



RR SERIES

FINAL MAJOR PROJECT PRESENTATION

KURT PRITCHARD

PROJECT DEFINITION

“THE PINNACLE OF DRIVER SAFETY WITHIN RACING SERIES, THIS NEW CONCEPT WILL CHANGE THE WAY RACING IS NOT ONLY OPERATED BUT HOW IT IS VIEWED BY SPECTATORS AROUND THE GLOBE.”

WHY?

AS F1 BECOMES MORE AND MORE POPULAR, THE LEVEL OF SKILL AND COMPETITION WILL KEEP RISING. WITH THIS RISE DRIVERS ARE FORCED TO BECOME MORE RECKLESS TO GET THOSE BEST TIMES AND WIN THE TITLES, THE RATE OF CRASHES AND POTENTIAL DEATHS WILL RISE. WITH THIS IN MIND, I WILL BE CREATING A NEW RACING VEHICLE WHICH WILL BE THE ABSOLUTE PINNACLE OF DRIVER SAFETY

WHEN?

2040 TO ALLOW TECHNOLOGIES WITHIN THE REMOTE RACER TO IMPROVE AND BECOME MORE ADVANCED

OBJECTIVE: REMOTE RACER BASED ON AERO AND DRIVER SAFETY

SUSTAINABILITY



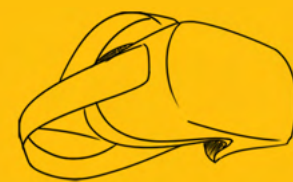
- ZERO EMISSION
- SUSTAINABLE MATERIALS
- RENEWABLE ENERGY
- BATTERY POWERED
- NO CARBON FOOTPRINT

REMOTE DRIVING



- REMOVE DRIVER FROM VEHICLE
- NO DANGER
- PINNACLE OF SAFETY
- DRIVER IN IMMERSION POD

IMMERSION



- VR HEADSET FOR SPECTATORS
- AR GLASSES FOR DRIVER
- 360 CAMERAS
- HELMET CAM

AERODYNAMICS



- BETTER CORNERING
- OPTIMAL AERO
- FASTER LAP TIMES
- MORE CONTROL



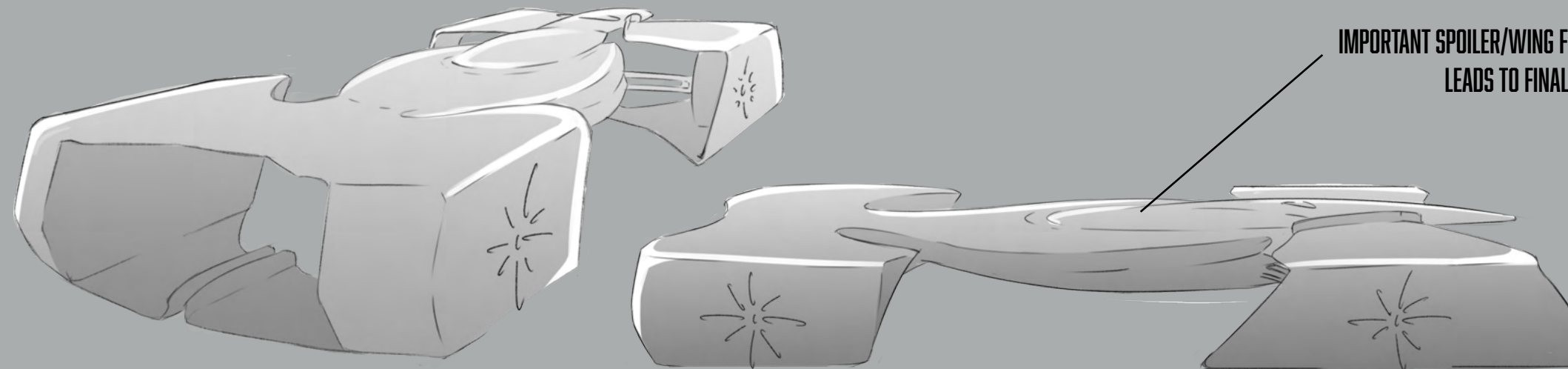
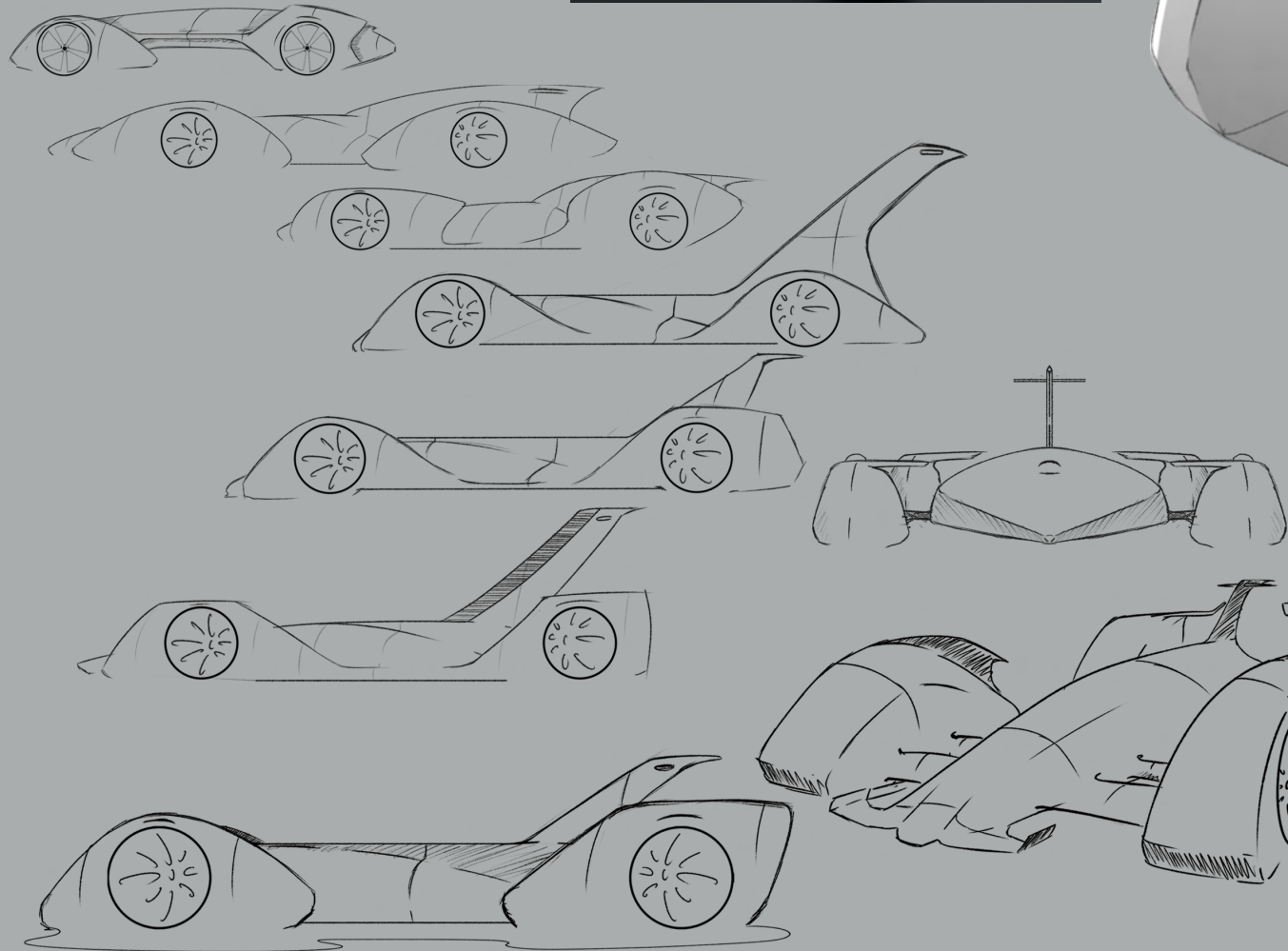
DRIVER

ALL DRIVERS WILL HAVE TO HAVE A HUGE PASSION FOR RACING AND WILL NEED TO BE EXPERIENCED. DUE TO THE DRIVER NOT BEING IN THE VEHICLE, IT ALLOWS ANYONE REGARDLESS OF AGE/ GENDER/ HEIGHT OR WEIGHT TO DRIVE OUR VEHICLE. HOWEVER THE IDEAL AGE RANGE WOULD BE FROM 20-25. THE AVERAGE INCOME OF THE DRIVERS WILL VARY DEPENDING ON THERE PERFORMANCE THROUGHT THE RACES BUT CAN VARY FROM £600,000-£1,000,000.

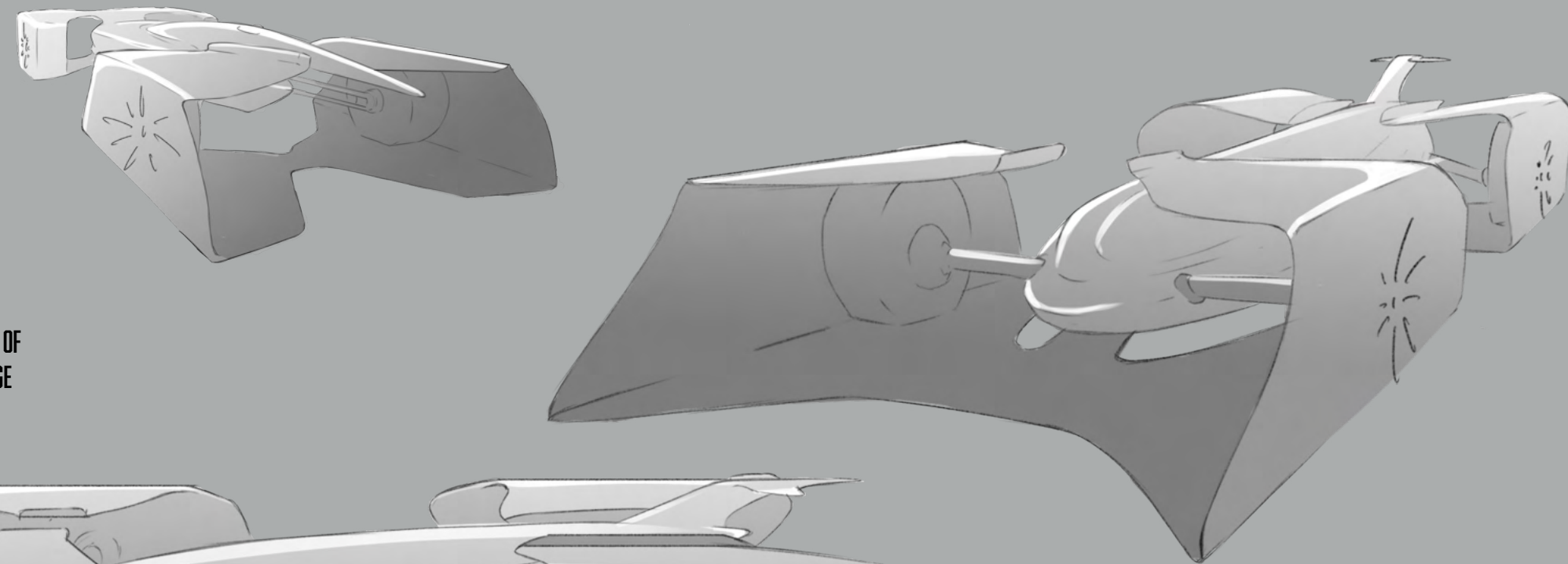
SPECTATOR

ANY SPECTATOR OF THIS RACE SERIES WILL MOST LIKELY BE A BIG FAN OF OTHER RACING SERIES SUCH AS F1. THEY WILL HAVE A LOT OF PASSION FOR THE SPORT OF RACING AND WILL HAVE A FAVOURITE DRIVER WITHIN THE SERIES. SIMILAR TO THE DRIVER, THERE NO AGE LIMIT FOR THE SPECTATOR. THEY COULD BE A FAMILY WHERE THE PARENTS AND KIDS BOTH ENJOY RACING AND HAVE BROUGHT EVERYONE ALONG TO WATCH. THERE IS ALSO NO SPECIFIC GENDER OR ETHNICITY.

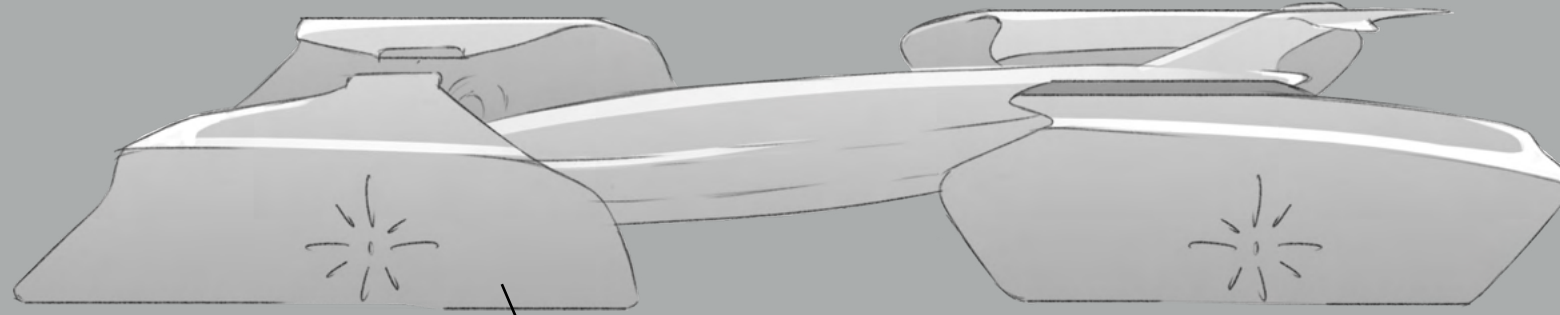
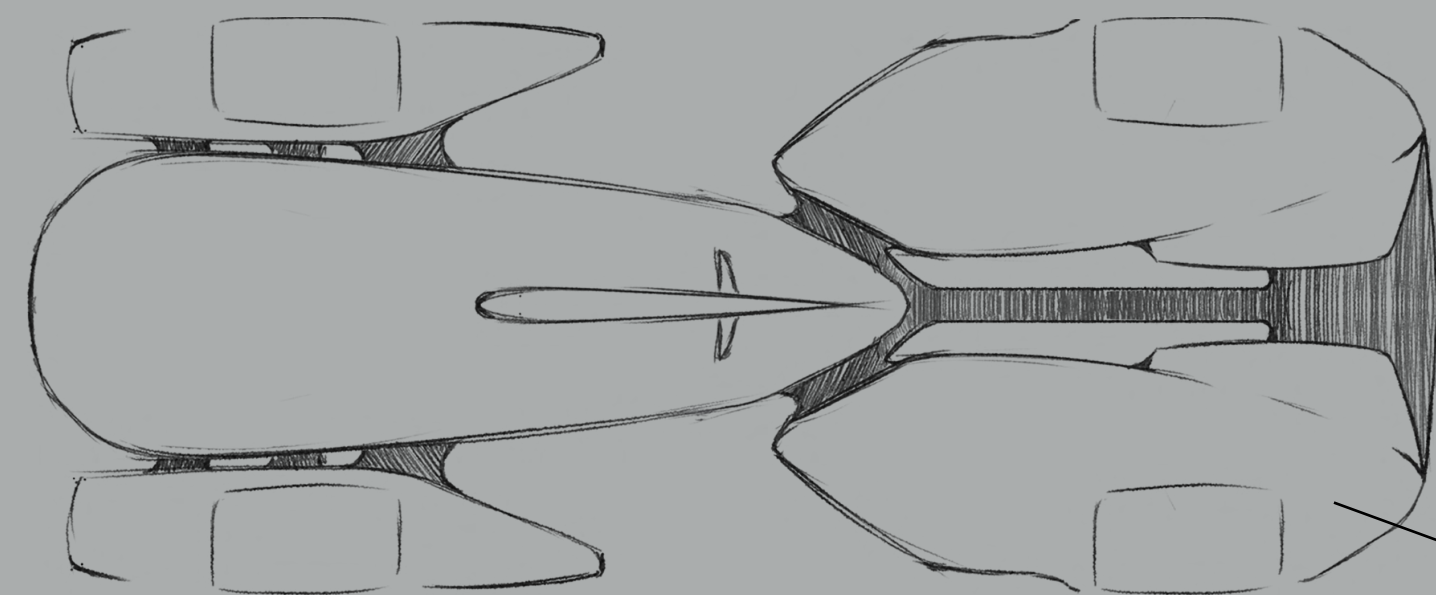
INITIAL SKETCHES



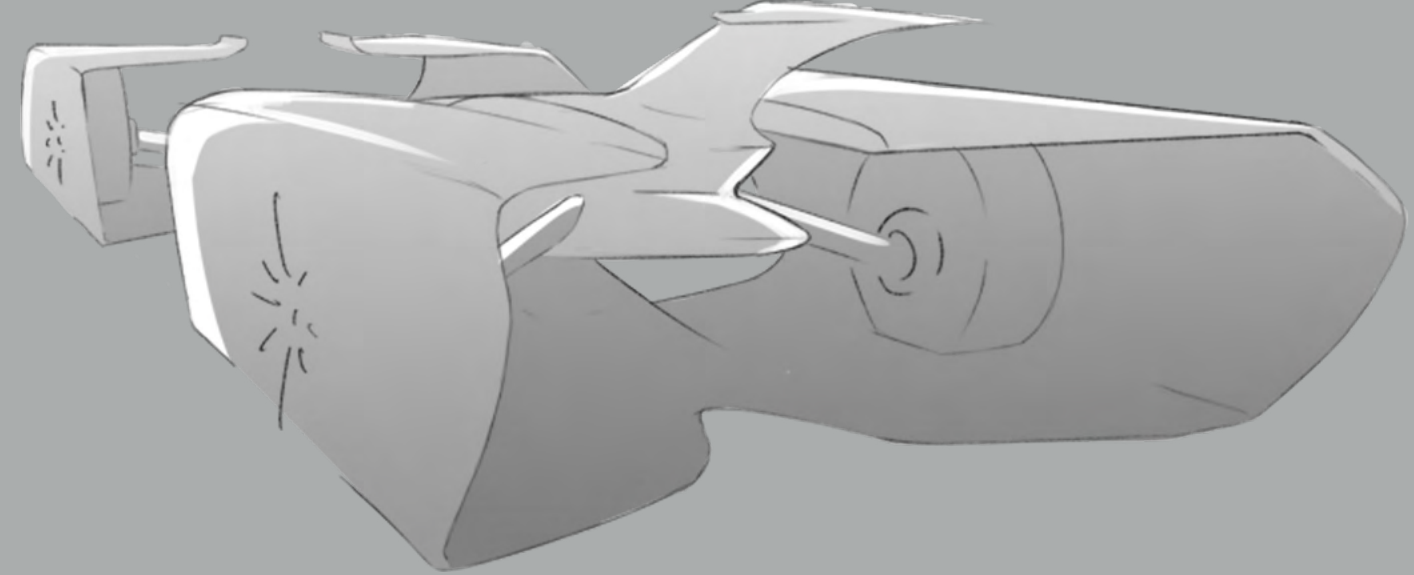
IMPORTANT SPOILER/WING FORM SKETCH THAT LEADS TO FINAL IDEA



TRYING DIFFERENT FORMS OF SPOILERS AND FUELSELAGE



BUILDING UPON THE INITIAL KEY SKETCH TRYING DIFFERENT WAYS TO CONNECT WHEEL ARCH TO FUELSELAGE



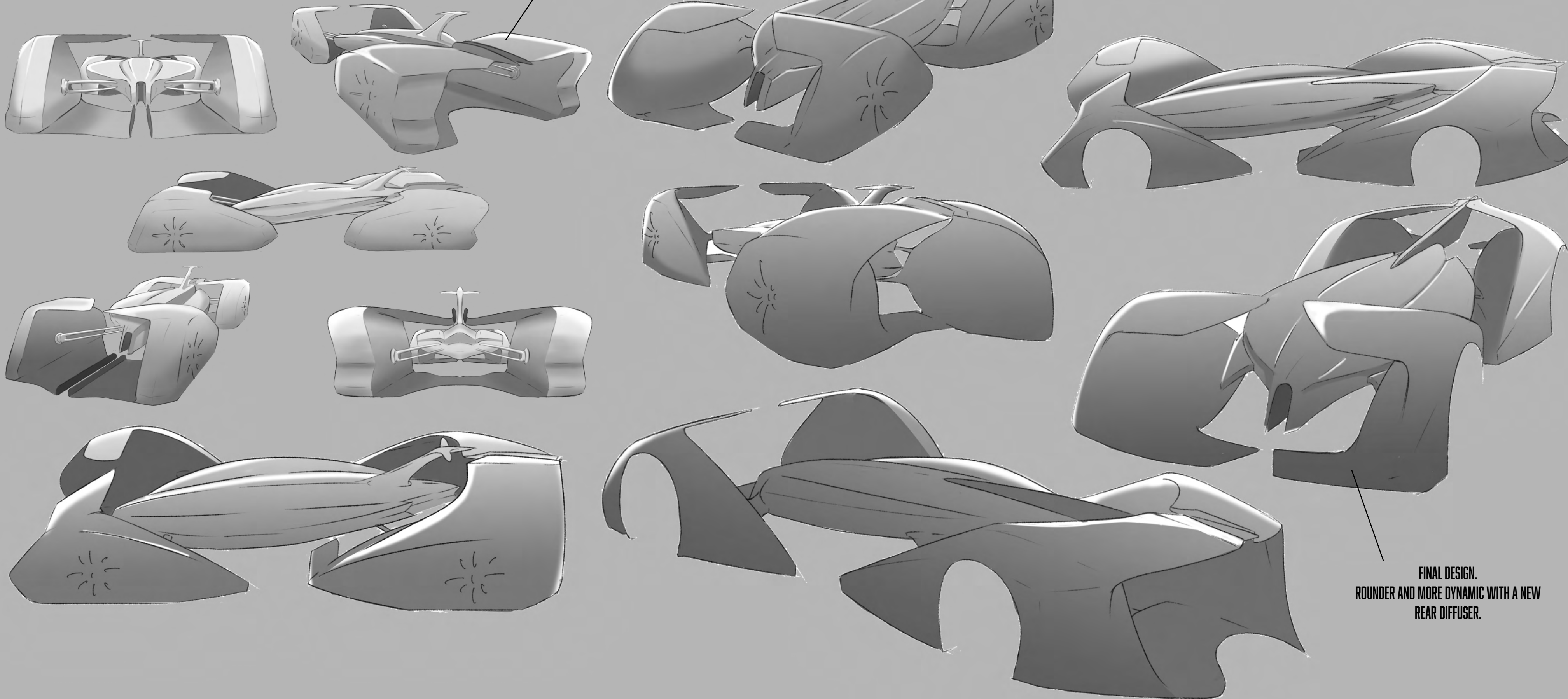
FIRST INITIAL KEY SKETCH WITH THE MAIN FUELSELAGE WITH THE CONNECTING WHEEL ARCHS

