

The Perspective of Integrated Protection of Industrial Heritage

A Case Study of Shuanggou Historical Town Protection Planning

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Abstract

This article will emphasis on a special kind of industrial heritage, the alcohol-drink industry heritage. Currently, there are 163 sites of the Chinese industrial heritage, most of them are established after 1900s. however, the liquor industry heritages are different with most of industrial heritage that this kind of heritage inherited long history of brewing traditional industry. Meanwhile, the liquor producing mode was transited from manual workshop to modern industry during the modernization upgrades after the founding of New China, and continuing to this day. therefore, the alcohol-drink industry heritage is a witness for development of traditional Chinese industries and represent the characteristics of living heritage. Additionally, due to geographical constraints on alcohol-drink producing, there is used to a close relationship between distilleries and the towns they are located in. This relationship demonstrates how towns promote the clustering of the alcohol industry, and how the distilleries influence on the economic and spatial development of these towns. However, currently, the protection practices of industrial heritage mainly focus on the conservation and utilization of the core items of the heritage, and lack of attention on the relationship between industrial heritage and the surrounding factory towns. In December 2023, the Jiangsu provincial government announced Yanghe town and Shuanggou town as Jiangsu Historical Towns. It shows a perspective of industrial heritage protection extent towards the urban-rural relationships on which these heritages based on, and a discission to protect that kind relationship. Therefore, this article based on the application work for the Jiangsu Historical Town of Shuanggou, and it reevaluates the value of the Shuanggou alcohol-drink industry for the development of the town from the perspectives of geographical factors, industrial development transition and distiller-town relationships. And the framework for town protection was constructed by the value.

Keywords

Integrated Protection, Industrial Heritage, The Shuanggou Historical Town

How to cite

Xie Chen, Xiaoyu Ding, "The Perspective of Integrated Protection of Industrial Heritage: A Case Study of Shuanggou Historical Town Protection Planning." In Ian Morley and Hendrik Tieben (eds.), *International Planning History Society Proceedings, 20th IPHS Conference*, "The (High Density) Metropolis and Region in Planning History," Hong Kong, 2 - 5 July, 2024, TU Delft Open, 2024.

DOI: 10.7480/iphs.2024.1.7818

1. INTRODUCTION

The system of Chinese history and culture protection management are composed by two main departments. The one is the cultural heritage department which main duty is protection for historic monuments and sites. The another is the construction department which main task is concentrated on the historic city, town and village. Comparison with role of these two departments in the works of history and culture protection, the historic cities protection system is much more emphasis on a kind of integration protecting on relationship between historic cultural relics and living environment of urban and rural.

In 2022, the central government promulgate a new programmatic document for historic and cultural protection work in new generation of China, named <the Opinions on Strengthening the Protection and Inheritance of Historical and Cultural Heritage in Urban and Rural Construction>. The document claimed that the main task of Chinese protection work is to create an integrated protection and inheritance system which include national level, province level and city level in next generation. And the protection system should interpretate completely the Chinese history and the value. Meanwhile the system will include much more comprehensive protection objects, such as officially protected monuments and sites, historic city, historic building, industry heritage, agriculture heritage.

In this background, this article discusses a new perspective for integrated protection of industrial heritage which based on application of Shuanggou historic town. Shuanggou Town has been renowned for its liquor industry since the Ming Dynasty, and it still is an important liquor production base in recent China, meanwhile the liquor brewing techniques of Shuanggou are declared as The National Industrial Heritage of China. The development of the liquor industry is closely linked to urban development. In the application for the title of The Historic Town, it is proposed to focus on protecting the environment which liquor industry base on and the interact relationships between the environment and liquor industry in whole area of the town centre. It was a pioneer that applying for the Historic Town with industrial heritage as the core area of town. Taking advantage of this unique industrial heritage, a new approach to industrial heritage protection is being explored.

Currently, Shuanggou Town has been declared as The Jiangsu Historic Town by Jiangsu province government.

