



ŽATEC AND THE LANDSCAPE OF SAAZ HOPS

NOMINATION DOSSIER

Czech Republic
January 2021



The annual spring celebration for welcoming the hops - the Chmelfest (Hopfest), takes place in Zatec under the direction of civic associations, hop growers and hop organisations



Foreword

The Royal town of Žatec is located in the north-western part of the Czech Republic. Looking at the town, we can see a wide panorama of hop chimneys, which, as symbols of the town's wealth and its famous hop growing and hop processing traditions, tell visitors about the rich history of Žatec, due its connection with hops. The panorama shows us that Žatec holds an important position in the world, where a unique story of continuous development, growing, processing, and the worldwide trade with hops took, and continues to take, place today.

The processing of this important brewing raw material of the region, was the catalyst for the formation of an extensive area in Žatec, with a set of completely unique hop-related buildings, that cannot be found in such concentration, and extent, anywhere in the world. This rare, authentic urban and architectural property complex, in the town of Žatec, witnessed the hop growing industry's stormy development over a wide area, which is significantly imprinted on by the history of world brewing. Žatec is also the home of the internationally recognised hop brand, Saaz, the best aroma hop in the world. Saaz hops' fine aroma sets the standard of quality, and these hops initiated some of the world's most successful beer brands. In their local environment, these hops have been scientifically studied, and professionally cultivated, over a long period of time. The extent, design, architectural attraction, and authenticity of the hop-related buildings in Žatec are the reasons why the property of Žatec and the Landscape of Saaz Hops, would complement a wide range of properties that have been already included on the World Heritage List. The property represents a heritage of knowledge, protection and preservation, and would significantly enrich the world community because of the authentic structures linked to the processing of hops, preserved to a similar extent only in Žatec; the landscape's uniqueness enhances this – which is unmistakable.

We are resolutely committed to this unique history, this unique heritage of hop-related buildings, and the landscape's uniqueness, that shapes and influences these attributes. We will develop them, and we will prove that the hop-related heritage of Žatec and its hop growing areas are completely irreplaceable inside the world's cultural and natural heritage.

Mgr. Zdeňka Hamousová

Mayor of Žatec

Stekník, it means hops! I don't know of many settlements that are so closely connected with the main, raw material for beer production – hops – such as our village, Stekník.

This connection can undoubtedly be called an intimate relationship. If we consider the fact that beer was already being produced in ancient Egypt, then this relationship has been tested for millenia. Every spring, I am delighted that our village puts on a beautiful emerald green ring of hop fields surrounding it. Our hop fields are a natural, visual calendar, and their changes during the year inevitably complete the genius loci – the spirit of the place.

This harmony also has its human form; the vast majority of our citizens are in some way, both historically and contemporary, connected with the phenomenon of this hop tradition. They work in hop fields, they know almost everything about this crop, they have experienced and still experience many ordinary every day human stories connected with, and in them. Every homestead in our village bears some distinctive imprint of this unique affiliation with the so-called "green gold".

Our landscape bears the imprints not only of today but also of the times of former inhabitants, times of those who came to settle this region, times when they were forced to give up these newly acquired homes in the spirit of ideology, and times when perhaps everything returns and will return at least to the state of elemental normality. I am proud to represent a community that testifies to a unique phenomenon that we can boast to the whole world.

Danuše Čilcová

Mayor of (the village) Zálužice



Danuše Čilcová and Zdeňka Hamousová at the signing of the Memorandum of Cooperation, Žatec, 2020

MĚSTO ŽATEC



OBEC ZÁLUŽICE



MINISTERSTVO
KULTURY



NÁRODNÍ
PAMÁTKOVÝ
ÚSTAV



Chmelářský institut s. r. o.



Svaz pěstitelů chmele
České republiky



Chmelobrana
Žatec

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Annexes

MANAGEMENT PLAN

USB DEVICE (NOMINATION DOSSIER, MANAGEMENT PLAN AND PHOTOGRAPHS)



Hand-picking hops at Saaz whose panorama can be seen on horizon, unknown author, early 20th century



Executive Summary

Executive Summary

STATE PARTY

Czech Republic

STATE, PROVINCE OR REGION

Ústecký Region

NAME OF PROPERTY

Žatec and the Landscape of Saaz Hops

GEOGRAPHICAL COORDINATES TO THE NEAREST SECOND

Component part 01

Saaz Hop Landscape
(rural component)

50°19'13"N

13°37'12"E

Component part 02

Žatec
(urban component)

50°19'36"N

13°32'45"E

TEXTUAL DESCRIPTION OF THE BOUNDARIES OF THE NOMINATED PROPERTY:

The cultural landscape proposed for inscription on the World Heritage List is a serial nomination consisting of two complementary component parts documenting the impact of hops on the environment in historical, technological, and scientific contexts. Both components are located in geographical proximity and belong to the administrative territory of the town of Žatec. The historical connection between the component parts is provided by the river Ohře, transport roads and railways routes.

The nominated property is of an appropriate size to illustrate the fundamental tangible and intangible aspects of hop culture depicting the proposed Outstanding Universal Value of the property. Its boundaries have been drawn so that it encompasses all the elements that clearly illustrate the tradition of cultivation, processing, and trading in hops.

Saaz Hop Landscape (component part 01) contains the most valuable and fertile hop fields in the region, on which hops have been grown for centuries and have been subjected to long-term breeding research, as well as historic settlements and buildings associated with the processing of harvested hops. This rural landscape component part 01 is complemented by the territory of the historical core of the town of Žatec and its historical part "Pražské předměstí" – the Prague Suburb, which are significant by the amounts of technical monuments related to hop processing and storing, this component is called **Žatec** (component part 02).

The boundary description is prepared for each component part separately below:

Boundaries of the component part 01

Description of the boundary was prepared using the basic topography map 1 : 10,000 and the tourist map (without indicating the parcel numbers that are available in maps in the Chapter 1.e).

As the starting point for description of the rural component part 01 boundary, the Trnovany railway station in the cadastral area of Bezděkov u Žatce was chosen. It goes in a north-easterly direction, which connects to the boundary of cadastral area of Trnovany u Žatce, along the boundary of the cadastre, it then continues to the river Ohře. Here the boundary of the component part 01 crosses the river, thus entering the cadastral area of Zálužice nad Ohří, in an easterly direction. It then runs freely along the left bank of the river Ohře, approximately for 250 m before the road bridge over the Ohře. The boundary then diverts from the river and leads in a north-easterly direction around the garden at No. 13, crosses the road III/22535 and continues across the field towards Zálužice. At the earthen road in front of Zálužice, it turns in a north-eastern and northern direction. It continues until another field road, along which it continues in a northern direction to the boundary of the cadastral area of Rybňany. It goes briefly along this boundary and continues along a field road to the meander of the river Ohře. It freely copies the left bank of the river to the east, crossing the river, where it enters the cadastral area of Hradiště nad Ohří. Near the village of Hradiště, it bends to the south and goes along a drain and a stream, crossing the tip of the cadastral area of Strkovice and then continues along the boundary of the cadastral area of Stekník.

In the vicinity of the junction of the boundaries of the cadastral areas, Stekník, Strkovice, and Drahomyšl, the boundary of the component part 01 turns west. It follows drains in a westerly direction to the boundary of the cadastral area Stekník, after which it follows a field road to the south for a short distance where it reaches the road II/225. It then runs for a while along this road towards Trnovany and continues in a westerly direction. At Liběšická ravine, it turns to the south and bypasses it at its southern most tip, where the boundary of the component part 01 then bends again to the west, crosses the Liběšický stream, and enters the cadastral area of Dobříčany.

It continues in a westerly direction on the way to the village of Dobříčany, while bypassing the village in the north. It briefly continues along the line plot to the north and then again to the west to the boundary of cadastral area of Trnovany u Žatce, which continues to the railway lines. Here the boundary of the component part 01 turns to the north and along the railway lines which lead to Trnovany. It crosses the road II/225, along the boundary of cadastral area of Trnovany u Žatce, bypasses the village of Trnovany

u Žatce, in cadastral area of Bezděkov u Žatce and follows the railway line to the point where the boundary of the Saaz Hop Landscape component part 01 closes.

Boundaries of the component part 02

The urban component part is located south of the river Ohře. In the northern part, the boundary corresponds with the area of the medieval town inside the town walls. On the eastern and southern sides, it seamlessly connects to the territory of the historical "Pražské předměstí" – the Prague Suburb, from which the boundary of the component part 02 returns to the northern part of the town.

As the starting point for description of the urban component part 02 boundary, plot No. 6800/1 in Příkrá Street on the north was chosen. The boundary then it leads eastward clockwise through the axis of Streets Příkrá Street and Nákladní Street plot No. 6810/1, crossing Kruhové Square plot No. 6775/1 and follows the axis of U odborů Street plots No. 6781/3, 6781/1. There it turns south along the axis of Fügnerova Street plot No. 6781/1, breaking to the east and it runs along the axis of Tyršova Street plot No. 6777/1 in a southeast direction.

Then it turns to the west and follows the axis of Pražská Street plot No. 6960/1, and continues along the axis of the Komenského alej Street plot No. 6960/2 to the Masarykova Street plot No. 6787/1. Here, the boundary turns north to the southwest corner of plot No. 505/1 and continues westward along the southern boundary of building plot No. 505/1, plots No. 221 and 220/1, building plots No. 508, 510/2 and 1133/2, plots No. 233/4 and 233/3, building plot No. 511, plots No. 6789, 6730/13 and 6730/16, building plots No. 974, 975 and plot No. 6730/14. On the western corner, the boundary continues eastwards along the northern side of plot No. 6730/15, building plot No. 1577/2, again plots No. 6730/15 and 6730/12, building plot No. 3129, plot No. 6730/6, building plot No. 973 and plots No. 6730/4, 6731/1 and 6731/10. Here, the boundary turns to the southeast along plots No. 6731/9 and 6731/3, follows the north and east side of plot No. 246/1, and perpendicularly crosses the Pod známkovnou Street, plot No. 6798, towards the northwest corner of plot No. 246/5. The property boundaries continue eastward along the northern side of plot No. 246/5, building plot No. 1977/1, plot No. 252/4, building plot No. 533/3, plot No. 252/2, and building plot No. 539. Here it turns north and perpendicularly crosses the Chmelařská Street, plot No. 6794/1, toward the southwest corner of plot No. 909, which bypasses from the west and north direction.

It continues eastward along the northern boundary of plot No. 909, building plots No. 549, 550/1, 552/3 and 552/1 to the point where it crosses northward at the communication plot 6794/1 and on the western side, building plot No. 554 and plot No. 6753. It goes to Příkrá Street, where it turns to the north and along the town walls, the boundary comes to its starting point at the buildings of the Žatec brewery.

Shared buffer zone of both component parts

A shared buffer zone was defined for both component

parts, which was determined to create adequate space for increased regulation of the activities in the vicinity of the nominated property. This connection will strengthen the internal functional integrity of the property and the general awareness of the historical and spatial context of both component parts. The shared buffer zone protects the values of the nominated property thanks to the individual legal regulations valid in its territory and also ensures its visual integrity.

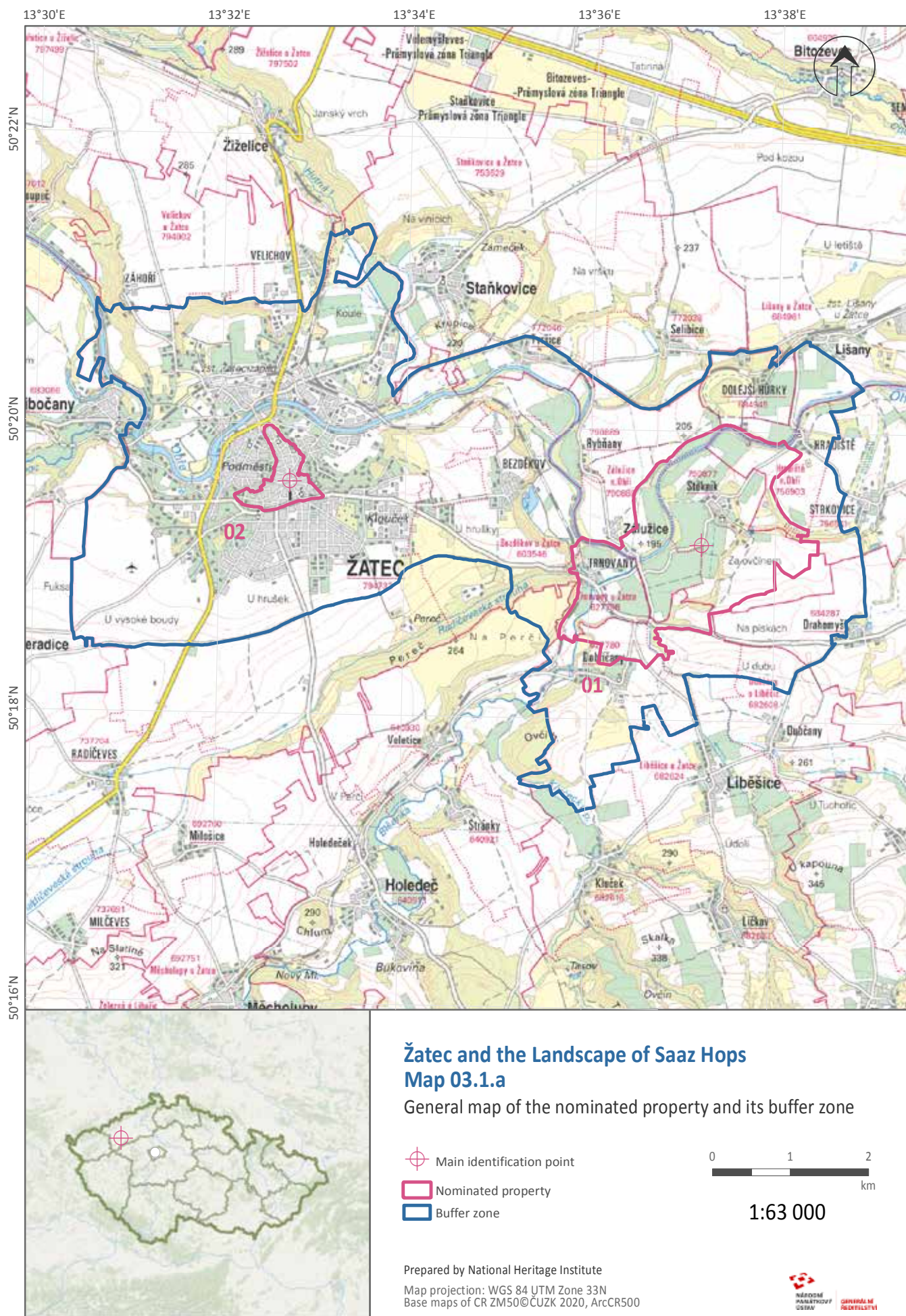
The extent of the buffer zone is based on a rational combination of natural terrain conditions in the area and the functional use of the site, which is closely related to the nominated landscape. The boundary of the buffer zone follows, as much as possible, the existing clear lines evident in the landscape (roads, terrain breaks, streams) or is uniquely determined by the boundaries of cadastral and administrative areas. At the same time, the long-term stable boundaries of the affected cadastral territories and self-governing municipalities have been used to the maximum extent. If necessary, the boundary follows the exact boundaries of individual plots, as recorded in the real estate cadastre, in order for the protective functions and related performance of the state administration to be unambiguous and as comprehensible as possible in the territory of the buffer zone.

The buffer zone fully includes the main road connecting the two component parts, as well as respects the relevant part of the river Ohře's course and also the relevant sections of the two local railway lines, whose role in the development of hop processing and trade is also essential. Last but not least, the buffer zone contains some significant contextual building units that complement the whole story of local cultivation, breeding, and processing of hops. Namely, the premises of the Hop Research Institute (research and breeding entity) at the western edge, as well as the modern processing complex of the CHMELÁŘSTVÍ, cooperative Žatec, north of component part 02 at the railway junction. It also includes the important, but now defunct, Dreher's Export Brewery. The area of the buffer zone also includes other productive hop fields (for example, north of component part 02 or in the area along the river Ohře). They are not as concentrated as in component part 01 but complete the overall picture of the nominated cultural landscape. They might form a welcome, more comprehensive background for potential visitors to the area who will want to follow the specifics of hop growing in a broader context.

The large extent and character of the buffer zone can thus ensure future monitoring and a coordinated development of other presentation activities related to the values of the property and the development of visitor infrastructure outside the property itself.

A4 MAP OF THE NOMINATED PROPERTY SHOWING BOUNDARIES AND BUFFER ZONE

The following map gives an overview of the location of component parts. For more detailed maps see *Chapter 1.e*.



CRITERIA UNDER WHICH PROPERTY IS NOMINATED

(iii) The nominated property provides a unique testimony of a long and uninterrupted tradition of hop growing, breeding and processing which shaped its extraordinary features. This tradition is perceived as an integral part of the local identity which is projected into cultural events linked to hops and reflected in the reputation of this region within the Czech Republic and abroad.

(iv) The nominated property contains well preserved specific structures, buildings, components and process installations closely associated with hop growing, processing and trading which in this unique combination of rural and urban environment are unparalleled elsewhere in the world.

(v) The nominated property represents an outstanding example of a traditional hop growing landscape which is still evolving and authentically reflects the interactions between man and his rural and urban environments whose functions complement each other and are inseparable from each other.

DRAFT – STATEMENT OF OUTSTANDING UNIVERSAL VALUE

a) Brief synthesis

The nominated property Žatec and the Landscape of Saaz Hops represents an important site associated with a unique history of continuous development in cultivation, processing and international trading with the "beer spice", which is an agricultural commodity whose botanic name is hops (*Humulus lupulus* L.) and which is an important ingredient in the beer brewing process all over the world. This cultural landscape is a testimony of a tradition more than 700 years old which is continuing and centres around the finest aroma hops in the world. This local variety of hops – Saaz, is the result of an extremely favourable climate and natural conditions combined with skills and knowledge of the local hop growers passed from generation to generation for centuries. This has shaped this specific organically evolving landscape and its built heritage associated with hop processing and helped to keep the leading position of the Saaz hops in this region to date.

The nominated property is situated in the north west of the Czech Republic, in the basin of Žatec, and consists of two component parts which naturally complement each other and jointly represent the uniqueness of the local hop heritage. Component part 01 consists of the rural hop landscape including the villages of Stekník and Trnovany and component part 02 represents the historic urban landscape of the very centre of

the region – the town of Žatec (Saaz) which gave its name to the most famous variety of local hops. Both component parts are geographically close, naturally linked by the river Ohře (Eger) and also by a network of historic communications, including a railway which for centuries has connected the town of Žatec with its rural hinterland. These close interactions make these two component parts truly inseparable.

The nominated landscape contains all unique attributes directly linked to hop cultivation and processing. The gradual changes in the growing methods at the hop fields and hop processing technology which occurred over the centuries were – and still are – reflected in the visual quality of the landscape. This development affected not only the character of the hop growing landscape but also the look of individual buildings, farmsteads, settlements and the town of Žatec where it impacted both the historic centre and the adjacent hop processing industrial zone of Prague Suburb. This landscape with specific buildings and structures linked to hop production demonstrates close interactions between the rural hop growing landscape and its urban base which has been preserved on this scale nowhere else other than in the nominated property.

b) Justification for Criteria

Criterion (iii)

The Property bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

Žatec and the Landscape of Saaz Hops bears an exceptional testimony of a strong, centuries' long and never interrupted cultural tradition of hop growing and processing in Europe. This tradition is based on the exceptional quality of most sought-after Saaz hops which is a globally recognised agricultural commodity, protected by administrative acts since the time of the Enlightenment reforms carried out in the former Austrian Monarchy. As a result of the innovations in hop production and booming trade with the commodity in huge demand in the world, in which the Czech, German and Jewish communities were involved and interacted as well as influenced each other, the town of Žatec became a globally recognised centre of hops, particularly in the 19th century.

Numerous specific skills, knowledge and experience on work organisation in hop production was passed from generation to generation. The empirical approach gradually improved and developed into a socio-economic and technical system, which survives today. Targeted breeding of particular hop varieties subsequently led to a new independent and locally conducted discipline which uses hop fields in the nominated property for basic research. The outcome of such endeavours are internationally recognised clones of Saaz hops.

Every year many experts from all over the world gather at the site to participate in specialised events, conferences and workshops the organisation of which has a long tradition. The celebration of the living intangible heritage of hops in the nominated landscape is reflected in the public and social events associated with the annual cycle of hop growing, seasonal festivities, local customs, rituals and festivals closely linked with hops and strengthening the identity of Žatec, its residents, and the surrounding hop growing landscape.

Criterion (iv)

The Property is an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

Žatec and the Landscape of Saaz Hops is an outstanding example of a monoculture landscape associated with hop growing and processing both in the rural and urban environment. Throughout the time various methods of hop drying, preservation, packaging, quality certification and breeding were developed in this specific hop growing regions, as well as outstanding examples of buildings, architectural and technological ensembles and productive landscape.

The visual quality of the rural landscape is particularly defined by hop fields with their typical trellises consisting of poles and wires, rural settlements with preserved farm buildings and barns where hops were dried and stored, a residence of the local landlord which is a dominant landmark in the landscape as it rises above the preserved historic hop fields which are still in use. The natural centre of this hop growing landscape is the town of Žatec which developed in a close relationship with the hop growing culture and is the only comprehensively preserved urban complex focused on activities related to processing, certification of origin and quality of hops as well as international trade which first started across Europe and later spread overseas.

Concentration and authenticity of municipal warehouses, hop drying kilns, sulphurisation chambers, hop packaging and certification facilities, together with the town's exceptional skyline, accentuated by the vertical dominants of the hop drying kilns and sulphuring chambers tall chimneys and, in the rural landscape, complemented by the hop fields trellises and buildings related to hop growing, harvesting, processing and storage, all this makes the nominated property unique as it does not exist in the same quality elsewhere in the world.

Criterion (v)

The Property is an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

Žatec and the Landscape of Saaz Hops is an outstanding example of a continuous, never interrupted and, to date, traditional use of an agricultural landscape with traditional human settlements where the main focus is on growing of a crop with special requirements for climate, cultivation and processing. The nominated property is authentic evidence of continual interactions between humans and their environment and a well-preserved example of the European cultural tradition in which hops, as an attractive complementary crop in the local farming, have been widely used in beer brewing since medieval times. Hop cultivation on the site of the nominated property also largely depends on the knowledge and experience of the hop growers related to the climate and natural conditions, breeding and cultivation and processing methods for centuries transferred and improved from generation to generation.

The technical knowhow and skills were further developed and improved on the site of the property from where they spread under the name of the hop growing centre – Saaz (Žatec). This had also a crucial impact on the appearance of the Saaz landscape which is well demonstrated by the hop fields with the fixed structure of the trellis, usually made of wooden poles and wires and every year complemented by hop strings, which are guiding wires providing support to the twining hop bines. On the basis of the local empirical knowledge, this structure developed into a specific design of Saaz hop wire trellis called "žatecká drátěnka" which is now used in many other hop growing regions around the world. Typical hop drying kilns and other hop processing facilities were built in the rural area and the processing of hops impacted the overall appearance of Žatec where the architecture of residential buildings as well as industrial facilities, educational institutions and amenity centres designed for different groups of local residents associated with the hop processing business is unmistakable.

c) Statement of Integrity

The nomination Žatec and the Landscape of Saaz Hops is a very well preserved site which, within its boundaries, documents the entire "hop cycle", as well as all significant attributes associated with its growing and processing.

The productive character of the hop growing landscape with specific climate conditions is still fully reflected in the preserved functional integrity of its composition as well as in its attributes the most distinctive of which are the following ones: hop fields situated near the river, sets of functionally diverse buildings used for drying, sulphurisation, packaging, certification and storage of hops as well as the safeguarding of traditional knowledge of hop growing and processing developed over the centuries. The transport network based on the historic roads also underlines the integrity of the property as it has enabled access to the hop fields and facilitated the export of hops.

Component part 01 with hop fields around the villages of Stekník and Trnovany represents an area which has not changed much over the centuries and the current use of which copies its historical use and settlements where no major building modifications have been carried out. The village of Stekník with its well-preserved integrity emphasised by the typical brick buildings surrounding the central village square and the chateau of the same name create a visual unity underpinned by large areas of hop fields.

The fertile sediments of the floodplain around watercourses, the location of the hop fields in their vicinity and the village of Stekník situated at a safe, elevated place all contribute to the visual integrity of the property. The visual integrity of component part 01 is strengthened by the morphology of the site. Monitoring the site integrity in the future will also be helped by the recently opened walking trail along the eastern and south-eastern boundary above the flat part of the landscape with hop fields.

Component part 02 is a large urban complex with high integrity of the hop story in the urban environment which includes all the elements that illustrate the history of the town of Žatec as a world-famous centre for centuries associated with processing and exporting of high quality hops.

d) Statement of Authenticity

Functional authenticity of the hop growing rural landscape has been fully preserved and lies in the locations of hop fields which have not changed and the presence of watercourses, rural settlements which served as a base to the farmed fields and which preserved their original footprint, and the historic communication network.

The buildings in component part 01 have a high degree of authenticity. This applies both to individual buildings, farmsteads and the former residence of the local landlord (Stekník Chateau) and a large Baroque granary at Stekník which was later converted into a hop drying kiln.

The buildings in the historic centre of Žatec (component part 02) display authentic signs of an older traditional method of drying hops in the lofts, particularly in the town centre. The authentic mass of the buildings is closely monitored during all refurbishment and restoration projects. Even more recent hop-related buildings with unique functions concentrated in a small area of the Prague Suburb have mostly been preserved in their authentic quality. Some of them no longer serve their original function, but remain in a relatively stable condition with their authentic form and many specific details preserved. They are expected to undergo well thought-through and sympathetic conversion.

e) Requirements for protection and management

Both component parts of the nominated property Žatec and the Landscape of Saaz Hops are already protected or will be protected in the near future under the National Act no. 20/1987 Coll. on the National Heritage Protection as amended in combination with other protective regimes stemming from this act which include the following ones:

At present the cultural values are administratively protected by Land Use Plans of the village of Zálužice as well as town of Žatec. For component part 01 with hop fields, the Landscape Heritage Zone has been outlined for designation which is expected in 2021. The cultural values of Žatec in component part 02 are fully protected by law, namely by two decrees of the Ministry of Culture which, in several steps, delineated joint heritage areas.

The hop fields located in the nominated property and its buffer zone are also protected under Act no. 97/1996 Sb. on Protection of Hops. This act not only sets forth the requirements for certification, quality control, blending, treatment and introduction of the commodities into circulation, which are subject to hop common market organisation, but it also defines state administration responsibilities including state supervision over compliance with the European Community obligations declared in international treaties.

The entire area of the nominated property including its buffer zone is also protected by the Protected Designation of Origin which is a guarantee that the quality of hops grown in this area is primarily or exclusively determined by the special geographic conditions combined with unique natural and human factors.

In the preserved component part 01 as well as in the urban structure of component part 02 no major changes are envisaged in the future.

The nominated property is managed by the Steering Group (SG), the core team of which was established at the Žatec municipal level already in 2013. The Steering Group includes the key stakeholders active in the nominated property and they are assisted by the Working Groups focused on specific areas of the Management Plan.

NAME AND CONTACT INFORMATION OF OFFICIAL LOCAL INSTITUTION / AGENCY:

Ministerstvo kultury České republiky
(Ministry of Culture of the Czech Republic)
Maltézské náměstí 1
CZ-118 00 Praha 1 – Malá Strana
Phone: +420 257 085 111
Fax: +420 224 318 155
Email: epodatelna@mkcr.cz
Web: <http://www.mkcr.cz>



Manual loading bales of dried hops in the Saaz, Oskar Brázda (1887-1977)



1. Identification of the Property

1. Identification of the Property

1.a STATE PARTY

Czech Republic

1.b STATE, DISTRICT OR REGION

The Ústecký Region

1.c NAME OF THE PROPERTY

Žatec and the Landscape of Saaz Hops



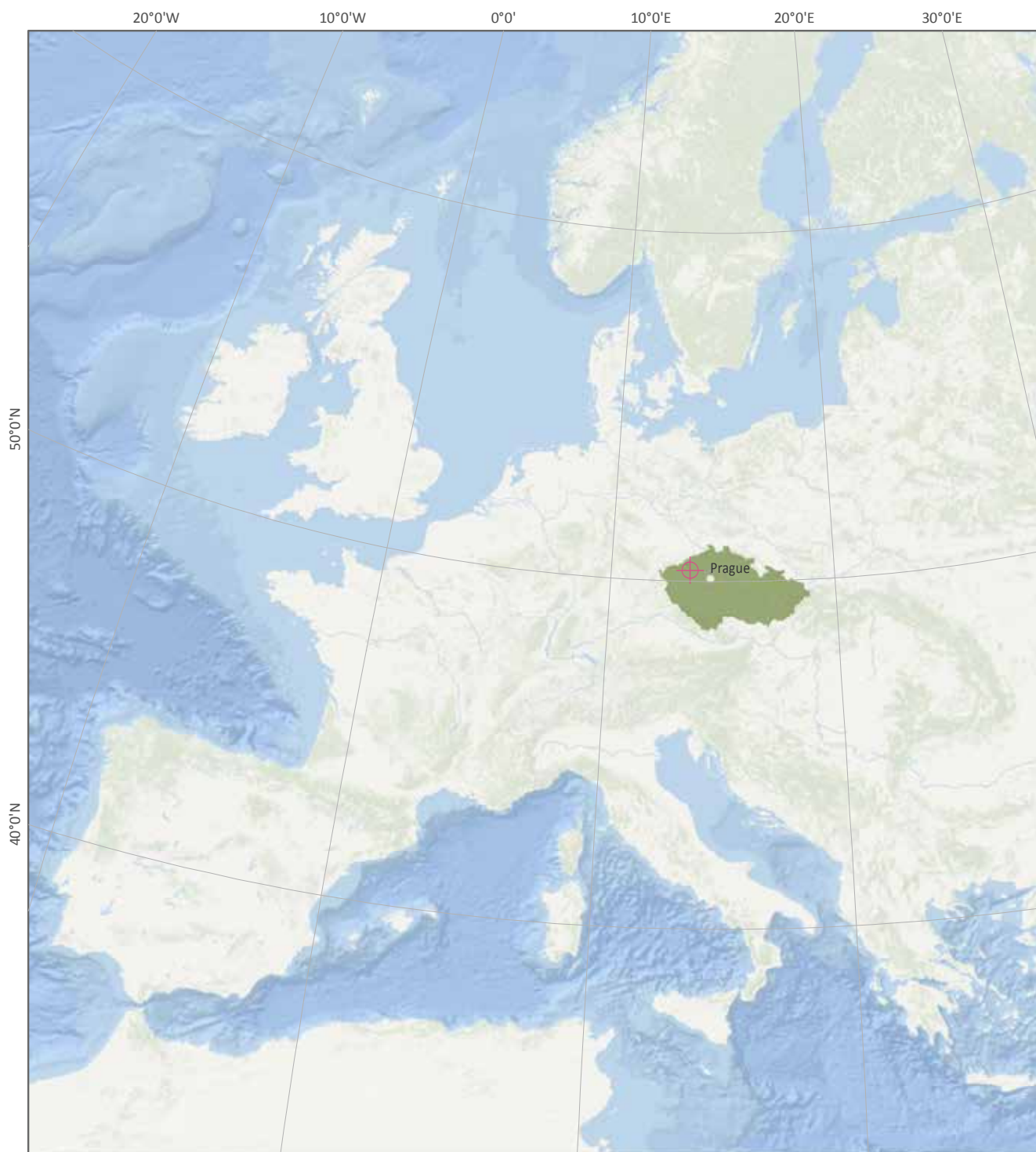
View of hop fields from Stekník to Hradiště, 2019

1.d GEOGRAPHICAL COORDINATES TO THE NEAREST SECOND

ID NO.	NAME OF THE COMPONENT PART	MUNICIPALITY	COORDINATES OF THE CENTRAL POINT	AREA OF NOMINATED COMPONENT PARTS OF THE PROPERTY (ha)	AREA OF THE BUFFER ZONE (ha)	MAP NO.
01	Saaz Hop Landscape	Zálužice	50°19'13"N 13°37'12"E	549.83	3,330.94	Map 03, 04
02	Žatec	Žatec	50°19'36"N 13°32'45"E	44.14		Map 03, 05
Total				593.97	3,330.94	

1.e MAPS AND PLANS, SHOWING THE BOUNDARIES OF THE NOMINATED PROPERTY AND BUFFER ZONE

MAP N°	DESCRIPTION	SCALE	SIZE	COPYRIGHT / DEPOSITION
MAP 01	Location on the map of Europe	1 : 18,000,000	A4	(cc BY-SA 4.0) NPÚ 2020 © OpenStreetMap © ESRI
MAP 02	Location of the nominated property in the Czech Republic	1 : 3,000,000	A4	(cc BY-SA 4.0) NPÚ 2020 © OpenStreetMap © ESRI
MAP 03.1a	General map of the nominated property and its buffer zone	1 : 63,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020, © ESRI 2020
MAP 03.1b	General map of the nominated property and its buffer zone	1 : 63,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020, © ESRI 2020
MAP 03.1c	General map of the nominated property and its buffer zone	1 : 63,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020, © ESRI 2020
MAP 03.2	General map of the nominated property and its buffer zone	1 : 36,000	A3	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 04	Boundaries of the component part 01	1 : 20,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 05	Boundaries of the component part 02	1 : 7,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 06	Overview of map sheets relating to the component part 01	1 : 22,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 06.1–06.4	Atlas of map sheets showing the boundaries of the component part 01	1 : 10,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 07	Overview of map sheets relating to the component part 02	1 : 8,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 07.1–07.8	Atlas of map sheets showing the boundaries of the component part 02	1 : 2,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 08	Overview of map sheets relating to the buffer zone boundaries	1 : 65,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 08.1–08.18	Atlas of map sheets showing the boundaries of the buffer zone	1 : 10,000	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020



Žatec and the Landscape of Saaz Hops Map 01

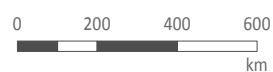
Location on the map of Europe



Main identification point



Czech Republic

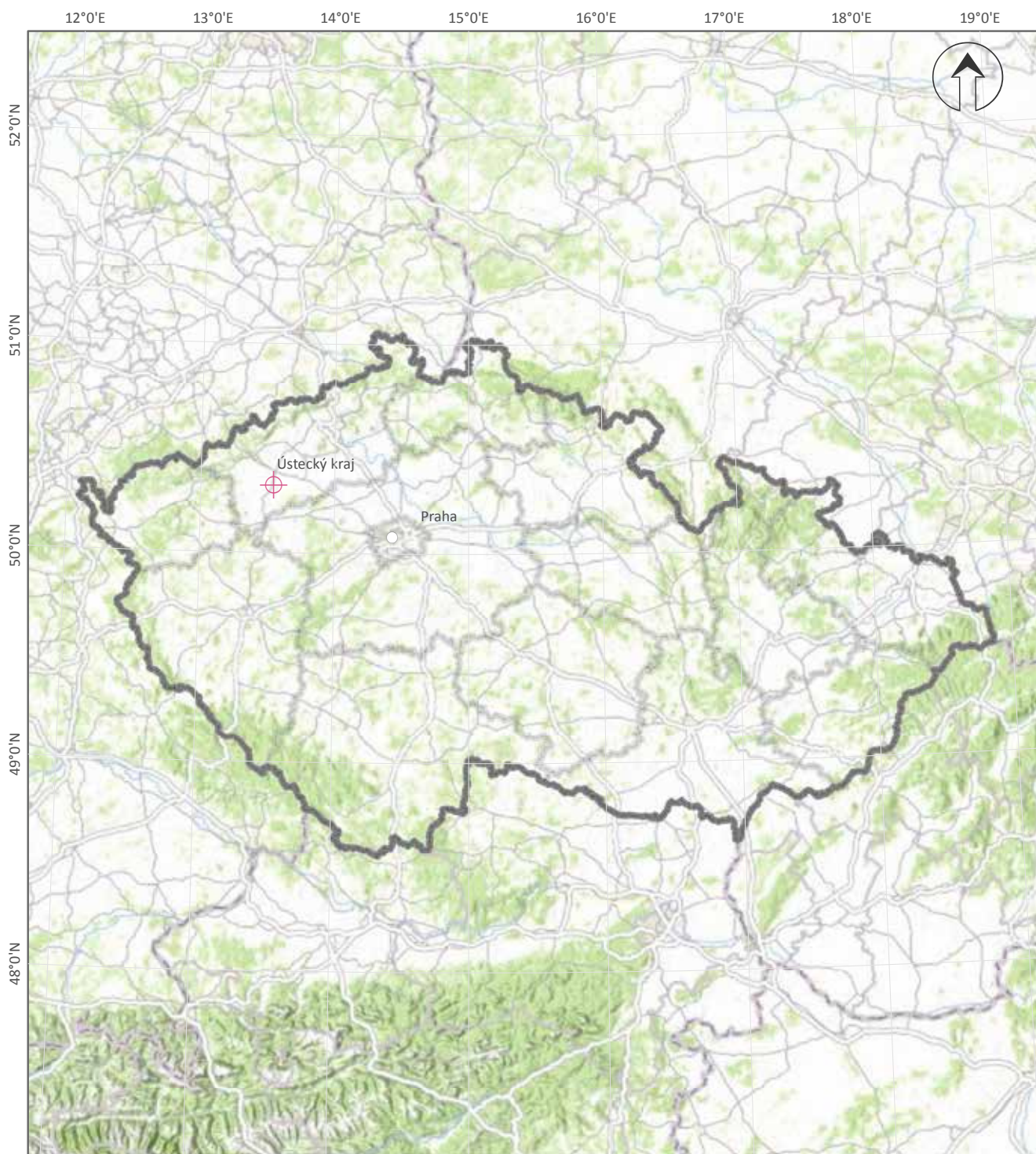


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Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Source: Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

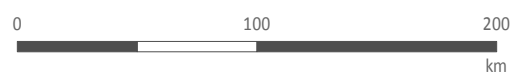




Žatec and the Landscape of Saaz Hops Map 02

Location of the nominated property in the Czech Republic

 Main identification point



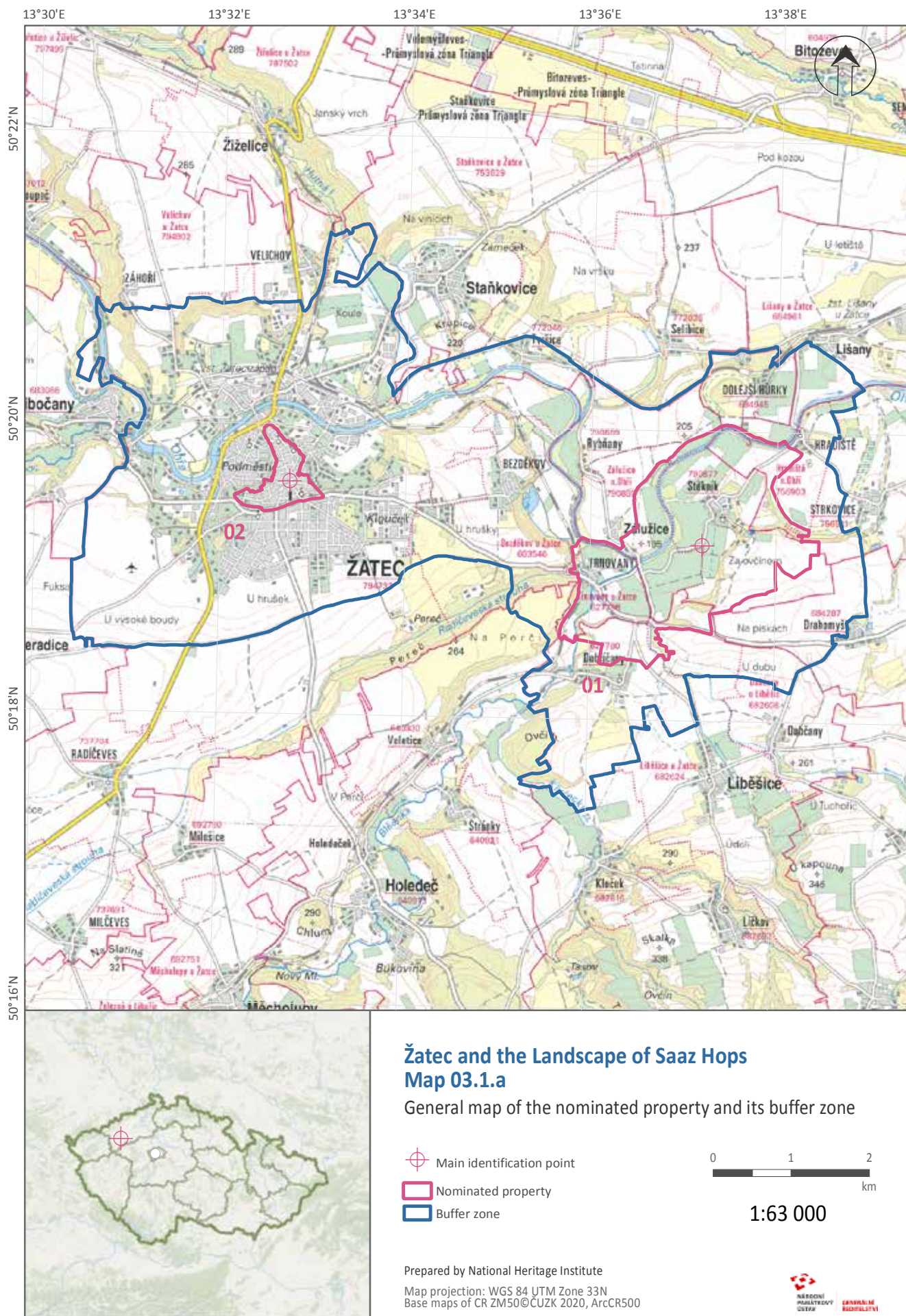
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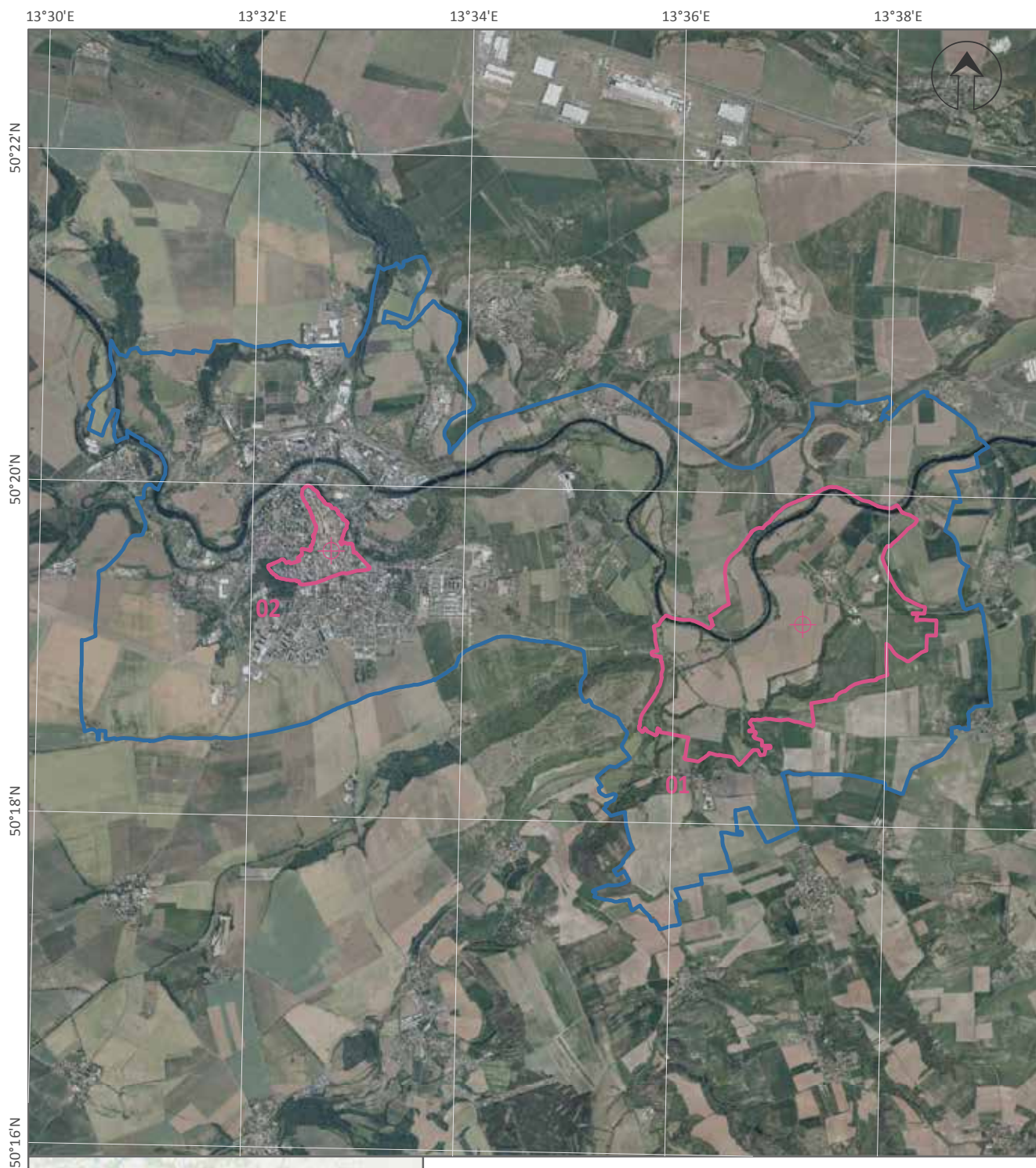
Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N

Sources: Esri, HERE, DeLorme, increment P Corp., NPS, NRCAN, Ordnance Survey, © OpenStreetMap contributors, USGS, NASA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community










Žatec and the Landscape of Saaz Hops Map 03.1.b

General map of the nominated property and its buffer zone

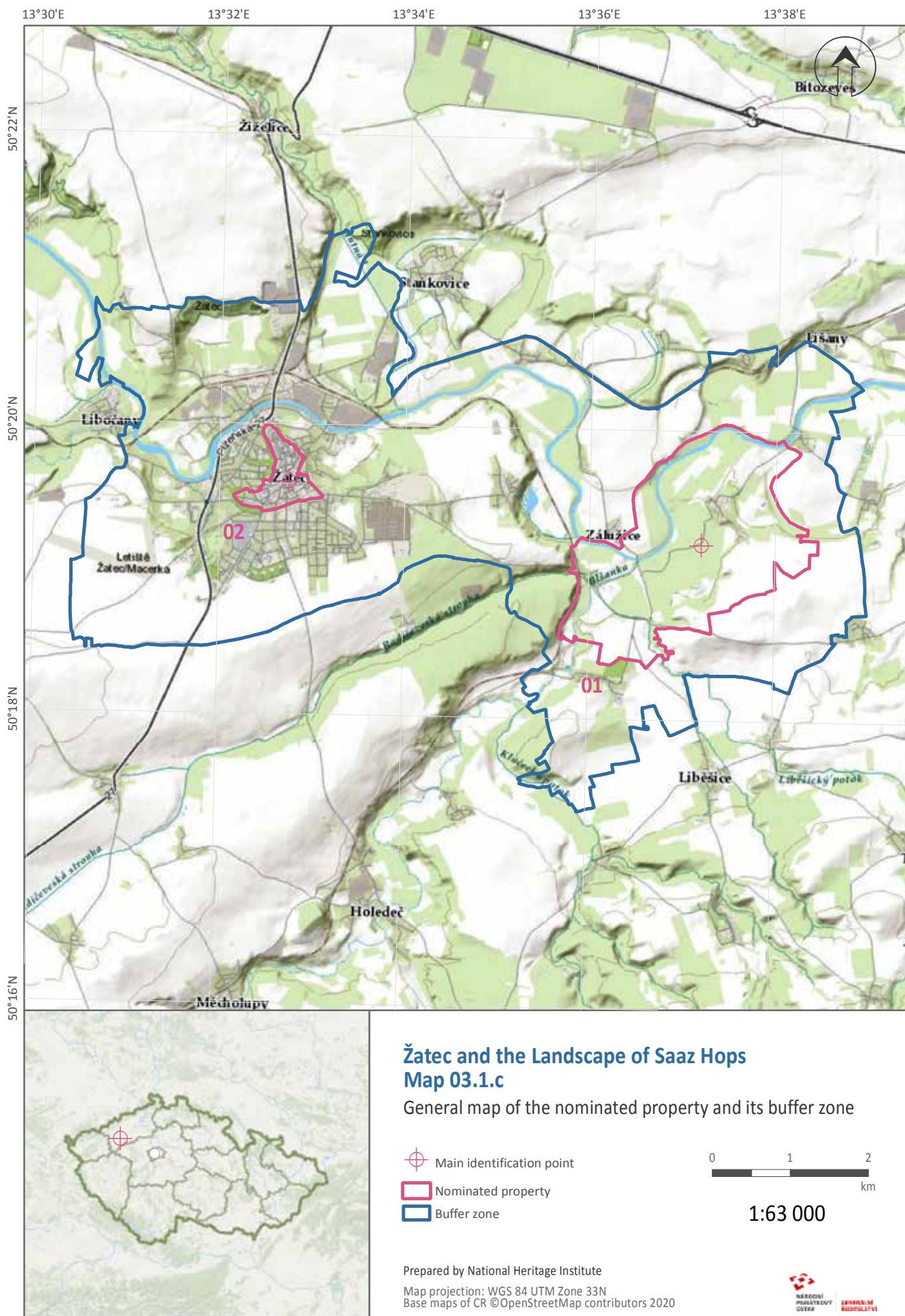
-  Main identification point
-  Nominated property
-  Buffer zone

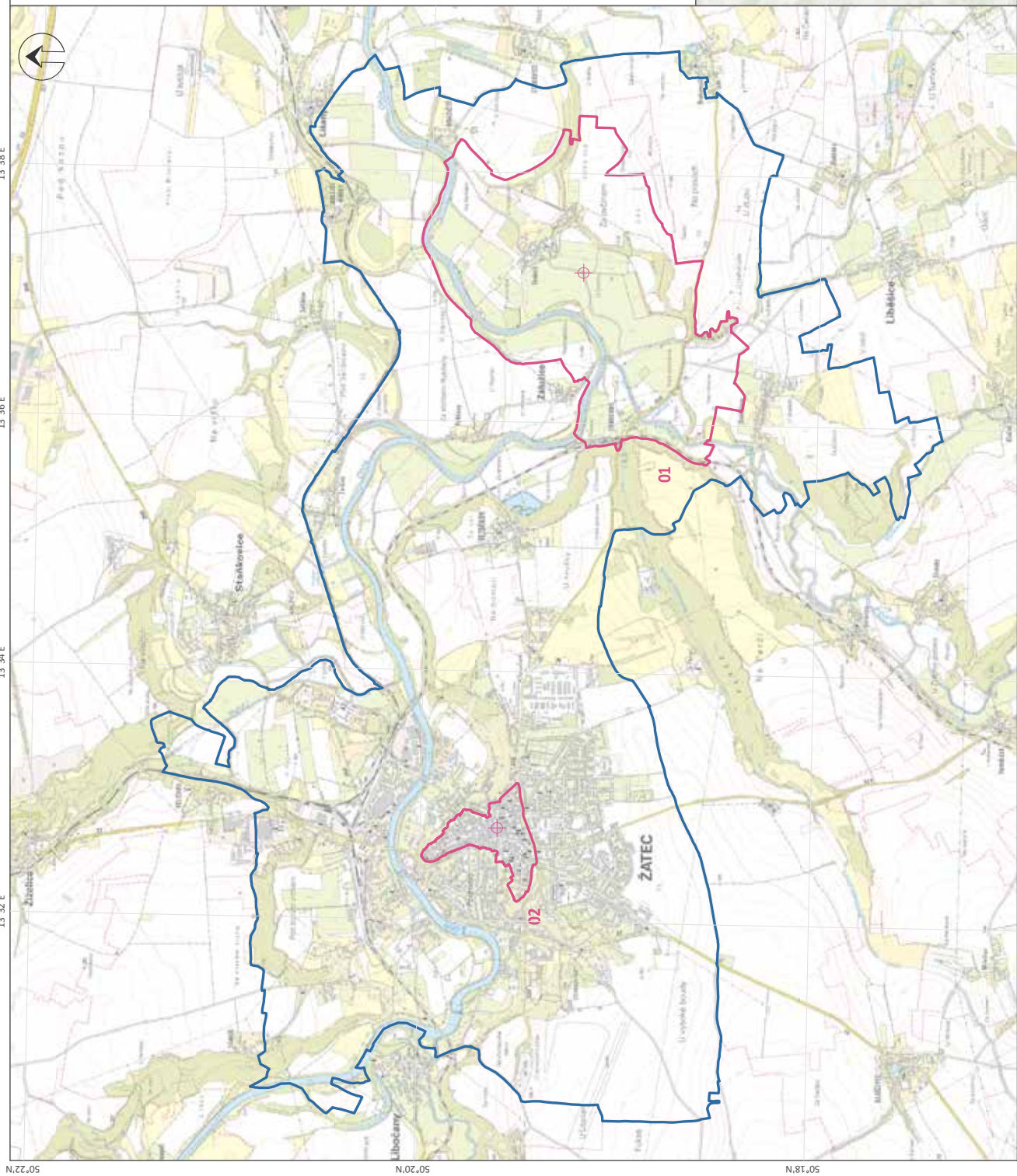


1:63 000

Prepared by National Heritage Institute
Map projection: WGS 84 UTM Zone 33N
Base maps of CR Ortofoto©CUZK 2020



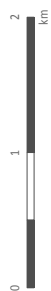




Žatec and the Landscape of Saaz Hops Map 03.2

General map of the nominated property
and its buffer zone

- Main identification point
- Nominated property
- Buffer zone

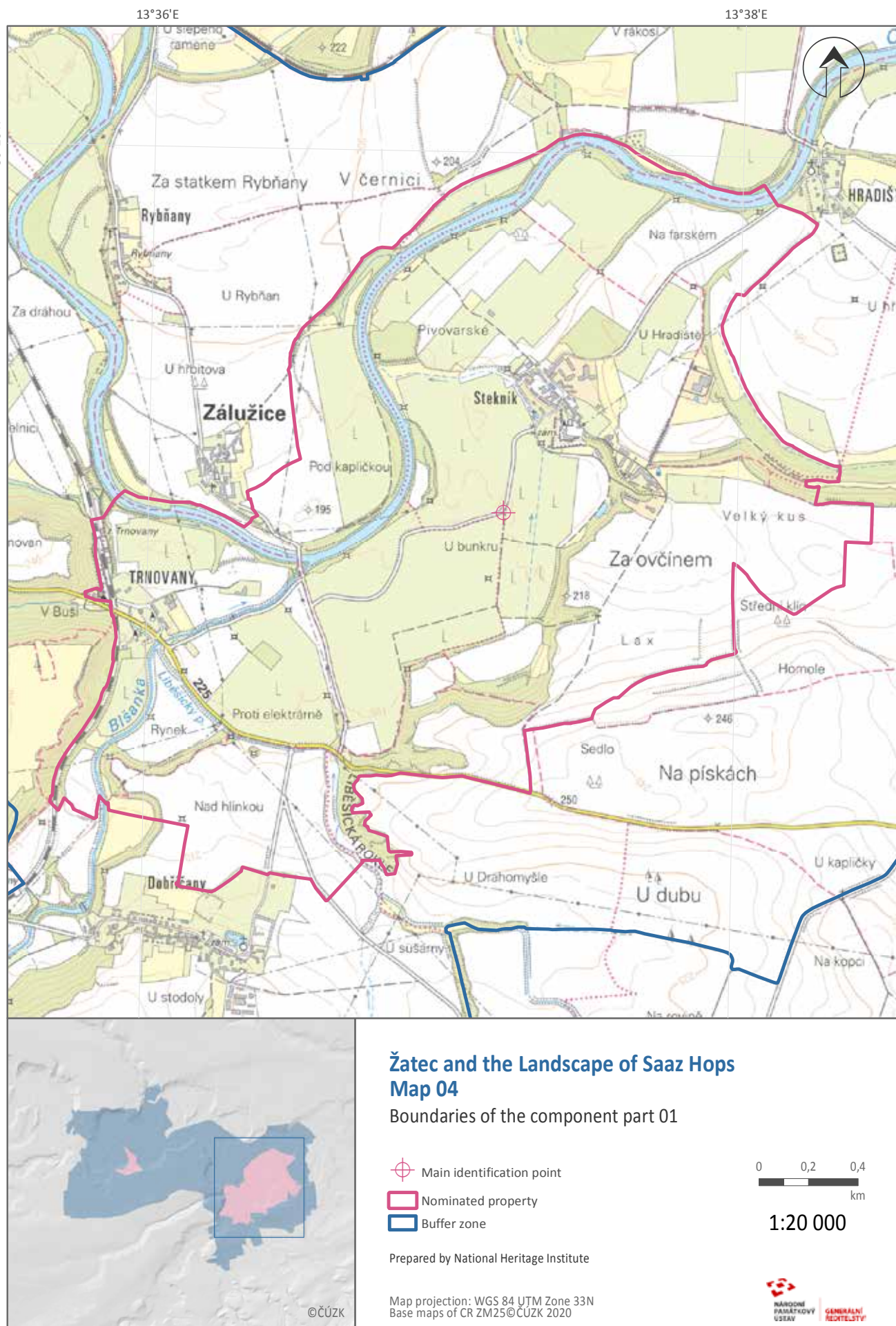


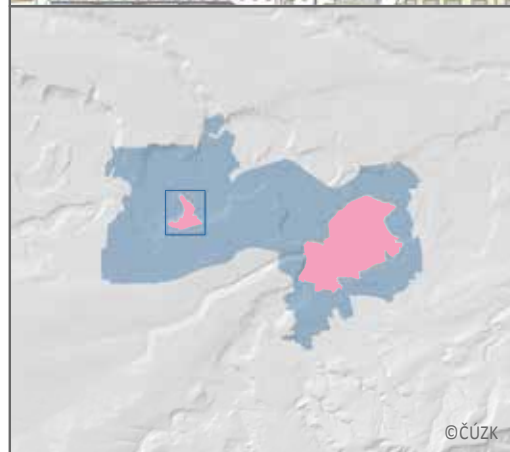
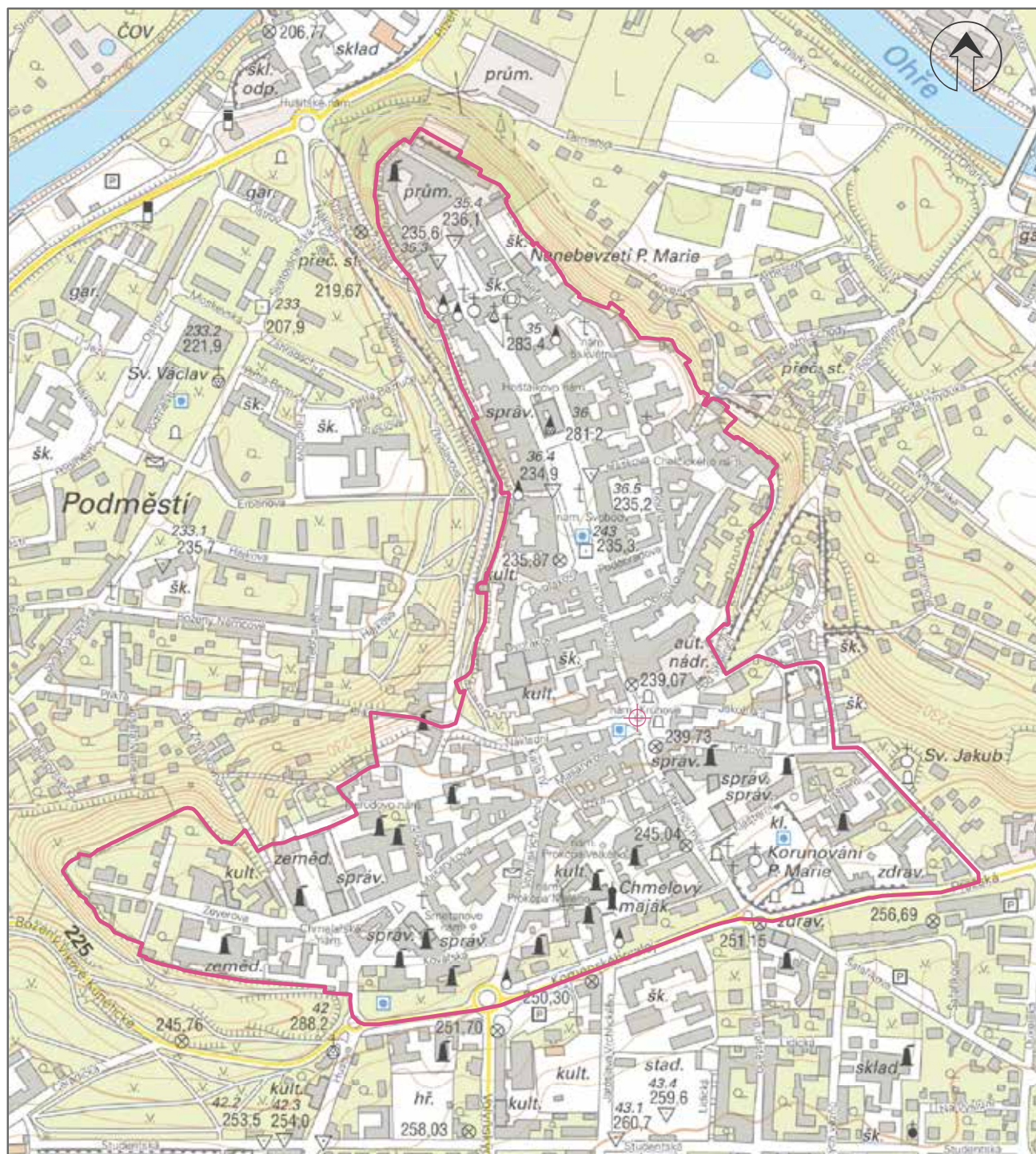
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Prepared by National Heritage Institute

Map projection: WGS 84 UTM, Zone 33N
Base maps of CR 2025 © ÚZK 2020









Žatec and the Landscape of Saaz Hops Map 05

Boundaries of the component part 02

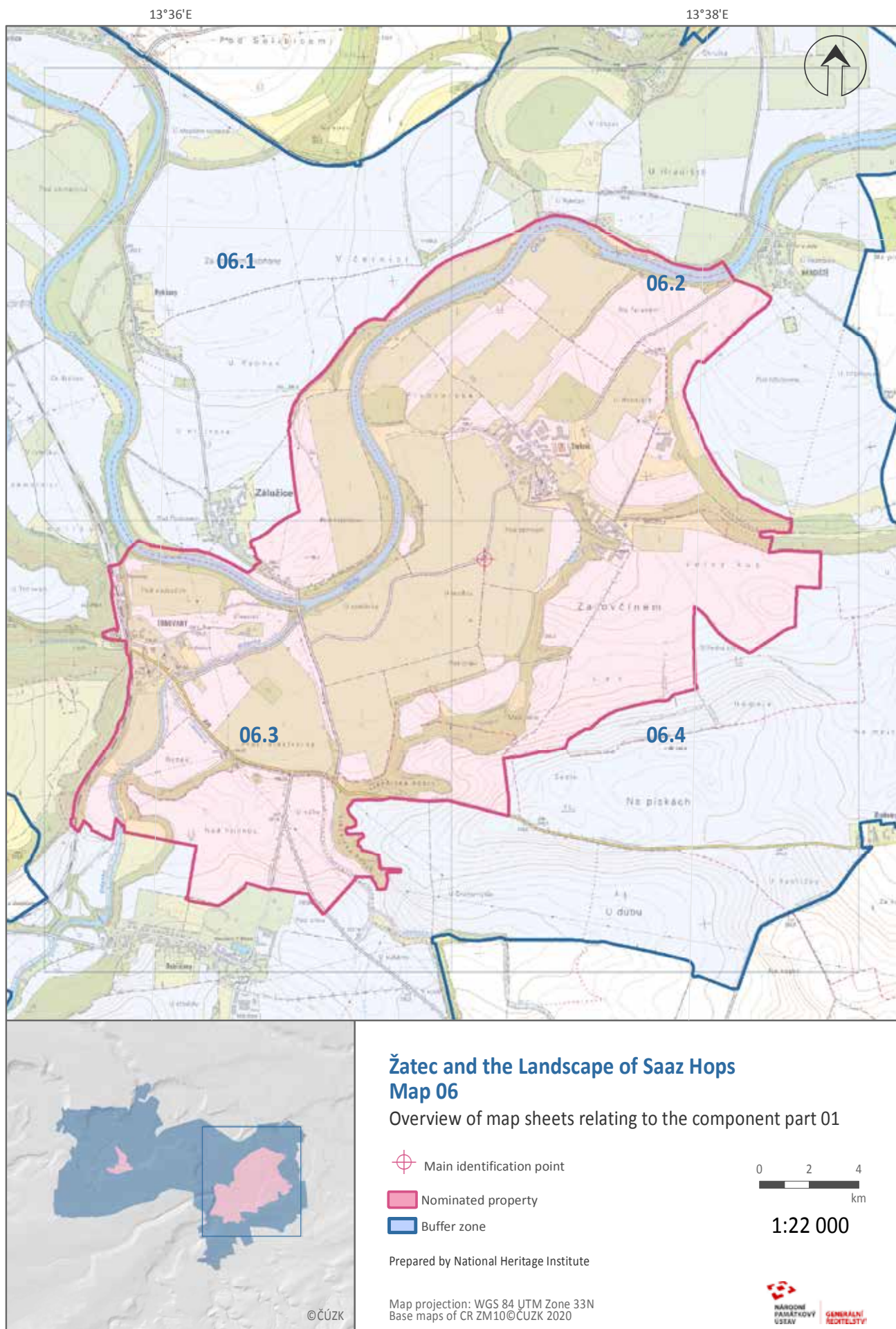
-  Main identification point
-  Nominated property

0 0,1 0,2
km

1:7 000

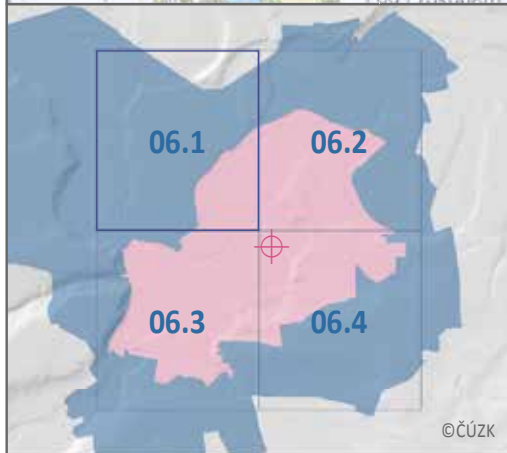
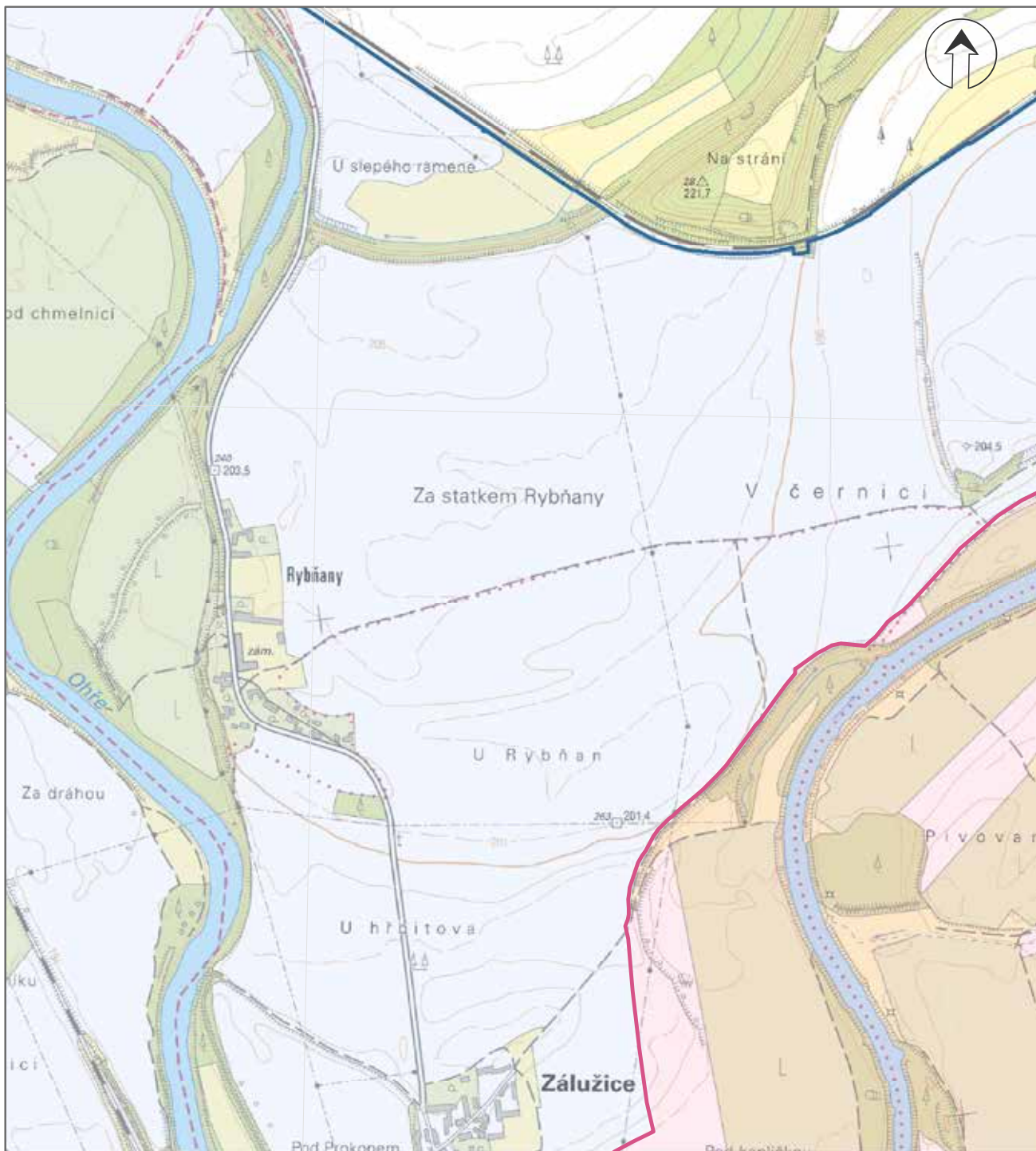
Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020






13°36'E

50°20'N



Žatec and the Landscape of Saaz Hops Map 06.1

Atlas of map sheets showing the boundaries
of the component part 01

-  Main identification point
-  Nominated property
-  Buffer zone

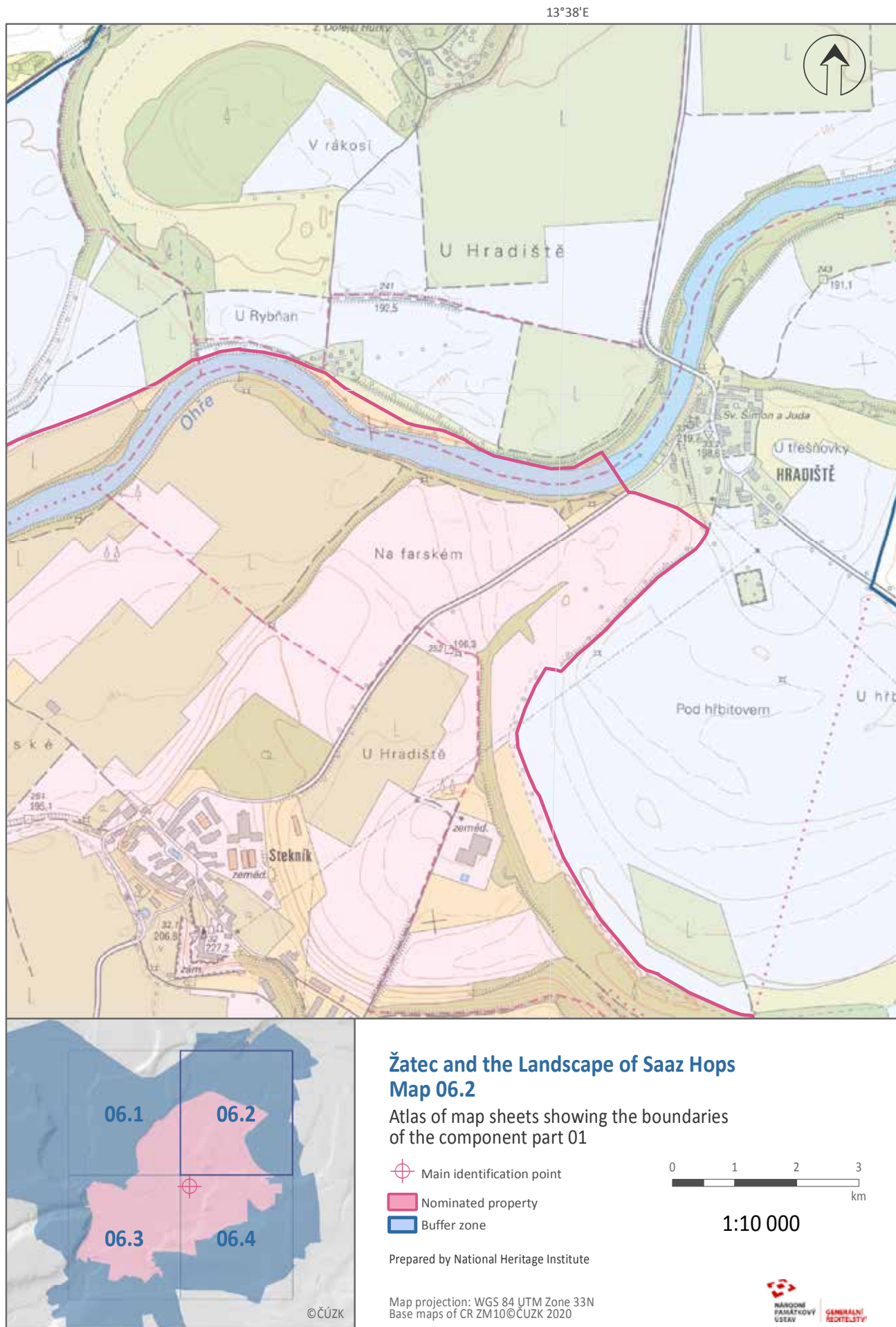


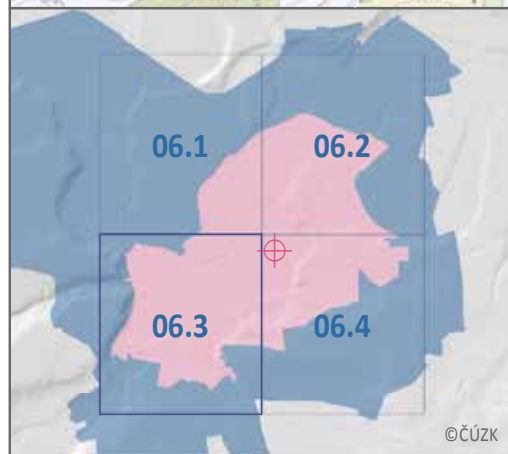
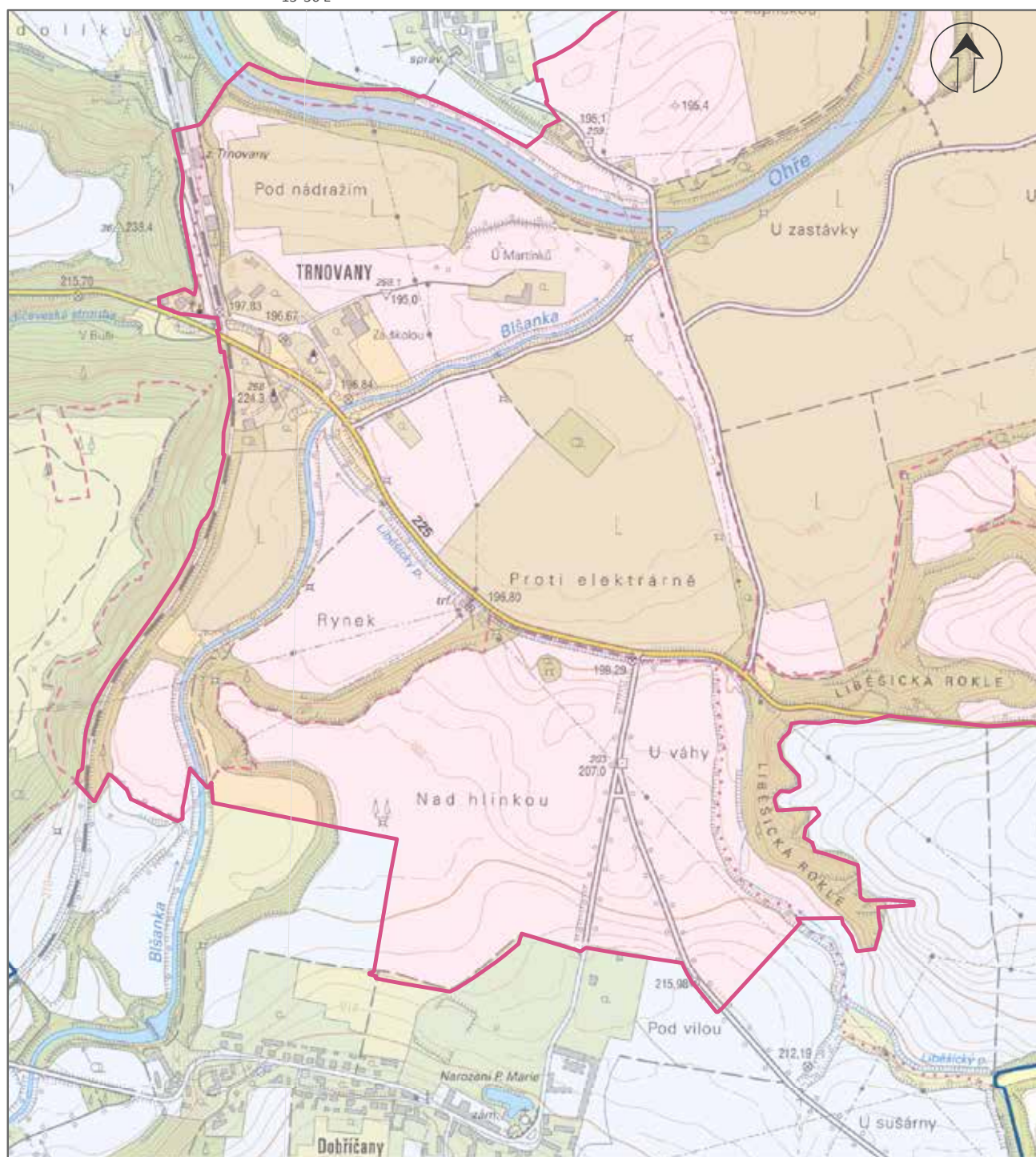
1:10 000

Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020










Žatec and the Landscape of Saaz Hops Map 06.3

Atlas of map sheets showing the boundaries
of the component part 01

-  Main identification point
-  Nominated property
-  Buffer zone

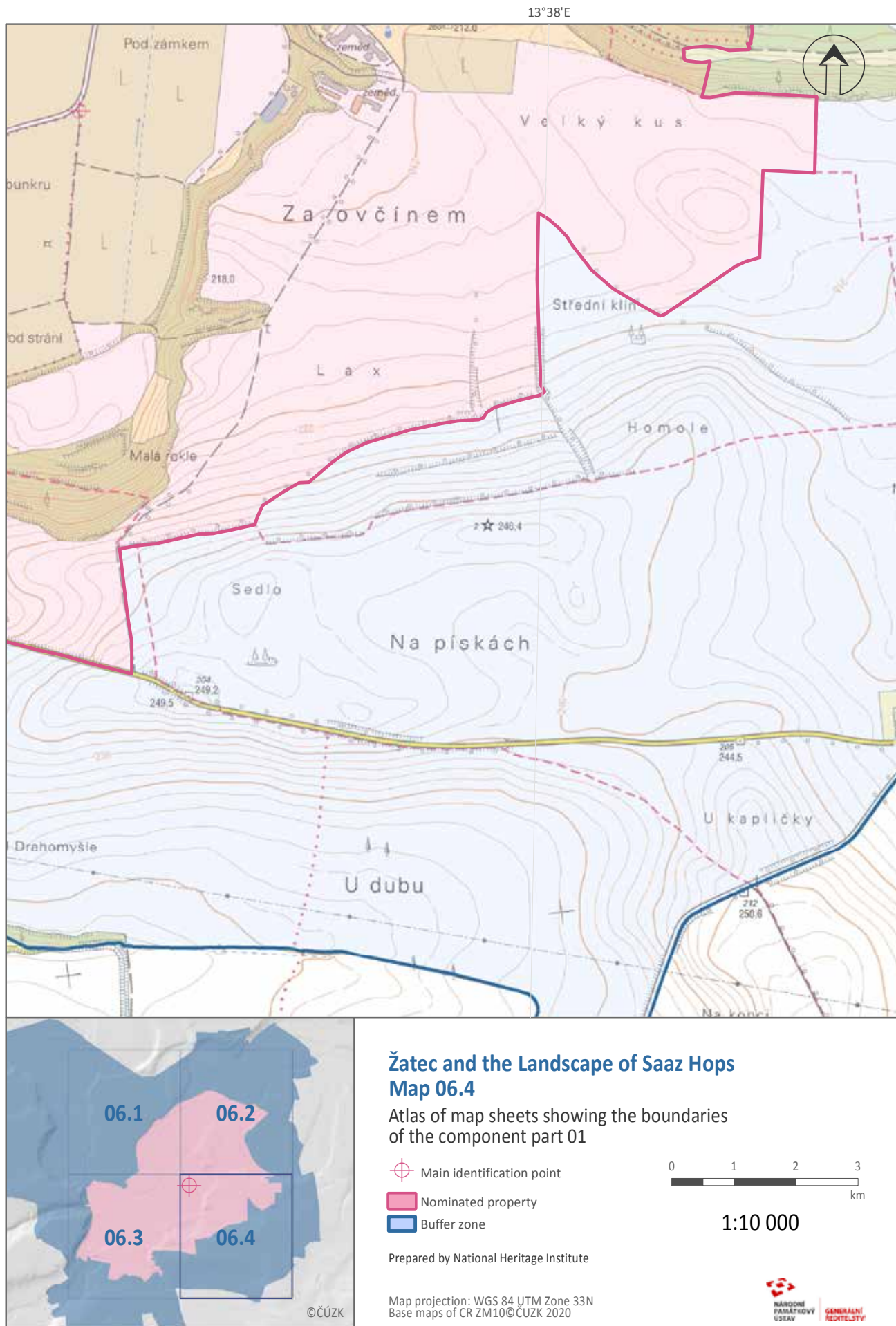


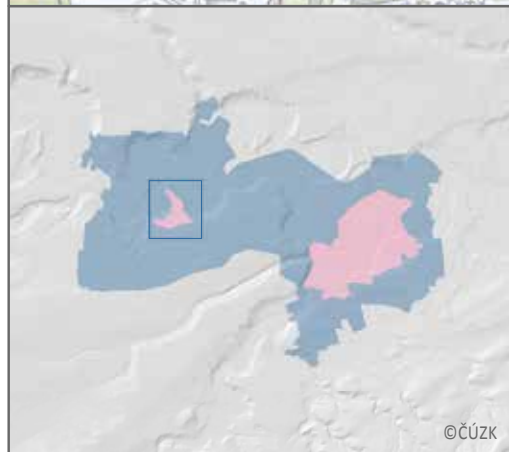
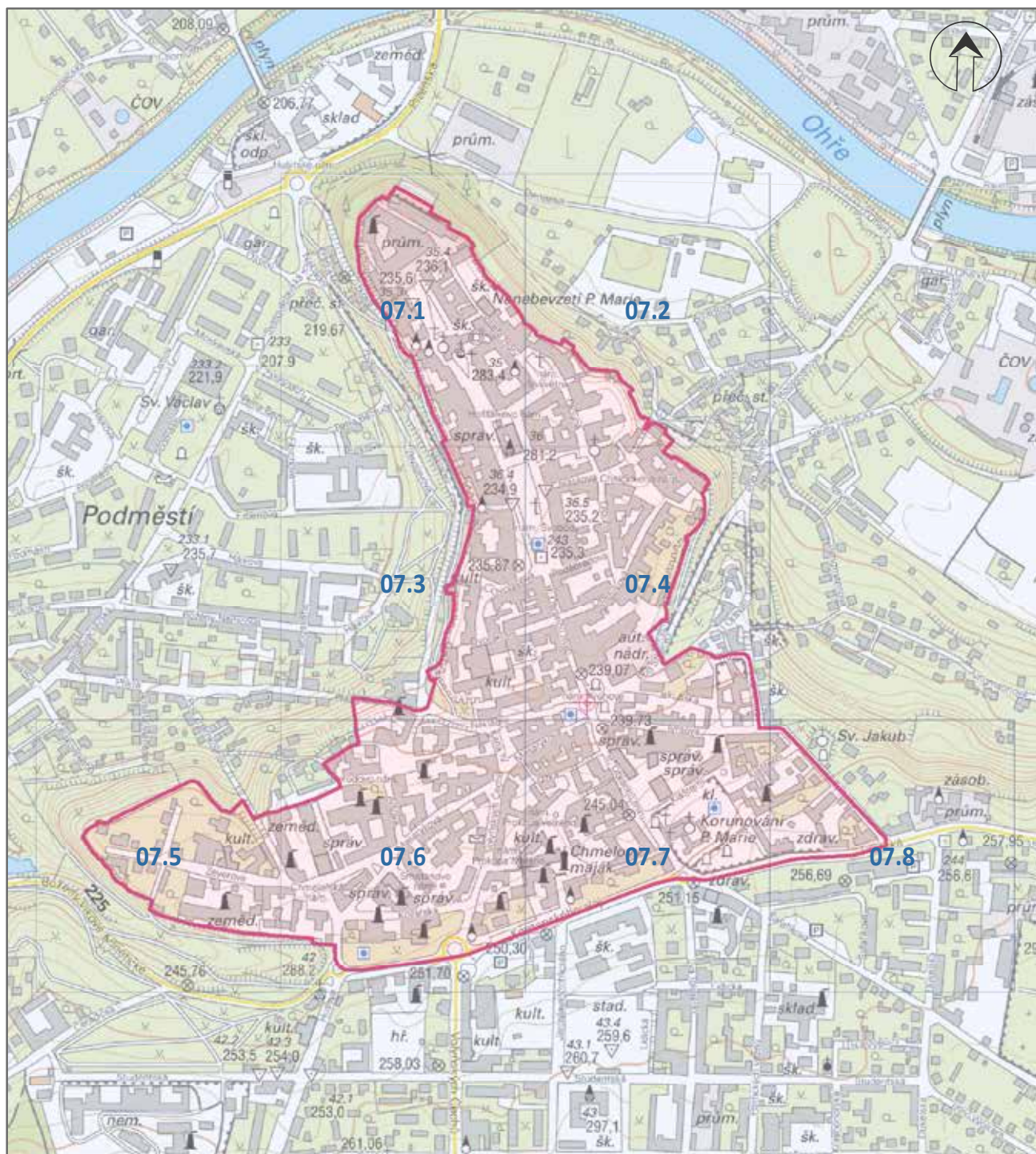
1:10 000

Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020










Žatec and the Landscape of Saaz Hops Map 07

Overview of map sheets relating to the component part 02

-  Main identification point
-  Nominated property
-  Buffer zone

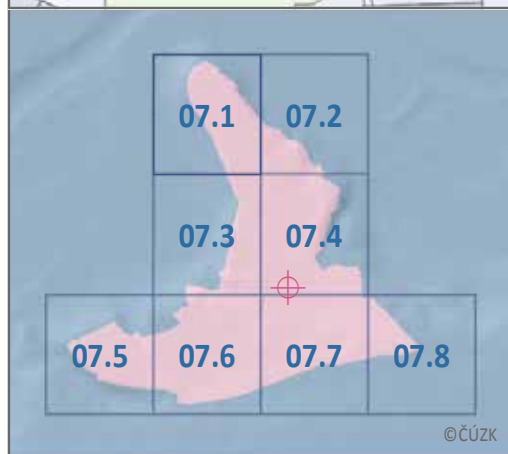


1:8 000

Prepared by National Heritage Institute




Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020





Žatec and the Landscape of Saaz Hops Map 07.1

Atlas of map sheets showing the boundaries
of the component part 02

-  Main identification point
-  Nominated property
-  Buffer zone

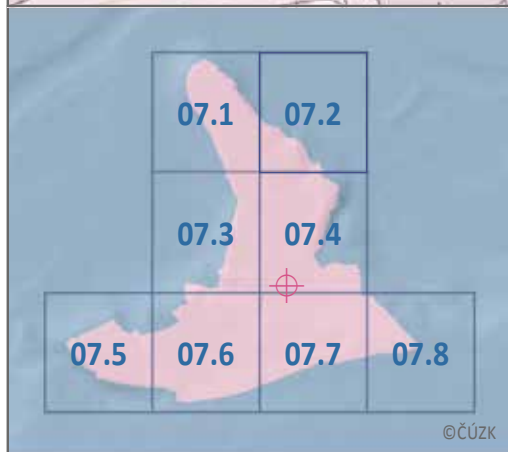


1:2 000

Prepared by National Heritage Institute




Map projection: WGS 84 UTM Zone 33N
Base maps of CR: Cadastral maps © ČÚZK 2020





Žatec and the Landscape of Saaz Hops Map 07.2

Atlas of map sheets showing the boundaries
of the component part 02

-  Main identification point
-  Nominated property
-  Buffer zone

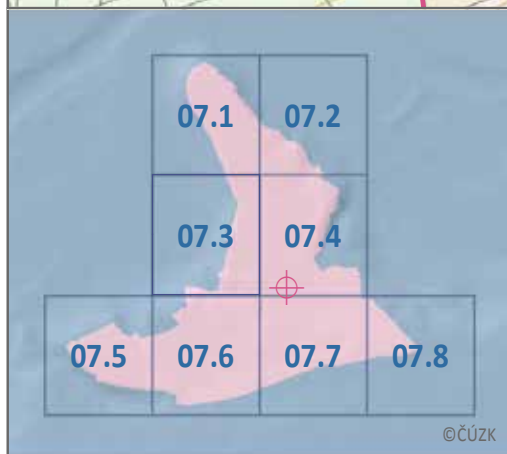
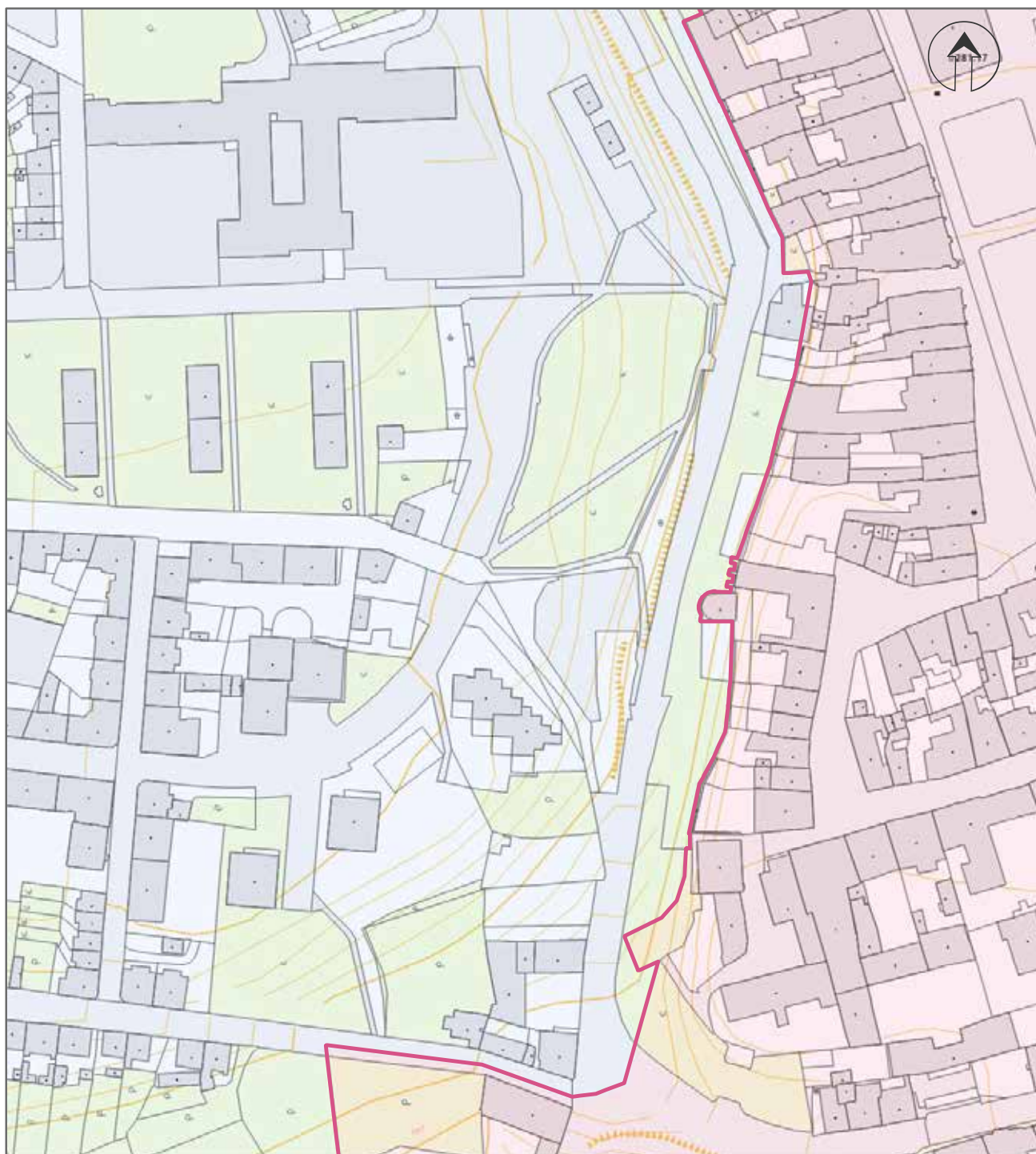
0 0,5 1
km