FURTHER SKETCHES



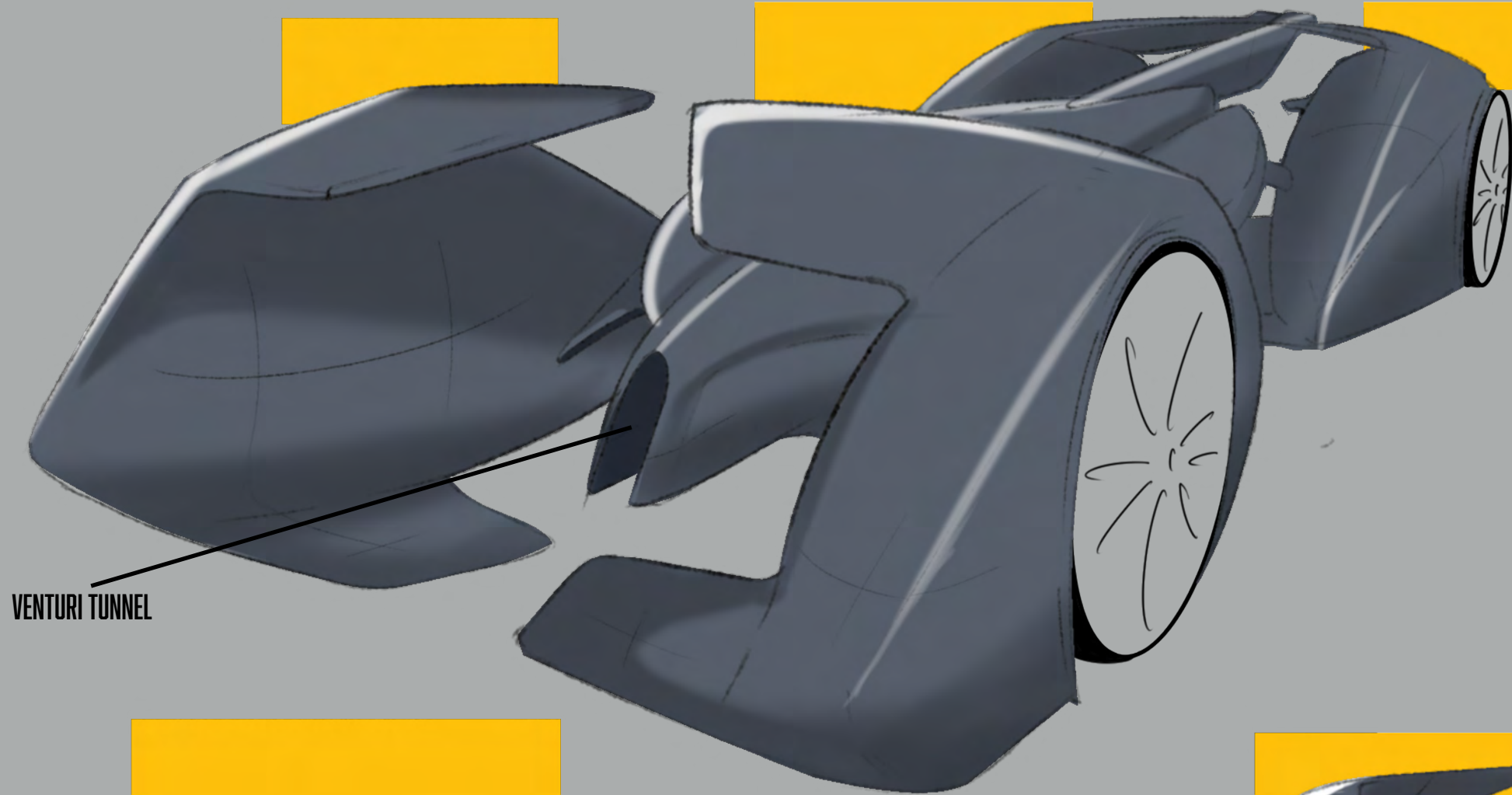
VERY IMPORTANT KEY SKETCH THAT I ADAPTED LATER TO MAKE FINAL DESIGN. WHEELARCHES TO SQUARE AND AGGRESSIVE

KEPT SAME FUELSLAPGE FORM HOWEVER MADE THE WHEEL ARCHES ROUNDER AND MORE DYNAMIC. ALSO TRYING NEW AERO FEATURES

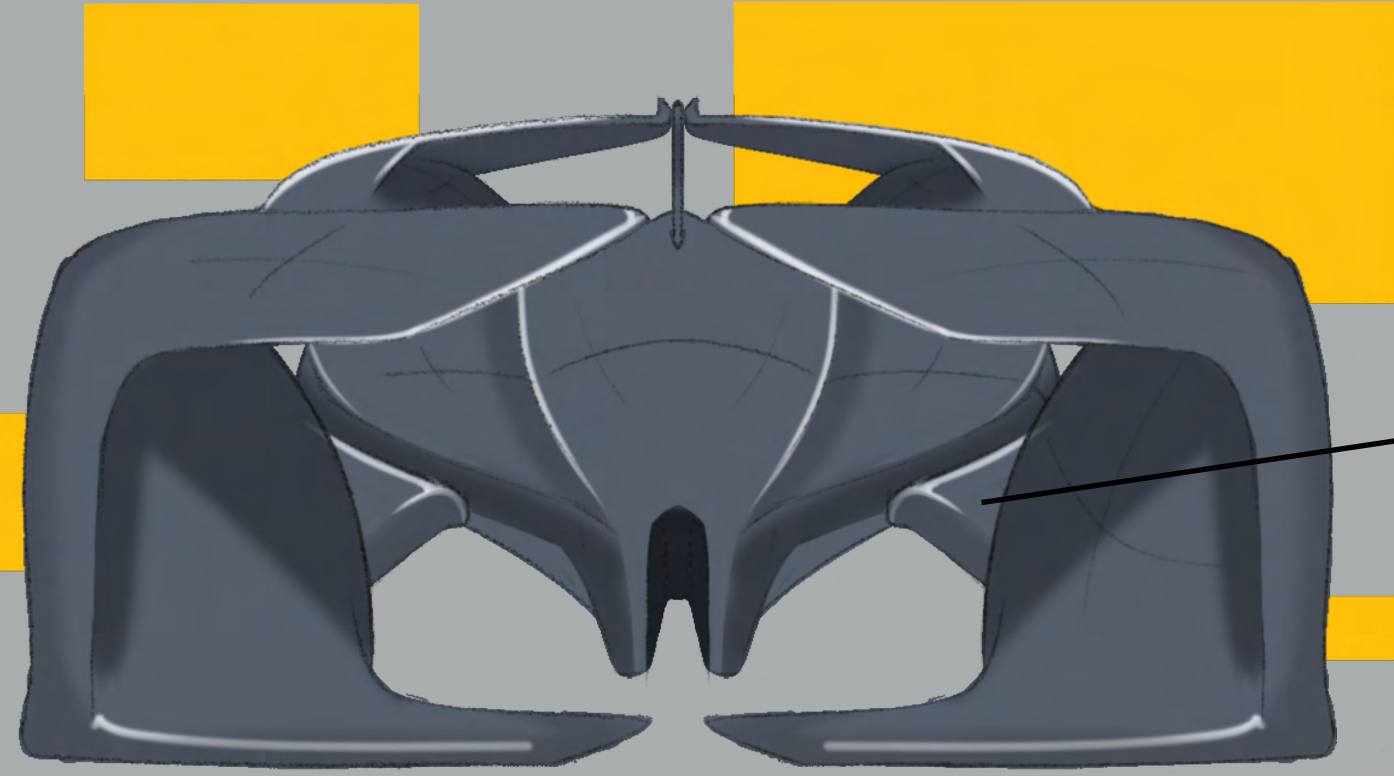


FINAL DESIGN. ROUNDER AND MORE DYNAMIC WITH A NEW REAR DIFFUSER.

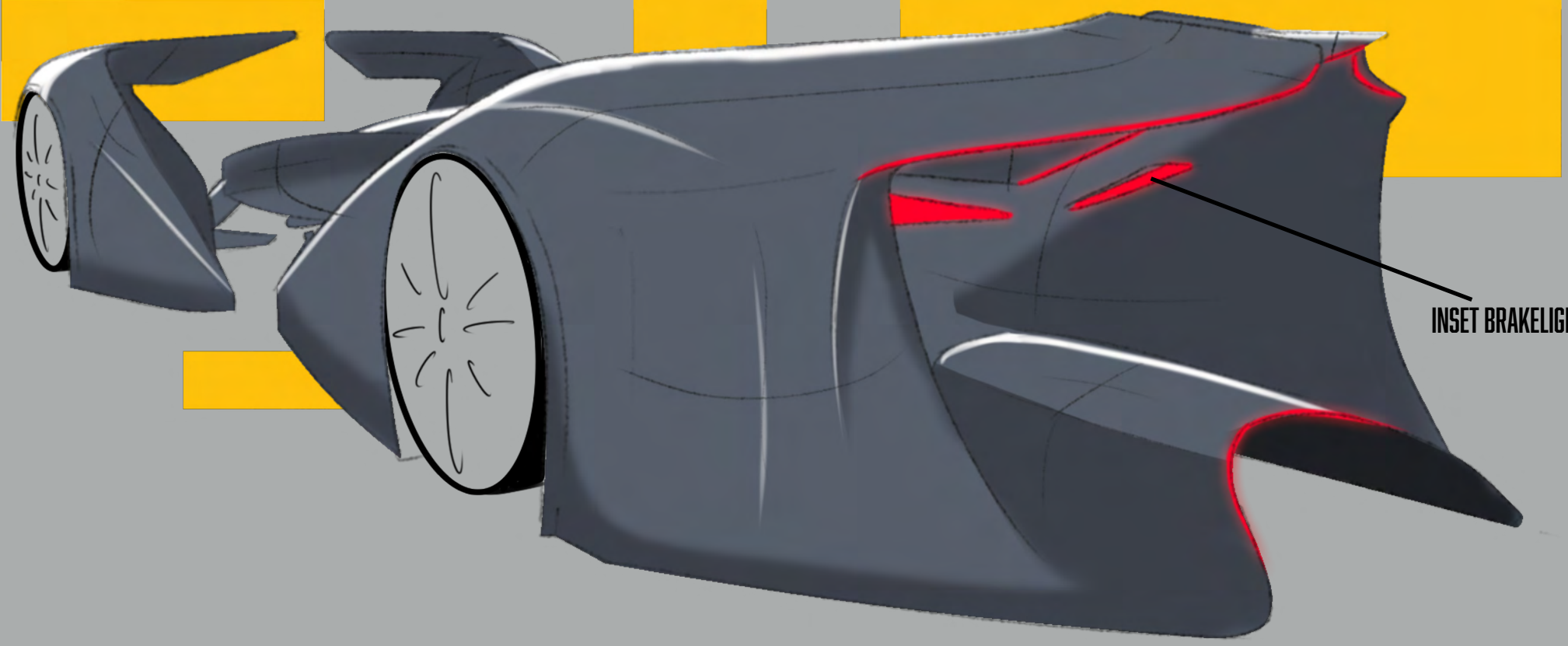
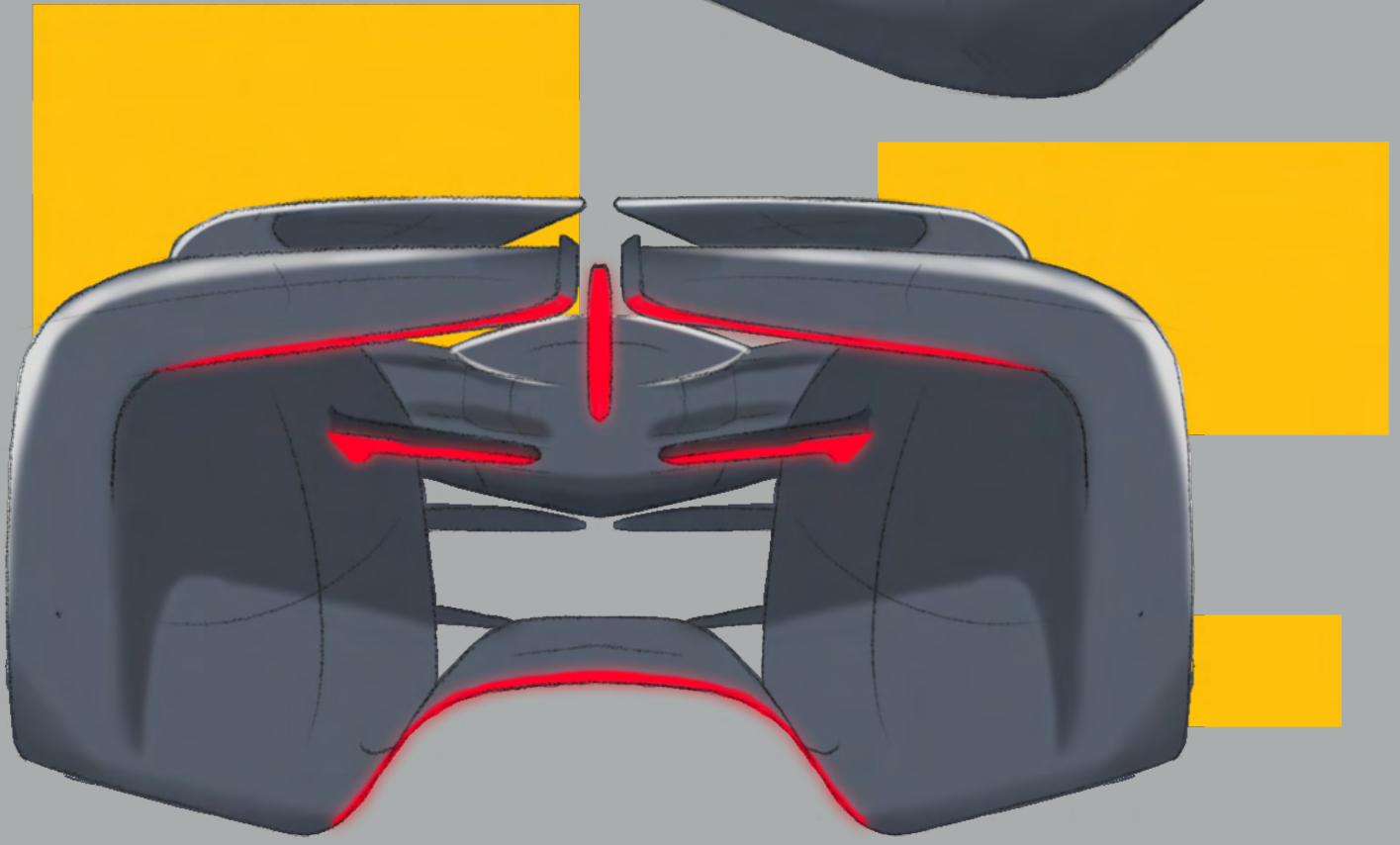
CHOSEN DIRECTION



VENTURI TUNNEL



SUSPENSION ARMS

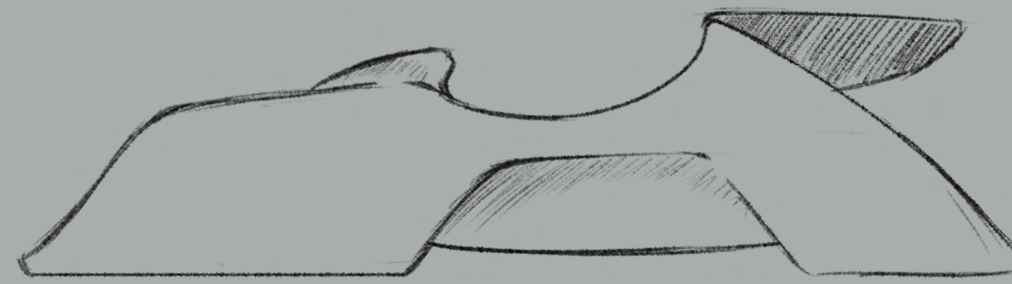
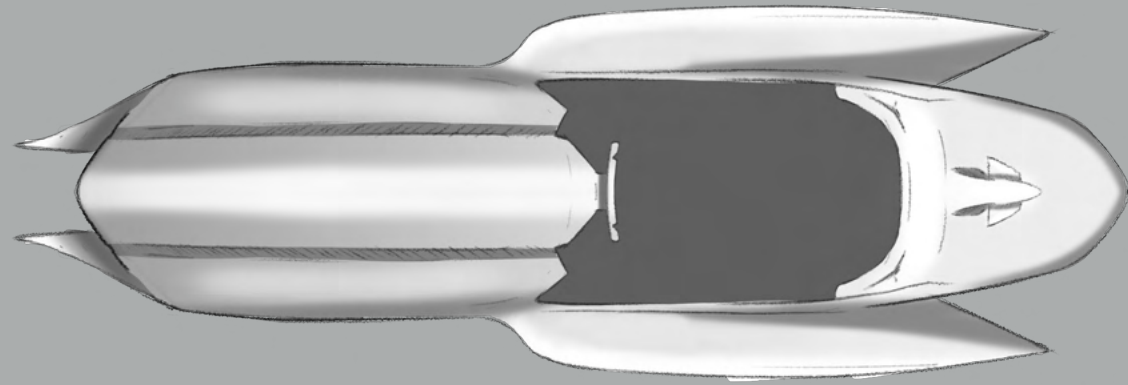