2. THE CURRENT TRENDS OF INDUSTRIAL HERITAGE PROTECTION IN CHINA

2.1 THE CONTENT OF PROTECTION IS BECOMING INCREASINGLY ENRICHED

The movement to protect industrial heritage originated from the United Kingdom. With the acceleration of industrialization, a more comprehensive concept of protecting industrial her-

itage gradually took shape by the 1970s. Since the International Committee for the Conservation of the Industrial Heritage (TICCIH) adopted the Nizhny Tagil Charter in 2003, which defined industrial heritage, the scope of objects of industrial heritage has gradually expanded. The concept has evolved from industrial buildings to including associated residences, educational facilities, and related social activity venues. It has also broadened from emphasizing physical remains to jointly protecting both tangible and intangible cultural heritage.

The definition of industrial heritage articulated in the Nizhny Tagil Charter reflects basic concept of industrial heritage that all buildings and structures constructed for industrial activities, the processes and tools contained within these buildings and structures, the towns and landscapes where these buildings and structures are located, and all other material and non-material manifestations have critical significance (TICCIH 2003). And industrial heritage includes industrial cultural relics with historical, technical, social, architectural, or scientific value, including buildings and machinery, plants, production workshops and factories, mines and processing sites, warehouses, production, conversion and usage sites, transportation and its infrastructure, as well as social activity venues related to industry such as residences, religious worship sites, or educational facilities (TICCIH 2003).

In 2006, the China Industrial Heritage Preservation Forum was held in Wuxi, where <the Wuxi Recommendations> were proposed. This document is China's first charter on the preservation of industrial heritage. The definition of industrial heritage in this document is: "Industrial cultural relics with historical, sociological, architectural, technological, and aesthetic value. This includes industrial buildings such as factories, workshops, mills, warehouses, and shops; transportation facilities; social activity venues related to industrial production; relevant industrial equipment; as well as material and intangible cultural heritage such as technological processes, data records, and corporate archives." (Forum 2006)

2.2 INTEGRATED PROTECTION OF INDUSTRIAL HERITAGE

In 2012, TICCIH adopted the Taipei Declaration, which further advanced the concept of "holistic preservation" for significant and exemplary instances of industrial heritage. This declaration explicitly recognized that intangible cultural heritage is also a component of comprehensive preservation. In 2023, <the National Industrial Heritage Management Measures>, was enact by Chinese centra government, clarified that core elements of national industrial heritage refer to the tangible and intangible remains that represent the main characteristics of national industrial heritage. Tangible remains include production and storage facilities such as factories, workshops, workspaces, and mining areas, industrial-related management and research sites, other life service facilities and structures, machinery and equipment, production tools, office supplies and archives. Intangible remains include production processes, regulations, corporate culture, and industrial spirit.

This evolution demonstrates that the recognition and protection of industrial heritage have progressed from individual preservation to holistic protection, and from viewing heritage as static to appreciating it as dynamic heritage.

However, during the processing of urbanization, industrial heritage is threatened globally as well as others cultural heritage. To protect various values by industrial heritage, the concept of integrated protection has gained importance. Domestically, there have been certain practical explorations in this regard, ranging from designating modern industrial buildings as cultural relics for protection, to defining industrial heritage districts for comprehensive preservation, and even to constructing city-wide industrial heritage systems for overall protection. Suzhou has designated the Changmen area (an industry urban area) as the historical district and has expanded its protection scope. Based on the “General Plan for the Preservation of the Beiyang Fleet Dagu Dock,” Ji Hong(2012) have introduced the concept of an industrial heritage protection zone for the protection of industrial heritage, achieving a hierarchical approach to the protection of “industrial heritage protection zones” and the “protection scope” of cultural relics units.

