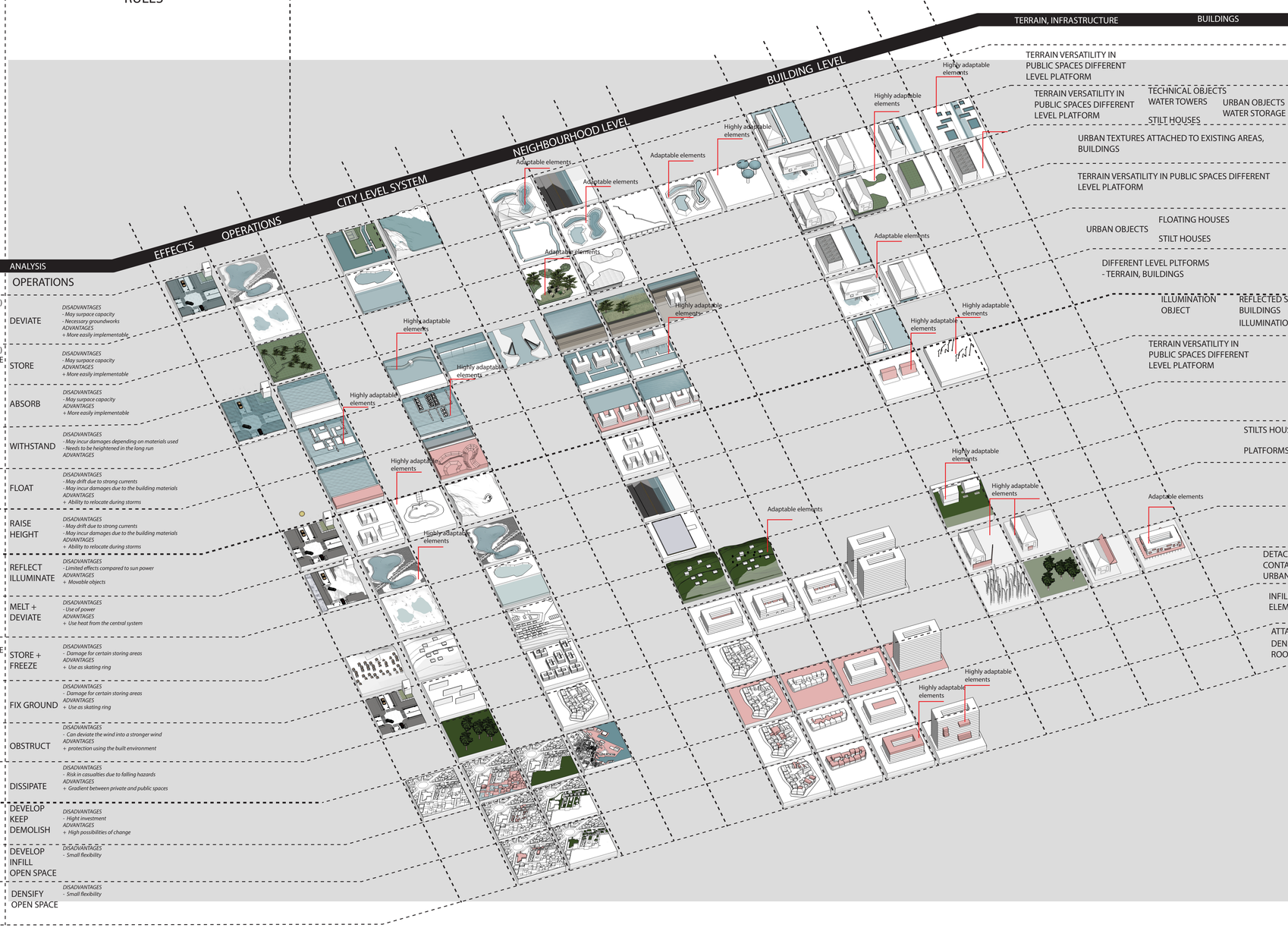
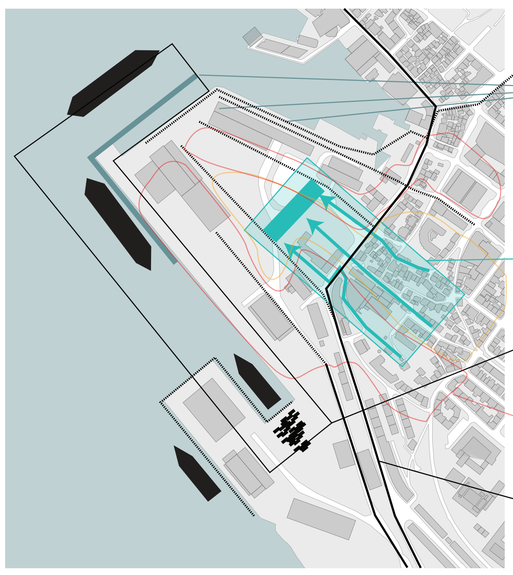
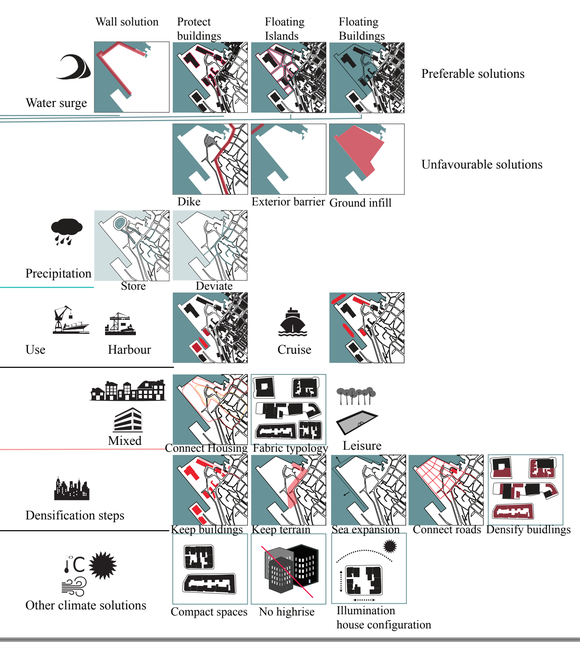
PATTERNS

PROCESSES		SPATIAL VARIABLES	DEVELOPMENT RULES	SPATIAL SOLUTIONS	HIGHLY VERSATILE URBAN ELEMENTS
CAUSES		SPATIAL VARIABLES	ANALYSIS		
			OPERATIONS		
PRECIPITATION FLUCTUATIONS	INCREASED PRECIPITATION	HARD MATERIALS (NONABSORBANT) TERRAIN SLOPE GRADIENT *CALCULATIONS variable* *Input - Height of slope, Length of slope, Canal surface* *Output - Discharge rate*	DEVIATE *DISADVANTAGES* *- May surpace capacity* *- Necessary groundworks* *ADVANTAGES* *+ More easily implementable*		
	TERRAIN CONFIGURATION SLOPE SURFACE MATERIALS OPEN SPACES CORRIDOR SPACES BUILT - UNBUILT	HARD MATERIALS (NONABSORBANT) TERRAIN BASINS, MOVABLE STORAGE *CALCULATIONS variable* *Input - Aria surface* *Output - Cubic meaters of water*	STORE *DISADVANTAGES* *- May surpace capacity* *ADVANTAGES* *+ More easily implementable*		
