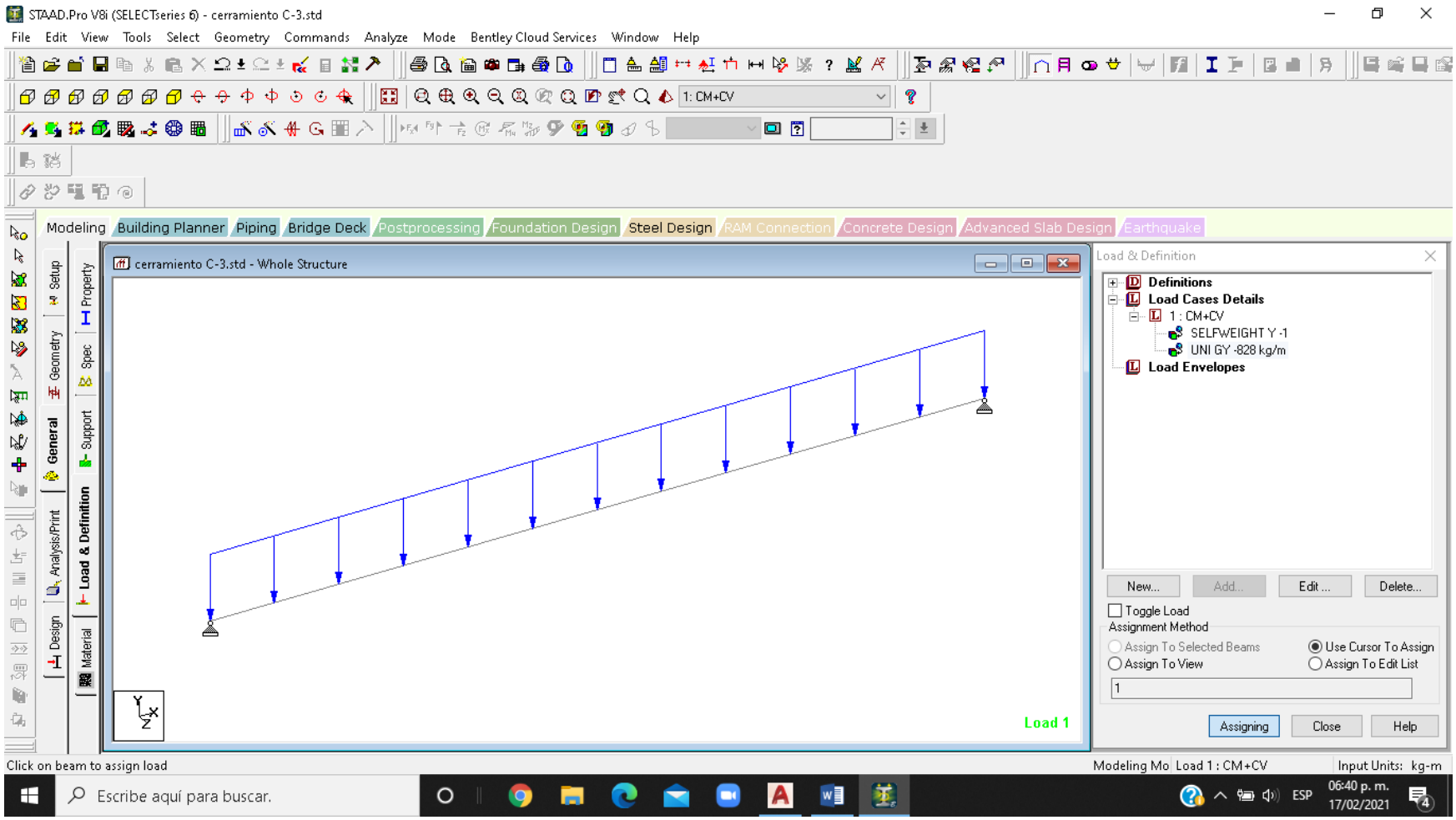
Cerramiento 3

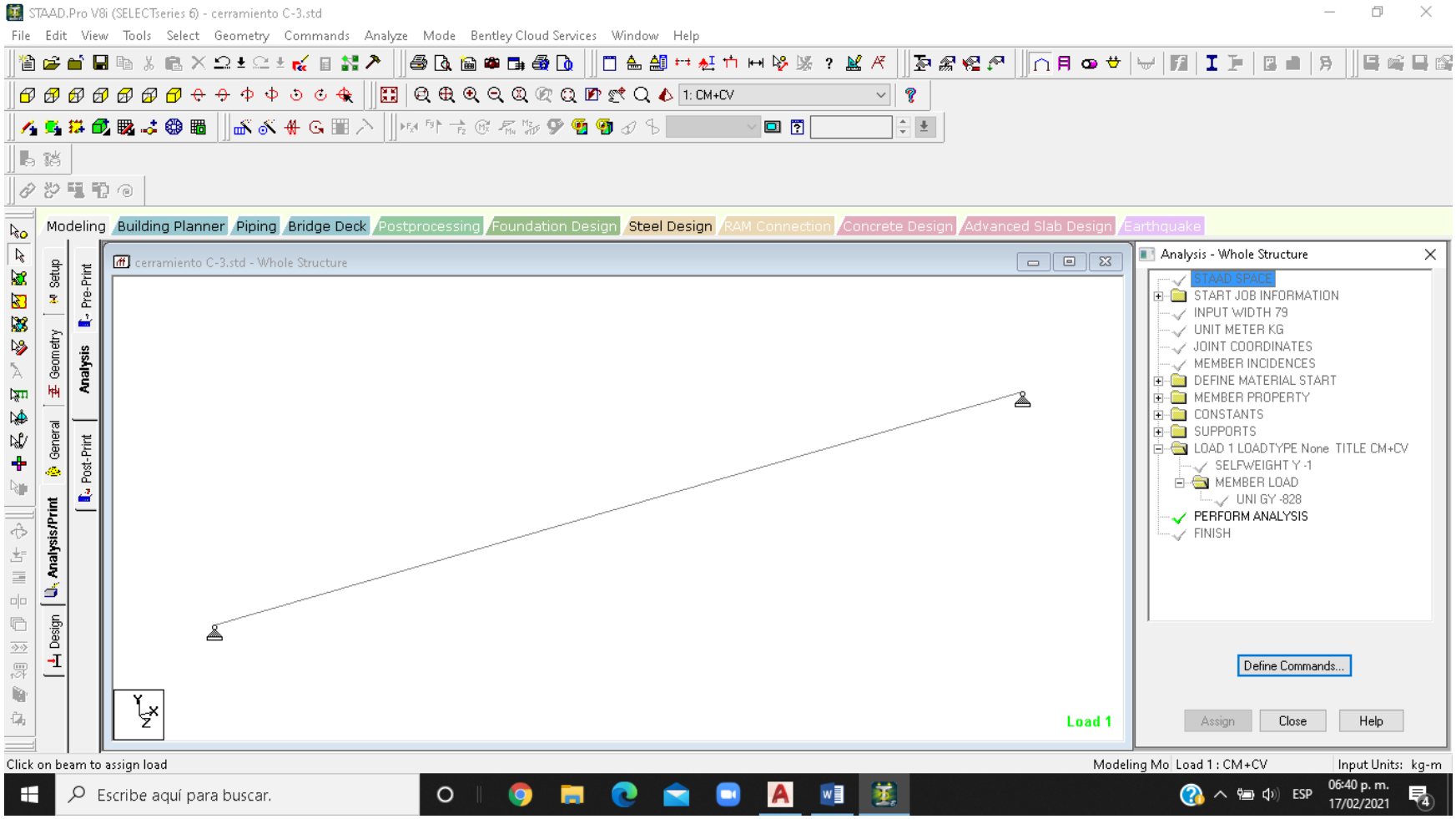


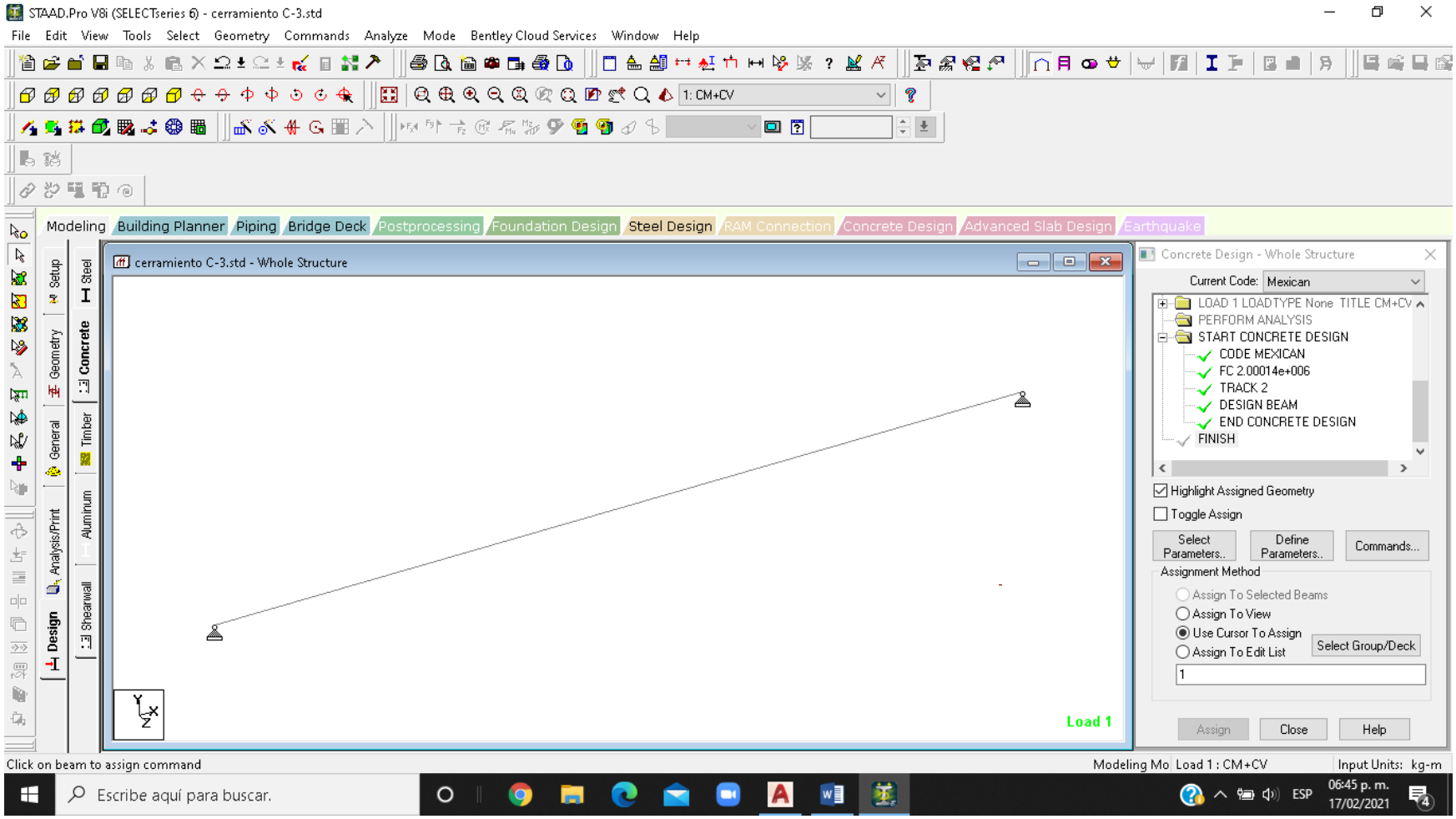

STAAD.Pro V8i (SELECTseries 6) - cerramiento C-3.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
cerramiento C-3.std - Whole Structure
cerramiento C-3.std - Nodes
Node X m Y m Z m
1 0.000 3.000 0.000
2 2.650 3.000 0.000
3
cerramiento C-3.std - Beams
Beam Node A Node B Property Refn.
1 1 2
2
Click on node at start of beam
Input Units: kg-m
Escribe aquí para buscar.
ESP
06:32 p. m.
17/02/2021

