

# **Land use analysis at An-Ping Street during Japanese rule**

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## **Abstract**

An-Ping at present-day Tainan City is the birthplace of Taiwan's history. She lived through the Dutch occupied period (1624-1662), Koxinga and Ming loyalists garrison for revenge (1662-683), Ch'ing regime took over (1683-1895), Japanese rule (1895-1945) till the end of the World War II, also testimony the development vicissitudes of Taiwan. The reasons why Taiwan named "Taiwan" It's said original from pronounce of "Tayouan" which is one of tribe of the Siraya race lived close An-Ping. After Dutch landed they were forced moved to inland then "Taiwan" was spread around the island. Finally became the appellation of the island.

For 400 years An-Ping has possessed her position very important. Those constructs established by the Dutch in Tayouan in 17 century, such as Fort Zeelandia (also known as An-ping Fort) was the political and economic center of the colony for 38 years and Stad Zeelandia later develop to the first Han people settlement (also known 6 tribes of An-Ping), The stronghold of Koxinga and Ming loyalists, The navy headquarter of Ch'ing Court also one of most important port in Taiwan, During Japanese rule the government still conduct spare no efforts there.

In 1895 (Meiji 28) after Japanese government landed in Taiwan in order to carry out civil administration in 1896 (Meiji 29) the Council passed through the law to collect land tax. And this plan was beneficial result in practice. Further more for arrange cadastre, set up land information, to know the relation of ownership, increase tax income, strengthen finance consider land investigation is the first proceeding and process land investigation mast start out from land surveying. In 1898 (Meiji 31) the "Temporary Taiwan Land Investigation Bureau" was established so as to check up completely.

This paper use cadastral map surveying by Temporary Taiwan Land Investigation Bureau and land ledger search for development of An-Ping, analysis land use during Japanese rule period, also compare relationship with a urban planning formulation in 1625 by Dutch and an un-realize plan formulation in 1941 by Japanese.

Keywords: land use, cadastral map, land ledger, land catalog, urban planning

## 1. Introduction

In 1624, the Dutch re-entered Tayouan Harbor (present-day An-Ping), where they deemed to be a feasible base of operations then began 38 years of occupation. The recorded history of Taiwan began during this time; as a consequence, the island burst into the international scene.

Long before the Dutch arrived, Japanese businessmen and the Han's people had used this natural harbor to do business. The north side of Tayouan faces to Baxemboy across a shipping lane; the southeast side is a major trading site for Japanese traders and their Han's counterparts. When the Dutch came to Tayouan, they quickly made full use of this harbor to commence trading. To expand the scale of business, they later built a commercial hostel and residences on Baxemboy Island to do more business with the Japanese and Ch'ing's traders.

In the winter of 1624, due to the climate and the terrain, the Baxemboy Island did not have adequate space to be used for exchange. To protect the interests of the V.O.C., there was a rush to relocate the commercial hostel. On January 14, 1625, the meeting convened by Martinus Sonck arrived at a decision: to move the personnel and goods of Baxemboy Island to the other side of the coast (present-day Ming-chuan Road in Tainan) and named the newly constructed city Provintia. The next day (January 15, 1625), he went to the opposite shore to purchase some land. He used 15 bolts of cangan textile to barter for a piece of land from the indigenous people of Shingang-Shih. Upon acquiring the land, the Dutch began planning the settlement; they completed design of the road system and submitted this to the Governor-General of Batavia. This urban plan was the beginning of Taiwan's urban planning history.

On September 29, 1626, the 17-member chamber of the V.O.C. sent a joint letter to the Governor-General of Batavia contained orders to rename Fort Orange to Fort Zeelandia; the city was called Zeelandia. Although Provintia was already renamed into Zeelandia in the summer of 1627, it seem that the name was not liking by the Governor of Tayouan . Ironically, the name Zeelandia was used by Hans Putmans, the succeeding Governor of Tayouan, the new Stad being built 200 meters away from Stad Zeelandia (this is why Zeelandia is also called Stad Tayouan). The Stad Zeelandia planned and built on Tayouan Island can be considered Taiwan's 2<sup>nd</sup> urban plan; it was also major factor in adding another facet to the island.

The study uses the cadastral maps produced from land surveys conducted during the Japanese Occupation (Figure 1-1) and uses the village map (Figure 1-2) as the base map for the maps overlaying. Together with related literature, land ledgers (Figure 1-3), and image geometric correction technique, it hopes to be able to accurately label the spatial distribution of each

historical period. At the same time, the study uses the information recorded on the land ledgers, especially land categories, to analyze the land development process of An-Ping during 50 years of the Japanese Occupation.

