# Between the tracks

Reclaiming an abandoned railyard in Gdynia, Poland

Master Thesis in Sustainable Urban Design Dominika Misterka, June 2020

#### **KEYWORDS**

Sustainable Urban Recycling Brownfield Redevelopment Land Reclamation Railyard Transformation Inspired by Community Ideas



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one peculiar case quite a persistent!) support, interest and advice. Marcin,

Last but not least, I want to thank

#### **DESIGN SITE CHOICE**

1. A unique yet underdeveloped place where two different worlds meet

2. New development detail plan from 2017 has been widely questioned by many citizens of Gdynia 3. Personal attachment to the city



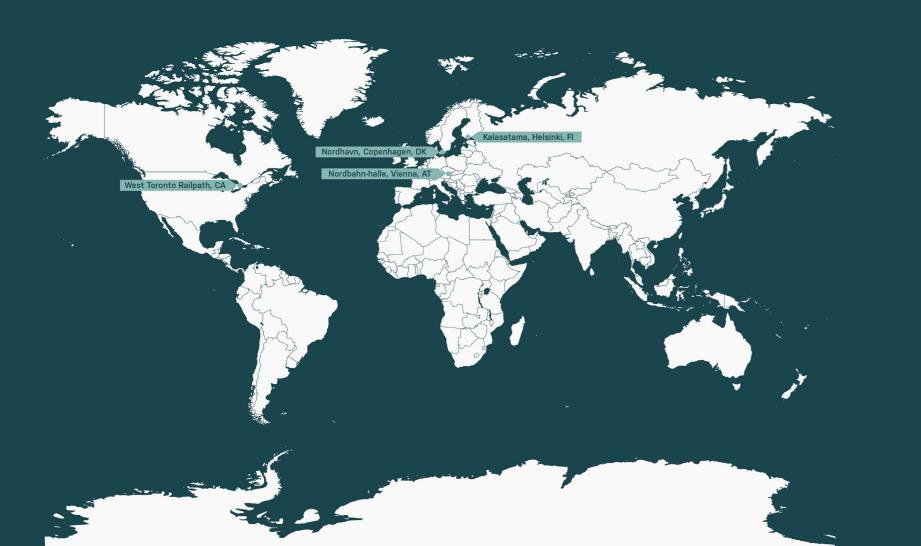
## PROJECT INTRODUCTION

the concept of reclaiming a brown- city. City authorities enacted a detail field. It explores what can happen plan for this area in 2017. This was, when industrial activity vacates the however, followed by a public deprevaluable land in the city centre. It is cation. Some of its concepts were an opportunity not to be squandered. widely disputed by the citizens of Through urban recycling, "Between Gdynia. As a follow-up to those conthe tracks" unlocks the value of cerns, "Between the tracks" aims to underutilized land and reuses the start a dialogue and propose an alterlast, so vast free land in the exact native for the future development of citv centre.

al site of a former railyard. The site scale neighbourhood. is called "Miedzytorze" (eng. verbatim. "Between the tracks") and is in Throughout the design process these a peculiar location, just at the edge research questions were the main of the modernist city centre that is a drivers helping structure the project: historical monument and the Port of Gdynia. In 1926, when the first urban How to develop a transitional zone plan of Gdynia appeared, the main between the port and the city? How urban axis of the city was following to safeguard the identity of the site? a line leading through the site, from How can the city centre benefit from the railway station to the sea on the the redevelopment of this area? How West. A big, important public space to link the "forgotten", "inaccessible" was planned. The rapid development site to the city? How to deal with the of the port caused the necessity of issues of congestion, transportation, reorientation of the original plan. The and accessibility when building on area, which was supposed to be the the site in proximity to a port? Which central part of the city, became and uses can activate currently underutiremained the "dead end" of the city lized spaces? center to date. The city office, however, plans to redevelop this land in the near future, providing an answer

"Between the tracks" builds upon to the problem of urban sprawl in the the site located in such a strategic point. Inspired by community ideas, "Between the tracks" explores the proposal aims at transforming how to redevelop the post-industri- Miedzytorze into mixed-use, human-

## CASE STUDIES Learning from around the world





## PROJECT COMPARISON

Scale	XL	L	м	S
Name	Nordhavn	Kalasatama	West Toronto Rail Path	Nordbahn-halle
ocation	Copenhagen, Denmark	Helsinki, Finland	Toronto, Canada	Vienna, Austria
Area	360 ha	175 ha	2,1 km long	0,27 ha
Status	2008 - 2040(50) (under construction)	2009 - 2030(40) (under construction)	opened in 2009	opened in 2017
No. of new job positions	40 000	10 000	ca. 5-10	ca. 20
No. of residents	40 000	25 000	0	0
Aim	Creating a city of islets and canals with water on three sides that becomes a diverse city district with the special harbour identity. Bringing Nordhavn to the forefront of sustainable development and encourage a sustainable lifestyle.	Creating a "functional Kalastama" residential district located near Helsinki's city centre. And offering commercial and office premises near the metro station. Serving as a test bed for new Smart City innovations.	Urban recycling - creating a safe, car-free, linear park built on an abandoned rail line, WTR (West Toronto Railpath).	Urban recycling of a former warehouse on the railway siding - creating a space for common use for the citizens.
Solution	The existing harbour space will be cut through the new canals dividing the area into a number of small islets with individual identities. The development will take place in stages, populating islet by islet. In addition, Nordhavn will be connected to the rest of Copenhagen via the new Metro line with its 8 new stops on the design site. Located on the Øresund coast, Nordhavnen will also utilize its direct access to the sea by providing a multitude of recreational urban spaces and public facilities at the water.	Building the "Kalasatama centre" with eight high rise buildings of various functions. Developing the "Sörnäistenniemi", a residential area with school, daycares, a hotel, and an office building. Reintroducing the "Suvilahti", the former gas plant area as a cultural centre with work facilities, studios, and stages for artists, etc, and the "Wholesale Market" with the event venue "Kellohalli", shops and restaurants in the courtyard of the former abattoir. Opening two parks, a 6 km long waterfront promenade, and the Mustikkamaa island recreation area.	Creating a connection and new recreational opportunities in the neighbourhood. The Railpath is a multi-modal trail that connects Toronto's West End. It serves as a place that is a constantly evolving canvas for many types of art, including murals, sculpture, and temporary installations and is an inspiration for artists. It provides new ecological benefits to the city. The Railpath is home to an ecosystem of plants that are well adapted to harsh urban conditions and which provide food and habitat to birds and insects, and beauty and color along the path.	Offering different activities such as co-working spaces, film festivals, theater performances, symposiums, exhibitions, tours, discussions, consultation hours with the architectural teams, workshops for adults, children and adolescents, bicycle races, etc.



## NORDHAVN, DK

Østerbro strait.

ect is to physically extend Nordhavn coherent unit that provide the frameby extending the pier 100 hectares work for a diverse urban environment ect has a total capacity of approxi- the area's infrastructure. mately 18 million tonnes of earth, of which 7 million tons is clean and 11 million tonnes is contaminated. Such large volumes of soil to backfill the reclaimed area come from the construction of the Metro City Ring and the new road Nordhavnsvejen. The land reclamation project will make

The population of Copenhagen Copenhagen 1.0% larger. The first will grow by 18% by 2025 (approx. phase of the project has already how-100,000 new residents). This will ever finished and In 2015 the first require the construction of new residents moved into the "Århusgade homes. Luckily, in recent years, many Quarter". This is an area of old buildindustries and traditional activi- ings, silos, and guays combined with ties such as ferry berths, a contain- the new urban spaces, buildings, and er terminal, and the marina have left wharves. The area is characterized by Copenhagen harbor, providing great dense buildings with narrow streets, opportunities to develop some parts small urban spaces and well-deof the city for this purpose. The fined courtyards. All of this standagency By og Havn (eng. CPH City & ing in contrast to the water's wide Port Development, jointly owned by open spaces. Such structure will also the City of Copenhagen (95%) and help to decrease the impacts of the the Danish state (5%)) has decided to Danish coastal climate which is not realize the major urban development always perfect for outdoor activity. At in Nordhavn, a peninsula located near Nordhavn, the wind is strong and the temperature during the summer is quite low. The buildings help to create Currently, the area is being trans- diversity, as their design, scale, and formed from an active industrial port the content will vary from place to into a modern residential and busi- place. The outdoor spaces unite the ness Quarter. A big part of the proj- area's buildings and facilities into a to the sea. The land reclamation proj- and ensures the good functionality of

#### shoreline before land reclamation



shoreline after land reclamation





#### **KALASATAMA, FI**

Kalasatama is currently one of the co-creation processes. It is said that largest neighbourhood construction a broad range of people was involved projects in Helsinki. The area is locat- in the decision-making and designed on an area of a former commer- ing of the Kalasatama. When a develcial harbor (the name Kalasatama opment project begins, companies, can be translated to "Fish Harbor" or city authorities, citizens, and aca-"Fiskhamnen" in Swedish). The site demics are invited to participate in is gradually being transformed into workshops where roles and processa city district, with homes, services, es are defined collaboratively. For new job places, and cultural activ- instance, students from The Urban ities. By the time it is completed in Academy (a new strategic collaborathe 2030/40s, the district will con- tion platform and network between tain 200 football fields-worth of new the City of Helsinki, University of Helhousing. The Kalasatama district is sinki and Aalto University that combeing built close to the centre of Hel- bines interdisciplinary research, edusinki with excellent transport connec- cation and city development within tions - such as the new Kalasatama the fields of urban research, planmetro station.

An important aspect of the develop- perceived by citizens of Helsinki and ment process is The Smart Kalasat- what they want from the district as ama Strategy project. In early 2000 it develops. Another good example is the urban planners from the Helsinki that in the spring of 2016 the City City Office decided they need a smart Office collaborated with the citizens city district for pilot projects - a pur- to improve the parking situation in pose-built neighbourhood to test new the district. Furthermore, those who solutions for smart urban living. And already live in the Kalasatama disso, it has designated the Kalasata- trict are already benefiting from innoma area as a platform for smart city vations like shared electric cars, the development. Firstly, everything is ability to control their domestic envibeing realized through the agile pilot ronment remotely, and a pneumatic method, which makes all the subproj- waste collection system that sucks ects short (time-wise), usually carried bags of sorted household waste out in real-life situations. The Smart through pipelines to a central collec-Kalasatama strategy focuses on tion system.

ning and design) used social media to collect data about how the area is



## WEST TORONTO RAILPATH, CA

multi-modal, linear park that runs direct access to the adjacent train north to south through Toronto's platforms too. The City of Toronto Junction Triangle, a neighbourhood in plans to extend WTR 2 km south from Toronto that is located in the city's its current termination possibly by west end. As a triangle, it is sur- 2022. It is important to mention, that rounded on all three sides by railway the expansion shares a border with lines. The Railpath project is built on the Georgetown Rail corridor which an abandoned rail line, West Toronto is operated by the crown agency Railpath (WTR) and combines the res- called Metrolinx. Metrolinx has expantoration of historical rail bridges with sion plans within the corridor and any the installation of new public art, and WTR extension needs coordination is situated within a palette of indige- between the City, Metrolinx and other nous planting. Phase one of the devel- stakeholders and has already been opment runs 2.1 km south from Cari- followed by a number of meetings boo Avenue to Dundas Street West and workshops. The aim is to develand connects a relatively dense part op a shared vision for the future of of the city, where segregated multi- the area. use paths are hard to come across, with the downtown of Toronto. The WTR is maintained by City of Toronto Parks, Forestry and Recreation.

WTR is mostly used for different activities such as cycling, walking, running or rollerblading, etc. However, since its opening in 2009, it has also served as a canvas for art and lively community gathering space. Besides authorized maintenance vehicles, there are no cars, trucks, motorcycles or electric bikes allowed on the WTR. The entire length of WTR is designated an "on-leash" zone for dogs. In addition, there are three Bike Share

The West Toronto Railpath it is a locations on the Railpath. There is

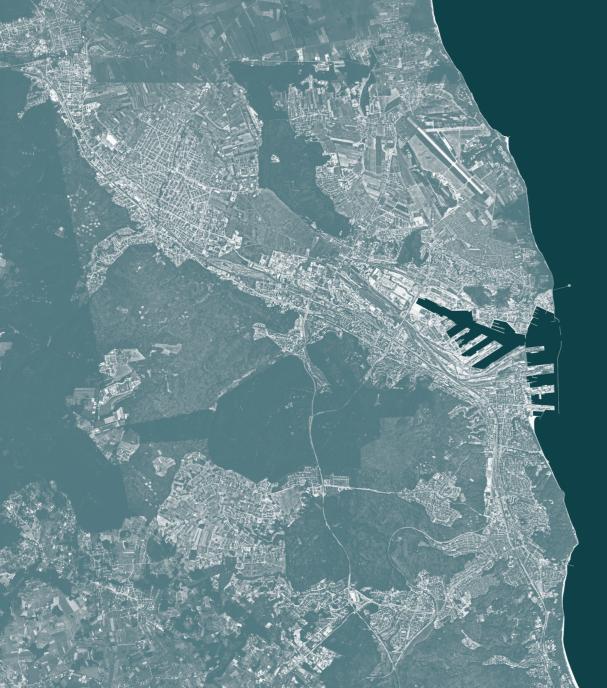


## NORDBAHN-HALLE, AT

experimentation for sustainable use no longer needed by the Austrian Fedin the new Nordbahnviertel\*. A once eral Railways for railway operations. abandoned and forgotten ware- Thanks to this, this vast, quite empty house, located just next to the small area could become Vienna's largest Wasserturm (Water tower), has been inner-city development area. Due to transformed as a place for the Vien- its central location, one can easily nese to use. The building has been commute to the city center and the successively redesigned as part of surrounding recreational areas such the design.build a course at TU Wien. as the Donauinsel (Danube Island) or All the rooms inside it are architec- the Am Grüner Prater park. turally reinterpreted and structurally adapted for different uses - from In addition to the already built-up area events to experimental work formats around the Rudolf-Bednar-Park and (co-production, co-working). Nowa- the Austria Campus, the last developdays, it is often referred to as a "living ment areas "Wohnallee mit Bildungslab", space where people can come campus" (Residential avenue with together and create, or just enjoy education campus) and "Freie Mitte the good life. It is a docking station Vielseitiger Rand" (Free Center - Verfor "doers" with a focus on network- satile border) will be realized by 2026. ing and collaborative forms of collab- In the end, around 40,000 people will oration. The building is partly rented be able to live there. by startups and the two large halls in the center of the building host various festivals and events. From February 2018, the range of uses of the Nordbahn-Halle has been extended by the newly adapted 700m2 workshop area.

\*The Nordbahnviertel (Northern Railway District) is an area west of the former cargo railway station Wien Nord (Vienna North Station), located in the 2nd district (Gemeindebezirk) in

The Nordbahn-Halle is a place of Vienna. This is an 85 ha site that is



## **GDYNIA**

General information about the city

Country
Voivodeship
Metropolitan area
Coordinates
City rights
City area
City population

Poland
Pomorskie
Tricity (with Gdańsk, Sopot and suburban municipalities)
54°30'N, 18°32'E
February 10, 1926
135 km² (415 km² in the Tricity metropolitan area)
246 204 (2018) (1 080 700 in the Tricity metropolitan area)



#### AN IMPORTANT HUB

Gdynia, together with its neighbour- rence, the Caribbean ports, northing cities Gdańsk and Sopot, forms ern and eastern portions of South the largest transportation hub in America and many more. There are northern Poland.