INSET BRAKELIGHTS

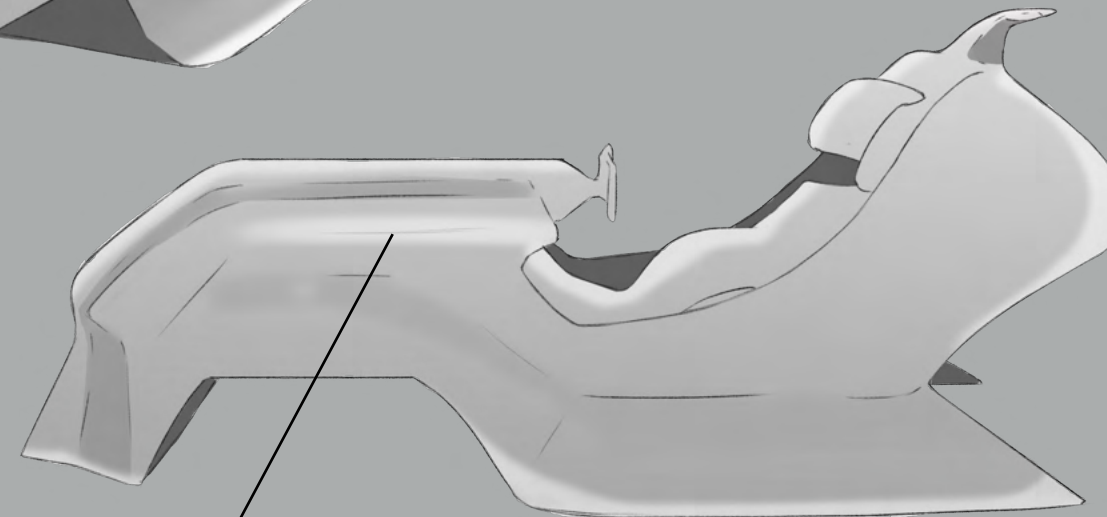
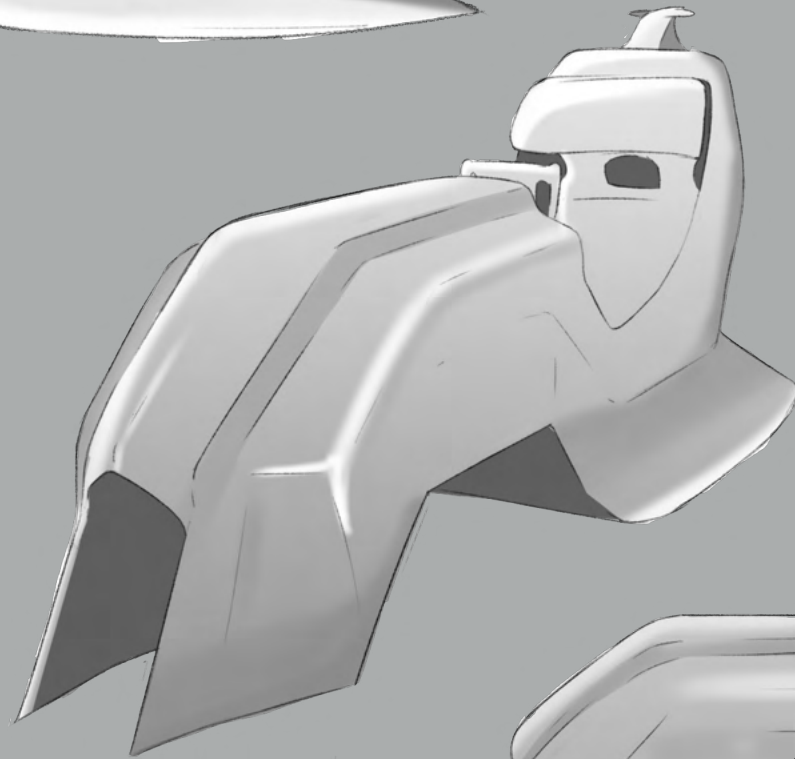
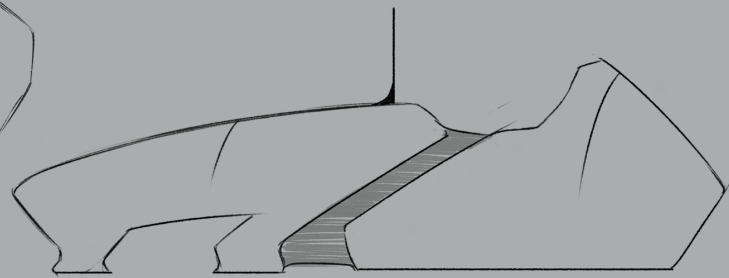
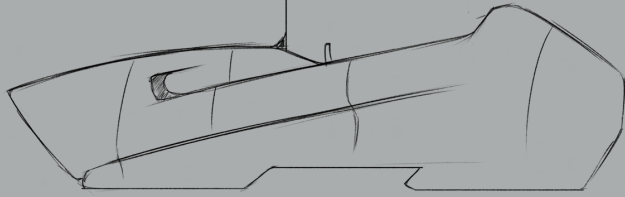
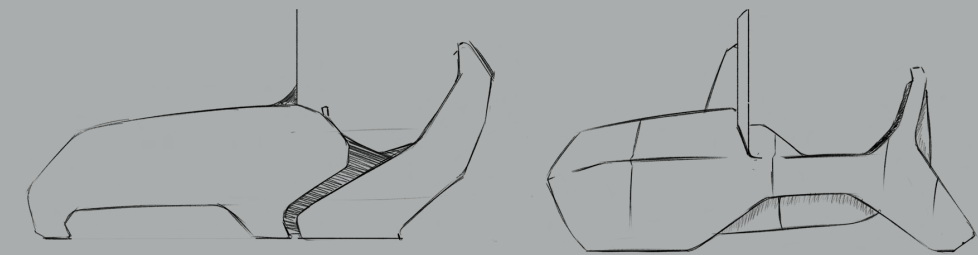
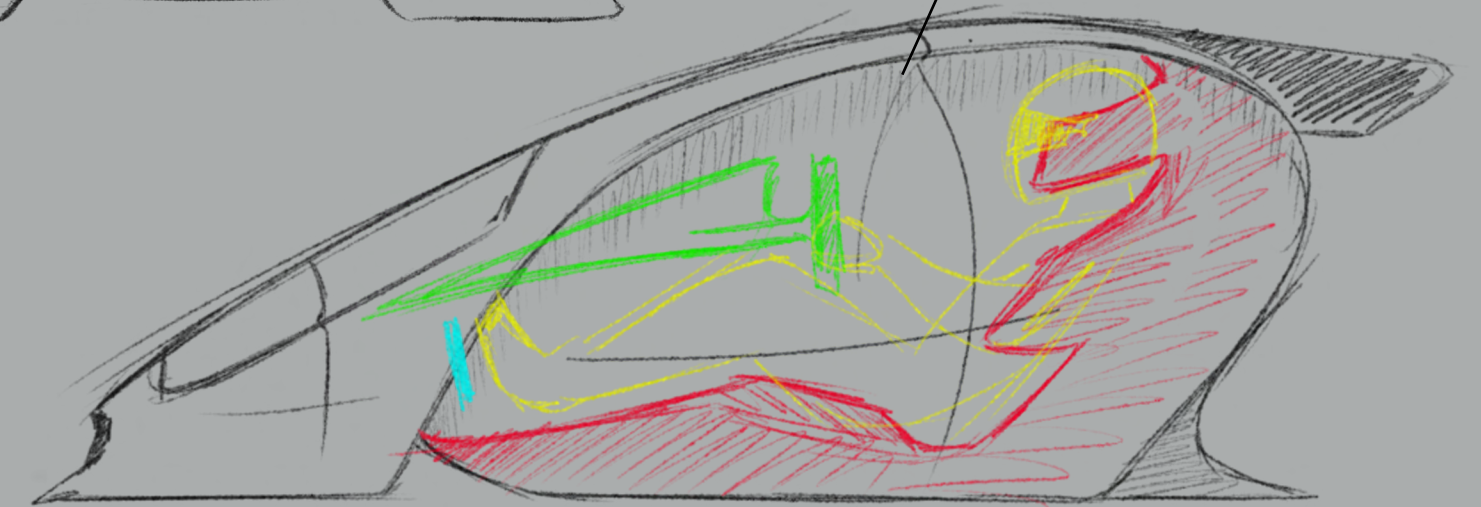
POD INITIAL SKETCHES



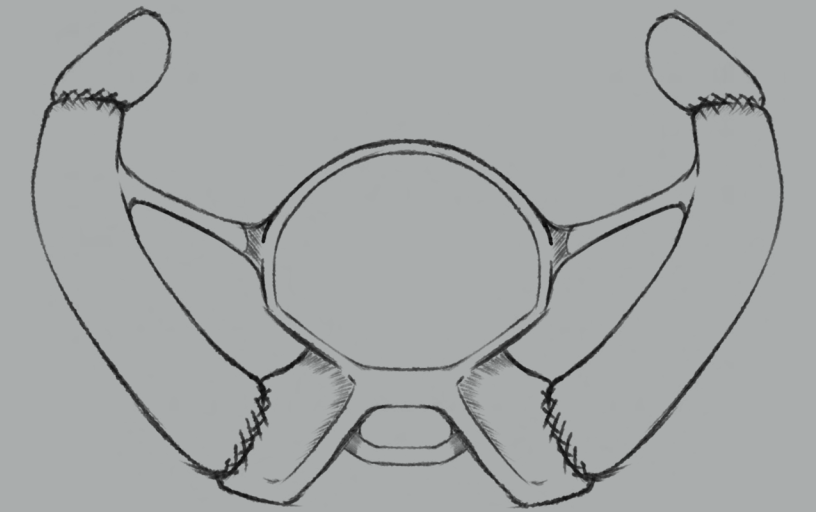
SEATING POSITION



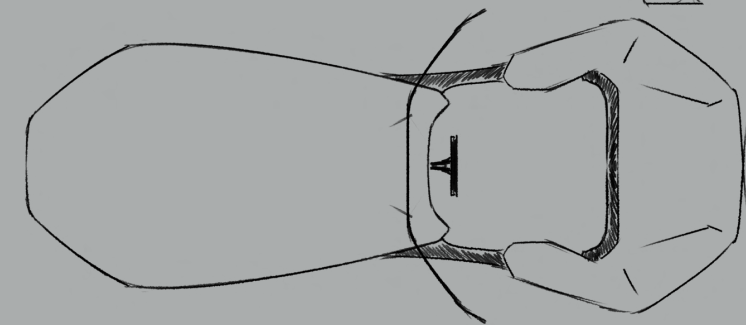
MAJOR KEY SKETCH FOR FINAL DESIGN



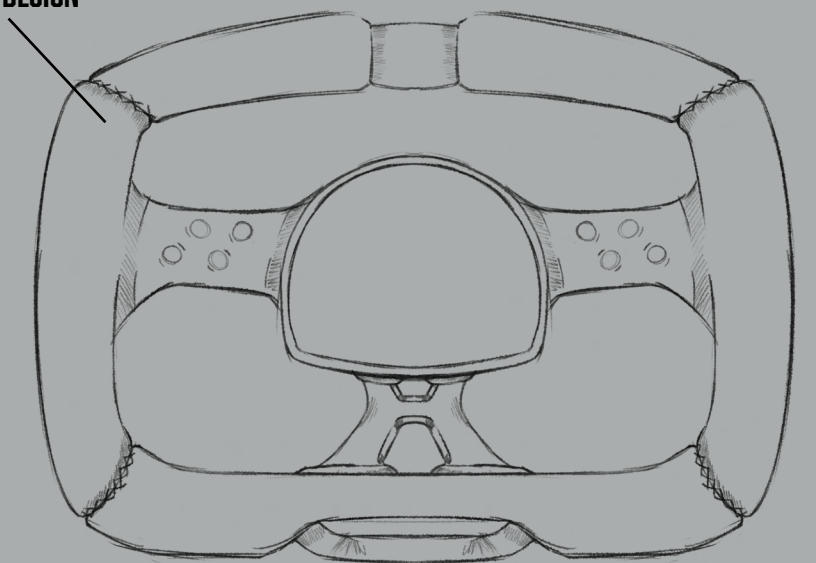
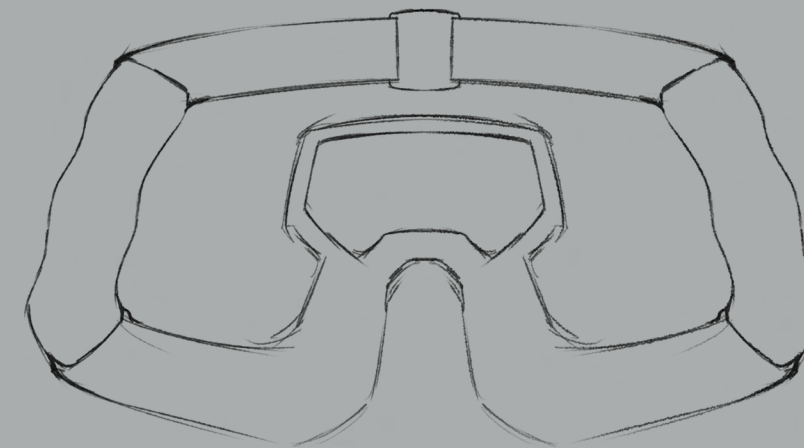
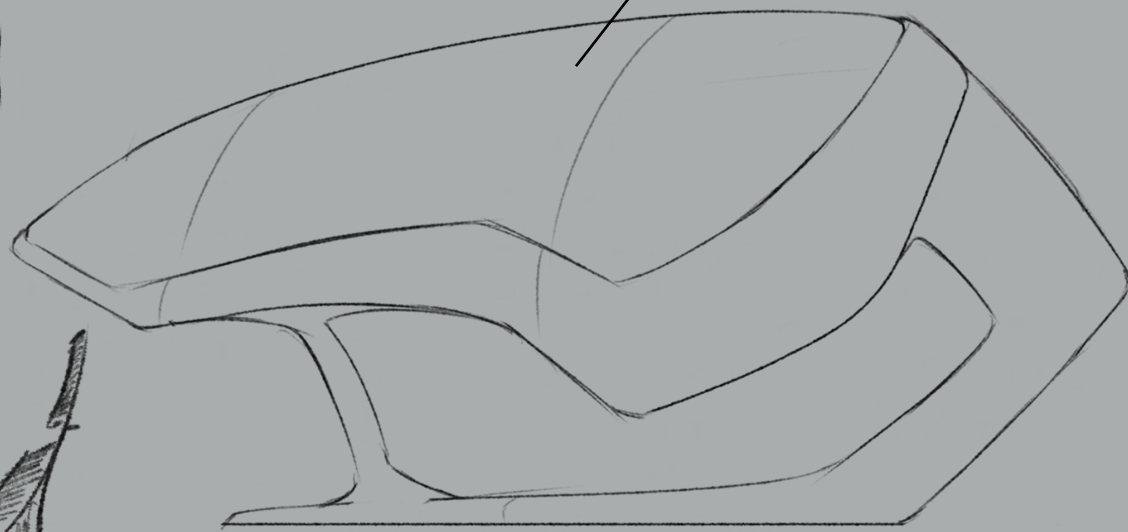
FIRST KEY SKETCH, OPEN TOP DESIGN