2.3 THE PROTECTION OF INDUSTRIAL HISTORIC TOWN

Although the Integrated protection of industrial heritage in central cities such as Beijing and Shanghai have been relatively successful, it remains relatively neglected in many small towns across China due to differences in levels of economic development and heritage conservation concepts. Meanwhile, industrial heritage used to be damaged in these small towns in the processing of further urbanization. Currently, there is lack of practice of integrating industrial heritage protection with the historical towns. On one hand, the recognition of the historical towns had stringent requirements regarding the age of these towns, typically focusing on those built during or before the Qing Dynasty. In this historical period, the historical town were often a kind of residential settlements, commercial hubs, or military fortresses. The basic characteristics of economy of ancient China's used to difficult form that towns due to industrial development. On the other hand, due to the requirement of local economic development, traditional industrial historical towns have undergone continuous transformation, renovation, and iteration during their use in ongoing production processes. This has often impacted or damaged the authenticity of related relics, thereby affecting the value recognition of the historical town.

3. THE BACKGROUND OF SHUANGGOU HISTORIC TOWN

3.1 THE CURRENT SITUATION OF SHUANGGOU TOWN

Shuanggou is located at the southwest corner of Sihong County in Suqian City, and it is the southernmost town of Suqian city. It borders Hongze Lake to the east and the Huai River to the south. Across the lake, it faces Hongze County in Huaian City. To the west it is adjacent to Si County, Wuhe, and Mingguang City in Anhui Province. To the south, it neighbors Xuyi County in Huaian City, historically known as “the rooster crows in two provinces, and the dog barks in three counties.”

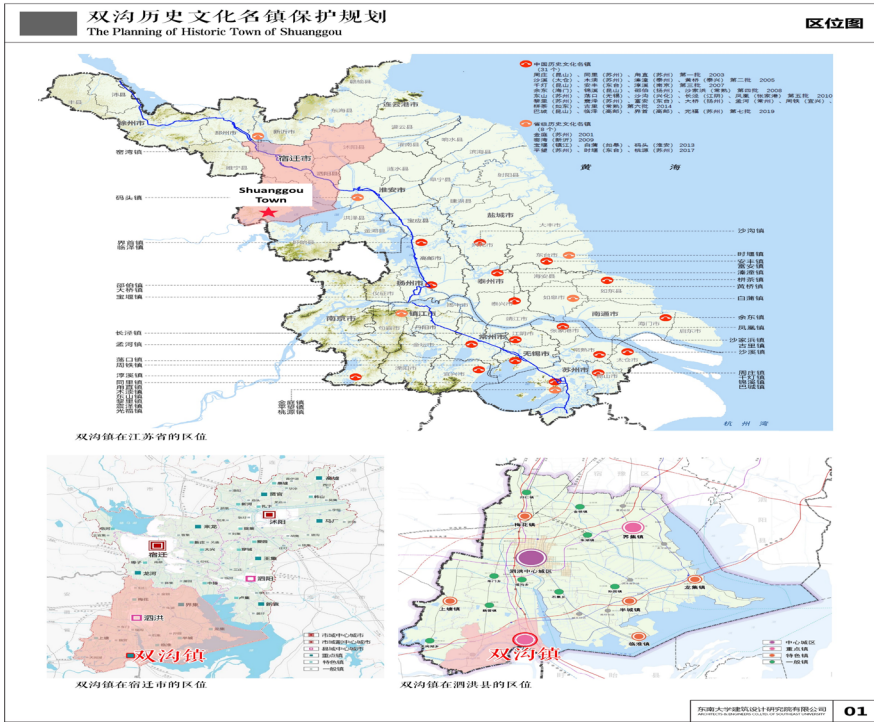


Fig. 1. The location of Shuanggou Town in Jiangsu Province and the position of the Historic town in Jiangsu

Shuanggou is an important origin and production town for Jiangsu's liquor. Suqian was awarded the title of "Chinese Baijiu(Chinese white liquor) Capital" in 2012 by China Light Industry Federation. The city's large-scale liquor enterprises have accumulated a total operating income of 31.316 billion yuan, accounting for 60.38% of the province's large-scale liquor enterprises' operating income, and 5.2% of the Chinese's. Shuanggou's liquor operating income was 4.7 billion yuan, accounting for one-sixth of the city's total sales in 2023. It is an important part of Suqian's liquor capital.