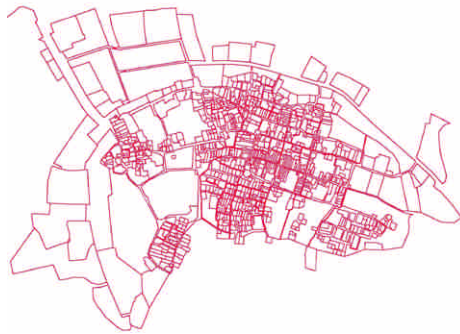


Figure 1-1: 1903 cadastral map of An-Ping<sup>1</sup>

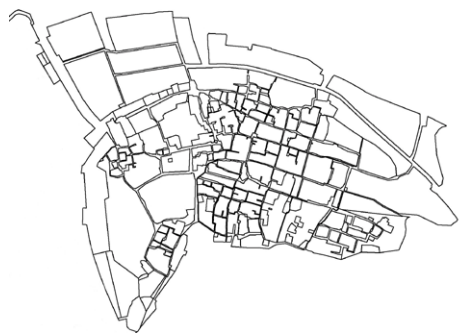


Figure 1-2: 1903 street and district map of An-Ping

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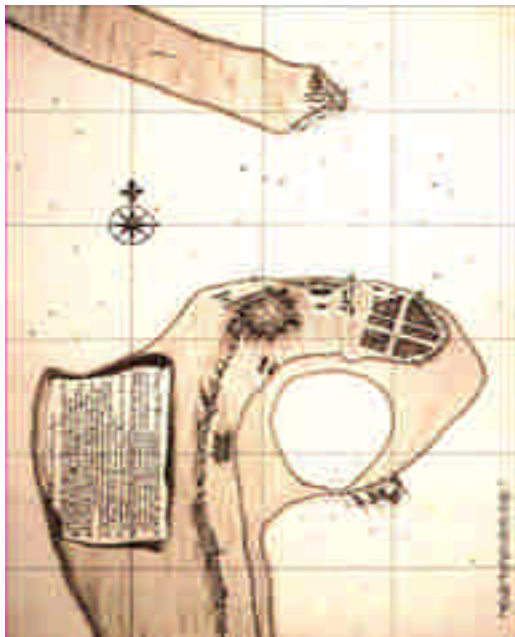
Figure 1-3: Land ledger<sup>2</sup>

## 2. Development of An-Ping

### 2.1 Dutch Occupation (1624-1662)

In March 1623, prior to formal occupation of An-Ping, due to the expansion of trading scope, the Dutch had already dispatched ships to Taiwan's coastal areas for reconnaissance. In the report, An-Ping was considered by the Dutch as a suitable harbor for anchoring ships; north-east monsoon make for even smoother sailing.

The Dutch built Stad Zeelandia based on An-Ping's unique topography on the South Asian seas at that time; it was under the jurisdiction of the V.O.C. and there was an officer commissioned to Taiwan to handle internal affairs. Stad Zeelandia was an important element in military defense against outside forces.



The Dutch started building Fort Zeelandia after occupying An-Ping in 1624; it was completed a decade later. They also undertook the planning of Stad Tayouan the same time the fort was being built. In the beginning, the plan designed three major thoroughfares and six blocks (Figure 2-1). The result of the overlay was: the horizontal road on the north side is present-day Chunghsing Road; the horizontal road further down is present-day Hsiaochung Street, which the Dutch also called Breestraet. Present-day Yenping Street is the southern border in the urban design of

Figure 2-1 1634 design drawings of Tayouan Zeelandia. Island<sup>3</sup>

During the mid-period of the occupation, the Dutch redesigned the city's road and sewage systems; they also completed a 28-foot wide stone-paved road (western section of present-day Chunghsing Road) that stretched from the fort to the town square. The Dutch ordered residents with homes on the city street to rebuild their houses with fireproof materials; they also re-measured the land and homes and made maps. At the same time, they built hospitals, cemeteries, public toilets, garbage dumps, and used the old commercial hotel as a marketplace for the Han's people.

Due to an increase in population, the Dutch redesigned the city to have six major thoroughfares and 19 blocks. The width of the roads was about 6 – 15 meters with drainage ditches on both sides. They also built city government, public scale department, hospitals, markets, orphanages, women’s shelter, cemeteries, prisons, and other public buildings. Figure 2-2 shows the space distribution of some public buildings during the latter part of the Dutch Occupation; the labels are based on information from related literature.