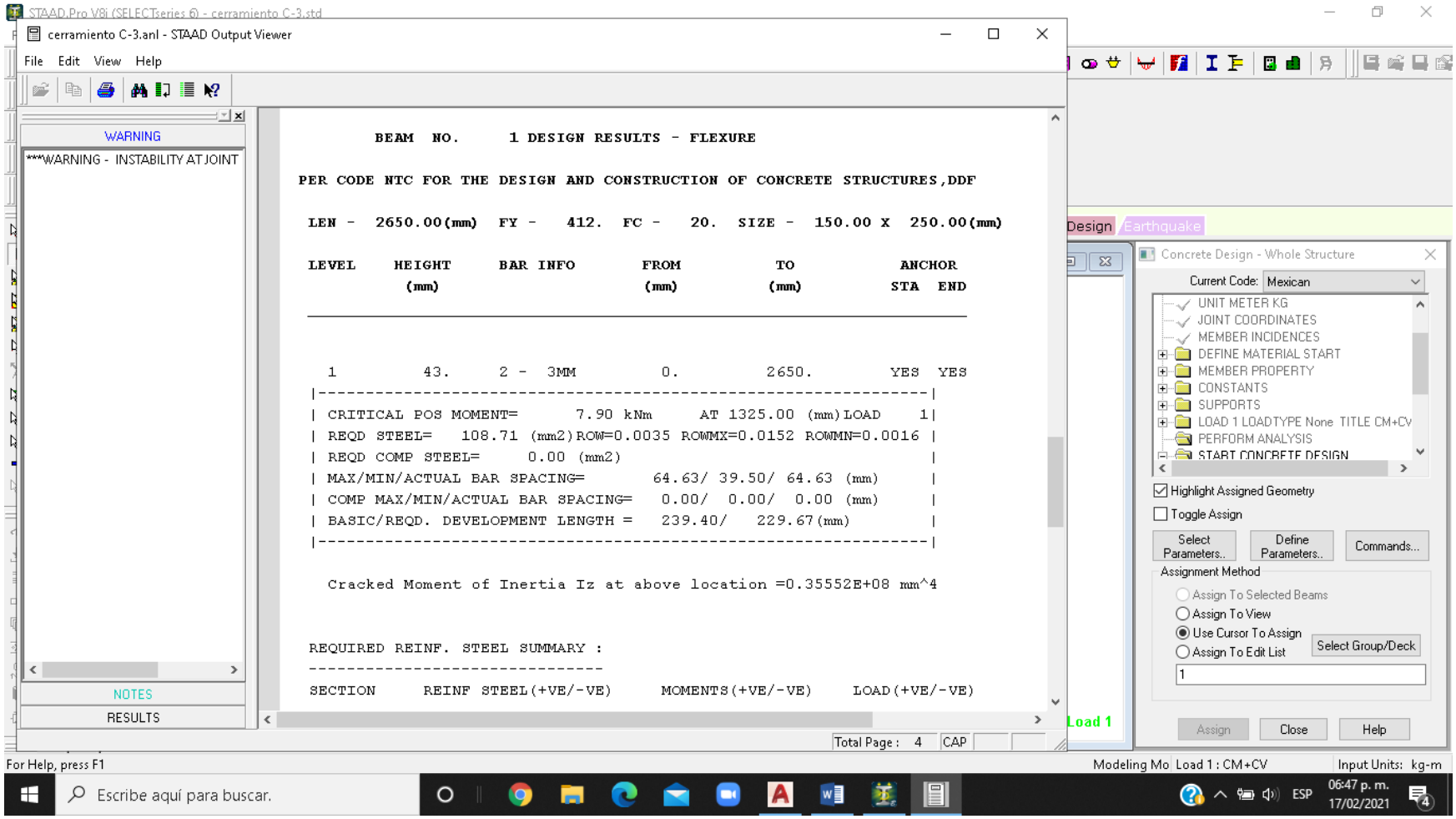

STAAD.Pro V8i (SELECTseries 6) - cerramiento C-3.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Property
Rectangle
ZD
YD
YD: 0.25 m
ZD: 0.15 m
Material
CONCRETE
Change Assign Close Help
Modeling
Steel Design
RAM Connection
Concrete Design
Advanced Slab Design
Earthquake
R1
cerramiento C-3.std - Beams
Beam Node A Node B Property Refn.
Properties - Whole Structure
Section Beta Angle
Ref Section Material
1 Rect 0.25x0.15 CONCRETE
Highlight Assigned Geometry
Edit... Delete...
Values... Section Database Define...
Materials... Thickness... User Table...
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To Edit List
Assign To View
Click on beams to assign property
Escribe aquí para buscar.
ESP
06:34 p. m.
17/02/2021

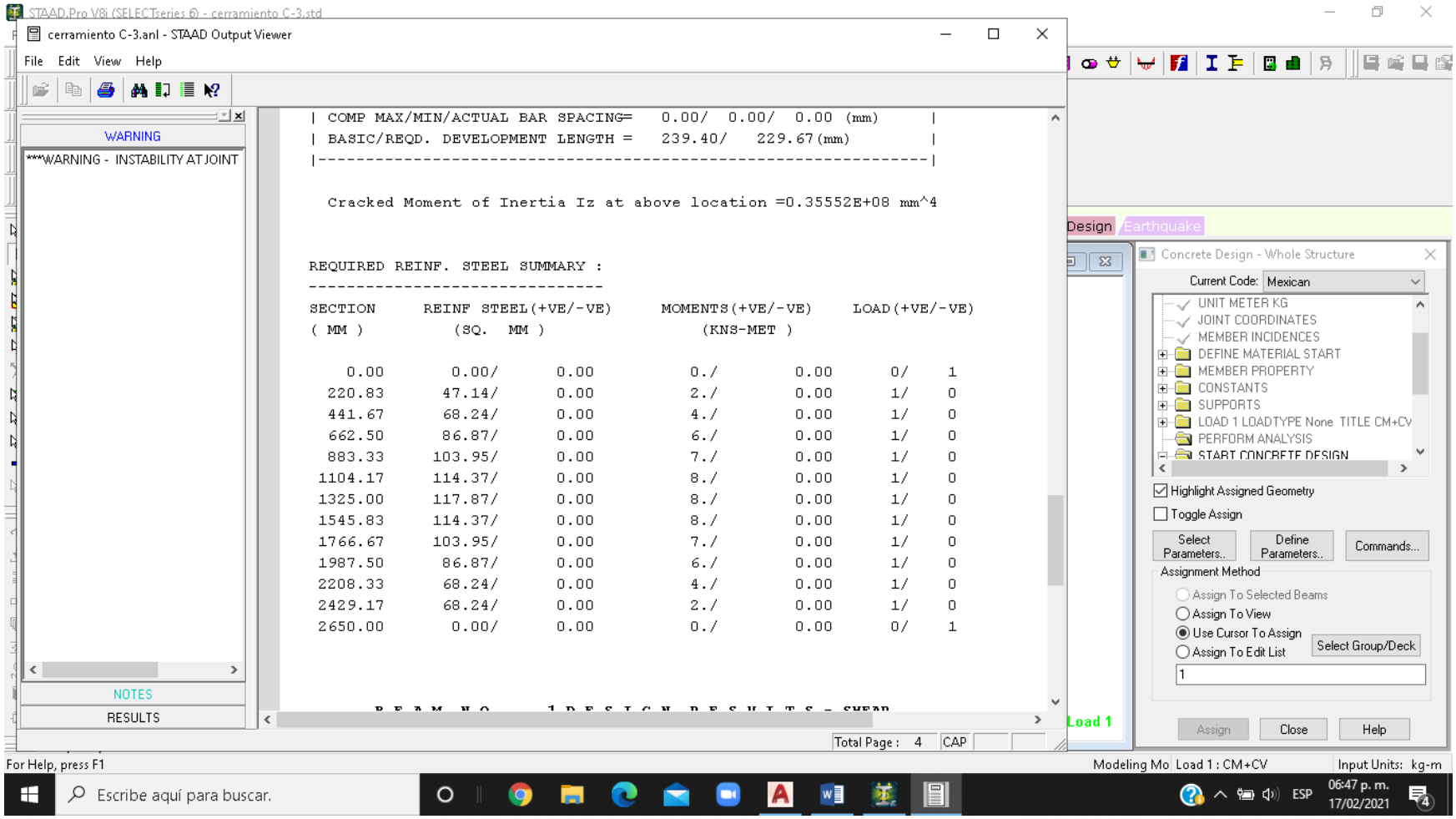

STAAD.Pro V8i (SELECTseries 6) - cerramiento C-3.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
cerramiento C-3.std - Whole Structure
cerramiento C-3.std - Node...
Full List Supported
Node Support Description
1 S2 Support 2
2 S2 Support 2
Supports - Whole Structure
Ref Description
S1 No support
S2 Support 2
Edit Create Delete
Assignment Method
Assign To Selected Nodes
Assign To View
Use Cursor To Assign
Assign To Edit List
1 2
Assigning Close Help
Setup Geometry General Design Analysis/Print
Property Spec Support Load & Definition Material
For Help, press F1
Escribe aquí para buscar.
ESP
06:36 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - cerramiento C-3.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM+CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Property Spec Support Load & Definition Material
cerramiento C-3.std - Whole Structure
Load 1
Load & Definition
Definitions
Load Cases Details
1 : CM+CV
SELFWEIGHT Y -1
UNI GY -828 kg/m
Load Envelopes
New... Add... Edit ... Delete...
Toggle Load
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To View
Assign To Edit List
1
Assigning Close Help
Click on beam to assign load
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
06:40 p. m.
17/02/2021

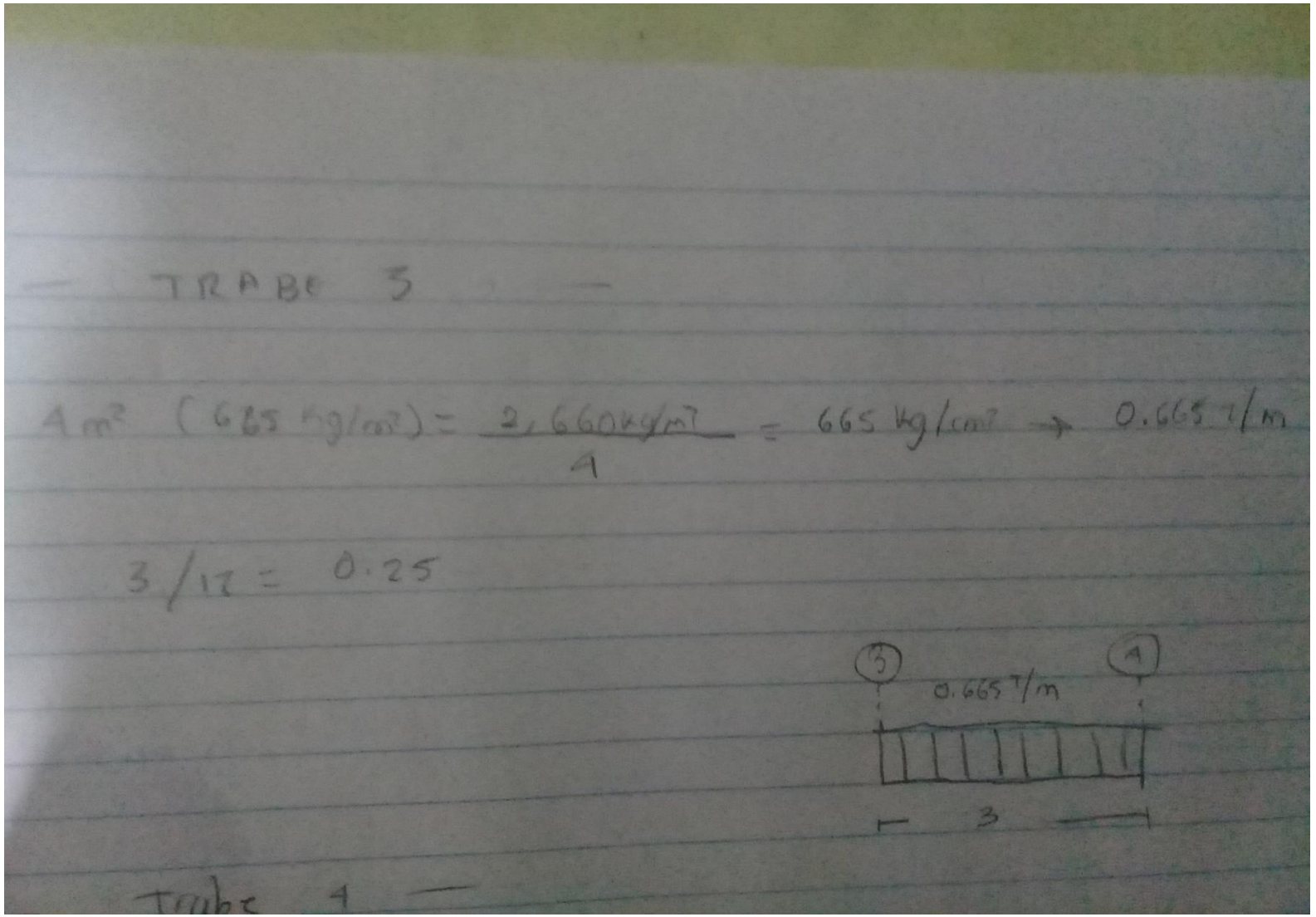

STAAD.Pro V8i (SELECTseries 6) - cerramiento C-3.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM+CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Pre-Print Analysis Post-Print
cerramiento C-3.std - Whole Structure
Load 1
Analysis - Whole Structure
STAAD SPACE
START JOB INFORMATION
INPUT WIDTH 79
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
SELFWEIGHT Y -1
MEMBER LOAD
UNI GY -828
PERFORM ANALYSIS
FINISH
Define Commands...
Assign
Close
Help
Click on beam to assign load
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
06:40 p. m.
17/02/2021