The international Lech Wałęsa airport Germany. located in Gdańsk is the third largest airport in Poland. It is approx. 21 km On the national scale, Gdynia's accesfrom the city center of Gdynia (ca. sibility might seem less favorable 25 minutes by train from the centre due to its peripheral location (in relaof Gdynia). In addition, Gdynia used tion to the geographic center of the to have a military Gdynia-Kosakowo country). Nevertheless, there are airport. In 2014, however, its board three national roads leading to the declared bankruptcy and the place west, south, and east of Poland and has remained closed ever since. More- a well-developed network of provincial over, the Pan-European corridors con- roads. Gdynia is also well connected necting Scandinavia and Northeast to Europe through a network of the Europe with Southern Europe and railway system. The principal train the Mediterranean Sea run through station in Gdynia, Gdynia Główna, has Gdynia (Corridor VI - Gdynia - Gdańsk the largest annual capacity in north-- Katowice - Żylina/Brno) and the ern Poland and is one of the largest northern part of Western Europe with in the country - in 2017 it served 11.2 Eastern Europe (Corridor IA, Via/Rail million passengers. The station has Hanseatica - Helsinki - Tallinn - Ryga direct international train connections - Kaliningrad - Gdańsk - Gdynia). Fur- with Berlin and Vienna as well. thermore, the port of Gdvnia services many international ports such as in (The illustration to the right shows Europe (Aarhus, Hamburg, Helsinki, travel times to different points of Klaipeda, Lubeck, Reydarfjordur, Reyk- interest in Europe. Various line colors javik, Rostock, Rotterdam, Ryga, St. represent different means of trans-Petersburg, Tallinn, Teesport, Thame- portation). sport, Thorshavn), Africa (ports of West Africa and East Africa), in the Gulf of Mexico, the ports of the Great Lakes and the Gulf of St. John. Law-

also ferry passenger connections to Karlskrona in Sweden and Rostock in

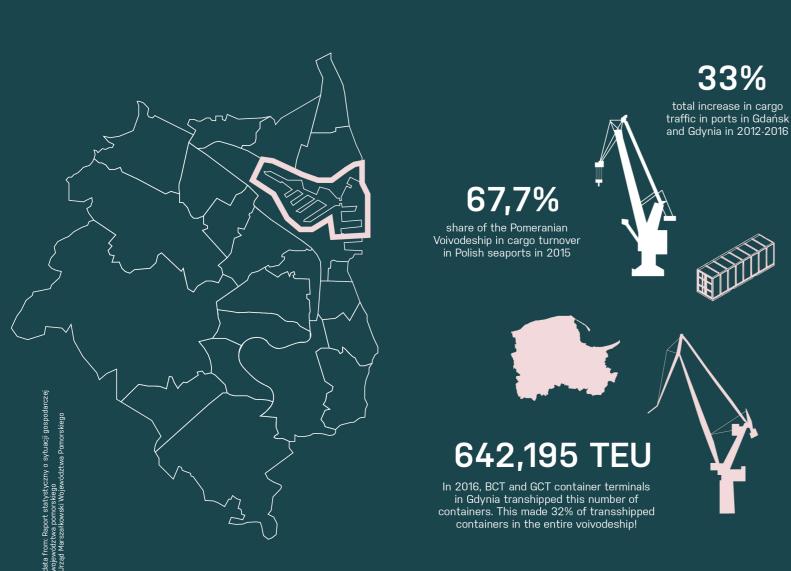


## A PART OF THE TRICITY

(eng. Tricity) metropolitan region a joint management board was creatwhich consists of the three cities - ed for the port in Gdynia and Gdańsk, Gdańsk, Sopot and Gdynia. These are the common culture department was situated adjacent to one other, in a established. Since 2007, the Tricity row on the coast of the Gdańsk Bay became an officially assigned name on the Baltic Sea.

long history of cooperation. Gdańsk, In addition, Gdynia is a part of the Sopot, and Gdynia for the first time Gdańsk-Gdynia-Sopot Metropolitan found themselves within one state Area (formerly the Gdansk Metropoliorganism only in the autumn of 1939, tan Area or GOM). established in 2011 when all three cities were incorpo- to achieve the harmonious developrated into the Third Reich. The totali- ment of the entire metropolitan area, tarian character of the state (includ- making the most of the cities and ing the centrally planned economy) suburban municipalities. It is also and the period of war favored making a window for the largest and most decisions to unify them. In those important seaports in Poland, one days, various, complementary func- of the most used airports in Poland. tions of ports in Gdynia and Gdańsk Other aims of the collaboration are have been assigned, and a company to be more attractive for companies managing both ports has been creat- with foreign capital or to be able to ed. In addition, the name of a joint- work on a number of joint research stock company with a monopoly on projects. public transport service was changed and its operation was extended to neighboring Gdynia. After the Second World War, attempts were made to connect three cities into one. They were, however, not successful. In later years, several organisations were established to help to manage Gdańsk, Sopot, and Gdynia in certain transboundary services such as

Gdynia is a part of the Trójmiasto organizing common public transport, to this area. The act was a declaration on the need to cooperate and The cities, however, don't have a to develop as the agglomeration.

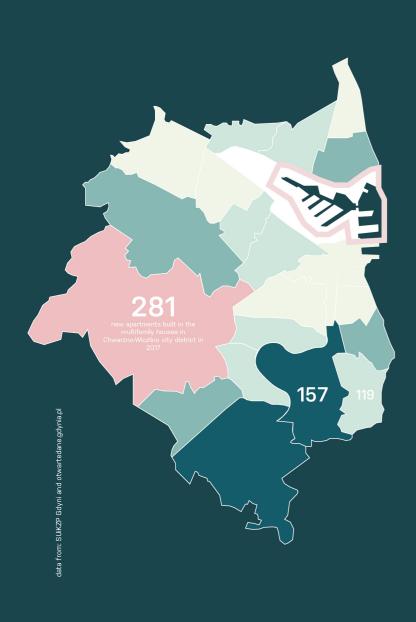


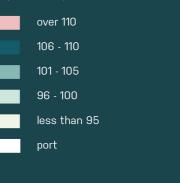
## MARITIME ECONOMY

er ports of the southern Baltic. Next yacht tourism, sea rescue, defense of to the world!] to Gdańsk and Szczecin, it is one of the country and the shipbuilding and the three major Polish seaports of repair industry play important roles in significant importance for the nation- the functioning of this port too. Due al economy. The port is located on to the scale of service of cruise ships, the north-western shore of the Gulf the Port of Gdvnia is classified as a of Gdansk. From the north, the port medium port, servicing approximateborders with the Oksywie district, ly 51 calls of cruise ships during the the oldest settlement located in the year. city, and from the south with Kamienna Góra, one of the most luxuri- It should be emphasized that in 1989 ous districts in Gdynia. The length of the then port borders were reduced the guays in the Port of Gdynia is 17,7 for the first time. The largest change, km, of which over 11 km are intend- however, came from the ordinance ed for reloading operations. The port of the Minister of Infrastructure of is protected by a 2.50 km long break- January 30, 2003 when the areas water. The depth at the quays of the of the Molo Rybackie (Fisherman's port measures from 6.50 to 14.00 m. Pier), used by Dalmor S.A. and the which makes the port easily accessi- southern part of the "Miedzytorze" ble from the sea. In addition, it is a area belonging to the company Polnon-freezing port with basically no skie Koleje Państwowe (PKP), were tides. The water level may increase excluded from its borders. by 60 cm during strong western winds or fall by about 60 cm during

strong eastern winds.

Maritime industries have been boost- The port in Gdynia is multi-functional, [The construction of Gdynia had an ing Gdynia's economy since the it handles various loads and passen- impact not only on the development beginning. They have in fact given ger traffic. The port offers container- of the maritime economy but on the rise to the city. It is not surprising ized and general cargo services. A big reorientation of the entire Polish that the main source of incomes in the part of its activities are referrals to economy - until 1938 as much as 80% city include port, transport and stor- mass loading of grain, coal, and coke. of Polish exports and 65% of imports age operations. The Port of Gdynia In the port, as much as 40 ships can went by sea, from Gdynia! Gdynia has is one of the most modern contain- moor at one time. Coastal marine, become and is the window of Poland



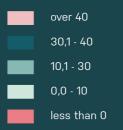


Dynamics of population change in Gdvnia in the vears 2005-2011



The expansion of Gdynia in relation to it's physiographic determinants

Total population growth in 2011 in Gdynia and neighbouring municipalities [‰]



#### **CITY GROWTH?**

tunities for spatial development. Its This simply means, that someone of the largest of such areas is the boundaries are narrowed through the who lives in Gdynia might probably "Miedzytorze", a former track yard waters of the Gulf of Gdańsk from work in Gdańsk, and someone who located in the port guays which used the east, intensively developed areas goes to school in Gdynia might live in to serve the transshipment of coal. of Gdańsk and Sopot from the south Sopot and so on. and the town called Rumia to the north as well as protected forests of In recent years in Gdynia, the highest the Trójmiejski Park Narodowy, locat- population growth was noted in the ed in the central and the western south-western districts of the city parts of the city.

In the regional scale, a clear sub- has been predominant due to the urbanisation trend between differ- psychographic structure of the city ent municipalities has been record- (multiple hills and forests that divide ed. Surprisingly, the largest cities and the younger city districts into smalleconomic drivers of the whole region, er islands) and the spatial strategy Gdańsk, Sopot, and Gdynia, have the of the city authorities which favored lowest population growth. Moreover, these locations for the new devel-Sopot and Gdynia note negative indi- opments in the city. While this has cators which means that they have been happening, the city centre has been losing their inhabitants for a remained subtly untouched or maybe handful of years now. Most proba- even forgotten. Even though, within bly, in the favor to the smaller, neigh- the city center of Gdynia, there is bouring municipalities or bigger cities a lot of land reserves which are the in Poland. On the other hand, it is after-effects from the fact that preimportant to mention, that a lot of job war development plans for the city seekers from other cities in Poland, have never been fully implementand latterly immigrants from Russia ed. Recently, as a result of limiting and Ukraine too, have been numer- the activity of some business entiously moving to the Tricity. In addi- ties, in Gdynia, the possibility of tion, the collaboration within the Tric- redevelopment of industrial and port ity metropolitan area gives a wide areas located in the city center has range of possible accommodations appeared, and new plans and investto choose from, and most important- ments in the central part of the city

(these districts has the lowest population density in the city). The trend

Gdynia has relatively limited oppor- ly, provides commuting opportunities. have been pushed forward. One



#### A BRIEF HISTORY OF GDYNIA

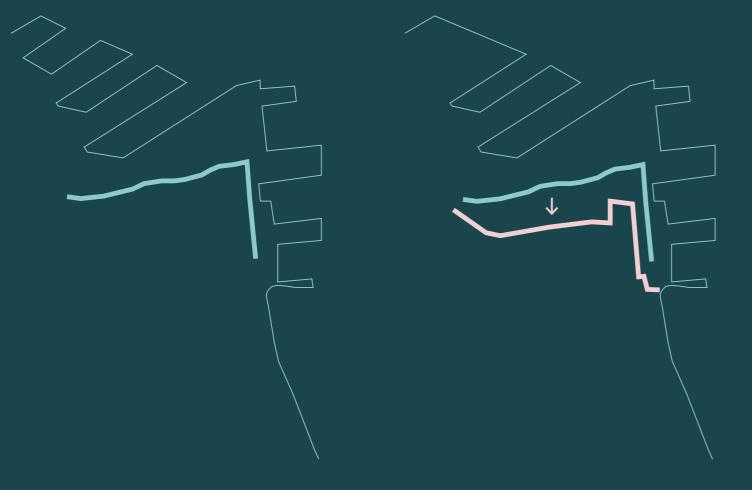
served as a fishing and farming vil- new railway line Gdynia - Kokoszki, lage. At the turn of the XIX and the bypassing the Free City of Gdańsk. XX centuries. Gdynia was still a small

seaside town, but the first important Due to the complicated political situbuildings, such as the Resort Orlowo ation in Europe, Poland's marine econ-Klif - Kurhaus (the Cure House, now- omy could not depend on the Gdańsk gone), villa "Elle" (now-gone) and and its port, where German interthe first street in the city. 10 Lutego port in Gdynia. This choice was moti-Street, was delimited. It provided the vated by its location near the railshortest way from the train station way line and the assets of the terto the Kurhaus. Major growth of the rain. At this point, it was the only city came after World War I. Gdynia state-controlled seaport, so it had to was returned to Poland by the Treaty secure Polish interests in all sectors of Versailles, after three partitions, and trades. The wetlands in the tri-Austria. and the period of 123 years Oksywie, and Chylonia were soon when the state ceased to exist. transformed into a vast building site. Back then, Gdynia became very pop- New docks and guays started springing on the coast reclaimed after the new buildings and housing estates. first World War and "bathing in the Gdynia became a pride of the coun-Polish sea" was perceived as a patri- try and grew dynamically alongside otic duty.

The swift pace of the port's construction caused the influx of thou- In 1933, the National Geographsands of job seekers. In 1922 Gdvnia ic wrote that Gdvnia is one of the had 1.300 residents but in 1926 the best-equipped ports on the Baltic number increased to 12,000, with as Sea. They illustrated the text with many as 127,000 on the eve of the an image that portraved Gdynia. The Domek Abrahama (Abraham's house) ests took precedence. That is why Second World War, becoming the cityscape was massive and made a were constructed. In those years, in 1922 the Seim decided to build a 12th biggest city in Poland. reminding illusion of New York City. Nevertheless, goods in the port were Importantly, unlike the port's, the chiefly exported to Western Europe city's construction was not a state and Scandinavia. In the late 1930s. investment. The city centre was the port covered a surface area of divided into parcels which were 897 ha, had a vast port railway netbought by private investors. The work, 57 storehouses, and 93 pieces prices of the best parcels were very of loading equipment. In 1933 the perpetrated by Russia, Prussia, and angle between the villages of Gdynia, high. Luxury buildings were created. Magistrala Weglowa (the Coal Trunk-They had rounded corners and balco- Line) was constructed. It connectnies, terraces and balustrades recall- ed the Upper Silesia region with ing captain's bridges, and high-gual- the Baltic Sea, through the newly ular with holidaymakers. Vacation- ing up at rapid pace, followed by itv ships. The facades were often built port of Gdynia. It enabled the guite light-colored, which gave rise export of Polish coal. It was primarito the myth of the "White Gdynia". Iv designed for freight transport, but Close to the port, the social hous- it served the passenger transportathe emerging port. And as a result. ing for officers and ordinary work- tion too. already in 1926 Gdynia was granted ers was built. In contrast to the At this point, it was urgent to provide its city rights. In this year, the first wealthy town centre, the outskirts of In addition, since 1933 the port a new connection between Gdynia urban plan of the city, prepared by Gdynia were crowded with poor dis- became a centre of the big migration. and the rest of the country. At the Roman Feliński and Adam Kuncewicz, tricts, often sneeringly called Buda- Well-developed emigration infrastructime, the only railway link led through was introduced. It was designed for pest (buda means shed in Polish), ture with transatlantic ships to New the area of the Free City of Gdańsk. nearly 100 000 inhabitants and had Wooden Warsaw, and Beijing, Thus, York and South America served thou-Yet. its authorities hindered Polish to be revised very soon. The compleliving conditions in Gdynia reflected sands of emigrants who bid farewell transit through this territory. Thus, tion of the port was very agile and the deep social divisions. As W. Tołł to their homeland from here. A lot of in 1920 the Seim (part of the parlia- the port area was finally substantialwrote in 1933 on the poor districts: people departed from here before the

instance, the plan proposed a northeast axis between the main train station area and the waterfront (passing by my design site, Międzytorze). This concept had to be forsaken, and

ly greater than originally planned. For "Gdynia has special districts for the unemploved with romantic-sounding names - Chicago, Mexico... but in fact, there is nothing romantic about them. (...) The houses are set up higgledy-piggledy, without streets (...), First mentioned in 1253, Gdynia ment) started the construction of a the area was repurposed to a railyard. right on the sand' these are the most miserable places in Gdvnia (...)."



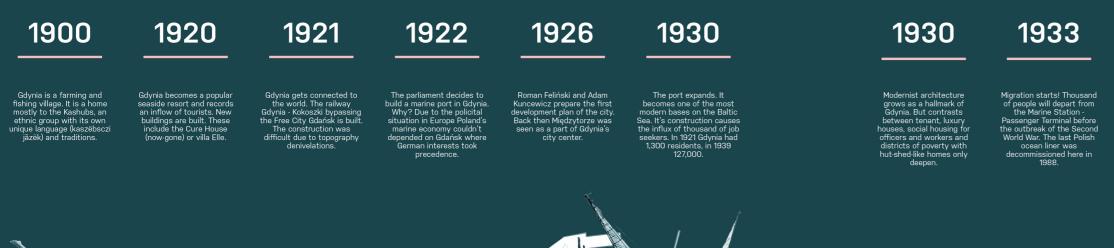
Edge of the city centre in the first plans of the city from 1926 and 1930, data source: MMG

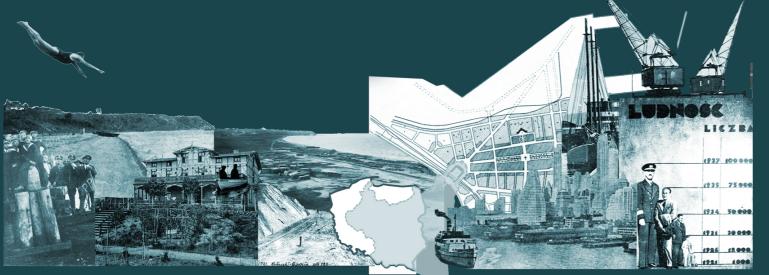
senger check-in, "hotel-barrack" for ing in either case. about 400 people, and Transit Warehouse (Main Departure Hall), Emigra- The 1970 and 1980s architecture was tion Camp in the district of Grabówek, made mostly out of the so-called bloand guarantine hospital in Babie Doły kowiska, i.e. fabricated, pre-stressed were built here to assist the migra- concrete blocks, reminders of Eastern tion processes. A new railway siding Bloc, planned as a residential areas. was brought to the guay too. The last At the beginning of the XXI centu-Polish ocean liner was decommis- ry, along with the insulation of apartsioned in 1988.

