

Walk-in Slide: AU 2014 Social Media Feed

1. Click on the link below, this will open your web browser

<http://aucache.autodesk.com/social/visualization.html>

2. Use “Extended Display” to project the website on screen if you plan to work on your computer. Use “Duplicate” to display same image on screen and computer.

Hollywood BIM for Infrastructure

José Andrés Lara Seedorf

Visualization Manager

@andreseedorf

Class summary

We'll be learning how to integrate CG with Live Action footage as a selling tool. Using MatchMover for camera tracking, basic rigging and animation within 3ds Max, rendering through Backburner application and finally, compositing different layers with our favorite compositing software. Also, how to bring our Revit models into 3ds Max and animate them to create visually striking but comprehensive videos for building processes.

Key learning objectives

At the end of this class, you will be able to:

- Discover the enormous advantages of using 3D tracking with the MatchMover application for transportation infrastructure projects.
- Discover the relevance of rigging and animation in transportation infrastructure projects.
- Learn about BIM pipeline integration in 3ds Max software for visualization purposes.
- Discover how Autodesk products can allow you to deliver technical information to both engineers and non-technical audiences.

Introduction



First of all...

Say NO to

Hollywood BIM

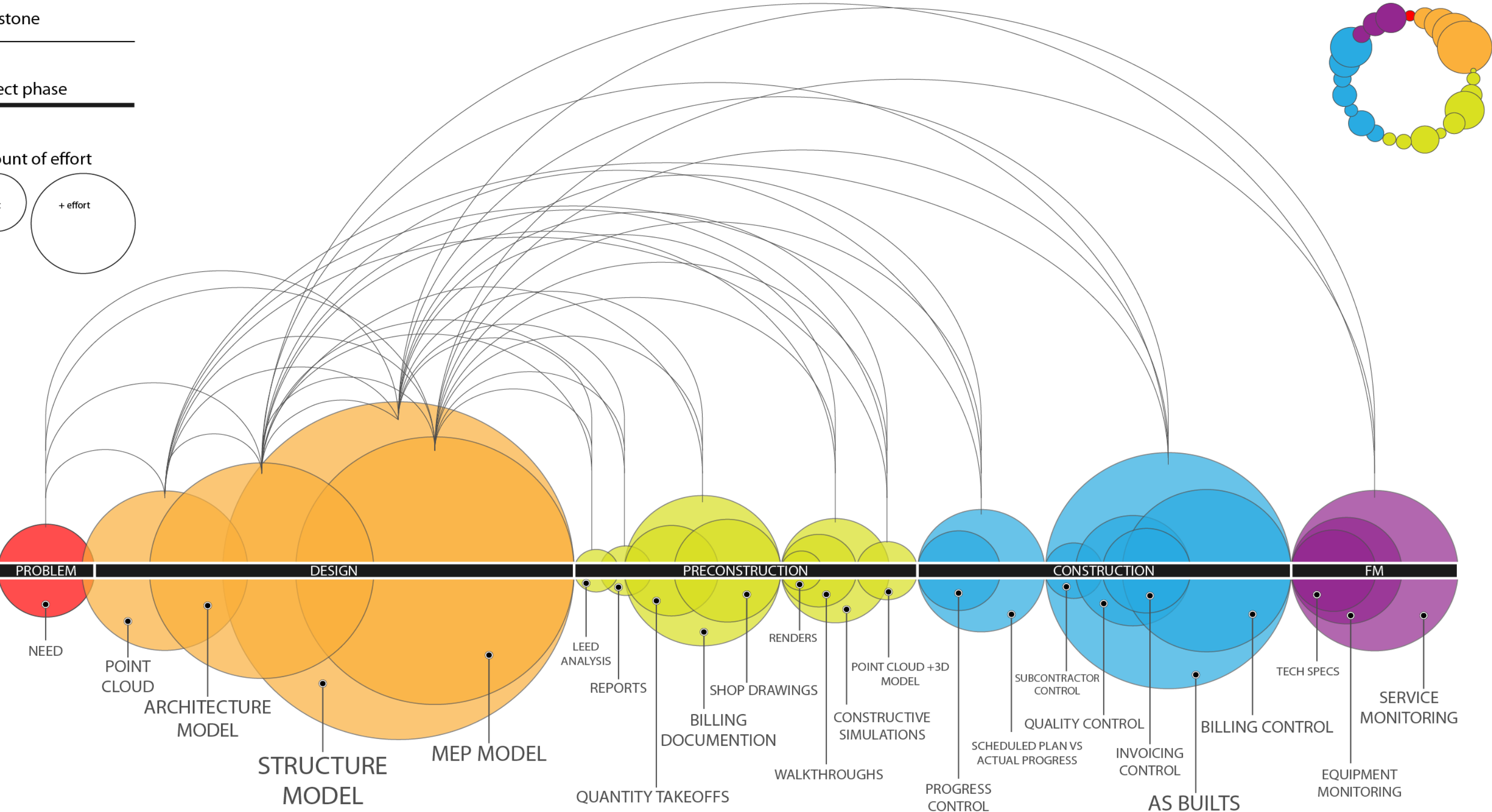
Milestone

Project phase

Amount of effort

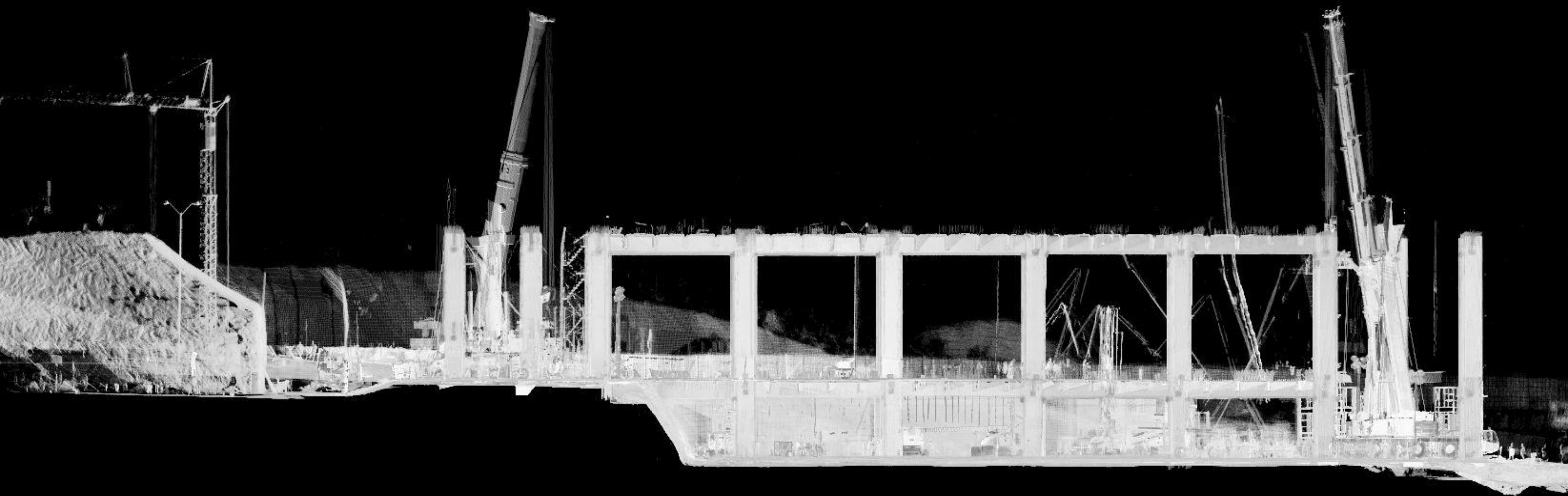
- effort

+ effort



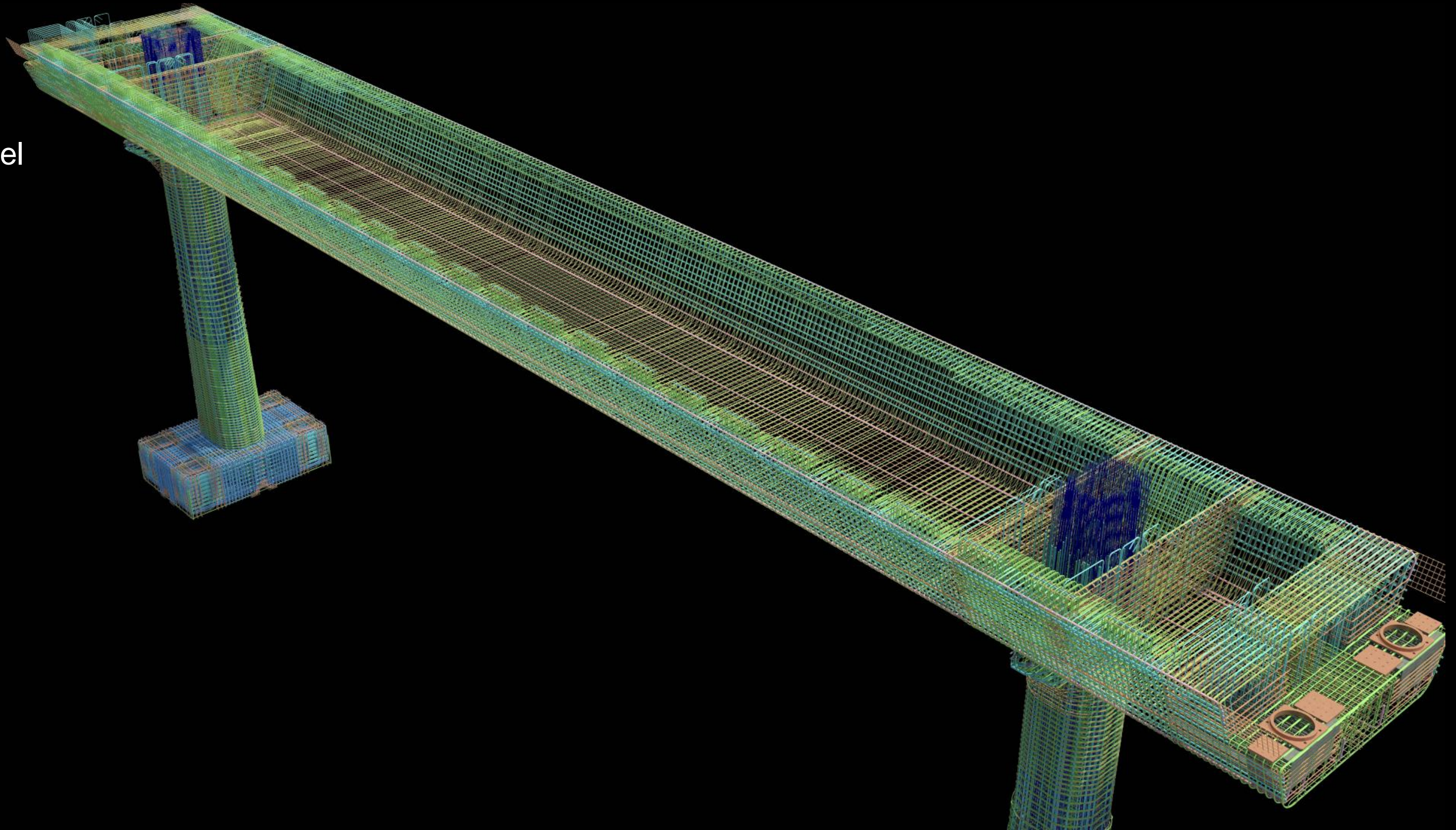


Point Cloud



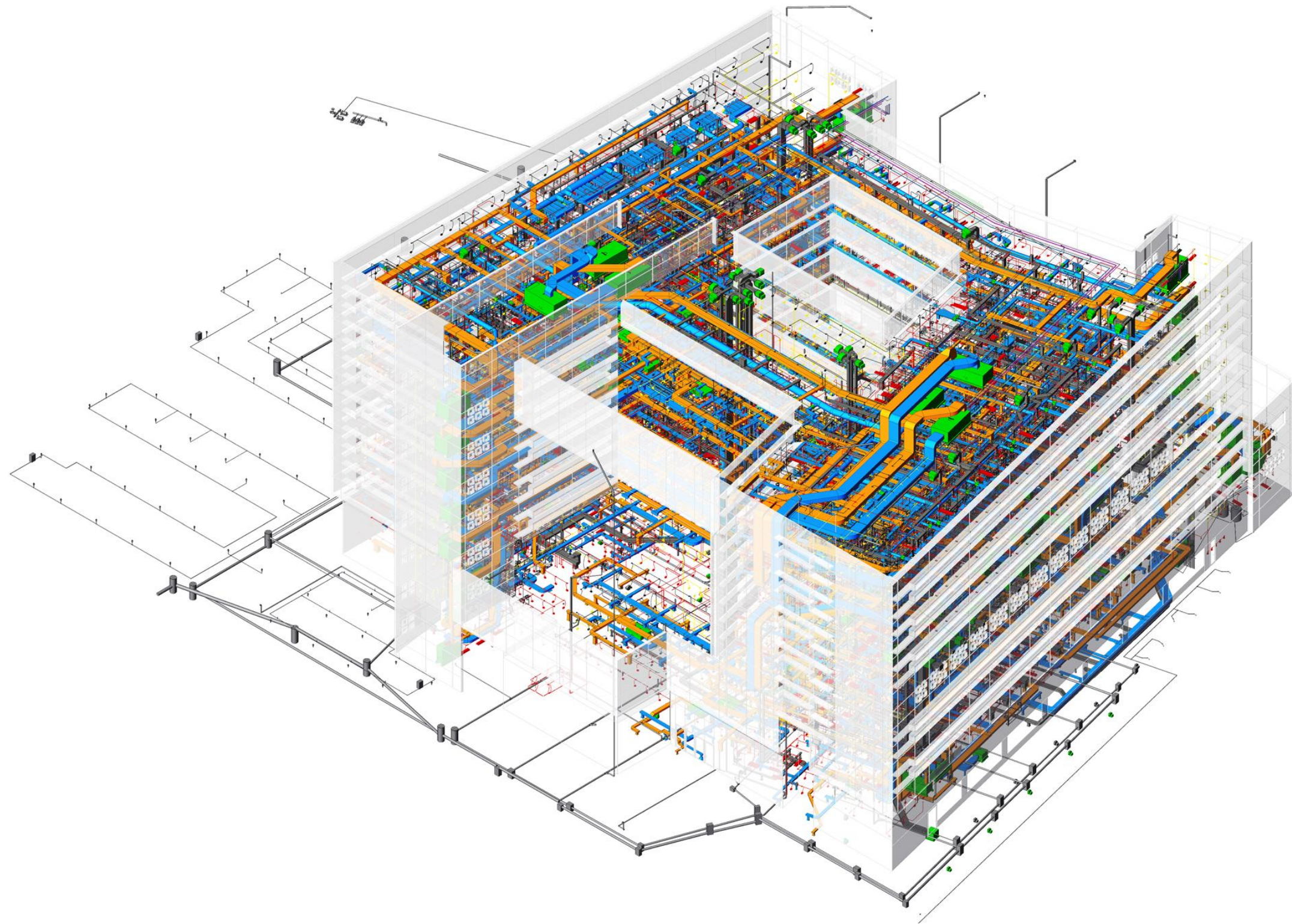


Structure Model



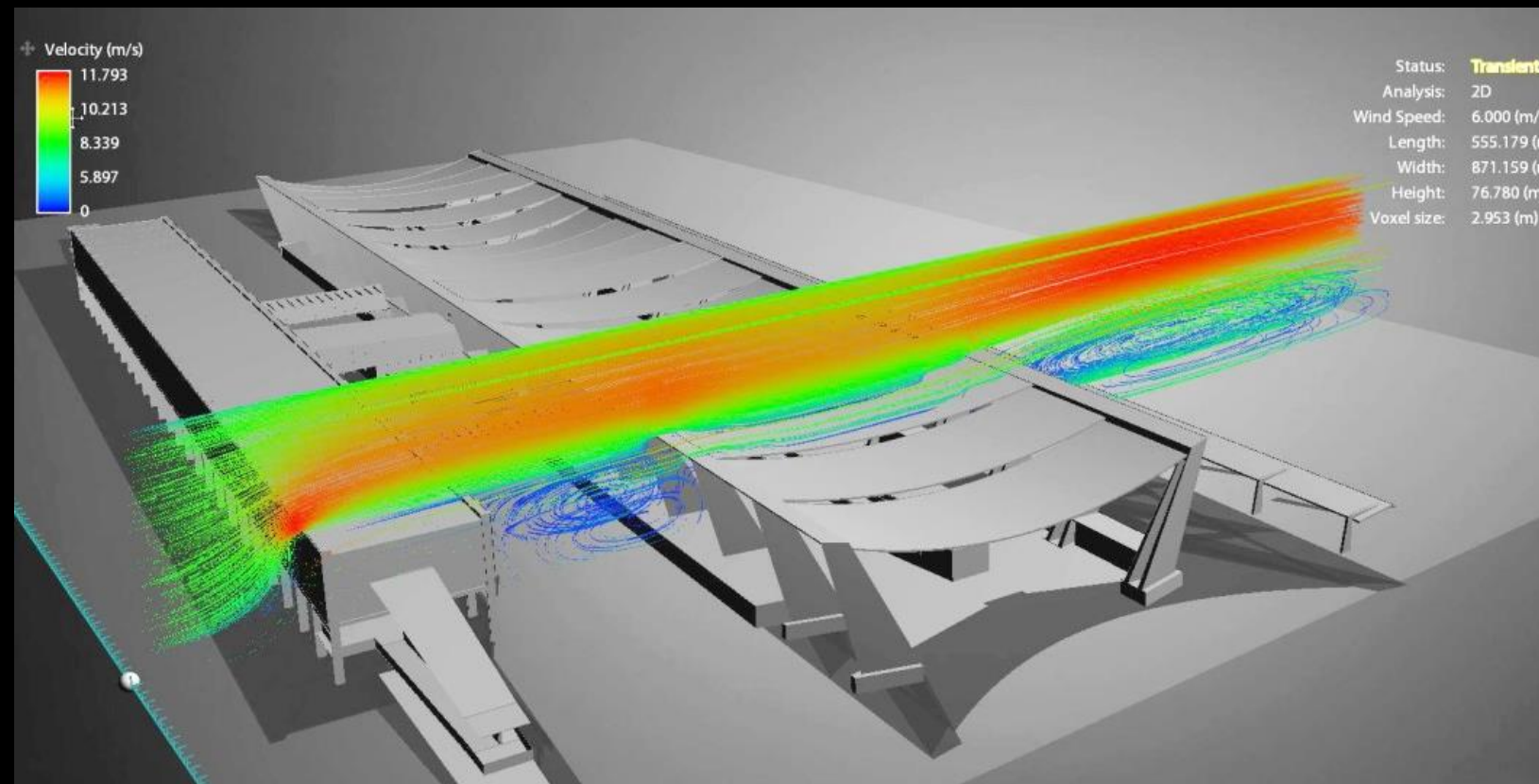
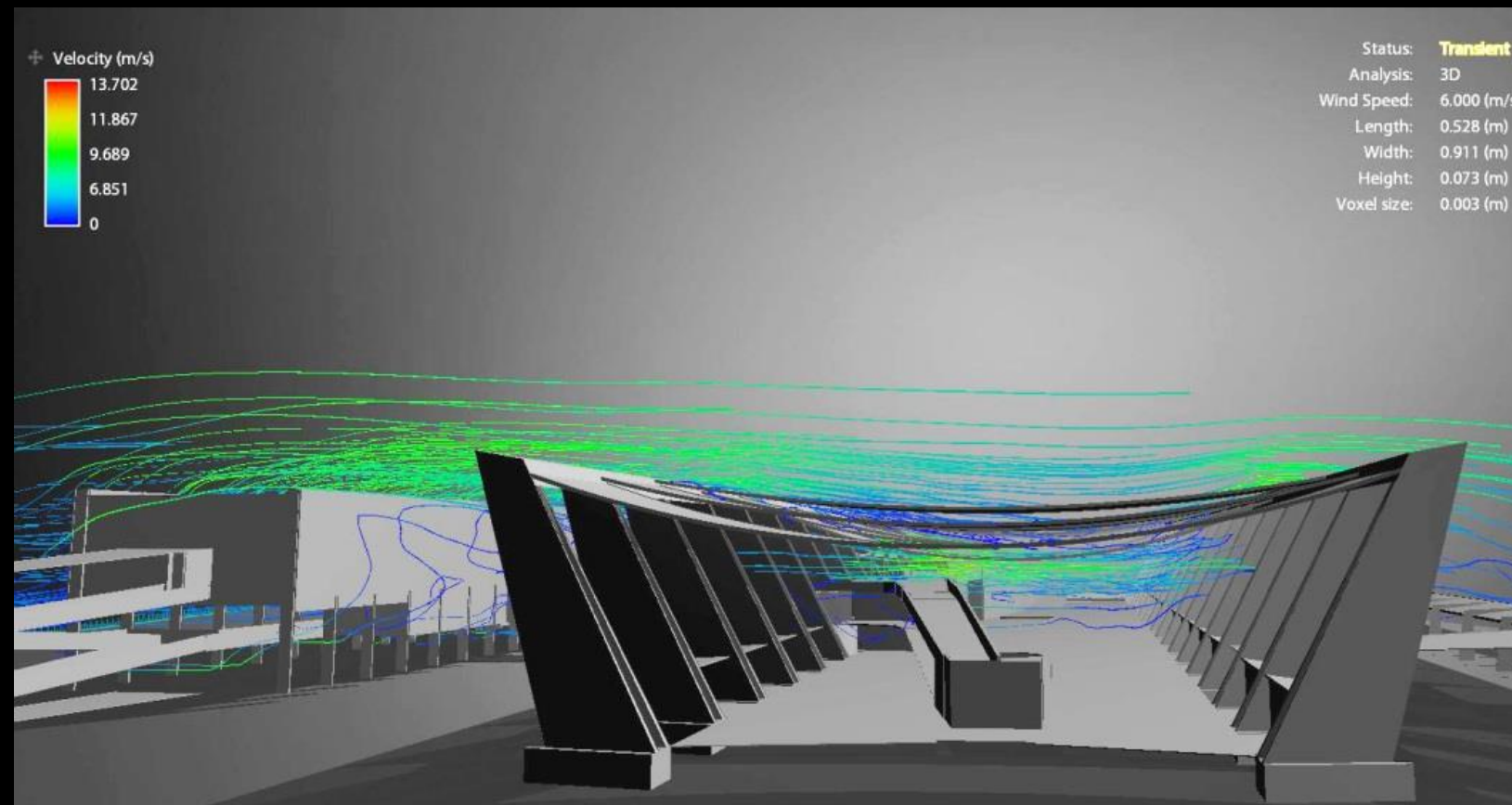


MEP Model





LEED ANALYSIS





REPORTS

PTAR Atotonilco_IM_300_02

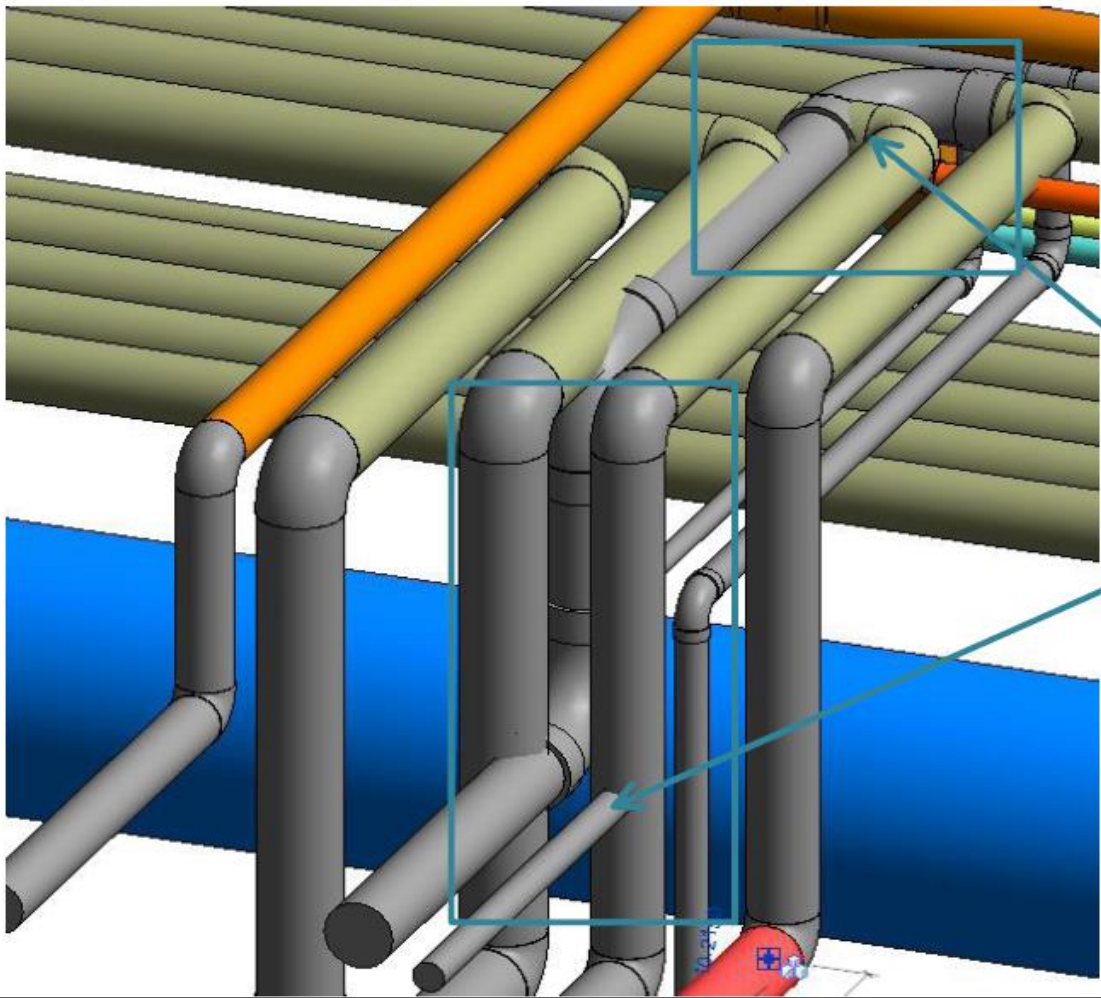
viernes, 09 de diciembre de 2011
08:52 a.m.