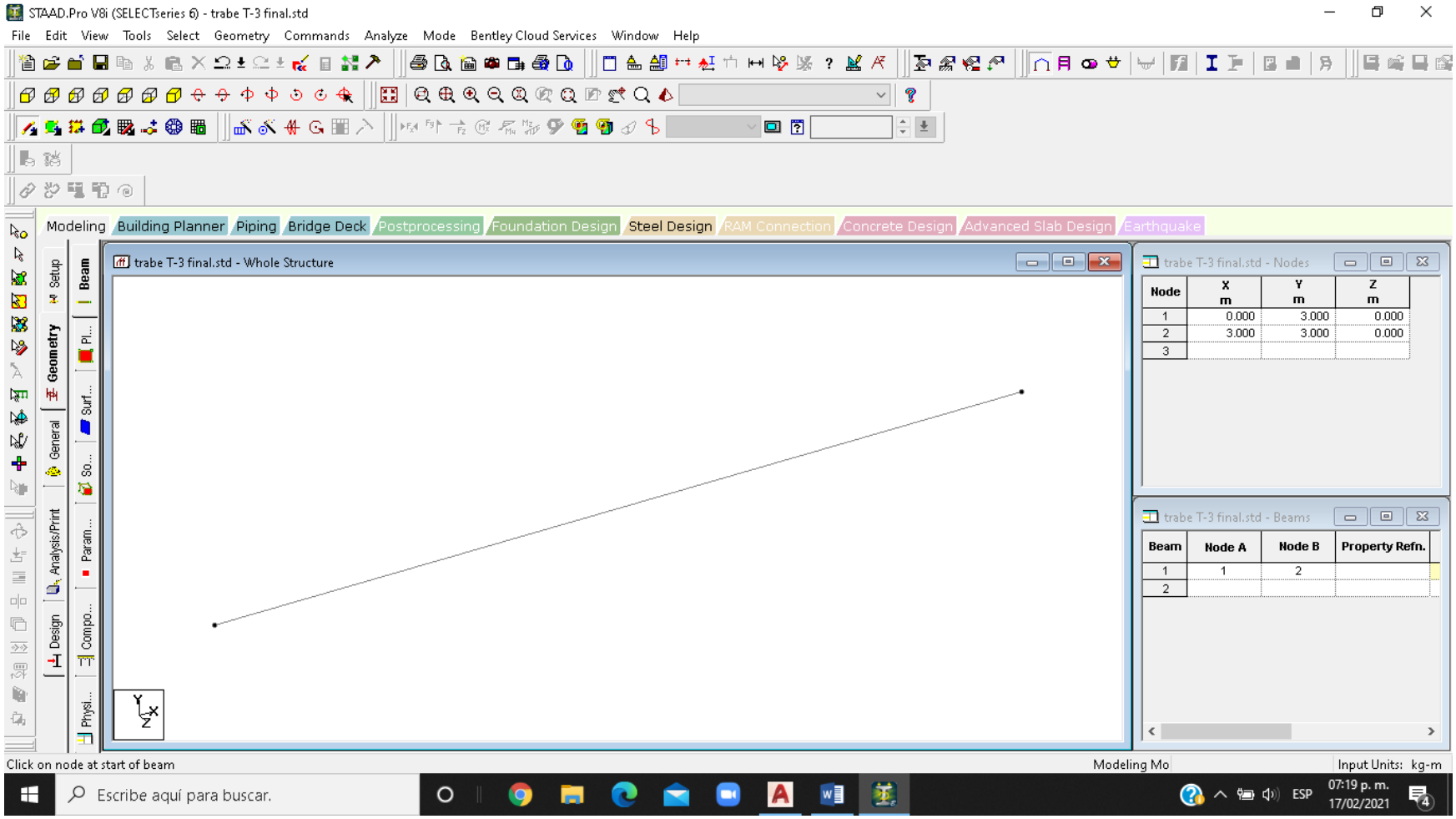

STAAD.Pro V8i (SELECTseries 6) - cerramiento C-3.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM+CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Steel Concrete Timber Aluminum Shearwall
cerramiento C-3.std - Whole Structure
Load 1
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Click on beam to assign command
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
06:45 p. m.
17/02/2021

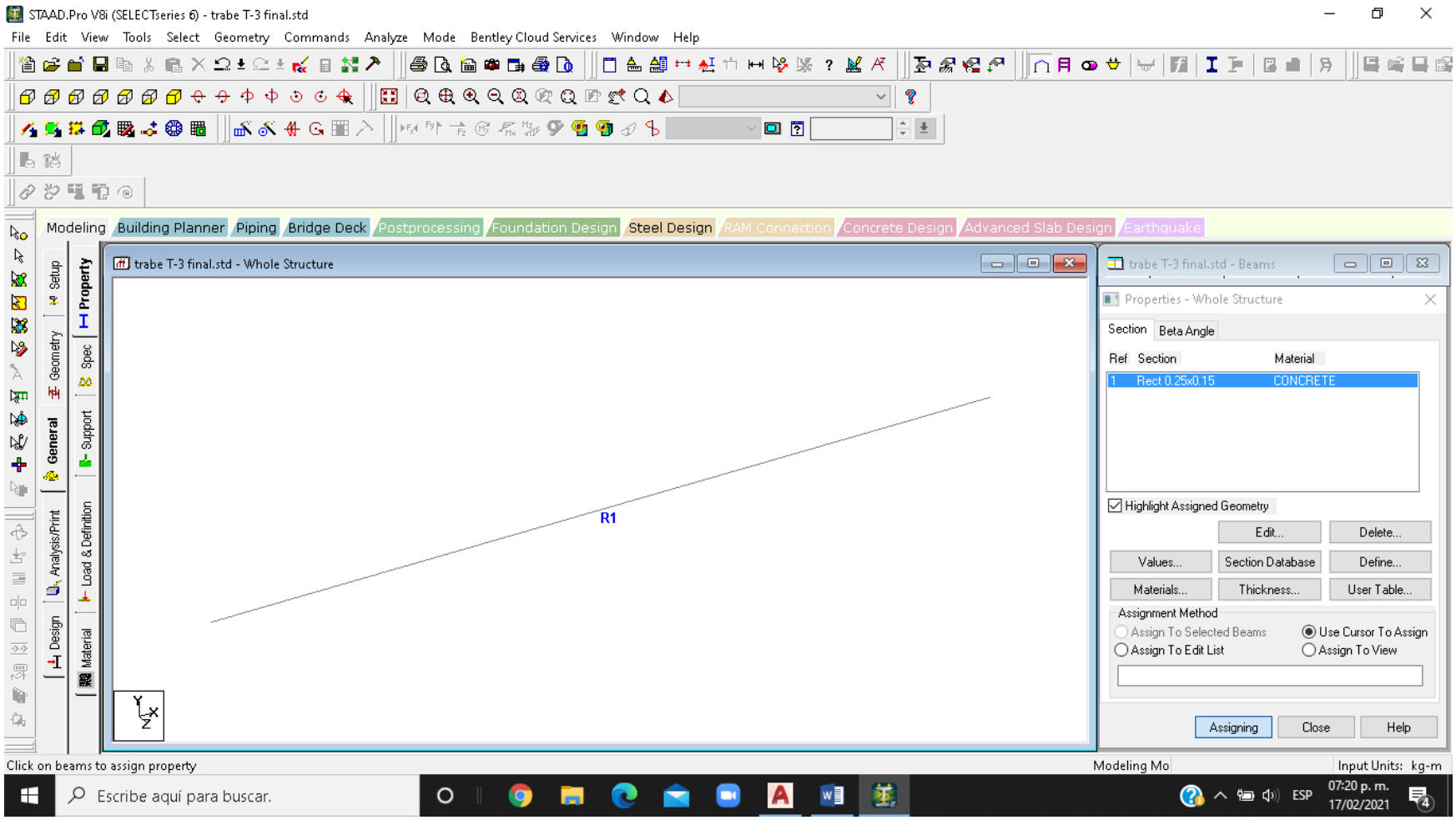

STAAD.Pro V8i (SELECTseries 6) - cerramiento C-3.std
cerramiento C-3.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
BEAM NO. 1 DESIGN RESULTS - FLEXURE
PER CODE NTC FOR THE DESIGN AND CONSTRUCTION OF CONCRETE STRUCTURES,DDF
LEN - 2650.00(mm) FY - 412. FC - 20. SIZE - 150.00 X 250.00(mm)
LEVEL HEIGHT (mm) BAR INFO FROM (mm) TO (mm) ANCHOR STA END
1 43. 2 - 3MM 0. 2650. YES YES
CRITICAL POS MOMENT= 7.90 kNm AT 1325.00 (mm) LOAD 1
REQD STEEL= 108.71 (mm2) ROW=0.0035 ROWMX=0.0152 ROWMN=0.0016
REQD COMP STEEL= 0.00 (mm2)
MAX/MIN/ACTUAL BAR SPACING= 64.63/ 39.50/ 64.63 (mm)
COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm)
BASIC/REQD. DEVELOPMENT LENGTH = 239.40/ 229.67(mm)
Cracked Moment of Inertia Iz at above location =0.35552E+08 mm^4
REQUIRED REINF. STEEL SUMMARY :
SECTION REINF STEEL(+VE/-VE) MOMENTS(+VE/-VE) LOAD(+VE/-VE)
Total Page : 4
CAP
Design
Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
06:47 p. m.
17/02/2021

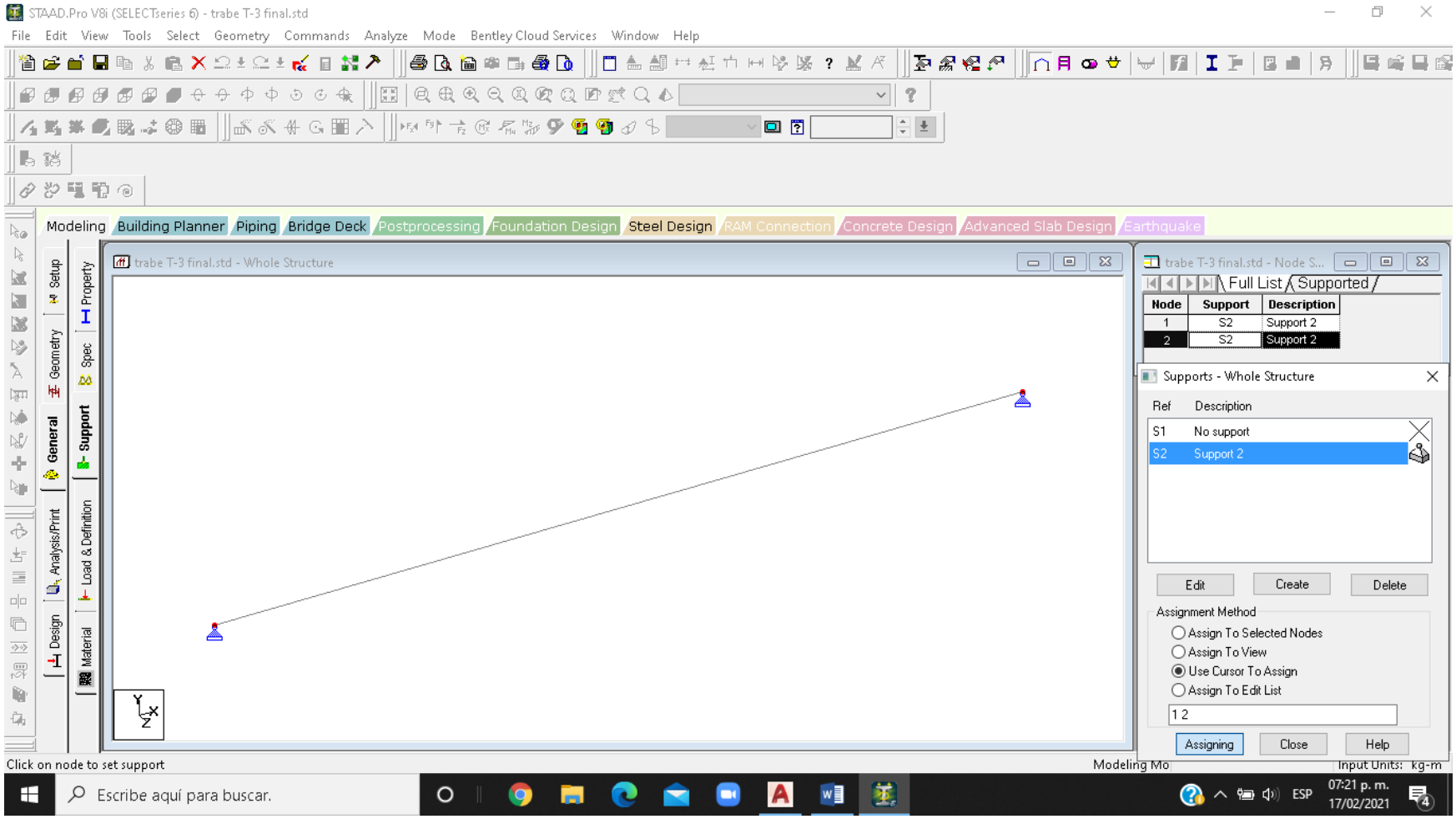

STAAD.Pro V8i (SELECTseries 6) - cerramiento C-3.std
cerramiento C-3.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
| COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm) |
| BASIC/REQD. DEVELOPMENT LENGTH = 239.40/ 229.67(mm) |
Cracked Moment of Inertia Iz at above location =0.35552E+08 mm^4
REQUIRED REINF. STEEL SUMMARY :
SECTION (MM) REINF STEEL(+VE/-VE) (SQ. MM) MOMENTS(+VE/-VE) (KNS-MET) LOAD(+VE/-VE)
0.00 0.00/ 0.00 0./ 0.00 0/ 1
220.83 47.14/ 0.00 2./ 0.00 1/ 0
441.67 68.24/ 0.00 4./ 0.00 1/ 0
662.50 86.87/ 0.00 6./ 0.00 1/ 0
883.33 103.95/ 0.00 7./ 0.00 1/ 0
1104.17 114.37/ 0.00 8./ 0.00 1/ 0
1325.00 117.87/ 0.00 8./ 0.00 1/ 0
1545.83 114.37/ 0.00 8./ 0.00 1/ 0
1766.67 103.95/ 0.00 7./ 0.00 1/ 0
1987.50 86.87/ 0.00 6./ 0.00 1/ 0
2208.33 68.24/ 0.00 4./ 0.00 1/ 0
2429.17 68.24/ 0.00 2./ 0.00 1/ 0
2650.00 0.00/ 0.00 0./ 0.00 0/ 1
Total Page : 4 CAP
Design Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
06:47 p. m.
17/02/2021

