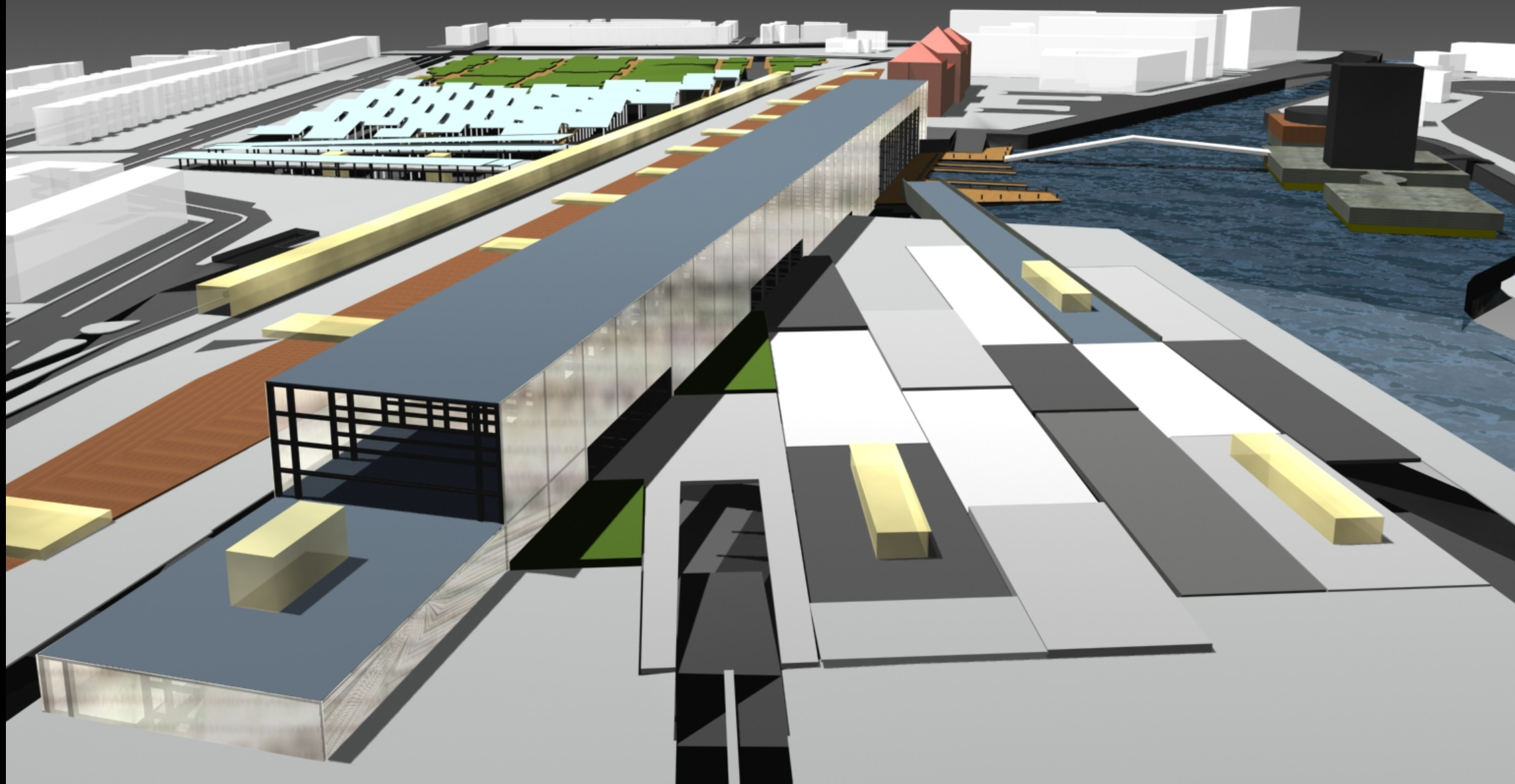


# GRONINGEN



**ESTACION CENTRAL**



# GRONINGEN

145 Km AL NORTE DE AMSTERDAM  
200.000 HABITANTES





# GRONINGEN



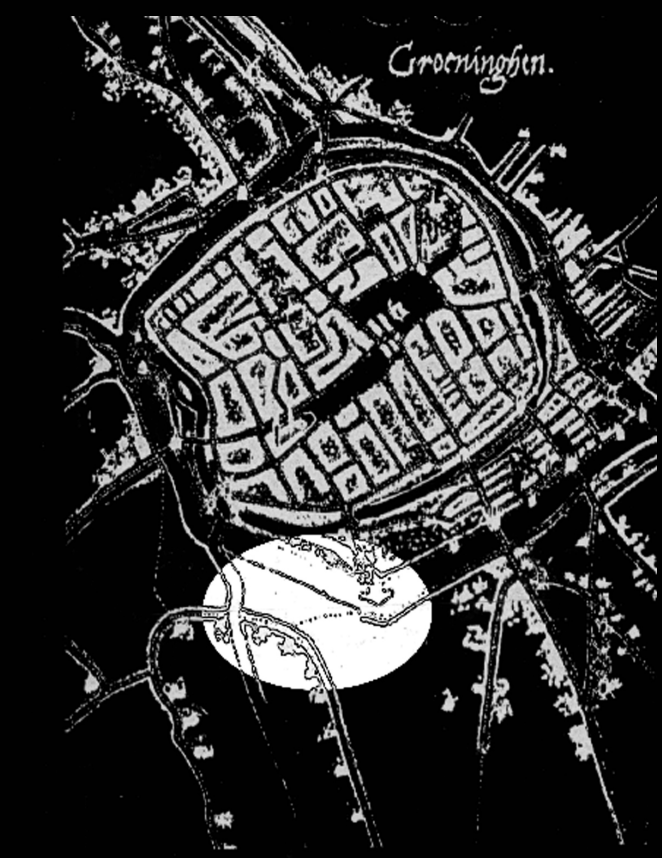






SG.XVI

CIUDAD MEDIEVAL



1565



# SG.XVII. CIUDAD AMURALLADA





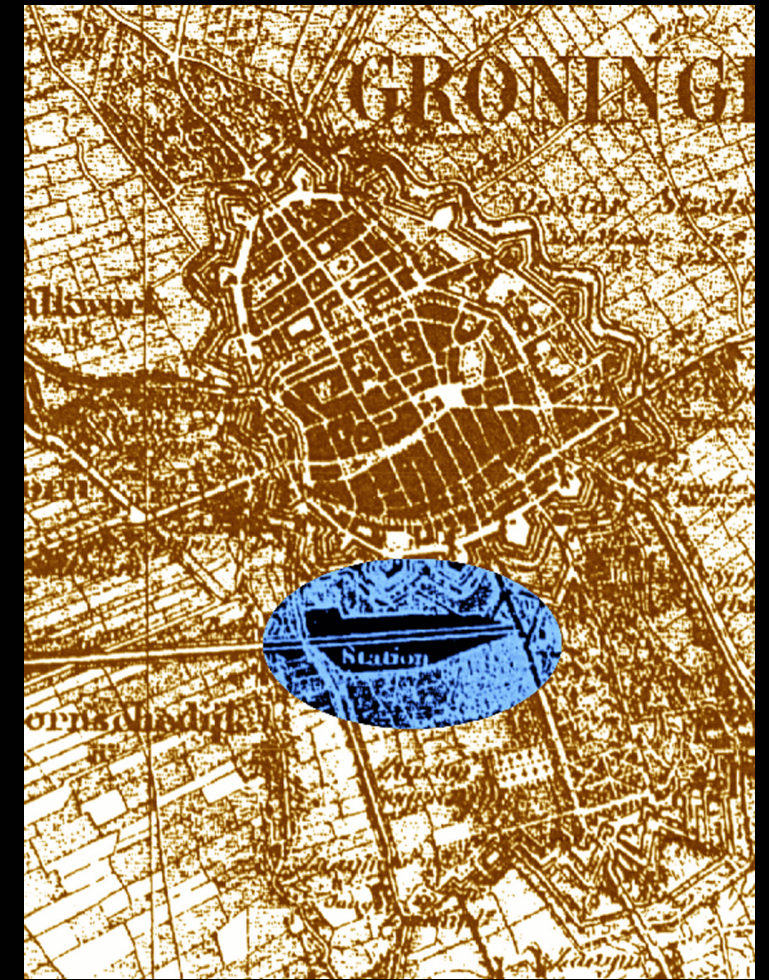
# FOTO AEREA







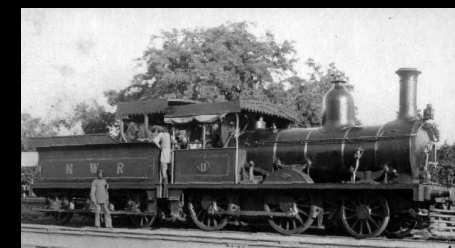
1868



1864



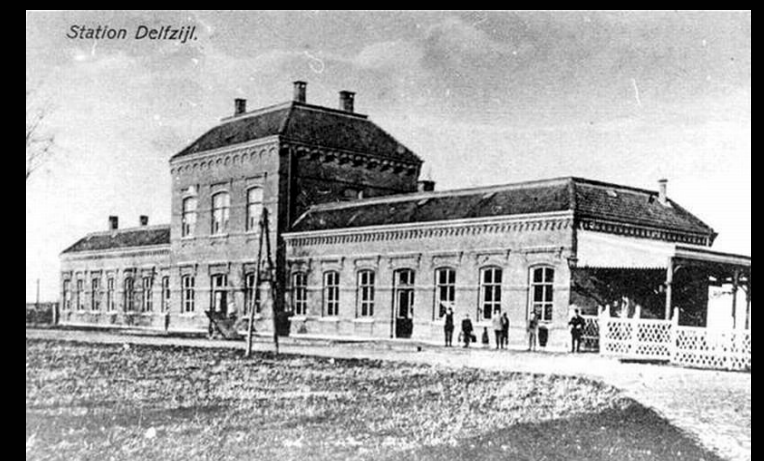
# LA PRIMERA ESTACION





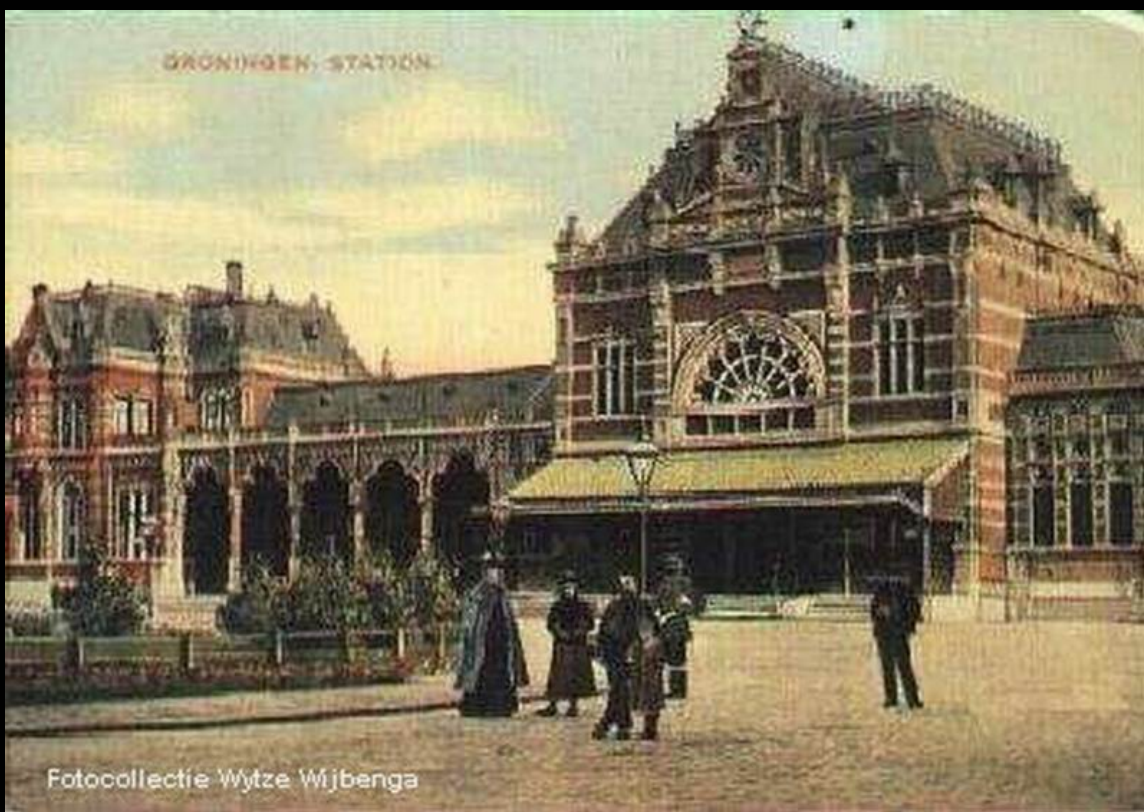
# SEGUNDA ESTACION

1876





# TERCERA ESTACION



Fotocollectie Wytze Wijbenga

1893



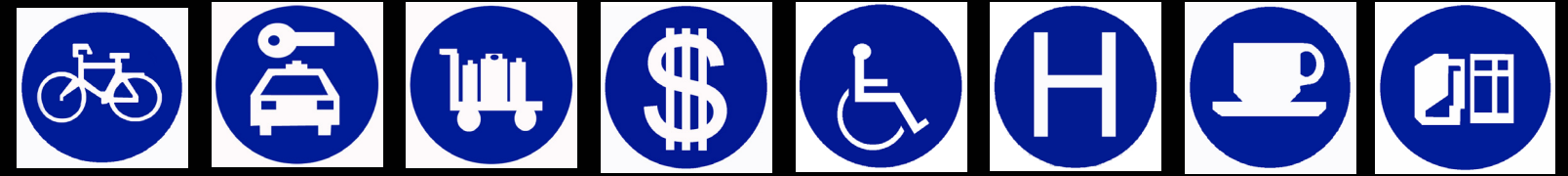


# PRINCIPIOS DEL siglo XX





# EL TRANSPORTE MULTIMODAL



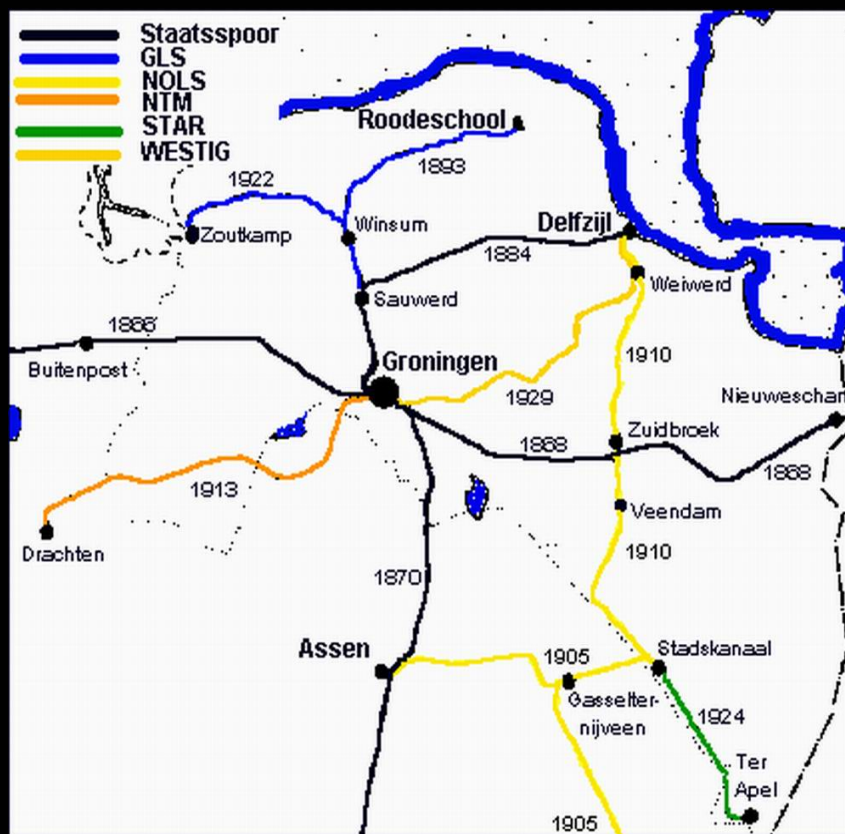
Seguridad, facilidad de acceso, velocidad, eficiencia, empleo, etc



ALTA VELOCIDAD







### Vertrek van de treinen

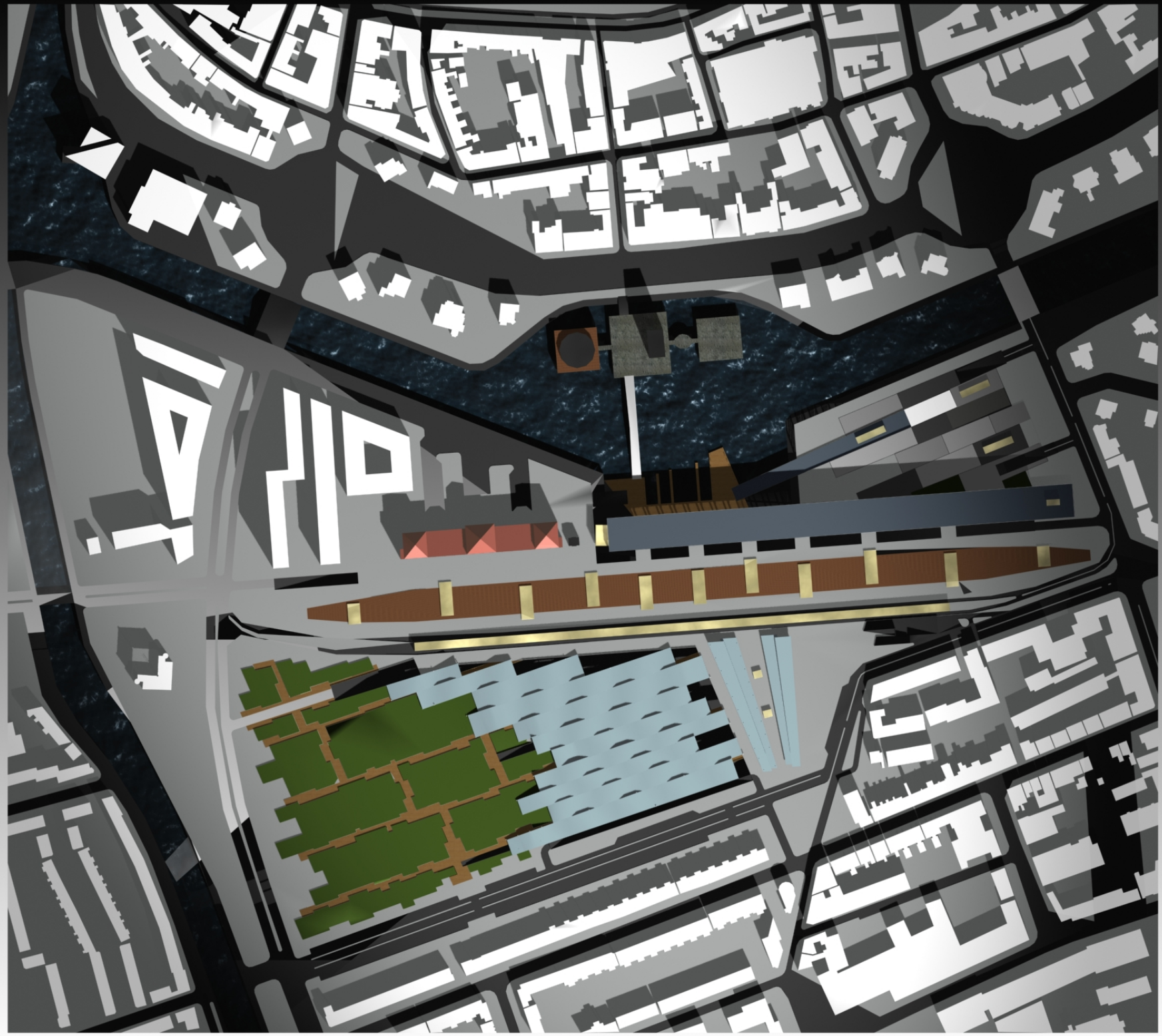
tijd	naar	spoor	treinsoort	via	opmerkingen
11 15	Heerlen	7a/b	Intercity	Dordrecht - Eindhoven - Sittard	
11 15	Amsterdam Centraal	8a/b	sneltrein	Den Haag HS - Haarlem	
11 17	Arnhem	11a/b	sneltrein	Gouda - Utrecht Centraal	