1:2 000

Prepared by National Heritage Institute




Map projection: WGS 84 UTM Zone 33N
Base maps of CR: Cadastral maps ©ČÚZK 2020





Žatec and the Landscape of Saaz Hops Map 07.3

Atlas of map sheets showing the boundaries
of the component part 02

-  Main identification point
-  Nominated property
-  Buffer zone

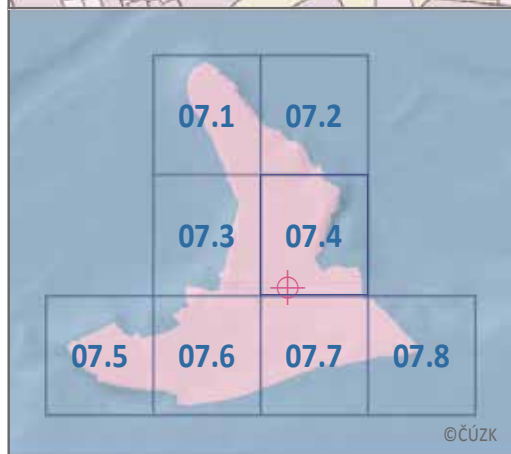
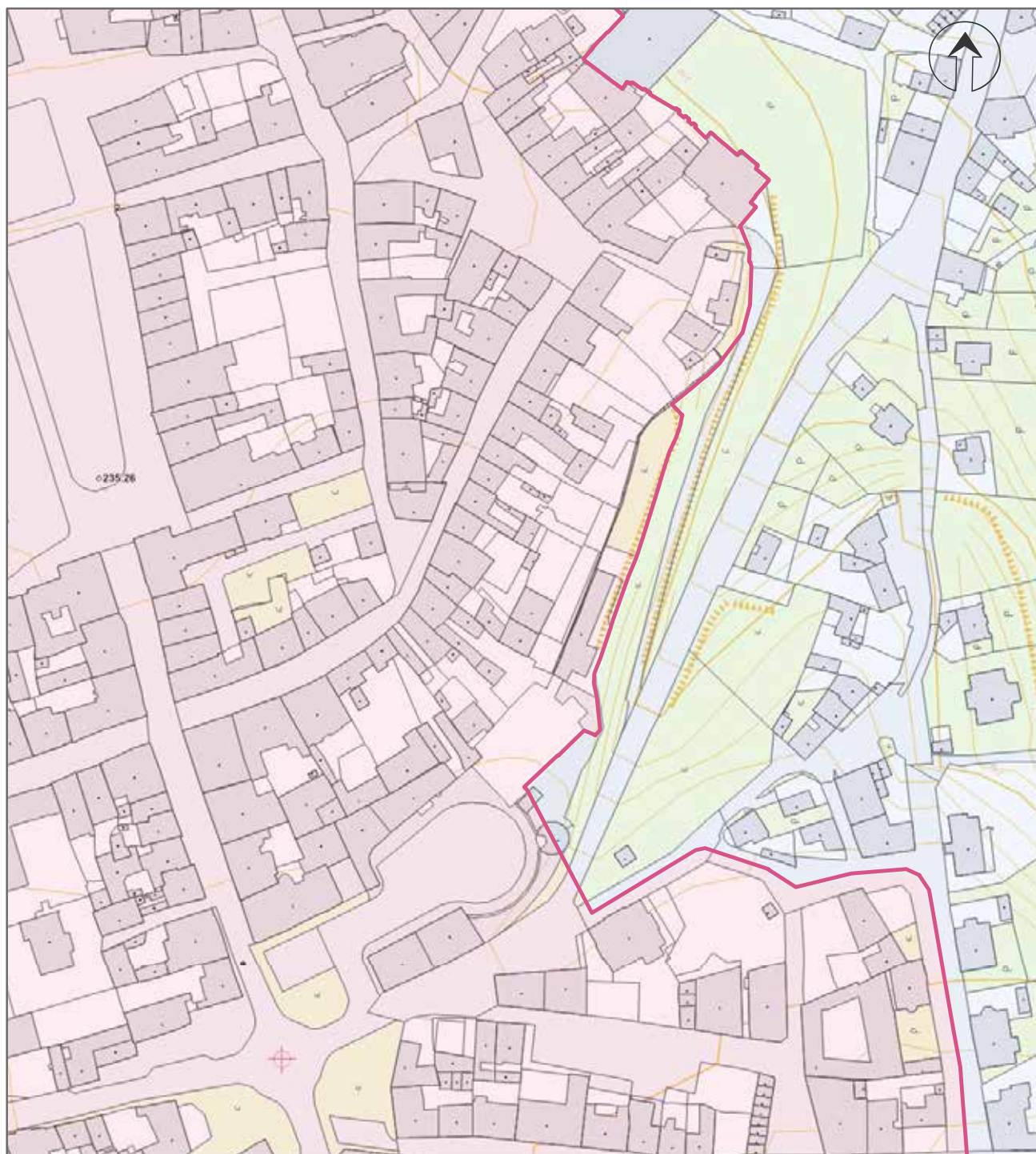
0 0,5 1
km

1:2 000

Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR: Cadastral maps ©ČÚZK 2020





Žatec and the Landscape of Saaz Hops Map 07.4

Atlas of map sheets showing the boundaries
of the component part 02

⊕ Main identification point

■ Nominated property

■ Buffer zone

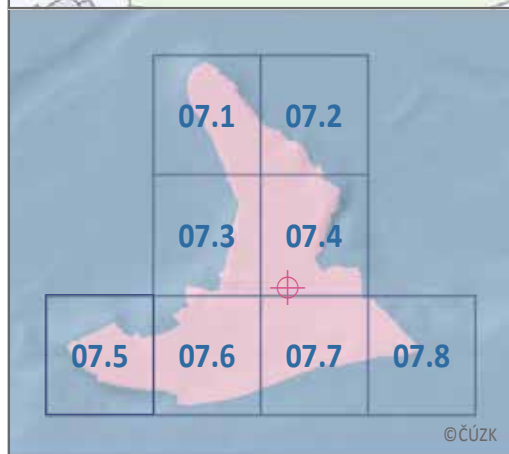
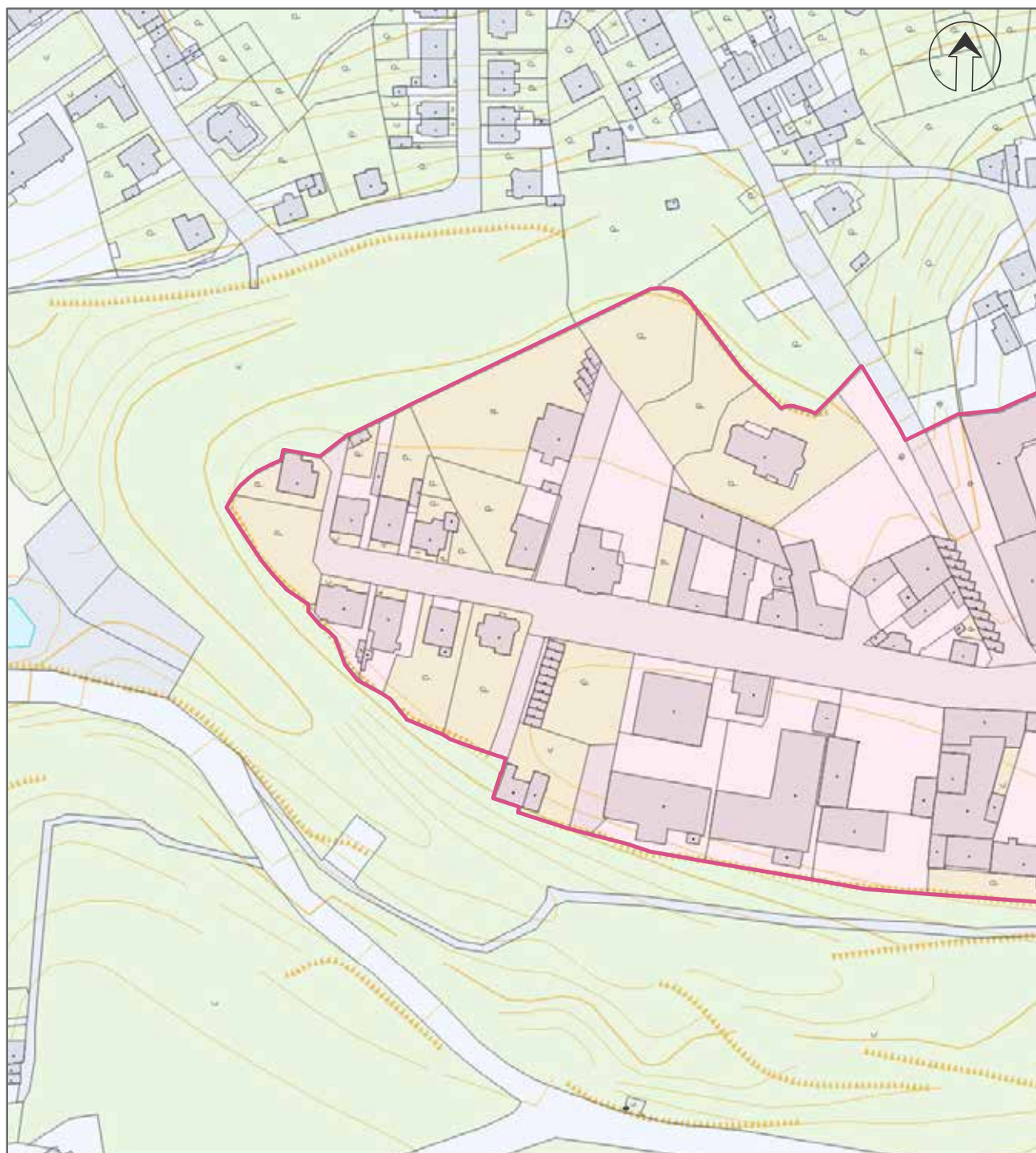
0 0,5 1
km

1:2 000

Prepared by National Heritage Institute




Map projection: WGS 84 UTM Zone 33N
Base maps of CR: Cadastral maps ©ČÚZK 2020





Žatec and the Landscape of Saaz Hops Map 07.5

Atlas of map sheets showing the boundaries
of the component part 02

-  Main identification point
-  Nominated property
-  Buffer zone

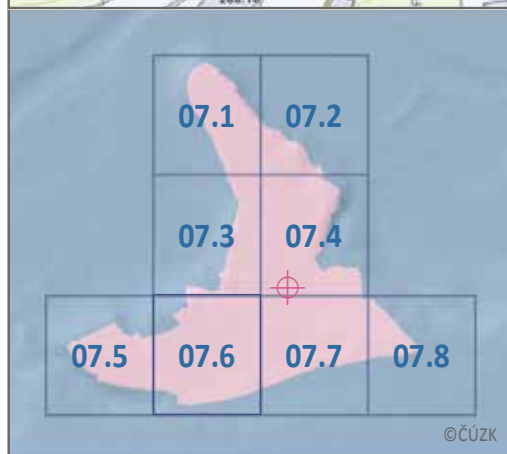
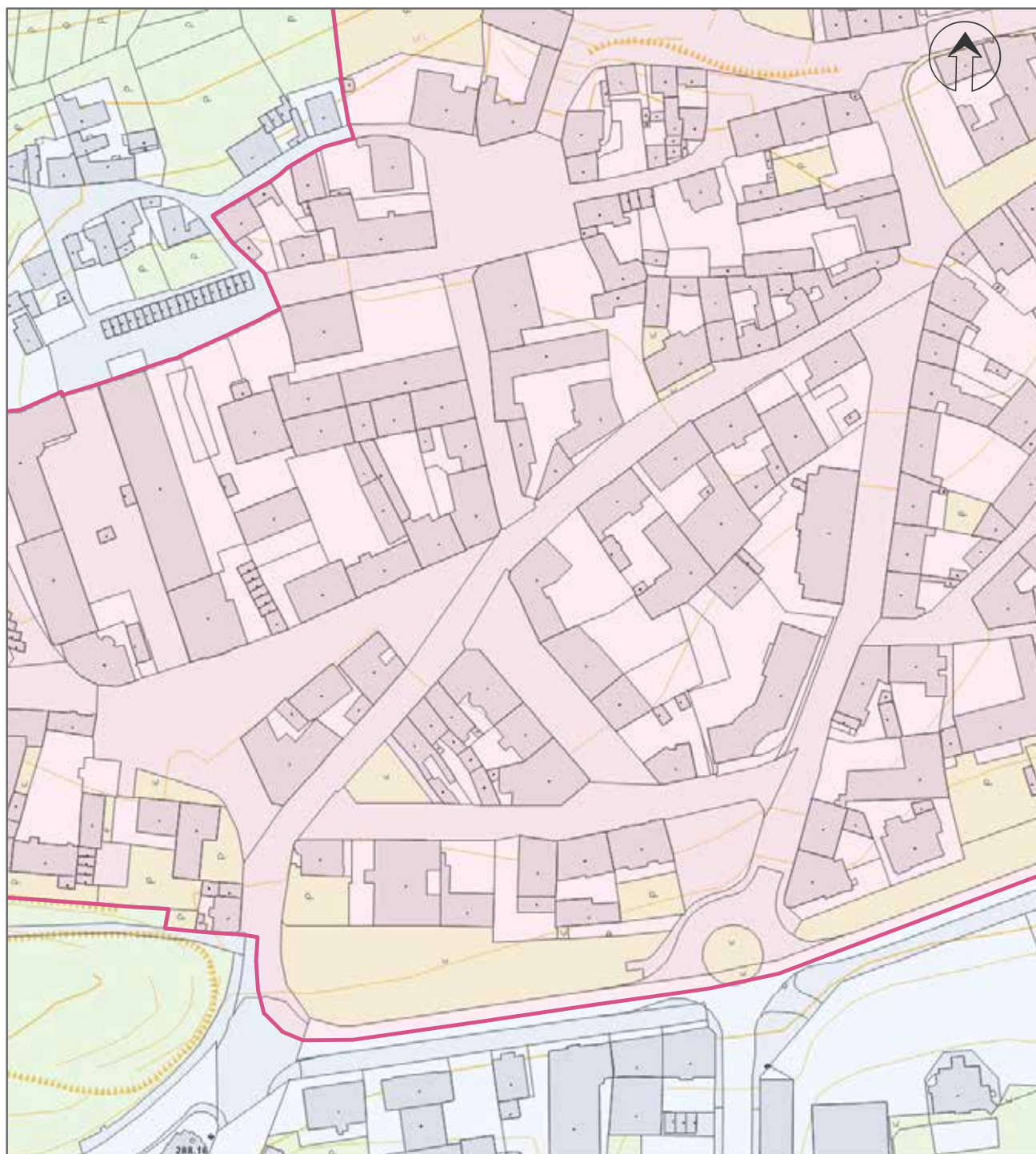
0 0,5 1
km

1:2 000

Prepared by National Heritage Institute




Map projection: WGS 84 UTM Zone 33N
Base maps of CR: Cadastral maps ©ČÚZK 2020





Žatec and the Landscape of Saaz Hops Map 07.6

Atlas of map sheets showing the boundaries
of the component part 02

-  Main identification point
-  Nominated property
-  Buffer zone

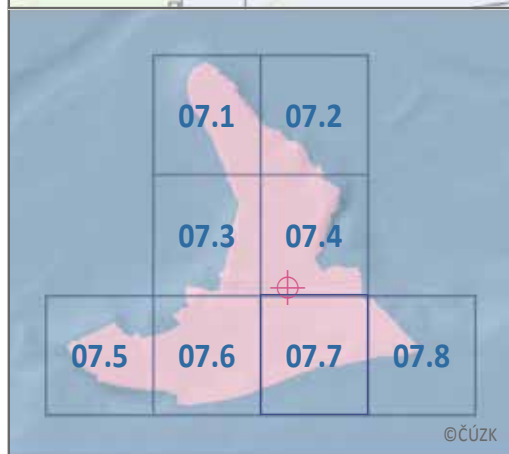
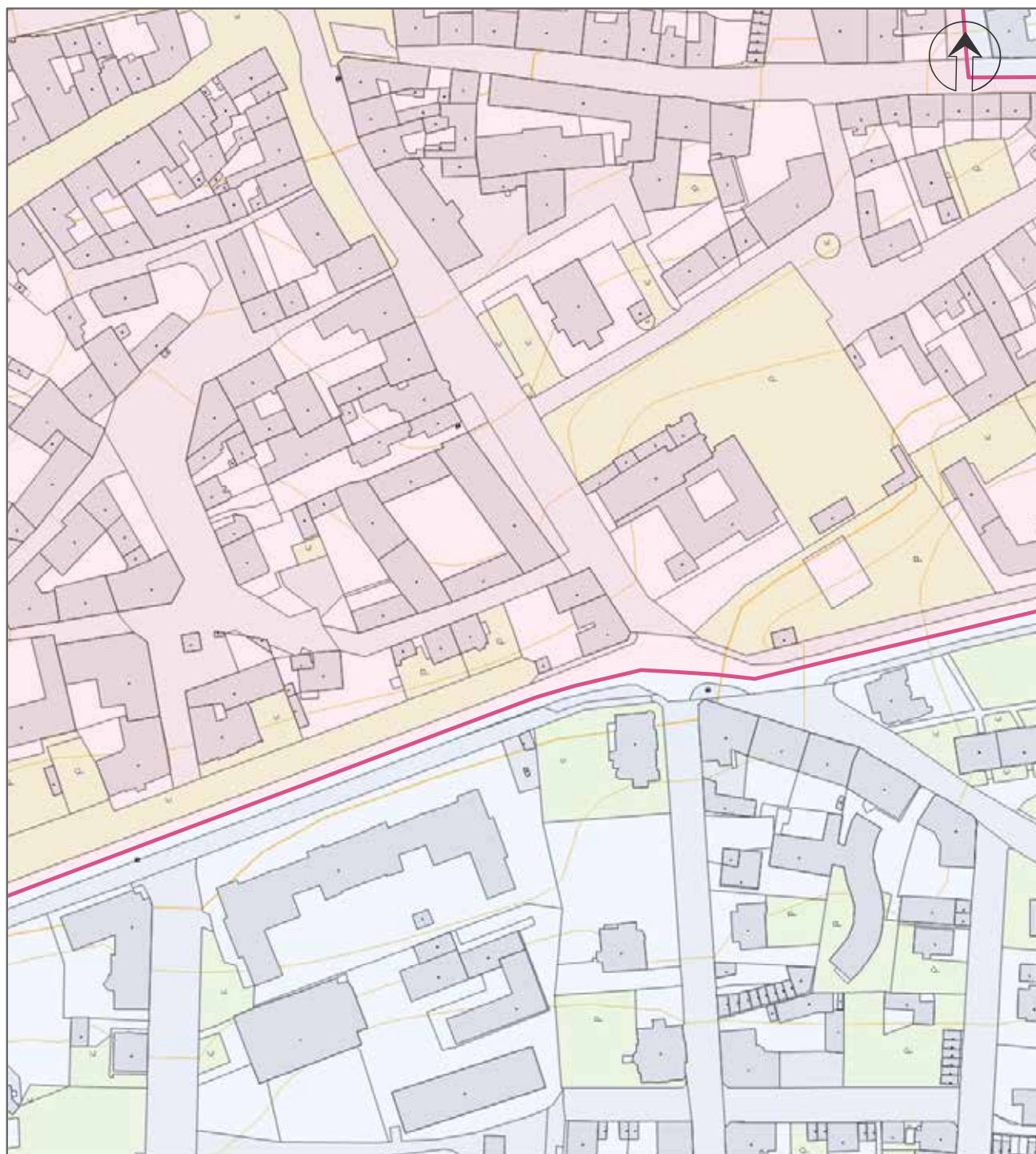
0 0,5 1
km

1:2 000

Prepared by National Heritage Institute




Map projection: WGS 84 UTM Zone 33N
Base maps of CR: Cadastral maps ©ČÚZK 2020





Žatec and the Landscape of Saaz Hops Map 07.7

Atlas of map sheets showing the boundaries
of the component part 02

-  Main identification point
-  Nominated property
-  Buffer zone

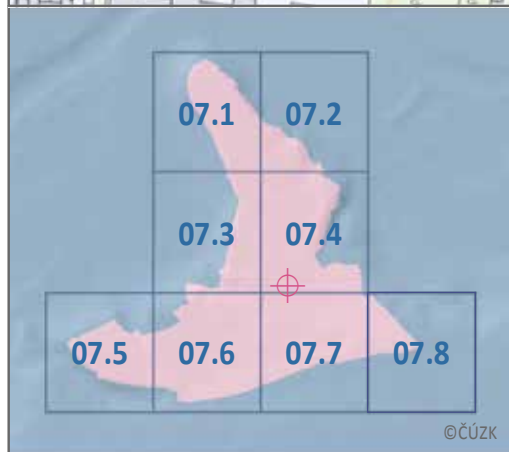
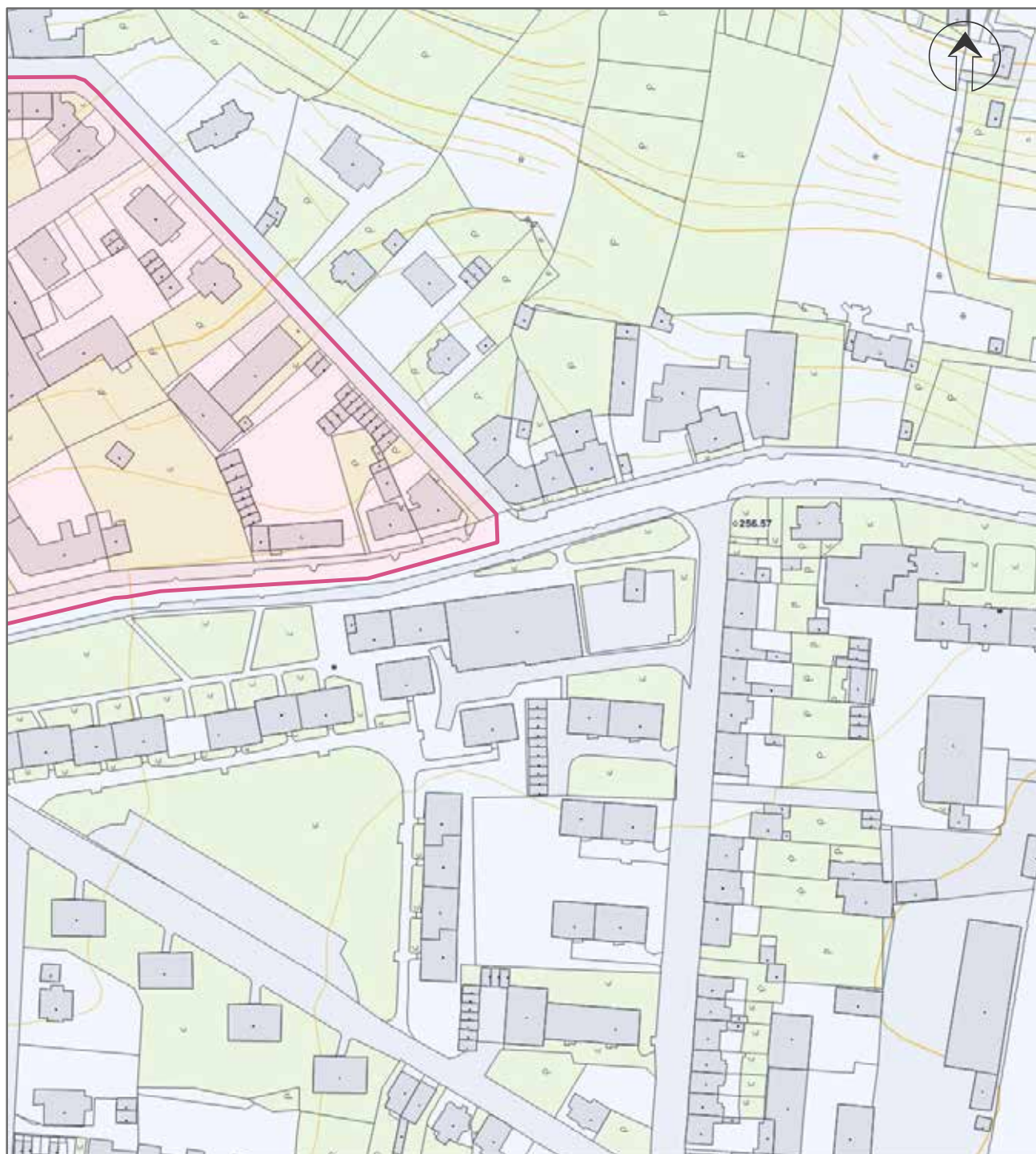
0 0,5 1
km

1:2 000

Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR: Cadastral maps ©ČÚZK 2020








©ČÚZK

Žatec and the Landscape of Saaz Hops Map 07.8

Atlas of map sheets showing the boundaries
of the component part 02

-  Main identification point
-  Nominated property
-  Buffer zone

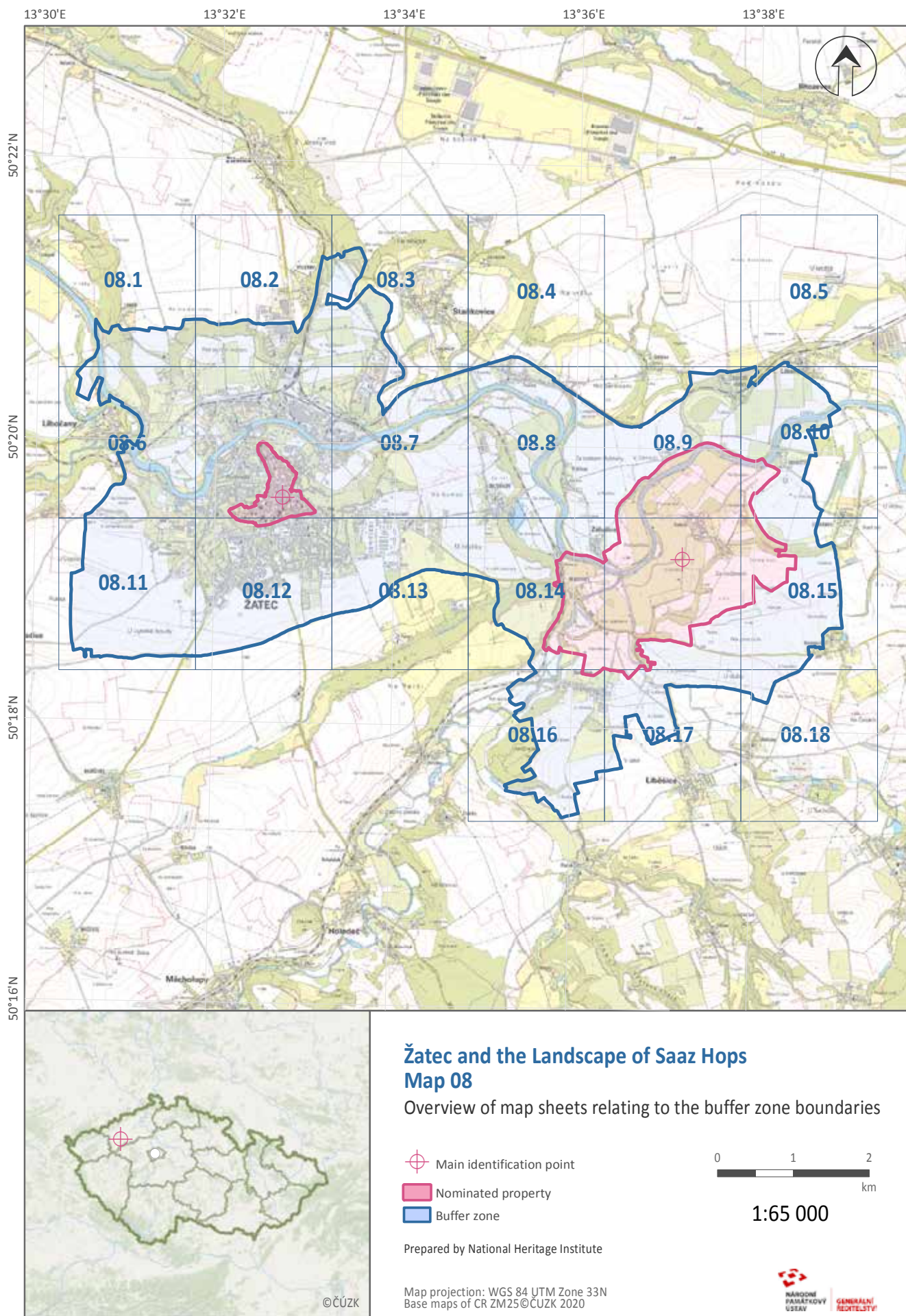
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km

1:2 000

Prepared by National Heritage Institute

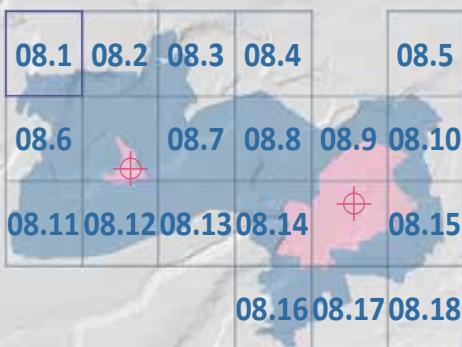
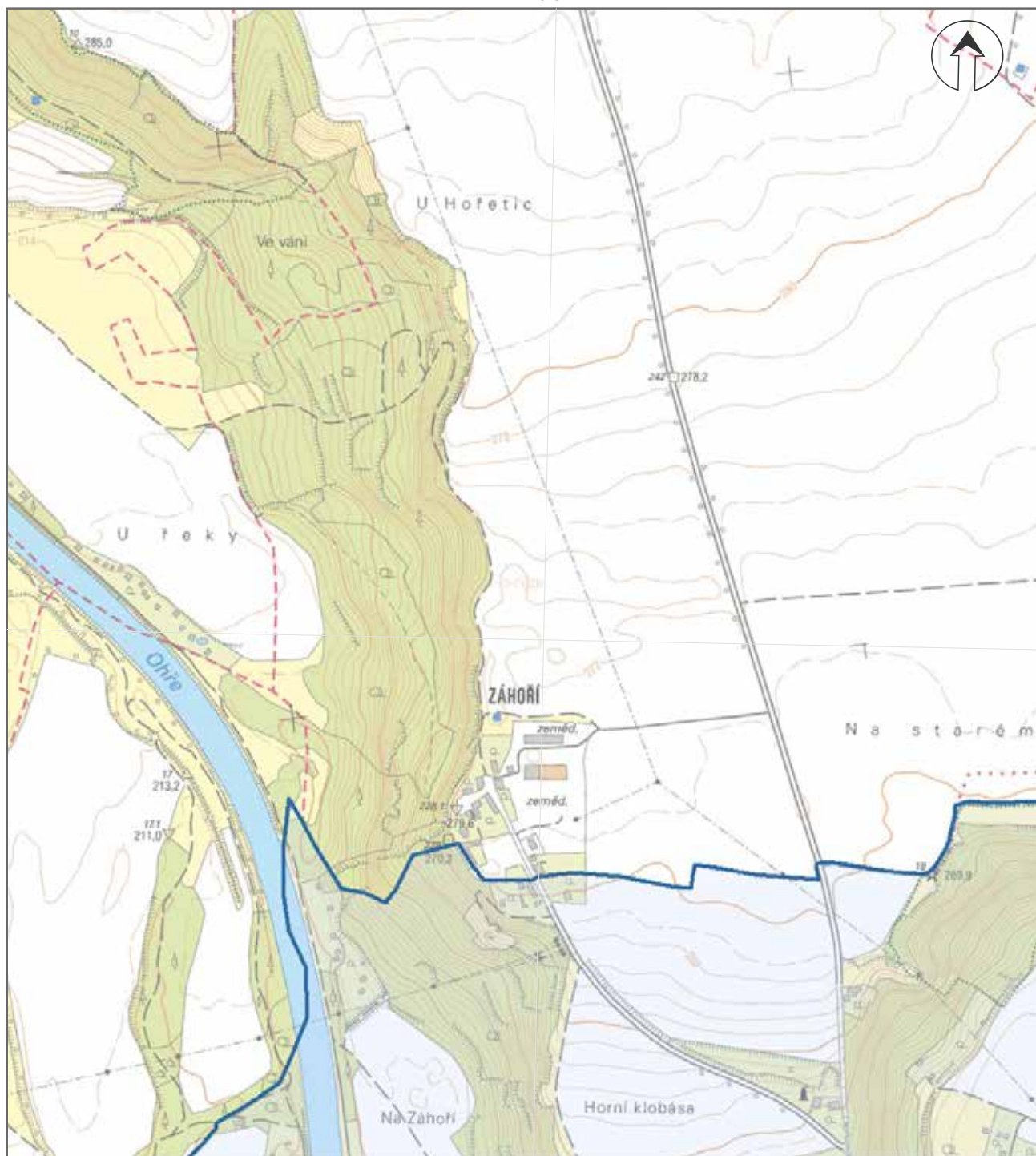
Map projection: WGS 84 UTM Zone 33N
Base maps of CR: Cadastral maps ©ČÚZK 2020





13°31'E

50°21'N



©ČÚZK

Žatec and the Landscape of Saaz Hops Map 08.1

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

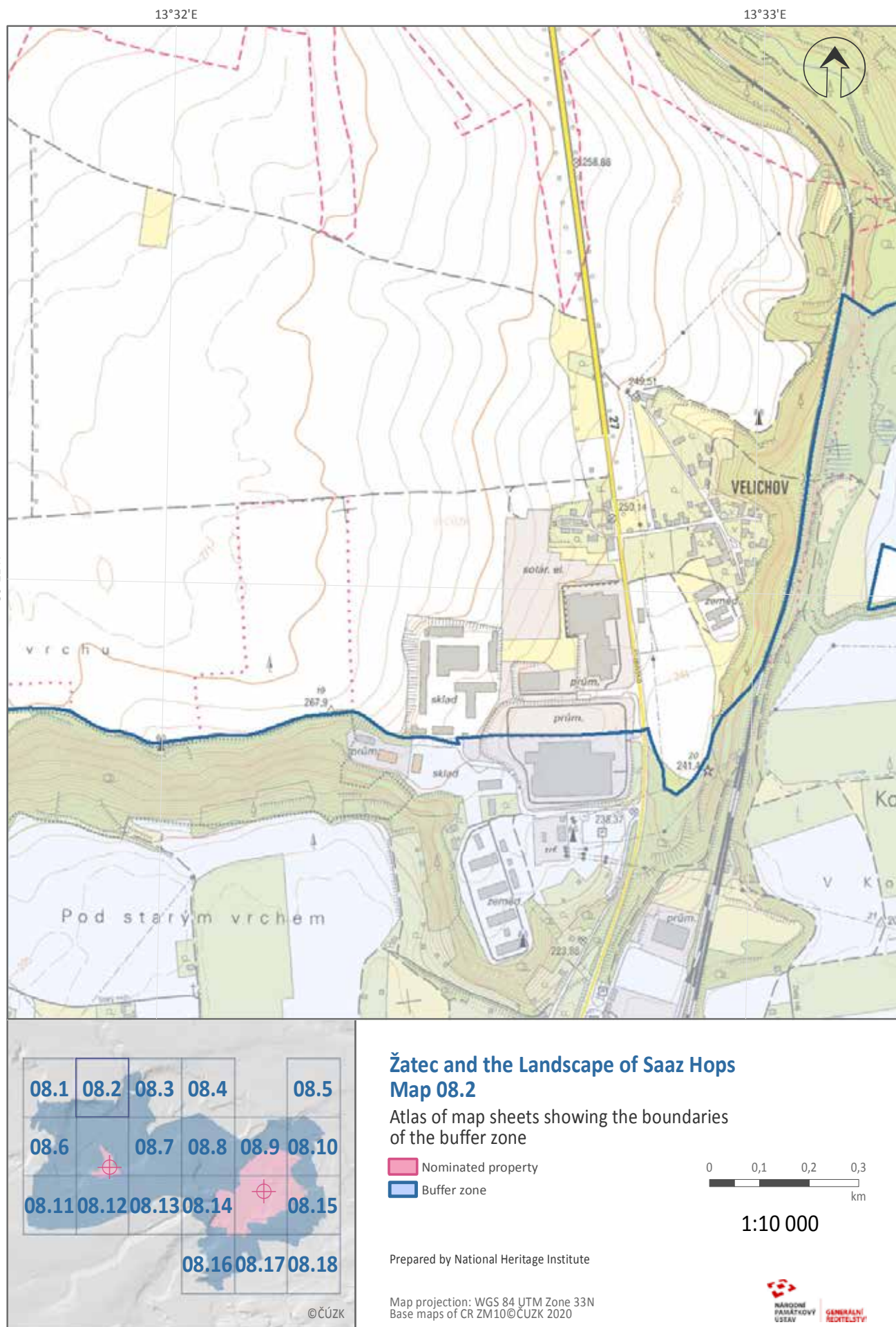
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km

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Prepared by National Heritage Institute

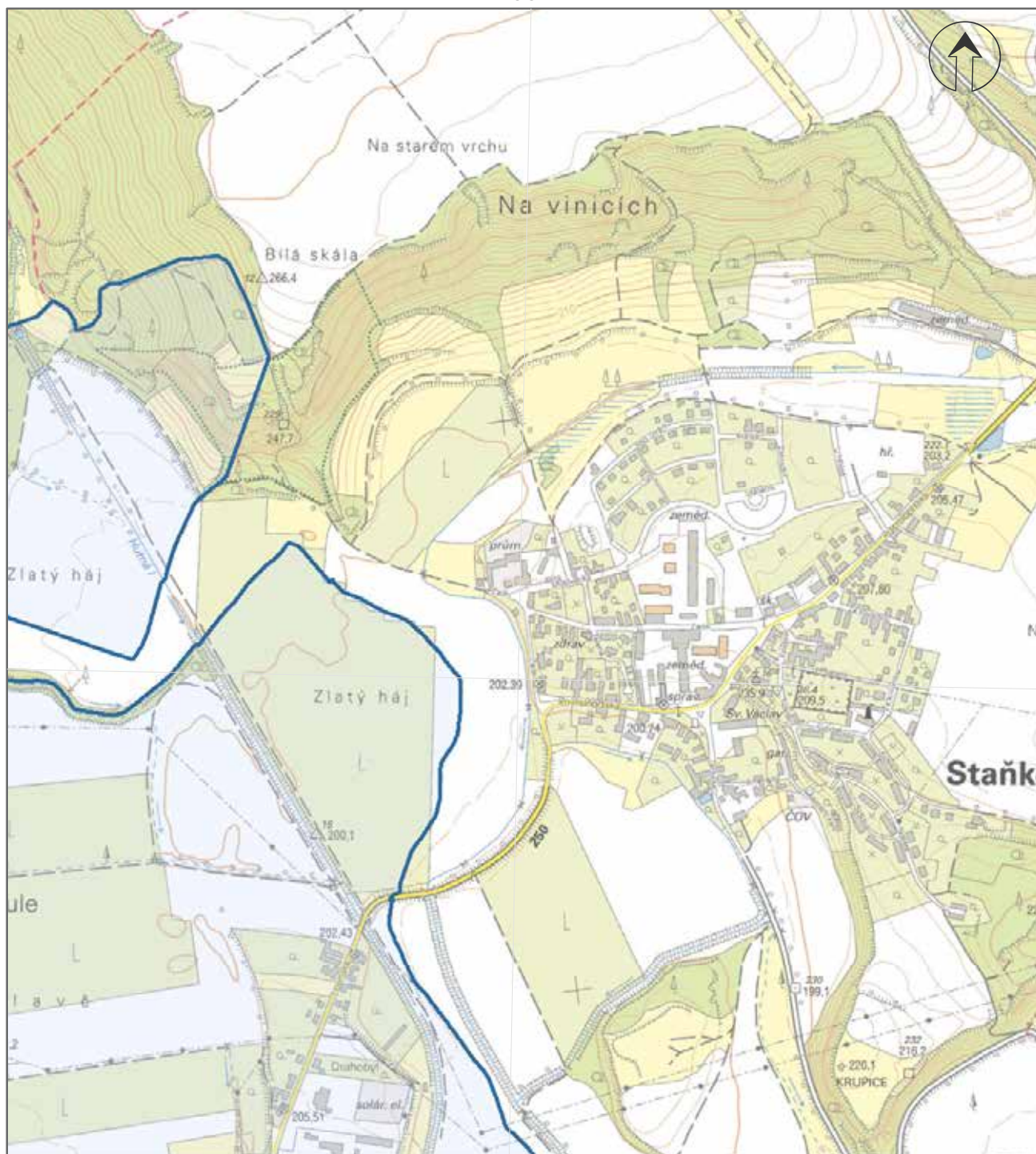
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Base maps of CR ZM10©ČÚZK 2020



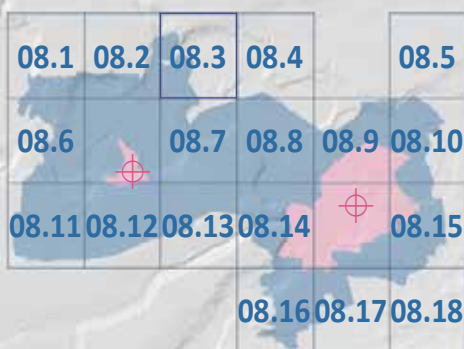


13°34'E

50°21'N



47



Žatec and the Landscape of Saaz Hops Map 08.3

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone



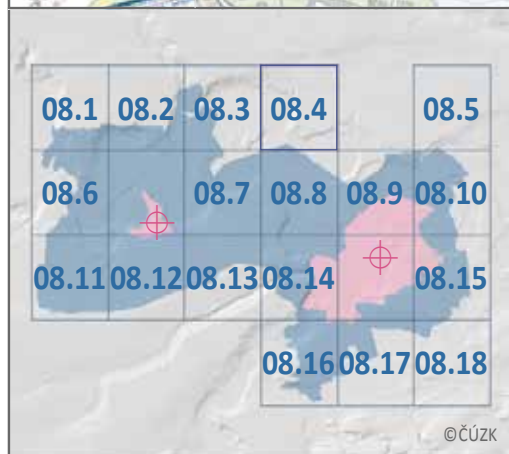
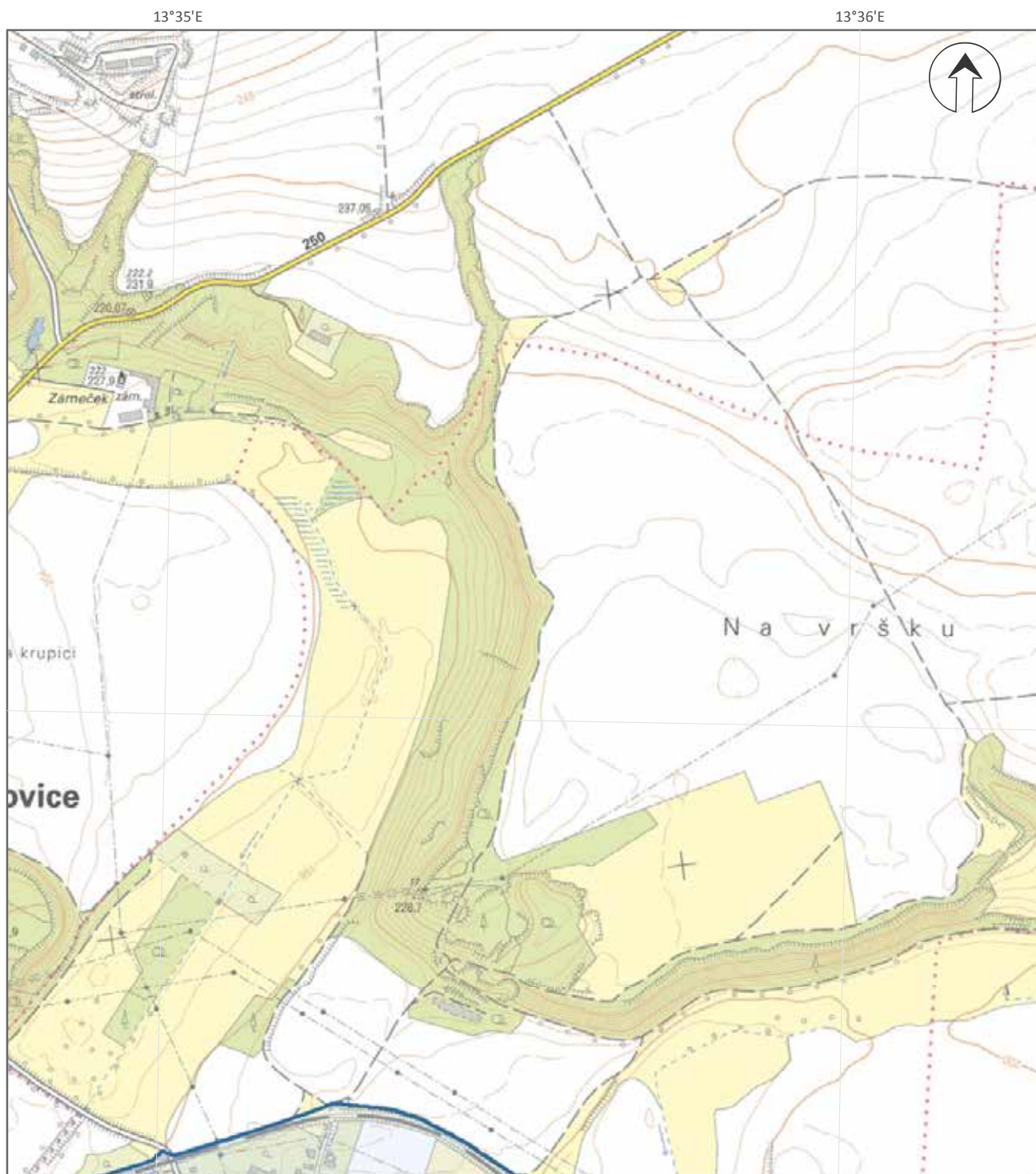
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Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020

©ČÚZK





Žatec and the Landscape of Saaz Hops Map 08.4

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

0 0,1 0,2 0,3
km

1:10 000

Prepared by National Heritage Institute

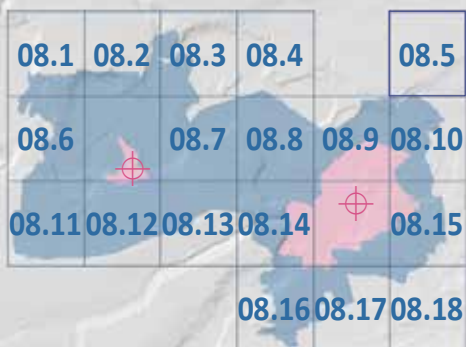
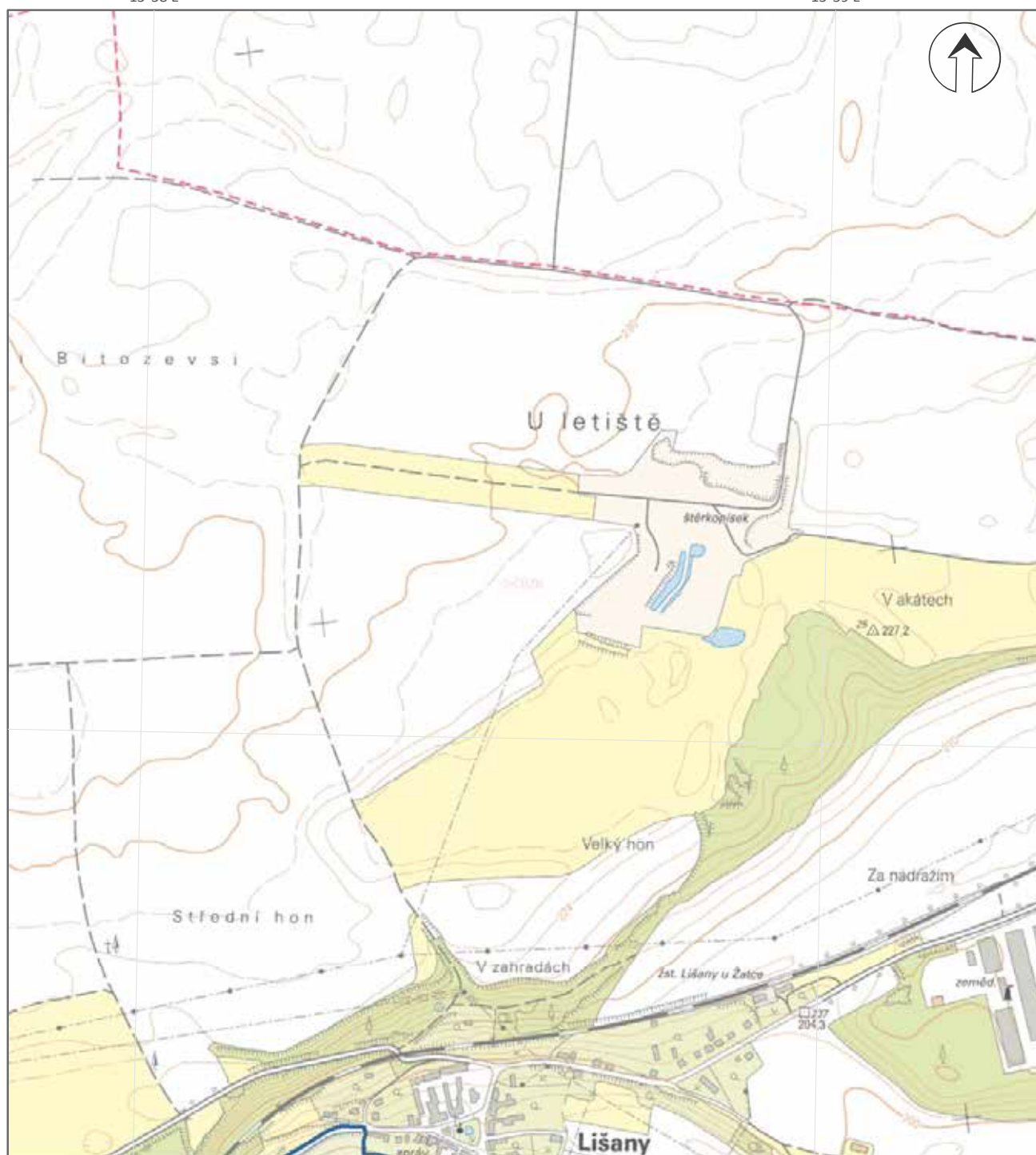
Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020



13°38'E

13°39'E

50°21'N

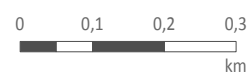


©ČÚZK

Žatec and the Landscape of Saaz Hops Map 08.5

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

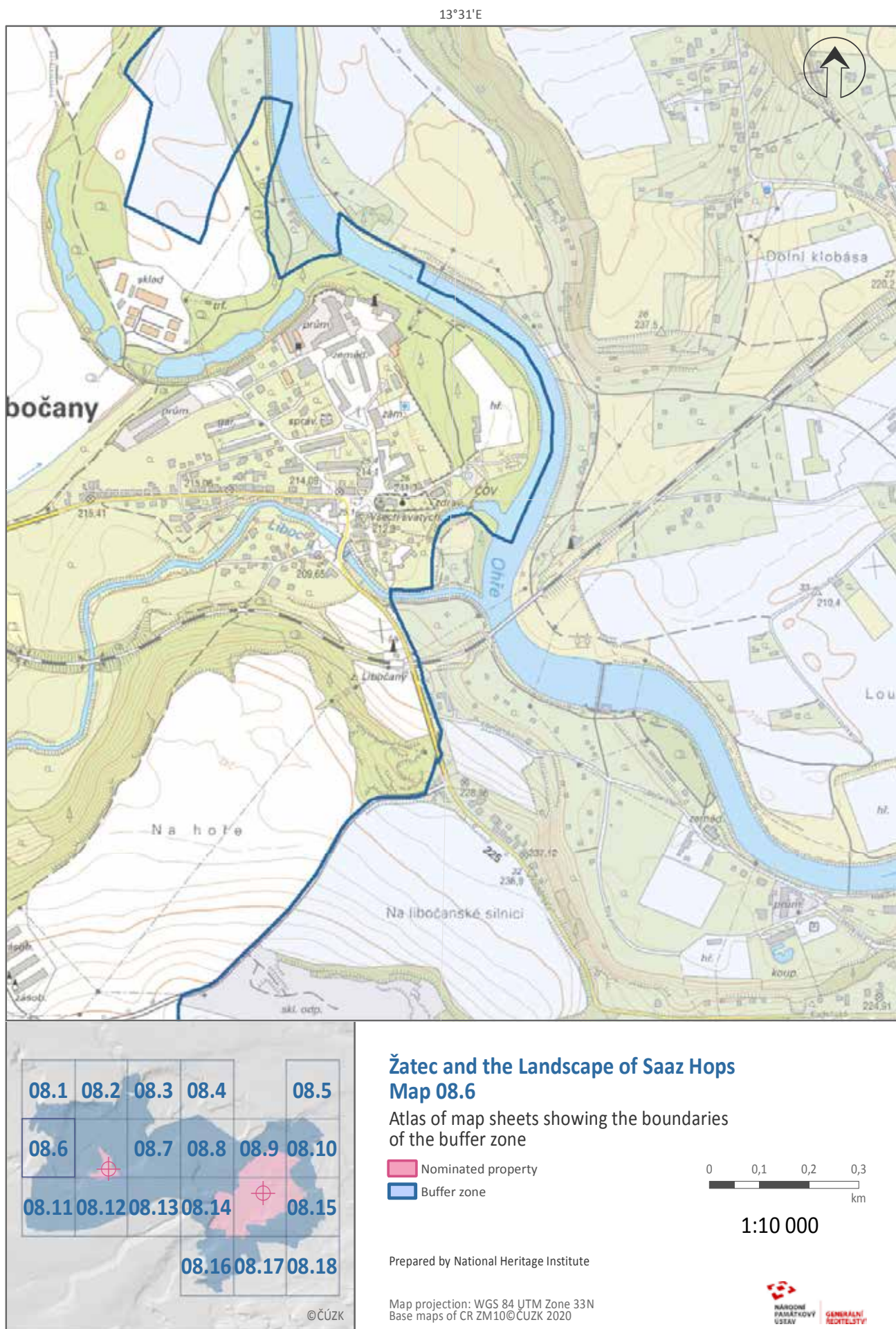


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Prepared by National Heritage Institute

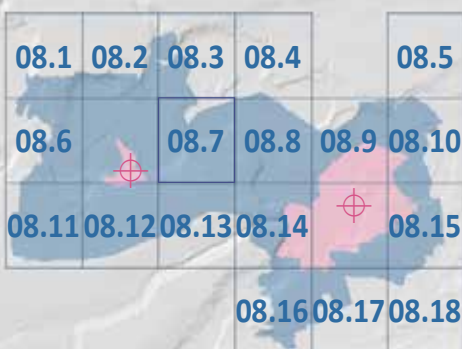
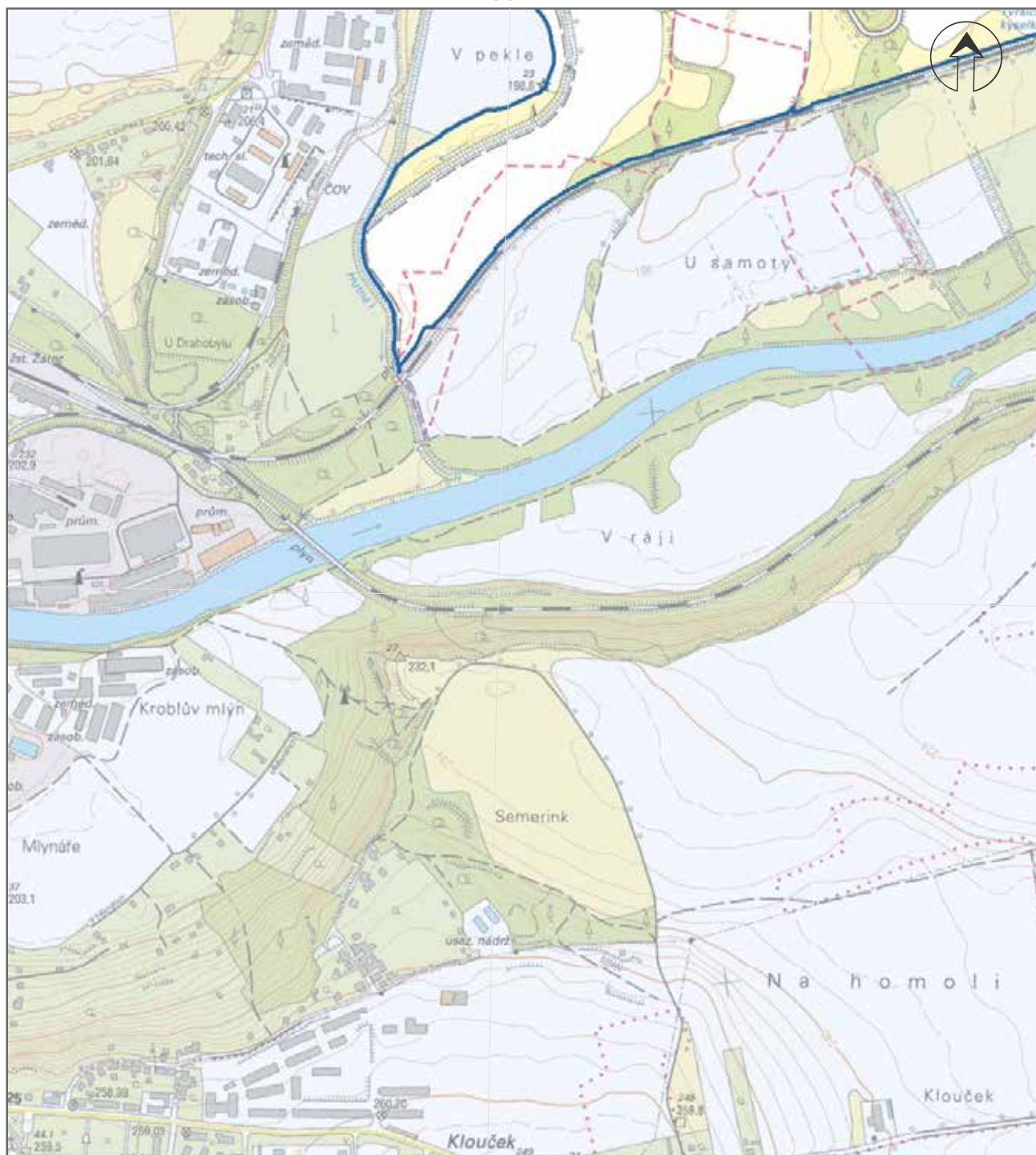
Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020





13°34'E

50°20'N

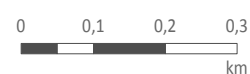


©ČÚZK

Žatec and the Landscape of Sazka Hops Map 08.7

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

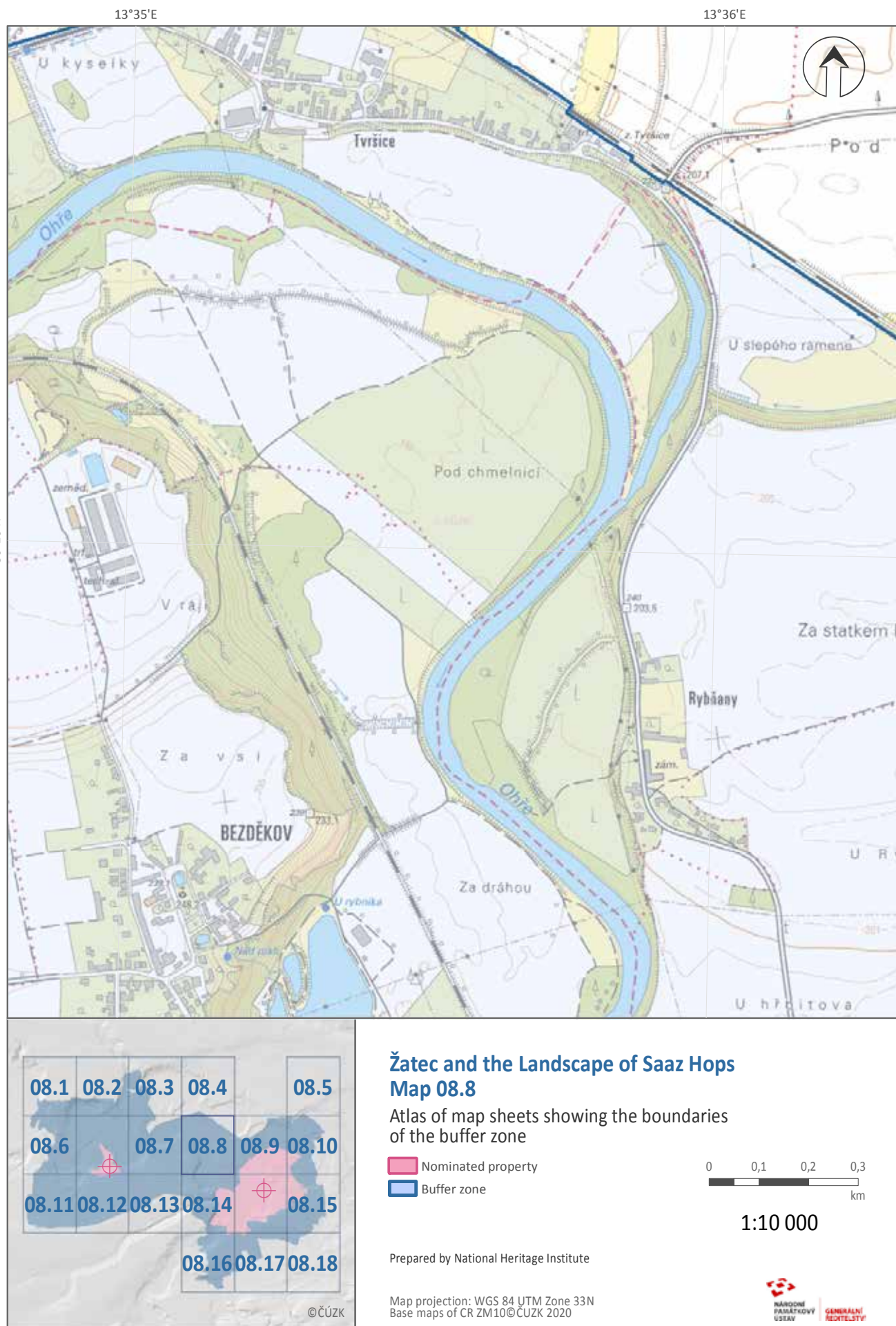


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Prepared by National Heritage Institute

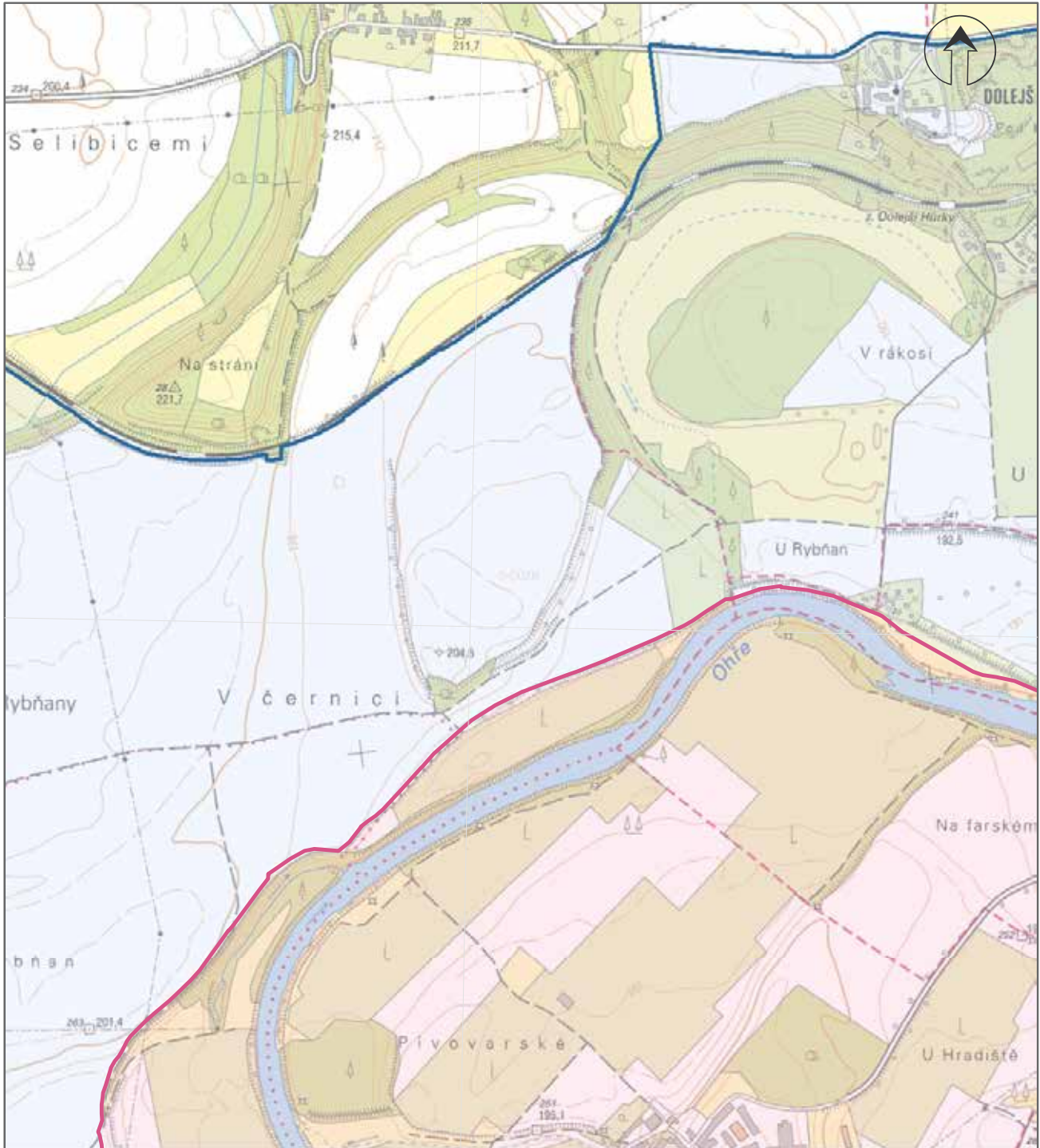
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Base maps of CR ZM10©ČÚZK 2020



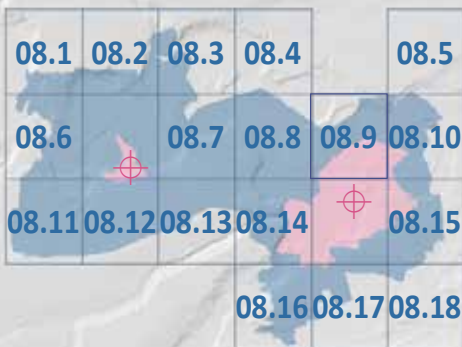


13°37'E

50°20'N



53



Žatec and the Landscape of Saaz Hops Map 08.9

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

0 0,1 0,2 0,3
km

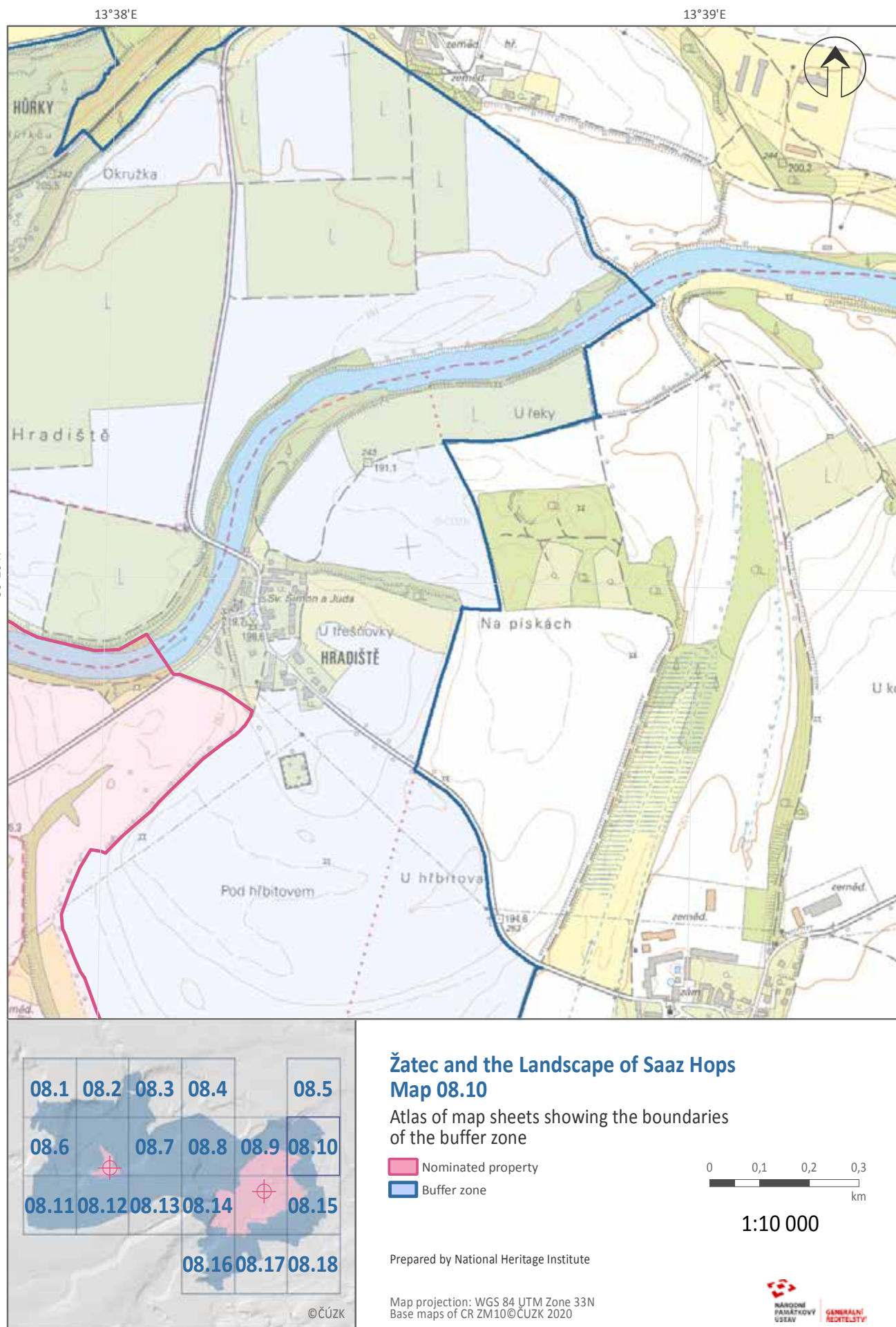
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Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020

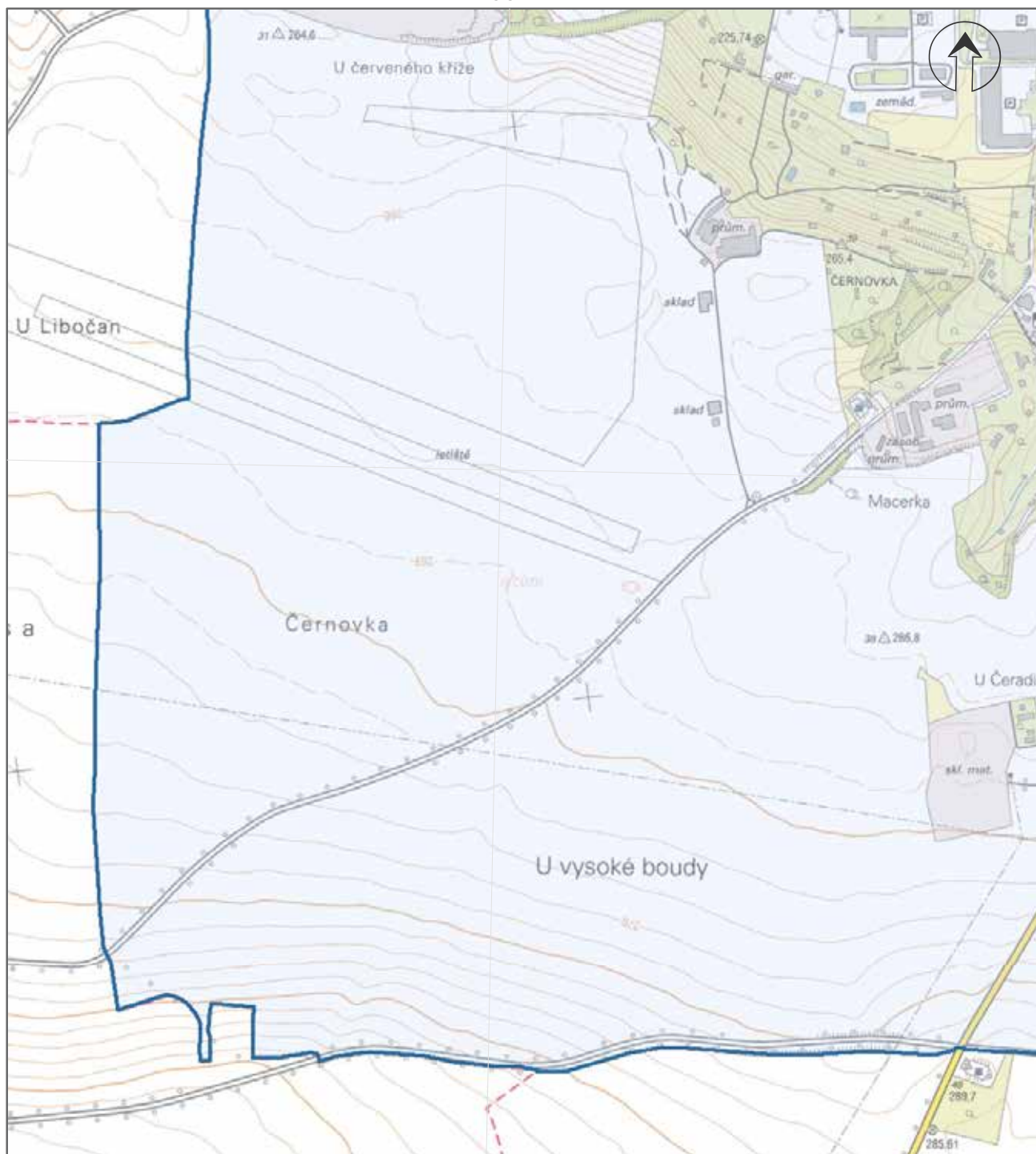


©ČÚZK

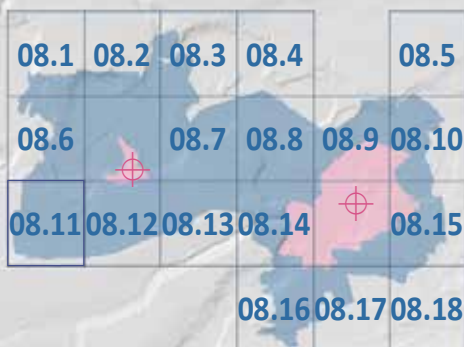


13°31'E

50°19'N



55

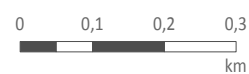


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Žatec and the Landscape of Saaz Hops Map 08.11

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

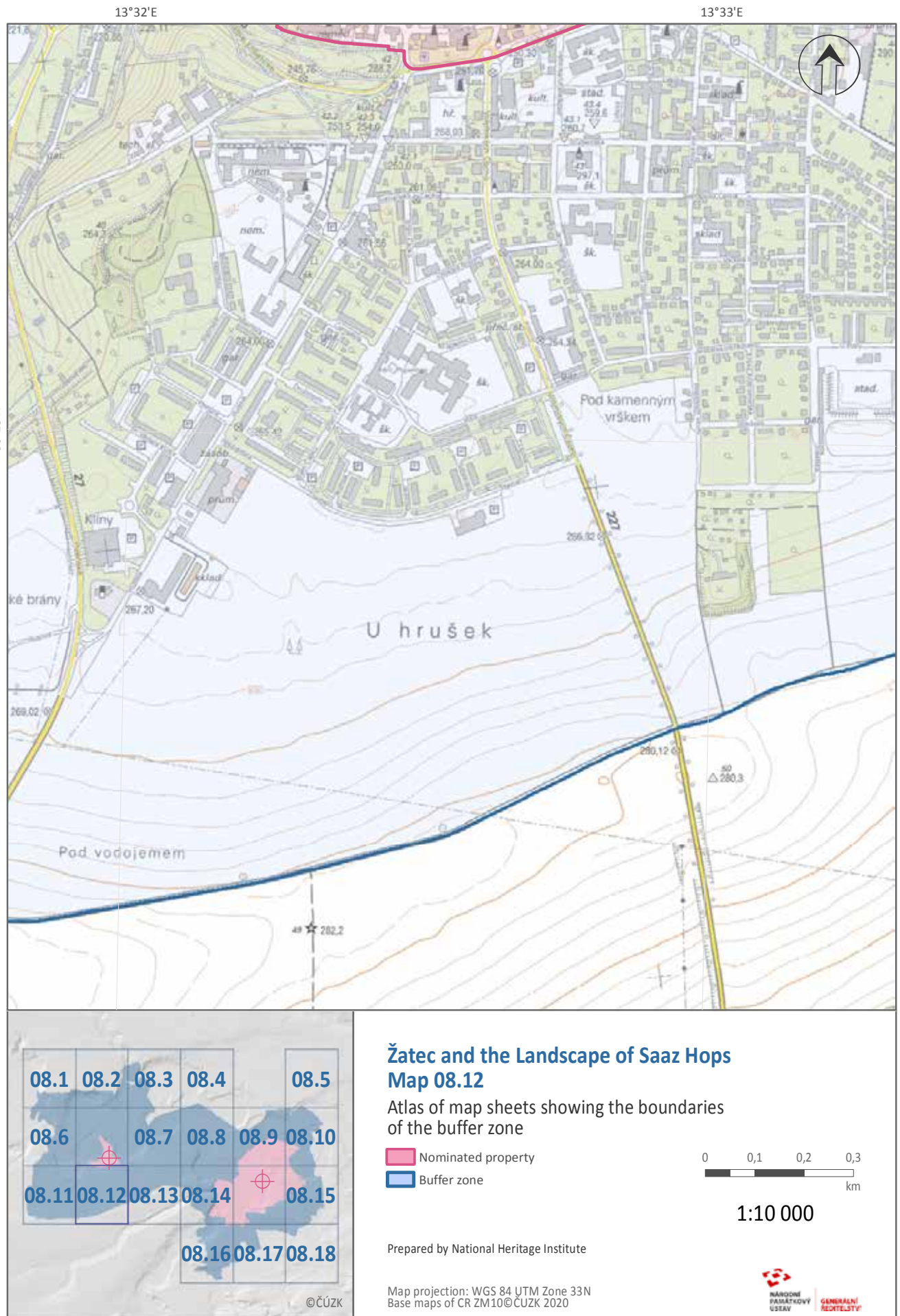


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Prepared by National Heritage Institute

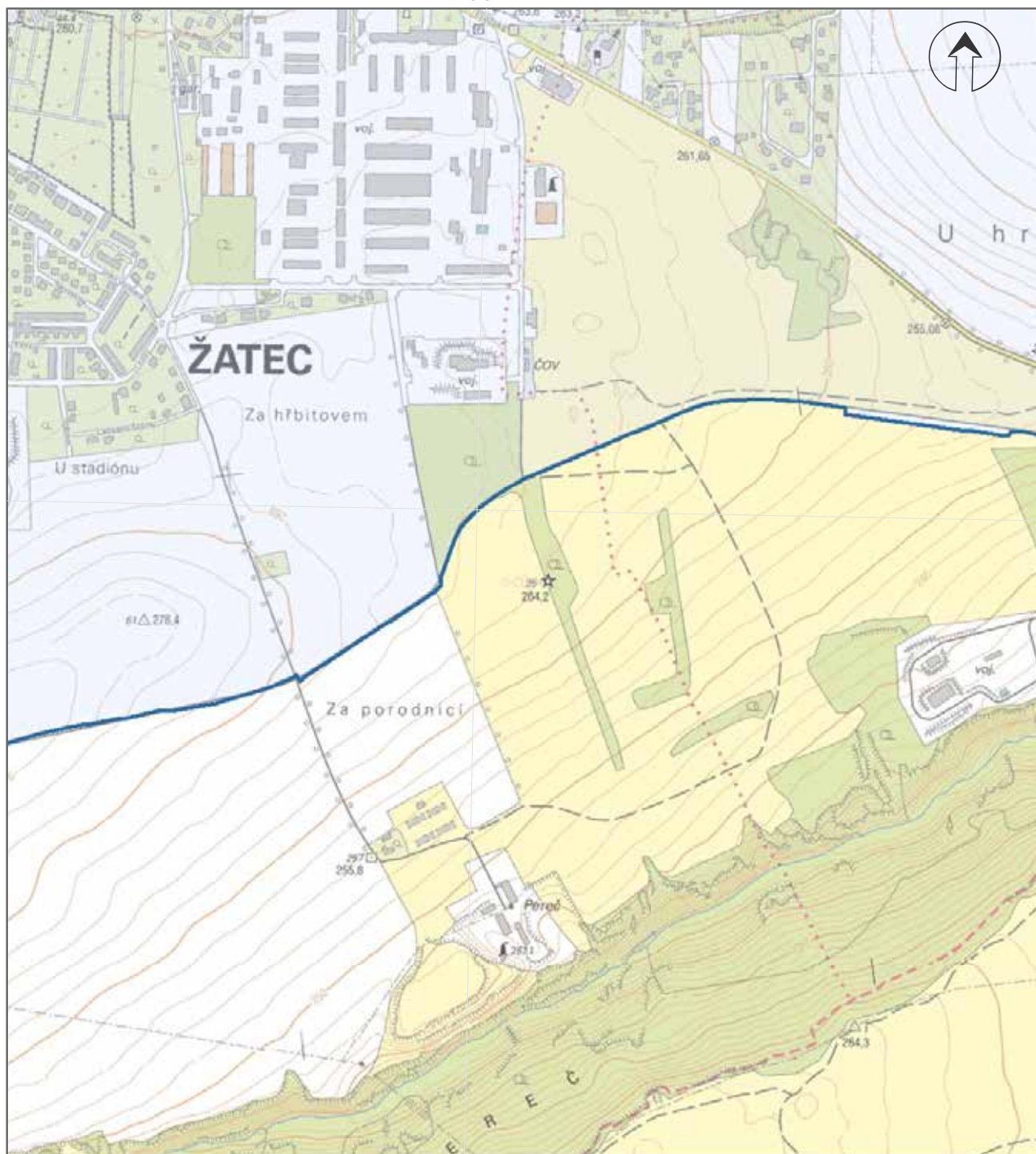
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Base maps of CR ZM10©ČÚZK 2020



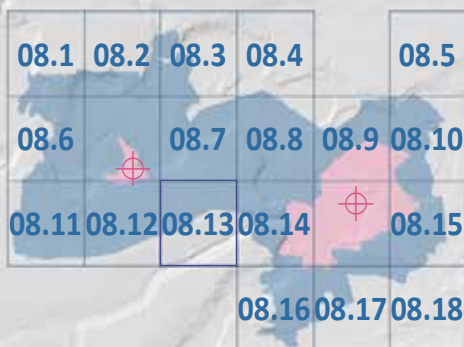


13°34'E

50°19'N



57



Žatec and the Landscape of Saaz Hops Map 08.13

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

0 0,1 0,2 0,3
km

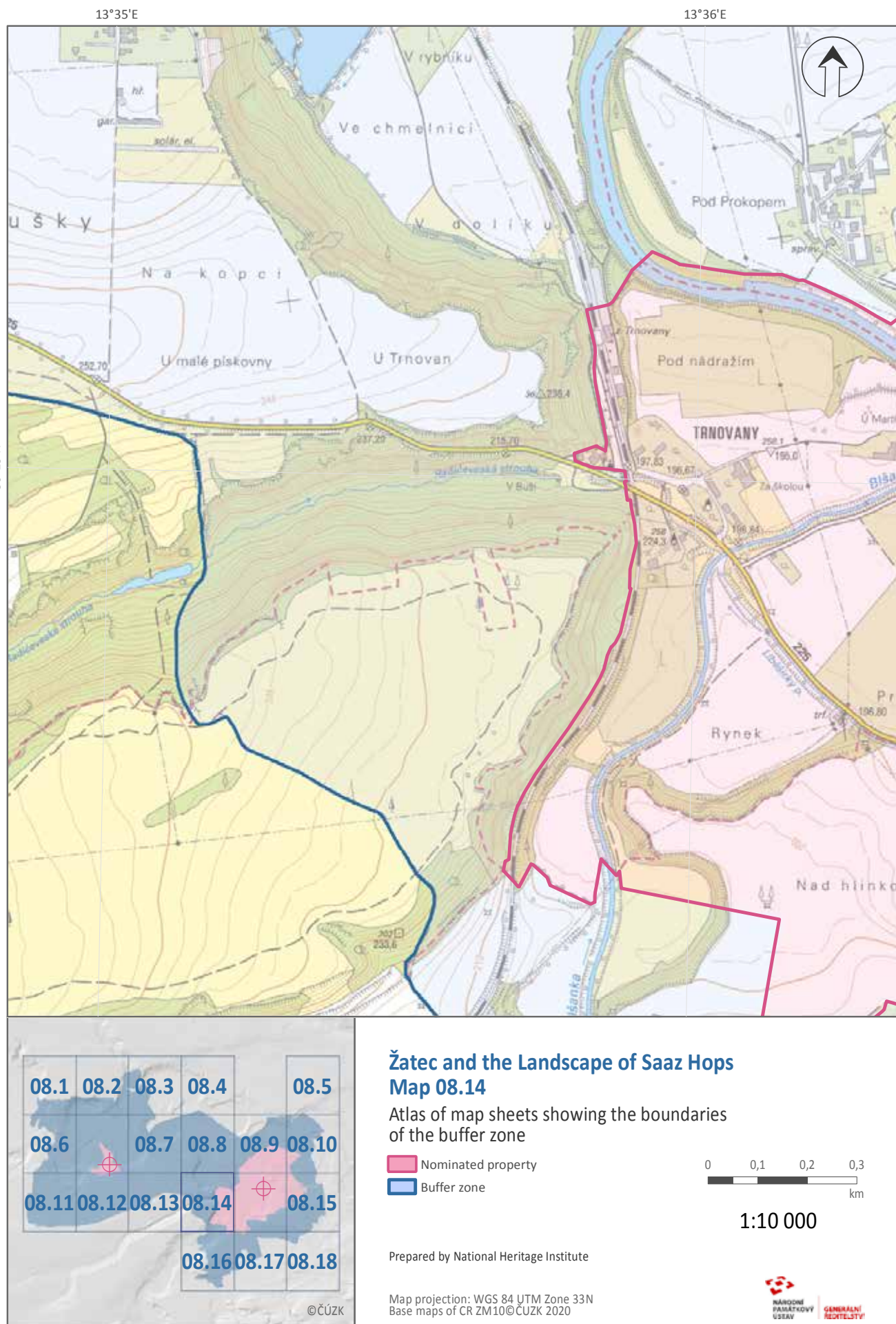
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Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020



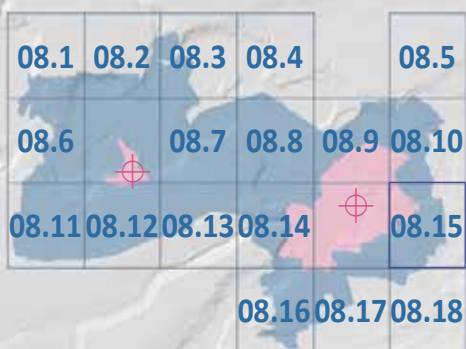
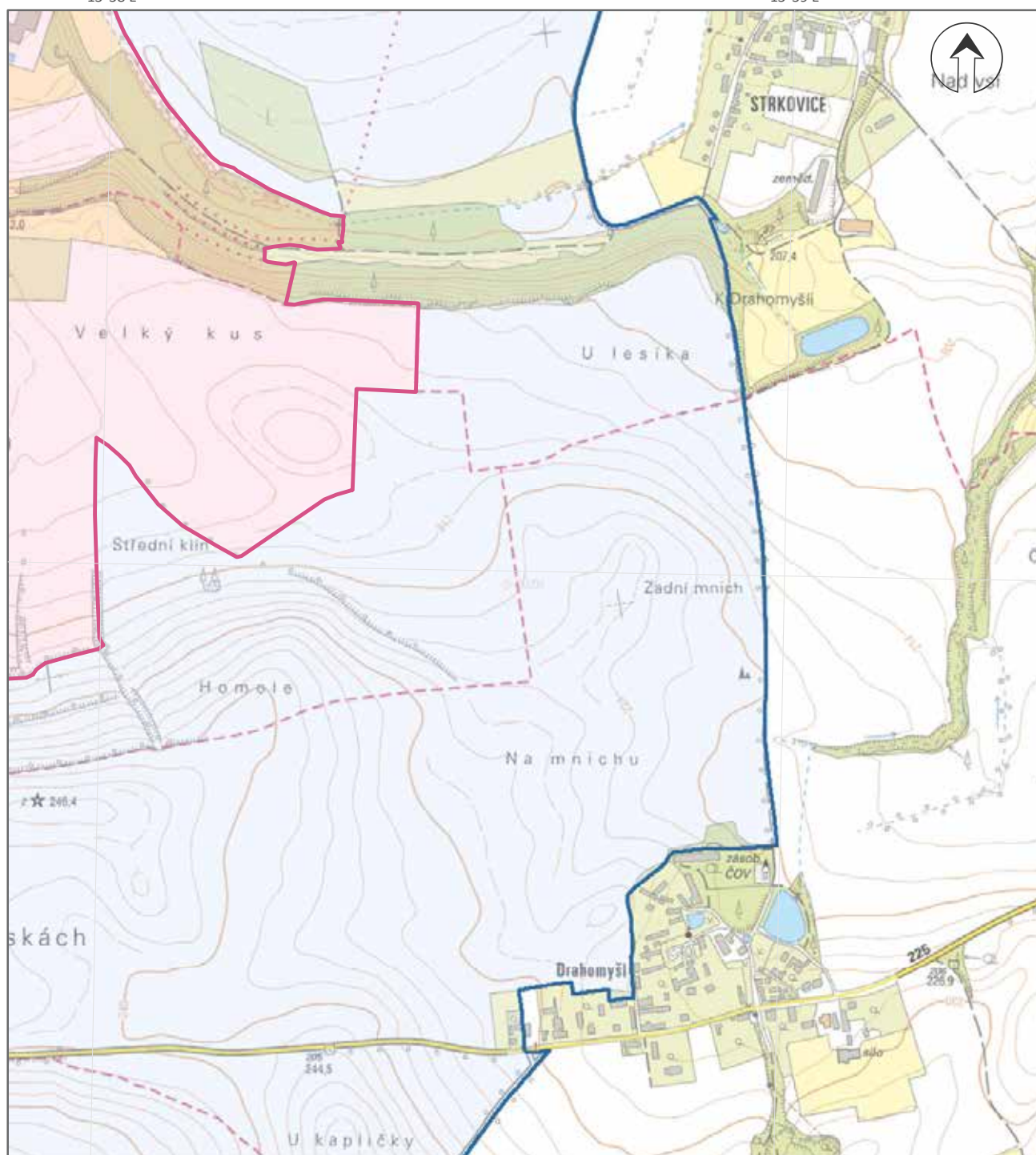
©ČÚZK



13°38'E

13°39'E

50°19'N



©ČÚZK

Žatec and the Landscape of Saaz Hops Map 08.15

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

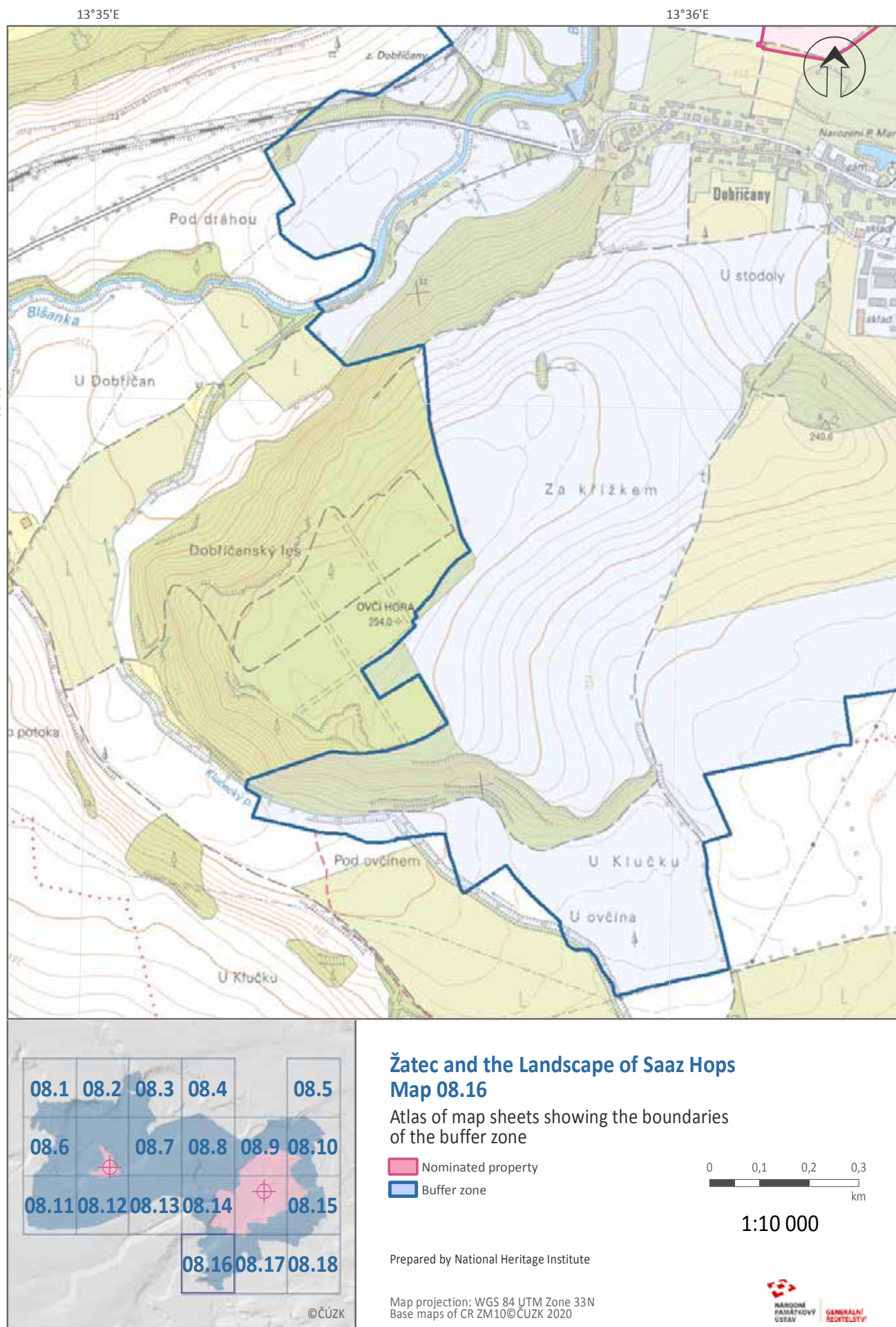
0 0,1 0,2 0,3
km

1:10 000

Prepared by National Heritage Institute

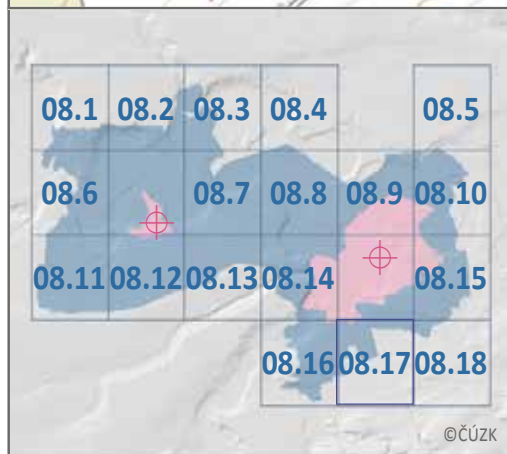
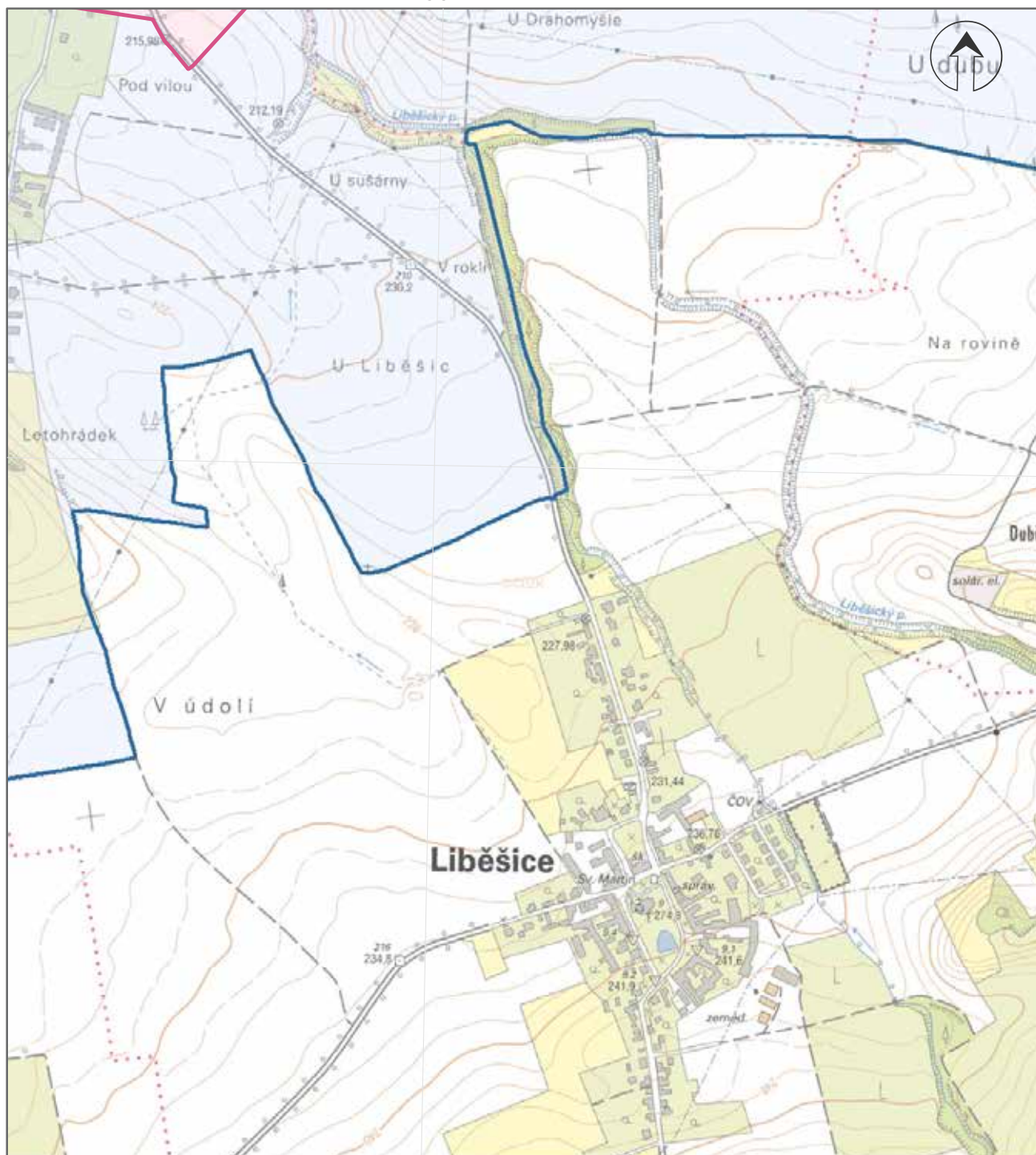
Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020





13°37'E

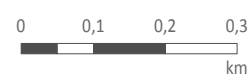
50°18'N



Žatec and the Landscape of Saaz Hops Map 08.17

Atlas of map sheets showing the boundaries
of the buffer zone

- Nominated property
- Buffer zone

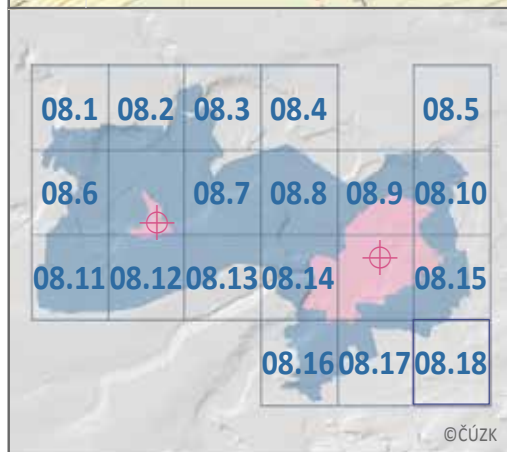
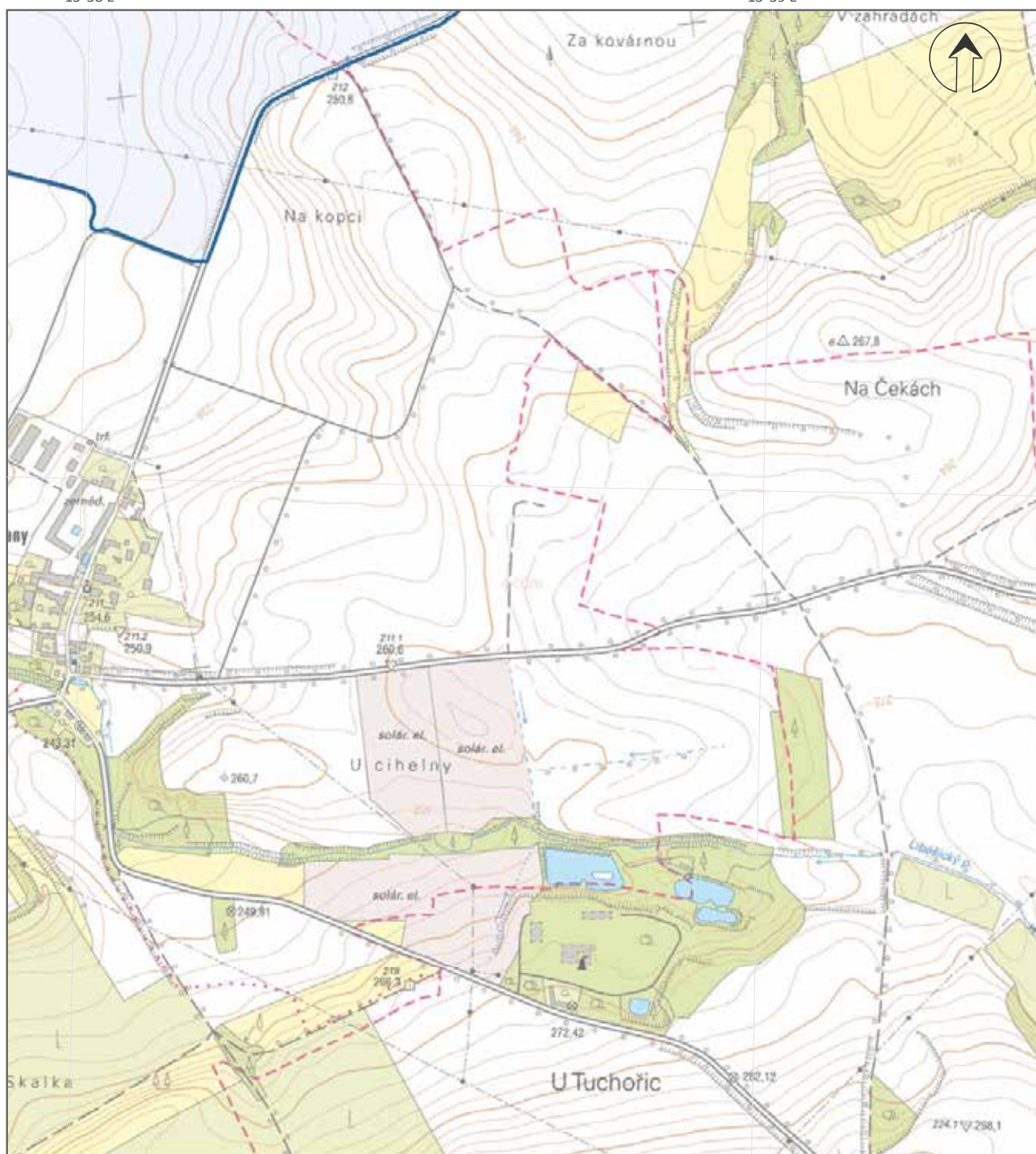


1:10 000

Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020







Žatec and the Landscape of Saaz Hops

Map 08.18

Atlas of map sheets showing the boundaries of the buffer zone

-  Nominated property
-  Buffer zone

1:10 000

Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČUZK 2020



1.f AREA OF NOMINATED PROPERTY (ha) AND PROPOSED BUFFER ZONE (ha)

AREA OF NOMINATED PROPERTY (ha):

01 Saaz Hop Landscape: **549.83**

02 Žatec: **44.14**

Total: **593.97**

BUFFER ZONE (ha):

The buffer zone is common to both component parts,
so only one entry is necessary: **3,330.94**

TOTAL (ha):

3,924.91



The Fountain of the Hop Knights, Capuchin Monastery Garden, Žatec, 2016



Spring works on a hop field in the Saaz hop growing region, Oskar Brázda (1887-1977)



2. Description

2. Description

2.a DESCRIPTION OF THE PROPERTY

2.a1 PRESENTATION OF THE PROPERTY

Northwest of the capital city of Prague, by the middle of the course of the river Ohře, lies a unique area in which hop vines have thrived for centuries, a specific plant whose infructescence – hop cones – are the basis of the delicate hop taste and bitterness of many of the most famous beer brands in the world. Famous Czech sayings such as, "Hops are our gold", "The hops welds the nation together", "Green gold", "Hops are the only holy thing to us, only hops, only hops!", show how highly our ancestors appreciated the value of this climbing plant. However, few people know the complexity of the process, which is associated with the cultivation, certification and processing of fresh and dried Saaz hops before reaching the places where they are used in brewing beer. The specific characteristics of Saaz hops were even integral in the origin of the most widespread type of beer in the world, Pilsner beer. The unique tradition of growing and processing hops in the Žatec region, the hundreds of years of hard work, and ingenuity, have been imprinted on the face of the landscape around the town of Žatec.