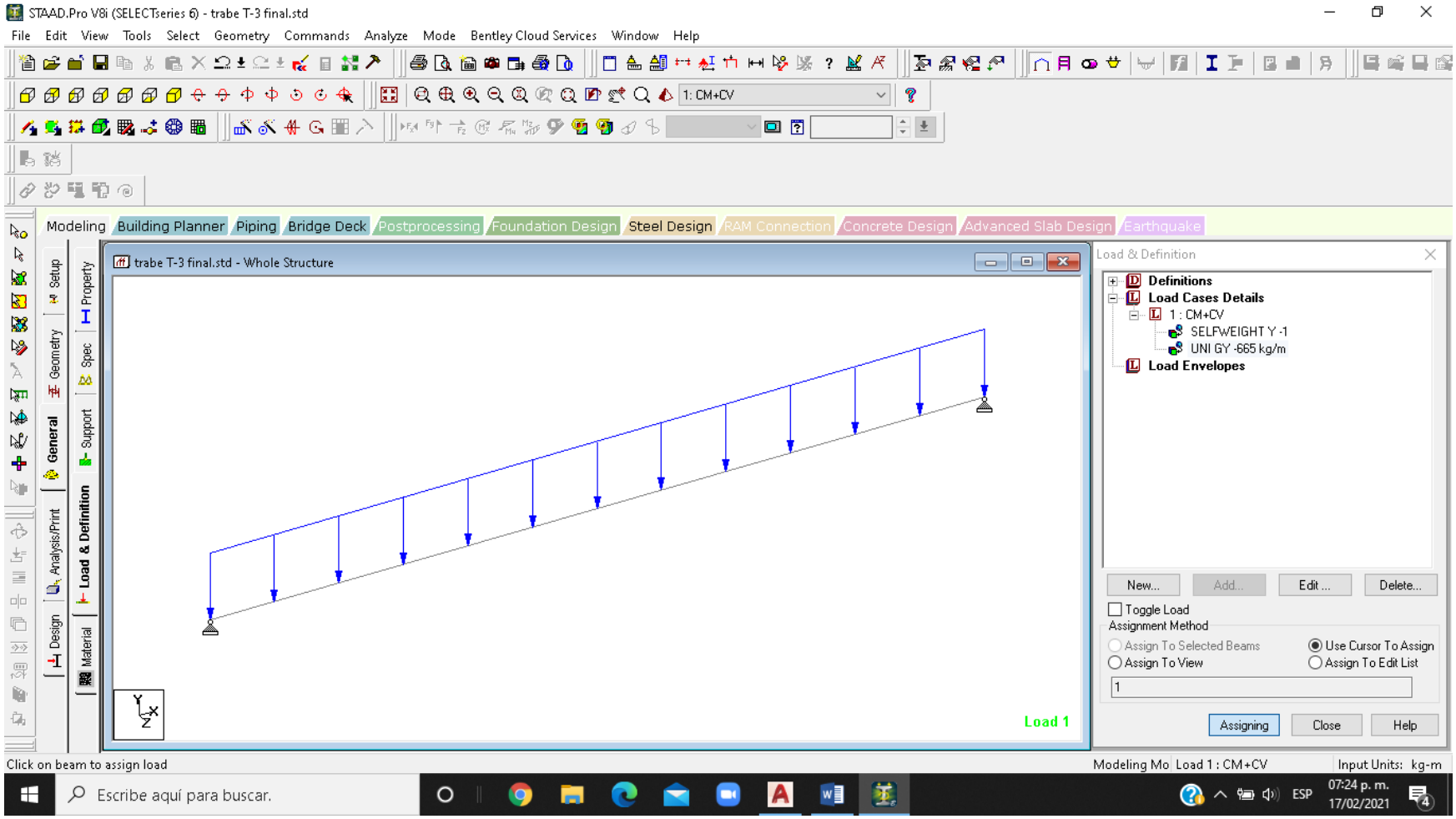
Trabe 3

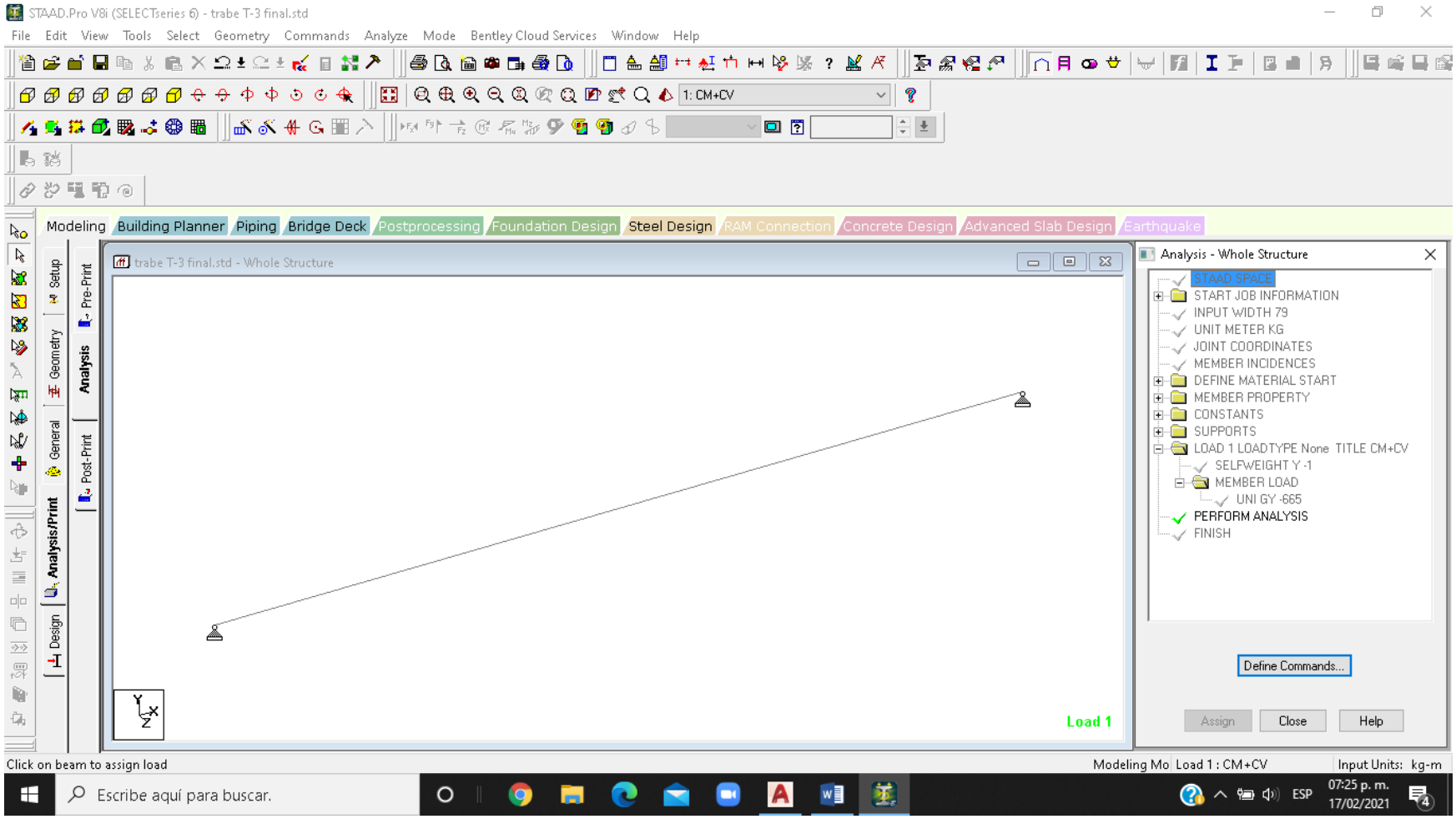

TRABE 3
A m² (665 kg/m²) = 2,660 kg/m² / A = 665 kg/m² → 0.665 T/m
3/12 = 0.25
3
A
0.665 T/m
3
Trabe 4

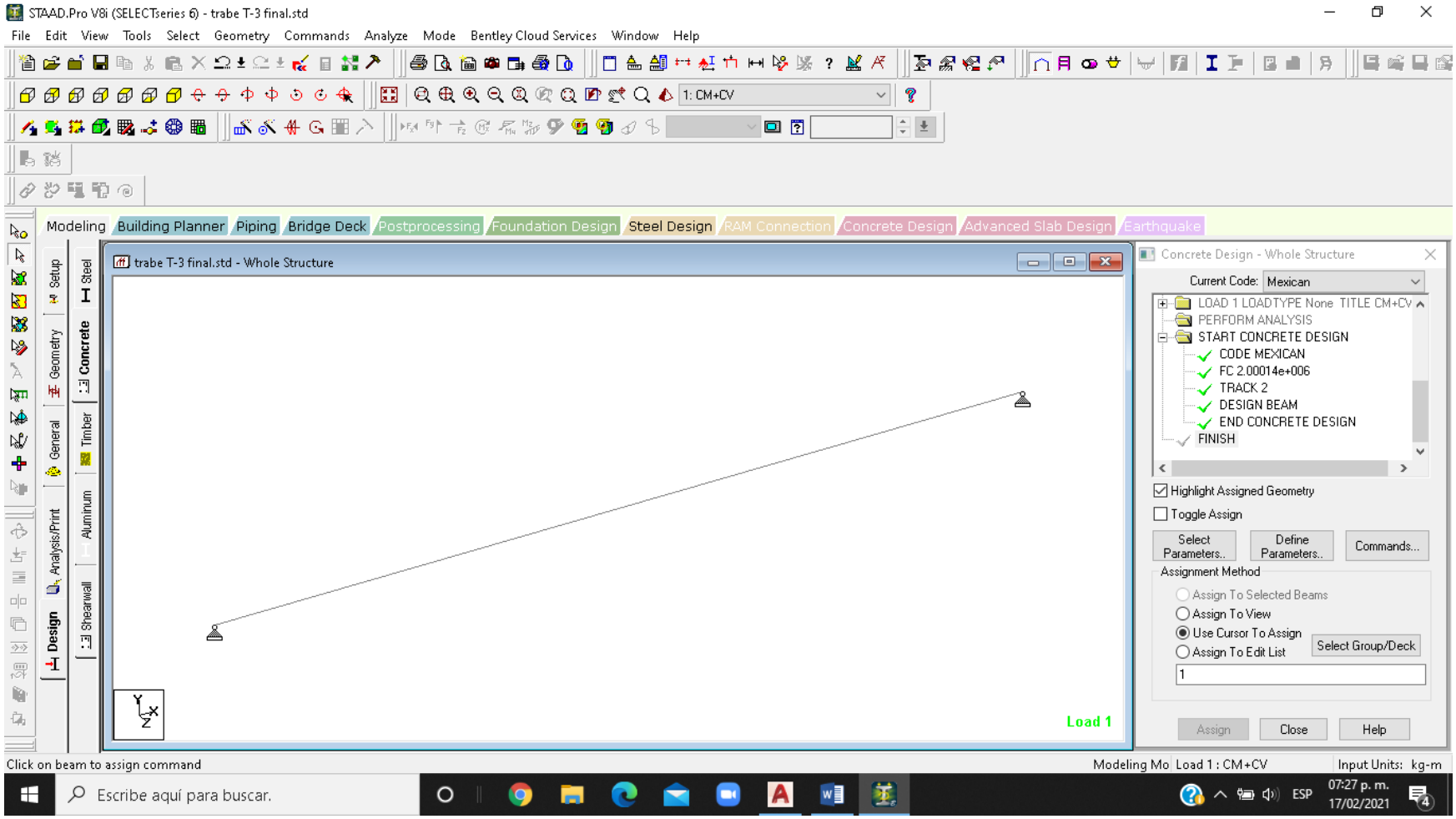

STAAD.Pro V8i (SELECTseries 6) - trabe T-3 final.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-3 final.std - Whole Structure
trabe T-3 final.std - Nodes
Node X m Y m Z m
1 0.000 3.000 0.000
2 3.000 3.000 0.000
3
trabe T-3 final.std - Beams
Beam Node A Node B Property Refn.
1 1 2
2
Click on node at start of beam
Modeling Mo
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:19 p. m.
17/02/2021