11 19	Woerden	13a/b	stoptrein	Gouda	
11 20	Breda	6a/b	sneltrein	Dordrecht	
11 24	Brussel Zuid	1a/b	Internationale sneltrein	Dordrecht - Roosendaal	
11 24	Den Haag Centraal	9a/b	Intercity	Den Haag HS	
11 26	Maassluis West	3a/b	stoptrein		
11 31	Roosendaal	7a/b	stoptrein	Dordrecht	
11 31	Amsterdam Centraal	9a/b	Intercity	Den Haag HS - Schiphol +	
11 33	Dordrecht	6a/b	Intercity		
11 34	Den Haag Centraal	8a/b	stoptrein	Den Haag HS	
11 37	Leeuwarden / Groningen	9a/b	Intercity	Utrecht C - A'tert - Zwolle	
11 41	Hoek van Holland Strand	3a/b	stoptrein	Vlaaringen - Massada	
11 42	Amsterdam Centraal	9a/b	Internationale sneltrein	Den Haag HS - Schiphol +	
11 43	R'dam Lombardijen	7a/b	stoptrein		
11 45	Amsterdam Centraal	8a/b	sneltrein	Den Haag HS - Haarlem	
11 45	Venlo	6a/b	Intercity	Dordrecht - Delft - Tilburg	
11 47	Arnhem	12a/b	sneltrein	Gouda - Utrecht Centraal	
11 49	Amsterdam Centraal	14b/c	stoptrein	Gouda	
11 50	Dordrecht	6a/b	sneltrein		
11 50	Den Haag Centraal	9a/b	Intercity	Den Haag HS	
11 53	Leiden Centraal	8a/b	stoptrein	Den Haag HS	
11 56	Maassluis West	3a/b	stoptrein		