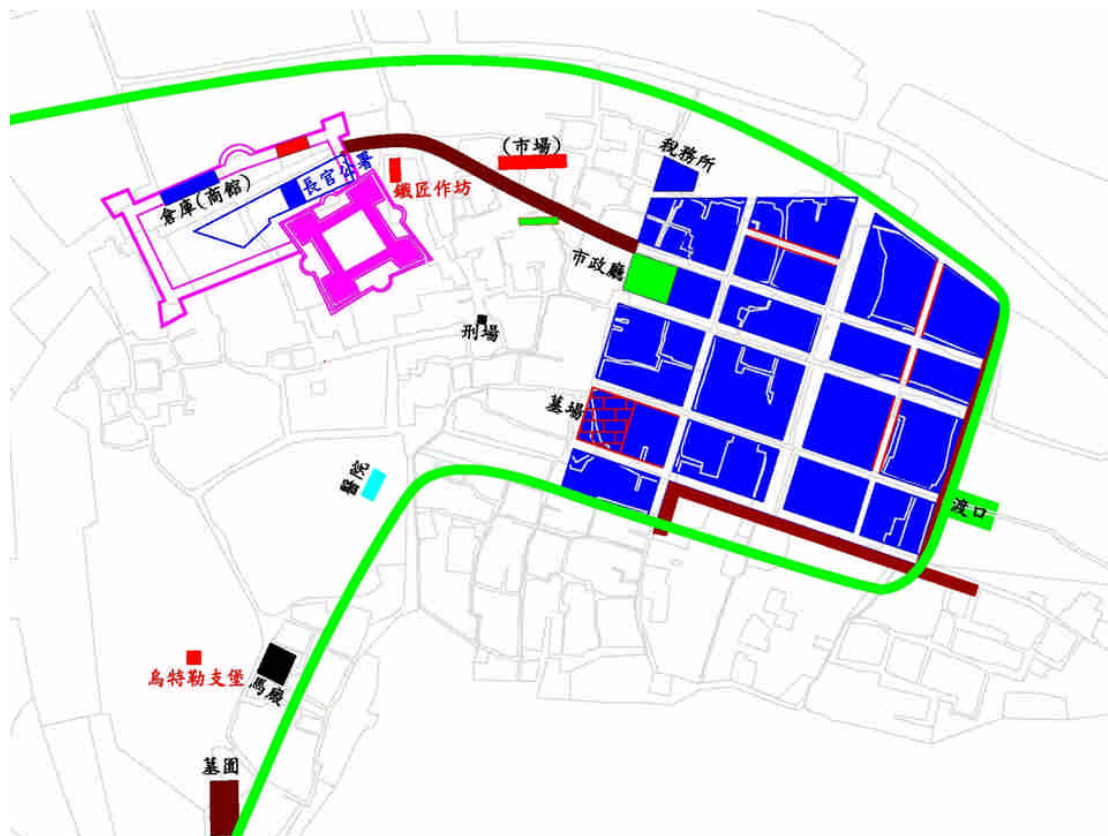


Figure 2-2: Aerial map of Tayouan towards the end of the Dutch Occupation<sup>4</sup>

In April of 1661, (Yunli 15 of Ming), the troops of Koxinga attacked An-Ping from Luermen and violent fighting erupted in Baxemboy. The Dutch lost both land and sea battles, raising the specter of peaceful negotiations. In 1662 (Yunli 16 of Ming), after the 125 (January 25) artillery battle, Koxinga and the Dutch negotiated for cease fire, signing a treaty within a week. The Dutch withdrew from An-Ping in February of 1662 according to the stipulations of the treaty, ending their 38 years of colonial administration in Taiwan.

## 2.2 Period of Koxinga (1662-1683)

After Koxinga took over Taiwan in 1661, he renamed Taiwan Fort “An-Ping Chen;” this is the origin of the name An-Ping. He also built an imperial castle in Saccam and called the area the Eastern capital. At the same time, Koxinga established Tiansin Prefecture and Wanian

Prefecture, in the northern and southern parts of Taiwan. An-Ping became Koxinga's base for launching his revolution against Ch'ing Dynasty.

On May 8, 1662 (Yungli 16), Koxinga died in An-Ping and the revolution against Ch'ing is on halt. His son Cheng Jing took power; together with Chen Yung-Hwa as his ally, renamed the eastern capital as "Tongning;" Tiansin County and Wanian County were changed to provinces. In 1681 (Yungli 35) Chen Jing died at forty in the Imperial Castle. After his death, General Feng killed the successor and supported Cheng Ke-Shuang, signaling the failure of the revolution. In 1683 (Yungli 37), Cheng Ke-Shuang surrendered to the Ch'ing Court, ending their colonization in Taiwan.

### **2.3 Period of Ch'ing Reign (1683-1895)**

In June 1683 (Kanghsi 22), Shih Lang led troops and conquered Penghu; on August 18, Cheng Ke-Shuang surrendered to the Ch'ing Court. There were many arguments about Taiwan's position; finally, they followed Shih-Lang's recommendation and made Taiwan a part of the Ch'ing's domain. On May 27, 1684 (Kanghsi 23), Taiwan came under the jurisdiction of Fuchien Province.

An-Ping became a major military town after becoming part of the Ch'ing Court. Many military establishments were built in the city, like the Naval Association, Center Camp Guerilla Agency, Left Camp Guerilla Agency, Right Camp Guerilla agency, garrisons, smoke mounds, training grounds, armament bureau, position, food supply warehouses, and harbor. In addition, there were five hostels - "Ti-Biao Guan", "Feng-Huo Guan", "Ming-An Guan", "King-Men Guan" and "Hai-Shan Guan." These places primarily served as activity centers for Ch'ing sailors, which are very similar to clubs today. The five earliest hostels were built due to the demands of military management. However, discipline declined and so the functions of these five hostels declined along with it until they slipped into oblivion.

With the population increasing steadily, An-Ping's development has gradually taken the form of "community." The term "community" was primarily used on aboriginal tribal settlements; from the time of Kanghsi, An-Ping residents slowly formed themselves into 6 settlements, which were Haitoushe, Kangtsaiweishe, Wangchenghsishe, Miaoshoukuanshe, Shierhkongshe, and Hweiyauwei-hongchishe. The six settlements shared temples like Tienhoukong, Dachong Temple, Kuanyin Temple, and Chenghuang Temple. In addition, each settlement has its own temple: Haitoushe has Kaungchi Temple, Kangtsaiweishe has Lingchi Temple, Wangchenghsishe has Hsilong Temple, Miaoshoukuanshe has Tsaitsaikong, Shierhkongshe has Sanling Temple, and Hweiyauwei-hongchishe has Hweiyauwei-hongchi Temple. In 1858 (Hsienfeng 8), the Treaty of Tianjin signed by the Ch'ing Court, the British, and the French gave rise to the development of Taiwan Fu as a commercial port, which signaled a new phase

in An-Ping's development.

After An-Ping harbor opened, foreign businessmen and missionaries immigrated to Taiwan; the number of commercial and administration agencies increased. Furthermore, England, the United States, Germany, and Holland set up embassies; numerous foreign merchant guilds also set up commercial stores, like Bain & Co., Boyd & Co., Tait & Co., D.M.Wright, Mamnich & Co., and others. In 1864 (Tongchih 3), the An-Ping Customs was established. Since the opening of the An-Ping Harbor, every country sought to expand their influence through it; An-Ping became a place where merchants contend for hegemony, and every country working to expand their power.