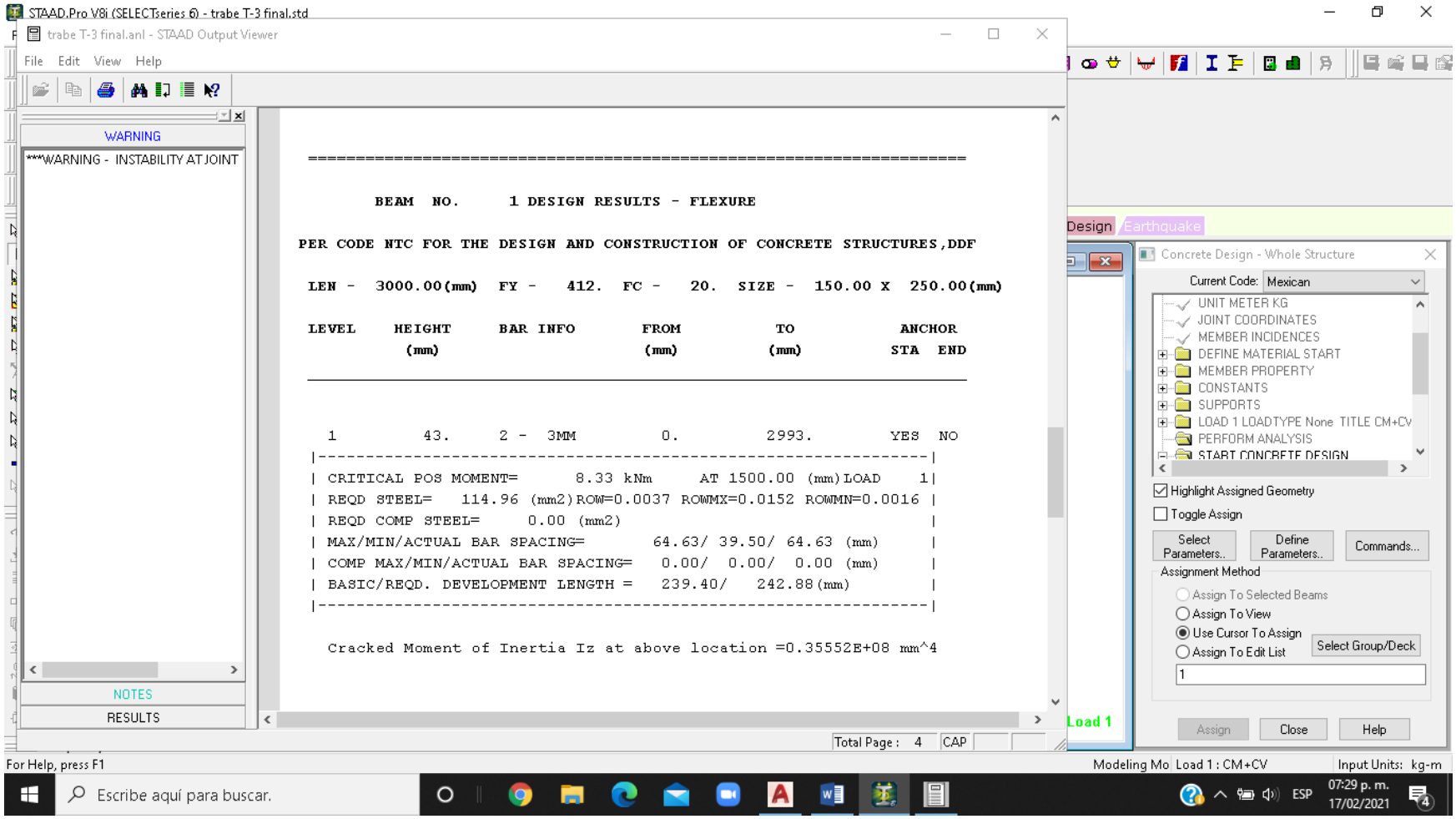

STAAD.Pro V8i (SELECTseries 6) - trabe T-3 final.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-3 final.std - Whole Structure
R1
trabe T-3 final.std - Beams
Properties - Whole Structure
Section Beta Angle
Ref Section Material
1 Rect 0.25x0.15 CONCRETE
Highlight Assigned Geometry
Edit... Delete...
Values... Section Database Define...
Materials... Thickness... User Table...
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To Edit List
Assign To View
Assigning Close Help
Click on beams to assign property
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:20 p. m.
17/02/2021

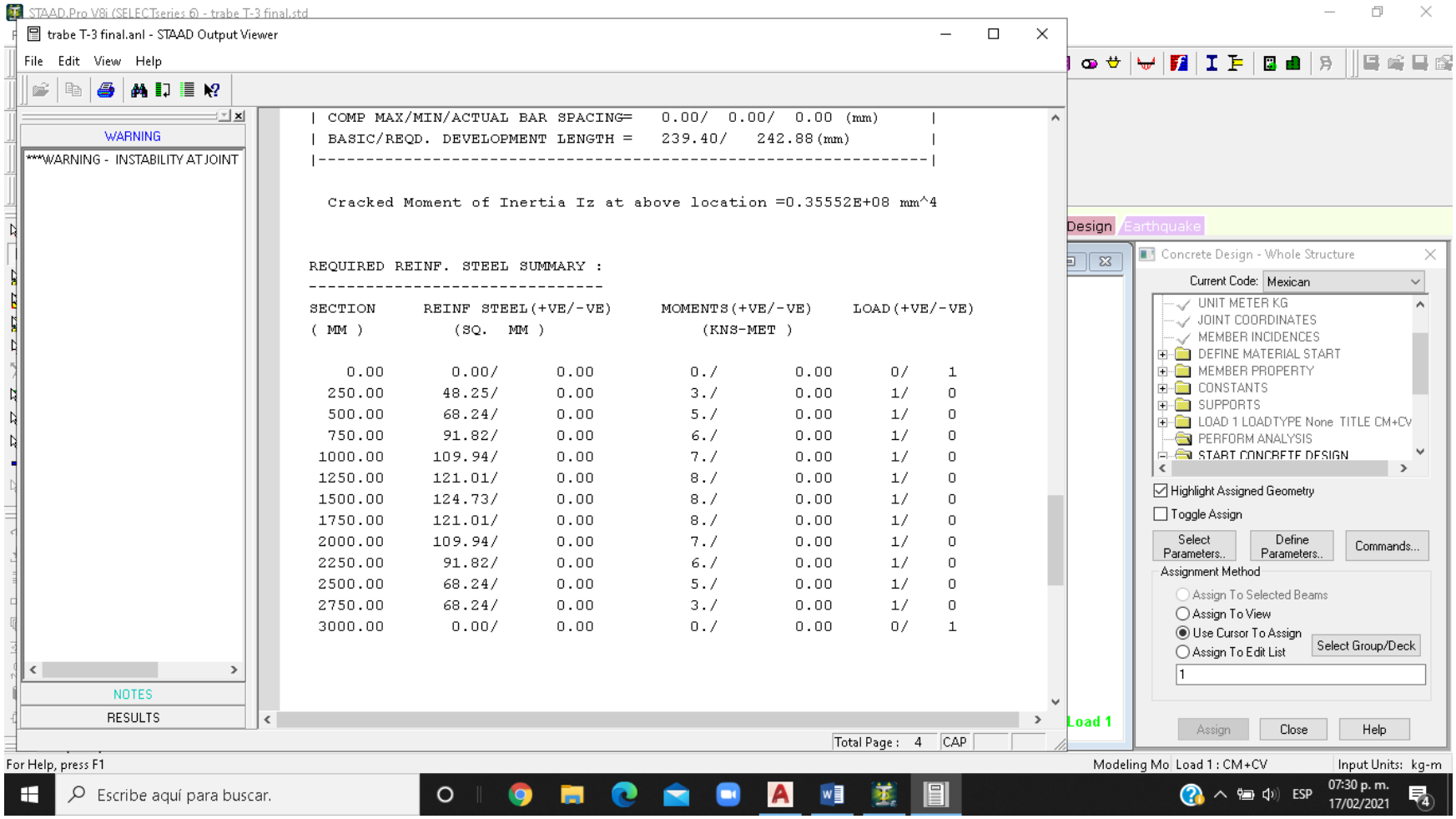

STAAD.Pro V8i (SELECTseries 6) - trabe T-3 final.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-3 final.std - Whole Structure
trabe T-3 final.std - Node S...
Full List Supported
Node Support Description
1 S2 Support 2
2 S2 Support 2
Supports - Whole Structure
Ref Description
S1 No support
S2 Support 2
Edit Create Delete
Assignment Method
Assign To Selected Nodes
Assign To View
Use Cursor To Assign
Assign To Edit List
1 2
Assigning Close Help
Property Spec Support Load & Definition Material
Setup Geometry General Analysis/Print Design
Click on node to set support
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:21 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - trabe T-3 final.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM+CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Property Spec Support Load & Definition Material
trabe T-3 final.std - Whole Structure
Load 1
Load & Definition
Definitions
Load Cases Details
1 : CM+CV
SELFWEIGHT Y -1
UNI GY -665 kg/m
Load Envelopes
New... Add... Edit ... Delete...
Toggle Load
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To View
Assign To Edit List
1
Assigning Close Help
Click on beam to assign load
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:24 p. m.
17/02/2021

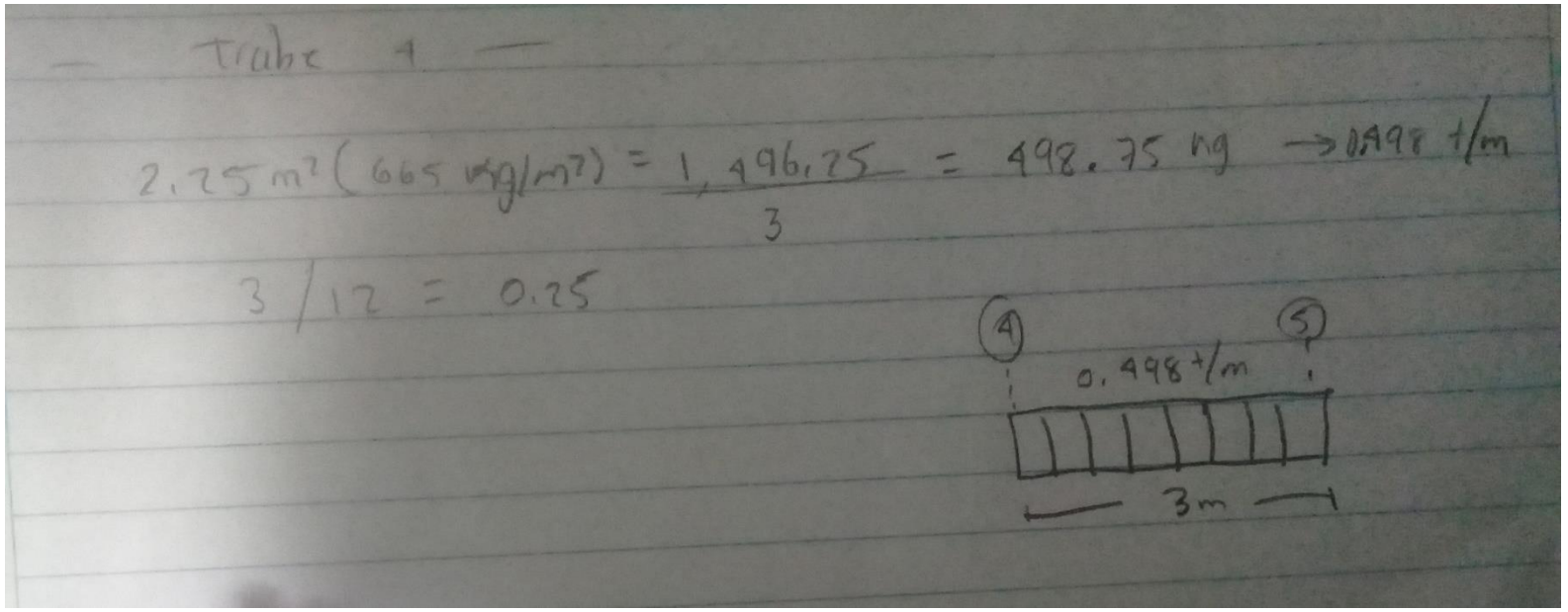

STAAD.Pro V8i (SELECTseries 6) - trabe T-3 final.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM+CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Pre-Print Analysis Post-Print
trabe T-3 final.std - Whole Structure
Load 1
Analysis - Whole Structure
STAAD SPACE
START JOB INFORMATION
INPUT WIDTH 79
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
SELFWEIGHT Y -1
MEMBER LOAD
UNI GY -665
PERFORM ANALYSIS
FINISH
Define Commands...
Assign
Close
Help
Click on beam to assign load
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:25 p. m.
17/02/2021