# ESTACION INTERMODAL EN GRONINGEN







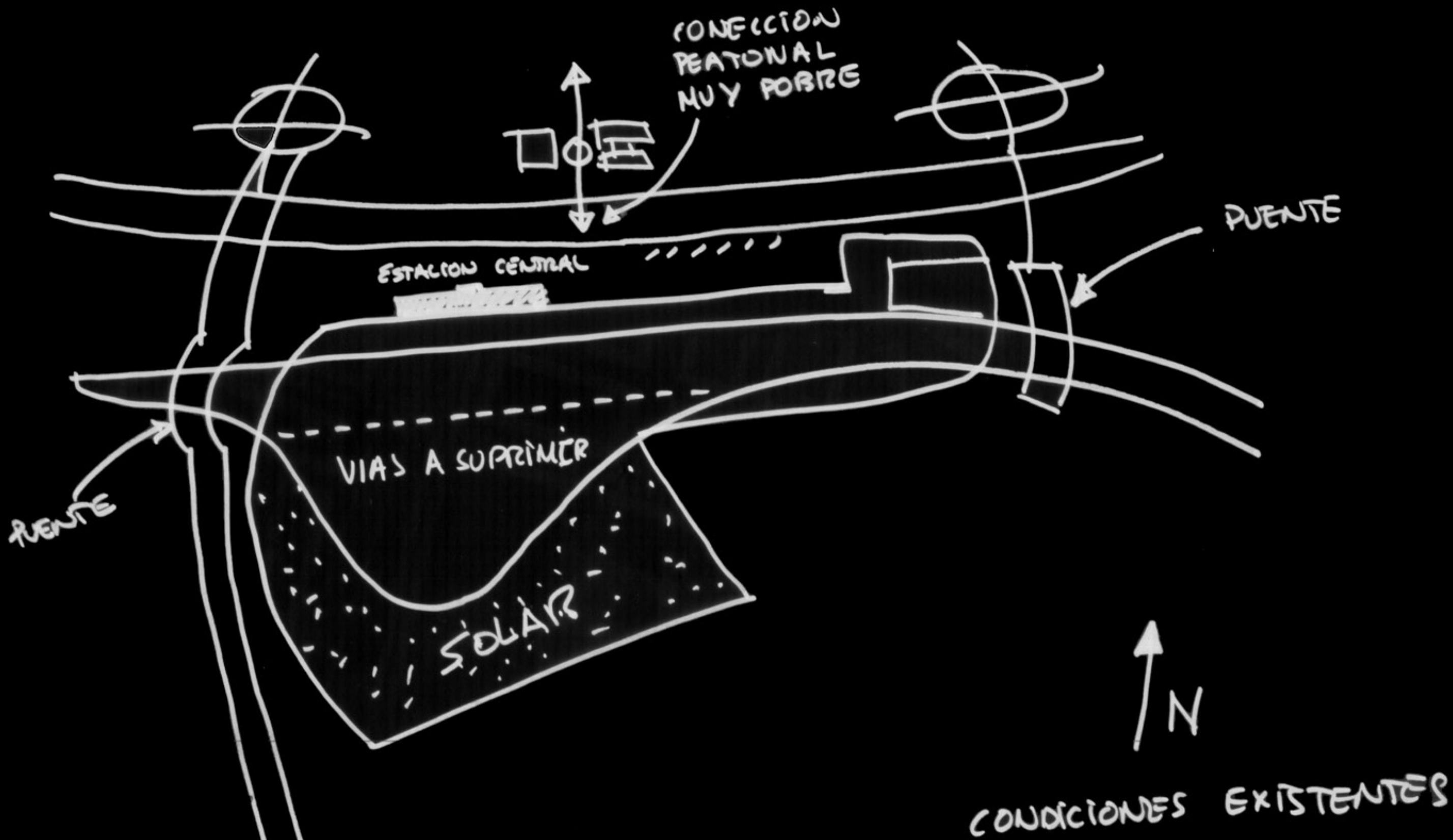








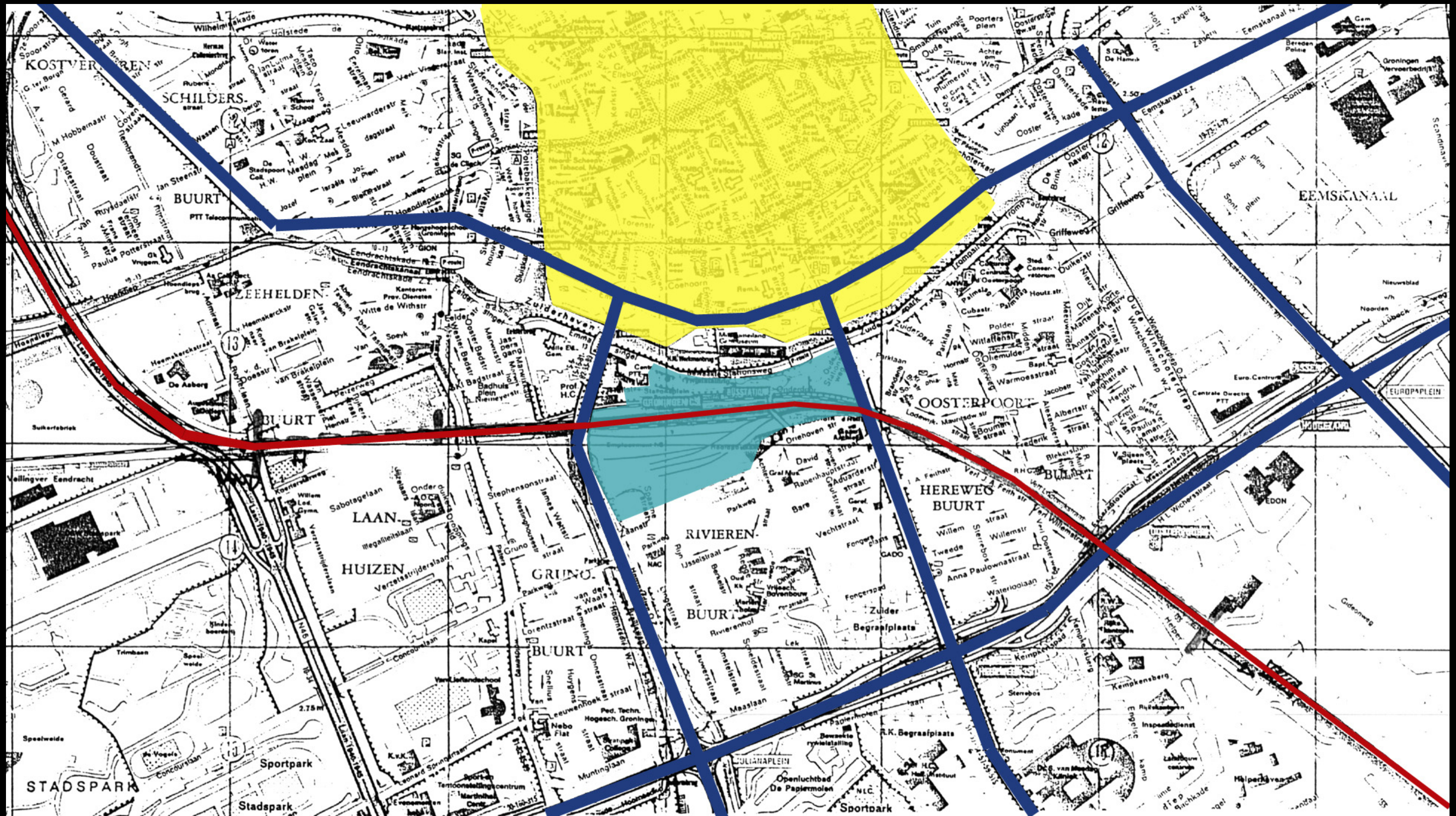




VIA PRINCIPAL  
(RODADIA)

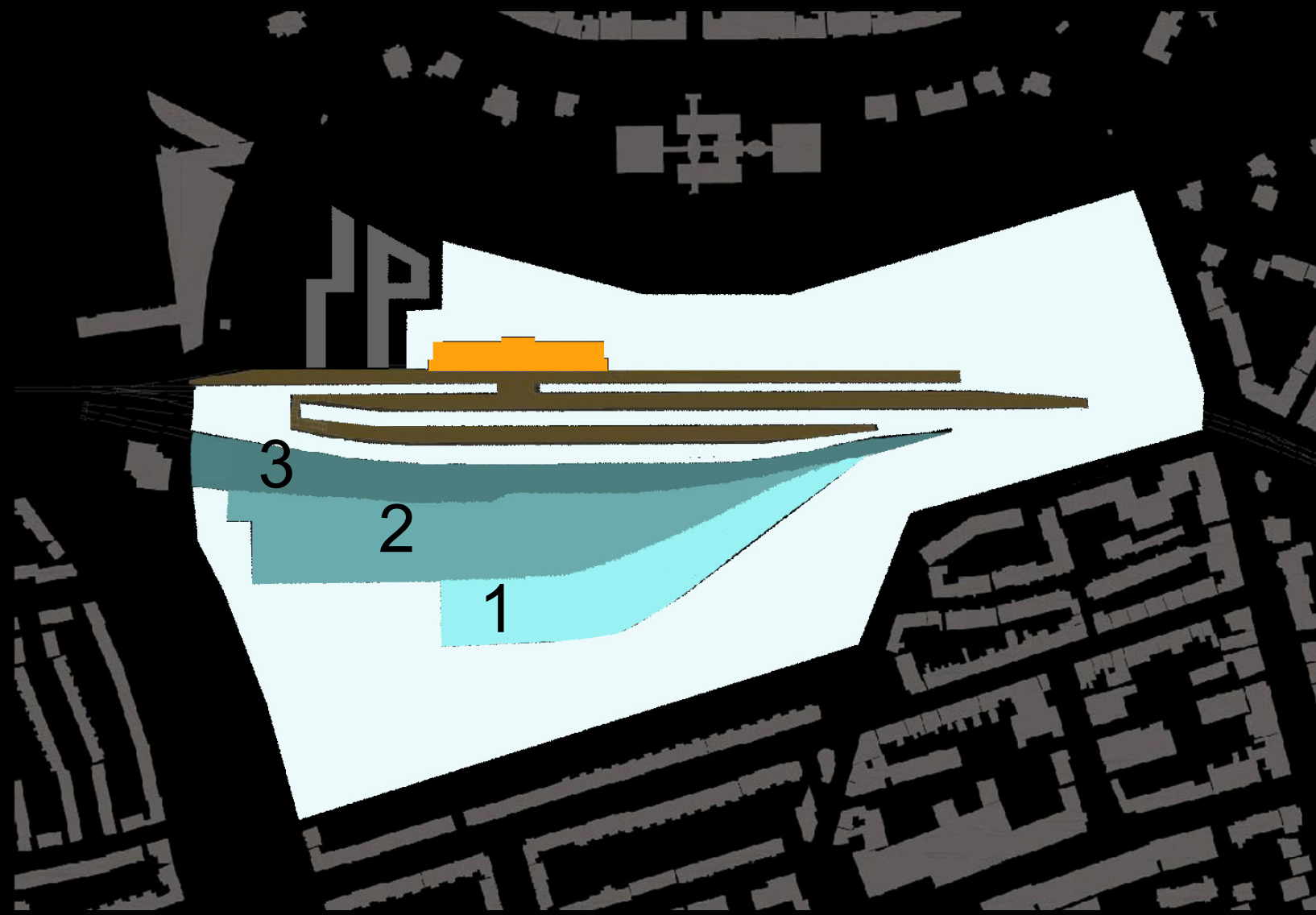
- = M<sup>2</sup>
- = LIMITES DEL SOLAR?
- = RELACIONES ENTRE CENTRO Y NUEVO DESARROLLO
- = CONDICION DEL SOLAR.





# VIARIO RODADO PRINCIPAL



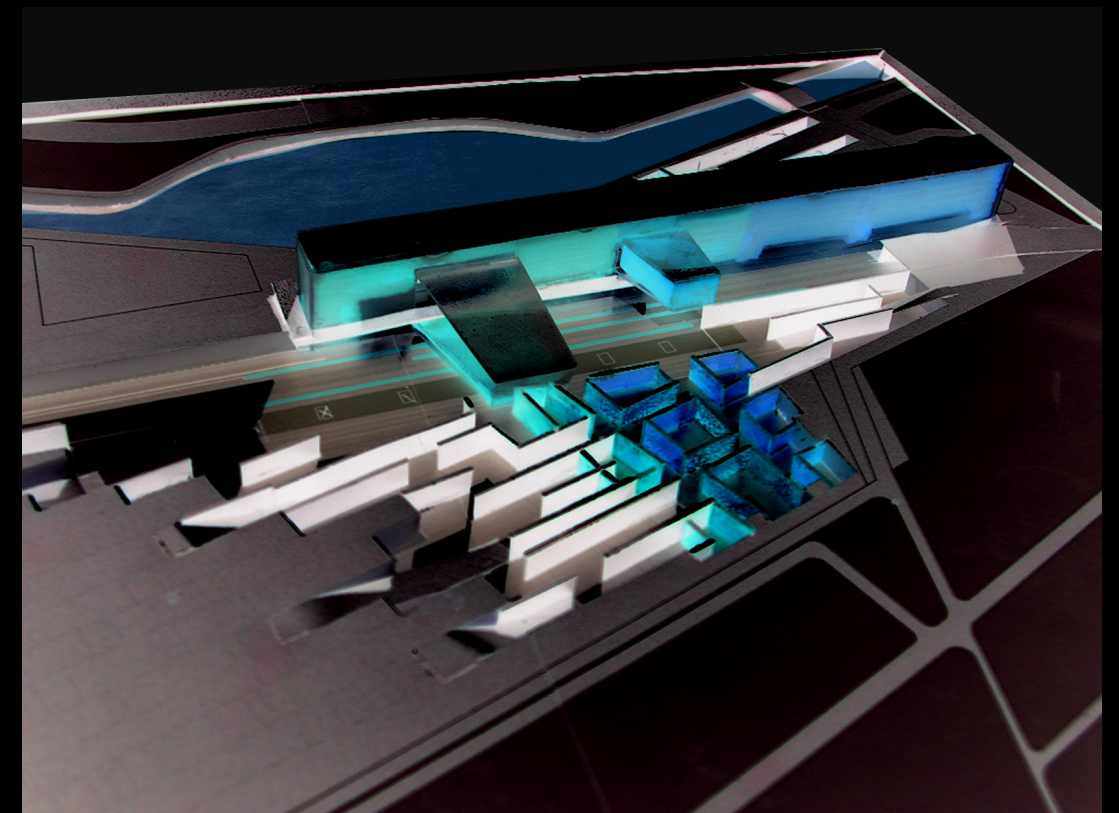
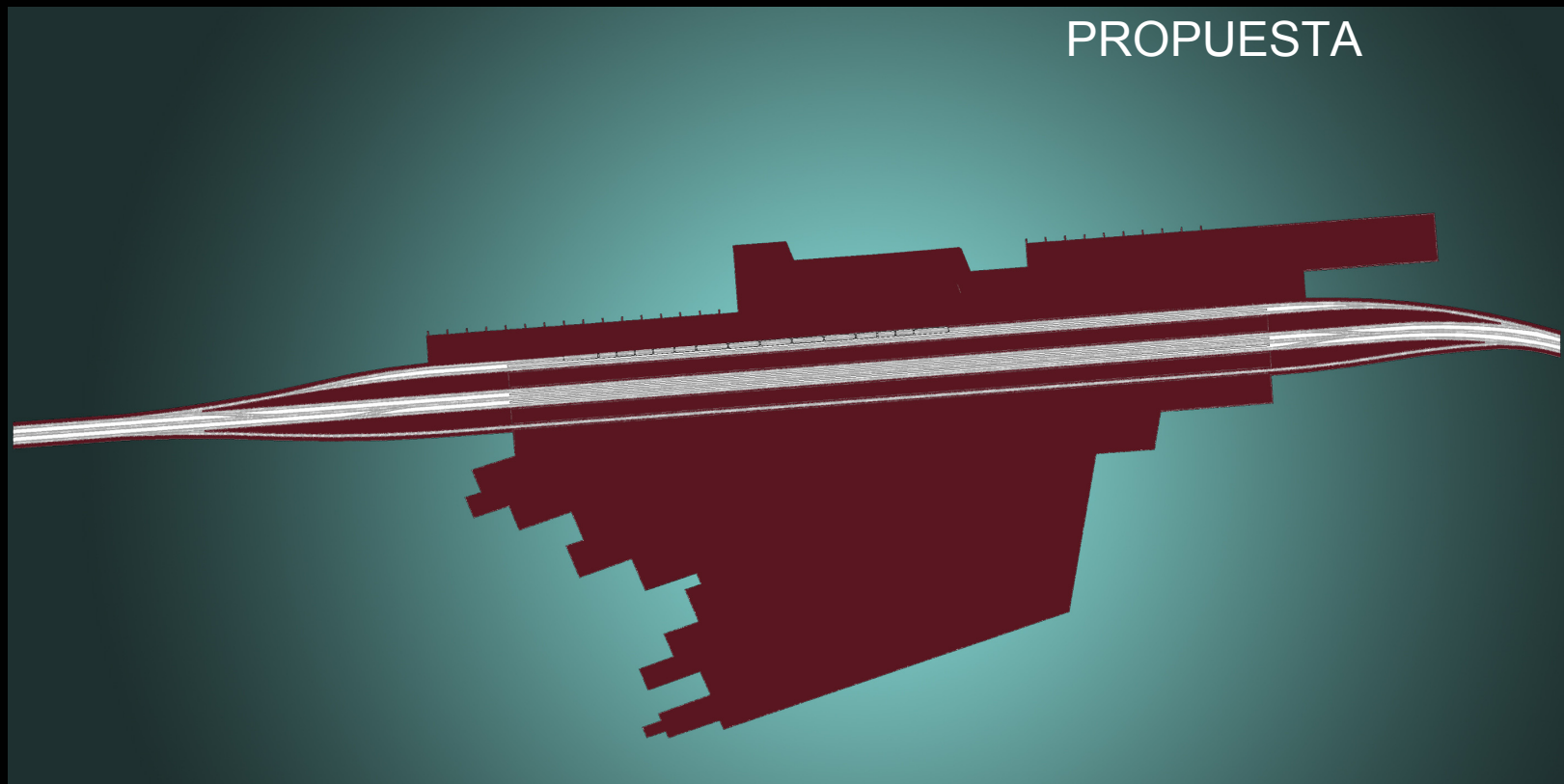