3.2 THE SITUATION OF SPATIAL PATTERN OF SHUANGGOU TOWN

Shuanggou is located between the hills in the hilly area on the north bank of the Huai River. The eastern and western hilltops and the northern hillside of the town are well preserved. And there are two river channel on opposite sides of the town. These two river channel can still be identified clearly, with the west one segment being well protected in the Shuanggou distillery.

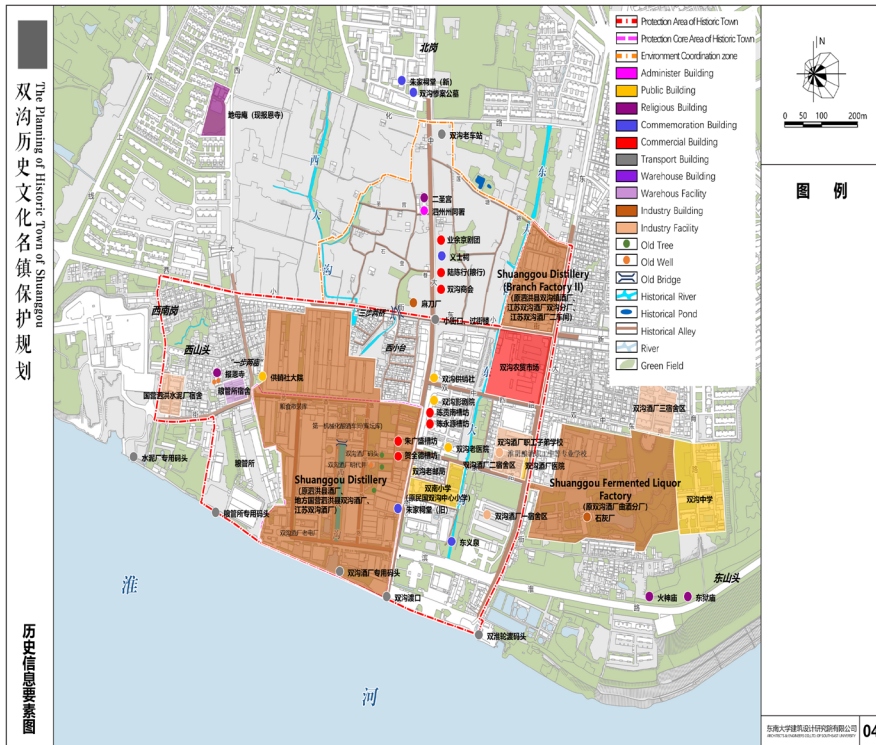


Fig. 2. The Distribution of Historical Information in Shuanggou Town

The town is divided by Centre Street (Zhongda) as the north-south axis, and Dong Street and Xi Street as the east-west axis, forming a cross-street framework. Zhongda Street is lower in the south and higher in the north. As the town has expanded northward since ancient times, the southern end is the historical ferry crossing. Dong Street and Xi Street cross the East and West river channel, following the natural terrain with undulating elevations.

3.3 THE HISTORIC RELICS' DISTRIBUTION OF SHUANGGOU TOWN

The Shuanggou old distillery and its ancillary functional areas local on both sides of the southern section of Zhongda Street, while the northern section is mainly for commercial and residential purposes.

The fermentation pits of Shuanggou distillery were built in the tenth year of Emperor Yongzheng's reign in the Qing Dynasty (1732). In 1951, they were merged to establish the state-owned Shuanggou distillery. Currently, the east side of the old factory still retains industrial heritage buildings such as the fermentation pits, the Ming and Qing Dynasty fermentation pits, the Zhu Family fermentation pits, the 201 workshop, and the bulk grain storage built to meet industrial production needs. Some factory buildings have undergone certain updates

and renovations in modern times due to production requirements, but they still retain the traditional appearance and texture of the factory area.