No.Proyecto 11_006_ATOTO_FASE2

Revisión de Proyecto

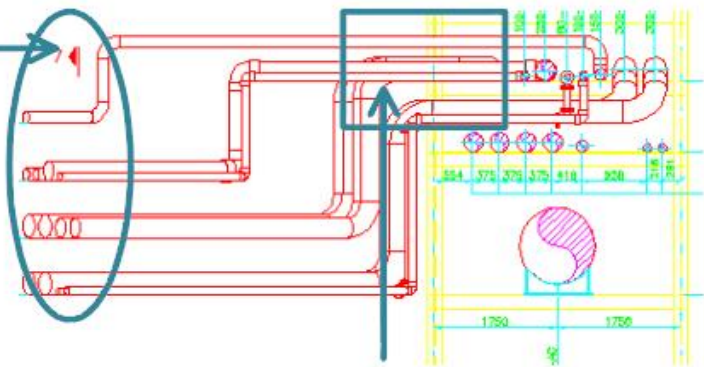


Clave Reporte	Edificio	Nivel	Plano	Elemento	Descripción	Solución	Tipo	Ejes	Reportó	Solucionó	Fecha Reportado	Fecha Entregado	Fecha resuelto
IM-02	Área 300	Rack de tuberías entre reactores biológicos	ID_0300_IM3_PL_2027_0B		Acorde a las cotas y planos, existe interferencia entre varias tuberías		Incongruencia		LMM		26/12/2011	05/01/2012	



Conforme al orden dentro del rack hacia Area 800 no alcanza a librar las tuberías por lo cual se generan las interferencias

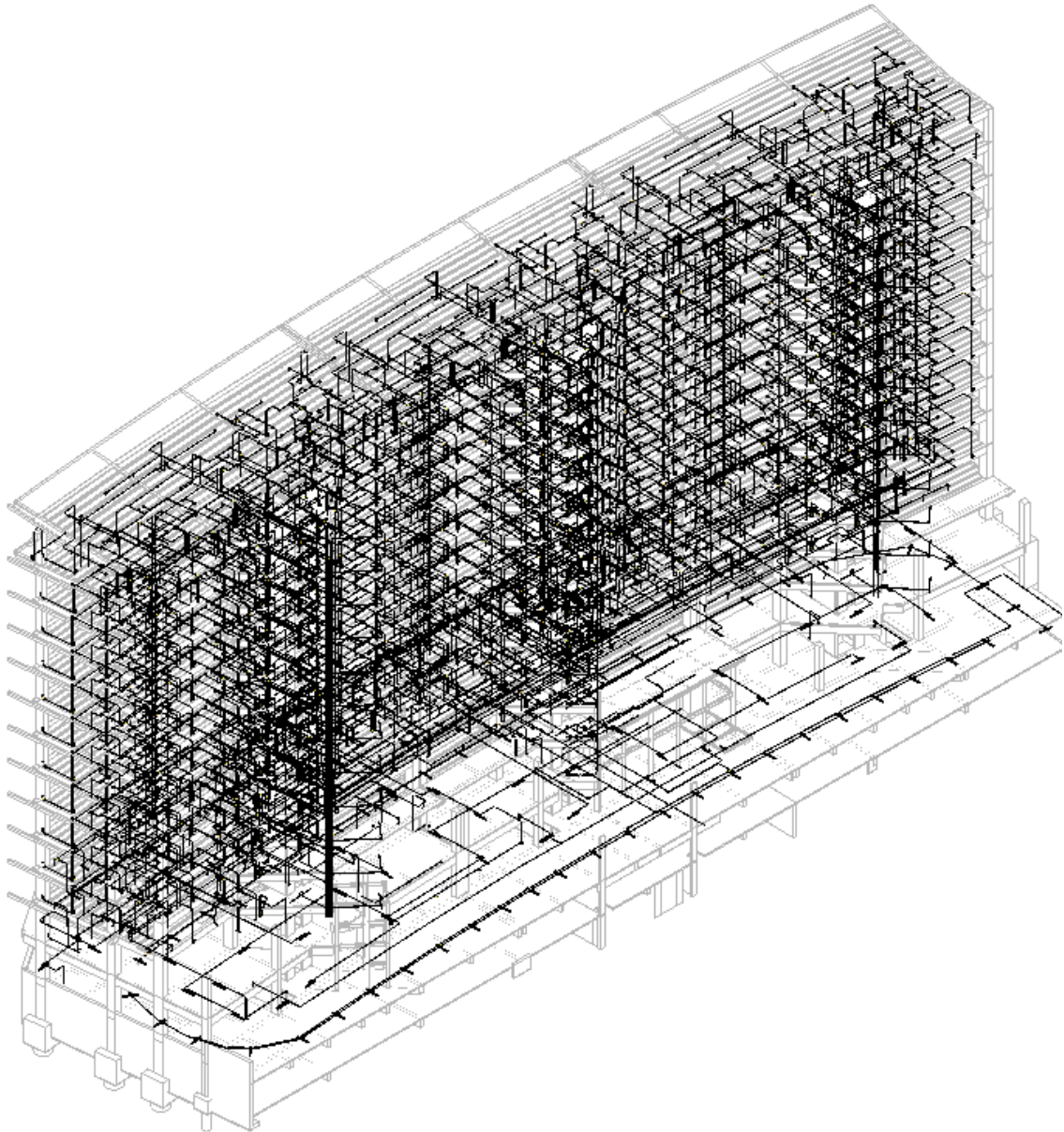
No coincide las elevaciones marcadas con la distribución de tuberías dentro del rack, generando varias interferencias en el quiebre de la trayectoria



No se indican elevaciones de este tramo del arreglo de tuberías



QUANTITY
TAKEOFFS

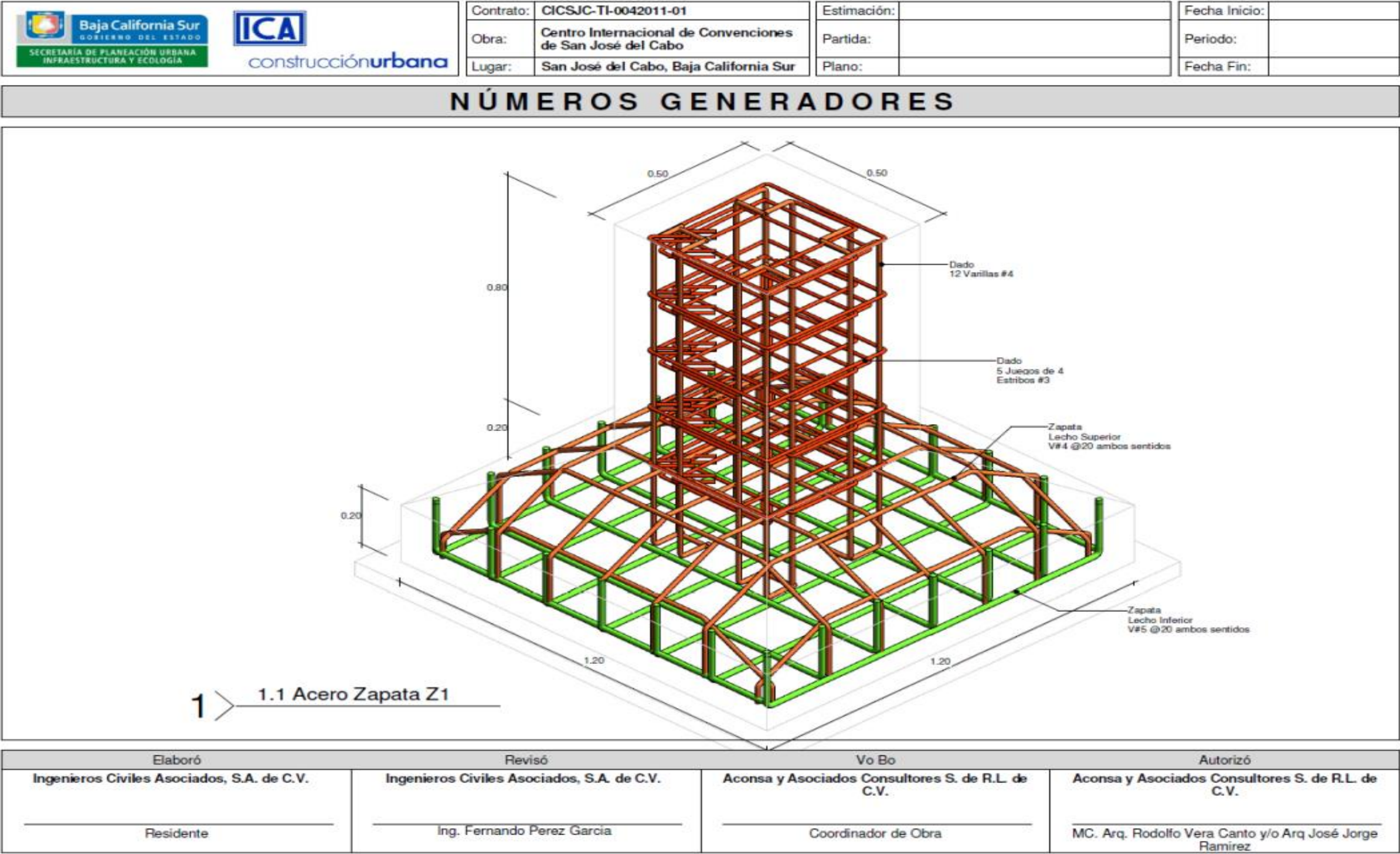


LUMINARIAS				
INSTALACIÓN	NIVEL	TIPO	DESCRIPCIÓN	CANTIDAD
L Emergencia	S01	L_01	Luminaria suspendida en losa con lámparas fluorescentes de 2X13W, 127V, 1F-2H, 60Hz	3
L Emergencia	S01	L_02	Luminaria en escaleras	3
L Emergencia	S01	L_05_01_E	Luminaria de empotrar en muro con lámpara fluorescente de 26W, 127V, 60Hz	8
L Emergencia	S01	L_50_01	Luminaria sobrepuesta en losa con lámparas fluorescentes de 2X32W, 127V, 1F-2H, 60Hz	17
L Normal	S01	L-01	Luminaria suspendida en losa con lámparas fluorescentes de 2X13W, 127V, 1F-2H, 60Hz	32
L Normal	S01	L_04_01	Luminario en piso, 50W, 127V, 1F-2H, 60Hz	13
L Normal	S01	L_04_02	Salida para luminaria en plafón, 60Watts, 127V, 1F-2H, 60Hz	3
L Normal	S01	L_50_01	Luminaria sobrepuesta en losa con lámparas fluorescentes de 2X32W, 127V, 1F-2H, 60Hz	72
L Emergencia	N00	L_02_02	Luminaria con lámpara fluorescente de 1x28W, 127V, 1F-2H, 60Hz	12
L Emergencia	N00	L_50_01	Luminaria sobrepuesta en losa con lámparas fluorescentes de 2X32W, 127V, 1F-2H, 60Hz	11
L Normal	N00	L_01	Luminaria suspendida en losa con lámparas fluorescentes de 2X13W, 127V, 1F-2H, 60Hz	38
L Normal	N00	L_07_01_E	Arbotante de sobreponer en muro	6
L Normal	N00	L_02_02	Luminaria con lámpara fluorescente de 1x28W, 127V, 1F-2H, 60Hz	9
L Normal	N00	L_50_01	Luminaria sobrepuesta en losa con lámparas fluorescentes de 2X32W, 127V, 1F-2H, 60Hz	38
L Emergencia	NMZ	L_07_01_E	Arbotante de sobreponer en muro	10
L Emergencia	NMZ	L_02_03	Salida para luminaria en cajillo 180Watts, 127V, 1F-2H, 60Hz	53
L Emergencia	NMZ	L_06	Lámpara indicadora de salida de emergencia, 14 Watts, 127V, 1F-2H, 60Hz	5
L Emergencia	NMZ	S-02	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	2
L Emergencia	NMZ	S-03	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	17
L Normal	NMZ	L-07-01-E	Arbotante de sobreponer en muro	6
L Normal	NMZ	L_02_03	Salida para luminaria en cajillo 180Watts, 127V, 1F-2H, 60Hz	116
L Normal	NMZ	L_04_03	Salida para luminaria en piso, 60 Watts, 127V, 1F-2H, 60Hz	42
L Normal	NMZ	L_04_04	Luminaria/Salida en piso	7
L Normal	NMZ	S-01	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	12
L Normal	NMZ	S-02	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	9
L Normal	NMZ	S-03	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	89
L Emergencia	N01-09 (tipo)	L_02_03	Salida para luminaria en cajillo 180Watts, 127V, 1F-2H, 60Hz	18
L Normal	N01-09 (tipo)	L_02_03	Salida para luminaria en cajillo 180Watts, 127V, 1F-2H, 60Hz	9
L Normal	N01-09 (tipo)	L_04_03	Salida para luminaria en piso, 60 Watts, 127V, 1F-2H, 60Hz	12
L Normal	N01-09 (tipo)	S-01	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	6
L Normal	N01-09 (tipo)	S-02	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	30
L Normal	N01-09 (tipo)	S-03	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	157
L Emergencia	N10	L_02_03	Salida para luminaria en cajillo 180Watts, 127V, 1F-2H, 60Hz	18
L Normal	N10	L_02_03	Salida para luminaria en cajillo 180Watts, 127V, 1F-2H, 60Hz	12
L Normal	N10	L_04_03	Salida para luminaria en piso, 60 Watts, 127V, 1F-2H, 60Hz	12
L Normal	N10	S-01	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	6
L Normal	N10	S-02	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	27
L Normal	N10	S-03	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	135
L Emergencia	N11	L_02_03	Salida para luminaria en cajillo 180Watts, 127V, 1F-2H, 60Hz	14
L Normal	N11	L_07_01_E	Arbotante de sobreponer en muro	18
L Normal	N11	L_02_03	Salida para luminaria en cajillo 180Watts, 127V, 1F-2H, 60Hz	24
L Normal	N11	L_04_03	Salida para luminaria en piso, 60 Watts, 127V, 1F-2H, 60Hz	24
L Normal	N11	S-02	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	9
L Normal	N11	S-03	Salida para luminaria en plafón, 60 Watts, 127V, 1F-2H, 60Hz	183





BILLING
DOCUMENTATION





SHOP DRAWINGS

INGENIEROS CIVILES ASOCIADOS
BUILDING INFORMATION MODELING

ESPECIFICACIONES GENERALES:

CONCRETO:
SE USARÁ CONCRETO CON UNA RESISTENCIA MÍNIMA A LA COMPRESIÓN $f_c = 400$ kg/cm² (5.7 ksi), CON UN PESO VOLUMÉTRICO EN ESTADO FRESCO SUPERIOR A 2.2 kN/m³.
SE USARÁ PARA SU ELABORACIÓN CEMENTO TIPO PORTLAND PUZOLÁNICO.
SE EMPLEARÁ AGREGADO GRUESO CON TAMAÑO MÁXIMO DE 2 cm (3/4") Y PESO ESPECÍFICO SUPERIOR A 2.6 kN/m³.

ACERO DE REFUERZO:
EL ACERO DE REFUERZO DEBERÁ TENER UNA FLUENCIA MÍNIMA $f_y = 4200$ kg/cm² (59.0 ksi).

ACERO DE PRESFUERZO:
SE USARÁ ACERO DE PRESFUERZO DE BAJA RELAJACIÓN DE $\sigma = 1.27$ cm, CON L.R. $\geq 19,000$ kg/cm². EL TENSADO SE DEBERÁ HACER CUANDO EL CONCRETO ALCANCE UNA RESISTENCIA DE $f_c = 350$ kg/cm² (5.12 ksi).

NOTAS GENERALES:
CON OBJETO DE QUE LA CALIDAD DEL CONCRETO DE LAS VIGAS NO SE VEA DETERIORADA POR LOS PROCEDIMIENTOS DE ELABORACIÓN Y CURADO, SE DEBERÁ CUMPLIR CON LAS LIMITACIONES ESPECIFICADAS EN LA ÚLTIMA EDICIÓN DE LA SIGUIENTE NORMATIVIDAD, APLICABLE A LA INFRAESTRUCTURA DE TRANSPORTE:
-AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
-ASTM C-94 - STANDARD SPECIFICATION FOR READY - MIXED CONCRETE
-ASTM C-1064 STANDARD TEST METHOD FOR TEMPERATURE AT FRESHLY MIXED PORTLAND CEMENT CONCRETE
-AMERICAN CONCRETE INSTITUTE (ACI)
-ACI 305.1-06 SPECIFICATION FOR HOT WEATHER CONCRETING
-ACI 308 STANDARD PRACTICE FOR CURING CONCRETE
-ESPECIFICACIONES TÉCNICAS GENERALES DEL MINISTERIO DE OBRAS PÚBLICAS DE PANAMÁ (MOP)

Piezas a Fabricar: 1

ELEMENTO:
VIGA CAJON

HOJA:
6/7

CROQUIS:
DESPIECE

PIEZA A FABRICAR:
PA_T-I-a_2A-2B

PLANO DE REFERENCIA:
DD-INT-PA-EST-P-12 Y DD-INT-PA-EST-P-13
ESCALA:
S/E

COTAS:
CM

FECHA:
01 DE ABRIL DE 2013

ACERO VIGA CAJON

Codigo en Proyecto	Diametro (mm)	Longitud Unitaria	Cantidad	Suma Longitudinal	Peso Lineal	Peso Total (Kg)	Forma
PA_T-I-a_2A-2B							
#03							
A3	10 mm	2844.26	1	28.44 m	0.56	15.93	RECTA
A3	10 mm	2950.00	9	265.50 m	0.56	148.68	RECTA
B	10 mm	400.51	175	700.90 m	0.56	392.50	A
B1	10 mm	404.19	37	149.55 m	0.56	83.75	B
B2	10 mm	418.22	19	79.46 m	0.56	44.50	C
B2	10 mm	418.54	18	75.34 m	0.56	42.19	C
C	10 mm	145.19	89	129.22 m	0.56	72.36	D
C1	10 mm	130.16	89	115.84 m	0.56	64.87	E
C2	10 mm	56.81	195	110.78 m	0.56	62.04	F
D	10 mm	127.08	10	12.71 m	0.56	7.12	G
D1	10 mm	116.70	8	9.34 m	0.56	5.23	H
D1	10 mm	116.71	2	2.33 m	0.56	1.31	H
E	10 mm	184.69	40	73.88 m	0.56	41.37	I
E1_a	10 mm	137.54	2	2.75 m	0.56	1.54	J
E1_b	10 mm	137.75	2	2.76 m	0.56	1.54	J
E1_c	10 mm	137.99	2	2.76 m	0.56	1.55	J
E1_d	10 mm	138.08	2	2.76 m	0.56	1.55	J
E1_e	10 mm	142.54	2	2.85 m	0.56	1.60	J
E1_f	10 mm	142.75	2	2.86 m	0.56	1.60	J
E1_g	10 mm	142.99	2	2.86 m	0.56	1.60	J
E1_h	10 mm	143.08	2	2.86 m	0.56	1.60	J
E1_i	10 mm	145.54	2	2.91 m	0.56	1.63	J
E1_j	10 mm	145.75	2	2.92 m	0.56	1.63	J
E1_k	10 mm	145.99	2	2.92 m	0.56	1.64	J
E1_l	10 mm	146.08	2	2.92 m	0.56	1.64	J
E1_m	10 mm	150.54	2	3.01 m	0.56	1.69	J
E1_n	10 mm	150.75	2	3.02 m	0.56	1.69	J
E1_o	10 mm	150.99	2	3.02 m	0.56	1.69	J
E1_p	10 mm	151.08	2	3.02 m	0.56	1.69	J
E1_q	10 mm	154.54	2	3.09 m	0.56	1.73	J
E1_r	10 mm	154.75	2	3.10 m	0.56	1.73	J
E1_s	10 mm	154.99	2	3.10 m	0.56	1.74	J
E1_t	10 mm	155.08	2	3.10 m	0.56	1.74	J
			732	1,811.86 m		1,014.64	
#04							
A1	13 mm	2956.00	12	354.72 m	0.996	353.30	RECTA
A2	13 mm	2844.00	2	56.88 m	0.996	56.65	RECTA
A2	13 mm	2953.00	7	206.71 m	0.996	205.88	RECTA
A4	13 mm	164.00	85	139.40 m	0.996	138.84	RECTA
A5	13 mm	142.00	4	5.68 m	0.996	5.66	RECTA
A6	13 mm	164.39	10	16.44 m	0.996	16.37	RECTA
			120	779.83 m		776.71	
#05							
A	16 mm	2953.00	6	177.18 m	1.56	276.40	RECTA
			6	177.18 m		276.40	
#06							
ANCLAS	19 mm	59.64	32	19.08 m	2.25	42.94	
			32	19.08 m		42.94	
			890	2,787.96 m		2,110.69	

B1_FORMA B
1:10

B2_FORMA C
1:10

B_FORMA A
1:10

C1_FORMA E
1:10

C2_FORMA F
1:10

C_FORMA D
1:10

D1_FORMA H
1:10

D_FORMA G
1:10

ELABORÓ:

Arq. Alejandro Ortega Anaya
JEFE DE FRENTE

REVISÓ:

Ing. Guillermo Ruiz Santiago
JEFE DE OBRA

VISTO BUENO:

Ing. Carlos A. Juárez Robledo
SUPERINTENDENTE

VISTO BUENO:

Arq. Arantza López Sierra
JEFE DE OBRA ESTRUCTURAS

AUTORIZÓ PARA SU EJECUCIÓN:

Ing. Tomas Medrano Sanchez
GERENTE DE CONSTRUCCION

AUTORIZÓ PARA SU EJECUCIÓN:

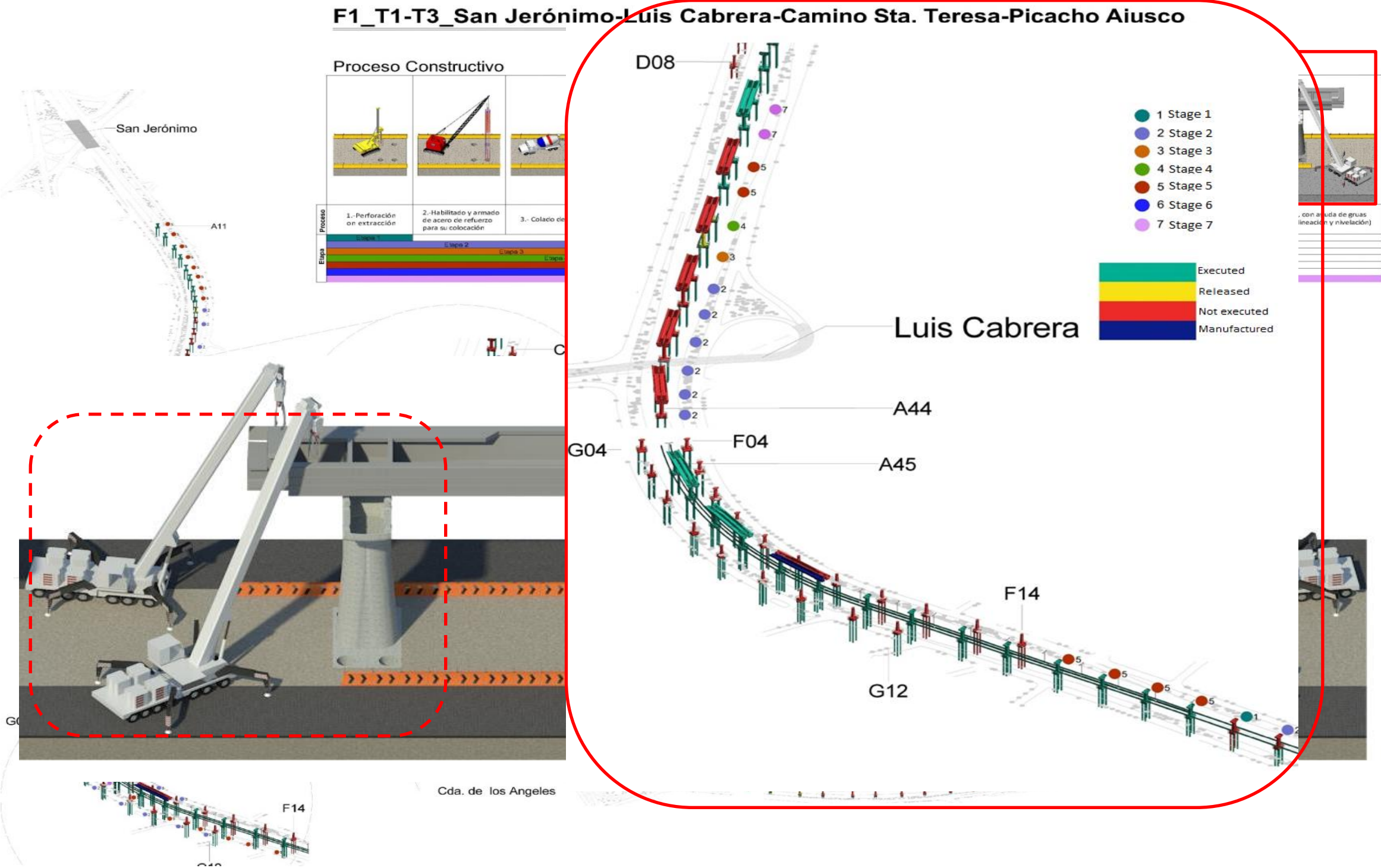
Ing. Alejandro Castillo Lopez
GERENTE DE PROYECTO

AUTODESK UNIVERSITY 2014

AUTODESK



PROGRESS
CONTROL



autopistaurbana[®]
sur

Ciudad México
Capital en Movimiento

Proyecto:
ARCO SUR
No. de Proyecto:
10_009
Dirección:
Periférico Sur, San Jerónimo-Muyuguarda-Caseta a Cuernavaca.

Descripción:
F1_T1-T3_San Jerónimo-Luis Cabrera-Camino Sta. Teresa-Picacho Aiusco

Simbología:

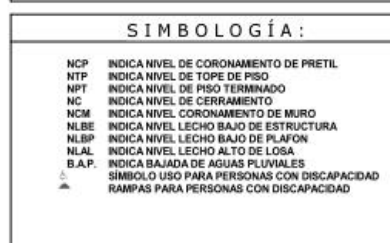
- 1 Etapa 1
- 2 Etapa 2
- 3 Etapa 3
- 4 Etapa 4
- 5 Etapa 5
- 6 Etapa 6
- 7 Etapa 7

Legend:

- Ejecutado
- Liberado
- No ejecutado
- Fabricado

ICA bim ICA construcciónurbana





				ESCALA GRÁFICA (INDICADA)			
				<p>PROCESO</p> <p>ELABORÓ: J. L. G. 11. Mar. 2017</p> <p>REVISÓ: J. L. G. 11. Mar. 2017</p> <p>APROBÓ: J. L. G. 11. Mar. 2017</p> <p>FIRMA Y FECHA</p> <p>ELABORÓ: J. L. G. 11. Mar. 2017</p> <p>REVISÓ: J. L. G. 11. Mar. 2017</p> <p>APROBÓ: J. L. G. 11. Mar. 2017</p> <p>FIRMA Y FECHA</p> <p>ELABORÓ: J. L. G. 11. Mar. 2017</p> <p>REVISÓ: J. L. G. 11. Mar. 2017</p> <p>APROBÓ: J. L. G. 11. Mar. 2017</p> <p>FIRMA Y FECHA</p>			
<p>NO. DE PLANO</p> <p>TÍTULO</p>				<p>NO. DE PLANO</p> <p>TÍTULO</p>			