The outbreak of the Second World - a setting much associated with War brought Gdynia's progress to post-communist countries. Later, an abrupt halt. The Germans occu- many new districts were built in the pied the city in 1939 and renamed it eastern parts of the city. In 2006 in Gotenhafen. Gdynia was incorporat- first, and only so far, high-rise builded into the Third Reich. During the ing was constructed. The Sea Towers war, the city was one of the most complex is 141,6 m high and located important bases of the Kriegsmarine at the waterfront. (the German Navy). After the war, the decline in the national significance of Gdynia has been noted. But the city's expansion plans were still being created. And some were quite eccentric. In the late 1940s, a construction plan for two main roads was created. One was meant to run alongside the coastline - from Gdańsk to Gdynia, separating the city from the

outbreak of the Second World War sea. Later designs envisioned closing too. For many Poles, however, Gdynia the centre in a ring of roads creating ended up being their final destina- a bypass. The ideas aimed to make tion. The Passenger Terminal (now Gdynia more of a metropolis and to the Emigration Museum), a so-called relieve the city of some of its traffic. "Blaszak" (a tinware shed), a pas- Happily, there was insufficient fund-

ment blocks, many refreshed facades took on various, mostly pastel colors







## 1933

## 1950

## 2006

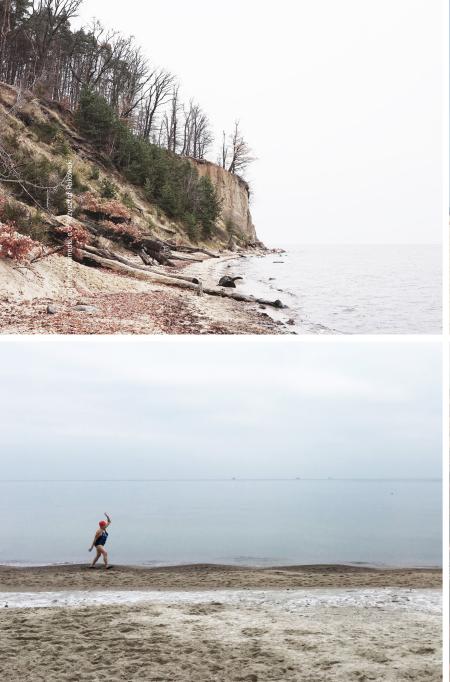
#### The Coal Trunk-Line is built allowing the export of Polish coal. Annexation of the neighboring villages begins. New parts of Gdynia were often called "garden and breeding" housing estates.

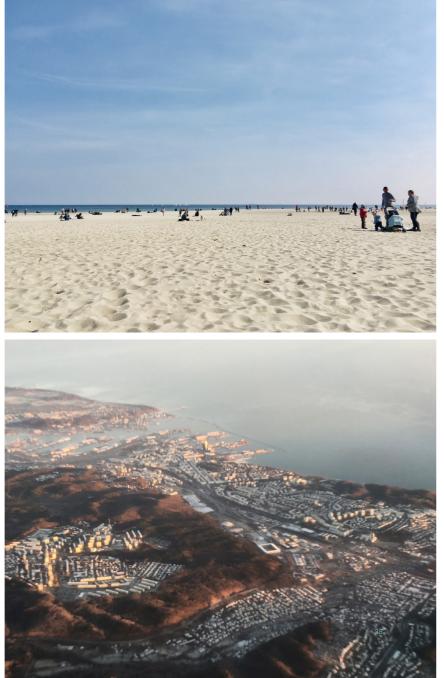
The return of Gdynia's modernist traditions. The new Railway Station designed by Wacław Tomaszewski is a unique combination of social realism and pre-war art-moderne modernism.

The Sea Towers is built. At the time it is the 12th tallest building in Poland. Very quickly it becomes known as the "elite building" - closed to the public. It height and form provoke a lot of heating discussions.

## 2015

"Śródmieście" - the centre of Gdynia becomes a historical monument. Gdynia keeps growing on its outskirts forgetting about empty areas in the center. The port shrinks due to new technologies.





## NATURE

the Gulf of Gdańsk, in the south-east- south-eastern part of Gdynia. Being ern part of the Baltic Sea (the coast- opened in 1938, it is also one of the line is 15 km long). Gdynia is locat- oldest nature reserves in Poland. The ed between a diverse region of the reserve is a home to a formation of early post-glacial landscape of the the cliffs on Gdynia's coastline. The Kashubian Lake District (Pojezier- Klif Orłowski (Orłowo Cliff) is 60 ze Kaszubskie) and the area of m high and one of the most widely the Kashubian Coast (Pobrzeże known cliffs in Poland. Kaszubskie), shaped by the activities of the sea. In consequence, the edge zone of the moraine plateau the, areas of abrasion (part of the shoreline is a cliff coast) and the sea accumulation have shaped the characteristic landscape of the city. It consists of numerous moraine hills and erosional valleys. Out of all the hills in Gdynia, Góra Donas (Mount Donas) is the highest one, rising 205.7 m above sea level.

A significant part of Gdynia is taken by the forests. Together with other biologically active areas, they occupy ca. 45% of the whole city. This makes Gdynia the 4<sup>th</sup> greenest city in the whole country. The most important local forests are the Trójmiejski Park Krajobrazowy (Tricity Landscape Park) and four nature reserves. The Tricity Landscape Park occupies forest complexes primarily in the north-west and south of the city. The largest nature reserve, called Kepa Redłowska, is

Gdynia is located on the west bank of 1.2 km<sup>2</sup> large and is located in the



#### CLOSE-UP

The illustration to the left shows the design site within the context of the city centre. As presented, the site is located within a walking distance from both, the public waterfront to the east, and the recreational areas in the forests of the Trójmiejski Park Krajobrazowy (Tricity Landscape Park) to the west. The site itself lacks major green assets and is mostly overgrown with wild, shrub-like vegetation. It is also party occupied by allotment gardens "ROD im. Jana z Kolna". Besides, the site is almost entirely flat. It has one noticeable lowering of the terrain, which is filled with a small marshland.



#### CLIMATE

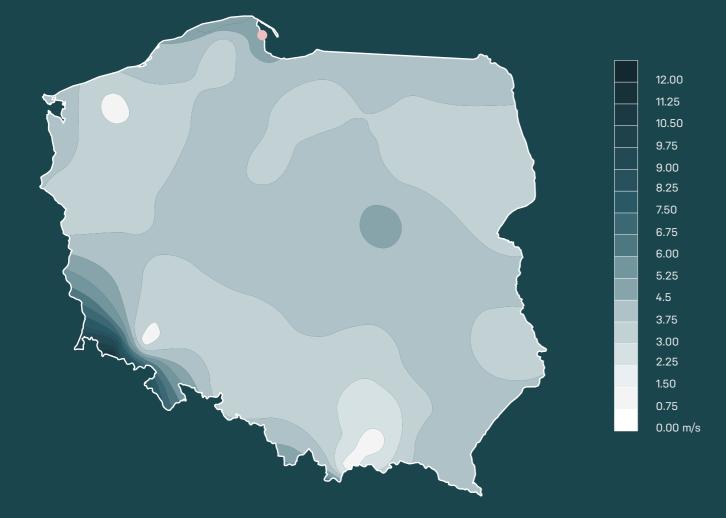
Gdynia, thanks to its proximity to the The occurrence of higher wind Baltic Sea, has a cool oceanic cli- speeds, the sea breeze, and vast mate. As a result, spring begins rela- woodlands make the air in Gdynia tively late (in May) here, and summer considerably clean. Unlike in most air temperatures are lower than the cities in Poland, there is no or low national average (the perceived tem- concentration of air pollution here. perature also reduces sea breeze). Autumn is warmer than in the central Citing my conversations with the rep-

comes to wind behaviors in Gdynia. threat to Gdynia. There are very few windless days

here. Storm winds, with an average It is important to mention that the speed above 17 m/s, occur in the Tric- most powerful natural hazards in ity region every year (on average 1.6 Gdynia are the aftermaths of the times a year). The largest number of intense storms and cloudbursts storm cases was recorded in 2007, the flash floods, rivers floods, storm but in general, there is an upward floods and landslides (also caused trend that has been observed in the by the abrasion). These cause fires, last years. Storms occur mostly in the broke trees, and damage parts of the autumn-winter season - from Octo- city's infrastructure. ber to May. The strongest instantaneous wind speeds (gusts) recorded are quite strong - they usually exceed 31 m/s, but sometimes can reach up to 110 km/h.

part of the country, while winters are resentatives of the city of Gdynia, rather mild. The number of rainfalls is there is a very small risk of the sea evenly distributed over the months, level rise in Gdynia at this point. In but the cloudbursts are often strong the period 1955-2015, very small changes in average annual sea levels were observed. It is believed that The close vicinity of the sea has the storm surges occurring in the significant consequences when it South Baltic Sea cause a bigger flood

#### Average wind speed in Poland in a year



data source: Dygulska A., Perlańska E., "Mapa wietrzności Polski, projekt czysta energia", 2015

T k

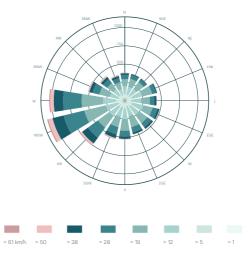
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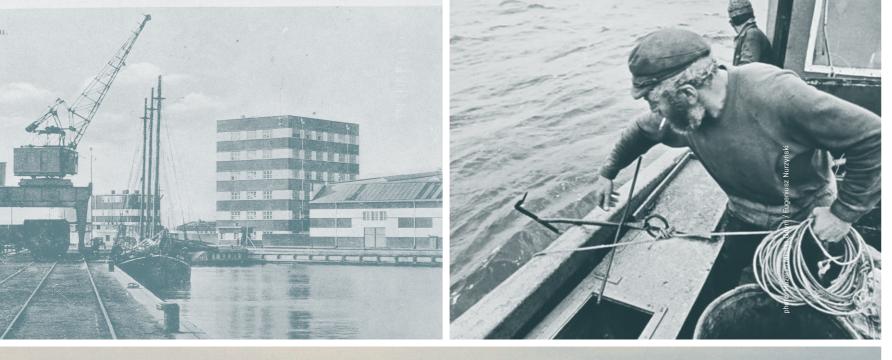
## The number of hours in a year when the wind blows in the indicated direction

data source: www.meteoblue.com/pl/

Gradition of the second second

Lund, Sweden







## THE PORT

naval base, an export centre (mainly the lines of simple, functional blocks. for coal), an import and storage loca- The structure would often be completion, and passenger and fishing mented with brickwork and metalwork ports. Serving the many functions detailing inspired by art déco motifs. it took a lot of space and its infra- Many functions of the port buildings structure makes a significant part translated directly into a wide range of Gdynia's landscape up to today. of designs. A good example of such a The cargo-ships, tugboats, war and building is the Łuszczarnia Ryżu (the naval ships, sailboats, motorboats, Rice Mill building) shown on a picture fishing boats, historically signifi- in the top left corner. cant tall ships, passenger ferries or cranes, reach stackers, dry docks, and numerous railway sidings scattered all around the city. A big part of it is also represented in the adjacent architecture.

Early architectural work at the port, which included the power plant, a water tower, the first temporary harbour of fishing boats, the ships of the Polish Navy, the first customs officer, and the pre-war harbormaster's office, was rooted in historicism with nods to neo-Baroque and neo-Renaissance. Nevertheless, when the wave of modernism came to Gdynia in the late 1920s, it was first apparent in the port. The architecture of port buildings followed the modernist trend for years. Port warehouses, industrial complexes, and public and administration facilities were built using modern reinforced con-

The port in Gdynia was built as a crete, steel, and glass which followed



The illustration to the left shows the design site within the context of the city centre. The image shows the area owned by the Port of Gdynia (light blue). "The quays at the Port of Gdynia are 17,700 meters long, of which over 11,000 are used for handling operations"\*. Even though the coastline seems long, it is apparent that most of the waterfront is inaccessible to public use. In the past years, the city authorities have started rebuying the land. More quays are being retransformed and will be opened to the public soon. Some of them have a direct connection to the design site.

CLOSE-UP

\* citation: www.port.gdynia.pl





## WHITE GDYNIA

dynamic growth to the city. In this are Tel Aviv, Brasilia, and Gdynia. rapidly developing, young city the modernist architecture was put on. \*Śródmieście = downtown In consequence, the rural, fishing and then the curative architecture of

The urban character of Gdynia's Śród- gious title given to Poland's historical mieście\*, a part of the city that bor- areas. Thus, the Śródmieście, despite ders with the design site directly, being one of the youngest Polish has been mostly shaped in the inter- cities, found itself in the elite group war period (ca. 1918 - 1939). Gdynia's of 60 monuments with such status. first master plan has been designed Komorowski stressed that the cities by Roman Feliński and Adam Kunce- whose entire downtown area were wicz only in 1926. Within a few years, built in the spirit of the avant-garde the plan has been updated a couple stream in modernism can be calculatof times, all due to the fast and very ed on the fingers of one hand. These

the turn of the 19th and early 20th centuries, swiftly gave way to modernism which became the hallmark of the city. Today, Gdynia's modernist buildings resemble transatlantic, with balconies as captain's bridge, flagpoles, spacious glass terraces as decks of ships, windows in the shape of portholes and walls rounded on the model of hulls. The city's architecture is also characterized by its functionalism which introduced simple, geometric forms, and flat roofs.

Besides, in 2015 the Śródmieście area has gained the status of a monument to the history of the Republic of Poland. The then-president of Poland - Bronisław Komorowski honored this area with the most presti-





#### WHITE GDYNIA ADDENDUM

interview with Robert Konieczny, one example, the Market Hall - a construc- [p\_] of the most innovative architects in tivist and high-class work looks like it Poland, a leader and founder of the was built yesterday. In Katowice, we TM: Czy Gdynia może zbudować Nie powstaje tu nic, co by mogło KWK Promes architecture studio also had a beautiful modernist buildfrom Katowice. The conversation, led ing like this... And it is gone now! (...) by Tomasz Malkowski, appeared in The work of the prominent constructhe article "White Gdynia" published tor and architect Stefan Bryła was in the Salon Magazine in 2019.

#### [ENG]

TM: Do you think that Gdynia can talist station in Katowice hurt me the build its brand basing on modernism? most. Along with the landscape features, it TM: What do you think about the conis its greatest value. There is no other temporary architecture in Gdynia? city in Poland completely built from Nothing could compete with the gualiscratch in the inter-war period. And it ty of the architecture of the inter-war happens to be home to a very good period. The new buildings are created modernist architecture. This is also in a "modern-bis" style, both trite and a phenomenon on a European scale. literally referring to ship's modernism. Plus, it is an amazing thing to walk They repeat some of its motifs, e.g. down the street, see the shimmering window-portholes. On the other hand, sea on the horizon and feel a fresh the latest architecture did not spoil breeze. The only seaside city that can the city's urban tissue, which is guite be called "The White City" and that a success. In other places in Poland it can compete with Gdynia is Tel Aviv. often only deepens the spatial chaos. It was also built in the Bauhaus style. TM: At that time, the construction of TM: What is the current condition of the Sea Towers has awakened great modernism in Gdvnia?

cities. Other great examples of mod- city?

ernism are in Warsaw or Kraków, but They have certainly changed the skyonly here I saw that this architec- line of Gdynia, creating a landmark ture is treated with respect. The city - a bit like the Palace of Culture in traktuje modernizm na Górnym Śląsku.

Below you can read a part of the is investing in the renovations. For demolished. In its place, they located the shopping mall. I could present multiple negative examples of this kind. But the demolition of the bru-

excitement in the city. (...) Are these

where I was. But I would not build hali postawiono grzmot galerii hanmore high-rise buildings anymore dlowej. Takie negatywne przykłady - just one landmark of this type is mógłbym mnożyć. Najbardziej zabolaenough.

#### swoia marke na modernizmie?

To jej najwieksza wartość, obok walorów krajobrazowych. Nie ma drugiego w Polsce miasta całkowicie wybudowanego od podstaw w miedzywoiniu i do tego wypełnionego bardzo dobrą modernistyczną architektura. To ewenement także na już spory sukces, bo w innych miejskale europeiska. Do tego rzecz nie- scach w Polsce często tylko pogłębia bywała – idziesz ulicą, a jej perspektywe zamyka migoczące morze, czu- TM: Swego czasu duże emocje w iesz świeża bryze. Z Gdynia pod tym wzgledem może konkurować tylko ców Sea Towers. (...) Czy te wieżowinne nadmorskie Białe Miasto - Tel ce nie są za wysokie dla nadmorskie-Awiw, które również wybudowano w go miasta? stvlu Bauhausu.

#### modernizmu w Gdvni?

Gdynię można stawiać za wzór dla innych miast. Bo mamy przecież te wieże, to wiedziałem, gdzie jestem. świetne przykłady modernizmu, także Ale nie budowałbym już tutaj więcej w Warszawie czy Krakowie. Ale tylko wieżowców – wystarczy jeden landtutaj zobaczyłem, że ta architektura mark. traktowana jest z szacunkiem, inwestuje się w jej renowację. Na przykład miejska hala targowa - konstruktywi-Gdvnia can be a model for other skyscrapers too high for the seaside styczne dzieło wysokiej klasy. Wygląda, jakby powstała wczoraj. W Katowicach też była piękna modernistyczna hala tarqowa... I już jej nie ma! Tak sie

Warsaw. When I walked around the Wyburzono dzieło konstruktora city and saw these towers, I knew i architekta Stefana Bryły. W miejscu ło mnie wyburzenie brutalistycznego dworca w Katowicach.