4. THE DEVELOPMENT CHARACTERISTIC OF SHUANGGOU LIQUOR INDUSTRY

4.1 GEOGRAPHY

The development of the liquor industry is closely related to the local geographical conditions. The high-quality water source and the geographical environment surrounded by the Huai River and Hongze Lake have created a favourable environment for Shuanggou liquor industry. The groundwater in this area is good quality, and the air and soil contain dozens of microorganisms beneficial for fermentation and brewing. The climate is suitable, with temperatures ranging from 22 to 30 degrees Celsius year-round and humidity maintained at 83%, which is conducive to microbial fermentation of grains.

Secondly, the development of liquor industry in Shuanggou town is also influenced by major engineering of the surrounding area. By the Ming and Qing Dynasties, with the building of the Grand Canal near Shuanggou town, a large amount of sorghum straw was needed for canal construction. As a result, sorghum was extensively planted in the vicinity. Local residents did not like to eat sorghum, so a large amount of it was used for brewing liquor. At the same time, there was a strong demand of liquor by canal workers, such as for disinfection and heating in winter. Therefore, the liquor industry in Shuanggou town developed vigorously with these efforts of raw materials, demand, and natural environment.

4.2 CONTINUITY

The value of liquor industry heritage is continuously developing and accumulating. Due to geographical constraints, most liquor industrial heritage sites demonstrate strong continuity to maintain the unique flavor of liquor. Whatever production tools and organizational methods continue to modernize, but the brewing techniques and sites remain unchanged. Therefore, the liquor industry heritage, which base on the brewing techniques and sites, was superposed various periods values and fully reflecting the time sequence of liquor industry development.

The brewing of liquor in Shuanggou Town began in the Tang and Song Dynasties and has always been the main handicraft industry of local villagers. Currently, in the Shuanggou Liquor Factory, more than 13 foundations of buildings from the Song and Yuan Dynasties to modern times have been discovered, along with a large number of pottery shards.

To the Ming and Qing Dynasties, the brewing industry in Shuanggou Town had become quite mature. There were many small-scale brewing workshop in Shuanggou Town, such as Quande, Guangsheng, Yongyuan, and Tailai. The core item of the industrial heritage, 243 fermentation pits, are main relics of this period.

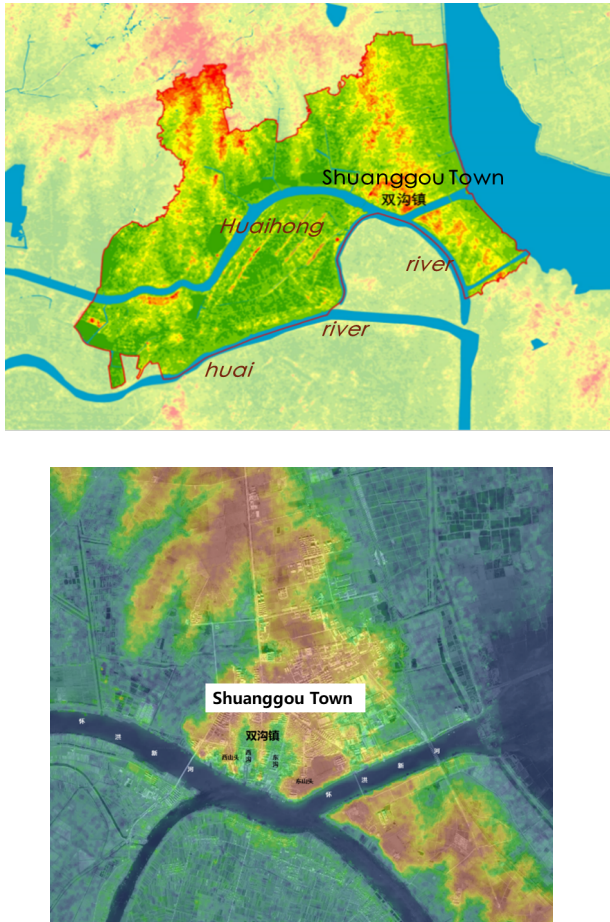


Fig. 3. The topography of Shuanggou Town. The left one is the whole area of the Town, and the right one is the central area of the Town.

After the Republic of China to the People's Republic of China, the state-owned Shuanggou distillery was established through mergers of old brewing workshops and continuously modernized on the basis of subsequent development. Currently, the covered structures above the old fermentation pits and China's first mechanical liquor storage cellar are relics from this period.