FINAL DESIGN

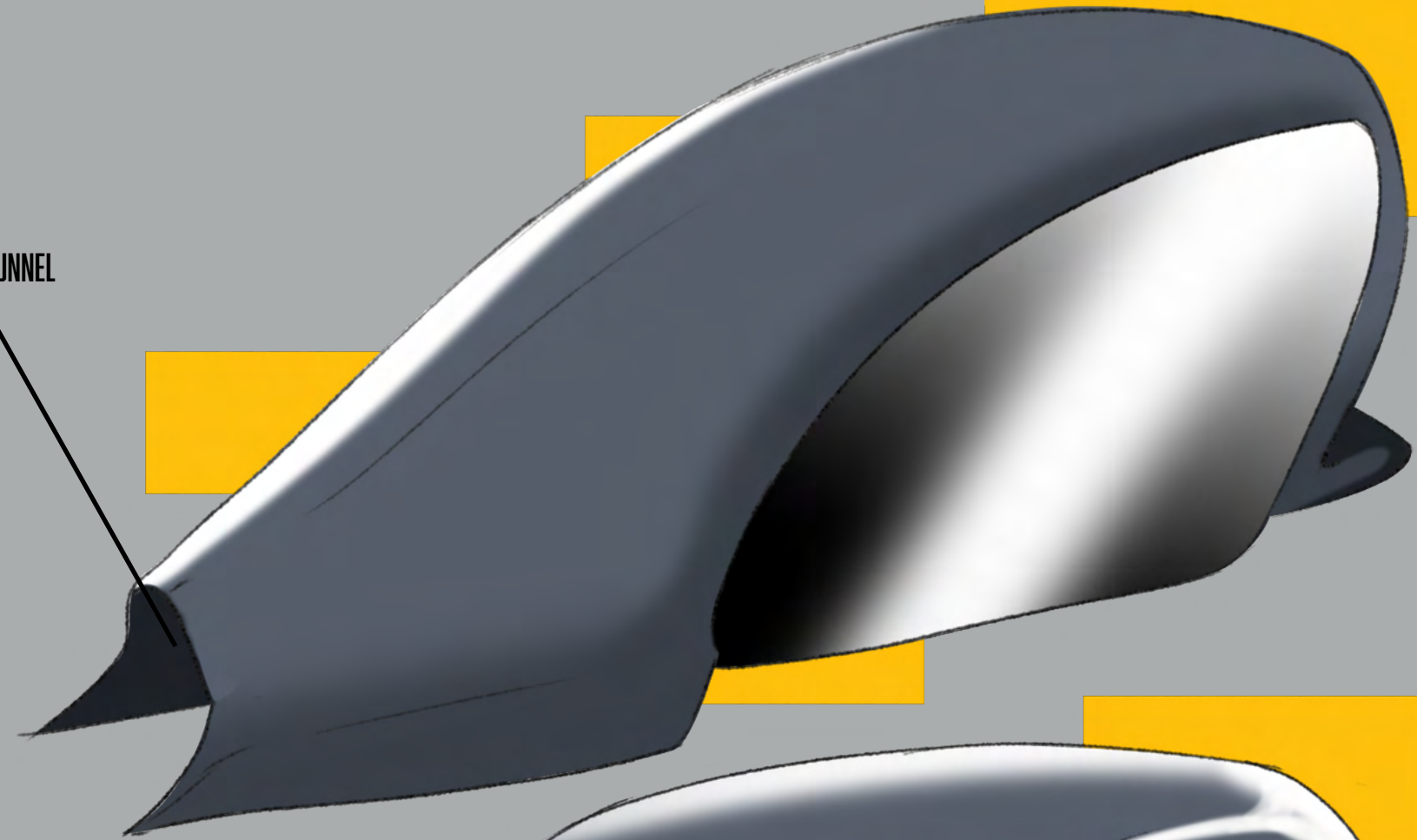


CLOSED TOP POD

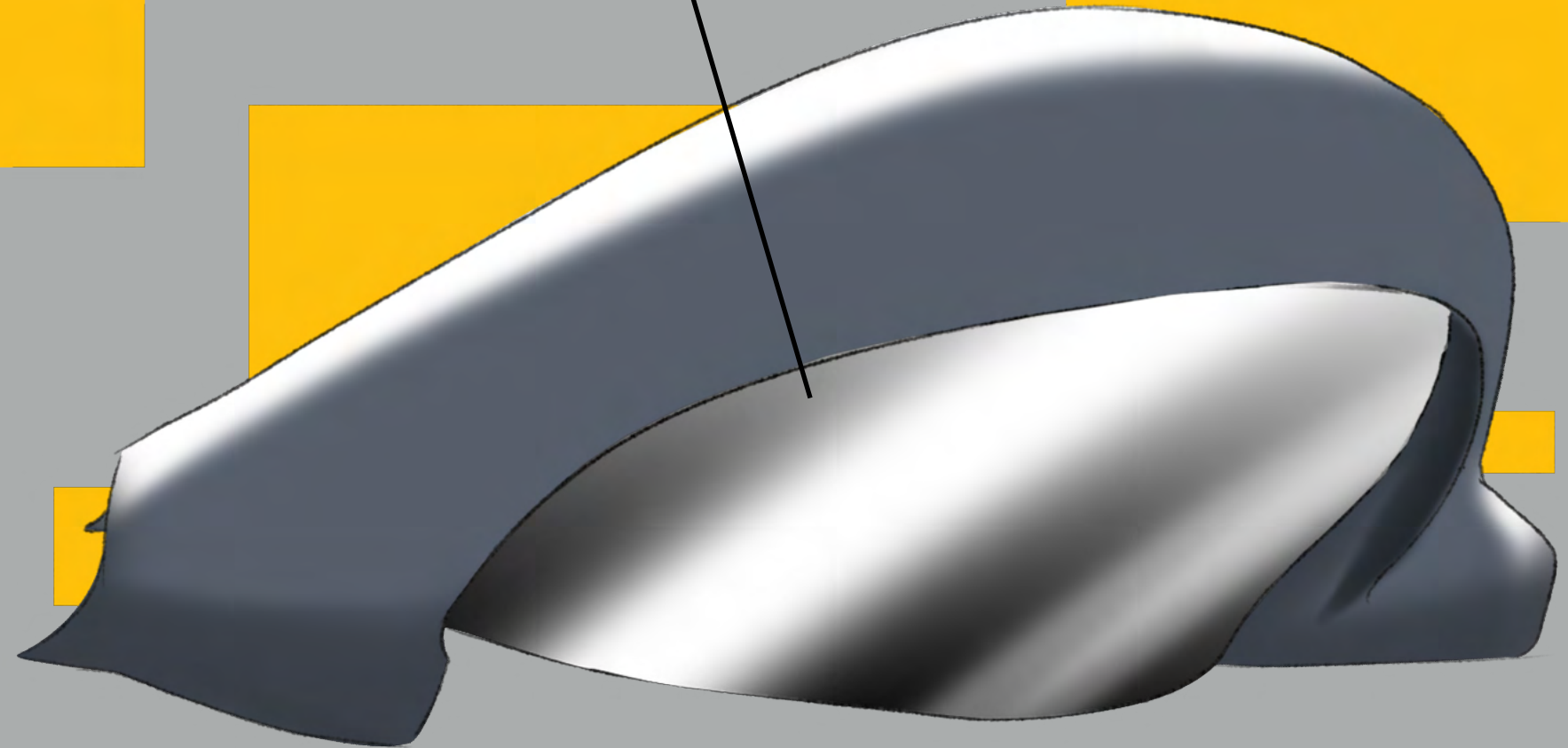


POD CHOSEN DIRECTION

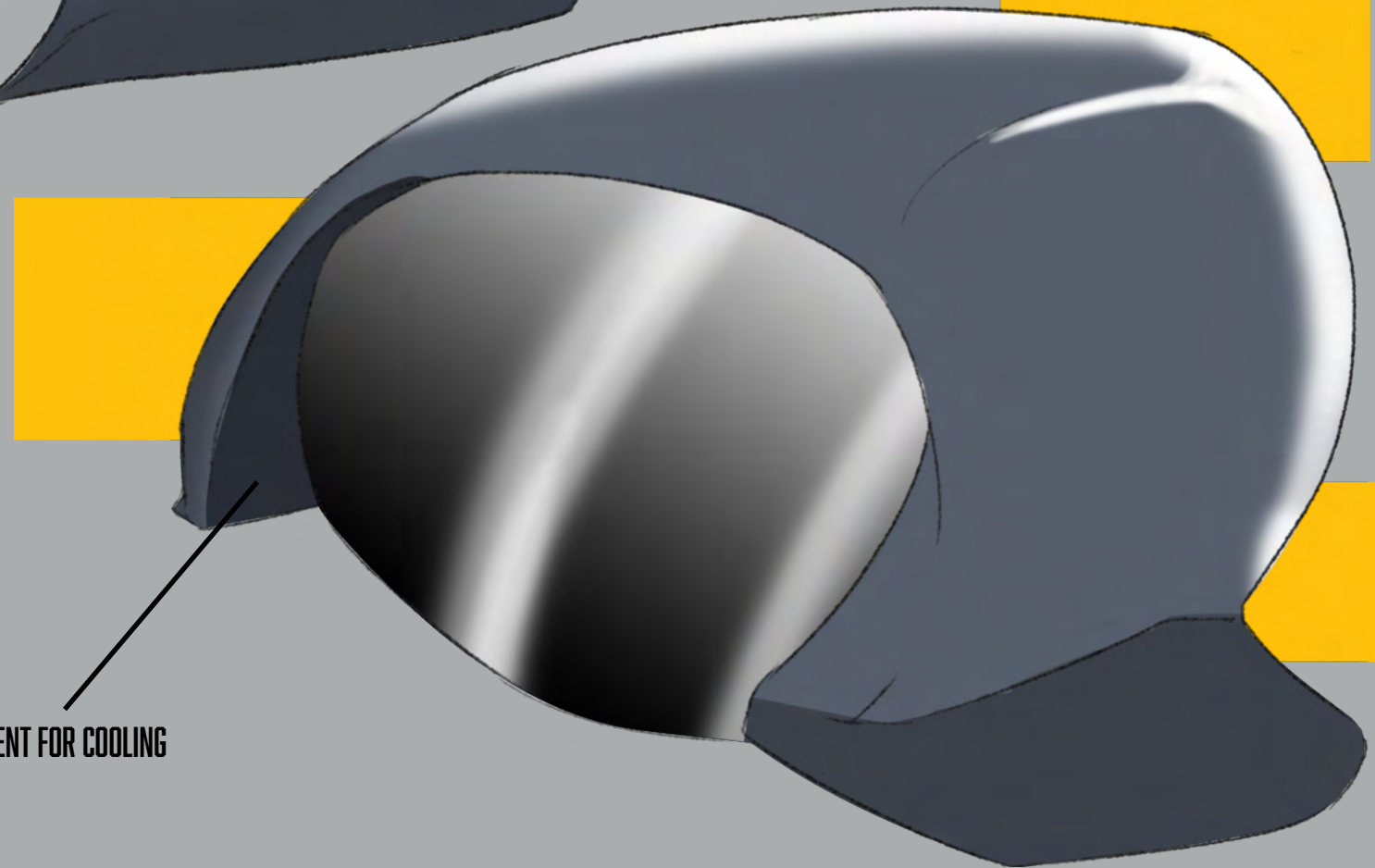
VENTURI TUNNEL



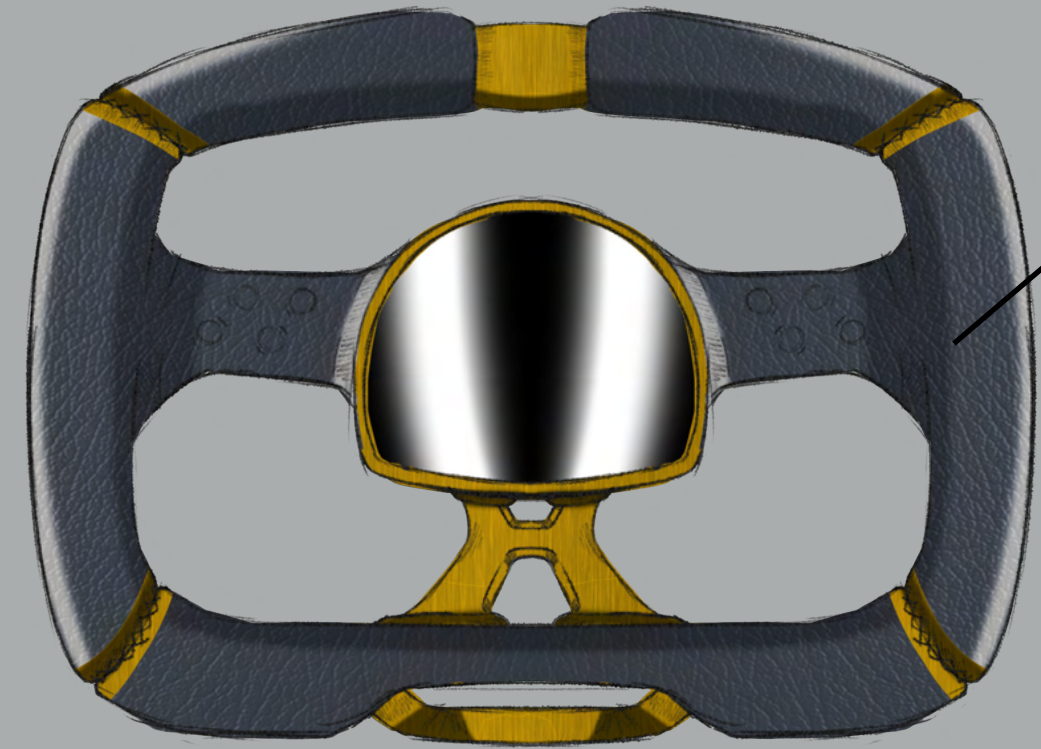
TWO-WAY GLASS



AIR VENT FOR COOLING



MUSHROOM LEATHER



CMF EXTERIOR



HEMP COMPOSITE FIBERS

MEMORY ALLOY

RECYCLED CARBON FIBER

BRUSHED ALUMINIUM

#E7C938

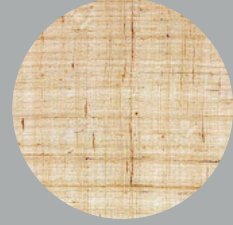
#242424

CMF INTERIOR

2-WAY GLASS



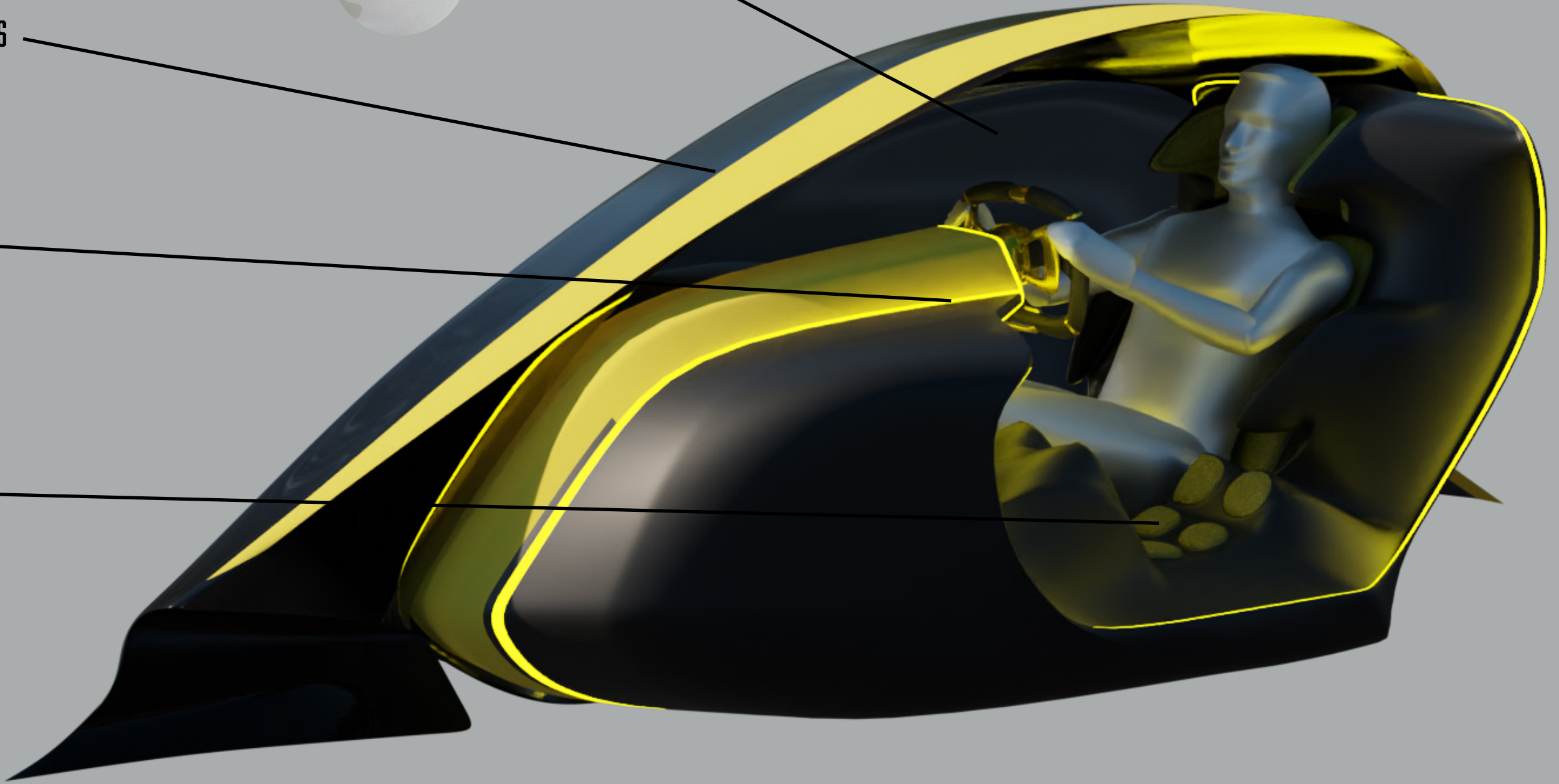
HEMP COMPOSITE FIBERS



LED LIGHTS



MUSHROOM LEATHER



DRIVER HMI



REAR CAMERA



HAZARD WARNING

WARNING INDICATOR



POSITION INDICATOR



IDEAL RACELINE

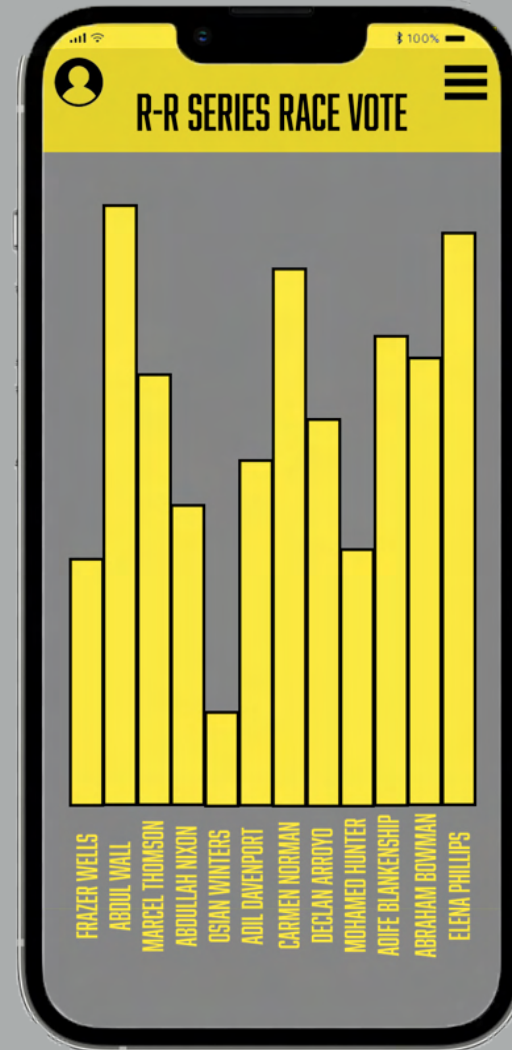
TIRE WEAR INDICATOR



213
km/h

CURRENT LAP TIME
12:47:11

VOTING PAGE



START-UP SCREEN

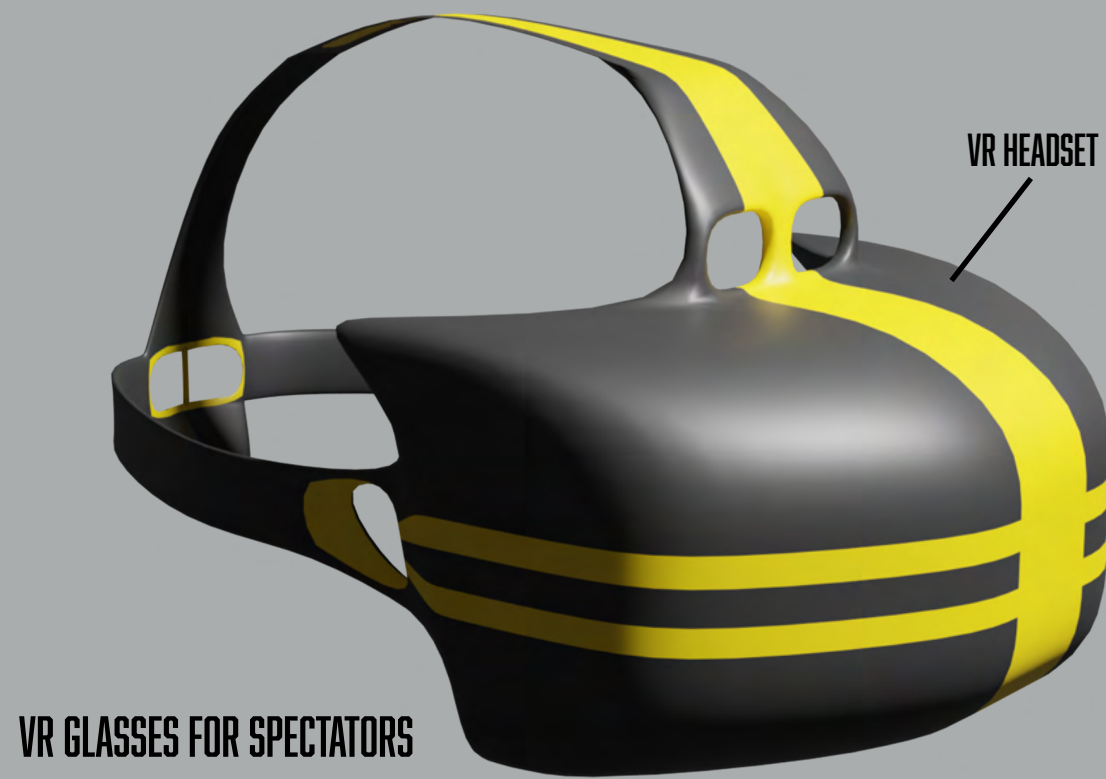
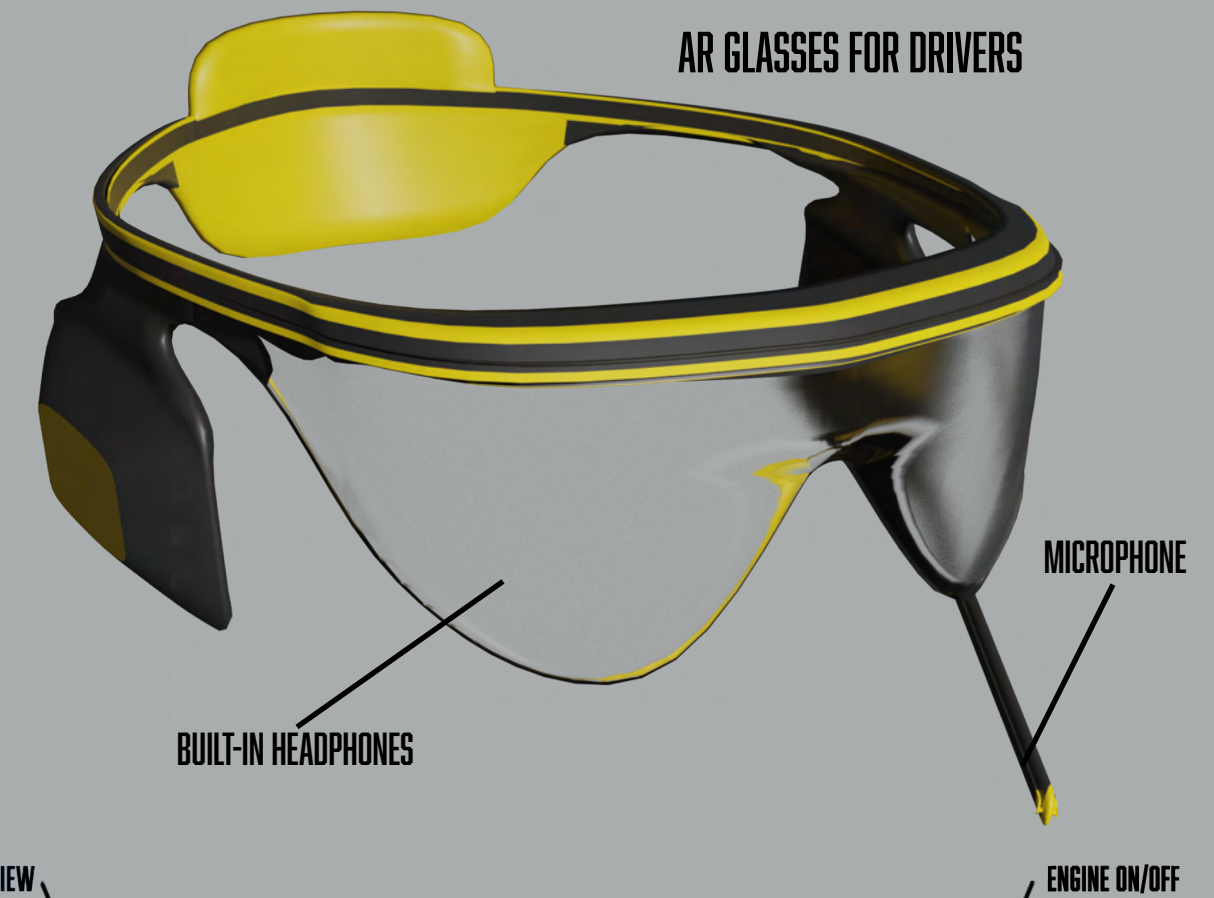


SEASON TABLE PAGE

R-R SERIES SEASON TABLE

DRIVER	PNTS
FRAZER WELLS	71
ABDUL WALL	37
MARCEL THOMSON	33
ABDULLAH NIXON	30
OSIAN WINTERS	28
ADIL DAVENPORT	25
CARMEN NORMAN	20
DECLAN ARROYO	16
MOHAMED HUNTER	12
AOIFE BLANKENSHIP	8
ABRAHAM BOWMAN	6
ELENA PHILLIPS	4