CONAGUA

Comisión Nacional del Agua

Supervisión

SEP

CONAGUA

PROYECTO: PTAR Atotonilco

UBICACIÓN: Ejido de Coneyes, Municipio de Atotonilco de Tula, Hidalgo

TÍTULO: CIMBRA

NÚMERO DE CONTRATO: SGAPDS-GF00-DFMEX-HGO-10-001-LPI

DISCIPLINA: No. DE PLANO

ESCALA: 1:1000

ASOCIACIONES: No. DE ARCHIVO

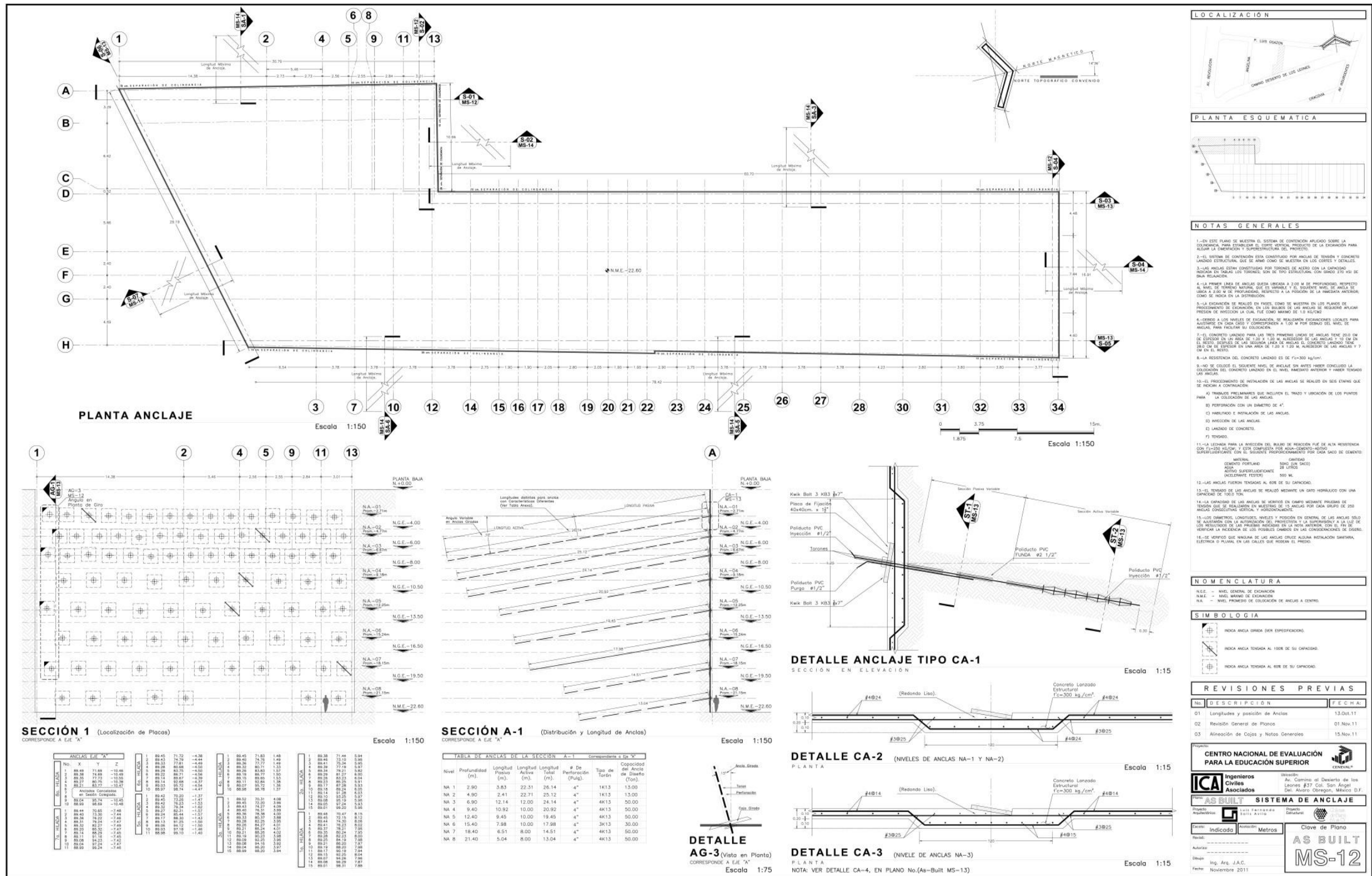
INDICADA: MHI D

Dibujó: Author





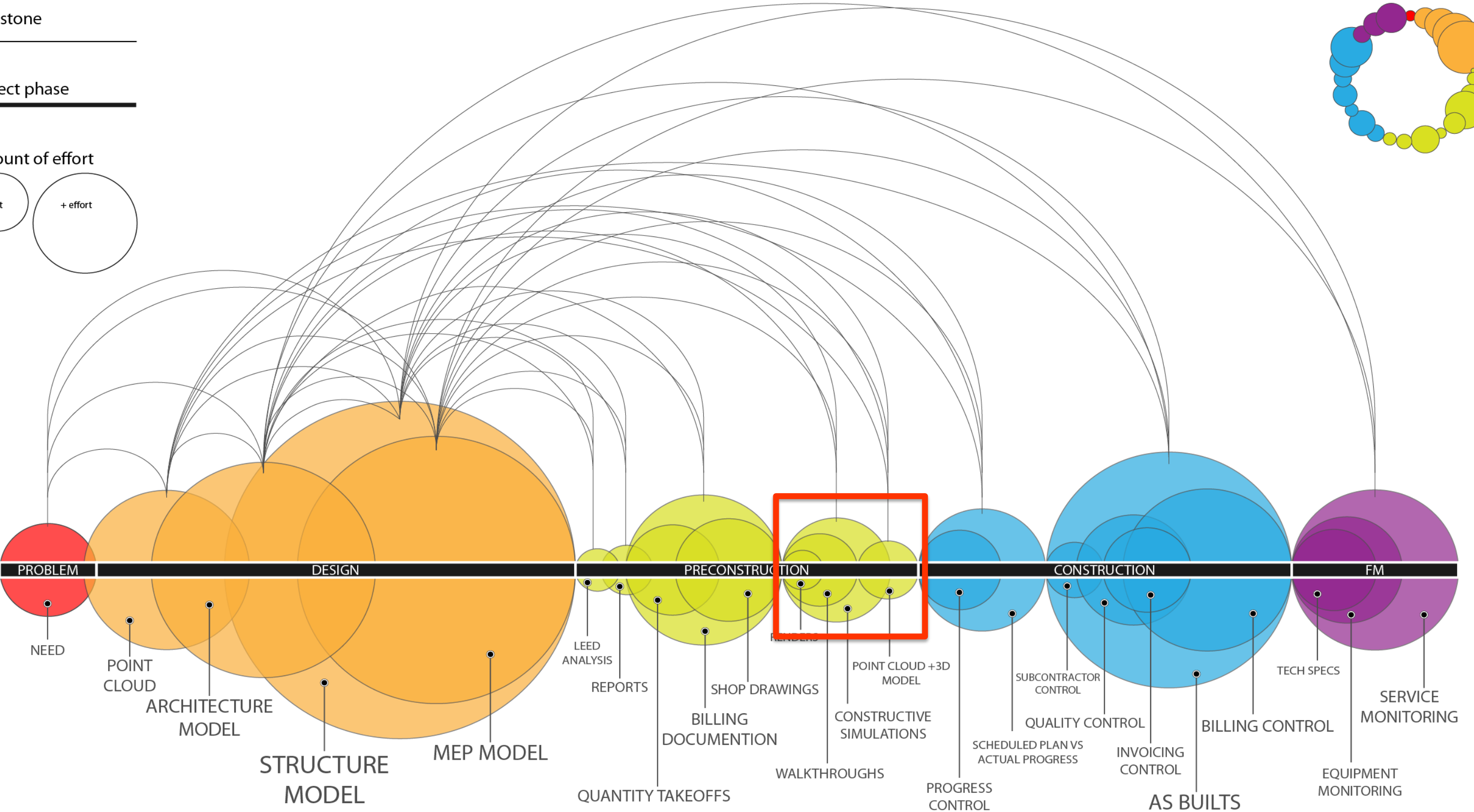
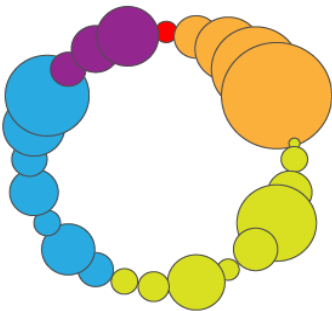
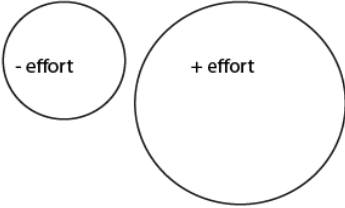
AS BUILT

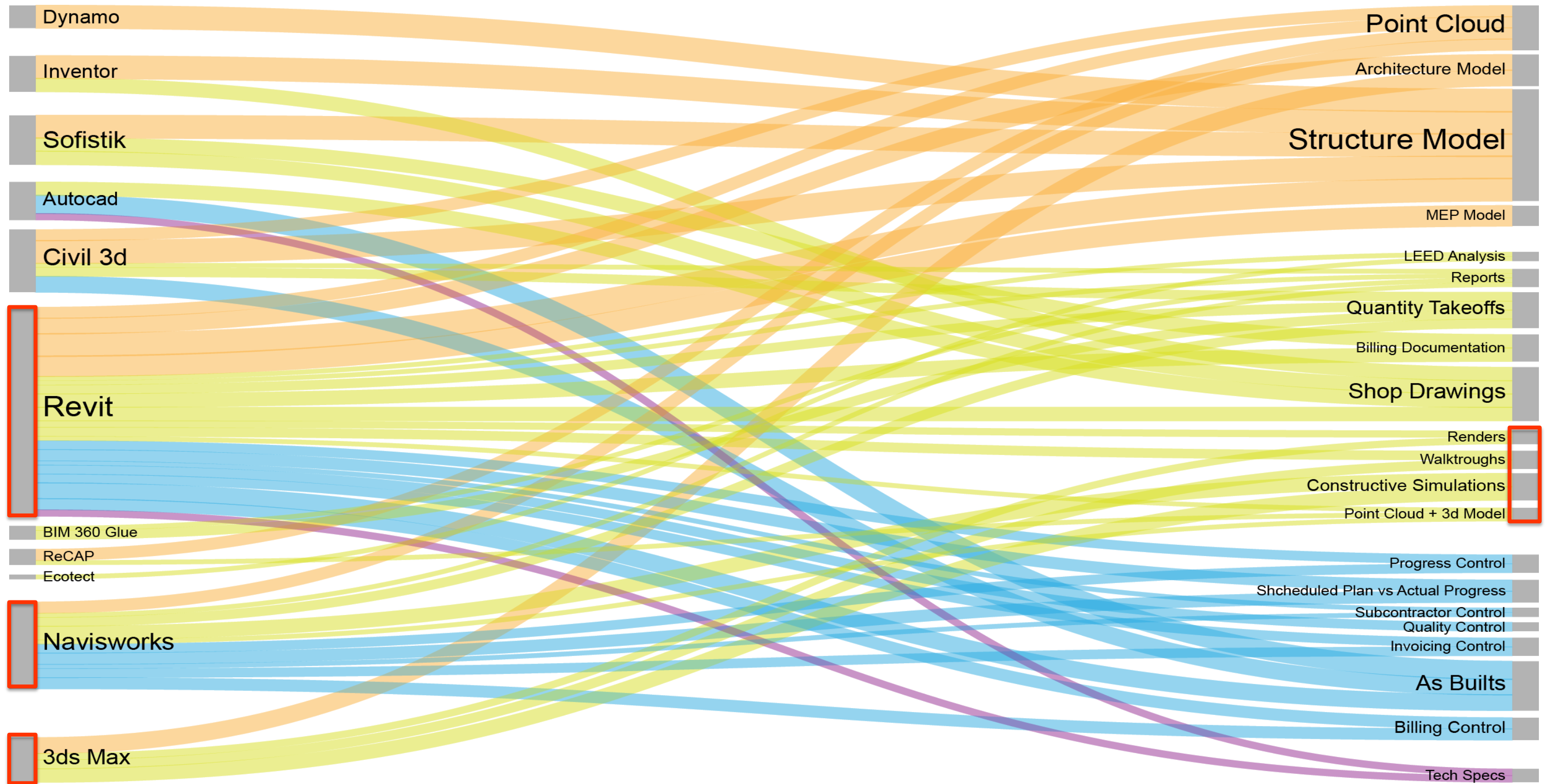


Milestone

Project phase

Amount of effort







80



8

Sexy

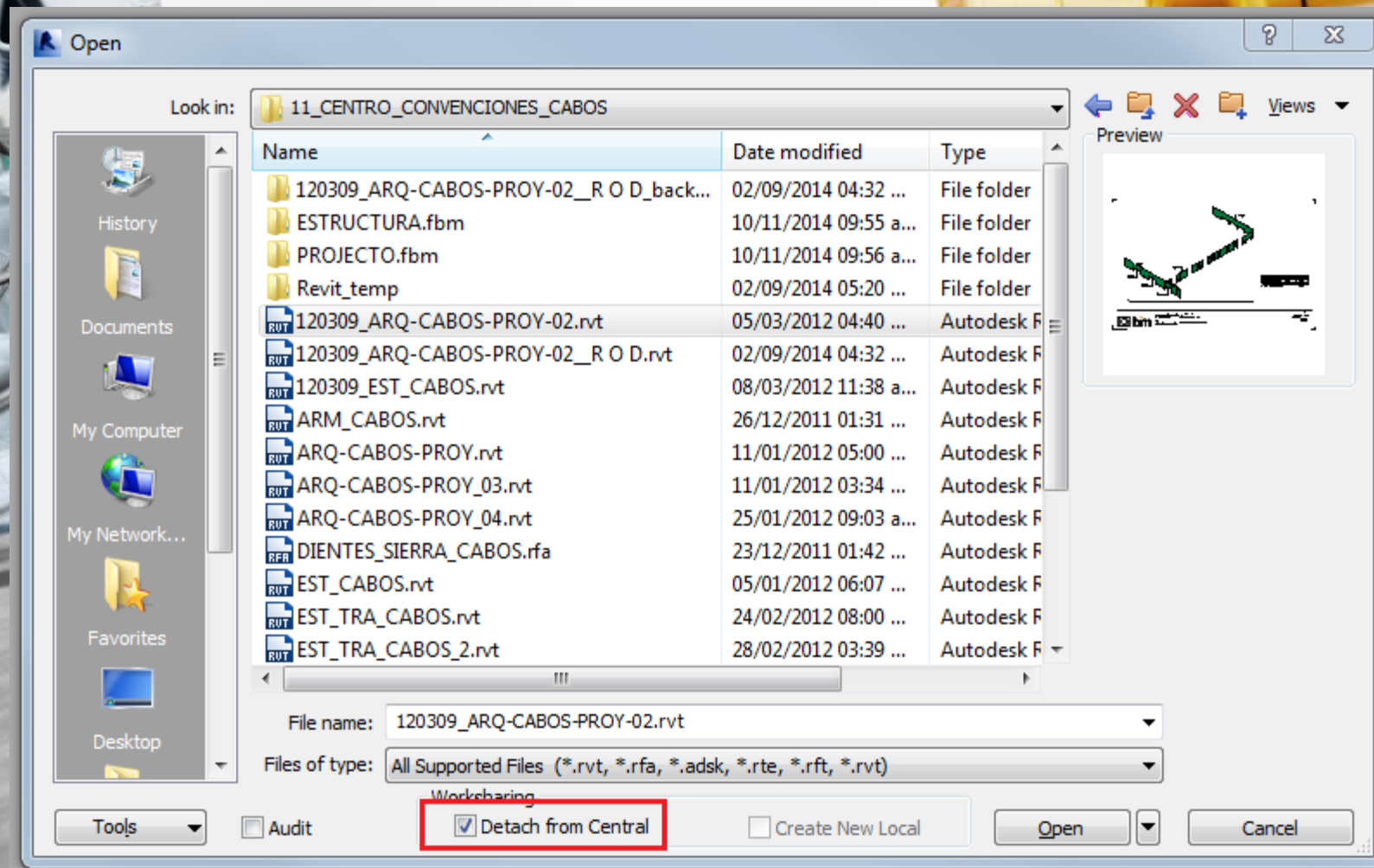
~~Hollywood~~ BIM

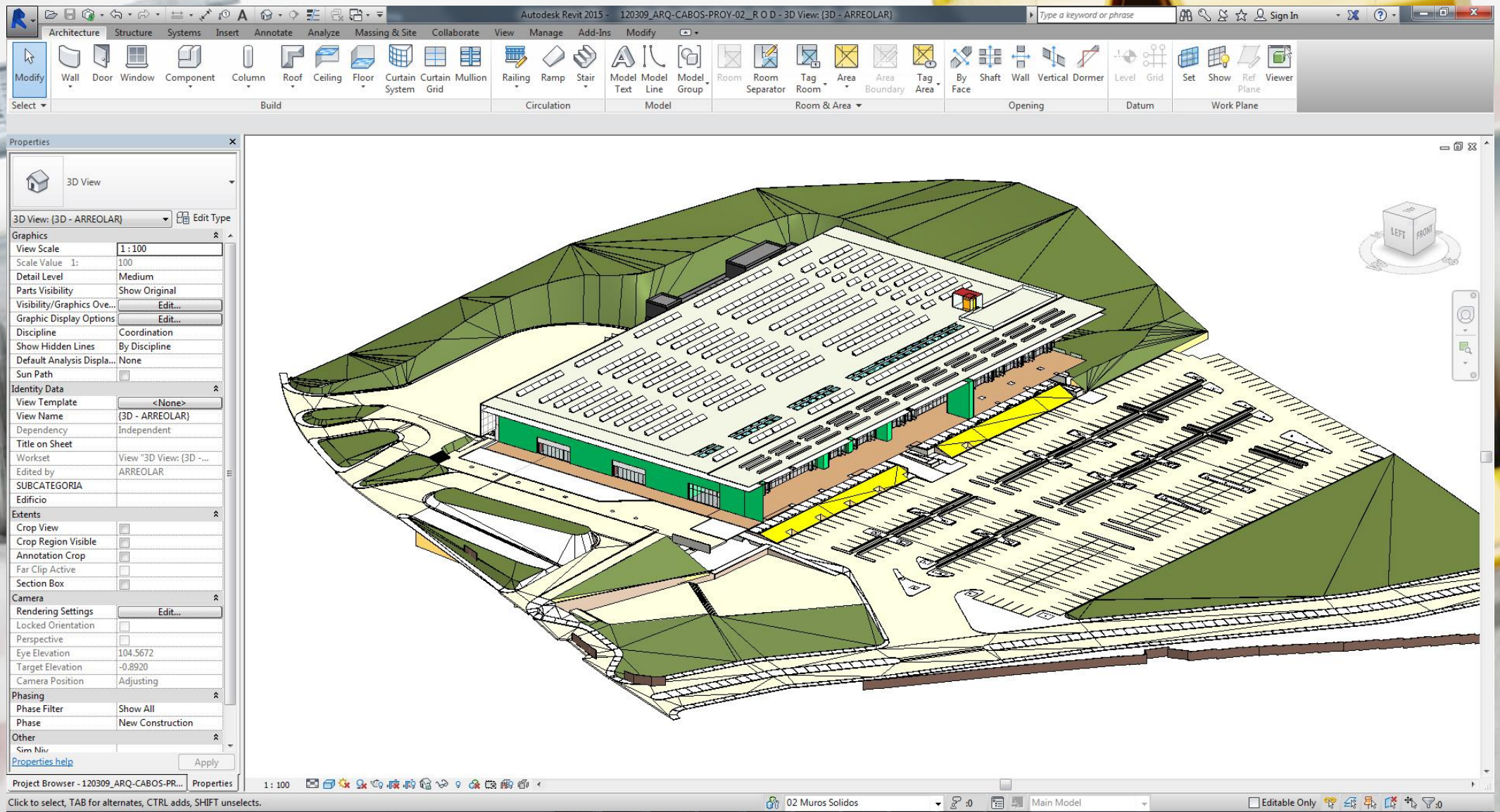
ICA | bim

From Revit to 3ds Max









Visibility/Graphic Overrides for 3D View: (3D - ARREOLAR)

Model Categories

Annotation Categories

Analytical Model Categories

Imported Categories

Filters

Worksets

Revit Links

☒ Show model categories in this view

If a category is unchecked, it will not be visible.

Filter list: <show all>

Visibility	Projection/Surface			Cut		Halftone	Detail Level
	Lines	Patterns	Transparency	Lines	Patterns		
<input checked="" type="checkbox"/> Curtain Panels						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Curtain Systems						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Curtain Wall Mullions						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Data Devices						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Detail Items						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Doors						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Duct Accessories						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Duct Fittings						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Duct Insulations						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Duct Linings						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Duct Placeholders						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Ducts						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Electrical Equipment						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Electrical Fixtures						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Entourage						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Fire Alarm Devices						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Flex Ducts						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Flex Pipes						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Floors	Override...	Override...	Override...	Override...	Override...	<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Furniture						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Furniture Systems						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Generic Models						<input type="checkbox"/>	By View

All

None

Invert

Expand All

Categories that are not overridden are drawn according to Object Style settings.

Object Styles...

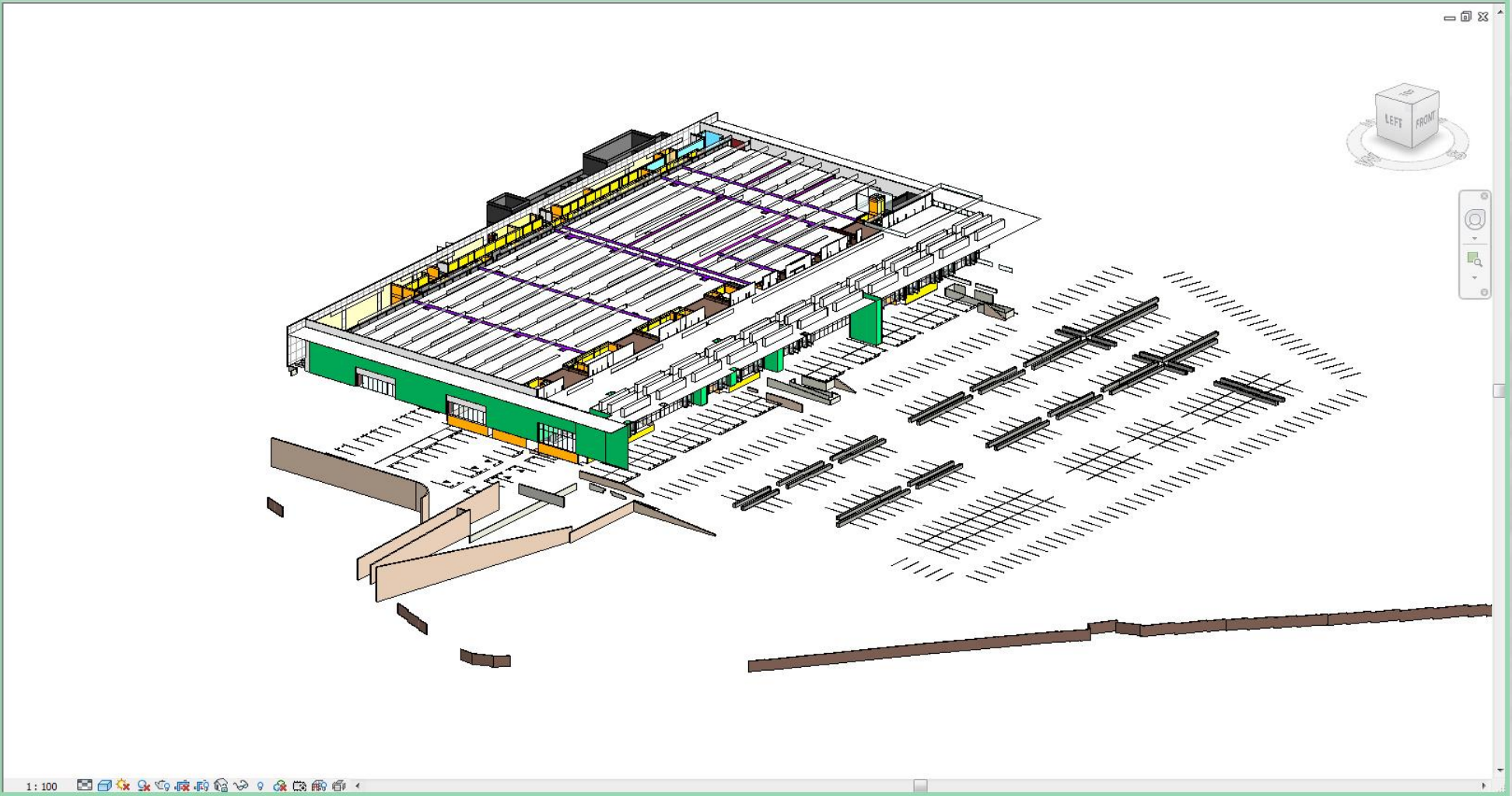
Override Host Layers

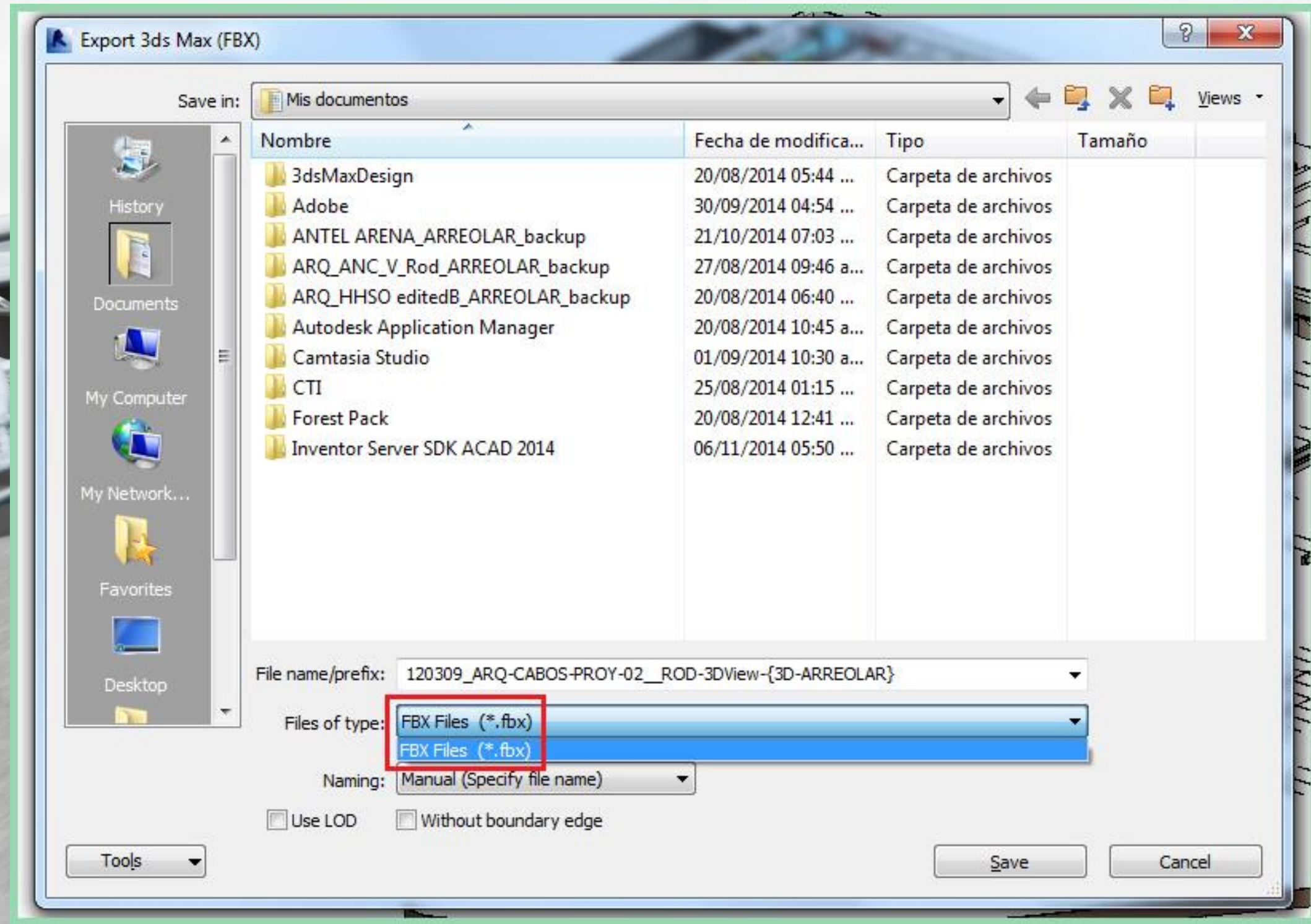
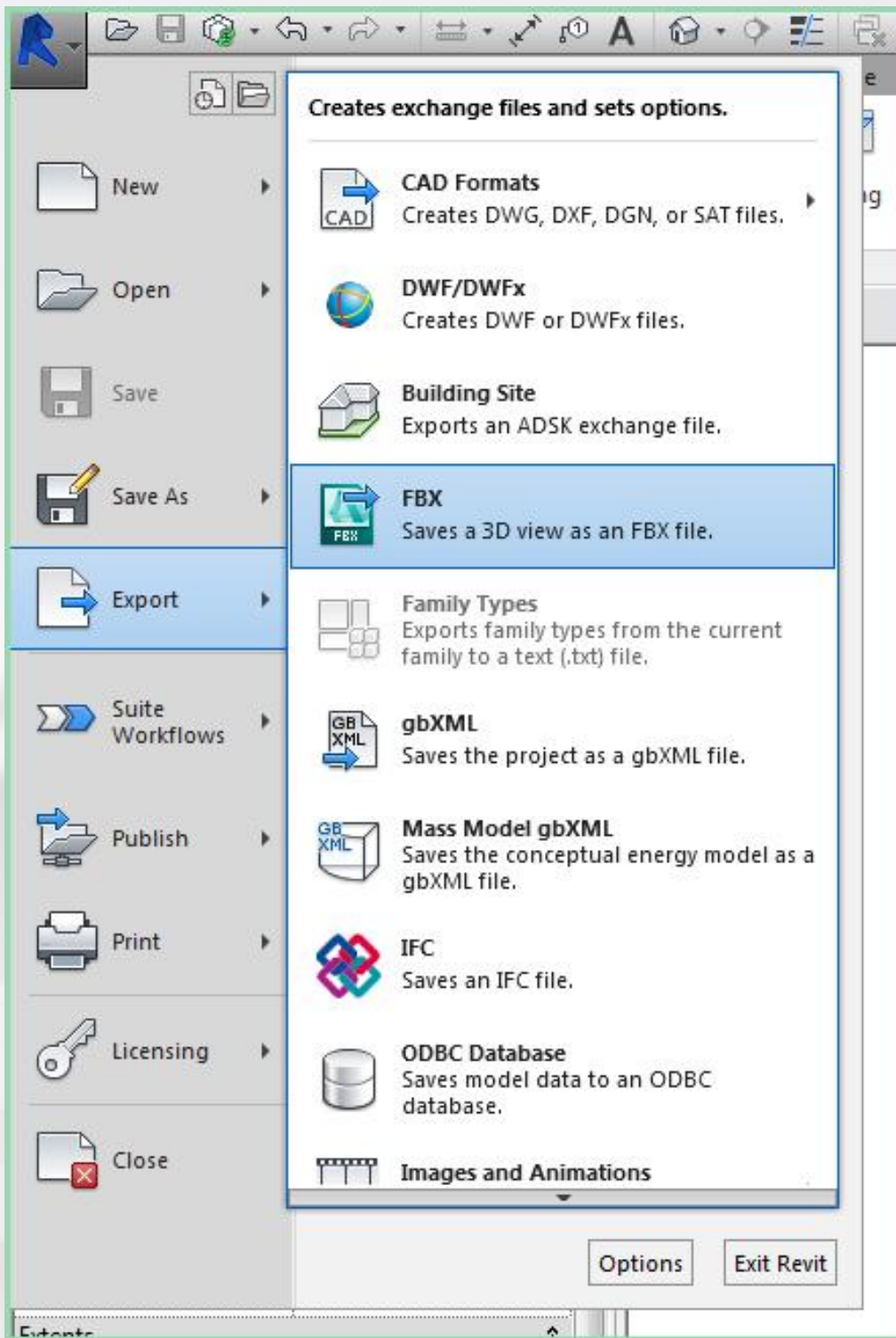
☐ Cut Line Styles