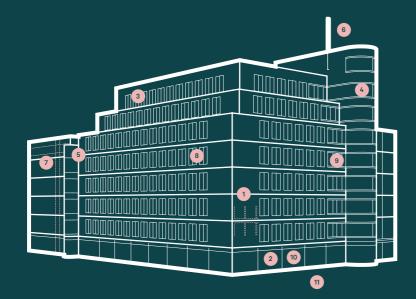
#### TM: Co sądzisz o współczesnej gdyńskiei architekturze?

konkurować jakościa z miedzywojniem. Albo jest to taki modernizm-bis, banalnie i dosłownie nawiązujący do modernizmu okretowego, bo powtarzający jego niektóre motywy, np. okna-bulaie. Na szczeście nainowsza architektura nie popsuła Gdyni, a to chaos przestrzenny.

mieście wzbudziła budowa wieżow-

Na pewno odmieniły skyline Gdyni, TM: A jak oceniasz obecną kondycję kreują punkt orientacyjny – trochę jak Pałac Kultury w Warszawie, Gdv spacerowałem po mieście i dostrzegałem

- 1 reinforced concrete frame structure of the walls
- 2 glazed ground floor giving lightness to the building
- 3 retracted upper floors optically reduce the massiveness of the building
- 4 a half-round turret, similar to the captain's bridge
- 5 bay window overlooking the sea
- 6 flagpole as on a ship



- 7 cladding of the facade made of limestone
- stone window frames
- comfortable loggias with flower boxes
- entrance gate to the courtyard (for pedestrain and vehicles)
- 1 underground parking

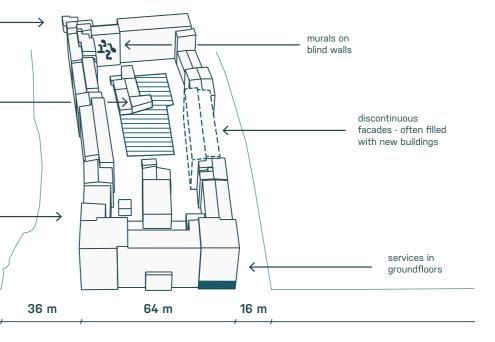
The most important features of the modernist building on the example of the building at the intersection of 3 Maja and 10 Lutego Streets in Gdynia, building designed by Ziołowski (1938) Graphic inspiration: www.gdynia.pl/zabytki/modernizm

#### AN EXAMPLE OF A MODERNIST BLOCK IN GDYNIA

maritime reference such as rounded corners, balconies and terraces

> sheds, garages, parkings in the courtyards

combitation of heights





## **UNESCO WORLD HERITAGE SITE?**

World Heritage List?

uments Protection held in April 2019 and because of its special role in in Gdynia, the information about the the development of the country and authorities' efforts to enroll the mod- the building of Polish identity after ernist Śródmieście of Gdynia on the regaining independence, is regarded UNESCO World Heritage List was as a symbol of the Second Republic". finally confirmed. At this point, the city's application has been granted a necessary recommendation of the UNESCO National Committee. The modernist Śródmieście will first go to the waiting list (called the Tentative List). The next stages include document verification, external evaluation of the application, its presentation to the World Heritage Committee and, finally, receipt of the entry.

Will the modernist Śródmieście of In 2015, the then-president of Poland, Gdynia be enrolled to the UNESCO Bronisław Komorowski, in the Presidential Decree said that Gdynia's Śródmieście is: "an outstanding During the International Day of Mon- achievement of Polish modernism,





#### TRANSPORTATION

#### Road network and bicycle infrastructure

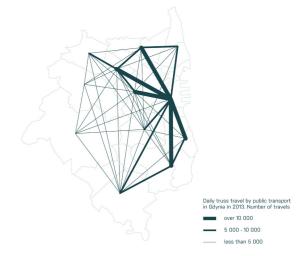
is as follows - public transport 50%, in Sopot. cars 49%, cycling 0.4%, and other 0.6%". Thus, during rush hours many Gdynia Główna train station, located main streets of the city are congest- on the design site, is a regional transed. The city centre is usually over- portation hub. Unfortunately, it has loaded with cars. Designated parking many flaws. The city authorities realspaces are often fully occupied. Many ize that and acknowledge the need to cars are parked in illegal or semi-le- better integrate collective and indigal spaces. Besides, Wiśniewskiego vidual transport here. The new trans-Street (west to the design site) portation strategy from 2016 stressand Trasa Kwiatkowskiego link the es that there is a need to reconstruct city and the Port of Gdynia with an or modernize this area. That includes express road Obwodnica Trójmiejska for instance upgrading walking and and A1 motorway. That brings a lot of cycling infrastructure (e.g. footbridge heavy traffic to the city centre. The or tunnel, pavements), improving bicycle infrastructure in Gdynia, previ- public transportation (e.g. rearrangously almost absent, is growing. New ing bus stops at Constitution square), routes are being built. In 2019 the city reorganizing car parking around the has also introduced its first system station (e.g. adding Park & Ride) of shared city bikes. Unfortunately, due to the hilly landscape, many As shown on the illustration to the people choose not to use this mode left, the design site is surrounded of transportation.

#### Public transportation

Gdynia is based on buses, trolleybus- kiego, Władysława IV, Wójta Radtkego es and light rail. Interestingly, studies streets.

made by Zarząd Komunikacji Miejskiej in 2015, indicated that public transportation in Gdynia was used on aver-The motorization rate in Gdynia is age by 4.66 passengers per kilomehigh. According to CIVITAS DYN@MO ter. The values in neighbouring cities (2011-2016) "the modal split in Gdynia were higher - 6.54 in Rumia, and 6.24

by many important transport corridors that favor buses and trolleybuses in road traffic. These include 10 Lutego – Świętojańska, Jana z Kolna The public transportation system in - Wiśniewskiego - Trasa Kwiatkows-







#### THE FUTURE

Miedzytorze is not the only site in the ly awaiting its implementation. This surroundings that will undergo sig- project will become a good reference nificant changes. Subsequently to in the debate on the future shape of the advancement in port technology, the center of Gdynia. a lot of land in the city center has

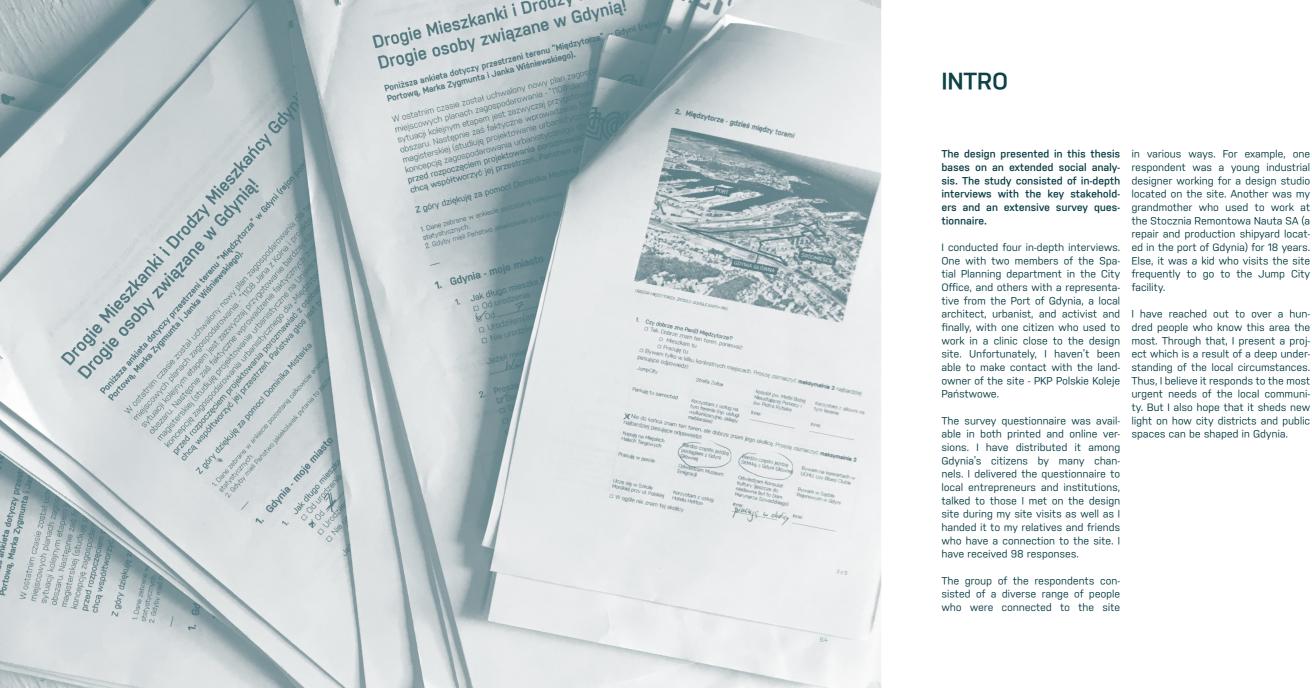
been vacated. Most of those areas In addition, a new port terminal and a are destined for future developments. new ferry passenger terminal next to According to the city authorities, new the Emigration Museum will be built investments in those post-industri- as well. The new ferry terminal will be al areas are meant to "double the relocated there from a more distant potential of the city center, enlarge Helskie Quay (Nabrzeże Helskie) and the scope of representative, public is to be ready by the end of 2021. The spaces and change the panorama aim behind those actions is to build seen from the historic city center and a stronger "maritime highway" to the the sea".

the Gdynia Sea City (Gdynia Śród- business relations with Scandinavia. mieście Morskie). It includes 71.6 ha of areas designated for "downtown" Another future investment is the functions and 33 ha of areas for Outer Port and its adjacent infraother investments. It is divided into structure (eg. Nowa Węglowa Street 6 separate projects (one being my north to the design site). This extendesign site). Another example project sion to the Port will be built on artifiis the Yacht Park at the Pier Rybacki cial land. As the port authorities state, (Molo Rybackie). It is currently under this project has become a necessity construction. This site will become in the face of growing market compea mixed-use residential and office tition in the world. It will also help to complex with a new marina. Accord- meet the growing demands for coning to the estimates, this area is to tainer transhipments in Polish seaaccommodate around 8,000 people ports. and serve as a workplace for another 4,000. This is the physical, master planning urban change in the center of Gdynia in many years. I am eager-

north. An allowed larger number of ferries and passengers is believed A part of this undertaking is called to increase local tourism and cramp

# SOCIAL STUDY





the Stocznia Remontowa Nauta SA (a repair and production shipyard locat-

urgent needs of the local community. But I also hope that it sheds new



#### Spatial Planning Department, City Office, Gdynia

How would you phase in time the future development of the Międzytorze?

Traffic connections need to be solved at first - Nowa Wąglowa and Nowa Dworcowa Streets, and some major changes on Władysława IV and Waszyngtona Streets. Otherwise, the whole city center will be stuck up in a traffic jam. The second step is to reorganize the Constitution Square and to the construct a new transportation hub adjacent to the railway station. The least burning solution is a connection with Morska Street to the west of the site.



#### A former worker of a clinic on Chrzanowskiego Street

#### What is your experience from working close to the site?

This part of Gdynia stinks, especially when the biofuel (stored coconut shells) gets in contact with water. There is a lot of coal dust here too. I remember it was difficult to ventilate the clinic. After opening the windows, if it did not smell, everything was covered in a speck of fat coal dust. I think it is important for you to consider the environmental factors in your project.



Port of Gdynia

#### Should the Międzytorze offer office spaces for the port employees in the future?

The port is growing. We need more space, for example for the container services. There is no free land in the city so we will build a new part of the port on the water, so-called the "Outer Port" (Port Zewnętrzny). This means, we will need more office spaces. The proximity to the port is, however, not relevant. New offices could be located anywhere. Just a few days ago we have signed an agreement to build a new Ferry Passenger Terminal close to the Emigration Museum. The area will already provide us with a few office spaces.



An architect and urbanist from Gdynia Do we need high rise buildings in Gdynia?

I am not sure. Our Sea Towers is definitely too high. There has to be the reason to put a high-rise building somewhere, such as to remind of an important feature or to stress an important axis. But, if another higher building had to be located somewhere in Gdynia, your site is probably not the worst place to do so. It is just on the northern edge of the city and next to the railyards so the shadows wouldn't be a big issue. But remember, Gdynia has always been a "bright" city with white buildings and a lot of open space. Even in the old city plans from the 1930s the light-shadow play has been important. We can't forget about this.

#### INTERVIEWS

The individual interviews focused on the experiences, feelings, and perspectives of my respondents. These helped me to narrow down my design concepts, provided me with deep insight, more details as well as brought different perspectives that enriched my design. The interviews were semi-structured and hence allowed the respondents to freely address the issues I didn't hark back to myself.

#### The interviews considered:

- 1. Pros and cons of the Międzytorze area
- Site-specific conditions wind patterns, flood risks, sea-level rise risks, etc.
- General visions for future the Międzytorze
- 4. The local plan for the Międzytorze

"Great location next to the city center and the sea" "Proximity to the port" "Wild vegetation" "A potential for the new CBD" "Easy access to public transport" "Severity and relics of the previous era" "Silence, peace. I like running there" "Industrial character" "Lots of buildings where birds nest" "JumpCity!"

"Scraps, wood, coal" "It's a bit scary there" "Proximity to the port, trains, coal and industry" "Dingy pipes, ugly SKM station" "Market Hall is becoming a ruin" "Spatial chaos, lack of ideas, grayness" "Poor public communication close to . the Kashubian square" "Strong winds and port fragrances"

"Post-industrial, repulsive architecture"

"Destroyed, dirty, old buildings, hideous pubs closeby"

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## QUESTIONNAIRE

to the questionnaire. The profile of sidered the following issues: the respondents looked as follows:

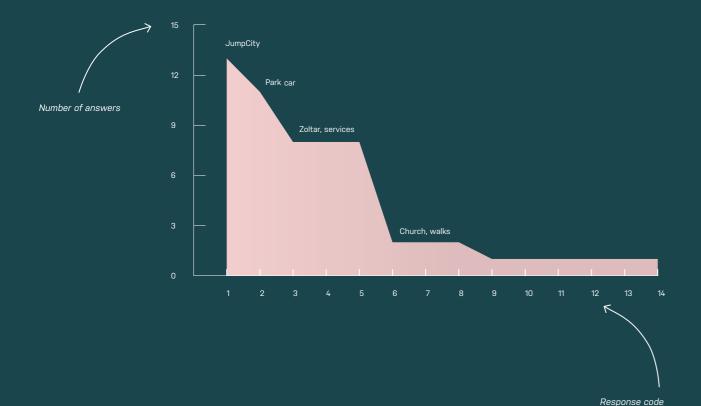
- 1. 13,3% of the respondents live in the Śródmieście district i.e. near 2. the design site. 40,7% live in 3. the neighbouring districts of the site (Kamienna Góra, Wzgórze 4. Świętego Maksymiliana, Działki Leśne, Grabówek, Obłuże, Oksy- 5. People's opinion about the new wie), 31,7% in other districts and 14,3% live outside of Gdynia. 6. General visions for the future of
- 2. 49,0% of the respondents have been living in Gdynia since birth, 28,6% have been living in Gdynia for over 5 years, 12,2% were born in Gdynia but live in another city now, 2,1% were not born in Gdynia and do not live in Gdynia, and finally 8,1% have been living in Gdynia from up to 5 years now.
- 3. 25,5% of the respondents were between 51-65 years old. 19.4% were over 65 years old, 17,3% were between 25-35 years old, 16,3% were between 19-24 years old, 15,3% were between 36-50 years old, 4,1% were between 14-18 years old, and 2,0% were less than 14 years of age.

I received the total of 98 responses Among others, the questionnaire con-

spaces

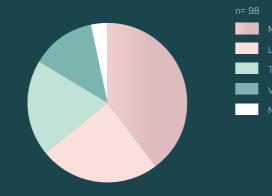
How people use the Miedzytorze How people move around Międzytorze What people like and dislike in Miedzytorze local plan for Miedzytorze Międzytorze

1. How people use Gdynia's public



#### What do you usually do in the Międzytorze area?

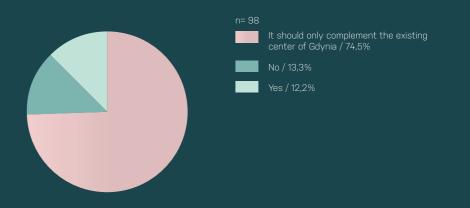
Międzytrze in the future?



## What height of buildings should predominate in the

Medium buildings (from about 3 to 5 oors) / 39,8% Low buildings (up to about 3 o ors) / 24,5% Tall buildings (from about 6 to 10 o ors) / 194% Very tall buildings (height similar to Sea Towers) / 13,3% No opinion / 3,1%

## Should the Międzytorze be a new center of Gdynia?



## SOCIAL STUDY SUMMARY - IN-DEPTH INTWERVIEWS

## SOCIAL STUDY SUMMARY - QUESTIONNAIRE





## Urban Planning Office

Gdynia Główna station as a first phase of the new development - a need for a new transportation hub

## The Port of Gdynia

New offices are needed but they don't have to be located near the port

Connecting north and south districts through water would be advantageous but it is not realistic due to a very high cost of such undertaking

There are no height limitations for the new buildings on the part of the Port



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Gdynia has a very strong and unique architectural identity. It is important to relate to the modernist architecture



## Worker from a clinic nearby

There is a need for a design that helps to prevent or mitigate strong winds as well as coal dust pollution coming from the port



## Difference of opinion

Modern city versus old fishing Village dispute - should the new buildings be high or low?