AR GLASSES FOR DRIVERS



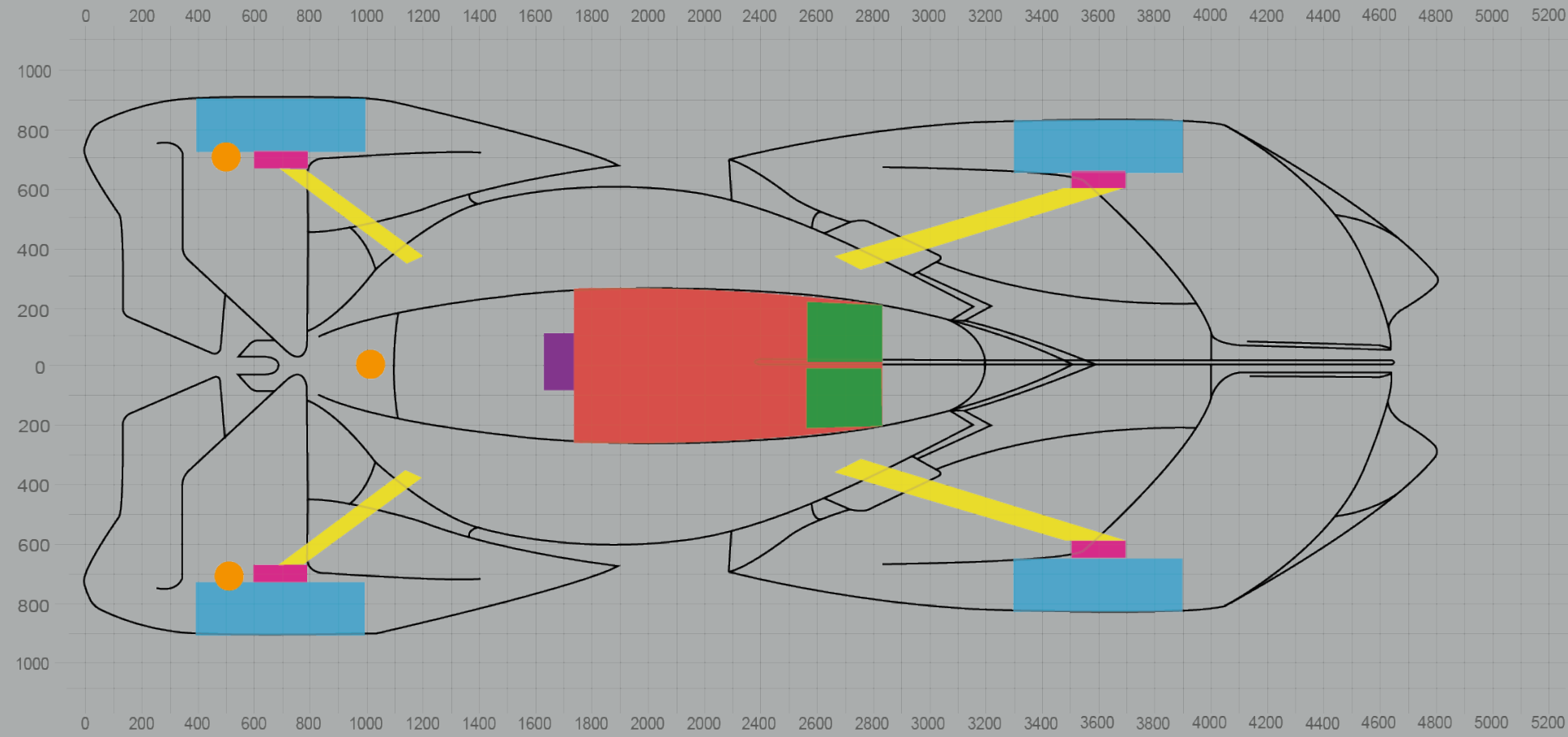
BACK VIEW



PACKAGE

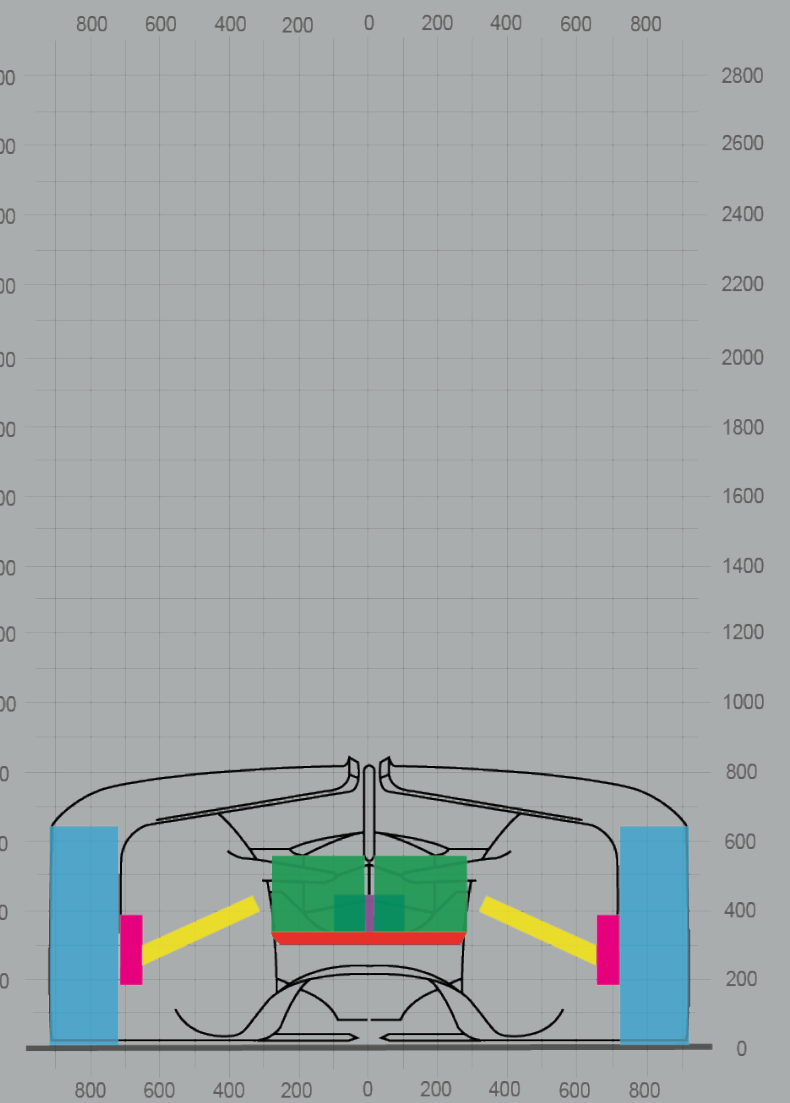
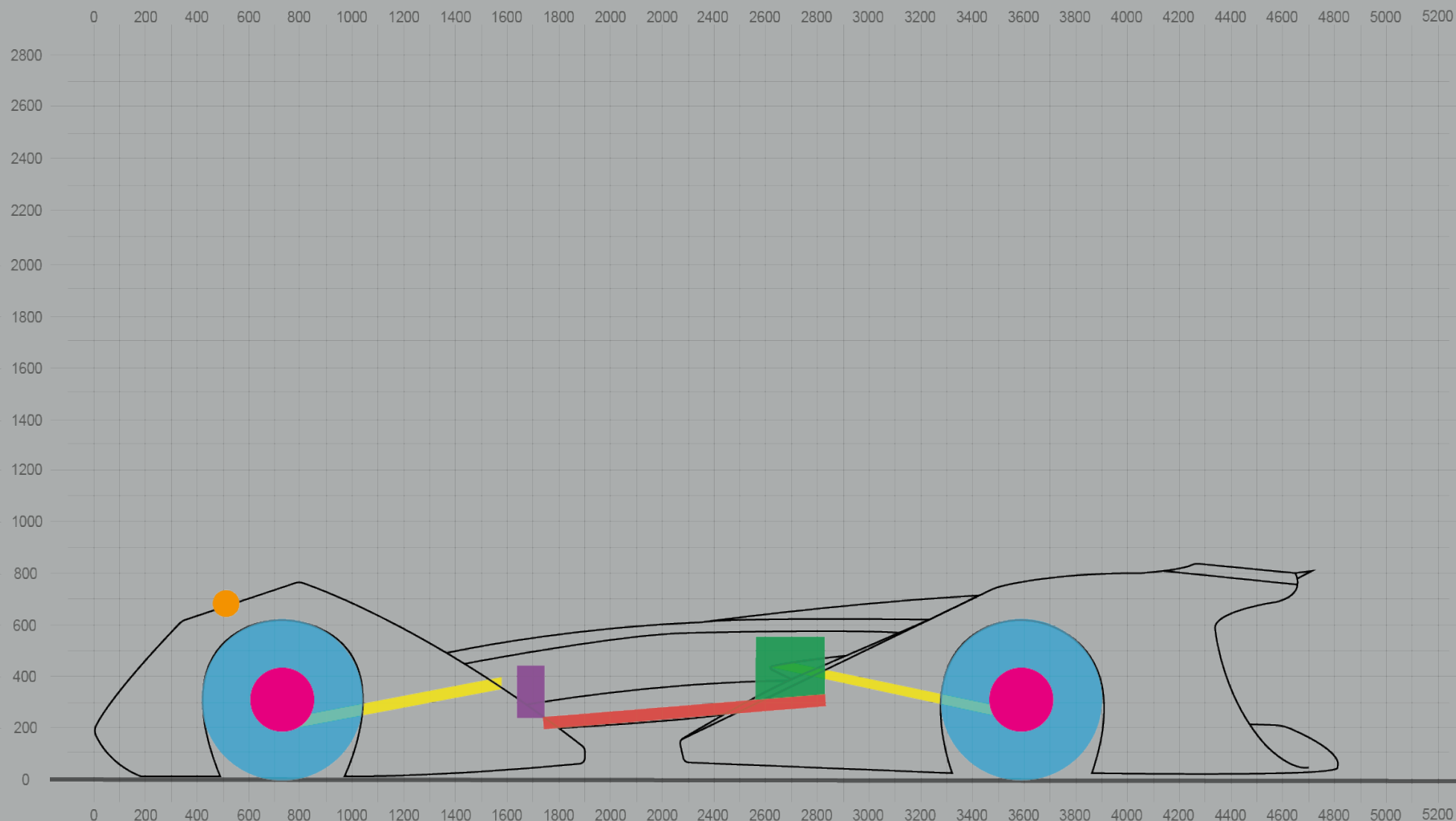
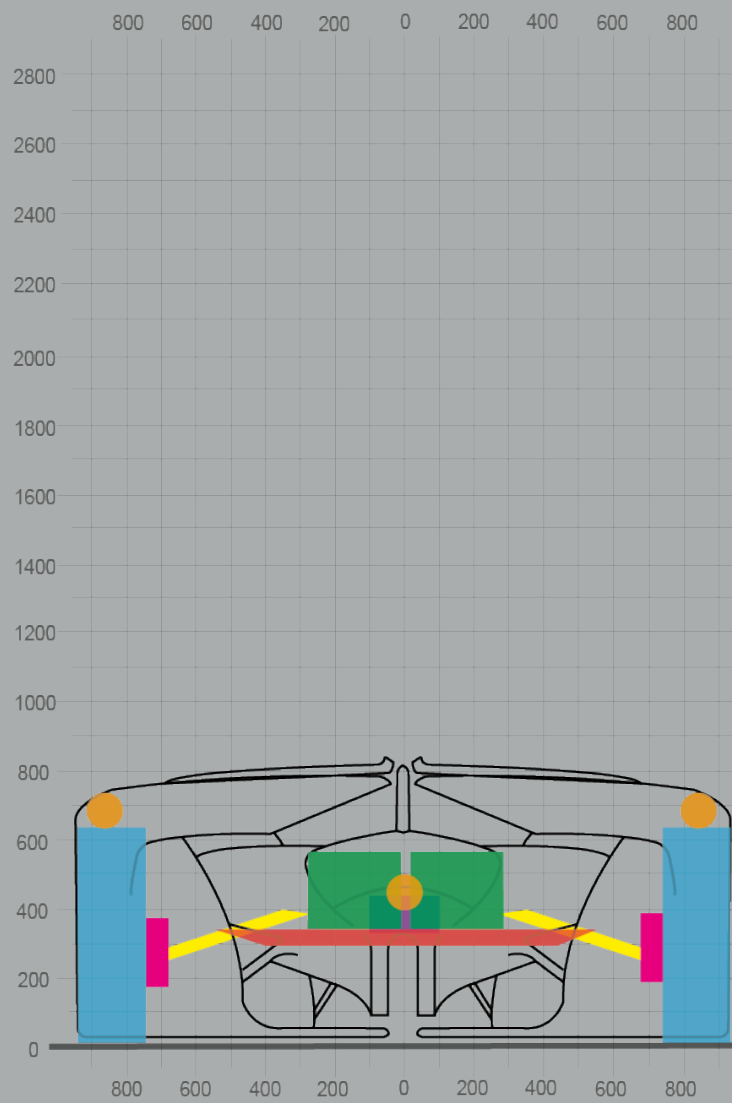
DIMENSIONS

HEIGHT- 0.82M
 LENGTH- 4.8M
 WIDTH- 1.9M



KEY

	WHEELS
	HUB MOTORS
	SUSPENSION
	INTERCHANGERBLE BATTERY
	MAIN BATTERY
	360 CAMERAS
	RECEIVER/RELAY



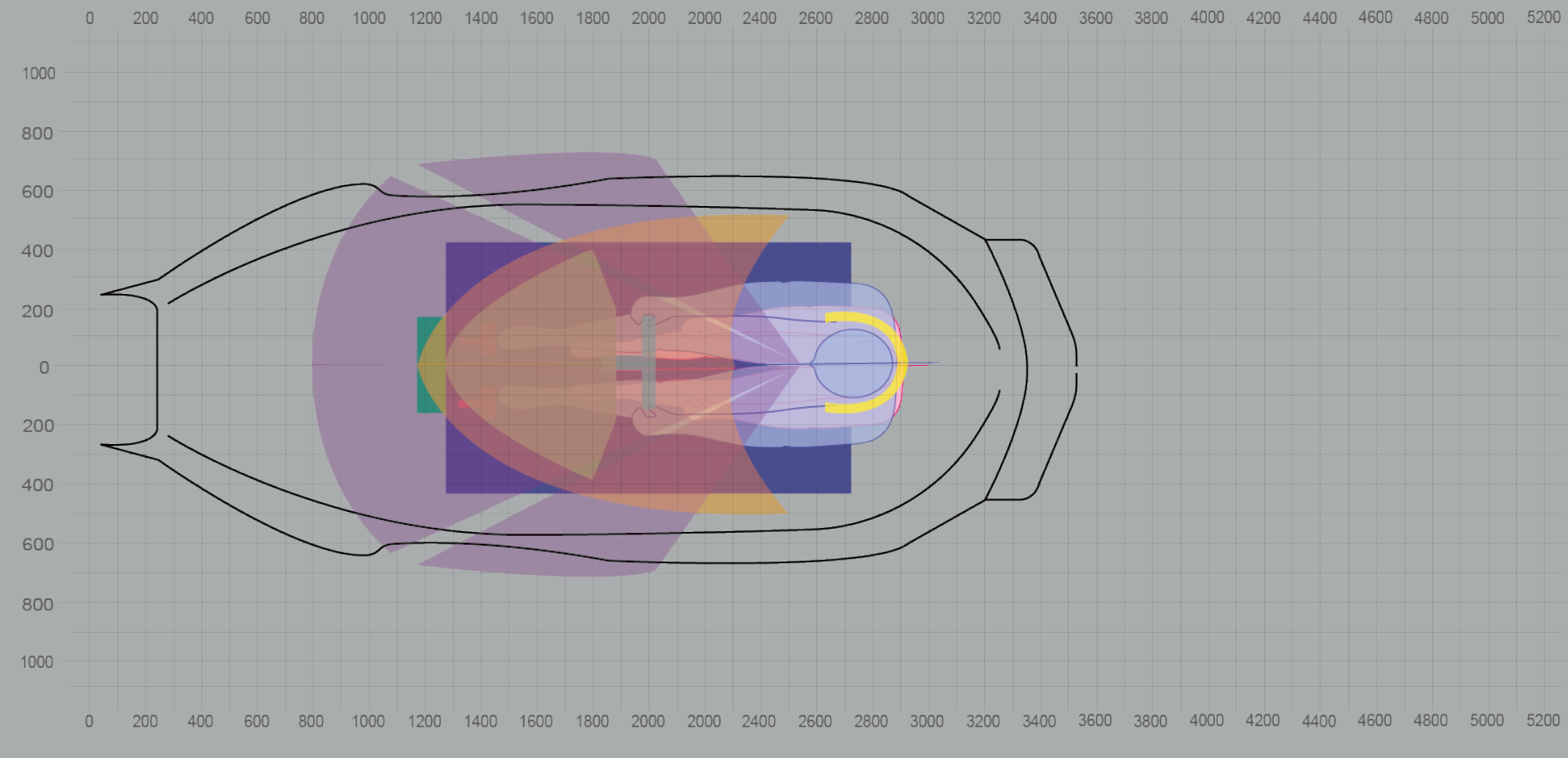
PACKAGE









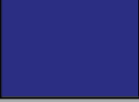
DIMENSIONS

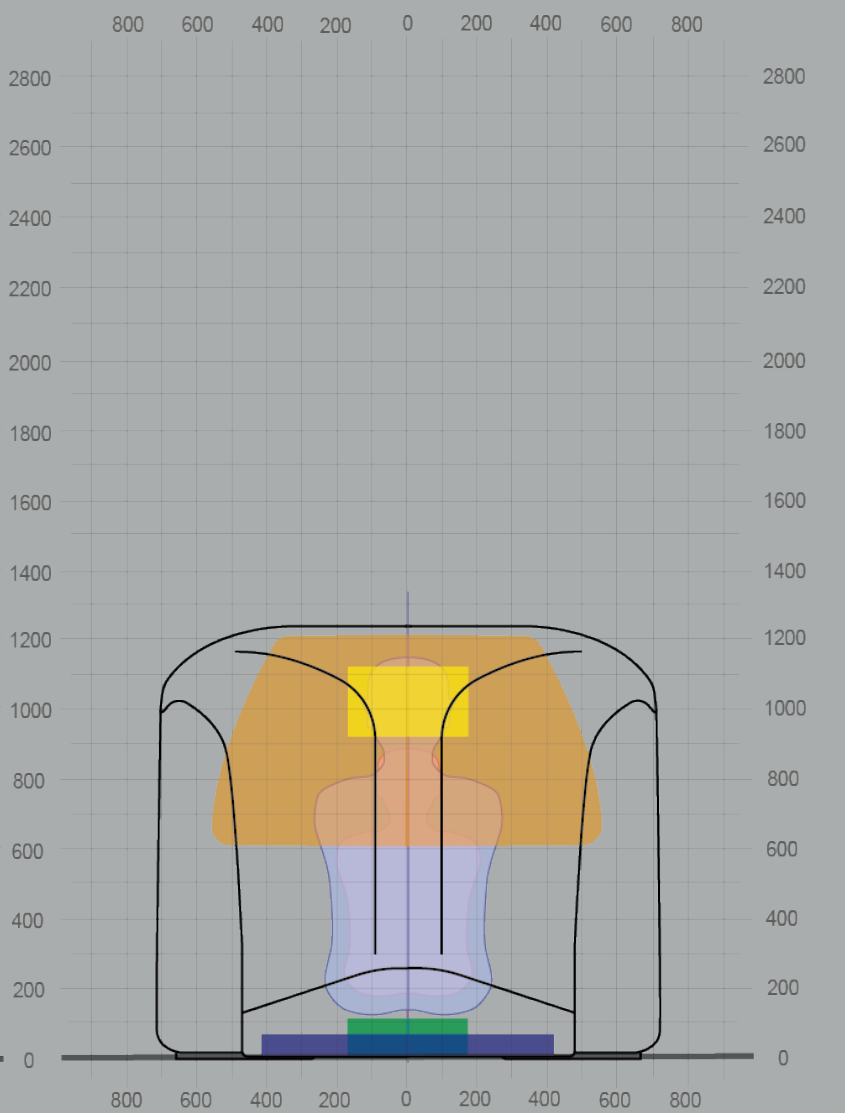
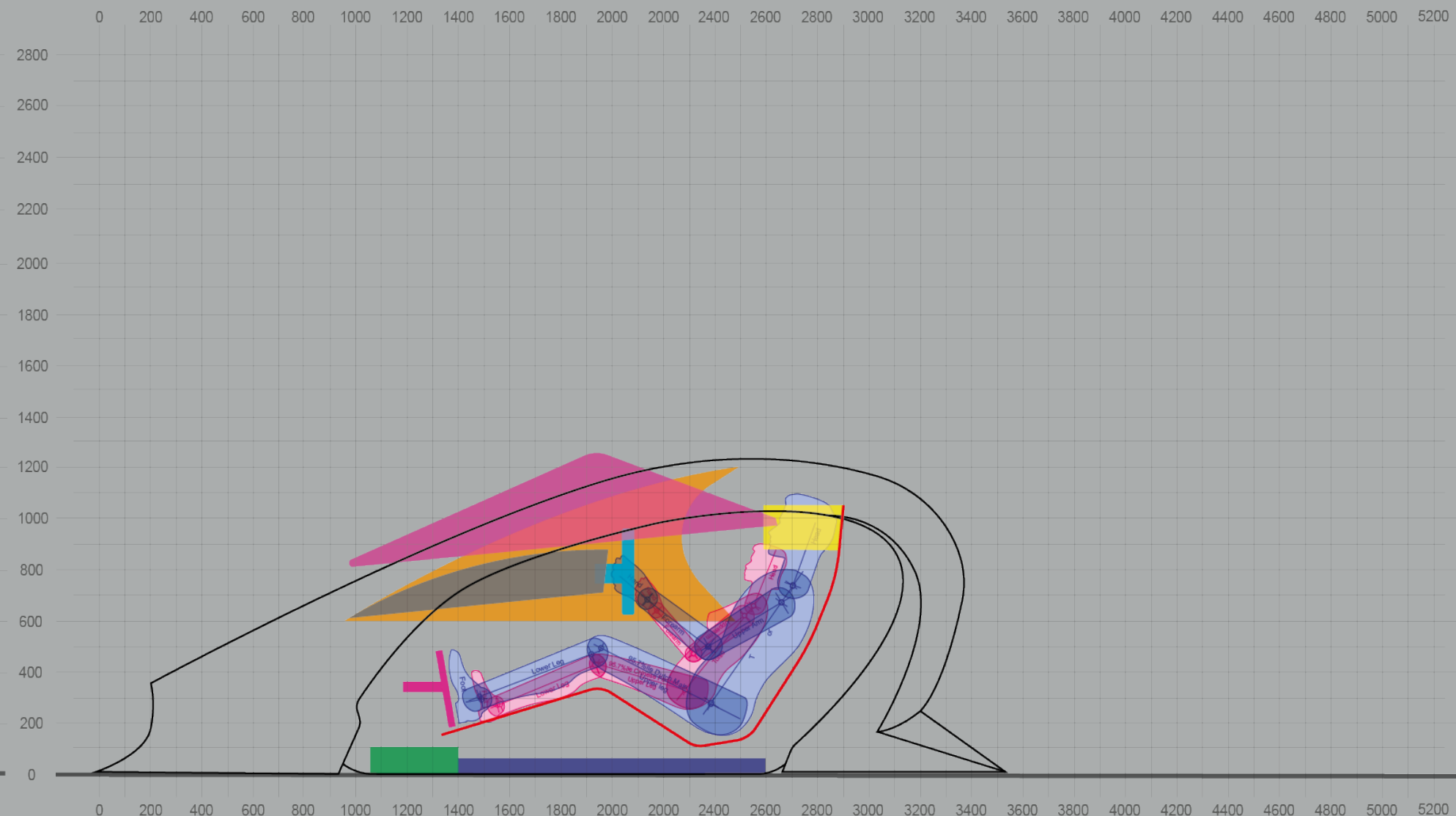
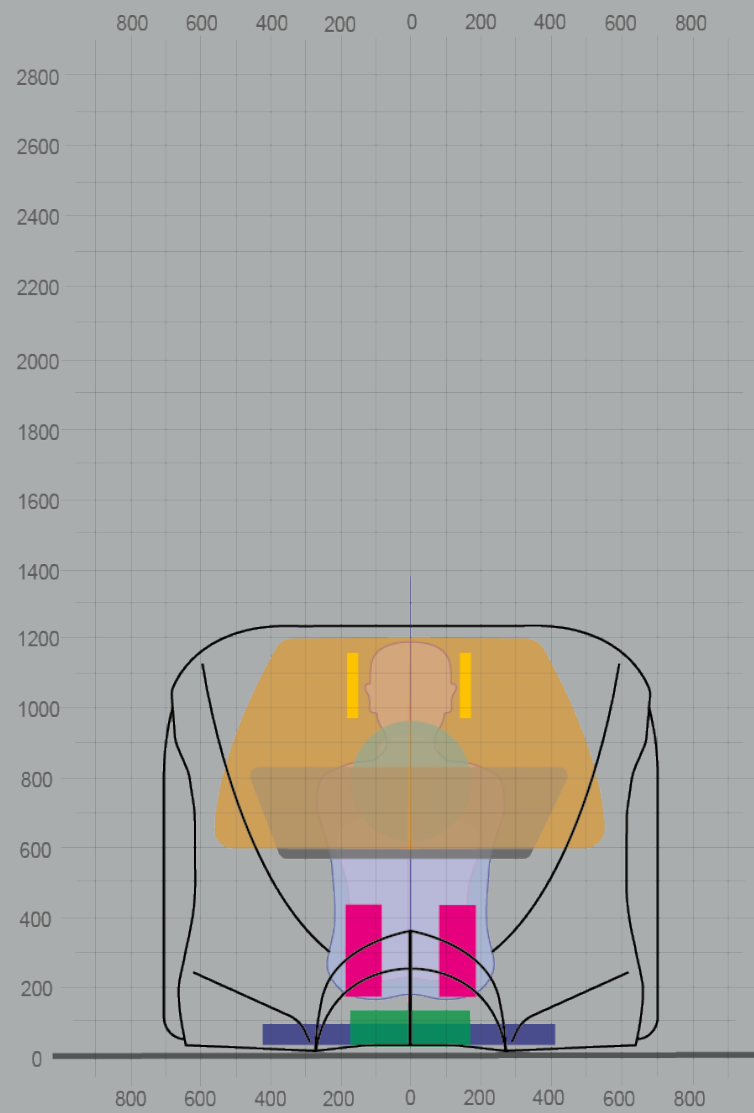
HEIGHT- 1.25M