REDUCCION DEL NUMERO DE VIAS

VIAS DE LA  
PROPUESTA



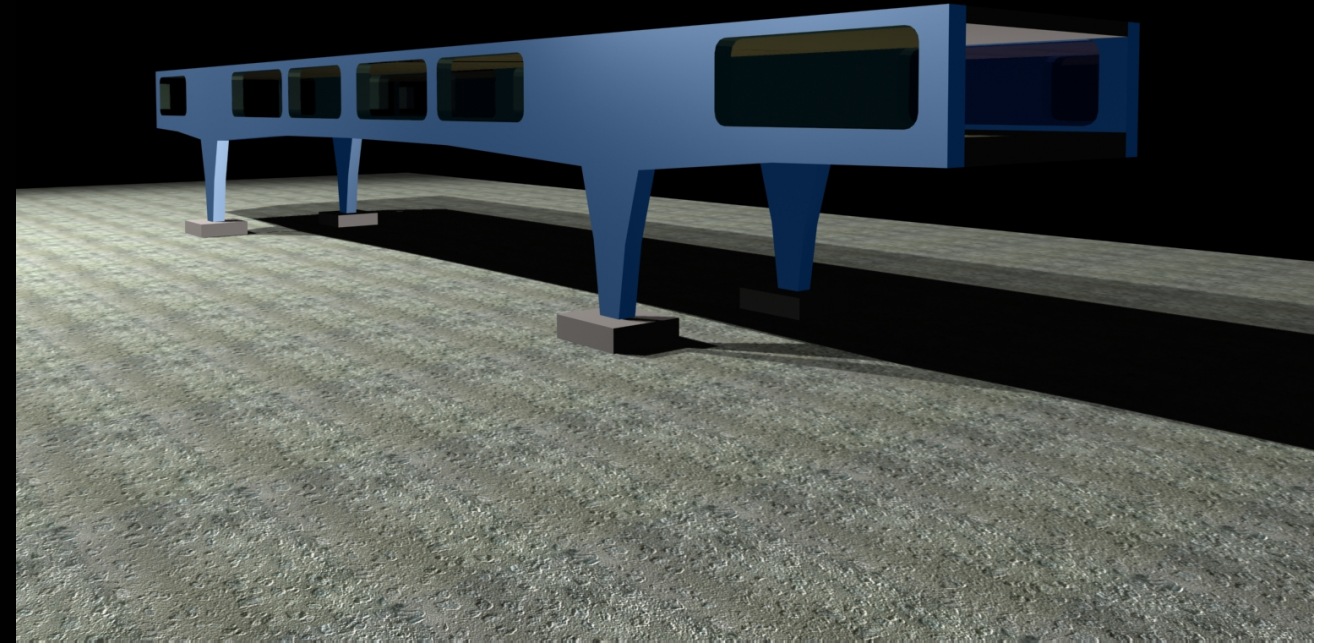
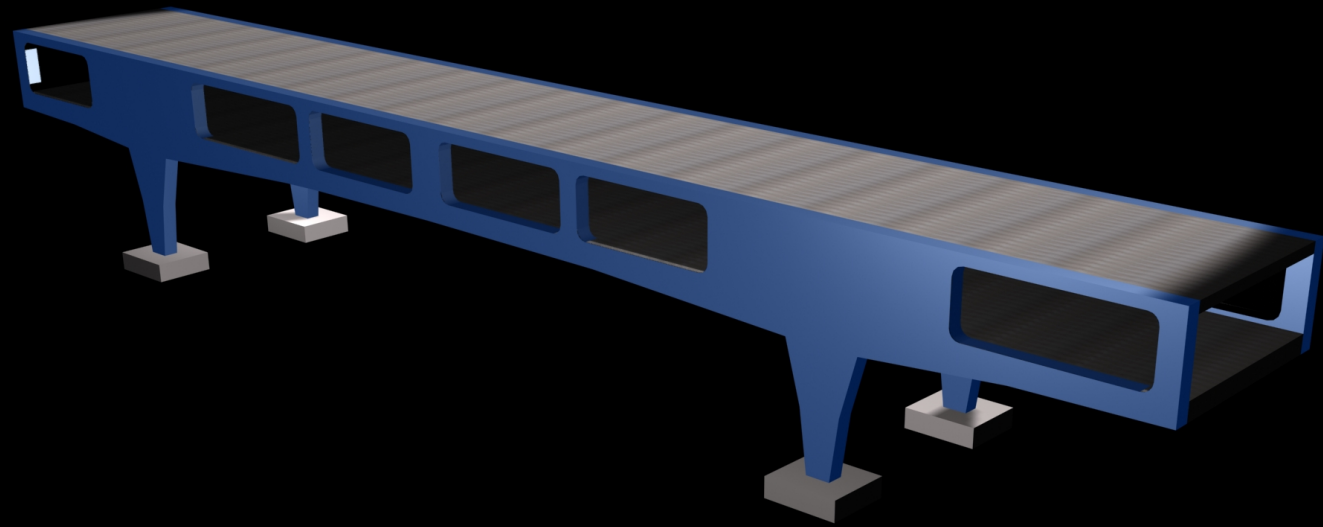
AREA DE  
ACTUACION





GRONINGEN  
CENTRAL STATION





ESQUEMA ESTRUCTURAL

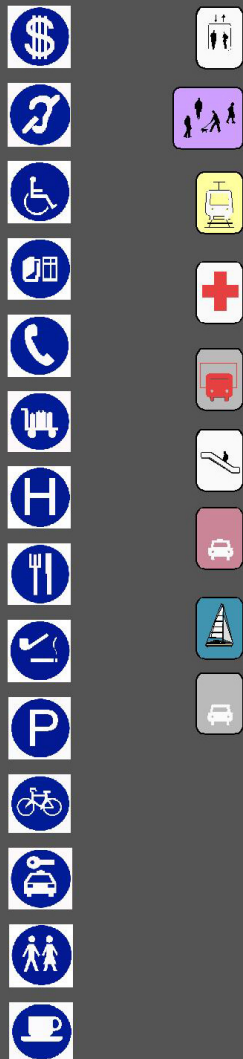




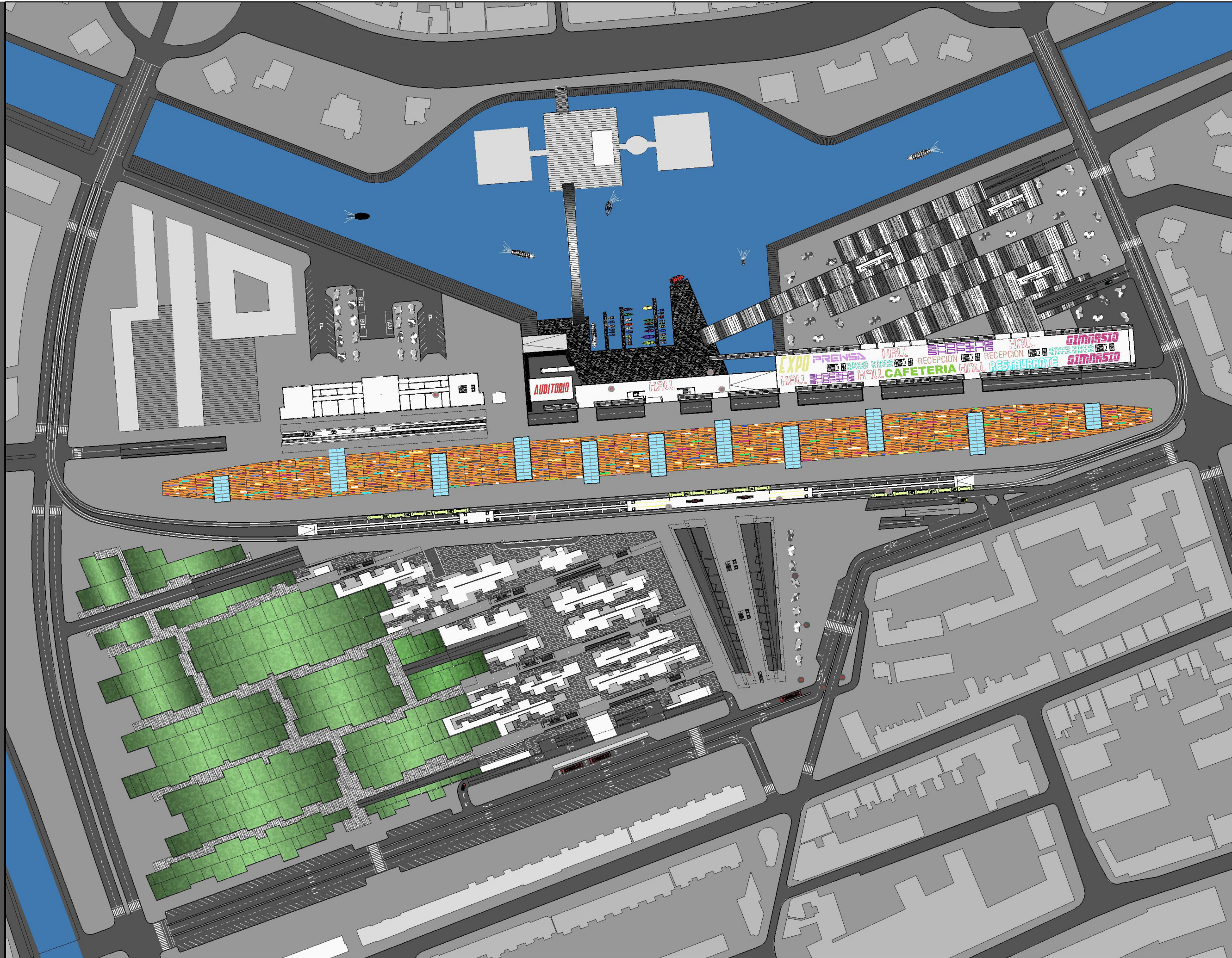


PFC

JOSE ROBERTO PIS MARTIN  
TUTOR:  
JUAN RAMIREZ GARCES  
CONSULTOR DE ESTRUCTURAS:  
HUGO F. VENEURA, RODRIGUEZ  
CONSULTOR DE CONSTRUCCION:  
FRANCISCO CARTEGA ANDARKE  
CONSULTOR EN INGENIERIA:  
RONALD AL. YIN DUVENIDOK