The home for growing the original hops, which may bear the prestigious name of Saaz hops, is known as the Saaz hop growing region. It is a certified name for the area

on the border of the Středočeský (Central Bohemian) and the Ústecký Regions of the Czech Republic, approximately at the level of the 50th parallel north, in a geographical zone generally very convenient for growing hops.

The unique combination of the quality of soil and climatic conditions enabled the continuous cultivation of hops in reasonable and less prosperous times when in many other countries, the owners of the fields resigned from its cultivation. The local hops, bearing a European-recognised quality mark, have transformed the town of Žatec into a hop growing centre. Žatec is also the seat of scientific and growing institutions whose influence on science, research, and trade is global.

Žatec region still is one of the world's most productive areas for hops. New cultivation techniques and hop facilities have been developed through time, but they have not changed the fundamental landscape. The tangible evidence for hop culture from the late Middle Ages to the present remains. The town and its surroundings form an ensemble that expresses sustainability of the technical, economic and social development of hop culture. The layout and skyline of the landscape have kept their distinct character.



The river Ohře and hop fields, from Trnovany to Hradiště, 2019



What are hops?

A hop bine (*Humulus lupulus* L. in Latin) is an important technical crop and raw material for beer production. It is also known for its healing effects, such as prevention against *Helicobacter pylori* (bacteria that causes stomach ulcers) or for menopausal comfort. In the 16th century, the doctor Tadeáš Hájek from Hájek advised the use of raw plant juice, root, the decoction of leaves and cones of hop plants for various diseases. The therapeutic effects of hops could thus relieve a patient suffering from leprosy, liver, and urinary disorders, and constipation.

Hops were also valued in the 8th century by the Arabic physician Mesüe, who recommended them for blood purification or as a treatment for yellow fever. Gourmets in ancient Rome also enjoyed hop leaves, and in the Middle Ages, the nobles were said to consume young hop shoots with salt, pepper, vinegar, and oil.

The cultivation of hops is closely linked to the production of beer. Hop cones give the beer a characteristic bitter taste, aroma, and, at the same time, act as a preservative. Hops contribute decisively to the overall character of the beer. Their advantages have been widely known since the Middle Ages and unreservedly recognised by experts worldwide. The balanced content of individual resins, polyphenols, essential oils, and other substances in the lupulin grain of the cone forms a unique centuries-old natural array of properties.

A hop bine is a perennial clockwise fast-growing plant that may last up to twenty or more years in a well-managed hop field. For good cultivation, it requires artificial support and enough moisture obtained, mainly from the soil, using a prosperous root system, usually reaching up to 2 metres in length. The hop plant needs sufficient sunshine (in domestic conditions, the average duration of sunshine in the growing season is 1,300–1,500 hours), with a growing season (April to August) and a thermal constant (2,000–2,800 °C). The plant still requires real manual labour and year-round care.

Hop soils are defined as those which have a considerable topsoil thickness, an adequate proportion of humus, good water and air capacity,



A typical Žatec building, the chimney of a former packaging house and hop warehouse in the town centre, Žatec, 2014

Picked hop cones, 2016





Hop variety designation, Stekník, 2019

Hop field in May, Stekník, 2020



a low groundwater level, and a suitable mechanical and chemical composition. Hop fields around Stekník are configured at an altitude of about 200 m above sea level.

Hop cultivation also generates many non-productive functions, such as supporting biodiversity, stabilising the climate, and minimising erosion. The use of tall hop trellises has become a refuge for local fauna. The hop field provides shelter for wild animals such as roe deer, hares, pheasants, foxes and martens, hop trellis wires become a temporary refuge for songbirds and birds of prey, for example kites, crows, ravens, sparrows and tits. From a climate perspective, hop biomass dampens the greenhouse effect by absorbing the energy of sunlight and covering the soil with its shadow. If wind or water erosion is to occur, the distance between the plants will cause the soil not to be irretrievably carried away or washed away.

Žatec semi-early red bine hops (Saaz variety) are the variety most associated with Saaz hops. From a brewing point of view, it is highly valued and still recognised as a standard for top quality in a demanding world market. It gives the beer a real delicate hop aroma without side aromas and a pleasant bitterness. The content of alpha and beta acids in the hops is well balanced. Their mutual ratio is in the range of 0.60-1.00. The composition of hop resins is characterised by a relatively low content of bitter alpha acids. Concerning the variance of the weather in a given year, it is in the average range of 1.5-5.5%. Another characteristic feature is the presence of a large amount of β -farnesene (14-20% rel.), which can be found only in a minimal amount in other hops, and, conversely, a low content of myrcene. The overall character of the aroma of Saaz hops is given by the mutual ratio of all individual components of the hop's essential oils. The variety has undergone centuries of development where its biological properties have been formed and consolidated.

Socioeconomic significance of Saaz hops

Saaz hop growing was one of the primary sources of livelihood and monetary income of the local population as evidenced, for example, by the "Berní rula" tax chronicle for the Žatec region from the 17th century. The monetary income of the burghers and villeins significantly affected their overall economic and social position. It thus accelerated the process of social differentiation of the rural environment in the 18th and 19th centuries. During this period, the designation "green gold" became famous for Saaz hops.

The hop trade shaped relations between Czech, German, and Jewish communities in the area, especially in the interwar period, which resulted in the establishment of associations protecting and supporting Saaz hops.

The cultivation and subsequent processing of hops are reflected in the balance of foreign agricultural trade, and thus strengthens the country's gross domestic product. The unique quality of Saaz hops, despite the often uncertain profitability of the crop due to the weather, affects the standard of living not only of growers but also ordinary society. It is of national economic importance, supports employment, develops cultural and social life, and, last but not least, organically shapes the landscape of Žatec.

Protected Designation of Origin

The Saaz hop growing region is the most important hop-producing area in the Czech Republic. Of the total 5,003 ha of hop cultivation area in the Czech Republic registered in 2019, 3,869 ha were located here. Other regions of hop growing in the Czech Republic are Ústěčko (513 ha) and Tršicko (621 ha).

The Saaz hop growing region is formed by an irregular belt between the town of Rakovník in the south and the towns of Žatec and Podbořany in the north, and roughly in the middle, it is interspersed with the Džbán Highlands. On the west side, it is bordered by the volcanic hills of the Doupov Mountains and on the north side by terrain ridges of the vast floodplain of the meandering river Ohře. The Saaz hop growing region is a term based on the valid legislation of the Czech Republic. Saaz hops are protected by European legislation. Only hops grown in more than 300 municipalities of this locality in the specified parameters may use the Protected Designation of Origin "Žatecký chmel" (PDO), which is together with national certification of hops, to a certain extent, comparable with the appellation contrôlée of French wines. The area and the product thus bear the name of the town of Žatec.

The nominated property Žatec and the Landscape of Saaz Hops represents the parts of this broader area that best demonstrate the story of hop cultivation and processing. It is the place where the most concentrated hop area has been in the same position for centuries and where the most important hop processing facilities, in rural and urban areas, are preserved.



Marking of hop bales in a hop warehouse, Žatec, 1947



Irrigation of a hop rhizomes nursery, Zálužice, 2019



The nominated property represents the best preserved and most authentic parts of this region. It is, by its nature, an organically evolving cultural landscape, which has been continuously, strongly influenced by one main commodity since the Middle Ages. The property is located in a unique position south of the long ridge of the Ore Mountains, which function as a natural barrier against the prevailing cold northern to northwest winds. This also means a lower amount of precipitation. Central Poohří is generally one of the driest areas in Bohemia, as it lies in the shadow of the Ore and Doupov Mountains.

The actual floodplain of the river Ohře, therefore, has unique climatic conditions. At the same time, the river offers plenty of surface and groundwater, which is vital for both irrigation and the quality of the microclimate. The climate, together with the quality of the soil, therefore, enabled the production of excellent, delicately aromatic hops. These properties gave rise to the agro-industrial system of this specific monoculture influencing the landscape and the hop growing town centre in Žatec.

Over the centuries, the landscape around Žatec has undergone a variety of historical and socio-economic changes, with significant changes in a large part of the population and radical changes in the ownership of local real estate. Saaz hops and their quality have become a symbol associated not only with the inhabitants of the Czech Republic but with the name Žatec (Saaz). The excellent quality of the finest Saaz hops, and therefore the strong demand for them, contributed to the fact that their fame has spread beyond the borders and built their reputation all around the world.



August morning in the hop field, Stekník, 2019



Geology, geomorphology, and phytogeography

According to the geomorphological division, the area is located in the Hercynian region, in the province of the Bohemian Highlands and on the border of the geomorphological systems of the Ore Mountains and the Czech Plate. The geological unit of the Bohemian Massif covers the area.

The geological basis consists of Tertiary formations, covered by deposits of the river Ohře with deposits of loess, clay and gravel. On this subsoil, soils were created, mostly medium-heavy, clayey, which are characteristic of the entire surroundings of Žatec. These are agriculturally useful soils, suitable for growing hops, namely black earth soils created on loess, or Cretaceous saliva. They are accompanied by brown earth on loess and rendzinas formed from carbonate weatherings of Cretaceous rocks. The most well-known variant of brown earth soils is the so-called "červenka" (medium-hard Permian red soil), typical of the central Žatec region.

The area belongs to the North Sea basin and the hydrogeological region Most Basin -southern part. The floodplain of the river Ohře is located mainly in the area of the original meanders. The Q100 floodplain extends into the intra-urban areas of the municipalities of Zálužice, Trnovany, and Strkovice. There are both historic and newly built flood control banks in the landscape. On the territory, there is the river Ohře, the Blšanka stream, the Liběšický stream, the Radičevská dyke, and other small streams. The occurrence of wetlands in the places of the original river meanders and a large number of small streams, dykes, and mill-races is typical.

The climate is strongly influenced by relief, the shape of the land. The basin is bordered on the northwest and the west by mountains, of which the Ore Mountains in particular fall with a steep high slope. During the westerly flow, this creates a large-scale anemo-orographic system, which, to no small extent, conditions a mighty rain shadow. According to data from 1961-2000, Žatecko is one of the warmest regions in the Czech Republic; the temperature conditions are comparable to South Moravia, the Elbe Basin, and the Lower Moravian Valley. The average precipitation is

the lowest in the Czech Republic. However, the average annual relative humidity is higher than in South Moravia in some areas of the Elbe (less than 75%). North to northwest winds predominate.

In terms of individual biogeographical division, the area belongs to the phytogeographical province of Central European deciduous forests, the Hercynian subprovince. The site includes these bioregions 1.1 Mostecký and 1.2 Řipský. The phytogeographical division falls within the district of Czech termofytikum.

Distribution of Saaz hops to other growing areas

In the case of fine aroma varieties, the so-called "red bines," the genetic group of Žatec red bine hop is considered to be the oldest and originated from Staročeský, Starožatecký, and Starouštěcký red bine hops. Many bred varieties of the red bine category in almost the whole of Europe come from the original regional varieties of Saaz hops. In Germany, for example, the Tettmanger, Spalter, and Hersbrucker varieties. A large number of varieties from the genetic group of Saaz hops originated in the then USSR by importing them into Ukraine. This created the Žitomir variety, then the Rogatýnský semi-early red bine variety, Ivanovický, and the like. In Poland, Opolski hops were created from Saaz hops, followed by the Lubelsky and Nadwislansky varieties. As part of a competitive business strategy, these varieties are often classified abroad in the category of Saaz hops, which form a group of fine aroma hops.

The uniqueness of Saaz hops is evidenced by academic records of average hop prices from the end of the nineteenth century. The cost of Saaz hops was at the top of the statistics (up to three hundred marks per quintal of hops), much higher than of hops from Spalt, Wolnzach, Hersbrucker, Tettmang (Württemberg), Baden or Alsace. Quoting from contemporary literature (Leopold M. Zeithammer 1890): "Again, this is new evidence that Old Bohemian (Staročeský) early red bine hops reached the largest and unsurpassed prices".

None of the varieties whose subsequent breeding (by selection or interspecific hybridization) was based on the imported original regional hops from Žatec can logically achieve the same quality of brewing valuable substances because the influences of the given area will always differ. Attempts to grow Saaz hop varieties outside the original territory are known not only in Europe, as described above, but also in Asia, the USA, Australia as well as other areas.



A healthy hop shoot of the Saaz variety, Stekník, 2019



The historic building of a four-chamber hop kiln, Trnovany, 2017

In Žatec and its surroundings, generations of growers took turns in passing on experiences with optimal seasonal practices and growing locations. Gratitude has to be given to these growers for the fact that the cultivation and processing of hops have been preserved to this day and forms an exceptional picture of the local landscape and its natural historical administrative and residential centre, the town of Žatec. At the same time, confidence in quality was behind many innovations associated with hop drying, from older methods of drying harvested hop cones in the roof spaces of buildings in the town and villages, to the development of unprecedented rural hop drying kilns. They made it possible to speed up the drying process and thus increase production by leaps and bounds. The quality of hops and the pursuit of efficient cultivation have also been behind several inventions in introducing mechanisation, finding new ways to control hop diseases and pests, and generally improving the methods of various seasonal work, including enhancing the relevant working tools.

The mass construction of drying kilns for the artificial drying of hops in rural and urban environments, buildings for certification, conservation in sulphur chambers with high chimneys, which enriched the town skyline, and

last but not least, building large warehouses, where the harvested hops were stored to be later transported to the place of use, permanently influenced the image of the nominated cultural landscape and settlements. Žatec has become a world centre of hop trade, with the need for the relevant administrative, communication, accommodation, and banking infrastructures. At the same time, remarkable residential houses and villas of warehouse owners were built here, as well as other, large buildings with social, cultural, and spiritual functions such as the theatre, synagogue and cinemas.

At the same time, the image of the rural landscape gradually changed after a completely revolutionary change in the appearance of the hop fields where the hops are grown. The beginning of the cultivation of hops was associated with supports for the hop vines, which consisted of wooden poles, similar to the poles used in hop trellises today. They had been heavily sunk into the ground every spring since the Middle Ages, removed from the land together with the harvested vines and carefully stored until the next season. Since the inventive improvement of all the methods of growing, processing, and breeding hops, headed by growers from Žatec, the image of the landscape of Saaz hops has fundamentally



Historic buildings of hop warehouses and packing rooms, Žatec, Nerudovo Square, 2020

changed. Since the end of the 19th century, hop fields have been gradually defined in a field with very specific support structures, which will last on the spot for many years and which have since changed the image of the rural landscape all year round. The constructions of hop fields are made of wooden, and more recently, concrete columns, or poles, with an approximate height of 7 metres located at regular intervals. Their stability is ensured on the one hand by immersion in the ground, and on the other hand, by horizontal interconnection and anchoring with the help of strong wires, and more recently, steel ropes. The row of wires is used to anchor thinner vertical wires, which are attached to them every spring during an operation called stringing. This design is known as a hop wire trellis. It is soon followed by the spring manual introduction of hop bines to the wires called training. The individual hop shoots wind up fast along the training wires during the growing season. Wires with hop plants are then pulled off at harvest at the end of summer. Over several months (April – August), the image of the landscape of Saaz hops changes dynamically and makes it a unique area. Local growers improved the technology of supporting structures into the unmistakable form of the construction of the "Saaz hop wire trellis" (žatecká drátěnka) with an overlap all over Europe.

Hop fields are located not only in the proposed component parts, but also within the shared buffer zone. A total of 51.5 ha are registered in the cadastre of the village of Stekník, 46.1 ha in the cadastre of the village of Zálužice, 21.3 ha in Trnovany, 14.4 ha in Hradiště nad Ohří, 8.8 ha in Dobříčany, 10.9 ha in Rybňany, 34.7 ha in

Lišany and 3.7 ha in Strkovice. In the cadastre of the town of Žatec, there are a total of 58.4 ha of fertile hop fields. In total, there are approximately 250 ha of hop fields in the component parts of the nominated property and the buffer zone.¹

The nomination project called Žatec and the Landscape of Saaz Hops is conceived to preserve this image of the local cultural landscape and symbolic places associated with the cultivation and processing of hops, and with evidence of the impact of related processes for future generations. The Nomination Dossier describes a fascinating story of Saaz hops from planting hop bines in the fields through the ongoing care of their growth, the need to organise the harvest in a short time accurately, and ensuring the quality of hops for storage and trade. The completeness of the "hop story" is ensured by two large component parts of the series: the rural landscape around the hop villages of Stekník and Trnovany (component part 01), and the historical part of Žatec, with its unprecedented buildings preserved in its original form, construction and numerous details (component part 02).

The geographical proximity of both component parts, which are connected not only by their location by the river Ohře but also by historical paths, already documented on old maps, allows us to develop ideas about how they developed in the past. Thus, the links between the countryside and the town worked in mutual synergy. In the selected component part 01, hops are not only still grown, partially processed by drying and pressing, but it also contains interesting buildings. They enhance the

¹ The data were taken over from the Central Institute for Supervising and Testing in Agriculture as of 20 August 2019.

impression of landscape stability and its beauty, which changes many times during the year, depending on how the green walls of hop fields gradually fill it. The power of nature is evident to anyone who has the opportunity to see hop fields during the spring and peak season. It also annually fills the local productive hop culture landscape with the expectation of the harvest is a real celebration not only for the inhabitants of the region but for the whole country.

The beginning and end of the season are celebrated in the town of Žatec. During the celebrations of spring – Chmelfest (the Hopfest), many hop growing villages organise traditional processions called Chmelmarš (the Hopmarch). Among them are growers and citizens from the rural component part. The hard work and year-round efforts of growers need to be properly celebrated, how else but with beer from Saaz hops! The various festivities of the growers, their families, and all those who took part in the work strengthened the strong hop growing cultural traditions, among which the Dočesná (the Hop Harvest Festival) is an inseparable part. For this purpose, the locals richly decorate their town with hop plants from Stekník and invite guests from a number of countries, with groups staying for several days. Together, they appreciate the main product using hops – beer. The Žatec Dočesná, with its tradition and scope, is a celebration of the hop harvest which is unique in the world.

The quality of hops and the possibilities of their development were also behind the birth of the tradition of research and breeding, which is accompanied by international professional events. Czech hops and the Saaz hop growing region, in which the nominated property Žatec and the Landscape of Saaz Hops is located, have become concepts of international renown.



Typical visitors to the Dočesná, Hop Harvest Festival, Žatec, Svobody Square, 2018



The Hop Harvest Festival – The Dočesná

The Dočesná is the largest festival associated with hops and the end of the hop harvest. The whole event is also a big cultural and beer festival with significant participation of breweries, both beer stalls and the representatives of individual breweries themselves and takes place in Žatec. The Dočesná also has both a cultural and a professional character because it is associated with visits to the hop harvests in the Saaz region by important Czech and foreign customers, very often they are also customers from Japan or China, for example. The professional part of The Dočesná in Žatec includes professional beer tastings organised by the Hop Research Institute Co., Ltd. in several categories, where the jury consists of representatives of breweries as well as representatives of hop growers and the town of Žatec. At the beginning of The Dočesná, hop traditions, such as the hand picking of hops, are mentioned, and the results of professional beer tasting are announced. (See also Chapter 2.b)

Hop-Growers' Day

Hop-Growers' Day in Stekník is annually held at the end of the first week of August (component part 01). It is an opportunity for hop growers to meet. Representatives of hop trading companies, breweries, students of agricultural schools, the Ministry of Agriculture, hop-related authorities, suppliers of technology and plant protection products, and the media also take part in the programme. The professional part includes information on the state of vegetation and harvest estimates both in the Czech Republic and abroad (provided by Hop Growers Union of the Czech Republic, Ministry of Agriculture of the Czech Republic, Central Institute for Supervising and Testing in Agriculture, CHMELÁŘSTVÍ, cooperative Žatec and the Hop Research Institute Co., Ltd). A significant portion of the day is a tour of the hop plants of different varieties, for which individual agrotechnical operations and interventions in protection against diseases and pests are described.

Saint Lawrence Day (Sv. Vavřinec)

The description of a cultural phenomenon of Czech hop growing must include the celebrations of the feast of the patron saint of hops, St. Lawrence. St. Lawrence is the patron saint of librarians, archivists, the poor, chefs, confectioners, millers, bakers, innkeepers, glassmakers, winemakers, and

also hop growers. He is often called upon against eye and skin diseases, against fever, and for the rich harvest of grapes and hops. According to available information, no other hop growing country celebrates such special day. On August 10, on which the feast of St. Lawrence is honoured, Czech growers gather for an informal discussion before the hop harvest. It is forbidden to enter hop fields on this day. The hop growing tradition of celebrations in the nominated property is represented by the statue of St. Lawrence on the gable of the gate of the farmstead in component part 01 (See also Chapter 5.h2).

Other traditional activities within the professional hop-related work taking place in Žatec

Every year there are seminars for growers focused on the protection of hops against diseases and pests, and seminars on the latest types of agricultural technology. Also, there is training for growers and operators of hop picking machines and hop drying kilns, purchase of hops from growers with a rating of hop samples, selection of hops by breweries, so called the acceptance of hops from offered samples, to which breweries come, for example, from Belgium, the USA or Japan. Other activities and institutions based in Žatec include hop certification and the Central Institute for Supervising and Testing in Agriculture (ÚKZÚZ) – a hop department based in Žatec, which provides hop certification based on the Hop Protection Act.

Evaluation of hops – on the basis of concluded contracts between the grower and the trading company, the grower will supply dried hop cones. Samples are taken from each batch of hops (approx. 1–2.5 t of dry hops). These samples are analysed for the content of bitter substances, impurities (the content of leaves and stems), and the moisture of the hops and for assessing (evaluating) their appearance (colour of the hop cones, damage by pests, the color of lupulin or weeding). This evaluation then determines the final price of hops in connection with the content of the contract.

Selection of hops by breweries - this act is also called acceptance of hops. Based on concluded contracts between the company and the brewery, the brewery selects according to the submitted samples of hops, the corresponding amount of hops according to the concluded contract, which will be further processed for the brewery. The acceptance of hops takes place in Žatec at the headquarters of companies, usually from September to the beginning of November and belongs to modern traditions confirming the recognition of Žatec as the centre of the hops quality.



Participants of the Hop-Growers' Day, Stekník, 2020



Participants in the celebrations of St. Lawrence's Day, Stekník, 2016

A characteristic feature of the territory of the nominated property is the interconnection of the open landscape and settlements. Intensive use of the landscape would not be possible without the facilities provided by the villages for the subsequent processing of hops. Conversely, the specific appearance of towns and villages in the Žatec region, the urban structure of their development, was influenced by the requirements arising from the need to ensure the conditions for processing this crop. For this reason, the nominated property consists of two component parts (rural and urban) in order to explain in a balanced and comprehensible way the cultivation and processing of hops in the countryside and the subsequent processing and trade in the town. Saaz Hop Landscape (component part 01) was defined to contain a characteristic example of historic villages with a high degree of authenticity of their material composition and individual farmsteads. At the same time, it has the most concentrated area of hop fields, not only within the entire Saaz hop growing region but also within the Czech Republic and probably even Europe. Žatec (component part 02), the component part represents the oldest parts of the town of Žatec, also has no parallel in the Czech Republic or the world. The choice was, therefore, quite logical. Žatec (Saaz) gives its name to the whole area and the local, quality hops. It has been, for centuries, the natural centre of the territory in which, among other things, buildings directly related to hop growing were built, are still preserved, are unique and, elsewhere in a similar number, no longer exist.

The buffer zone of both component parts of the property is shared to help preserve their mutual communication and meaningful connections. It has been defined



The phenomenon of hop seasonal works during the hop harvest

Hop seasonal works (chmelové brigády) have been associated with hop growing since time immemorial. Despite all the modernisation, the most critical work in hop fields - early harvesting - had to be done by human hands in the past. Due to labour shortages and the gradual collectivisation of hop cultivation after the Second World War, the provision of seasonal workgroups gradually became hard to organise in the then Czechoslovak Socialist Republic. As a result, tens of thousands of young boys and girls were brought, at the turn of August and September, to hop fields in Žatec, Louny, Rakovník and other growing areas every year. However, hop seasonal works (mandatory work for high school and university students) were not only a compulsory aid to agriculture in the time of socialism, but gradually also a space for creating strong social ties, strengthening the team, acquiring work habits, getting acquainted with the hop growing process, meeting the countryside and hop growers. This phenomenon was very specific in Europe and, in fact, in the world, because almost everyone in the country, especially young people, was familiar with this term, almost everyone had his own such experience. This specific social phenomenon



Spring hop seasonal work, training of the hop vines, Stebník, 2020

associated with one commodity is practically unique in the world. At the same time, the mass of hop-pickers also influenced the development and tradition of hop tokens, which were a reward for the picked rate of hop cones, the so-called "věrtel" (the measurement of hops ought to represent the volume of 30 liters).

Seasonal workers are part of hop growing even in the 21st century. Although harvesting technology has advanced and labour productivity has increased significantly at harvest, high school students continue to commute to spring work and university students to harvest. But not as much as in the time of socialism. However, it is not unusual for regular participation of the same groups of friends, which is a small parallel to the past, when the hop seasonal work became a major backdrop for the first Czechoslovak musical "The Green Gold" (Czech cult film from the '60s filmed in the Žatec region).

Today's recruitment companies use slogans like "Experience hops!" That the hop seasonal work is not just about money is summed up by the comment of one of the many young seasonal workers: "This year, I'm going to hop seasonal work for the third time. At first, I was afraid to work from morning to evening in the field. I didn't know what awaited me; after a few days, I found out that hops are not just about work and money. It's mainly about meeting super new people. I will never forget the experiences I've had here. In conclusion, I would evaluate it in just one sentence. It's a different world where the problems of "civilian" life go by, and enjoying summer at work is top-notch. So don't worry and be open to experiences you won't easily forget" (Ruman, 2019).



Summer hop seasonal work, hand-picking hops, Stekník, the 1960s



according to the characteristics of the local landscape in the vast floodplain of the river Ohře. It also includes some other hop fields and complementary structures completing the broader picture of both component parts, such as newer processing plants from the second half of the 20th century, including some very recent ones, such as the premises of the research and breeding institute. Another vital element of the buffer zone are the historic railway lines, which have helped development since the mid-19th century. At this time, the Saaz hops trade accelerated to truly global proportions and the railway ensured the arrival of thousands of seasonal workers, without whom spring work and the subsequent harvest, in such a short time, could not have been managed. Hop growing is one of the activities that are very reliant on manual labour even today, let alone in the days before mechanisation.

HOPS ROUTES THROUGH THE LANDSCAPE

In connection with the cultivation and processing of hops, a specific road network structure has developed in the area of the nominated property, which complements the natural interconnection of both its component parts. In addition to the primary road network, which enables common communication relations between individual settlements, there is also a dense network of service roads in the landscape, which serves to ensure the operation of the hop field. This network of small field roads is a significant secondary manifestation of hop management in the landscape. From the long-term point of view, the ground plan structure of the basic road network is relatively stable, rather, the hierarchy of significance of the individual routes is changing. The majority of the primary road network is situated in an elevated and more stable position of river terraces and, if necessary, descends into the river floodplain in places of terrain notches and ravines.

The main transport connection of both component parts is still provided by the historic road leading from Žatec to the town of Louny. The relationship between the two nominated component parts is also strengthened by one of the railway lines, which was introduced into the territory between 1871–1873. The construction of the railway simplified the export of hops and made the whole area more accessible. The railway was also used by seasonal, temporary workers who came every year to work in the hop fields. Part of this railway is part of the nominated property, and its line also forms the western delimitation of component part 01. The village of Trnovany became a vital transport hub situated by the railway, where, in the past, there was not only a train stop, but also a post office, a telephone station, and, from 1902, a telegraph. In the past there were numerous inns in the village and the vicinity.

The network of service roads is still functional to the extent corresponding to current needs of management. At the same time, it is preserved to the greatest extent in the territory of component part 01. Other historical service roads are conserved between the two component parts. The specific network of access roads is directly related to the method of management of individual hop fields, the operational relations between the agricultural base and the agricultural land, the structure of ownership relations, and local natural conditions. The complex system of this network and the way it is used is more variable compared to a basic road network and reflects both the development of cultivation techniques and the processes taking place in the landscape as part of the harvest. This network is used all year round in connection with seasonal work, and more intensively at the time of harvesting and drying hops. Its fundamental goal is to ensure the movement of hops between the hop field, the owner's registered office, the place of processing, the location of certification, and the subsequent distribution to customers.



The motion of hops through the landscape

Based on the physical structure of the road network, a significant event also takes place between the two component parts. It consists of the movement of hops through the landscape in the process of their cultivation, processing, and subsequent export.

Before the harvested hops are prepared into a form intended for sale and use, they must take a relatively complex and varying path in the landscape. Its route has changed throughout history and is derived from the technology of the hop processing procedure and the spatial localisation of its individual phases. The nominated property also illustrates this specificity: while in the past, the drying phase took place mainly in component part 01, in areas where hops were grown and then dried and then were waiting for purchase or mass transfer by a grower to Žatec, phases of more capacity and more extended storage, sulphuring, packaging, certificating and sealing before further sale or export abroad is tied to the town of Žatec.

The need to dry the hops directly at the place of cultivation is due to the short lifespan of the harvested hop cones and the need to reduce their volume for subsequent transport. Thus, all hops from component part 01 must complete their first journey through the Žatec landscape before their export. The transfer of hops from the countryside to Žatec is a one-off process that takes place every year during the harvest season.

In the past, the drying of hops took place mainly in villages, where hops were imported from hop fields via a network of service roads. Only large hop drying kilns belonging to the wealthiest owners were located outside the village, closer to the hop fields. After drying, the hops were loaded onto a cart and transported to Žatec.

The transport of hops from the villages to Žatec continued along with the primary road network between the individual municipalities. The safe overcoming of the terrain difference between the level of the river floodplain and the elevated position of the town of Žatec also played an essential role. From the component part 01, the transport of hops took place via Trnovany along the main road; as

the railway was more crucial for the transport of workers, traders, and fuel for the hop drying kilns. While in the landscape, hops were processed in order to effectively preserve their properties to be transported to the next trade; in Žatec, all processes were located in order to sell the raw material in a guaranteed quality. The stages that took place here are therefore not connected with cultivation, but with maintaining the quality and selling. In Žatec, hops were preserved, packed for export. Also their origin and quality were compulsorily verified here. Since the introduction of mandatory certification, every hop bale on the way in Žatec had to "visit" the Znamkovna building (Public Hop Certification Centre), firstly on today's Tyršova Street, and then later on Chmelařské Square.

Contemporary "hop paths" continue to operate on a similar principle as in the past. From hop fields on the territory of the component part 01, the hops are transported to three large hop picking machines, located near the village of Stekník. Here, hops from the hop plant are mechanically picked and dried, followed by moisture treatment in air conditioning chambers.

Pressed hops are transported to a modern air-conditioned warehouse in Žatec (which is part of the buffer zone), where the quality of hop cones is assessed, among other things, by laboratory analysis.

After that, the hops are gradually processed in various ways, for example, into volumes according to customer requirements, and ready for sale on the domestic market or for export.

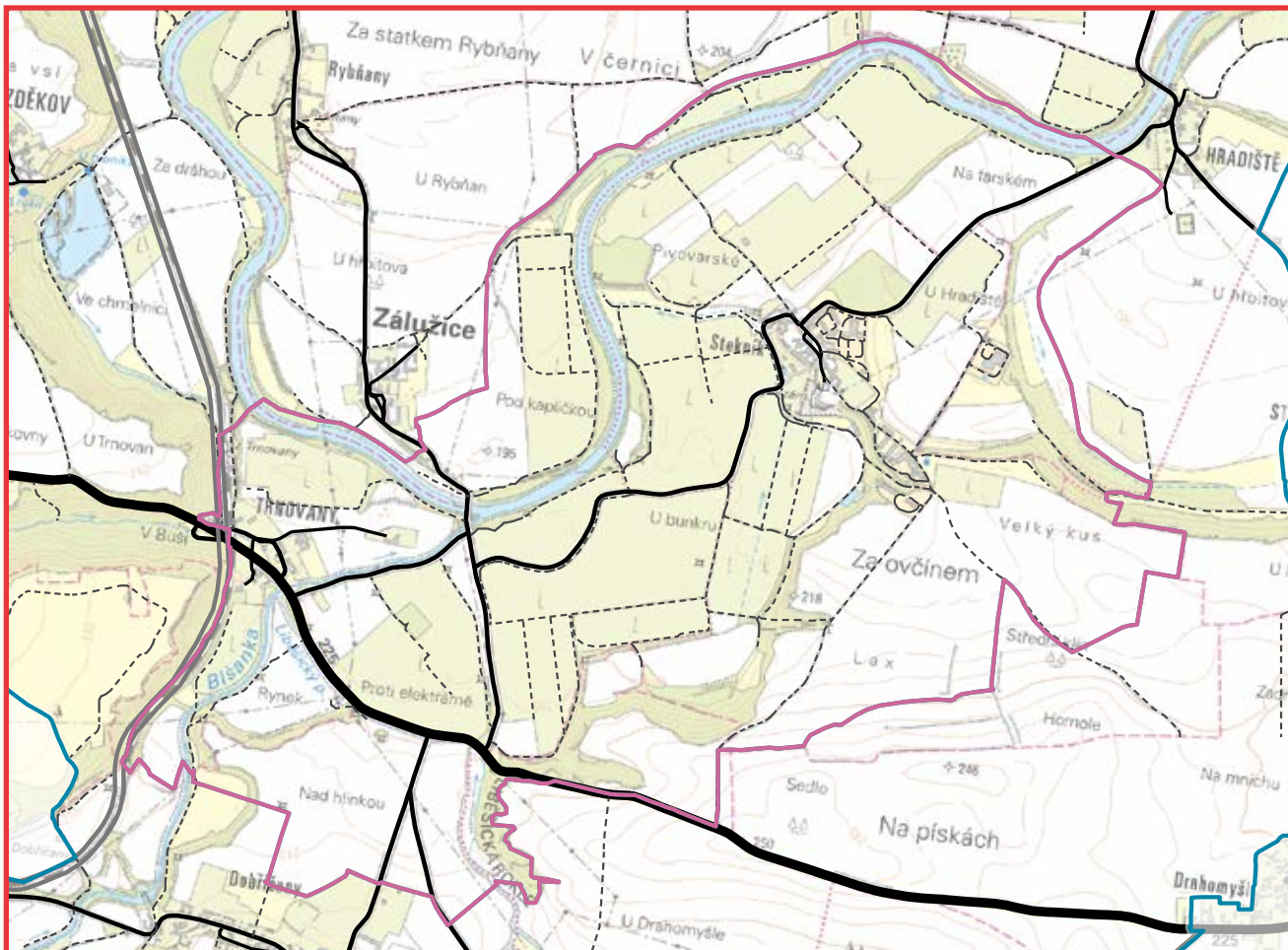
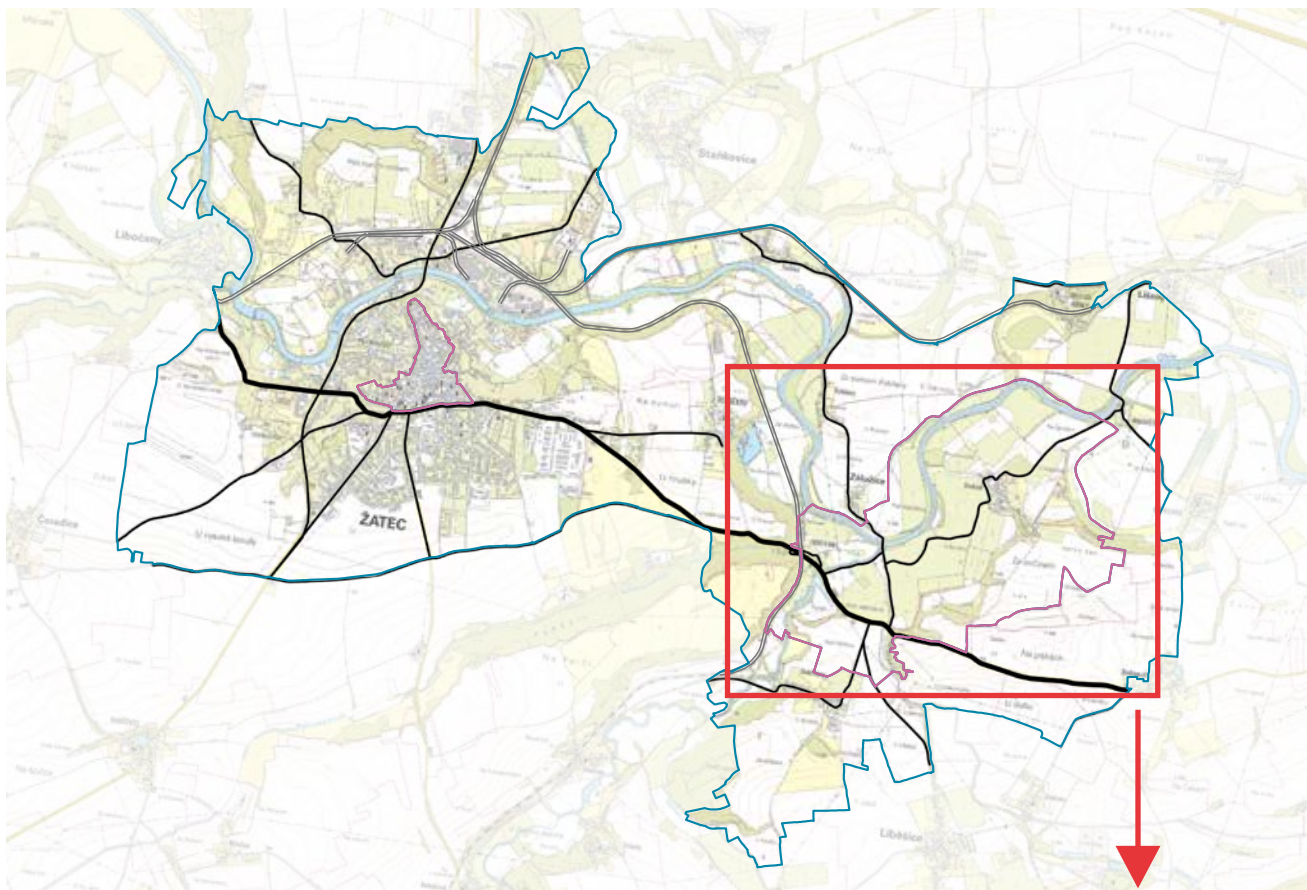
In the past, the ownership structure of the land and the way it was managed was much more complex, and therefore the system of operational ties that took place in the area was more complicated. The areas of hop fields formed an additional production of individual farmsteads, a large part belonged to the local feudal seat, and the town of Žatec which also owned some hop fields. The area was fragmented into much smaller plots, the area of individual hop fields was significantly smaller, and the network of service roads was denser. It was often a simple route between the hop field and its owner's home. The harvested hops were then most often processed (i.e., dried and packed for further transport for sale) directly in the village, in the place of the grower's farmstead. At the end of the 19th century, after the introduction of artificial drying, there was a substantial expansion of hop fields. Hop drying kilns allowed farmers to process significantly more hops, so both the number of hop fields and their area considerably increased. At the same time, the service communication network in the landscape changed, and its transport capacity expanded to enable more hops to be harvested from hop fields. These visually specific hop drying kilns became a new feature of the landscape. On the territory of component part 01, it was, for example, the Josef Schöffl hop drying kiln or the Hassmann hop drying kiln in the area of Mill No. 8 in Trnovany. The network of roads between the hop fields and the processing site was complemented by smaller, now mostly non-existent, farm buildings. These were situated directly in hop fields and probably served as storage for agricultural implements and shelters for workers cultivating hop fields located at a greater distance from the farms of their owners or employers. Thanks to their location "halfway" between the place of cultivation and processing, they helped to serve the entire system more efficiently.

Social changes and the gradual transition to a centralised way of farming, culminating in collectivisation just after the middle of the 20th century, were also reflected in the form of the hop growing landscape. The demise of private

Transportation of pressed hops to hop warehouses in Žatec, Stekník, 2019



Map showing the stability of the historic main transport connections and service road network of the nominated property (marked in black), the network of component part 01 in greater detail



agriculture led to the consolidation of production areas and a new organisation of work practices. Hop fields were no longer consistently tied to individual farmsteads; hops were no longer dried in historic small scale drying kilns but new large-capacity hop drying kilns built on the outskirts of the village. At the same time, hops were no longer stored in barns and roof spaces, but after drying, the hops were transported to warehouses in Žatec. The result of the new situation was, among other things, a significant simplification of the network of service roads, the creation of new roads leading to new processing complexes on the outskirts of villages, and a strengthening of the importance of backbone roads between Žatec and the rural municipalities. This development is also ideally illustrated by the nominated property.

SUMMARY OF THE LANDSCAPE CHARACTERISTICS

The nominated property Žatec and the Landscape of Saaz Hops is a unique spatial structure. The gradual changes in the way hops have been managed and the technological advances in the subsequent processing of the crop, which have taken place over several centuries are reflected in the form of the landscape. Tangible and intangible attributes represent its values. The material characteristics of the landscape are defined by its relief: the river connecting the two component parts, the panorama of the villages and the town of Žatec and the character of the buildings that are associated with hop processing. Rural and urban elements form different parts of the whole picture of the hop growing landscape, from hop plants in fields with wire trellises to built heritage and its features related to hop drying technology, such as wooden floors of warehouses, whole hop drying roof spaces, specific roof dormers, rural hop drying kilns and hop warehouses in the town.

The intangible aspects of the nominated landscape are the favourable natural conditions for growing hops, several hundred years of continuity of cultivation, the amount of specific knowledge and skills passed down through generations between growers and breeders, and human interactions on the environment that have influenced the unmistakable image of the landscape. The individual component parts of the landscapes are inseparable, and one without the other would not work.

Hop fields were established in places with suitable conditions. The composition of the soil, the level of the groundwater, the exposure of the area to sunlight, the proximity of the watercourse, and the natural barrier preventing the flow of northwestern winds are particularly important. The existence of village farms, their proximity to hop fields, connections to local roads and locations within farmsteads, their size, construction, building materials used, and the appearance of their roofs, all this is based on the need for quality and, above all, fast processing of this crop as long exposure to air may degrade it. The structure of trade, in which big traders played an important role, able, unlike rural producers, to transport hops practically all over the world would not be possible without the administrative

and warehousing facilities provided to them in the town of Žatec. Subsequent processing of dried hops in the urban environment, therefore, affected the appearance and structure of the town due to the formation of its districts and buildings, which were associated with consecutive hop processing processes (drying, sulphurisation, packaging, certification, trade, and transportation). However, in the spirit of the period's requirements, these utilitarian hop-related constructions had to be incorporated into the town and its structure, so as not to damage it visually. This was reflected mainly in the form of their street facades, which in most cases, imitate residential buildings with their architectural design. All this together gives the town a peculiar and unique atmosphere.

The urban and rural environment of the urban centre and village within the nominated property are thus entirely different, as is their traditional building culture. Nevertheless, both rural and urban hop related structures show some common and specific features. Their roof landscape is especially typical, in which roofs with low gables and large handling openings for the transport of hops to the lofts and roofs with rows of ventilation dormers of specific shape have been preserved. All-wooden internal constructions of the buildings also facilitate the hop processing, during which it was essential to ensure the vertical movement of hop processing from the roof space to the ground floor for its speedy processing and rationalisation. The crop, as such, is also specific, not only because of its impact on land use and the need for structural support for hop bines. As one of the fastest-growing cultivated plants, hops have a fundamental effect on the landscape's appearance, in a very extraordinary, dynamic way that distinguishes it from the vast majority of other agricultural landscapes. In the main growing season, the appearance of the landscape changes practically during individual hours, so the visual dynamics of the hop landscape is not comparable to any other agricultural landscape.

The characteristics of hops have also fundamentally affected the construction and external appearance of the buildings in which they were and are being processed because they are light, but their storage requires a large area. It has also always been essential to provide adequate ventilation for drying and a good possibility of shading the area where the hops were stored so that they do not lose colour. Awareness of the quality of Saaz hops, the specifics of their cultivation and processing, and the celebration of their harvest are part of the cultural traditions of the inhabitants of the whole Czech Republic. The eventual success of the nomination will undoubtedly be shared by all groups of the population, because there is general pride in the quality Czech hops and belonging to the town of Žatec, and good general knowledge about the hop cultivation in the hop fields.

Let's get acquainted in greater detail with the places where the hops are at home, in Žatec and the Landscape of Saaz Hops.

2.a2 THE SAAZ HOP LANDSCAPE (COMPONENT PART 01)

Within the Žatecká (Saaz) hop growing region, the Saaz Hop Landscape (component part 01) was chosen as an excellent example of a highly concentrated and for hops production continuously used landscape since the medieval times, bearing all the attributes of growing and processing hops up to the stage of the sale to wholesalers.

The local hop fields use wire constructs typical of the area and they are still in authentic positions. Another important attribute documenting the mutual interaction of man and his environment is proof of technological and scientific development in the field of professional hop breeding. It is carried out on research hop fields in this component part, and also includes the management of the Research Farm in Stekník by the Hop Research Institute Co., Ltd., in Žatec. The Institute, founded by the Hop Growers Union of the Czech Republic, is located in the buffer zone of the property. It is one of world's leading hop research centres and plays a key role in breeding new hop varieties as well as fighting diseases of the hops. The Institute also runs a collection of world's hop varieties which has significant value for the conservation of natural heritage and biodiversity. The knowledge on the historical development of hop landraces, especially of Saaz hops, is of great importance in designating Saaz hops as an original high quality noble hops in the world.

Component part 01, which is a continuous area, can be best characterised by the following elements, some of which are also individually listed and protected cultural heritage assets.

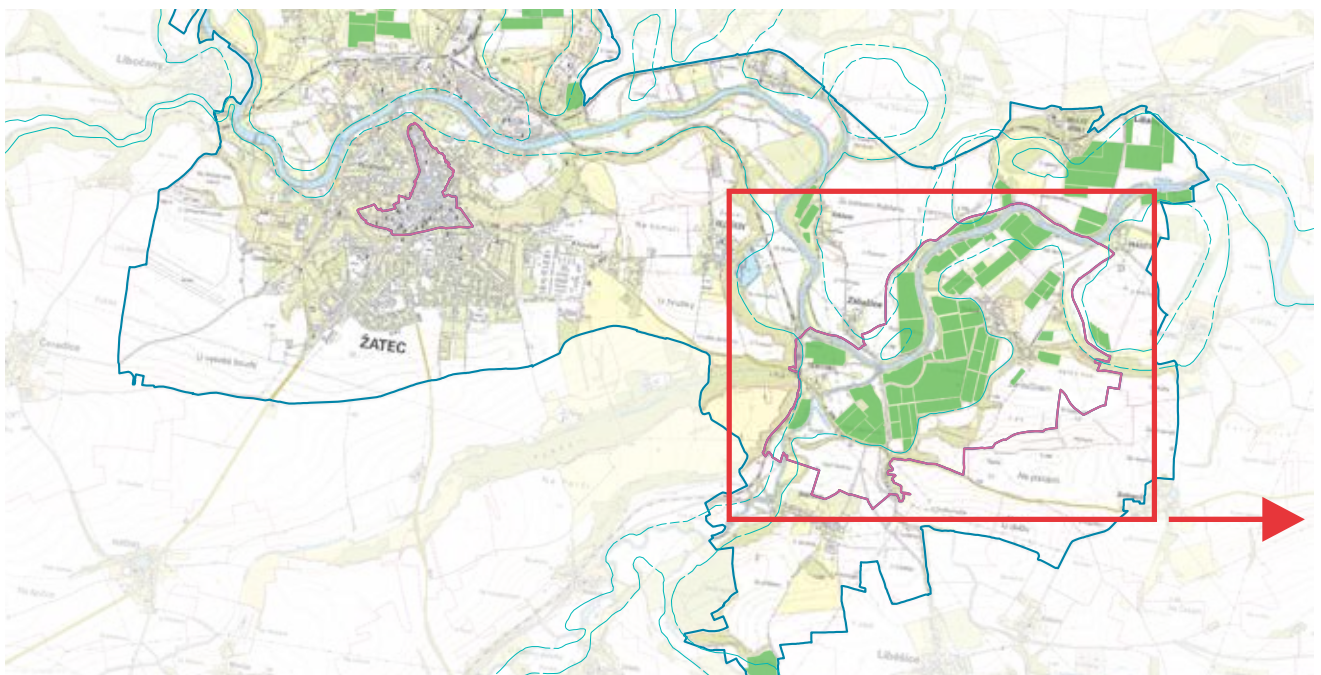
HOP FIELDS

The hop fields within component part 01 are located near the confluence of the river Ohře and the stream Blšanka (called Golden stream). Due to regular floods in the past, the local soil has always been extremely fertile. Elevated terrain in the north of the area restricts airflow. For these reasons, the location provides ideal conditions for growing hops.

Hop fields use wire trellises, the construction principle of which consists of a wire ceiling formed by transverse (supporting) wires connecting transverse rows of supporting poles (wooden, concrete), and in-line thin wires used annually to hang training wires to support the growth of the hop plants. The wire ceiling is supported by 7 metres high poles, which are distinguished into central (perpendicular) and marginal (built against the direction of tension). The tops of the poles are connected by bearing or pulling wires. The perimeter poles are fixed to the terrain with special anchors to ensure the stability of the whole hop trellis.

According to the Land Register² maintained by the Czech Republic, the Research Farm of the Hop Research Institute Co., Ltd. in Stekník manages a total of 149.5 ha of hop fields (of which 140.2 are located directly in component part 01). All hop fields are under the so-called drip irrigation and are continuously used for breeding research, registration, and nutritional experiments, for pilot plant and operational testing of new growing technologies and hop varieties. Drip irrigation is used to optimise water management. The return of organic matter to the soil is used for sustainable management. Bines cleaned of hop cones, leaves, and other parts of the plant are cut into small pieces, the so-called "chmelinka,"

² Land Register - LPIS is a geographic information system (GIS), which consists primarily of records of agricultural land use.



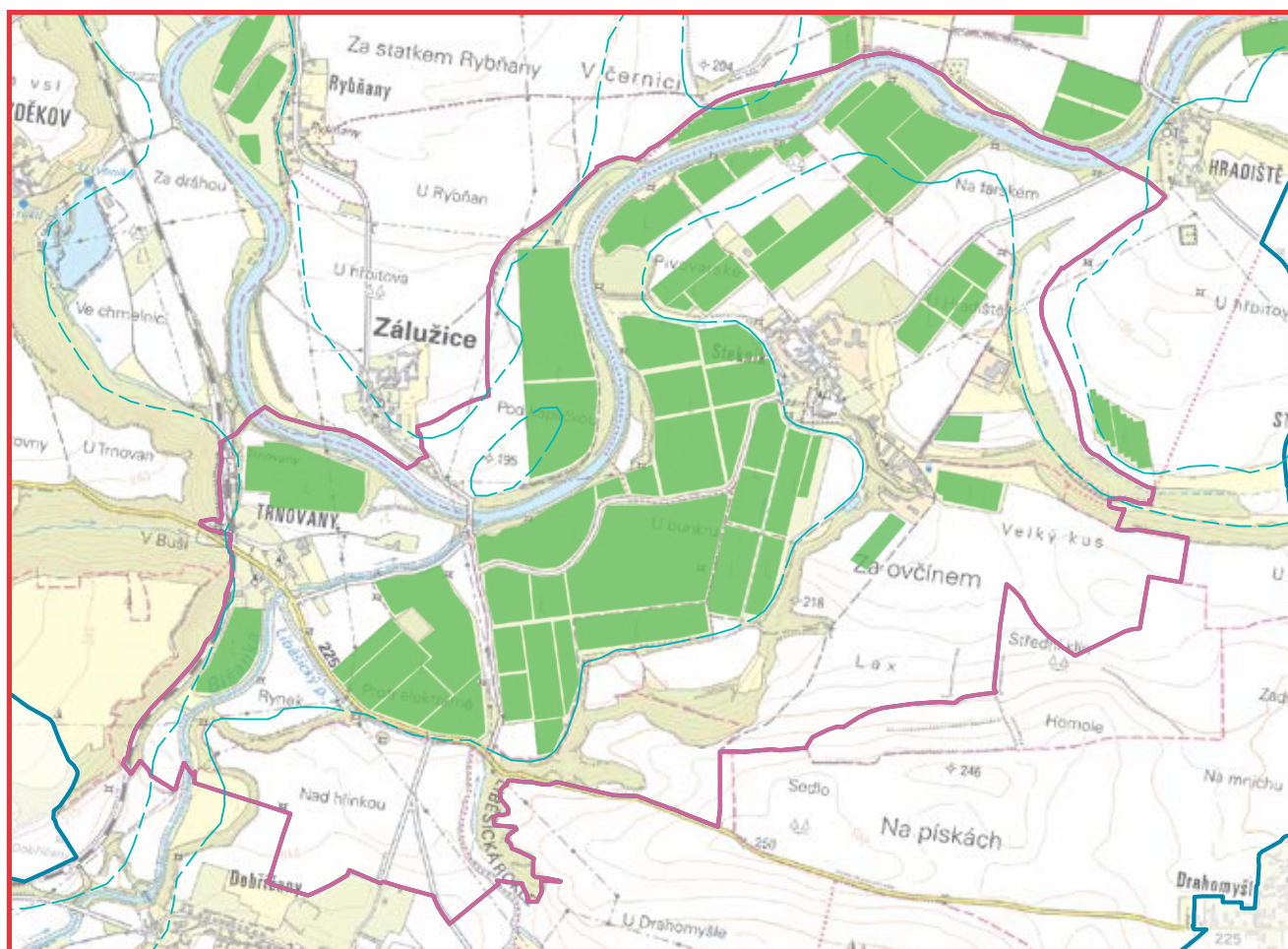
Map of the present extent of hop fields of the nominated property (blocks of hop fields marked in green)

which is then used in compost, or directly as a fertiliser applied to the field or hop fields. This enriches the soil with nutrients and helps the natural carbon cycle. Since 1992, the Hop Research Institute Co., Ltd. has registered almost 20 new hop varieties, all of which can be seen only on the Research Farm in Stekník. The breeding programme continues, and therefore there are other newly-bred varieties in hop fields, as well as a unique collection of a world-wide range of hops and more than 350 hop items, which is located in the buffer zone. An important part of the Research Farm are also the field areas used for the production of cured seedlings (virus free hop plants from in vitro meristem cultures) of all hop varieties for the planting of hop fields throughout the Czech Republic.

On an area of 2.2 ha in the north-eastern part of component part 01, the Hop Research Institute Co., Ltd. operates an organic hop field with two varieties cultivated under an ecological regime. For example, fertilisation is carried out exclusively with livestock fertilisers (manure) obtained from organic farming. Another measure is the maximum use of so-called green manure. For example, *Synapis alba* (white mustard) or *Phacelia tanacetifolia* (lacy phacelia) are sown. As protection against pests, natural enemies are used, which are able to protect the crop to a certain extent in case of low occurrence. Harvesting takes place separately. However, significantly lower yields are achieved with this method of cultivation at present.



View of a spring hop field from Hradiště with the former granary (later a hop drying kiln) in the background, Stekník, 2020



STEKNÍK AND TRNOVANY

The village of Stekník lies in the heart of component part 01 and forms its core. It is surrounded by hop fields on almost all sides. Today's appearance of the buildings and their layout dates from the 18th century. Thanks to the preserved authentic form of the village core, the area was declared a protected Rural Heritage Zone in 1995. The development, which includes hop drying kilns and hop warehouses, is located around the historic village square, and is supplemented by a chateau with extensive terrace gardens. The spatial structure of the village is significantly influenced by its location on a promontory above the floodplains of the river Ohře, on the plateau of which the central part of the village is situated. The urban structure of the village can be characterised as two interconnected parts: the northern part, including the core of the village with a village square surrounded by farmsteads, and the southern, belonging to the chateau grounds and modern hop growing operations with workers' hostels and a monoblock of a characteristic hall with a hop picking machine. The main access road to the village from Žatec and Trnovany runs from the southwest between hop fields, then rises from the flat floodplain with a simple serpentine along a narrow neck in the west and just before entering the village square it is diverted northeast towards the village Hradiště.

The core of the village is a rectangular village square with the original village pond modified into a fire water basin. The individual gables of farmsteads are oriented into the village square with their gable facades, which with their material structure and decorative details well represent the vernacular architecture of the region. The buildings are mostly single-storey, brick, with distinctly rectangular layouts and gabled roofs. The architectural

articulation is moderate and is based on classicist morphology. The dwelling parts are oriented to the village square, from which the courtyards are accessible through gates, the residential buildings are connected to other farm buildings, especially the stables and granaries. The back edge of the plot is closed due to adjoining barns. Only in case of a few farmsteads forming the northern part of the village square, this typical layout was partly disrupted in the second half of the 20th century by the construction of several modern agricultural buildings. They are, however, not visible from the village square and considerably contributed to sustainable management of the local hop fields.

Architecturally high-quality buildings No. 9 and 10, belonging to the Stekník Chateau estate, stand out from the smaller scale of the single-storey development. Farmsteads Nos. 18, 19, and 20 or No. 23 are also among the most architecturally valuable. All historic buildings of the village show many regionally specific features proving their use for the drying and processing of hops. These include large openings in the roofs, used for storing hops in the roof spaces. Additional, smaller openings, provided by blinds and allowing the regulation of the air during the drying of hops in the loft, are opened in the side facades just below the main cornice. Numerous elements in the form of continuous dormers or "oel-de-boeuf" oxe-dormers mounted on roof planes/surfaces, also have a similar function. Other hip or ridge dormers on the roofs of farm buildings were also used to handle hops.

Hop drying kilns, most often in the form of high tower-like buildings attached to standing structures, were built into the grounds of farmsteads since the end of the 19th



Farmsteads on the Stekník village square, Stekník, 2019

century so that drying did not interrupt the technological process and the kilns were naturally connected to other service areas, especially to the hop drying lofts needed for quality hop processing. For fire reasons, it was preferred to place them at the rear of the plots, as far away as possible from the residential building. These hop drying kilns are also, in addition to their proportions, identifiable due to their many specific architectural elements, such as evaporators located above the oast chimneys, chimneys attached to the gables, or due to the existence of specific small ventilation openings in the perimeter walls. A less common design is represented with the existence of kilns built into a farm building, most often in a barn. These are distinguishable from an external view only due to small details, such as the protruding of the kiln body out of the perimeter or existence of a chimney.

Completely intact, including its original technological equipment, is the hop drying kiln in the farmstead No. 23. The single-chamber body of the kiln was added to the older farm building. Other hop drying kilns are preserved in the grounds of the farmstead No. 43 (here with an infrequent system of symmetrically placed roof evaporators) or No. 9 (with a visually and materially dominant half-timbered superstructure of the evaporators). Thanks to its location outside the urban area, the hop drying kilns on plot No. 43 adapted from a former granary building, to which a tract with drying technology was added, can be well recognized in the village panorama. Two fans protrude above the surface of its roof at the level of the oast, a central two-vent chimney was added to the gable wall, and a handling ridge dormer was installed in the south-western roof plane, enabling the hops to be stored. The hop growing tradition of the village is also demonstrated by elements of architectural decoration, especially by

the depiction of hop cones in the gables of the gates (No. 22, No. 15) or the statue of St. Lawrence, the patron saint of hop growers, located on the gable of the gate of the farmstead No. 10.

The development of the village is complemented by an architecturally and artistically valuable chateau complex with extensive terraced gardens, delimited from the surrounding buildings by walls with three richly decorated gates. From the highest level of the gardens, a magnificent view of the surrounding hop fields opens up in the floodplain below the promontory. The chateau complex consists of the dominant main building with a ground plan of the letter "L". The current form of the building was acquired in the 1760s during an extensive Rococo remodelling, the author of which was the builder of Žatec, Johan Paul Losch.

The chateau complex also includes some buildings standing outside its enclosed area, illustrating the functional complexity of the chateau management. These are single-story houses, Nos. 26 and 27 in front of the northern gate, used to house the chateau servants, and a Baroque granary terminating the north-eastern view axis. The sizeable free-standing granary was built during the time of the Kulhánek of the Klauenstein dynasty in the 1780s. The original wooden structure of built-in floors, which has been preserved up until today is of high-quality carpentry. Its facades also had a magnificent appearance, as evidenced by the remains of the architectural decoration on the gable walls in the interior. The granary was adapted into a hop drying structure at the turn of the 19th and 20th centuries when a rectangular hop drying kiln was added to the eastern facade, and then later the lower body of a boiler room.



The Statue of St. Lawrence, the patron of hop growers, on the gable of the gate of farmstead No.10, Stekník, 2005



The original technology of the Linhart patent hop drying kiln from Rakovník remains installed here to this day. A dangling system of handling carts complements the two-chamber kiln with a boiler, heating pipes, and folding hop drying trays at two height levels.

The centre of religious life in the locality became the Chapel of the Visitation of the Virgin Mary within the chateau ensemble, which served the Catholic liturgy. It was complemented by other small religious structures, such as the Chapel of St. John of Nepomuk above the mineral water spring in Stekník or the Chapel of the Virgin Mary of the Seven Sorrows in Trnovany. An important role in the religious life of the site was also played the statues of holy patrons, that were placed in the grounds and on

the borders of the built up area. The collection of baroque and classicist statues of saints is unique. Situated initially in various positions on the access roads, they have now been located in the chateau garden. There is a statue of St. Florian: the patron saint of firefighters and the symbolic protector against fires; which were a great danger in kilns, the statue of John of Nepomuk, St. John the Baptist and the statue of the Virgin Mary. In the centre of the village of Trnovany, there is an exceptionally high-quality Baroque statue of St. John of Nepomuk, the Czech provincial saint patron.

The most recent development in Stekník, represented mainly by production, storage, and accommodation facilities of the Hop Research Institute Co., Ltd. in the



northern perimeter of the village, in the 1970s and 1980s partially disrupted the urban structure and scale of the village. The design of the buildings located in the southeast and northeast of the territory is very utilitarian, both in terms of architecture, material used and crafts-manship. They are however a period testimony of technological changes in the processing of hops that took place during this period. At the same time, they document the still-living and well-kept hop growing tradition.

In the south-west part of the component part 01 lies the village of Trnovany, which administratively belongs to the town of Žatec. Its urban structure is not entirely preserved, but it still maintains the raw material characteristics of a small hop growing village in the region. Its core, with irregularly scattered buildings, is situated around an expanding road. The development consists of multi-story brick buildings of a mostly rectangular floor plan, with gabled and hip roofs. The building stock of the village has been damaged due to long-term neglect. During the second half of the 20th century, some buildings were demolished or utilitarian rebuilt after the expulsion of the German population after World War II. During the second half of the 20th century, the village never managed to be resettled to its original extent. However, the original structure, scale, and material make up of the historic buildings are still legible. Several exceptionally authentic hop growing buildings have been preserved to this day, which, thanks to their mass, location in the landscape, design, and architectural design, are among the most iconic buildings of the entire Saaz hop growing area. This is especially the area of the Mill No. 8, which includes a generously designed hop drying kiln. It was created by rebuilding an older barn, which received a magnificent neo-Gothic facade with characteristic turrets, in fact,

vents used to regulate the airflow in the oast and on the adjoining hop stores. The second important ensemble in Trnovany, closely related to the local history of hop growing and processing, is the area of farmstead No. 9, located in hop fields near the confluence of the river Ohře and Blšanka stream. By the beginning of the 19th century, a large courtyard surrounded by an ornamental garden already stood on the site, the owner of which, Josef Schöffl, was one of the largest hop producers in Bohemia in the middle of the 19th century. Today's appearance is the result of gradual construction modifications of the area, especially at the beginning of the 20th century. A visually significant, and for the technical heritage of the component part 01 utterly characteristic part of the building, is the south wing of the farmstead, the facade of which is formed by a set of four tower-shaped extensions, in which the Linhart patent hop drying kiln are still located. The building, with hop drying kilns, is complemented by an architecturally high-quality residential villa, built in the 1930s. The structures of the train station from the 1970s, which is a valuable part of the history of harvesting, hop processing, and successful trading, still show a high degree of authenticity in the exterior expression.

A detailed description of hop-related objects in component part 01 is given in *Chapter 7.c*.

The image of the landscape is complemented by the permanent vegetation around the stream Blšanka and river Ohře and the former meanders of the river bed. Another set of permanent greenery naturally defines the component part 01 at its eastern and southeastern edges. The area rises slightly in the southern direction and its borders naturally define the most visually valuable territory of the landscape, whose integrity is extraordinary in the conditions of the Czech Republic.

THE RIVER OHŘE

The river Ohře and nature of the landscape conditioned by the cultivation and processing of hops are directly linked because the cultivation of hops is dependent on the presence of water. That is why the quality locations of hop fields within the nominated property have been long-established in close proximity to the river. The river Ohře is also the main artery passing through the site, and the area of the river floodplain is a natural connecting element of the rural and urban component parts.

The detailed form of influencing the river landscape by growing and processing hops on the territory of component part 01 is given by the spatial relationship between the river Ohře and the hop fields. The study of historical data and current hop practice shows that the most profitable areas for hop growing are located in the area of the river floodplain, on the flat bottom of the river valley, which is regularly affected by floods. These locations have sufficient air and soil moisture, alluvial soils with sufficient nutrients, and are also protected by the surrounding river terraces from the weather. On the territory of component part 01, the fertile river floodplain stretches on both sides of the river Ohře. It widens significantly in the area between the villages of Stekník and Trnovany, where it is delimited from the west and southeast by protruding river terraces. The village of Trnovany, unlike the village of Stekník, also extends into the area of the river floodplain.

The current image of the landscape along the river Ohře is not only the result of the action of natural forces but also the long-term influence of human activity. The preserved method of hop management in the territory

of component part 01 illustrates how human still adapts to the local characteristics of the landscape and uses the knowledge of its natural conditions and cyclical changes during the year. At the same time, in the area, there has been preserved the testimony of how human has adapted the river landscape throughout history with intention to achieve its efficient management and farming.

Without human influence, a series of typical floodplain natural areas would undoubtedly developed in the river floodplain of the nominated property, as is common in other river landscapes. The process of deforestation in the river landscape took place over a long period of time. Significant deforestation of the floodplain landscape occurred here from the Middle Ages and continued with the development of hop cultivation and processing. The floodplain landscape was thus gradually transformed into a forest-free, agricultural landscape. In the example of the component part 01, we see that the stable positions of the hop fields still extend to the immediate vicinity of the river. However, areas cover of typical floodplain forests are also represented here, although they had been reduced to narrow strips of river bank vegetation to date. The only fragment of the original floodplain is present in the territory of component part 01 northwest of the village of Stekník in places where it has not been soil managed for a long time due to unsuitable soil conditions.

The river has retained its natural meandering character in the nominated property. Its current course is partially influenced by a series of less extensive regulatory interventions, which served primarily to protect the hop fields and individual villages from floods. The first



Aerial view of the hop fields on the both sides of the river Ohře in the component part 01, as seen from the northeast (the village of Zalužice at the back), 2020



mention of riverbed regulations dates back to 1688–1690 when the riverbed in the section between Žatec and Tvršice (a village in the buffer zone) was straightened. In 1906, the riverbed was also modified near the village of Zálužice (directly on the territory of component part 01). The water level on the river Ohře is currently regulated by the sizeable Nechanice Reservoir built between 1961–1968 in the upstream area near the town of Kadaň. This has eliminated the previously more frequent floods and stabilised the river flow.

In addition to the regulatory modifications to the riverbed, the protection against floods has also been ensured by the construction of flood control banks. In the territory of the component part 01, the oldest such artificial modification is considered to be a stone rampart located south of the village of Hradiště.

Although enough groundwater is vital for hops, saturated soil does not suit them. Waterlogged soils are found in the river floodplain in places of groundwater springs and areas of shallow terrain depressions. Such sites are not visible in the landscape, at first sight. However, they significantly affect the quality of hop growing, and therefore some of them have been drained for agricultural purposes. Earlier and later examples of building drainage systems can be seen in the component part 01. The remains of earlier drainage ditches are still located south below the Stekník Chateau. In connection with modern farming,

other drainage systems have recently been built on the territory of component part 01 in the soggiest places of hop fields. For more efficient cultivation and ensuring the optimal amount of moisture, water from the river Ohře is now distributed to hop fields by drip irrigation systems.

It has never been possible to grow hops on a floodplain on a large scale, without research and planning. For this reason, an exact knowledge of the local soil, moisture, and microclimatic conditions were always needed to select suitable growing areas. From this information, passed down from generation to generation, a human was able to evaluate correctly when it makes sense to modify the landscape with small interventions, and on the contrary when it is more advantageous to give way to natural conditions and grow hops elsewhere. In the territory of component part 01, not only long-term stable areas for hop growing were created, but also areas permanently not used for hop growing purposes.

The construction of bridges with the possibility to overcome the river's flow are also related to the management of the river landscape. It enabled communication in a broader area such as between the two component parts. In the past, there were bridges between the component parts near the villages of Hradiště, Zálužice, Trnovany, and Rybňany and north of the town of Žatec. Of these bridges are preserved in the historical footprint Hradiště, Zálužice and Trnovany.

2.a3 ŽATEC (COMPONENT PART 02)

Žatec (component part 02) consists of the oldest parts of the town of Žatec, its historical core and its Prague Suburbs. For this reason, the name of the town has been used for nomination purposes. The component part contains many unique structures representing the built hop-related heritage: warehouses, sulphur chimneys, hop drying kilns, and includes many other important buildings with excellent architecture. With its preserved urban structure, the component part clearly maintains the concept of the centuries-old development of the town in relation to the hop industry. Its overall image embodies past and present activities concerning the social life and cultural tradition of the town as it contains tangible elements expressing the social values associated with the processing of hops and trade. A reference to hop traditions is also the tradition of the colour of structures, architectural details, or motifs in paving, currently being developed in a consistent visual form within the component part. Elements of urban interiors refer to hops, in which colour shades of green hops are applied to the facades of houses and a number of decorative motifs of hop cones are used including up to the present for example, in gradually installed identification plates with house numbers and street names.

The component part 02 contains all the standard types of buildings with the functions of a historic town founded in the Middle Ages, as well as a particular architectural heritage, associated with its relationship to the cultivation and business of hops. It is these structures that important attributes of outstanding values within the nominated property can be found and they can be divided into four categories according to their function. There are buildings of burgher houses, structures associated with the processing of hops, and buildings reflecting the socio-economic effect of business with hops, which are villas of hop entrepreneurs and buildings

of related infrastructure such as banks, post offices, railway stations, schools, theatres and cinemas.

BURGHER HOUSES

From the very beginning, the appearance of the town of Žatec has been determined mainly by natural and geomorphological conditions. The oldest settlement locality was created for strategic reasons on a promontory above the river Ohře. Its elongated shape, copied by the line of the walls on the edge of the promontory limited the possible building development. Therefore, due to the lack of space, new buildings could not be created for drying hops in the inner area of the town, and the roof spaces of burgher houses were used for this purpose. In the roof spaces of many houses, the hops were dried naturally due to the airflow; then, they were also stored here before the sale. Many houses still reflect Gothic parcelling in their proportions, and many of their constructions date back to the Middle Ages when the hop cultivation and trade were already an important means for the inhabitants of the town in ensuring their existence. The impressive size of stone houses reflects the wealth of the hop traders, who often also traded in wine, fabrics, and barley. Many other buildings were renovated or newly built in the Baroque style in the early modern period when Saaz hops had a high reputation in Central Europe.

The constructions of hop roof spaces of burgher houses were adapted to the needs of hop processing. Even the preserved historic roof structures are large enough to withstand the burden of the seasonal drying of hops, their usable spaces are often multi-story, with solid floors secured on the sides with anti-fall elements, complemented by handling openings and winches/pulleys for handling hop bales. The roof spaces are separated from the rest of the house by a metal fire door and are accessible by grand brick stairs. From the outside, roofs with a hop drying function are well recognisable. To this day, they are equipped with a system/rows of typical



View of Žatec town from the north-west, Žatec, 2016



ventilation dormers. A specific feature of the urban development in Žatec is the visually applied semi-hip roofs with roof spaces gables facing public spaces with openings, which were used to transport hops to the roof space. It was not until the very end of the 19th century, and rather exceptionally in the town centre that separate buildings were created for drying and storing hops.

Examples of hop roof spaces of burgher houses

The roof structures of house No. 7 appear to be the oldest, perhaps as early as the second half of the 17th century, according to the building development of the house. This most common type of roof structure occurring in the following three centuries on townhouses in Žatec already appears here. Hambalek system roof structures are tied in one or two levels by longitudinally oriented standing stools ("der stehender Stuhl" in German). This type of roof structure probably offered sufficient load-bearing capacity for the selected roofing as well as for the practical use of the roof space.

The oldest layer of roof structures created after fires in the second half of the 18th century includes both roof structures with vertical supporting posts (Nos. 52, 88) and roof structures with advanced variants of horizontal posts ("der liegender Stuhl" in German), such as on houses Nos. 137 and 30. This pre-classicist construction era lasted

until the turn of the 18th and 19th centuries, where several other roof structures of these types appeared.

Throughout the 19th century, the most common type of construction was a hambalek roof structure with one or more levels of longitudinal binding using vertical supporting posts, which are varied, combined, enlarged, or lightened.



House No. 7 in Obránců Míru St. with "dormer windows" on the roof, Žatec, 2016

CONSTRUCTIONS ASSOCIATED WITH HOP PROCESSING

The town of Žatec has been the centre of the entire hop growing region since the Middle Ages, where all the following processes connected with further processing, conservation, certification, and trade in hops were combined. The preserved urban-industrial set of hop constructions, their functional connection with the whole procedure of processing, and trade had a fundamental influence on the image of the town.

In the northern part of component part 02 in the historical core of the town of Žatec, there are ten hop warehouses. Still, their largest concentration, including other processing ensembles, is in the southern part of the component part, the Prague Suburbs. The development structure of the Prague Suburbs reflects its gradual growth. It includes groups of industrial hop constructions, mainly from the 19th and 20th centuries, usually supplemented by residential buildings of individual owners of packing rooms and hop warehouses, which usually are located at the street line in the town. The combination of industrial and residential functions within the individual ownership units gives this part of the nominated property a truly unique atmosphere of the business environment of the second half of the 19th century and the beginning of the 20th century. The buildings, with their composition and the nature of the facade design, still demonstrate how individual hop processing family businesses created new building units according to their financial possibilities,

integrating the residential function with the operation of hop drying kilns, hop packaging rooms and hop warehouses. Hop processing buildings are brick, multi-story, with a characteristic construction and typology. To this day, most of the hop drying kilns and sulphuring buildings have been preserved, completed with tall and low chimneys. It is the tall chimneys for the extraction of sulphur fumes during the sulphuring (conservation) of hops, as well as the original storage facilities, which are often still used for their original purpose, are now an integral part of the colour of Žatec and complete its unique panorama. They are proof of its position as a former and current metropolis of world hop growing, an important centre of processing and trade in hops.

The facades of hop processing buildings in the Prague Suburbs are brick. In the vast majority, they still have architecturally high-quality decoration. Few visitors to the town know that behind them hides a wooden skeleton and the technology of industrial spaces. The high quality of the solution of the facades of hop warehouses is based on the fact that they were built directly in the already built-up area of the town, and the architectural designs of their facades had to meet the strict regulations of the town building council. The same regulations applied to the construction of residential townhouses. The respect of these regulations enabled the construction of independent functional units, both magnificent residential houses and simpler utility buildings.



The former Epstein & Mendl's hop warehouse and baling room, No. 1257, with the residential building, No. 753, in Kovářská Street, Žatec, 2016

The wooden fillings of the openings (windows, doors, blinds, and entrance gates) were designed with regard to the functionality and operation of the building, and their division fully corresponded with its overall architectural concept. Examples of such a solution are, e.g. a hop packaging room and hop warehouse, No. 1232 in Kovářská Street (investor Vinzenz Zuleger from 1913), or a warehouse building without a descriptive number on the building plot No. 1017/3, next to the corner building No. 837 in Komenského Alley (investor Johann Simon from 1891).

Hop packaging rooms and hop warehouses in the densely built-up area of the Prague Suburbs were logically placed in easily accessible places for transport. The warehouses required a consistent and that time a natural exchange of air. Ventilators later supplemented natural gravitational ventilation. In order to maintain a constant, low temperature in the interior of the hop growing buildings, the storage rooms were oriented to the north side of the building, if construction conditions allowed. The described orientation towards the north side can be observed in several preserved hop constructions. This is especially evident, for example, at the warehouse and packing house in Kovářská Street (No. 753, Gustav Epstein, Adolf Mendl from 1913) or at the building on Prokopa Velkého Square (No. 1950, Christl brothers from 1920).

The perimeter of the hop packing spaces was usually made of mixed masonry. The most commonly used was marl or local stone. These were stones from the original medieval buildings, which were gradually replaced by newly built hop growing buildings. The inner skeletons, which divided the storage space of the building into several floors, were wooden with a load-bearing capacity suitable for the use at the time.

Dried hops burn easily, and hop warehouses were built with a wooden inner skeleton (see above), so they had to comply with fire regulations from the beginning. This was also reflected in their appearance. Each building is fire-separated and has its own wooden staircase, often supplemented by an external metal fire escape staircase.

To preserve its quality to the maximum during long transport to the customer, the hops underwent sulphurisation – a specific technological conservation process which, thanks to its secondary construction manifestations in the form of tall chimneys located above the sulphur chambers, also affected the image of the town of Žatec. Therefore, buildings containing these sulphuring chambers, in which hops have been preserved due to the application of sulphur dioxide, are an essential part of the nominated property. This process reduced the development of microorganisms and improved the gloss and color of the hop cones. The sulphur chambers had iron mesh floors on several levels. Hops were poured into the chambers from above until a conical pile of hops filled

The former Christl Brother's hop warehouse and baling room, No. 1950, in Prokopa Velkého Square, Žatec, 2016



the entire chamber. Then the double steel doors closed, and pieces of sulphur or a sulphur flower were set on fire on the ground floor in a special fireplaces. After approx. 5–6 hours of the sulphurisation process, the chimney flaps opened and, if necessary, the fans started. The chimneys of individual warehouses and packing plants released sulphur dioxide into the air. Precisely due to the sulphuring of hops and the discharge of sulphurous fumes into the air, the Saaz warehouses and hop packing houses were equipped with brick chimneys up to 45 m high. After sulphuring, the hops were removed from the chambers with special shovels and stored in export bales. Sulphur chambers are preserved in almost all buildings where hops were originally conserved this way, for example, in the Prokopa Velkého Square (No. 1950, Christl brothers from 1920 or Nos. 305 and 1952, Pfister & Würstl from 1873).

The transport of hop bales in a vertical direction is evidenced in preserved warehouses and packaging rooms by hand-held wooden rope lifts with a winch, as an example is a lift in the building (Nos. 305 and 1952, Pfister & Würstl from 1873). At the beginning of the 20th century, these winches were replaced by electric freight cabin elevators, which were gradually installed in all the warehouses. They have been preserved in most cases of the described buildings in the area considered for nomination and also confirm the technical value of the preserved site.

In addition to various types of hop elevators, other technical equipment is preserved in the interiors of the warehouses and packing houses, such as control flaps, special presses, scales, stencils, sewing machines for bales, air-conditioning equipment, and original operating furniture.

A detailed description of hop processing structures is given in *Chapter 7.c*.

VILLAS OF ŽATEC HOP ENTREPRENEURS

Sufficient funds coming from the hop trade were reflected not only in the constructions directly related to hop growing but also in the magnificence and quality of residential buildings.

An utterly unique characteristic of a number of buildings in the Prague Suburbs in Žatec is the close spatial connection between the representative villa of the owner of hop growing operations and their production and storage building. The hop warehouses were often built in the rears of built up areas, and the villas of the owners of hop companies were thus oriented directly towards the street line. They are very representative buildings, both in terms of interior and exterior.

In the area of the component part 02, we can find built neo-classical style villas from the end of the 19th century (for example, Bondy's villa No. 828 in Tyršova Street), through Art Nouveau buildings to the representatives of modern residential villas dating from the 1930s (for instance No. 2051 in Fügnerova Street). The villas are authentic, in the vast majority preserved, including many details. Small garden buildings complement them; the original architectural solution also includes fences and paving. The most typical example of such a set is, for instance, villa No. 1257 with a garden gazebo and warehouse No. 753 in Kovářská Street, villa No. 395 with a garden gazebo and its economic background, including a hop warehouse united under No. 365 on Nerudovo Square or villa and warehouse No. 828 in Tyršova Street.

A detailed description of the most important villas in component part 02 is given in *Chapter 7.c*.

STRUCTURES REFLECTING THE SOCIO-ECONOMIC EFFECT OF WEALTH AS A DIRECT CONNECTION OF HOP GROWING

Wealthy entrepreneurs not only built luxury villas but also contributed to the creation of many public representative buildings such as cinemas and theatres. Following the brisk business activities of hop growers concentrated in the town, hotels and restaurants were also built here. These buildings reflect the international scale of hop growing and the subsequent



The process of production of bottom-fermented Pilsner-type beer

Beer is a fermented, slightly alcoholic beverage, which is usually produced in breweries (smaller "home breweries" are also popular). The beer production process is entirely independent of the hop cultivation and processing locations because the beer contains a very low hop volume, which is added to the beer in the form of a "spice" during brewing.

The principle of beer production lies in the breaking down of complex sugars (starch) contained in cereal grains into simple fermentable sugars and the subsequent fermentation of these simple sugars by microorganism culture, brewer's yeast. The production process mixes raw materials with water and thus transfers desired substances into an aqueous solution. The production process was improved immensely after the onset of the Industrial Revolution leading to the production of larger volumes.

The basic beer brewing process can be described as follows: Beer is made from the following raw materials – malt, water, hops, and yeast. The primary raw material is "malt". Malt is obtained in the malting plant by having the grain germinate (in the Czech Republic, especially barley, wheat somewhat less, or corn or rice) and subsequently dried. Grain supplies starch (or sugars), which later converts to alcohol and carbon dioxide. The produced malted barley is left for about 4–6 weeks to mature. It is then mixed with heated water. One unit of malt is usually mixed with four units of water.

The next production stage is mashing, melting the malt in even warmer water, forming the "mash" (where polysaccharides break down further). In the subsequent stage, the liquid part of the mash is separated from the solid malt residue by straining, resulting in a "wort," a clear, sweet-tasting solution. Only at this stage, hops are added to the wort (approximately 200–300 grams in the case of head hops), producing a hopped wort. In the following process, the hopped wort is briefly boiled for about 120 minutes, where the noble bitter substances pass into the solution and result in a "hot wort." The hot wort is subsequently cooled in a plate cooler at a fermenting temperature of 8 °C.

The cooled and aerated wort, after adding brewer's yeast, is then pumped into open containers, fermentation tanks, where the beer ferments vigorously. After fermentation, the beer is cooled, the sedimentary yeast pumped out and poured into the barrels placed in a lager cellar where the beer rests to maturity. Maturing takes place in closed tanks and low temperatures for varying lengths, depending on the type and quality of the beverage; draft beer matures for about 20 days, lager up to 60 days. Consequently, the beer is bottled according to customer requirements – in casks, bottles, or cans.



prosperity. The construction of the main railway station building was also conditioned by the hop trade and the effort to ensure its transport to the whole world (for more on this, see *Chapter 2.b*).

The local Jewish synagogue, built in the 1870s, also has a direct connection with hop growing, its construction was initiated and funded by the local Jewish community, whose members included virtually all large hop traders. Due to its dimensions, the synagogue ranks among the largest of the Jewish synagogues in the Czech Republic.

An important building, which is in component part 02 currently directly associated with the phenomenon of hops and beer, is a burgher brewery, built in 1801 at the northern end of the high promontory above the arch of the river Ohře at the site of the now non-existent Přemyslid Castle. The brewery with the current trade name Žatec Brewery Co., Ltd. is still functional, and one of the most known brewing groups is the majority owner. Concerning its significant mass and elevated position, it forms the visual landmark of component part 02. The main preserved historically valuable buildings in the brewery complex include the former water tower, brewery, part of the malthouse, and extensive underground cellars, which are still used for maturing and fermentation of beer.

Directly opposite the brewery complex, there is a small Beer Brewing Museum of the Žatec Region established in a historic building with the aim of informing visitors in the context of hop growing and beer brewing (more also *Chapter 5*).

A detailed description of the most important buildings reflecting the socio-economic effect of hop wealth in component part 02 is given in *Chapter 7.c*.

Žatec Brewery Co., Ltd. in Žižkovo Square, No. 81, Žatec, 2019



2.b HISTORY AND DEVELOPMENT

The rich history of Žatec and the Landscape of Saaz Hops has been competently documented through archives, professional literature, and cartographic sources. The local variety of aromatic hops has been sought-after, as a key ingredient for beer production, for centuries up to the present day. As a result, the town and its wider surroundings have adapted to this specific agricultural sector by developing specific economic structures aimed at growing, processing, and trading in hops.

The following text will gradually take the reader through more than a thousand years of history; history that shaped the countryside and the town of Žatec itself. The town and the landscape of the immediate surroundings became an important extensive European hop growing metropolis, especially in the 19th century, and played a crucial role in the international hop trade. But let's not get ahead of ourselves.

2.b1 EARLY HISTORY OF HOP GROWING AND HOP TRADING

Hops have been documented for centuries within the Saaz hop growing region since the early Middle Ages. German literature from the beginning of the 20th century states that German brewers primarily used hops from Bohemia in the 10th and 11th centuries. The first written proof of the sale of Saaz hops dates back to 1088. This is a document of the Vyšehrad Chapter regarding the proceeds from the sale of hops from a yard in Žatec. At

the end of the 10th century, according to written records, hops were exported from Bohemia to cities on the Baltic Sea, Bavaria, and Trieste.

The development of monastic and burgher breweries in Central Europe in the 12th and 13th centuries caused a massive demand for hops on the market. Numerous archaeological finds of hop and cereal remain from older settlements, and the newly established royal towns in the Bohemian (Czech) Kingdom also date from this period. At this time, the inhabitants of the Žatec basin began to take advantage of the local natural conditions for the cultivation of quality hops and the convenient position of trade crossroads of both the domestic roads and waterways. Contrary to other European areas, with hop cultivation for their own local needs, people from Žatec started to grow hops in greater amounts than they needed to sell it to distant regions as early as the Middle Ages.

The decisive growth of hop production took place in Bohemia during the 12th and 14th centuries. In 1306, the word "hop field" is documented in written sources. Cultivation was already at a high level, and the quality of Bohemian hops was highly rated. Hop growing became an essential part of agricultural production.

The Emperor Charles IV (rule 1346–1378) supported the establishment of hop fields, especially due to the valuable financial benefit that flowed from hop exports into the royal treasury, and he regulated the export of



The oldest depiction of hops from around 1300, from the book Saské zrcadlo (The Saxon Mirror)

Bohemian hop varieties abroad. Back then, hop plants were propagated in a vegetative way, using hop cuttings that were cut off and adjusted from the lower lignified part of the stem. In early cultivation, slips from the best wild-growing female plants were picked. This was actually the dawn of improvements in the hops, which were based on simple selection. The best hop varieties were used for propagation and subsequent planting in hop fields, grown on wooden poles.

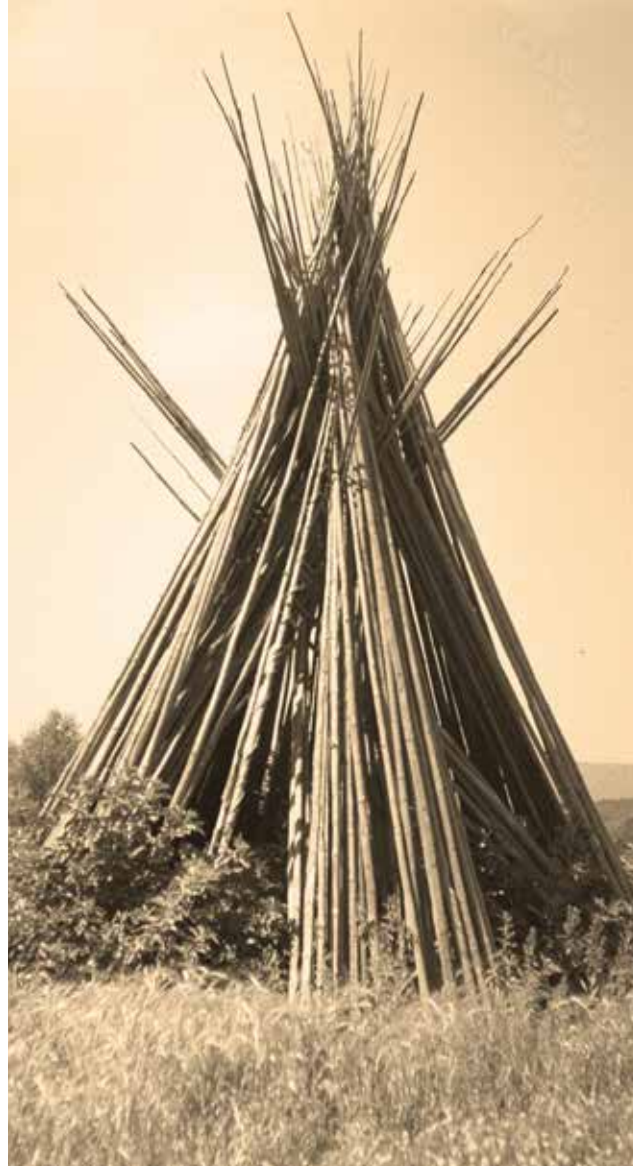
In the history of Czech hop growing, the time of Charles IV can be considered a period of prosperity not only in hop growing but also in the hop trade. Charles IV ordered the cultivation of hops and sought suitable places on his travels in Bohemia (Czech Republic) for them to be grown. Hop growing also spread to other countries, and hop seedlings from Bohemia were used to establish hop fields abroad. The Bohemian hop seedlings were introduced to Spalt, Germany, in the 14th century by a monk, and subsequently, the hops became very widespread here. The nobles of the Bohemia were afraid of competition from foreign lands, and because Bohemian hops were already famous abroad at that time, they forced Charles IV to issue a ban on the export of hop plants under penalty of death. It is the first official measure that we know, with the purpose of limiting the cultivation of hops to a particular area, in this case the whole of Bohemias.