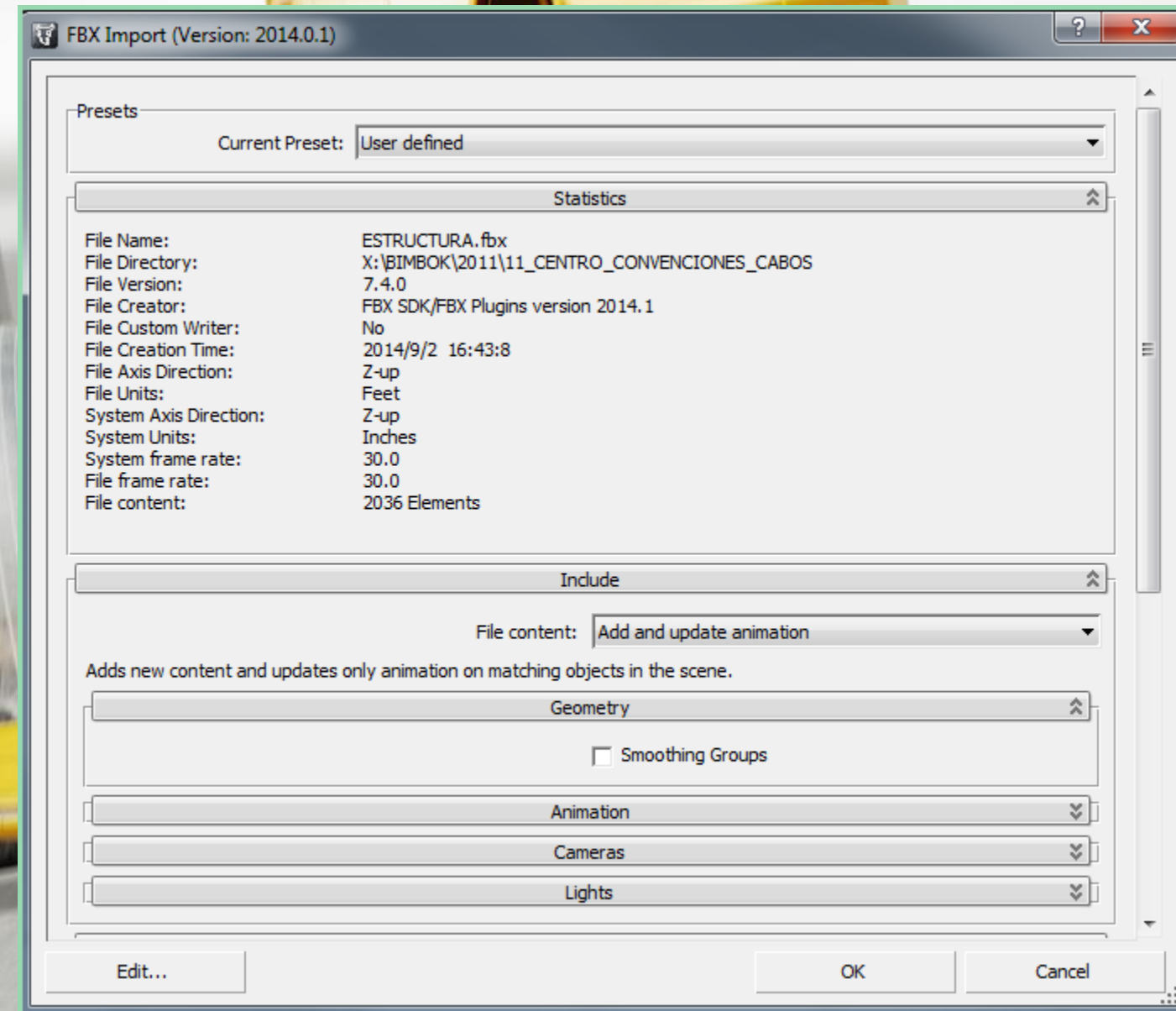
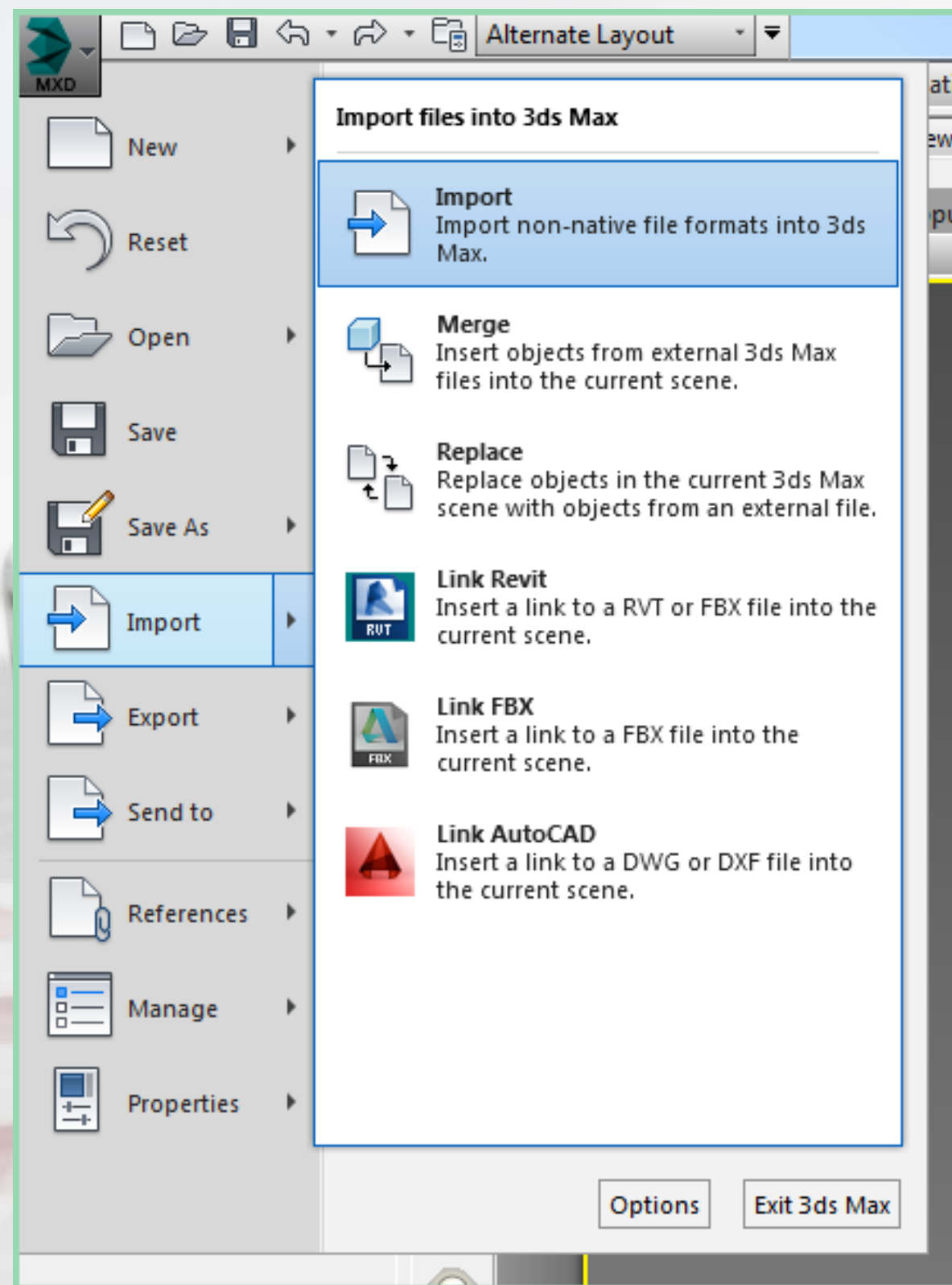
Aceptar

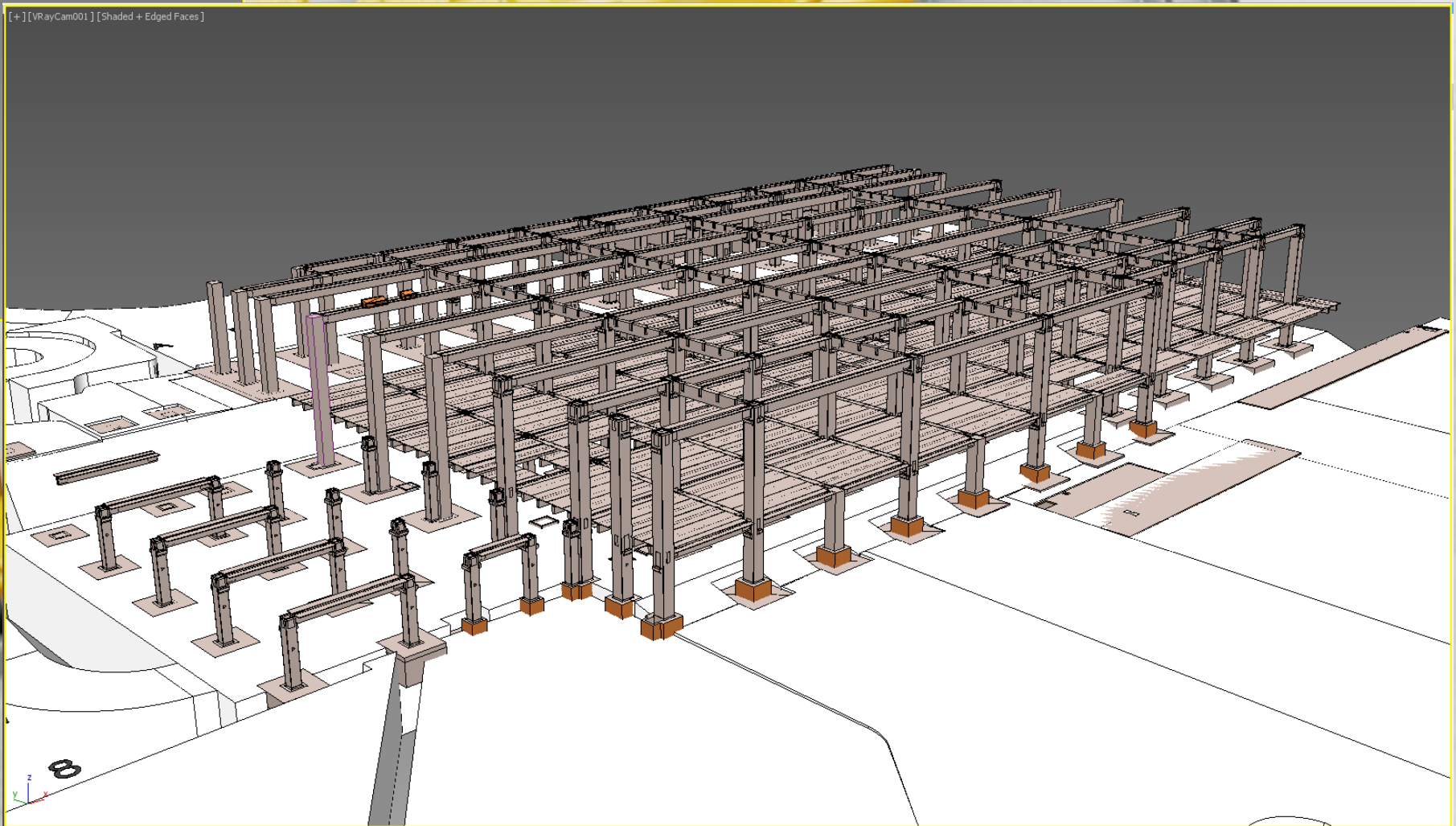
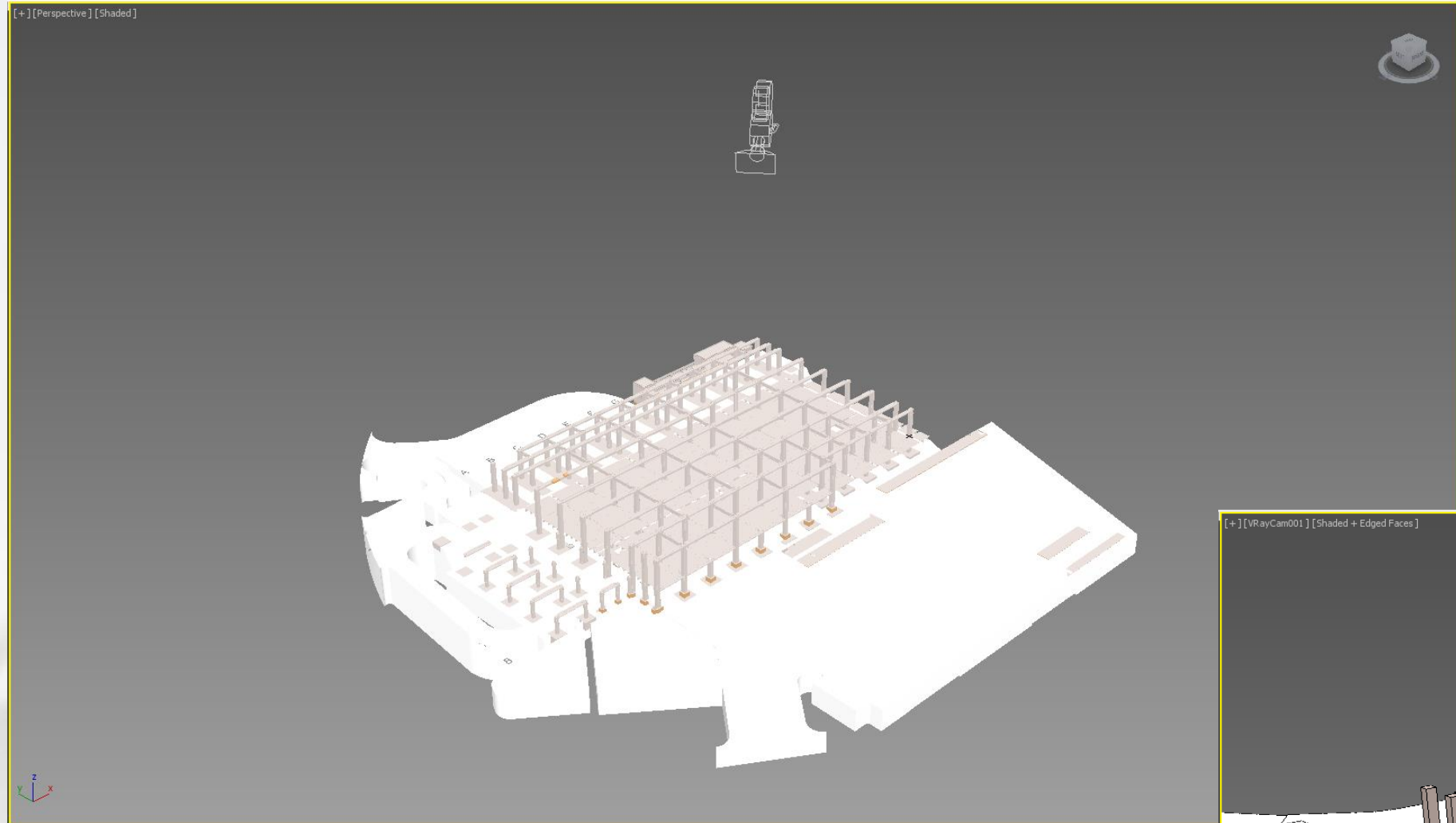
Cancelar

View Visibility

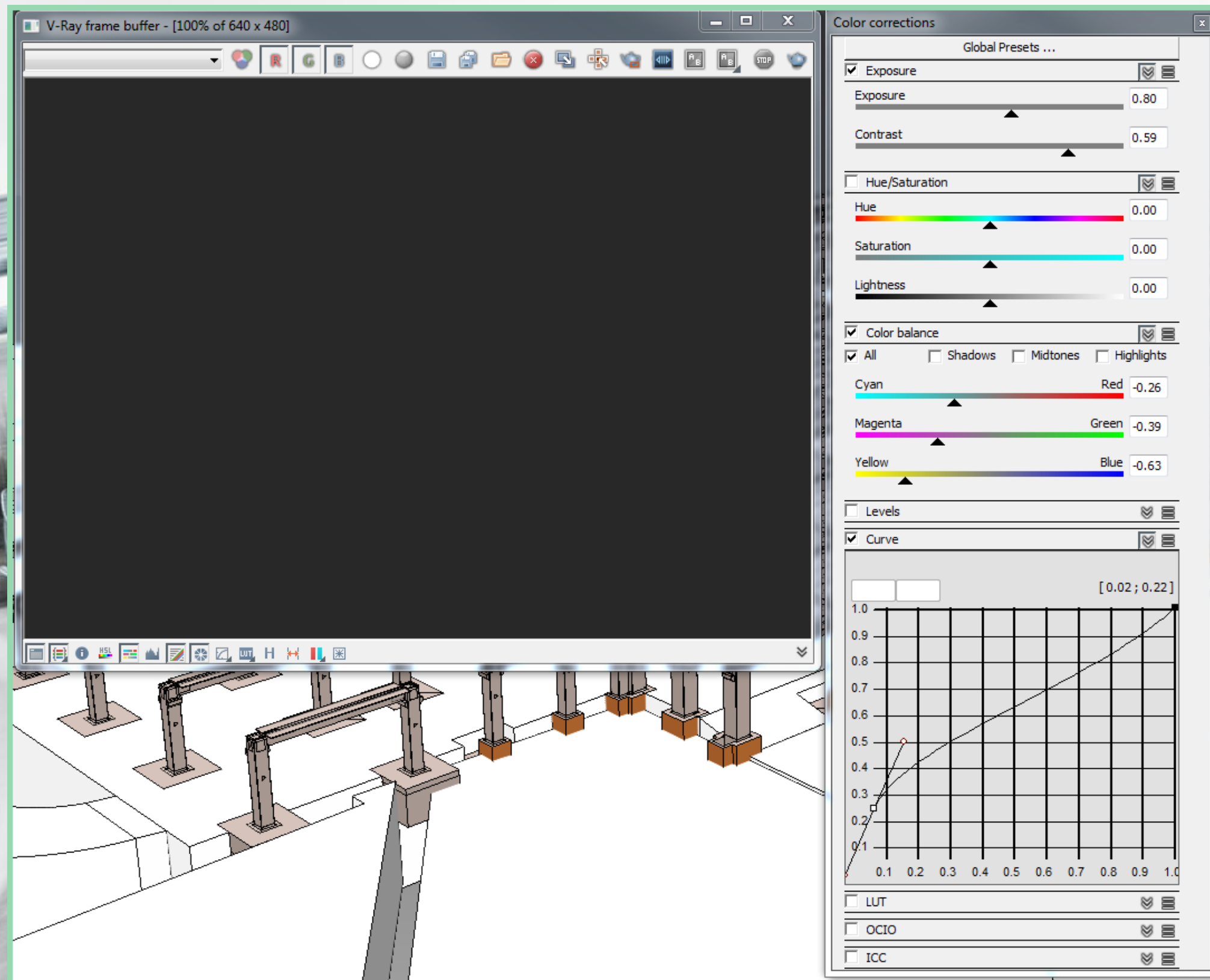


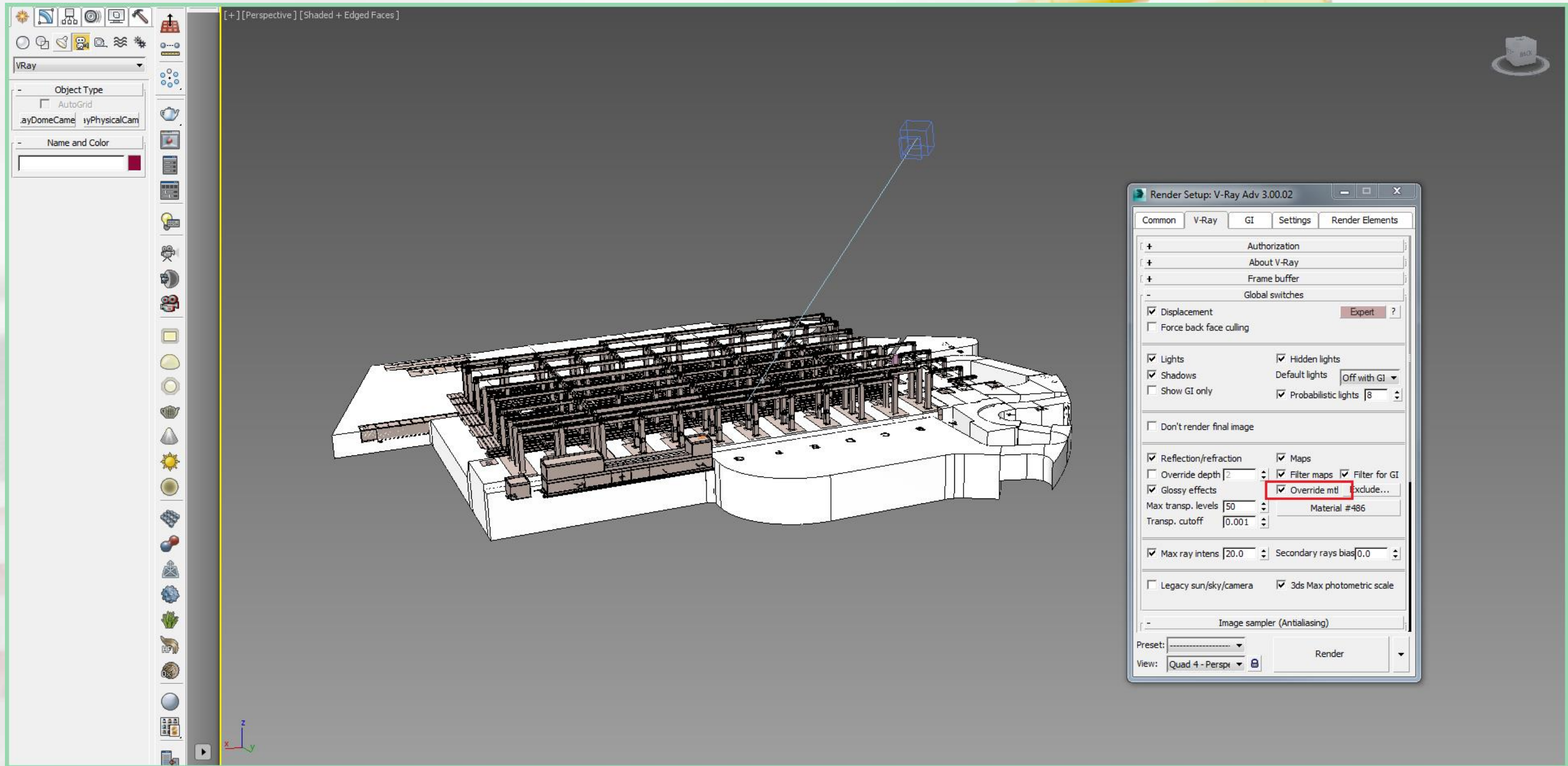


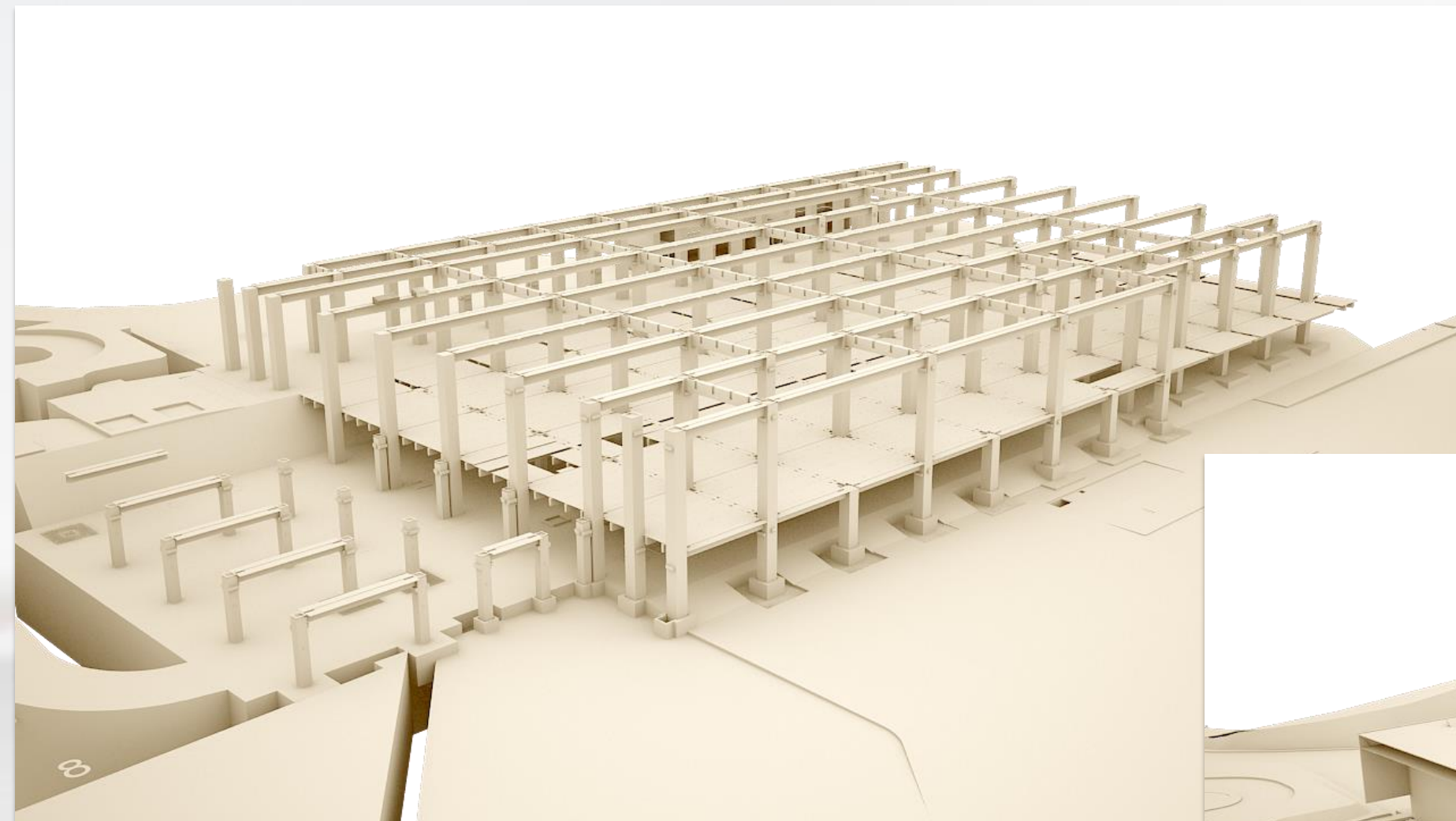












ICA | bim

Preproduction



Helicopter flight

- Bell 206
- Eurocopter EC 130 B4



http://simple.wikipedia.org/wiki/Bell_206



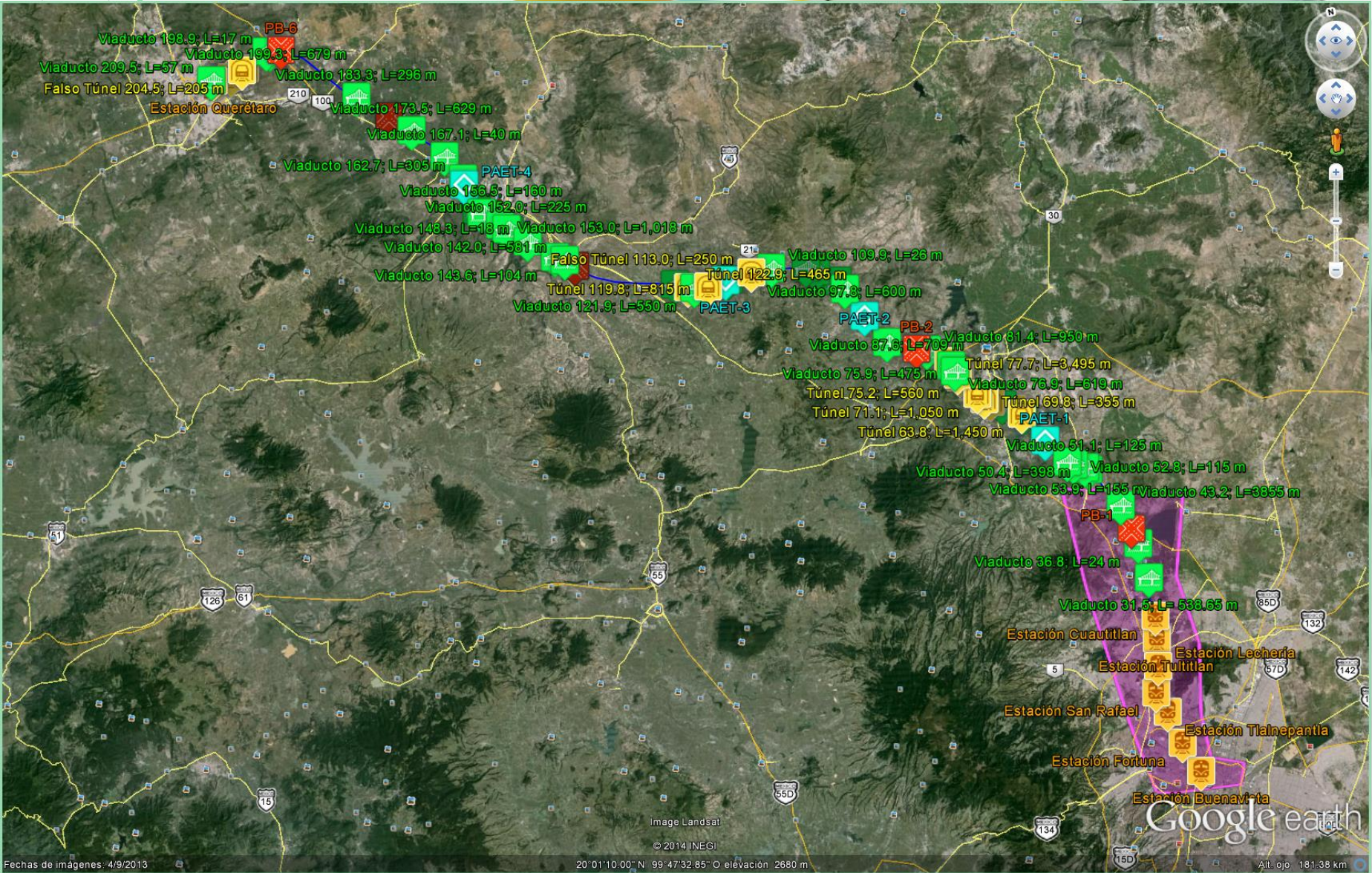
http://img.planespotters.net/photo/300000/original/SP-ERY-_PlanespottersNet_300635.jpg