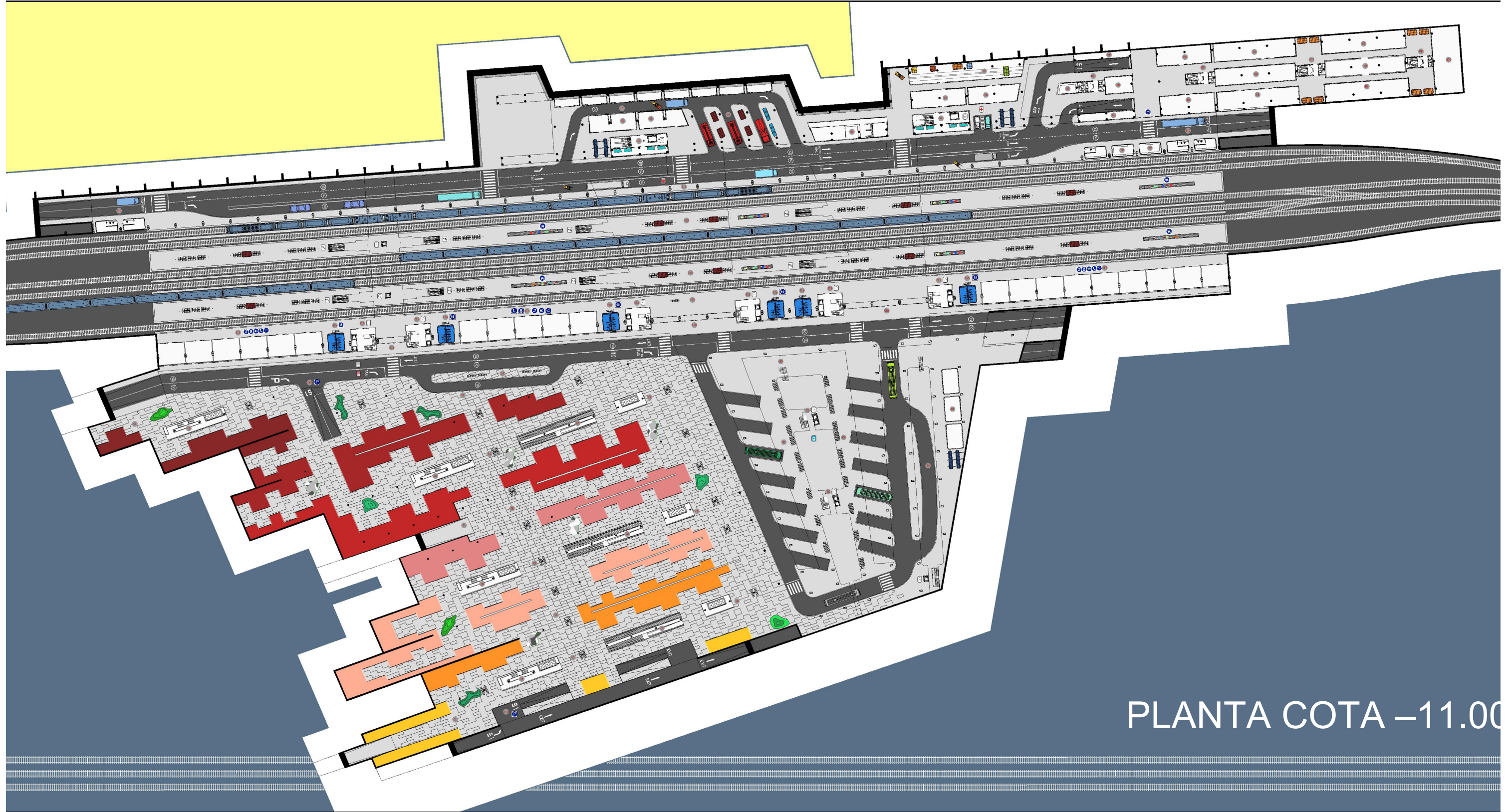


NIVEL 0  
ESCALA 1/1000

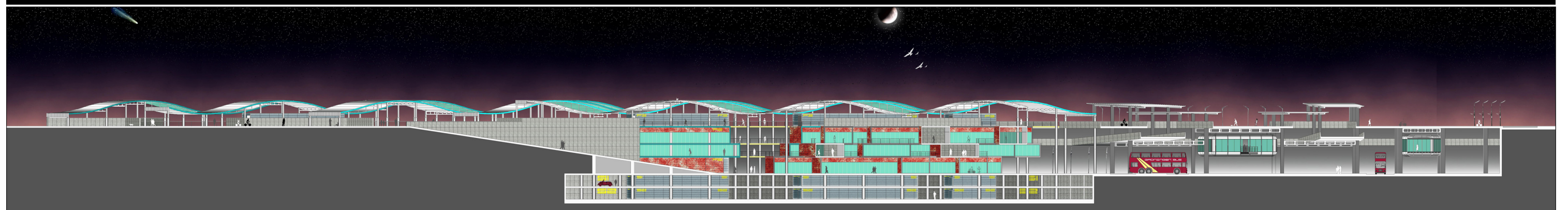


Planta cota +0.00





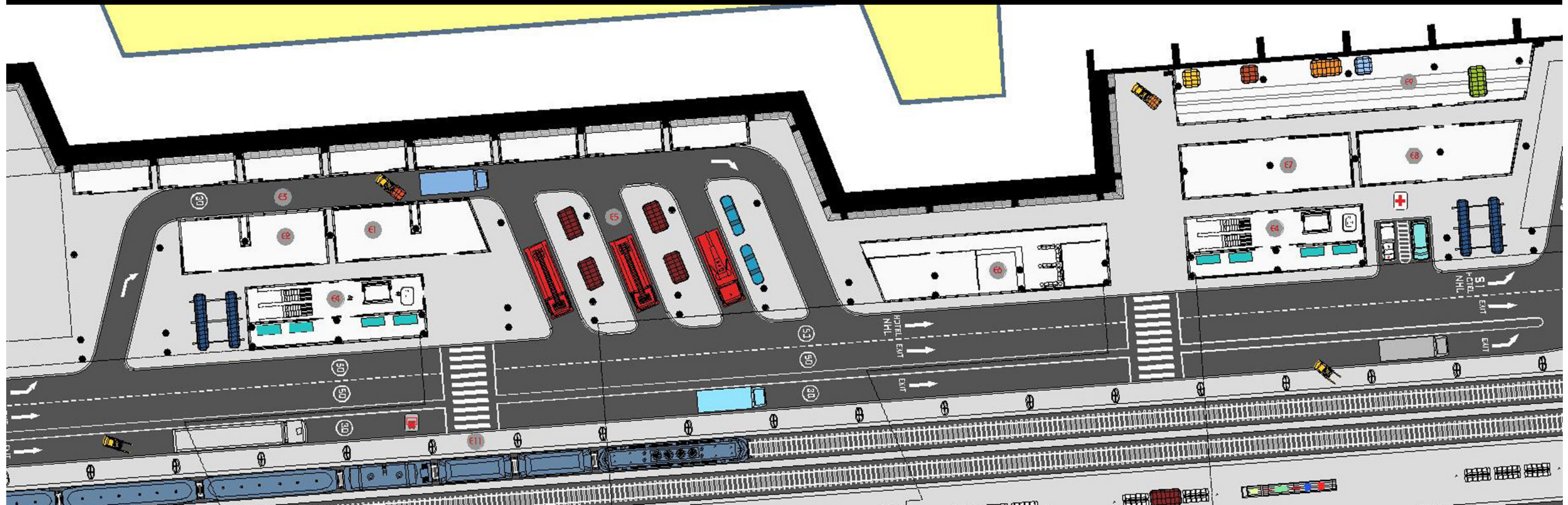
PLANTA COTA -11.00







# MERCANCIAS Y SERVICIOS DE LA ESTACION

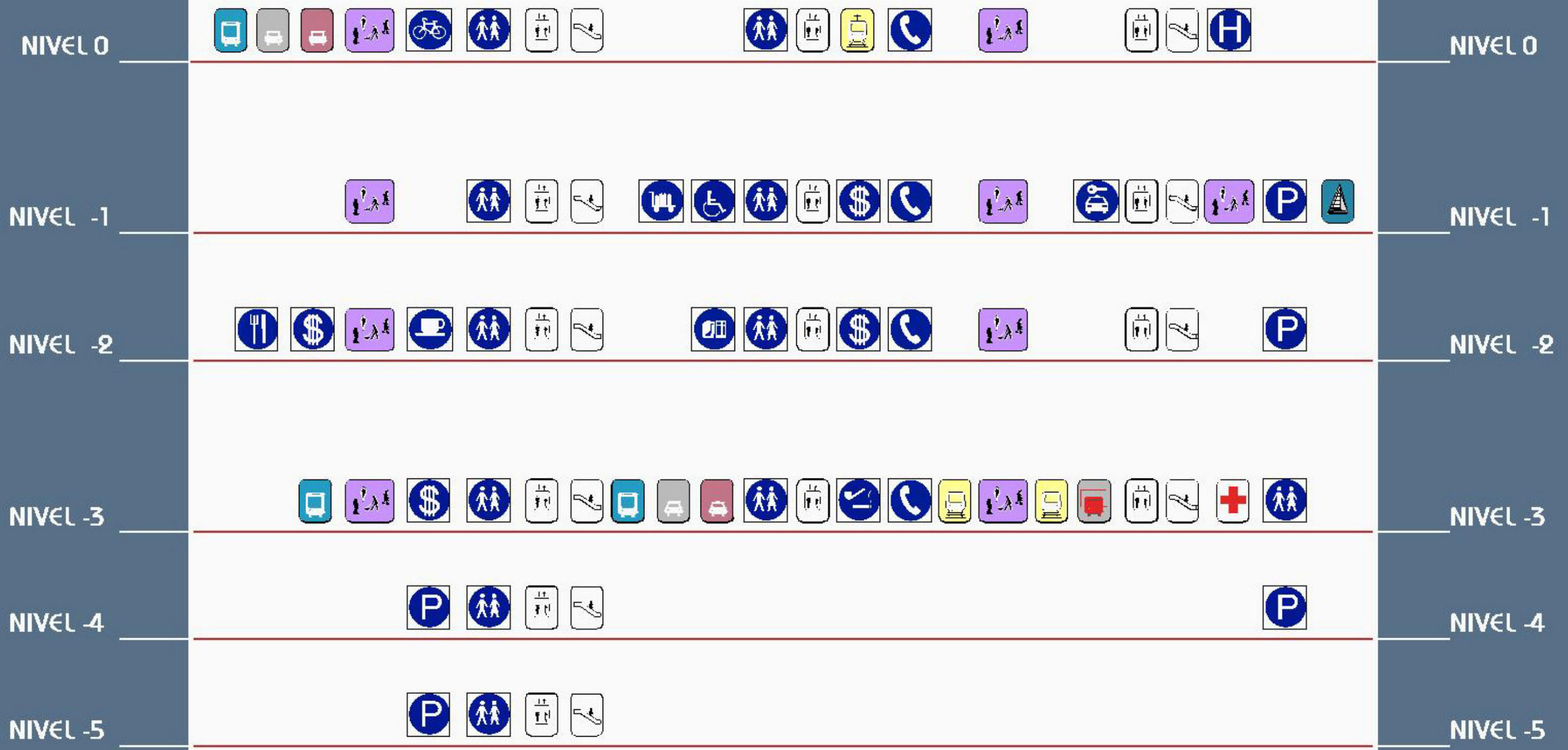




CENTRO COMERCIAL

ESTACIÓN CENTRAL

HOTEL

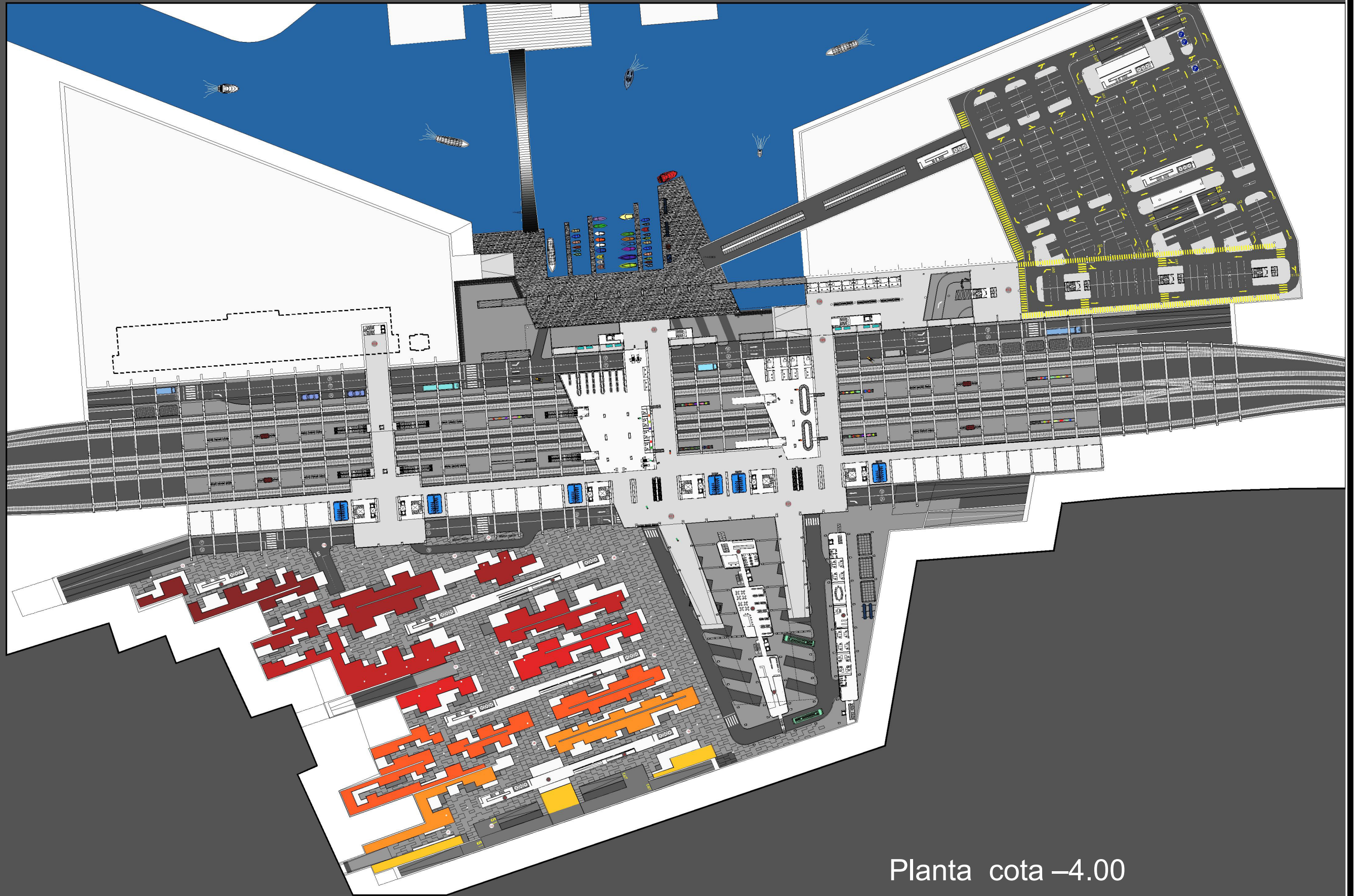


ESQUEMA FUNCIONAL DE USOS

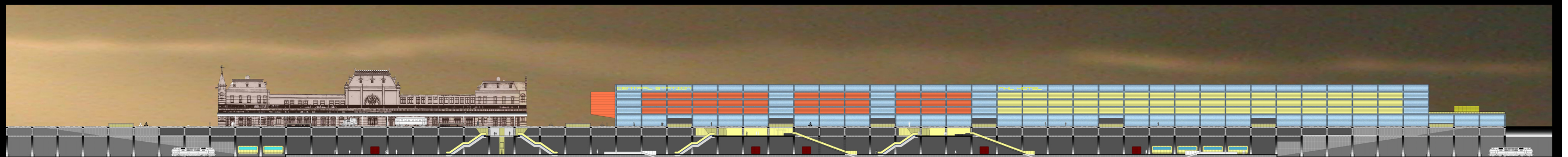
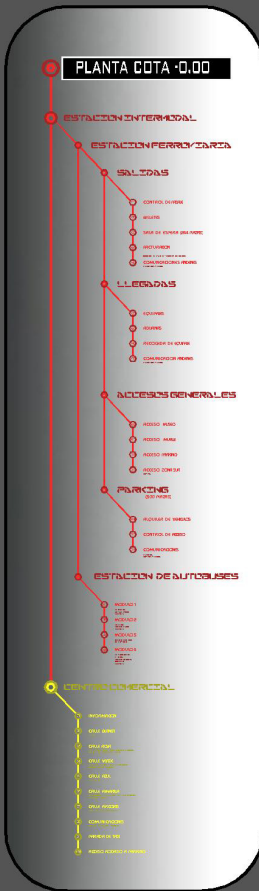