At least from the High Middle Ages until the beginning of the 20th century, hops were almost exclusively grown on pole trellises. This type of hop fields has been documented since the 14th century and consisted of the use of a wooden pole support for the hop bines. Each year, in April, a 6 to 7 metre long pole was placed near each hop bine seedling on which the hop shoots were then trained. The plant gradually wound up the whole pole with the help of bast fibre or straw string. In early hop pole trellis, the hops were mostly planted in a square 80 by 80 centimetres, so the poles were spaced at relatively short distances apart. At harvest time, the poles, together with the hop plants, were pulled out of the ground with hooks, and they were hand-picked directly in the hop field.

The use of poles in hop fields represented the highest item of all the costs for setting up a hop field. In times of war or unrest, the poles were often confiscated by the army.

At the time of harvest, the hop plants were pulled down from the poles, bound into small sheaves, and brought down to barns and sheds where the hop cones were picked. Picked hops were dried in a very simple manner: in the sun on a swept yard or on wicker hurdles.

Almost every burgher house at that time owned a hop field, and the drying of hops took place, even up until the beginning of the 19th century, in specially adjusted lofts in these houses. This reality was reflected in the image of the roofscape and even in the current component part 02,



Hop poles after hop harvest placed in pyramids, Saaz hop growing region, early 20th century

in the existing built-up area of the medieval centre of Žatec, where many ventilation dormers have been preserved on numerous historic buildings. It has been proven by research that more than 80 % of all the existing roof spaces in the territory of this component part of the nominated property were used for the drying of hops. Proof is given by the specific appearance of the roof parts with low gables, extensive manipulation openings for the handling and distribution of hops into the loft space, and by the use of typical roof dormers, which provide better airflow, the "oeil de boeufs" (dormers).

In the 14th century, the trade in hops from Žatec began to reach very distant places. Bohemian trade with foreign or coastal Hanseatic towns used long-established connections and trade routes. The largest medieval hop market was established in Hamburg, called "Forum Humuli". Bohemian hops were also imported to this market down the river Elbe, and later hops were imported to Germany via an overland route, due to their light weight. Two important trading routes led through Žatec, the Royal Route (Královská) from Prague to Nuremberg, and the Northern Salt Route (Severní solná) from Prague to the Baltic sea, which helped the trade tremendously.

The component part 01 (Saaz Hop Landscape) contains the historic villages of Stekník and Trnovany. The village of Stekník is first mentioned in writing in 1389, Trnovany, in 1088.

The component part 02 (Žatec) was already at this time a residential centre with a strategic location and significant privileges. Essential town privileges, which were granted to Žatec by King Přemysl Otakar II in 1265, also included the regular prohibition of establishing pubs "within one mile from the town". This year can therefore be considered indirect proof of beer brewing in Žatec, and it can be assumed that the cultivation of hops in the Žatec region was also used to brew the local beer.

Back in the 13th century, a group of "právoavěrečníci" (holders of the right to brew beer) originated in Žatec and were concentrated mainly around the main square.

The first direct written mention of Saaz hops comes from the 14th century, and it states that in 1348 a Žatec burgher Albert sold his plots of land in the villages of Kole, Mlynáře, and by Stroupeček, including a hop field, to a Žatec burgher Jeclin nicknamed Bohatý (Rich).

At this time, hops were grown in Žatec both in gardens and on hop fields. As in other royal towns, Žatec brewed beer based on the so-called "beer brewing right" in selected burgher houses. In 1376, Charles IV confirmed "právo milové" (the right of miles) for the production of malt, brewing, selling of beer, and its drawing from taps in pubs.

2.b2 HOP GROWING DURING THE 15th–18th CENTURY

The establishment and expansion of towns in the High Middle Ages generally brought in a new era in the development of Czech hop growing. The increase of municipal brewing resulted in greater hop consumption, which led to the founding of further hop fields in all places

which possessed suitable conditions. The quality of beer improved, thanks to increased requirements for the quality of the ingredients, especially the hops. The increased interest of burghers in hop cultivation is, therefore, understandable.

There was a great demand for Saaz hops, which is why, according to entries in the town books, the area of hop fields near Žatec gradually expanded. At that time, more than half of the hop fields in Bohemia were in Žatec and its immediate surroundings.

The area of the nominated component part 01 was still used for agricultural activities; in the village of Stekník, a chateau has been mentioned since 1539, a fortress belonging to the Kaplíř family from Sulevice.

The centre of the area, the town of Žatec, which had optimal preconditions for growing quality hops and an exceptionally convenient location by the navigable river Ohře, which flows into the river Elbe, further expanded its hop fields. It also participated in the sale of hops both in the domestic and foreign markets to a greater degree. During this time, Žatec (Saaz) gave its name to the main hop growing area of Bohemian hops, and it became the center of knowledge for hop culture, not only for hop growers across the Bohemia but also from neighbouring countries.

In the 15th century, town councillors determined the ripeness of the hops and protected them from falsification and adulteration with foreign, coarse hops. They verified the origin of the hops with municipal or special seals and a written certificate, attesting that the hops were grown by the town and we profess to their goodness.

Attention was also given to the methodology for growing hops. One of the oldest instructions on hop cultivation was written before 1540 by Mikuláš Černobýl (1495–1556), a Žatec burgher and pedagogue of the Latin school. We find mention of Saaz hops and beer also in the works of the significant Czech Renaissance scientist Tadeáš Hájek



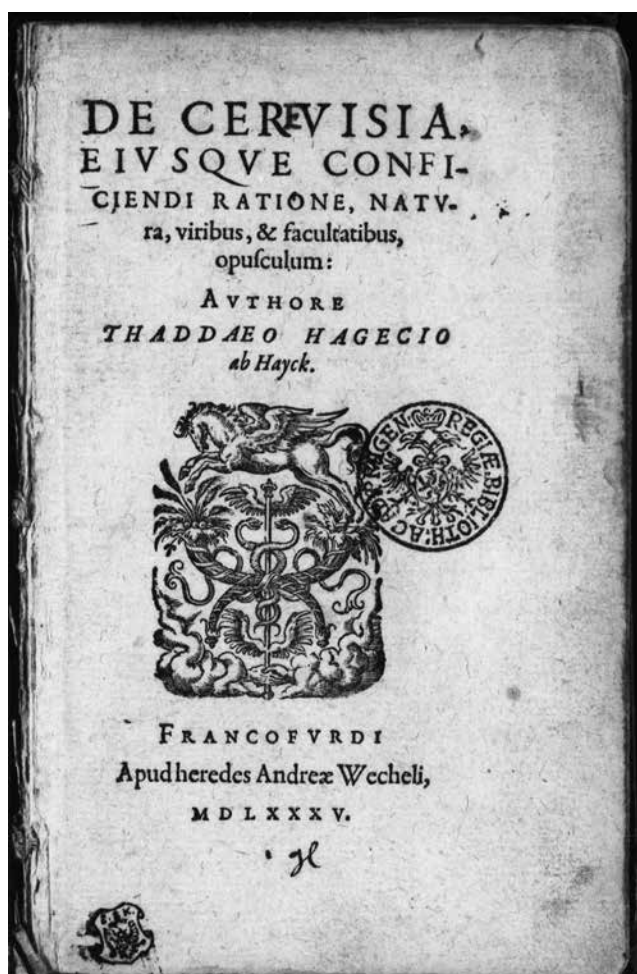
View of a hop field below the chateau, photo by J. Wara, Stekník, early 20th century

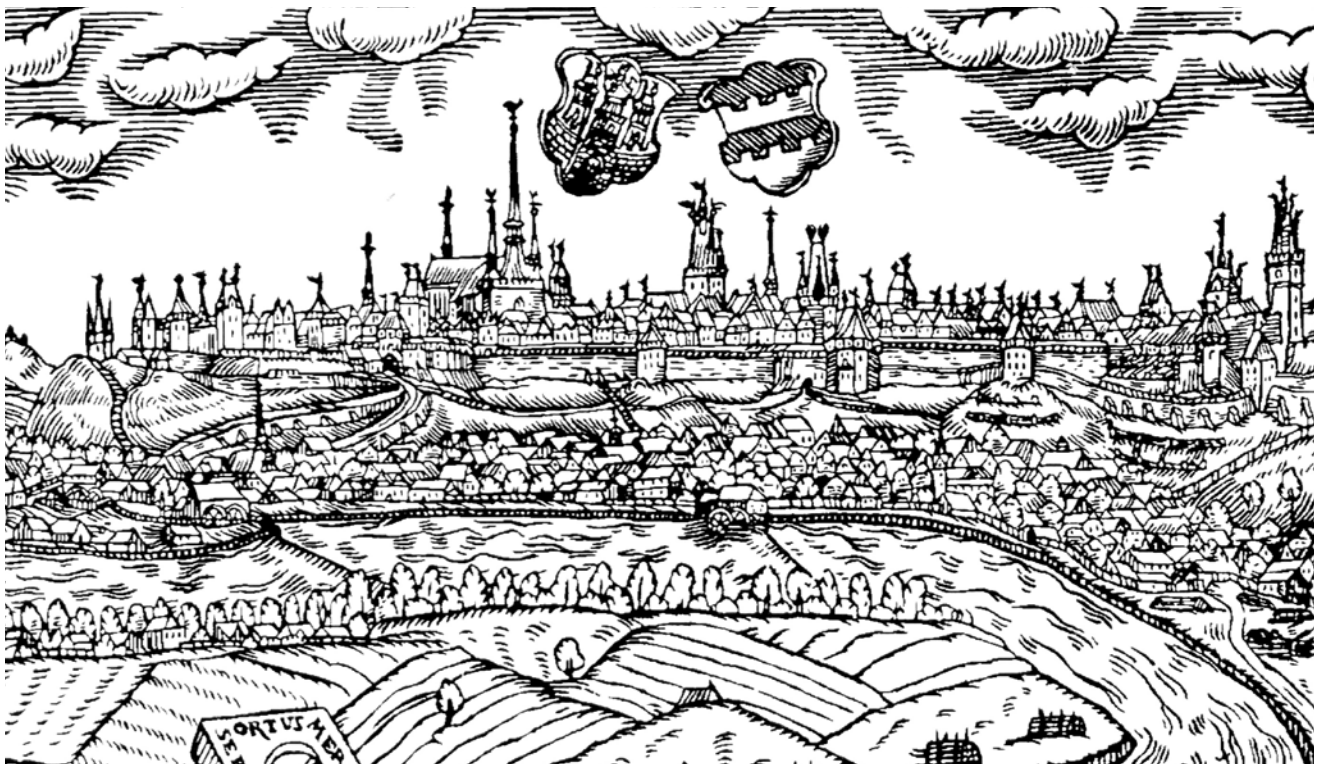


from Hájku, in his famous translation of Matthioli's "Book of Herbs" (Commentarii in sex libros Pedacii Dioscoridis), issued in Prague in 1562, he described Czech hops and methods for their cultivation in the supplements. In his other work, "On beer and methods of its preparation, its substance, strengths and effects," which came out in

Frankfurt in 1585, he made a laudable mention of Žatec beer called "Samec" (Male), that was allegedly supposed to strengthen masculinity.

In the first half of the 16th century, hop merchants from Žatec and hop growers created a special order for





winemakers and hop growers. This order gradually developed, and at a time when vineyards were ceasing to exist in the Žatec region, it dealt only with hop growing.

Written sources state that in the mid-16th century, 1,200 to 1,500 "strychů" (about 400 ha; 1 "strych" is approximately 0.7 acres or three roods) of hop fields were located around the town of Žatec.

A famous landscape engraving, from 1602, evidences the view of the hop fields around the town at the beginning of the 17th century by Jan Willenberg.³ The importance of the Royal town of Žatec is confirmed by the fact that it was captured by Willenberg in a series of vedutas of Czech towns. Some fenced hop fields on the outskirts of Žatec are depicted, others without fences, but all of them were with pole trellises. At the same time, Willenberg captured the piles of wooden poles stored in the hop fields over the winter, which confirms the practice that is generally associated with pole hop fields.

An important document from the second half of the 16th century is The Guild Order of Žatec, at the time still common to both winemakers and hop growers. Czech statutes (guild order, articles) consist of thirteen articles on the rights and conditions, the manner in which members are accepted, and of directives for a guild's activities. Up until 1645, the designation of a "hop grower" was regularly used in records instead of a "winemaker."

In the period after the Battle of White Mountain (1620) and the Thirty Years' War (1618–1648), the situation in hop growing was negative. It is estimated that in Žatec and its environs, the area of hop fields decreased between a fourth or fifth of its original size. Immediately after the war ended, the fields laid dormant, hop poles served as firewood to both the army and the inhabitants, and there was a lack of experienced workers.

However, Saaz hops did not lose their reputation as their quality was praised, for example, in the works of the patriotic Jesuit and writer, Bohuslav Balbín (1621–1688), as well as the exiled writer Pavel Stránský (1583–1657). The gradual rise in hop growing is proved in a significant document by the Austrian Monarchy, "Berní rula" (Tax Registry), which states that in around 1654, shortly after the war, there were 293 ha of hop fields in Žatec; and in 1757 there were 368 ha.

Bohemia produces the finest hops; the Žatec region is especially famous for that. It is exported in large quantities to Palatinate, Voithland, Lusatia, Bavaria, Meissen, and Hamburg for this reason, as Czech hops are very spicy and add to their longevity to beers.

In his book "De Oeconomia suburbia," Křištof Fišer deals with the cultivation of hops in the Žatec, Úštěk, and Klatovy regions in 1687, which proves that the cultivation of hops was concentrated in these areas.

³ Jan Willenberg (1571–1613) was the author of wood engravings, graphics, and drawings, which depicted a number of towns, castles, and chateaux in Bohemia, Moravia, Silesia, Slovakia, and Austria. His work has become a valuable iconographic source for the fields of historical geography and art history.



The Thirty Years' War was reflected not only in the landscape but also in the ownership of the fortress in Stekník, a knightly family of the Kaplíř family from Sulevice. According to other written registers after the Thirty Years' War, the village of Stekník was registered as devastated, only seven inhabited farmsteads and three desolate ones were recorded.

In 1681, however, the local chateau was bought by the burgher family of Jan Jiří Kulhánek, who already owned a hop field in Žatec at the beginning of the 17th century. They also expanded their business to hop fields in the vicinity of Stekník, which were known for their quality. The profitability of this business is also evidenced by the costly reconstruction of the chateau (For more, see the section on the Stekník Chateau).

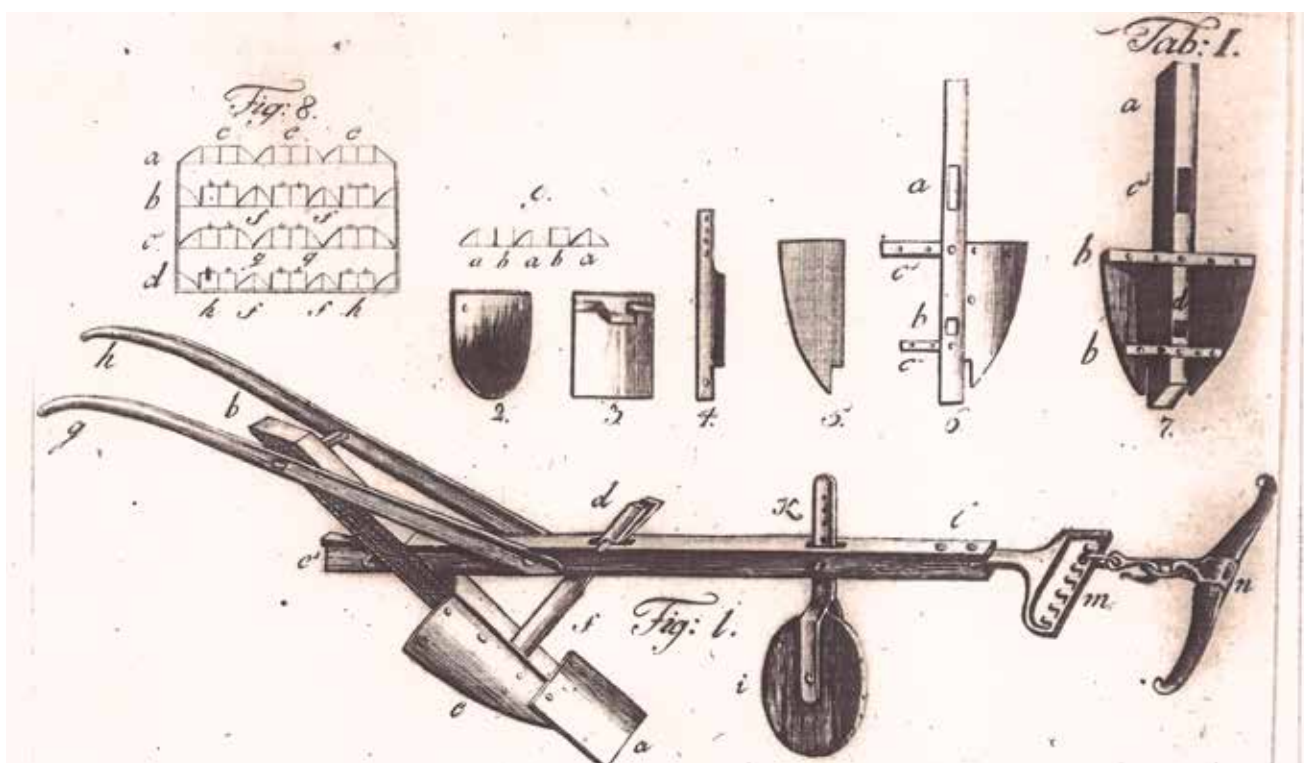
Like other territories of Central Europe, Žatec and its surroundings were looted several times during the Thirty Years' War by foreign troops of both warring parties. The armies of Saxons and Swedes repeatedly passed through Žatec. By 1654, out of the total number of 232 houses in the city centre, 79 are abandoned, nine demolished, and 42 burned down. There were 109 houses in the suburbs, of which 25 were deserted and 15 burned.

Müller's map of Bohemia from 1720, created by cartographer Jan Kryštof Müller, is the oldest map work, which fully depicts all towns and villages, but also manor farmsteads, castles, sacral buildings, inns, and other buildings in the open countryside. Müller's map shows that the country road did not lead through Žatec at this time, and the town lay between two road tractions. The Prague – Louny – Postoloprty – Chomutov – Saxony

roads led along the same route as in later periods. The second road, from Prague to Nové Strašecí and Řevničov, was roughly the same as later. Still, between Řevničov and Kadaň, it diverted through Mutějovice, Kounov, Sřem, Liběšovice, between Sýrovice and Pšov, Kaštice, Mory and Pětipisy. This route was later almost wholly abandoned (not even used as side roads). Very rarely, alleys or geometric landscape compositions are drawn.

Müller's map of Bohemia schematically shows several vineyards in the circle around Žatec (nowhere on the broader area is anything similar drawn). They cover practically the entire area between Záhoří, Velichov, the Hutná u Staňkovic valley, Bezděkov, Perč, Radičevy, Čeradice and Libočany. The legend of this map applied uniformly for the entire territory of the mapped countries depicts only the map symbol for the vineyard, so it cannot be completely ruled out that it could also be used to represent hop fields. On the other hand, it should be noted that the vineyard symbol indicates areas where hop fields have never been found and where conditions are not suitable for them, for example, in elevated positions south of the town. As for the vineyards, it would mean that at that time (in the first quarter of the 18th century), the vineyards around the town still dominated. However, this is in conflict with the fact that the Berní rula recorded only 33 winemakers with 8 ha of vineyards here in 1654. In the Ohře floodplain, not even near Stekník, but nowhere else in the vicinity of Žatec, there is no symbol of vineyards.

The professor of the University of Nuremberg, writer and historian Johann Heumann, published information about Saaz hops in 1759 as follows: "This is the unanimity



that Bohemia has the best hops and the best of them are born in the Saaz Hop Region." (Heumann, 1759).

During the 18th century, hop cultivation in the area stabilised, and technologies in cultivation and plant care began to develop. As early as the 2nd half of the 18th century, a very specific tool was invented in the Žatec region for cultivation and loosening of soil in the hop fields, the "žatecký percák, parzhaken," a type of a scratch plough. The plough helped to produce more effective cultivation of the hop fields and to increase the production of hops. The invention of the "parzhaken" was related to the development of row crops, in particular root vegetables, such as potatoes and beets, and hops, and to the changes at a time of transition from shifting cultivation to the crop rotation system. It was used until World War II.

The quality of Saaz hops was protected by legislation prohibiting the export of offshoots and hops. Hops intended for export had to be officially sealed. The oldest known certificate guaranteeing the origin of hops was issued in Žatec in 1774. These certificates were later numbered regularly for evidence and inspection and also to prevent their falsification. In 1796, a unique book was established by the Žatec municipal council, where every issued certificate of hops sales was recorded. The names of the seller and the buyer, the amount and price of hops sold, as well as the number of sacks and place of destination to where the hops were to be taken, were stated.

The development of the village of Stekník is documented by a record from 1784 of a fire that hit the village, which burned 15 houses and 5 barns. The economic success

of hop growing and trade is proof that the village was restored in a short time in a magnificent Baroque form, which due to its quality and state of preservation, was the reason that the village is now protected as a conservation area (for more information, see Chapter 5.b, 5.c).

Even the 18th century was not quiet from war; during the fights for the Austrian heritage (period 1740–1748), the town was occupied by the French and during the Seven Years' War (1756–1763) by the Prussians. In the second half of the 18th century, the town was also damaged by several large fires. In 1767, the town hall, along with the old documents that were deposited there, was also burnt down. The project for its renovation, in the Late Baroque style, was prepared by Johann Paul Loschy, who also took part in Baroque adjustments of many houses in the square. The town hall then underwent two more large remodellings, the last of which was performed in the mid-19th century.

One of the most valuable cartographic sources for the Czech lands is the so-called I. military mapping.⁴ For the nomination project Žatec and the Landscape of Saaz Hops, this mapping is of fundamental importance, confirming the specifics of the area with many hop fields and the logic in the selection for optimal illustration as a component part 01 of the nominated property. Within all currently active hop growing areas of the Czech lands, hop fields are drawn on the First Military Mapping only in the floodplain of the river Ohře and on the adjacent slopes between Lišany, Žatec, and Libočany. The most concentrated belt of hop fields was located in the right-bank floodplain of the river Ohře from Stekník through Trnovany and Bezděkov



to Tvršice. It was followed by a concentrated left-bank area of hop fields between Tvršice, Staňkovice, Velichov, and Žatec and smaller regions of hop fields near Libočany. East of Stekník at that time, there were no hop fields, except two hop fields below Dolejší Hůrky (towards Hradiště) and one small hop field on the outskirts of Lišany. The village of Stekník itself already existed to today's extent, including the chateau and other buildings. Another long narrow strip of hop fields is shown on the southern slope of the Pereč gorge (west of Trnovany). Smaller areas of hop fields are shown in this mapping only south of the village Holedeček and east of Liběšice.

Nowhere else in the Czech lands, neither in Rakovnícko nor in Úštěcko (i.e., areas where there are currently other growing areas in Bohemia – see *Chapter 3.2.*), are hop fields drawn on this map. This does not mean that they did not exist there at that time, but apparently they did not cover larger continuous areas, did not apply significantly in the image of the landscape and were not so important in terms of the interests pursued by the army leadership organizing this mapping.

The position of the Žatec landscape was, therefore, undoubtedly extraordinary at that time.

At that time, the imperial road from Lubenec already led to Žatec, leading through Vroutek, Podbořany, and Radičevy. Its further continuation through Žiželice and Havraň to Most and is drawn on the map in dashed lines, as being planned or under construction. The route of both sections has not changed to this day. The landscape was interwoven with a dense network of other roads of various qualities. The first military mapping, therefore, also shows the already stabilised communication network around Žatec, which still connects the town of Žatec with the territory of the nominated rural component part 01 and was undoubtedly used for the transport of hops from the countryside to the town of Žatec. This is especially true of the journey from Hradiště over the edge of Stekník to Trnovany (and further to Žatec). The road passed through the village square in Stekník, which branched out in three directions behind the village: to Liběšice, to Drahomyšl and Strkovice. None of these roads were later rebuilt and some have completely disappeared.

⁴ Bohemia was mapped in 1764–1768, but because the result was considered insufficiently accurate for military use, a new mapping of the northern half of Bohemia, including Žatec, followed in 1780–1783 - therefore (as far as is known) the original map sheets were not preserved. I. military mapping placed great emphasis on capturing the real image of the landscape because they were really to serve military purposes and show the conditions for the movement of troops and strategic details for the possible preparation of combat strategies or logistics. It goes without saying that all settlements are covered, including their ground plans, but also individual buildings in the landscape (mills, courtyards, solitudes, etc.). Castles, churches, but also chapels are drawn. Special attention was paid to capturing phenomena that had a direct impact on the movement of armies in the field: imperial roads, all roads, ponds, streams, floodplains, but also vineyards and hop fields, which, unlike other agricultural crops, formed a poorly permeable barrier. It is, therefore, the oldest map work that captures hop fields. The maps are hand-coloured, and the individual landscape component parts are easily distinguishable due to the different colours.

http://oldmaps.geolab.cz/map_root.pl?lang=cs&map_root=1vm

2.b3 DEVELOPMENT OF HOP GROWING IN THE 19th CENTURY

The end of the 18th century and the whole of the 19th century are significant periods in the development of hop growing methods in the Czech lands. The foundations of future hop technology started to form, as well as an expansion in production. Technological progress had arrived in hop growing and replaced the old empirical customs.

At the beginning of the 19th century, the trade in hops was in the hands of a significant number of both Czech and foreign merchants. Apart from large merchants, who bought from 700 to 1,000 "strych" of hops (490–700 acres), the registries also document some small merchants that bought 10 to 50 "strych" (7–35 acres) annually, so that they could speculatively wait for an increase in prices and re-sell the hops for a profit. Up until 1843, hops were not weighed, but measured according to units called a "strych" or also a "korec". This was both a surface and solid measure: 1 strych = 1 korec = 93 litres.

An important milestone in the future development of Czech hop growing was the absolute abolishment of corvée, forced labour exacted in lieu of taxes, in 1848, and thereby also of the bond of serfdom and patrimonial authority over serfs. This way, the serfs became lawful citizens, could become landowners, and they were able to grow hops on



Pulling out hop poles from the ground during the hop harvest, 18th century



Hop tokens

In Žatec, the engraving and stamping enterprise of Rudolf Lässig was active in hop tokens production. These hop tokens were circular, most often small brass plates with a diameter of around 32 mm. On the front, the name of the farmer, village, and street number were stamped. On the back of the small plate, its nominal value was stamped. This value usually represented a specific hop growing unit of volume, a "věrtel" (one-quarter of a "strych"). Czech hop tokens are unique material evidence that tells the story about a vanished human activity, the manual harvesting of hops. The historic documentary quality of an extensive collection of hop tokens is undebatable. They reflect the impact of world-historical events on a regional history from the end of the 19th century to the 2nd half of the 20th century. Such an extensive collection can be seen in the Regional Museum of K. A. Polanek (located in the buffer zone, south of component part 02), where a unique permanent exhibition of hop tokens, which currently consists of almost 1,000 items, was opened in 2001.

The "věrtel" is an old unit of measurement for bulk materials, and sometimes also a surface measurement. Its size was deduced from the size of a surface sown with seeds that would fit into one "věrtel". The Czech word "věrtel" comes from the German Viertel – which means "one fourth" since it was a fourth of the larger unit called "strych" or "korec" in Czech. The oldest "věrtel" was a unit with a capacity of 25 litres. Preserved hop tokens document this historical data with the values of $\frac{1}{4}$ or $\frac{1}{2}$ and also by measuring wooden containers that were used for weighing picked hops in the hop field. Later, a transition took place from the twenty-five-litre "věrtel" to a thirty-litre one (the exact date is not known).



their own land. This change significantly motivated and increased the number of new hop growers.

The share of rural hop fields in the Žatec region continued to grow, and in the 1860's it reached 80% of the area of all the hop fields in Bohemia. This development was contributed to by the fact that hop growing was one of the most characteristic crops of small-scale rural production. The value of hops, and thereby also its market price, depended, and currently still depends, on the careful execution of all the necessary agricultural processes, from spring pruning to harvesting and, to its thorough drying. All this could be done to a much greater degree, and quality, by smaller rural farms, rather than by the older patrimonial estates that used unqualified workers for its hop fields or hired farmhands. Therefore, from the 2nd half of the 19th century, the importance of the countryside increased, both for the total production of Czech hops and for its assertion on foreign markets.

The abolishment of the corvée duty, based on the number of days, also led to an essential change in the assessment of work performed during the hop harvest from "time-based" to "task-based." This resulted in the introduction of unique metallic "hop tokens" for the registration of work performed. The picker's earnings were established according to the number of hop tokens they received. At first, these were only metal clippings, from galvanized iron or brass, with imprinted initials of the farmer on them. Later, at the end of the 19th century, professionally stamped hop tokens were used.

Rotational tillage was gradually introduced in the fields in the 19th century, characterised by sowing methods that



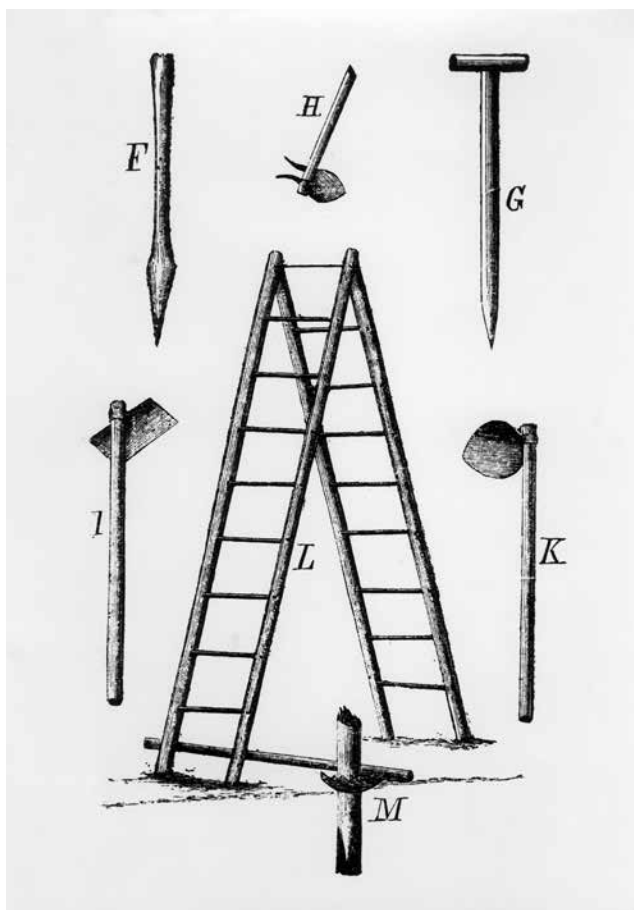
Wooden measure for picked hops "věrtel" with a capacity of 25 litres, Saaz hop growing region, end of the 19th century

maintained the balance and permanent productivity of the agricultural soils. Progress was shown in the sufficient production of fodder and an increase in the production of manure.

The introduction of new crops provided the impetus for the improvement of ploughing and cultivation tools. In 1827, a plough with a cylindrical board was invented, the swing-plough from the Veverkovi cousins, ploughs which turned the soil and could be used for heavy soil and to make deep ditches. This development reached Bohemian hop growing in the 19th century. The production of hops was then consistently separated from other agricultural production, and the most suitable soils were sought for



Set of hop tokens in the Regional Museum in Žatec, 2016



it, those which would be ideal for its effective cultivation. Hop fields with unsuitable conditions were closed, especially in southern and western Bohemia, from the Klatovy region to the Sokolov region.

Hop cultivation started to be concentrated only in areas in which the climate and soil were most suitable for the growth and development of hops. In these areas, hops are still cultivated today. The exceptionality of the Žatec region for hop cultivation, within the entire Austrian-Hungarian Empire, became even stronger.

A set of maps of the stable cadastre, which are the result of the first comprehensive cadastral mapping of the former Austrian monarchy, during the first half of the 19th century, is of fundamental importance for a detailed knowledge of the territory, which is the subject of the nomination. The mapping took place in Bohemia, Moravia, and Silesia in the years 1824–1843, before the beginning of the industrial revolution.⁵

Stable cadastre maps are the first completely accurate recording of hop fields, even the smallest ones. The

surroundings of Žatec and Postoloprty were mapped in 1843. While the areas of the vineyards are distinguished in pink, the hop fields are the same colour as other agricultural fields and are indicated not very distinctively by the symbol of hop poles. However, when inspected in detail, the extent of the hop fields is clearly visible.

The authenticity of component part 01 can be well documented by a map of the stable cadastre of the cadastral village of Stekník from 1843. It is the first truly detailed and entirely accurate depiction of the urban structure and built-up area of the village, including the chateau grounds. It proves that the current situation has existed almost unchanged to this day. The largest part of the cadastre covered the field, the smaller area the meadow. Hop fields were concentrated in the space between the village, the road to Trnovany, and the river Ohře. A dense network of field roads connected the individual parts of the cadastre.

Similarly, on the map of the stable cadastre of Žatec from the same year, we can see the urban structure of the northern part of the town and the communication network of all suburbs in the final historical form before modern interventions (except for the Prague Suburbs, which had yet to have a boom in construction at this time). In the area west and east below the Žatec promontory (ie, in the buffer zone), in addition to small gardens, there were also relatively concentrated areas of hop fields, of which only a small part has survived to the present day. Other hop fields are drawn in the wider vicinity of the town.

These maps of the stable cadastre show that compared to the situation in the 1780s, the area of hop fields in the vicinity of Žatec had increased significantly, and that hop fields had also developed in the Ohře floodplain east of Stekník, specifically around Lišany and Hradiště, and further east to surroundings of Louny.

The geodetic foundations and the maps of the stable cadastre themselves were subsequently used for a generalised representation of the individual countries of the monarchy in the form of II. military mapping at a scale of 1 : 28,800.

To get a clear idea of the extent of hop fields on a wider landscape scale, II. military mapping is more advantageous than maps of a stable cadastre, although its scale is less detailed. Although this map work was derived from the maps of the stable cadastre, it was also updated at the time of its creation. This is obvious when comparing the areas of hop fields again, for example, in the Stekník cadastre, which differs in both map parts,

⁵ The emergence of a stable cadastre was associated with the growing need of the Habsburg state apparatus to control tax revenues, which presupposed to capture all taxpayers and accurately capture the extent of their property. The maps are geodetically extremely accurate, and thanks to the scale of 1 : 2,880 (in urban areas also 1 : 1,440), very detailed. A separate "island" map was created for each cadastral municipality, which complicates their connection into a seamless form. The maps exist in three versions (so-called indication sketch, original, imperial print). Still, not all cadastral municipalities have all three preserved. (However, Žatec and Stekník and other municipalities in this area do). Maps are available online on the geoportal of the Central Archive of Surveying and Cadastre (ÚAZK) <https://archivnimapy.cuzk.cz/uazk/pohledy/archiv.html#>

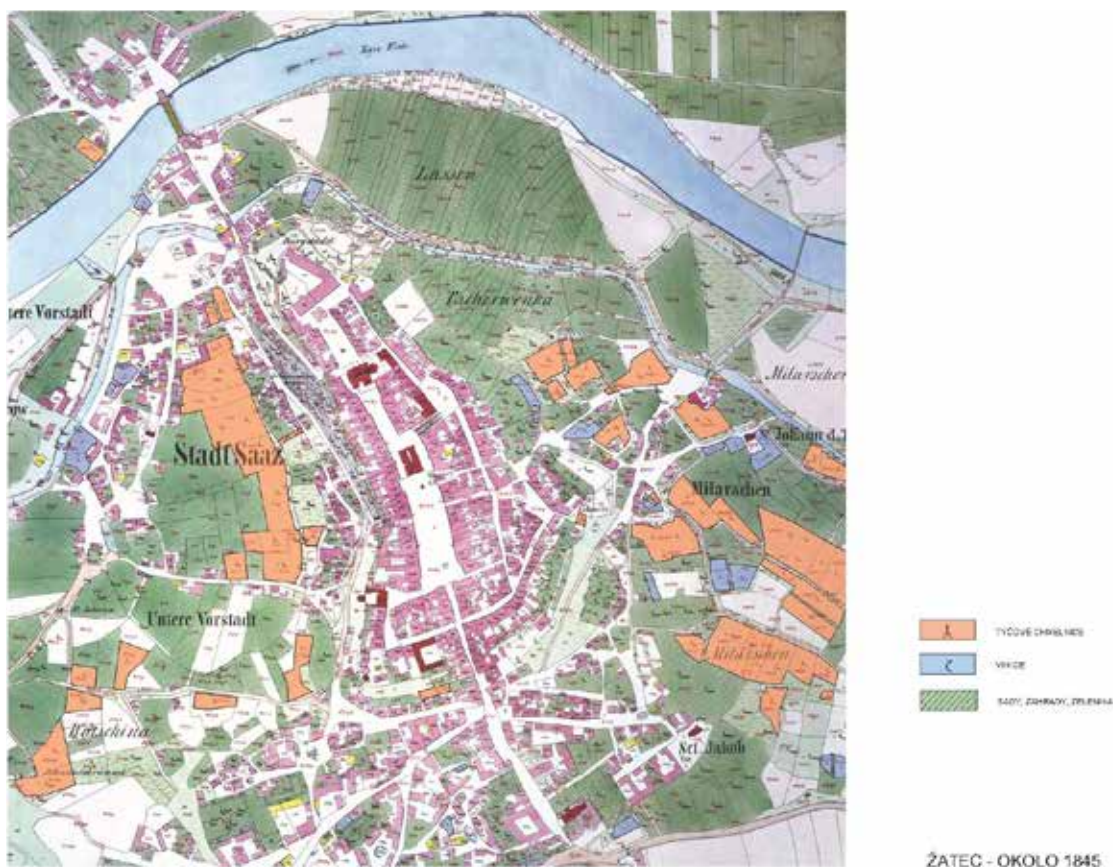
The most important part of the rural component part 01 on the map of the stable cadastre of the cadastral municipality Stekníč from 1843 (ÚAZK).
The areas of the hop fields are highlighted in brown compared to the original.



although not very significantly. This example can be understood as evidence of a development in less than ten years, which led to an increase in hop cultivation areas (although in some places, on the contrary, hop fields disappeared), but even more as evidence of the then instability of the position, and sizes, of hop fields in general. This is especially true of the then hop fields of wooden poles, which had to be renewed every year (as already explained above, the poles were pulled out of the ground at harvest and stored during the winter). Theoretically, therefore, the planted area of hop fields could differ from year to year. In fact, this was not the case, of course, because hops are a perennial plant that will last 20 years or more in the habitat.

II. military mapping (together with maps of the stable cadastre) proves that by the middle of the 19th century at the latest, hop fields occupied all suitable positions in the wider Ohře floodplain, in the belt from Libočany further east to the town of Postoloprty (and basically to Lenešice). Later changes in the area of planted hop fields in this area were relatively insignificant. If there was a major reduction at any time, it was only temporary. II. military mapping captures practically the same situation in the space of both component parts as contemporary maps of a stable cadastre. Due to the continuous display and medium scale, II. military mapping is, for a framework study of landscape structure, more advantageous. At that time, the imperial road from Lubenec to Most already passed

Map of the stable cadastre of the cadastral municipality Žatec from 1843 (crop) (ÚAZK). Compared to the original, the hops are highlighted in ochre. The map documents the tradition of hop growing even near the historic town centre.



through Žatec. There was also an important road from Cítoliby to Žatec through Lipenec, but its continuation towards Kadaň was limited to a short section west of Libočany. In II. military mapping, the central railway station in Žatec, and four railway lines leading to it were drawn. The first of them was put into operation in 1871, which proves that the railway was added to the map sheets later.

In other parts of the northern half of Bohemia, there was a significant concentration of hop fields in the middle of the 19th century, for example, in the vicinity of Hořtka

and Polepy (north of Roudnice nad Labem), where, however, no significant hop trade centre developed. In other Czech hop growing areas, there was a massive increase in the area of hop fields only in the second half of the 19th century. It was during this period that the territories that best suit the growth and development of hops with their climate and soil were profiled throughout Bohemia, and in which the areas of hop fields expanded significantly, or even were newly established. On the contrary, in other regions, hop cultivation was significantly reduced or completely disappeared (Klatovy region in southwestern Bohemia,



The territory of Žatec and the Landscape of Saaz Hops on II. military mapping (1842–1852), crop scale: 1 : 20,000. MAPIRE.
The railway lines were plotted in the map additionally.



Sokolov region). At this time, two main hop growing areas in Bohemia were defined: Žatec (where the red hop variety was grown) and Ústí nad Labem (with the green variety).

Since II. military mapping was no longer sufficient for the requirements of the army of the Austrian monarchy for accurate, and especially current, maps, in 1868, the Austrian Ministry of War decided for new mapping. Already in the years 1876–1878, followed in Bohemia, Moravia, and Silesia III. military mapping at a scale of 1 : 25,000. The elevation is expressed not only by hatching but also by contour lines. The original maps are colourful and very clear.

III. military mapping shows the shape of the territory of the nominated property at the beginning of industrial development, including the already stabilised railway. In addition to a further slight increase in hop field areas, the maps show the initial stage of the restructuring of the road network into a system of state and district roads. Žatec became not only a critical railway junction but also a road junction, which was very important for transportation from more distant places in the Saaz hop growing region, the development of which was just beginning. In the immediate vicinity of Žatec, they gained good road connections with the town of Staňkovice and Trnovany. Elsewhere, however, only old field roads still survived in the Ohře floodplain (Tvršice, Selibice, Zálužice, Rybňany, Stekník, Hradiště, Strkovice, Lišany, Levonice, Mradice and others). However, new wooden bridges over the river in Rybňany, Zálužice, Hradiště, and Mradice meant significant transportation improvements.

The most important factor that transformed hop growing into an agricultural industry was the railway, which reduced transport costs to one-eighth of their previous levels and accelerated the transport of hops at an unprecedented rate. It also enabled better supply lines to Žatec.

In the years 1871–1873, Žatec became one of the most important railway junctions in Bohemia. It gained the preconditions to maintain its position as the largest centre of hop processing and distribution. In contrast, its share in hop production itself decreased because further suitable areas for new hop fields were no longer available.

The extraordinary increase in the area of hop fields in Bohemia in the second half of the 19th century is evidenced not only by statistical data. While according to the data of the stable cadastre (before the middle of the 19th century), it was 4,336 ha, in 1907, the historically largest area of 17,280 ha was reached. It was then that hop fields arose in those areas where they still exist, albeit to a somewhat reduced extent. Ohře's floodplains were not affected by this increase because long-term continuity can be observed there when comparing individual mappings. But it was then that the establishment of hop fields spread, for example, in a large area south of Ohře, in the space between Žatec and Rakovník, which is already interspersed with forests, and from Lubenec to Nové Strašecí. Undoubtedly, a change in the drying method using hop kilns and the improvement of transport opportunities for quality certification in Žatec and other trades played an essential role in this.



HISTORY AND DEVELOPMENT OF HOP GROWING IN THE 19th CENTURY

Hop cultivation in a hop field also changed substantially in the 19th century. The traditional form involved treatment of the entire surface that was divided into rows each year. Young hop plants were planted in holes together with manure in marked places. In older hop fields, the plants were carefully trimmed. When the hops started growing, poles were driven in next to each plant, and the best offshoot was bound to the pole. Then it was watered, protected from pests, and during growth, continuously trained all the way to the end of the pole.

Special wooden pyramidal ladders with a supporting leg were used for this. If the wind knocked down poles, they were erected again.

At harvesting time, the plant was cut using a knife, about 1 m from the ground, and the pole was pulled out from the ground by a special heaver, a hook, together with the reeled majority of the hop plant. The hop bines were picked either in the hop field or sometimes were cut into smaller parts as they lay on the poles, and these were bound into small sheaves and taken into barns where the picking took place.

During the hop picking in the hop fields, the poles, together with the reeled hops, were taken down to prepared constructions placed at the edge of a hop field. Supports were gradually leaned against each other until they formed a one-sided wall, and the hop-pickers would sit below this wall. The pickers pulled the hop bines off the poles and picked hop cones putting





them into picking containers, wicker handbaskets, and back-baskets. After the container was full, hops were handed in at the hops measure, where the hops were poured into a container to be measured by věrtel, and a surveyor also inspected their quality.

For every handed-in "věrtel" of hops, the hops picker would receive a hop token. At the end of the harvest, and sometimes during the harvest, hop tokens were exchanged for money, while the price for one "věrtel" was always fixed beforehand. An adept and skillful picker could pick up to 35 to 40 "věrtels" a day. The picked hops were put into small sacks. They were not to be pressed or squashed, as they have a moisture content of 80 %, and had to be taken for drying as fast as possible.

Through the winter, the hop poles were left in the hop fields and stored in piles of lying or standing cones or pyramids.

The hop poles lasted for 10 to 15 years, after which time they were usually too short and had to be replaced by new ones. The shortening of the poles was caused by the fact that the end embedded in the ground rotted quickly, which is the reason why the length of the poles had to be trimmed, according to necessity, before their



Digging holes in the soil for erecting hop poles using an iron digging bar, Saaz hop growing region, the 1st half of the 20th century

spring bedding. The pole would often break in the wind, usually in the place directly above the ground, where it suffered from rot the most.

In the middle of the 19th century, there was a revolutionary change in the use of supporting structures in hop growing areas; this change significantly affected the nominated property Žatec and the Landscape of Saaz Hops.

The transition from poles to wire hop trellises was gradual. First, it started where they needed to replace the costly wooden poles with cheaper hop support for the hop vines, such as a wire. Mathieu de Dombasle made the first mention of the hops on the wire in 1837. Various cost-saving ways replaced the reduced number of wooden poles. At first two, later four wires were tied to one pole, so 3 to 5 plants could be introduced to such hop supports. This pyramidal system had numerous disadvantages, especially as the hop cones inside the pyramid were shaded. Therefore, a cross was later inserted into the top of such a pyramid, which eliminated this main disadvantage.

The next stage of development in wire constructions was the row-structured poles. The principle of this hop support was that wire at the height of 7–8 metres was stretched between two poles. The hop plants were tied to twine, which was attached to a wire.

Since 1850, a wired system with vertical poles connected in the upper sections by a wire trellis has been used. The current types of wire trellises were preceded by a whole development line, which was improved continuously by individual growers over forty years. Josef Schöffl tested



Construction of hop wire trellis

At the very beginning, the entire hop field had to be measured longitudinal and transverse rows marked, marker stakes placed in the positions of future poles and anchors placed. First, anchor pits were dug and fitted with anchor stones and anchor wires. For the base of the poles, holes were dug about 30 cm deep for the inner poles, 90 cm deep for the corner and frame poles. Drawn wire of various sizes was used to build the structures. It was delivered in coiled wheels and had to be stretched before construction. To get it tighter, a single-arm lever or a pair of strong horses were used. The straightened wire was cut to the required length. Some wires were terminated with trellises.

Making trellises required two skilled workers. It was quite a complicated procedure, which had to be repeated for each pole.

Before the erection of the poles, helping, seven-metre, rods with a hook and forks with spikes for lifting and supporting the poles had to be prepared. First, the front middle pole began to be raised. On the ground, a longitudinal wire and two front partitions were threaded with trellises on its head.



Erection of a frame column during the construction of a hop trellis, Saaz hop growing region, mid-20th century

The lower part of the pole was inserted into the hole, stepped on, and the poles were slowly raised to the appropriate position with the help of forks. To the left direction, the other front poles rose gradually.

Thus the whole front of the hop trellis was erected, and the inclined poles were tied to each other and supported. All other poles were gradually provided with trellises and wires in the exact order. These poles were no longer lifted, but pushed forward, bringing them into position with all the wires. The frame poles were immediately tied to the anchor stones. This continued throughout the plot to the other end. Two-arm levers with short chains, special pliers, and special wrenches were needed to strengthen the structure. After the strengthening was completed, the entire hop structure was made level.

Eventually, the row wires had to be attached. That was the only job done from the ladder. The wires were straightened with a light short two-armed lever.

The hop structure had to be maintained every year. In the winter months, mostly in January and February, the anchor wires were straightened by turning the rollers, the so-called "špačeks," using single-arm levers. It was also necessary to repair or replace damaged or rotten poles.

a new construction in Žatec in 1856. The Žatec wire trellis design was perfected by F. Wachtl in Hořesedly and further improved by Josef Heiyak at Dreher's estate in Měcholupy in 1884. Since the 1890s, the Saaz hop wire trellis has been widely used in the Czech hop growing areas, and in a short time, it spread abroad with some modifications.

The Žatec hop wire trellis differs from other wire trellises. Its frame or edge poles are inclined, which ensures greater stability of the entire structure erected on a hop field and its durability. This design required a sophisticated, anchoring system that has been constantly improved over the years.

Saaz hop growing thus became famous in the world not only for the excellent quality of hops but also for those specific structures on hop fields. It was the Saaz hop wire trellis that has taken over in many growing countries and still forms the basis of the hop field structures used today. The cost of setting up this type of hop field was 25–30 % lower than for the hop field of wooden poles-supporting the hop vines. At the same time, the hop plants had higher yields, and the hops were better (the plant did not have to be so high because the wire they grew up had a smaller diameter than the pole, and the sun could better reach the lower parts).

The impact of this transition to a new type of hop field was extraordinary in terms of the development of the hop industry. It has helped to increase yields because, as less room was needed, more plants could be planted over the same area. Labour needs also dropped because the bines did not have to be



Žatec hop wire trellis with typical inclined edge poles, Saaz hop growing region, early 20th century

manually "attached" as frequently as in the case of a pole field, also the poles did not have to be taken down and then set up again in the spring. A single harvester could pull down the same number of vines as several people under the previous system. The wire trellises also made it possible to start using teams of animals for cultivation, and later machines, even though this was slow to be introduced here.

Technological development in drying

Specific developments in hop drying processes have had an impact on building structures and their image associated with the processing of this crop.

Drying in lofts (roof spaces)

Since time immemorial, hops in the Czech lands were commonly dried laid on the floors using natural heat. They were placed in the shade, as it is a fact that the sun's rays decrease the potency of the hop substances desirable for brewing. Drying of hops was carried out in all usable areas and spaces of country farmsteads and other suitable structures.

In loft spaces within the roof structure, hops were spread in thin layers of only of 2–4 cm in depth. During drying, they were carefully turned over three times a day.

The repeated seasonal use for drying in the nominated property (both of the component parts) is proven both by the specific design of the roof structures with gables, large manipulation openings for shifting of hops into the roof spaces and by numerous typically shaped roof dormers which served to get rid of the humidity that was accumulated in the lofts during the drying.

The use of roof spaces for drying in component part 02 has also been attested by several other details, such as winches, counting inscriptions executed on wooden elements of the structure, and last but not least, the quality of the floors with precisely laid floorboards or brick tiles with specific barriers of the floor perimeter that prevented the hops from falling through to lower levels.

Hop drying using natural heat lasted for several days, it depended on the weather, and it required large spaces. That is the reason why new, more economical drying methods were sought. Some farmers also hung the hop drying trays in heated residential dwelling rooms. In 1858, the principal of the first Czech agronomical school in Rabin near Netolice, and agronomist and organiser, František Horský (1801–1877), started using drying on hop drying trays which were on stands. This method was adopted both in practice and through the expert literature of the period. At the end of the 19th century, rope hangers with loops for hanging hop drying trays spread in the Žatec region, replacing stands. They were arranged above each other in the same manner as in the stands. This way, handling the hop drying trays was made more accessible, and not as much space was needed. However, hop drying was still affected by the weather. In dry weather, the hops were dry in 2 to 4 days; but in wet weather, drying lasted up to 10 days.

The development in the cultivation of hops in the second half of the 19th century was reflected in the great construction development of farmsteads, which resulted in significant remodelling and adaptations of most existing buildings, including superstructures and/or their extensions.



A typical courtyard of a hop farmstead, where hops were dried in the attic, Trnovany, early 20th century



As early as the second half of the 19th century, there was a need to modify the hop drying process to ensure that the dried hop cones were of the highest quality. At the same time, efforts were made to ensure that the drying process took place over as short a time as possible and was less demanding of space. Various forms of accelerated drying processes were tested, for example, by placing hop drying trays with the hop cones near hearths, ovens, or chimneys. Written sources also document drying using specific constructions placed on the floors above the kilns in breweries or modified fruit drying structures. Around the middle of the 19th century, a number of changes were made that significantly affected domestic hop production. Having been released from their feudal duties (1848), farmers had more free time. They could devote themselves to the demanding work needed for the hop fields, which, at times of good harvest, brought extraordinary financial returns, far more than any other agricultural sector. The area cultivated for hop growing in the Žatec region, therefore, progressively expanded. However, it was limited by the lack of free space within the farmsteads, which could be used for drying during the relatively short harvest season. Therefore, alongside the expansion of the area of hop fields, the size of the buildings in the individual farmsteads also increased in the villages. Already existing buildings were raised by an additional storey, and during the harvest season, the entire floor area within these buildings was used for hops drying. But it was still not enough. Many farmers, therefore, sought additional opportunities for drying hops more quickly.

Following the example of England and Bavaria, from the 1880s, hop producers focused their attention on the introduction of a hot-air hop drying system; the hop kiln. Its benefits were obvious – it significantly accelerated the

process (from several days to a few hours, regardless of the weather). Moreover, the hops dried in this way were of better quality, the hops do not have to be handled so much, so they do not lose their specific powder, they have a better colour and the higher-quality drying allows them to be stored longer. A significant advantage was the reduction of the need for large floor areas for drying, so the hot-air drying saved both on space and labour. The newly developed specific drying structure resembling the hot-air drying vertical plant within breweries allowed the farmer to be sure the hops would be of high-quality and easy to sell. The economic benefits were unquestionable. However, the hop kilns designed according to the foreign examples used in the English or Bavarian countryside did not suit the extraordinarily successful and large-volume Czech production of that time. From the 1880s onwards, the quite specific buildings (or wings of buildings) comprising the hot-air drying facilities, with furnaces on the ground floor, began to occur in the Czech hop growing areas, inspired by the technical arrangements used for the kilns used for malt processing in breweries (This is why their description and the Czech term "hvozd" for such a structure runs parallel to this practice). Several types of these structures received official patents during this period. They differed mainly in the arrangement of the furnace and the method by which the hot air in the drying chambers was distributed. Such hop kilns, are also part of the nominated property.

At the beginning of the 20th century, Jan Linhart and Jan Vltavský perfected this type of drying structure. They provided the furnace with high-performing boilers. The heating pipes were placed in chambers at several levels of elevation in a diagonal direction and supplemented the ventilation duct system to ensure the continuous circulation of warm air. Metallic hops drying trays were

Chamber hop drying kiln with an evaporator on the roof, house No. 30, Dvořákova St., Žatec, 2016



usually placed at three levels, and also a mechanism enabling to extract hops mechanically was developed. This was they created an ideal system that reduced the length of the drying process from several days (between four and ten, depending on external climatic conditions) to only a few hours. Using this innovative solution, the new drying buildings, hops drying kiln buildings (in form quite different of "oasthouses" as we know them e.g. from the English Kent, significantly saved not only time but also expensive and demanding human effort. These specific Linhart or Vltavský patented hop drying kilns/drying buildings totally dominated the market during the thirty years of the 20th century. Thanks to their extraordinary efficiency, they were also exported to other hop growing areas in Europe (especially Bavaria).

The drying boom was extraordinary during the first decades – whereas, during the 1870s, the total number of hop kilns could be observed by individual units; by the 1920s, there were almost 5,500 such facilities in the Saaz hop growing region. Practically every village farm had its own hop kiln, and large estates could have two specific structures within the same farming entity. Seasonal demand for drying facilities from hop growers and general prosperity from hops became a significant determinant of the image of villages. Hop kilns were also built in the villages by members of the lower social strata, who themselves owned relatively small hop fields. Because of the difference in the purchase price for well-dried hops, it was even worth their while to build their own hop kiln because, in the high-hop harvest season, they could offer a capacity of their hop kiln for rent to other growers.

At the turn of the 19th century, the hop growing villages in the Žatec region experienced a period of exceptional building development. This was not only expressed through the construction of dozens of hop drying facilities over a relatively short period of time, but also the modernisation and modification of farms through which the hop growers demonstrated their wealth to the outside world. The massive construction boom of this period was not only dependent on a sufficient supply of bricklayers, carpenters, and roofers but also enough building materials. Another feature of these villages, prospering from the production and processing of hops, was the newly established lime works and brickyards from that time. The unusual building expansion and architectural beauty of these villages was also a subject of great surprise for many local and foreign visitors to the region. It was also reflected in the newspapers of that time. The village of Stekník perfectly represents the grandeur of village development of this period.

Technological development in subsequent processing (storage, sulphurisation, and packaging of hops)

The increase in beer consumption, as well as changes in the technology of its production in the mid-19th century, influenced the usage of hops and their production. As a result of this increase, new warehouses and hop packing



Rural hop drying kiln with an evaporator on the roof, attached to the barn, Saaz hop growing region, early 20th century



Sulphuring chambers

Sulphuring chambers with fine iron mesh floors were filled with hops from above until the conical pile of hops filled the chamber. It was closed with two steel doors, and special furnaces burned pieces of sulphur or sulphur flowers below the mesh. About half a kilogram of sulphur was used to preserve 50 kg of hops properly. The resulting sulphur dioxide permeated the chambers and the hops. After about 5 or 6 hours, open chimney flaps, and sometimes fans, were used to vent the chambers. The chimneys of the warehouse released the sulphur dioxide into the atmosphere. Žatec hop warehouses and packaging houses were built with brick chimneys, up to 45 m tall, precisely because of the discharge of sulphur fumes into the atmosphere. After treatment in the chambers, the hops were pushed out, using shovels, and packed into export sacks. The sacks were filled through a round hole in the floor, which had metal hooks around the circumference to hang the 180 to 200 cm long export sack. The sacks were filled, using a light wooden shovel, up to 40 cm in depth, after which a worker lowered himself into the sack to even out the spread using his legs. This process was repeated until the sack was full. The full sack, weighing about 60 kg, was taken off the hooks and moved, using a hand truck, to the storage space.

Pouring dried hops on the top floor of a hop warehouse and packaging room – the beginning of the process of refining the hops, Žatec, beginning of the 20th century



houses belonging to the hop merchants were built in Žatec, especially in the southern part of the component part 02. Jewish families began to prosper among the traders, bringing their names into the new companies: Würdinger, Kohn, Melzer, Christl, Pfister, Wüstel, Abeles, Stern, Epstein, Mendl, Grube, Zuleger, Bondy, Löbl, Glaser, Holy, Paulus, Hahn and Danzer, amongst others.

Older hop warehouses were mostly simple structures, sometimes with an adjoining residence of the owner. They were built using a technique commonly used for the construction of multi-storey burgher houses. Since the initial boom of hop warehouses and packing house construction in Žatec, there was an apparent trend in building warehouses with dry spaces large enough to allow the storage of large quantities of dried hops while also allowing for vertical and horizontal hauling, bagging, and pressing of the hops.



Pouring hops into the sulphur chamber in the hop packaging room and hop warehouse, Žatec, early 20th century

These warehouses mostly accepted pre-dried hops bought from the growing regions and villages.

In the storeroom, the hops were processed according to company traditions, or as requested by the growers. Bags of hops were hauled to the upper floors of the warehouse using manual winch elevators, both internal and external, for storage, after which they went through processes that took them gradually down through the building.

The warehouses used wooden floors because they retained the least moisture. The wooden floors of warehouses have been preserved in a large number of buildings, for example, in No. 1950. The outer walls were designed to insulate against heat. The windows were covered up, mostly with blue paper, to prevent sun damage to the stored hops. The warehouse had to be large because one quintal of stored hops takes up an area of 1.8 m². Each bale accepted for storage was sampled for testing.

The bales of hops were stored in rows with lanes in between for handling and checking their condition. Each bale had long probes stuck in at various places. These were used to check the temperature inside the bale. Twice a day, an operator pulled them out and held them against his cheek to check for an increase in temperature. The temperature increase is usually caused by high humidity or the activity of microorganisms leftover after drying. If the bale was too warm, its sides had to be ripped to increase ventilation. In some cases, the hops had to be removed to be redried.

To transport bales of hops along floors, the warehouse had various specialised carts and hand trucks. Iron hooks

with wooden handles were used for easier bale handling. For transporting loose hops, there were wicker baskets, lightweight wooden carriers, wooden shovels, and pitchforks. On the lower storeys of the warehouse, the hops were packed into export bales, which were branded with the company name.

Prior to export, the hops were treated in special chambers using sulphur dioxide to preserve them for longer. Sulphur dioxide was used to halt the development of microorganisms and to improve the shine and colour of the hop cones.

Unlike today, where the certification of the hops is done right at the warehouse, in the past, there was a separate building housing the certifiers. Transportation from the warehouse to the certification hall was handled by a special group of people, who established their own guild.

The warehouses were later equipped for pressing hops with mechanical comb presses imported from Germany. These were run using a four-stroke cylinder, gas engines.

The first modern hop packing and preserving house in Bohemia was founded in 1878 by J. & L. Kohn & company, in Žatec on what is now Tyršova Street, No. 250 (component part 02). H. Melzer installed the first electric motor to drive the presses. Only the warehouses of the Christl brothers were equipped with a steam engine. Even then, there were attempts at establishing refrigerated storage areas in the hop packing plants.

The last decade of the 19th century and the period before the World War I changed the appearance of Žatec and its inhabitants' way of life, which to this day is well illustrated



Refined, sulphured, pressed and packaged hops are waiting for the certification, warehouse and packaging room of the Zuleger company, Kovářská St., No.1232, Žatec, beginning of the 20th century



especially by the southern part of component part 02. Several dozen warehouses and packing centres sprung up as well as the chimneys of the sulphur chambers. The hop-related buildings imprinted a unique and specific character in this part of the town.

The development of the hop growing and processing sectors brought an increased need for certain trades along with the emergence of entirely new occupations. The rhythm of life adapted to the cultivation, processing, and trade of hops, which left an indelible mark on the fate of the people, the appearance of the close and distant landscapes, and the architecture of Žatec.

At the end of the 19th century, Žatec was a lively and economically important centre in northwest Bohemia. It was at the junction of two important railway networks (see below) that undoubtedly contributed to the rapid growth of the industry. The railway connection had a particularly significant impact on the transport and trade in hops. In 1900, Žatec had 15,900 inhabitants and 1,034 houses. 161 registered companies were dealing in the sale of hops, and there were 53 hop warehouses and packing centres. Two breweries complemented the industrial businesses of Žatec and the significant agricultural production of mostly hops, cucumbers, and vegetables. The development of hop growing around Žatec was also connected with the significant expansion of railway transport. Modern and high-capacity transport contributed to the prosperity of the area not only due to the transport of hops for certification or to resellers, but especially due to the provision of a coal supply for heating kilns and the transport of people who came to the countryside to pick hops. Each of the hop growing communities, therefore, sought to ensure that the line ran through their territory and that there was a railway station in it.

Hop certification

In 1833, when the Association of Hop Growers was established in Žatec, systematic certification of the origin of Saaz hops was introduced, limited only to hops grown in the town's cadastre. Bales with hops were sealed, and certification was issued. The first "Public Hops Certification Centre" was actually the town hall, where sealing was carried out on the ground floor. The town also benefited from the corresponding fees from this activity.

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Hop traders waiting for certification of authenticity of their hops in bales, the Public Hops Certification Centre, Chmelařské Sq., No.1612, Žatec, 1931



In 1837, the hop growing villages of the Žatec district were united for the first time, and hop categories were divided into the municipal, district, and regional. All the mentioned measures were supposed to protect the quality and reputation of Saaz hops.

When the Public Hop Certification Center of Žatec (No. 290) was founded in 1884, which was also supposed to be a crops stock market, most growers hoped for an improvement in the circumstances of hop growing.

The main task of the Certification Centre was to certify hops as "Saaz hops" for only those hops that were cultivated in the Žatec district. Hops were inspected and assessed with the participation of both growers and merchants. The Certification Centre used the basic terminology from the original hop growing market. Its duty was to inform the trading public on current prices of Saaz hops, but larger groups of growers were still preferred. The certification of hops was, in reality, still based on the goodwill of the growers, and this resulted in adulteration through the mixing of hop varieties. The falsification of official certificates of the Žatec Certification Centre was discovered, which led to a dispute between the producers and the founding of the so-called "peasant certification centre" in 1869. From that time, two parallel certification centres operated in the town's territory.

Trading in hops in the 19th century

In the mid-19th century, a pervasive change took place in the hop trade. In connection with the gradual

introduction of the railway (see below in more detail), the number of hop merchants in Žatec that used horse and wagons decreased significantly. "Hops magnates" was the name given to this kind of Czech hop merchants in Alpine countries. The introduction of the telephone and telegraph also enabled better and faster availability of information.

In the 1860s, the "hop growing commercial law" was instituted, which may never have been officially confirmed, but was rigorously observed. It divided the merchants into three groups: locals, commission merchants and exporters. The locals specialised in buying hops from the growers and the commission merchants mediated in hop sales for a commission.

At this time, the sales technique used also had a definite shape. Gradually, a transition was made from the original door-to-door way of trading to trade that was "purely capitalistic," taken from the trade customs of the Bavarian Trade Chamber. In this way, the number of local merchants decreased, and the trade was left in the hands of an increasingly narrower circle of merchants and exporters.

In the 1860s and 1890s, six large companies specialising in the hop trade originated in Žatec. The company "Martin Holly" (Holý) was the first of them. In 1889, the brothers Adolf Holý (1853–1905) and August Holý (1859–1906) founded a company for trading hops called



Storage of hops in wooden cases protecting it before transport to distant destinations loading cases from the hop warehouse and packaging room on Prokopa Velkého Square, No. 1952, Žatec, 2nd half 20th century

Training hop bines to hop poles using rye straw, photo J. Wara, Saaz region, 1st half of the 20th century



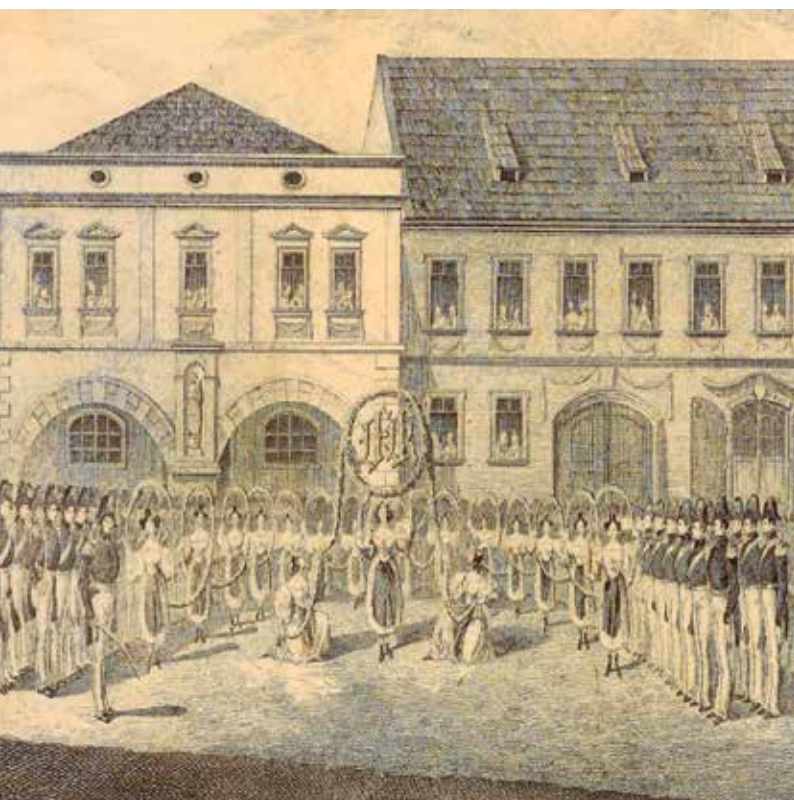
Period photographs

At the end of the 19th century and the beginning of the 20th century, the teacher, musician, and most importantly, excellent photographer, Josef Wara (1862–1937), was active in Žatec. This outstanding observer with a sense of continuity, created a very valuable collection of photographs over the course of three decades, paying special attention to Žatec hop growing.

A collection of photographs was created, telling the story of the work and troubles connected with the cultivation, processing, storing, and selling of hops. This collection has a unique value not only for Žatec and Žatec hop growing but also for hop growing all over Europe. There is no similar collection to be found in Europe. The glass negatives and the collection of these unique photographs are deposited in the Regional Museum of K. A. Polanek, in Žatec.

Hop dance for the Emperor

In the first half of the 19th century, Žatec experienced two visits from the head of the state. In 1833, the town was visited by Emperor Francis I and Empress Caroline. The official programme for the distinguished visitors also included the traditional hop dance (Hopfenkranzfest) performed by local girls. This dance then became part of official town festivities for many decades. It could be seen at hop festivals and on the occasion of other distinguished visits. Local girls also danced it for Emperor Ferdinand V and his wife Maria Anna during their visit in 1835. It was even admired by Archbishop Karel, who later became an emperor, during his stay in Žatec in 1910, at a big municipal and sharpshooting festival. Photographs have also been preserved from this event.



Hop – dance on the occasion of the visit of Emperor Franz I. of Austria with his wife Caroline, Žatec, 1833



"Bratři Holý" (Gebrüder Holly, The Holý Brothers), which was owned by Amalie Holá after their death. From 1896, František Kellner (1876–1933) worked in the company of "Bratři Holý" in various positions, working his way up to be a chief clerk. He became an important Saaz hop merchant and founder of a business dynasty.

In 1860, "Žatecký chmelný trh", the Žatec hop market, was established, which was active in the town up to 1879. It took place every Thursday, from October to December, whilst during October, which is in the main hop processing season after the harvest, it took place virtually every day.

In 1861, the Hop Growing Association bought the originally leased old malt house in Jakubská Street (today Tyršova Street in the component part 02) and renovated it for use as a marketplace. By dividing the hops into the municipal, district, and regional, the Public Hop Certification Centre was established, which sorted and assessed hops not according to quality, but according to the relation of the grower to the place where they owned land. Other hops, which also passed through the Žatec Public Hop Certification Centre, only received a certification of origin but did not obtain the Žatec market stamp.

An unjustifiable price preference for the "municipal," but in part also for the "district" hops, soon led to conflicts between the growers. Unhealthy relations formed between individual groups of growers, and this, in its final consequence, harmed Žatec hop growing as a whole. This wrong decision by the Hop Growing Association of Žatec was possibly advantageous in the long term only to a small circle of growers and the town but laid the foundations for lengthy disputes that were not to be dealt with for more than half a century, limiting the possibilities of Žatec and thereby, Bohemian hop growing in general.

By the end of the 19th century, the hop trade in Bohemia was in the hands of the German capital. A limited partnership company, which was established in 1861 as the first Bohemian hop growing trade association, became the foundation of the "První česká akciová společnost v Rakovníku a v Žatci," the First Bohemian Joint-stock Company in Rakovník and in Žatec, in 1898.

Along with the change in the market, other significant changes were closely related to the trade.

Railways as an impulse for changes in the hop trade

The railway connection with the city of Pilsen was particularly important, as already in 1842, a successful boom in the brewing of Pilsner type beer began, using Saaz hops.

In the 1870s, the operation of the Prague – Chomutov railway started, and the railway section on the track Plzeň – Duchcov was opened. In 1871, operation of the railway commenced on the section Lány – Chomutov, where Žatec is located, thus gaining a connection to Prague.

In Žatec, the Buštěhrad track and the other important track Plzeň – Most crossed, the latter started operating two years later. In connection with it, a railway station building in Trnovany was built in 1878. Based on the requirement for a railway connection from sugar and hop producers in the Žatec and Louny regions and the development of brown coal mining in Podkrušnohoří (a large area near the ridge of the Ore Mountains, northwest of Žatec), the Buštěhrad Railway track (in 1867 a functional system between Prague and Lány) was extended to the whole area. The railway meant a break in the existing method of the trade in hops, as this helped to reduce costs of transportation to an eighth of what they previously were. The new means of transport also significantly sped up exportation and provided protection against climatic influences on the hops being transported.

During this time the first specialised shipping companies were also established. The largest shipping company was the Eduard Fanta company which had special railway wagons for the transportation of hops.

The widening of market territories and higher demands for the quality of hops also brought changes in the packaging methods. The original linen cloth was replaced by jute in the production of the bales (sacks).

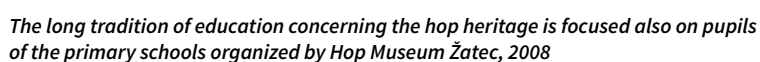
In the 1880s, metallic cylinders were used for a better and longer storage life. These were cylindrical containers made from galvanised metal with removable covers. Ship transport required storage of packed hops into tin-lined boxes. The main journey overseas led through Hamburg, and to a lesser degree, through Terst.



Hop warehouse and packaging room by Kaspar Danzer, built next to the Prague – Chomutov railway line, photo by J.Wara, Žatec, 1925



In 1895, the Winter Agronomic School was established in Žatec, mainly for future hop growing experts. The name was derived from the seasonal nature of the school since the school year started on the 1st of November and ended on the 31st of October, which was a rule up until 1954. The school still operates in Žatec today; it is one of the most important educational centres in the region in the fields of agriculture, ecology, and environmental protection. It continues to maintain the hop growing tradition, its good reputation being connected to the founding of hop fields. It is located in the buffer zone of the property as one of several "secondary attributes."



2.b4 THE FIRST HALF OF THE 20th CENTURY AND THE WAR PERIODS

Hop Market in Nuremberg which was destroyed during the World War II, 1920

In 1901, in the Žatec region, 9,218 growers were recorded. Including the largest producers, this represents an average acreage of 1.2 ha per grower. In the administrative area of Žatec alone, there were 487 ha of hop fields at the time, and 491 hop growers were registered there. The biggest surface area of hop fields was recorded in the second half of the 19th century, owned by J. Schöffl.

From the 1860s, there was a marked increase in hop field areas, especially in the rural areas (see above), and therefore, the town of Žatec started to lose its position as the leading hop producer. On the other hand, it maintained and strengthened its exceptional position as a major European hop trade centre. Small growers were increasingly more dependent on trade security of production uptake, and Žatec started to fully specialise in individual segments within the process of production and the trade of hops.

With respect to the volumes of hops traded, Žatec might have been gradually caught up by the hop growing market in Bavarian Nuremberg. Still, it surpassed its competition with the first-class quality of its hops. Under the name "Saaz hops," all the hops cultivated in the Žatec region started to be marked and certified, and the whole region profited from the prestige of Saaz hops, which were a highly requested trading commodity. Outside the European continent, Saaz hops was exported to North America in the 19th century. In 1901, the export of hops to Japan also began.



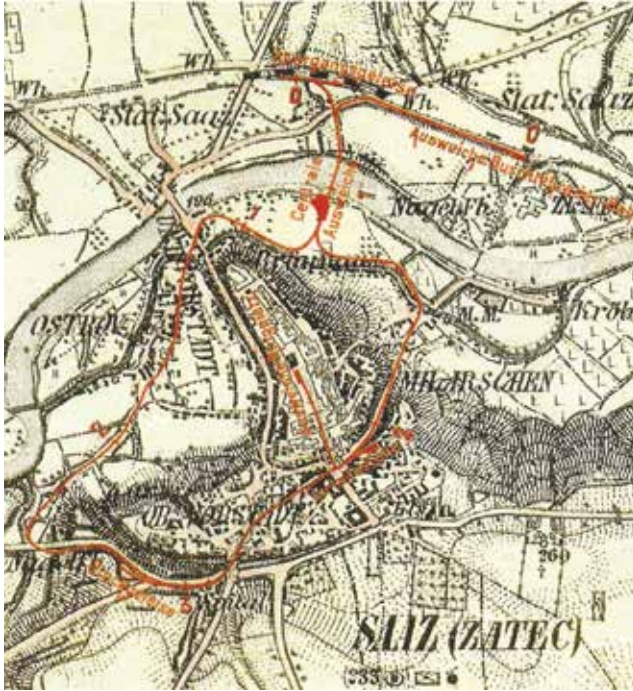
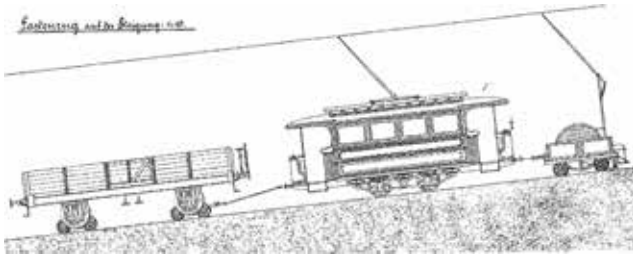
At this time, hop picking was still carried out directly in the hop fields. Concurrently with the increase in surface areas of the hop fields, the demand for a greater number of hop pickers grew. Large quantities of hops had to be harvested in a relatively short period of time, between 10 to 14 days when the amount of lupulin is at its highest in the plant. Providing that the required number of pickers was more than the local labour market could supply, seasonal workers came down or were brought down, from the wider surroundings.

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The hop warehouse and hop packaging plant of the Sonnenschein & Landesmann company in Zeyerova St., No. 1907, photo by J.Wara, Žatec, early 20th century

Drawing of a proposal for transport machines and a sketch of the planned freight railway for transporting hop bales to the rail, Žatec, 1898



The agronomical historian Zdeněk Tempír (*1926) states that during the years before World War I, between 60 to 140 thousand seasonal workers, hop pickers, were needed for the hop harvest in the Žatec region. The atmosphere of hop harvests before World War I is described engagingly by writer Egon Ervín Kisch in his report from 1910 called "Na chmel na Žatecko", Hop picking in the Žatec region. A number of photographs, with a harvesting theme from the first half of the 20th century, have also been preserved.

As already mentioned, in 1907, Bohemia recorded the highest acreage of hops till that point in time; 17,280 ha. The first provenance law was issued the same year, defining the grower communities and areas and put in place the voluntary grading of hops. The Žatec area was thus still divided into three groups: municipal hops, district hops, and regional hops. The municipal hops group only included the town of Žatec.

This division was amended in 1910, and the municipal hops group was abandoned. The Žatec Hop Growers Group and its two sections, namely Czech and German, had been gathering data and reports on the status of hop growing in Europe. The situation at that time was not good, especially the sale of hops which was facing problems. After a detailed evaluation of the situation and many discussions with growers, the Hop Growers Group



The idea of a central warehouse with a city railway

The town authorities, in cooperation with over one hundred hop traders, started to consider the construction of a central hop warehouse, which would be used to dispatch hops after customs clearance. They were looking for appropriate ways to connect hop warehouses, packing plants, and vegetable markets with the stations on the two railway tracks. The idea of establishing an urban freight and passenger railway line was discussed. Shipments of up to 50,000 freight wagons per year with passenger transport around the town were considered. The total length of the planned route was more than 5 km.

The first project was submitted in 1898, but the Ministry of Railways was very reluctant to discuss it. The main reason for their hesitation was the design, which was to use special cable constructions to overcome the steep streets between the railway stations by the river and the historic centre of Žatec (on the elevated position on the terrain plateau, see the description in Chapter 2.a.), along with the warehouses. In 1902, the town brought a new project, which was to deal with the segregation of urban rail lines for passenger and freight traffic. This track would have even had a spur to the Žatec town hall on the main square. The project was handed over to the town in 1903, and the Town Hall and governing bodies approved the project.

Its implementation was prevented after a thorough in site inspection of responsible officers and their analysis reported in 1905, which evidenced some of the problems of the project. The project would have required the demolition of several corner houses in the historic town centre, extensive landscaping would have been required and the whole implementation would have been very expensive. The hop and vegetable wholesalers found that the cost, at which they would be loading rail wagons directly at their warehouses, was unreasonable. Finally, not even the town could devote enough funds to the project, and the implementation of a freight tram system in the town was therefore abandoned. Due to the timely analysis, none of the planned demolitions took place, and Žatec continued to use simple transport carts and later the first lorries.

decided to convene the first International Conference of Hop Growers in Žatec on the 1st of September 1911. The aim of the meeting was to create a strong organisation amongst hop growers throughout regions and countries, a long-term creation of reliable statistics on areas and harvests of hops, and to create a "Hop Corporations Centre of Central Europe," with a view to further expand production areas, including overseas.

This conference and its conclusions encouraged further developments in hop growing in Europe. Still, in 1913 the promising developments were hampered by the exit of the German Association of Hop Growers and the shortly later event of the beginning of World War I. After the World War I, the so-called Central European Hop Office was established in 1926 in connection with the idea of the Hop Corporations Centre of Central Europe. Its activities were developed almost until the World War II, and its activities in the following period were followed by the European Hop Growers' Convention, which was followed by the modern International Hop Growers' Convention (I.H.G.C.).

In his publication *Green Gold* in 2017, researcher and historian Vojtěch Pojar summarised the position of Saaz hops as follows: "The rise of Czech hop growing, at the expense of German and Belgian, was particularly evident at the beginning of the 20th century. In Bohemia, hops were grown on 14,715 ha in 1910 Czech hops had, in addition to their quality, another significant advantage. It was extremely suitable for the production of bottom-fermented beer, especially Pilsner type lager. In 1884, 99% of our beer was already produced by the bottom fermentation process. In Germany, this process took place with a certain delay before the World War I. The change in brewing technology thus made Bohemia the fourth-largest centre of world hop growing in terms of hop area after the turn of the century."

CZECH HOP GROWING AND HOP GROWING IN ŽATEC FROM 1918 TO 1945

After the World War I and the disintegration of Austro-Hungaria, leading to the establishment of the Czechoslovak Republic, the initial situation for Czech hop growing was not simple. The area of the hop fields was significantly reduced during the war period. The 15,378 ha of hop fields in Bohemia in 1913 were reduced to only 8,540 ha at the end of the war.

The Žatec region focused on the renewal of its hop industry after the establishment of Czechoslovakia. However, an experienced workforce was scarce and the soil in the hop fields exhausted by the lack of farmyard manure, caused by a reduction in the number of cattle. Due to the insufficient workforce, the cultivation of the hop fields was neglected, and the hop constructions were not maintained. The war took its toll on the hop growing organisations as well, including the hop trade.

Members of German Agriculture Community on an friendly excursion in a hop town, Žatec, approx. 1920



In contrast, however, advantageous to hop growing in Žatec were great supplies of hops stored and unsold during the World War I, which could be quickly used in the post-war market. The trade was based on the traditional quality, goodwill, and popularity of Saaz hops.

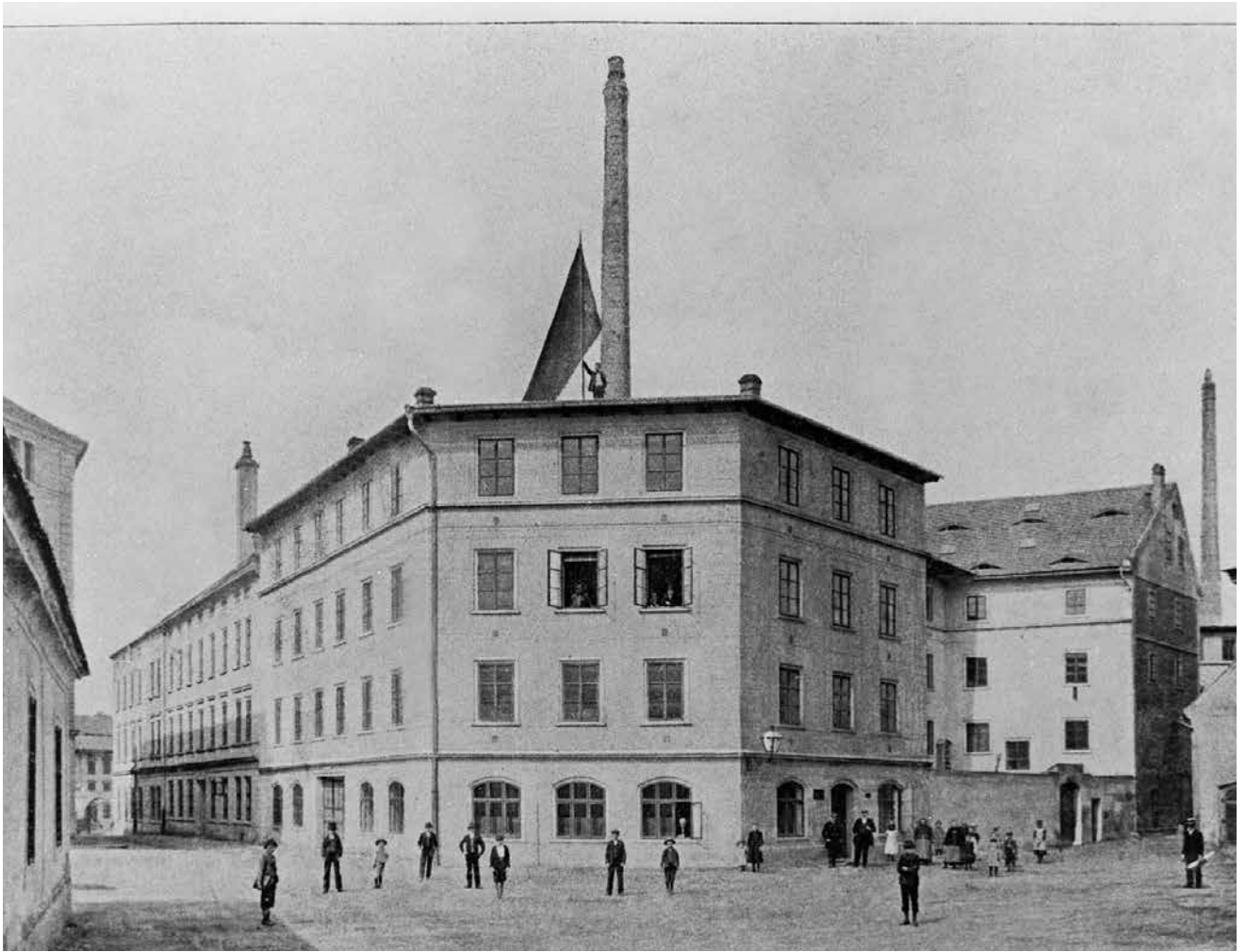
Gradually, the hop organisations were renewed, new basic structures to run the new state were established, and the activities of the professional hop growing institutions went back to normal. A new generation of hop growers entered the cultivation and processing industry.

The Czech and German section of the Hop Growing Union in Žatec, along with state administration, focused on the preparation of a law concerning obligatory hop marking.



57th Congress of modern I.H.G.C. in Slovenia, Ljubljana, 2019

Hop warehouse of Pfister & Wüstl company, No. 305 in Prokopa Velkého Sq., Žatec, early 20th century



Hop warehouse of Edmund Stern company, No. 1194 in Nerudovo Sq., Žatec, early 20th century

It was passed as the Provenance Act No. 297/1921 Coll. on 12th August 1921, and it was followed by a particular governmental regulation in 1922. The new legislation introduced unified hop marking. The marking of hop growing areas, which had only been optional before then, was changed by this Act to the obligatory marking of hop growing locations within the areas. The notions of the district and region hop were removed, and the category of "Hops from Žatec" was introduced.

The Czech Hop growing Society of the Czechoslovak Republic, earlier with the addition "for the Czech Kingdom," after a disagreement with the most significant hop industry organiser, educator and consultant Antonín Mohl (1859–1924) and his resignation from all his posts, elected its new executive in 1919 and started gathering suggestions and opinions from the hop growers and make proposals to act on them. The problems concerned were defining the hop growing areas, a specialised educational system, tariffs, and transit depots, amongst others. The Czech Hop Purchase and Sales Society founded in 1917, in Žatec, and its partner organisation, the German Hop growing Trade Company" (Die Deutsche Hopfenverkehrs-Gesellschaft), started to develop as well.

The Ministry of Agriculture, to further state-led agricultural research, founded the State Experimental Agricultural Centre in 1925, in the nearby village of Deštnice, which was renamed as the Hop growing Research Centre in 1936. In 1927, the significant hop grower, Karel Osvald (1899–1948), started to breed the original regional varieties of Czech hops. These varieties, later named as Osvald's clones, prevailed significantly within the hop growing areas and in Czech hop production in the second half of the 20th century.

The "Hop growing Municipality Union of the Žatec region" organisation, with a permanent seat in Žatec since 1891, was renamed as the "Hop producing Municipality Association of the Žatec region," or the shortened "Hopfenbau – Verband." In 1929, this organisation united a record number of 11,000 hop producers from 237 municipalities from the German community and 116 municipalities from the Czech community.

After a short period of consolidation in the post-war period, there was a short period of growth in cultivation, from 1923 to 1929, and the area of hop fields was enlarged. The hop field area increased to 17,264 ha in 1929.

Whereas the prices of hops reached their peak in 1924, when 50 kgs of hops was worth as much as 5,000 CZK, the prices of hop later began to sink due to the growth of production. Sales prices of hops in 1928 did not cover the expenses for their picking and drying. Later, due to a worldwide overproduction of hops, there was a dramatic drop in interest in hops. Subsequently, during the world economic crisis, from 1929 to 1933, there was a catastrophic drop in hop prices well below the production costs.

The crisis in Czech agriculture affected the hop industry to the largest extent, as it was mainly dependent on demand from foreign markets. There was an emergency situation for the hop industry in the Žatec region as local hops were exported at 60 to 85 % of their previous levels. The unfavourable situation further deteriorated due to the Prohibition Act passed in the United States of America.

The impact of the economic crisis on the Czech hop industry was, therefore, drastic. The hop growing area in 1929 of 17,264 ha plummeted to 9,856 ha in 1932. A collapse in prices took place, reaching their lowest level in 1931 when the average price for 50 kgs of hops was only 229 CZK. A certain part of hop fields were even left unpicked and were down cut and burnt in the autumn. The economic crisis increased unemployment, which lead to a drop in the purchasing power of the majority of the population. The situation deteriorated due to the forced procurement of hops and the introduction of high import duties in the states that used to import Czech hops on a regular basis, especially in Germany. In 1933, 150 hop traders were registered in Žatec. Only ten of them were Czech nationals.

Steam tractors with ploughs on the village square, Stekník, early 20th century



There was no demand for the highest-quality hops, and the warehouses in Žatec remained full. The prices of hops were rapidly changing, sometimes even from hour to hour. To resolve the crisis in demand, especially to monitor the prices, quality, and maintain the goodwill of the hops, the Czechoslovak Hop growing Syndicate Ltd. was established, with governmental support, after the harvest in 1930, with offices in Žatec.

The unmarketable hops was bought up, destroyed through the companies close to the Czech and German section of the Hop growing Union in Žatec, and the hop field area was decreased and later regulated. In



The educator Antonín Mohl among his students, Saaz hop growing region, approx. 1922

Door of a hop drying kiln of the Vltavský Rakovník company, Saaz hop growing region, beginning of the 20th century



equipment of agricultural farms producing hops. The main source of energy for the operation of tools and machinery, as well as the transport of materials in hop growing, had been manpower and the pulling power of horses and cattle. Combustion engines started to be increasingly used in agriculture, to run the stationary machines and drive the working machines in the fields and in the hop fields, and for the transportation of the fertilisers, harvest, and products.

The necessary hop growing tools were mostly manufactured and supplied by local smiths and some smaller production plants and factories, such as Hans Schuldes. A wide range of special equipment for hanging strings and wires on the hop field trellis constructions, little wolves, irons, squirrels, and cuckoos, were developed by the local craftsmen and businessmen. As well as these, there were aids to anchor the wires, tools for hop field construction assembly, devices for dusting and spraying against pests and diseases, water vessels and tankers, and sprays and suds. All these stages of innovation, in the development of hop fields and economic procedures, have been faithfully captured by the extensive collections of authentic objects and technological elements within the exhibitions of the Hop Museum in Žatec.

There was a great ongoing need for workers during the main harvest season. With new social and labour conditions, new situations and problems occurred during the hiring of pickers and the signing of work contracts. It was necessary to organise the remuneration of mediators, accommodation, transport, and boarding, amongst other things. Associated services were developed in the town, including accommodation capacities at different standards, and monetary services of the new banking institutions. All this took place during the economic crisis and in the subsequent period that followed.

After the beginning of the 20th century, hop drying in hop drying kilns became commonly used. The most frequent were Linhart's and Vltavský's drying kilns, especially in the Rakovník, Žatec, and Podbořany regions. In some regions, Löschner's drying kilns were used. These were soon modernised according to the Linhart system. In 1942, the number of drying kilns in the region was estimated at two thousand.

A drying technology, called Saazia that was produced in Bílina, was partially used. Kreisl's drying kilns, from Kněžves, or Václav Kurka's drying kilns, from Louny, were also common, and drying kilns with trays were used for hop drying for quite a long time.

Manufacturers produced drying kilns of various power and sizes to meet the needs of the growers, and they were later equipped with newer technical accessories. Such modernisation took place in the hop warehouses and hop packaging houses in Žatec as well. Hop sulphuring chambers were newly added and embedded, and they

total, 2,500 tonnes of hops were bought up and destroyed. A similar solution was introduced in neighbouring Germany.

In the interwar period, Žatec further specialised in monitoring the quality of its hops and trade activities; in the second half of the 1920s, a new hop marking centre was constructed, with storerooms, in Žatec. The building on Chmelařské Square (in component part 02) was ceremoniously opened on the 5th of October, 1929. From 1930 to 1931, an administrative building was added for the hop growing institutions. In 1932, thanks to the initiative of the German hop growers, a monument with reliefs of three significant German hop growers, who were organisers of the hop growing and agricultural societies in Žatec, at the turn of the 20th century, was erected on the premises of the marking centre. They were Hans Damm (1860–1917), Theodor Zuleger (1858–1929), and Josef Fischer (1852–1941).

Further progress was made in the field of hop cultivation when new specialised ploughing blades were developed for the new wire trellis hop fields. In the 1920s, pest-spraying was introduced; it was first animal-drawn and then motorised.

As well as innovations in hop drying, there was rapid improvement in the technical and the motorised



were simultaneously used to redry the hops delivered from the countryside for storing. Multi-storey buildings were gradually equipped with electric lifts and hydraulic presses.

The protection of hops constituted as an independent field of activity in the interwar period. The findings from natural and technical sciences were systematically used and applied in hop growing and processing. After the severe demand crisis, the self-governing hop growing organisations came to recognise the inevitability of risks to hop growing and trading. Gradually, suitable domestic and international institutions, securing a decrease in potential risks for growers and traders, were formed. Last but not least, there was a significant trend in the interwar period of replacing the people and animal labour force with engines and various mechanisms during hop growing and processing. An Act concerning obligatory hop marking and processing, and the extent of hop growing, passed into law in Czechoslovakia in 1934. It was a consequence of the need to prevent a crisis in production and demand in the hop industry in order to boost Czech hop growing and make the hop growing areas more precise.

According to this law, any hops grown in the specified areas was subject to obligatory marking, marked according to their area of origin, and certified by the public marking centre of that particular area. This duty was imposed regardless of whether the hops were to be exported or used domestically. The authorities of the public hop marking centre in Žatec and in the eastern part of the today's Ústecký Region in towns of Úštěk and Dubá watched and inspected all areas of the hop trade itself and the hops route from the grower to the consumer.