In 1874 (Tongchih 13), Japan invaded Taiwan, inducing the “Peony Tribe Affair” After the incident, the Ch’ing Court sent Shen Bao-Jhen to reinforce Taiwan’s coastal defenses. Shen built the Eternal Golden Fort (Castle) upon his arrival. In 1885 (Kuangshu 11), Taiwan was promoted to a province, Liou Ming-Chuan established Taiwan Fu in Taichung, and Tainan was renamed Tainan Fu and managed An-Ping County. This arrangement remained until Japan took over Taiwan.

Table 2-1 contains the results of the An-Ping Agent on November 28, 1895 (Kuangshu 21, Meiji 28). Aside from the number of households and population, it also showed the location of several important architectural buildings. However, the location of the mess kitchen was not very easy to determine; it is possible that it may have been registered as worship lands.

Number of households : 936	
Population	4816 (Males: 2676; females: 2140)
Government Agencies	Naval Association (at the end of Putsai Street), Center Camp Guerilla Agency (beside the temple of Matsu), Left Camp Guerilla Agency (at the end of Putsai Street), Right Camp Guerilla Agency (beside Chenghuang Temple)
Garrisons	Located at Tsaitsai Temple, west of Fort Wang, Dakangtsue, Erhkunshen, at both ends of Chunlu Bridge; major camp (Hutienliao)
Artillery	Located at Dakangtsue, Erhkunshen, west of Fort Wang, Hutienliao
Hostels	Yen Hostel (Putsai Street), Wanan Hostel (Putsai Street), Haishan Hostel(Haitoushe), Fenghuo Hostel (Kangtsaiweishe), Wangyeh Hostel (beside Tsaitsai Temple), Tipiao Hostel (in front of Shierh Temple), Kinmen Hostel (Kuanyin Shed)
Kitchens	East Fort Kitchen (Hai-tou Community), South Gate Kitchen (Kuanyinting), Houchi Kitchen (Wangchenghsi), East Gate Litchen (Kangtsaiwei), Hsimen Kitchen (Kangtsaiwei), Haishan Kitchen (Haitoushe), Jialitou Kitchen (Putsaitou)
November 8, 1895 (Meiji 28) Governor-General files ( 0000027-007-0088 )	

Table 2-1: Survey Results of An-Ping map department



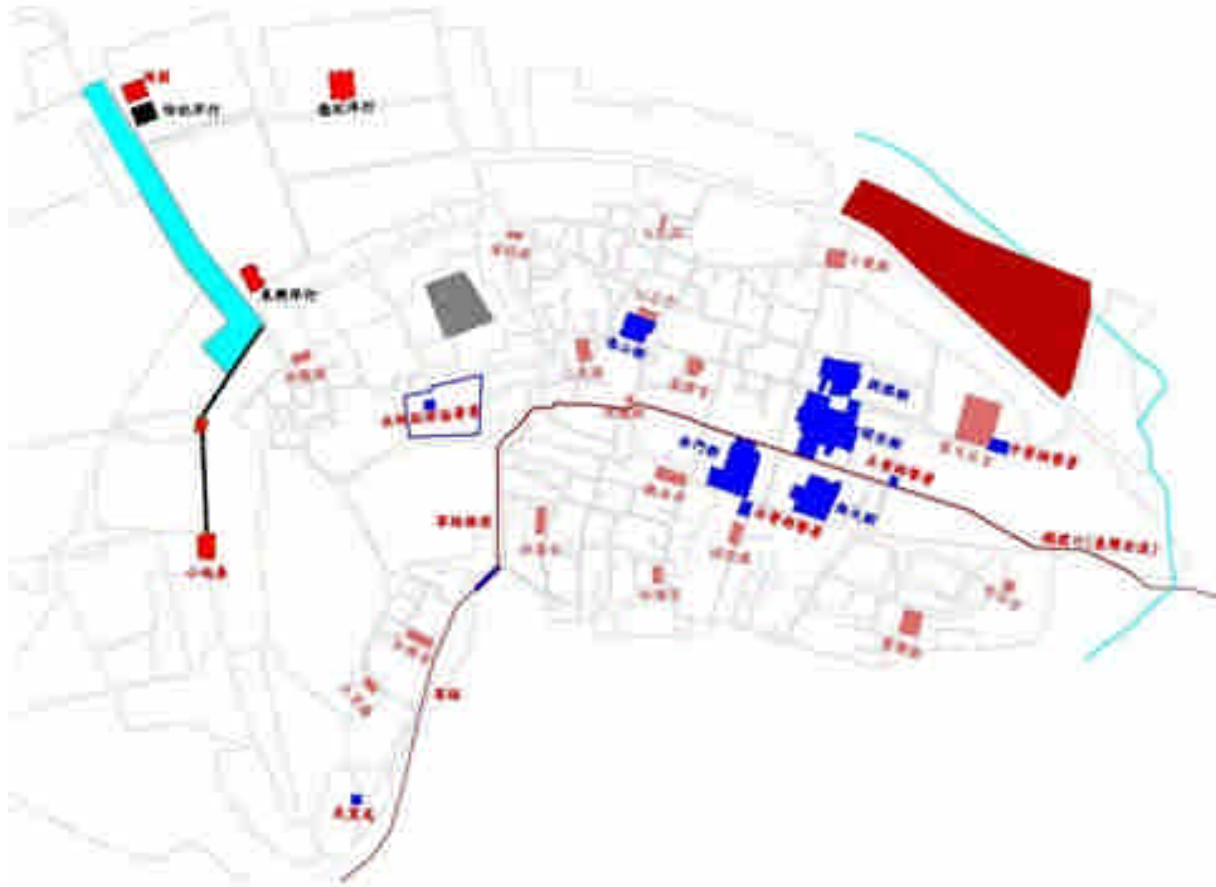


Figure 2-3: Aerial photograph of distribution of major architectural buildings on An-Ping Street in 1895