4.3 USABILITY

The usability is the most significant characteristic of liquor industrial heritage. Using traditional brewing techniques, old fermentation pits can still produce about 1 ton of mash liquor per year for the production of high-end liquor varieties. Therefore, the daily use, protection, and some modernization of the heritage pose challenges to its preservation. Innovative management mechanisms are needed.

5. THE STRATEGIES OF INTEGRATED PROTECTION

5.1 CREATING PROTECTION FRAMEWORK OF THE HISTORIC TOWN BASED ON INDUSTRY HERITAGE

Geographical environmental elements are incorporated into the protection framework. Currently, most protection planning treats geographical elements as environmental factors for protection. In the protection planning of Shuanggou historical town, its geographical elements are an important part of the unique characteristics of the liquor heritage. On one hand, the surrounding hills (East Hilltop, West Hilltop) and major rivers are the key elements of a natural environment for brewing. On the other hand, parts of the west river channel were historically used as transportation channels in the Shuanggou distillery. Therefore, the protection planning proposes to incorporate the surrounding river systems and mountain forms into the protection framework.

Constructing a complete time-series protection framework. In the early days, Shuanggou town was an important ferry crossing the Huai River. In the Ming and Qing Dynasties, with the concentration of liquor industry, the spatial functions of the town gradually adapted to the requirement of liquor industry development. Zhongda Street, the town's central axis, had its functions on both sides gradually transformed from commerce to a commercial mixed-use ancient liquor workshops. Also, the period after the founding of the People's Republic of China was an important period for the development of the liquor industry in Shuanggou. A series of modern buildings built during this period, representing important achievements in post-founding development, are also included in the protection framework. The planning constructs a complete timeline of liquor industry development by covering comprehensive relics by every vital period of Shuanggou town.

Enhancing the extraction of elements related to factory-town relationships. In the period of People's Republic of China, depend on the development of the Shuanggou distillery, Shuanggou Town gradually formed a functional pattern centered on the distillery. Most of the town's residents was employees of distillery. Therefore, a large number of functions, which served the factory workers, were concentrated around distillery, such as workers' hospitals, workers' primary schools, vocational schools. These facilities are important carriers of collective memory for the development of the Shuanggou distillery for period of the People's Republic of China, and are included into protection framework.

5.2 DEFINE THE PROTECTION AREA OF THE HISTORIC TOWNS BASED ON INDUSTRY HERITAGE

According to the richness of historical remains and their relationship with the carriers of value, the protection range of Shuanggou historical town is divided into three levels:

The first is the core protection range of the historical town, centered around the Shuanggou distillery, including major cultural heritage units, industrial heritage, historical buildings, and docks along the west river channel and other water systems. It protects the "three horizontal

and three vertical” historical road pattern of the old factory area. It protects the traditional appearance of the riverside streets. It protects the traditional functional layout and architectural style of production, storage, and packaging in the old factory area. It protects historical environmental elements such as rivers, embankments, pavements, ancient wells, bridges, and trees in the historical cultural district, and preserves the traditional production techniques and flow organization methods in the old factory area. It protects the intangible cultural heritage of Shuanggou brewing techniques.

The second is the construction control zone of the historical town. It mainly reflects the urban spatial pattern of factory-town relationships. The control zone includes the surrounding urban layout and construction controlling area which carriers of collective memory of distillery, such as workers’ hospitals, workers’ dormitories, and workers’ schools.

The third is the environmental coordination zone, which serves as a buffer zone around the historical town. It mainly includes natural environments that should be subject to control, such as East and West hilltops and East and West river channel. The emphasis is on protecting the surrounding landforms and maintaining the topographical characteristics of high-ground construction and natural drainage in low-lying areas in the historical town. Minimizing changes to landforms and terrain caused by above-ground development. Preserving the historical names of important landforms, such as Xixiaotai, Dongshantou, Xishantou, and Beigang.