New city centre for people or an extended base for the port dispute

> Industrial or modernist character of the new development dispute





## A lot of ideas for a change

Essential reorganization of parking situation around the station area

Recreational spaces which offer activities all year round (resistance to wind is important)

Much needed water-connection to northern districts of the city Help in identifying the most popular places on the site

JUMPCITY, parkings, Zoltar, church - everything indoors

Help in identifying popular places nearby

The Market Hall, the Emigration Museum, concert places everything indoors



# THE SITE

NIKA MISTERKA / MASTER THESIS IN SUSTAINABLE URBAN DE

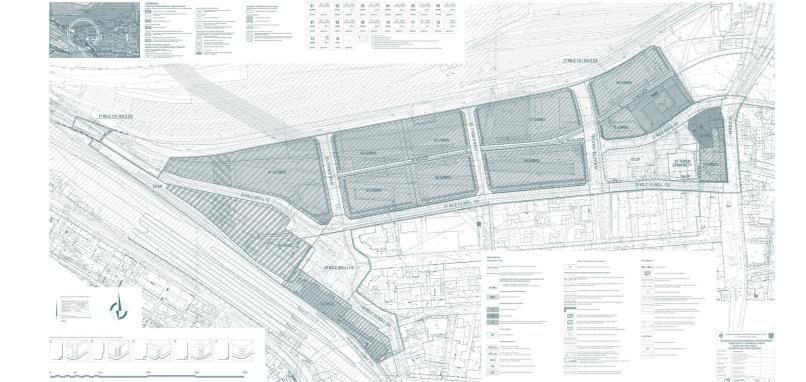
## THE LOCAL PLAN

The design site accords with the ous comments to the plan's draft. boundaries of the local plan\* called City activists have spoken in the Miejscowy plan zagospodarowan- debate, arguing that the construcia przestrzennego części dzielni- tion of the next shopping mall will furcy Śródmieście w Gdyni, rejonu ulic ther fragment the city and will lead Jana z Kolna i projektowanej Nowej to the ruin of the local Market Hall Weglowei. The plan was enacted by (owned by the city). They also pos- Well-distributed commerce the municipality on April 26th, 2017 tulated to divide vast residential but the first works on it have started buildings into smaller, more climatalready in 2012. It covers an area that ic units. Many people were also conis mostly owned by PKP S.A. (Polskie cerned about the scale of an extend-Koleje Państwowe).

The plan envisions the construction direction. They also proposed to New habits of a shopping mall, two high buildings expand modest green places in the (up to 55 meters), the reconstruc- plan. Their comments were rejecttion of Władysława IV Street, and the ed by the municipality. Based on my construction of the New Weglowa analysis and knowledge of the city, I Street. A new park is to be allocat- answer the inhabitants' doubts. Thus, ed between Jana z Kolna and Tade- through my design, I want to invesusza Wendy Streets. The document tigate how the site could look if the opts for multi-family housing with concerns were taken into considerfunctional ground floors, Besides, the ation, I will, however, look at the complan stresses that the area is located ments through the lens of a profeswithin the historic, protected part of sional. I will, if necessary, modify Gdynia, and it imposes certain design them and enrich them with other solutions. The new design must be missing elements. Nevertheless, the M-scale living supported by, for example, a net- design will follow the general framework of streets that extend the exist- work of the local plan but it will be ing pattern, and a parcel layout and fashioned anew. For example: block-typology buildings.

It is crucial to mention that the plan The spine running along the preserved stimulated a heating debate among railway siding which was presented the citizens. They submitted numer- in the plan will be wider and extend-

Public spaces



MIEJSCOWY PLAN ZAGOSPODAROWANIA PRZESTRZENNEGO CZEŚCI DZIELNICY ŚRÓDMIEŚCIE W GDYNI. REJONU ULIC JANA Z KOLNA I PROJEKTOWANEJ NOWEJ WEGLOWEJ RYSUNEK PLANU, skala 1 : 1000 1108

illustration: "Miejscowy plan zagospodarowania przestrzennego części dzielnicy Śródmieście w Gdyni, rejonu ulic Jana z Kolna i projektowanej Nowej Węglowej", published in Dziennik Urzędowy Województwa Pomorskiego in 2017. no. 2278

Główna. This will assure a seamless tration to the left. connection with the new transportation hub and will provide more space for decent public functions.

## Lush areenerv

relocated. It will also be directly connected to the spine running along with the railway siding.

in a shopping mall, the services in my design will be distributed on the street level, along the spine running on the preserved railway siding.

environmentally-friendly mobility all the longitudinally designed streets ty, the polish local plans are usually will be narrowed down in my proposal. This will create more human-friend- of the city cores. The authors also ly spaces and mitigate strong winds, note that the plans tend not to be All streets will be armed with biking developed to organize the urban relapaths. Besides, some places will have tions, but rather to cover the areas of limited car access but, in general, the site will be better connected by reorganizing nearby public transportation. areas for green areas and waters (as

Proposed large block typology will be subdivided into smaller units creating a more balanced mixture of public and private spaces. This will also allow for better wind mitigation and a larger number of "modernist corners" in the buildings - an iconic part of Gdynia's architectural landscape highlighted

ed towards the station area Gdynia even in the local plan - check the illus-

\*A local plan in Poland is called the "Miejscowy Plan Zagospodarowania Przestrzennego". It determines the purpose of the area, distribution of The park presented in the plan will be *functions within the area and devel* opment methods and conditions. If necessary, it may indicate special standards such as the size and dimensions of land area as well as the form and scale of buildings. It under-Instead of putting retail functions lines the issuing of administrative, planning decisions in the municipality.

As dr hab. prof. Przemysław Śleszyński, an expert on deglomeration and spatial policy and his team stated in 2018 in the report "Analiza stanu To advocate for more sustainable, i uwarunkowań prac planistycznych w aminach w 2017 roku", in realifaulty and contribute to dispersions new investment. Besides, larger cities in Poland are more likely to separate much as 28.7% do so) than smaller towns. But public functions occupy on average only about 1% of the area designated in the plans.

ed Władysława IV Street, which was planned to have extra lanes in every

## **REALIZATION?**

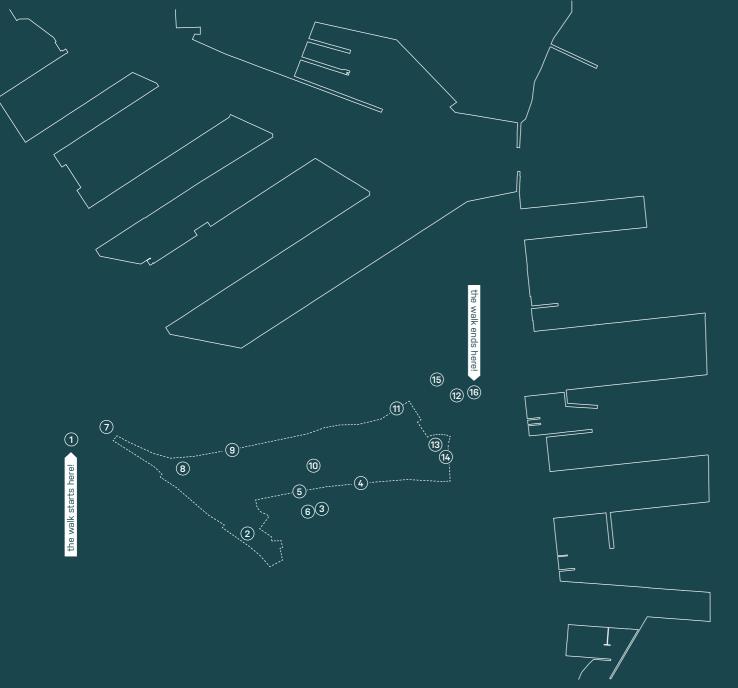
In 2015, the landowner of a vast part of my design site, the PKP S.A. appointed Semeko Grupa Inwestycyjna S.A. and Xcity Investment as partners to develop 14 ha in Międzytorze. The project is planned to be completed on the 100th anniversary of the City of Gdynia in 2026. The value of the investment is estimated at EUR 700 million (PLN 3 billion).

Also in 2015, the consortium published the first and presumably, so far, only promotional visualizations of their concept (see illustrations to the left). If the concept hasn't been modified over the years, it includes highrise buildings with commercial spaces and some public spaces. Social media is full of speculations that, in the first phase of the investment will focus on the residential buildings around 3 Maja Street. It is also assumed that the second phase will include the construction of a shopping mall at the Gdynia Główna station.

In 2018 an information appeared that Bank Ochrony Środowiska S.A. and Semeko S.A. signed a letter of intent regarding cooperation in financing the project's implementation. However, little is still known and it is hard to find more information about the progress of the investment process.



Some of the visuals presented to public opinion source: PKP S.A. / SEMEKO



## A WALK THROUGH THE SITE

The walk starts at the main train sta- care of their allotment gardens or tion called Gdynia Główna and runs those who squat there, small entreto the east through the design site. preneurs, those who park their cars During the walk, you will pass through here, and those who choose to meet the Market Hall (Hale Targowe), a rai- for an outdoor, off the beaten track, lyard, allotment gardens, a few drink in the open air here. In addipost-industrial buildings, and a pecu- tion, the site contains some additionliar church. The walk ends very close al historical buildings (some of them to the waterfront. Unfortunately, we are under the protection of the city's cannot continue all the way down conservator). It is important to mento the water - the area is fenced off. tion that, thanks to its central loca-That is private land that belongs to tion, the site is directly surrounded the Port of Gdynia. Luckily, the ships by many significant buildings, such as and cranes do not block the view of the Market Hall, Fisherman's House, or the sea. We are able to enjoy the first the Immigration Museum. glances of the water.

During the walk, you will see that the vast part of the design site is a railyard that served the port of Gdynia. You will understand that after most of the railway sidings had been excluded from use, the site has changed into a chaotic and eclectic part of the city with its unique, rough character. It will be apparent that apart from the Gdynia Główna station area, the site is today mostly underutilized. There are, however, some people who use

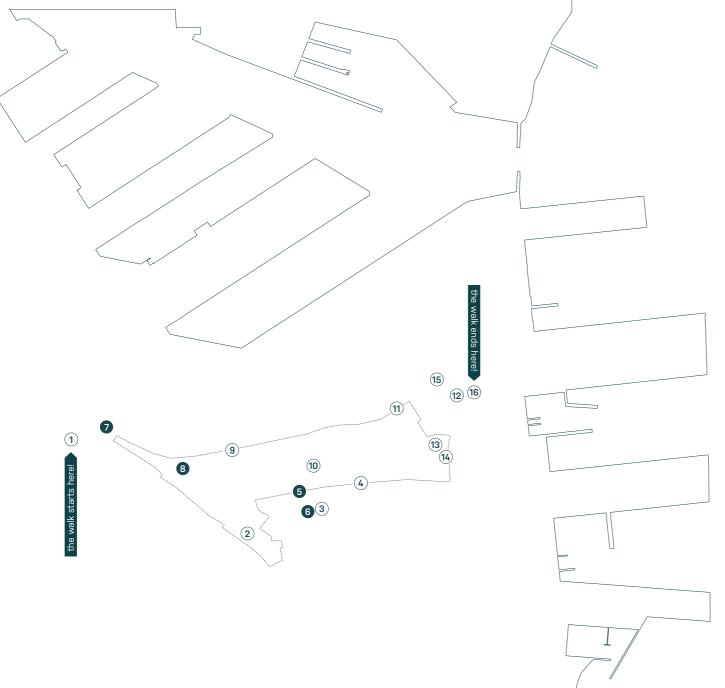
Follow the numbers to visit the site. it. These are the gardeners who take













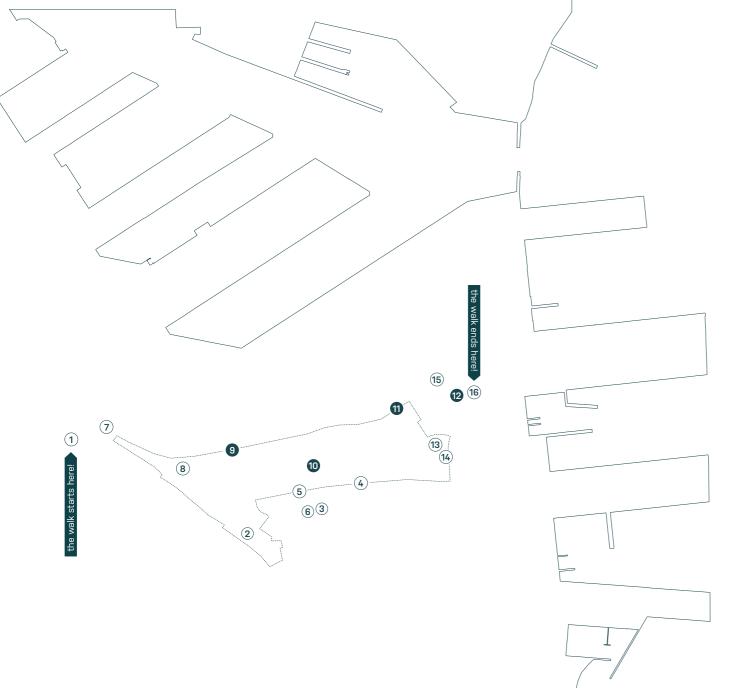




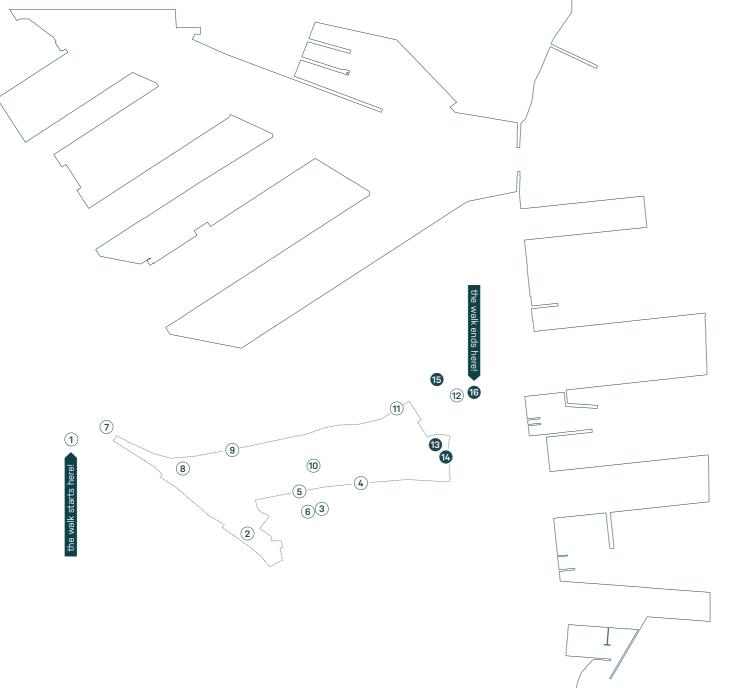








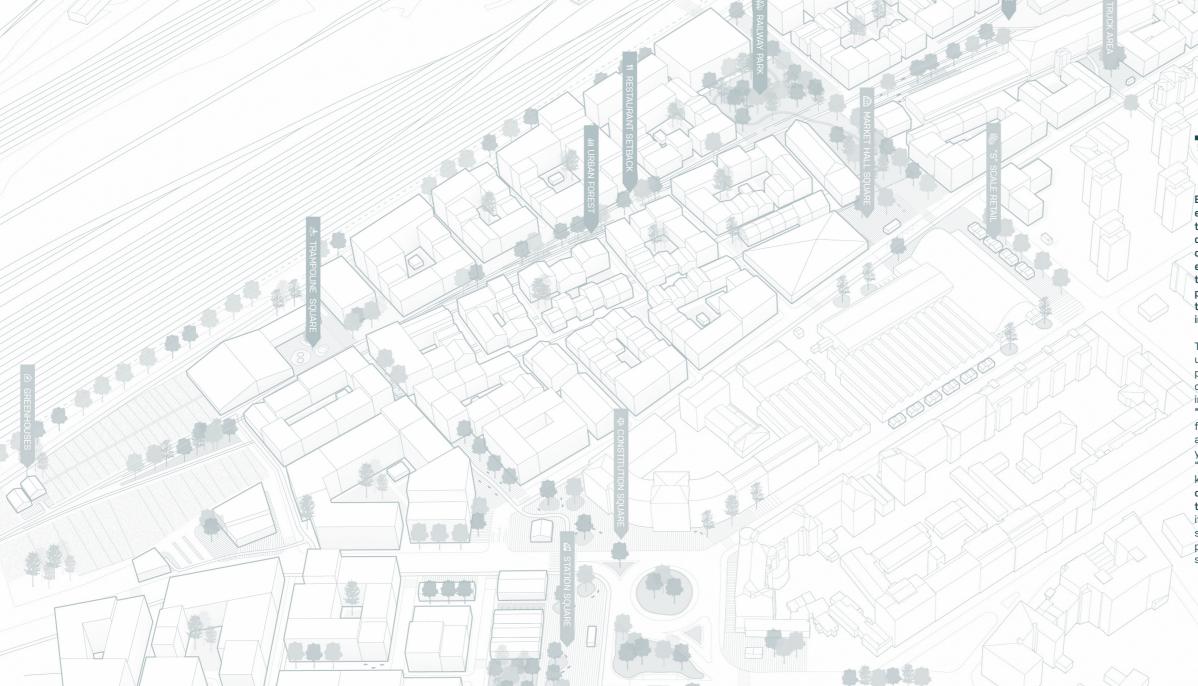












# THE DESIGN

Between the tracks is an attractive vailing public functions on their first extension of the city centre. It aims floors. Besides, the "Track Path" harcentre of Gdynia. The proposal cel- the city's high streets, significant ebrates the site's industrial identi- recreational areas or the transporty by providing a strong sense of the tation hub - Gdynia Główna Station. public realm which constantly inter- The unlocked network of pedestritwines with omnipresent railway sid- an and bike-friendly paths (which to inas.

public waterfront, becomes the heart means of transportation. of the new district and is transformed into a linear public space called the On top of that, the design explores spine is framed by buildings with pre-present in the area.

to seamlessly integrate this aban- nesses many important connections doned railyard with the iconic city to the site's surroundings, such as this point had never been present in the city centre) will help to seamless-The main railway siding, which contin- ly bridge the city and give the street ues all the way east to the soon-to-be priority back to the non-motorized

"Track Path". It gives a space for different ways of living by the railfunctions that the city lacks now- way tracks from the block-like typoladays - e.g. places for gathering for ogy close to the thriving Gdynia young people and a city park. The Główna station area to small-scale, "Track Path" is sub-divided into three single-family units along abandoned key areas: the transportation hub, railway tracks. The building struccentral part, and maritime educa- ture intensifies in a high-density tion area. These offer different activ- mixed-use area around the station ities and attractions along the way, and subtly dilutes towards the watersuch as the trampoline square, a new front. Its form and shape are also park or a track trolley play area. The meant to mitigate the strong winds

DOMINIKA MISTERKA / MASTER THESIS IN SUSTAINABLE URBAN DESIGN

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port

site

city

## THE VISION

The vision for the Miedzytorze bases It is important to mention, that redeon the need to fill the gap between veloping the former railyard is a the port of Gdynia and the modernist common process, happening in most city centre. It seeks answers about of the cities worldwide these days. how to expand the central functions I do, however, believe that my projof the city. Basing on the in-depth ect will shed new light on this issue, interviews with the site's key stake- especially since this matter is still holders and many citizens, the pro- quite unprecedented in Poland. The posal combines opportunities for proposal could undoubtedly be used living, working, and recreation on as a starting point for further discusa former brownfield. The site will sions about the future of this valube integrated into its surroundings able land, or as a reference when and will become a pedestrian-friend- reflecting on the city's development ly area with active meeting places strategies and envisioning new poslocated in between the tracks.