#### 2.4 Japanese Occupation (1895-1945)

Ch'ing-Japan War broke out in 1894 (Kuanghsu 20, Meji 27) and in 1895, the Ch'ing Court surrendered and signed the Treaty of Shimonoseki, ceding Taiwan and the Pescadores to the Japanese. After the Japanese government swore Taiwan's Governor-General into office on June 17, 1895, rebellions by the local people followed the Japanese all the way down south; the Japanese entered An-Ping in October of the same year. In 1901 (Meji 34), implemented "small administrative districts system" then changed "Hsiao chung-Li" to "Hsiao chung-Li An-Ping Street". The Japanese government was very specific in its infrastructure plans for An-Ping, from the early light railway, post office, police station, market, elementary schools, public schools, aquaculture colleges; the Osaka Commercial Shipping Association took care of the shipping aspect.



Salt making was An-Ping’s most important industry during the Japanese Occupation; it was also the area’s only industry. In July of 1919 (Taisho 8), the Taiwan Salt Corporation was established in An-Ping. From 1920, the company built drying and boiling factories, experimental factories, warehouses, and dormitories. In addition, the An-Ping branch of Japan’s Salt Industry Association took care of the exporting business. Aside from spurring the growth of An-Ping, it also contributed to the development of land in the western part of the city.

The Tainan Canal was formally opened in April 25, 1926 (Showa 1); the new An-Ping Harbor was opened to traffic in July of 1937 (Showa 12); and the An-Ping Fishing Harbor was completed in 1940 (Showa 15). These are all major infrastructure projects during the Japanese Occupation.

**3. Land Utilization Analysis during the Japanese Occupation**

**3.1 Land surveying and making of cadastral maps**

After Japan occupied Taiwan, a complete land database was built to clarify land ownership and understand land rights; land survey was conducted all over Taiwan to increase tax revenues and solidify financial administration. Land inspection was conducted starting from land survey; at that time, surveyed areas had different scales in accordance to their respective importance:

Surveyed Areas	Scale	Map	Remarks
Urban areas	1/600	200Ken x 250Ken	1 Ken = 1.818M
Suburban areas	1/1200	400Ken x 500Ken	
Mountainous areas	1/3000	1000Ken x 1250Ken	
N.B: Old cadastral maps were used for areas which have not undergone re-surveying for new cadastral maps.			

Table 3 – 1 : Regulations for surveying and making of cadastral maps during the Japanese Occupation

Figure3– 1: “The incomplete map of survey conducted by Tainan agency in mid-May of Meiji 36.” The project was supervised by Watanabe Kunisi, while Toyama Riukichi was the survey specialist. The land survey of An-Ping was conducted by senior Specialist Tanaka and was completed in May of 1903 (Meiji 36) (the aqua blue part indicates the completed parts). The scale is a 1/600 cadastral map.



Figure 3 – 1: Incomplete map of survey conducted by the Tainan police station<sup>5</sup>

### 3.2 Categories of land use

The table of land names as mandated by Article 1 of the 13<sup>th</sup> announcement of the July 1898 (Meiji 31) "Taiwan Land Register Regulations" is as follows:

	1	2	3	4	5	6	7	8	9	a
1	plowland	drought	buildings site	salt-pan	mineral spring	fish pound	--	--	--	--
2	mountain	wide field	wet land	pasture	--	--	--	--	--	--
3	temple	clan hall	graveyard	railway	park	drill ground	target range	artillery base	light house	ditch
4	roads	channel	--	--	--	--	--	--	--	--
5	dike	--	--	--	--	--	--	--	--	--
6	mix soil	--	--	--	--	--	--	--	--	--

Table 3-2: Glossary of land terms for cadastral regulations

According to the recorded data on the land ledger, land use at An-Ping during the Japanese Occupation was simple. Majority of the land was used for residential/commercial buildings and temples; some of the lots were public lands for miscellaneous uses (e.g. schools, public toilets, slaughterhouses, garbage dumps, warehouse, etc.); there were also some fishponds and cemeteries around the settlement. Most lands were public ones; majority of them were confiscated lands upon which official residences, military camps, consular offices were built. Lands owned by religious organizations mostly had kitchens built on them. Status of land distribution at that time is shown in Figure 3-2.