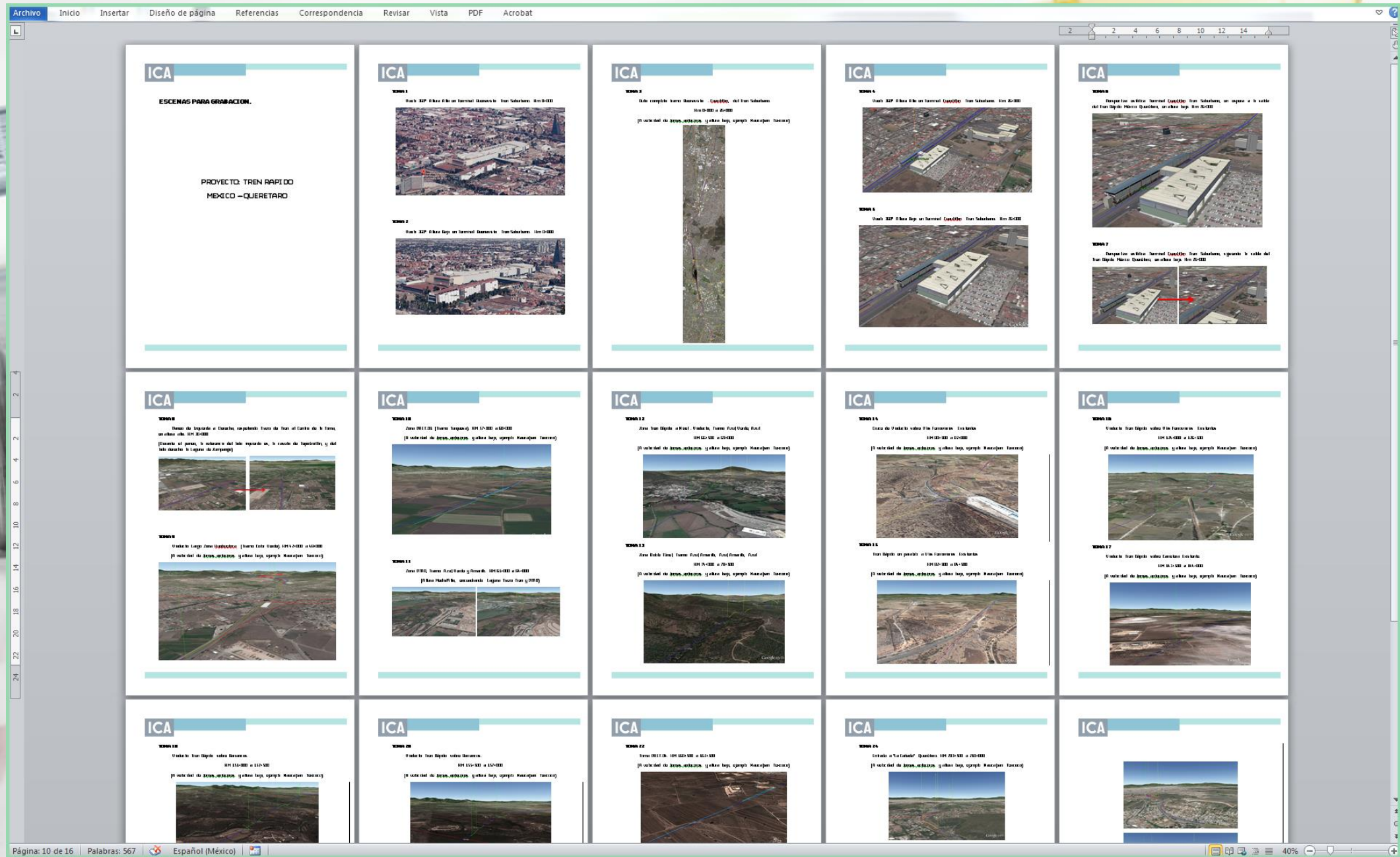
Plan ahead



Google Earth KMZ

Archivo Inicio Insertar Diseño de página Fórmulas Datos Revisar Vista Programador PDF Acrobat												
A1												
A	B	C	D	E	F	G	H	I	J	K	L	M
1												
2	Plan de vuelo con información por líneas de vuelo en hojas de cálculo											
3												
4												
5	Latitude	Longitude	Elevation									
6	19.44833168	-99.1517055	2240									
7	19.45130997	-99.1511572	2239									
8	19.45134903	-99.1511504	2239									
9	19.45138820	-99.1511443	2239									
10	19.45142746	-99.1511389	2239									
11	19.45146681	-99.1511343	2239									
12	19.45150623	-99.1511303	2239									
13	19.45154570	-99.1511271	2240									
14	19.45158523	-99.1511247	2240									
15	19.45162479	-99.1511230	2240									
16	19.45166437	-99.1511220	2240									
17	19.45170396	-99.1511217	2240									
18	19.45174355	-99.1511222	2240									
19	19.45178312	-99.1511233	2240									
20	19.45182267	-99.1511253	2240									
21	19.45186219	-99.1511279	2240									
22	19.45190165	-99.1511313	2240									
23	19.45194105	-99.1511354	2240									
24	19.45198037	-99.1511403	2240									
25	19.45201961	-99.1511458	2241									
26	19.45205875	-99.1511521	2241									
27	19.45209778	-99.1511591	2241									
28	19.45213669	-99.1511669	2241									
29	19.45217546	-99.1511753	2241									
30	19.45221408	-99.1511845	2241									
31	19.45225255	-99.1511944	2241									
32	19.45229085	-99.1512050	2241									
33	19.45232896	-99.1512163	2241									
34	19.45236689	-99.1512283	2241									
35	19.45398265	-99.1517557	2240									
36	19.45398265	-99.1517557	2240									
37	19.45462276	-99.1519646	2238									
38	19.45469414	-99.1519883	2238									
39	19.45476531	-99.1520127	2237									
40	19.45483627	-99.1520378	2237									
41	19.45490700	-99.1520635	2237									
42	19.45497751	-99.1520899	2237									
43	19.45504778	-99.1521171	2237									
44	19.45511782	-99.1521449	2237									
45	19.45518760	-99.1521733	2237									
46	19.45525714	-99.1522025	2237									
47	19.45532642	-99.1522323	2237									
48	19.45539544	-99.1522628	2237									
49	19.45546418	-99.1522940	2237									
50	19.45553265	-99.1523258	2238									
51	19.45560084	-99.1523583	2238									
52	19.45566875	-99.1523914	2238									
53	19.45573636	-99.1524253	2238									
54	19.45580368	-99.1524597	2238									
55	19.45587069	-99.1524948	2238									
56	19.45593739	-99.1525306	2238									
57	19.45600377	-99.1525670	2238									
58	19.45606984	-99.1526041	2239									
59	19.45613558	-99.1526417	2239									





Camera Tracking



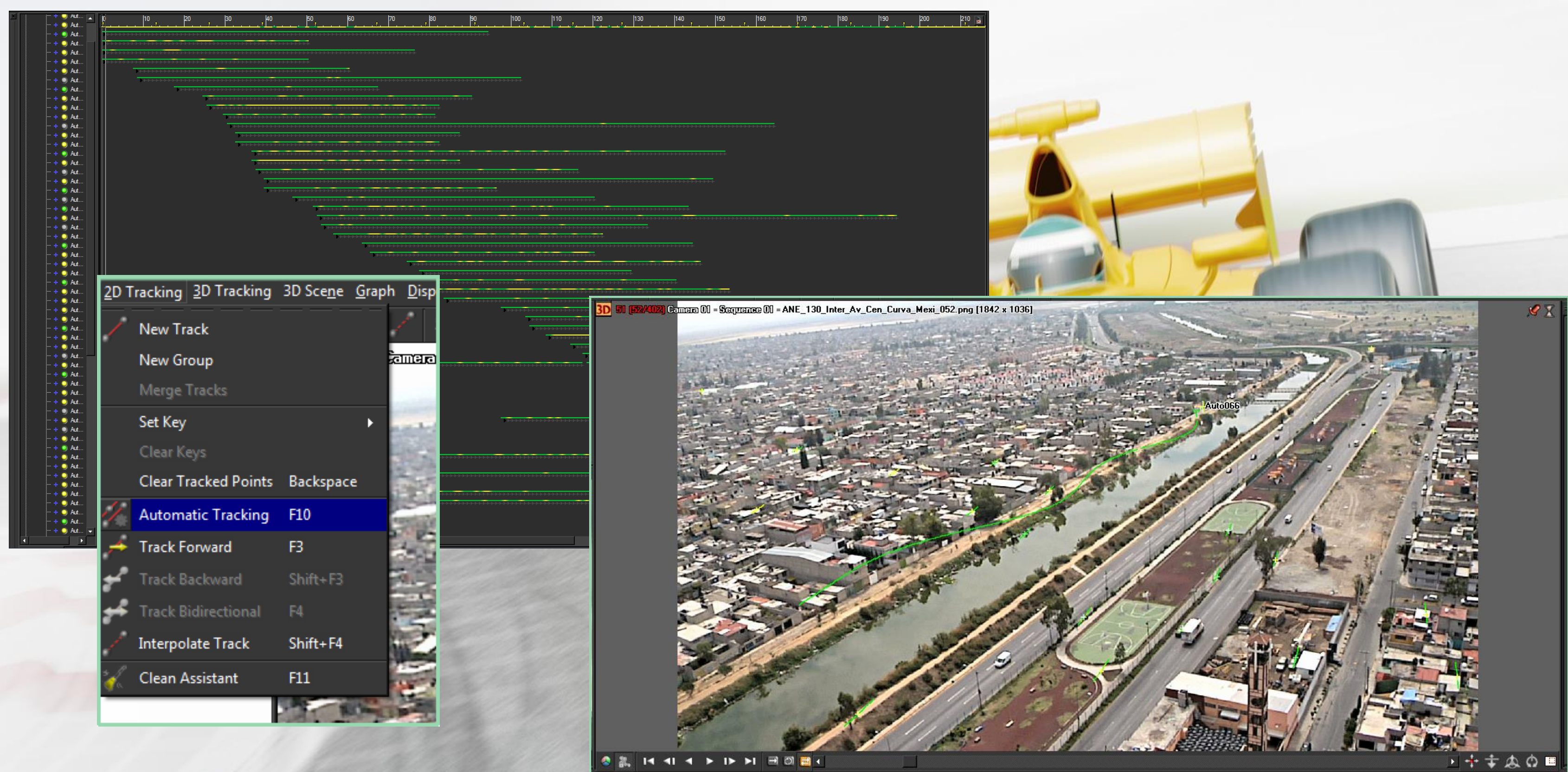




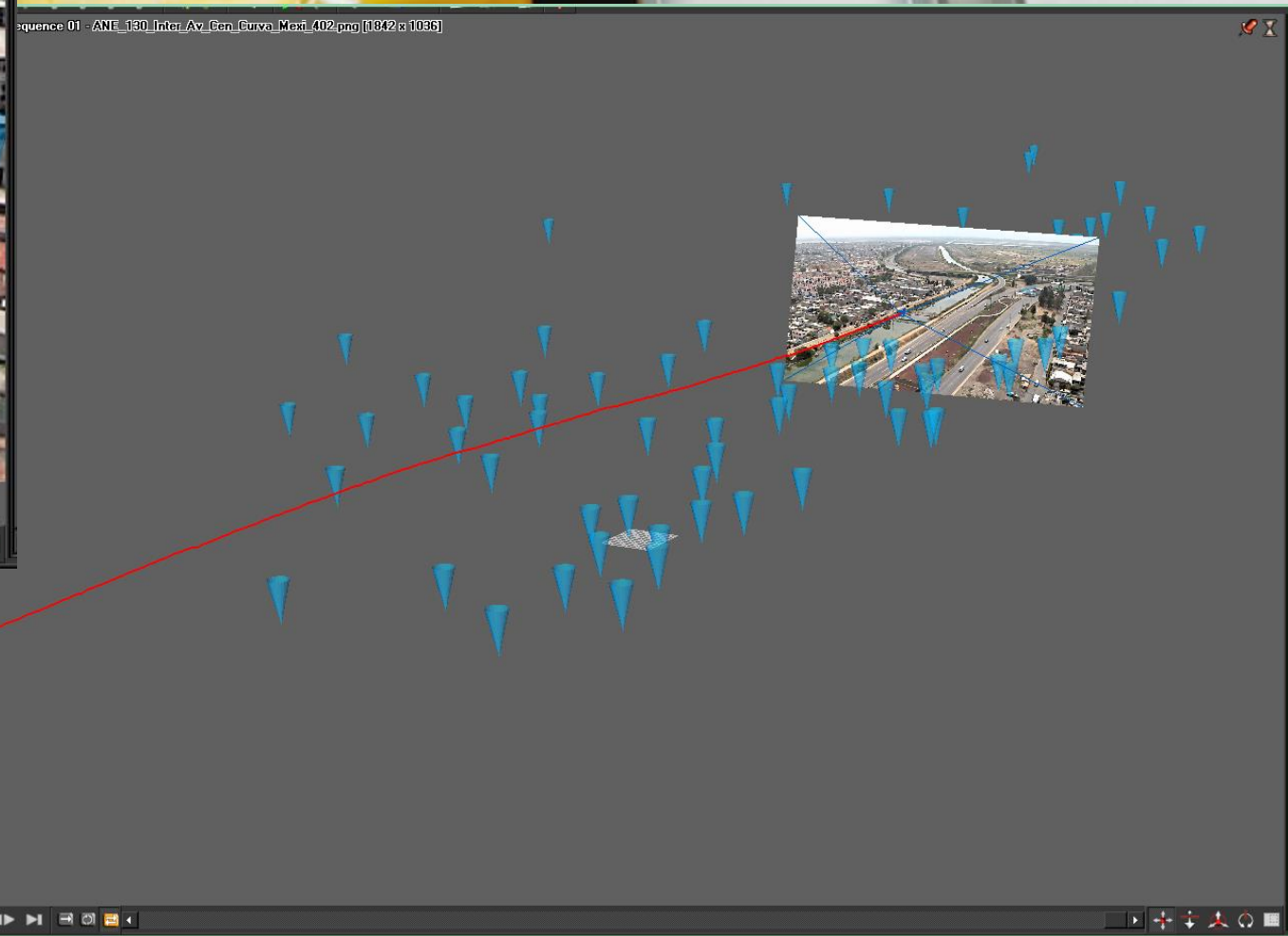
AUTODESK® MATCHMOVER™

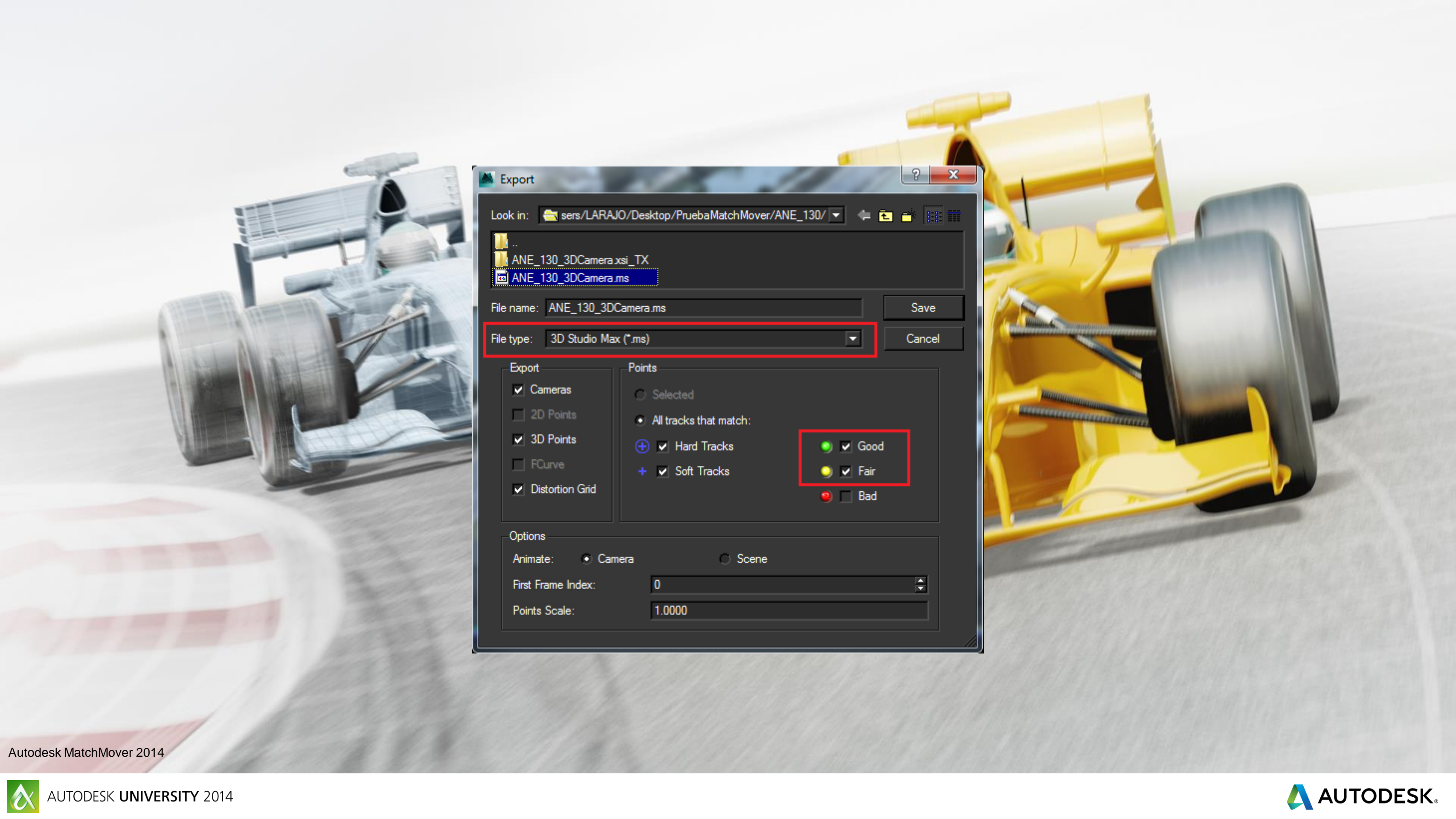


AUTODESK.



Autodesk MatchMover 2014





Export

Look in: sers/LARAJ0/Desktop/PruebaMatchMover/ANE_130/

ANE_130_3DCamera.xsi_TX
ANE_130_3DCamera.ms

File name: ANE_130_3DCamera.ms

File type: 3D Studio Max (*.ms)

Save Cancel

Export

☒ Cameras
☐ 2D Points
☒ 3D Points
☐ FCurve
☒ Distortion Grid

Points

☐ Selected
☒ All tracks that match:

+ ☒ Hard Tracks
+ ☒ Soft Tracks

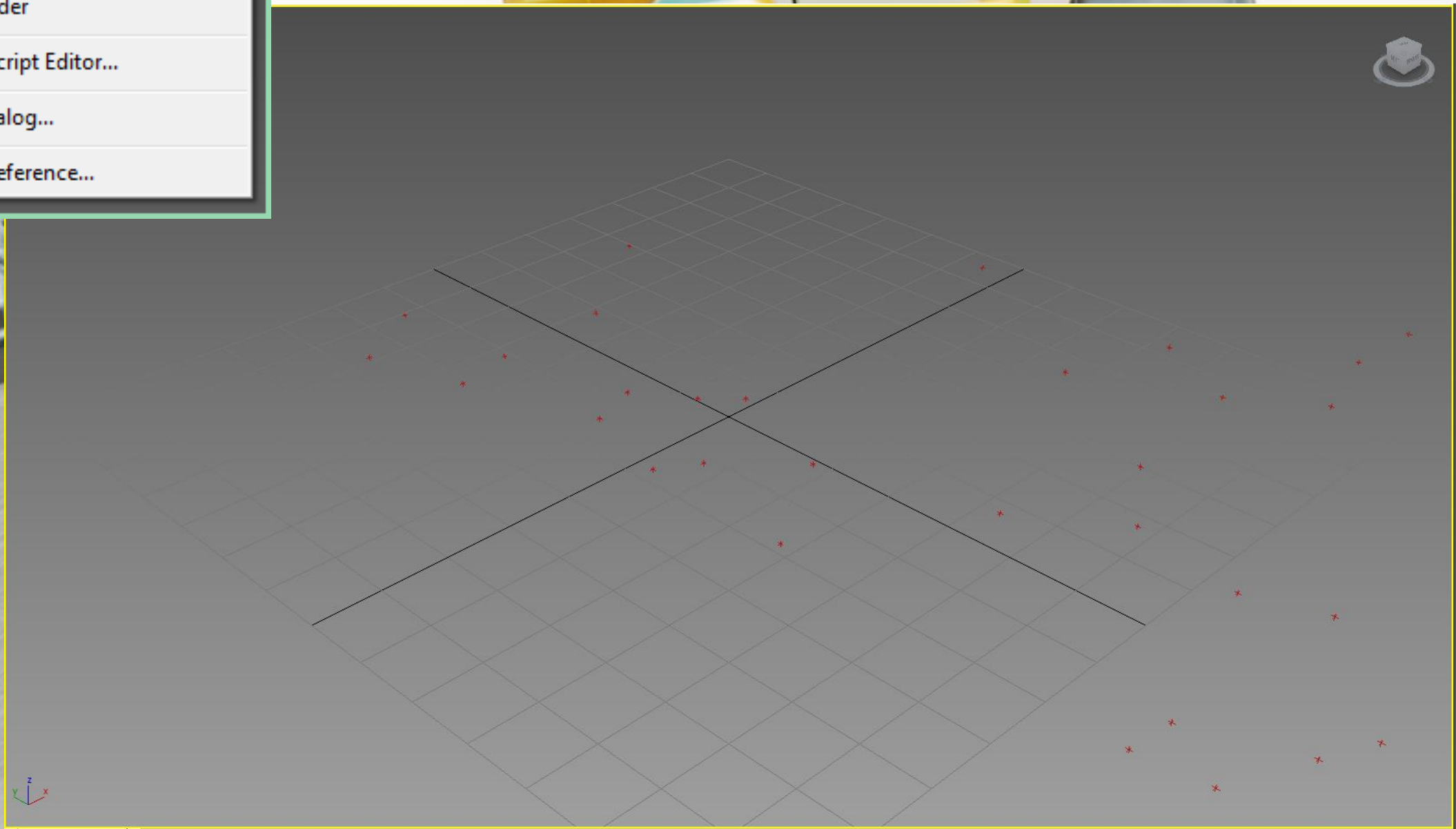
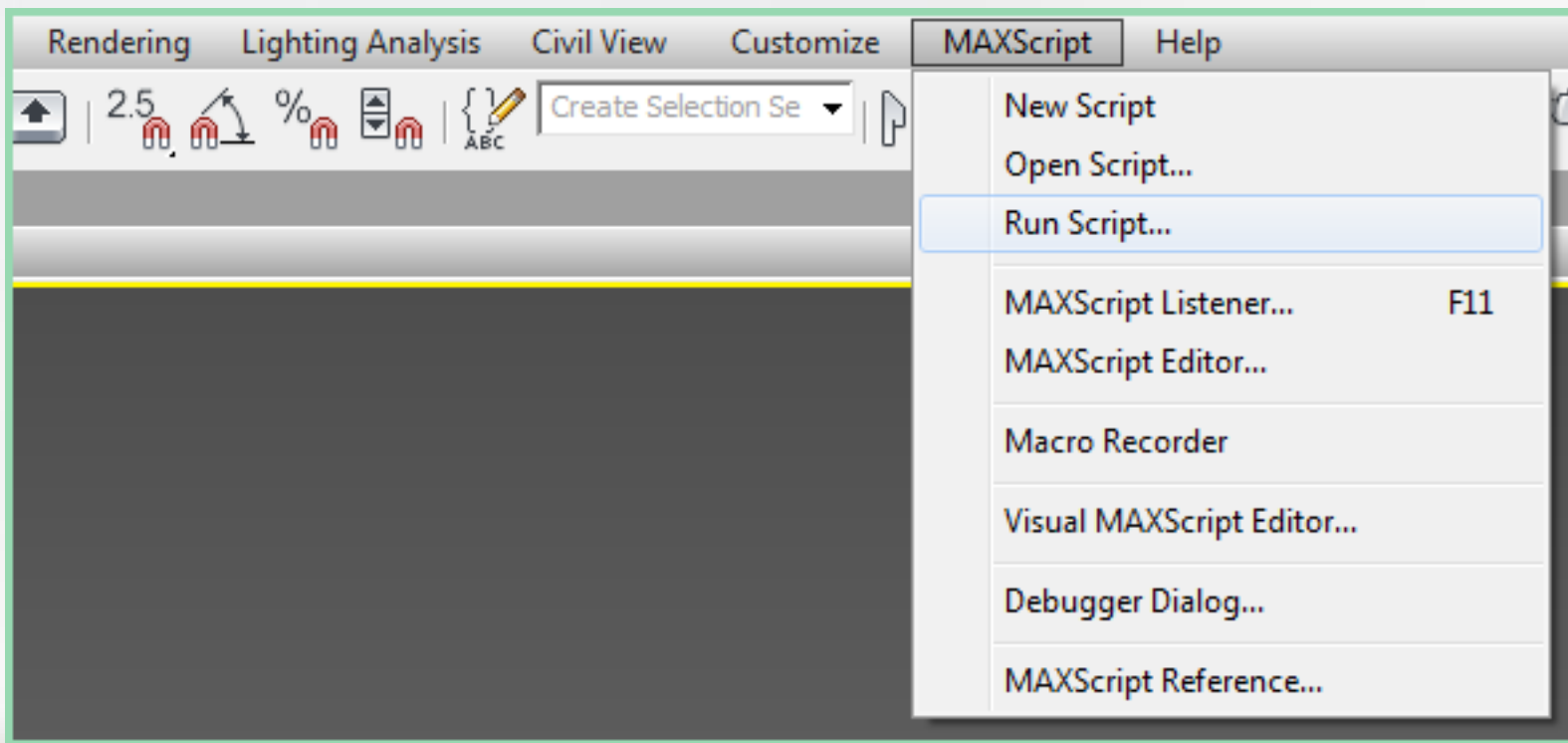
☒ Good
☒ Fair
☐ Bad