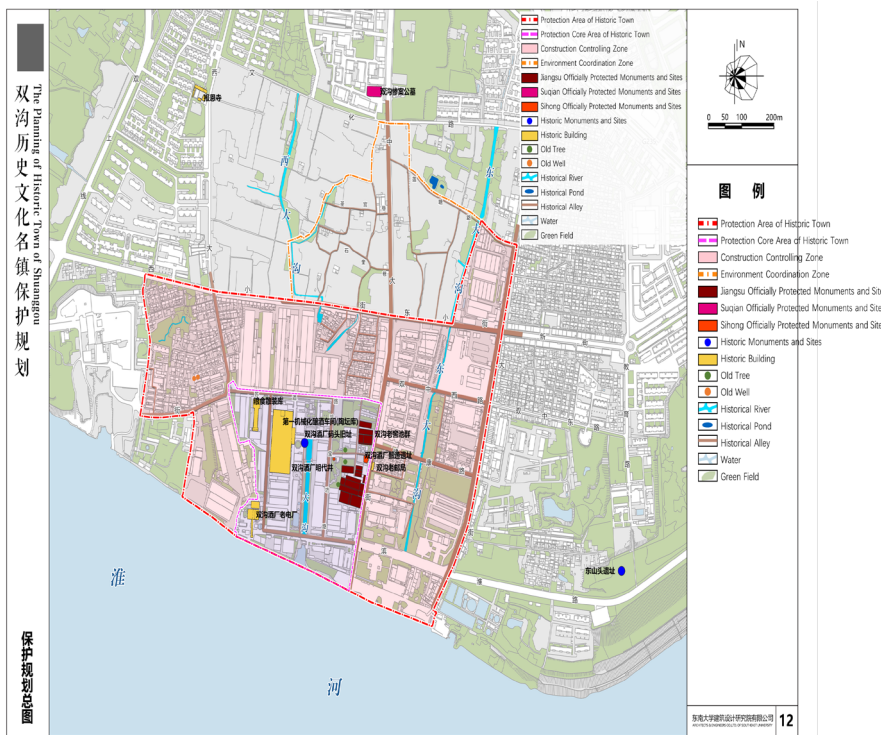


Fig. 4. The Protection Area Planning of Shuanggou Historical Town

6. THE STRATEGIES OF INHERITING AND DEVELOPMENT OF INDUSTRY HERITAGE

6.1 ENHANCING THE INHERITANCE OF COLLECTIVE MEMORY

The greatest characteristic of liquor industry heritage is its usability. To resolve the conflict between heritage preservation and industrial production, Shuanggou distillery has built a new factory outside the historical town. Currently, the old factory area is mainly used for the production of high-end products and industrial tourism. High-end liquor products are produced using by inheritors of intangible cultural heritage with traditional techniques. It is an exploring for revitalizing intangible cultural heritage. Industrial tourism mainly involves visiting the brewery, participating in brewing techniques, and selling specialty products.

6.2 IMPROVING THE QUALITY OF PUBLIC SPATIAL ENVIRONMENT

Upgrade the industrial functions of the old town area, enhance the improvement of public space environment, especially the original spaces such as workers' schools and dormitories. Promote a new round of transformation and development of the town in the new era.

Enhance the optimization of public spaces in streets, alleys, waterfronts, etc. Add several landscape nodes, especially around industrial heritage sites such as Dongshantou and industrial spaces that carry the value of Shuanggou.

7 CONCLUSION

Shuanggou Town is the first historical town with a liquor industry background in Jiangsu. It represents two main situations. One is the approach towards the integrated protection of industrial heritage and its surrounding environment. The government explore the path to protect the industry historical town.

This article explores the relationship between industrial heritage and the protection of the historic towns from a technical perspective. It outlines the elements that should be included in the protection framework and delineates the protection range based on these elements. However, due to its usability, there is a certain contradiction between the current management requirements for the protection of famous towns and the use of industrial heritage. In the subsequent planning and practice, local governments and planning units need to work together to resolve these contradictions and effectively protect industrial heritage and historical and cultural famous towns.

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