**PFC**

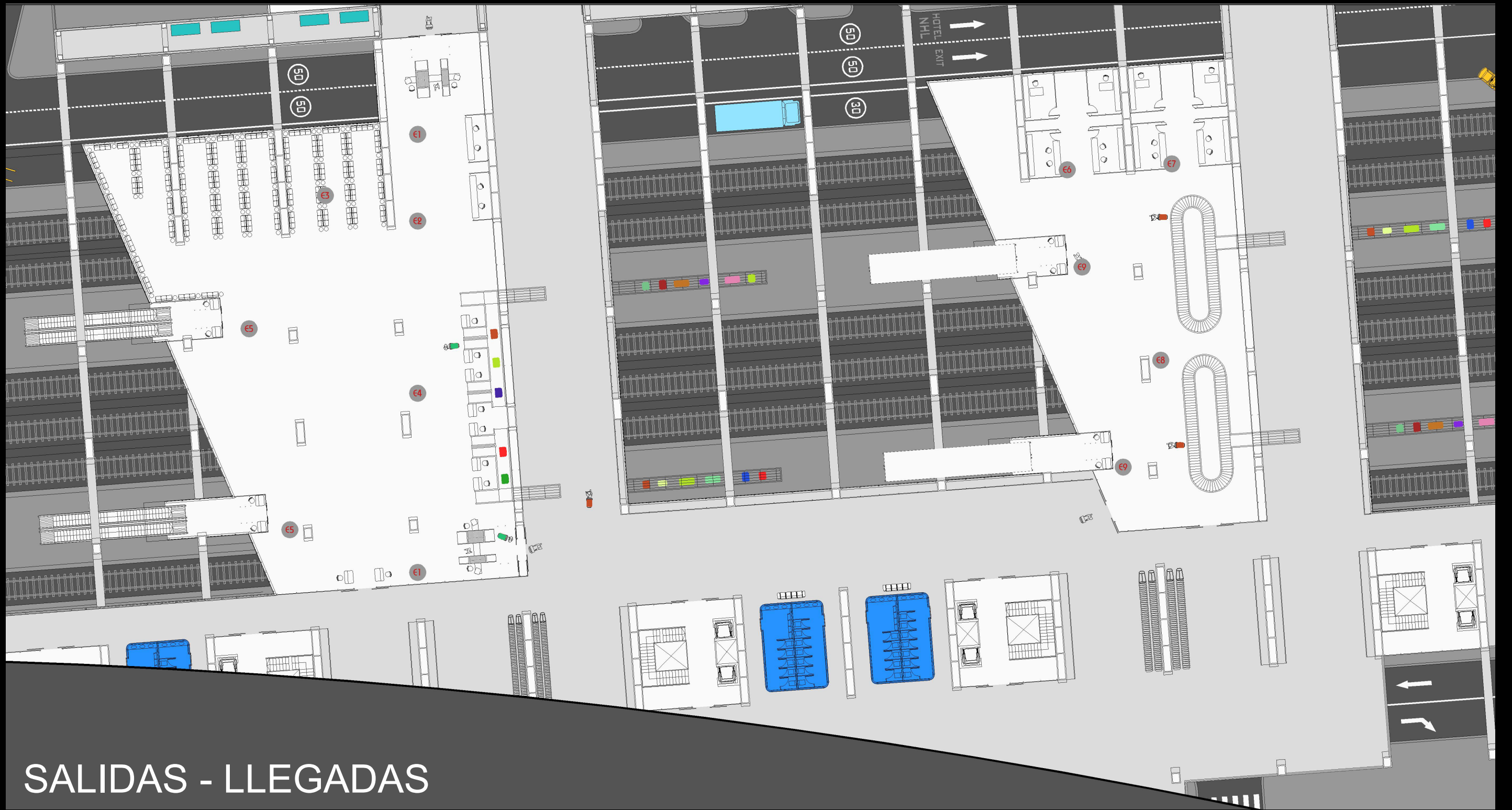
JOSE ROBERTO PHEL MARTIN  
 TUTOR: JUAN RIVERA GARCIA  
 CONSEJEROS DE ESTRUCTURAS: HUGO A. WENTURA - RODRIGUEZ  
 CONSEJEROS DE COORDINACION: FERNANDO ORTEGA ANDRADA  
 CONSEJEROS EN INGENIERIA: ROBERTO M. VILA DELVANDER