Land catalog	Land area	No. of pieces of land
buildings	28.0655	980
fish pound	9.5383	15
temple	1.1090	22
graveyard	2.5255	3
mix soil	1.0461	7
Total	42.2844	1,027

Land area: in hectares

Table 3-3: Statistical table of categories of land use, land area, and number of lots on An-Ping Street in 1903

Land ownership	Land area	No. of pieces of land
public	19.4708	122
private	14.7854	648
joint	7.6070	208
religious organizations	0.4212	49
Total	42.2844	1,027

Land area: in hectares

Table 3-4: Land ownership, land area, number of lots on An-Ping streets in 1903

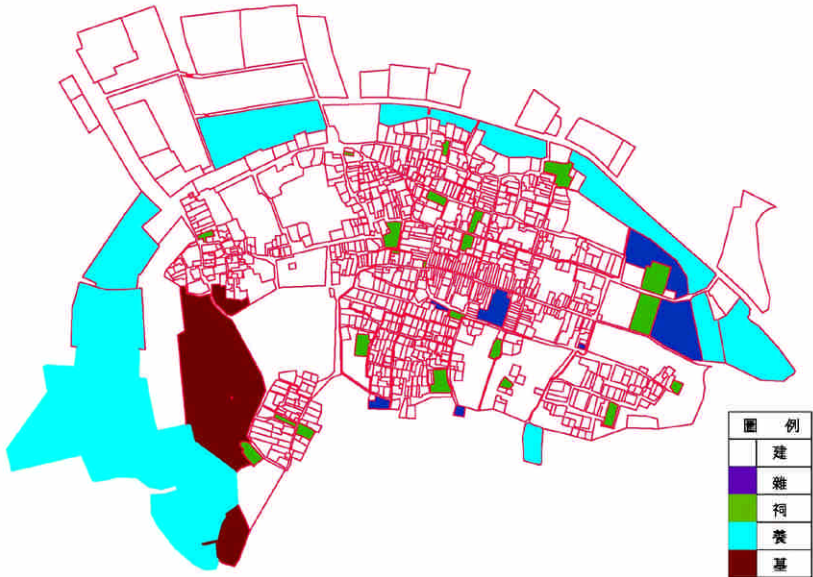


Figure 3 – 2 : Distribution of land use on An-Ping streets in 1903

### 3.3 Planning and utilization of land

#### 3.3.1 Opening of the Tainan Canal



Figure 3-3: Schematic diagram of the Tainan Canal Plan<sup>6</sup>

The Tainan Canal is one of the most important infrastructures built during the Japanese Occupation. Construction began in April of 1922 (Taisho 11); ditch flow ceremonies were held on December 17, 1925 (Taisho 14). The canal was formally opened on April 25, 1926 (Syowa 1). The entire length of the canal is 3782 meters; its width is 37 meters and had a lift of 1.8 meters at low tide.

From figure 3-3, it can be seen that the original intention of the plan was for the canal to go northwest and link up with the existing commercial canal; this can be seen from the division carried out with 6 parcels of land, including land no. 1008 in October of 1922. However, this plan was not implemented, or else the canal may have divided An-Ping into eastern and western parts.

In addition, building issues related to the main waterway of the Tainan Canal and the development of ship docks can be seen from the division of 7 parcels of land, including land nos. 68 and 659 in October of 1922.

#### 3.3.2 Establishment of salt factory

In 1919 (Taisho 8), the Taiwan Salt Corporation developed the Anshun salt plowland on the northern shore of Szutsao Lake (located 3.5 kilometers north of An-Ping). Construction was completed in March of 1923 (Taisho 12). At the same time, a drying and boiling factory and a salt vacuum factory were built in An-Ping (these places sit on land no. 1000-1). Registration for land no. 1000-1 was completed in December of 1912; registered land area was 3.6655 acres (3.5524 hectares).



Figure 3-4: Land use distribution of An-Ping's western part

Land catalog	Land area	No. of pieces of land	Coloring
ditch	0.1811	1	Aqua blue
building	2.0277	6	Red
wide field	1.5310	7	Brown
fish pound	56.0884	37	None
drought	2.7155	10	Light Green
dike	0.2898	1	Black
Total	62.8335	62	

Land area: in hectares

Table 3-5: Statistical table of categories of land use, land area, and number of lots on An-Ping's western part

Because the land ledger did not record very clearly of the land numbers 1000-6 to 1000-67, upon checking land no. 1000-5, it is found that registration for this piece of land was completed in November of 1944 (Showa 19); therefore, it can be deduced that registration for land nos. 1000-6 to 1000-67 was completed in 1945. Related land catalog, land area, and number of pieces of land are shown in Table 3-5; distribution of land categories is shown in figure 3-4.

The blue part in Figure 3-4 (lots with no land number) is the "An-Ping salt shipping canal," built in July 20, 1937 (Showa 12). It passed through the An-Ping Harbor canal and was used mainly for the shipping of salt. From the schematics, one can see that there are warehouses on both sides of the river way; this is why there are three pieces of land cataloged as "building lands."

### 3.3.3 Implementation of the Preservation Law for Historical Sites, Scenic Spots, and Natural Memorabilia

The "Preservation Law for Historical Sites, Scenic Spots, and Natural Memorabilia" is a law promulgated by the Japanese government on April 10, 1919; implementation began June 1<sup>st</sup> of

the same year. Taiwan, which was under the jurisdiction of the Taiwan Governor-General, started implementing the law in 1930. On September 21 of the same year, the consular government announced Articles 11 and 15 of the Preservation Law for Historical Sites, Scenic Spots, and Natural Memorabilia, which categorized historical sites into national and local levels.

On November 25, 1933 (Showa 8) six scenic spots and historical sites, as well as seven types of natural memorabilia were announced. The foundation of An-Ping’s Zeelandia was among one of the six historical sites.