LENGTH- 3.5M

WIDTH- 1.2M

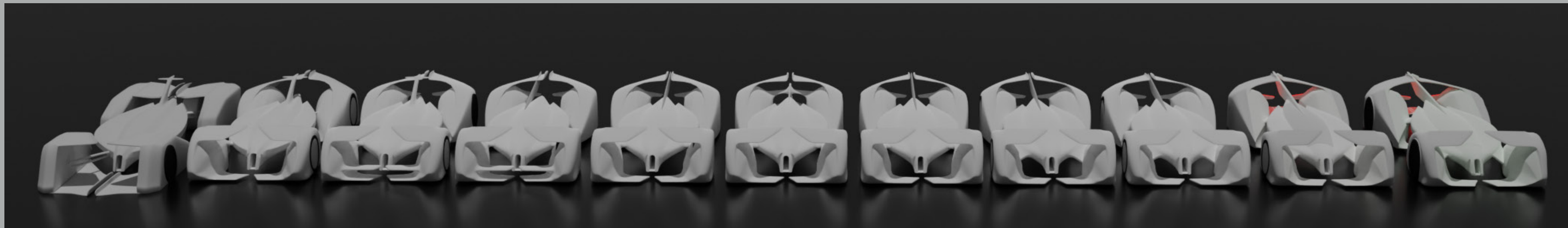


KEY	
	HAPTIC STEERING WHEEL
	PEDALS
	SPEAKERS
	RECEIVER AND RELAY
	SEATING POSITION
	SCREEN
	VIEWING ANGLES
	CENTRE CONSOLE
	BATTERY