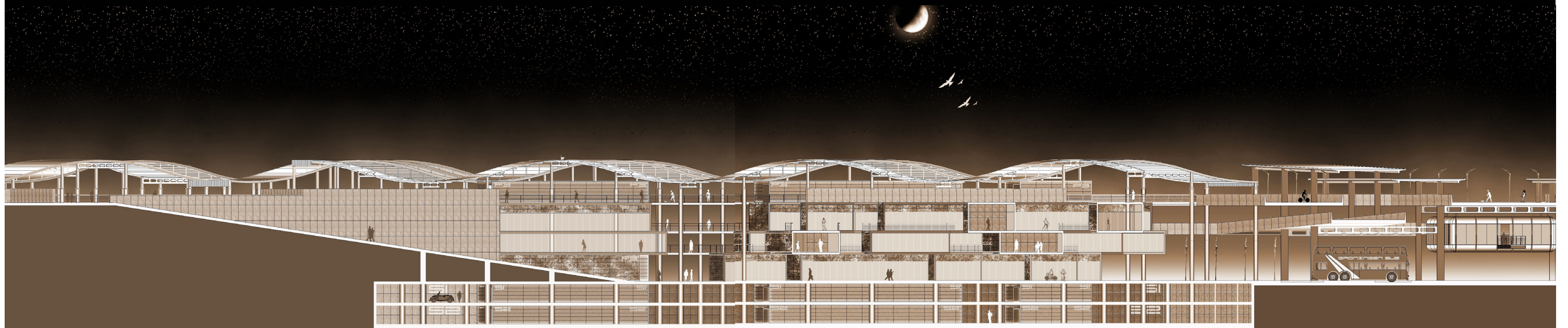
Planta cota -4.00





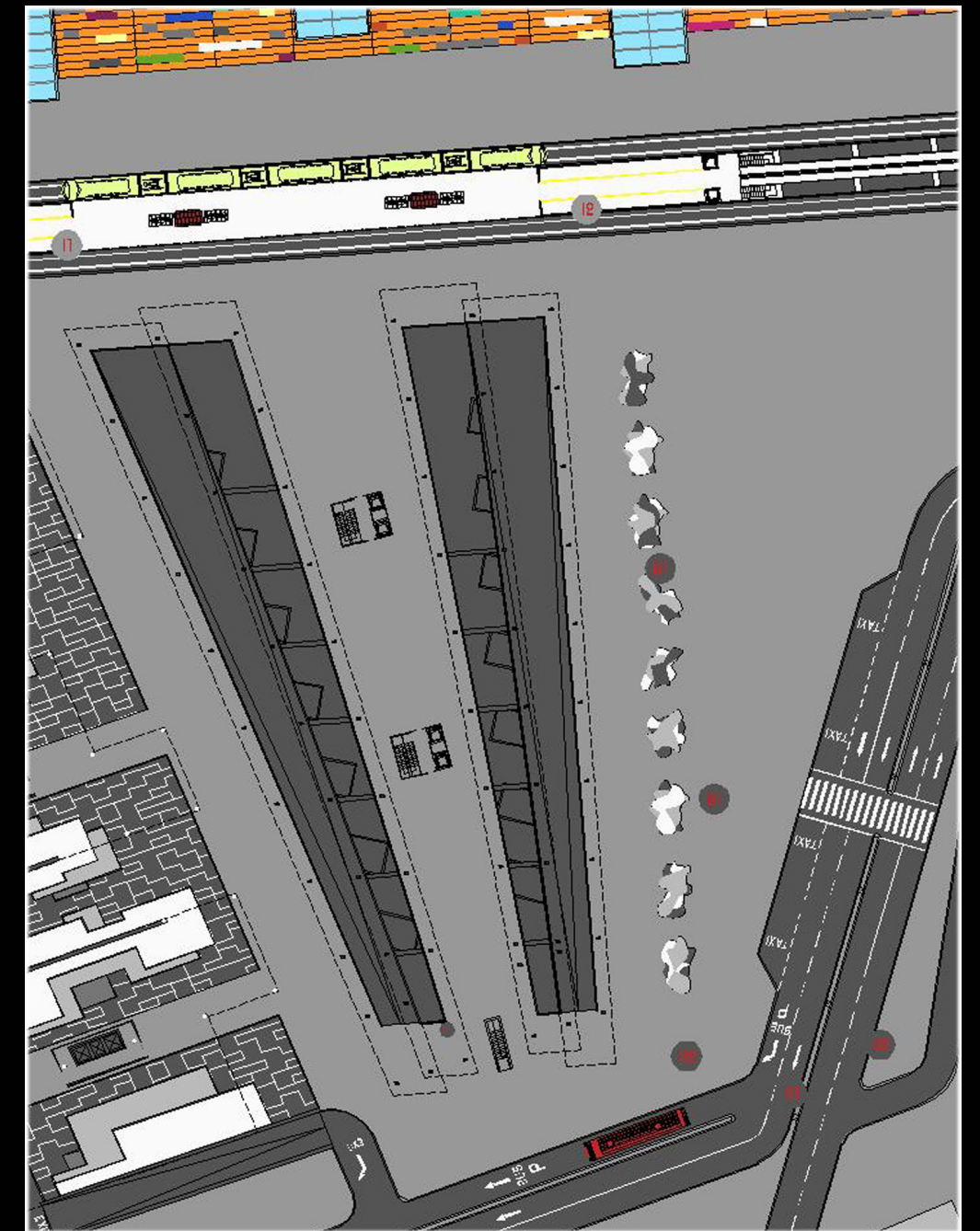


SALIDAS - LLEGADAS

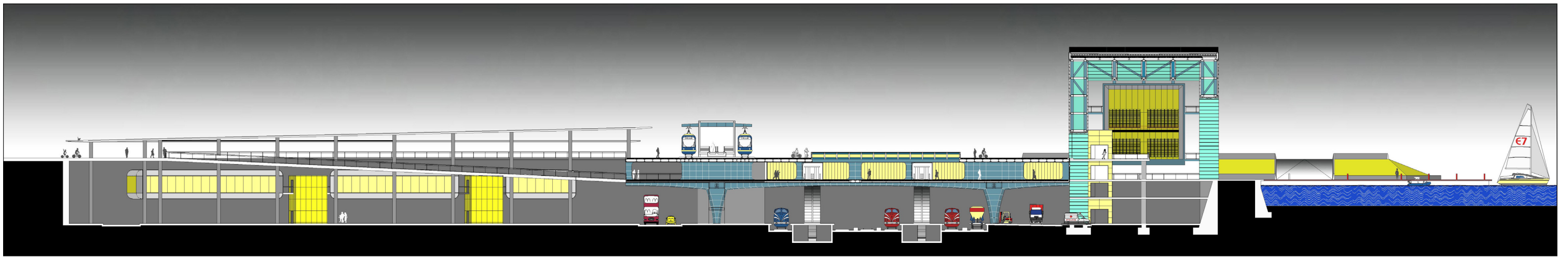




# TERMINAL DE AUTOBUSES

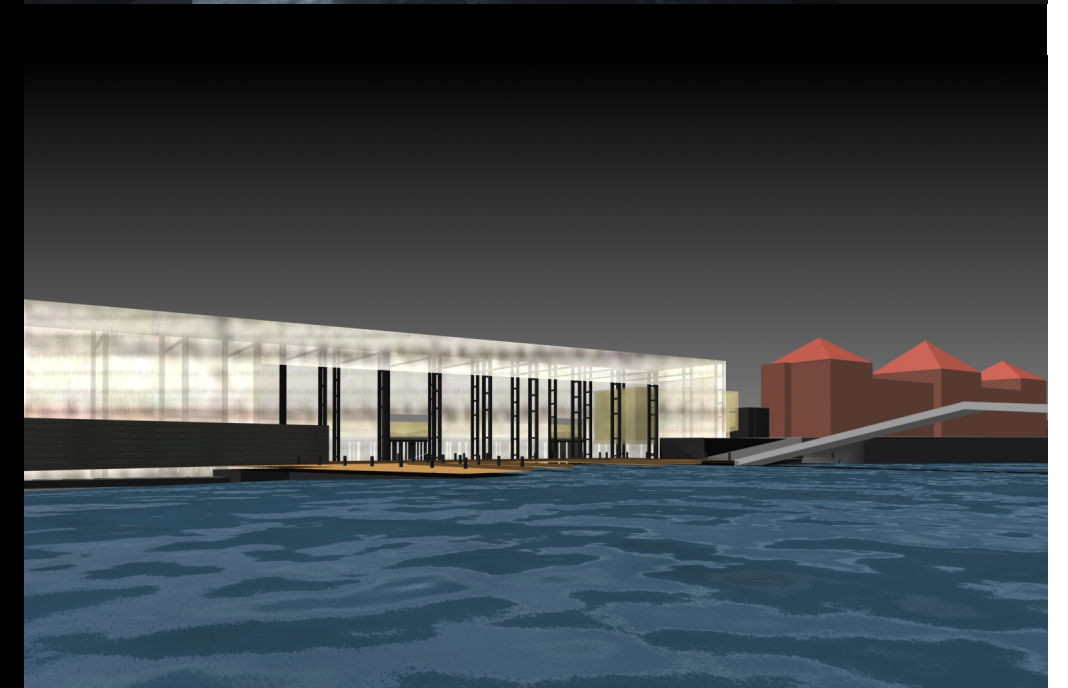
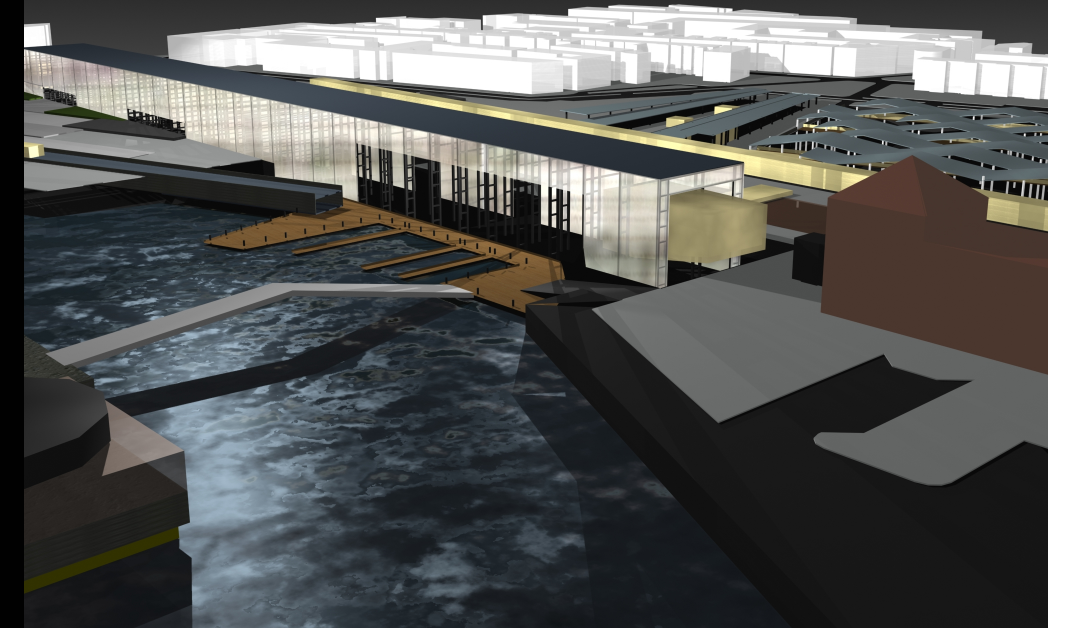
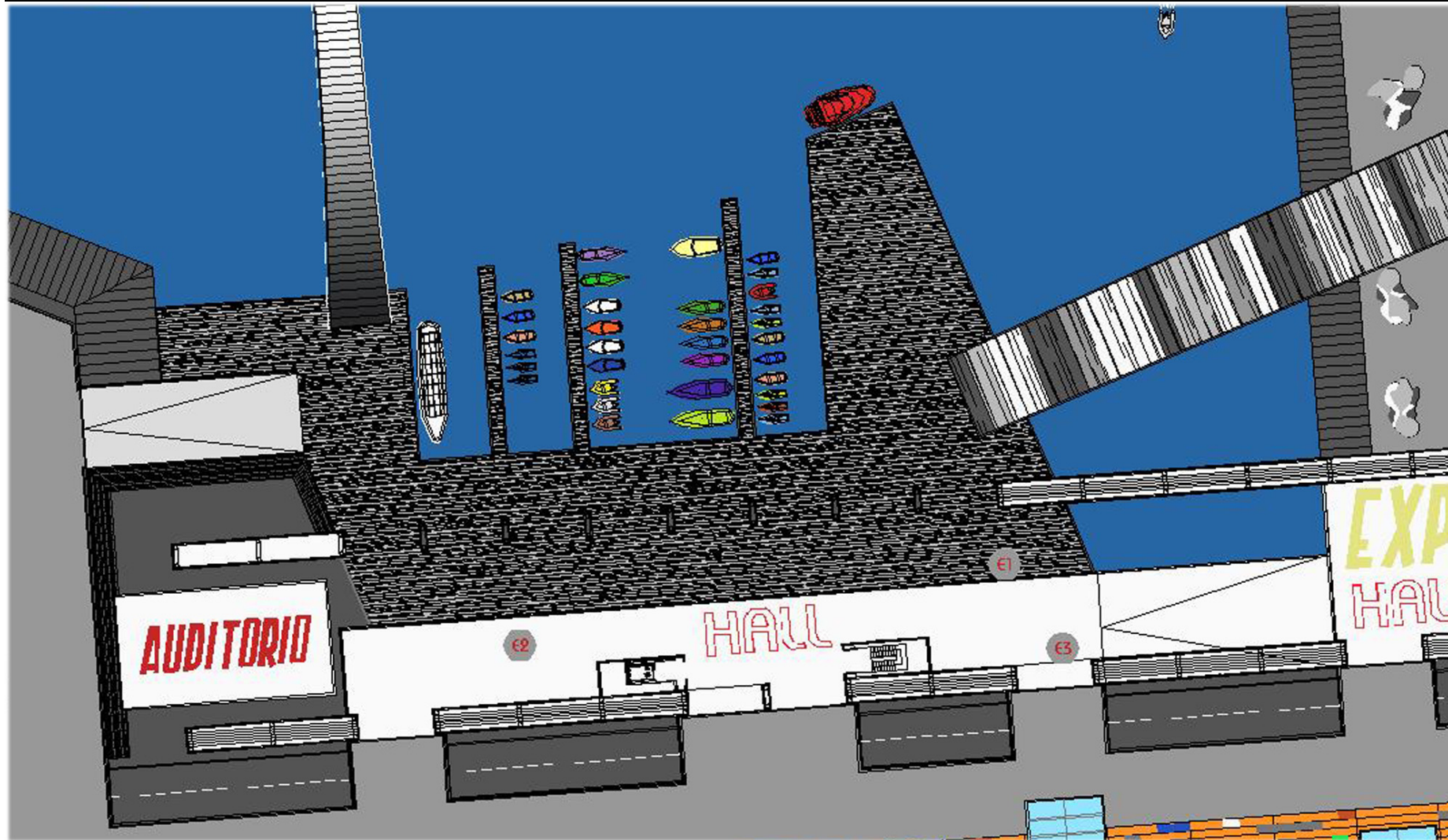