The first marking, of the locality origin of the hops, was conducted directly in the hop growing villages, where the officials of the marking centre attached seals containing their official printing and marking labels stating the country, region, municipality and common number to the sewn-up bales filled with dried hops. For every such sack and accompanying list, a weight certificate was prepared. Other technological procedures, or actions, on hops marked in this manner, such as drying, sorting, sulphuring and repackaging, could only be performed in the hop warehouses and hop packaging rooms of the hop traders, such as can be found in the nominated property in Žatec, and only with the consent, and under the inspection of the marking centre representative.

The particular marking centre and other monitoring authorities had the right to enter the hop warehouses and hop packaging rooms at any time and inspect the documentation, so as to detect whether prohibited hop adulteration was taking place.

When the hops in the packaging room and hop warehouse were ready for dispatch to the brewery, they received the compulsory certification marking from the marking centre, as well as a seal with a particular stencil printing. The certificate, which was a written document, included information about the production municipality, variety, sulphuring, repackaging, and total weight, of the hops, as the certificate could be issued for as many as 50 pieces of packaging filled with hops.

In 1938, František Zima (1883–1961) and Václav Zázvorka (1903–1976) released a publication called "Hop growing" intended as a textbook for economic colleges.

With the rising power of the Sudeten German Party (SGP), the requirements of the members of the German section of the Hop growing Union in Žatec intensified. In June 1938, the SGP won the municipal elections in Žatec. The countryside that was peaceful up until this point saw an outbreak of conflicts between the Czech and German growers, which was soon joined by the traders as well. In 1938, the German traders and purchasers initiated a full boycott of the Czech growers, and after the harvest at the end of that summer, they bought hops solely from SGP members. When they did purchase from Czech growers, they forced them to offer prices incomparably lower than those offered by German growers, as well as to mark the hops and issue weight certificates in German.

After the Munich Agreement in 1938, the Czech border regions, including that of Žatec, became part of Germany, and in the same year, most of the Czech population left Žatec. The wealthier local Jewish population had already emigrated earlier during the 1930s, fearing future developments. After the annexation of the border regions of the republic, the so called Sudetenland and their affiliation to the Third Reich in the autumn weeks of 1938, only approximately 4,120 ha of hop fields remained within the remaining territory of the republic, and later in the German Protectorate of Bohemia and Moravia, from March 1939 (The two other hop growing Roudnice and Tršice regions remained intact).



Dr. Karel Osvald (1899-1948), the leading Czech expert and hop breeder with his famous clones, Saaz hop growing region, approx. 1940

The Nuremberg laws restricted Jewish growers and traders from the Žatec hop growing economy. Their property, hop warehouses and hop packaging rooms, unless they had been sold or handed it over earlier, was taken over by the German trade companies in Žatec. This concerned about 60 hop warehouses and hop packaging rooms worth 60 million CZK in the former currency.

During the World War II, there was a significant reduction in the size of the hop growing area. The hop industry, along with the whole agriculture and national economy, was subject to the needs of the Third Reich.

In the occupied territory, the hop growing areas were linked to the organisational structures of the Third Reich. In the Protectorate of Bohemia and Moravia, the Czech agricultural organisations were abolished or integrated into the Agriculture and Forestry Association established by the occupying power. The "protectorate hops" was not allowed to be imported to the Third Reich. The area of hop fields in the Žatec region dropped by nearly one quarter from 8,756 to 6,682 ha from 1938 to 1945. This area was strictly monitored, and no grower dared to exceed the given area and number of hop plants due to severe sanctions. At this time, "Osvald's clones" became known to the wider body of hop growers (see below in the Chapter Hop growing research), namely clone No. 126, which was more productive and more resistant to the hop disease called downy mildew. It was, therefore, typical of this era to plant this clone amongst the more common Žatec hop.

During the war, a ban on establishing new trade bodies was in force, and therefore no new hop growing companies were founded. The hop trade stalled, and exports basically came to a halt.

HOP GROWING RESEARCH

In spite of this difficult period, some crucial moments and events for the Czech hop industry also occurred, affecting its development for a long time afterwards. The endeavours of the specialised employees of the Agricultural Research Institutes under the Ministry of Agriculture in Prague, and the university agricultural educational facilities, helped to lay the foundations for further hop growing research, especially during the World War II.

In particular, the hard work of the leading Czech grower, Doctor Karel Osvald, a senior lecturer at the university, led to the constant refinement of hops through the individual selection of propagated clones from the highest-quality population of the regional varieties from the Czech hop growing areas, as well as the monitoring of their qualities and suitability for growing. Shortly after the war, in the winter of 1945, Dr Karel Osvald applied for the recognition procedure of a selection of clones of the "žatecký poloraný červeňák" variety, semi-early red-bine hops. This concerned clones Nos. 31, 72, 114, and 126.



The first Hop Harvest Festival - The Dočesná

The main and oldest traditional event is undoubtedly the Žatec Dočesná. In its beginnings, the Dočesná was only a celebration in the courtyards, at most in the villages or of individual owners of hop fields.

The origin of the hop harvest festivities can be traced back, according to the documentation of the current organiser, to the Middle Ages. It meant saying goodbye to the hop harvest. Even when the hops were grown on poles, the most beautiful of the last remaining poles on the hop field was chosen and decorated with ribbons, a garland of hops, and finally, a colorful scarf was fastened to it.

The decorated pole was placed on a carriage. Gradually, the celebrations became more massive and moved to the main centre-Žatec.

According to surviving depictions, a similar town celebration took place as early as 1833 during the emperor's visit. The Hop Dance for the Emperor thus preceded the Žatec Dočesná. The first such festival, after World War II, took place in 1946. In 1957, the Dočesná was recognised as a national celebration.

The Žatec Hop Harvest Festival has been held every year since then, and it has become one of the most celebrated events in the Czech Republic, with its importance spreading outside the region's borders. As it is tied firmly to the end of the harvest, it is usually celebrated at the end of August or the beginning of September. The festival was only cancelled in 1968.

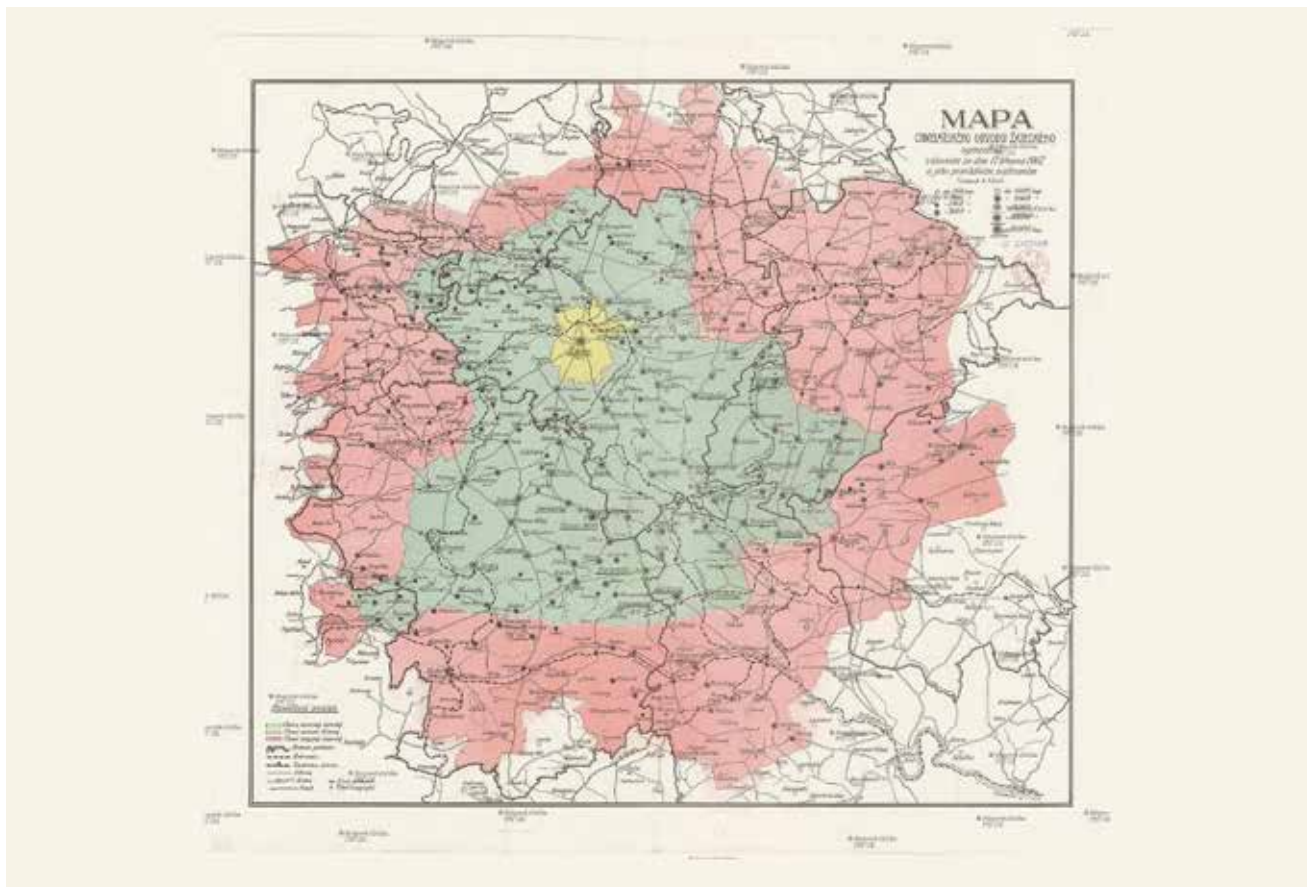
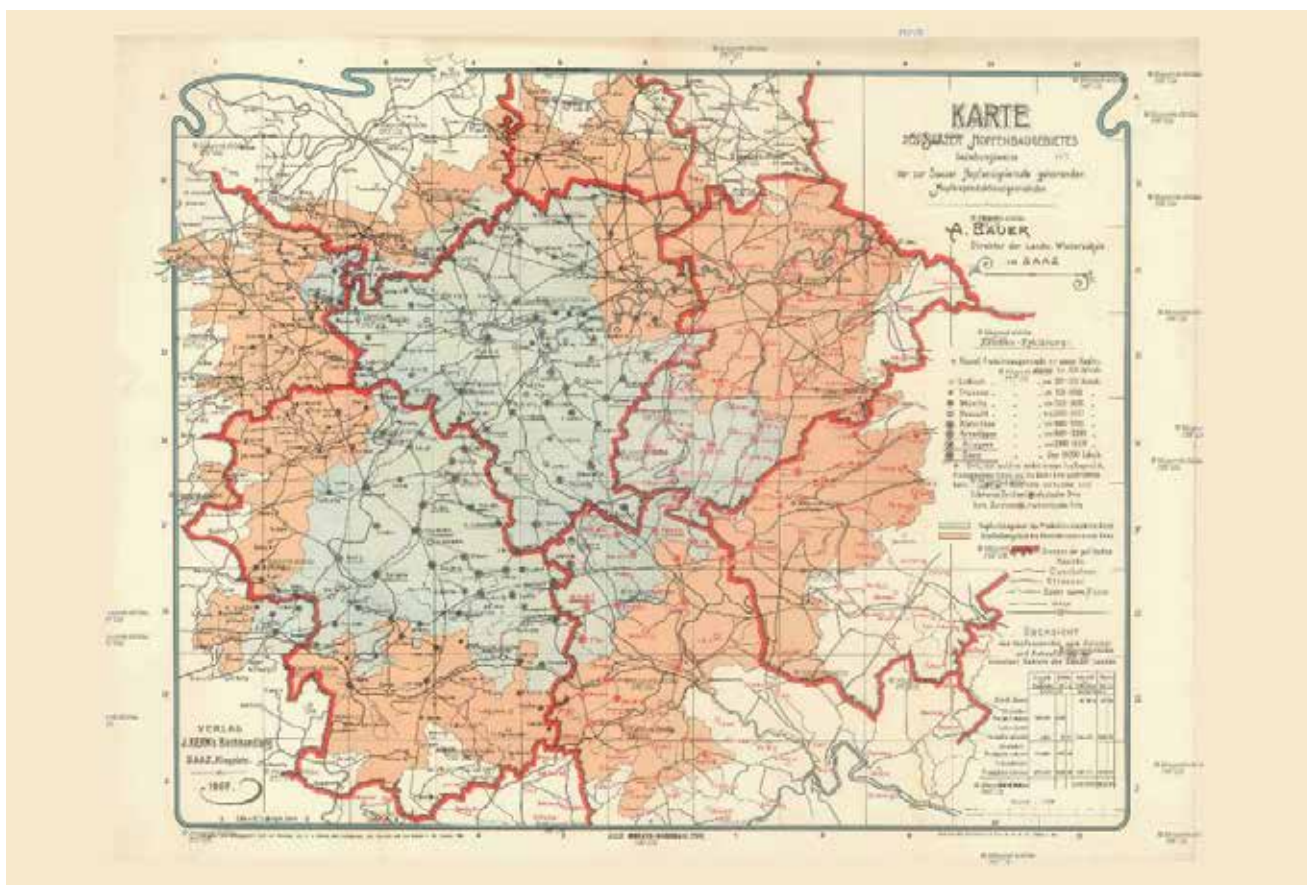
The Dočesná also got into artistic circles. Many posters were illustrated by the well-known painter of hop motifs, Oskar Brázda: such as in 1959, where under a drawing of a globe dressed in a garland of hops, it says: "THE WHOLE WORLD IS WAITING FOR OUR GREEN GOLD." More about Žatec Dočesná is Chapters 2.a and 2.b.

Hop growing research began its development in this region back in the inter-war period, in the period of the First Czechoslovak Republic (1918–1938, see above). The State Research Agricultural Station was founded in Deštnice near Žatec in 1925 and since 1936, it was active as the Research Hop growing Station. After the annexation of Sudetenland, it was relocated to Rakovník in 1939, and after World War II, in 1947, it returned to Žatec. In 1950 it was renamed; the State Hop growing Research and Cultivation Institute. Shortly after this, in 1952, the Hop growing Research Institute was founded in Žatec, 1070 Studentská Street. Dr. Osvald, one of the founders of hop growing research, worked in Žatec; he had been engaged in the cultivation of original Czech hop cultivars in Deštnice since 1927.

Other internationally recognised experts in the hop growing field were also heads of this institute, such as Ctibor Blatný, Lubomír Vent, Antonín Šrp, and Robert Kellner. In 1974 a new premises for the research institute on the western periphery of the town was built and equipped. It was also completed with experimental hop fields on small plots, for the scientific verification of the procedures and results of hop cultivation. The area was also equipped with a microbrewery for brewing tests of the cultivated hops (Regarding its certain remoteness and recent architectonical nature, it does not form any part of the nominated property, however, it is part of the buffer zone and can be considered as an additional attribute).



Poster for the Dočesná, Hop Harvest Festival in Žatec, author Oskar Brázda, 1958



The example of historical map documented dividing hop prices into three levels, the highest one was urban (yellow), then district (green) and regional (red), 1907

After social changes in Czechoslovakia following 1989, the Hop growing Research and Cultivation Institute was changed to the Hop Research Institute Co., Ltd. in 1992. Specialists of the institute are engaged actively in specialised events related to the presentation of Žatec hops, including this nomination project.

The institute has been working at a high scientific level for several decades, and it performs a series of traditional activities for the lay and expert public, including beer tasting. It also participates in the programme of the traditional festival at the end of hops picking season in Žatec - the Dočesná.

Land cadastre and other cartographic sources for capturing fluctuations in hop production in the interwar period.

The stability of the position of hop fields and their extent can also be observed on maps of the 20th century. However, the general development of the changing size of hop fields, including the area around Žatec, is very difficult, if not impossible, to document cartographically. This is due both to its dynamics and especially to the fact that from the 1780s to the 1840s, no map work was created that would capture the state of the territory in a fixed (short) period of time and in sufficient detail.

The relatively detailed maps of the stable cadastre (see above) were followed by new cadastral maps practically only after a hundred years, after the establishment of Czechoslovakia (1918). They were processed for individual cadastral areas at different times.

On 16th December 1927, Act No. 177/1927 Coll. z. a. n., On Land Cadastre and its Management (Cadastral Act). The technical level of the newly created cadastral maps (land cadastre maps) has reached an unprecedented level. In built-up parts of towns, the replacement of the map base on the basis of maps of the stable cadastre began with a modern, detailed, and accurate display, usually at a scale of 1 : 1,000 or 1 : 2,000 (Cadastral Act No. 177/1927 Coll. 46/1971 Coll., On Geodesy and Cartography). Maps of the land cadastre of individual cadastral municipalities (and thus created at different times) were merged into a seamless cadastre layer after 1989. To this day, it is a primary source for understanding the development of the landscape and settlements.

The interwar cadastral maps document both the stability of the urban structure of all parts of the nominated property, namely the town of Žatec and individual villages, and the modern urban development, which was most manifested in Žatec. They also show the completion of the system of district roads, which finally intersected the floodplain with the largest areas of hop fields, the area of the component part 01. The more important road here became the road from Trnovany to Hradiště. The country roads from Stekník south to the east remained

Academician Ctibor Blatný (1897–1987), our most important phytopathologist, Žatecko, approx. 1930



less important country roads. The maps also show the location of newly built technical structures for hop processing and other purposes.

2.b5 HOP GROWING AFTER WORLD WAR II AND IN THE SECOND HALF OF THE 20th CENTURY

After World War II, the organisation of hop growing changed significantly. During the expulsion of German inhabitants, the German hop growing enterprises were confiscated. In this respect, the Association of hop growing producers in the Žatec region was particularly active, with its offices in Louny. The Public Marking of Hops and the Property of the German hop growing companies passed into Czech hands. The Cooperative of Hop Producers was founded in 1945.

About five thousand hop growing firms had around 30 administrators, which was not practical. The Ministry of Commerce, therefore, introduced a united administration for the 27 hop packaging rooms and warehouses in 1947. A Central Hop growing Commission was also founded in 1947.

Hops as an attractive commodity in the view of international business, including the chance to acquire payments in scarce foreign currencies, was important

Seasonal workers at the conveyor belt of a hop picking machine of the type ČCH3, Stekník, around 1965



Hop-Grower's Day with Dr. L. Vent, Stekník, 1970s

in the time of the Czechoslovakian socialist economy after 1948, and emphasis was, therefore, fortunately, still placed on maintaining the production and organisation of hop growing. The Purchasing Stock of Hops, a state enterprise, was founded in 1952, the Hop Growing Station in 1954, and the Hops Purchasing Enterprise was founded in 1958. In connection with changes in the rural economy, where private ownership was suppressed, the whole structure of hop growing changed towards mass production and the mechanical picking of hops. However, most of the objects for drying, storing, and packing hops, were utilised continuously due to their quality and utility properties, and this helped in their preservation.

In 1963, academician Ctibor Blatný stated in the literature that only in some locations, where hops grow and ripened, they give a product of exceptionally high qualities. One of such locations included Czechoslovakia. The concentrated cultivation of hops only in certain areas is the result of a process that has lasted for centuries. This concentration must be understood comprehensively. It was decided not only by the conditions of the area but equally and inseparably by the variety of hops, the method of cultivation, and knowledge of cultivation.

Only all these factors together lead to the cultivation of high-quality Czech hops, the quality of which is unattainable elsewhere.

The main change, which was significantly reflected in the landscape in the second half of the 20th century, was the transition to large-scale production and machine picking of hops. In 1943, a hop picking machine was first tested in Žatec. Around the 1970s, manual picking of hops has almost completely disappeared. Since then, the harvested hops have been transported to large utility hall buildings, the so-called "česáren" (hop-picking rooms), built in almost every hop growing village. Here, picking is performed automatically on a picking machine. This has speeded up the whole process, and the work can take place even in bad weather. On the contrary, many village farmsteads throughout the region fell out of the entire production cycle, subsequently fell into disrepair due to many factors, and many of them disappeared.

CARTOGRAPHIC SOURCES TO CAPTURE THE DEVELOPMENT OF HOP GROWING IN THE SECOND HALF OF THE 20th CENTURY

In the 1950s, aerial photography of the state was completed (begun in the 1930s), which is the only one to fully capture, for example, the resulting historical division of the agricultural landscape just before the stage of the merging of land and disturbing its dividing landscape elements. These images were georeferenced with extraordinary accuracy in a seamless form. However, the photography took place in different months of the growing season, which is why it is often difficult to distinguish the areas of hop fields in the images.



Detail of aerial photo on the part of the component part 01: Development of the village of Stebník in the southern part on an orthophoto map from 1953



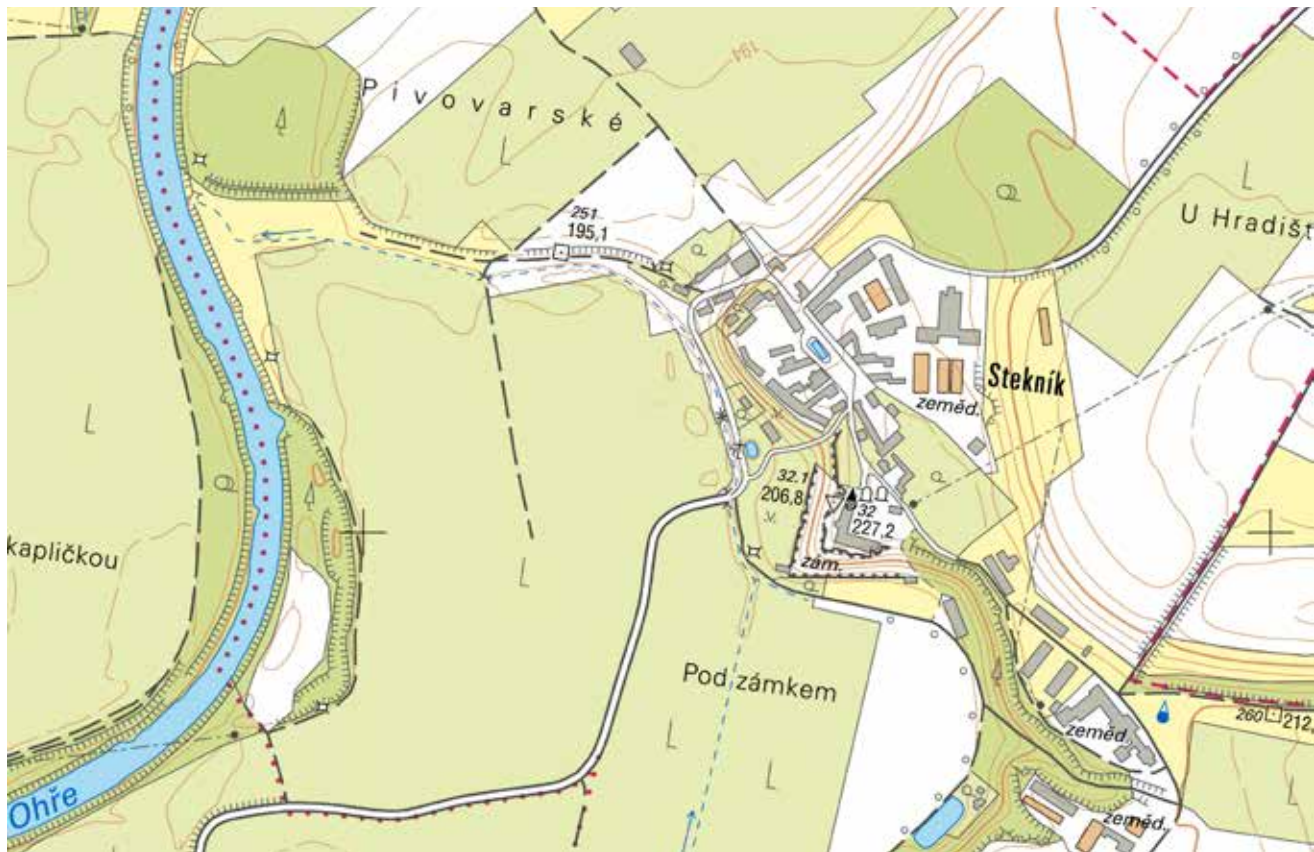
Orthophoto maps were created more or less simultaneously with the military mapping of 1 : 25,000 (in the case of Žatec in the same year 1953), so they enable mutual comparison of both sources, ie, the real image with its cartographic interpretation. The pictures show very well the development of settlements (especially the roofscape). You can also distinguish the ruins of buildings at that time (buildings without roofs or demolished) when after a demographic change, many buildings that had fallen into disrepair and other details that even the more detailed map does not capture.⁶

In the 1960s, a colour military topographic map was created for the then Czechoslovakia at a scale of 1 : 10,000 giving details of depictions of landscapes and settlements that were not available until then. Hop fields are shown here really clearly. A great benefit is also the determination of the type of agricultural construction related to it (hop kiln, hop picking plant, JZD-United Agricultural Cooperative, STS/machine tractor station, etc). The time of the creation of the

map makes it possible to compare (in comparison with the map from the 1950s) what changes have occurred in the landscape and settlements in the past 10–15 years, that is already in the changed social conditions.

In the area of the component part 01, however, not many changes can be traced in this period, as the whole area is long-term stable both in terms of landscape organisation, including hop fields, the settlement network, and the size of individual villages. More significant changes are noticeable in Žatec, especially with regard to the north-south road stretch. The extent of hop fields within the town has already been significantly reduced. The Lower Suburb is captured at the very beginning of mass housing construction. Due to the marked factory chimneys, a dense network of industrial hop kilns is clearly visible in the Upper (Prague) Suburb (individually and elsewhere). The map makes it possible to distinguish brick buildings (orange-pink colour, similar to the maps of the stable cadastre) from wooden buildings (yellow).

⁶ In the second half of the 20th century, the unhappy situation in the field of cadastral maps and registration of private rights to real estate deepened in the then socialist Czechoslovakia, which continued even after the adoption of some laws. New land maps were gradually made on the basis of the results of technical and economic mapping - THM (1961–1981), later based on the results of the creation of a large-scale basic map - ZVM (1981–1992). The comprehensive establishment of real estate records (KZEN), during which the current legal relations to real estate were ascertained and recorded, took place in the years 1964–1988. The use of these sources to understand the development of the landscape and settlements is possible, but due to the fragmentation of the material and different times of origin difficult and not very effective. For this purpose, it is possible to make better use of other cartographic sources, available nationwide and from a relatively short period of time, in addition, relatively regularly updated. However, the archiving and availability of current digital vector map works has not yet been resolved.



Since 1950, State Map 1 : 5,000 – derived (SMO5, SM5) was published. This map is very important in terms of depicting the landscape because it contains a distinction between basic cultures, including hop fields. Its advantage is both a practical scale and a focus on capturing the topographic situation both in the landscape and in settlements, including phenomena that cadastral maps do not capture.

CARTOGRAPHIC SOURCES FOR CAPTURING THE CURRENT STATE OF HOP FIELDS

After the year 2000, the conversion of older state map works into a seamless digital vector form was completed and made available online on the Internet. For understanding the current structure of the territory, this state is optimal and incomparable with the past.

The surroundings of Stekník as an example of the detail of the available depiction and stability of the landscape of the component part 01 on the current cadastral map (2020), including the symbol for hop fields



Detail on the current orthophoto map. The differentiation of hop fields is not always easy with regard to imaging in different periods of the growing season. However, the basic structure of production areas is visible).



Currently, the system called ZABAGED (Basic Geographic DataBase) is the most important. It is a digital topographic model of the territory of the Czech Republic.

ZABAGED is commonly available in standardised cartographic processing, which also includes hop fields. In addition, as a digital vector map work, it enables the creation of specific thematic previews, for example, with an emphasis on hop fields.

As of January 1, 1993, a new legal regulation came into force in the Czech Republic, on the basis of which the Real Estate Cadastre of the Czech Republic (CN) was established. The CN integrates the function of the former land register and the former land cadastre into a single instrument. At present, the currently valid state map of the real estate cadastre is available online both within various geo-portals (not only ČÚZK), but also as a WMS map service, and the use and ownership of individual plots can be studied remotely for various administrative and research purposes.

Especially for the understanding of the current or recent state of the landscape (orthophoto maps, now commonly available on geo-portals or as WMS map services, are of fundamental importance (not only in the Czech Republic). The geo-portal www.mapy.cz contains, in addition to the current orthophoto map, also other time layers since 2003, so it is possible to monitor changes in the landscape in a very operational way over almost 20 years. The ČÚZK geo-portal also offers an even longer time span of orthophoto maps.

Additional layers plastically depicting terrain modelling are a specific feature of the map. Shading (CENIA) is suitable for maps of smaller scales, while for larger scales, digital relief models based on laser scanning are optimal, especially the latest model of the 5th generation. Using these modern tools, the landscape in which the nominated property and its buffer zones lie is also shown. From this form of depiction, we can see especially the significant conditionality of the location of hop fields by modelling of the terrain, respectively their location in the floodplain, in the vicinity of Žatec, and in the rural component part 01. This feature is not prominent enough on regular maps.

Historical and current mapping has shown that the landscape of the nominated property Žatec and the Landscape of Saaz Hops represents the most important and most concentrated area of hop fields in the Czech Republic. It also shows unprecedented stability, not only in terms of hop fields but also in the distribution and size of settlements, communication networks, and land cover. It has also been proven that it is the oldest landscape of hop fields in the Czech Republic, which has existed in this form since the second half of the 18th century at the latest.

The amendments mentioned above to confirm the authenticity of hop fields in the nominated property were carefully studied in the process of preparing this nomination documentation, and the topic was also discussed with the cooperating Faculty of Architecture of the Czech Technical University. In 2019/2020, a diploma project Žatec Hop Growing Landscape around the Stekník

Chateau, was written. There is paid great attention to the historical development of this landscape. With great effort, the author of this diploma project, Ms. Klára Bohuslavová, prepared a series of maps depicting the distribution of hop fields in the period from the second half of the 18th century to the present, which deepen the above-mentioned historical context of defining the extent of hop fields in the nominated property. The maps below in this chapter thus confirm all the above conclusions. We see that a very concentrated area of hop fields between Stekník and Trnovany existed already on the I. military mapping (1780–1783).

In the following period, until the middle of the 19th century, the areas of hop fields both in this area and in the surrounding area expanded significantly. This situation lasted almost until the middle of the 20th century. It was then that the cultivation of hops experienced a significant crisis as a result of the events of the war and especially after the war. The result was a reduction in the area of hop fields in the broader floodplain of the river Ohře, except Stekník. Here, hop fields existed either continuously or were restored after a short decline. The result is the historically largest concentration of hop fields in the area between Stekník and Trnovany and the expansion of hop fields to some previously unused areas in the past, going from the north to the east of Stekník. This proves both the extraordinary stability of hop fields in the component part 01 and the development of this tradition in the recent past, and present.

The diploma thesis also includes a probe verifying the historical memory of the landscape within component part 01. Reconstruction of the landscape in previous

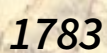
periods (before the 1980s) is extremely difficult, as it cannot consistently rely on cartographic sources in the necessary detail (see the explanation of the maps above). The work complements the historical data described above and was based on written sources, especially records of land use in the nationwide registers such as Berní rula and Tereziánský cadastre. These sources make it possible to obtain a relatively real understanding of the area of the total acreage of hop fields in individual cadastres. Exact reconstruction of these hop fields on the map is often impossible, but for this nomination documentation, an illustration was obtained.

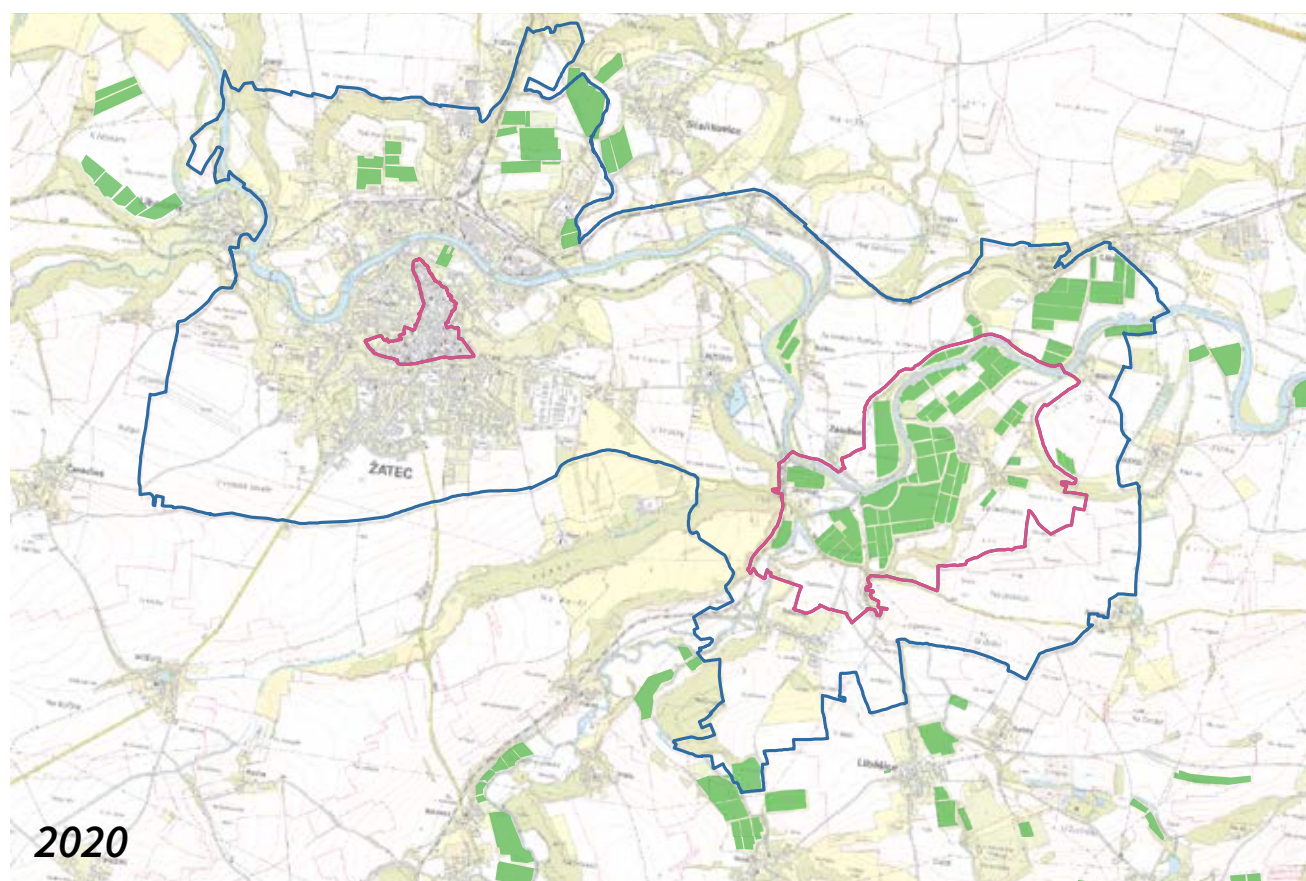
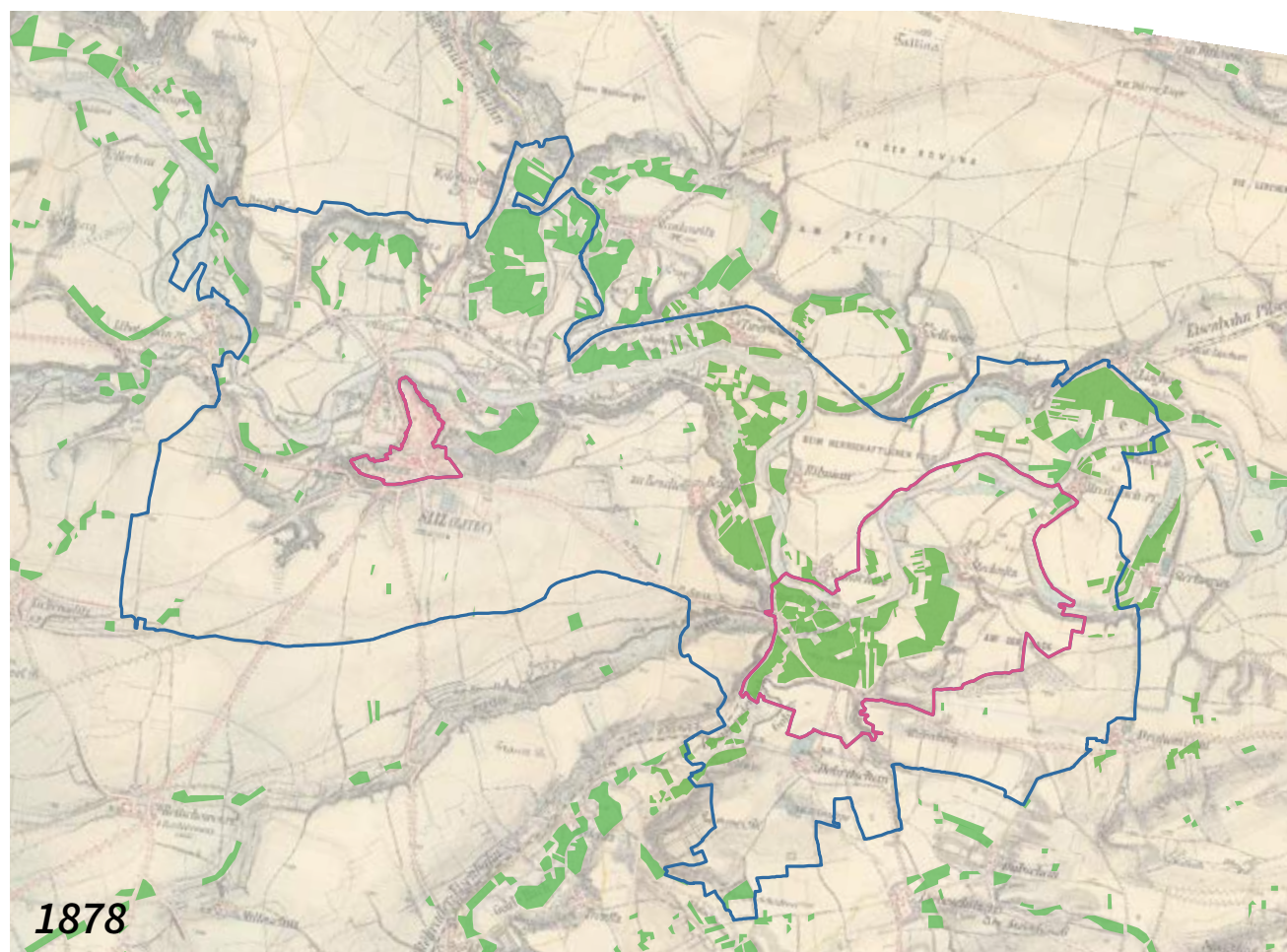
However, the landscape itself is also a valuable source. Remains of the older course of the river Ohře riverbed can be traced both in the current landscape and on historical maps. The Ohře is still an unregulated river, which creates large meanders in the floodplain. As a result of long-term erosion processes, and the result of massive floods, the course of the riverbed has changed, often very significantly. Traces documenting a different older course of the riverbed have been mapped. Still, there are not enough of them (and come from at least two developmental stages) that it is possible to reconstruct the older course of the riverbed in its entirety. However, it is important that they prove that the landscape of component part 01 around the village of Stekník shows a very long historical memory, dating back to the Middle Ages in many aspects.

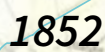
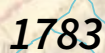
Preserved traces of the historical development of the river Ohře riverbed. Cartographic processing by Klára Bohuslavová.

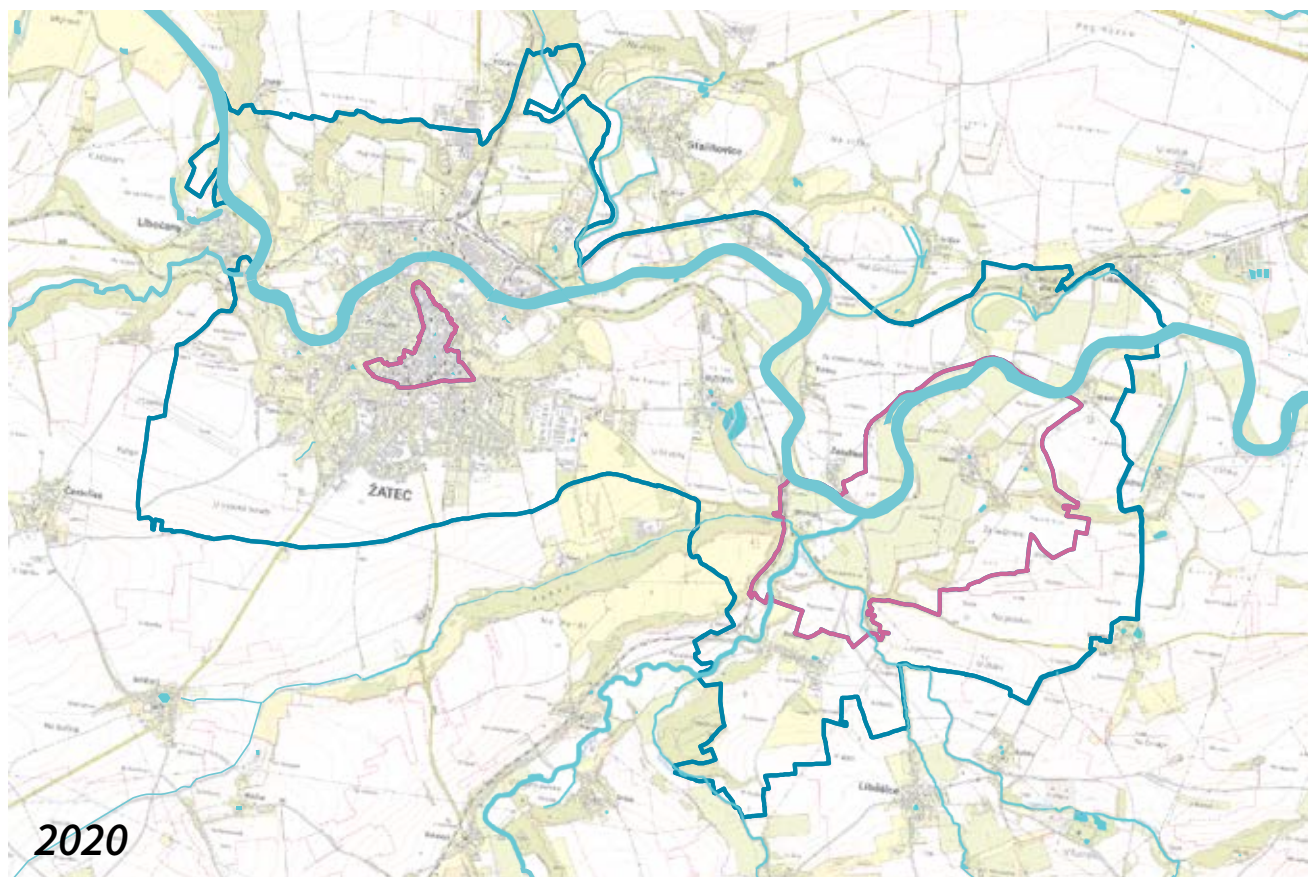
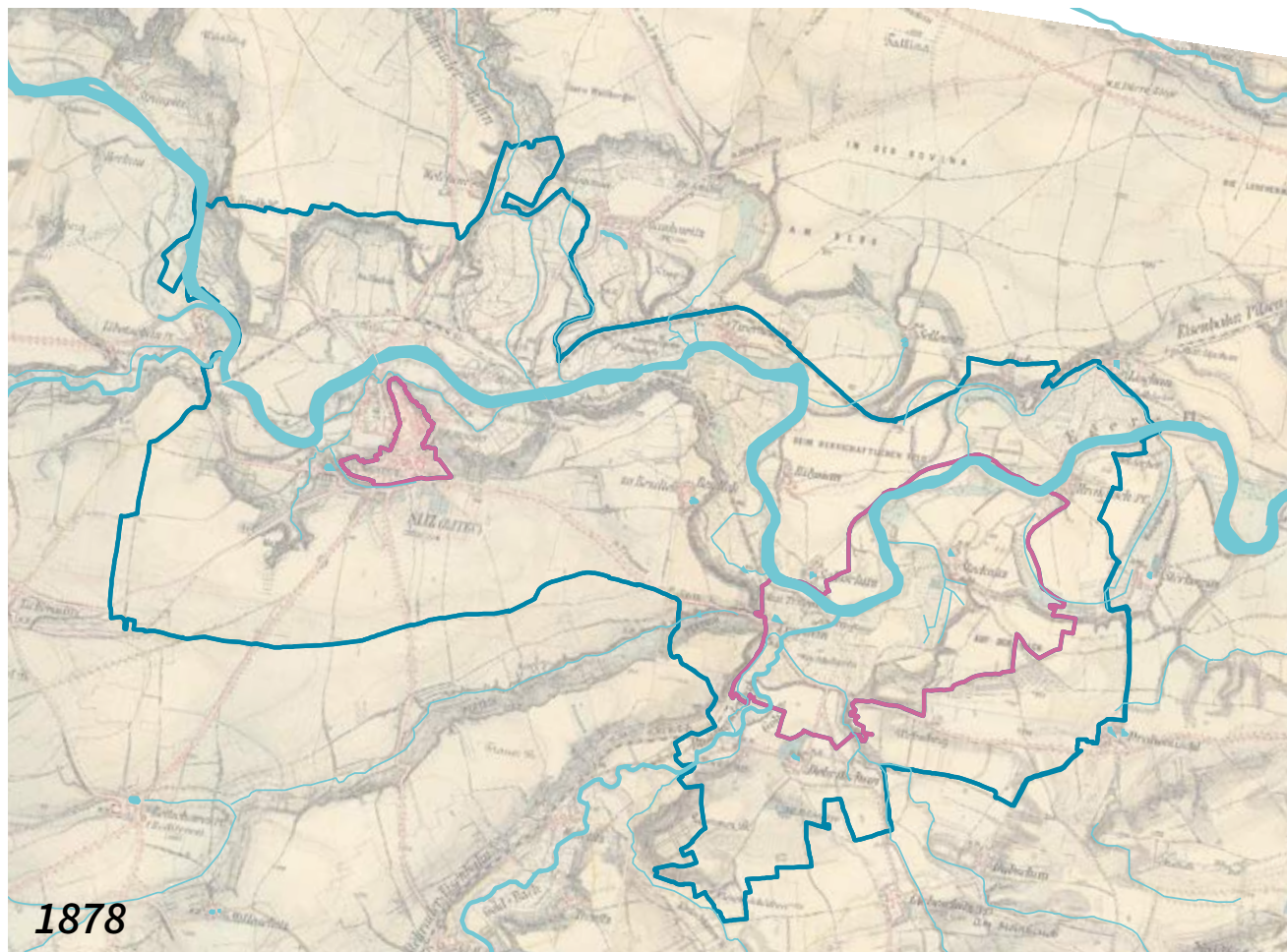


Territory of the nominated property and the wider surroundings at present. Map materials: © ČÚZK, ZABAGED, CENIA. Crop scale: 1 : 20,000.









THE HISTORY AND DEVELOPMENT OF HOP GROWING AT THE END OF THE 20th CENTURY

The state enterprise Chmelařství, Hop growing, was founded in 1960 and underwent several reorganisations. In the 1970s, the operation of the first production line of granulated hops, in the former hop packaging room on Chmelařské Square, commenced. The new line began processing hop heads in the form of hop powder that has since been called "ground hops"; however, this technology was soon modified to produce granulated hops because granules are easier to process in brewing. At the beginning of the 1990s, 65% of dried hops were still delivered to customers in pressed form, in ballots.

At the beginning of the 1990s, a change in the government regime created new hop organisations. In 1990, the Cooperative for the Cultivation, Processing, and Sale of Hops was established. The period of establishment of the Cooperative for the Cultivation, Processing, and Sale of Hops and strong expectations are probably best illustrated by the words of Ing. Miloš Kňákal, which he used in evaluating its foundation in 1990: *"We are at the beginning of a new period of our hop growing. By concentrating practitioners and experts in production and experienced commercially skilled workers in the sale of this crop, we will deepen the tradition not only in production but also in technology and foreign markets. New science and technology will then be applied in production, which will also ensure the required profitability and the overall development of our hop growing."* (Malířová, 2020).

Two years later, the Cooperative was replaced by the Interest Association of Hop Entrepreneurs in Žatec. A resolution at a membership meeting of the Interest

Association established CHMELAŘSTVÍ, cooperative Žatec. In the same year, breeding research was reorganised, and the association established the Hop Research Institute Co., Ltd., Žatec, as the successor organisation of the Hop Research Institute in Žatec. In 2000, the Interest Association of Hop Entrepreneurs in Žatec transformed into the Hop Growers Union of the Czech Republic, which is the founder of the Hop Research Institute Co., Ltd., Žatec, and defends the interests of hop growers at home and abroad. The Hop Growers Union is a partner of Czech governmental organisations such as the Ministry of Agriculture of the Czech Republic, European Union bodies, and is a member of the Agrarian Chamber of the Czech Republic or the Agricultural Union of the Czech Republic. The Hop Growers Union represents 93-95% of hop areas in the Czech Republic.

In 1999, CHMELAŘSTVÍ, cooperative Žatec, became the holder of a certificate of Quality Management Systems for the purchase, storage, processing, and sale of hops, according to international standards ISO 9002 (after revisions acc. to standards ISO 9001:2000). The certificate was issued by the worldwide recognised company Lloyd's Register Quality Assurance. The cooperative gives information about its activities on a well-structured website (<http://www.chmelarstvi.cz/>). At present, the cooperative is located in the new centre in Mostecká Street No. 2580 (the area is part of the buffer zone of the nominated property). The cooperative includes over 100 Czech hop producers farming on 94–96% of the total hop field area in the Czech Republic: it is mainly engaged in the purchasing, storing, processing of hops, and trade in hops (Bohemia Hop joint-stock company). Its other activities include hop growing mechanisation,



Aerial view of hop processing buildings, Chmelařské Square and Zeyerova Street, Žatec, 2006

construction of hop fields, and the storage of hops. CHMELARSTVÍ, cooperative Žatec, is the founder of the Hop Museum and has contributed significantly to the foundations of the reputation of the local hop growing heritage.

However, the area of hop fields in the region decreased sharply for the first time in the late 1990s after changes in the property structure of objects and production facilities, and business relations. Also when the consumption of a significant amount of hop production by an American brewery was cancelled after the Czech state did not agree to transfer the "Bud" brand. It was not possible to find a market for such a large amount of production. Since then, the area of hop fields increased quite noticeably, by 1904 ha, 20.4 % of the area in 1996, and by another 1818 ha (24.4 %) in 1998. In addition to the mentioned changes, production costs also rose. The strong competitive environment, trends, and new technologies in brewing, as well as crisis periods with overproduction on the market, had an impact.

Since 1997, a new law on the protection of hops came into force in the Czech Republic. It replaced the older law of 1957. Act no. 97/1996 Coll. On the Protection of Hop, as amended, stabilises the liabilities in issues of the registration of hop fields, the marking, and the verification of hops during their processing and their circulation (more on this Act in *Chapter 5.c/d*).

Another significant change was the accession of the Czech Republic to the European Union in 2004, when the free market, free movement of people, foreign capital,



The interior of the "New Warehouse" with supporting concrete structures, from 1937, No. 1580, Chmelařské Square, Žatec, 2016

costs, and labour costs rose even more, and Czech agriculture became part of the EU's common agricultural subsidy policy, including legislative requirements.

From the millennium, the area only decreased, until 2013 to 4,319 ha. Subsequently, there has been a strong recovery due to the influence of artisanal breweries on the market and a strong demand for Czech hops. At present, the area of hop fields is around five thousand ha (5,003 ha in 2019), about 45–50 % of the size in the early 1990s.



Modern air-conditioned hop warehouse and packaging room with a pellet processing plant on the left, No. 2580, Mostecká Street, 2016

2.b6 CHANGE IN THE SIZE AND FORM OF HOP FIELDS IN THE CONTEXT OF MAJOR SOCIAL CHANGES

The nominated Saaz Hop Landscape, component part 01, best represents a landscape of its type: it contains stable locations of hop growing, which are documented in the landscape at all stages of their historical development and are depicted on existing historical map materials. The extent of the areas used for hop growing and their location in the landscape is more or less unchanged, especially in its epicentre below the Stekník Chateau. However, the internal structure of these areas and exact external boundaries of individual hop fields have changed considerably during their historical development. The following chapter focuses on describing these changes over the last two centuries.

Changes in the internal structures of hop growing areas are due to at least two factors. They are the development of hop growing technologies and the socio-political changes that have affected farming methods. Not all social and technological changes have been dramatic, but to some extent, they have always affected farming practices in the landscape. The main development of technology in modern history is the transition from the original form of growing hops on poles driven into the ground each year, to growing on more permanent pole and wire trellis structures. The gradual change to more or less monocultural management is also significant. Socio-political changes include changes in the structure of ownership in the area since the 19th century and especially the radical change of population in this part of former Czechoslovakia after 1945. Another significant change was the liquidation of private property and business after February 1948. Related to all this were changes in the organisation of management in an effort to maximise centralisation, but also a significant interruption of continuity of generations of experience. However, the demand for quality Saaz hops and the

demands on its quantity and method of processing continued to influence interest in the development of specific mechanisation and processing technologies. It maintained the concentration of local agriculture on the production of this crop.

The original method of hop growing in the period before these social changes is best illustrated by maps of the stable cadastre from 1826–1848. The main difference compared to the current situation, was the smaller scale organisation of the land for growing hops, where there were often different agricultural areas and areas without agricultural use between individual hop fields. The small scale organisation of the land was based on different ownership relations and the way of growing hops because there was a large number of small fields owned by individual farmers in the landscape. Growing hops on pole trellises, in contrast to wire trellises, allowed greater flexibility in the shape and size of the land, and smaller areas could be used for such hop fields. Due, in contrast to the current situation, to the inhabitants being directly dependent on agriculture in the past, they had to grow other crops in addition to hops. In addition to the fields, there were many pastures in the landscape. Sheep farms also testify to sheep breeding, one of which was also located near the village of Stekník and has been preserved. The breeding of bulls at the end of the 20th century is also documented in Stekník. There were also fruit trees and orchards in the landscape. Within the land structure, some areas were not permanently used for agriculture; they consisted of waterlogged soils in terrain depressions, places where groundwater sprang to the surface, and enclaves of stony soils, which are formed by protrusions of river terraces into the area of the river floodplain. Such places in the nominated property represent some locations north of the village of Stekník and south of the chateau, which were not used for hop growing in the past. In addition to the bottom of the river floodplain, hop fields used to occur on smaller plots of land on the surrounding slopes, such cultivation occurred, for example, on the edge of the river terrace in the southern part of component part 01.



Hand-picking hops in a pole hop field, Žatec region, early 20th century

Aerial photographs from 1938 are the first photographic evidence of the structure of hop fields and document the transition between the original cultivation of hops and its current form. At the same time, they depict the state of the landscape just before the post-war socio-political changes. The first wire trellises appeared in the Žatec region in 1846, and together with their introduction, the areas of individual hop fields gradually increased. From then, pole trellises and hop wire trellises were mixed in the landscape for many decades. The structure of the plots in the mentioned aerial photographs still largely corresponds to the form captured on the maps of the stable cadastre. Thus, farming was maintained on the slopes, where hop fields remain in the form of hop fields of wooden poles. Where ownership relations have made it possible, the areas of individual hop structures were

already increasing. It can therefore be stated that the increase in the area of individual hop fields is mainly due to the development of technology and would take place in the landscape without such extensive socio-economic changes such as the more recent history of the Czech lands, including the nominated property.

The period of the Second World War brought fundamental political and economic changes to the landscape. The German population was expelled from Žatec during the spring of 1945. From February 1947, the area was settled by Volhynian Czechs (Ethnic Czechs and their descendants who settled in the Ukrainian region of the then Tsarist Russia, Volhynia, in the 19th century, who were offered re-emigration after World War II). The Jewish population, which provided the hop trade, also had left Žatec due to German persecution before the start of World War II. The Volhynian Czechs probably had experience with growing hops because Ukraine is one of the few areas where hops are still grown (see comparative analysis in *Chapter 3.2*). Still, they had to adapt it to the local conditions of the country in which they moved. Besides, after the advent of the communist regime, agriculture was collectivised (the process of transforming individual private agriculture into collective agriculture with the creation of the so-called United Agricultural Cooperatives /collective farms called JZD). The Large original estate in Stekník was confiscated after the war, and the related farm came under the control of the Czechoslovak State Estates from 1949. Later it served as the Agricultural Research Institute, which concentrated mostly on hop production (today's Research Farm of the Research Hop Institute Co., Ltd. in Stekník).

In aerial photographs from 1953, there can already be seen more continuous areas of hop fields due to the transition to wire trellises and due to the collectivisation of agriculture. In the photographs the cultivation of hops already takes place only on these structures, and in connection with the abandonment of the cultivation of hops on poles, farming on slope positions has gradually disappeared. Another reason for abandoning the cultivation of hops on the slopes was, in particular, the fact that farming on the slopes was difficult for the newly used mechanisation, and smaller areas were economically less important for larger scale collective agriculture. Such places represent, for example, the area at the edge of the river terrace of the southern part of component part 01. Together with the structure of the hop fields of larger sizes, the overall pattern of land use has been simplified.

The extent of the area used as hop fields has not changed much since 1953. However, the internal structure of hop wire trellises was changed by the transition from narrow to wider spaces between the hop plants due to a change in the mechanisation and harvesting technology used. Hop fields currently are also appearing in locations that were not previously used. These are the originally waterlogged areas that have been drained, or locations that were less fertile, where hops are now grown under challenging conditions. Such places in component part 01 represent, for example, the positions of hop fields northwest of Stekník.

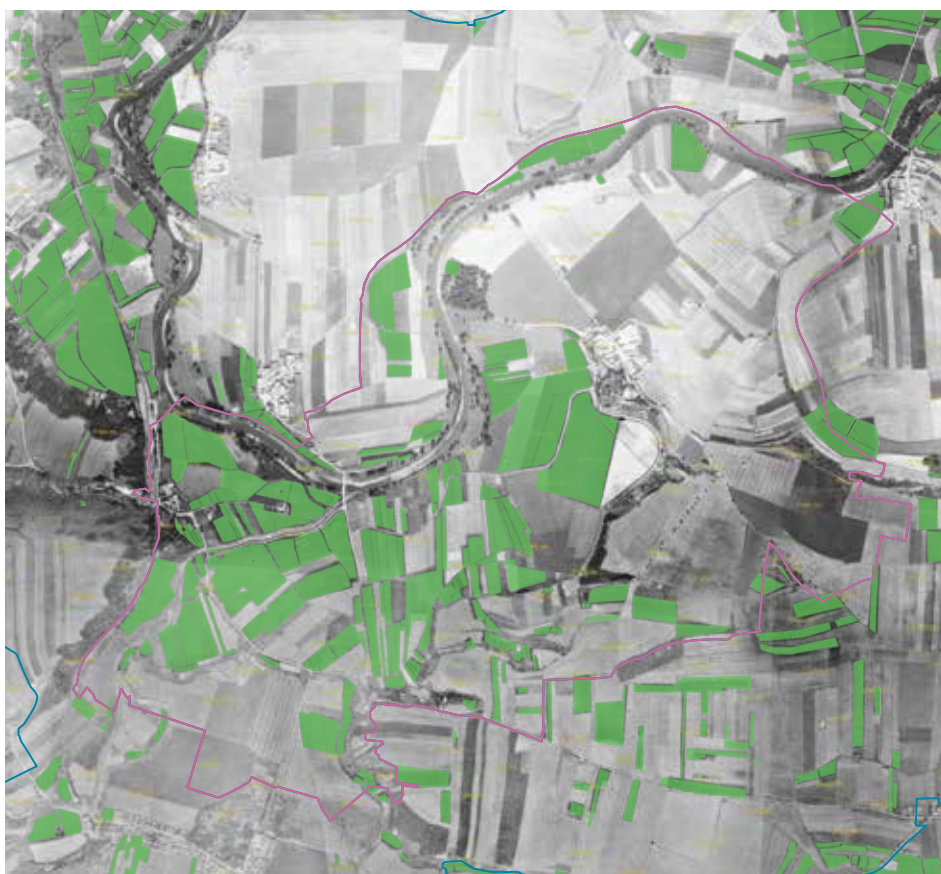


Aerial view of hop fields during the hop harvest, Stekník, 2019

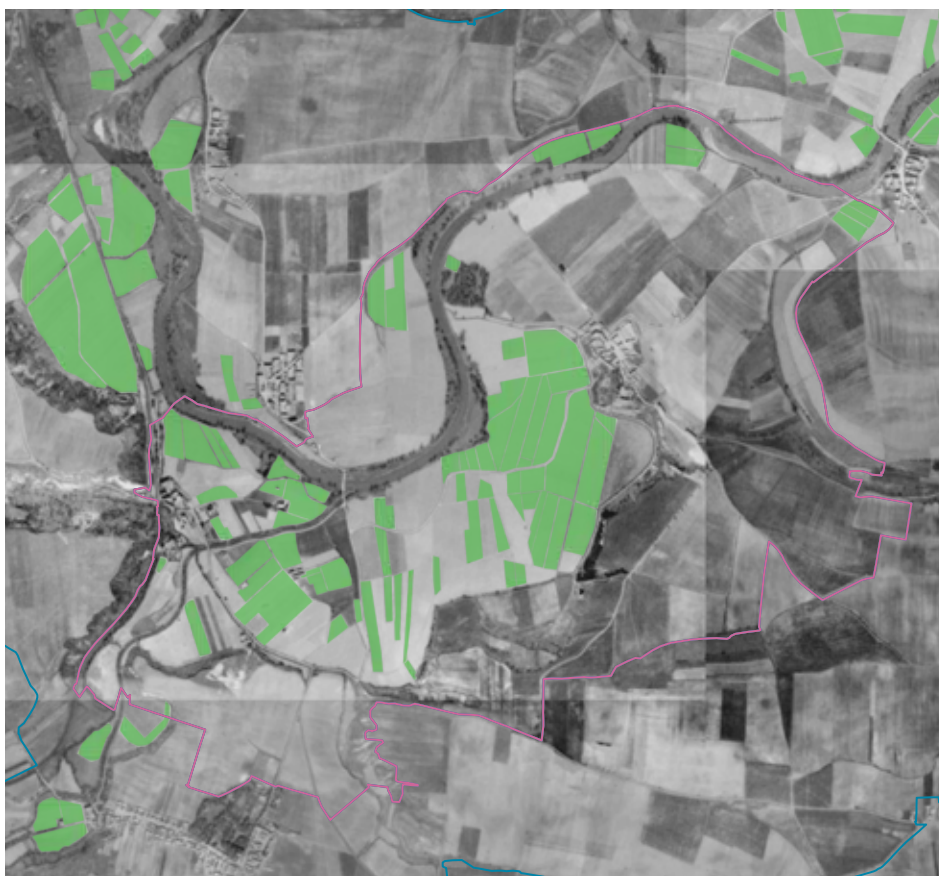
1783



1938



1953



2020





Protective spraying of hops against pests in the Saaz hop growing region, Oskar Brázda (1887-1977)



3. Justification for Inscription

3. Justification for Inscription

3.1 JUSTIFICATION FOR INSCRIPTION

3.1.a BRIEF SYNTHESIS

The nominated property Žatec and the Landscape of Saaz Hops represents an important agricultural landscape associated with a unique history of continuous development in cultivation, processing and international trading with a special "beer spice" which is an agricultural commodity whose botanic name is hops (*Humulus lupulus* L.) and which is an important ingredient in the beer brewing process all over the world. This cultural landscape is a testimony of a tradition more than 700 years old which is continuing and centres around the finest aroma hops in the world. This local variety of hops – Saaz, is the result of an extremely favourable climate and natural conditions combined with the skills and knowledge of the local hop growers (who were quite often also processors and merchants) passed from generation to generation for centuries. This has shaped this specific landscape and its built heritage associated with hop processing and helped to keep the leading position of the Saaz hops in this region to date.

The nominated property is situated in the north west of the Czech Republic, in the basin of Žatec along the river Ohře (Eger), in the rain shadow of the Krušné hory mountains (Erzgebirge). It represents an organically evolving landscape consisting of two component parts which naturally complement each other and together demonstrate the uniqueness of the local hop heritage.

Component part 01 represents authentic example of the rural hop growing landscape, including two small villages of Stekník and Trnovany surrounded by hop fields, where hops have been grown in traditional way for centuries. It is representative of a region whose climate and soil conditions have helped the local economy based on a specific plant – hop, to flourish. It is well documented that the hop fields have been in the area for centuries because the nearby water sources helped the hops to be high-yielding and high-quality. At present the top quality hops grown here are closely monitored by the organisation called Hop Research Institute Co., Ltd. Saaz (Chmelařský institut, s.r.o., Žatec). The Institute was established in 1925 building on the centuries' long tradition of careful breeding and cultivation of hop plants in the Saaz region. The Institute also runs its research farm in Stekník and breeds the best hop varieties. In addition to the hop fields with specific permanent structures – wire trellises that allow hop plants to grow, there are also well-preserved buildings functioning as an integral part of the farmsteads and directly associated with original methods

of hop drying process. Most buildings and structures are authentic and, despite the modernisation, they do not compromise the visual integrity. Many buildings have decorative details on facades, doors and gates pointing to the hop culture e.g. painted or sculpted hop cones. The preserved historic settlements, the Stekník Chateau, situated on a plateau overlooking the hop fields, and the village of the same name surrounded by large hop fields make the picture of the landscape complete.

Component part 02 represents the outstanding historic urban landscape of the very centre of the region - the town of Žatec (Saaz) which gave its name to the most famous variety of local hops. This component part contains a large and compact urban complex rich in typology, authenticity and number of buildings which reflects the centuries' long history of hop processing and distribution. In the last decades of the 19th century, the town of Žatec became the most important centre of hop production in Europe and currently is the only urban environment connected with hops in the world.

The historic urban landscape of the town of Žatec consists of the historic town centre and the adjacent quarter of Prague Suburb. This area contains an ensemble of unique buildings, which are unparalleled in terms of their concentration, scale and focus on a single agricultural commodity in the urban environment. Individual burgher houses were directly involved in hop growing and processing, and the harvested hops were dried in the roof spaces of the houses in the town which are preserved to date. In the 18th century, the Žatec region was the most important hop producing district in Bohemia and Bohemian hops were the premium brand in Central Europe. To protect the high quality of Saaz hops, attempts were made to introduce a system of certification and trade marks to guarantee the origin of the commodity. It later became the guiding principle for maintaining the highest quality and reputation of the locally grown hops. In the 19th century hop production increased immensely resulting in a booming hop business which was reflected in the construction of a large range of specific buildings linked to hop processing and mainly concentrated in the Prague Suburb. This included, for instance, multi-storey spacious warehouses to store the loads of hop bales before dispatching to the destination markets and sulphurisation chambers with chimneys to treat the hops for long-term preservation. There were also other buildings which were an indispensable part of the hop business in Žatec such as packing and quality certification and trade mark stamping facilities which

also shaped the overall appearance of the town. Other grand buildings, such as the theatre, bank and historic hotels, reflect the international scope of the hop trade and, consequently, the prosperity generated. In the centre of the town there is a big Jewish synagogue built in the 1870s which has survived to date and is testimony to the large Jewish community living in Žatec in the past. Several of its members were successful hop traders who commissioned the construction of many important hop-related buildings in Žatec. The success of the hop trading business impacted the urban architecture and the town fabric in that period and transformed Žatec into a true hop trading hub in the centre of Europe.

Both component parts of the series – rural and urban – jointly provide strong evidence of the entire hop cycle from hop growing to its processing and international trade and testify to the set of specific knowledge and skills of many generations of hop growers and traders, who are credited with building the leading position of Saaz hops in this region to date. Hops were and still are grown in many European countries but the nominated property with the internationally recognized Saaz variety of hop is one of the oldest. The preserved rural and urban heritage of the nominated property is associated with the tradition of hop growing, processing and trade, and is an exceptional testimony of the impact of the specialised rural landscape and its administrative urban centre.

Both component parts are geographically close to each other and naturally linked by the river Ohře and a network of local historic roads which for centuries has provided a link between the countryside (where hops are grown, harvested, dried and packed into bales) and the town of Žatec (where the hops are processed, stored and traded). Later this road network was supplemented by the railway which sped up the hop transport as well as the transport of thousands of seasonal workers needed in the hop fields. The buffer zone shared by both component parts includes this link and will protect it and preserve it for the future. The buffer zone contains additional hop fields and many other contextual features associated with the living and constantly evolving hop growing tradition. It is obvious that these two component parts are practically inseparable as one would not be functional without the other.

The values of the Saaz hop landscape are conveyed by both tangible and intangible attributes. The tangible characteristics of the landscape are defined by its relief, the river connecting both component parts, hop fields with their dynamic visual changes during each year, the panorama of the villages and the town of Žatec, and many typologically specific buildings for hop processing. Rural and urban elements make the picture of the hop landscape complete: hop plants in fields and built heritage with preserved elements associated with hop drying technology such as typical timber structures, roof spaces/lofts where hops used to be dried, typical

"oeil-de-boeuf" (ox eye) dormers, hop drying kilns in rural areas, big warehouses and sulphurisation chambers with tall chimneys in the town.

The intangible aspects of the nominated landscape include the favourable natural conditions for hop growing, several centuries long uninterrupted cultivation of hops, a vast amount of specific knowledge and skills crowned with the activities of internationally recognized professional institutions, seasonal celebrations of milestones in the growing season and a multitude of interactions between man and the environment.

The uniqueness of the nominated property is particularly well communicated through the social, economic and technical systems:

- The impact of hop growing, harvesting and processing on the nominated landscape which is clearly identifiable and visible in both rural and urban landscapes: in component part 01 hop fields and rural hop processing buildings connected by historical roads as well as in the component part 02 (lay-out of the hop processing sites at Prague Suburb and elsewhere, typical skyline of chimneys rising above the hop drying kilns and sulphurisation chambers including the remains documenting the old method of hop drying in the historical roof spaces);
- Typology, uniqueness and diversity of rural and urban buildings designed for hop processing which are in harmony with the older rural and urban environment;
- Highly attractive visual links between the landscape with unmistakable character of hop fields changing throughout the year and the well preserved rural settlements with a dominant of chateau the former prosperity of which was directly associated with the local hop fields;
- Remarkable visual qualities and preserved visual integrity of the urban landscape of Žatec determined by a unique historical development of the site with a concentration of rare industrial buildings testifying to an unprecedented scale, intensity and impact of the industrial transformation of the entire area, contributing to its unique atmosphere and creating its unique character which cannot be found anywhere else;
- The impact of the landscape on the settlements and the town and the interactions between them documenting the integrity of the entire process consisting of the hop growing, processing and trading;
- A high level of authenticity of a significant number of buildings without any secondary modifications or later undesirable interventions. The building stock in the villages of Stekník and Trnovany as well as in the historic parts of Žatec is in a satisfactory condition

which was helped by the fact that most buildings have lost their original purpose relatively recently;

- A unique concentration of industrial buildings in historically connected parts of the town centre and Prague Suburb demonstrate a long tradition, rapid development and a high standard of hops processing at the transnational level;
- The trade mark of Saaz hops which is recognised not only in Europe and which is the result of a long tradition of hop growing which evolved into a scientifically based breeding with a global impact; the town of Žatec still keeps its position as the centre of hops thanks to the research and development organisations based there;
- The maintained continuity of unique traditions associated with the hop plant, which include the living intergenerational transfer of knowledge, skills, traditions and customs associated with the hop farming and processing seasons and traditional rituals related to them;
- The nominated property demonstrates its important commercial role as the global market leader in the hop industry based on the interactions between diverse social groups, communities and cultures which in the past generated its wealth and reputation.

3.1.b CRITERIA UNDER WHICH INSCRIPTION IS PROPOSED

Criteria selected for the Outstanding Universal Value include the following ones: (iii), (iv) and (v). This decision was made after a careful analysis and comparison of the criteria used for the crop producing agricultural landscapes inscribed in the World Heritage List (for more details see *Chapter 3.2* and the tables).

Criterion (iii)

The Property bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

Žatec and the Landscape of Saaz Hops bears an exceptional testimony of a strong, centuries' long and never interrupted living cultural tradition of hop growing and processing in Europe concentrated on a relatively small area. This tradition is based on the exceptional quality of most sought-after Saaz hops which is a globally recognised and protected by administrative acts since the Age of Enlightenment reforms in the former Austrian monarchy. As a result of the innovations in hop production and booming trade with the commodity in huge demand in the world in which the Czech, German and Jewish communities were involved and interacted

with each other and influenced each other, Žatec and the Landscape of Saaz Hops became a globally recognised centre of hops, particularly in the 19th century.

Numerous specific skills, knowledge and experience on work organisation in hop production was passed from generation to generation. The empiric-based approach gradually improved and developed into a socio-economic and technical system, which survives today. Targeted breeding of particular hop varieties subsequently led to a new independent and locally conducted discipline which uses hop fields in the nominated property for basic research. The outcome of such endeavours are internationally recognised clones of Saaz hops. Every year many experts from all over the world gather at the site to participate in specialised events, conferences and workshops the organisation of which has a long tradition. The celebration of the living intangible heritage of hops in the nominated landscape is reflected in the public and social events associated with the annual cycle of hop growing, seasonal festivities, local customs, rituals and festivals closely linked with hops and strengthening the identity of Žatec, its residents, and the surrounding hop growing landscape.

This strong cultural tradition is annually reinforced by many events and hop festivals (eg. spring, harvest) organised in the facilities associated with hop production and at the open public spaces both in the town and in the countryside. These events are mainly related to the hop growing seasonal milestones. They follow on the past customs and rituals of the hop growers (eg. Hop-Growers' Day, St. Lawrence gathering) and they help to preserve the public awareness of the hop growing and processing.

Criterion (iv)

The Property is an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

Žatec and the Landscape of Saaz Hops is an outstanding example of a unique type of a monoculture landscape associated with hop growing and processing both in the rural and urban environment. Throughout the time various methods of hop drying, preservation, packaging, quality certification and breeding were developed in this specific hop growing regions, as well as outstanding examples of buildings, architectural and technological ensembles and production landscape.

The rural landscape visual quality is particularly defined by hop fields with their typical trellises consisting of poles and wires, rural settlements with preserved farm buildings and barns where hops were dried and stored, a residence of the local landlord which is a dominant landmark in the landscape as it rises above the preserved historic hop fields which are still in use. The

specific structures devoted to drying of hops have been preserved in exceptionally high numbers in this rural component part as they are located nearly in every single farmstead. They exist in several variants and they have a strong impact on the image of the landscape and its visual integrity. They perfectly illustrate the entire hop handling process at the primary hop producer in the rural area and bear also different kinds of decoration indicating a connection to hop cultivation.

The natural centre of this hop growing landscape is the town of Žatec, which developed in a close relationship with the hop growing culture and is the only comprehensively preserved urban complex focused on activities related to processing, certification of origin and quality of hops as well as international trade which first started across Europe and later spread overseas. The oldest layer of buildings associated with hop production is represented by numerous lofts in the burgher houses in the centre of Žatec. Their true function is hardly visible from the outside, the only sign of their purpose are typical front gables with large hatches for transporting hops in and out and a system of typical dormer vents in the roof. The internal layout of lofts was modified to dry as much hops as possible there despite of the limited space given by the original medieval footprint of the buildings.

In addition to that, the urban component part also includes a unique ensemble of dozens of other buildings related to hops dating back to the late 19th, early 20th century when, as a consequence of the social and economic reforms, hop trading became a successful business resulting in an economic boom in the entire Žatec region, marked by the expansion of hop fields. In this period the Prague Suburb was transformed into a hop-related industrial site which is an exceptional ensemble of these buildings preserved in the town. During an extremely short period of about 40 years nearly one hundred hop drying kilns and multi-storey warehouses were built there. They have a distinctive architecture and design in which the interior layout was particularly affected by the functional requirements and overall economy while the exterior design was influenced by the fact that these industrial buildings became an integral part of the urban fabric. The dominant features of the interiors are massive wooden load bearing and support structures. On the other hand, the exteriors are mostly designed to look like the town residential buildings of that time. The real function of these buildings can only be guessed from the details such as single glazed windows, vents in the walls and the shape of the roofs from which parts of process equipment protrude. They also make the town skyline rather unusual displaying a dramatic silhouette accentuated by distinctive vertical dominants of tall chimneys situated above the sulphurisation chambers of the warehouses which are another typical feature of Žatec. Highly comfortable villas of local hop growers are showcases of fine architecture and, for practical reasons, they were built close to warehouses and like other public

buildings associated with hop growing (certification facilities, banks, theatre, sacral buildings) were the status symbols reflecting the prestige and economic power of the local hop producers.

Historic buildings used for hop drying, processing and trading have been preserved in such high numbers, concentration and authenticity both in the rural area and in the town of Žatec which does not exist in the same quality elsewhere in the world. The hop processing buildings are special not only for their single purpose but also for their architectural forms, design and process equipment preserved inside.

Criterion (v)

The Property is an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

Žatec and the Landscape of Saaz Hops is an outstanding example of a continuous, never interrupted and, to date, traditionally used agricultural landscape with traditional human settlements (villages and a town) focused on a crop with rather specific requirements for climate, growing and processing conditions. The nominated property is an authentic evidence of continual interactions between humans and their environment and a well-preserved example of the European cultural tradition in which hops have been widely used in beer brewing since medieval times. In the past beer brewing was always an integral part of local farming because it made economic sense and aside the many hop-related attributes the beer has been still brewed which gives the nominated property additional context. Even today this knowledge is still passed on and deepened. It is a spontaneously preserved part of the hop landscape memory which is widely shared by the local community.

The exceptionally favourable conditions in this landscape are the key reason why hop growing and processing in the nominated property has been preserved without any interruption since medieval times to date. During this entire period, it has never happened that there would be a time when no hops were grown here. Hop growing and processing is an integral part of the landscape, settlements and life of the local people and there are such strong interactions, both formal and mental, between all three of them that it is impossible to separate one from another.

The technical knowhow and skills were further developed and improved on the site of the property from where they spread under the name of the hop growing centre – Saaz (Žatec). Hop cultivation largely depends on the knowledge and experience of the hop growers

related to the climate and natural conditions, breeding and cultivation and processing methods for centuries transferred and improved from generation to generation. This knowledge did not only concern the hop bines and crops as such and the work to be performed during each growing season but it also included the detailed knowledge and deep understanding of the landscape, its qualities and processes taking place in it. The technical knowhow and professional experience has been exchanged and business culminated particularly in the 18th and 19th centuries.

The set of specific experience and work management skills acquired over the centuries resulted in a well-developed and intertwined social and technological systems on the site of the nominated property. This is an unprecedented achievement worldwide.

This had also a crucial impact on the appearance of the Saaz landscape which is well demonstrated by the hop fields with a fixed structure of the trellis, usually made of wooden poles and wires and every year complemented by hop strings, which are guiding wires providing support to the twining hop bines. The present visual quality of the Saaz hop landscape is the outcome of its continual and systematic shaping driven by the ongoing changes in the hop growing methods. There are still visible traces of these changes which form distinctive layers. Its key visual feature are hop fields where one of the fastest growing crop in the world – hop bines – twining on extremely high trellises. A good example is the trellis to support the hop plants which consists of poles where those at the perimeter are leaning and fixed with the anchoring wires. The trellis also includes fixed and temporary guiding wires. The development of this design of trellis for support of the plants was the outcome of the exchange of local empirical knowledge. On the basis of this knowledge this structure developed into a specific design of Saaz hop wire trellis called "žatecká drátěnka" which replaced the original one/structure consisting only of densely applied single thin wooden poles, and which is now used in many other hop growing regions around the world. It also profoundly changed the character of the landscape and enabled its more intense use, increased sustainability and continuous use of hop fields. This new approach brought about the innovations in farming which in turn resulted in economic stability of the hop growing business.

Typical hop drying kilns and other processing facilities were built in the rural area and the processing of hops impacted the overall appearance of Žatec where the architecture of residential buildings as well as industrial facilities, educational institutions and amenity centres designed for different groups of local residents associated with the hop processing business is unmistakable.

All this makes the landscape's look dynamic that is incomparable with any other agricultural landscape and ensures its unique and distinctive visual qualities.

The nominated property thus perfectly represents the interaction between the landscape and the settlements situated there. Without adequate premises and technology available in component part 01 the high quality of hop processing would not have been achievable. The same applies to the warehouses, transport network and administrative facilities in Žatec because without them the hops certification and international trade would not have been possible either.

The nominated landscape is thus the only region in the world in which the story of hop growing, processing and trading is captured in its entirety, from the selection of a suitable land plot and preparation of the soil for the erection of trellises and establishing hop gardens to the shipping of the final product.

3.1.c STATEMENT OF INTEGRITY

The nominated property of Žatec and the Landscape of Saaz Hops is a very well-preserved site which, within its boundaries, documents the entire "hop cycle" and represents all the essential attributes of hop cultivation and processing.

The productive character of the hop growing landscape with specific climate conditions is still fully reflected in the preserved functional integrity of its composition as well as in its attributes the most distinctive of which are the following ones: hop fields situated near the river, and villages where hop growers lived, the town where most of the hops were processed for trade purposes, the transport network enabling the access to the hop fields and export of hops, sets of functionally diverse buildings used for drying, sulphurisation, packaging, certification and storage of hops as well as traditional knowledge of specific climate conditions, hop growing and processing developed over the centuries. The transport network based on the historic roads also underlines the integrity of the property as it has enabled access to the hop fields and facilitated the export of hops.

Component part 01 with hop fields around the villages of Stekník and Trnovany represents an area which has not changed much over the centuries and the current use of which copies its historical use. There are settlements where no major building modifications which could have an adverse impact on the overall character of the landscape have been carried out. The village of Stekník with its well preserved integrity emphasised by the typical brick buildings surrounding the central village square and chateau of the same name whose main construction phase is related to the time when its owner was actively involved in growing hops on the surrounding fields as well as other village buildings until recently used for their original purpose, document the methods of drying freshly harvested hops in the rural area before transporting them to the nearby town for certification and

further trading. All this clearly illustrates the story of hops in the rural area and create a visual unity underpinned by large areas of hop fields.

The fertile sediments of the floodplain around watercourses, the location of the hop fields in their vicinity and the village of Stekník situated in a safe, elevated place - all this contributes to the thematic and visual integrity of the property. Local nature, climate and social conditions are a good prerequisite for the continuity of hop growing in this component part thus preserving its integrity.

The visual integrity of the component part 01 is strengthened by the morphology of the site the boundary of which has been delineated to include not only the flat parts of the river floodplain but also the elevated area in the south-east. There are several walking trails from which it is possible to admire the integrity of the component part both from inside the site as well as around its perimeter. Monitoring the site integrity in the future will also be helped by the recently opened walking trail along the eastern and south-eastern boundary of the component part on the elevated terrain above the flat part of the landscape where the hop fields are situated.

The component part 02 is a large urban complex of a high integrity covering the whole story of hops in the urban environment whose individual elements provide a complete picture of the history of the town of Žatec as a world-famous centre for centuries associated with processing and exporting high quality hops: there are all types of buildings typical of the medieval town footprint as well as buildings not seen elsewhere which illustrate the processing of hops for trade purposes. The compact urban organism includes the town centre with preserved lofts used for drying hops and the adjacent Prague Suburb which is a unique example of the rapid growth in the number of buildings at the end of the 19th century which expanded the already existing urban structure. On a relatively small area of the Prague Suburb, several dozen typologically unique hop-related buildings are concentrated: warehouses, drying kilns with high chimneys, packaging houses, trademark stamping and certification facilities and many more. However, the state of conservation of the old warehouses is variable. Some of buildings have been properly restored, such as the Hop Museum Žatec and Temple of Hops and Beer. Several others are empty, waiting for a new use and funding to preserve them for the future. For some buildings a restoration has already been carried out or is about to be carried out. Finding a new use and restoration funds for the remaining abandoned warehouses will be a great challenge for the integrity in next future.

The town of Žatec which is situated on an elevated plateau above the river displays a high degree of visual integrity accentuated by the chimneys of sulphuring chambers and hop drying kilns. The modern housing developments

coming from the second half of the 20th century do not interfere with the site of the nominated property and they are exposed only in some long-distance vistas.

3.1.d STATEMENT OF AUTHENTICITY

The nominated property consists of two landscape component parts which complement each other. They both are preserved in the authentic footprint and overall mass which is a clear testimony of the traditional methods of hop growing in the landscape.

Functional authenticity of the hop rural landscape (component part 01) has been fully preserved and lies in the locations of hop fields which have not changed and the presence of watercourses. The authenticity of rural settlements which served as a base to the farmed fields is also significant. The landscape organisation and functional links are reflected in the historic communication network which is still used.

The buildings in the rural landscape component part 01 have a high degree of authenticity. This applies both to individual buildings, farmsteads and the residence of the local landlord (chateau), large Baroque granary which was later converted into a hop drying kiln and in more recent times also housed the hop picking machines. The village of Stekník has preserved a unique footprint and mass of buildings which is documented in many historical maps. In the village there is a large historical complex still in operation where numerous traditional processes associated with hop growing and harvesting are carried out by the Hop Research Institute, which is the owner of the local hop fields.

Most buildings and structures in the village are authentic; modernization took place without imparting strong visual impact. There are no elements disturbing the landscape, probably a part from a modern metal ball containing water for irrigation purposes which rises high above the houses but very important for keeping this landscape living.

The character of the town as centre of hop processing and trade (component part 02) has been preserved in a mostly complete state. Many buildings and technical equipment have remained in their original state, providing a reliable and authentic impression of the industry and its influence on the architecture and shape of the town. Some of them no longer serve their original function but remain in a stable condition.

The buildings in the historic centre of Žatec display authentic signs of an older traditional method of hop drying in the lofts of town houses when smaller hop fields were an integral part of the town centre and they were also situated immediately outside the town

walls. The roof spaces contain authentic evidence not only in the form of load bearing structures and typical dormers but there are also written or scratched notes, comfortable staircases for easy access to the lofts and fire doors which protect the lofts from the rest of the building. In the Prague Suburb the authenticity of more recent hop-related buildings with unique functions has been preserved including some parts of technology. The buildings containing the sulphurisation chambers have high chimneys for flue gas removal; hop warehouses have shutters on the windows to shade the storage area from the light etc. The majority of the buildings have neither been converted to other functions nor modified. Thanks to their structural quality, layout and quality of architecture they have been used for their original purpose to present times, despite major economic and social changes, including changes of ownership in the first half of the 20th century. The authentic mass of the buildings and the details referring to hop processing are carefully monitored during all refurbishment and restoration projects.

3.1.e PROTECTION AND MANAGEMENT REQUIREMENTS

PROTECTION MECHANISM

Both component parts of the nominated property Žatec and the Landscape of Saaz Hops are already protected or will be protected in the near future under the National Act no. 20/1987 Coll., on the National Heritage Protection as amended in combination with other protective regimes stemming from this act which include the following ones:

For component part 01 with hop fields, a Landscape Heritage Zone has been outlined for designation which includes the already protected village of Stekník (since 1995) and its wider surroundings. The designation process affects many corporate bodies and individuals. The completion of Saaz Hop Landscape Heritage Zone is expected in 2021.

At present the cultural values of component part 01 are administratively protected by means of the Land Use Plan (spatial plan) of the village of Zálužice.

The cultural values of component part 02 are fully protected by law namely by two decrees of the Ministry of Culture which, step by step, delineated close heritage areas. In the north it is a more compact area from the point of view of its architecture and it is protected as the Urban Heritage Reserve. It was designated as a heritage area by the Ministry of Education and Culture already in 1961 (Decree ref. No. 36,568/61-V/2). Moreover, currently (2020) there are 140 individually protected cultural heritage assets

and any work on them even in interiors is subject to a detailed review and closely monitored. Those are mainly burgher houses, sacral buildings, office and public administration buildings.

Immediately south of the Urban Heritage Reserve of the historic town centre is the Urban Heritage Zone which was established to protect the industrial heritage there. The designation is pursuant to Regulation of the Ministry of Culture no. 108/2003 Coll. of 1 April 2003 on the designation of areas with historic heritage in some towns and villages as heritage areas and on the stipulation of the protective requirements. The process of designating important structures protected cultural heritage assets in this part of the property also has continued. Within the entire component part 02 any maintenance on the cultural heritage assets is subject to a detailed review and any modifications of all other properties including public spaces, maintenance of woody plants and landscaping are also regulated.

The hop fields located in the nominated property and its buffer zone are also protected under Act no. 97/1996 Sb., on Protection of Hops. This act not only sets forth the requirements for certification, quality control, blending, treatment and introduction of the commodities into circulation, which are subject to hop common market organisation, but it also defines state administration responsibilities including state supervision over compliance with the European Community obligations declared in international treaties.

The entire area of the nominated property, including its buffer zone, is also protected by the Protected Designation of Origin which is a guarantee that the quality of hops grown in this area is primarily or exclusively determined by the special geographic conditions combined with unique natural and human factors and the production, processing and preparation is linked to the designated geographical region.

The long tradition of land use planning in the Czech Republic in which the heritage protection bodies have always been involved helped to apply protective measures aimed at the preservation of cultural and historical values in the nominated landscape to the maximum degree possible. In the preserved component part 01, as well as in the urban structure of component part 02, no major changes are envisaged in the future which is also documented by the requirements of the valid land use and spatial plans, specifically the Land Use Plan of Zálužice and the Land Use Plan of the town of Žatec. These plans envisage the use of the landscape for the same crop production and maintaining the structure of the village of Stekník unchanged; as for Žatec the plan clearly defines the

protected areas as key aspect of local planning. Green belts of parks mainly copy the protective belt around the town centre and enable control of development activities around the boundary of component part 02. The Land Use Plan is the basic tool regulating the overall volume, mass and height of buildings in order to preserve the visual quality of the town and its panorama. The Land Use Plans of all municipalities situated in the buffer zone contain many protective measures covering nature, wildlife, landscape, flood defence as well as the air defence corridors so that the buffer zone can effectively perform its key role.

Aside from the applicable legislation, the protection of the public interest is also secured by a structure of heritage preservation authorities and agencies, the measures and decisions of which ensure the conservation, the restoration and the preservation of the extensive inventory of cultural heritage. Monitoring provisions for the property are securely in place.

ADMINISTRATION AND MANAGEMENT SYSTEM

The leader of the nomination project is the town of Žatec which acts as the co-ordinator and planner of the property management measures for the future. The Town has established the positions of Site Manager, World Heritage Site Co-ordinator and Chief Urban Architect. It has also established a Steering Group (SG) and Working Groups focusing on specific areas of the Management Plan (education, support, sustainable development, promotion, protection and maintenance of hop related buildings and structures). The town has also commissioned the development of the Management Plan.

The Municipal Office of Žatec executes the state administration in the area of heritage management and land use planning, not only for component part 02 but in its position as a body with extended powers it also covers most of component part 01. The community of Trnovany (part of component 01) is also within the remit of the town of Žatec.

Together with the Site Manager, the Site Co-ordinator and Chief Urban Architect will bear the responsibility for the management of the nominated property. In the Municipal Office organisational set up their positions are within the Development Department which also deals with the town development projects and project subsidies. The Vice-mayor of the town holds the position of the Site Manager.

Other departments of the Žatec Municipal Office are also involved in the presentation and promotion of the nominated property through the Tourist Information Centre run by the town.

The town of Žatec also operates the Temple of Hops and Beer – a complex where presentation, education,

tourist and catering activities are concentrated. This complex is located in Prague suburb, which is within component part 02. People from the relevant departments of the Municipal Office are members of the working groups focusing on education and property presentation as well as protection of hop-related facilities. The department heads are members of the Steering Group which guarantees good communication and information exchange at the level of management.

A significant portion of component part 01 (the village of Stekník) is within the remit of the village of Zálužice. The village has its own office which in some areas of public administration combines the role of a self-governing body and state administration. The mayor of the village is also a member of the Steering Group.

The town of Žatec is the centre where all important organisations involved in hop growing, trading and research are based. Hop growers in the Žatec region are associated in the Hop Growers Union of the Czech Republic which is also based in Žatec. The Union supports the hop growers and maintains the hop tradition which they also promote in the Union's professional journal – "Czech Hop Magazine". The Secretary of the Union is also a member of the Steering Group.

Hop Research Institute Co. Ltd. is a research and development institution focused on breeding and protecting hops. It operates its own research farm at Stekník and the results of its research are applied in a significant area of hop fields situated in component part 01. The Managing Director of the Hop Research Institute is also a member of the Steering Group.

CHMELÁŘSTVÍ, cooperative Žatec is a co-operative organisation of hop growers who manage and cultivate about 96 % of the area of all hop fields in the Czech Republic. The co-op does joint purchases and focuses on storage, processing and hop trading. The chairman of the co-op is also a member of the Steering Group. The co-op also contributes to the preservation of hop-related traditions and it is a founder of the Hop Museum which has the biggest collection of hop-related exhibits in the world. The manager of the Museum is also a member of the Steering Group.

All those mentioned above have also signed the Memorandum on Co-operation for the Preparation for the Nomination Process.

This comprehensive management system has been developed to ensure the highest level of protection of Žatec and the Landscape of Saaz hops.

The Management Plan has been elaborated in cooperation with all mentioned stakeholders as an

essential tool for ensuring the effective protection of the proposed Outstanding Universal Value of the property, its authenticity and integrity. The main goal is to protect and preserve the nominated property while ensuring its sustainable development and reducing risks that could jeopardise its values. Consistent and gradual implementation of proposed measures, goals, and intentions, which are described in more detail in the proposal part of the Management Plan, will lead to the preservation of the property's values for future generations and, at the same time, help eliminate threats that may arise in the future.

LONG-TERM CHALLENGES FOR THE PROTECTION AND MANAGEMENT

The key prerequisite for good management is to co-ordinate and harmonise the development interests of all stakeholders. The Management Plan outlines specific measures in six key areas: Protection and Management, Preservation and Restoration, Risk Reduction and Damage to the Property, Ownership and Legal Arrangements, Presentation of the Property Values, Access to Both Components by Public/Private Transport.

The key challenges addressed by the Management Plan in the long-time horizon include the following:

- Restoration and repair of the important buildings in both components and completion of the landscape and urban structure based on the Land Use Study of the Žatec Region while preserving the landscape's hop growing function;
- Identification of the suitable alternative use of hop-related buildings emphasising the OUV without compromising their authenticity and integrity;
- Completion of the Strategy for Tourism covering the entire nominated property and linked to higher level tourism development strategies such as regional and national.

Development of an architectural and land-use planning study addressing the organisation of the entire nominated area, facilities for visitors and use of preserved hop-related buildings in component part 01.



Grooving the hop string, Stekník, 2020



3.2 COMPARATIVE ANALYSIS

In 2007, the Czech Republic included in its Tentative List the topic of built and urban heritage related to hops as a crop and as a trade commodity which has been associated with the town of Žatec for centuries. The aim was to present this very interesting urban structure, whose construction form, overall urbanistic structure and panorama were shaped by the fact that since the Middle Ages within the town and especially in its vicinity hops have been grown and then further processed and prepared for onward trade within the city, attaining huge volumes from the 19th century onwards. This successful progress in hop growing, in addition to buildings which are functionally and structurally exceptional, and which have not been preserved in such numbers anywhere else in the world, brought a number of other functions to the city.

The original version of the nomination documentation was elaborated for a serial property called "Žatec – the Town of Hops", which contained an extensive component part with the historic part of the town, and a large, currently non-operational brewery near it, as evidence of bold business activities related to the use of local hops. The corresponding comparative analysis was thus focussed only on those areas where hops are cultivated. Evaluation of the nomination took place in 2017–2018. A dialogue with ICOMOS experts at the Evaluation Panel in November 2017, the evaluation report and later discussion by the World Heritage Committee in 2018 all showed that an approach based only on the specifics of urban structure and development was too narrow. The World Heritage Committee decided (42 COM 8B.26) that *"the review of the Žatec - the Town of Hops nomination be deferred in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to deepen the research on the theme of hop growing and processing, as well as on the property and its wider setting to bring into focus areas of potential significance and areas where traditional hop farming and processing and its impacts on the landscape can be identified and, if a robust case can be made, then reconsider the scope of the nomination"*.

The decision of the World Heritage Committee was discussed with the representatives of the local authority and with the local community. The result of this was agreement that they are still very interested in continuing with the project and that the recommendation formulated in the Committee's decision will be applied. In dialogue with the ICOMOS experts, it was confirmed jointly that the revised nomination will focus on the unique specifics of hop cultivation and processing and the impacts of this activity on both the landscape and on the town of Žatec as a world centre for hop processing and trade.

