

# The Potential of Port Buildings and Structures for Further Renovation under Cultural - Community Centers

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**Abstract – In the article the receptions of social activation and reconstruction of port industrial buildings under cultural - community centres and aspects of their forming are examined. The tendency of reconstruction of port territories under entertaining and health areas of the city, adaptation of technical buildings for the rest of population and sporting-health measures, for the device of temporal city holidays and festivals is exposed.**

Key words – trade - industrial port ; potential, renovation ; social activation ; reconstruction; cultural - entertaining centers.

## I. Introduction

Modern trend of the port development is to provide a harmonious combination of the port and the city: the obsolete industries and port territories are carried out of the city, and the main areas of the coast, located in the central part of the city will be given under device of embankments, parks , sports and recreation centers. Such reconstruction will have a positive impact on the further development of the port (the ability to use modern technology) and will significantly improve the ecological situation in the city (recreational area) .

## II. The Need for the Renovation of Port Buildings and Structures

The port and the city - are inextricably linked . Port buildings and facilities - an integral part of the urban environment, the city-forming elements. Port is a highly symbolic place, transmits information, bears the history of many generations of sailors and their families, shows their feelings and joy, meetings and separation. Port - combines professional and business activities, it is one of the most important components of the transport complex. Commercial port - the main starting point of the history of cities, their base. Port industrial buildings and structures - are an integral part of the image of a modern city , they take part in the formation of "Marine Facade". Most of port industrial facilities in the cities occupy a substantial part of the territory (25 - 30%). Financial value of industrial heritage is very high. It is the availability of engineering and transport communications. Industrial

enterprises have the cultural, architectural, historical, planning, and artistic information [1]. As a result of modernization of traditional production - the technology of the port had changed. Many port buildings and facilities have lost their original function, they are isolated from the urban environment. Modern requirements to the port, require the introduction of new "clean" technologies, the construction of appropriate modern types of industrial buildings, reducing turnover, the use of "clean" modes of transport [2]. Often located in the central areas of the city port buildings do not work, they make difficulties in the functioning of the main areas of the city and create ecological and aesthetic imbalance. There is a shortage of the urban area for the development of business, shopping and entertainment features, small and medium businesses, the service sector. Port territory is regarded as a potential reserve for further development of urban space from the standpoint of the concept of sustainable development. The current trend of urban development - a combination of the interests of the port and the city. Renovation of obsolete port buildings, engineering structures and territories under the recreation area and relocation beyond the city industrial areas of the port - the necessary balance to create harmonious environment of the city .

## III. Methods of Adaptation of Port Buildings and Structures

The techniques of social revitalization and reconstruction of port industrial buildings and structures under the cultural - community centers were identified and analyzed. They are divided into three main groups: the preservation of the existing structure; change in the internal space; an increase in the spatial structure. Preservation of the existing structure - is complete preservation of historic Portside Industrial Design, its restoration by archival drawings and documents, recreation of the lost parts and fragments. Gives the primordial image of the object. Precondition: full compliance with its functional and aesthetic characteristics of the same requirements to the new object (Fig. 1).



Fig. 1. Inactive power station on the south bank of the River Thames near Battersea, south London. Planned for the reconstruction of public utilitytion

Changing the interior space - this change planning structure within the boundaries of the constructive scheme, (partial reconstruction, the main load-bearing elements remain unchanged, only the change in shape due to the characteristics of planning). The increase in the spatial structure - is an add of the entire structure or its part, extension planning elements, connecting the neighboring buildings, underground space can be used. (Fig. 2).



Fig. 2. Kraanspoor - very light , glass , three-story office building constructed on the existing concrete unloading board. This platform is built in 1952 , length of 270 m, a height of 13.5 m and a width of 8.7 m - a monument of industrial design

The vertical structure allows the use of basic functions to accommodate cultural - community centers; horizontal structure of buildings, allows building on top volume. (Fig. 3).



Fig. 3 Renovation of port dock under Philharmonic, red brick building , built in 1963 by Werner Kallmorgenom. Contrast of glass and industrial design

Significant advantages in the device are the functional capacity of the buildings; flexible layout ; considerable internal volume. The classification of port buildings and facilities, which are subjected to adaptation was derived (facilities on the water for the extraction of raw materials, port docks, lighthouses, cranes, supporting facilities, floating airfields). The basic functions under which port buildings and facilities are adopted were given (theater; hotel; interactive element; a business center; a museum; gallery of modern art; the multipurpose center; a public amusement park; industrial - landscape park; city, street, temporary celebration and festivals). (Fig. 4).

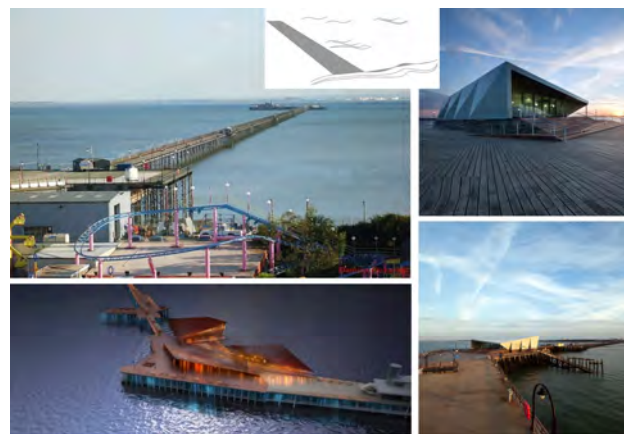


Fig. 4 This building , built in 1830 , is considered the longest pier in the world: its length is 1.33 miles ( 2.14 km). Project of reconstruction - the conversion of Pier into a modern public space. New construction in the final of his platform - will not only be used to host a cafe, souvenir shops, stalls of merchants, infrastructure, but also for concerts and public events. There is possibility of planting the "head" of the pier

Industrial enterprises have the cultural, architectural, historical, planning , and artistic information. To preserve the genetic code, the reconstruction should precede depth analysis of aspects of the value of buildings. Reconstructed historical buildings up to date at every stage of its existence, and links the past with the future through the present [3] Features of reconstructed structures are divided into two groups: qualitative and quantitative. Quantitative characteristics: length, width , height , number of storeys of the building. In addition to quantitative characteristics must take into account the qualitative characteristics of renovated structures. These include: architectural, urban, artistic, functional, planning and material values. The main task during the restoration - is to identify its architectural and artistic value. Identify of one or more values can attribute to the category of historic buildings. However, historical and artistic values - are essential [3].

## Conclusion

Port territory and buildings - a huge reserve of urban development, additional territory in the central part of the city . They can be used as a recreation area of the city. They are an integral part of the maritime sector; participate in the formation of the sea front (the image of the city). In most cases, the physical condition is satisfied for future use and adaptation to the new function. Engineering structures possess the cultural , architectural, historical, planning and artistic value. Renovated engineering facilities can be divided into three groups: cranes, auxiliary structures (adapted for interactive elements), docks, lighthouses , harbor bridges, platforms, power plant (adapted for cultural - community centers), industrial area (adaption under industrial - landscape parks).

## References

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