		SOFT MATERIALS (ABSORBANT) *CALCULATIONS variable Infiltration rate* *Very Slow - clays <2.5mm/h* *Slow - high clays 2.5mm-12.5mm/h* *Moderate - sandy loam - 12.5mm-25mm/h* *Rapid: sandy silt : >25mm/h*	ABSORB *DISADVANTAGES* *- May surpace capacity* *ADVANTAGES* *+ More easily implementable*		
SEA WATER FLUCTUTIONS	WIND TIDE WAVE STRENGTH	EMBANKMENT MATERIAL EMBANKMENT HEIGHT TERRAIN CONFIGURATION *CALCULATIONS variable Wave height*	WITHSTAND *DISADVANTAGES* *- May incur damages depending on materials used* *- Needs to be heightened in the long run* *ADVANTAGES*		
	WAVE HEIGHT TIDE HEIGHT TERRAIN CONFIGURATIONS WATER INLET AREAS BUILDING CLUSTERS	CONNECTION TO MAINLAND ANCHORING TO FLOOR BED ABILITY TO RELOCATE *CALCULATIONS variable Wave height*	FLOAT *DISADVANTAGES* *- May drift due to strong currents* *- May incur damages due to the building materials* *ADVANTAGES* *+ Ability to relocate during storms*		
		EMBANKMENT MATERIAL EMBANKMENT HEIGHT TERRAIN CONFIGURATION *CALCULATIONS variable Wave height*	RAISE HEIGHT *DISADVANTAGES* *- May drift due to strong currents* *- May incur damages due to the building materials* *ADVANTAGES* *+ Ability to relocate during storms*		