An advisory consultation with ICOMOS (Midstream Process) was held in 2019 on the new concept for the

nomination documentation, and its related comparative part. Its mission part and the final Interim Report recommended that the new comparison, in addition to the listing of other landscapes where hops are grown, compare more generally other relevant agricultural landscapes. The content of the original comparative analysis, of course, remains valid and, partly amended, has been included in the text which follows. However, the study has been augmented with knowledge gained from the study of other agricultural landscapes, apparently different, but in which crops are also grown, which shape their image and the homes of communities that live and farm in cultural landscapes. For this reason, it is appropriate to thank the international ICOMOS organization for contributing with its methodological assistance within the Midstream Process to our attempts to explain to the general and expert public outside the Czech Republic the differences and similarities of hop cultivation and processing when compared with other widely grown crops represented on the World Heritage List. The new concept for the nomination is also one reason why we have decided not to compare just warehouses and processing facilities intended for a single commodity. There is strong evidence that Prague Suburb of the component part 02 offers an exceptional density of hop warehouses and other buildings related to the trade of hops which bear witness to the Golden Age of industrial development in hop processing. Many buildings and technical equipment there have remained in their original state, providing a reliable and authentic impression of the industry and its influence on the architecture and shape of the town. The proposed Outstanding Universal Value is expressed more by the linkage of elements related to hops in the landscape into rural-urban ensemble, therefore we chose to compare more generally the cultural landscapes associated with the cultivation and processing of consumer crops. In our opinion the unique value of the nominated cultural landscape is the complexity and interconnectedness of individual components of the preserved hop heritage, which together provide coherent evidence of cultivation, processing and trade in this commodity.

Given that the World Heritage List does not yet include any property reflecting the heritage associated with the cultivation, processing and trading of hops, an analysis of all major world hop growing areas was carried out as a matter of priority (*Subchapter 3.2.a*); this contains 24 hop growing areas throughout the world.

Applying the ICOMOS recommendations and with the aim of objective comparison, plenty of relevant cultural landscapes associated with the cultivation and processing of consumer crops inscribed on the World Heritage List and other agricultural landscapes included in the Tentative List were also selected (*Subchapter 3.2.b*).

CATEGORY OF PROPERTY

For the Žatec and the Landscape of Saaz Hops nomination the category of a cultural landscape was chosen in line with the Operating Guidelines for the Implementation of the World Heritage Convention, 2019 (the OGs), Section 47, based on the definition in Article 6 of Annex 3 "Guidelines on the Inscription of Specific Types of Properties on the World Heritage List": Cultural landscapes are cultural properties and represent *"the combined works of nature and man" (Article 1 of the Convention). "They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal."*

Art. 7 of the OGs Annex 3 selects cultural landscapes "on the basis both of their Outstanding Universal Value and of their representativity in terms of a clearly defined geo-cultural region and also for their capacity to illustrate the essential and distinct cultural elements of such regions."

Art. 10 of the OGs Annex 3 further states that "Cultural landscapes fall into three main categories...". From their characteristics it is clear that Žatec and the Landscape of Saaz Hops is an example of Category (ii) an organically evolved landscape. In view of the cultivation and processing of hops still carried out, maintained and developed here, this is a living, continuing landscape, which from the Middle Ages bears the influence of a monoculture/hops on the agro-economic system, including evidence of technological development in the cultivation and breeding of hops and subsequent processing and trade. The whole system at the same time had a socio-economic impact on the rural and urban parts of the nominated property from the Middle Ages to the present. Žatec is an important example of an urban medieval hop growing centre, which remains of great importance to this day. For these reasons, the nominated property is being presented as a living continuing landscape.

Art. 11 also is very important for this nomination and its scope; it comments inter alia on how the extent of the cultural landscape should be selected during the nomination, stating: "The extent of a cultural landscape for inscription on the World Heritage List is relative to its functionality and intelligibility. In any case, the sample selected must be substantial enough to adequately represent the totality of the cultural landscape that it illustrates."

TYPE OF PROPERTY

Žatec and the Landscape of Saaz Hops is also a nomination for a serial property composed of two component parts. Within the meaning of Art. 137 a of the Operational Guidelines, the two component parts "should reflect cultural, social or functional links over time that provide landscape connectivity."

The effects of the cultivation and processing of hops in the landscape of the nominated property are clearly recognizable and visible in both the rural and urban component parts. The component part 01 – Saaz Hop Landscape documents the changes in the hop field landscape over a year, in authentic historically documented locations of production areas, linking hop fields to specific hop growing rural buildings, to the stability of historic routes that were used in the landscape and in travel to Žatec. The component part 02 – Žatec covers the layout of the site of hop processing facilities, the panorama of the chimneys of hop kilns and sulphuring chambers, including the remains of evidence of hop drying in historic roof spaces.

The use and significance of Žatec hops are worldwide, even though its cultivation is territorially limited. It is therefore interesting how throughout the world this crop still represents a region that has been a major supplier to other countries since the Middle Ages. In this respect, hops have much in common with other crops that are popular worldwide, but where the natural conditions for growing them in the natural environment are limited (generally tropical and subtropical fruits, such as tobacco, coffee, rice).

Hops as a monoculture, whose appearance is the same every year during the plant's productive life, are characteristic:

- by the nature of the plant that produces the hop cones and the demands it makes on climatic and soil conditions;
- by the plant as such;
- in the form of the fields where they are grown;
- by the nature of the cone harvest and the need for rapid processing;
- by its minimum share of the weight of the final product (usually beer);
- in its use of specific buildings where hops are combed, dried and stored.

INTRODUCTION TO CULTURAL LANDSCAPE COMPARISON

"There exists a great variety of landscapes that are representative of the different regions of the world. Combined works of nature and humankind, they express a long and intimate relationship between peoples and their natural environment."

We have borrowed this quotation from the general motto of the World Heritage Centre website, which gives specific and consolidated information about cultural landscapes, in order to explain the concept of this part of the comparative analysis.

Since 1992, when the Convention on the Protection of World Heritage became the first international legal instrument for the recognition and protection of cultural landscapes, and the Committee adopted guidelines for their inclusion on the World Heritage List at its 16th session, cultural landscapes have become a major part of this prestigious List. However, the term "cultural landscape" includes a wide variety of manifestations of the interaction between man and his natural environment. In the comparative part of the nomination documentation, the nominations for cultural landscapes being presently submitted must deal not only with the basic classification of the particular landscape into basic categories, but also carefully select relevant parallels or explain how the landscape is different and exceptional.

Collective expert knowledge of agricultural landscapes is constantly evolving in this direction under the influence of other nominations, in which individual countries contribute new information in partial comparative analyses. A comprehensive overview and definitive typology of agricultural landscapes to which the nominated Žatec and the Landscape of Saaz Hops - property could directly related is not however available.

The aforementioned fact was a major new challenge for the Czech Republic when preparing this nomination documentation, as well as when selecting agricultural landscapes to be commented on at least briefly for comparison with the Landscape of Saaz Hops.

The World Heritage List as at 2020 already includes more than a hundred cultural landscapes (114 as at spring 2020), of which five are transboundary properties. Dozens of other cultural landscapes appear on the Tentative List, in the plans of a number of countries. Of this number of cultural landscapes, the World Heritage List contains 19 whose Outstanding Universal Value and criteria are associated with the cultivation and processing of consumer crops in a particular place, i.e. landscapes directly affected by an agricultural culture that has shaped the landscape, settlements and population.

The world heritage cultural landscapes selected for this comparison are productive agricultural landscapes. These properties are recorded in short annotations for which aspects that are relevant to the nominated property were selected. (These short characteristics are mostly based on the OUV definitions as displayed on the WHC website). It is obvious that Outstanding Universal Value was most often acknowledged for agricultural landscapes whose visual character was shaped by monocultures. Such undoubtedly is also the character of the nominated Žatec and the Landscape of Saaz Hops property.

The Outstanding Universal Value of some agricultural landscapes is conveyed by attributes that also reflect the local community, the vernacular architecture of related settlements and even the significant stylistic architecture

of associated towns. Such a simplified summary can also be applied to the nominated Žatec and the Landscape of Saaz Hops property.

Many agricultural cultural landscapes are exceptional not only for the cultivation and processing of the harvested crop at the particular location, but also for subsequent processing, often into a final product ready for consumption. This applies in particular to most properties presenting the heritage of vineyard culture and the production of wine or wine-based beverages, as well as the cultivation of agave and its processing into tequila, olive oil processing and the production of cigars from dried tobacco.

A secondary finding of the comparative analysis is the fact that of the crops that are contained in the localities compared in this analysis and which are the basis of those particular agricultural landscapes, the nomination of the hop landscape of the Czech Republic has direct parallels in principle only with vineyard landscapes. Other crops associated with Outstanding Universal Value on the World Heritage List have been, and are, grown or traded across the world's regions (coffee, tea, rice, olives, date palms, tobacco etc.) and are primarily cultivated in other climatic zones.

GENERAL BASIS FOR THE COMPARISON OF CULTURAL LANDSCAPES

The basic reference material when considering nominations for the World Heritage List is the long-established ICOMOS study "Filling the Gaps - an Action Plan for the Future", abbreviated as the "Gap Report" from the beginning of the 21st century. The study draws attention to the thematic imbalance of the World Heritage List and identifies cultural landscapes as an interesting and desirable type for monitoring the potential of a balanced World Heritage List.

The bases of this ICOMOS study already included the results of a series of expert meetings, one result of which is "The Global Strategy for a Representative, Credible and Balanced World Heritage List". This Strategy traced a number of "gaps and imbalances" on the (then) World Heritage List. Of these, the following thesis is of particular relevance to the nominated cultural landscape in terms of time scale and topic: "In more general terms, all living cultures - and especially the "traditional" ones -, with their depth, their wealth, their complexity, and their diverse relationships with their environment, figured very little on the List". The final parts of this study state inter alia: *"The (second) main focus is on the need to identify properties, which are under-represented on the list or not represented at all, through assessments of cultural qualities of heritage assets, which may highlight properties not previously considered for nomination."*

The topic of cultural landscapes was opened up for the World Heritage List on the basis of the often quoted

conclusions of the 16th Meeting of the World Heritage Committee in 1992, where general categories were defined (see above).

After ten years of experience with cultural landscape nominations (2003), an analytical document was prepared by P.J. Fowler at the initiative of the World Heritage Centre; this analysed the trends in nominations for cultural landscapes for the period 1992-2002, since as of 2002 there were already 30 such properties on the List. Moreover, even at that time Fowler's study showed that of the World Heritage List properties registered before 1992 (that is, by recognizing "cultural landscapes as specifics"), a further 70 had features of a cultural landscape, although previously they could not be so nominated and entitled). In his summaries, P.J. Fowler predicted great interest in this type of nomination and estimated another hundred over the next decade. The methodological scope of this material goes far beyond the details that can be directly related to the comparison of the hop landscape, but it is important also to place our study in this context.

P.J. Fowler concluded his work with a set of 12 clear recommendations on how to proceed on cultural landscapes; even 18 years later these remain valid: Long before the wording of the "UNESCO Recommendation on Historic Urban Landscape (2011)," he here recommended viewing smaller historic towns in particular as distinctive "urban landscapes" with their own character (which in the case of the property being nominated is very well represented by the panoramically distinctive urban landscape component of the town of Žatec). One of the recommendations even then appealed for the involvement of local communities in the preparation of the nomination and in the subsequent care of such a landscape, which was perfectly fulfilled in the case of Žatec and the Landscape of Saaz Hops. From a methodological point of view, the key recommendation is number 11, which states inter alia:

"...before too many more nominations of continuing agricultural landscapes are proposed, in particular from Europe, a series of regional thematic studies of farming landscapes (pastoral and arable) should be made with a view to a global overview providing criteria on how to distinguish in World Heritage terms potential cultural landscapes resulting from the commonest land-use in the world".

A special review number World Heritage No. 69, released in 2013, can undoubtedly be taken as part of such recommended analytical work. It dealt with the basic comparison of agricultural landscapes as being unequivocally landscape-cultural. In addition to a few more detailed examples of landscapes, it contains two inspiring general articles that greatly helped the way of looking at the optimal form of comparison for the nominated Žatec and the Landscape of Saaz Hops property for the World Heritage List.

Ana Luengo in her article World Heritage Agricultural Landscapes recalls in particular the very important common semantic origin of the terms culture and cultivation and mentions the numerous social contexts of agricultural landscapes. Pierre-Marie Tricaud is more specific in his article Agricultural Landscapes in a World Heritage Context, in which he discusses the infinite diversity of agricultural systems. The article divided these up from different perspectives, from which for our comparison the division according to the general characteristics of crops and products is also important, so we here present the whole list: basic foods (cereals, tubers), fruit-bearing plants and woody plants, from which other products, including alcoholic beverages, can be obtained from most of the juices by fermentation; oil plants (olives, sunflowers), high sugar plants (cane, sugar beet, etc.); stimulants containing alkaloids (coffee, tea, cocoa, tobacco), which require a number of subsequent processes (drying of leaves, roasting of beans, etc.).

According to P.M. Tricaud, other large groups of agricultural landscapes are those specializing in a textile base (flax, hemp, cotton, jute, etc.) and landscapes with ruminants which provide milk, meat, leather, but at the same time provide a significant amount of energy as working and load-carrying animals and are irreplaceable within agro-grazing systems.

From the point of view of the image of a cultural landscape, various land-use systems, or rather the degree of landscaping necessary for the purposes of more intensive agricultural production, are very important. In this respect, there are also well-known artificial production terraces on the World Heritage List, usually visually spectacular in their scope and various slopes of hills and mountains (rice terraces in the Philippines, vineyard terraces in Italian sloping landscapes, the interesting terraces of the African Konso nation and region). There are numerous agricultural landscapes with sophisticated water-use systems, including artificial canals or aqueducts (rice fields, landscapes with olives and vineyards in Palestine, the archaeologized or partly derelict landscapes of old coffee plantations or terraces with olive trees and vineyards. Of visual significance are farming systems in fields surrounded by masonry walls (e.g. vineyards on the island of Pico).

In the concluding part, the author again states that for products and commodities that are grown in several countries or even in several regions of the world, it is difficult to determine "which are the more representative, emblematic or exceptional landscapes in each type". This thematic issue of World Heritage Revue thus confirmed that the themes of productive landscapes, important for the nomination of Žatec and the Landscape of Saaz Hops still have many open questions and global thematic studies are not yet available. Even with the passage of the next few years, it turns out that the study of the interconnection of

humankind and landscape activities, in which it has used natural conditions for a wide range of agricultural activities for generations, remains relevant. Crop monocultures not yet represented on the World Heritage List, enrich the knowledge of humanity with evidence of how diverse successes have been achieved when making use and even breeding originally wild plants, especially where the natural conditions for cultivation were optimal.

In 2017, the joint ICOMOS-IFLA Principles Concerning Rural Landscapes As Heritage were adopted. It can be stated that the nomination of Žatec and the Landscape of Saaz Hops fully complies with the notion of its Preamble as well as the Definition explaining "rural landscape as heritage". Of many ideas formulated the specific one: *"Rural landscapes as heritage encompass technical, scientific, and practical knowledge, related to human-nature relationships"* fits to our project perfectly. Žatec and the Landscape of Saaz Hops property well *"... demonstrate the entangled connections between humans and other species across broad areas ..."* as it is commented on in the paragraph devoted to the Importance of *"... landscapes used for the production and or harvesting of plant"*.

CRITERIA FOR OUTSTANDING UNIVERSAL VALUE AND BASIC COMPARATIVE ATTRIBUTES

The criteria selected for the definition of Outstanding Universal Value are (iii), (iv) and (v). For the justification, see *Chapters 3.1 and 3.3*. The basic comparative attributes proving the uniqueness of the nominated property were determined with regard to the following criteria:

1. Time period – criteria (iii), (v)

Continuity of landscape use (in cultivation, up to hop processing). Especially in comparison with hop growing regions.

2. Influence of the Žatec wire trellis innovation on other structures – criterion (v)

High artificial hop field structures (6.5–7 meters high) and the influence of the innovative so-called Saaz hop wire trellis on the technologies of structures in the world's hop growing regions. Especially in comparison with hop growing regions.

3. Landscape visual expression – criteria (iv), (v)

Dynamically expressed landscape especially in the period from May to September (under optimal conditions plants with a daily growth of approximately 10–20 cm). The plant grows up to the ceiling of the structure and as a result creates the impression of a "hop sea". Within a hop growing landscape, all comparable hop growing regions are visually very similar. This attribute was observed mainly in connection with other agricultural cultural landscapes.

4. Interconnection of rural production and urban processing collection of hop buildings, specific typology of structures – criterion (iv)

Represents the historical connection of the rural cultivational landscape and its connection to processing in the urban landscape. Rural conservation of hops by drying - typical constructions of hop drying kilns, the subsequent part of the processing process (final drying, cleaning, pressing, sulphuring preservation) then took place in Žatec as a centre of international trade and transport, whose buildings were completely adapted to hop processing. A unique concentration of buildings specific to hops. In comparison with all cultural landscapes.

5. Quality certification and scientific breeding research within a property – criteria (iii), (v)

The presence of a functional certification process guaranteed by the state with a link from hop production via transport to the certification centre within the nominated property and back to the research base from the urban component part 02 to the rural component part 01, which is fully under the control of hop growers. In comparison with all cultural landscapes.

METHOD OF WORK ON THE COMPARISON OF AGRICULTURAL CULTURAL LANDSCAPES

The comparison of landscapes with hop fields is a general follow-up to the general studies in the aforementioned issue No. 69 of World Heritage from 2013. However, landscapes with hop fields were not even mentioned in the articles cited, but the general remarks on possible ways of viewing agricultural landscapes were very inspiring.

Following earlier consultations with ICOMOS, we realized that it is necessary not only to compare hop field landscapes with each other, but to bring about a basic comparison with other related productive agricultural landscapes. Therefore, selected nomination files for already registered World Heritage sites were studied, especially for those that are still productive and contain large monoculture fields, as well as references to preserved documents on older agricultural activities. It should be noted that, in particular, comparative studies of agricultural landscapes registered on the World Heritage List seldom deal with any crop beyond the one which determines the nature of the nominated landscape in question. No studies have looked at hop field landscapes. It is thus obvious that hop field landscapes are not only objectively relatively uncommon, but are evidently also a little-known kind of landscape. In order to explain the specifics and uniqueness of the nominated property, it was useful for this nomination project also to try to compare seemingly typologically different landscapes. We believe that by emphasizing certain aspects of cultivation, natural conditions and morphological contexts, the nature of plants, the seasonality of the harvest and the link to the local population, it was

possible to compile a plastic overview of the similarities and differences of the Žatec and the Landscape of Saaz Hops property from those represented by other world-renowned large-scale agricultural monocultures.

Cultural landscapes associated with the cultivation of agricultural crops are a very specific kind of cultural landscape. More than both the other general categories of cultural landscape (i.e. designed or associative ones), agricultural landscapes are closely linked to the natural conditions for growing a particular crop.

The most significant visual characteristic of the agricultural landscape and the conditional factor for farming is morphology of the terrain: some crops thrive on sloping terrain, others require horizontal or artificially prepared terraced areas because of the need for irrigation. Other differences are closely related to the local climate, because the success of cultivation has always depended on the required air temperature and/or humidity, the intensity of sunlight, etc. The properties of the specific soil profile are important, which even within the same climate zone can differ fundamentally according to the geological composition of the subsoil. It can happen that crops of globally significant landscapes are undemanding and thrive on poor soils (agave), while others are very sensitive to subtle differences in soil composition (specific types of wines, Saaz hops, etc.)

Agricultural landscapes that are recognized as part of the world's heritage are often specific in that they retain evidence of mankind's skill in making use of its natural environment or creatively locating or shaping structures associated with crop processing. World Heritage landscapes usually contain growing areas with crops grown in the same place for centuries. This is true regardless of the fact that some species must be planted annually (rice, tobacco), while others grow on perennial, sometimes very long-lived woody species (olives, tea trees, but also grapes, hop cones) or are the product of other perennial plants (sugar cane, agave). Crop stability is then the basis for the exploitation of local generational knowledge and is also the basis of local inventiveness, with a view to improving local techniques. This is also the case with the nominated property.

Agricultural landscapes which are World Heritage, usually also bear witness to a gradual or even revolutionary transformation in cultivation and processing techniques. In some landscapes, proven practices with a higher share of manual labour have been maintained even when the proportion of mechanization has increased in other places, but the continuation of traditions even confirms the higher quality of traditional practices and increases the commercial success of such crops.

Some of the world's agricultural landscapes represent a continuing, still vivid picture of crop cultivation closely linked with the livelihood of the rural population, in which

not only have manual methods of activities in fields and plantations survived to this day, but which contain many ethnic and religious features, in which the production cycle is closely associated with folk traditions and local rituals. Such agricultural landscapes have a very close relationship to the countryside throughout the whole process of cultivation and processing. It is also interesting that such crops are usually not just single-purpose but give their growers more ways of being used. In such cases, it is clear that the population growing the crop also consumes it directly or indirectly, and only puts the surplus into commercial follow-up processes. For a long time some agricultural landscapes made use of slave labour; this applies to a number of colonial countries in the tropics and labour-intensive crops, where the Outstanding Universal Value of the landscape lies not only in the plantations themselves, in modifications to the landscape for growing and processing crops, but also in evidence of the life of non-free peoples in the past.

ATTRIBUTES OBSERVED IN COMPARISONS OF CULTURAL LANDSCAPES

As indicated above, in many cultural landscapes, the cultivation of economically successful crops forms a significant part in the Outstanding Universal Value attributes. In order to explain the similarities, differences and specifics of the nominated Žatec and the Landscape of Saaz Hops property in comparison with agricultural productive landscapes inscribed on the World Heritage List or Tentative Lists, the following main aspects that are important for such landscapes were therefore observed:

- The actual plant/wood species and crops in terms of their characteristics (including whether technical props are necessary for their cultivation), or a direct comparison with hops;
- The growth cycle and seasonality of the harvest, and thus the dynamics of the field/plantation's appearance during the year or the life cycle of the plant/tree;
- The water demands of the crop, and thus the need for or existence of an artificially enhanced water system within the landscape;
- The harvesting process, when and for how long it takes place in the specific landscape being compared;
- The processing method in the specific landscape being compared, or more exactly, the use of the crop, its single- or multi-purpose use by producers, and thus also relationships, rituals, faith;
- The visual dynamics of crop cultivation within the wider scope of the landscape as well as its seasonal variability;
- Crop-related professional aspects - the scientific contribution of recent generations building on the

experience of older generations; certification, research, breeding (within the property);

- Natural conditions for crop cultivation in general and any which are specific to the landscape being compared (possibly including altitude and the intensity of natural rainfall, sunshine);
- The impacts of crop cultivation and processing on the image of related villages and/or towns, the administrative centre;
- The existence of the necessary follow-up relations between the countryside and a particular city, which provided the final stage of processing and possible further processes before actual use of the crop;
- Any further specifics.

Far from all agricultural landscapes that are already on the World Heritage List or shown on the Tentative List demonstrate their Outstanding Universal Value in the fullness of this selected set of characteristics.

It should also be borne in mind that Outstanding Universal Value of many of the World Heritage landscapes is conveyed by attributes characteristic of designed and/or associative cultural landscapes, which does not however mean that they do not include productive agricultural areas; this is very common in visually attractive vineyards, significant for important architectural ensembles, towns and villages: In the Czech Republic, for example, there is the large-scale complex of the Lednice-Valtice Cultural Landscape, which includes large areas of extremely picturesque vineyards, as well as productive fields around its villages. The cultural landscape of the Wachau,

situated along a stretch of the Danube Valley in Austria, includes distinctive areas with vineyards; likewise the Loire Valley in France between Chalonnes and Sully-sur-Loire or the Upper Rhine Valley in Germany. An interesting combination of values in a cultural landscape is an Indonesian property, which is a Cultural Landscape of the Bali province : the system of subaksas a manifestation of the TriHitaKarana philosophy, which consists of five rice terraces and their water temples, which since the 11th century have followed the ecology of rice terraces on the scale of entire river basins and the property as a whole demonstrates important elements of the architectural composition of the landscape, and there are certainly more to be found. However, such landscapes were not selected for these comparative analysis because its purpose is not to provide a complete list of the world's cultural landscapes, but only of those whose value and significance is based on productive monocultures.

Based on a general analysis of the spectrum of properties registered on the World Heritage List, even before the analysis which follows it can be stated that in no cultural landscape registered on the World Heritage List are productive hop fields mentioned, nor are they mentioned in any descriptions of world properties as an complementary aspect of their values.

Visual stability undoubtedly contributes to the Outstanding Universal Value of a cultural landscape; this is a function of perennial and permanent monocultures. In Europe, for example, there are visually stable extensive landscapes of vineyards and olive groves, cork oak plantations and orchards (more recently planted in the form of plantations with fruit walls which are self-supporting or with auxiliary supporting structures which bring them closer to the appearance of vineyards.)

Other visually unvarying production landscapes are, in addition to woody plants, places with fields planted with perennials, and for whose repeat output the fields are necessarily treated in the off-season or on which plants are even "overwintered" outdoors (and subject to local conditions, also covered against "freezing" during the winter months). Typical of this are, for example, strawberry plants, which can remain in the field for several years. There are also perennial plants that "overwinter" directly underground (for example, asparagus - another perennial plant introduced into Central Europe). Hops are also specific in this respect, as they are perennial and at the same time "practically invisible after harvest".

The comparison therefore focuses on a cultural landscape with a monoculture that is not represented on the World Heritage List, and at the same time has a significant impact on the visual appearance of the landscape.



View of the Church of the Assumption of the Virgin Mary from the north, Žižkovo Square, Žatec, 2016

3.2.a HOP FIELDS IN THE CZECH REPUBLIC AND ABROAD

In view of the climatic conditions required, hops are grown globally between the northern 35th and 55th parallels and the southern 35th to 55th parallels.

There are three hop growing areas in the Czech Republic: Saaz (Žatecká) and Auscha (Úštěcká) in Bohemia and

Tirschitz (Tršická) in Moravia. The Saaz hop growing region is remarkably large. The districts of Louny and Rakovník make up its core. In the district of Louny there are a total of 241 cadastral areas (of which 27 in the hop growing location of Podlesí and 35 in Údolí Zlatého potoka); in the district of Rakovník there are 110 cadastral areas (of which 14 and 8 in the above-mentioned locations). There are quite a number (44) of related cadastral in the Kladno district (the other 5 cadastres here belong to the Auscha hop growing area), while in other districts there

This overview of hop growing areas is ranked by country (Czech Republic, Germany and other areas abroad) and according to the length of cultivation. Note on the attributes in the table, Attribute No. 3 visual appearance; given that the visual appearance of the hop landscape is similar worldwide, this attribute has been observed mainly in connection with other agricultural landscapes.

	IMPORTANT HOP GROWING REGION NAME (CURRENT STATE OF NOMENCLATURE), COUNTRY	TIME PERIOD - ATTRIBUTE NO. 1	INFLUENCE OF THE SAAZ HOP WIRE TRELLIS INNOVATION ON OTHER STRUCTURES IN OTHER COUNTRIES (YES/NO) - ATTRIBUTE NO. 2	INTERCONNECTION OF RURAL AND URBAN COMPONENT PARTS (YES/NO) - ATTRIBUTE NO. 4	CERTIFICATION, SCIENTIFIC BREEDING RESEARCH AND INTERCONNECTION WITHIN THE HOLDING (YES/NO) - ATTRIBUTE NO. 5
Czech Republic					
1.	Žatecká (Saaz) hop growing region, Czech Republic	from the 10 th century	YES	YES	YES
2.	Úštěcká (Auscha) hop growing region, Czech Republic	from the 16 th century	YES	NO	NO (state-guaranteed certification YES, research in the hands of growers YES)
3.	Tršická (Tirschitz) hop growing region, Czech Republic	from the 19 th century	YES	NO	NO (state-guaranteed certification YES, research in the hands of growers YES)
GERMANY					
4.	Hopfenanbaugebiet Hallertau Germany (Bavaria)	from the 9 th century	YES	NO	NO (Hüll Hop Research Institute - public ownership, managed by representatives of breweries (4 persons, Bavarian government 1 person and representatives of growers and traders one person each)
5.	Hopfenanbaugebiet Spalt Germany (Bavaria)	from the 9 th century	YES	NO	NO (Hüll Hop Research Institute)
6.	Hopfenanbaugebiet Elbe-Saale, Germany (Saxony-Anhalt)	from the 11 th century	YES	NO	NO (Hüll Hop Research Institute)
7.	Hopfenanbaugebiet Hersbruck, Germany (Bavaria)	from the 13 th century	YES	NO	NO
8.	Nuremberg and Bamberg, Germany (Bavaria)	from the 14 th century	YES	NO	NO
9.	Hopfenanbaugebiet Tettnang, Germany (Bavaria)	from the 14 th century	YES	NO	NO (Hüll Hop Research Institute)

	IMPORTANT HOP GROWING REGION NAME (CURRENT STATE OF NOMENCLATURE), COUNTRY	TIME PERIOD - ATTRIBUTE NO. 1	INFLUENCE OF THE SAAZ HOP WIRE TRELLIS INNOVATION ON OTHER STRUCTURES IN OTHER COUNTRIES (YES/NO) - ATTRIBUTE NO. 2	INTERCONNECTION OF RURAL AND URBAN COMPONENT PARTS (YES/NO) - ATTRIBUTE NO. 4	CERTIFICATION, SCIENTIFIC BREEDING RESEARCH AND INTERCONNECTION WITHIN THE HOLDING (YES/NO) - ATTRIBUTE NO. 5
OTHER AREAS ABROAD					
10.	Poperinge, Belgium	from the 13 th century	YES, but lower structure height, max. 6 m	NO	NO (research - universities, private activities)
11.	Alsace, France	from the 14 th century	YES	NO	NO (research - universities, private activities)
12.	Paddock Wood, Kent, UK	from the 16 th century	YES, but lower structure height (max. 6 m), currently mostly (max. 4 m)	NO	NO (research - universities, private activities)
13.	George, Republic of South Africa	from the 17 th century	YES, but lower structure height	NO	NO (research - private activities)
14.	Areas in the states of Washington, Oregon and Idaho USA (North-west)	from the 18 th century	YES, but lower structure height, max. 5.5-6 m	NO	NO (research - universities, private activities)
15.	Lublin Oblast, Poland	from the 19 th century	YES	NO	NO (research - universities, private activities)
16.	Nelson, New Zealand	from the 19 th century	YES, but lower structure height, (max. 5 m)	NO	NO (research - universities, private activities)
17.	Savinja valley	from the 19 th century	YES	NO	NO (research - Hop and Brewing Research Institute in Zatec)
18.	Tasmania, Victoria Australia	from the 19 th century	YES, but lower structure height, (max. 5 m)	NO	NO
19.	Zhytomyr region, Ukraine	from the 19 th century	YES	NO	NO
20.	Chuvash Hop Region, Cheboksary, Russia (Chuvashia)	from the 20 th century	YES	NO	NO
21.	Xinjiang + Gansu Provinces, China	from the 20 th century	YES, but max. height 6 m	NO	NO
22.	Tono, Hokkaido + Iwate Provinces, Japan	from the 20 th century	YES	NO	NO
23.	Horná Streda region, Trenčín district, Slovakia	from the 20 th century	YES	NO	NO
24.	León, Spain	from the 20 th century	YES	NO	NO (research - universities, private activities)

is a negligible number: Rokycany (6), Chomutov (3), Plzeň-sever (2). There are a total of 406 cadastral areas. Valuable units of the hop growing landscape can be defined in all three hop growing regions. However, none of them is comparable to the Žatec landscape in the river Ohře floodplain either in scope or concentration, but especially in age.

For map of the Saaz hop growing region based on cadastral areas inscribed on the list of the Geographic Indications of European Union see *Chapter 7.b2*.

OVERVIEW OF LOCATIONS COMPARED IN DIFFERENT HOP GROWING REGIONS

CZECH REPUBLIC

ŽATECKÁ (SAAZ) HOP GROWING REGION (1.)

The nominated property was selected from the most fertile hop growing location of the whole region, situated in the Valley of the stream Blšanka, also called the Zlatý potok (Golden creek). The basis for the uniqueness of the hops in the Žatec region are the specific natural conditions. This area is protected from the north-west by the Ore Mountains, the Doupov Hills and the Bohemian Central Mountains, which create a so-called rain shadow.

The landscape context of the proposed property is demonstrated by the rural component part 01, with its hop fields located in the most fertile locations of this hop growing region. History shows that the area of hop fields in the Žatec region has changed significantly several times, but the selected area represents the most permanent, centuries-old location, depicted and described over

a long period in historical sources (A more detailed description of the territory selected for nomination is given in *Chapters 2.a and 2.b* and is not repeated here).

The territory of this hop growing region is relatively large. When choosing the rural component part 01, the primary consideration was the quality of the area, the concentration of hop fields and the documented length of hop cultivation. In the Saaz hop growing region, it is possible to define other valuable hop field landscapes, however, none have all the important attributes of the nominated territory. This is evidenced by the testimony of cartographic sources. Ročovsko area on the northern side of the Džbán Highlands was chosen for a detailed test that confirms these conclusions:

Unlike the wide floodplain of the river Ohře, the landscape of the Ročovsko area is shaped quite differently. It consists of a system of parallel, deeply cut valleys, separated by flat ridges, largely still forested. Of all the hop field landscapes in our country, the landscape of this area is the most remarkable. The developments by means of which this area - part of the Podlesi hop growing locality within the Saaz hop growing region - became a hop field landscape is also very interesting.

The centre of this landscape is a small town, founded in the mid-14th century near an existing fortress. The town was first called Bor, Dráčov, Vysoká obec, and only since 1470 is the name Ročov (from the fortress) documented. In the valley below it, a monastery of Augustinian hermits was founded in 1373 with a Church of the Assumption of the Virgin Mary.



The first military mapping (1780–1783) does not capture any hop fields here. This does not mean of course that hops were not cultivated here at that time (or earlier), but it was of limited output that the cartographers did not consider worth recording (hop fields are mentioned in older sources).

The second military mapping (1842–1852) recorded a narrow strip of hop fields along the stream Hasina from Hřivice to Solopysky and along the stream Pnětlucký to Pnětluky and along the Výrovka towards Černodol. Hop fields are not recorded in the more easterly valleys.

The third military mapping (1876–1878) shows a similar situation in the Hasina valley, with new hop fields being added above Solopysky, but disappearing along the Pnětlucký stream.

So the main period of the building up of the local hop fields occurred somewhat later. In Horní Ročov, hop cultivation had been developing since the 1860s. Orthophoto maps from the middle of the 20th century document the process of abolishing hop fields in valley locations and the establishment of new, significantly larger ones, on flat plateaux, where large-scale cultivation technologies could be better deployed. During the second half of the 20th century, this process was completed, so today the Džbán hop fields are to be found on the tops of the ridges separating individual valleys, but hardly at all along the main streams, where wider floodplains, so typical of the river Ohře around Žatec, are missing.

Ročovsko area is still one of the densest hop field landscapes in Bohemia. Hop fields here cover about a third of all used agricultural land outside the forest. The local villages preserve the architectural heritage of the hop growing tradition and their value is enhanced by the generally well-preserved urban structure, traditional village buildings, numerous churches, feudal settlements and other monuments.

However, the Ročov area has not a hop growing centre like the town of Žatec, which is the centre of this largest hop growing region with a preserved extensive complex of architecturally unique buildings for hop processing.

All the attributes of the hop growing heritage that Ročovsko could represent, albeit relatively far from Žatec, are contained in the rural component part 01 around the village of Stekník.

ÚŠTĚCKÁ (AUSCHA) HOP GROWING REGION (2.)

This second largest hop growing region in the Czech Republic is named after the historic town of Úštěk (Auscha). It includes the districts of Litoměřice, Mělník and Česká Lípa. According to the town annals, the beginnings of the productive cultivation of hops are documented in writing to the year 1537. The most famous hop growing location in this area is Polepská Blata, where the best regional hops are produced, in terms both of yield and quality. In the second half of the 17th century, hop growing saw renewed growth, and new vineyards were established on the Budín hill and on the slopes of the valley towards Tetčiněves. On the first military



Hop field in Radovesice, Házmberk Castle in the background, Auscha Region, 2004

mapping, however, smaller hop fields are recorded only to the east of Liběšice (i.e. west of Ústěšk). It was not until the middle of the 19th century that the second military mapping also showed a significant concentration of hop fields, for example, in the vicinity of the town of Hoštka and the village of Polepy (to the north of Roudnice nad Labem). Especially after 1850, Ústěšk became an important centre for hop cultivation and processing, and in 1865 a hop certification station was established here; local hops were supplied under the Ústěšk hops brand. A number of buildings for the preparation, packaging and storage of hops were built in both suburbs. From then on, the area of hop fields increased throughout the area, but only a small part of these has survived to the present day. Specific natural conditions are also the basis of the uniqueness of the local hops. The Auscha region is immediately adjacent to that of Žatec.

In general, one can state that the processing of hops in this area took place mainly locally, in the rural environment. The local hops, with significantly different aromatic and taste features, was never of the same quality as hops from the Saaz hop growing region, and were much less valued on the market. In addition, the local climate was ideal for growing fruit, so the area never had a major focus on growing hops. It was only ever a supplementary crop in the local output. This was reflected in the local building stock, specific buildings used for processing and preservation of figure to a lesser extent than in the component part 01 of the nominated property, their technical equipment is also much simpler, often home-made by the local farmers-inspired by the hopdrying

kilns with their brick chimneys, widespread in the Žatec region. In the town of Ústěšk and its surroundings, there are still scattered hop buildings intended for the storage and drying of hops. In the wider vicinity of the town of Ústěšk, individual vernacular buildings in village settlements have been preserved and are characterized by large loft spaces intended for drying hops with dormer windows in multiple rows. In the northern parts of this hop growing area, buildings for drying and storage of hops are preserved in larger numbers, but here the tradition of hop growing is no longer a living one and hops are currently grown here on minimal areas only.

TRŠICKÁ (TIRSCHITZ) HOP GROWING REGION (3.)

This is the most recent of the areas in the Czech Republic, the only one in Moravia, its name taken from the village of Tršice (Tirschitz). The first mention of hop growing in Tršice dates back to 1506, in 1561 a brewery is mentioned. However the hop fields later disappeared. The modern development of hop growing began in 1861, when a farmer Hynek Florýk in cooperation with a prominent hop expert Prof. Jan Lamble planted the first hop field and his successes led to the rapid establishment of hop fields in and around Tršice, creating the Tirschitz hop growing region. It was established in 1883 Hop Growers Association for Tršice and surroundings, which defended the interests of hop growers and had its own experimental hop field; thanks to its support, a modern building for the Provincial Vocational Agricultural and Hop School in Tršice was built in 1927. In 1902, the area of hop fields was 867 hectares. The hop fields were reduced during the World War I, then again in the 1930s and during



Hop field near Velká Bystřice, in the background the pilgrimage site on the Holy Hill at Olomouc, Tirschitz region, 2011

the German occupation (when only 75 ha of hop fields survived in Moravia). At the beginning of 1950 there were only 60 ha of hop fields in Moravia; their reinstatement then began and in 1958 they spread over an area of 289 ha, in 1976 564 ha, in 1980 675 ha and in 1990 1,135 ha. After 1993, there was once more a decline and in 1997 the area of hop fields was only 876 ha.

Tršice near Olomouc is the centre of hop growing and storage in the Moravian part of the Czech Republic. There are two hop warehouses built in the 20th century. The tradition of hop growing in Tršice is currently documented in particular by the permanent museum exhibition in part of the local chateau. Individual hop related heritage assets are preserved in nearby villages, such as a independent village hop drying kiln in Odrlice. There is no larger concentration of hop fields nor a well-preserved hop growing village. Also, no processing and commercial centre was ever established here which could be compared to Žatec.

FEDERAL REPUBLIC OF GERMANY

The German regions belong to a similar climatic territory as the Czech Lands, and that since the Middle Ages. Of all the German Länder, the Free State of Bavaria has the best reputation for hop cultivation and the quality of its beer. Preserved reports of beer and hops are even older than those in Bohemia and date from the 8th century.

Hop production and trading centres are now scattered, especially in smaller Bavarian villages and towns such as: Mainburg, Wolnzach, Au id Hallertau, Tettnang, Spalt, Hersbruck. Some areas have also given their names to specific hop varieties. The hop growing regions are called Hallertau (the predominant area), Hersbruck, Spalt, Tettnag, Elbe-Saale.



Hop trellis with concrete poles, Hallertau, Germany, 2016

At present, Germany is the world leader in the trade in hops, ahead of the USA, the Czech Republic and China. Despite this fact, historically even in Germany there is no landscape or town where such massive construction of a set of hop buildings has taken place as in the nominated Žatec and the Landscape of Saaz Hops property, or more exactly, where a territorially concentrated set of buildings of a similar character and cultural-historical value has been preserved from a particular historical period.

HALLERTAU / HOLEDAVA HOP GROWING REGION (4.)

The Mainburg-Hallertau hop region in Bavaria is today one of the largest hop growing regions in the world. The main hop growing commercial centres in the Hallertau region are, for example, Mainburg, Wolnzach and Au in der Hallertau. It is still possible to find in them individual historical buildings associated with the processing of hops. However, there are no complete sets of buildings similar to the industrial buildings of hop growing Žatec.

In the town of Wolnzach, south of Regensburg in Upper Bavaria, a large German Hop Museum has been open since 2002. Deutsches Hopfenmuseum. It is a modern, interactive museum built on a green-field site with a number of illustrative exhibits and a wide range of specific goods representing the history of the use of hops. In this respect, there is a certain parallel with the Temple of Hops and Beer in Žatec, but from the point of view of the historical architectural heritage, it is a completely different kind of site. The hop growing visitor and educational centre in Žatec is built inside an authentic building, in direct connection with a professional historical hop museum, in an environment of historic hop buildings and an extensive preserved urbanist complex. The exhibition of authentic Žatec buildings and the visitor centre now occupy a larger area and have great potential for further development.

The Hallertau area currently has the largest concentration of hop fields in Europe. In 2010, the Protected Geographical Indication "Hopfen aus der Hallertau" was registered. This designation is a geographical category, not one of origin as in the case of Saaz hops (Žatecký chmel).

SPALT HOP GROWING REGION (5.)

Spalt is a town that is also the centre of the hop growing region to the south of Nuremberg. The traditional Spalter variety of hops is genetically similar to the hops grown in the Žatec region. Cultivation takes place in the form of family businesses. Smaller hop fields are also spread across the terraces of the often undulating landscape. This picturesque small town with a number of half-timbered buildings presents a different hop growing environment, in contrast to the urban nature of Žatec. The historical process of drying hops in multi-storey lofts is recalled by the shape of the gables and the composition of the roofs in most buildings in the town. Today, these historic lofts are used mainly for residential purposes.

In the town there is an historic granary and hop warehouse – the Kornhaus. The building was originally used to gather tithes for the local archbishopric, and at the end of the 19th century was in use for the hop trade. Since 2015, it has housed an interactive hop museum opened with the support of the town. This historic building has been relatively sensitively adapted to the needs of the museum exhibition. The municipality is home to an active town brewery, for the Spalter brand of beer popular in Germany.

The historic town of Spalt itself is medieval with its half-timbered houses with high gables and natural hop drying in the roof spaces, including simple pulley lifts. Hops were poured onto the top floor and gradually poured over to the lower level and dried by natural ventilation. The buildings preserved in an almost intact historical form, provide, in contrast to Žatec, evidence mainly of the production of hops in the pre-industrial era. Buildings intended exclusively for the large-volume drying of hops and for trade are not preserved here on the scale approaching the level of the nominated Žatec and the Landscape of Saaz Hops property.

In the wider area, a considerable number of scattered farm buildings for the storage of plant products have been preserved, including some for the drying and storage of hops. These preserved buildings are on a smaller scale, but without the connection to processing in the urban landscape. The history of hop cultivation and beer brewing is very long here, traditions are passed down from generation to generation.

The Hopfenzupferfest (hop picking) is held here every year. Although there is a specific hop museum in Spalt as well, no set of buildings similar in size to Žatec was built in the region.

In 2012, the Protected Designation of Origin "SpaltSpalter" was registered with the EU. This designation is a category such like Saaz hops.

HERSBRUCK HOP GROWING REGION (6.)

Since the Middle Ages, this small Bavarian town has benefited from its location on the long-distance route of the Golden Trail between Nuremberg and Prague. Hops from this area were always closely tied to the commercial activities of Nuremberg traders. The Hersbruck hop growing region is located in the immediate vicinity, to the east of Nuremberg. There is no set of buildings similar to the industrial buildings of hop growing Žatec and the Landscape of Saaz Hops.

ELBE-SAALE HOP GROWING REGION (7.)

The Elbe-Saale hop growing region is located to the west of Leipzig, Querfurt. The hop industry developed here particularly in the 20th century. There are no buildings in

Hop field with more simple supporting structure of concrete poles near the village of Monstab, Elbe-Saale, Germany, 2013



the area comparable to the hops architecture of Žatec and the Landscape of Saaz Hops, nor its concentration.

In 2014, the Protected Geographical Indication "Elbe-Saale Hopfen" was registered in the EU. This designation is a geographical category, not one of origin as in the case of Saaz hops.

NUREMBERG AND BAMBERG (8.)

Nuremberg is the most important centre of the hop trade in Germany to this day. From the 14th century onwards, as in Bohemia, there was a wider expansion of beer production in the Holy Roman Empire. Traders established in the capital of the empire gradually became intermediaries between growers in the surrounding regions and brewers.



Hop field with poles placed in pyramids, Nuremberg, Germany, end of the 19th century

Jewish families in particular played a central role in the development of the hop trade. It should be noted that the Jewish families of hop merchants have historically been persecuted many times in Nuremberg. By the middle of the 19th century, Nuremberg had become the most important centre of trade in Europe, a place comparable to Žatec in this respect. By the size of its historic centre, Nuremberg was already significantly different from Žatec at the time of the beginning of the industrial processing of hops. Hop warehouses and drying kilns were also built in the suburbs, but there was no establishment of a single concentrated urban district as in Žatec. The World War I was negative for the hop industry in Nuremberg in terms of lower demand. Moreover, the rise of nationalism in Germany as early as the beginning of the 20th century caused the departure of Jewish families, who played a decisive part in the local hop trade. The historic buildings associated with the hop industry in Nuremberg are not preserved in such numbers as in the unique "hop town" in Žatec. Another reason is the damage to many buildings in Nuremberg during the bombing by Allied troops at the end of World War II.

The only major monument associated with the hop trade in Nuremberg is the Mauthalle, the former customs house. This exceptionally large preserved building was built between 1498 and 1502 and originally served as a granary for storing grain and other agricultural products, including hops. Over the years, the ways in which the building was used gradually changed. As its name suggests, it also served as a building for collecting tolls to enter the city and as a customs house. A neighbourhood of merchants later grew up around

the customs house, including those dealing in hops. In the second half of the 19th century, Nuremberg became the centre of the world's hop trade. The Mauthalle was severely damaged during World War II, and then repaired in the 1950s. The building now includes a brewery and its extensive vaulted cellars serve as a restaurant.

Unlike the almost intact preserved complex of industrial buildings in Žatec, only this important building in Nuremberg to document the hops industry.

The German town of Bamberg is literally an historical icon for brewers around the world. Many breweries are still active in and around the town. Another world-renowned industry is the local malting industry. Following this development, manufacturing companies for equipment in the brewing industry were established in the region, which are still setting the pace for technological developments worldwide. The architecturally interesting housing development of the town still includes buildings with industrial elements.

With the rise of industrial beer production and the increased demand for hops in the 19th century, there was also an increase in hop production in the region around the town. At that time, mainly Jewish families became involved in the hop trade; they were connected to a number of local breweries and were also connected to the dominant neighbouring hop trading centres, Nuremberg and Žatec. The rise of the importance of the hop industry in Bamberg was halted by pressure on the Jewish community at the beginning of the 20th century, and the hop industry in the region was de facto competed with by other thriving local industries related



Hop structure with inclined wires, Tett nang, 2017

to brewing, such as the manufacturing of equipment for breweries and the malting industry.

In Bamberg, buildings erected for the storage and processing of hops have not been preserved in a complex like that in the hop town of Žatec. The historic centre of Bamberg is inscribed on the World Heritage List, but for different value attributes than evidence of the processing of hops or trade in it. These aspects are not emphasized in the description of Bamberg's values.

TETTNANG HOP GROWING REGION (9.)

In Baden-Württemberg, the most important town associated with the cultivation of hops is Tettnang. A small town on Lake Constance, in the vicinity of which aroma hops are grown, it is another proof of the common historical development of the German lands and Bohemia in the fields of hop growing and brewing. The cultivation of these hops dates back to the reign of Charles IV in the 14th century (Holy Roman Empire). Even then, uniform historical standards were set for hop growing and beer brewing in Central Europe. However, the growth in cultivation dates back to after the Napoleonic Wars in particular, when it complemented the region's wine growing activities and took advantage of the climatic advantages of the foothills near the lake. The Tettnang hop variety is genetically close to the hops cultivated in the Žatec region.

However, there is no similar set of hop buildings in the town such as in Žatec. The local Hop Museum (Tettnanger Hopfenmuseum), founded as the first of its kind in Germany, is located in an historic three-storey building and represents more than 170 years of tradition. Some

similarities can be found in the local celebration of the hop growing tradition, which is reflected in popular annual festivities such as the town parade and the Queen of Hops Ball.

In 2010, the Protected Geographical Indication "Tettnanger Hopfen" was registered in the EU. This designation is a geographical category, not one of origin as in the case of Saaz hops.

BELGIUM

POPERINGE HOP GROWING REGION (10.)

Belgium is a country with a major tradition of beer production and consumption, it has perhaps the most types of beer of any country in the world, many of them with a long tradition of brewing and quality improvement.

It was in the monasteries of present-day Belgium that perhaps the most intense medieval "transformation of beer" into a cultural drink took place. Belgium is therefore a country recognized for having a beer culture tradition. In Belgium, records of the cultivation and use of hops have also been preserved from the 13th century, which corresponds to local processing similar to that in the historical core of Žatec. However, the parallels end here, because most of the hops for brewing beer in the areas of present-day Belgium were imported. No larger set of buildings is known in any of the cities with a tradition of hop growing. The hop field structures used in this area do not attain the same height as in the Žatec region, they reach up to a maximum of only 5.5 to 6 meters.

The architecture of an industrial hop warehouse with similar features to the buildings in Žatec is represented in



Hop field with the natural windbreak, Poperinge, Belgium, 2010

Belgium by the building of the National Hop Museum in a small town in south-western Belgium, Poperinge. The region around Poperinge accounts for the largest share of Belgian hop production and the town itself is also called the hop town (*hoppestad*). Although the museum is a well-repaired area, it is a one-off, without any similarity to the number and concentration of buildings of this kind in the nominated Žatec and the Landscape of Saaz Hops property. The two towns have been linked for several years by a partnership which also includes the exchange of experience with hop growing. There is no set of hop buildings of comparable size and historical depth elsewhere in Belgium. Every three years, Poperinge is the venue for brewing and hop celebrations, similar to the ŽateckáDočesná (Hop Harvest Festival in Žatec). An overview of the main growing regions in the world is presented during the celebrations.

<https://www.visitflanders.com/en/things-to-do/events/top/beer-and-hop-festival.jsp>

FRANCE

HOP GROWING REGIONS IN ALSACE (11.)

STRASBOURG / BRUMATH / HAGENAU

The main area with a tradition of beer production in France is Alsace, in the north-western part of which hops are also grown. The area played an important role in the cultivation and trading of hops from the Middle Ages until the World War II.

The city centre of Strasbourg also included a large buildings complex (near the historic hospital) for

storing and drying hops belonging to the Cophoudal cooperative. This block of special-purpose industrial buildings was demolished in the 1990s. The original historic warehouses were completely replaced by a modern apartment complex. In Strasbourg, no comparable complex of buildings intended for the processing and trading of hops, such as that in Žatec, has been preserved. The Cophoudal cooperative was unable to compete with multinational trading companies, trading as it did on a small scale, so it stopped using the historic buildings in Strasbourg and sold them.

The surroundings of the town of Brumath are the centre of a hop growing region focused on family hop growing. The villages are dominated by half-timbered buildings enclosed in three-sided courtyards with an entrance gate facing the road. Hops were historically dried in the lofts. Today, these roof spaces are mostly adapted for residential purposes. In rare cases, the separate brick drying kilns have been preserved in the courtyard. Private smaller hop fields are scattered across the landscape where they alternate with agricultural areas, fields and pastures. Today, almost every one of them has a modern warehouse in the form of a ground-floor sheet metal hall. Larger areas of hop fields have modern warehouses and hop kilns.

With the gradual emergence of multinational corporations, and thus the association of storage and production facilities into modern warehouses even outside the region, the original small buildings used for post-harvest storage and processing of hops in the Alsace region have disappeared in recent years.

The only building corresponding in terms of type and architecture to the Žatec hop buildings is the hop drier and hop warehouse of the Cophoudal cooperative (Alsace hop cooperative) in Brumath. It consists of a 19th century warehouse and a built-on drying room (1920-1930s) and other more modern buildings (double hall and garage). Today, the building also houses the central administration of the Cophoudal cooperative.

An important monument for the hop trade is the large hall in the nearby town of Hagenau, which, thanks to its location on the border of Alsace in the Rhineland, has historically played the role of a trading place. A large hop market from 1867 has been preserved in the town (*Halle au houblon*); it was extended in 1881 and 1908. Although the market is an architecturally interesting building corresponding to the historicism of the 19th century, it is a solitary building, not an urbanist complex. In addition, it served the trade and certification of hops, but not, for example, its drying and processing. It is therefore typologically different from the processing hop drying kilns, packers and warehouses, in the nominated Žatec and the Landscape of Saaz Hops property.



A young hop field near the town of Brumath, Alsace, France, 2019



UNITED KINGDOM
HOP GROWING REGION IN KENT (12.)
PADDOCK WOOD

The tradition of brewing beer is also historically associated with the British Isles. The name for beer: "Ale" (originally without hops) comes from the Celtic peoples of Scandinavia. Hops as a crop for growing and the use of hops in beer came to England later, it was allegedly first brought by Dutch colonists in the 15th century and began to be cultivated in Kent from the 16th century.

Specific larger buildings and areas for trade purposes were not created at that time. During Britain's industrial era, there was an unprecedented boom in beer production. Hop production spread to the more climate-friendly counties in the south of England, especially in Kent and Sussex. On the farmsteads of the English countryside, scattered architecturally interesting hop drying kilns (oast houses) of very specific shapes have been preserved to this day, grouped into larger groups on larger farms.

Probably the largest area with authentically preserved hop drying kilns of this type is the complex at the former farm of the Whitbread brewery, currently called The Hop Farm Family Park, near Tonbridge in Kent, about 60 km from London. This large ensemble has been transformed into an entertainment and relaxation centre with a number of activities that are not primarily focused just on hop growing.

In particular, however, these are architecturally and technically different buildings, originally representing a single production unit. This is a completely different

segment of architectural and architectural heritage than in the nominated Žatec and the Landscape of Saaz Hops property. No important trading centre, including the complex historical development of the hop industry and the centre of the hop trade and a related concentration of drying kilns and warehouses, similar to Žatec, has been preserved in England.

The main centre of the hop trade gradually became London, where the most beer was also brewed. The centre of the hop trade at the time was the East End. Because of its location on the banks of the Thames, it was well placed for transport to the markets and there were also large warehouses. Many of them were destroyed during the World War II.

In any case, the processing and drying of hops in England was always been based on smaller rural farms, and London was the real centre of trade. London was also a transport hub where seasonal trains for hop pickers to rural Kent were organized.

From a typological point of view, in England these are significantly different buildings, both in terms of those intended for drying hops and the organization and centralization of international trade in this commodity directly in the country's capital city.

In the south-east of England, Sussex, Suffolk and Surrey can also be identified as areas. Roughly another half of the hops are grown in the West Midlands in Herefordshire and Worcestershire.



**REPUBLIC OF SOUTH AFRICA
GEORGE MUNICIPALITY (13.)**

The brewing of beer with hops is also carried out by breweries in South Africa, where they also follow up on the traditions associated with the colonial expansion of European traditions, in this country in connection with ties with Great Britain. It is of course managed for local needs.

South African Breweries' farms provide local hop production. The large SAB World of Beer complex has been located in the modern part of Johannesburg since 1995; this is a combination of a thematic museum devoted to all aspects of hops and beer brewing and a conference centre (more here <http://www.worldofbeer.co.za/content/page/about>).

However, hop structures of similar purpose and historical significance as in the nominated Žatec and the Landscape of Saaz Hops property have not been built in South Africa.

**UNITED STATES OF AMERICA
HOP GROWING REGIONS OF WASHINGTON, OREGON,
IDAHO (14.)**

In the USA, beer is a very popular drink, and the tradition of brewing is very broad. The United States is currently the world leader in hop producing, alongside Germany. As with many other social, manufacturing and cultivation traditions, US practice is tied to imports from the period of European colonialist conquests. Similarly, the tradition of growing hop vines and making beer is more recent than in Europe.



The first hop growers were allegedly settlers of French origin. From the east coast, hop fields were gradually moved to the north-west. The beginning of more intensive hop cultivation in the USA came in the 19th century.

For the purposes of the present comparison, it is not realistic to list all growing regions. Due to the boom in artisan breweries in the USA, which has been gradually transferring to the rest of the world for at least the last 7 years, various very limited acreages of hop fields have also emerged in other states within the USA. In the case of the three largest growing regions, these are different buildings based on modern traditions transferred from Europe, quite different from the situation in Žatec, where the property represents an urbanist structure of medieval origin that has evolved over time.

However, it is worth mentioning the fact that local hop growers monitor the quality of the varieties and Saaz hops belong to the highly valued species from the "old continent". (<https://freshops.com/hop-variety-descriptions/>). The main site is briefly commented on below.

Yakima River Valley hop growing region

The Yakima area in Washington State is a very fertile agricultural area, producing many kinds of fruits, but is also an area that provides a very significant proportion of the hops for the US market and for trade with other countries. It is the current main centre for hop cultivation. Historic rural hop drying kilns in the Yakima River Valley are by shape and grouping an analogy to these buildings in rural Kent, although the fan roofs are not in the form of cones, but are mostly pyramids topped by a ventilation tower.

The Yakima Valley is the location of the only thematic hop museum in the USA – the American Hop Museum in Toppenish (<http://www.americanhopmuseum.org/home.htm>). The museum is located in the historicised building of a former dairy, which was originally Trimble Brothers Creamery, opened in 1917.

Hop cultivation is also widespread in the surrounding states of Oregon, in Willamette Valley, and Idaho, in Treasure Valley. The historical and architectural development is similar to the drying facilities in the Yakima River Valley.

In the United States there is no historical set of hop buildings with a continuous tradition from the Middle Ages, with evidence of a trade boom in the 19th and 20th centuries similar to the nominated Žatec and the Landscape of Saaz Hops property.

POLAND

LUBLIN HOP GROWING REGION (15.)

The largest hop growing area in Poland is still the area around the city of Lublin (Lublin Voivodeship), called the Lublin hop growing region. Hop growing in the east of Poland is connected to the neighbouring Ukrainian hop growing region.

Also in the west of Poland there is a small hop growing region around the town of Nowy Tomyśl belonging to the Greater Poland Voivodeship. Another small area is in the Lower Silesian Voivodeship.

Regardless of significant traditions of beer production, in the whole of Poland there are no architectural monuments comparable to the historical hop buildings



Young hops in a tall hop trellis, Lublin, Poland, 2011

Hop field on the northern edge of the South Island, Nelson, New Zealand, 2011



in the nominated Žatec and the Landscape of Saaz Hops property. In recent years, the Chmiel Fest has been held in Poland, but it is not directly connected with the hop growing region and is similar to the Oktoberfest. The festival is organized by the Flax Museum.

<http://www.muzeumlniarstwa.pl/chmiel-fest/>.

Another activity is Chmielobarnie, similar to the Hop Harvest Festival, but the event is a private activity.

NEW ZEALAND

NELSON HOP GROWING REGION (16.)

On the northern edge of the South Island lies the town

of Nelson, which is the main centre of hop growing in New Zealand. Most of the local breweries are also located here. Hops began to be grown in the area at the end of the 19th century. There are no historic hop buildings of architectural significance in such range.

SLOVENIA

SAVINJA VALLEY HOP GROWING REGION (17.)

The town of Žalec (do not confuse Žalec with Žatec) is located in the central part of Slovenia. It is part of the fertile Savinja Valley in the foothills of the Savinja Alps. The history of the use and cultivation of hops has a long tradition here, hops are also included in town coat of arms and the town is also home to a specialized regional museum of hops and brewing (Ekomuzejhmeljarsstva in pivovarstvu Slovenije). Numerous scattered buildings for drying and storing hops have been preserved on farms in the area. However, the historical monuments do not attain a comparable constructional and technical level to those of the preserved historical properties in Žatec.

In 2017, the Protected Geographical Indication "Štajerski hmelj" was registered in the EU. This designation is a geographical category, not one of origin as in the case of Žatec hops.

AUSTRALIA

HOBART HOP GROWING REGION (18.)

With the progress of European colonial expansion, the cultivation of hops for brewing beer spread to Australia. Hops began to be grown on the south coast of Australia and in Tasmania in the 19th century. According to available sources, in 1822 hops began to be grown in Australia by a farmer from Kent, William Shoobridge.

<http://www.hops.com.au/hop-history>.



Hop field near the town of Žalec, in the background the Savinja Alps, Savinja Valley, Slovenia, 2014



The tradition and organization of the work, known from England, has found their parallels in the Australian countryside.

In Australia, there are no historic hop buildings similar to the Žatec hop architecture. The preserved buildings are located mainly in the rural environment of the farming business and do not form an urban unit similar to that in Žatec. Hop drying kilns are located mainly around New Norfolk in Derwent Valley, with the largest complex being Bushy Park Hop Farm, about 55 km north-west of Hobart. The complex presents itself as being the largest hop farm in the southern hemisphere.

Another hop growing region in Australia is the southern state of Victoria.

UKRAINE

ZHYTOMYR HOP GROWING REGION (19.)

Settlers from Bohemia, who settled here at the invitation of the Russian Tsar after 1868, brought the tradition of hop growing to the area around the town of Zhytomyr in north-western Ukraine. Cultivated aromatic hops therefore have their origin in Czech hops. In view of the relatively short tradition and the local character of the production, monuments similar to the Žatec ensemble of historical industrial hop structures did not develop and have not been preserved in Zhytomyr.

RUSSIA

CHUVASH HOP GROWING REGION – CHEBOKSARY (20.)

The city of Cheboksary, capital of Chuvashia, located on the Volga River in the European part of the Russian Federation, is the centre of the region. After the World War II, it began to give more support to hop growing for

Russia's needs. However, the neglected region has a long tradition of using hops, as evidenced by a mention in the Russian Chronicle dated 1521: *"And Vladimir made peace with the Bulgars (today the Chuvash) and they swore oaths to each other. And the Bulgars said: – There will be no peace between us only when stone floats and the hops sink..."* (Annals of ancient times). Hop production is now in decline. There are no historic hop buildings of architectural significance that could be compared to the nominated Žatec and the Landscape of Saaz hops property.



Hop field with an original way of anchoring side inclined columns, Altai, Russia, 2006

Corrective training of hops in a young hop field near the village of Tono, Hokkaido, Japan, 2018



CHINA

XIN-JIANG REGION (21.)

The northern provinces of China Xinjiang and Gansu, in the areas around the historic trading "Silk Road", are the production location for Chinese hops. The hop growing industry, focused on a commodity intended for brewing beer and using the knowledge of countries that have developed this drink over centuries, is relatively young in China. It is growing in line with the growth of beer output. Nevertheless, China is today the largest beer producer in the world. However, there are no architecturally significant complexes of hop buildings in these provinces.

JAPAN

TONO (22.)

Japan has long been one of the main customers for Saaz hops. In the prefectures of Hokkaido and especially near the village of Tono in Iwate, hops are grown for the requirements of Japanese breweries. One of these centres is the city of Sapporo. Hop production did not begin until the 20th century. Throughout the country, there are no buildings with a specific hop focus as in the nominated property.



Hop fields near Čachtice, Horná Streda region, Slovakia, 2018

SLOVAKIA

Mountainous Slovakia, with a high proportion of forests and somewhat different climatic conditions, is one of the few Central European countries that has not developed hop cultivation more significantly. Traditionally, viticulture dominates here, especially in the southern parts of the country, historically connected with Hungary. Slovakia imports a significant volume of its beer.

HORNÁ STREDA (23.)

The hop growing region is spread along the river Váh. The hop industry was built and supported especially in the second half of the 20th century, during the existence of Czechoslovakia, when the Horná Streda processing plant for hops was built in a small village above the Váh. Although the tradition of brewing beer is maintained in Slovakia at a number of breweries, there is no comparable set of hop structures similar to Žatec's "industrial hop town".

Other countries in Central, Southern and South-Eastern Europe focused primarily on vine growing and the development of wine production. The beer brewing tradition and the establishment of buildings related to this is therefore not significant or is only of local significance.

SPAIN

LÉON HOP GROWING REGION (24.)

This hop growing region is located in the north of the country in the province of León. The history of hop cultivation is relatively recent. The beginning of significant hop cultivation occurred here during the 20th century. There are no historic hop buildings of architectural significance that could be compared to the nominated property.

OTHER HOP GROWING REGIONS IN THE WORLD

Hop cultivation has also been introduced in other regions of the world, in connection with the development of the modern brewing industry. These are small hop growing areas in the following countries: for example, Austria (Mihlviertel, Neufelden), Bulgaria (the municipalities of Velingrad and Rakitovo), Romania (municipality of Seleş), India (Himachal Pradesh region), Belarus, Argentina (Patagonia, the area around El Bolsón) North Korea, Turkey (Eskisehir) and Canada. In none of these other regions is there a comparable set of historically significant hop structures, an historical connection with the rural growing landscape and its links to processing in the urban landscape or the appropriate research background.



3.2.b CULTURAL LANDSCAPES ASSOCIATED WITH THE CULTIVATION OF CROPS INSCRIBED ON THE WHL AND TL

From the high number of productive cultivating agricultural landscapes, the table below provides an overview of those for which brief characteristics and

basic comparisons with the nominated landscape have been prepared. On the World Heritage List and on the Tentative List, there are basic crops that determine the characteristics of such cultural landscapes. Therefore, tables of the compared landscapes (WHL and TL) first precede the verbal commentary for clarity. The text which follows is then structured according to the main cultivated crop or traded commodity, so as not to repeat general information and the comparative notes.

Table of all the cultural landscapes being compared on the World Heritage List (sorted chronologically by year of inscription on the WHL)

	NAME	PLANT/CROP	STATE PARTY	CRITERIA	YEAR OF INSCR.
1.	Rice Terraces of the Philippine Cordilleras	Rice / rice grains (generally rice)	Philippines	(iii), (iv), (v)	1995
2.	Portovenere, Cinque Terre, and the Islands (Palmaria, Tino and Tinetto)	Grapevines / grapes, olive trees / olives	Italy	(ii), (iv), (v)	1997
3.	Viñales Valley	Tobacco (plant) / tobacco	Cuba	(iv)	1999
4.	Jurisdiction of Saint-Émilion	Grapevines and wine production	France	(iii), (iv)	1999
5.	Archaeological Landscape of the First Coffee Plantations in the South-East of Cuba	Coffee bush / coffee beans	Cuba	(iii), (iv)	2000
6.	Palmeral of Elche	Date palm / dates	Spain	(ii), (v)	2000
7.	Alto Douro Wine Region	Grapevines and wine production	Portugal	(iii), (iv), (v)	2001
8.	Tokaj Wine Region Historic Cultural Landscape	Grapevines and wine production	Hungary	(iii), (v)	2002
9.	Landscape of the Pico Island Vineyard Culture	Grapevines and wine production	Portugal	(iii), (iv)	2004
10.	Agave Landscape and Ancient Industrial Facilities of Tequila	Agave / agave fruit / agave pineapple - including tequila production	Mexico	(ii), (iv)	2006
11.	Lavaux, Vineyard Terraces	Grapevines and wine production	Switzerland	(iii), (iv), (v)	2007
12.	Stari Grad Plain	Grapevines / grapes, olive trees, lavender	Croatia	(ii), (iii), (v)	2008
13.	Coffee Cultural Landscape of Colombia	Coffee bush / coffee beans	Colombia	(v), (vi)	2011
14.	Cultural Landscape of Honghe Hani Rice Terraces	Rice	China	(iii), (v)	2013
15.	Palestine: Land of Olives and Vines - Cultural Landscape of Southern Jerusalem, Battir	Grapevines / grapes, olive trees / olives	Palestine	(iv), (v)	2014
16.	Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato	Grapevines and wine production	Italy	(iii), (v)	2014
17.	Champagne Hillsides, Houses and Cellars	Grapevines and wine production	France	(iii), (iv), (vi)	2015
18.	The Climats, terroirs of Burgundy	Grapevines and wine production	France	(iii), (v)	2015
19.	Le Colline del Prosecco di Conegliano e Valdobbiadene	Grapevines and wine production	Italy	(v)	2019

Table of all the cultural landscapes being compared on the Tentative List (sorted chronologically by year of inscription at TL)

	NAME	PLANT/CROP	STATE PARTY	PROPERTY CATEGORY	PROPOSED OUV CRITERIA	YEAR OF INCLUSION ON TL
1.	Hacienda Chuao (Chuao Plantation)	cacao trees / cocoa beans	Venezuela	Cultural landscape	-	2002
2.	Primošten Vineyards	Grapevines and wine production	Croatia	Cultural landscape	(v), (vi)	2007
3.	Negotinske Pivnice	Grapevines However it is the wine cellars that form the essence of the nomination	Serbia	Cultural property, series	(iii), (iv), (v), (vi)	2010
4.	Cultural Landscape of the Lower Basin of the Chicamocha River	tobacco, its processing and sale	Colombia	Mixed / Cultural landscape	(ii), (iv), (vii), (viii)	2012
5.	Ancient Tea Plantations of Jingmai Mountain in Pu'er	tea	China	Cultural landscape	(iii), (iv), (v)	2013
6.	La Rioja and Rioja Alavesa Vine and Wine Cultural Landscape	Grapevines and wine production	Spain	Cultural landscape	(ii), (iii), (v), (vi)	2013
7.	Apatani Cultural Landscape	rice using fish farming	India	Cultural landscape	(iii), (v)	2014
8.	The Industrial Heritage of Barbados: The Story of Sugar and Rum	Sugar cane and sugar and rum processing	Barbados	Cultural landscape	(ii), (iii), (vi)	2014
9.	Early Farmsteads of the Cape Winelands	Grapevines and wine production	South Africa	Cultural landscape	(ii), (iii), (iv), (v)	2015
10.	Ayvalık Industrial Landscape	olives and oil processing	Turkey	Cultural landscape	(iii), (v)	2017
11.	Balaton Uplands Cultural Landscape	the nomination also includes vineyards	Hungary	Mixed / Cultural Landscape	(iv), (v), (vii)	2017
12.	The Olive Grove Landscapes of Andalusia	Olives	Spain	Cultural landscape	(iii), (v), (vi)	2017
13.	The Wine in Iberia	Grapevines and wine production	Spain	Series of cultural elements	(ii), (iii), (iv)	2018
14.	Wineries and Vineyards for traditional Pisco Production	Grapevines and wine and pisco production	Peru	Cultural landscape	(ii), (iv)	2019
15.	Gedeo Cultural Landscape	coffee tree / coffee specific use of coffee beans in cultivation	Ethiopia	Cultural landscape	(iii), (v)	2020

The tabular overview already shows that landscapes with vineyards are the most numerous, both registered at the WHL and in the nomination plans of a number of countries. In terms of comparing hop landscapes with vineyard landscapes are the closest visually, as the vine also usually requires a permanent supporting structure for plant growth. For this reason, vineyard landscapes are included at the beginning of a special part of the comparison and the greatest space is devoted to them. For completeness, many other cultivated crops have been examined to find aspects of similarity or difference.

The sequence of landscapes and comments given in more detail below is therefore not chosen chronologically or regionally, but according to the monocultures that determine the OUV. They are described in the following order:

- I. VINEYARD LANDSCAPES**
- II. RICE TERRACES**
- III. TOBACCO PLANTATIONS**
- IV. AGAVE AND ITS PRODUCTION AREAS**
- V. COFFEE PLANTATIONS**
- VI. TEA PLANTATIONS**
- VII. OLIVE GROVES AND OIL PRODUCTION**
- VIII. SUGAR CANE**
- IX. DATE PALMS**
- X. COCOA PLANTATIONS**

I. VINEYARD LANDSCAPES

The vine is one of the oldest cultivated plants grown by man. It is grown in the suitable climatic and natural conditions of the temperate zone. The most important vine growing areas for wine-production purposes are western and southern Europe, which includes France, Italy, Spain, Portugal and Germany, which have their most important vineyard landscapes on the World Heritage List. Wines from Hungary, Romania, Bulgaria and Moldova are also famous. There are also important vineyards in the Czech Republic, both in Moravia and in Bohemia; their output is mostly of local significance. On the American continents, important areas include certain territories in the United States, Argentina and Chile.

The African continent is represented by the most famous output from South Africa; other important areas are located in Australia. In many countries, grapes for eating and varieties suitable for the production of raisins are also grown.

The grapevine (*Vitis vinifera*), sometimes referred to as the European vine, is a climbing woody vine that

stretches along the supports to which it is attached using tendrils. Its roots usually reach a length of over 10 metres, even on a rocky subsoil. Cultivated vines are grown in vineyards, established optimally on slopes with a southern exposure (south-east and south-west). The lifespan of vineyards is 20–25 years, but can sometimes last up to 60 years. A complex of vineyards makes up the vineyard tracts of lands of the area. Both the plant and the vineyard require year-round work, which includes spring work and culminates in the harvest – wine festival. In some cases, manual labour has already been replaced by mechanization, but there are many operations that cannot replace human labour and attention.

The harvest consists of the grapes being harvested and is carried out once a year, depending on the variety, from the end of August to the end of November, with the quality of the grapes at harvest time representing the maximum potential of the wine that can be made from them.

In contrast to hops, which were the subject of trade for further use, by being added during the process of brewing beer (both in the Czech Lands and abroad, including overseas), in the case of most vineyards the harvested grapes are further processed at the place of harvesting into the final product, that is, wine, which usually bear the name of the production area.

Of course, a number of breweries were also established in the Saaz hop growing region (there is still an operating brewery in Žatec producing beer bearing the name of the town). Brands of beers brewed from Saaz hops in other localities usually do not bear the name of Saaz hops. Nevertheless, the Saaz hops is often mentioned on the labels of their products or in promotional tools as proof of the quality of the raw materials used.

The quality mark is therefore linked to the resulting locally processed drink – the wine, not to the harvested grapes. On the other hand, Saaz hops are provided with a certificate of origin proving the origin and quality of the geographical indication.

A. Vineyard landscapes on the World Heritage List (WHL)

In 2020, 11 cultural landscapes primarily associated with the cultivation of grapes and the subsequent production of wine on site already inscribed on the World Heritage List, all of which are located in Europe. The properties compared bear the same features of all vineyard landscapes, a general comparison with regard to the impacts of the cultivated hop/vine plant on the landscape and architecture.

The table provides an overview of all vineyard landscapes inscribed on the World Heritage List in chronological order of inscription, including their basic characteristics and criteria, as presented on the World Heritage Centre website. <https://whc.unesco.org/en/list/> (as of April 2020)

	NAME	PLANT/CROP	STATE PARTY	PROPOSED CRITERIA	YEAR OF INCLUSION ON TL
1.	Portovenere, CinqueTerre, and the Islands (Palmaria, Tino and Tinetto)	Grapevines and wine production and olive tree	Italy	(ii), (iv), (v)	1997
2.	Jurisdiction of Saint-Émilion	Grapevines and wine production	France	(iii), (iv)	1999
3.	Alto Douro Wine Region	Grapevines and wine production	Portugal	(iii), (iv), (v)	2001
4.	Tokaj Wine Region Historic Cultural Landscape	Grapevines and wine production	Hungary	(iii), (v)	2002
5.	Landscape of the Pico Island Vineyard Culture	Grapevines and wine production	Portugal	(iii), (v)	2004
6.	Lavaux, Vineyard Terrace	Grapevines and wine production	Switzerland	(iii), (iv), (v)	2007
7.	Stari Grad Plain	Grapevines and wine production, olive tree, lavender	Croatia	(ii), (iii), (v)	2008
8.	Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato	Grapevines and wine production	Italy	(iii), (v)	2014
9.	Champagne Hillsides, Houses and Cellars	Grapevines and wine production	France	(iii), (iv), (vi)	2015
10.	The Climats, terroirs of Burgundy	Grapevines and wine production	France	(iii), (v)	2015
11.	Le Colline del Prosecco di Conegliano e Valdobbiadene	Grapevines and wine production	Italy	(v)	2019

1. PORTOVENERE, CINQUETERRE, AND THE ISLANDS (PALMARIA, TINO AND TINETTO)

The Ligurian coast between CinqueTerre and Portovenere is a cultural landscape of great scenic and cultural value. This property encompasses the territory of Porto Venere, the three islands of its archipelago (Palmaria, Tino and Tinetto), and the CinqueTerre, the collective name for the five villages of Monterosso, Vernazza, Corniglia, Manarola and Riomaggiore. Stretching 15 km along the eastern coast between Levanto and La Spezia, the jagged, steep coastal landscape has over the centuries been intensively developed with stone walled terraces for the cultivation of vines and olive trees. The terraces were mostly built in the 12th century, and are characterized by dry-stone walls, most often carefully assembled from un-worked sandstone blocks, intertwined with collected pebbles.

The maintenance of the terraces and the cultivation of vines and olive trees on these terraces reflect a communal approach to farming and the collaboration and cooperation of individual communities without which such cultivation would not have been possible. The general use of natural stone for roofing gives these settlements their characteristic look. The terraces are also dotted with innumerable tiny stone huts isolated or grouped together, used for temporary shelter during the harvest.

Although this cultural landscape contains areas with agricultural terraces for growing vines and olives, its main characteristics are based on an exceptional landscape

location in which the coastline is inhabited by small towns and villages of a very specific design, established on the steep slopes of the coast and watchtowers.

2. JURISDICTION OF SAINT-EMILION

According to the wording of the Outstanding Universal Value, the property represents a landscape influenced by the cultivation of vines since the 11th century with many preserved monuments in towns and villages. Its position on the route to Santiago de Compostela also contributes to the uniqueness of the locality. A characteristic feature here are the stone houses from the beginning of the 19th century intended for vineyard workers, as well as the architecture of the wine cellars (the chais) and other residential buildings.

3. ALTO DOURO WINE REGION

Traditional landowners have been producing wine in the Alto Douro region for about 2,000 years; since the 18th century, the region's main product, port wine, has been renowned for its quality. The vineyard landscape is characterized by terraces, complexes of vineyard estates quintas (wine-producing farm complexes), villages, chapels and roads. In 1756 the area was declared the first wine-area protected by law. There is no seat here of any scientific institution for research of plant varieties.

The region carries the highest Portuguese classification of quality and origin DOP/DOC. The appellation system was first introduced for port wines from this area in the 17th century.

4. TOKAJ WINE REGION HISTORIC CULTURAL LANDSCAPE

The cultural landscape of Tokaj illustrates the long tradition of wine production in this region of low hills and river valleys. The intricate pattern of vineyards, farms, villages and small towns, with their historic networks of deep wine cellars, illustrates every facet of the production of the famous Tokaj wines, the quality and management of which have been strictly regulated for nearly three centuries. There is no seat here of any scientific institution for research of plant varieties. The "appellation" labelling system for wines from this area is referred to as early as the 18th century.

5. LANDSCAPE OF THE PICO ISLAND VINEYARD CULTURE

The large territory on the volcanic island of Pico, the second largest in the archipelago of the Azores, consists of a remarkable pattern of spaced-out, long linear walls running inland from, and parallel to, the rocky shore. The walls were built to protect the thousands of small, contiguous, rectangular plots (currais) from wind and seawater. Evidence of this viticulture, whose origins date back to the 15th century, is manifested in its extraordinary assembly of fields, houses and early 19th century manor houses, and in its wine-cellars, churches and ports. This extraordinarily beautiful man-made landscape is the best reminder of a once much more widespread cultivation. There is no seat here of any scientific institution for the research of plant varieties.

6. LAVAUX, VINEYARD TERRACES

The terraces of the Lavaux vineyards spread along some 30 km of the northern shore of Lake Geneva from the Chateau de Chillon to the eastern outskirts of Lausanne in the Vaud region. Although there is some evidence that vines were grown in the area in Roman times, the current wine terraces can be traced back to the 11th century, when the area was controlled by Benedictine and Cistercian monasteries. It is an outstanding example of a centuries-long interaction between people and the environment, developed to optimize local resources so as to produce a highly valued wine that has always been important for the economy.

The vineyard landscape is another manifestation of the terraced arrangement. The local wines are covered by AOC protection.

6. STARI GRAD PLAIN

The Stari Grad Plain is a cultural landscape located on the island of Hvar in Croatia and has been practically intact since the first colonization by Ionian Greeks from Paros in the 4th century BC. The original agricultural activity on this fertile plain focused mainly on grapes and olives and has been maintained since Greek times to the present.

The landscape is an example of land organization based on geometric parcels with dry stone wall boundaries. This system was supplemented from the very beginning by a rainwater recovery system involving the use of tanks and gutters.

7. VINEYARD LANDSCAPE OF PIEDMONT: LANGHE-ROERO AND MONFERRATO

This landscape covers five distinct wine growing regions with an outstanding landscapes and the Castle of Cavour, an emblematic name both in the development of vineyards and in Italian history. It is located in the southern part of Piedmont, between the Po River and the Ligurian Apennines, and encompasses the whole range of technical and economic processes relating to vine growing and wine making that has characterized the region for centuries since the 5th century BC.

Piedmont is a predominantly mountainous landscape, made up of the Langhe and Monferrato hills. The main vineyards are concentrated in the rolling hills around the towns of Alba and Asti, 200-500 meters above sea level. The Piedmont wine trade includes 59 zones of the DOCG and DOC categories.

8. CHAMPAGNE HILLSIDES, HOUSES AND CELLARS

The property encompasses sites where the method of producing sparkling wines was developed on the principle of secondary fermentation in the bottle since the early 17th century to its early industrialization in the 19th century. The property is made up of three distinct ensembles: the historic vineyards of Hautvillers, Aÿ and Mareuil-sur-Aÿ, Saint-Nicaise Hill in Reims, and the Avenue de Champagne and Fort Chabrol in Epernay. These three components – the supply base informed by the historic hillsides, the production sites (with their underground cellars) and the sales and distribution centres (the Champagne Houses) - illustrate the entire champagne production process. The property bears clear testimony to the development of a very specialized artisan activity that has become an agro-industrial enterprise.

9. THE CLIMATS, TERROIRS OF BURGUNDY

The Climats are precisely delimited vineyard parcels on the slopes of the Côte de Nuits and the Côte de Beaune south of the city of Dijon. They differ from one another due to specific natural conditions (geology and exposure) as well as vine types and have been shaped by human cultivation. Over time, they came to be recognized by the wine they produce. This cultural landscape (like the nominated property) consists of two parts: the vineyards and associated production units, including the villages and town of Beaune, which together represent the commercial dimension of the production system, with the other part including the historic centre of Dijon, which embodies the political regulatory impetus that gave birth to the climat system. This site is an excellent example of grape cultivation and wine production as they have developed since the High Middle Ages.

10. LE COLLINE DEL PROSECCO DI CONEGLIANO E VALDOBBIADENE

Located in north-eastern Italy, the property includes part of the wine growing landscape of the Prosecco wine production area. The landscape is characterized by "hogback" hills, ciglioni- small plots of vines on narrow grass terraces – forests, small villages and farmland. For centuries, this rugged terrain has been shaped and adapted by man. Since the 17th century, the use of ciglioni has created a particular chequerboard landscape consisting of rows of vines parallel and vertical to the slopes. In the 19th century, the bellussera technique of training the vines contributed to the aesthetic characteristics of the landscape. This technique consisted of lifting the vine up to 4 metres above the ground and arranging it in an arch; raised in this way, the plant was protected and could grow and expand, which was reflected in the visual dynamics of the landscape.

B. Vineyard landscapes on the Tentative List (TL)

In addition to the number of vineyard landscapes registered on the WHL, a number of countries have in recent years extended the Tentative List (updated as at April 2020) with several other landscapes with vineyards and vineyard buildings (plans from Spain, Hungary and South Africa, Serbia, Croatia and Peru).

1. PRIMOŠTEN VINEYARDS

The Primošten vineyards on the Bucavac Veliki site represent a traditional form of cultivating a specific kind of Mediterranean soil, characterised by a dense concentration of rocks, which has to be extracted manually and with great human effort in order to acquire a small quantity of soil for cultivation. This method of soil cultivation is generally characteristic of

the entire region of Dalmatia, namely Karst areas. The fields and vineyards are rectangular, trapezoidal or irregular in shape, and are delimited by rock fragments hand-picked during that demanding land acquisition.

The nomination will evidently be based primarily on this unique method of cultivating the land under difficult conditions and the extraordinary value of the landscape resulting from this method. In comparison with the fertile soils in the Žatec region, the methods of field/hop field preparation have differed significantly from the method described.

2. NEGOTINSKE PIVNICE

The Negotinske Pivnice is a series of ensembles of rural buildings, especially wine cellars, located in the border area of Negotin in eastern Serbia. These cellars were used to process grapes into wine and brandy, as well as storage facilities. The significance of these settlements is reflected in the fact that these wine cellars were often built as more monumental and better quality structures than family houses were. These cellars and the wine were incorporated in many birth and burial rituals. Even today, an archaic and very interesting custom has been preserved - the last rites and funeral ceremony are performed with wine, and for those who have their own cellars, the funeral ceremony takes place in the cellars complex, while for others, in the village.

The monumental preserved buildings for processing and preserving wine and brandy represent the main bearer of values. This property does obviously not have the intention of nomination as a cultural landscape, but belongs to the topic of wine growing and processing, and is included here for completeness.

Vineyard landscapes on the Tentative List (TL). The brief description is arranged in the order of entries on the TL.

	NAME	PLANT/CROP	STATE PARTY	PROPOSED CRITERIA	YEAR OF INCLUSION ON TL
1.	Primošten Vineyards	Grapevines and wine production	Croatia	(v), (vi)	2007
2.	Negotinske Pivnice	Grapevines However it is the wine cellars that form the essence of the nomination	Serbia	(iii), (iv), (v), (vi)	2010
3.	La Rioja and Rioja Alavesa Vine and Wine Cultural Landscape	Grapevines and wine production	Spain	(ii), (iii), (v), (vi)	2013
4.	Early Farmsteads of the Cape Winelands	Grapevines and wine production	South Africa	(ii), (iii), (iv), (v)	2015
5.	Balaton Uplands Cultural Landscape	The nomination also includes vineyards	Hungary	(iv), (v), (vii)	2017
6.	The Wine in Iberia	Grapevines and wine production	Spain	(ii), (iii), (iv)	2018
7.	Wineries and Vineyards for traditional Pisco Production	Grapevines and wine and pisco production	Peru	(ii), (iv)	2019

3. LA RIOJA AND RIOJA ALAVESA VINE AND WINE CULTURAL LANDSCAPE

This vineyard landscape is spread along both banks of the river Ebro; the vineyards are scattered throughout the landscape and are protected by the surrounding mountains. Thanks to its terrain, La Rioja makes use of the cultivation of the vine on terraces and, as in other vineyard landscapes (but also as in hop field landscapes), the suitable climatic, hydrological and soil conditions play an important role. Within the general characteristics of the area, there is exceptionally high diversity for such a small area, which facilitates the territoriality of the wines.

Elements related to the nomination also include the structures for the subsequent processing of grapes, such as stone wine presses and buildings/facilities associated with processing, including wine cellars, and shelters at vineyards (Guardaviñas vineyard shelters).

The La Rioja and Rioja Alavesa vineyard landscape and Wine Cultural Landscape, just like the Žatec and the Landscape of Saaz Hops nomination, uses the protection according to the Protected Designation of Origin, which is carried by wine from this area cultivated continuously since the early Middle Ages. The site is again presented in a different landscape context than the hop landscape nomination.

4. EARLY FARMSTEADS OF THE CAPE WINELANDS

The vineyard landscape at Cape Winelands is located on the south-western tip of Africa, in the immediate vicinity of Cape Town. This position permitted and predetermined the possibility of bringing together influences from different continents.

The local cultural landscape has been conditioned both by natural conditions suitable for agriculture and especially viticulture, and the surrounding dramatic natural environment, in which a specific rural architecture developed. With its vineyards, orchards and fields, farmsteads and their ancillary buildings, settlements, villages and towns, this vineyard landscape is illustrative of agricultural activities since colonization in the mid-17th century, labour practices (including slavery practices) and human settlement, on the original landscape. Constantia and Vergelegen represent two of the earliest examples of an idealized farmstead in an agricultural landscape.

The Tentative List description of the property suggests that the Outstanding Universal Value will be defined to show the active social role of this landscape in contemporary society, by preserving the traditional way of life of the wine sector. At the same time, significant material evidence of the development of Cape folk architecture will be emphasized. The landscape is in a completely different morphological context, and in addition to aspects of vineyard culture, will study the

local rural architecture as well as the typology of "ideal settlements", landscape influences in long-distance roads, etc. Therefore, it is not relevant for comparison with the landscape of hop fields in Žatec region.

5. BALATON UPLANDS CULTURAL LANDSCAPE

This property on the Tentative List is located on the northern shore of Lake Balaton in Hungary. As with the nominated property, it includes a chateau, at Keszthely, and an extensive park and the historic Georgikon farm complex, which later developed into a major educational institution and the historic district of Balatonfüred.

The common and defining basis of the excellent values of the Balaton Uplands is their geological historical past, the processes of which have created a variety of geological structures on which an harmonious landscape has further developed. In the landscape by Lake Balaton intended for nomination, there is evidence of various kinds of farming (from agriculture and fishing to viticulture), but also of the mining of basalt. Particularly famous are the healing springs near Lake Balaton itself and especially on nearby Lake Hévíz.

So far, the Tentative List specifies the potential Outstanding Universal Value landscape at Lake Balaton very broadly, but it is already clear from the descriptive information that it will be a completely different concept from the hop landscape in the Žatec region. Balaton Uplands already differs in the form of its landscape, which is determined by a large lake and multi-layered settlements and functions, and undoubtedly has the ambition to present a comprehensive and picturesque read of Central Europe, with multiple use of the natural background. The main differences are the types of agricultural production, the emphasis on the heritage of wine culture and the healing aspects of the area related to its mineral springs.

6. WINE IN IBERIA

The nomination project, Wine in Iberia, integrates a group of cultural properties that demonstrate the exchange of ideas between two different communities, resulting in a rich Iberian culture in which wine aspects are threaded through as one of the main themes.

The aim of this nomination will be to supplement the range of examples of vineyard heritage with the oldest evidence of the spread of viticultural knowledge and techniques resulting from Phoenician journeys along the Mediterranean coast and the Mediterranean in general, and to examine the interaction of knowledge imported with the skills of other nations. It is clear from the current description of the plan that this nomination will seek to supplement the existing archaeological finds and interpretations with aspects of wine heritage, which have not yet been described in sufficient detail in the wider Mediterranean.

7. WINERIES AND VINEYARDS FOR TRADITIONAL PISCO PRODUCTION

One of the last plans to nominate a vineyard landscape in 2019 was to supplement the Tentative list in Peru by adding a landscape associated with the production of the alcoholic beverage pisco. This is made in Peru and Chile from grapes of aromatic varieties and distilled in copper containers without the addition of water to produce a drink that is then matured in oak barrels. This vineyard landscape is located on the Peruvian coast and makes use of the suitable climatic conditions and subsoil.

The Peruvian coastal vineyards represent examples of the successful use of the land and climatic conditions of the Peruvian coast to grow vines. The theme of vineyards will thus render another world region more visible. More than on the cultivation of plants imported into South America, the nomination will focus on the processing and production technology of wine and especially of pisco.

SUMMARY COMPARATIVE NOTES ON VARIOUS ASPECTS OF VINEYARD LANDSCAPES ON THE WHL / TL

For example, a very recent comparative analysis, prepared in connection with the nomination of the Italian vineyard landscape "Le Colline del Prosecco di Conegliano e Valdobbiadene" (2019), provides a high-quality comparison of landscapes with vineyards inscribed on the World Heritage List and those on the Tentative List. It is this analysis that very convincingly explains the specifics of vineyard landscapes, their morphological diversity and mutual differences.

For the Žatec and the Landscape of Saaz Hops nomination project a more detailed comparison of vineyard and hop landscapes is much more important, as they are visually the closest to each other of all functioning monocultures. Vineyards and hop fields are areas that are visually distinctive in the landscape and functionally unmistakable even in the period outside the main production season. For this reason, their similarities and differences are described in more detail below:

Aspects of structural support for plants

Vineyards, like hop fields, require (although not in all cases in vineyards) artificial structural support for vine growth. We usually divide the methods of leading vine vines into three groups, according to the height of the vine above the soil: low - up to 30 cm, middle - up to 80 cm and high - over 80 cm. As a support, the vine uses a trunk or low poles, which, unlike long rods and later the wire trellis used to hold hop vines, did not require such high financial costs when establishing and periodically restoring the production area of the field for cultivation. On the other hand, terraces are a very common basis for vineyards, which has not been common in the nominated property or on other hop landscapes, because it would greatly complicate the use of mechanization (both earlier animal teams and, more

recently, establishing structures across entire fields. Compared to wine, the hop plant grows individually to a height of up to 4–7 metres, depending on the variety, and this fact has influenced the development of technologies in support systems since the Middle Ages and especially in the 19th century and up to the present. In the Žatec and the Landscape of Saaz Hops area, the structures reach a height of up to 7 metres, and today they are used in their specific design form, the so-called Saaz hop wire trellis (see the description in *Chapter 2.a*). As a result of visually significant supports and regular rows needed for cultivation, the hop fields in the landscape image represent technicised areas that are clearly distinguishable from the surrounding vegetation.

Aspects of the terrain

Hop fields were preferably built on a flat base, the reasons being mainly practical. A flat terrain ensured better stability of the support structure for the hop field (for a description see *Chapter 2.a*), but above all it was practical for the movement of workers and technicians during their demanding and frequent cultivation of the hop field and the subsequent picking and processing of hops. Vineyard landscapes, on the other hand, have often very sloping terrains of various inclinations and divisions, creating with their lines visually very specific landscapes of various contours and structures emphasizing the modelling of the terrain. Hop landscapes, on the other hand, form geometric shapes and are more technicist.

Ensuring suitable climatic conditions for hop fields was extremely important and fundamentally limited the locations in which hop fields were established. The best hop growing sites are therefore located in close proximity to local geological formations (exposed rocks or quarries), which, thanks to their ability to absorb heat, provided the site with a favourable microclimate and in the spring protected plants from ground frosts. Equally important for the microclimate of hop fields was the proximity of a watercourse and the presence of natural barriers protecting the hop fields from wind exposure from the north and north-east. The nominated Žatec and the Landscape of Saaz Hops property has all these important features. At the same time, none of these plays such an important role in viticulture when establishing vineyards, as it does in hop growing. While vineyards could thus be established in a number of localities with different climatic conditions, the locations for establishing hop fields were very limited due to these requirements.

Visual impact of the landscape during the year

"Seasonal optical thickening", depending on the growth of hop vines and vine shoots and the enlargement of leaves and fruits can be described as a very similar visually distinctive common feature of both hop fields and vineyards. In full season, hop fields and vineyards represent practically impenetrable parts of the landscape,

but for hop fields, their optical impact on the wider surrounding landscape is much more significant due to the height of the plant. While the connection of hop fields to the village buildings is clearly visible before the appearance of vegetation, during the growth of the plant it gradually disappears, so much so that the built up areas and village structures cease to be visible in this landscape. Therefore, together with the plant itself, the importance grows during the year of local landmarks, which thus become essential elements for one's orientation within this landscape. The high cubes of rectangular hop fields in the flat terrain form a truly visually impenetrable barrier, and are therefore of absolute significance and function in the landscape.