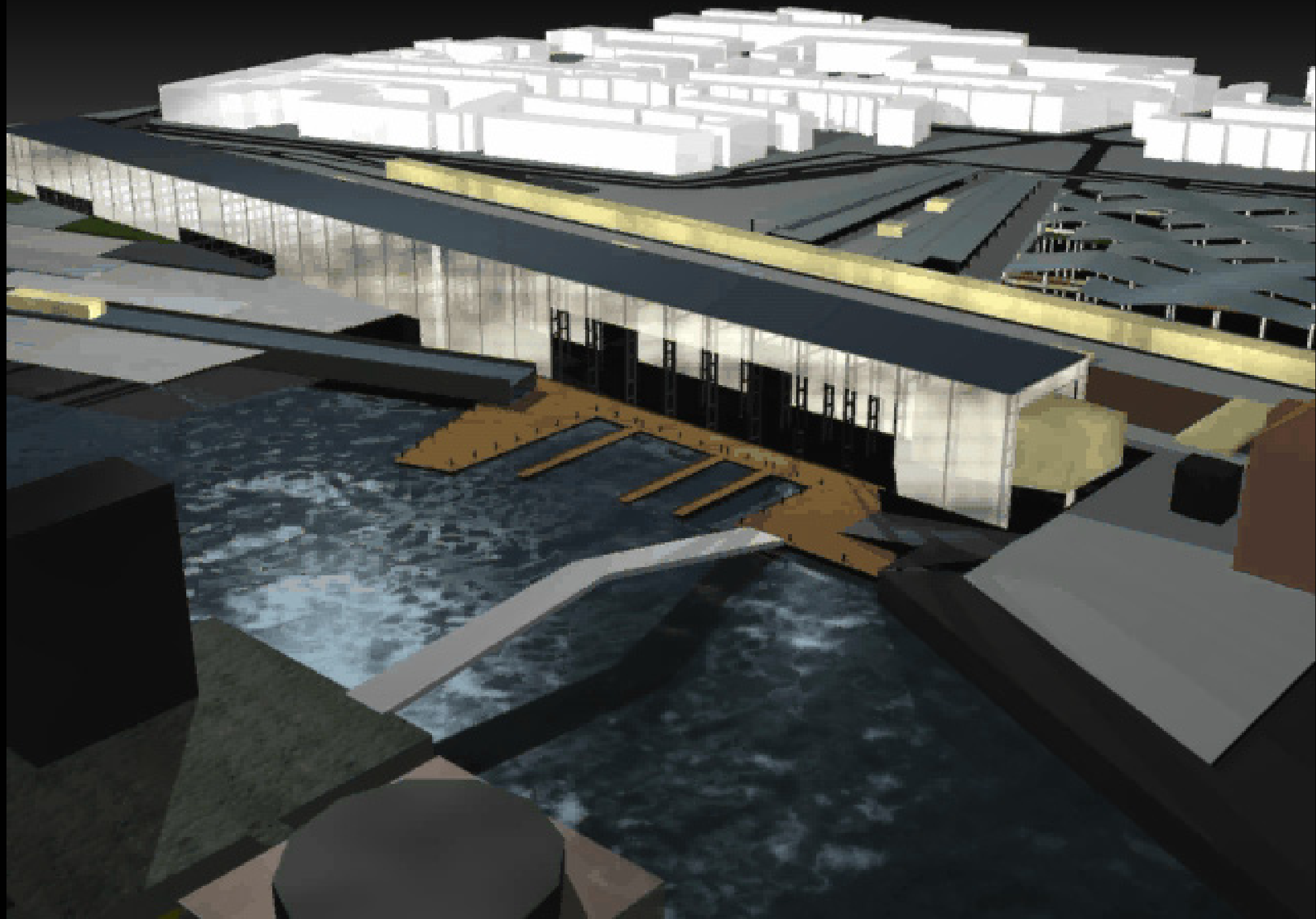


SECCIÓN TRANSVERSAL

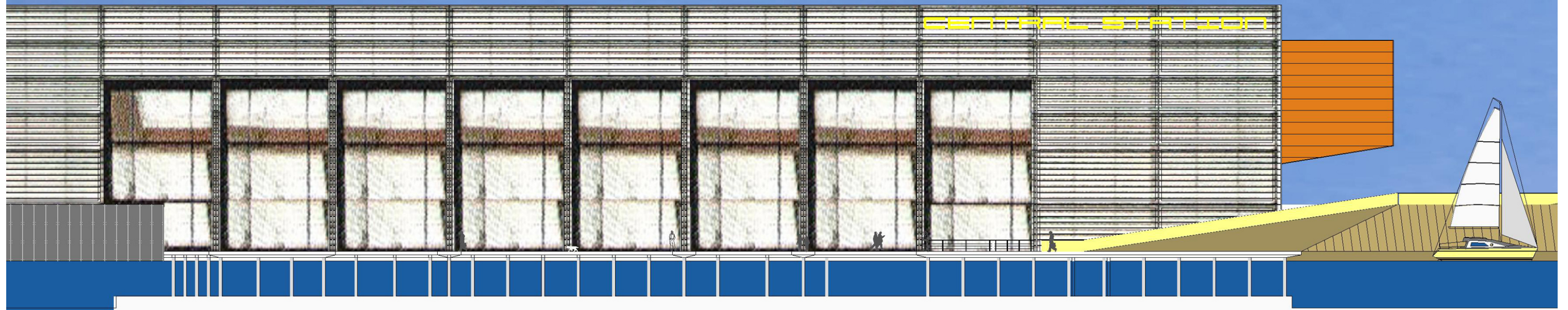
MUELLE



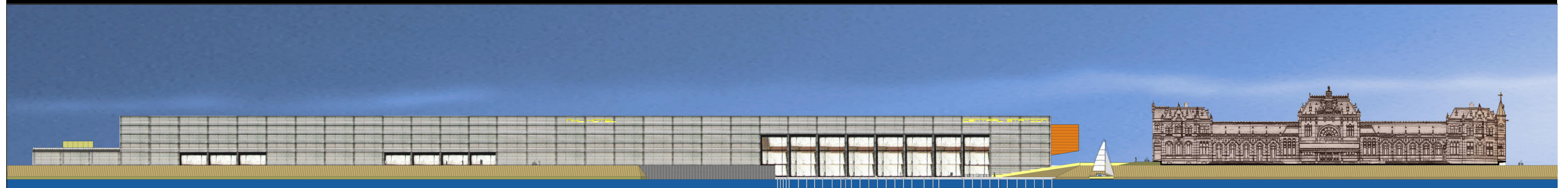




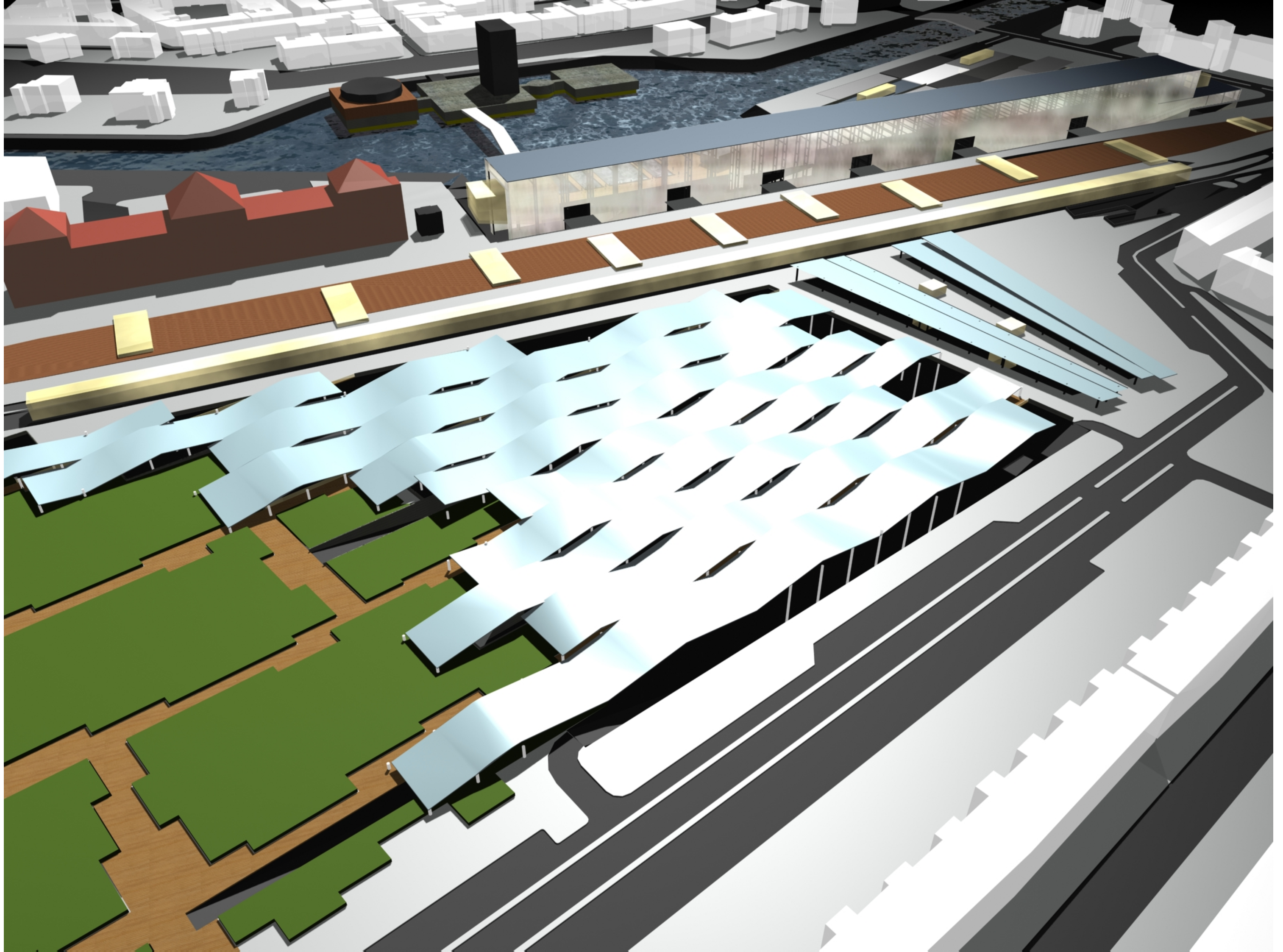




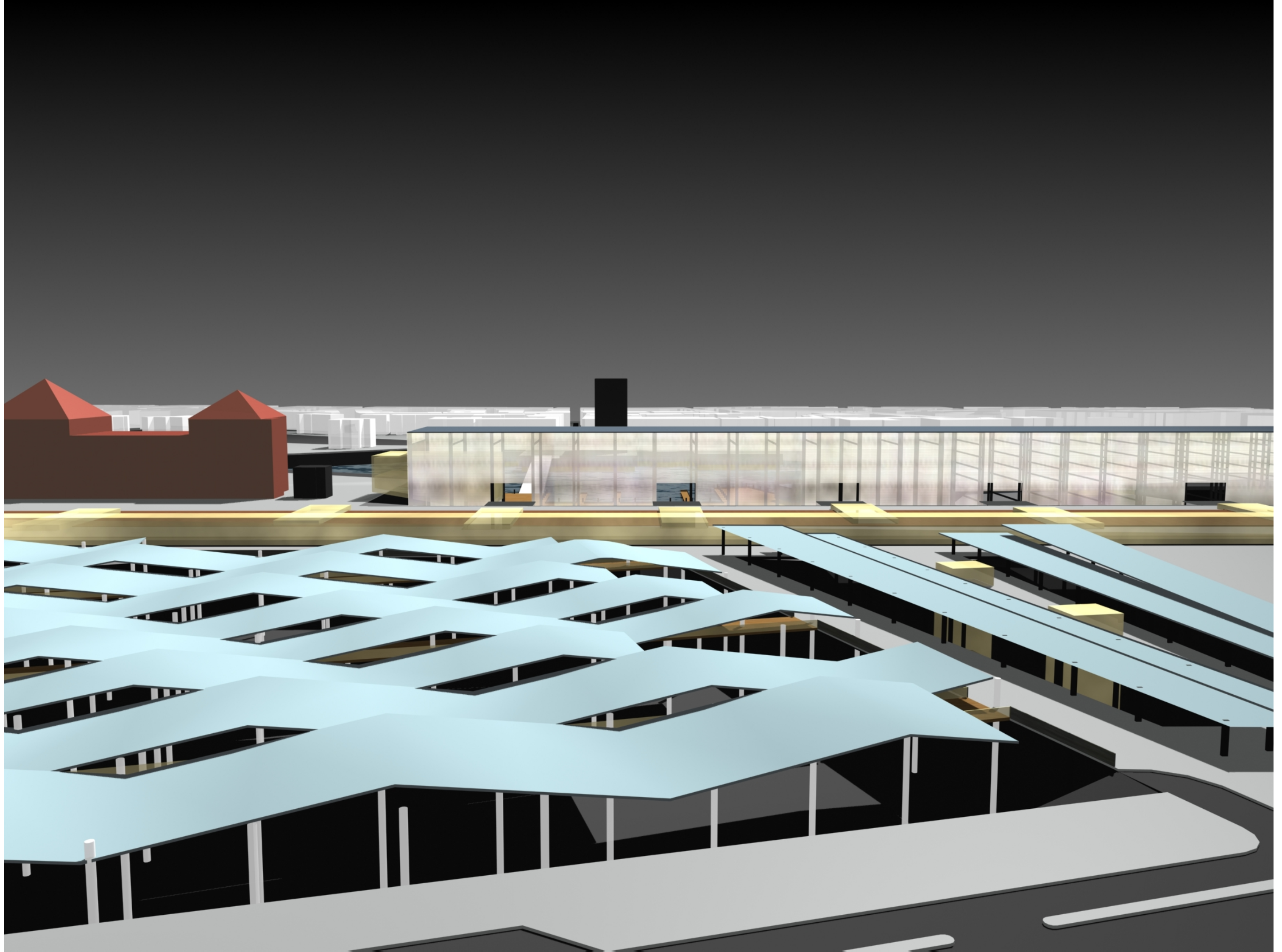
**ALZADO NORT**



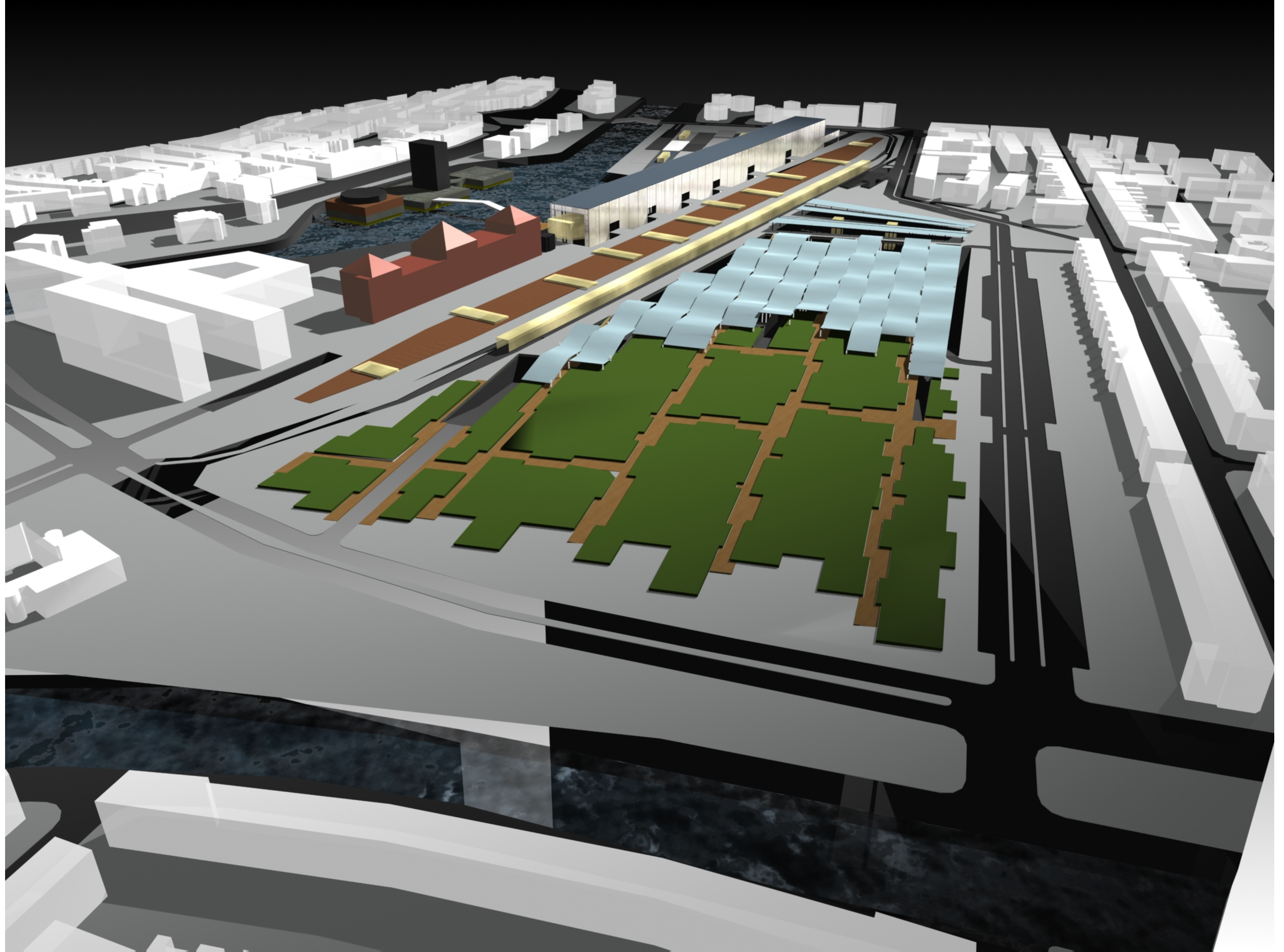






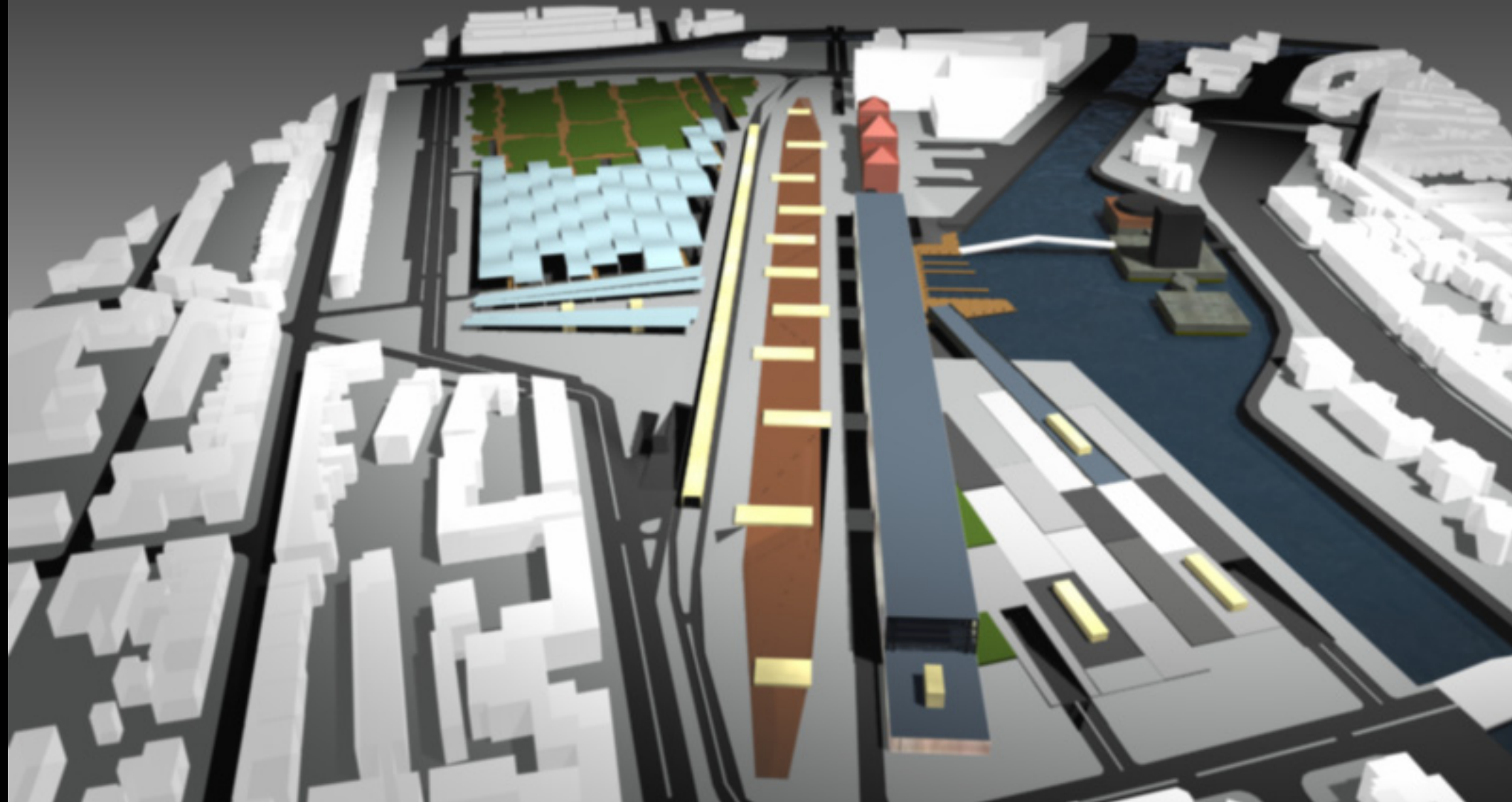








# GRONINGEN



# CENTRAL STATION