Beyond its potential to extend the city centre and make a vibrant neighbourhood the project aligns with the city's broader economic development goal. By providing new working and living spaces and by enhancing connectivity it stimulates the city's development and competitiveness on both local and regional levels. It fosters commercial activity and attracts business investments in the vicinity to the train station. By maximizing the development there, the proposal fits in with the concept of transit-oriented development. The site will also become a local and regional destination that will appeal to commuters and visitors.

sibilities.

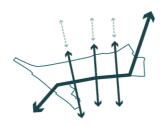
## **DESIGN STRATEGIES**

Θ



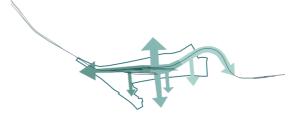
## REVIVE EXISTING LANDMARKS

The aim is to preserve and highlight the existing landmarks around the site and to arm them with an eventful public realm. This, for example, includes the preservation of main viewpoints and axises or providing more transparency in the city grid by reflecting functions of the buildings in the imminent public realm.



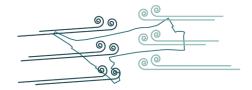
## CONNECT TO THE CITY

The site becomes a heart of the connection along the main railway siding (the "Track Path") which runs between the Gdynia Główna station area all the way east to the waterfront. This pedestrian & bike connection will become a multiuse zone for recreation. Besides, the site's grid will reflect and continue the street network which is already existing in the city centre. The main high streets of Gdynia - 3 Maja, Władysława IV, and Świętojańska, will be seamlessly prolonged into the design site. New paths will also link the design site to the recreational forest areas to the west and the Emmigration Museum and a new ferry terminal to the north-east.



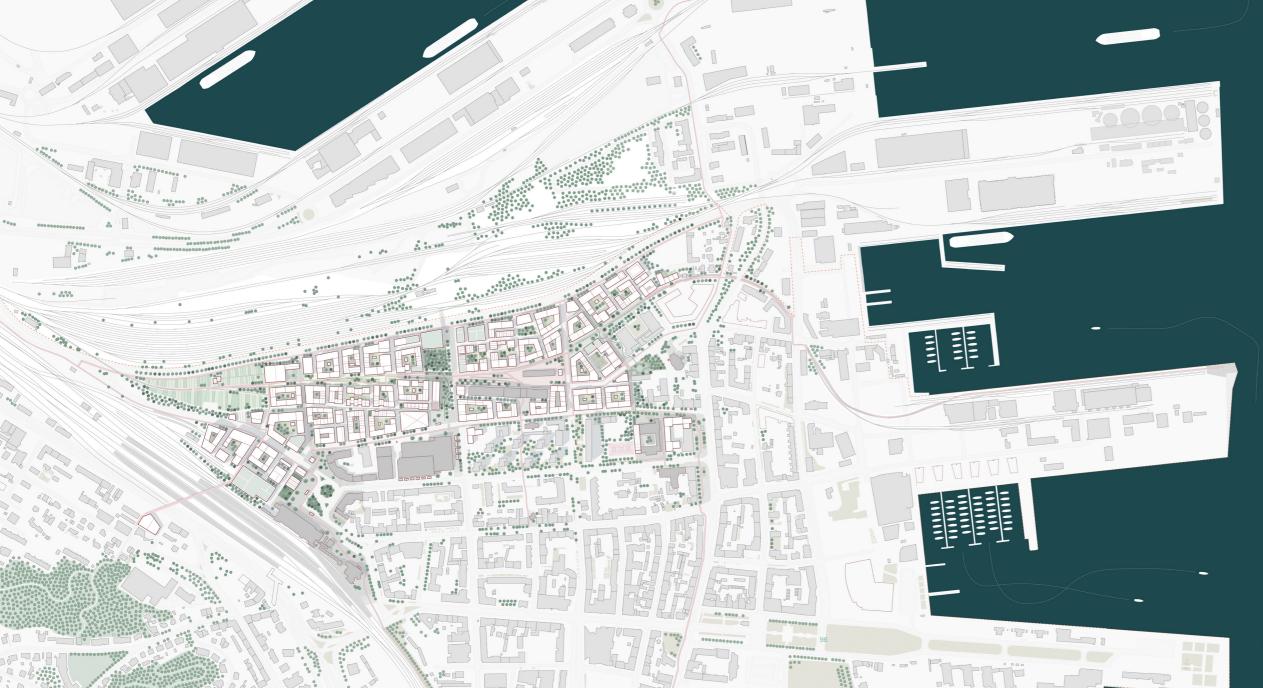
## INTRODUCE THE PUBLIC REALM

The designed public realm includes the "Track Path" and other, complementary public spaces. It is vibrant and allows for many social-gathering opportunities. It changes in size, form and shape constantly adapting to the existing structures on the site (e.g. abandoned railway tracks). It will be framed by the functional bases in buildings first grounds. In that way, public facilities and retail/offices accompanying public spaces will embrace diverse usage and will allow for activity, fun, and movement on the design site for all age groups.



## MITIGATE WIND

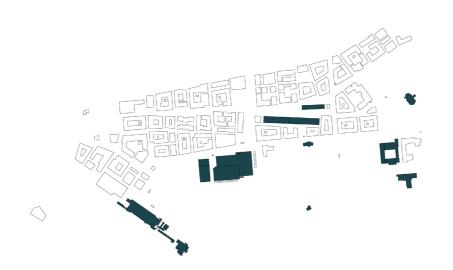
The site is exposed to strong winds and sudden gusts coming from the west (cool sea breeze from the Baltic Sea during the day) and the east (mostly in the winter). The design addresses that by recommending "shortened" block-typology, ca. 50x50m (comparing to the existing, modernist blocks nearby and the local plan) with varied roofs and enriched with weather resilient elements that can improve pedestrian comfort (e.g. frontage setbacks, awnings, canopies, and arcades). To reduce ground-level wind speeds, building heights do not exceed 9 stories (the average building height ranges between 4-5 stories). This also allows better sun exposure of the public realm and weaker wind turbulences at the base of buildings.





## Preserved & New Buildings

The project keeps most of the buildings on the site, including the Gdynia Główna station and the Market Hall (Miejskie Hale Targowe). The site is, however, relatively empty at the moment so it leaves a lot of space to develop. New buildings will prevail here.



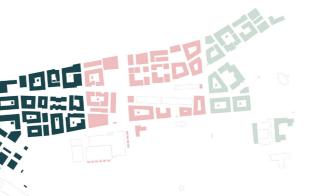
Preserved existing buildings



The Three Neighbourhoods

The design is divided into three key neighbourhoods: the Transportation Hub, the Central Part, and the Maritime Education Area. The neighbourhoods are distinct from each other, which is reflected especially in the functions of the public realm. They are linked to each other through the Track Path.





## The Track Path

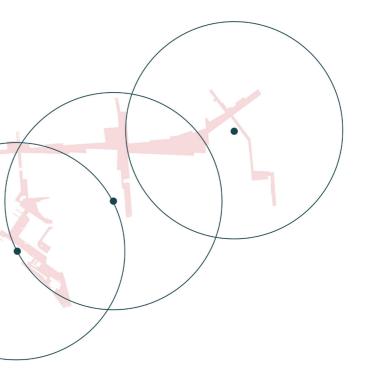
The Track Paths becomes the heart of the site. It runs along with the existing preserved railway siding. It is framed by buildings with prevailing public functions on their first floors. It harnesses many important connections to the site's surroundings, such as the city's high streets, significant recreational areas or the transportation hub - Gdynia Główna Station. It will certainly help to fill a void in the city center and bring a lot of life to this area.

## Space distribution

It takes ca. 15 minutes to walk from the station area to the end of the eastern edge of the design site. The main facilities are accessible and are located ca. 5 minutes within walking distance from each other. This will ensure a tight-knit, pedestrian-friendly and varied structure of the new neighbourhood.

- Train Station Hub
- Central Part
- Maritime Education Area
- ----- The Track Path
- Linking the existing streets

5 minute walking distance



## **Prevailing functions**

Residential

Educational

Transportation

Community facility

Retail Offices

Public

The Transportation Hub consists mainly of mixed-use office spaces and retail facing the main streets. The area includes some transportation-related facilities such as bike parkings, a regional bus terminal or a car-sharing facility. The Central Part is filled with public facilities such as a new library or a museum. It also incorporates retail in functional bases of the buildings and a significant number of residential units. The Maritime Education area is focused around such as the new elementary school or student housing & dormitories. The entire structure is supported by mixed-use residential, retail and office spaces.

10

## Heights

The heights of the proposed buildings respect the local context with an average number of 4 to 5 stories. The highest buildings are grouped in proximity to the station area (ca. 6-9 stories), and at the northern edge, where the site meets a new high-speed road - Nowa Węglowa. With this, the site will be better protected from the heavy traffic. The design highlights the importance of the Track Path by framing the space with higher buildings (4-5 stories). The smaller, neighbourhood streets are structured by lower dwellings (ca. 2-3 stories).





## Greenery

A new park is placed centrally in the design structure. It is located where an existing wetland and the only major topography change are currently at. It is framed by new public facilities. There are a few smaller parks scattered around the site too. Preserved allotment gardens to the west will complement the design with another layer of greenery. On top of that, the area has a significant number of private green areas. These will be located mostly in the courtyards. Public facilities are enriched with public rooftops.

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## Main squares

Each of the main public facilities is enriched with a public square. For instance, the space in front of the Gdynia Główna station is transformed into an area fitting the needs of the passengers. A decent public space is also reclaimed in front of the Market Hall - it will increase the commerce area and allow the people to finally enjoy the view of its iconic architecture. To take another example, the Jump City facility gets its own outdoor space enriched with a trampoline playground in front of the entrance.

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Public green areas

Private green areas

Public green roofs

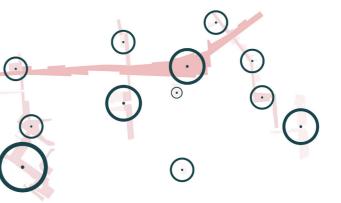
The Track Path
Main squares

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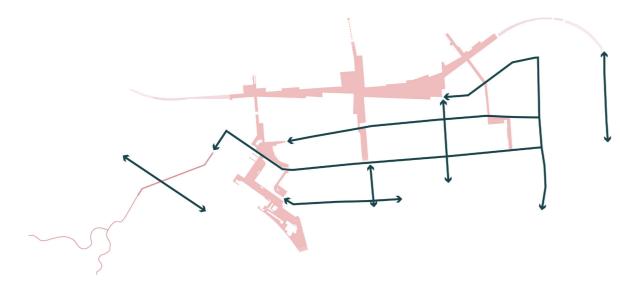
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## **Pedestrian flow**

A continuous network of pedestrian paths meanders through the site and leads to its surroundings. The "shortened" block structure and mixed functions allow for smaller walking distances. At the same time, they provide attractive alternatives to motorized means of transportation. An important aspect is to assure a friendly connection from the station area to the "Track Path".



Pedestrian friendly zones

Currently most used existing sidewalks

## Biking infrastructure

Biking infrastructure is present in the entire neighbourhood. It is supported by outdoor and indoor bike parking stands distributed around the site.





## Car transportation

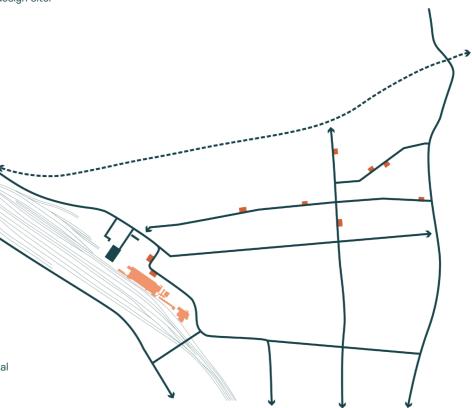
The Track Path is a car-free zone, but since it is located just 90 m from the main streets of the city, it remains easily reachable by public transportation. The design provides adequate space for parking facilities (underground parking or self-standing parking buildings, with a program of 2/3 parking and 1/3 living or working). However, the project sees those as adaptable buildings, which in the future should be transformed into a different use. The parking situation close to the station area was reorganized.

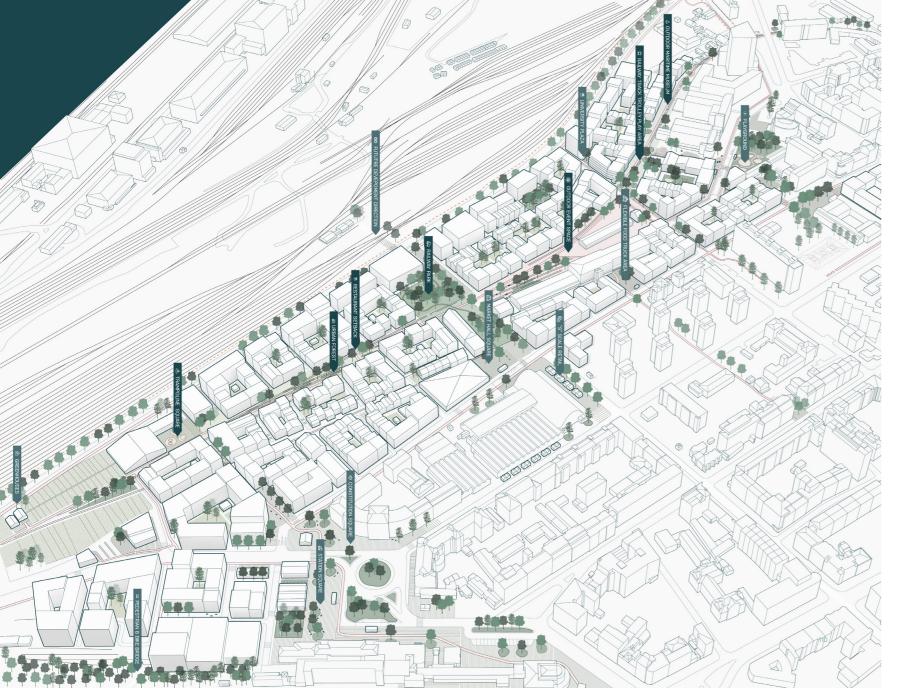
## Public transportation

A new bus lane is recommended. Else it is advised to prolong the existing lines. The site has new bus stop shelters well distributed around the design site.

Bus & Taxi terminal
Bus stop
Train station
Bus lane
Bus lane
Bus lane - possible extension
Railway - passenger trains

- Main designed streets
- Existing streets
- Park & Ride
- Kiss & Drive
- Car sharing facility
- Indoor car parking





## THE TRACK PATH

of the new district. It is a linear, car- Thus, it is sub-divided into three dis- er, so-called, neighbourhood streets free public space that runs latitu- tinct key neighbourhoods: the trans- the "Track Path" creates an invitdinally along an abandoned railway portation hub, central part, and mar- ing space for everyday use by locals siding. It interprets the site's former itime education area. These offer but it also accommodates a tempouse and transforms heavy rail infra-different activities along the way, rary event space capable of hosting structure into a new contemporary such as the trampoline square, a new larger events for a broader communipublic space. It is filled with industri- city park or a track trolley play area. ty - a special place for that is located al materials and custom outdoor rail furniture.