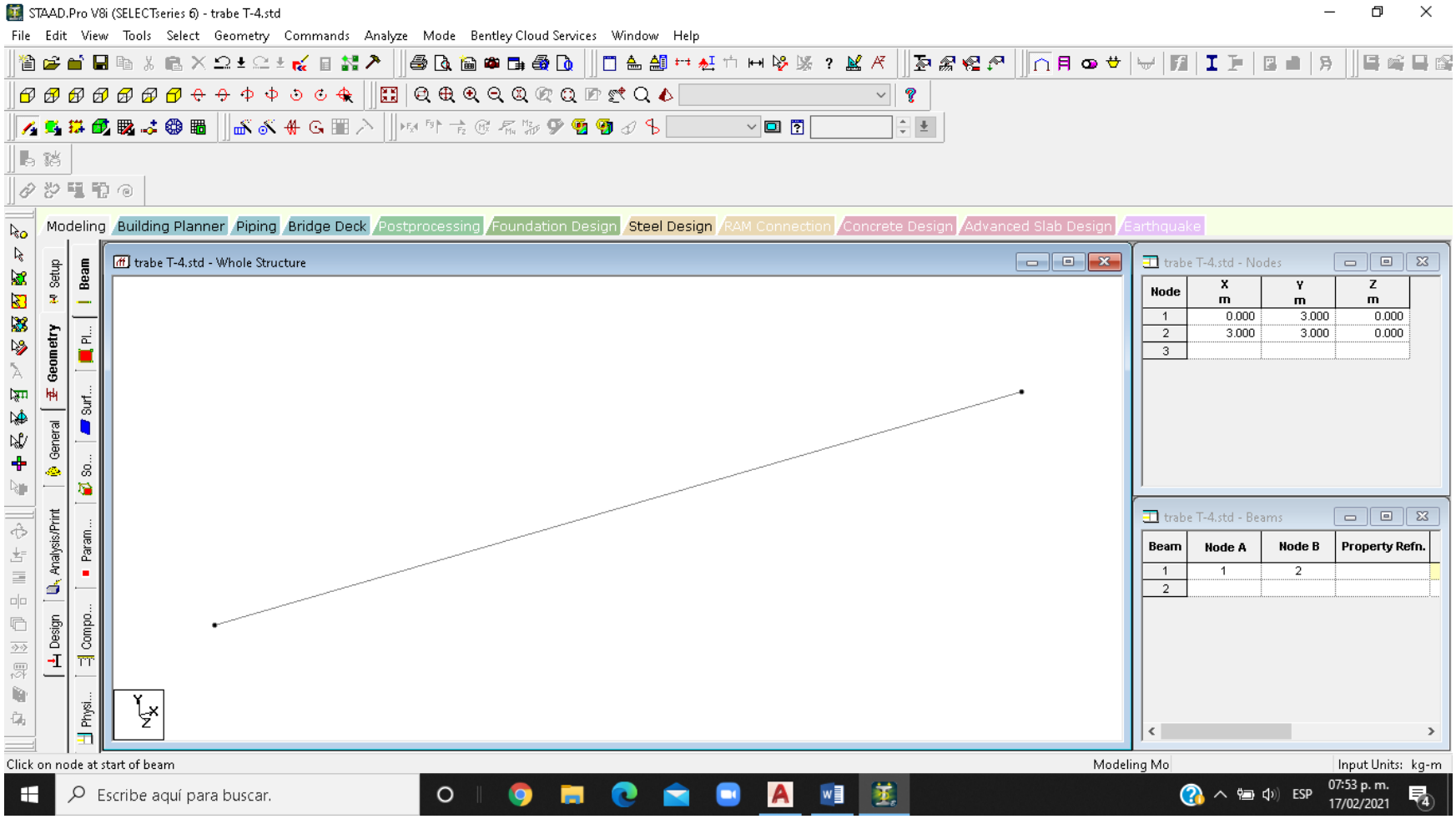

STAAD.Pro V8i (SELECTseries 6) - trabe T-3 final.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-3 final.std - Whole Structure
Load 1
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
Assign
Close
Help
Click on beam to assign command
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:27 p. m.
17/02/2021

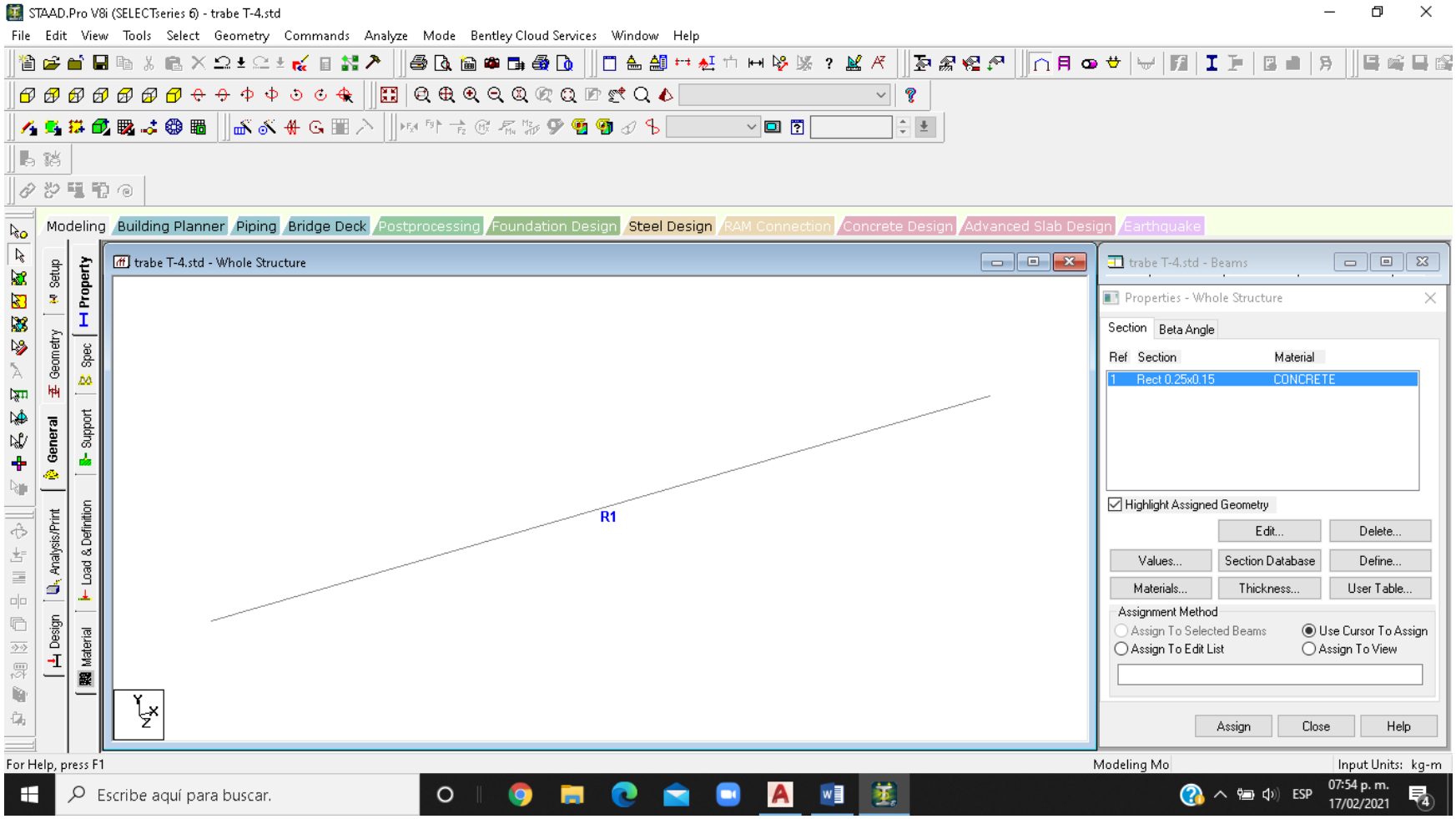

STAAD.Pro V8i (SELECTseries 6) - trabe T-3 final.std
trabe T-3 final.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
BEAM NO. 1 DESIGN RESULTS - FLEXURE
PER CODE NTC FOR THE DESIGN AND CONSTRUCTION OF CONCRETE STRUCTURES,DDF
LEN - 3000.00(mm) FY - 412. FC - 20. SIZE - 150.00 X 250.00(mm)
LEVEL HEIGHT BAR INFO FROM TO ANCHOR
(mm) (mm) (mm) STA END
1 43. 2 - 3MM 0. 2993. YES NO
| CRITICAL POS MOMENT= 8.33 kNm AT 1500.00 (mm)LOAD 1|
| REQD STEEL= 114.96 (mm2)ROW=0.0037 ROWMX=0.0152 ROWMN=0.0016 |
| REQD COMP STEEL= 0.00 (mm2) |
| MAX/MIN/ACTUAL BAR SPACING= 64.63/ 39.50/ 64.63 (mm) |
| COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm) |
| BASIC/REQD. DEVELOPMENT LENGTH = 239.40/ 242.88(mm) |
Cracked Moment of Inertia Iz at above location =0.35552E+08 mm^4
Total Page : 4
CAP
Design
Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:29 p. m.
17/02/2021

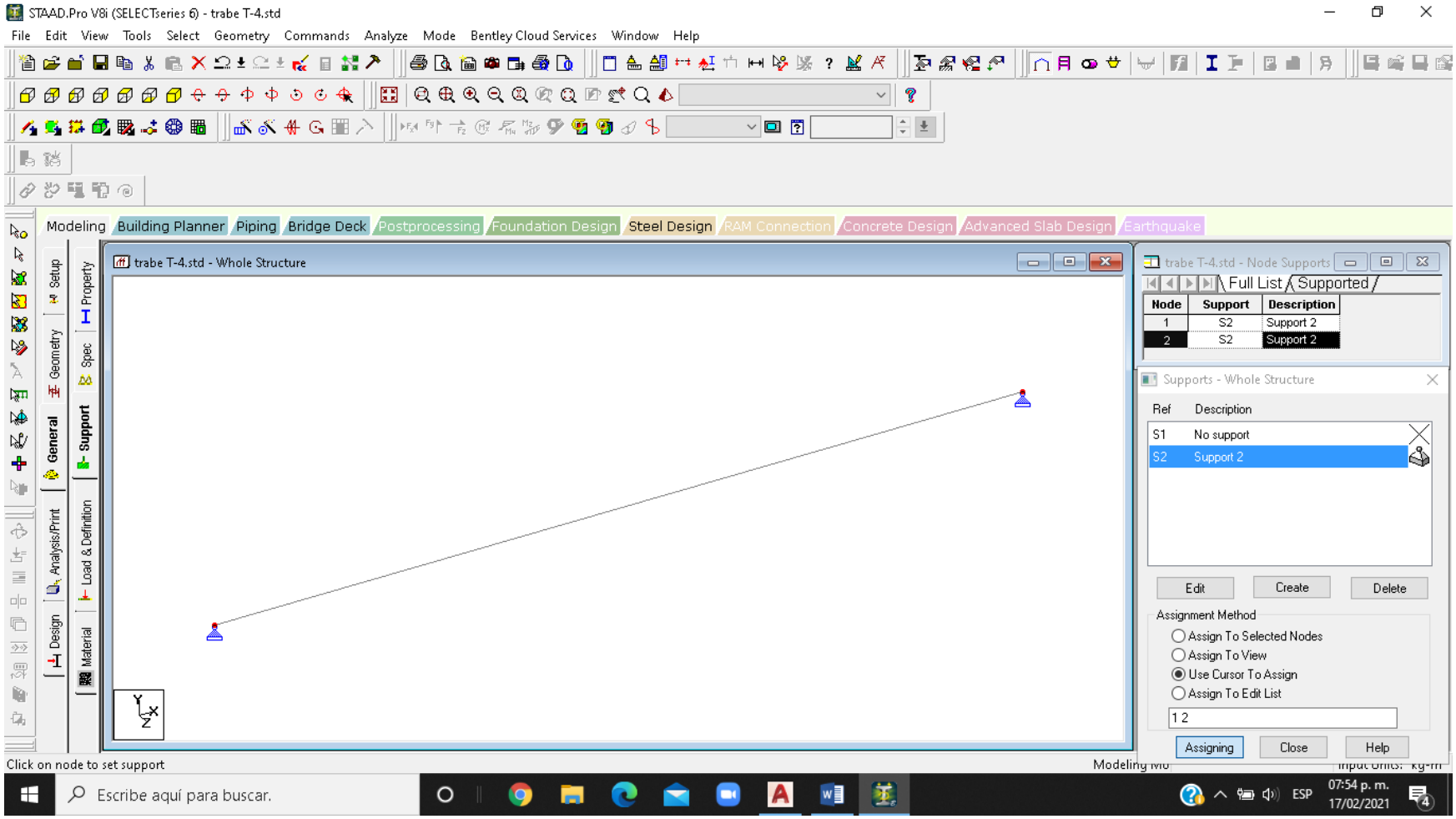

STAAD.Pro V8i (SELECTseries 6) - trabe T-3 final.std
trabe T-3 final.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
| COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm) |
| BASIC/REQD. DEVELOPMENT LENGTH = 239.40/ 242.88(mm) |
Cracked Moment of Inertia Iz at above location =0.35552E+08 mm^4
REQUIRED REINF. STEEL SUMMARY :
SECTION (MM) REINF STEEL(+VE/-VE) (SQ. MM) MOMENTS(+VE/-VE) (KNS-MET) LOAD(+VE/-VE)
0.00 0.00/ 0.00 0./ 0.00 0/ 1
250.00 48.25/ 0.00 3./ 0.00 1/ 0
500.00 68.24/ 0.00 5./ 0.00 1/ 0
750.00 91.82/ 0.00 6./ 0.00 1/ 0
1000.00 109.94/ 0.00 7./ 0.00 1/ 0
1250.00 121.01/ 0.00 8./ 0.00 1/ 0
1500.00 124.73/ 0.00 8./ 0.00 1/ 0
1750.00 121.01/ 0.00 8./ 0.00 1/ 0
2000.00 109.94/ 0.00 7./ 0.00 1/ 0
2250.00 91.82/ 0.00 6./ 0.00 1/ 0
2500.00 68.24/ 0.00 5./ 0.00 1/ 0
2750.00 68.24/ 0.00 3./ 0.00 1/ 0
3000.00 0.00/ 0.00 0./ 0.00 0/ 1
Total Page : 4
CAP
Design
Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:30 p. m.
17/02/2021