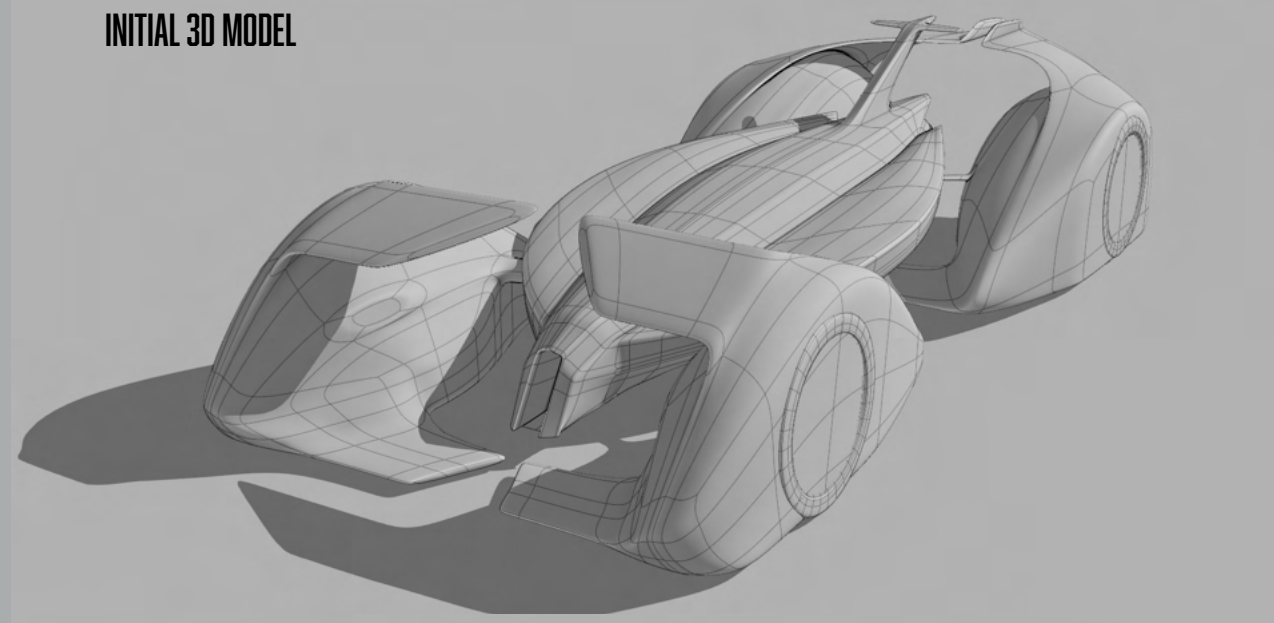


BLENDER DEVELOPMENT

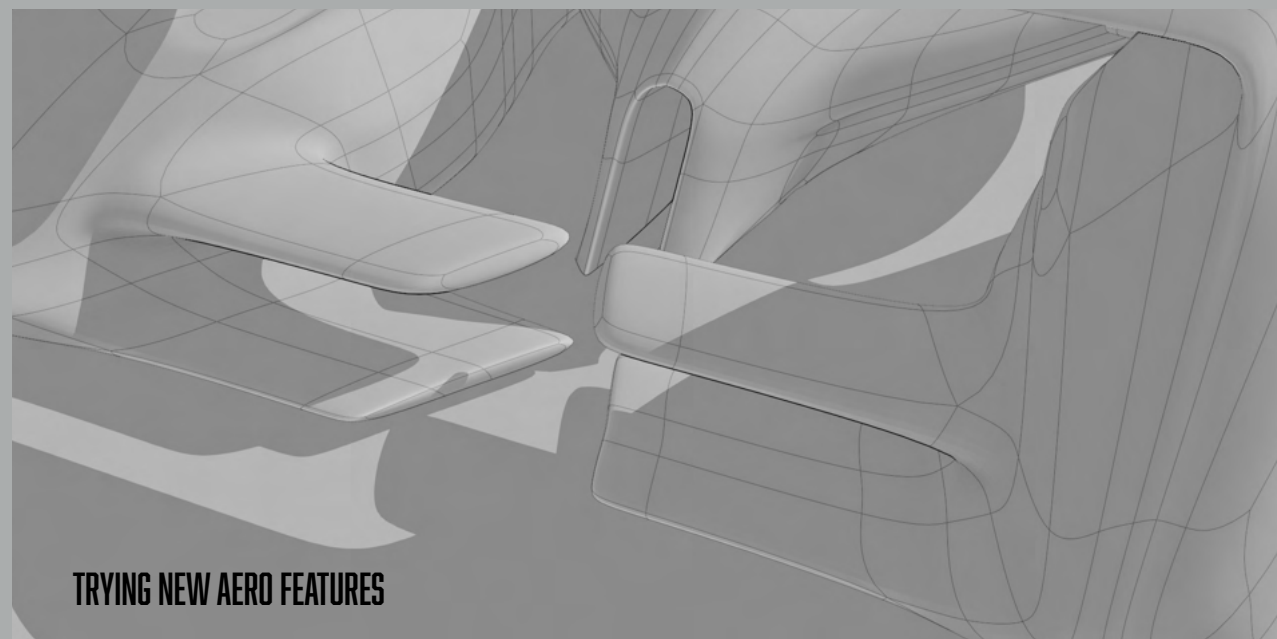
FULL DEVELOPMENT PROCESS



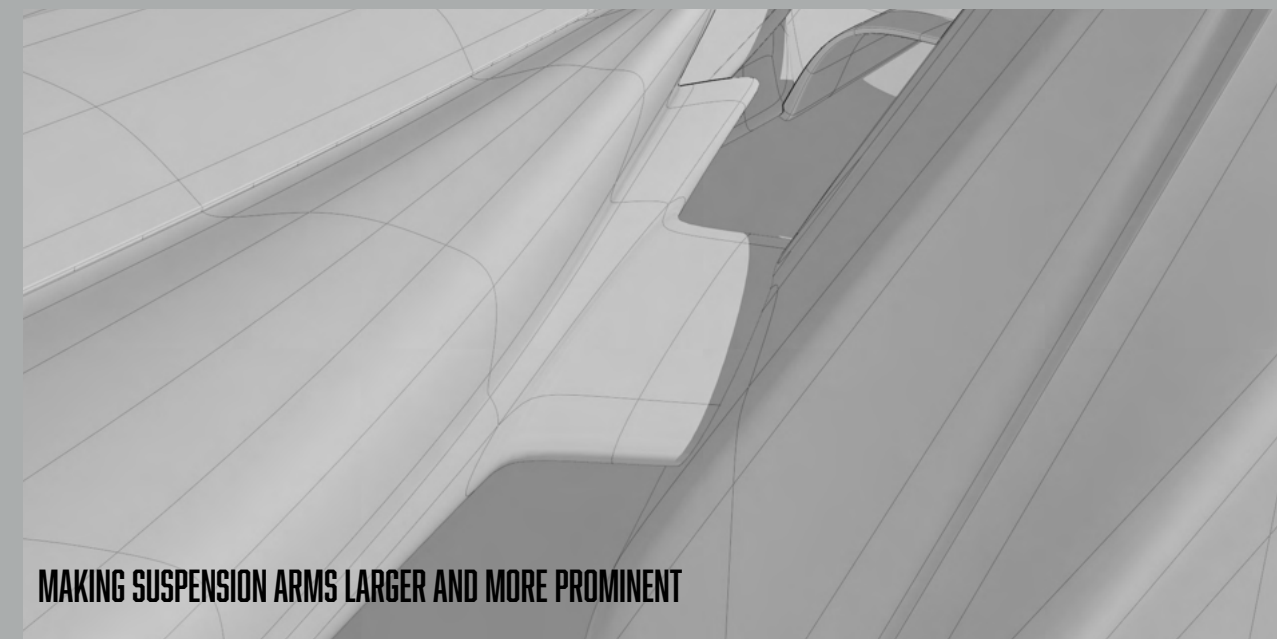
INITIAL 3D MODEL



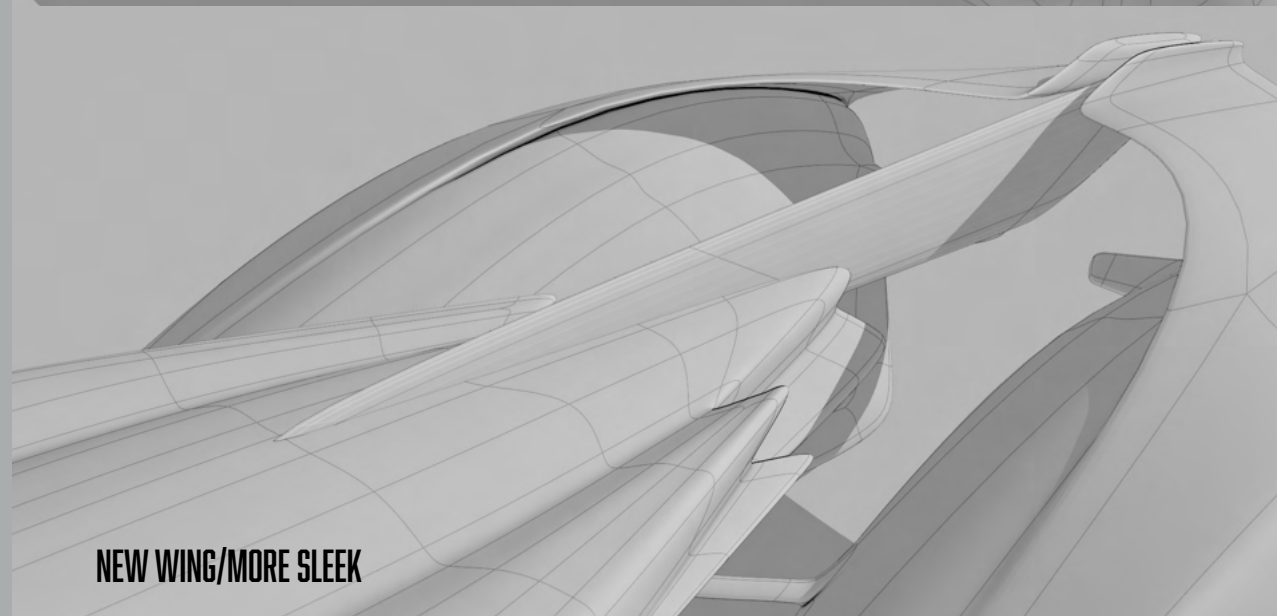
TRYING NEW AERO FEATURES



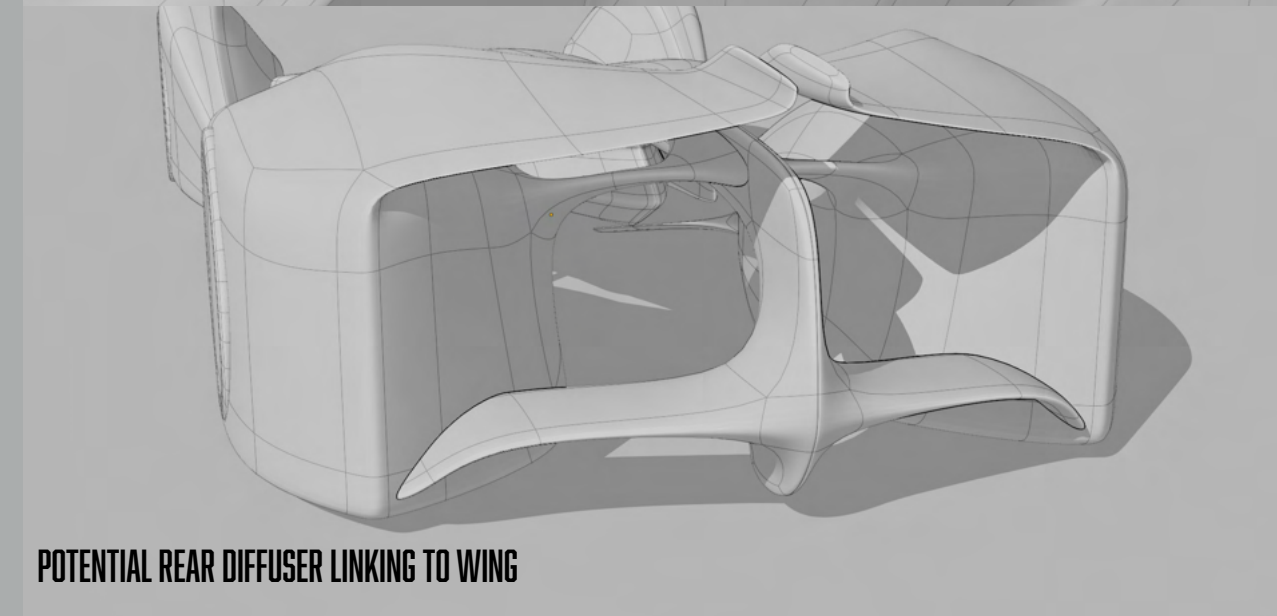
MAKING SUSPENSION ARMS LARGER AND MORE PROMINENT



NEW WING/MORE SLEEK

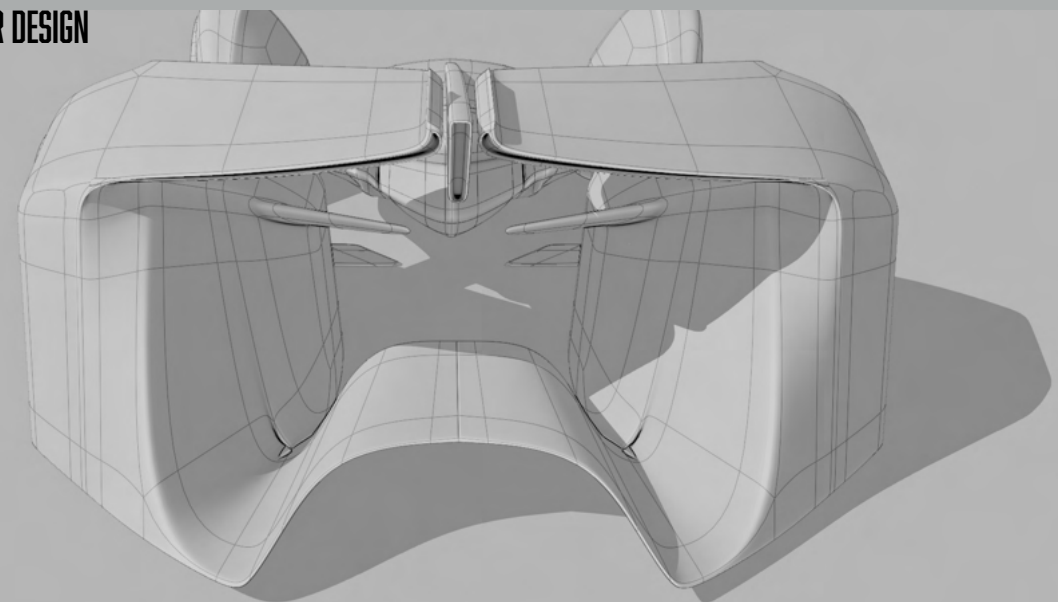


POTENTIAL REAR DIFFUSER LINKING TO WING

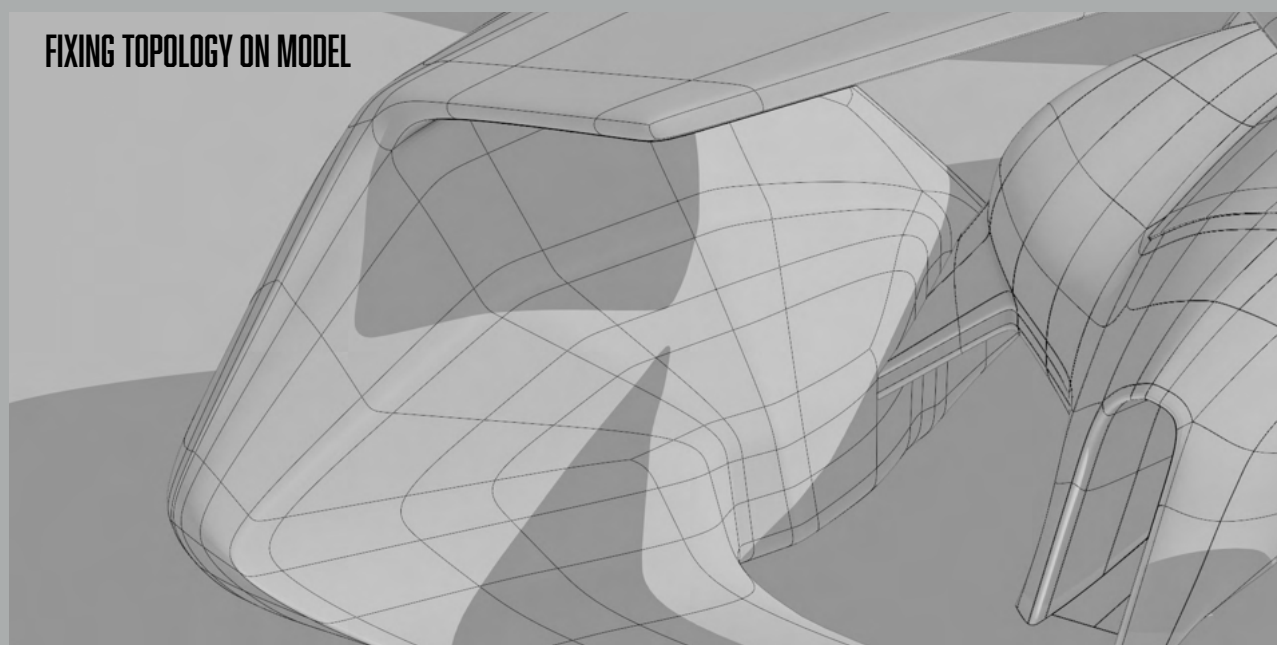


BLENDER DEVELOPMENT

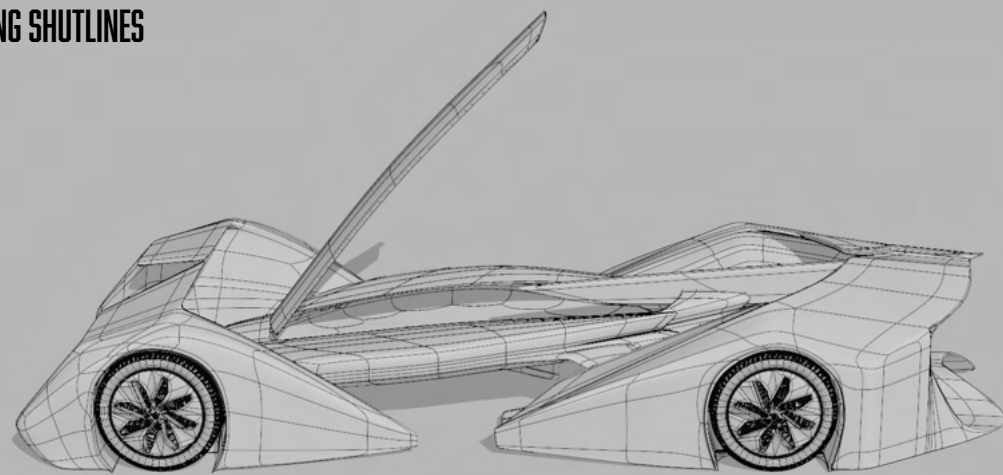
FINAL DIFFUSER DESIGN



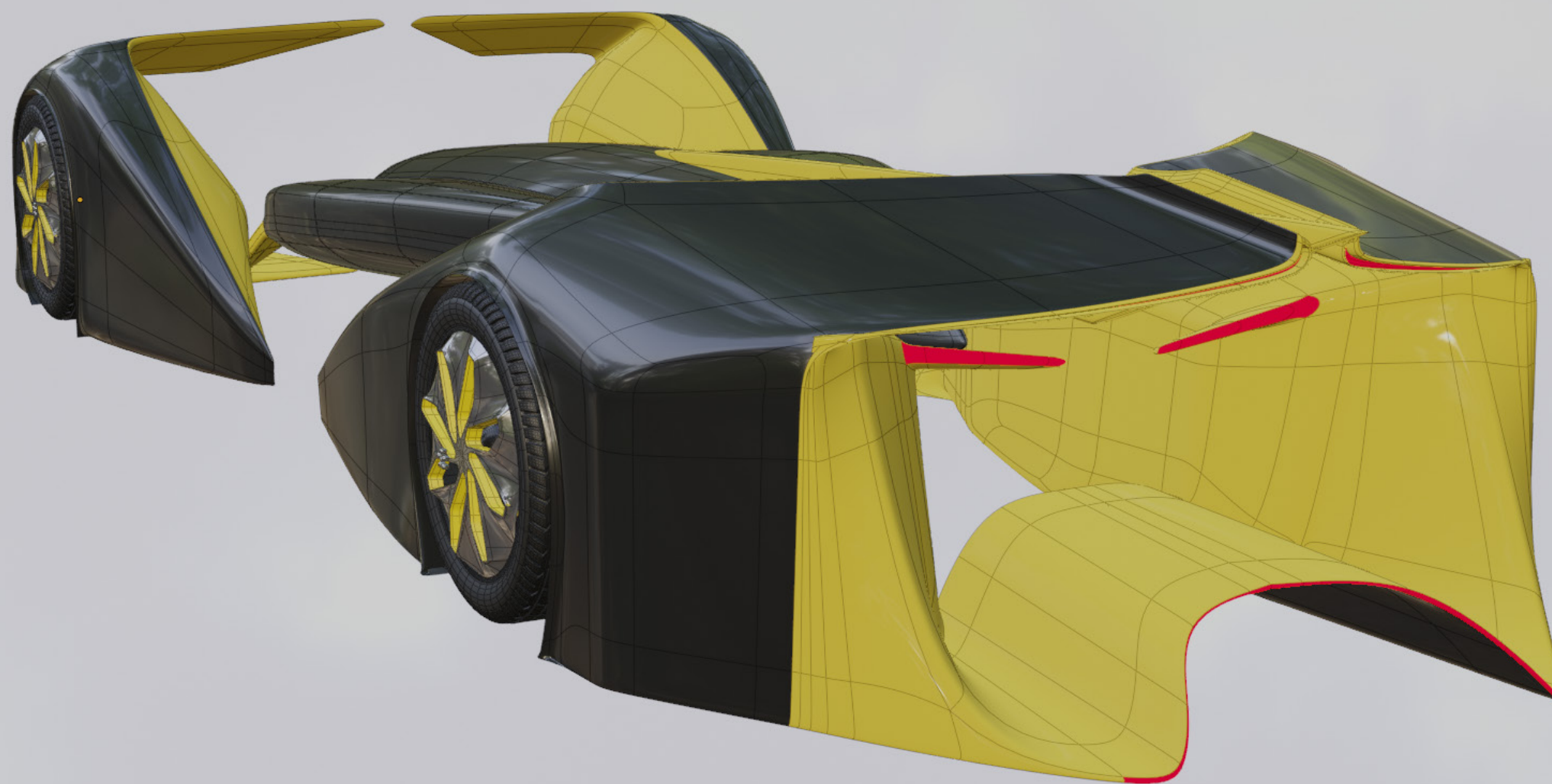
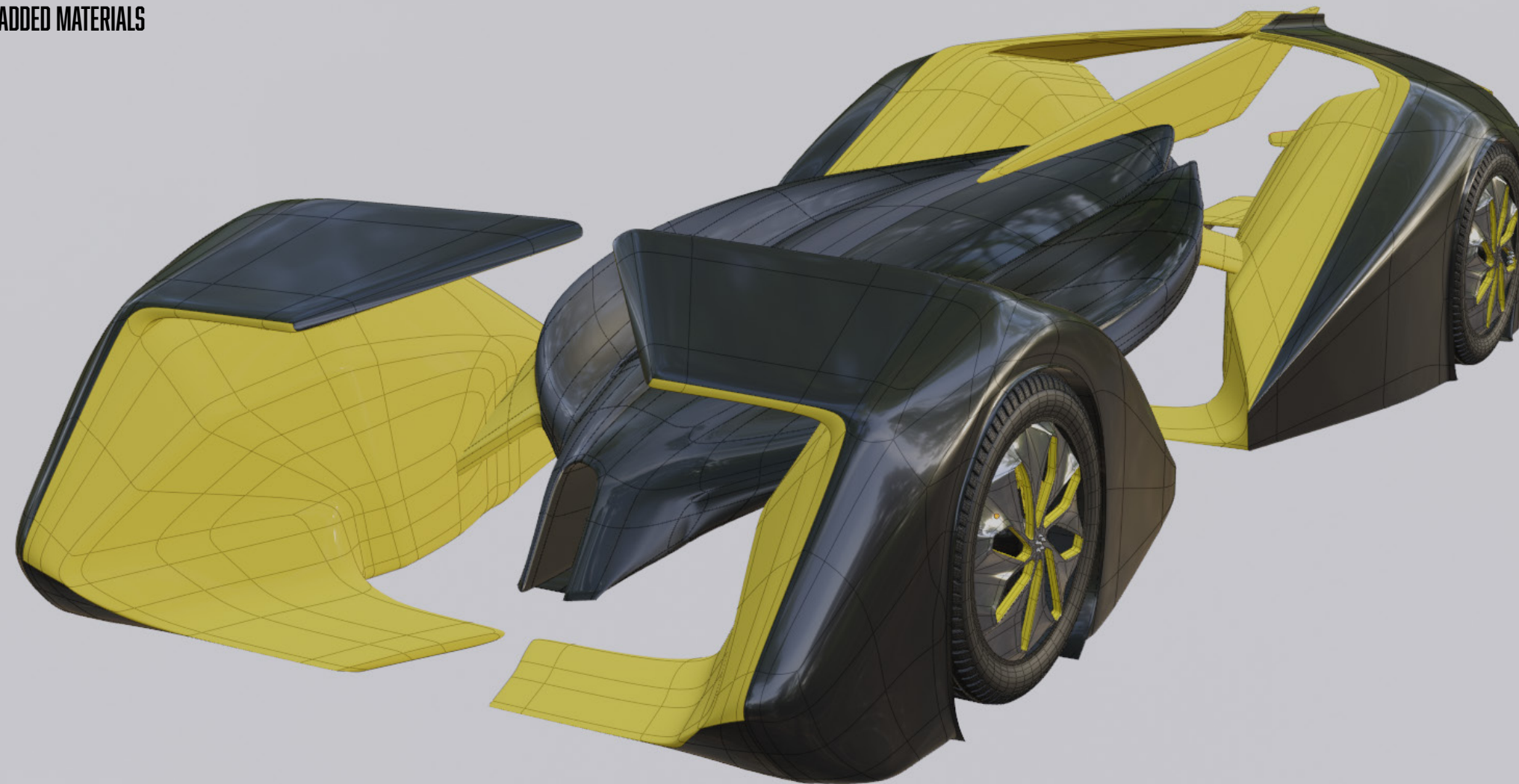
FIXING TOPOLOGY ON MODEL



ADDING SHUTLINES

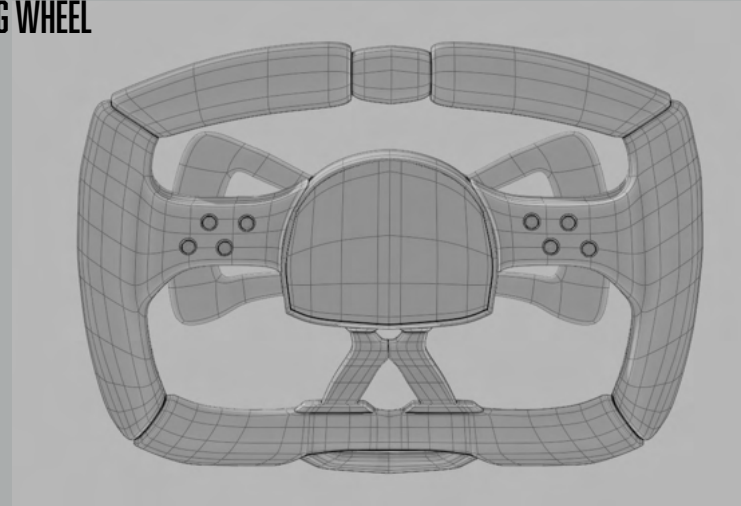


FINAL MODEL WITH ADDED MATERIALS

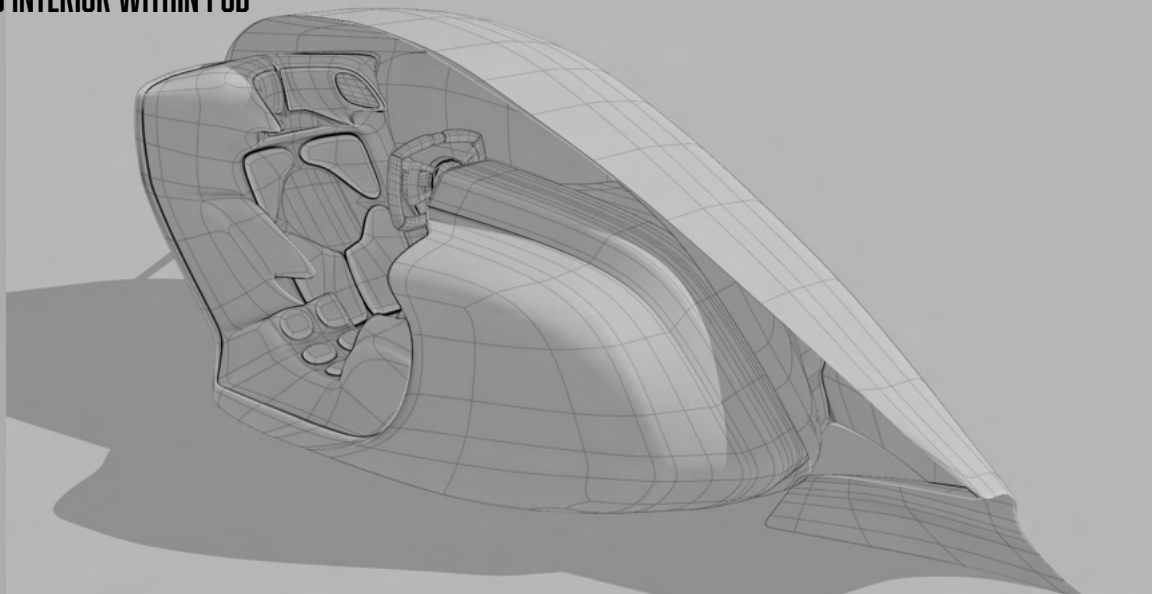


INTERIOR BLENDER DEVELOPMENT

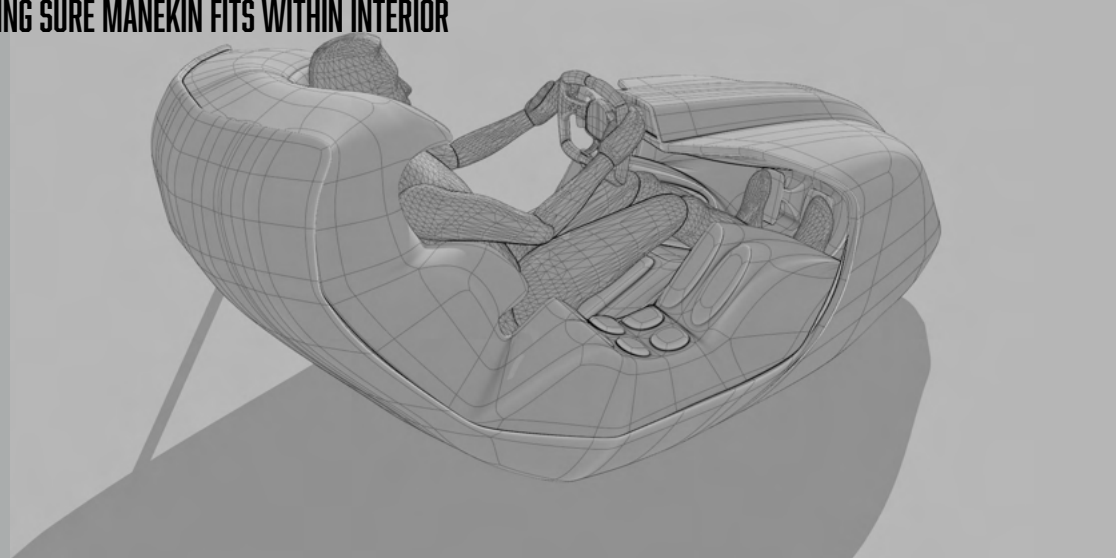
BUILDING STEERING WHEEL



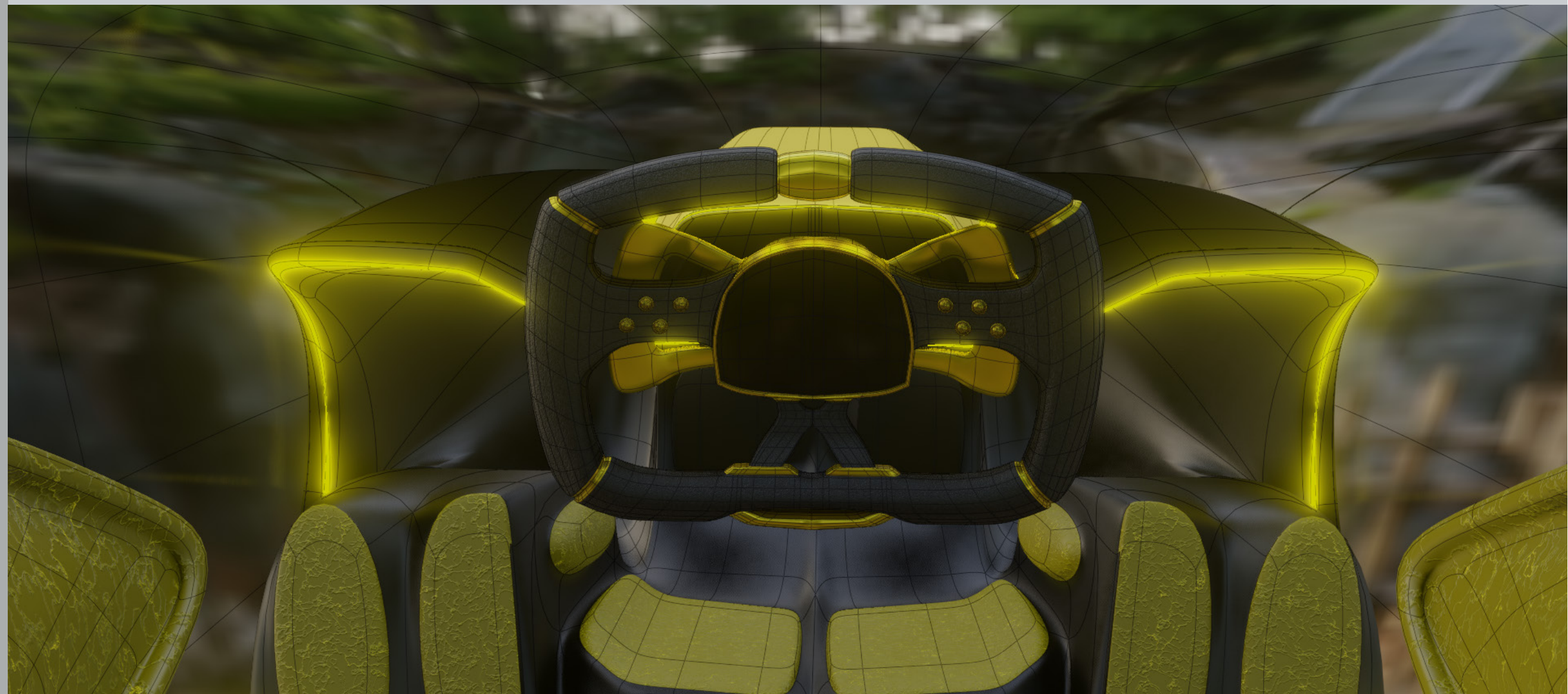
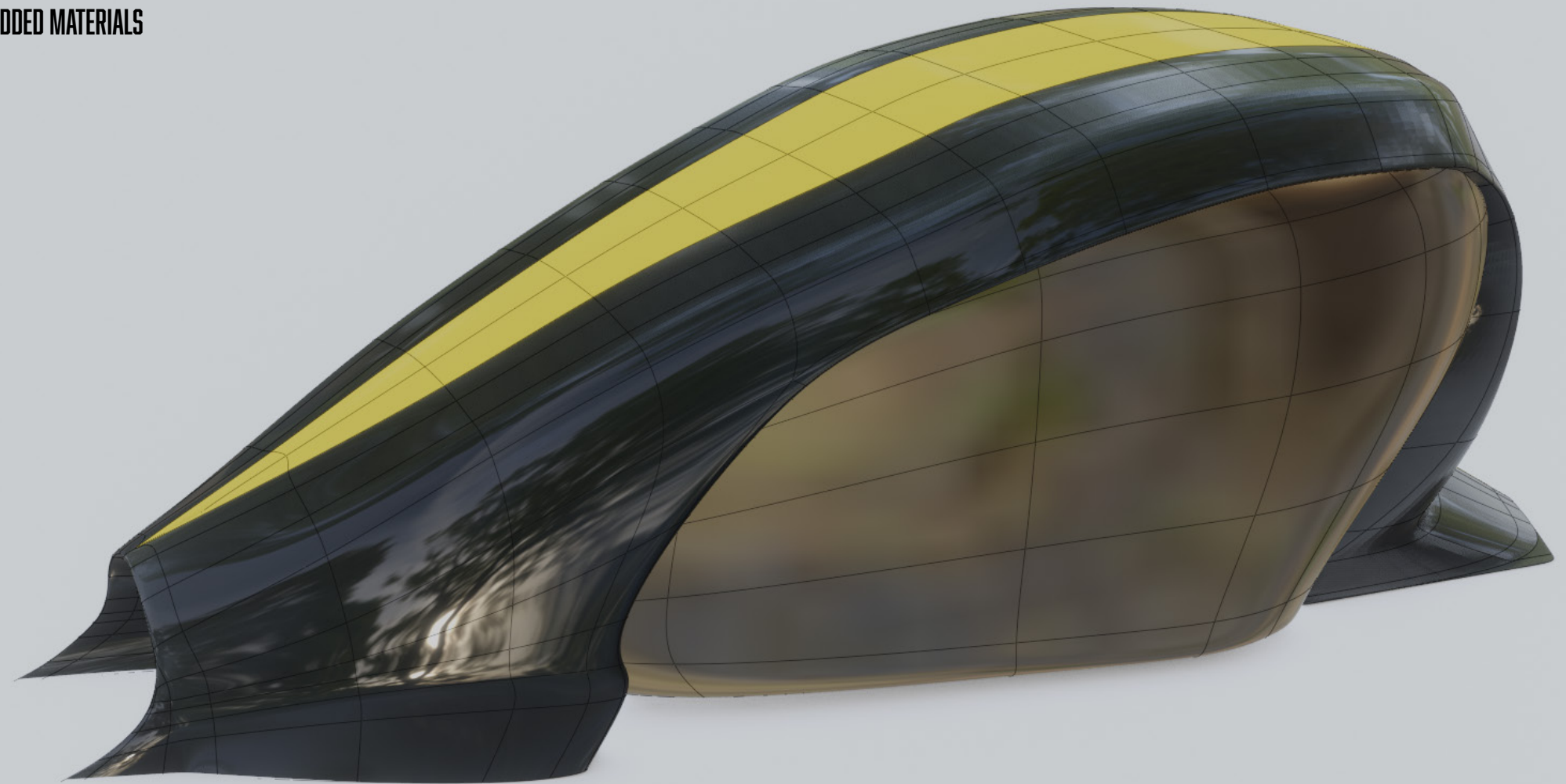
BUILDING INTERIOR WITHIN POD