Options

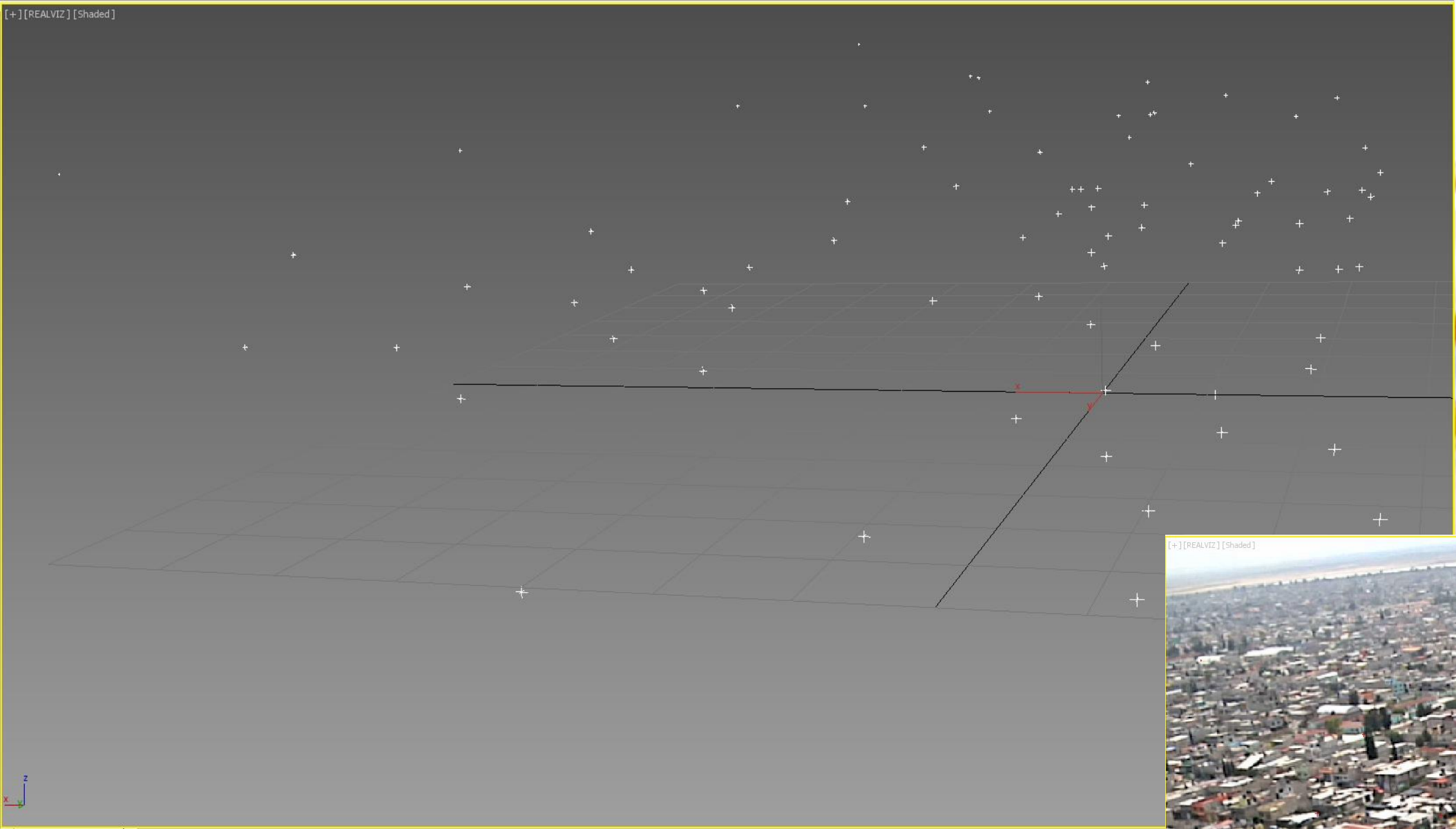
Animate: ☒ Camera ☐ Scene

First Frame Index: 0

Points Scale: 1.0000



[+][REALVIZ][Shaded]



[+][REALVIZ][Shaded]



Autodesk 3ds Max Design 2014



Basic Rigging & Animation





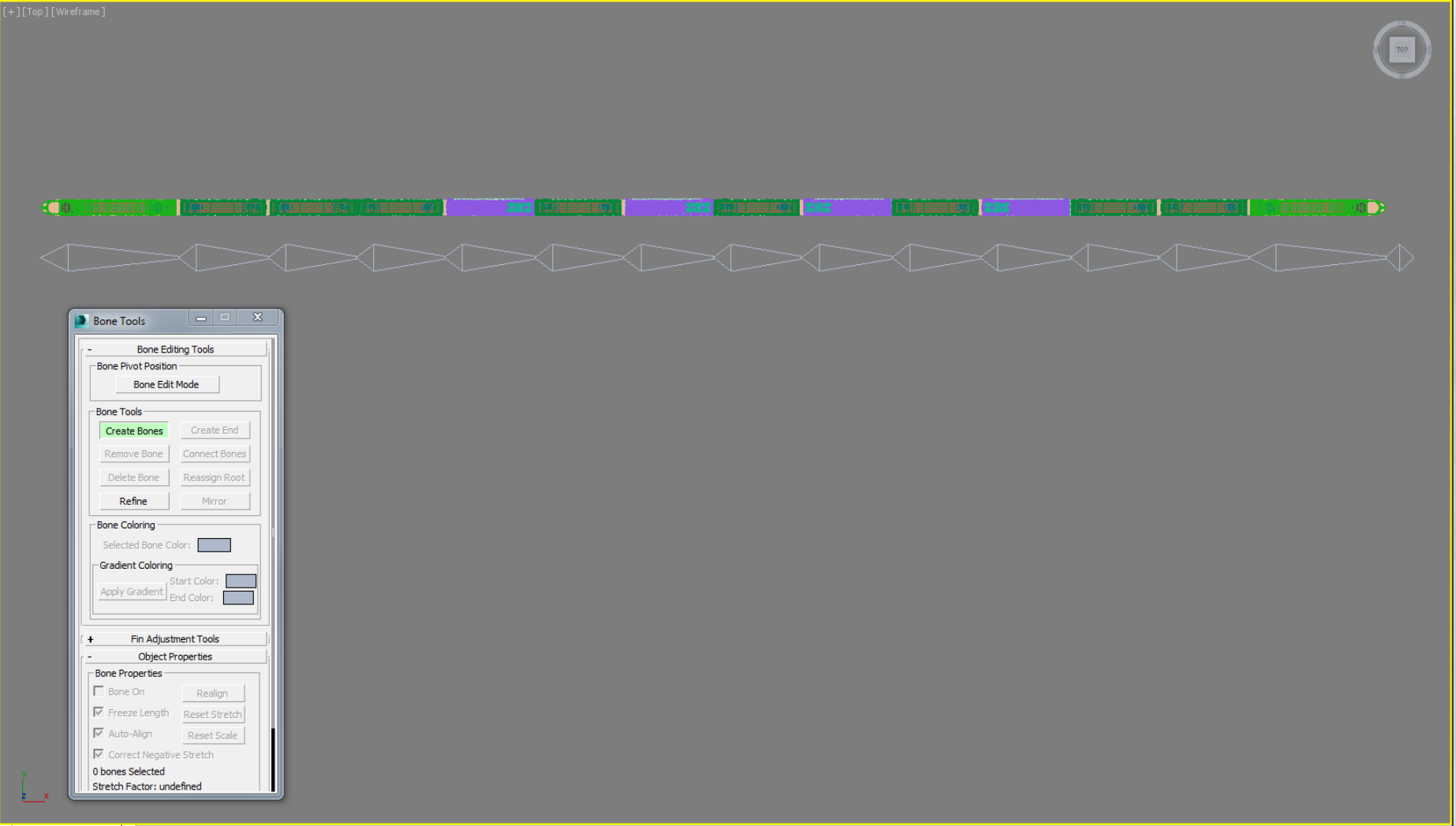
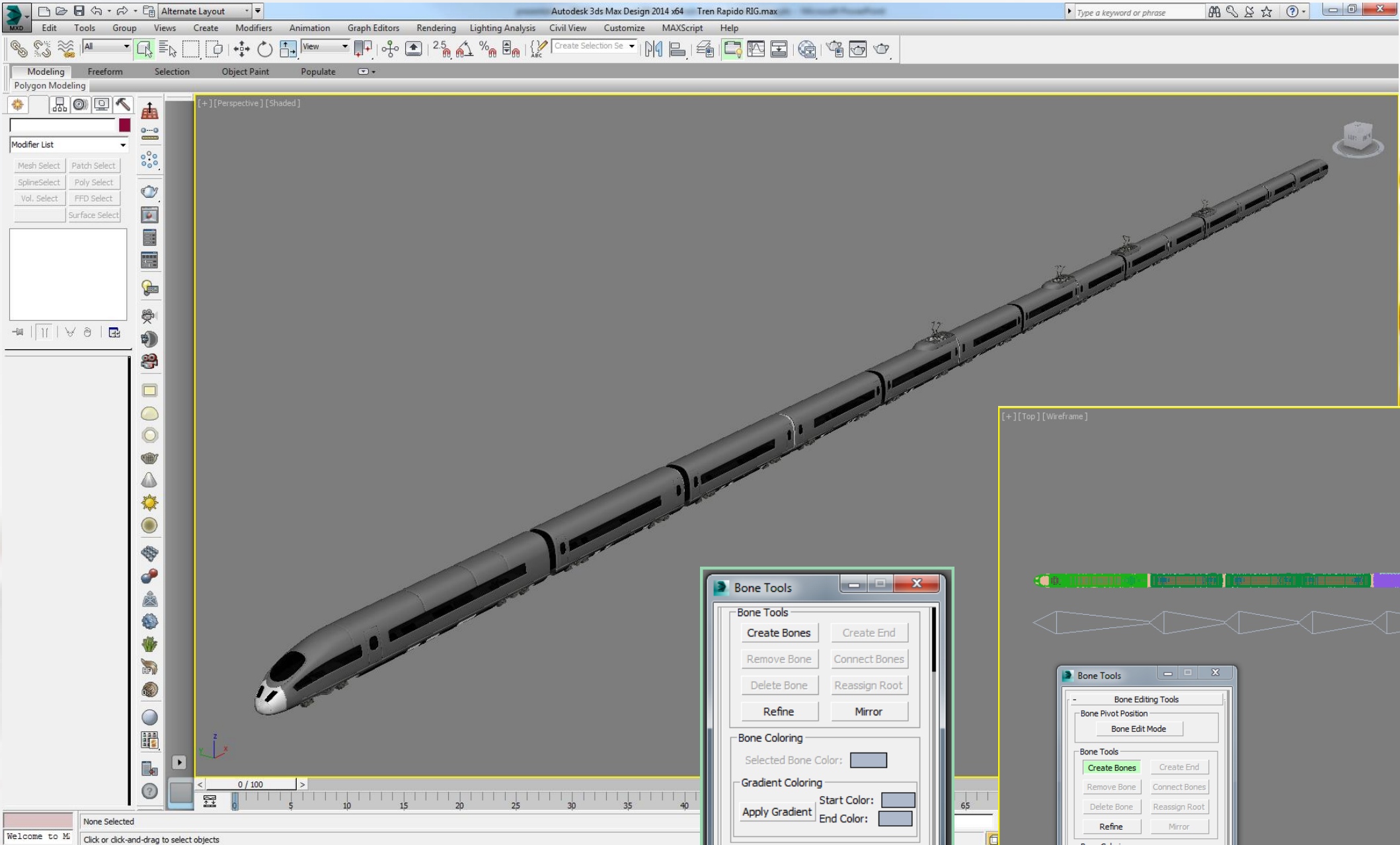
AUTODESK® 3DS MAX® DESIGN 2014

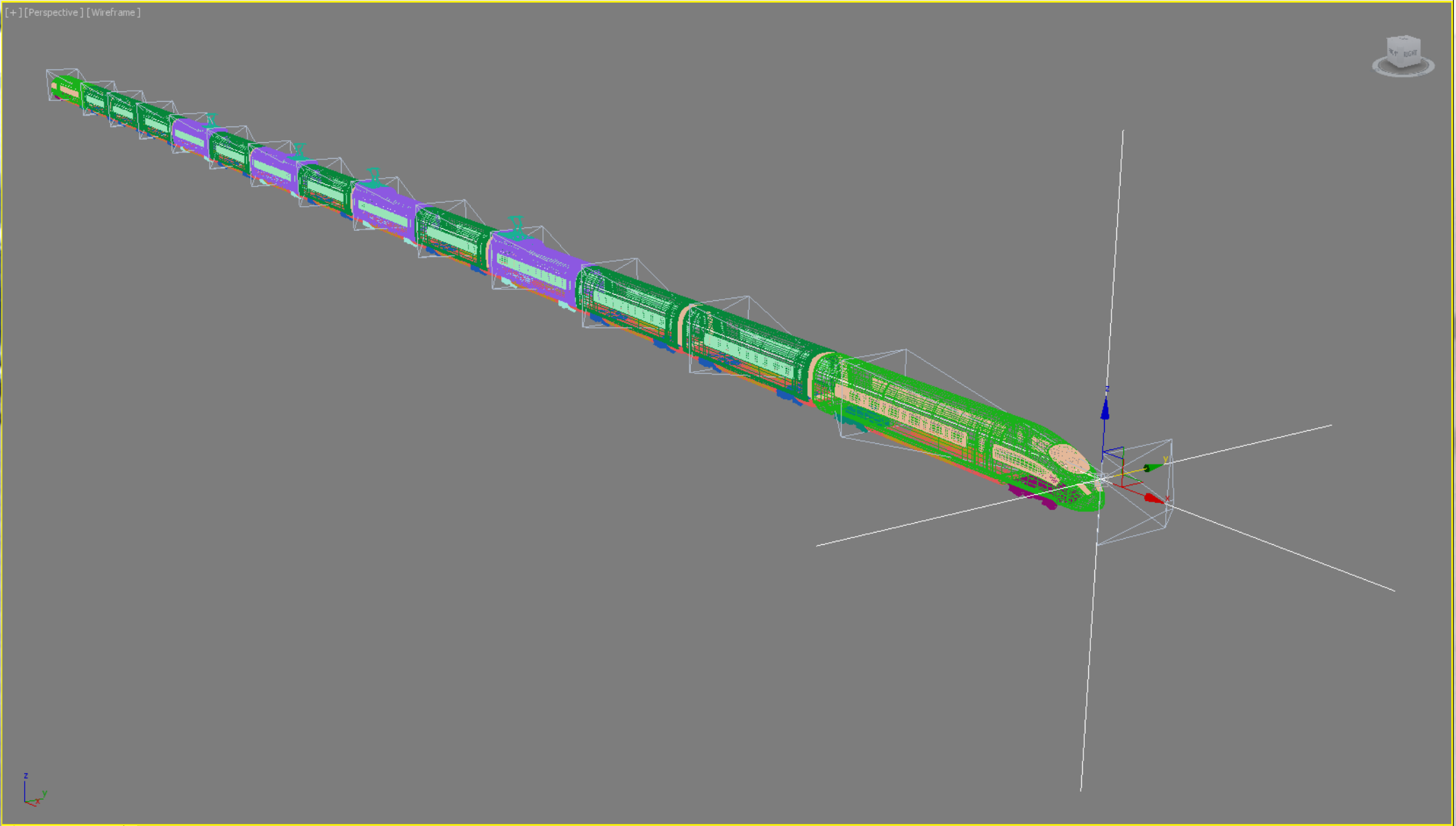
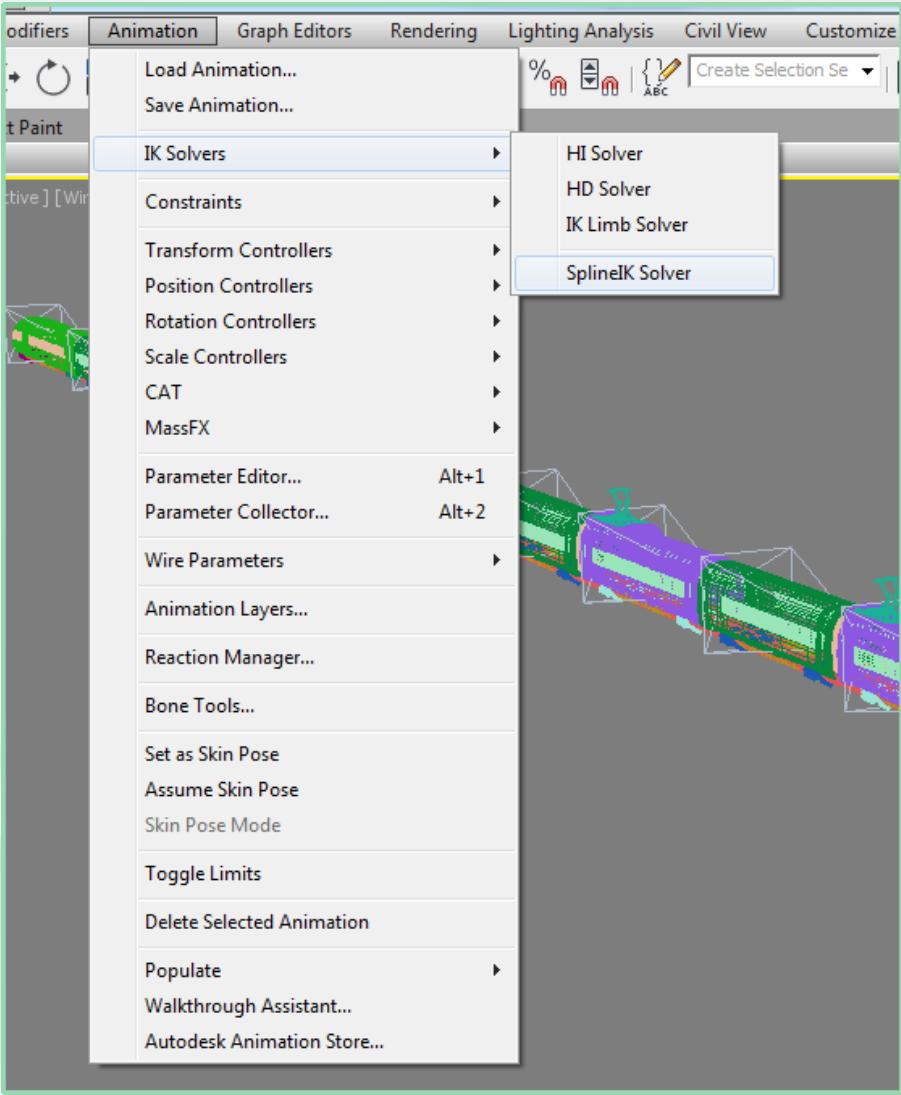


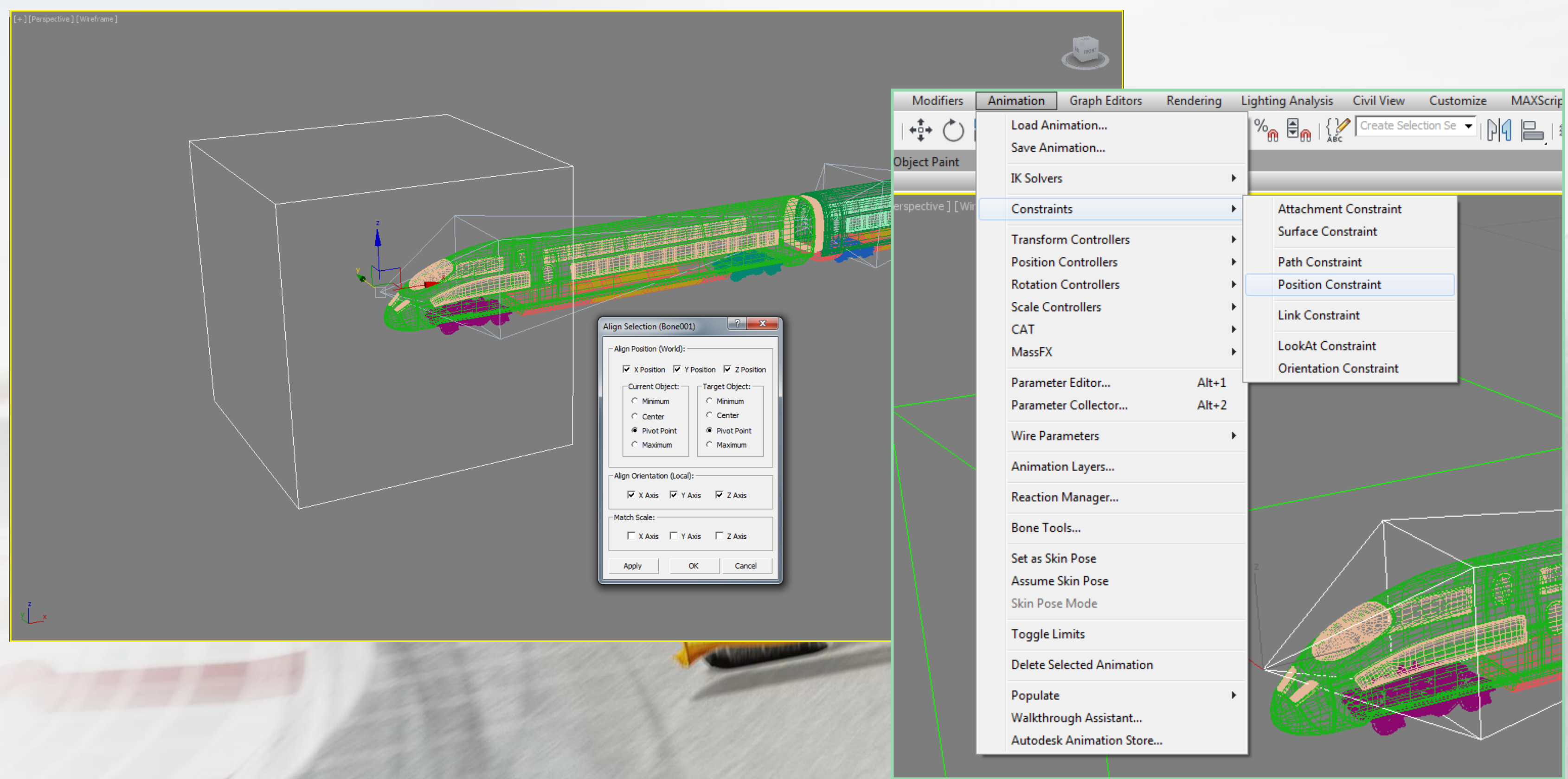
AUTODESK.

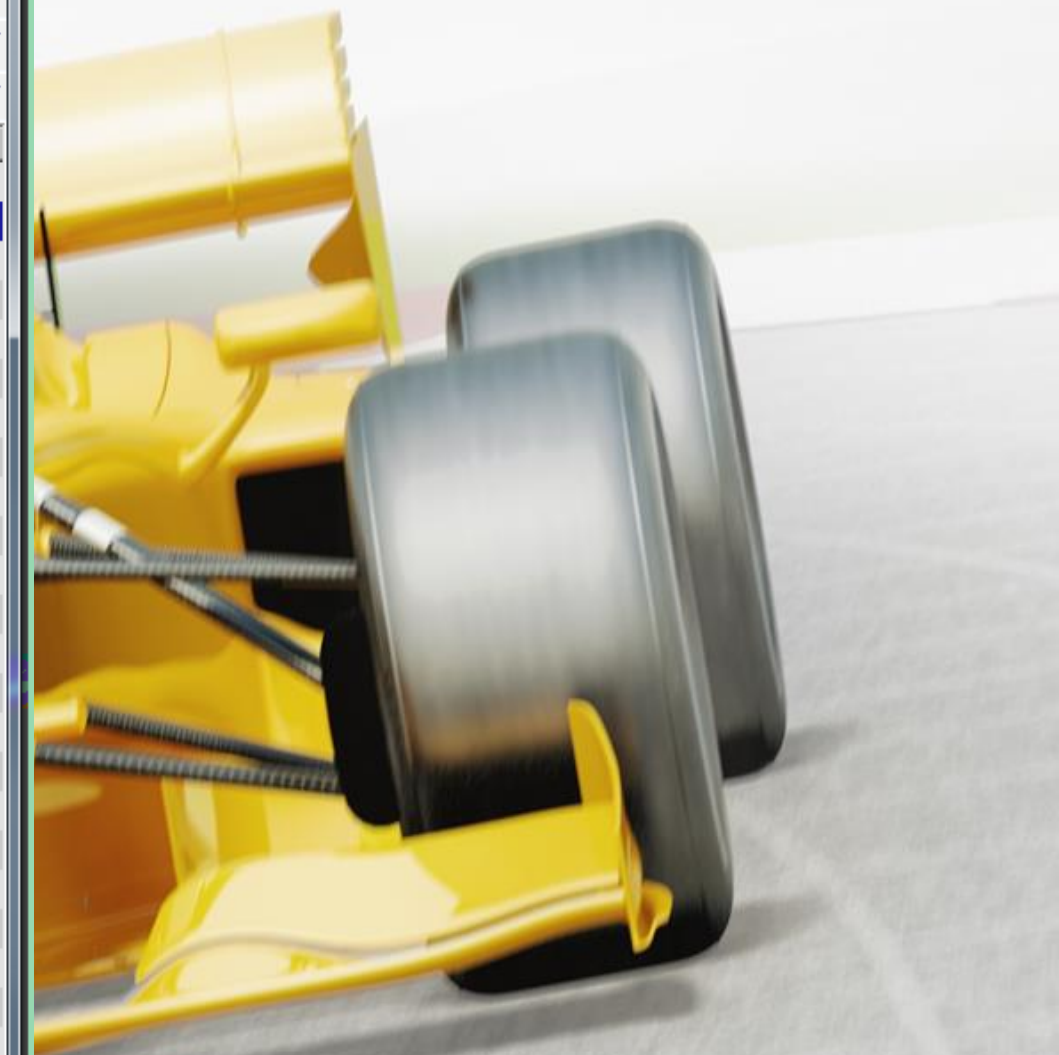
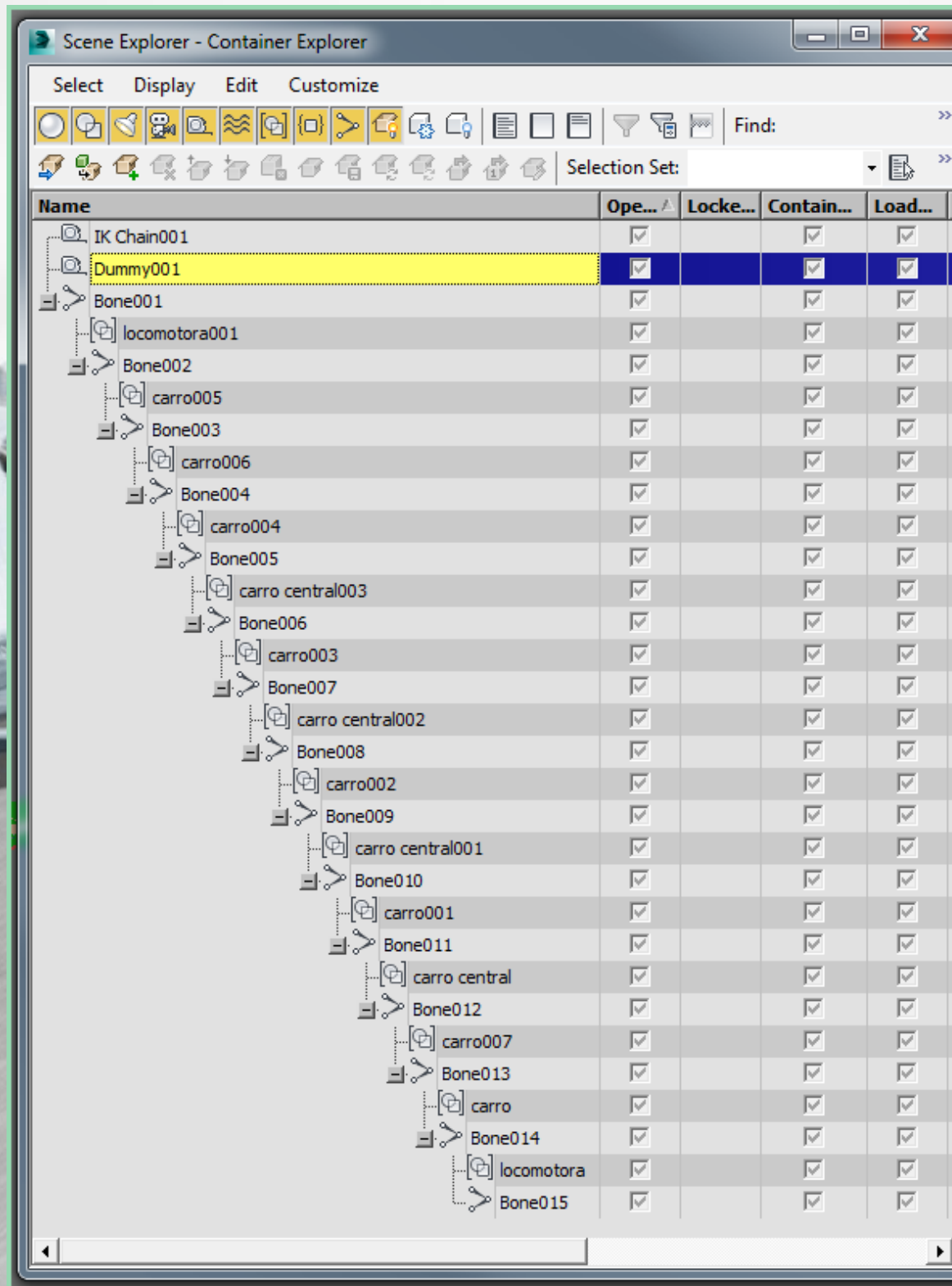
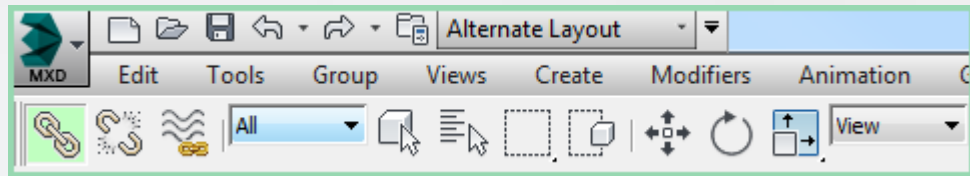
Starting 3ds Max...