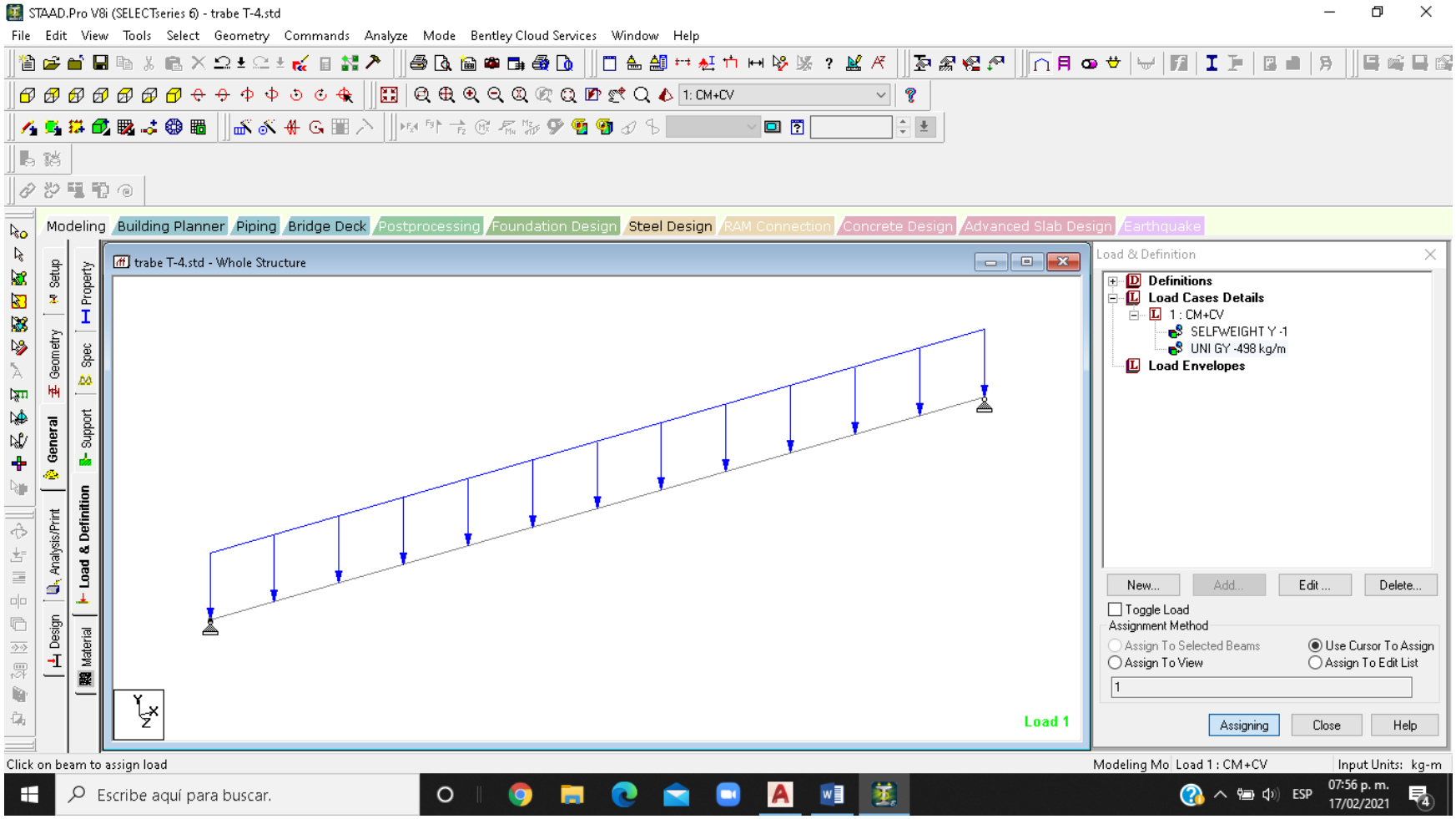
trabe 4

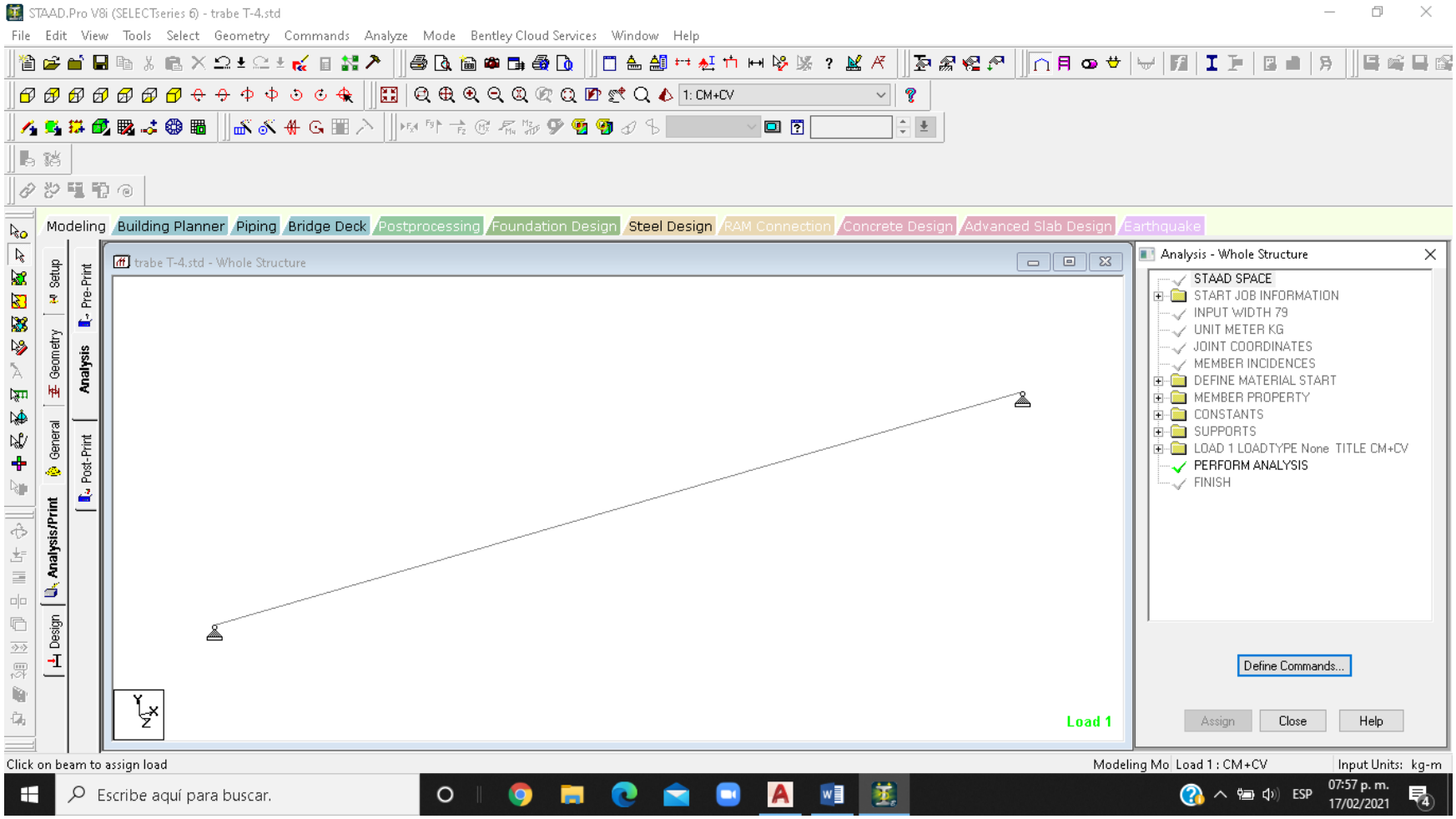

Trabe 4
2.25 m² (665 kg/m²) = 1,496.75 / 3 = 498.75 kg → 0.498 t/m
3/12 = 0.25
4
5
0.498 t/m
3m

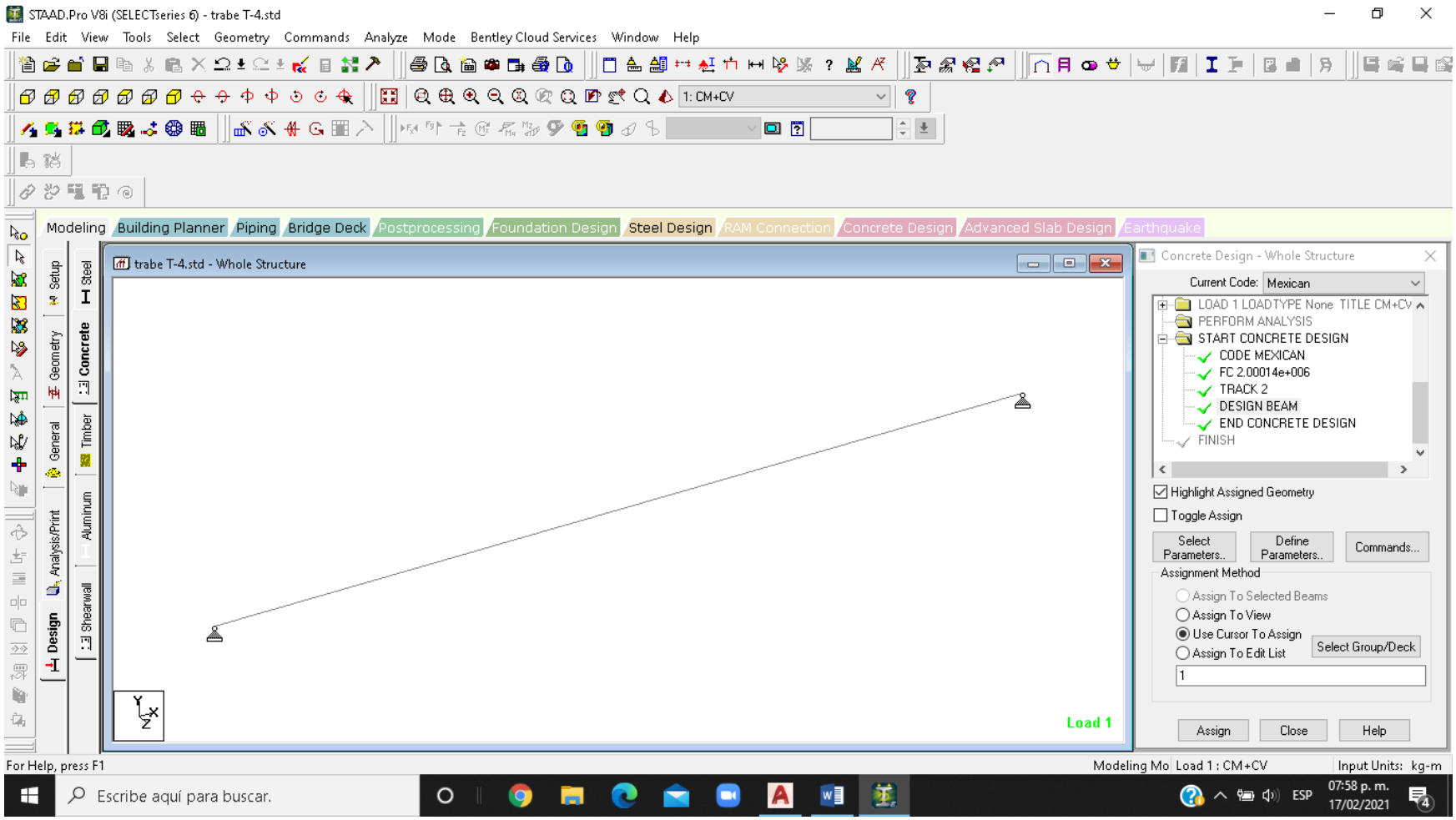

STAAD.Pro V8i (SELECTseries 6) - trabe T-4.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-4.std - Whole Structure
trabe T-4.std - Nodes
Node X m Y m Z m
1 0.000 3.000 0.000
2 3.000 3.000 0.000
3
trabe T-4.std - Beams
Beam Node A Node B Property Refn.
1 1 2
2
Click on node at start of beam
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:53 p. m.
17/02/2021