The "Track Path" stretches 920 m facility, the new city park is a landalong the new neighbourhood and scape end of an important composicovers a total area of 32 766 m<sup>2</sup> tional axis running from 3 Maia Street. such as the city's high streets, signif- an outdoor museum where the instalicant recreational areas or the Gdynia lations could be set between the rail 1 km all the way east, where it could the nearby educational facilities. meet the soon-to-be-public waterfront.

Besides, the spine is framed by build- islands between the rail tracks - a ings with prevailing public functions number of pocket "urban forests" or services on their first floors. It allo- made out of planted trees, recycates enough space for cafe gar- cled rusty steel profiles used pergodens and other activities that require las and new sitting furniture. These access to outdoor public space.

a compact and attractive space for canalled into the public stormwater functions that the city currently system to mitigate potential flooding lacks - engaging and playful places in the city.

to the relocated, existing Jump City 28. (3,28 ha). It harnesses important con- Whereas, the track trolley play area is nections to the site's surroundings, using the railways and its trolleys as Główna Station. In the future, the tracks and tell the story of Gdynia, as spine could be extended for another well as an outdoor workshop area for

Besides, the "Track Path" has a green ridge of plantings clustered in green create a shelter and an oasis for relaxation. The basins can also col-In addition, the "Track Path" offers lect rainwater which can be further

The "Track Path" becomes the heart for gathering and outdoor recreation. Combined with a network of smallaround the transformed warehouse -The trampoline square is adjacent Magazyn Towarowy, ul. Jana z Kolna

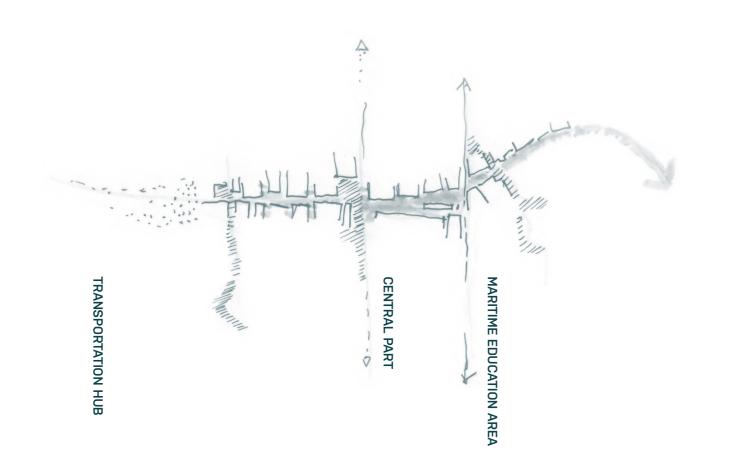


VIEW FROM THE GDYNIA GŁÓWNA STATION AT THE CONSTITUTION SQUARE AND THE BEGINNING OF THE TRACK PATH





Track Path, Urban Forest Transportation Hub **Track Path** Central Part



## THE THREE NEIGHBOURHOODS

and the maritime education area.

The transportation hub, around the new restaurant hall which comple-Gdynia Główna station, creates a ments the Market Hall and the new lively station area neighbourhood for Railway Museum building with it's the those who commute, work, live or rooftop arch viewpoint. The square is travel to the city. The area is trans- also fused with a new bus stop and formed into a welcome point to the a new traffic calming and low-speed city. It is shaped by new leisure public limit zone on a redesigned Jana z spaces, outdoor and indoor waiting Kolna Street. The square further rooms for travelers, office areas in the opens up to the new "Railway Park" vicinity, and better-integrated cycling which is partly located on a former and public transportation infrastruc- wetland area. To the north, the axis is ture. This is reflected in designed bike closed shut by the new public library. parkings, new city bus stops new The "Track Path" here is a bit elevatregional bus terminal, dedicated Kiss ed, responding to the small topog-& Drive, Park & Ride, and car-sharing raphy denivelation. Through this, it facilities. A clear pedestrian-bike con- offers many resting opportunities in nection to the "Track Path" and most a green enclave. of the site is established from here

too. In this neighbourhood, the "Track Thirdly, the maritime education area Path" is supported by the trampo- seeks to explore and bring closer the line square which accompanies the history and industrial legacy of the new Jump City building, and islands site. The area abounds in educationof urban forests (mixed green, natu- al facilities - a new kindergarten, eleral and mast-like, reused poles from mentary school with outdoor play rusty steel which serve as relaxation areas, student housing and dormitozones between the railway sidings). ries and a Gdynia Maritime Universi-

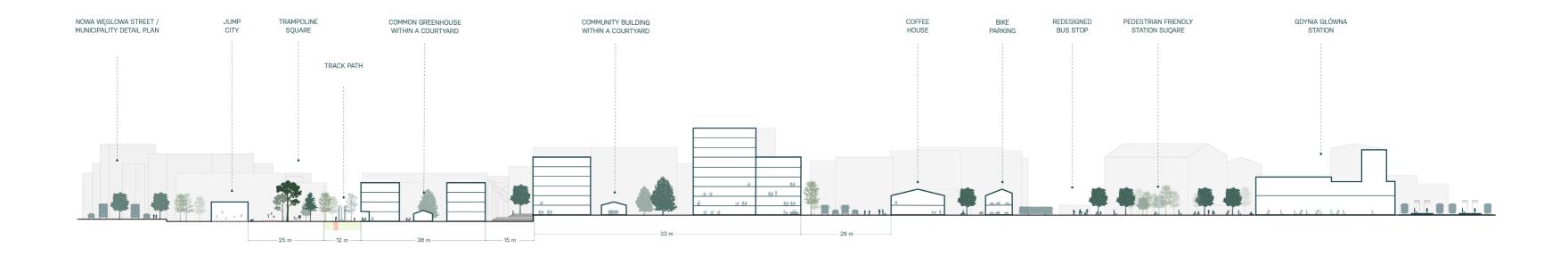
the existing Market Hall (Miejskie Hale smaller interventions that accompa-

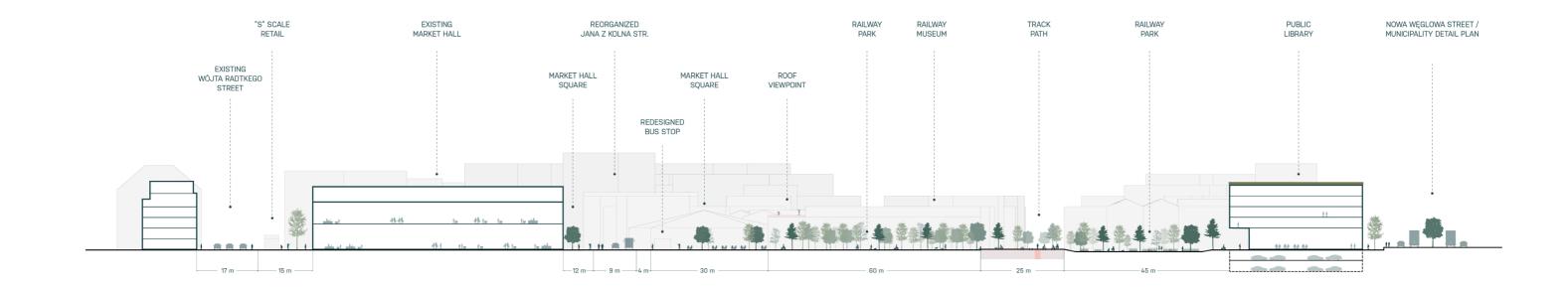
ty facility. These are sewed togeth-The central part is designed around er by the outdoor running track and

building finally allows people to spec- tion modules. tate it. The square is framed by the

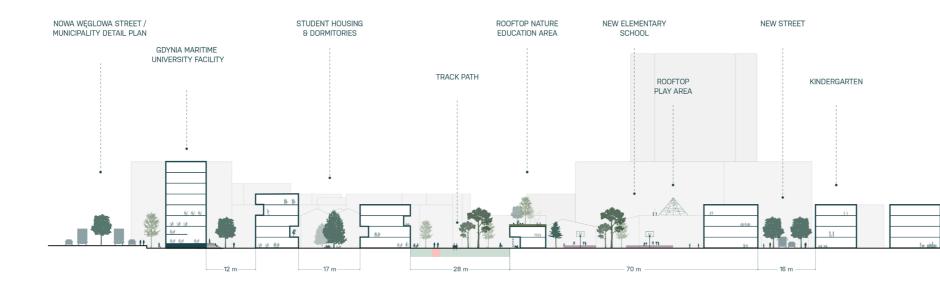
As mentioned before, the proposal Targowe), an important architectural ny it along the way. The "Track Path" distinguishes the three key neigh- landmark of Gdynia. This part stress- transforms here into a mobile play bourhoods along the "Track Path", es the importance of this building. A area with shuffling railway trollies the transportation hub, central part, new square in front of this arched and outdoor, flexible, outdoor exhibi-

## TRANSPORTATION HUB





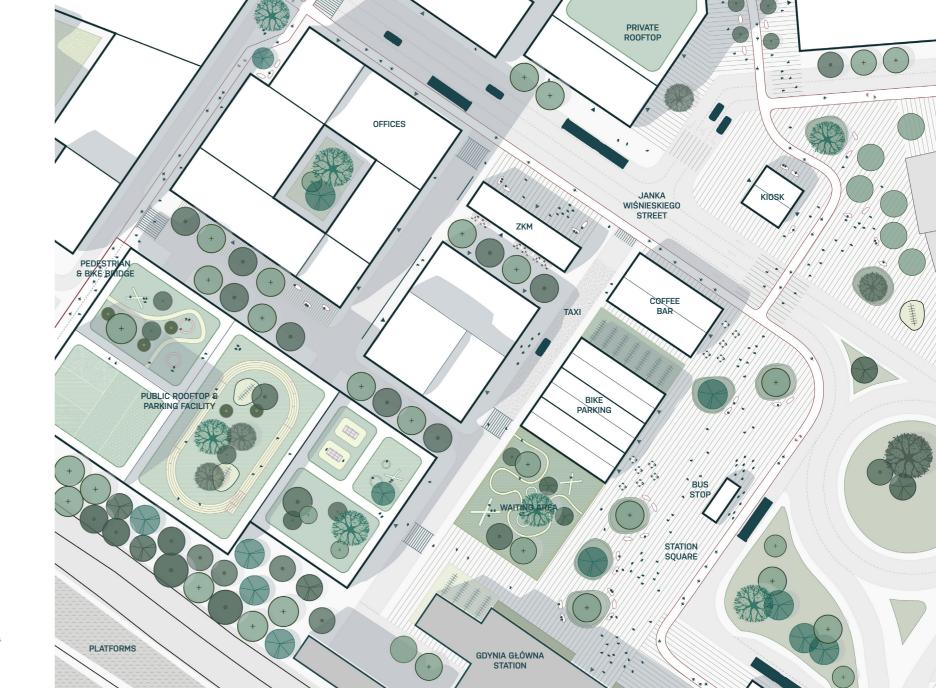
## **CENTRAL PART**



## MARITIME EDUCATION AREA

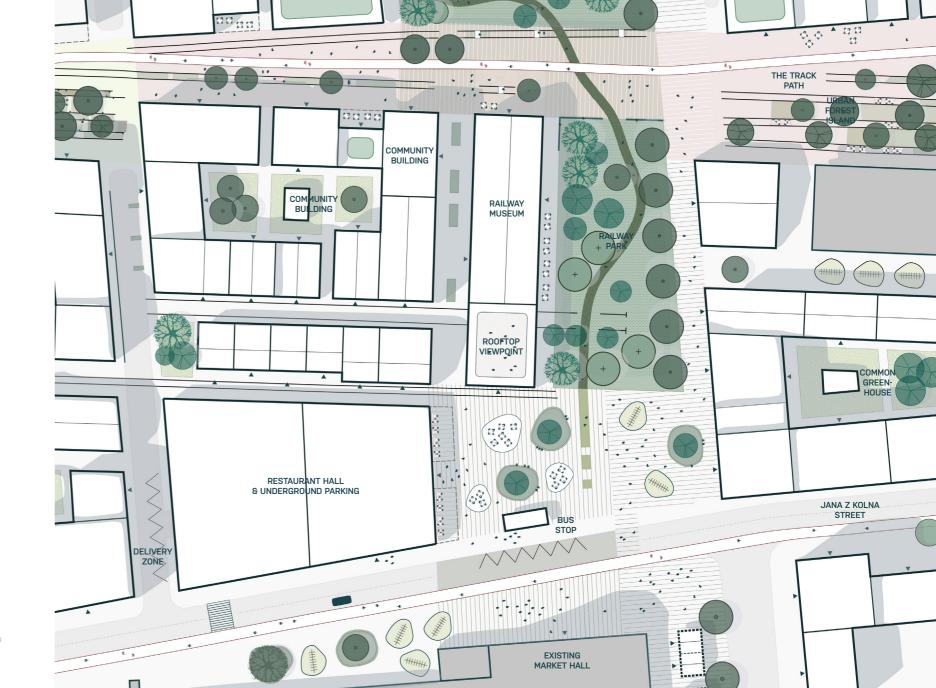


TRANSPORTATION HUB



124

**CENTRAL PART** 



126

MARITIME EDUCATION AREA



## LIVING BY THE TRACKS

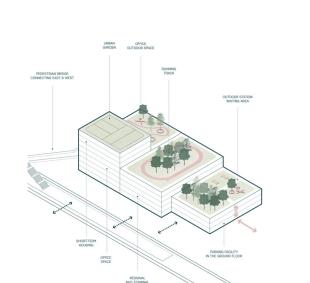
and working by the tracks but it social housing. Large and medium the gradual aging of its population explores three specific building typol- scale housing units face bigger, ver- the rent and living costs in the citv ogies in more detail. The first called tical streets connecting to the city center itself become more and more the multi-functional building is locat- center. Smaller multi-family housing expensive and, therefore, unafforded by active tracks, whereas the units, reassembling the row houses, able for many elderly who are often second, the mixed-use block, and the will face the neighborhood streets. forced to move elsewhere. third, the fisherman's village stand by Besides, a part of the block facing the the abandoned tracks left on the site. "Track Path" will have active ground

The multifunctional building is con- and other services. Cafe gardens and structed in the station area. It is a other activities that require access to mixture of car parking, offices and a outdoor public space will be incorpohotel. It rethinks the monofunction- rated into the preserved rail tracks. al parking facility by transforming it

access to the station is provided.

at the northern edge of the design they are located within walking dissite. They border the Nowa Weglowa tance to many important places in Street which is foretold in the local Gdynia but also as they are armed plan. In order to protect the site with small backyard gardens, winter from the heavy traffic that it might gardens that many desire. accommodate, in this place, the block has higher and wider edge buildings that can create a buffer from the noise pollution. These buildings will

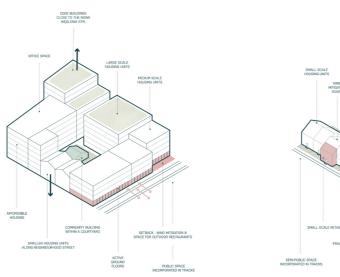
into a public utility. On top of that, it Last but not least, the fisherman's has a public rooftop with outdoor lei- village is the smallest typology on the sure and waiting areas for the pas- site. This typology is a modern take sengers. Through this a few roasts on Gdynia's original housing strucare baked on one fire - a valuable land ture when it was a small fishing vilat the station is given to the com- lage. These row houses are intendmuters, new residents get a unique ed to serve as senior co-housing\* or outdoor space and convenient car small workshops creating a unique landscape in the city centre. These houses will certainly be very attrac-The mixed-use blocks are located tive to many elderly not only because



ACTIVE TRACKS

Multi-functional building

## OUT OF SERVICE TRACKS Mixed-use block



PRIVATE SMALL SCALE HOUSING UNITS

DOMATE WINTED CADOE

WIND MITIGATING ROOFS

OUT OF SERVICE TRACKS

Fisherman's Village

130

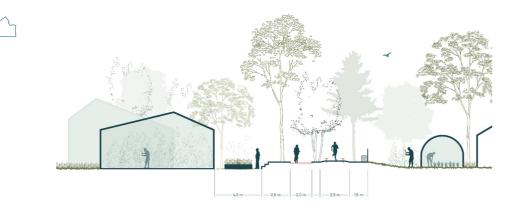
floors, with space for public facilities

The design offers many ways of living mostly accommodate offices and \*While Gdynia's age structure shows



## AUTUMN VIEW AT THE FISHERMAN'S VILLAGE

## OFF THE BEATEN TRACK



Allotment gardens



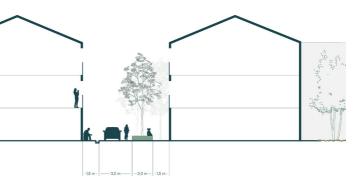


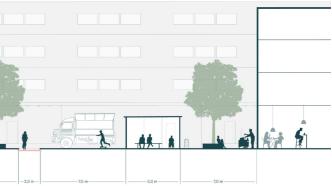
Neighbourhood street

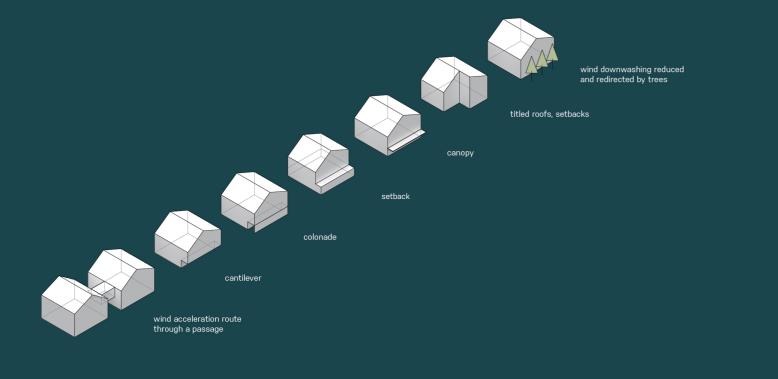


Flexible food truck square

Neightbourhood park







## MITIGATING THE STRONG WINDS IN PUBLIC SPACES

Building forms can influence the power of winds in public spaces. It is important to determine the optimal orientation and size of the buildings, . especially in such a windy city as Gdynia. For instance, in some cities, high-rise buildings are discouraged in order to minimize wind turbulence . and wind speeds at the base of buildings.