WINTER SUN	TERRAIN CONFIGURATIONS WATER INLET AREAS BUILDING CLUSTERS	TERRAIN CONFIGURATION BUILDING POSITIONING BUILDING SHAPE *CALCULATIONS variable Hours of daylight*	REFLECT ILLUMINATE *DISADVANTAGES* *- Limited effects compared to sun power* *ADVANTAGES* *+ Movable objects*		
TEMPERATURES UNDER 0C	TERRAIN CONFIGURATIONS	TERRAIN SLOPE GRADIENT *CALCULATIONS variable* *Input - Height of slope, Length of slope, Canal surface* *Output - Discharge rate*	MELT + DEVIATE *DISADVANTAGES* *- Use of power* *ADVANTAGES* *+ Use heat from the central system*		
		TERRAIN BASINS, MOVABLE STORAGE *CALCULATIONS variable* *Input - Aria surface* *Output - Cubic meaters of water*	STORE + FREEZE *DISADVANTAGES* *- Damage for certain storing areas* *ADVANTAGES* *+ Use as skating ring*		
PRECIPITATION FLUCTUATIONS LANDSLIDES	TERRAIN CONFIGURATIONs BUILDING CLUSTERS	TERRAIN SLOPE GRADIENT WATER STREAMS *CALCULATIONS variable* *Input - Height of slope, Length of slope, Canal surface* *Output - Discharge rate*	FIX GROUND *DISADVANTAGES* *- Damage for certain storing areas* *ADVANTAGES* *+ Use as skating ring*		