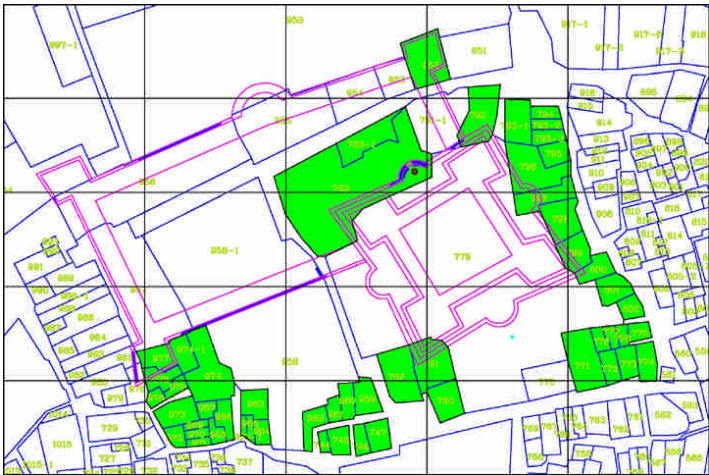


Figure 3-5: Map of land catalog revised into “parks”

In keeping with the implementation of the Preservation Law for Historical Sites, Scenic Spots, and Natural Memorabilia, the land catalog of 52 parcels of private land on no. 744, An-Ping and six parcels of public land on no. 783-1 was changed to “parks” on November 30, 1934 (Showa 9); total land area was about 2 hectares. In addition, the land originally as part of Fort Zeelandia<sup>7</sup>, including five parcels of public land on no. 953 and one piece of private land on no. 791-1 (ones without color) with a total land area of about 0.8 hectares, have not been changed to “parks.”

3.3.4 Categories of Land Use in An-Ping during the latter years of the Japanese Occupation

Collating information up to the time before World War II, aside from the original buildings, fish pound, temples, graveyard, and mix soil, the categories of salt-pan, wide field, park, roads, channel, ditch, drought, and dike were added to the land catalog for all registered lands in An-Ping. Moreover, due to the development of the western part of the settlement, the total registered land area jumped from 42.3 hectares to 136.3 hectares; total number of pieces of land jumped from 1,027 to 1,233. Worth mentioning is land catalog “drought;” it is equivalent of farmlands. However, it is not clear exactly what was produced or what types of crops were planted on it during that time.

Land Catalog	Land area	No. of pieces of land
buildings	34.2800	1007
salt-pan	1.9271	1
fish pound	76.5563	68
wide field	7.9105	23
temple	0.7027	21
graveyard	2.5496	4
park	1.9918	58
road	0.0447	2
channel	5.3638	9
ditch	0.1811	1
drought	2.7155	10
dikes	0.2898	1
mix soil	1.8213	28
Total	136.3342	1,233

Land area: in hectares

Table 3-6: Statistical table of categories of land use, land area, and number of lots on An-Ping streets in 1945

Ownership	Land area	No. of pieces of land
pubic	105.9472	246
private	23.7729	692
joint	6.1929	246
religious organization	0.4212	49
Total	136.3842	1,233

Land area: in hectares

Table 3-7: Land ownership, land area, number of lots on An-Ping streets in 1945

### 3.4 Urban planning of An-Ping

#### 3.4.1 Urban Planning

The “City Reform Plan” started due to the announcement of the “Tokyo City Reform Law” in 1888 (Meji 21); this was the first example of urban planning for a Japanese city in recent times. Although Taiwan was a colony of Japan, Article 63 Law, promulgated in June 3 1896 (Meji 29) stated that orders with legal consequences may be announced within colonial jurisdiction. In pursuant of this, in 1899 (Meji 32), Regulation No. 30 announced the rules governing land and buildings within the city plan; in 1900 (Meji 33), Regulation No. 4 announced the rules for residential construction in Taiwan, formally starting the planning and construction for Taiwan’s city reform plan. City planning of Taichung City and Taipei City were established in 1900 starting Taiwan’s urban modernization in recent times. There were more than 70 cities in the process city reform planning or construction. till 1943 (Showa 18).



In terms of the differences in “city reform” and “urban planning,” an item worthy of note is that the “Taiwan City Planning Law” was implemented starting April 1, 1937 (Showa 12). Before this, official government documents called any urban plan “city reform plan” or “city plan.” The term “urban planning” was used later as the legal term of planning regulations. Tainan City, Taichung City, and Taipei City were the seats of the Tainan government, Taiwan government, and Taipei government, respectively during the last years of the reign of Ch’ing. Because Tainan Fu was the largest in size, the west walls of the city were torn down in 1903 to implement urban planning. As a result, compared to Taichung City and Taipei City, implementation of Tainan City’s urban plan was delayed for 11 years. Below is a description of the urban plans carried out in Tainan City:

No. of times	Plan Detail	Remarks
1 <sup>st</sup> time: 1911 (Meji 44) Urban plan for Tainan City was drawn up for the first time.	<ol style="list-style-type: none"> <li>1. Uses Tainan City as the scope of urban planning.</li> <li>2. Light railroad (Diasha) stretches from the train station westbound of present-day Chengkong Road; south turning into present-day Hsimen Road, then turning into present-day An-Ping Road towards An-Ping.</li> <li>3. The entire Tainan city is divided into 8 districts; Mingsheng Road and An-Ping Road are considered accomplished roads.</li> </ol>	An-Ping Road: In 1884, Taiwan’s Governor Liu-Ao led the town and Navy soldiers in building it.
2 <sup>nd</sup> time: 1920 (Taisho 9) Revised urban plan of Tainan City	<ol style="list-style-type: none"> <li>1. Scope of plan included expansion of the original Tainan City as well as areas such as Hojia, Tunpanchien, Yencheng, and Shang Kunshen.</li> <li>2. Light railroad stretches from East Gate Circle, running horizontally on the east side of the railroad along east of the 3<sup>rd</sup> connecting road (Dongmen Road) exiting the Eastern Gate towards Guanmiao.</li> <li>3. The 4<sup>th</sup> connecting road runs west of Taisho Circle through the north side of the Tainan Canal towards An-Ping.</li> <li>4. The entire Tainan City was divided into 10 districts; the Tainan Canal flowed from Tainan City’s Tamachi westbound towards An-Ping.</li> </ol>	
3 <sup>rd</sup> time: 1941 (Showa 16) Continued	<ol style="list-style-type: none"> <li>1. Expand the original Tainan City as well as the 31 districts outside of it and 8 suburban districts.</li> <li>2. Tainan City and An-Ping are divided into 12 districts; secondary roads are added in An-Ping;</li> </ol>	Parts of the chessboard design were realized only after World War II

revision of Tainan City's urban plan	roads are shown as Area XII. ° 3. The canal links Tainan City and An-Ping District. An-Ping Harbor becomes a major harbor in Taiwan. 4. Plans for three parks (no. 13, 14, and 15) and 1 public graveyard (no. 2) in An-Ping. °	
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Table 3-8: Tainan City's Secondary Urban Plan<sup>8</sup>

### 3.4.2 Relationship between the urban plan of An-Ping streets and Stad Zeelandia

Figure 3-6 is the An-Ping portion of the revised Tainan City urban plan. Because this plan was made just four years before the end of World War II, it was an urban plan that the Japanese government was unable to put into effect. Figure 3-7 is the result of the overlay of the 1941 An-Ping urban plan and the 1903 village map; the A-B link on it is present-day Pingsheng Road; the C-D link is the middle axis of the six streets of Stad Zeelandia planned during the Dutch Occupation. Upon measurement, it was found that A-B link is 25 meters east of the C-D link.

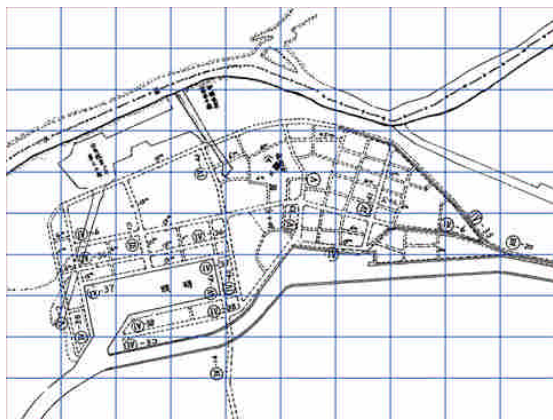


Figure 3-6: Revised Urban Plan Map of Tainan City in 1941<sup>9</sup>



Figure 3-7: Overlay Results of 1941 An-Ping Urban Plan Map and 1903 village map

Originally, the development of the An-Ping settlement unfolded along the lines of Stad Zeelandia. In 1941, revision done on the An-Ping portion of Tainan City probably did not take into account the development history of the An-Ping settlement; the plan probably called for no structure were built near the A-B line (see Figure 3-8), which was planned as a road. Due to the opening of Pingsheng Road, the An-Ping settlement was divided into eastern and western parts; lines of settlement development were also broken on the two sides of the road. If this plan continues to be implemented, even this richly historical “stone-paved road” may disappear as a consequence.



Before the end of World War II, the development of An-Ping was already very comprehensive. This study ends by presenting the aerial photograph of An-Ping in 1947 (Figure 3-8) to show the village at the end of the Japanese Occupation.

Figure 3-8: Aerial Photograph of An-Ping in 1947<sup>10</sup>

#### 4. Conclusion

- (1) The cadastral maps produced by the Temporary Taiwan Land Investigation Bureau have preserved each and every settlement existing in the last years of the Ch'ing Dynasty in their entirety. They are excellent materials for studies conducted on settlements. Together with related literature and records on land ledgers, they provide a more accurate and objective picture of space distribution during different periods in Taiwan's history.
- (2) In the urban plan announced in 1941, the opening of Pingsheng road have already severed the development lines of the An-Ping settlement. This reality is something that urban planning arm of the Tainan City government needs to consider carefully.
- (3) According to the records on the land ledger, there are many pieces of land which are "jointly owned" or categorized as "temple or lands for places of worship." As of the present, there are already many issues related to land management which has yet to be resolved.
- (4) The framework of the An-Ping settlement may be discussed further by studying the distribution of family names of owners registered on the land ledgers.
- (5) This research has not conducted further analysis on the form of the base as well as the distribution, form, and structure of the buildings. Further research may be conducted on this topic.
- (6) An-Ping is the cradle of Taiwanese history. It is imperative that serious consideration be given to the following issues: how should it be developed? How should it be preserved?

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1. February 2007: “Exploring Taiwan’s Land Survey through Old Maps,” Land Survey Bureau, Ministry of Interior 60<sup>th</sup> Anniversary issue
2. June 2007: “Present-day Use of Old Maps – On the Revival and Applications of Old Maps,” Taichung City Litoutien Cultural Association Newsletter, Vol. 8
3. July 2007: “Land Survey of Taiwan during the Japanese Occupation (1895 – 1954),” National Science and Technology Museum special exhibit: “A Minute Study in Equilibrium”

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