The following guidelines to reduce . the ground level wind speeds have been considered in this process and are included in the design:

- Vary building heights along a block length;
- Determine suitable building setbacks and variations in building trian experience;
- passage or under a bridge:
- · Work with awnings, canopies, Winter City. and arcades:
- Provide weather shelters such as covered stairs and ramps along building frontages;
- Create outdoor rooms using trees and vegetation to shelter areas from prevailing winds;
- Give preference to evergreen

wind protection. frontages to enhance the pedes- The ideas are highly inspired by the guidelines prepared and implement-• Use setbacks to create sun ed by the City of Edmonton and are traps and shelters from the wind described in more detail in the doc- Accelerate wind route through a ument Winter Design Guidelines Transforming Edmonton into a Great

vegetation on the windy sides of open outdoor spaces, they can serve as "wind sponges"; Plant dense vegetation along the edges and against any blank walls to reduce wind accelera-

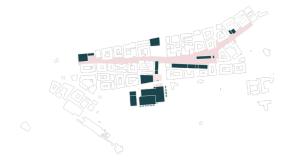
tion:

Provide shelters or wind blocks in areas that serve as outdoor gathering spaces, particularly where transit stops are located: Incorporate balconies, softened corners, stepped-back façades, and even porosity, openings and irregularities into a building's exterior to dissipate;

Orient outdoor furniture to maximize sunlight and allow some

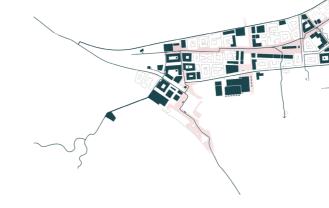
## TIME PERSPECTIVE

in the implementation of the design



## Phase 1. Re-introduce the abandoned

The first phase of construction can begin already in 2021. This phase will focus on a small scale, low-cost and partly temporary changes to the built environment. The aim is to re-introduce the citizens to the site by a series of events happening in this post-industrial setting. Through this, the preserved heritage spaces will be activated. The demolition of unnecessary infrastructure and the reconfiguration of the train tracks will take place too. In addition, the layout for the "Track Path" will be built and the first catalyst buildings will be constructed, such as the renewed Jump City facility and restaurant hall.



## PHASE 1

Re-introduce the abandoned 2021 - 2025

## PHASE 2

Improve accessibility 2025 - 2030

## Phase 2. Improve accessibility

This phase involves improving the accessibility of the site, and concentrating the construction around the station area in particular. New bus stop shelters and transportation facilities (regional bus terminal, Kiss&Drive, Park&Ride) around the station area will be built. On top of that, the extended pedestrian paths and new bike connections will increase the permeability of the site. The "Track Path" branches, i.e. shared-spaces linking the site to the key buildings, should also be introduced. More new buildings, such as new educational facilities or first mixed-use block will begin to be constructed as well.

## Phase 3. Frame the Track Path

This phase involves framing the "Track Path" - a main public space of the proposal. A new, active frontage of the spine will help to create an interesting network of public spaces. The first planting works at the Railway Park will take place too.



## PHASE 3

Frame the Track Path 2030 - 2035

PHASE 4 Densify the site 2035 - 2040

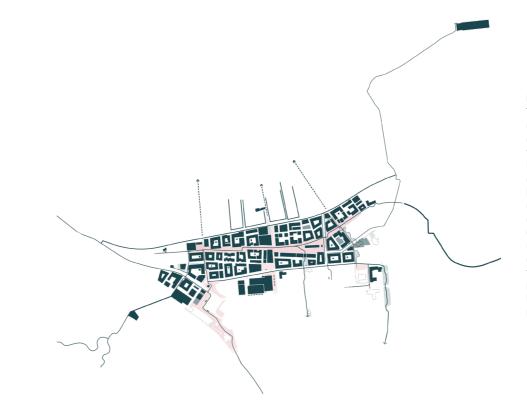


## Phase 4. Densify the site

This phase aims to densify the area which is close to the edge to the existing city centre. This aims to seamlessly bridge the old & new parts of the city. The phase requires renewing and reorganizing the existing Jana z Kolna Street and expanding the development in the vicinity to the train station.

## Phase 5. Protect

This phase focuses on protecting the site from the traffic, noise and dust pollutions which might stretch over the area after the construction of the new thruway Nowa Węglowa Street (its construction has already been planned by the municipality; the street will be built soon in order to serve the expanding port). "Edge", 5-8 story high, buildings of primary office usage will be built. New, "mitigating" trees along the Nowa Węglowa Street should be planted too.



## PHASE 5

Protect the site 2040 - 2045

## PHASE 6 Think outside of the box 2045 +

## Phase 6. Think outside of the box

This phase focuses on the possibilities of further expansion of the site. The development axis heads to the north, where the rest of the vast, active railyard is today. The street grid could easily be further extended there, bringing the city centre closer to the northern waterfront. All of this could, however, happen assuming that the port of Gdynia will vacant more land. The site could also continue to grow to the east, following the "Track Path" down to the Fisherman's Quay (Molo Rybackie) where a new, public waterfront could be created in proximity to a new investment that is being built there now.

# HARVESTING THE POWER OF LOCAL MICROCLIMATE

## A NEED FOR A CHANGE

Cities worldwide became creators by using the piezoelectric materiof a high-carbon reality that devas- als which produce an electric curtates the climate. It is now certain rent when placed under mechanical that we need to change the ways stress i.e. when for instance someof designing and managing them. As one steps or drives on them. A good the CDP (an organization which sup- example illustrating how to apply the ports companies and cities to dis- second approach in the cities is the close the environmental impact of renovation of Croeselaan Street in major corporations) states, we need Utrecht, the Netherlands. Its 30 km to pursue aggressive strategies to stretch has been transformed with improve urban environments, while at new greenery and a room for bikes the same time preparing them for the and pedestrians. The new design has implications of climate change.

Therefore, designing more environ- pedestrians in energy generation. ment-friendly cities is indispens- This makes the street not only more able. According to CDP, the full list of engaging but can also be applicable cities shifting into renewable energy in the following issues: crowd control, keeps growing successfully. At the smart lighting, and wayfinding. moment, over 100 out of 620 global cities reporting to them, get over In Gdynia, it is worth taking advan-70% of their electricity from renew- tage of strong and constant winds able sources such as hydro, geother- that make the local microclimate. mal. solar and wind.

This shows, that local governments the site has good sun exposure so can easily reduce their carbon foot- there is a great potential for solar print. There are many ways of doing power there too. that. One example is by using the mechanical technologies that capture the energy and convert it into electricity. One example is the highway turbines which are designed to pick up wind generated from passing cars. Secondly, this can be achieved

Renewed Croeselaan Street behind the Central Station in Utrecht is claimed to be one of the most sustainable streets in the Netherlands. Among other things, it can generate its own energy.

source: energy-floors.com

some sustainable and innovative solutions which can, for example, engage

They can be easily harvested and transformed into energy. Besides,

## WHERE TO START?

### THE CITY BECOMES SENTIENT BIOMIMETIC DESIGN ENSURES NO NEED TO OBTAIN A MORE INNOVATIVE CITY SEAMLESS BLENDING INTO THE A CONTRUCTION PERMIT LOCAL LANDSCAPE \_\_\_\_\_0 \_\_\_\_\_\_6 [\_\_\_\_ĵ i\_\_\_\_\_ L\_\_\_\_> 6 G 9 4 AIDS MOBILITY BECOMES A MICRO-NETWORK PROVIDES INTELLIGENT REUNITES INHABITANTS WITH THAT CREATES PLAYFUL AND OUTDOOR AND INDOOR THE SOURCE OF THEIR ENERGY INTERACTIVE SPACES LIGHTING

## Wind power

for example, the Urban Street Tur- ly generated the power to illuminate per year. bines (USTs) along the Nowa Weglowa hundreds of integrally mounted LEDs. Street which is the future will be

vibrations to built structures, and coal a year. prevent energy transport losses from large power plants to consumers but Solar power need to reach up to sufficient wind quality, they can be noisy.

the public space with the use of 500 solar power plants in Denmark. It is the cloudier northern European cli-Wind power can be utilized by using, mini turbines. The installation direct- estimated to produce over 200 MWh mates".

Solar energy could also become a transformed into the high street serv- Besides, there are many products construction element of noise baring the expanding port. It is a good on the market meant to become an riers alongside the Nowa Weglowa location for them, as a combination of integral part of public spaces and Street. For this purpose, the trastrong winds and increased, steady which at the same time provide elec- ditional Solar Panel Noise Barritraffic could easily power the tur- trical services animated by wind. For er or Luminescent Solar Concentrabines. Through this, a produced clean example, the Wind Tree artificial tree tors (LSCs) could be used. The LSCs electricity could be stored and used by New World Wind produces green noise barriers are still a relatively new to power the street lights or to ser- energy. It is composed of steel trunks technology but they were tested for vice other elements along the way. and branches with 36 leaf-shaped example, in 2015 on a highway in According to the researcher Christina wind turbines. The Wind Tree can the Den Bosch region in The Nether-Beller (2009) from Danmarks Tekni- exploit all types of wind, from gentle lands. The project was developed by ske Universitet, Urban Street Tur- breezes to powerful gusts of wind. It researcher Michael Debije from the bines are smaller than regular tur- uses the Aeroleaf technology which Eindhoven University of Technology. bines and therefore can be positioned doesn't create any noise. 1 Wind Tree The research showed that the solumore freely, do not transmit their with 36 turbines equals 864 kg of tion is low cost and continues to produce energy even when there is little davlight available. According to the study results. 1km of LSCs can collect enough energy to power 50 homes. velocities. Depending on the product Solar panels could become a con- It is important to stress, that accordstruction material of for example, ing to the Scottish Institute of Solar public buildings, just as the Copen- Energy Research, LSCs solutions are A good example of an aesthetic wind hagen International School in the Nor-less effective than traditional barriers harvesting is the installation "Wind dhavn district in Copenhagen. It was but are more beautiful, which makes to Light" realized by Jason Bruges built in 2017 by C.F. Møller Architects them more suitable to be used in Studio, onedotzero and Light Lab in and has a unique facade covered in public spaces. The main advantage of London in 2007. The project was a 12,000 solar panels. They supply LSCs over typical products is, howevpart of the Architecture Week enti- over half of the school's electricity er, that they "can collect both direct tled "How green is our space?". It consumption per annum. It is one of and diffuse solar radiation. Therefore

visualized wind movements among the largest buildings with integrated (...) are excellent candidates for (...)

# REFLECTIONS

## Estimated project numbers

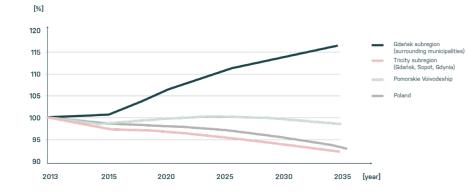


REFLECTIONS

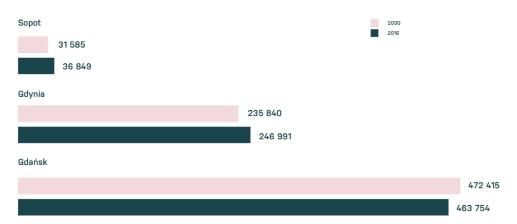
The project, accommodating a vari- price of the apartments in the neighety of sustainable solutions, allows bourhood will be significantly lower. a significant change in an area currently dominated by railway tracks, logistics, cars, and parking spaces. The proposal provides dwellings for almost 8 thousand people and office spaces for over 6 thousand workers. It recycles and repurposes a total of 4,4 km of existing rail tracks and introduces new, public green areas for relaxation, recreation, and sport.

To compare the project numbers, city authorities of Utrecht, together with the city of Amsterdam are currently about to build the first (almost) carefree housing project in the Netherlands. Their design called the Merwede Channel (Merwedekanaalzone) will accommodate around 12,000 inhabitants. The design concept is based on the belief that almost nobody will need a car in an area which is well-connected and full of services. And if someone will, there will be a car-sharing facility in one of the mobility hubs in the neighborhood provided. Therefore, the municipality dedicates "only" ca. 0.3 parking spaces per apartment. City authorities claim that it's not just about sustainability or ecology. They argue that parking spaces are expensive, and perhaps due to such limitation, the

## Population growth dynamics in Poland



## Population growth dynamics in the Tricity



Through transforming the station realm. area, I hope to present a solution that copes with one of the greatest chal- Finally, embraced with the voices of lenges of the region - the progress- Gdynia's inhabitants, the proposal ing suburbanization. Unfortunately, could be used as a starting point for chaotic settlement and rapid develop- further discussions about the future ments in the suburbs and rural areas of this valuable land, or as a referhas been an intensifying trend in the ence when reflecting on the city's region in the past years. It has been development strategies and enviproven that while neighboring Gdańsk sioning new possibilities. and the municipalities surrounding the Tricity will gain new residents by 2030, Gdynia will, on the contrary, lose them. However, a positive balance of population in the whole region allows us to believe that urban changes in Gdynia can trigger and allure new citizens. The statistics are reflected in the statistics presented to the left.

An important aspect of the design To sum up, the proposal shows one was to take advantage of the prox- of the ways of developing an integral imity to, at the moment underutilized, piece of the city centre and enhanctransportation hub at the Gdynia ing its industrial heritage. The ulti-Główna station. In doing so, the city mate goal is to improve the quality of will not only fill its void but will gain life by providing necessary connecan area that provides services and tions and enriching the city with an functions for the whole region too. attractive, flexible and diverse public

data source: GUS, 2014-2017

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# ANNEX

## QUESTIONNAIRE

## Drogie Mieszkanki i Drodzy Mieszkańcy Gdyni Drogie osoby związane w Gdynią!

### Poniższa ankieta dotyczy przestrzeni terenu "Międzytorza" w Gdyni (rejon pomiędzy ulicami Portową, Marka Zygmunta i Janka Wiśniewskiego).

W ostatnim czasie został uchwalony nowy plan zagospodarowania dla terenu (można sprawdz miejscowych planach zagospodarowania - "108 Jana z Kolna i projektowana Nowa Węglowa"). sytuacji kolejnym etapem jest zazwyczaj przygotowanie bardziej szczegółowego projektu zago: obszaru. Następnie zaś faktyczne wprowadzenie faktycznych zmian w przestrzeni. Dlatego w magisterskiej (studiuję projektowanie urbanistyczne na Uniwersytecie w Lund w Szwecji) chc koncepcję zagospodarowania urbanistycznego dla "Międzytorza". Bardzo zależy mi na tym, żeb przed rozpoczęciem projektowania porozmawiać z osobami, które przebywają w Gdyni, znają chcą współtworzyć jej przestrzeń. Państwa głos jest bardzo ważny dla przyszłości "Międzyto

## Z góry dziękuję za pomoc! Dominika Misterka

1. Dane zebrane w ankiecie pozostaną całkowicie anonimowe. Pana(i) odpowiedzi będą wykorzystane wyłącznie do cel statystycznych 2. Gdyby mieli Państwo jakiekolwiek pytania to zachęcam do kontaktu telefonicznego pod numerem telefonu 0048 79

## 1. Gdynia - moje miasto

1.	Jak długo mieszka Pan(i) w Gdyni?
	Od urodzenia

🗆 Od \_\_\_\_\_\_ lat 🗆 Urodziłem(am) się w Gdyni, ale teraz mieszkam w \_\_\_\_\_ Nie urodziłem(am) się w Gdyni i nie mieszkam w Gdyni, lecz w \_\_\_\_\_\_

Jeżeli mieszka Pan(i) w Gdyni, to gdzie? Proszę wpisać dzielnicę.

### 2. Proszę powiedzieć, jak się Panu(i) osobiście żyje/spędza czas w Gdyni?

Bardzo dobrze
Dobrze
□ Średnio
🗆 Źle
🗆 Bardzo źle
Uszczegółowienie odpowiedzi:

### 3. W przybliżeniu, jaki procent swojego wolnego czasu w Trójmieście spędza Pan(i) w G Sopocie, a jaki w Gdyni?

WIOSNĄ I	LATEM	JESIENIĄ I	ZIMĄ
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Sopot		Sopot	
Gdynia		Gdynia	

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Master Thesis Booklet June 2020

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