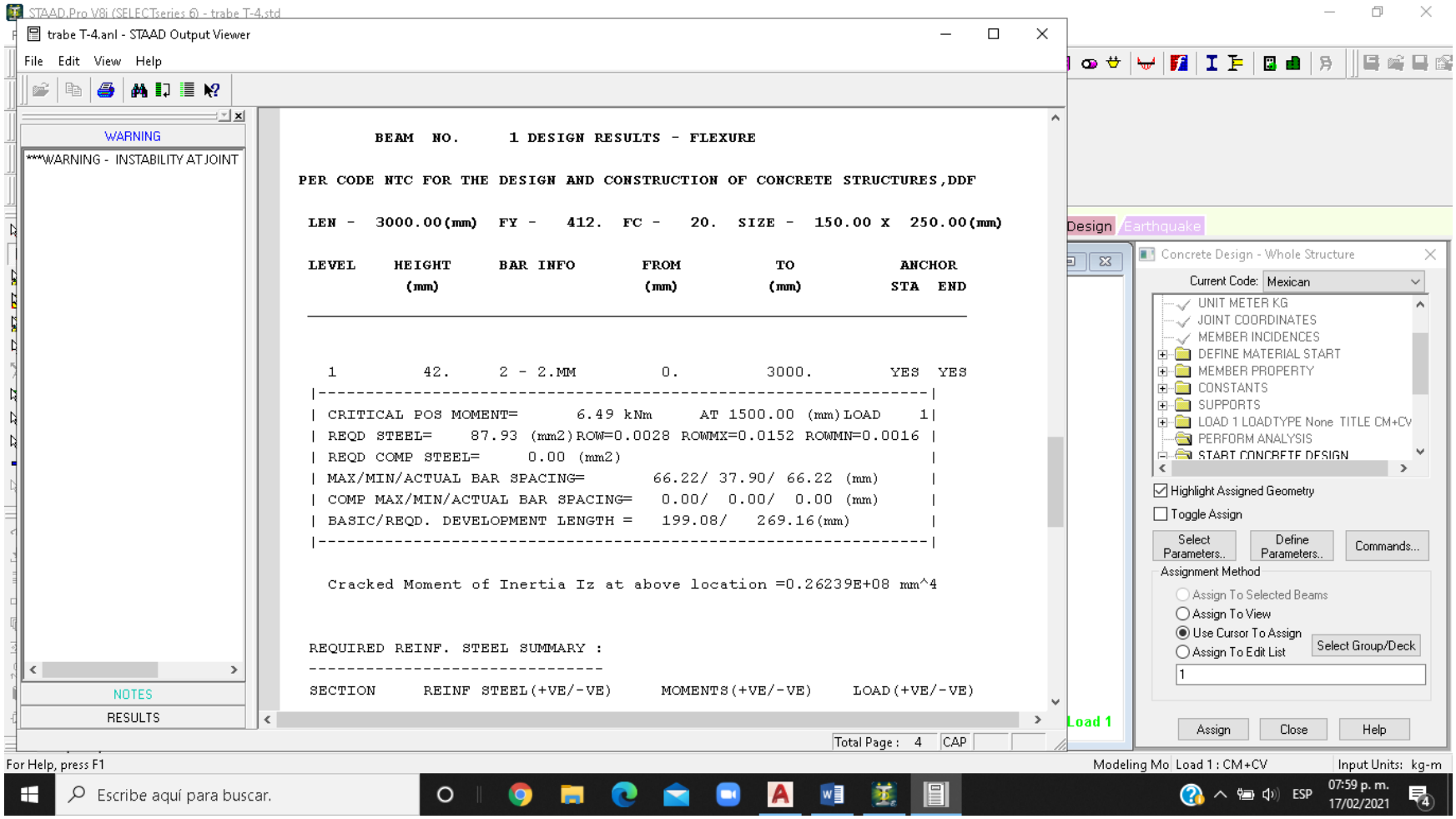

STAAD.Pro V8i (SELECTseries 6) - trabe T-4.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-4.std - Whole Structure
R1
trabe T-4.std - Beams
Properties - Whole Structure
Section Beta Angle
Ref Section Material
1 Rect 0.25x0.15 CONCRETE
Highlight Assigned Geometry
Edit... Delete...
Values... Section Database Define...
Materials... Thickness... User Table...
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To Edit List
Assign To View
Assign Close Help
For Help, press F1
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:54 p. m.
17/02/2021

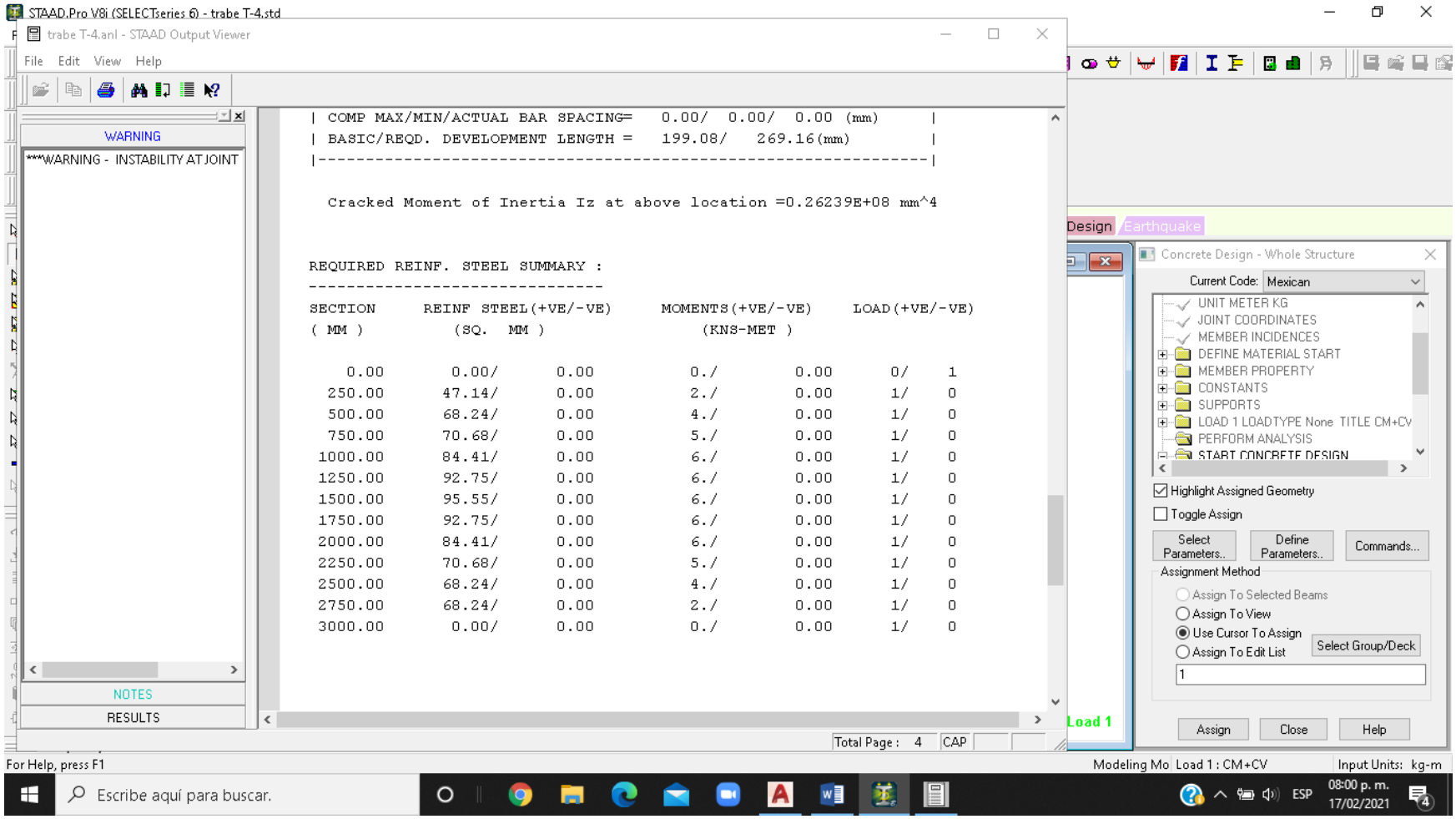

STAAD.Pro V8i (SELECTseries 6) - trabe T-4.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
trabe T-4.std - Whole Structure
trabe T-4.std - Node Supports
Full List Supported
Node Support Description
1 S2 Support 2
2 S2 Support 2
Supports - Whole Structure
Ref Description
S1 No support
S2 Support 2
Edit Create Delete
Assignment Method
Assign To Selected Nodes
Assign To View
Use Cursor To Assign
Assign To Edit List
1 2
Assigning Close Help
Click on node to set support
Escribe aquí para buscar.
ESP
07:54 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - trabe T-4.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM+CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Property Spec Support Load & Definition Material
trabe T-4.std - Whole Structure
Load 1
Load & Definition
Definitions
Load Cases Details
1 : CM+CV
SELFWEIGHT Y -1
UNI GY -498 kg/m
Load Envelopes
New... Add... Edit ... Delete...
Toggle Load
Assignment Method
Assign To Selected Beams
Use Cursor To Assign
Assign To View
Assign To Edit List
1
Assigning Close Help
Click on beam to assign load
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:56 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - trabe T-4.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM+CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Pre-Print Analysis Post-Print
trabe T-4.std - Whole Structure
Load 1
Analysis - Whole Structure
STAAD SPACE
START JOB INFORMATION
INPUT WIDTH 79
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
FINISH
Define Commands...
Assign
Close
Help
Click on beam to assign load
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:57 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - trabe T-4.std
File Edit View Tools Select Geometry Commands Analyze Mode Bentley Cloud Services Window Help
1: CM+CV
Modeling Building Planner Piping Bridge Deck Postprocessing Foundation Design Steel Design RAM Connection Concrete Design Advanced Slab Design Earthquake
Setup Geometry General Analysis/Print Design
Steel Concrete Timber Aluminum Shearwall
trabe T-4.std - Whole Structure
Load 1
Concrete Design - Whole Structure
Current Code: Mexican
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
CODE MEXICAN
FC 2.00014e+006
TRACK 2
DESIGN BEAM
END CONCRETE DESIGN
FINISH
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
For Help, press F1
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:58 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - trabe T-4.std
trabe T-4.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
BEAM NO. 1 DESIGN RESULTS - FLEXURE
PER CODE NTC FOR THE DESIGN AND CONSTRUCTION OF CONCRETE STRUCTURES,DDF
LEN - 3000.00(mm) FY - 412. FC - 20. SIZE - 150.00 X 250.00(mm)
LEVEL HEIGHT (mm) BAR INFO FROM (mm) TO (mm) ANCHOR STA END
1 42. 2 - 2.MM 0. 3000. YES YES
CRITICAL POS MOMENT= 6.49 kNm AT 1500.00 (mm) LOAD 1
REQD STEEL= 87.93 (mm2) ROW=0.0028 ROWMX=0.0152 ROWMN=0.0016
REQD COMP STEEL= 0.00 (mm2)
MAX/MIN/ACTUAL BAR SPACING= 66.22/ 37.90/ 66.22 (mm)
COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm)
BASIC/REQD. DEVELOPMENT LENGTH = 199.08/ 269.16(mm)
Cracked Moment of Inertia Iz at above location =0.26239E+08 mm^4
REQUIRED REINF. STEEL SUMMARY :
SECTION REINF STEEL(+VE/-VE) MOMENTS(+VE/-VE) LOAD(+VE/-VE)
Total Page : 4
CAP
Design
Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
07:59 p. m.
17/02/2021


STAAD.Pro V8i (SELECTseries 6) - trabe T-4.std
trabe T-4.anl - STAAD Output Viewer
File Edit View Help
WARNING
***WARNING - INSTABILITY AT JOINT
NOTES
RESULTS
| COMP MAX/MIN/ACTUAL BAR SPACING= 0.00/ 0.00/ 0.00 (mm) |
| BASIC/REQD. DEVELOPMENT LENGTH = 199.08/ 269.16(mm) |
Cracked Moment of Inertia Iz at above location =0.26239E+08 mm^4
REQUIRED REINF. STEEL SUMMARY :
SECTION (MM) REINF STEEL(+VE/-VE) (SQ. MM) MOMENTS(+VE/-VE) (KNS-MET) LOAD(+VE/-VE)
0.00 0.00/ 0.00 0./ 0.00 0/ 1
250.00 47.14/ 0.00 2./ 0.00 1/ 0
500.00 68.24/ 0.00 4./ 0.00 1/ 0
750.00 70.68/ 0.00 5./ 0.00 1/ 0
1000.00 84.41/ 0.00 6./ 0.00 1/ 0
1250.00 92.75/ 0.00 6./ 0.00 1/ 0
1500.00 95.55/ 0.00 6./ 0.00 1/ 0
1750.00 92.75/ 0.00 6./ 0.00 1/ 0
2000.00 84.41/ 0.00 6./ 0.00 1/ 0
2250.00 70.68/ 0.00 5./ 0.00 1/ 0
2500.00 68.24/ 0.00 4./ 0.00 1/ 0
2750.00 68.24/ 0.00 2./ 0.00 1/ 0
3000.00 0.00/ 0.00 0./ 0.00 1/ 0
Total Page : 4
CAP
Design
Earthquake
Concrete Design - Whole Structure
Current Code: Mexican
UNIT METER KG
JOINT COORDINATES
MEMBER INCIDENCES
DEFINE MATERIAL START
MEMBER PROPERTY
CONSTANTS
SUPPORTS
LOAD 1 LOADTYPE None TITLE CM+CV
PERFORM ANALYSIS
START CONCRETE DESIGN
Highlight Assigned Geometry
Toggle Assign
Select Parameters..
Define Parameters..
Commands...
Assignment Method
Assign To Selected Beams
Assign To View
Use Cursor To Assign
Assign To Edit List
Select Group/Deck
1
Assign
Close
Help
Load 1
For Help, press F1
Modeling Mo
Load 1 : CM+CV
Input Units: kg-m
Escribe aquí para buscar.
ESP
08:00 p. m.
17/02/2021