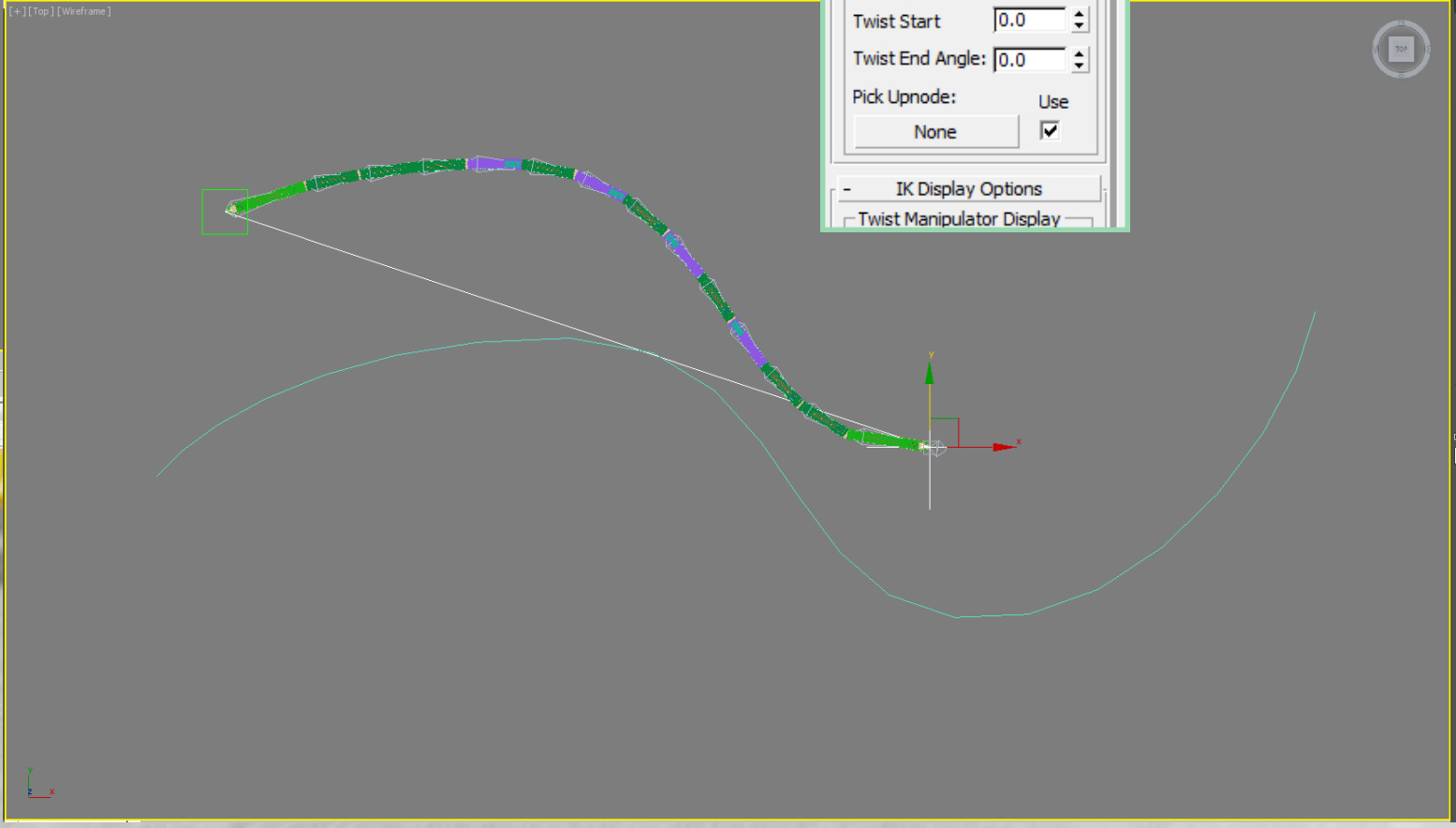
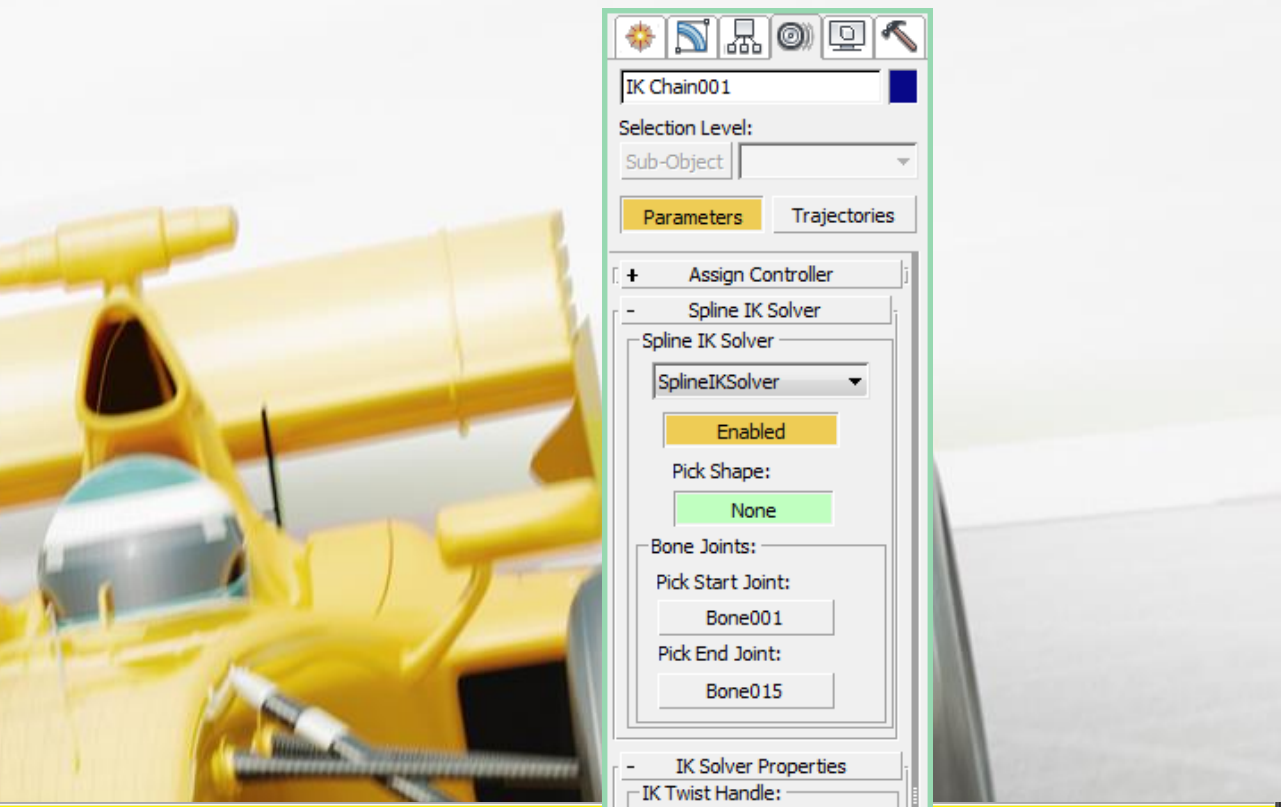
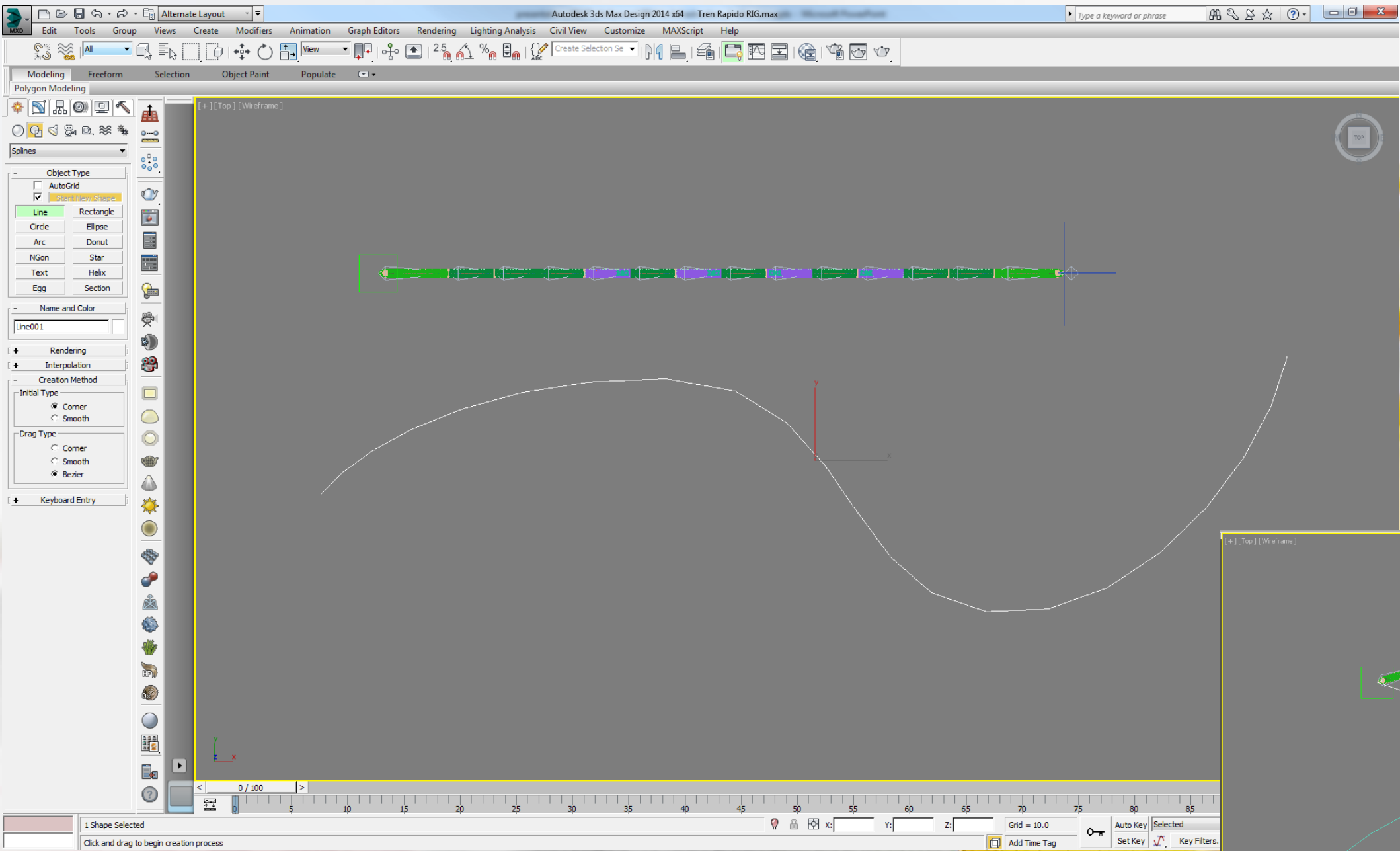













AnimationGraph EditorsRenderingLighting AnalysisCivil ViewCustom


Load Animation...Save Animation...IK SolversConstraintsTransform ControllersPosition ControllersRotation ControllersScale ControllersCATMassFXParameter Editor...Alt+1Parameter Collector...Alt+2Wire ParametersAnimation Layers...Reaction Manager...Bone Tools...Set as Skin PoseAssume Skin PoseSkin Pose ModeToggle LimitsDelete Selected AnimationPopulateWalkthrough Assistant...Autodesk Animation Store...

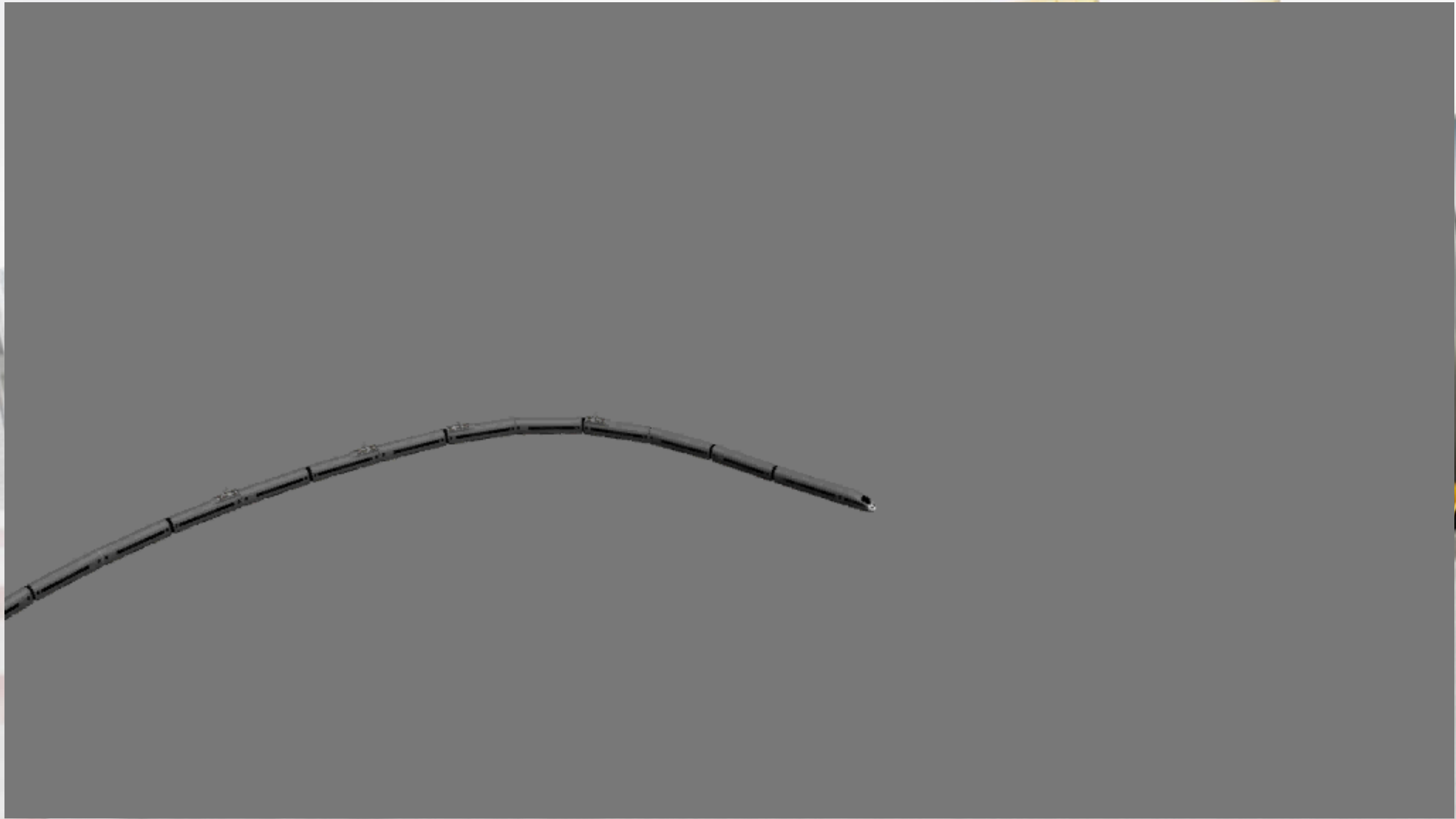
%ABCCreate Selection Se

Attachment ConstraintSurface ConstraintPath ConstraintPosition ConstraintLink ConstraintLookAt ConstraintOrientation Constraint

Autodesk 3ds Max Design 2014

AUTODESK UNIVERSITY 2014

AUTODESK



Autodesk 3ds Max Design 2014 / Capture

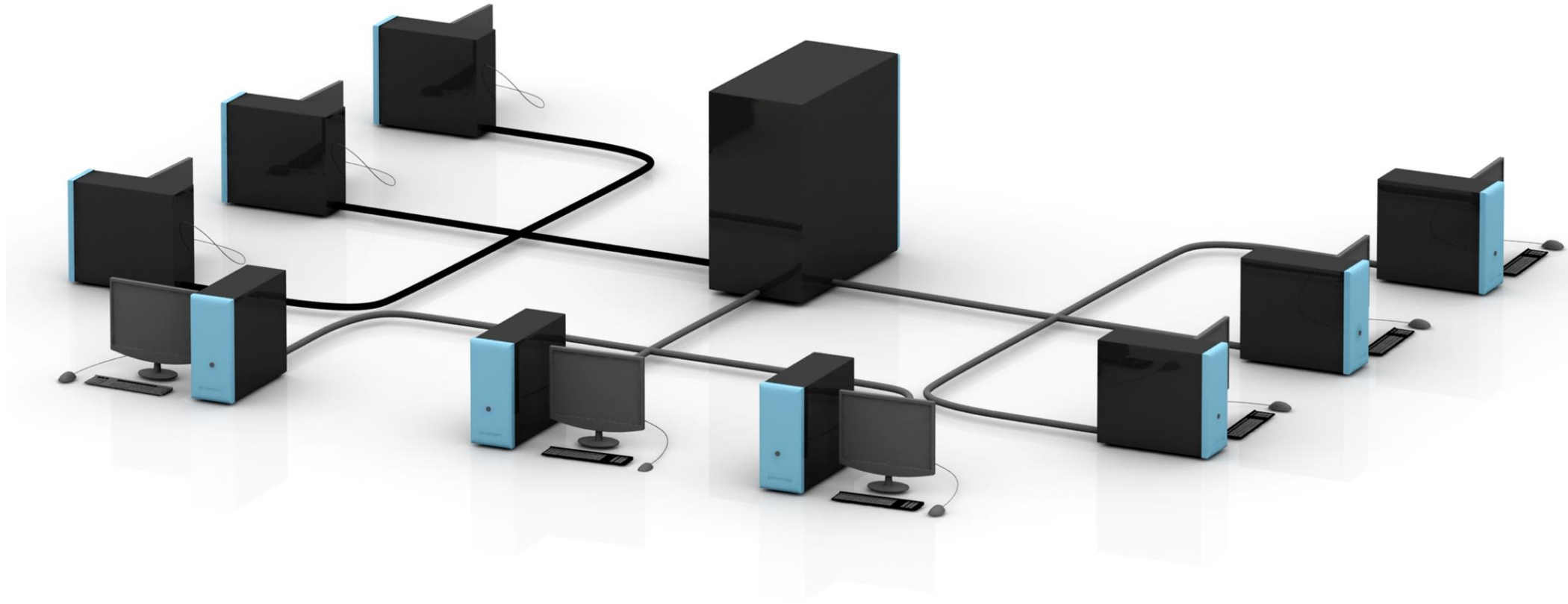
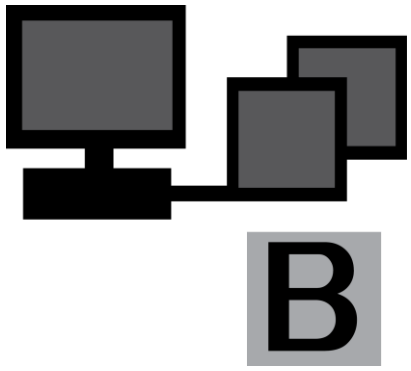


AUTODESK UNIVERSITY 2014



Render





<http://www.clker.com/cliparts/a/6/9/9/13566046731880120818network%20computers2.jpg>

Backburner Manager

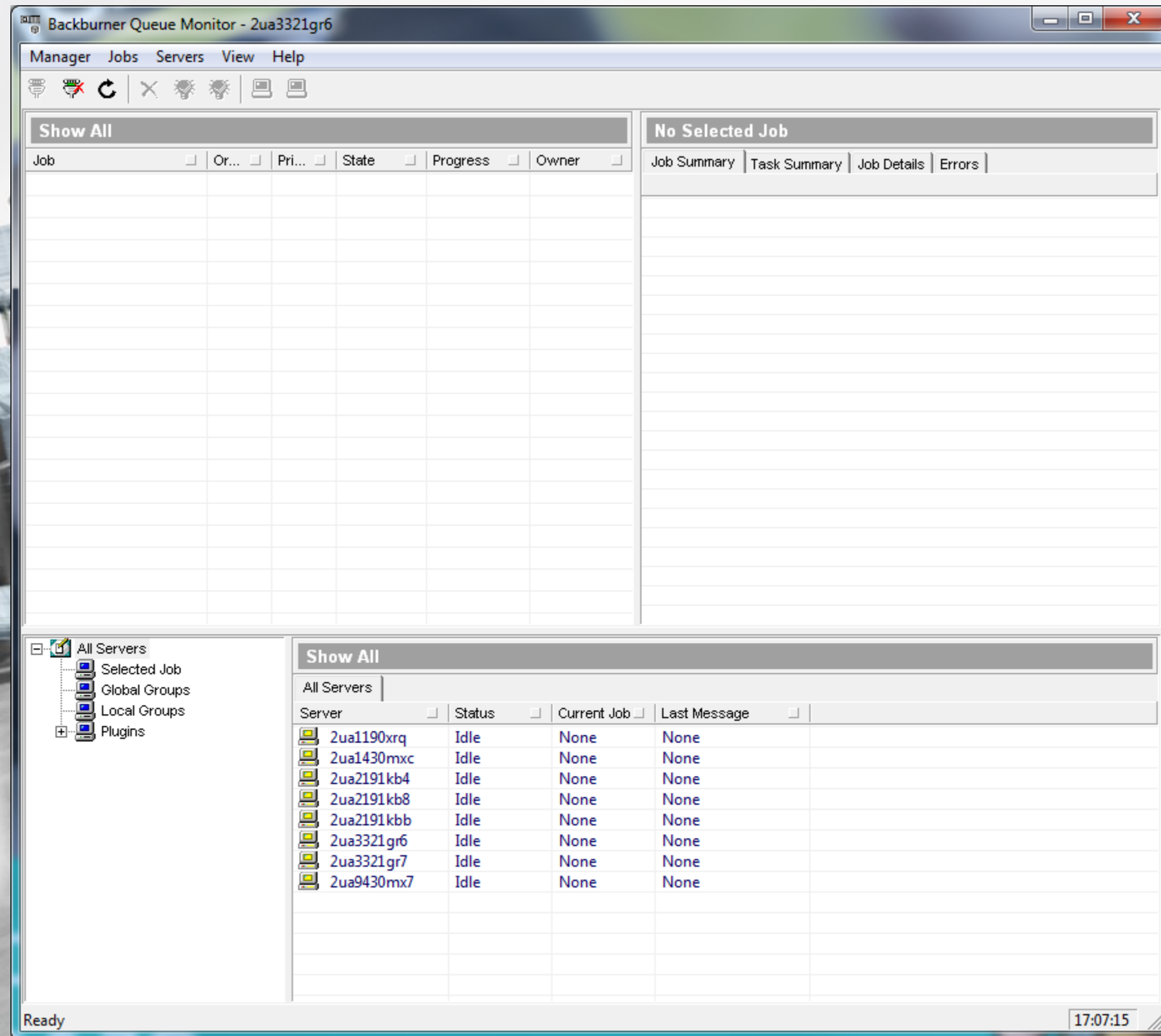
```
File Edit View Help
INF <Name>Autodesk 3ds Max 2014 (64-bit)</Name>
INF <Version>300</Version>
INF <Description>Autodesk 3ds Max Design 2014 (64-bit) Renderer Adapter</Description>
INF </AdapterInfo>
INF <AdapterInfo>
INF <Name>Autodesk 3ds Max 2013 (64-bit)</Name>
INF <Version>300</Version>
INF <Description>Autodesk 3ds Max Design 2013 (64-bit) Renderer Adapter</Description>
INF </AdapterInfo>
INF <AdapterInfo>
INF <Name>Command Line Tool</Name>
INF <Version>300</Version>
INF <Description>Command Job Adapter v2014</Description>
INF </AdapterInfo>
INF Using Job Path 'C:\Users\LARAJ0\AppData\Local\backburner\Jobs\' instead
INF Loading plugin: Autodesk 3ds Max Design 2014 (64-bit) Renderer Adapter from Backburner Ad
INF Loading plugin: Autodesk 3ds Max Design 2013 (64-bit) Renderer Adapter from Backburner Ad
INF Loading plugin: Command Job Adapter v2014 from Backburner Adapter Plugin
INF New client 10.3.56.223 added to client list
INF Wiretap interface connected to the local manager
INF Successful registration from 2ua2191kb8
INF Successful registration from 2ua1190xrq
INF New client 10.3.56.223 added to client list
INF Successful registration from 2ua3321gr6
INF Successful registration from 2ua1430mx7
INF Successful registration from 2ua9430mx7
INF Successful registration from 2ua3321gr7
INF Successful registration from 2ua2191kbb
INF Successful registration from 2ua2191kb4
INF New client 10.3.56.223 added to client list
```

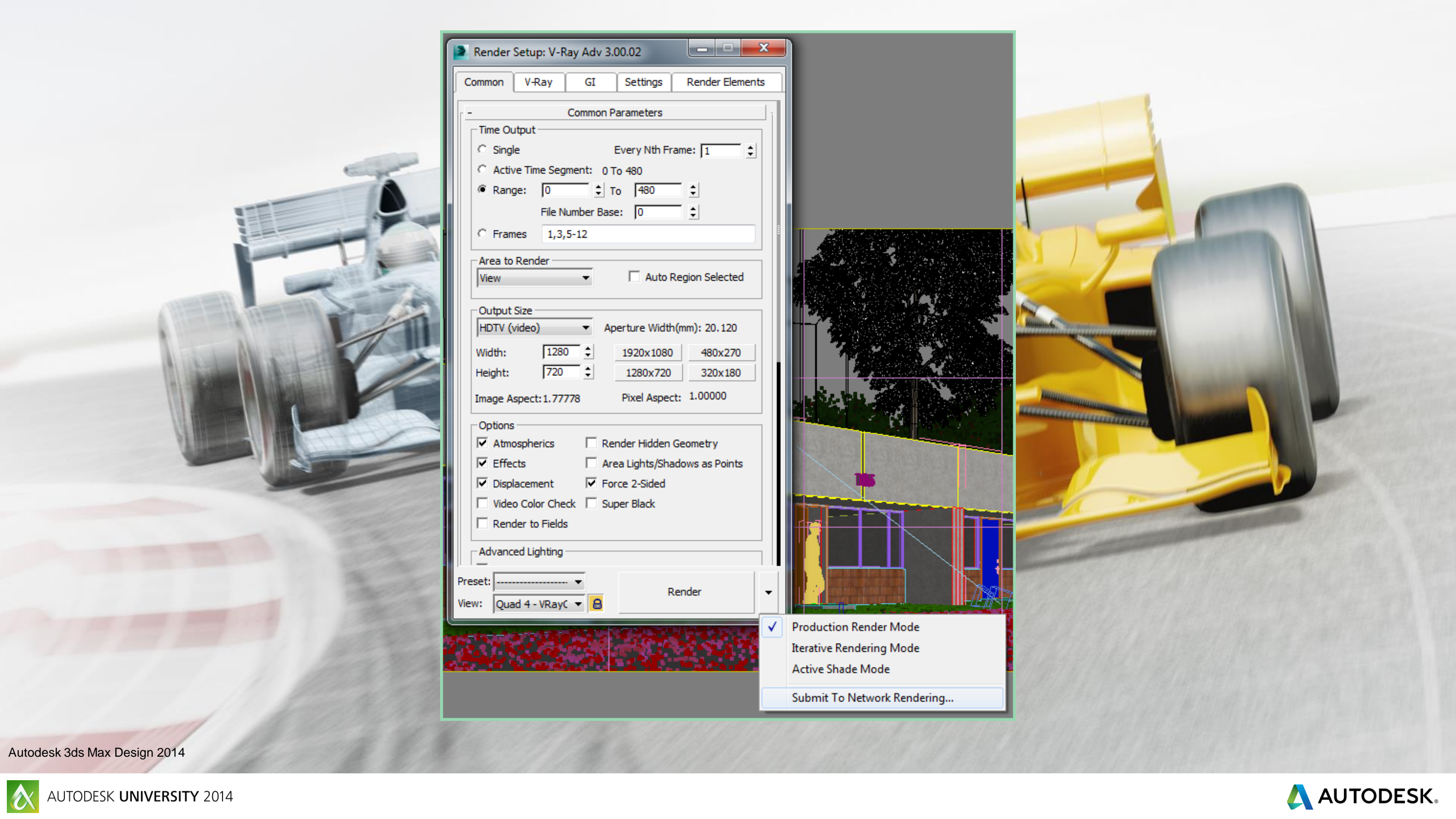
Ready Manager 17:06:30

Backburner Server

```
File Edit View Help
INF <AdapterInfo>
INF <Name>Autodesk 3ds Max 2014 (64-bit)</Name>
INF <Version>300</Version>
INF <Description>Autodesk 3ds Max Design 2014 (64-bit) Renderer Adapter</Description>
INF </AdapterInfo>
INF <AdapterInfo>
INF <Name>Autodesk 3ds Max 2013 (64-bit)</Name>
INF <Version>300</Version>
INF <Description>Autodesk 3ds Max Design 2013 (64-bit) Renderer Adapter</Description>
INF </AdapterInfo>
INF <AdapterInfo>
INF <Name>Command Line Tool</Name>
INF <Version>300</Version>
INF <Description>Command Job Adapter v2014</Description>
INF </AdapterInfo>
INF Starting backburner Server
INF Loading plugin: Autodesk 3ds Max Design 2014 (64-bit) Renderer Adapter from Backburner Adap
INF Loading plugin: Autodesk 3ds Max Design 2013 (64-bit) Renderer Adapter from Backburner Adap
INF Loading plugin: Command Job Adapter v2014 from Backburner Adapter Plugin
INF Registration to 10.3.56.223 accepted
```

Ready Server 17:06:56





Render Setup: V-Ray Adv 3.00.02

Common V-Ray GI Settings Render Elements

Common Parameters

Time Output

- ☐ Single Every Nth Frame: 1
- ☐ Active Time Segment: 0 To 480
- ☒ Range: 0 To 480
File Number Base: 0
- ☐ Frames 1,3,5-12

Area to Render

View ☐ Auto Region Selected

Output Size

HDTV (video) Aperture Width(mm): 20.120

Width:	1280	1920x1080	480x270
Height:	720	1280x720	320x180

Image Aspect: 1.77778 Pixel Aspect: 1.00000

Options

- | | |
|--|--|
| <input checked="" type="checkbox"/> Atmospherics | <input type="checkbox"/> Render Hidden Geometry |
| <input checked="" type="checkbox"/> Effects | <input type="checkbox"/> Area Lights/Shadows as Points |
| <input checked="" type="checkbox"/> Displacement | <input checked="" type="checkbox"/> Force 2-Sided |
| <input type="checkbox"/> Video Color Check | <input type="checkbox"/> Super Black |
| <input type="checkbox"/> Render to Fields | |

Advanced Lighting

Preset: -----

View: Quad 4 - VRayC

Render

- ☒ Production Render Mode
- ☐ Iterative Rendering Mode
- ☐ Active Shade Mode
- Submit To Network Rendering...