In the post-harvest period, in winter and in early spring, both types of production areas are practically "transparent". A vineyard contains bare vines and (for the most part) basic posts and the permanent horizontal guide wires; hop fields are evident through their basic constructional framework of columns and anchor ropes; their "outline" is defined by the system of upper wires, ready for the hanging guide wires. In hop fields, the change in visual impact in the landscape is also much more dynamic than in vineyards, because from about mid-September, through winter until the initial growth (April, May), the fields are completely plant-free and their function is evidenced only by these basic structures. In addition, not all hop fields need to be in use all of the time. Some have been waiting fallow for several years, and parts of the landscape can be found where "full" and "empty" hop fields stand side by side, without such a field being deprived of its role over the long run.

Thus, a hop field is optically very different from vineyards, because the landscape of vineyards contains vine bushes even after the grapes are harvested, until the leaves fall off, and even then, until the spring cycle, they form variously "transparent" structures of their own species as well as the lower structures of the horizontal guide supports.

The visual changes of hop fields and vineyards during the year are therefore apparently similar; however, the shape of hop fields changes much more dynamically during the period of growth. During the main vegetation period for hops, the appearance of the landscape can change in just hours, the visual dynamic of a hop landscape is therefore not comparable to the more visually stable vineyard landscape, nor any other (see other parts of this comparison).

Seasonal nature of activities in a vineyard and in hop fields

Seasonal work in hop fields and vineyards also has similar phases, although the resulting crop (grapes, hop cones) are different: at the beginning of the year there is checking of the stability of supports; annually, before the development of the hop plants, providing vertical

supports (formerly rods, now wires); during the initial growth, "draping of vines on the wires"; then repeated spraying against pests. On the contrary, there are big differences in harvesting; these are influenced by the height of the hop vine. While in vineyards, the grapes are merely harvested from the plants on the spot, the hop harvest has two parts. During the first, the whole plant is cut off and pulled down at the hop field, in the second, the cones are picked. This latter phase is nowadays carried out outside the production area. It is during harvest that the image of hop fields changes quite radically "before one's eyes" and over the course of the next few days, and these "empty fields" are then there until spring comes again.

For the dynamics of the hop landscape in the nominated Žatec and the Landscape of Saaz Hops property, diversification of the hop fields based on centuries of experience is also important. Its goal is to time the harvest so that the cones do not ripen all at once. Thanks to this, the harvest can take place gradually by field units, and the picking and fast drying of the hops does not overload the available labour and technical capacities. This was especially important in the pre-industrial period. This is also one of the reasons why before the introduction of artificial drying in heated buildings, it was not realistic to establish more hop fields (for more see *Chapter 2.b*). This specific way of timing the work also has its effect on the appearance of the landscape during the harvest.

Comparison of the crop management of vineyards and hop fields after harvest

To understand the differences in processes and differences in the buildings that are needed to make use of the harvested fruit from vineyards and hop fields, it is useful to reiterate that although hops, thanks to the structures in the fields and the shape of their leaves, are somewhat similar to grapevines, the final crop is quite different - in the height of the vine, the size and lightness of the hop cones themselves, and their share of the weight of the individual vines.

The most significant difference is that between the final volume and the weight of the basic harvested crop: the grapes from the vineyard and the hop cones from the hop field, as well as the volume of the crop a few days after harvest - the dried hops and grapes from which wine has been pressed. The difference between the weight/volume ratio of grapes and hop cones in the final product, i.e. fermented wine and brewed beer, is quite crucial.

From the moment of harvest, the grapes become part of a completely continuous process, which in practice is impossible to interrupt. There is no drying phase (except for specific varieties of straw wine and the drying of raisins); the harvested grapes are processed in full by crushing to extract the basic juice, which must be immediately processed into another product, and the end result of this process is wine in barrels or in bottles.

Harvested hop cones (whether previously picked directly on the edges of the fields and transported to village drying kilns or nowadays transported directly to fully mechanized lines integrating picking and pre-drying) are, on the contrary, processed as quickly as possible into an "intermediate product" whose parameters allow its storage for weeks and months without any loss of taste or sensory qualities (or for other purposes - see *Chapter 2.a*).

Dried hop cones therefore wait for various lengths of time for further use as a kind of "spice", sold to any particular brewery wanting to use the unique properties of Saaz hops for its own branded beer. To this end, the landscape has necessarily become part of a wider process of specialization and cooperation between various actors in the large-scale cultivation of hops. The nominated property with its urban component that has completed the process of hop processing through its certification and storage of hops by international traders before its distribution worldwide, is a unique example of synergy between rural and urban community activities, which has a parallel in wine-growing countries only in those where the resulting wine product requires specific processing techniques (sparkling wine from Champagne).

Impact on built heritage

The appearance of village farm buildings intended for drying hops, their distance from the hop fields, connections to local roads and their location within settlements, but also their size, construction, the building materials used and in particular the appearance of their roofs, all of these in the case of the nominated property are based on the need for high-quality, and above all, quick drying of this crop, because any long exposure to air (more than a few hours) brings with it the risk of deterioration.

Grapes and their subsequent processing and storage once also took place mainly in the countryside and this had a significant impact on the location, character of the structure and material of farm buildings associated with vineyard culture. However, the two crops (grapes and hops) are completely different in their post-harvest processes.

Preservation of the unique properties of Saaz hops is not possible in a humid environment; on the contrary, the humidity of the hop cone itself must be quickly reduced to a minimum after picking (from the initial 85–75% down to 6–8%). Therefore, it was essential to carry out the last phase of hop processing in dry and well-ventilated spaces/buildings with exclusively wooden internal structures. The external evidence of the existence of the air-conditioning equipment of these buildings are the characteristic dormer windows on the roofs or the typical small ventilation openings in the perimeter walls. The buildings had to have extensive floor areas for the immediate processing of all hop crops. At the same time, their construction features had to be able to react

to the climatic conditions in which drying took place -during sunny weather, shutter blinds were to protect hops from exposure to sunlight, which worsened its quality, metal shutters restricted moisture access to the interior if drying took place during rainy weather. Drying reduces the weight of hops, but does not greatly change their volume. Extensive storage facilities were therefore associated with the areas where hops were dried.

On the other hand, the processing of grapes is characterized by walled press houses and wine cellars, i.e. premises with a completely different type construction, because the process of maturing and storing wine requires cold, unlike hops. Therefore, the typical underground cellars are often very large, combined with significantly smaller above-ground spaces used for wine processing and consumption (including living spaces). In vineyard landscapes, a direct relationship between the grower and the wine producer is quite common; in the case of hops, on the other hand, the aim of the rural producer was to dry the hops after cultivation and pass them on to a commercial process in which he was not directly involved. It was thanks to this that the town of Žatec gained its exclusive position within the nominated property, as a place where hops were concentrated and stored by wholesalers before their further distribution, and at the same time a place where its certification took place.

In this case, the comparison with the subsequent processing of harvested grapes is logically already different and the impact of wine processing on the architecture of buildings, their size, appearance, design and their impact on the appearance of the landscape are different.

Research and breeding aspect

Hops, like vines and overall a number of now common agricultural crops, are a domesticated plant. Man first used wild plants, and over time, on the basis of evolving experience, there was natural selection of the highest quality plants, which were deliberately grown on a defined area. The beginnings of breeding are therefore common to both plants. Empirical knowledge in plant breeding came about only in the 19th century, evolving from basic methods of selection or hybridization, the greatest growth followed in the 20th century and continues to this day in modern forms such as genetic breeding and modification. In many countries traditionally associated with wine culture, there are scientific institutes dealing with breeding. In many cases, however, these are centralized institutes located in the main administrative centres. In the case of the Žatec hop landscape nomination, it is possible to demonstrate the continuity of real scientific research carried out since the 1920s, based directly in Žatec, which developed into an internationally respected institution, whose results are applied directly in the selected rural component. This interconnection of scientific research with the town

of Žatec and the surrounding landscape is therefore completely exceptional in comparison with other areas.

II. RICE TERRACES

Rice, like hops, is another representative of originally wild plants that have been domesticated by man. It is one of the world's staple food crops, is Asia's most important cereal, and accounts for up to 90 % of field crop production in some areas. It is the main plant for grain production, because in many areas two to three harvests are obtained per year. Rice is closely linked to the history of tropical agriculture, since it was grown as early as approx. 3,000 BCE. Today it is grown not only in Asia but also in Africa, America, Australia and even in Europe.

Flooded or irrigated rice is grown in fields where various irrigation canals and dams are created. The building of an entire irrigation system is laborious and expensive, which is why rice is grown here as a monoculture. This means many continuous years on the same plots, which places increased demands on maintaining soil fertility, and on eradicating diseases, pests and weeds.

The constant cultivation of rice on a single plot of land without alternating with another culture is made possible by careful agricultural techniques - it is cultivated in an almost horticultural manner. The land is regularly fertilized with organic fertilizers, weeds and diseased plants are removed in a timely and regular manner.

When growing rice in hilly terrain, rice fields are set up in terraces one above another.

In the cultural heritage landscapes of the countries of south-east Asia, rice is still harvested by hand, because in this process the plants are only minimally exposed to mechanical shocks and there is not a great risk of loss of grains. The cut or uprooted plants are immediately tied into smaller sheaves, which in some areas are left in a flooded paddy field, at other times they are carried out on the dikes to dry sufficiently. The actual threshing is done manually or on stationary threshers. Usually, manual threshing predominates, which causes only minimum damage to the grain. After threshing, the grain is dried to storage moisture.

The use made of rice is much wider than that of hops, not only as a food, even if cooked rice is the most common and widespread food of all. In many countries in south-east Asia, alcoholic beverages are produced from rice. Rice gluten is used to make soup flavourings. High-quality paper and other utility items are made from rice straw. The immature plants can also be harvested for the purpose of making ribbons and weaving into straw braids for the production of hats, rice is also ground to make flour, oil is pressed from its sprouts, it is also used to make mats, baskets and fine paper. Pasteboard is made from rice husks.

1. CULTURAL LANDSCAPE OF HONGHE HANI RICE TERRACES (WHL)

The Cultural Landscape of the Honghe Hani Rice Terraces, China is an extensive area in Southern Yunnan. It is marked by spectacular terraces that cascade down the slopes of the towering Ailao Mountains to the banks of the Hong River. Over the last 1,300 years, the Hani people have developed a complex system of channels to bring water from the forested mountain tops to the terraces. They have also created an integrated farming system that involves buffaloes, cattle, ducks, fish and eel and supports the production of red rice, the area's primary crop. The inhabitants worship the sun, moon, mountains, rivers, forests and other natural phenomena including fire. They live in villages situated between the mountain top forests and the terraces. The resilient land management system of the rice terraces demonstrates extraordinary harmony between people and their environment, both visually and ecologically, based on exceptional and long-standing social and religious structures.

The combined cultivation models for rice cultivation on irrigated terraces in China are a very interesting landscape type. The OUV of this World Heritage property appreciated the complex management with which the whole land management system of the rice terraces demonstrates the extraordinary harmony between people and their environment, both visually and ecologically, based on exceptional and long-standing social and religious structures. The landscape is entirely different from a hop landscape, having no urban component to contribute to the OUV. It is subject in a major way to the life of local communities, which have based their complex economy on the rice terraces.

2. RICE TERRACES OF THE PHILIPPINE CORDILLERAS (WHL)

The Rice Terraces of the Philippine Cordilleras is an example of an evolved, living cultural landscape that can be traced as far back as two millennia ago in the pre-colonial Philippines. Out of the extensive historic terraces, the WHL inscribed property consists of five clusters of the most intact and impressive terraces. They are all the product of the Ifugao ethnic group, a minority community that has occupied these mountains for thousands of years. The network of canals and ditches along the terraces allows water collected from family-owned forests or woodlots at the top of the mountain to be distributed evenly to the terraces below. The terracing technology that underpins an intricate agro-forestry system has been handed down from generation to generation without direct interference from outside forces.

Rice fields are a visually distinctive part of the cultural agricultural landscape, and like hops, in the areas where it is grown, rice fields occupy differently sized areas. It is the agricultural landscapes with terraced rice fields, where rice is grown in flooded rice plains, that are represented by the two World Heritage sites described above, i.e. in China and the Philippines.

Although these are functional monocultures, in the case of China, part of the Outstanding Universal Value is the fact that an effective combination of fish and duck farming is maintained in this landscape. Hops in the nominated Žatec and the Landscape of Saaz Hops is not combined with any other crops or animal husbandry, these are flat areas.

In both cases, the OUV also includes the traditional culture of local ethnic groups, which is by no means a characteristic relevant to Žatec and the Landscape of Saaz Hops, which is part of the Czech Republic, which is a highly secularized civil society with a high ratio of industrial production and where agricultural production and crop processing for many decades have followed pragmatic practices aimed at moving most activities to the natural urban centre of the local hop heritage, i.e. the town of Žatec.

3. APATANI CULTURAL LANDSCAPE (TL)

The Apatani cultural landscape is an example of the use of a limited area that has developed on the basis of a century of experimentation. There are separate areas here for human settlement, wet rice cultivation, dry cultivation, burial grounds, pine and bamboo gardens, private plantations and community forests. It is an example of a highly successful human adaptation mechanism in unfavourable mountain regions and is thus of exceptional value.

The Apatani still use traditional methods for making use of natural resources which are well known for their sustainability. Exceptional value therefore lies in the examples. Despite the limited water resources, the entire cultivated area in the valley is well connected by a network of carefully designed irrigation canals.

A specific of the Apatani cultural landscape is the combined growing model and above all a very gentle approach to the management of natural resources, complemented by the distinctive and exceptional culture of the ethnic minority from this area. The landscape is entirely different from a hop landscape, having no urban component to contribute to the Outstanding Universal Value. It is subject in a major way to the life of local communities, which have based their complex economy on the rice terraces.

III. TOBACCO PLANTATIONS

One of the few widely grown crops that requires careful drying after harvest is tobacco leaves grown in tobacco fields, which are represented by the Cuban site of The Viñales Valley on the World Heritage List. Although the Outstanding Universal Value of this property is co-created by the extraordinary morphology of the valley with its specific geological formations (the so-called mogota), the main valued crop of the valley is clearly tobacco and its associated landscape and architectural heritage.

Tobacco also thrives in less fertile soil, so it is a welcome alternative crop for farmers. In the few countries where tobacco is grown on a large scale, tobacco leaves are already harvested mechanically. However, manual leaf harvesting is more common, and it is in the Vinales Valley that it is a maintained (indeed, a purposefully renewed) practice. The grower undertakes harvesting over a period of two to four months, gradually harvesting two to four leaves from each plant as they ripen. This distinguishes this harvest from the one-off removal of hop vines from the supporting structures. After the harvest, however, a complex drying process begins in the countryside (as performed until recently in the Žatec region), and in the case of tobacco these processes require excellent organization of the activities of small farmers. The method and consistency of the drying procedures is the most important factor determining the final aroma of the tobacco, (which is also similar to maintaining the quality of hops after harvesting). However, the drying of tobacco leaves is completely different, when allowing for the size of the leaves and their only gradual collection. Tobacco drying takes several forms (natural air circulation, hot air, in the sun, even with the help of fire, which is more of "smoking").

Thus, the drying of tobacco and the gradually added bundles of collected leaves takes several weeks, in contrast to the drying of hops; natural drying is still preferred. Cuba is characterized by manual workshops for the production of its sought-after cigars from dried and otherwise processed tobacco leaves.

1. VIÑALES VALLEY (WHL)

Vinales is located in the Sierra de los Organos, almost 200 km west of the Cuban capital in the province of Pinar del Río. The Vinales Valley is made up of several long valleys divided by limestone mountain massifs of rounded shapes overgrown with tropical vegetation, the so-called Mogotá. The valley lies at an altitude of 300 to 400 metres. In the era of the Mesozoic Jurassic, this area was part of the seabed and in more recent history has undergone a tectonic uplift. Subsequently, unique natural features were formed within it, making up an important part of the visual characteristics of the landscape.

The indigenous peoples have been growing tobacco in Cuba since time immemorial. However, tobacco plantations for commercial purposes were only introduced here by the Spanish colonizers at the end of the 16th century. At that time, a large part of Cuba was uninhabited, so the colonizing authorities offered immigrants various benefits. A group of immigrants from the Canary Islands, who settled in the western part of Cuba (in the registered locality), was selected for tobacco work. The first settlements and, in time, towns were established. Farmers also used slave labour for the work.

The Viñales Valley, is an emblematic cultural landscape of the island state of Cuba, symbolizing the cultivation

of tobacco, just as the Czech Republic is proud of its Saaz hops. However, the visual appearance of the two landscapes is different: The Cuban Valley draws its fame from its scenic beauty, based on the spectacular combination of an agricultural landscape combined with interesting volcanic formations.

The Žatec landscape, on the other hand, is different in that it is a relatively flat area of a wider floodplain of a major national river, on the alluvium of which hop cultivation has developed for centuries.

In both landscapes, the Outstanding Universal Value includes local vernacular structures and local crop processing in related urban centres. Tobacco is one of the few consumer crops that is dried after harvesting (similar to hop cones). However, the registered WH property does not contain an urban landscape, which in itself would be a significant larger unit with specific building features. In the same way, the whole Cuban complex can be described primarily as a rural heritage, unlike Žatec and the Landscape of Saaz Hops, where the proportions of rural and urban landscape are balanced. In Žatec, the town's share in growing and exporting from the local area has been significant since the Middle Ages, because the characteristics of hops and the usefulness of even small amounts of dried hops for the profit of the field or garden owner allowed them to cultivate this crop directly into the 19th century, when large-capacity post-harvest processing began to develop.

2. CULTURAL LANDSCAPE OF THE LOWER BASIN OF THE CHICAMOCHA RIVER (TL)

The Cultural Landscape of the Lower Basin of the Chicamocha River is the product of the overlap of an exceptional natural landscape of different times of occupation and movement of population. From the sixteenth century until the mid-twentieth century, muleterring was a critical activity for trade, to the extent that a large percentage of goods was transported by land; or through a combination of land and river transportation.

The landscape of the lower Chicamocha basin is also associated with the cultivation and drying of tobacco. The image of the landscape is co-determined by the crop itself (with a characteristic arrangement of the fields and their bright green colour), which is practically everywhere, as well as simple sheds designed for drying leaves. The area is completed by simple houses, in which farmers dry and then spread tobacco leaves and then compress their bundles with old wooden presses. Tobacco has been, and is today the region's largest commercial product.

Even today, the lower catchment area of the Chicamocha River remains a major producer of tobacco leaves and is constantly striving to improve its quality. The aim is not to sell to cigarette manufacturers in the form of tobacco blends, but to be used for the purpose of manual craft processing directly by tobacco producers, which brings farmers more income.

One of the most important elements of the locality is the local architecture, which retains the vernacular expression which comes from construction using local raw materials. The basic technique is adobe, i.e. pressed clay. The landscape also contains evidence of technical structures related to the production of tobacco and represented by cabins for drying leaves. These simple examples of folk architecture are key factors in the territory, since they give the areas its specific character.

The theme of growing and drying quality tobacco and trading it beyond the region itself connects the landscape of the lower catchment area of the Chicamocha river with the nominated Žatec landscape. However, this similarity is only of the most general kind.

The character of the landscape itself is quite different. The Colombian landscape will also be nominated for its exceptional scenic qualities, a function of the deep river canyon; set against this, the rural component of Žatec is a flat river floodplain, above which low terrain formations rise, on one of which lies the village of Stekník. The town of Žatec component is characterized by its panorama on a low watchtower.

However, the difference between structures related to the processing of hops and tobacco respectively is absolutely fundamental. In the Chicamocha valley there is a quite simple vernacular architecture complementing the tobacco fields, where tobacco leaves are dried and pressed by the farmers themselves; this is individual production. In the case of Žatec, the building complex being nominated reflects a stylistic architecture using utility warehouses and drying kilns, with the whole structure of the originally royal town developing and making use of the successful hop trade from the Middle Ages to the present.

The nature of the trade in the agricultural commodity is also different. The Colombian nomination will emphasize the centuries-old tradition of transporting goods along trails using mules, while in the Žatec region there are completely different transport routes and processes corresponding to European technological progress in the 19th and 20th centuries.

IV. AGAVE AND ITS PRODUCTION AREAS

Agaves grow naturally mainly in Mexico, but we also find it in the southern and western United States and in Central and South America. However, it is cultivated and domesticated elsewhere in the world with a matching climate, such as in the Mediterranean.

The plants have a large rosette of thick leaves with a barbed edge, usually ending in a further barb. The thick stem is short. Each rosette grows slowly and flowers only once. During flowering, a tall stem ("mast") grows from the centre of the plant with flowers at its end. After

it develops fruits with seeds, the plant dies, but suckers survive that grow freely from the base of the stem.

Agave is a succulent plant that in addition to its main fruit, which is the "agave pineapple", has been processed for many purposes. The best known is an alcoholic beverage, which is the basis of Mexico's World Heritage property, other parts of the plant were previously used, as a raw material for paper, thick leaves for thatching rural dwellings, the thorns as needles and pins, even the root was consumed when properly cooked.

Until the agave fruit was fully grown and developed, the plantation areas were also used for growing other crops, which made contact with the agave closer in terms of repeated encounters over many seasons.

1. AGAVE LANDSCAPE AND ANCIENT INDUSTRIAL FACILITIES OF TEQUILA (WHL)

The World Heritage property is a landscape spread between the foothills of the Tequila Volcano and the deep valley of the Rio Grande River. It is part of an extensive landscape shaped by the culture of the plant used since the 16th century to produce tequila spirit and for at least 2,000 years to make fermented drinks and cloth. Within the landscape are working distilleries reflecting the growth in the international consumption of tequila in the 19th and 20th centuries. Today, the agave culture is seen as part of national identity. The area encloses a living, working landscape of blue agave fields and the urban settlements of Tequila, Arenal, and Amatitan with large distilleries where the agave 'pineapple' is fermented and distilled. The property is also a testimony to the Teuchitlan cultures which shaped the Tequila area from AD 200-900, notably through the creation of terraces for agriculture, housing, temples, ceremonial mounds and ball courts.

The agave landscape is similar to the Žatec and the Landscape of Saaz Hops property based on the division of agave cultivation within the landscape and its concentrated processing, represented at three important towns in the world heritage property.

However, there is a great developmental difference, where the primary processors of agave up to the final drink were complexes of rural haciendas, associated with distilleries. In the middle of the 19th century, with the growth of exports and trade, large distilleries were established in the towns. This led to the decline of some rural areas in terms of spirits production in rural areas; growers began to concentrate on the supply of raw materials to the towns, which resulted in a rapid increase in land under agave cultivation. After the Mexican Revolution in the third decade of the 20th century, hacienda-related land was reallocated to workers on a communal basis or was privatized.

Thus, as in hop growing landscapes, the cultivation and processing of the crop also went through various social

stages, during which this important crop maintained its character and local identity. Apart from the appearance of the fields, the difference is that in the World Heritage property in Mexico, agave is used in the process up to the final product, whereas in the Žatec hop growing region it is partial processing of a crop for onward trading; to this corresponds the typology of the structures in the towns of both properties.

V. COFFEE PLANTATIONS

Coffee is a relatively demanding plant, which needs specific weather for its development with plenty of sunny days, but also rain. For its optimal development, the coffee tree needs a constant air temperature of around 20 °C. The ideal environment for it is the band roughly between the 23rd northern and 25th southern parallel across several continents, which was given the apt name of "the Coffee Belt". Coffee is grown in more than 50 countries around the world, with Latin America producing two-thirds of the world's production, with plantations in Colombia, Ecuador, Peru and other countries.

The pickers put the ripe coffee berries in baskets by hand - the beans must not be bruised or otherwise defective. In this state, the berries are still covered with a pericarp and other layers, all of which must be separated (A cheaper option is harvesting using picking machines, which run along the coffee trees and shake the branches until the coffee beans fall into waiting collection baskets).

The harvested berries are then sorted and washed and then have weeds and dirt removed. The washed beans are left to dry for a long time in the sun or in huge dryers. In order for the beans to dry evenly, it is necessary to turn and rake the coffee thoroughly during drying. After three weeks of washing, drying and raking, the berries are peeled so that only coffee beans remain, then processed in coffee roasters.

The cultivation and processing of coffee require completely different technological approaches compared to the growing and processing of hop cones. Also, the visual appearance of a coffee tree landscape is quite different.

1. ARCHAEOLOGICAL LANDSCAPE OF THE FIRST COFFEE PLANTATIONS IN THE SOUTH-EAST OF CUBA (WHL)

The first coffee plantations in the south-east of Cuba are a cultural landscape illustrating colonial coffee production from the 19th to the early 20th centuries. It includes not only the architectural and archaeological material evidence of old coffee plantations, but also the infrastructure for irrigation and water management and a transport network of mountain roads and bridges connecting the plantations with each other and with coffee export points.

Individual plantations exist in varying states of preservation, from the restored La Isabelica coffee plantation museum to plantation ruins which are nothing more than archaeological sites. Typically, plantations included the owner's house, terraced drying floors, production areas for milling and roasting, and workers' quarters. On the larger plantations, there are other out buildings, such as workshops. The wet-pulping coffee processing system, developed exclusively by the French, required a specific hydraulic infrastructure of cisterns, aqueducts and viaducts which are still visible in the landscape. Surviving vegetation illustrates the integration of coffee growing shaded by the natural forest or under fruit trees, as well as the French-style formal gardens that integrated local flora.

The archaeological landscape of the first coffee plantations in the south-eastern part of Cuba differs from the others being compared in that it protects the archaeological remains of the first coffee plantations as an expression of a fossil (fossilized) landscape whose process reached its end-point. The Cuban property emphasizes the importance of bearing witness to the remains left by this former activity, protecting the remnants of the economic and social history of the Caribbean and Latin America.

The nominated property in the Žatec region is a living production landscape representing the result of a centuries-old, successful process, which has constantly and variously intensively concerned the urban community and was complemented by village activities, and focused mainly on seasonal cooperation with urban processors and growers.

2. COFFEE CULTURAL LANDSCAPE OF COLOMBIA (WHL)

The Colombian property is an example of a productive cultural landscape that is a strong symbol for coffee growing regions around the world. It is a serial property, comprising six agricultural landscapes, including 18 urban centres on the foothills of the western and central ranges of the Cordillera de los Andes in the west of the country. It reflects a centennial tradition of coffee growing on small plots in the high forest and the way farmers have adapted cultivation to difficult mountain conditions. The urban areas, mostly situated on relatively flat hilltops above sloping fields, are characterized by the architecture of Antioquian colonization with Spanish influence. Building materials were, and remain in some areas, cob and pleated cane for the walls with clay tiles for the roofs.

The Colombian property represents production closely linked to rural life, based on family coffee-producing farms and other processes taking place in the landscape. The layout of the villages matches the sloping conditions, the numerous smaller towns of the

coffee landscape are also on the sloping terrain; here there is a closer connection between the property and the contours of the landscape. The Colombian case therefore emphasizes the durability and uniqueness of its crop in difficult topographical conditions. The nature of the coffee tree, the progressive harvesting and preparation of the harvested berries are of a different nature than the clear seasonal harvesting and processing of hops. It is a completely different agricultural landscape, although the OUV does include a combination of the attributes of rural and urban areas.

3. GEDEO CULTURAL LANDSCAPE (TL)

Gedeo is located in the southern part of Ethiopia. Gedeo is very well known for its autonomous land use system based on indigenous knowledge. The cultural landscape of Gedeo has many aspects, an agroforestry system has developed here, which is considered a sustainable land use system with a high population density of more than 1,300 people per km² and has a rich biodiversity. The agroforestry components include coffee, banana trees, baobabs and root crops. Each plant occupies distinct layers of the vertical space of the plant community. The Gedeo agroforestry system has evolved over a long period of time without significant deterioration and loss of biodiversity, as it is based on indigenous knowledge of environmental management and land use. It is a property of a completely different nature from the hop landscape of the nominated property.

VI. TEA PLANTATIONS

Tea, like hops, is a cultural plant, bred thanks to the knowledge and skills of the locals passed down through generations. It is grown in suitable climatic and natural conditions, especially in tropical and sub-tropical areas. Most plantations are located in China, Japan, India, Vietnam, Sri Lanka, Java and Sumatra. Unlike hops, it does not need structural supports to grow, but, like hops, it does require a higher proportion of manual labour. Large terraced plantations are used to grow tea, in contrast to the clearly defined boundaries of hop fields.

Tea leaves are the basic raw material for tea preparation, but buds and roots are also processed. Unlike hops, tea leaves are harvested several times a year, with the first harvest in spring and the last in September. The collection of leaves is gradual and the landscape of tea plantations has, in contrast to the hop field landscape, significant visual stability.

The processing of both crops is similar, occurring after the harvest, when it is necessary to dry both harvested crops, which brings with it considerable requirements for space. Further processing of tea is different from hop processing (rolling, fermentation, drying, roasting or smoking, sorting).

1. ANCIENT TEA PLANTATIONS OF JINGMAI MOUNTAIN IN PU'ER(TL)

The Ancient Tea Plantations of Jingmai Mountain is a special cultural landscape with a thousand years of cultivated tea plantations as its core area. It also contains a forest ecosystem closely linked to the growth of ancient tea trees, ethnic villages and a rich folk culture. The landscape is the largest long-lived man-made tea plantation in the world, and has witnessed the complete development of tea from wild growth to artificial domestication as an important life and cultural source of human existence. Tea was brought to every corner of the world through some important regions and international channels and made a significant contribution to the world's tea culture and the development of civilization.

The cultural landscape of the tea plantations is located in a mountainous area, at an altitude of about 1250–1550 metres. Unlike other terraced tea plantations, the Jingmai Mountain plantations benefit from a forest environment that offers a multi-layered ecosystem providing fertile soils and protection from pests. The landscape of these forest plantations is complemented by modern terraced tea plantations and villages as the places for the subsequent processing of harvested tea leaves.

Like Žatec and the Landscape of Saaz Hops, the Ancient Tea Plantations of Jingmai Mountain in Pu'er property is a cultural landscape which represents an exceptional example of the influence of a monoculture on the socio-economic system. However, in terms of the morphology and appearance of tea plantations and hop fields, these are completely different types of landscape. The Žatec and the Landscape of Saaz Hops nomination also includes the example of a hop centre, combining elements of subsequent processing in the town, including trade and transport to the outside world. Saaz hops are scientifically researched by institutions located directly in the town and verified by research on hop fields located on property. The entire cultural, historical and social context of the Asian region is also quite different.

VII. OLIVE GROVES AND OIL PRODUCTION

Olive trees are thermophilic trees, of which there are many species. The European olive tree (*Olea europaea*) is one of the oldest cultivated plants. This exceptionally long-lived tree with its evergreen silver leaves, due to its great ability to regenerate and its extraordinary ability to cope with the harsh conditions of dry and hot summers as well as a wide range of soil types, appears in various types of habitats. The fruit is a stone fruit usually containing one hard seed. The fruits give in particular a very high-quality oil, the fruit itself is a delicacy popular in many countries.

The origin of the olive as a cultural tree is ancient. It is believed to have originated in Asia Minor, from where it then spread westward across the entire Mediterranean.

Along with vines and grain, the olive tree has long been one of the pillars of Mediterranean agriculture. Covering huge areas, olive groves thus contribute significantly to the typical image of a Mediterranean landscape and can undoubtedly be considered one of the main symbols of many cultures. Among others, it is considered a symbol of peace, wisdom, patience, fertility, purification, strength, victory and immortality. The ancient Greeks dedicated the olive to the goddess Athena and worshipped it as a sacred tree. In the Christian and Jewish traditions, the olive tree symbolizes peace. The olive branch the dove brought to Noah was a sign of the end of the flood. For Islam, the olive tree is a cosmic tree representing the centre and axis of the world.

As far as monocultures are concerned, olive plantations and olive groves are a strong visual component in the landscape image, which is very stable. Evergreen and less water-intensive trees, usually planted in regular rows, have created completely distinctive parts of the territory of many countries, especially in the Mediterranean. They do not contain any supporting structures, they either form large continuous areas in various undulating landscapes and on sloping land there are also areas with trees planted on terraces.

1. PALESTINE: LAND OF OLIVES AND VINES – CULTURAL LANDSCAPE OF SOUTHERN JERUSALEM, BATTIR (WHL)

This world heritage property is located a few kilometres of Jerusalem, in the central highlands between Nablus and Hebron. The hilly landscape consists of a number of farmed valleys, with characteristic stone terraces, some of which are irrigated for market gardening of fruit and vegetables, while others are dry and planted with vines and olive trees. The strategic location of Battir and the availability of springs were the two main factors that attracted people to settle in the area and adapt its steep landscape into arable land. The development of terrace farming in such a mountainous area is supported by a network of irrigation channels fed by underground sources. A traditional system of distributing the water collected by this network is then used to share water with families from the nearby village of Battir.

This property is so far the only cultural landscape on the World Heritage List in which the olive tree is explicitly mentioned. The combination of knowledge and a fair distribution of water for families farming in the terraced landscape around Battir is an example of a landscape of a completely different agricultural character from the nominated landscape in the Žatec region with its monoculture of hops.

Spain and Turkey are planning the topic of growing olive trees as a tree that is completely characteristic of the wide Mediterranean area as their future nominations.

2. OLIVE GROVE LANDSCAPES OF ANDALUSIA (TL)

In the future, olives are to be symbolized by an ambitious plan from Spain, which in its own Tentative List plans to nominate a property under the name of The Olive Grove Landscapes of Andalusia as one of the main symbols of the cultural identity of Andalusia and the Mediterranean.

Although regular and sometimes relatively tall olive groves and younger plantations represent similar "cubic" formations in the landscape, as do hop fields for part of the year (both those with supporting rods and modern ones with wire trellises), olive landscapes cannot be more widely compare with a hop landscape. Both the tree species themselves and the seasonality of the harvest are different, as is the nature of the handling of the harvested olives.

The planned future nomination associated with the olive-growing heritage intends - similar to the Žatec and the Landscape of Saaz Hops nomination - to prove that the phenomenon of the "olive grove" has gone far beyond its traditional definition. It is also a basis for the development of economic activities, research, business boosts, and it generates wealth creation with the help of an entire economic sector that is linked in some way to olive groves: this can range from oil presses and oil processors to tourism companies, utility companies and companies that deal with residue obtained during oil production and from the olives themselves that can be used to create biomass for energy purposes. This may also involve universities and other institutions researching different ways of producing the main products, or different ways of growing and harvesting them. As in the case of hop processing, related industry is essential for olive growing. This type of industry is linked to obtaining olive oil and preparing olives for human consumption - processes (e.g. stoning and stuffing) which require a subsequent stage of industrial processing. The process also includes the subsequent processing of certain by-products created during industrial processing, and these by-products can provide us with other goods to sell on the market, for instance olive pomace oil, biomass for generating energy, organic fertilisers and cosmetic products."

However, the social and production parallels end here - having regard to the fact that olives are not dried, the post-harvest processing phase is much closer to fruit-growing practices, and less so, to viticulture. The processing of olives consists primarily of their pressing into oil, which usually takes place in the region of their cultivation, whole olives of various sizes are also subject to modification for long-term use, i.e. preserved, stored and traded. The weight and volume characteristics of crops/olives do not decrease, even if secondary pressing produces a secondary mass. The resulting products are therefore produced in olive-growing areas, in the same way as for wine, sugar cane and agave, coffee, tea and rice.

Another distinguishing feature of the olive groves being prepared for nomination is that they are held mainly by small owners (At present, 820 oil factories/mills are operated in Andalusia, representing 47.2% of all current mills in Spain). References in the text relate to whole production provinces rather than to a specific town.

Due to their genuinely huge area and small-scale production processes, olive grove areas have not come to be identified with a single town, since processing still had the nature of family farms and factories, and therefore it was the names of production provinces that were mentioned in trade relations. The theme of olives in the planned Andalusia nomination therefore a rural one.

3. AYVALIK INDUSTRIAL LANDSCAPE (TL)

Coincidentally, Turkey has a tradition of growing and processing olives and has a property on the Tentative List with the interesting name of the Ayvalik Industrial Landscape.

Ayvalik is an important trading port, whose activities are based on the olive industry, which has been in evidence here since the 19th century, and is also reflected in the structure of the town. The town has 20 industrial complexes and industrial buildings are divided into 2 groups (factories for olive oil production and for olive soap and warehousing). Most of the industrial buildings were in operation from the 19th century until 1970.

The site is proof of living witness to the traditions of olive growing, olive oil production and complementary soap production. The property, if the nomination is successful, will be an example of land use in an area where the population structure and over time, the olive processing technology have changed. The number of olive trees in the adjoining landscape and the centuries-old tradition of olive oil production were also reflected in the specific buildings used for olive oil production, product storage and the entire structure of the town, which also became an exporting port. The nomination will explain that olive production in this part of Turkey has created a cultural identity without parallel.

Although the olive grove landscapes and the product itself are different from the hop field landscape in the nominated area of the town of Žatec, partial parallels can be found within the Ayvalik Industrial Landscape project.

This is another example of the fact that if there is a long tradition in a certain area, quality crops and related processes take place in an organized fashion in an urban location, where there are the prerequisites for direct trade, then a strong cultural identity develops in that place, regardless of nature of the crop.

Ayvalik also has parallels in the societal awareness of the importance of such heritage, when (similarly to the Prague suburb in Žatec) in the second half of the

20th century, more modern processing operations were moved out from historic establishments and the national monument authorities leaned towards its protection as a conservation area). But here the similarity basically ends - the differences are due partly to the olive groves themselves in the rolling countryside (Ayvalik) and the hop fields in the flat floodplain around the river Ohře (Žatec and the Landscape of Saaz Hops) and to the landscape context of their own towns, which are the holders of these traditions. The diversity of the towns results from both different climatic and landscape conditions (Ayvalik is a seaport, Žatec is an inland town on an important river, and more recently on a railway junction). On a more detailed scale, the differences can also be evidenced by the nature of the buildings that make up the towns, determined by a different cultural region and architectural traditions, as well as the structural nature of the processing and storage buildings concerned.

VIII. SUGAR CANE

Sugar cane, from which sugar is made, is a perennial, very bulky grass with upright massive stalks. Each stalk has an average of about 20 to 40 nodes and is filled with a soft pulp containing up to 20% sugar (especially sucrose, with a small amount of fructose and glucose), which is stored here as a product of photosynthesis. Sugar cane is propagated on plantations exclusively by stem cuttings.

Sugar cane leaves reach a length of 100-200 cm and a breadth of about 7 cm and their arrangement is alternating. The leaves are either green, yellowish or purple, some varieties can have coloured stripes. The fruit of the sugar cane is a cereal. However, on plantations, the inflorescence of sugar cane is undesirable because the flow of the sugar in the stems decreases with the flower, thus reducing the value of the plant to the grower.

A constant temperature above 30 °C is needed to grow sugar cane, so this crop is grown mainly in the tropics and subtropics.

Sugar cane is harvested by special harvesting machines. In places where the machines cannot reach, the tradition of manual harvesting with machetes continues. After the harvest, the cane stalks are transported to sugar refineries, where they are pressed and sugar is produced from the extruded juice. In addition to the sugar itself, by-products such as molasses (waste sugar syrup) and bagasse (remnants of stalks after pressing) are also important. Molasses is used to make rum (1 litre of molasses is used to make 1 lighter of rum), as well as gin, vodka, yeast and other products. Molasses is also a suitable feed for livestock. Pressed stalks are burned in sugar refineries or used as a raw material for the production of paper, pasteboard and plastic sheeting. It is therefore again an important plant with a wide range of uses in the cultivating society.

1. THE INDUSTRIAL HERITAGE OF BARBADOS: THE STORY OF SUGAR AND RUM (TL)

The area planned for nomination includes representative elements of sugar cultivation and processing. The selected areas have evolved over several centuries and are an example of both surviving historical evidence and the continuing traditions of sugar processing. Barbados is the example of the first sugar-growing and sugar-producing island, an exceptional example of a cultural landscape that was influenced by both Europeans and Africans in the context of the Atlantic Ocean.

The sugar cane fields (plantation complexes), technical infrastructure and factories and residential buildings lie on the slopes of the hills and in the island's valleys. The Industrial Heritage of Barbados: The story of Sugar and Rum is an example illustrating the impact and influence of human settlement, slave labour and the production of Caribbean sugar and rum from the mid-17th century to the 19th century in a natural landscape. The uniqueness of the landscape lies, among other things, in the local soil rich in nutrients. The property represents a combination of land, labour, capital and adapted cultural traditions specific to the development of cultivation. It is also a testament to the patronage, control and protection of a highly prized sugar cane area, which contributed to the economic development of the British Empire, which played a significant role in the history of the geo-cultural Caribbean region.

In terms of comparison with this, it is possible with the Žatec and the Landscape of Saaz Hops property to find similar features, such as the trend towards commercial success, and thus in the socio-economic aspect (linking the production landscape and the processing centre). Residents of the Barbados cultural landscape were able to turn sugar production into a very profitable business, similar to the hop growers on the nominated property. However, the actual landscape, the character of the plant and the processing methods, and in particular the cultural-historical context, forms of settlement and related technical infrastructure are completely different.

IX. DATE PALMS

The date palm has been prized since antiquity and comes from the area of present-day Iraq. The date palm grows up to about 23 metres. Its trunk, heavily articulated by the stumps of old leaf bases, terminates in a crown of graceful, pinnate leaves about 5 metres long. Dates are fruits that vary greatly in shape, size, colour, quality and consistency of the flesh, according to the conditions of culture and the variety. In Europe the date palm is cultivated principally as a decorative tree on the shores of the Mediterranean and its leaves are used by Christians on Palm Sunday and by Jews at the Festival of Tabernacles.

1. PALMERAL OF ELCHE: A CULTURAL LANDSCAPE INHERITED FROM AL-ANDALUS (WHL)

The landscape of the palm groves in and around the Spanish city of Elche is a remarkable example of the deliberate implantation of a form of agriculture from one region to another and also reflects an important episode in European history.

This world heritage site, of course, differs significantly from the nominated hop landscape, but it was methodologically inspiring from the point of view of seeking the optimal extent of the nominated landscape for Žatec and the Landscape of Saaz Hops. In the case of the 'Elche', a much larger scale was originally proposed, but after consultation with ICOMOS, it was reduced to a relatively compact landscape. With a similar objective, the boundaries of the rural landscape component were considered to include compact blocks of hop fields in a history-proven natural environment, and where the future of hop gardens in this location could be guaranteed. The visually compact landscape of palm groves has slightly similar features as the rural component of the nominated property with its many hop fields.

X. COCOA PLANTATIONS

The cocoa beans from which cocoa is made are obtained from berries that grow directly from the trunk or thicker branches of a tree called the cacao tree. The cacao tree is an evergreen, native to the tropical regions of South America, which now grows in the tropics around the world. It originally grew in the undergrowth of rainforests, where it had ideal shade, temperature and the optimal amount of water. All these "conditions" must also be met today, so cacao can only be grown in the tropical zone around the equator, between 20° north and south latitudes, up to an altitude of 500 m above sea level, and a cultural landscape which will represent this crop on the World Heritage List should have this characteristic of optimal location.

The cacao tree grows in the rainforest to a height of 15 m, (on the plantations "left" to grow "only" to a height of 10 m) and its trunk reaches a diameter of 30 cm. The cacao tree blooms for the first time after 5 years, but it is only able to keep fruit suitable for harvesting from 9 years onwards. The average harvest from one tree is 20-30 fruits, i.e. about 2 kg of cocoa beans per year. The fruit of cacao trees ripens for about 6 months, which means that the plantations usually have one main harvest and several intermediate harvests. In Africa, the main harvest lasts from October to the end of February, intermediate harvests take place from May to July. In Brazil, the main harvest lasts from April to July and the intermediate harvests until the end of the year. In Ecuador, the main harvest takes place from March to May. With good care, the cacao tree can bear fruit for 30, 40 or more years.

1. HACIENDA CHUAO (TL)

The plantations in Chuao are more than 400 years old, as the first references are from the 16th century. Archaeological finds and monuments from the colonial period date from this period. Cocoa beans (Theobroma cacao) from this area are considered to be the best and finest in the world, while at the same time this type of cocoa bean is very rare and its occurrence is beginning to be endangered. Techniques for tillage, harvesting (using machetes, wicker baskets made in Chuao), fermentation and drying have remained the same for centuries. The beans are harvested twice a year and the beans are traditionally dried in the courtyard of the Plaza de Secado.

In Chuao County (located in the middle of the mountains with very limited transport links), a significant part of the population, especially women, is employed in the cocoa "sector", men make a living from fishing. The valley was not originally an ideal place for growing cocoa, it is too dry, so the villagers irrigate the plantations several times a year by diverting the flow of the river, whose springs flow from the mountains. Sediments from the river enrich the soil with minerals, and this gives the crop a key difference in taste.

Chuao is a high-quality example of a landscape of its type, representing the production of cocoa beans in North Latin America in a community that is the successor to slaves from Africa who preserved their culture. Production activities and social life take place around historic buildings, the most important of which are the church, the Casa del Alto (the administration building), the Patio (located in the middle of the city and where cocoa beans are dried) and Cruz el Perdon; the property thus has important ethnic attributes.

Local customs (especially the singing of traditional songs) during the harvest are also typical to the specifics of the area. Since 2012, Los Diablos Danzantes has been on the Representative List of the Intangible Cultural Heritage of Humanity.

It has only a few features in common with the nominated Žatec and the Landscape of Saaz Hops property; these are the exceptional and internationally recognized quality of the local crop, the need to dry it and the emphasis on identity associated with certain seasonal processes. Otherwise, it is a completely different type of landscape and buildings associated with post-harvest treatment of crops and, in essence, the different cultural and historical context of both localities.

SUMMARY COMPARATIVE NOTES ON ASPECTS OF OTHER AGRICULTURAL LANDSCAPES ON THE WHL/TL

Visual similarity of fields and plantations with agricultural crops - general thesis

In the previous sub-chapters, various similar aspects of productive agricultural landscapes and the management of crops and hop field landscapes were consistently observed. At the same time, it was found that even seemingly quite different agricultural products in different regions and climatic conditions have certain similar aspects or have characteristics that are the objective basis of any difference. For a general summary or, conversely, for a more detailed comparison with the nominated Žatec and the Landscape of Saaz Hops property it is necessary to narrow the comparison somewhat, especially to visual aspects of the landscape. Thus, to what elements associated with the cultivation and subsequent treatment of crops are present in the landscape, and how the cultivation of hops and other crops in a particular landscape demonstrates its functions.

As already mentioned in the comparison of regions with vineyards and hop fields, in these landscapes there is a relatively large variability of the image of the productive landscape over a calendar year. Evergreen plants and trees of the tropical and subtropical zones, from which berries or leaves are harvested gradually or in several seasonal waves, fill the area of production fields stably with plant and tree masses. Especially the perennial shrubs of coffee trees or tea trees, which in their wild form can reach a height of several metres. Production plantations are regularly pruned to a height suitable for collecting leaves.

For the Žatec landscape, in which hop vines are visible only a few months of the year at the time of their rapid growth, especially those crops with a complete cycle of growth and harvest of everything that grows in the field can be a parallel in terms of the dynamically changing the landscape image.

In the case of lower growing crops, from WH landscapes these are mainly tobacco, with its unmistakable plantations of geometric fields with regular rows.

Another plant whose cultivation is widely represented on the World Heritage List is rice and its associated rice fields. Planting is quickly repeated on these throughout the year, but the visual aspect of the rice fields is completely different, as the rice fields are planted with low seedlings not needing support. The main visual perception of this landscape is characterized mainly by the terraced arrangement of fields and water areas, some with the integration of comprehensive farming (see China).

Of the production landscapes on the World Heritage List, vineyards are visually closest to the nominated property;

their areas are visually distinct in the landscape and functionally unmistakable even in the period outside the growing season. Nevertheless, the dynamics of the two landscapes are different, mainly due to the different geomorphological conditions in which vineyards and hop fields are established.

Structures in the productive agricultural landscape necessary for the "post-cultivation phase"

The path of hops from the fields to rapid drying has affected the earlier history of construction related to rural areas, but even towns. The need to quickly dry large volumes in a dry and airy space is reflected in the roof landscape of the village and town components of the nominated property, later heated kilns brought to villages a distinctive type of buildings with typical tower-shaped extensions in the hops, which are visually applied in their material composition. The preparation of hops for their journey to further destinations then also fundamentally transformed that part of the urban component of the nominated property, where for the purposes of packing, certification, sulphurisation and storage an unprecedented concentration of very specific hop buildings was built, which, of course, by their very location react in a unique way with the medieval urbanist structure of the town. In the distant image, high chimneys are seen, on the contrary, from the, pedestrian's point of view, a number of interesting details typical of hop objects are interesting. Urban facilities closely linked to the process of trading in this commodity (hotels, banks, but also cultural and religious buildings) have also enriched the town in an unmistakable way (see *Chapter 2.a*).

Unlike the fruits from which the target food (beverage, root crop, cereal) is obtained in large quantities for direct consumption, hops are in their final form (dried and prepared for durability) a "spice", an ingredient, used in a final product to the largest extent by other producers outside the growing area. It is therefore a commodity that is incorporated into the final product by another, purchasing entity (mostly producers of beer or cosmetics). In this respect, it is similar to tobacco blends (the cigarette industry), coffee beans (mostly roasted after transport), cocoa beans (cocoa butter and chocolate are also often processed in various factories or small producers), less consistently to tea blends and rice (producers also already pack tea into bags in retail sales sizes). On the contrary, wine, olives, packages of dates or raisins, tequila, branded cigars are mostly traded already in the final product packaging, originally packaged and with their own label.

These seemingly distant connections concerning the final form of the product are reflected in the demands on the existence, size and form of the processing and storage facilities in the cultural landscapes of these monocultures. The requirements for the form and microclimate of storage facilities are also defined by the

output product in the growing area. Products with the nature of a beverage, oil or preserved crop, which are stored in barrels, ceramic containers, jars or bottles, or those cold-stored (fruit and vegetables), have completely different quality requirements than dried crops, which must be protected against dampness or even loss of colour, which is the case with hops.

From the point of view of the need to dry the crop and for the final consumer product to be processed at a distance, hops are similar to tea, tobacco, cocoa beans, coffee and even rice. From the point of view of careful and at the same time fast, and therefore well-organized "handling" of the crop at harvest-time, it is similar to sugar cane, for example. But also for other crops that are on the WHL, the Outstanding Universal Value characteristics or the description emphasize that the quality and reputation of the place is co-created and maintained by a high proportion of traditional, i.e. usually manual activities, as a rule manual harvesting (cocoa beans, coffee from coffee trees, manual, as opposed to machine threshing of grain).

The existence of an urban centre that has become a symbol for the particular crop and the whole landscape

In search of comparative similarities with the Žatec and the Landscape of Saaz Hops property, those cultural landscapes on the World Heritage List that represent the production of crops that have created monocultural systems and that have given the areas great prosperity and fame (especially in more recent history) can be identified as partially relevant, when progress in existing systems has been accelerated by international trade in the crop or "intermediate product".

This has happened especially since the 19th century, when modern technologies and energy for processing agricultural crops enabled the emergence of technically well-equipped concentrated facilities - whether it was local production on farms (as is the case with haciendas and distilleries in the agave landscape) or larger operations concentrated in larger places within the area, which then give some products their name. This is characteristic, for example, of vineyard areas (Tokaj wine, Burgundy wine, Champagne).

Crops grown more widely around the world usually bear general references to the country of origin, but not to a specific place or town ("Colombian coffee", "Chinese tea", "Cuban tobacco"). From this, another interesting comparative criterion can be derived for the perception of the specifics of Žatec, namely monitoring whether or not a certain identification core location was created for a certain agricultural crop in a specific urban environment in which the necessary post-cultivation processes take place, and which would then give the crop its name: If a crop is processed in several places directly in the agricultural landscape, with dozens to hundreds of smaller villages with direct farmers, into

the form that the final consumer buys "in a shop", it is important for the integrity of the story that the World Heritage property includes the whole process, i.e. also the material attributes of the creation of the "finished product". That is why the agave landscape has distilleries, the Champagne landscape has wine bottling and cellars for its maturation.

The more complex process of processing grapes into sparkling wine was then concentrated in town in close proximity to the vineyards, not least because the weight volume of grapes, care for them before pressing and the handling of them and the pressed juice all require a minimization of movement. Therefore, in a number of vineyard landscapes, wine buildings with presses and cellars are preserved directly at the foot of the vineyard slopes. Not even today are winemakers joined in centralising processing, fermentation and bottling for larger volumes; the characteristic family farms and family traditions and pride in their own wine are common in developed countries as well.

While the previously mentioned other crops (grapes, rice, tea, olives, coffee) are traded in the form of a finished product (with the exception of coffee, which retailers often roast at the point of consumption), hops from the Žatec region for the most part end up in products in other countries and places and which do not reflect the name of Saaz hops. Saaz hops are contained in the products of hundreds of beer producers; often their place of origin is stated on the beer label of these products in order to declare their high quality thanks to the use of Saaz hops.

Only in a town, which assisted the entire cultivation and processing process, was it possible to provide the necessary additional transport, processing, or conservation and certification infrastructure, as well as trade-related services such as accommodation or banking services. The production in the fields in the countryside could then be related to the necessary crafts in the given urban centres and later to the factory production reinforcing techniques and technologies in the fields and for transport and packaging materials for long-term storage or export. Not insignificant aspects of specialized urban centres or hinterland to the agricultural landscape are specialized training and the existence of facilities for social, cultural and other activities that attract people from the countryside and the wider environment in general. All this is represented by the urban component in Žatec.

The names of such urban centres (in terms of their international fame and the trade associated with them) are then directly identified on the "map of the business world" with a particular agricultural crop, whether it was also grown directly within the structure of the urban unit (Žatec in the Middle Ages) or only processed. So as with Mexican tequila, bearing the name of the town with the agave distillery, or

Tokaj wine, Saaz hops is associated with the town of Žatec (Saaz in German).

Where a single specific town has not been profiled in an agricultural landscape enough for its name to be identified with a particular crop, a commercially successful commodity bears the name of a wider area, sometimes indeed the entire country where it is produced. This is the case with Colombian coffee, Brazilian coffee, Chinese, Indian or Ceylon tea, Cuban rum. Also, widely grown rice is not so much identified with its own production area and its specific administrative centre, but with a more general type and its specific characteristics (jasmine, red, black, basmati, ...).

Specifics of the socio-economic aspects of hop cultivation and processing

The agricultural cultural landscapes of developed countries (especially in Europe) are generally different, for example, from the cultural landscapes of the tropical and subtropical belt, where agriculture binds together a higher percentage of the population and rural society also maintains its community specifics more. There is a difference in the OUV of cultural landscapes in which cultivation and processing themselves are associated with pragmatic approaches, guided by the awareness of the opportunity to successfully trade in the product, to which are also related attributes dependent on the final processing, certification and sales and transfer of these final stages of the story from rural to urban, particular in the case of supra-regional or international trade. This applies both in Europe (i.e. in the case of the nominated property and Champagne) and in the processing of tropical crops with subsequent production requiring more complex organization and specialization of production (Tequila, sugar). A different case is that of previously productive agricultural landscapes, which turned into derelict or fossil landscapes at the very moment when the original population changed significantly or disappeared completely or the social aspects of cultivation changed as a result of social changes (see Archaeological landscape of the first coffee plantations in the south-east of Cuba and numerous others, landscapes abandoned for various reasons, that are not on the WHL, but traces of cultivation are evident in them).

It is typical for monoculture crops that far from all of their output was consumed by their growers, however, at least part of it could be made use of by the growers themselves and was basically sold as a surplus (however large its share of the total harvest). In many regions, the direct consumer relationship to the cultivated crop has developed into a strong cultural tradition or rituals with ethnological aspects. Traditions associated with sowing, harvesting, and consumption are also referred to for those properties registered with the WHL. Numerous agricultural cultural landscapes that are registered with the WHL are valued for the fact that high-quality proven cultivation techniques are maintained by local communities, which often

associate the quality and success of cultivation methods directly with religion. Hop growing was - in contrast to the above - only a supplementary livelihood for the rural population. From the beginning of production, this deficit of a direct "connection of the rural population to the actual consumption of hops" put to the fore a completely pragmatic approach, which influenced the typology of buildings of the hop landscape. In the countryside, the intention was to grow hops, harvest the crop well, dry it quickly and sell it in the days which followed, not to store it for a long time. The consequence of this is a very strong link between the countryside and the town where all the "post-production" had moved to. Thus, rural growers brought sacks to Žatec for certification, or for further processing, final drying, and in the town the processes of packaging, sulphurisation and sale followed.

Many owners of smaller village farms did not grow hops at all in their fields, and in the hinterland of the villages in the hop landscape (in the buffer zone) there are also the usual fields for cereals and other crops. In the years of the biggest production boom, however, even these village inhabitants, who did not grow hops themselves, equipped their farmsteads with single-purpose drying capacities, leased to the owners of production fields for a time-limited period, when it was necessary to harvest and dry local hop output as fast as possible. Similarly, hops continued to be dried in the lofts of houses inside the historic centre of Žatec, even at a time when the plots of the towns people directly in the town did not contain hop gardens; hops were dried if necessary even in the roof spaces of religious buildings, as the roofscape of the town still reflects.

Thus, farms for the processing of hops for the final product (especially beer) have not developed in the rural landscape of the nominated property, as is the case in the vineyard landscapes of local producers or in the case of the "agave landscape" of local distilleries associated with haciendas. On the other hand, the town of Žatec has been a national hop growing centre since the Middle Ages, where hops were not only grown and processed, but also where they were later also certified and subsequently traded all over the world. In Žatec, of course, beer was always brewed from local hops, and to this day there is a functioning brewery (see *Chapters 2. and 2.b.*)

Thus, the processing and subsequent handling of hops differs significantly from other agricultural crops, which could also have been traded by the rural population or their elites. The certification of the quality of hops, which increased the opportunity to market it well and was therefore also in the interest of rural growers, made the town of Žatec a fundamental part of the whole process, without which the ordinary grower would not be able to succeed on the market.

The need for specialization, the advantage of mechanization for various stages of care for the fields and growing plants soon led hop growers to form an

association, also agreeing on the advantages of internal specialization, including building a scientific facility for breeding and creating the conditions for improved yields. This reality of a collective concentration of capacities, sharing of technology and know-how helped to maintain continuity even in those decades when national and ownership conditions in the former Czechoslovakia changed radically after the Second World War. With the knowledge of the exceptional quality of Saaz hops, forms of hop processing, improvements in plant care during growth and of the dried hops for the purpose of trade, were further developed as well as the picking of hop cones on specific locally invented machines, which are still manufactured in Žatec in mechanization companies. Even after further socio-economic changes, the model of centralization and joint cooperative management was adopted, of course on the basis of different principles of sharing the responsibility, costs and revenues from sales. The story of a cultural landscape specializing in the cultivation and processing of hops is therefore a unique testimony to the continuous improvement of mutually connected and still human labour-intensive practices, which are maintained by trust in the quality of the local natural environment, with the knowledge maintained of all the practices and last but not least with the necessary dose of local patriotism, reinforced by the retention of traditions associated with the main growing season.

3.2.c GENERAL SUMMARY OF THE COMPARISON

There is no property both on the World Heritage List and on the Tentative List that represents the distinctive architectural, structural, landscape and urban heritage associated with hop growing and hop processing. So far, no extensive materials have been prepared on which this comparative analysis could be based, the technical literature on the matter of hops deals mainly with hops properties. The topic of hop structures and their differences and similarities in the various countries where hops are grown are described mainly on local level. But other agricultural production landscapes contain interesting parallels even when their own image is completely different, and they are located in different morphological and climatic conditions. The study of the nature of selected cultural landscapes inscribed on the World Heritage List and on Tentative List is confirmed both by the principles in the "Global Strategy" for compiling a representative and credible WHL and the idea formulated by P.J. Fowler on the need "to carry out regional thematic studies on farming landscapes with a view to obtaining a global overview of important cultural landscapes resulting from the commonest land use in the world" (see above). This approach also contains the potential for the development of thematic international cooperation in the field of preservation of Outstanding Universal

Value as an important segment of cultural heritage representing by agricultural production landscapes.

With its comprehensible tangible and intangible attributes of exceptional values, the nominated property Žatec and the Landscape of Saaz Hops is comparable to the productive agricultural cultural landscapes that have been already inscribed on the World Heritage List, but represent the heritage of the growing and processing of other crops. Based on the thematically broad scope of this comparative analysis, we can sum up that differences from other productive landscapes show the quite specific kind of heritage of mankind, that relate to cultivation, processing and trading a commodity that needed highly organized coexistence of both rural and urban environments and gave them quite unique character. Visual impact of preserved heritage on such a landscape is closely connected both with local climatic and soil conditions and local building traditions which makes the whole property unmistakable with other cultural landscapes.

From the aforementioned more detailed particular aspects commented on in this comparative analysis, and indeed from the description of the nominated property, it can be concluded that no parallel of the cultural landscape type was found that would represent the same complex of specifics and visual qualities in the fields, purpose buildings in villages and in the town related to crops production. The impact on built heritage is different from other cultural landscapes: The appearance of village farm buildings intended for drying hops, their distance from the hop fields, connections to local roads and their location within settlements, but also their size, construction, the building materials used and in particular the appearance of their roofs, all of these are based on the need for high-quality, and quick drying of this crop, because any long exposure to air (more than a few hours) brings with it the risk of deterioration.

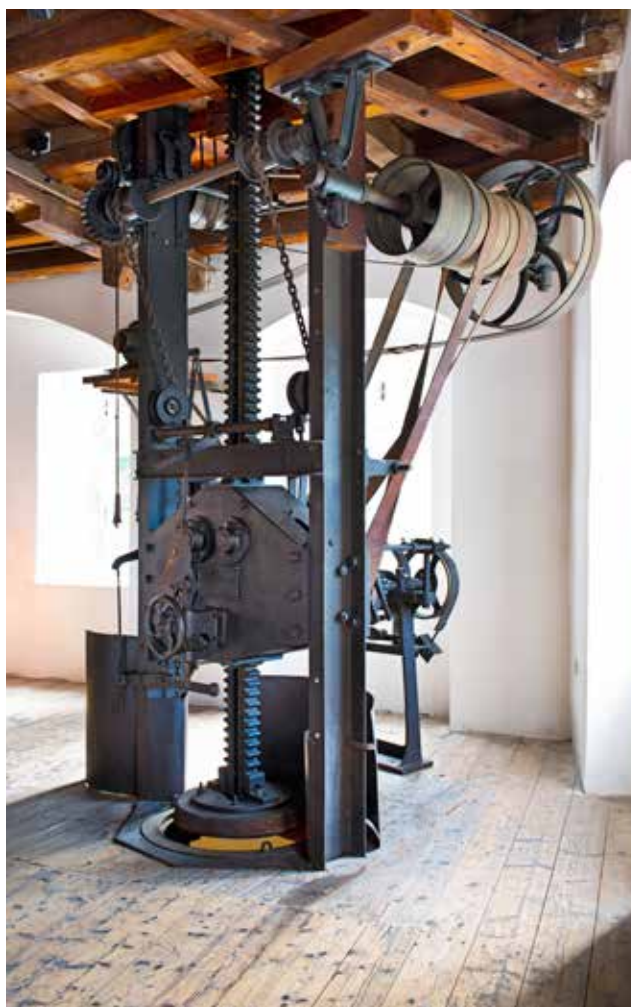
Žatec and the Landscape of Saaz Hops shows diverse aspects of hop growing, harvesting, the drying process, packaging and commerce from medieval times to the present. The continuity of similar land use, technical practices and commercial purposes through time is clearly shown by tangible features, such as hop fields, technical constructions and warehouses of diverse types, farms and villages, housing and buildings related to hop trading elites, related industrial activities and social/religious practices (e.g. the synagogue as witness of the former Jewish community, which included leaders of the international hop trade).

From the comparison of the main hop growing regions and the structures preserved in them related to hop processing which can be regarded as the most important part of this comparison, it was clearly shown that with its two complementary components the nominated property perfectly represents its type of a cultural landscape. In none of the compared hop growing regions mentioned was the equivalent found of the connection of a productive

hop growing area to a hop processing centre as is the case of the nominated property. The exceptional nature of the Žatec and the Landscape of Saaz Hops lies in the historical significance of this area, the continuity of specific land use, processing and trade with hops, the number of preserved hop structures and the integrity of the area with a number of tangible heritage assets related to the cultivation and processing of hops in one place. In addition to their continuity of cultivation, the hop fields in their rural component part are also areas where the research activities of a scientific institution have been in place for some time, directly at the place of cultivation. The structures located in the rural component with production hop fields complete the overall picture of the cultivation and initial processing of hops immediately after harvest, before their transport to the hop centre. The urban component contains numerous accessible authentic historical buildings associated with the processing and trading of hops, so the name "the town of hops" is already used for Žatec.

Therefore the nominated Žatec and the Landscape of Saaz Hops" property is unique on a global scale, not only regarding uniquely preserved specific typology of hop fields and a hop processing related spaces and structures, but also as a strong cultural tradition; the Saaz hops itself is traditionally called "Green Gold" what is widely known and resonates throughout wide public and society within of the whole country. Such a property can be longlasting sustainable and help to transfer specific knowledge cross generations and across regions and well contribute to general ideas of the World Heritage Convention.

Historical hop press from 1900, Hop Museum, Žatec, 2016



Hop field with planted Kazbek variety, Stekník, 2016

3.3 PROPOSED STATEMENT OF OUTSTANDING UNIVERSAL VALUE

3.3.a BRIEF SYNTHESIS

The nominated property Žatec and the Landscape of Saaz Hops represents an important site associated with a unique history of continuous development in cultivation, processing and international trading with the "beer spice", which is an agricultural commodity whose botanic name is hops (*Humulus Lupulus* L.) and which is an important ingredient in the beer brewing process all over the world. This cultural landscape is a testimony of a tradition more than 700 years old which is continuing and centres around the finest aroma hops in the world. This local variety of hops – Saaz, is the result of an extremely favourable climate and natural conditions combined with skills and knowledge of the local hop growers passed from generation to generation for centuries. This has shaped this specific organically evolving landscape and its built heritage associated with hop processing and helped to keep the leading position of the Saaz hops in this region to date.

The nominated property is situated in the north west of the Czech Republic, in the basin of Žatec, and consists of two component parts which naturally complement each other and jointly represent the uniqueness of the local hop heritage. Component part 01 consists of the rural hop landscape including the villages of Stekník and Trnovany and component part 02 represents the historic urban landscape of the very centre of the region - the town of Žatec (=Saaz) which gave its name to the most famous variety of local hops. Both component parts are geographically close, naturally linked by the river Ohře (Eger) and also by a network of historic communications, including a railway which for centuries has connected the town of Žatec with its rural hinterland. These close interactions make these two component parts truly inseparable.

The nominated landscape contains all unique attributes directly linked to hop cultivation and processing. The gradual changes in the growing methods at the hop fields and hop processing technology which occurred over the centuries were – and still are – reflected in the visual quality of the landscape. This development affected not only the character of the hop growing landscape but also the look of individual buildings, farmsteads, settlements and the town of Žatec where it impacted both the historic centre and the adjacent hop processing industrial zone of Prague Suburb. This landscape with specific buildings and structures linked to hop production demonstrates close interactions between the rural hop growing landscape and its urban base which has been preserved on this scale nowhere else other than in the nominated property.

3.3.b CRITERIA UNDER WHICH INSCRIPTION IS PROPOSED

Criterion (iii)

The Property bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

Žatec and the Landscape of Saaz Hops bears an exceptional testimony of a strong, centuries' long and never interrupted cultural tradition of hop growing and processing in Europe. This tradition is based on the exceptional quality of most sought-after Saaz hops which is a globally recognised agricultural commodity, protected by administrative acts since the time of the Enlightenment reforms carried out in the former Austrian Monarchy. As a result of the innovations in hop production and booming trade with the commodity in huge demand in the world, in which the Czech, German and Jewish communities were involved and interacted as well as influenced each other, the town of Žatec became a globally recognised centre of hops, particularly in the 19th century.

Numerous specific skills, knowledge and experience on work organisation in hop production was passed from generation to generation. The empirical approach gradually improved and developed into a socio-economic and technical system, which survives today. Targeted breeding of particular hop varieties subsequently led to a new independent and locally conducted discipline which uses hop fields in the nominated property for basic research. The outcome of such endeavours are internationally recognised clones of Saaz hops.

Every year many experts from all over the world gather at the site to participate in specialised events, conferences and workshops the organisation of which has a long tradition. The celebration of the living intangible heritage of hops in the nominated landscape is reflected in the public and social events associated with the annual cycle of hop growing, seasonal festivities, local customs, rituals and festivals closely linked with hops and strengthening the identity of Žatec, its residents, and the surrounding hop growing landscape.

Criterion (iv)

The Property is an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

Žatec and the Landscape of Saaz Hops is an outstanding example of a monoculture landscape associated with hop growing and processing both in the rural and urban

environment. Throughout the time various methods of hop drying, preservation, packaging, quality certification and breeding were developed in this specific hop growing regions, as well as outstanding examples of buildings, architectural and technological ensembles and productive landscape.

The visual quality of the rural landscape is particularly defined by hop fields with their typical trellises consisting of poles and wires, rural settlements with preserved farm buildings and barns where hops were dried and stored, a residence of the local landlord which is a dominant landmark in the landscape as it rises above the preserved historic hop fields which are still in use. The natural centre of this hop growing landscape is the town of Žatec which developed in a close relationship with the hop growing culture and is the only comprehensively preserved urban complex focused on activities related to processing, certification of origin and quality of hops as well as international trade which first started across Europe and later spread overseas.

Concentration and authenticity of municipal warehouses, hop drying kilns, sulphurisation chambers, hop packaging and certification facilities, together with the town's exceptional skyline, accentuated by the vertical dominants of the hop drying kilns and sulphuring chambers tall chimneys and, in the rural landscape, complemented by the hop fields trellises and buildings related to hop growing, harvesting, processing and storage, all this makes the nominated property unique as it does not exist in the same quality elsewhere in the world.

Criterion (v)

The Property is an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

Žatec and the Landscape of Saaz Hops is an outstanding example of a continuous, never interrupted and, to date, traditional use of an agricultural landscape with traditional human settlements where the main focus is on growing of a crop with special requirements for climate, cultivation and processing. The nominated property is authentic evidence of continual interactions between humans and their environment and a well-preserved example of the European cultural tradition in which hops, as an attractive complementary crop in the local farming, have been widely used in beer brewing since medieval times. Hop cultivation on the site of the nominated property also largely depends on the knowledge and experience of the hop growers related to the climate and natural conditions, breeding and cultivation and processing methods for centuries transferred and improved from generation to generation.

The technical knowhow and skills were further developed and improved on the site of the property from where they spread under the name of the hop growing centre – Saaz (Žatec). This had also a crucial impact on the appearance of the Saaz landscape which is well demonstrated by the hop fields with the fixed structure of the trellis, usually made of wooden poles and wires and every year complemented by hop strings, which are guiding wires providing support to the twining hop bines. On the basis of the local empirical knowledge, this structure developed into a specific design of Saaz hop wire trellis called "žatecká drátěnka" which is now used in many other hop growing regions around the world. Typical hop drying kilns and other hop processing facilities were built in the rural area and the processing of hops impacted the overall appearance of Žatec where the architecture of residential buildings as well as industrial facilities, educational institutions and amenity centres designed for different groups of local residents associated with the hop processing business is unmistakable.

3.3.c STATEMENT OF INTEGRITY

The nomination Žatec and the Landscape of Saaz Hops is a very well preserved site which, within its boundaries, documents the entire "hop cycle", as well as all significant attributes associated with its growing and processing.

The productive character of the hop growing landscape with specific climate conditions is still fully reflected in the preserved functional integrity of its composition as well as in its attributes the most distinctive of which are the following ones: hop fields situated near the river, sets of functionally diverse buildings used for drying, sulphurisation, packaging, certification and storage of hops as well as the safeguarding of traditional knowledge of hop growing and processing developed over the centuries. The transport network based on the historic roads also underlines the integrity of the property as it has enabled access to the hop fields and facilitated the export of hops.

Component part 01 with hop fields around the villages of Stekník and Trnovany represents an area which has not changed much over the centuries and the current use of which copies its historical use and settlements where no major building modifications have been carried out. The village of Stekník with its well-preserved integrity emphasised by the typical brick buildings surrounding the central village square and the chateau of the same name create a visual unity underpinned by large areas of hop fields.

The fertile sediments of the floodplain around watercourses, the location of the hop fields in their vicinity and the village of Stekník situated at a safe,

elevated place all contribute to the visual integrity of the property. The visual integrity of component part 01 is strengthened by the morphology of the site. Monitoring the site integrity in the future will also be helped by the recently opened walking trail along the eastern and south-eastern boundary above the flat part of the landscape with hop fields.

Component part 02 is a large urban complex with high integrity of the hop story in the urban environment which includes all the elements that illustrate the history of the town of Žatec as a world-famous centre for centuries associated with processing and exporting of high quality hops.

3.3.d STATEMENT OF AUTHENTICITY

Functional authenticity of the hop growing rural landscape has been fully preserved and lies in the locations of hop fields which have not changed and the presence of watercourses, rural settlements which served as a base to the farmed fields and which preserved their original footprint, and the historic communication network.

The buildings in component part 01 have a high degree of authenticity. This applies both to individual buildings, farmsteads and the former residence of the local landlord (Stekník Chateau) and a large Baroque granary at Stekník which was later converted into a hop drying kiln.

The buildings in the historic centre of Žatec (component part 02) display authentic signs of an older traditional method of drying hops in the lofts, particularly in the town centre. The authentic mass of the buildings is closely monitored during all refurbishment and restoration projects. Even more recent hop-related buildings with unique functions concentrated in a small area of the Prague Suburb have mostly been preserved in their authentic quality. Some of them no longer serve their original function, but remain in a relatively stable condition with their authentic form and many specific details preserved. They are expected to undergo well thought-through and sympathetic conversion.

3.3.e PROTECTION AND MANAGEMENT REQUIREMENTS

Both component parts of the nominated property Žatec and the Landscape of Saaz Hops are already protected or will be protected in the near future under the National Act no. 20/1987 Coll. on the National Heritage Protection as amended

in combination with other protective regimes stemming from this act which include the following ones:

At present the cultural values are administratively protected by Land Use Plans of the village of Zálužice as well as town of Žatec. For component part 01 with hop fields, the Landscape Heritage Zone has been outlined for designation which is expected in 2021. The cultural values of Žatec in component part 02 are fully protected by law, namely by two decrees of the Ministry of Culture which, in several steps, delineated joint heritage areas.

The hop fields located in the nominated property and its buffer zone are also protected under Act no. 97/1996 Sb. on Protection of Hops. This act not only sets forth the requirements for certification, quality control, blending, treatment and introduction of the commodities into circulation, which are subject to hop common market organisation, but it also defines state administration responsibilities including state supervision over compliance with the European Community obligations declared in international treaties.

The entire area of the nominated property including its buffer zone is also protected by the Protected Designation of Origin which is a guarantee that the quality of hops grown in this area is primarily or exclusively determined by the special geographic conditions combined with unique natural and human factors.

In the preserved component part 01 as well as in the urban structure of component part 02 no major changes are envisaged in the future.

The nominated property is managed by the Steering Group (SG), the core team of which was established at the Žatec municipal level already in 2013. The Steering Group includes the key stakeholders active in the nominated property and they are assisted by the Working Groups focused on specific areas of the Management Plan.





Picking hops and filling bales in the Saaz hop growing region, Oskar Brázda (1887-1977)



4. State of Conservation and factors affecting the Property

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4.a PRESENT STATE OF CONSERVATION

The nominated property Žatec and the Landscape of Saaz Hops consists of two component parts, a landscape illustrating the rural environment of hop growing and primary processing (Saaz Hop Landscape) and an urban component part (Žatec) documenting not only hop processing immediately after harvest but also subsequent processes including drying, sulphurization, packaging, certification, transportation, and trade.

The state of conservation of the property within the boundaries of the proposed component parts is already monitored through state heritage protection authorities (see *Chapter 5.b*), since a substantial part of the nominated property is already under national heritage protection.

In the years 2016–2020, a scientific project entitled "Documentation of Historical Buildings used for Hop Processing" took place in the affected hop growing regions under the leadership of the National Heritage Institute. The research was focused on rural buildings in the wider hop growing area, including not only Žatec but also Podbořany, Roudnice, Ústě, and Tršice hop growing areas. Thus creating a useful reference framework to ensure that the nominated property includes all essential aspects of historic buildings associated with the cultivation and processing of hops. Therefore, the

monitoring of the condition of the property focused on their typical features and this will be linked to future monitoring (see *Chapter 6*). The outcomes of the project were, among other things, detailed documentation protocols of hop constructions and a map application featuring all the relevant data, which provides a solid scientific basis for assessing the state of conservation and can be used in the future.

The register of municipal hop processing buildings in Žatec was prepared in the years 2007–2010, and this record is continuously updated and supplemented by other scientific outcomes. For example, a scientific survey of the urban component part from 2018, when the first stage of a systematic study and certification of the roof structures of the burgher houses took place. The aim was to document traces of the practical use of roof spaces for hop drying in the period before the development of industrial large-capacity kilns, which were recorded by archival sources. In 2020, the second phase of this survey was launched.

Both mentioned scientific projects were used for the formulation of specific measures in the Management Plan to create a useful tool for monitoring the condition of the property by the bodies of the Town Office in Žatec.

COMPONENT PART 01 – SAAZ HOP LANDSCAPE

The territory of the property is protected on the basis of several layers of Heritage Protection Act (see *Chapters 5.b and c*).

Component part 01 is an area whose present appearance uniquely demonstrates the stability and, at the same time, partial changes in the landscape, which has been shaped from the Middle Ages to the present by activities related to the cultivation and processing of hops. The most visible and iconic features of this component part are the hop fields, visually and functionally connected with the villages of Stekník and Trnovany.

The development of the village of Stekník, situated around a rectangular village square, is ground level, with farm buildings lining the plots on three or four sides. For a more detailed description, see *Chapter 2.a*. Hop drying kilns are located in the rear parts of the premises for space and fire reasons.



Entrance gate of hop farmsteads on a village square, Stekník, 2019



The territory of component part 01 is well preserved in terms of the state of conservation of its main properties. During the last ten years, there have been no development activities, except for ongoing repairs to several buildings and two overall modernizations.

In 2012, a minor repair of the facade No. 21 was carried out. In 2014, the roof was replaced at No. 23 and the facade at the former brewery No. 29 was repaired.

In 2015, a complete renovation of the houses No. 12 and No. 17 took place. For house No. 23, a complete repair of the facade to the street was carried out.

In 2019, the roof structure of No. 26 was repaired.

Major construction and restoration work has been carried out continuously at the Stekník Chateau since 1997. In the first phase, emergencies were removed: the roofing and bearing roof structure, electrical installation, and partial garden terraces were restored. A hydrogeological well was drilled (until 2014, the village of Stekník was without a backbone water supply system). Since 2014, interior repairs have also been carried out. In the first stage of the restoration financed by the Ministry of Culture, the chateau Chapel of the Visitation of the Virgin Mary, with the original furniture from 1772, was completely restored. This was followed by the restoration of the entrance hall and corridor with rich stucco decoration, and facilities for visitors were built.

In the period 2016-2019, the II. stage of interior restoration was carried out, again funded by the Ministry of Culture. The aim was to create a tour route, presenting the chateau at the time of the last private owner, in the interwar period of the 20th century, the family of Swiss

Consul Gerold Déteindre. The new main tour includes the ground floor salaterren, the entrance hall, and corridor of the south wing, the main hall, the four rooms of the west wing, and the chateau chapel. However, visitors are allowed to visit the still unrestored areas of the south wing. This sightseeing tour offers views of a fresco painting from the 18th century presented in the form of restoration probes.

The need to develop adequate access and parking is related to the ongoing and expected increase in traffic. The next stage of the restoration of the terrace gardens is planned, including the chateau courtyard and the restoration of the surviving external plasters of the chateau (see Management Plan).



Historical hop drying kiln in the locality of the former sheep farm, Stekník, 2019

The recent development in the 1970s and 1980s related to the hop growing function of the village, represented mainly by production, storage, and accommodation facilities of the Hop Research and Breeding Institute partially disrupted the urban structure and scale of the place on the northern perimeter of the village. However, these are low objects that hardly appear in the component part image. These and other few more recent buildings, situated in the southeast and northeast of the component part territory, are very utilitarian in terms of architecture, material and craftsmanship; however, they are a period document of technological changes in the processing of hops that took place during this period. They thus prove the still living and maintained hop tradition.

In the south-western part of the component part lies the village of Trnovany (for a more detailed description, see *Chapter 2.a*), whose urban structure is not fully preserved, but still maintains the basic material characteristics of a smaller hop village in the region. The building stock of the village was partially disturbed due to long-term neglect when, during the second half of the 20th century, some buildings were demolished or had a utilitarian rebuilt. When comparing the current state with historical sources, it is evident that the original structure, scale, and material make up of the historic buildings are still legible. Within this area, several incredibly authentic hop growing buildings have been preserved to this day, which, thanks to their mass, location in the landscape, construction, and architectural design, belong to the iconic buildings of the entire Saaz hop growing region and their future rehabilitation is possible. These extraordinary buildings are: the area of the former mill with the Neo-Gothic architecture of the hop drying kiln and a hop drying kiln with four brick chimneys, with

a farmstead, on the eastern edge of the village, at No. 9. The village of Trnovany, thanks to the preserved historic railway station, built in the past to ensure the distribution of hops and hop workers, and its position on the crossing of roads acts as a transport centre of the site. At the same time, it has preserved the extraordinary interconnection of buildings and hop fields, which "grow" practically to the edge of Trnovany's village square.

During the last ten years, there have been no development or construction activities, except for minor repairs representing routine maintenance (restoration of roofs and facades).

Hop fields in component part 01

Most of the hop fields in the component part are managed by the Research Farm of the Hop Research Institute Co., Ltd., which according to the Land Register of Stekník, manages a total of 149.5 ha of hop fields, of which 143.6 ha are located directly in the rural component part.

All the hop fields are professionally treated, equipped with the so-called "drip irrigation," they use a stable hop structure of the "Saaz hop wire trellis" type. The state of preservation of the hop fields in the rural component part is steady and due to their continuous use maintained annually. Special-purpose farm roads lead to the production areas.

All Czech hop varieties are grown here for commercial and research purposes. Newly bred hybrids are grown as experimental hops. Nutritional and agrotechnical experiments are based in other hop fields. Various types of artificial irrigation (micro-spraying, drip irrigation) were tested here.



The building of the former Baroque granary and hop drying kiln, Stekník, 2019



The Hop Research Institute Co., Ltd., closely cooperates with the CHMELÁŘSTVÍ, cooperative Žatec. Based on this professional cooperation, many innovative and inventive means of mechanization of hop production (cultivation, harvesting, and post-harvest technology) were tested in the hop fields in component part 01. The connection of the Hop Research Institute Co., Ltd., and CHMELÁŘSTVÍ, cooperative Žatec through the Hop Growers Union of the Czech Republic guarantees the continuity of hop cultivation in the Research Farm in Stekník in the future, as well as the preservation of science, research, and innovation in the field of hop growing.

COMPONENT PART 02 – ŽATEC

The most architecturally and urban-wise valuable heritage of the town of Žatec is protected (for more details see *Chapter 5.b*) and regulated in all construction plans concerning both specific buildings and their environment. Traditional building materials are used to the maximum extent during repairs. The surface and color modifications of buildings and public spaces are based on a careful on-site survey and study of documentation.

The legal protection of the component part provides the owners of all properties with the consulting assistance of the professional organization of national heritage conservation and professional supervision over all modifications of buildings and adjustments in their surroundings, both during project preparation and during the actual repairs and restoration. The expert organization of national heritage conservation, in cooperation with the executive body of the state administration, has been meeting regularly for a long

time during consultations on intended repairs and conceptual materials. The owners are notified of any possible deficiencies by the municipal authority in Žatec, which carries out the state administration with respect to the protection of heritage.

The owners of the estates within the nominated property and the citizens of the town in general know about the protection of the property over the long term. This is especially true in the course of the years since the inclusion of the property in the national Tentative List (2007). The hop processing buildings in particular have been actively inspected, and the most important ones, with respect to authenticity, have been documented in more detail. Based on the initiatives, a number of buildings and premises have been declared a cultural asset by the Ministry of Culture. With the aim of consistent protection of the broader environment, the buffer zone was also prepared so that the skyline values of the urban component part as a whole could be managed (see *Chapters 5.b and 5.c*).

Especially since the 1990s, many buildings have been renovated in the old part of Žatec, including the town walls, and this process is still ongoing. Its coordination is based on the local "Regeneration Programme," which is a document that links to the grant programme of the Ministry of Culture for listed cities and towns (for more details, see *Chapter 5.c*), using all the possible financial support available (see *Chapter 5.f*). In the last ten years or so, many construction projects have also taken place in Žatec, which were aimed at restoring the most endangered or damaged buildings located on the territory of the nominated property.

The urban component part is spatially extensive and it is not practical to describe the condition of all the property in detail. For the overall picture of the state of conservation for this component part 02, the most important renovations and restorations, or even challenges in the near future, are described in more detail below. In these aspects, the chapter is complementary to the analytical part of the Management Plan.

The Temple of Hops and Beer as a visitor centre for the presentation of hop heritage

This building ensemble is described in *Chapter 2.a* in excellent construction and technical condition thanks to the thorough construction repair of hop warehouses and their adaptation to a visitor centre. With regard to its increasing attendance, regular maintenance is also ensured.

Preparations for the project called The Temple of Hops and Beer began in 2001, when the citizens' association, The Temple of Hops and Beer, was established. In the same year, the town of Žatec also bought two historic buildings on the territory of the nominated property, where a tourist centre and restaurant, with a micro-brewery, had been planned to exist. In 2004, the joint-stock company The Temple of Hops and Beer was established, the shareholders were the citizens' association of the same name, the town of Žatec, the Hop Growers Union of the Czech Republic and the Krušovice Brewery. The main task of the company was the presentation of the project, the town, and its operation. Financial support from the European Union was acquired shortly after the property had been inscribed on the national Tentative List. The

project included the renovation of several streets, squares, former hop processing buildings, and the construction of a micro-brewery in the form of the conversion of an unused building. Also, an observation tower (called the Hop Lighthouse) and a museum with a restaurant were included. Further still, the restoration of the garden of the Capuchin monastery and of the Renaissance malt house was included in the project (see below).

The large project focused on the restoration of a highly authentic historical hop warehouse, No. 1950 on Prokopa Velkého Square, and the adaptation of the facilities of the hop warehouse, No. 1951, on the same square for the needs of the Hop Museum and Information Centre. During this project, the bearing constructions of the buildings were carefully renovated, and many technical details of buildings restored. The whole operation, from the start, was aimed at making the heritage of hop processing more visible, that is why some elements were supplemented within the area, to support the information and user qualities of this complex. The buildings became a reference example of how positive it is to renovate these specific buildings and give them a suitable new function.

Within the scope of The Temple of Hops and Beer project, two new buildings also originated, which are significant examples of the current architecture in the town. These are an observation tower called the Hop Lighthouse and an extension to the Hop Museum. Their planning and preparation were carefully consulted with both the executive body of heritage preservation and the heritage expert organisation.



Evening view of the Hop Museum and the neighbouring Temple of Hops and Beer, Prokopa Velkého Square, Žatec, 2010



The Hop Lighthouse is located at the southern edge of the component part 02 and has created a modern local landmark. Since the beginning, the attitude of heritage preservation towards the project was positive, and the intention to introduce a building representing the architecture of today into the current build-up area was approved. Concerning the fact that it is not a general commercial or an administration building, but a structure built with the only aim to provide the possibility of better perceiving the built heritage of the property including the specific roofscape, the intention was endorsed.

Other new structure is the extension of the Hop Museum Žatec in the historical building that has created a simple new space, which enables the permanent display of a large hop picking machine the dimensions of which would not fit into any historic building. The wooden structure is enclosed with light walls of perforated metal plate. This material evokes the industrial history of the modern Žatec hop processing industry, and at the same time, it lets light shine inside the space. On a sun-lit late afternoon, it illuminates the area slightly by emphasising the social function of the museum. A prestigious prize was awarded for the architectural form of this extension, which is presented once a year by a well-respected association called Klub za starou Prahu (Club for the Old Prague) for the Best New Building in a Historic Environment for the year 2012. In this context, the property already applies to the principles included in the UNESCO Recommendation on Historic Urban Landscape, which, apart from the emphasis on the preserved values, also recommends the development of the values of the properties through the sensitive introduction of modern architecture.

The Renaissance malt house, No. 356, Masarykova Street

The Renaissance malt house, No. 356, Masarykova Street belonged until recently to the group of unused and critically endangered buildings in Žatec. The malt house complements historical information on the direct use of hops in the town of Žatec since the early modern period. Its use for educational and social purposes is essential. On the ground floor of the malt house, there are exhibitions devoted to its history, conservation, and the archaeological research that took place during its rescue. However, the largest space on the ground floor serves as a community centre with free internet.

There is also a model of the old part of the town with the designation of objects that are directly related to its hop growing heritage. The multimedia presentation Žatec in Film is interesting – it is dedicated to both Czech and foreign films made in the town. On the upper floor are the Gallery of Modern Art and a conference room. The revitalisation of the building was completed in November 2011. From May 2019, the permanent exhibition of malting was renewed and supplemented.

The Capuchin monastery

The Capuchin monastery is a significant architectural cultural heritage asset in the southeastern part of the property, and its restoration has been advancing in phases for several years. In the years 2013-2015, the roof cladding was renovated, the roof structure was repaired and the damaged parts of the elements were removed and replaced with exact copies. All wooden items were coated against wood-destroying pests according to mycological assessment. In the following years, the restoration of wood-infested interiors will follow.

The monastery garden was renovated and restored in the years 2010-2011 as part of the Temple of Hops and Beer project. The main aim was to expand the range of aesthetically high-quality places for residents and visitors to the town. The total area of 8,500 m² was renovated in accordance with historical sources, in a simplified form of a formal garden with a central emphasis on modern art, thematically connected with the hop growing tradition. The garden is supplemented by a traditional herb garden and an example of a historical hop field with hop growing on individually embedded poles. Part of the garden is a relaxation area, a children's playground, and a small historic building by the enclosure wall was used to strengthen the educational content of the complex.

Burgher houses and hop processing buildings

Within the scope of the property, numerous restorations have taken place, similar to other historical towns. Between 2011 and 2020, several construction projects were carried out, focusing on the improvement of house facades, the renovation of structures, the replacement of technically outdated windows, and overall more extensive repairs of buildings for the modification of their practical use. Below is an overview:

In 2011, extensive restoration took place in houses Nos. 126 and 127 on 5. května Square, No. 110 in Dlouhá Street and No. 220 in Oblouková Street.

In 2012, houses Nos. 111 and 112 in Dlouhá Street underwent a significant restoration. Now, they are used as administration buildings of the Czech Republic Police.

Furthermore, the facade of the building No. 230 in Obránců míru Street was restored, including the refurbishment of the door and the historic wooden shop windows.

Building No. 2005 in Nákladní Street was carefully restored, through its re-roofing with kiln-fired tiles, and restoration of the facade, including the restoration of its architectural decorations.

In the vital space of Chmelařské Square, the first phase of the restoration of house No. 768 was completed, with repairs of the windows, doors, floors, and partial modification of the interior layout.

In 2013, the roof construction and the roof of houses, Nos. 108 and 220, were carefully repaired. In the building of the present municipal library (building No. 52), the ground floor was modified, including the replacement of the inappropriate recently fitted door and shop windows for more suitable wooden ones.

On the central Svobody Square, the facade of house No. 47 was completely restored, concerning its architectural statement and color scheme. In Dvořákova Street, burgher house No. 31 was restored, with partial modifications on the ground floor for a shop and on the first floor for services.

In 2013, the facades of house No. 22 in Dvořákova Street were restored as well as the house No. 360 in Nákladní Street. On the house No. 1100 in Fügnerova Street, the roof was replaced along with the restoration of the



The cultivation of hops on wooden poles was common from the Middle Ages to the early 20th century. Visitors can see it of hopfield in Capuchin Monastery Garden, Žatec, 2016.



facade. One of the greatest operations was the complex restoration of building No. 661 in Jakubská Street, so called "Dvůr u Svatého Jakuba" (St. James's Courtyard). In the former hop warehouse, a country club with facilities has been established, the facade of the building was restored, the courtyard paved with historical paving and new enterprises have been set up in the premises in the spirit of folk traditions.

In 2014, static security provisions for the protection of burgher house No. 108 at 5. května Square were carried out, including the insertion of several drawbars. In houses, Nos. 88 and 132, the roof was repaired.

A more extensive operation was the overall restoration of house No. 138 on Hošťálkovo Square, comprising of the establishment of a small café with a preparation room for meals and the restoration of the apartment on the upper floor. The exterior facade was restored; elements of missing architectural decorations were returned to the street facade according to their historical iconography. The windows were also restored. On Chmelařské Square, the restoration of house No. 768 was completed by the restoration of the frontispiece.

In 2015, several buildings were restored within the property as well. In houses, No. 41 in Dvořákova Street and No. 162 at Svobody Square, this was the restoration of plaster and layers of color of the facades. In houses No. 108 at 5. května Square and No. 154 in Jiráskova Street, the outdated windows were replaced at the same time. In others, houses, Nos. 66, 84, and 290, it was also necessary to considerably renovate the roof construction and roofing.

In 2016, the restoration of the courtyard facade, the replacement of the windows and entrance doors of burgher house No. 108 on 5. května Square and the renewal of the facade No. 109 in Dlouhá Street were completed. Replacement of damaged roof structure elements and replacement of the roof covering at the burgher house No. 137 on Hošťálkovo Square were carried out. Restoration of the street facade, including the repair of the front door and the replacement of the roof covering of burgher house No. 209 on Chelčického Square. The roof was replaced at burgher house No. 1881 on Hošťálkovo Square. Further restoration of the facade, including new shop windows, was carried out at No. 6 in Dvořákova Street and house No. 148 in Poděbradova Street. The roofing was replaced at building No. 352 in Masarykova Street. In the same year, the historic paving of U Plynárny Street was carried out.

In 2017, cultural heritage assets were restored, such as the repair of the facade, including painting and restoration of the balcony on burgher house No. 8 in Obránců míru Street, as well as the restoration of the facade and complete repair of the paint on burgher house No. 49 Libočanská Gate. The restoration of the facade of the house was completed, including the filling of the openings and the replacement of the roof towards the square at burgher house No. 88 on Žižkovo Square. At burgher house No. 119 on Svobody Square, the roofing was replaced, parts of the roof elements were replaced, and the chimneys were repaired. Furthermore, the repair of the facade and the repainting, including the replacement and overhaul of the windows, took place at burgher house No. 137 on Hošťálkovo Square, as well as the restoration of the facade at burgher houses Nos.

149, 150, and 151 on the main Svobody square. The street facades on burgher house No. 152 in Dlouhá Street and No. 154 in Jiráskova Street were also repaired, including the courtyard facade and the repair of the historical wall in the courtyard. Equally important was the restoration of the facade of the former hop warehouse No. 348/2.

In house No. 96 in Josefa Hory Street, the facade was repaired, including the addition of shambranos around the windows, the construction of a ledge, and the connection of the stone statue with the bay window. Further repairs were made to the facade of the house No. 948 in Masarykova street.

In this year, the town of Žatec carried out the first part of the installation of a new graphically unified identification of houses and streets in the Urban Heritage Reserve, in the form of house number plates. The graphic design was chosen to match the hop tradition.

In 2018, within the frame of the component part 02, the facade of house No. 49 Libočanská Gate was also repaired and a complete revitalisation of the Municipal Library at house No. 52 on Svobody Square was carried out. Restoration of the courtyard facade of the house, refurbishment, and partial replacement of windows and entrance doors of No.

119 on Svobody Square was done. Further work on the repair of the roof, facade, and porch on the north side of house No. 209 on Chelčického Square was completed. Also noteworthy was the replacement of the roofing on the hop warehouse No. 531 and the repair of the roof at the hop warehouse No. 483/3 on Prokopa Velkého the Square.

The restoration of the porch of the extension of house No. 108 on the 5. května Square was also carried out, as well as the replacement of the shop windows of houses Nos. 167 and 244 on Obránců míru Street. Further work on the renewal of the roof, windows and gates and the brewery chimney at No. 303 on Prokopa Velkého Square, restoration of the facade of No. 359 at Nákladní Street was carried out.

The renewal of the historic paving in the Urban Heritage Reserve in Josefa Hory Street and Oblouková Street was completed, the historic paving of U Plynárny Street was carried out, and the surfaces in the natural pavement in Nákladní Street and Karla IV Street were restored. In 2018, the renewal of Nerudovo Square in the Urban Heritage Zone was started. In 2018, the town of Žatec completed the installation of a new graphically unified identification of houses and streets in the Urban Heritage Reserve.