WIND PROTECTION	TERRAIN CONFIGURATIONS BUILDING CLUSTERS CITY GRAIN	TERRAIN CONFIGURATION URBAN BLOCK CONFIGURATIONS *CALCULATIONS variable* *Wind direction*	OBSTRUCT *DISADVANTAGES* *- Can deviate the wind into a stronger wind* *ADVANTAGES* *+ protection using the built environment*		
		URBAN NEIGHBOURHOODS GRAIN URBAN BLOCK GRAIN *CALCULATIONS variable* *Wind direction*	DISSIPATE *DISADVANTAGES* *- Risk in casualties due to falling hazards* *ADVANTAGES* *+ Gradient between private and public spaces*		
URBANIZATION / SHRINKGE		URBAN ISLANDS BUILDINGS URBAN SPACE/TERRAIN	DEVELOP KEEP DEMOLISH *DISADVANTAGES* *- Hight investment* *ADVANTAGES* *+ High possibilities of change*		
		BUILDINGS URBAN SPACE/TERRAIN	DEVELOP INFILL OPEN SPACE *DISADVANTAGES* *- Small flexibility*		
		BUILDINGS URBAN SPACE/TERRAIN	DENSIFY OPEN SPACE *DISADVANTAGES* *- Small flexibility*		



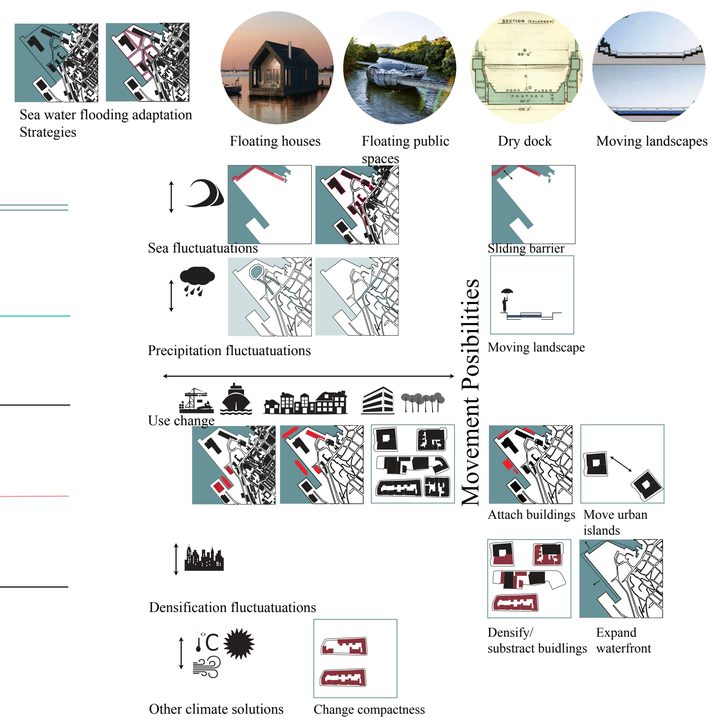
STATIC DESIGN STRATEGY

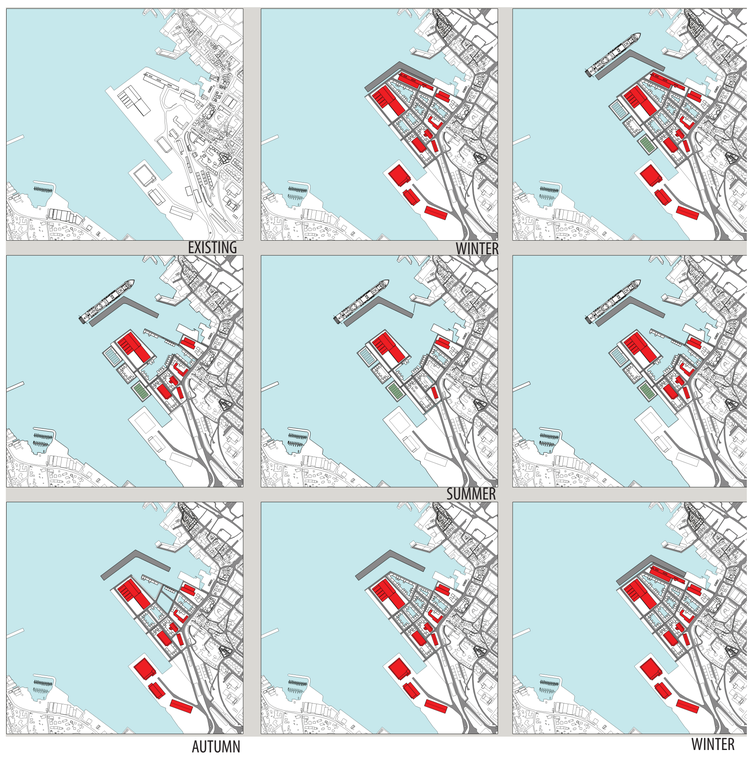




PRELIMINARY STATIC DESIGN

DYNAMIC DESIGN STRATEGY





WINTER SPRING SUMMER AUTUMN