Network Job Assignment - Submitting to 64-Bit Servers

Job Name: Backburner

Description:

Enter Manager Name or IP Address: 2UA3321GR6.ica.com.mx

Disconnect

Automatic Search

Refresh

Priority: 50

Critical

Dependencies

Options:

Enabled Notifications

Split Scan Lines

Ignore Scene Path

Include Maps

Rendered Frame Window

Initially Suspended

Server Usage:

Use Selected

Use Group

Use All Servers

Path File:

Use Alternate Path File

Status: Saving scene...

Advanced

Submit

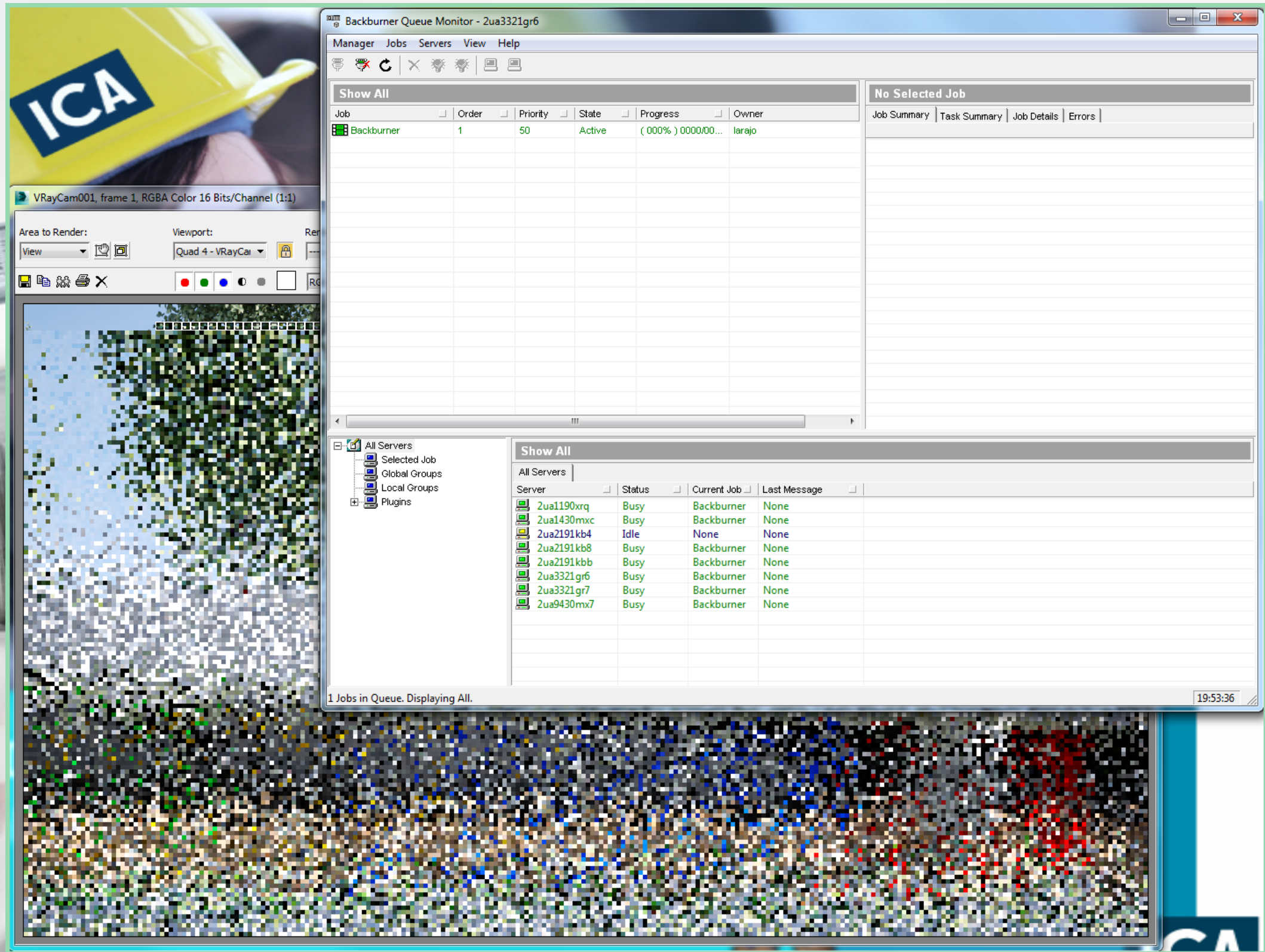
Cancel

All Servers

Server

- 2ua9430mx7
- 2ua3321gr7
- 2ua3321gr6
- 2ua2191kbb
- 2ua2191kb8
- 2ua1430mxc
- 2ua1190xrq

Job	Priority	Status	Output
Backburner_Job	50	Complete	



Autodesk Backburner / Monitor

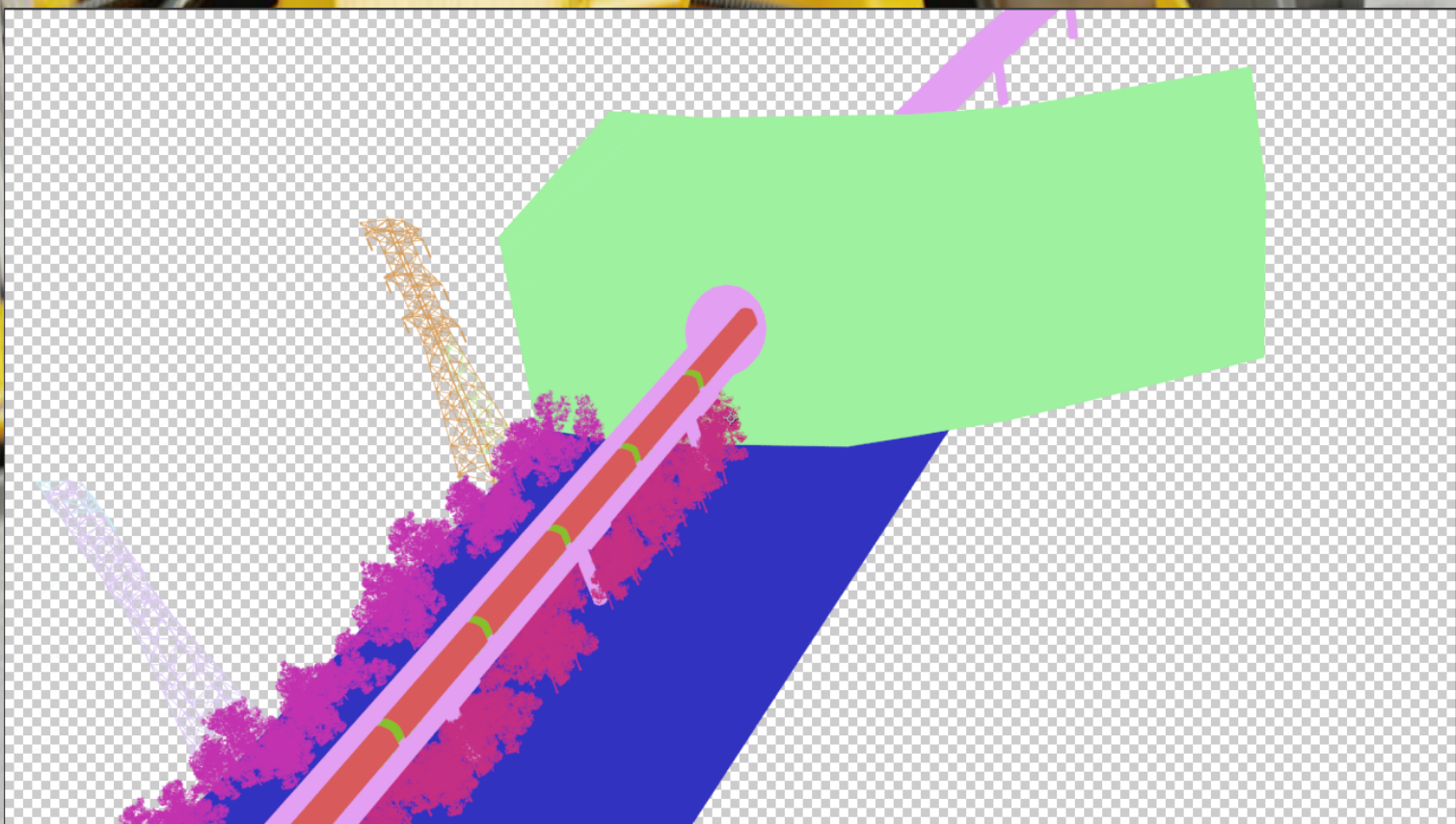
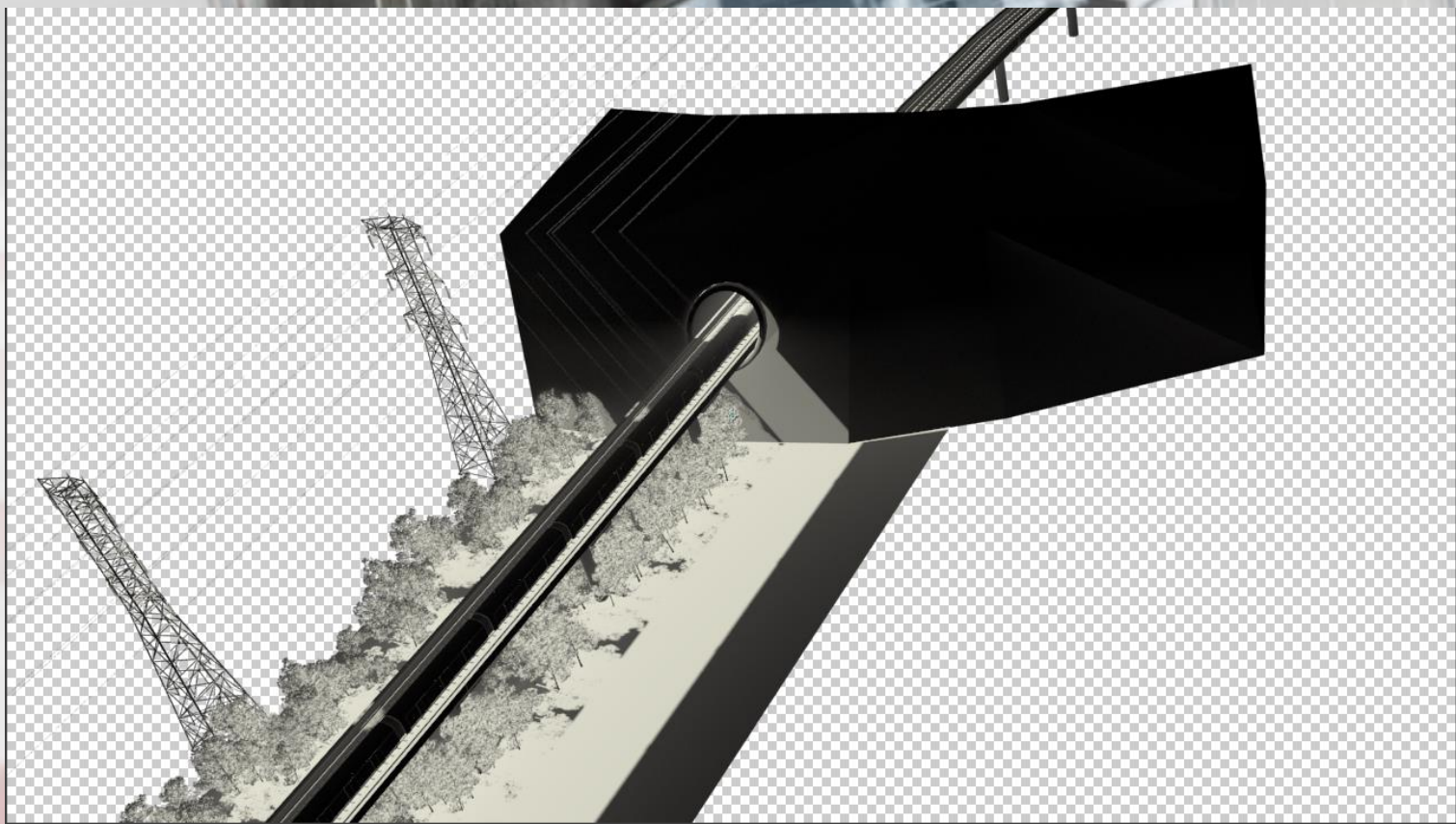
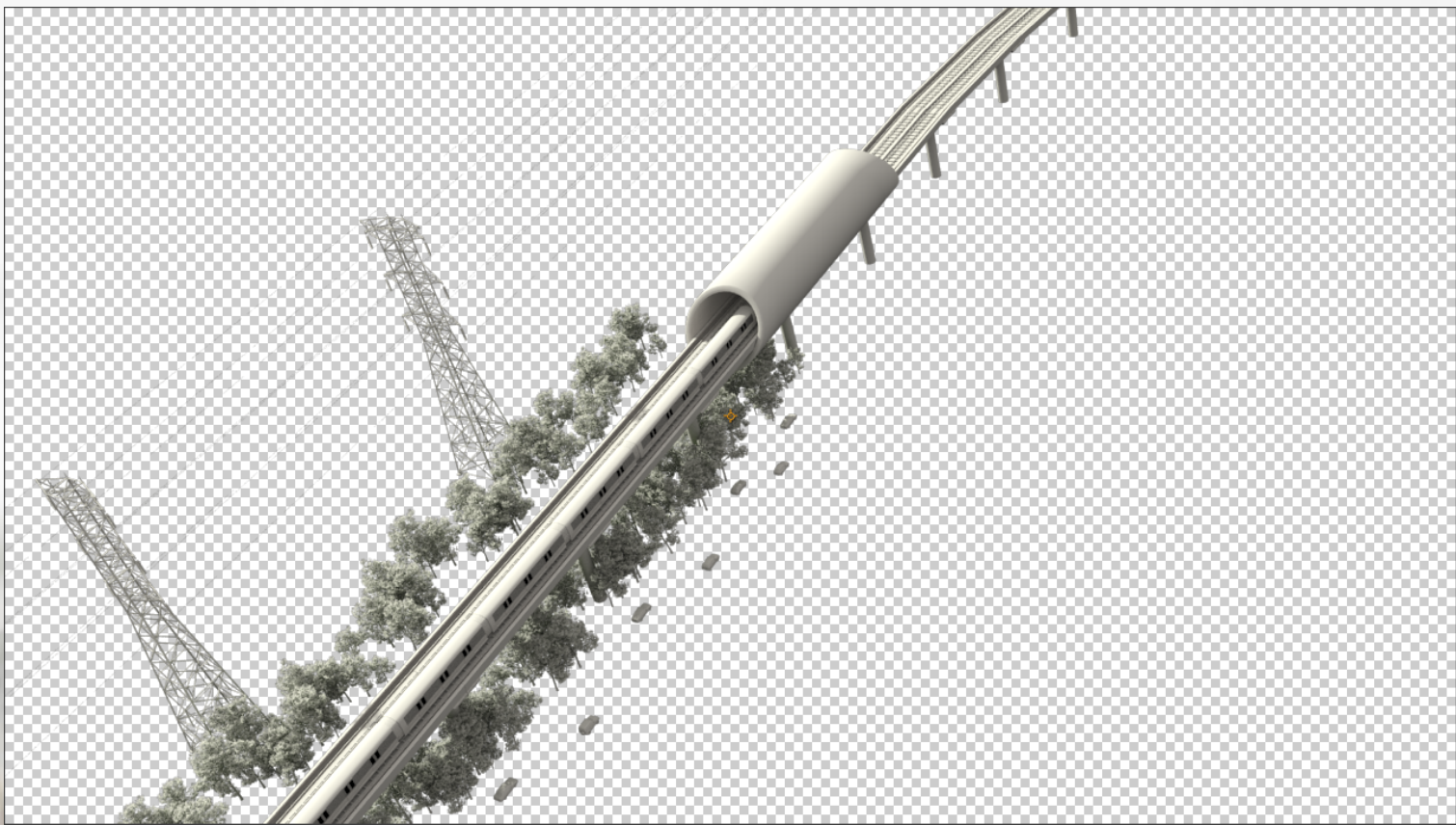
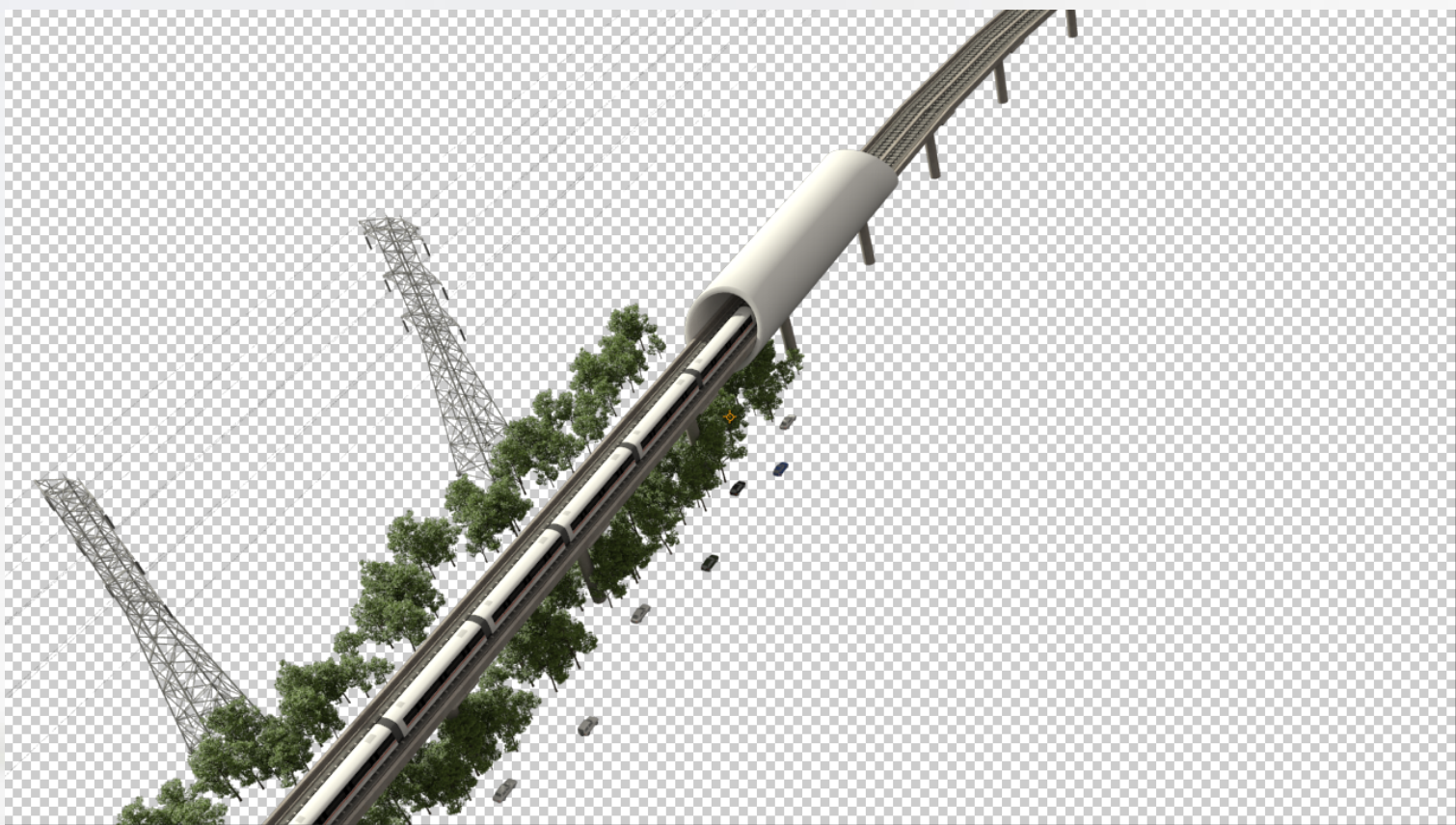
Compositing

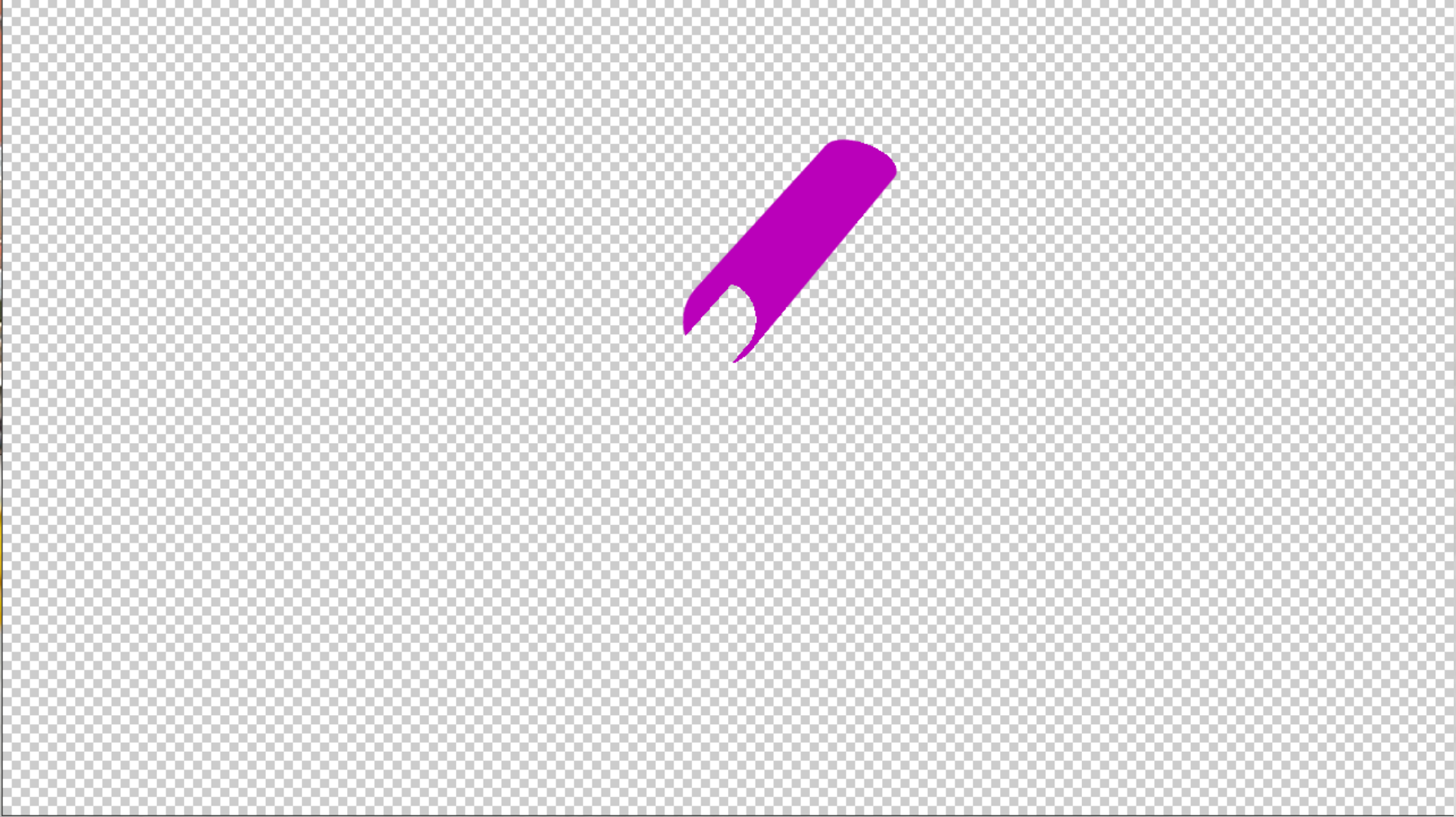


- **compositing:** The manipulated combination of at least two source images to produce an integrated result.¹

¹ Okun, Jeffrey A., & Zwerman, Susan (2010). The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures, Appendix C (p. 848). Burlington, MA: Focal Press.









Session Feedback

- Via the Survey Stations, email or mobile device
- AU 2014 passes given out each day!
- Best to do it right after the session
- Instructors see results in real-time





A group of four diverse young adults (three men and one woman) are jumping joyfully in a modern, industrial-style office space. They are all smiling and have their arms raised in celebration. The background shows a brick wall, string lights, and office furniture. A large blue banner on the left side of the image has the text 'DESIGN' and 'ERING' visible. A white banner with a blue 'B' logo is also visible in the background.

***Students, educators, and schools* now have**

FREE access to Autodesk design software & apps.

Download at www.autodesk.com/education



Earn your professional Autodesk Certification at AU

Visit the [AU Certification Lab](#)