MAKING SURE MANEKIN FITS WITHIN INTERIOR



FINAL MODEL WITH ADDED MATERIALS



CLAY DEVELOPMENT



MAKING AND MODELLING ARMATURE



ADDING CLAY TO ARMATURE AND ADDING WHEELS



CLAY ROUGHLY BUILT UP TO MAX WIDTH



REMOVING WHEEL ARCHES AND SCULPTING FUELSELAGE



ROUGHING OUT ONE SIDE TO MAKE SURE PROPORTIONS ARE CORRECT AND ADDING AERO WINGS



FULLY ROUGHING OUT MODEL AND FILING IN HOLOWS

CLAY DEVELOPMENT



ADDING MORE AERO WINGS AND FURTHER FIXING SURFACE IMPERFECTIONS



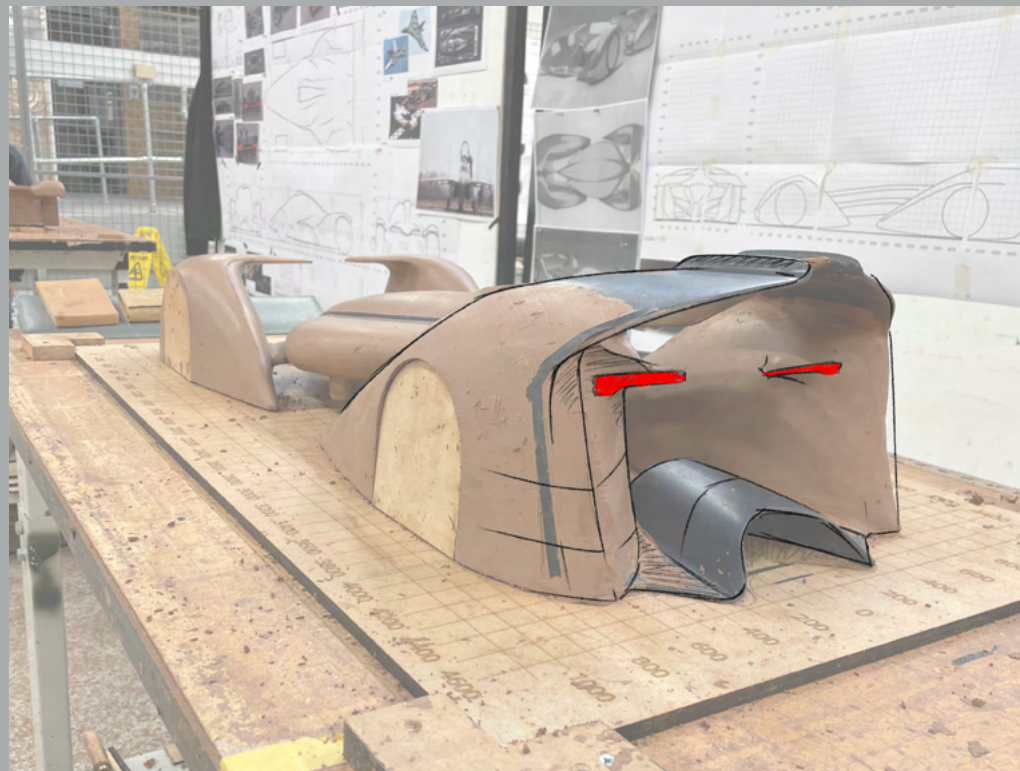
ADDED MAIN SPOILER AND FIXED FRONT VENTURI TUNNEL



ADDING CLAY TO MAKE WINGS FLOW MORE SMOOTHLY INTO THE WHEEL ARCHES



FURTHER REFINING SURFACE AND ADDING MORE REFINED LINES ON THE FUELTANK

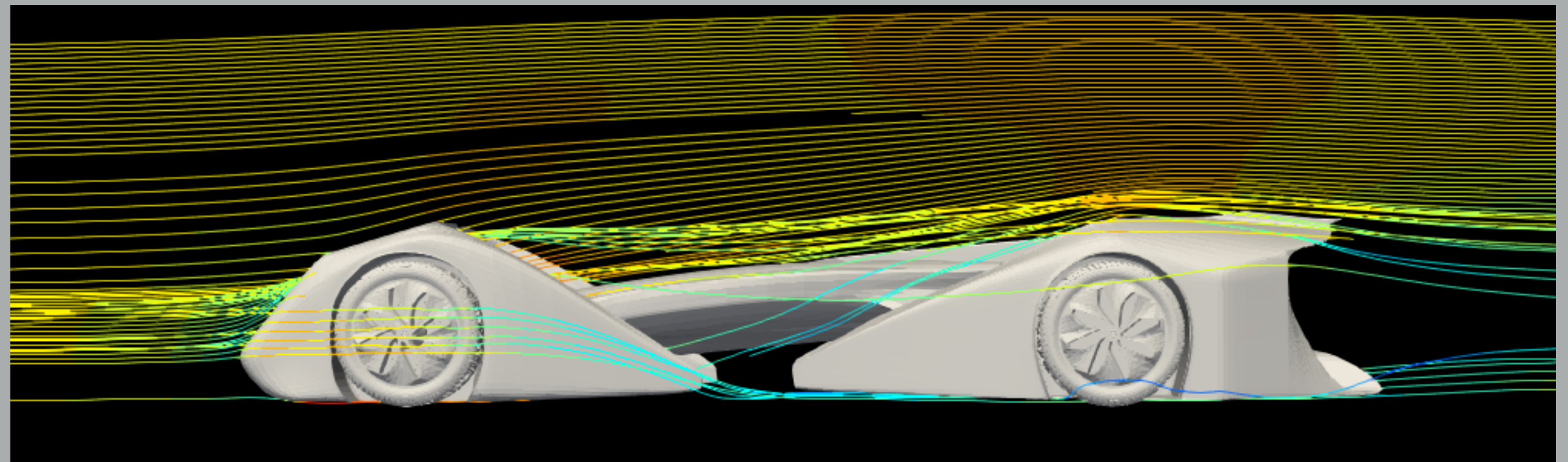
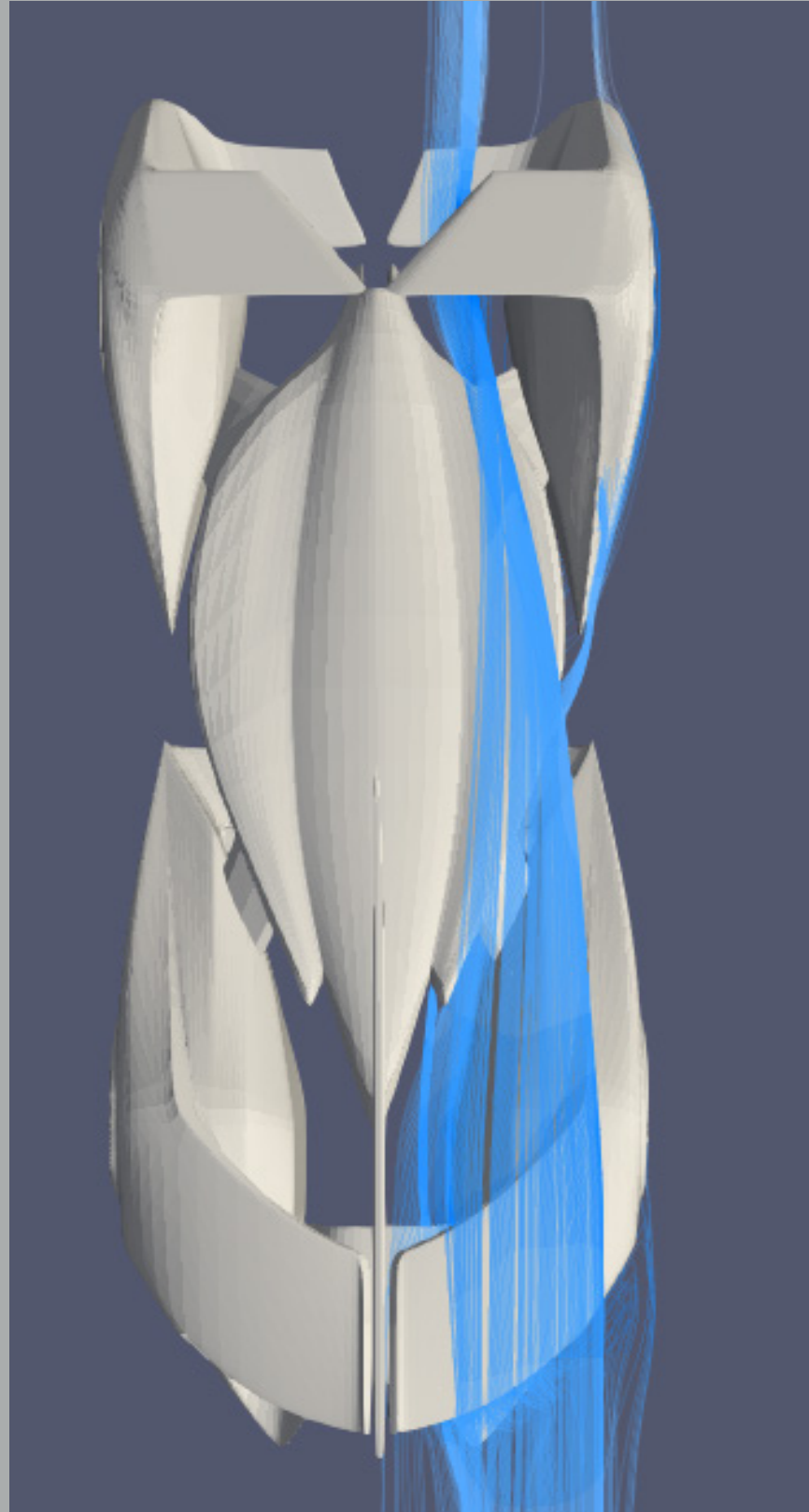


MAKING THE REAR FORM SHARPER TO IMPROVE THE OVERALL GRAPHICS ON THE MODEL



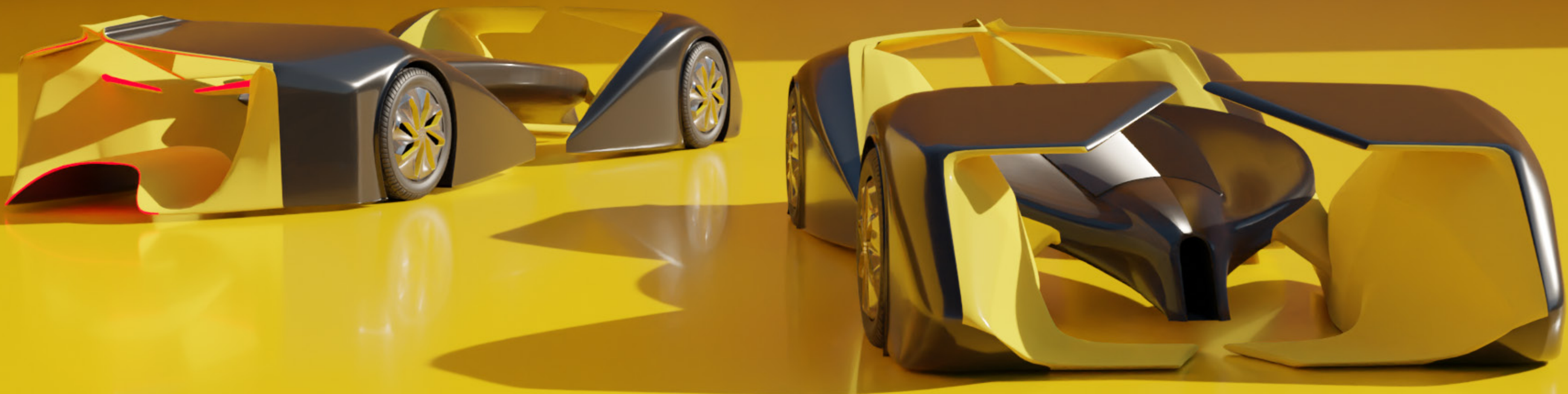
FINALISING SURFACES

AERODYNAMICS TEST



AFTER I HAD FINISHED MY BLENDER MODEL, I USED SIMFLOW TO CREATE A AERODYNAMIC FLOW TEST. USING THIS TEST I MADE SLIGHT CHANGES TO THE WING ANGELS TO FULLY OPTIMIZE THE FORM AS MUCH AS POSSIBLE

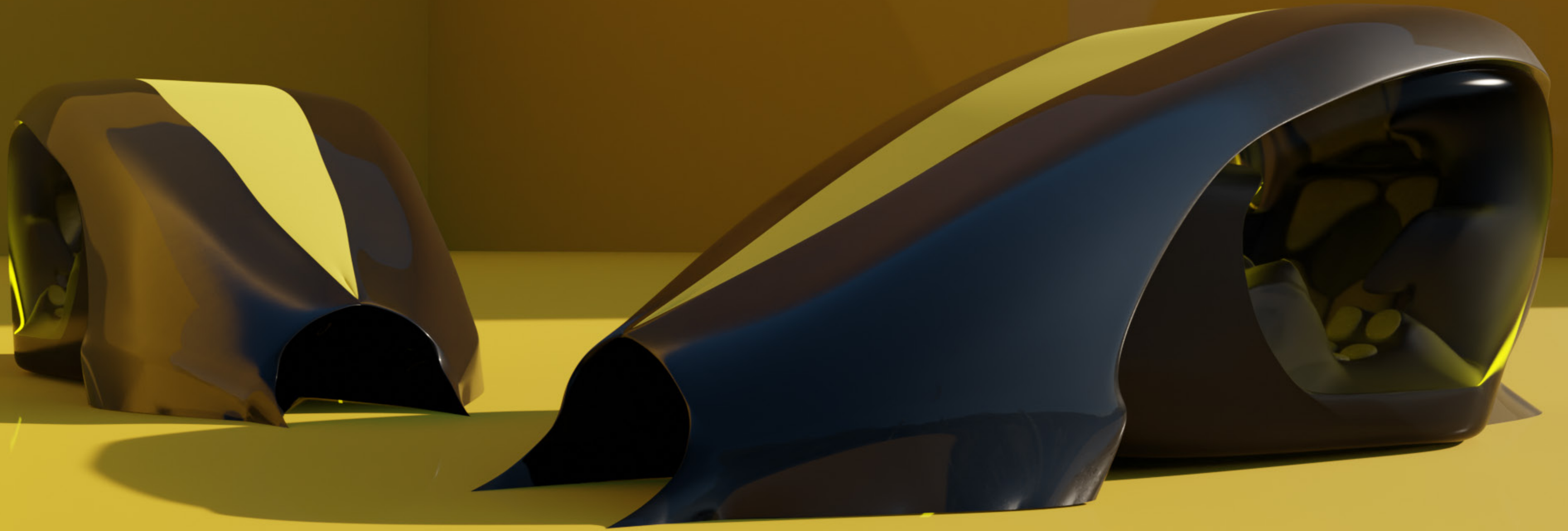
FINAL RENDER



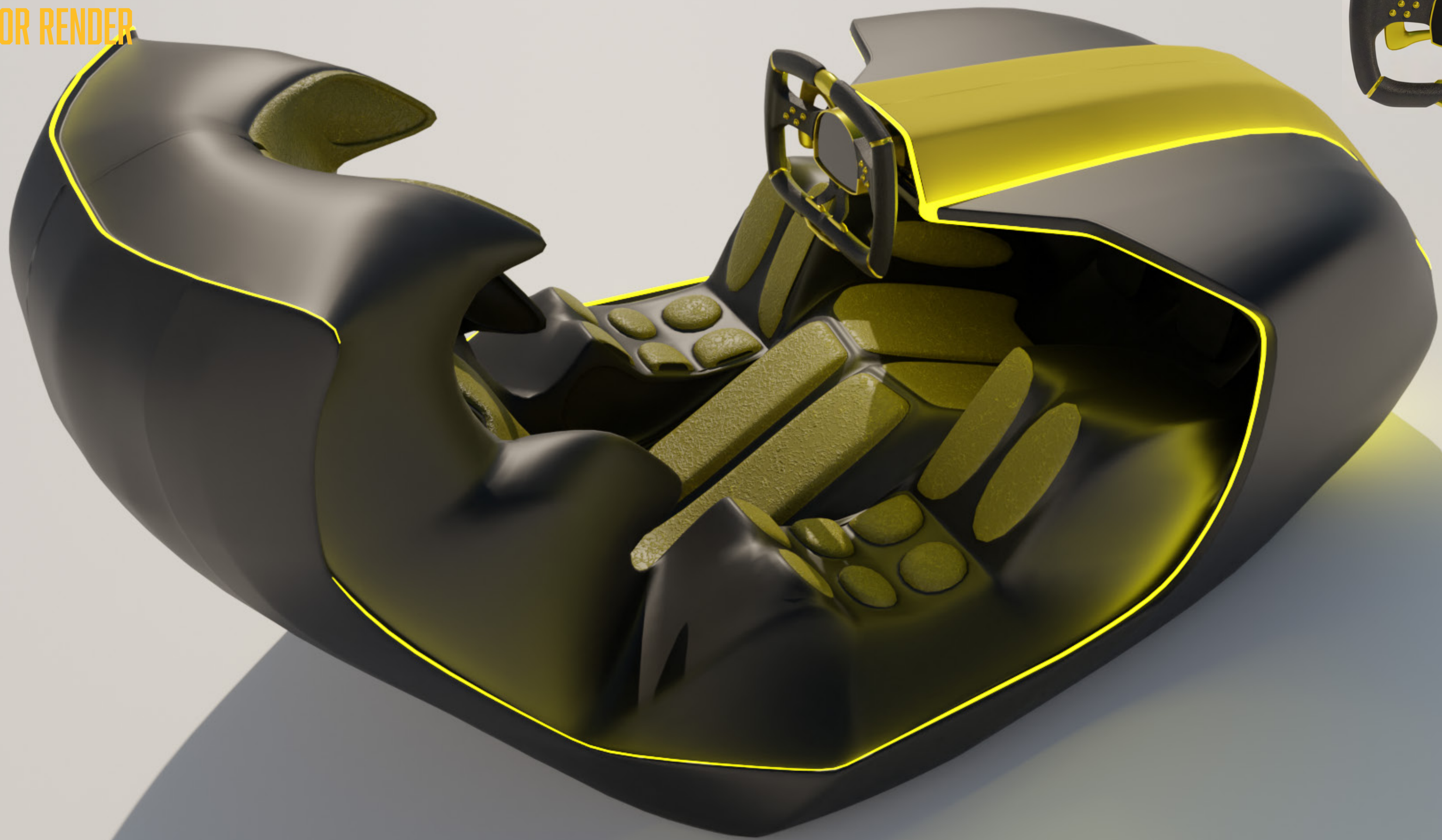
FINAL RENDER



POD FINAL RENDER



INTERIOR RENDER



FINAL CLAY MODEL