The interior of the Public Hop Certification Centre, No. 1612, Chmelařské Sq., Žatec, 2016

In 2019, the repair of the facades and restoration of the windows of house No. 61 on Hošťálkovo Square and the restoration of the street facade of No. 24 in Dvořákova Street were completed. The roof covering of the burgher house No. 31 in Dvořákova Street and No. 136 in Hošťálkovo Square was replaced. The unique restoration of the plaster and painting decoration of the burgher house was carried out in No. 108 on 5. května Square. Repair of the roof structure and replacement of the roof covering on No. 346 and restoration of the facades and roof of the house No. 1339 on Chmelařské Square took place. In 2019, the remodelling and new stone pavement of Nerudy Square in the Urban Heritage Zone was completed. Repairs in recent years have also affected some buildings that have a unique position in the town, and are therefore listed in more detail:

The Burgher Brewery No. 81

The extensive premises of the Žatec Brewery are in private ownership. Since the 1990s, the ownership has changed with the aim of maintaining the brewery's function, which is connected with the Žatec hop growing tradition. Currently, restorations are underway, targeting the aesthetically unsuitable changes of some of the facades which were done during the course of the 2nd half of the 20th century. In 2015, construction modifications were carried out along with the restoration of the brewery's principal facade, including the restoration of missing elements of the architectural decorations. Some windows were replaced by new, wooden ones, and a two-leaf wooden entrance door was hung in the door frame. The restoration also included the painted advertising signs in a historical style on the facade of the building.

In 2016, the interior courtyard was restored, and building repairs were made to the brewery's interior facades. In the same year, a new cultural heritage asset was declared, a Renaissance water tower, and a viewpoint available to the public. The project was supported by the in accordance with the "Programme for the Conservation and Restoration of Cultural Heritage of the Ústecký Region for 2016". At the same time, the project was implemented using a financial contribution provided by the Ministry of Culture under the "Programme for the Regeneration of Urban Heritage Reserves and Urban Heritage Zones."

In 2017, the Žatec Brewery began preparing the restoration of the declared cultural heritage asset building No. 85 within the brewery complex. As part of the project, supported by the Integrated Regional Operational Programme (IROP), the building was revitalised, the practical use of the historical asset was regenerated, and the exhibition of the History of Brewing in the Žatec Region was built. The restoration started at the end of 2018 and was completed in mid-2020.

The Hop Certification Centres

Among the functionally significant buildings connected with hops are the premises where the hops' origins

were certified. The Old Hop Certification Centre in Tyršova Street with its high baroque period structures has been preserved, the most valuable of these being its roof structure. After the great advancement in hop processing, the certification institute was replaced by the New Hop Certification Centre in house No. 1612. The building is in a stabilised technical condition, the same as the neighbouring building, the vast premises in Chmelařské Square. Both buildings are examples of authentic structures, they are in good condition, and their maintenance is carried out continuously.

The Town Hall

The historic town hall on Svobody Square is still used as the main building of the municipal government. Also, for this reason, the building is maintained in a condition corresponding to its necessary representational nature. In 2016, the documentation for the overall rehabilitation of the town hall facade and parts of the interior spaces (sanitary facilities and an elevator) was completed. The town of Žatec received a subsidy for this renewal from the Integrated Regional Operational Programme (IROP). Restoration work began in the autumn of 2018. Completion is planned for the second half of 2020.

Meder's house

At the end of 2018, an extensive restoration of a great burgher house from the turn of the 14th and 15th centuries began. The use of the premises and the presentation of the highly historically valuable building will focus on the general public, and the aim is to present the construction and development phases of the house and to introduce Maria Treben, an important native of Žatec. The restoration is being carried out by the Meder House Association, which received a subsidy from the Integrated Regional Operational Programme (IROP). The restoration is expected to be completed in 2020.

The Municipal Library No. 52

Restoration work on the late Gothic burgher house began at the end of 2017, with the contribution of the subsidy programme from the Ministry of Regional Development and the European Regional Development Fund of the European Union. Commissioning took place in September 2018. Repairs of roof structure and ceiling beams attacked by woodworm, reinforcement of the ceiling structure, new roofing, replacement of windows, restoration of the facade, and other parts of the interior of the building, including restoration of the internal plaster and repair of space on the town walls and its access took place.

The Church of the Assumption of the Virgin Mary

The most important preserved religious building of the town is the Dean's Church of the Assumption of the Virgin Mary that is inseparably bound with the spiritual life of Žatec. It also plays an irreplaceable role in its skyline. The church is in a good constructional-technical condition.

The Žatec Synagogue

Another important religious building of the town is the Synagogue, built by the local Jewish community, that was involved in the hop trade. The synagogue, like many other Jewish monuments throughout the Czech Republic, was abandoned for a relatively long time, and its unsatisfactory condition corresponded to this. In 2013, there was a change of owner, who received grant support for the restoration of the building from the Integrated Regional Operational Programme (IROP). In 2020, an extensive repair of the synagogue building and the adjacent rabbinate No. 200 began. The completion of the restoration is expected in 2022. A new cultural centre and an exhibition reminiscent of local Jewish history will be created this way in the centre. These activities are also based on the planned use of the synagogue described in the Management Plan.

The Town Walls

The original layout of the medieval town is still preserved today. The old fortifications of the town are in a good technical condition, and they are continuously maintained and restored. The walls are highly distinctive in the western panorama of the component part 02, and their physical condition can be easily inspected. The broader environment of the town walls is a popular part of public open spaces. One of the most important walking routes, with public lighting, leads alongside the walls, enabling the historic core of the town to be connected with the large complex of a residential building development, which originated in the 2nd half of the 20th century, westward from the town's centre. In 2001, extensive restoration of the Priest Gate (Kněžská brána) was carried out, and as part of these works, the traffic signs were also modified. Due to its increased protection, the historic gate is now passable only by passenger cars and only in one direction. The last substantial restoration of the town walls took place between 2004 and 2006 and minor local repairs from 2013 to 2015.

Public open spaces

Public open spaces, parks, and walkways, in the historical part of town, are subject to continuous maintenance, and any large scale work in the terrain is always carried out under archaeological supervision. The condition of town's public parks that supplement the component part 02 of the nominated property, especially on its southern and south-western perimeter, can be characterised as very good. Apart from the domestic tree and shrub species, also rare examples are preserved in the parks, for example, groups of full-grown French maple trees, unique within the Czech Republic. For the maintenance of public greenery, the sum of approximately CZK 3 million is paid annually from the town budget, and primary maintenance is provided.

An essential part of the repairs within the component part 02 has been the proper treatment of public spaces or their necessary adjustment, which continually takes place in all parts of this component part.

A significant feat in the management of the town of Žatec was the extensive restoration or even reconstruction of cobblestone paving between 2008 and 2010 in many public open spaces and streets in the area of the property. Within the scope of the project of The Temple of Hops and Beer (see above), the ample public space on Prokopa Velkého Square was re-paved using the original cobblestones and, where necessary, new stone elements have been added. The signposts were replenished, and the levels of the existing shafts and manhole covers were adjusted. Part of this work was also the planting of two grown trees. There are also several buildings in the component part area that are not in optimal construction and technical condition. This fact is described in the Management Plan, which makes up an attachment of this documentation, where the necessary measures for a gradual remedy are described as well.

Restoration of Nerudy Square in Žatec (1st stage)

The Nerudy Square represents one of the most important squares from the time of the greatest development of hop growing in the 19th century in Žatec. In recent years, it has belonged to the neglected parts of the town. The square did not fulfill the function for which it was historically intended; the population only passed through the place. The planned restoration of the square took place in 2019. It included the repair of a completely unsatisfactory surface of the historic square, including roads and pavements, the establishment of parking spaces, installation of new public lighting, and, together with the installation of missing public furniture and greenery, this completed the 1st stage. In 2020, the 2nd stage has been launched, concerning the adjacent streets to the square. This restoration will help revitalise the site and connect Nerudy Square with the town centre.

Hop processing buildings and their use – in general

The modernization of hop processing by its primary rural growers has had the effect of hops being imported into Žatec, for further processing, in an already dried and pressed form. The processing activity and production of hop pellets in Žatec have therefore been concentrated outside of the historical centre in recent years. Also, the storage of hop products is being gradually relocated into more modern, mostly air-conditioned buildings at the northern perimeter of the town.

In most of the older hop processing buildings, the current owners carry out regular maintenance, thanks to which the large majority of them are in good technical condition. Particular care is taken about



the maintenance of their roofs. Some of these specific historic buildings have already been converted for new uses, corresponding to their bearing capacity. They serve, for example, as small retail premises, shops, for accommodation or for local crafts. For some buildings, project documentation has already been approved for their functional conversion, which is expected in the near future.

The historical business and operation premises, and workshops, in the Prague Suburb are gradually ceasing to be suitable for the modern methods of hop processing and the storage of hops. As in other historic properties, it is necessary to reckon with the possible change of owners in some of the hop processing buildings. These factors have also been commented on in more detail in the Management Plan. The Steering Group of this project has been well aware that the future of hop buildings that are currently without use must be solved, and possibilities have been discussed. Plans concerning the change of use that might require significant building interventions will be monitored particularly carefully so that these specific buildings will not lose their values. In general, the condition of this part of the property can be described as good and consolidated. In the case of an inscription on the World Heritage List, an increase in importance can be objectively expected when deciding on further support from regional or national funds.



4.b FACTORS AFFECTING THE PROPERTY

There are real external influences that, in certain conditions, could endanger the nominated property or contribute to its partial damage. That's why it is necessary to determine these factors and to eliminate them in advance as much as possible. For the analysis of relevant factors for the nominated property, an updated List of factors affecting the properties was used as a basis for this in 2008 when the Tentative List for this project was considered. The factors analysed below were then selected on the basis of experience from the national monitoring of World Heritage properties in the Czech Republic and knowledge from the 2nd cycle and preparation for the 3rd cycle of Periodic Reporting. Factors were subsequently incorporated according to the general structure of Annex 5 of the Operational Guidelines and with several other indicated potential risks to *subchapters 4.b(i) to 4.b(v)*.

The hop growing landscape is continuously in use, still functional, and both component parts are a lively rural and urban environment. Town hall management and all other institutions involved in the nomination process are aware of the various risks, highlighted by the diverse ownership structure and the general deficit of financial means for the faster advancement of the restoration of some buildings within the nominated property. The meetings of the Steering Group were focussed on ways to eliminate possible threats to the property, and the most relevant ideas and recommendations were included in the specific measures of the Management Plan of the property Žatec and the Landscape of Saaz Hops.

Because the two component parts are close to each other and have a shared buffer zone, *Chapter 4* deals with these factors for both components together. Where appropriate, comments are made explicitly for component parts 01 and 02.

4.b(i) DEVELOPMENT PRESSURES

Potential pressures caused by development can be solved for the proposed property using spatial planning tools, which have a long tradition in the Czech Republic and, based on general limits, regulate any inappropriate pressures in advance. The Land use plan of each city or municipality or its change is subject to a precisely given process according to Act No. 183/2006 Coll., on Spatial Planning and Building Regulations (Building Act), as amended, and its implementing decrees. The requirements of the Land use plan are described in detail in *Chapters 5.c and 5.d*. The affected measures ensuring protection, according to the Land use plan, are commented on below.

DEVELOPMENT

The vast majority of the territory of component part 01 is undeveloped, and this aspect also protects the general objectives and tasks of spatial planning, so we can expect a consensus of opinion and synergy of the competence of the state administration bodies in the area of protection of landscape values and the construction development of this component part to be minimal. The village of Stekník has a protected urban structure in detail, and, given the low number of buildings, no significant increase is expected compared to current practice. If small development projects are planned, aimed at the material rehabilitation of the village of Trnovany, they will be under planning control, and at the same time, there will be a certain potential for improving the background for the population and visitors to the area.

Any risk from disproportionate or high-volume buildings may relate primarily to the component part 02 of the proposed property. At present, however, it is not realistic, due to the combination of processes based on land use planning and its binding regulations as well as heritage protection. Based on the land use planning, the rules of land use are determined by the maximum area of development and the minimum area of greenery, which is usually according to the existing surrounding development. The highest level of development, that of the five storeys, is located only in the southern part of the town, where one row of residential buildings is proposed. This area is in the buffer zone, and the plans will be under the control of the Town Office.

The ground plan and material structure of the component part 02, the still functional organism of streets, squares, and open areas within the property are based on a medieval ground plan, which has changed only minimally over the centuries. Conservation of the urban values of the area are covered by the area protection of the entire area of the component part 02 according to the Heritage Protection Act (see *Chapter 5.b and c*).

USE OF THE PROPERTY

The highest risk is posed by the change in the way hops are processed in the second half of the 20th century. As a result, many buildings ceased to be used for their original purpose and they have remained empty for a long time. This can be accompanied by their neglected maintenance and insufficient security, which can lead to the destruction of buildings, structures, fillings of openings and loss of authentic details, but also to the unwanted intrusion and theft of interior elements and any surviving technology in situ. According to the valid Building Act, however, every owner must prevent such a situation, as well as the obligation to keep the building in good technical condition. The primary tool guaranteeing the preservation of these buildings is the

existence of comprehensive heritage protection and the timely identification of risks and communication between the office and the owner. On the basis of protection, this cannot be neglected by the bodies of heritage conservation when deciding on the method of their restoration or future use.

In the component part 01, the hop drying kilns are no longer used primarily for drying and storing hops but are used for other storage purposes, and their condition has been preserved. Some of these buildings are still owned by the Hop Research Institute. The village of Trnovany, which belongs administratively to the town of Žatec, may be regenerated in the future under the expert supervision of land use planning and heritage conservation bodies and supplemented in selected places so that its urban characteristics are more apparent and at the same time the missing visitor infrastructure can be augmented as envisaged in the Management Plan.

The most significant potential danger lies in the possible inappropriate future use of currently empty buildings in the Prague Suburbs, where valuable hop constructions are concentrated. However, the area is protected as an Urban Heritage Zone, and a number of buildings have been declared as heritage assets. All future building modifications of these buildings are assessed under heritage conservation and based on the land use plan. In the years 2015–2020, several warehouses were sold from the central ownership of Chmelařství to private buyers.

Information on the fact that the buildings are located in a protected area will be obtained by a person interested in purchasing from the cadastral register. The seller is also obliged by law to inform that the building is a protected one. The cooperation with local real estate brokers is also doing very well in the town, who are drawing the attention of those interested in the purchase of the protected buildings. Thanks to this, cooperation between owners or potential future owners and representatives of heritage protection often begins before the actual acquisition of the property, when the interested parties discuss the intention and possible requirements for the modification of the property in advance. This significantly eliminates the risk of inconsistency between the owner's plan and the requirements of for the care of protected buildings. Of course, there is very close cooperation with the local building authority, which draws the attention of each new owner to the mandatory collaboration with the heritage conservation authorities. A lot of information is currently also available online. It is not only a public list of all cultural heritage assets but also map materials defining the extent of the protected area and the related texts of decrees, which specify the necessary safeguards. The National Heritage Institute itself also tries to inform all affected actors as much as possible; simple texts are published on its website, in which the owners find out how they can deal with the protected facility and they are also acquainted with the procedures for solving simple

administrative acts. The town of Žatec is actively looking for forms of use, including cooperation with universities, which, within the framework of student projects, pay attention both to the survey of buildings and to the design of suitable conversions of these buildings. An example of successful cooperation between the town and CHMELÁŘSTVÍ, cooperative Žatec is, for example, the transformation of a warehouse into a museum and a tourist centre representing its hop growing heritage. Due to the scope of the Steering Group and the experience of the town of Žatec with the Temple of Hops and Beer project, general recommendations were formulated for the possible use of hitherto empty buildings. These recommendations are contained in the analytical part of the Management Plan.

ASPECTS OF THE ROOFSCAPE – DETAILS AND MATERIALS

The relevant bodies of state administration and expert organizations of heritage preservation already control all the activities concerning the roofscape of the property in the form of binding opinions. This consists of advising on appropriate types of repair available focused on authenticity with respect to the materials used for roofing, and preserving as much of the valuable surviving details as possible. These details include chimneys and their heads, roof gangways, lightning conductors, specific dormers ("oeil-de-boeufs"), winches, and other roof elements.

Protection of the overall roofscape of the property is to be applied when considering any possible new buildings in vacant building plots of the property. The design and volume of such new buildings will be consulted over, with the professional staff of the National Heritage Institute, with respect to maintaining the character of the particular surrounding built-up area.

THE MEANING OF THE SKYLINE – LONG-DISTANCE VIEWS

Both component parts can be characterised by their significant panoramic views.

In the case of the component part 01, the visual relationships and the main panoramic views are very stable. The landscape of hop fields is located in a wide floodplain at the confluence of the river Ohře and Blšanka stream. The most suitable place to observe the dynamically changing hop landscape during the year are the southern and western terraces of the Stekník Chateau, which provide a unique space for viewing the landscape. These terraces are purposefully used in visitor tours of the chateau for viewing the landscape.

The iconic view of the elevated position of the village Stekník with a chateau in the context of hop fields can be seen from locations on the road to Žatec and from Liběšice. The horizon above a number of hop fields is formed by the silhouette of the village of Stekník with the

chateau complex above a flat landscape of hop fields. Here, the long-term "stabilization" of the territory is ensured by the land use plan, in which all land is managed as agricultural land, and it is therefore not possible that inappropriate construction activity could take place on it.

In the component part 02, the most distinctive panorama of the historical core of the town is in the views from the north and from the west, where you can easily see the elevated position of the town above the meander of the river. The skyline of the property consists of silhouettes of the historical houses, hop processing, hop drying kilns, and other buildings, which are impressively complemented with the vertical structures of the historical dominants, especially the towers. The unrepeatable phenomenon of the town's skyline is several dozen high, slender brick chimneys, which belong to the hop processing industrial buildings of hop drying kilns.

Danger to the panoramic values of the whole would lie in the possible additions of modern, high, vertical structures. However, this danger has already been minimised by establishing protective belts, forming the buffer zone of the property, and regulative measures adopted within the land-use planning documentation of the town.

The visual relation, within the property and its wider environment, will be further monitored in the process of land-use planning so that within sensitive relations,

height limits will not increase. The only tall recent new building in the area of component part 02 is the Hop Lighthouse, which was built as part of the Temple of Hops and Beer project, as a non-commercial building enabling the presentation of the hop building heritage in a protected zone. Before the start of the project, the construction was carefully assessed and commented on by all the heritage protection organizations concerned, and only based on expert recommendations was it implemented. The successful completion of the entire process is also evidenced by the fact that this building was awarded several architectural prizes, including an award from 2012, when it was presented at the national level as an example of a suitable new architecture in a historic environment. The building is located at the southern edge of the component part 02, and its position was chosen so as not to compete directly with close by chimneys, but was also intended to allow close enough details of chimneys and specific elements of the roof landscape that are not obvious or accessible from the pedestrian level. The name "lighthouse" also indicates the intention of the creators to make the illuminated top of the tower visible and to make it a real "lighthouse" in the complex organism of the town for all those who are "looking" for a visitor centre (for more, see also 4.a).

ASPECTS OF POTENTIAL COMMERCIAL DEVELOPMENT

The component part 01 comprises a village whose material structure has been protected since 1995. The place has a relatively low population, and an area north of the centre is set aside for a possible increase in family development, in a place not visually applied to the main hop fields. The other village, Trnovany, offers the potential for significant material rehabilitation following the traces of demolished buildings (see also *Chapter 4.a*).

The undeveloped area consists mainly of hop fields. It is one of the most valuable hop field areas in the Czech Republic, an area with the declared trademark of the Protected Designation of Origin for Saaz hops. Therefore it is not realistic that interest in functional change and pressure to stop fertile protected areas by commercial buildings would never prevail. In addition, the Building Act (see *Chapter 5.b*) protects the undeveloped part of the landscape. The protection of hop fields is strengthened by the conditions of the Landscape Heritage Zone.

At a distance of about 6 km northeast of Žatec, beyond the buffer zone, there is also the so-called Industrial Zone, called the Triangle, which was built on the area of the former Žatec military airport and which currently completely dominates any major investment plans in the region. It is very suitable for the development of production and commercial plans, because the D7 motorway, road II/250, and road II/607 pass directly by it, and the road I/27 is also within a close distance.

The industrial zone is intended primarily for investors whose business and investment plans are in the fields



The Renaissance Malt House, No. 356, Masarykova Street, Žatec, around 1960

of manufacturing. It has the required infrastructure and sufficient capacity, which is currently only used by less than 50%. Another 120 ha of land are still available for further possible construction.

For this reason, the creation of other larger development areas in the nominated property is not expected. The area of the Triangle industrial zone partly extends into the area of the Bitozeves, Staňkovice, Velemyšleves and Žiželice settlements. Their land use plans include the same underlying conditions: in the territory of the strategic industrial zone, there will be at least 10% of green areas for each building (each investor). The limit height for buildings is 15 m. Higher buildings are considered to be "visually exposed," and it is therefore proposed that in case of exceeding the limit in the industrial zone, their architectural quality must be ensured through the participation of an authorised architect in the project.

4.b(ii) ENVIRONMENTAL PRESSURES

POLLUTION

In the second half of the 20th century, acid rain, connected with air pollution from industrial agglomerations in the nearby Chomutov and Most regions, affected the technical conditions of many historic buildings of the nominated property, mostly the surfaces of the buildings and their roof coverings. At present, such a negative influence is not expected anymore, especially since the electric power stations of northern Bohemia have undergone the financially costly process of desulphurizing of their emissions. In 2020, the local power station was sold by the state to a private owner. The investor is planning technical innovations. Since this power station is technologically obsolete, and therefore the a large producer of CO₂, there is considerable pressure from the European Commission and the domestic environmental NGOs to close it or invest in reducing CO₂ emissions.

The most significant natural risk factors influencing the condition of the buildings and outdoor pavements are phenomena that are generally common, such as torrential rain, and rainwater leaking into the premises. Increased ground and air humidity can occur in combination with frost, black ice/glazed frost, and the effects of strong wind. These are common risks that the owners of buildings and other real estate face in general. It is necessary to maintain the buildings continuously. The whole area of the Žatec region is located in the rain shadow of "Krušné hory," the Ore Mountains, so these risks are rather lower than in the rest of the Czech Republic.

Condition of agricultural land and plant protection products

Czech hop growing does not use any herbicide during the growing season. Agrotechnical interventions regulate weeds. Growers may only use products that have

undergone a very long and complicated registration process in the context of state-of-the-art methods for assessing the impact on the health of the population, persons handling these products, the environment, and non-target organisms.

Conventional hop cultivation cannot do without plant protection products against diseases and pests, as in the case of other strategic commodities at home and abroad. This ensures yield, quality of harvested hops, and sales. The prosperity of hop growers makes it possible to invest and ensure sustainability not only in the proposed properties but throughout the Czech Republic. Commercial and legislative requirements for residues of hop protection products are rigorous. Growers proceed in accordance with the so-called Methodology for the Protection of Hops, which is compiled by the Hop Research Institute Co., Ltd, and approved by the Central Institute for Supervising and Testing in Agricultural as it is the only way to ensure that Maximum Residue Levels (so called MRL) are met.

The Czech Republic has a National Action Plan for the reduction of chemical, plant protection products. Compared to Western Europe, the Czech Republic (also in the nominated property) uses a third of these active substances per hectare of agricultural land.

Last but not least, Czech hop cultivation has been using the principles of integrated protection for many years using tools for signalling and monitoring temperatures and precipitation, which at certain amounts are suitable for the development of pathogens or pests. The treatment of hops is therefore only to the extent necessary, not widely applied, expensive, and non-ecological.

In 2020, the "Smart Hop Field" project will be launched to streamline forecasting tools. Several new online weather stations have been installed directly in hop fields in the component part 01.

In recent years, research in the component part 01 has also focused on modern biological forms of hop protection. The component part 01 also includes several hectares of hops in the organic growing regime.

Use/modification of biological resources

Secondary factor and risk of Land use conversion - this risk is not relevant in the case of the proposed property, agricultural land in the rural component has long been used at around 45% for growing hops and precisely concerning the optimal conditions here, any change would be ineffective.

The construction of wire trellis on hop fields is subject to the Hop Protection Act, the Agriculture Act, and also the Building Act. The risk of endangering traditional varieties with new ones is also irrelevant. Hop breeding is continually evolving. Modern molecular genetic methods are available. A genetic-analytical method for assessing

the adulteration of Czech hop varieties has been developed. The Hop Research Institute has a database of genetic DNA profiles of 230 hop varieties, 101 new breeds, and 39 wild hops from all over the world.

Saaz variety hops are grown on 87% of the area of hop fields in the country. Although new varieties are an interesting economic alternative for growers and breweries, the essence of Czech hop growing is still in the Saaz variety.

4.b(iii) NATURAL DISASTERS AND RISK PREPAREDNESS

In general, the Czech Republic is not a territory in which natural disasters manifest themselves significantly.

EARTHQUAKE

The town of Žatec and the hop growing region does not lie in any seismically active zone. However, the possibility of local light earth tremors can never be eliminated or predicted. This type of natural disaster would pose the greatest risk to the chimneys of the hop buildings.

RISK OF FIRE HAZARD

Hop growing and hop processing buildings located in the component parts 01, 02 contain internal wooden structures and must, therefore, be well secured and protected from fire. Already at the time of their origin,

such buildings had to meet the criteria of strict fire regulations. Fire regulations in present-day Czech Republic are of significant importance in the process of obtaining building permits for new buildings and structural modifications. Fire prevention inspections and required alterations of any chimneys and gas appliances are obligatory.

On the territory of component part 01, there are enough water sources for extinguishing fires: the river Ohře, a hydrant network, and a fire reservoir directly in the village of Stekník with a volume of 100 m³. The municipality of Zálužice, which administratively includes the village of Stekník and part of the territory of component part 01, adopted in 2016 Generally Binding Decree No. 1/2016 (Fire Regulations), which sets tasks in the case of protection of lives, health and property of citizens from fires, natural disasters, and other emergencies.

In the event of a fire, units of the Žatec Professional Fire Brigade (distance 7 km, travel time 9 minutes), units of the Postoloprty Professional Fire Brigade (distance 8.4 km, travel time 12 minutes) and the Volunteer Fire Brigade in Tuchořice (distance 8.5 km, travel time 11 minutes) are ready to intervene.

The village of Trnovany administratively belongs to the town of Žatec. In the event of a fire, the Professional Fire Brigade in Žatec will intervene (distance 4.4 km, travel time 6 minutes).

Component part 02 is located on a terrain promontory in the close vicinity of the river Ohře, which is another potential large source of water in critical situations. The town of Žatec also has its fire regulations, issued by the General Binding Decree No. 6/2011.

Document defines the circle of persons responsible for ensuring fire protection, contains an overview of water sources for firefighting, and requires their owners to maintain resources in such a condition that it is possible to use the necessary technology for their pumping quickly. A professional fire brigade is stationed directly in the centre of the Prague Suburb (component part 01), and it is equipped with the up-to-date technology. A voluntary fire brigade is also active in the town. A network of underground fire hydrants is available for use.

FLOODS

Hop fields in this part of the region were located in a floodplain area. Therefore, flooding in component part 01 cannot be completely ruled out. However, the risk of devastating flood waves was significantly reduced by the construction of the Nechanická dam on the Ohře River as early as the 1960s. Most of the hop fields of the component part 01 are on a slightly elevated right bank of the river, and the so called Imperial Road meandering between the blocks of hop fields partially serves as a flood barrier. In a flooded area, the construction of hop fields



Fire in the hop warehouse No. 1952, Prokopa Velkého Square, the 1950s

is often adapted to the risks of floods, for example, by the deeper embedding of hop poles. The risk of rupture of the Nechranická dam is very unlikely. The village of Stekník with its chateau and most of the building parts of the component part 01, are on a significantly elevated position, about 20 metres above the river level.

The entire component part 02 is located in an elevated position on the terrain promontory, so the risk of floods is generally not expected.

ASPECTS OF CLIMATE CHANGE

Agriculture is one of the most mentioned sectors, where the impact of climate change can be expected. Hops are among the commodities highly dependent on the total precipitation. For this reason, hop growers are generally starting to leave some areas. However, in the nominated property, the river Ohře flows, which reduces the risk of the direct impact of climate change and water scarcity. The Nechanice dam regulates the water level in the Ohře River, so the water source for the area of the component part 01 has been secured for a long time. Even in the driest years of 2015 and 2018, for example, the water authority (the town of Žatec) did not proceed to announce a ban on the use of irrigation water from the Ohře. On the contrary, on the Blšanka stream, these bans were issued in the mentioned years. In the future, a resolution of the Government of the Czech Republic proposes a project to build a water converter from Nechanice to the planned Kryry reservoir with further distribution to the Rakovnicko region. The

Storms belong to risk factors. Trained hops after hail, Žatec region, 2016.



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Hop fields might be flooded after persistent rains, Stekník, 2017

Kryry Retention Reservoir could then naturally help the volume of water in the Blšanka stream, which flows into the Ohře within the component part 01 of the nominated property.

Hop structures are generally endangered by storms that can defeat their construction. The component part 01 lies in the local lee, protected from the west by a low terrain formation, so strong direct winds are not recorded here.

4.b(iv) RESPONSIBLE VISITATION AT WORLD HERITAGE SITES

The attendance of component part 01 is not purposefully monitored. The area is freely accessible, and the audience is rather individual, or it is a part of the goals of cycling tourism. So far, the primary goal of visitors is mainly the Stekník Chateau, which is managed by the National Heritage Institute. Since 1997, the building has undergone a planned renovation (see *Chapter 4.a*) and the number of visitors is increasing.

In component part 02, formed by the historic town, the tourist infrastructure has already been built and the town has extensive experience with tourism, which can be divided into several destinations in the town. The town is ready for a possible increased number of visitors. Every year, events with traditionally high attendance are held in Žatec, such

as the popular Dočesná – the Hop Harvest Festival. This unique open-air celebration of the hop harvest brings up to 65,000 visitors every year.

With the expected increased use of the nominated property, both in public spaces and some other historic buildings for visitor attractions and/or facilities, the local risk of damage to the values of the property, by tourists, is realistic. However, the area of the historic centre and its suburbs is quite extensive, and most events take place in public spaces. No damage to the historic buildings caused by a high number of visitors, due to the increased humidity in a particular area or other reasons, has been observed yet. Žatec is not among those places where large influxes of tourists negatively affect life in the town, but the town management is well aware of the need to improve several issues. It is necessary to extend and even slightly expand out of the property area, the infrastructure, services, and parking capacity for a gradually increasing number of visitors. The necessary measures are presented in the property's Management Plan.

Existing tourist services are already available by the three information centres in the town, which provide information on optimal routes around the area and also refer to the values of component part 01, where the visitor centre has not yet been established (for more details see *Chapter 5.h*).



Hop field fallen after a storm close to harvesting time, Stekník, 2014



4.b(v) NUMBER OF INHABITANTS WITHIN THE PROPERTY AND THE BUFFER ZONE

The population of the entire property is rather stable.

The table below shows the situation in 2020

COMPONENT PART NUMBER	NUMBER OF INHABITANTS WITHIN THE PROPERTY	NUMBER OF INHABITANTS WITHIN THE BUFFER ZONE	TOTAL NUMBER
01 – Saaz Hop Landscape	55	18,106	
02 – Žatec	1,714		
Total number	1,769		19,875



Work in the hop packing room and hop warehouse in Žatec, Oskar Brázda (1887-1977)



5. Protection and Management of the Property

5. Protection and Management of the Property

5.a OWNERSHIP

The ownership structure within the nominated property is mixed; in both components, private ownership predominates (natural persons or legal entities).

Component part 01 includes two small villages, in which the private ownership of buildings predominates. At present it is partly made up of undeveloped areas, especially hop fields, which represent approximately 30% of the component's area. These are mostly managed by the Hop Research Institute, which has technical facilities directly in the village of Stekník. In Stekník, there is also an important heritage asset, the Stekník Chateau, which is owned by the state and which is managed through the National Heritage Institute. Another important owner of real estate is the village of Zálužice, which administratively includes the village of Stekník, including land. The state owns 11% of the properties in component 01. Except for the Stekník Chateau, other features are represented by the river Ohře and the railway. The river Ohře is managed by the Ohře River Basin, a state-owned enterprise, which is the administrator of significant and designated watercourses. It operates and maintains state-owned waterworks to which it has the right to manage, performs activities related to any assessments and assesses the surface and groundwater status along with other activities related to river basin management. The railway is managed by the state organisation Správa železnic, which is the owner and provider of national and regional railway infrastructure owned by the state and maintains and repairs the railway transport routes.

In component part 02, in addition to the private ownership, which is predominant, the town of Žatec,

whose town hall and other official buildings are part of the property, appears as a significant owner. The town of Žatec financially supports the restoration of registered cultural heritage assets in the historical centre and the Prague Suburb. Most individually protected buildings in the southern part of the urban component part are hop industry buildings, which are mostly privately owned by legal entities, especially the company CHMELÁŘSTVÍ, cooperative Žatec, whose seat is located within the buffer zone. The town of Žatec also plans, depending on its financial possibilities, the purchase of selected preserved hop processing buildings, with the highest degree of authenticity, for their functional conversion for everyday use (for more see the Management Plan section).

In the Czech Republic, real estate ownership can be monitored on an ongoing basis thanks to publicly available information from the Czech Office for Surveying, Mapping and Cadastre in the online application "browsing through the real estate cadastre." The application <http://nahlizeni.dokn.cuzk.cz/> allows obtaining, for example, selected data concerning ownership according to specific numbers of plots and buildings. Information concerning the real estate cadastre is freely accessible to all internet users, requires no registration, and is free of charge. Also, under the National Heritage Act No. 20/1987, on heritage conservation, the owner of a cultural heritage asset is obliged to notify the professional organisation of state heritage conservation of any change in ownership, administration, use of a cultural heritage asset, or its relocation. The notification must be made no later than thirty days before the date on which such a change would occur.

Ownership	in %		
	NOMINATED PROPERTY TOTAL	COMPONENT PART 01 – SAAZ HOP LANDSCAPE	COMPONENT PART 02 – ŽATEC
State	7	11	4
Region	1	1	1
Church	1	1	1
Village of Zálužice	2	4	0
Town of Žatec	9	2	18
Town of Podbořany	1	1	0
Private-legal entity	23	30	14
Private-natural person	56	50	62
Total	100	100	100

5.b PROTECTIVE DESIGNATION

The entire area of the nominated property of "Žatec and the Landscape of Saaz Hops" is protected under the National Heritage Act No. 20/1987, On the State Heritage Conservation as amended.

5.b1 SAAZ HOP LANDSCAPE

The entire territory of component part 01 will be comprehensively protected as a Landscape Heritage Zone on under the Measure of a General Nature, the process of declaring a landscape heritage zone was started in the middle of 2020, not yet completed.

However, the built-up area of the village of Stekník has been widely protected as a Rural Heritage Zone since 1995, which has helped to maintain the authentic urban structure of the whole village, and the extent of repairs and use of materials in all buildings in this area has been professionally consulted and monitored. In this protected area of the village of Stekník, there are already five individually protected cultural heritage assets, which are important buildings associated with the history of hop growing and processing, as well as the Stekník Chateau.

Hop fields, which form one of the main characteristics of this component, are also protected by Act No. 97/1996 Coll., On the Protection of Hops. This provides not only hop verification (certification), but also processing, mixing, treatment and marketing regulations of hop products that are applicable to standard market organisation. At the same time, the act stipulates hop growing regions and hop growing positions, regulates the performance of the state administration, including state supervision over compliance with the obligations specified by European Community regulations promulgated by international treaties of which the Czech Republic is bound in this matter.

The entire territory of component part 01 is also rich in valuable areas of nature. The importance of the river Ohře with its several functional, or former, meanders, and that of the Blšanka stream, support strong riparian zones. Follow-up plant and tree accompaniment is the basis of the Territorial System of Ecological Stability (TSES). Also, there are several local biocentres in the area, and all this contributes to the supervision of the territory, by state administration bodies, based on the authorisation given by the valid Act No. 114/19992 Coll., On Nature and Landscape Protection (more specifically in individual land use plans).

5.b2 ŽATEC

Component part 02 consists of the historic town centre and the territory of the Prague Suburb (see the *Chapter 2.a*). The protection of component part 02 has been declared in two main stages:

The northern part of the component part, which, in fact is the town's historic centre with a prevailing number of burgher houses and buildings of higher architectonic importance, was chosen for legal protection shortly after the adoption of the first legal act concerning cultural heritage in 1958. The historic core of Žatec was amongst the first historic towns and cities, in what was then Czechoslovakia, which were declared Urban Heritage Reserves in 1961. The protection, regulation, and consulting practice has been going longer than half of a century. The neighbouring southern part of the component, Pražské předměstí ("the Prague Suburb"), comprising mostly of specific "hop related" buildings, has been protected as a continuous area, an Urban Heritage Zone, since 2003, after a process of awareness-raising.

Between those two territories (the Urban Heritage Reserve and the Urban Heritage Zone), there is a very narrow gap whose protection is fully covered by the Protective belt of the Žatec Urban Heritage Reserve, declared already in 1987. Thanks to this, all the component part 02 is covered with legal protection. For more information see the text in the *Chapter 5.b4, Chapter 7.b1* and Map 09.2).

In addition to the protection of the overall urban structure, covering all the properties and aimed mostly at the urban attributes and values of the whole, there is currently (2020) a total of 140 properties and their premises that have cultural heritage status. This means extra protection and professional advice is necessary to ensure the authenticity of their design, material substance, technical and decorative features, and other details in their maintenance and restoration. Other buildings are also proposed for declaration as individual cultural heritage assets. They are undergoing administrative proceedings because, in the Czech Republic, it is a gradual and, in many cases, a time-demanding process.

5.b3 BUFFER ZONE

The entire territory of the nominated property, including the buffer zone, is under the protection of hops accorded by the Protected Designation of Origin. It declares that hops may be grown in this area, the qualities of which are predominantly or exclusively due to a specific geographical environment with its inherent natural or human factors, and that the production, processing,

and preparation of which takes place in the defined geographic area. This protection of the origin of hops guarantees the constant supervision of cultivation and processing practices, and also, by its importance, connects the two components. All hop fields located in the buffer zone also enjoy protection in the sense of the above-mentioned Act No. 97/1996 Coll., On the Protection of Hops.

No new legal documentation has been adopted for the actual scope of the buffer zone, for the purpose of this nomination project. The application of the current practice of using valid statutory regulations and existing limits within the buffer zone area will be sufficient for this purpose.

In the immediate vicinity of component part 02, the Municipal Office in Žatec, as a body of state heritage conservation, exercises increased supervision over the protection of the panoramic values of the historic town and its Prague Suburb. This is based on two consecutive protective belts, which were declared for the urban component in two stages, in connection with the strengthening of legal protection of urban heritage in Žatec.

These factors, mentioned above, lead to increased protection of the broader environment of the urban component, with monitoring, in particular, the panoramic values of the historic town and its Prague suburb, ensuring its high degree of conservation. The area of the described protective belts are currently forming integral part of the shared buffer zone, and its boundary is marked in the additional map sheets in *Chapter 7.b* showing other protection mechanisms to help protect the nominated property.

The territory of the buffer zone includes several areas where other protective and regulatory limits are in force, based on the protection of a variety of public interests. They have already been included in the Principles of Spatial Development of the Ústecký Region, which is the binding spatial planning documentation, which is materially superior to all land use plans within the Ústecký Region. Therefore, these limits must be respected at the local level and therefore carefully checked for preparing the buffer zone boundary (see *Chapter 5.d*).

This way, the buffer zone integrates the already existing protection regulations in the area. By its definition, it also determines the extent of the territory, to which increased attention will be paid in the future in terms of preserving the visual relations of both components to their surroundings. At the same time, it will be possible to monitor the territory so that any possible future construction development does not visually compete with the precious landscape construction and architectural heritage, which both components of the nominated property represent.

The buffer zone, therefore, uses already existing protection regulations. It includes, e.g. part of the local military, inaccessible and undeveloped, training area, and zones of the air defence, which itself requires strict control of all building heights in the area.

In the flood plain along the river Ohře, the buffer zone contains a major bio corridor, the changes, and cessation of which are prohibited by the Nature and Landscape Protection Act. North of Žatec, the bio corridor includes areas with local hop fields, the perimeter of which forms a terrain fault with a protected natural formation, the changes of which are also prohibited. The bio corridor also contains the area of the large-scale agricultural unit of a poultry farm, and its inclusion into the buffer zone will enable the supervision of any future development even in the areas of this building complex with a limited service life.

The extent of the buffer zone was carefully examined, firstly, in terms of the terrain context and the visual relations of its territory to the components of the nominated landscape. Next, the buffer zone area has been delineated in terms of sustainability of the state administration and rational minimisation of the number of affected municipalities whose territories are not decisive regarding heritage values of the nominated property.

Given the size of the area and the overall scale of the nominated cultural landscape, no more extensive construction plans are envisaged, which would require a higher degree of assessment than before. In any case, the buffer zone will be a new limit in the area for all authorities, signalling the need for a more careful examination of the visual impact of any plans, especially in terms of their area or height.

5.b4 LEGAL DOCUMENTS

All relevant legal documents in the Czech language with an English literature search are part of the appendices, *Chapter 7.b*.

Component part 01 Saaz Hop Landscape

Saaz Hop Landscape Heritage Zone as part of the work towards the nomination, the relevant basis for area heritage protection, corresponding to the boundaries of this component part, was prepared and handed over to the Ministry of Culture in July 2020. The Ministry is currently organizing the process to confirm its legal protection.

It includes the Stekník Rural Heritage Zone, which lies entirely within the component part and its protection was declared already on the basis of the Decree of the Ministry of Culture No. 249/1995 Coll. of 22 September 1995, On

the declaration of the territory of the historic cores of selected municipalities and their parts as heritage zones.

Component part 02 Žatec

This component is a combination of two neighbouring protected territories, which are an Urban Heritage Reserve and an Urban Heritage Zone, both declared under Act No. 20/1987 Coll., On national heritage conservation, as amended.

The Žatec Urban Heritage Reserve was established by the Decree of the Ministry of Education and Culture No. 36.568/61-V/2 from 08/ 17/ 1961 on the declaration of Urban Heritage Reserves in Kutná Hora, Tábor, Jindřichův Hradec, Slavonice, Žatec and the establishment of the archaeological heritage area in Slavníkovská Libice.

The Decree of the Ministry of Culture of the Czechoslovak Republic ref. 16.417/87–VI/1 of 21. 12. 1987 slightly extended this Urban Heritage Reserve.

The Žatec Urban Heritage Zone was declared by the Decree of the Ministry of Culture of the Czech Republic, No. 108/2003 Coll. (item 44), from 04/ 4. 2003.

The protective belt (PB) of these protected urban units, forming an urban component, was also declared in two stages, in connection with the legal decrees of territorial protection:

The protective belt of the declared Žatec Urban Heritage Reserve (PB UHR) from 1987 (revised 1988 and extended

in 1995 by the Decision of the District Office in Louny). The protective belt of the Žatec Urban Heritage Zone (PB UHZ) was announced on 30th November 2015 by the Territorial Decision of the Žatec Municipal Office ref. MUZA 31941/2015.

The facts, as mentioned earlier, lead to increased protection of the broader environment of the urban component, which monitors, in particular, the panoramic values of the historic town and its Prague suburb, and which ensures its high degree of preservation.

The long tradition of land use planning in the Czech Republic, with the involvement of conservation authorities, also enabled the application of measures aimed at preserving the maximum cultural and historical values of the nominated landscape. No significant changes are expected in the preserved landscape component in the vicinity of the villages of Stekník and Trnovany, as well as in the urban structure of the town of Žatec. This is currently documented by valid land use plans, namely: the Land Use Plan of the Municipality of Zálužice and the Land Use Plan of the town of Žatec, to which the both components of the nominated property belong. The concept of these documents envisages maintaining the rural production landscape and the structure of the rural component. In the urban landscape of Žatec with a ring of undeveloped areas, including greenery of urban parks around most of the perimeter of the urban component, as well as regulation of development in the wider area, including the buffer zone.



5.c MEANS OF IMPLEMENTING PROTECTIVE MEASURES

The conservation of the cultural heritage and its appropriate utilisation, in general, are defined by a series of international conventions and methodological documents as well as through the legal regulations of the Czech Republic. The conservation of tangible historical heritage has a long tradition in the Czech Republic, and national regulations and the principles for their implementation have been coordinated with international documents. The application of the legal provisions defining the protection and conservation for cultural properties is implemented at various levels, from central down to regional and local authorities.

The protection, conservation, and treatment of the nominated property are governed primarily by the following legal instruments:

National Heritage Act No. 20/1987 Coll., On the State Heritage Protection, as amended – the so-called Heritage Law (Czech version)

<https://www.npu.cz/portal/npu-a-pamatkova-pece/pamatky-a-pamatkova-pece/pravni-predpisy-a-mezinarodni-dokumenty/text-zakona-o-pamatkove-peci.pdf>

and **Decree No. 66/1988 Coll.**, For the Implementation of the Act on the National Heritage Protection, as amended
https://www.npu.cz/portal/npu-a-pamatkova-pece/pamatky-a-pamatkova-pece/pravni-predpisy-a-mezinarodni-dokumenty/provadedci-vyhlasaka-c-66_1988.pdf

Act No. 183/2006 Coll., On Spatial Planning and Building Rules (Building Act) – the Czech version is available primarily on the web site of the Ministry of Regional Development:

http://www.mmr.cz/upload/files/uzemni%20planovani%20a%20stav.rad/SZ_232.pdf

Where an English version of this act is available also:

http://www.mmr.cz/upload/files/uzemni%20planovani%20a%20stav.rad/SZ_232.pdf

Act No. 114/1992 Coll., on nature conservation and landscape protection, as amended which applies also to the protection of the Site of Community Importance (SCI) located on the territory of the hop growing landscape adn/or in the buffer zone.
<https://www.mzp.cz/>

Decree No. 166/2005 Coll., implementing certain provisions of Act No. 114/1992 Coll., on nature conservation and landscape protection, as amended, with respect to the creation of the NATURA 2000 system, as amended, which implements Act No. 114/1992 Coll., on nature conservation and landscape protection

with respect to the protection of Sites of Community Importance

<https://www.mzp.cz/>

Act No. 49/1997 Coll. on Civil Aviation as amended, which applies also to the protection of belts for radar military aircraft ground support equipments.

<https://www.psp.cz/sqw/sbirka.sqw?cz=49&r=1997>

Based on this Act, the Protective Belts of Hrušovany radar station are defined by Measures of a General Nature, which will ensure the height limit of high-rise buildings in the specified areas.

Act No. 49/1997 Coll. on Civil Aviation as amended, which applies also to the protection of belts for radar and military aircraft ground support equipment.

<https://www.psp.cz/sqw/sbirka.sqw?cz=49&r=1997>

Convention for the Protection of the Architectural Heritage of Europe (The Granada Convention)

The Czech Republic acceded to the Convention for the Protection of the Architectural Heritage of Europe, which is registered in the International Treaties Collection under No. 73/2000 Coll. According to Art. 10 of Constitutional Law No. 1/1993 Coll., Constitution of the Czech Republic, as amended by Constitutional Law No. 347/1997 Coll., Constitutional Law No. 300/2000 Coll., and Constitutional Law No. 395/2001 Coll., with effect on 6/6 2002. The decree of the Czech Ministry of Foreign Affairs No. 73/2000 Coll., On the Adoption of the Convention for the Protection of the Architectural Heritage of Europe. In the case of non-compliance with Czech law (including Act No. 20/1987 Coll.), this Convention shall be superior.

The European Convention on the Protection of Archaeological Heritage (the Malta Convention)

From 16/1/1992 Decree of the Czech Ministry of Foreign Affairs No. 99/2000 Coll., On the Adoption of the European Convention on the Protection of the Archaeological Heritage. The Convention is part of the Czech legal system by the same principle as described above.

<http://www.npu.cz/pp/dokum/legisl/umlarcheol/>

The Convention Concerning the Protection of the World Cultural and Natural Heritage

<http://www.unesco.org/whc/nwhc/pages/home/pages/homepage.htm>

Decree no. 159/1991 Coll., On the Adoption of the Convention concerning the Protection of the World Cultural and Natural Heritage, including the Directive for the Implementation of the Convention Concerning the Protection of the World Cultural and Natural Heritage, including the Nara Document on Authenticity, which is part of this Directive.

The Convention on the Conservation of Intangible Cultural Heritage

<https://ich.unesco.org/en/convention>

Decree No. 39/2009 Coll., On the Acceptance of the Convention for the Conservation of Intangible Cultural Heritage by the Czech Republic

The Convention for the Protection of Cultural Property in the Event of Armed Conflict (Decree by the Minister of Foreign Affairs No. 94/1958 Coll., On the Convention for the Protection of Cultural Property in the Event of Armed Conflict and the Hague Protocol from 1954), The Second Protocol on the Convention for the Protection of Cultural Property in the Event of Armed Conflict from 1954 (No. 71/2007 of the International Treaties Collection). Generally, the Czech Republic plans to apply for the enhanced protection under this Convention for properties inscribed on the World Heritage List.

UNESCO RECOMMENDATIONS FOR HISTORIC URBAN LANDSCAPES ADOPTED BY THE GENERAL CONFERENCE OF UNESCO IN 2011

International ICOMOS Charters

The National Committee of ICOMOS has been actively operating in the Czech Republic for a long time. Through its diligence, in cooperation with the National Heritage Institute, the major international charters and recommendations by ICOMOS have been gradually translated into the Czech language. They have already been issued at several stages in printed versions, and are available in digital versions on the Internet

<http://www.icomos.cz/images/dokumenty/mezinarodni-dokumenty-2011.pdf>

They can, therefore, be quoted, when necessary, in expert opinions and decisions of executive bodies when dealing with specific projects.

State administration in the field of heritage conservation includes activities, measures, and decisions by the executive bodies of state heritage protection and the professional organisations of state heritage preservation to provide and organise the conservation, protection, and appropriate use of cultural heritage. These bodies are usually involved in promotional and educational activities as well. Legislation in the Czech Republic is subject to the National Heritage Act No. 20/1987 Coll. and its implementation decree. A set of national methodical materials, in the field of heritage conservation, has been developed over a long time in the Czech Republic. Most of the materials were prepared by the National Heritage Institute to unify its scope of activity.

Other numerous methodical materials are offered by the National Heritage Institute; these materials are completed and updated to support research and development. Most

of published materials are in the Czech language and using the filter "metodiky" can be found here:

<https://www.npu.cz/cs/npu-a-pamatkova-pece/npu-jako-institute/publikace>

(for more to this topic, see the *Chapter 5.g*).

Main principles of applying the legal instruments

The before mentioned Act No. 20/1987 Coll., is the main legislative measure in the field of state heritage protection. Provisions of the act include a set of rights and liabilities of owners of cultural heritage assets, owners of real estates located in heritage-protected territories, administration authorities (not only the authorities relevant for this field but also, for examples, building offices) and professional organisations for heritage protection. Further, the provisions specify the rights and liabilities of municipalities and other physical and legal entities and organisational structures of the implementation of state administration. The act also includes sanction provisions for non-fulfilment or breach of individual liabilities and conditions of the act.

All the owners of cultural heritage assets and national cultural heritage assets have their obligations specified by the Act No. 20/1987 Coll., on State Heritage Protection, as amended later. The owner of a cultural heritage asset must, among other things, care for its conservation at his own costs, maintain it in good condition and protect it against any danger, damage, impairment, or theft. He may use the cultural heritage asset only in a way that corresponds to its cultural and political importance, historical and/or artistic significance, or other values and technical conditions.

Further, the owner of a cultural heritage asset shall report any danger or damage to the cultural heritage asset to the municipal office of the municipality with extended authority and, in the case of a national cultural heritage asset, to the locally relevant Regional Office and ask for a decision on how to remedy the case. The owner of a cultural heritage asset shall also report in advance each intended change in the use of the declared cultural heritage asset to the municipal office of the municipality with extended authority and, in case of a national cultural heritage asset, to the locally relevant Regional Office.

In case the owner of a declared cultural heritage asset intends to carry out maintenance, repairs, renovation or other work on the cultural heritage asset or its surroundings, he shall apply in advance for the binding judgment of the municipal office of the municipality with extended authority and in case of a declared national cultural heritage asset, to the locally relevant Regional Office.

Restoration of declared cultural heritage asset, or their parts, may only be carried out by persons with certified professional authority and upon permission issued by the Ministry of Culture of the Czech Republic.

The owners, state administration authorities, local government authorities and professional organisations share the complex care for the cultural heritage of the Czech Republic in different extents of details and responsibilities.

Nature conservation and landscape protection on the site of the nominated land is subject to legal regulations stipulated especially by Act No. 114/1992 Coll., on nature conservation and landscape protection, as amended, and the relevant subordinate implementing legislation as mentioned above. Given the fact that small parts of the nominated property is protected as a Site of Community Importance (Map 11), the protection of the local natural values is managed especially in accordance with the regime prescribed for this type of protected area. Pursuant to the said Act, Sites of Community Importance (SCI) are protected from damage and destruction. They may be used only so as to avoid any significant or irreversible damage to the site. Any interventions that might lead to undesirable consequences must first be approved by nature conservation bodies.

Even those parts of nature and landscape that are not subject to protection under one of the sophisticated legal schemes are subject to the general protection of nature and landscape within the meaning of the Act on nature conservation and landscape protection. This general protection of nature consists especially in the protection of significant landscape elements that, by law, include all forests, peat land, water courses, ponds, lakes, alluvial planes and protection for the character of the landscape as well as in the creation of regional systems of environmental/ecological stability (USES). Also, subject to general protection are all plant and animal species, while woody plants are subject to special protection.

NATIONAL LEVEL

The Government of the Czech Republic – adopts the principal conceptual documents and binds its members to implement them. In the field of care for historical, cultural heritage assets and therefore for the nominated property in Žatec, the Concept of care for historical monuments in the Czech Republic in the years 2017 to 2020, is currently relevant (<https://www.mkcr.cz/koncepce-pamatkove-pece-256.html>).

The document for the future period will follow these principles. The government also adopts regulations on the declaration of national heritage assets and sets general conditions for the provision of heritage conservation. It can also be involved in more complicated cases.

Ministry of Culture

The Ministry of Culture of the Czech Republic is the supreme executive body of state heritage conservation and protection and the body for appeal against decisions of regional authorities. The Ministry prepares

departmental conceptual measures and assigns financial means for the restoration of cultural heritage assets from public resources (see *Chapter 5.f*).

The task of national heritage conservation are fulfilled, above all, by the Heritage Conservation Department of this Ministry:

- It declares tangible and intangible property, and its collections, as declared cultural heritage assets, and when necessary, it cancels these declarations;
- It gives its judgment on landscape planning for the area of any property inscribed on the World Heritage List and for territories declared cultural heritage reserves or zones of any kind (urban, rural, landscape);
- It is the competent body to negotiate any proposal on measures of a general nature by which so called "plans on the protection" of historical reserves and zones are issued.

The broad scope of the relevant Heritage Preservation Department is contained in this part of the website: <https://www.mkcr.cz/cinnost-odboru-pamatkove-pece-245.html>

The web pages of the Ministry of Culture include a complete list of the applicable national legal regulations, most of them available online in full wording, including the relevant international conventions. <https://www.mkcr.cz/pravni-predpisy-z-oblasti-pamatkove-pece-253.html>

Necessary information in English is available here. <https://www.mkcr.cz/?lang=en>

The Ministry of Culture also administers through the Monument Inspectorate as its specialised enforcement body, having central supervision over the observance of the Heritage Protection Act, and in implementing regulations. If some failings are found, it proposes measures for their remedy and supervises their fulfilment, or proposes to impose a penalty. It is the superior and established body of the professional organisation of the National Heritage Institute (its role see below).

The International Relations Department at the Ministry of Culture of the Czech Republic includes a separate department to deal with communicating with the Centre of World Heritage for matters of the cultural heritage of UNESCO or the Secretariat of ICOMOS in Paris. It is also engaged in projects of international cooperation with the states party to these matters. Web pages of the Ministry contain, in Czech versions, the basic UNESCO documents related to cultural heritage. www.mkcr.cz

National Heritage Institute

The National Heritage Institute (NHI) is an organisation related to the Ministry of Culture of the Czech Republic. The current laws, particularly the Heritage Act, charge this institute with numerous specialised tasks in the field of state heritage conservation. The institute provides, for example, professional documents for the decisions of executive bodies, methodologies on the unification of approaches in the field of the conservation and development of the historical heritage fund in the Czech Republic, and maintains its national heritage listings. The NHI intervenes actively in the process of the declaration of individual assets, structures, and areas as protected cultural heritage assets of the Czech Republic, and within the scope of its authority, it provides their documentation. Adhering to the territorial administrative division of the Czech Republic, the NHI is composed of 14 regional departments one in each of the 14 regions of the Czech Republic, with the Directorate General as its headquarters. Its professional capabilities and knowledge are also reflected in its management of more than 100 cultural-historical properties, mostly extensive castles and country houses, accessible to the public. One of them is the Stebník Chateau in component part 01 (see 2.a). As for world heritage within the Czech Republic, the NHI significantly assists in the implementation of the Convention concerning the Protection of the World Cultural and Natural Heritage. As far as Periodical Reporting to the World Heritage Centre is concerned, the institute provides the preparation of the Section I of the Questionnaire of Periodic Reporting, in cooperation with its relevant regional departments. And with cooperation with site managers guarantees and prepares, the Section II of Questionnaire of Periodic Reporting, – The State of Conservation of World Heritage Sites. At the website of NHI is link with the information about World Heritage <https://www.npu.cz/pamatky-unesco>.

Ministry for Regional Development

The Ministry for Regional Development in the Czech Republic is the supreme authority with authority, among others, to issue building laws and decrees concerning development planning. This ministry is also responsible for the national coordination of structural funds and European Union programmes.

Development planning is provided in a hierarchy of planning documents linked to each other, with liability to respect higher levels of documentation, at regional or local levels. The ministry is also the supreme authority of state administration for appeals in matters of development planning documentation.

The ministry also provides extensive, methodical support for local and regional authorities and cooperates with other ministries on conceptual and strategic information. Necessary information in English is available at <http://mmr.cz/en/Homepage>.

The Czech Republic has had a stabilised system of development planning for the long term. The preparation of any Development Planning Documentation (DPD) is based on processes given by the Building Act which attempts to link DPD contents in view to more comprehensive relations, where the contents of the ÚPD of a lower administrative unit, and the DPD of a higher regional administrative unit with further state-wide importance, must be harmonised.

The document "Policy of Regional Development of The Czech Republic" has a state-wide extent for solutions and has been updated repeatedly. The document specifies the basic requirements for specific tasks of spatial and land use planning in national, international, supraregional, and cross-border contexts. It sets the strategy and basic conditions for the fulfilment of these tasks, the priorities of the development planning. It indicates which regions have increased requirements for changes to be made in areas with specific values. The criteria and conditions for decision-making on the possibilities of changes are specified for the defined regions, corridors, and areas. In view of the nominated property, there are not any discrepancies with this document.

In the case of municipalities of the nominated property and buffer zone, harmonisation of the local Land Use Plan with The Principles of Spatial Development of the Ústecký Region is regulated. Limits of regional importance were preferred when defining the buffer zone (see 5.b). No possible future conflicts with the above described state policy has been observed as no main development corridors are defined within the nominated property.

Ministry of Agriculture

The Ministry of Agriculture is the central state administration body in the field of agriculture, water management, the food industry, and for the management of forests, fish farming and game keeping outside national parks.

The Ministry of Agriculture, in the section of agriculture and food industry, which is responsible for growing hops, also manages the Czech Agriculture and Food Inspection Authority and even the Central Institute for Supervising and Testing in Agriculture, which ensures the certification of hops in the Czech Republic.

www.eagri.cz

Certification guarantees domestic and foreign customers the origin and quality of hops. This process includes the labelling of hops by the producer and the verification of the quality and origin by the institute. Only hops from hop growing regions that meet EU quality requirements, and hop products made from it are certified. The current method of certification has a positive effect on foreign trade in hops (75–80 % of hop production is exported, of which 60 % is to Asian markets). The benefit of the current

method of hop certification is also the traceability of the product, which is increasingly emphasised throughout the food chain.

The office of the Hop Quality and Product Certification Department is located in component part 02 in the historical building of the Hop Certification Centre in Žatec.

The Ministry of the Environment of the Czech Republic

The Ministry of the Environment is the central state administration body for nature protection in the Czech Republic and the supreme supervisory body with respect to nature protection.

With respect to the nominated property, especially the Component 01, the Ministry plays an important part in the formation and maintenance of the legal environment related to the conservation of the natural values of the landscape which also includes the Site of Community Importance at Ohře River. Nature conservation bodies subordinated to the Ministry of the Environment of the Czech Republic specifically include the Nature Conservation Agency of the Czech Republic and the Czech Environmental Inspectorate.

<https://www.mzp.cz/>

REGIONAL LEVEL

The Regional Office of Ústecký Region

The whole nominated property is located in the Ústecký Region. The Regional Office of the Ústecký Region controls the implementation of state heritage protection through its department of heritage protection. The office communicates with the owners of declared cultural heritage assets, such as municipalities and legal or physical entities. Their tasks include the implementation of their specific authority in the field of state heritage protection determined, in the region, by the heritage law. In addition to the task of specifying the procedures needed in the restoration of national cultural-historical monuments (which means the most recognized cultural heritage assets), they manage appeal proceedings against decisions and binding judgments issued by the municipality authorities with extended knowledge and authority in the field of heritage protection within the region.

The Region also approves the strategy for supporting national heritage management in the Region in addition to approving proposed plans and schemes aimed at the preservation as well as restoration of heritage sites in the Region while regulating their utilization for cultural and educational purposes.

The office is also charged with the authority to make decisions on the possible relocation of a declared cultural heritage asset, when necessary. The office also issues opinion during the process assessments to any proposals on declarations, or cancellations, of declared cultural

heritage assets within the regional jurisdiction. The Regional Office of the Ústecký Region is involved in land-use planning as a means for sustainable development of the territory. It prepares the conceptual tool for land-use planning for the territory of the Region, i.e. the Principles of Spatial Development (see *Chapter 5.d*), which are subsequently approved by the Regional Assembly.

The Regional Office announces subsidy schemes for restoration and presentation of sites in addition to areas subject to heritage protection (for more details see *Chapter 5.i*).

The Regional Office is responsible for taking care of the relevant Site of Community Importance and issues binding opinions regarding any interventions in the site. The Region is also responsible for preparing prognoses and strategies for the protection of nature on its territory in cooperation with the Ministry of the Environment of the Czech Republic.

Address: <http://www.kr-ustecky.cz/EN/>

National Heritage Institute, Regional Department in Ústí nad Labem

It is the regional department of the National Heritage Institute for the territory of the Ústecký Region. The institute provides written opinion and advice on the conservation and restoration of declared cultural heritage assets and historical urban, rural and landscape heritage areas for the executive bodies of the State Heritage Protection.

<https://www.npu.cz/cs/uop-usti-nad-labem>

LOCAL LEVEL

Municipalities with Extended Powers

The Town Office of Žatec

The town of Žatec has its own office, which connects the tasks of local selfgovernment, for the town, and the implementation of state administration in specified fields.

For the protection of values of the nominated property, the Department of Spatial and Land use Planning and Heritage Protection fulfills the tasks of a body for state heritage protection as follows:

- It applies judgments to spatial planning documentation for the majority territory of the both component parts, i.e. the area of Zálužice Municipality (which means for the Stekník village), area belonging to the Liběšice Municipality, town of Žatec and village of Trnovany and areas of most concerned municipalities within the buffer zone. (For the rests of the component 01 and the buffer zone, the same power goes to the Town Office of Louny - see below) For the nominated property, in case of inscription on the WHL, this authority as regards the spatial planning will be transferred to the Ministry of Culture;

- In matters concerning the whole nominated property and the individual protected historical structures, it implements supervision over their restoration and during any construction, changes, terrain or greenery modifications, placing or removal of historical equipment;

- It regulates building activities and any significant changes related to maintenance work and changes on other real estates within the nominated property even in case that those are not individually declared designated cultural heritage assets, as well as any possible planned building changes within the buffer zone;

- It may impose penalties to physical and legal entities for infringement of obligations imposed by the Act on National Heritage Preservation.

Essential direct contacts and all the necessary forms helping the smooth communication of the property owners with this executive body are online, accessible on the Town Office web pages:

<http://www.mesto-zatec.cz/mestsky-urad/odbory-uradu/stavebni-a-vyvlastnovaci-urad-zivotni-prostredi/pamatkova-pece/>

The Town Office of Louny

The town of Louny fulfills the responsibility of the state administration similarly as that of Žatec. In case of the nominated property, it applies to very minor part of the component 01 (its northeastern perimeter areas belonging to the municipalities of Lišany and Postoloprty; see the map 10.

Its tasks are similar to those described above and relate mainly to the spatial plans of the Town of Postoloprty, whose cadastral areas of Hradiště nad Ohří and Strkovice form parts of the component part 01, as well as small linear area on the left bank of the Ohře river belonging to the Lišany municipality.

Other administration authorities

These include all the bodies of state administration, which make decisions according to special legal regulations, and whose mutual linkage is monitored in the legislative process of the inter-department discussion process and the Parliament of the Czech Republic.

Their decisions may affect the interests of state heritage protection concerning the protection or conservation of the nominated property. Decisions on their proper utilisation are always issued on the basis of a binding opinion of the Town Office in Žatec, in the Department of Landscape Planning and Heritage Protection, and the Department of Heritage Protection of the Ústecký Region.

Any possible changes in the utilisation of buildings and other structures on the territory of the nominated property are subject to the permission of the Building Office of the Town Office in Žatec, according to Act No.

183/2006 Coll., On landscape planning and building orders. The basic parameters and possible limits, for the new construction and its utilisation, are subject to zoning and planning decisions. This is followed by a building permit commenting on, in detail, the technical parameters and the architecture of the construction. The office also decides one approving the so called notification of the structure, (which is a process in the cases of constructions not requiring any building permit according to the Building Act). Also, any modifications of terrain or a part of landscape and location or changes of public spaces equipment, for example, advertising or technical equipment, are subject to a permit from the Building Office.

In cases where the particular issue is not a matter of the general Building Office, for example, restoration of part of a construction, artistic decorations or statues, or other activity that is not subject to the proceedings according to the Building Act, the decisions on restoration, maintenance and repairs are issued by the relevant body of state heritage protection through its own separate administrative decision. In the case of cultural heritage assets in Žatec such decisions are issued by the Department of Heritage Protection of the Town Office in Žatec.

Written statement of the Regional Department of the National Heritage Institute (NHI) in Ústí nad Labem is the obligatory document to issue a binding opinion of the state heritage protection body (the Town Office in Žatec) in the nominated property. In case of more complicated issues or proceedings of appeal, an opinion of the general directorate of NHI in Prague is required.

In cases where the owner of a structure disagrees with the contents of a binding opinion of the state heritage protection body, the owner may appeal against it. The contents of the binding opinion, issued as an initial document of the decision of the Building Office, can only be contested by appealing against the decision of the Building Office is issued. In cases where the binding opinion of the state heritage protection body has been issued in a separate administrative decision process (see above), it can be contested by appealing directly against it.

The following authorities are authorised to accept appeals:

- The Department of Culture and Heritage Protection of the Regional Office of Ústecký Region in Ústí nad Labem. In the case of a binding opinion coming from the Department of Heritage Protection of the Town Office in Žatec;

- In case of a binding opinion coming from the Department of Culture and Heritage Protection's Regional Office in Ústí nad Labem it is the Ministry of Culture.

Municipalities

Municipalities perform on-site care of heritage sites and make sure that the owners of heritage sites meet their obligations imposed by the Heritage Act. In these activities, the Municipalities use the expert statements of the National Heritage Institute or more specifically of its regional office.

In the field of nature conservation and landscape protection, the powers of the municipalities biggest concern is issuing permission to cut down woody plants and impose the obligation to plant new woody plants, unless the area is subject to special protection.

Municipalities, within their power as local government bodies, are responsible for the development of their territory including a favourable natural environment,

i.e. the public greenery and cleanliness of the municipality.

In matters related to land-use planning, municipalities have extensive powers:

The Municipal Authorities provide information for the preparation of land-use planning background materials and land-use planning documents for the relevant municipality with extended powers, i.e. in this case, to the Municipal Authorities of Žatec and Louny and other bodies preparing these land-use planning instruments.

The Municipal Council, within its independent powers, decides on the commissioning of preparation of a land-use plan or a regulatory plan in addition to approving the requirements for the preparation as well as issuing the plan.



Hops of the Saaz variety on "the smallest hop field in the world" in front of the Žatec Town Hall, Svobody Square, Žatec, 2020

5.d EXISTING PLANS RELATED TO MUNICIPALITY AND THE REGION IN WHICH THE PROPOSED PROPERTY IS LOCATED

Area of heritage protection agenda State Cultural Policy

Area of heritage protection agenda State Cultural Policy for 2015–2020 (with a view to 2025) – approved by the Government of the Czech Republic in 2015. The document was prepared for supporting culture, art, and the protection of declared cultural heritage assets in connection with the Government Programme Statement of 2014. Priority 3 of this Policy is focused on the preservation of cultural heritage. It contains measures aimed at Landscape Heritage Zone (*Chapter 3.1.a*), which declares support for the protection of the cultural landscape or supports legislation in areas with real values (*Chapter 3.1.b*) as one of priorities. Other important goals for the nominated property are "To support the identification of inhabitants with unique values of the cultural environment of regions" (*Chapter 3.2.a*), "Use available methods of coordination for more effective enforcement of cultural values and development of cultural diversity in conceptual materials of regions and municipalities" (*Chapter 3.2.b*).

More information at <https://www.mkcr.cz/statni-kulturni-politika-69.html> (in Czech).

The conception of cultural heritage conservation and protection in the Czech Republic for the years 2017–2020 – prepared by the Heritage Protection Department of the Ministry of Culture in 2016.

The priority goals of the conception are greater interconnectedness and openness of the field inwards and outwards, as well as clarity and clarity of the protection of cultural heritage assets, or stabilisation and strengthening of heritage preservation in society.

Concerning the nominated property, the most relevant sections are:

- III.1. Legislation (e.g., regulation of the issue of cultural heritage with international status or preparation of government regulation on the declaration of selected declared cultural heritage assets as cultural heritage assets of National importance (národní kulturní památky);
- III.3. Heritage-preserved areas and protection of the historic cultural landscape (including gradual revisions of existing heritage zones and heritage reserves of a corrective and more precise nature);
- III.5. Support for the rescue and conservation of heritage fund;
- III.8. International cooperation in the field of heritage conservation.

More information at

https://www.mkcr.cz/doc/cms_library/koncepcepampece_2017_2020-5938.docx.

The Strategy for Adaptation to Climate Change in the Conditions of the Czech Republic, prepared by the Ministry of the Environment, was approved by the Government of the Czech Republic in October 2015. This adaptation strategy of the Czech Republic has been prepared for the years 2015–2020 with a view to 2030 and will be implemented by the National Action Plan for Adaptation to Climate Change approved in 2017. One of the goals is to ensure environmental sustainability, including minimising the impact of climate change on various areas of society and the economy, including agriculture.

https://www.mzp.cz/cz/zmena_klimatu_adaptacni_strategie

<https://apps.odok.cz/attachment/-/down/VPRAA3VATUSE>

Act no. 183/2006 Coll., On Spatial Planning and Building Code has been valid in the Czech Republic since 1st January 2007. This act imposes the updating of development planning on municipalities, defines the rules of construction procedures. Updating the existing, as well as newly prepared, spatial and land use plans must reflect the historical heritage protection on the territory concerned and the protection of individual structures declared. This applies also in connection with the delimitation of individual component part of the nominated property.

The basic information on urban planning principles in the Czech Republic in the English language is available at <https://www.mmr.cz/cs/ministerstvo/stavebni-pravo>.

The Principles of Spatial Development of the Ústecký Region is a key document of spatial planning for the development of the region's territory. They are based on the Spatial and Land use Development Policy (which is the nationwide tool of spatial planning) and are superior documentation for the acquisition of municipal spatial planning (see *Chapter 5.c*). The Principles of Spatial Development of the Ústecký Region stipulates, in particular, the basic requirements for the efficient and economic arrangement of the region's territory, defines areas or corridors of supra-local significance, and sets conditions for their use.

The Principles of Spatial Development of the Ústecký Region were issued by means of so called "measure of a general nature" with effect from 20 October 2011. The texts of their 1st and 3rd Updates came into force on 20 June 2017 and 17 December 2019. The complete documentation of the Principles of Spatial Development

of the Ústecký Region is available on the website:
<https://geoportal.kr-ustecky.cz/gs/zasady-uzemniho-rozvoje/>

General requirements for ensuring the protection of the landscape and landscape character within the region are contained in the Principles of Spatial Development of the Ústecký Region especially in the *Chapter 1 - Determining the priorities of spatial planning of the Ústecký Region to ensure the sustainability of territorial development in the part Tasks for spatial planning No. 3, 14, 33.*

● "(17) In the specified, specific areas of the region, supporting the solution of their territorial problems, promoting forms of a spatial, economic, and social development, meeting the needs of these territories, paying special attention to the protection and the revitalisation of natural, landscape and heritage values."

The issue of landscape protection is also incorporated in *Chapter 5 - Specification of territorial conditions of the concept of protection and development of natural, cultural, and civilisational values of the region (e.g., tasks for spatial planning 1, 9)* and in *Chapter 6 - Definition of target landscape characteristics. To specify the territorial conditions for the protection and development of the cultural values of the region, many principles are set, of which the essential tasks for spatial planning cited below are the most important for the nominated property:*

● "(25) Take into account proposed protected areas: e.g., landscape heritage zones, urban heritage zones, rural heritage zones, and archaeological and heritage reserves.";

● "(26) Among the heritage values, also include documents of the industrial development of the region, search for and protect suitable objects and areas of this type of values, monitor the possibilities of their use in the new condition.";

● "(27) To protect and develop the values of the unique heritage landscape of the region, to focus attention on the protection of the horizon lines of mountain massifs, landscape dominants, significant vantage points, and visual axes, typical and well-known views of settlements etc.";

● "(31) To monitor the possibility of the restoration of historical phenomena - the recovery of vistas, dominants, the removal of harmful elements of civilisation damaging the landscape, having inappropriate links to landscape or heritage values."

The fragmentation of the landscape should be effectively prevented in the subsequent spatial planning documentation, which means in the local land use plans. Emphasize and respect the need to protect the landscape and its landscape character.

Effective from 1 January 2007 in the Czech Republic is Act No. 183/2006 Coll., on land-use planning and the rules for construction procedure, as amended, according to which among other things, the municipalities are obliged to update their land-use planning documents. The updates of the existing as well as the newly prepared land-use plans reflect the requirements of heritage protection of the areas as well as individual protected facilities and components of the nominated site.

Land-Use Plans of Municipalities

The land-use plans of municipalities in the nominated property are the basic documents for decision-making in the area, especially with respect to the decisions of the Planning (Building) Authority.

Given the relatively vast area of the nominated property, several land-use plans have been applied here. These include the land-use plans of Zálužice, Liběšice, Postoloprty, Lišany and Žatec which relate to the both component parts and to the buffer zone and the land-use plans of a few other municipalities are in question as relates to the buffer zone only (those of Holedeč, Lipno, and Staňkovice).

The requirements of these land-use plans have always been prepared in agreement with the relevant authorities of state administration including national heritage conservation bodies (this applies always when even the only one protected cultural heritage asset is located on the territory of such municipality area). The commissioning authority of all land-use plans for the nominated property site including the buffer zone are the Municipal Authorities of Žatec and Louny (for more details see *Chapter 5.c* above).

The necessary co-ordination (coherence) between individual land-use plans of the relevant municipalities is ensured by the Act on Land-use Planning and Building Guidelines that set the hierarchy of and links between land-use planning documentation. From the aspect of cultural heritage the coherence is guaranteed by the legal framework. In the future, the coherence (in the case of updates of these plans) will be further enhanced because these plans will follow the Land Development Principles of the Ústecký Region and the Management Plan (see above).

The basic information on the land use plans relating to the nominated property has been summarized and listed below, in the order reflecting the component parts and the extent of territory within them:

Land Use Plan of the village of Zálužice (dominant part of the component part 01)

The Municipal Council approved and issued the Local Land use Plan of the Municipality of Zálužice in 2014, with the responsible architect-designer Jiří Vít, Atelier CON.TEC (Prague 10). The Land Use Plan sets out in its

obligatory chapter entitled "The Concept of Protection and Development of Spatial Values" defines by the following points:

- To create conditions for the protection of all cultural and historical values in the territory;
- To define areas for potential development exclusively in relation to already built-up areas;
- To protect the open landscape from uncoordinated development;
- Respect the basic urban division of the area in question;
- In the already built-up area, create conditions in particular for the intensification of its use, and renewal, or maintenance of existing buildings.

Furthermore, this Land Use Plan stipulates the protection and development of the following values:

"Apart from declared cultural heritage assets registered in the Central List of Cultural Heritage of the Czech Republic and the fact that the area is an area with a defined heritage zone (Stekník) and an area with archaeological finds, it is necessary to protect the following values:

- *urban structures and characteristic features of individual parts of the municipality administrative area, especially the local part of Stekník;*
- *a unique cultural landscape with preserved natural elements;*
- *urban significant compositional elements;*
- *declared heritage assets of local significance."*

The textual part of the Spatial Plan brings other vital principles for the use of areas or "conditions of the spatial arrangement of various types of buildings", where it is generally imposed that "... modifications of the original buildings must respect the compositional relations and respond to the scale and context of the surrounding buildings and the character of the territory by the architectural division of building forms and especially by the total volume of building-in."

The entire document, including its graphic part, is available here:

<https://www.zaluzice.cz/uzemni-plan/>

Land Use Plan of the village of Liběšice (second most involved part of the component part 01)

The south-eastern part of component part 01, located in the cadastral area of Dobříčany, is an administrative part of the Municipality of Liběšice. The Land-Use plan for this municipality was prepared by Ing. Arch. Ladislav Komrská

(Mladenovova 3234, 143 00 Prague 4) and came into force on 22 August 2010. The Land Use Plan underwent one partial change in 2017.

The territory of the village Liběšice consists of a total of 6 cadastral areas. Component part 01 includes an area of the local part of Dobříčany. Among the "basic values of the territory," the Land Use Plan lists the characteristics of the territory that are fully in line with the values of this part of component part 01, such as non-urbanised, native landscape or agricultural landscape arrangement such as borders, gullies and meadows.

The list of values is followed by the overall concept of further development of villages, according to which the Municipality of Liběšice will continue: "...developed as a system of separate settlements, built-up, and buildable areas, will form these compact areas of local parts". The development of the village will respect the current urban and spatial arrangement of the territory, the characteristic architectural expression, the characteristic material arrangement of buildings and their functional groups. The built-up, and buildable areas, of the individual town districts form a compact, integrated location."

The Land Use Plan emphasises the importance of the local part of Dobříčany, which "contains its own buildable areas for housing, while recreational areas are being developed in the vicinity of the former spa in the valley of the Blšanka stream. The area's development potential consists of the proximity of the regional centre, the town of Žatec, the natural environment, and a suitable position on the transport communication network. At the municipality level, the position of the railway station within walking distance is a significant bonus. "This stop can also be generally interesting for the pedestrian accessibility of component part 01.

However, directly in component part 01 lies only land, the undeveloped part of the cadastral area of Dobříčany, unused areas of land with partial areas valuable from the point of view of their ecological stability and their general nature.

The built-up part of the village of Dobříčany lies partly in the buffer zone. To maintain the function of a living village, in connection with the built-up area, partial locations have been defined on which it is possible to build in the future. The Land-Use Plan's general principles state: *"The development of the local part of Dobříčany must respect the existing character of the development in terms of scale, height, the shape of roofs and materials used."* A total of three development locations (D1 to D3) are planned. The nature of their potential constructions can be further stated:

- Development area No. D1 will allow a maximum of 4 family houses connected to a new vertical local road to road III / 22723. (road designed outside the component area);

● Development area No. D2 allows mixed housing up to the number of 28 family houses. It will consist of a street location of double-sided development around a new local road. Shielding from the component will ensure *"adjoining areas of gardens, which ... will be used exclusively without additional buildings."*;

● Another smaller development, area No. D3, will enable mixed housing in the number of 18 houses. The area is completely outside of any visual connection to component 01, on the southern edge of the village, and the plan is to build in the form of a single row of buildings *"... which will be accessible by a new local road leading along the southern edge of the development area."*

The last small development area of the village of Dobříčany (No. D5) is located completely outside the visual connection to component part 01. It is intended by the Land-Use Plan *"...for the establishment of public recreational space with the possibility of implementing leisure activities. Public greenery, sports areas, or facilities e.g. car parks will support the function of public space. A free handling strip of 6 m along the Blšanka riverbank will be maintained in the area"*. Therefore, it can be assumed that this area in the buffer zone, within walking distance of the hop growing landscape itself, can complement any programme for visitors to the landscape. The fact that Dobříčany has its own functional train stop can also be used.

There are also a number of local TSES elements in the monitored area, of which "functional contact biocentre of aquatic and alluvial communities and communities of thermophilic oaks and thermophilic herbs (LC13 LIB)" called "the Liběšická ravine" defines the natural form and part of component part 01 in the south-east. The future protection of components and parts of the buffer zone is aided by the fact that the Regional Biocorridor RK 1084 of water and floodplain communities is located in the area, led by the Blšanka stream and its riparian zones. The regional bio-corridor is functional in the area and is supplemented by a functional biocentre of local importance: LC5 LIB.

Land Use Plan of the Municipality of Lišany (partly represented in the component part 01)

The territory belonging to the Municipality of Lišany extends into component part 01 in completely marginal areas. It is a strip of territory on the left bank of the river Ohře with its riparian area.

The Municipality of Lišany has a Land Use Plan from 2009, prepared by the authorised persons - Ing. Arch. Alena Fárková, and Ing. Arch. Hana Vrchlavská, together with relevant specialists. The Land Use Plan was approved in the form of a Measure of a General Nature issued by the Lišany Municipal Council by Resolution No. 9 of 30 September 2009. In 2012, the Land Use Plan was slightly modified in an area that does not concern either the

nominated component or the buffer zone. This change came into force on 28 April 2012.

Part of component part 01 covers the village's undeveloped part, its south-eastern segment by the river Ohře.

The Land Use Plan contains the general Principles of the Overall Concept of Community Development. This chapter states that the goal is the overall stabilisation of the territory. The design of small development areas is based exclusively on built-up areas and prefers development in the immediate vicinity of the village square, outside the component itself and only in the buffer zone.

From the point of view of future care for the nominated property, it is appropriate to state some citations:

The Land Use Plan states that "good soil and climatic conditions create a precondition for maintaining the municipality's agricultural orientation." All area values are plotted in the plan drawings; in the area, which is a part of component part 01, there are valuable areas from the point of view of nature protection.

For the specified territory of component part 01, the following requirements result from the regional limits:

● "Fully respect the supraregional bio-corridor NRBK K 20 of aquatic communities, led by the river Ohře and;

● To fully respect the supraregional bio-corridor NRBK K 20 of wetland communities, running along the river Ohře."

The river Ohře is identified in the Land-Use Plan as the most important positive landscape-creating element, which has an aluminous-sandy meandering riverbed, a large riparian accompaniment, and is locally accompanied by small floodplain forests. The Land Use Plan therefore explicitly recommends "not to interfere with the riparian zones, do not drain waterlogged meadows, mow at least once a year." The Land Use Plan states that "The biocentre is fully functional, it is necessary to respect it to a limited extent." In terms of landscape, the main element in this area is the river Ohře. It is described in the Land Use Plan as "the most important positive landscape element of the territory." Local recreational use of the river's surroundings is marked as being insignificant, it is accepted in its current form, but the Land Use Plan does not envisage further recreational development in this part stating that "Location of other cottages is excluded."

The river Ohře is a NATURA 2000 locality (European important locality CZ0423510 OHŘE). The Ohře riparian zones contain "high-quality structural greenery of the landscape, whose community deserves protection."

The Land Use Plan of the Municipality of Lišany is a good tool for the adjoining buffer zone's future territory. The

characteristics of the agricultural landscape will continue to be respected. One of the other valuable areas, already in the buffer zone, is the local biocentre LC 5 called "Ohře u Dolejších Hůrek," Ohře at Dolejších Hůrek, evaluated as an ecologically important landscape element.

Land Use Plan of the Town of Postoloprty (partly represented in the component part 01 through the territory of Hradiště and Strkovice)

Component part 01 also extends to a part of the territory under the governance of the Town of Postoloprty, namely in the undeveloped parts of the cadastral areas of Hradiště nad Ohří and Strkovice. These areas are treated through the Land Use Plan of the Town of Postoloprty. The Land Use Plan was prepared by the Ústí nad Labem Urban Studio, O-PROJEKT, Teplice: a team led by the authorised architect Ing. Antonín Olžbut, supplemented by relevant specialists. The Land Use Plan was approved by the Postoloprty Town Council and came into force on 12 December 2013.

The administrative territory belonging to the Town of Postoloprty in component part 01 is relatively small. Other adjacent areas of cadastral areas in the buffer zone are also of a smaller extent. The Land Use Plan outlines, for the entire territory of the municipality of Postoloprty, what the landscape's target quality is "the landscape of high natural, landscape, aesthetic and cultural values, recreationally used."

As in neighbouring Lišany, the area of European importance (EVL) Ohře EVL CZ0423510, protected in the NATURA 2000 system, belongs directly to the specific locations, which are part of component part 01. In these areas, the priority in the Land Use Plan is the protection of natural and landscape values. Therefore, no changes in land use are proposed here which could have any negative impact on the objects under protection and the integrity of the protected area.

The STEKNÍK RBC181 Regional Biocentre is located in a given area, at the border with the cadastral district of Stekník, for which it has been approved that the inlets of the river will be *"...left to their own development, no disturbance of the riparian vegetation will be allowed. No other constructions, additions, or landfills will be allowed."* It is only recommended to mow the accompanying meadows once per growing season.

In the principles of protection of the values of the area, which also applies to small villages, in the case of a nominated property, such as the development of the villages Hradiště and Strkovice, which lie in the buffer zone, the Land Use Plan states, among other things, that *"The original development of settlements will be preserved, ... the character of new development should be adapted as much as possible to the character of the original development and the landscape, for this reason urban studies will be required for buildable areas larger*

than 2 hectares, or areas where a complex territorial situation so requires." In component part 01, however, new buildings are planned to a completely marginal extent on the outskirts of the village of Hradiště in an area which has been determined to maintain the village's living function.

The Land Use Plan of Žatec (the whole of the component part 02 and part of the component 01 – village of Trnovany)

The Land Use Plan issued for the cadastral territory of Žatec has been prepared under the superior spatial planning documentation, the Principles of Spatial Development of the Ústecký Region (see above). The content of the Žatec Land Use Plan is binding for the decision-making of the Building Office in the territory, especially within the procedure relating to land use and its any changes within the area. Its contents were prepared through the mutual consent of the relevant bodies of state administration, including the state heritage preservation bodies, represented by the Ministry of Culture of the Czech Republic, the Regional Office of the Ústecký Region, the Town Office in Žatec.

The Land Use Plan of Žatec was approved and issued by the Žatec Town Council in the form of a measure of a general nature, effective from 13 July 2008.

The full wording of the Žatec Spatial Plan, after the issue of its Amendments No. 1, 3, 4, 5, and 6, was approved in May 2019.

The material was prepared by the company Kadlec K. K. Nusle, spol. s.r.o., with the responsible architect-designer Daniela Binderová.

The Land Use Plan applies the principles of all protective decrees in force (see above in *Chap. 5.c*) and specifies in detail the main urban values of Žatec that have to be respected:

- The structures in the protected historical heritage areas with emphasis on the technical heritage related to hop processing;
- The protection of the historical silhouette of the town including determining landscape relief of the surrounding cultural landscape, compositional linkages and a town panoramas as perceived from viewing places;
- The character of the preserved historical medieval structure of the street network and several historical squares in areas of former medieval churches and burial sites;
- The technical cultural heritage of hop processing, the beer brewing and related manufactures, including their chimney stacks.

Chapter 5.1, in the written part of the Land Use Plan entitled "Basic Concept of Landscape Layout", is essential to preserve the character of the broader environment of component part 02 and thus the entire western part of the buffer zone. It states:

"The landscape of the town of Žatec consists of several areas with a different character:

- *The territory of the valley floodplain of the river Ohře, with predominantly mixed-use (urbanised areas of secluded settlements, gardens, permanent grasslands, individually used areas of arable land, hop fields, stands of natural character);*
- *The area of slopes along the Ohře valley and the area of tributaries of the Ohře, with predominant natural use (natural vegetation, forests, permanent grasslands, watercourses);*
- *The area of platforms with mostly arable land in the northern and southern parts of the administrative territory;*
- *This primary character of the landscape will be preserved, the mixed area on the northern bank of the Ohře and part of the arable land will be reduced at the expense of the urban areas. In the future, an increase in the share of greenery in the landscape (windbreaks, bulks, bushes, etc.) will be supported, and the existing elements of greenery will be preserved.*

Areas for strengthening the territorial system of ecological stability and areas on the agricultural land fund with the anti-erosion function will be established in the landscape, especially in areas of consolidated arable land in the southern and northern parts of the territory.

Furthermore, roads and paths can be set up to allow pedestrian passage through the landscape, cycle paths, or routes for other sports and tourist use such as bridle ways and cross-country trails.

New separate built-up areas will not be established in the landscape outside the existing built-up areas and outside the already proposed areas for development.

Areas for mining and recreation outside the areas defined by the land use plan will not be established in the landscape."

Programme of Regeneration of the Žatec Urban Heritage Reserve

A local programme of restoration of a protected valuable urban structures is the essential condition for applications submitted by any town or city government to assign the funding provided by the Ministry of Culture (in more details see Chapter 5.f). The town of Žatec is an active participant in this process working on basis of a material updated several times.

1994 – atelier Vega Praha, ing. arch. Baše (basic document for starting of conceptual works)

2003 – Huml & Vaníček Žatec, ing. arch. Jiří Vaníček (updating 1)

2010 – Huml & Vaníček Žatec, ing. arch. Jiří Vaníček (updating 2)

As part of the programme, the competition "Award for the best preparation and implementation of the Programme for the Regeneration of Urban Heritage Zones and Urban Heritage Reserves" is announced every year. The town of Žatec has been the winner of the regional round of this competition several times, most recently in 2019.

The last two mentioned documents (from 2003 and 2010) were used as initial documents for some parts of a management plan for this nomination documentation (see Chapter 5.e). This maintains the continuity of opinions on the values of the component part 02 of the nominated property and enhances the predictability of the actions needed for the conservation of the cultural heritage also among their owners.

The Strategic Plan of the town of Žatec

The town of Žatec formulated a conceptual document for the near future. This document includes goals to be attained across the whole of the nominated property. Together with the Land Use Plan of the town of Žatec, the Strategic Plan should be the basic document for the sustainable future development of the town.

The Town Council approved the currently valid Plan of Development of the Town (representing a material which the Strategic Plan shall follow) of Žatec in its resolution No. 276/15 on 2nd September 2015. It follows the preceding strategic document No. 123/08 of 2008. The plan sets up the main trends of the town's development in the five to eight years, therefore, for the period 2015 to 2020, with prospects up to the year 2023.

The key areas described also include an area place generally called "World Heritage". There are specified strategic goals and planned measures to support the nomination of the property for its inclusion on the World Heritage List and the sustainability of cultural heritage values in the town.

Many experts participated in the creation of the material, including most of the members of the Steering Group; the defined measures are entirely in line with the criteria set out in the Management Plan. The main development vision of the town is formulated as follows:

"The town of Žatec will continue its history as a commercially successful town and will make the most of its tradition as a world hop growing centre, its potential for tourism and building the infrastructure for new investments for further

economic and social development of the town and civil society."

This long term vision has already helped implementing the goals, formulated in the course of preparation of this nomination, into a complete

town strategic document of 2015. Unfortunately, there is no conceptual material focused tourism on the level of the nominated property yet. Therefore, the development of a Tourism Strategy is one of the priority measures recommended by the Management Plan to be achieved in the following years.



5.e PROPERTY MANAGEMENT PLAN OR THE DOCUMENTED MANAGEMENT SYSTEM INTERPRETING THE OBJECTIVES OF THE REPORT FOR A PROPERTY DESIGNED FOR WORLD HERITAGE REGISTRATION

At the time of submitting this nomination, the Czech Republic had already 14 properties inscribed on to the World Heritage List, using both the Czech Republic's own experiences with their administration and the international recommendations resulting from the Operational Guidelines for Implementing the World Heritage Convention, including methodological materials from the World Heritage Centre. Therefore, activities are organised from a central level and are aimed at the possibilities of sharing examples of good practice, improving the experience with the management

of World Heritage sites, and, last but not least, organising meetings of the site managers.

In 2018, a methodological publication was published, which was aimed precisely at emphasising the role of the network of site managers and a good understanding of the importance of management at the local level. The publication published by the National Heritage Institute also shows the system, and management of world heritage properties, which has the following structure in the Czech Republic. See the table below.

World Heritage Committee Výbor pro světové dědictví UNESCO	State Parties to the Convention Smluvní strany úmluvy	World Heritage Centre Centrum světového dědictví	Advisory Bodies (ICOMOS, ICCN, IUCN) Poradní organizace (ICOMOS, ICCN, IUCN)	
			ICOMOS Czech National Committee Český národní komitét ICOMOS	
Ministry of Foreign Affairs Ministerstvo zahraničních věcí		Ministry of Culture Ministerstvo kultury		Ministry of the Environment Ministerstvo životního prostředí
Czech Commission for UNESCO Česká komise pro UNESCO	Permanent Delegation of the Czech Republic to UNESCO Stálá delegace České republiky při UNESCO	International Relations Department - Division for UNESCO and International Cooperation Odbor mezinárodních vztahů - oddělení pro UNESCO a mezinárodní spolupráci	Heritage Conservation Department Odbor památkové péče	International Relations Department Odbor mezinárodních vztahů
Regional Offices Krajské úřady			National Heritage Institute Národní památkový ústav	Nature Conservation Agency Agentura ochrany přírody a krajiny
Municipalities with Extended Powers Obce s rozšířenou působností				
Selfgovernment on WHS level (Local Authorities and/or their associations) Samospráva na úrovni statku (města, obce a jejich sdružení)	Steerign Group Řídící skupina	World Heritage Site Statek světového dědictví	Site Manager Site manager	Thematic Associations/Non-Profit Sector (UNESCO Czech Heritage) Tematická zájmová sdružení/Neziskový sektor (České dědictví UNESCO)

The management system of the nominated serial property Žatec and the Landscape of Saaz Hops fully respects this structure and seamlessly follows it down to the local level.

The local procedure's current structure is based on the foundations already established for the original nomination of Žatec – the Town of Hops. The steering group has therefore been active since 2013. It has already developed the basic necessary measures for protecting and developing hop heritage values and is already fulfilling several topics. Following the nomination concept modification, the steering group was expanded in the years 2018–2020 by adding additional representatives.

The representation of stakeholders involved corresponds to the needs of the Management Plan's collective preparation and the sharing of the appropriate responsibilities. The group was therefore supplemented by members from the ranks of hop growers (CHMELÁŘSTVÍ, cooperative Žatec, Hop Research Institute Co., Ltd., and the Hop Growers Union) and representatives of municipalities (Zálužice) and institutions (National Heritage Institute, the Regional Heritage Site Management in Prague for the Stebník Chateau) operating in component part 01. For the future protection and management of the nominated property, the priority is to maintain the current property management structure, connecting the powers of the municipality of Žatec and the municipality of Zálužice, concerning the topic of protection and development of hop heritage, through the steering group. The preparation of all relevant documents is already coordinated by the Steering Group, operating as a methodological and conceptual team and regularly discussing the necessary partial steps to progress. The Steering Group has defined common goals in professional discussions, focusing on the property's outstanding values, and negotiates with the owners of individual properties inside the property and other interest groups.

The Site Manager is a member of the Steering Group as well as its executive officer. He negotiates the terms of the proposed measures and plans for any implementations in the rural and urban component parts with the other parties involved. Thanks to this already established practice, cooperation between the owners of individual properties and the related authorities aligns the owners' interests with the measures necessary to protect and preserve the property and offers them consulting, and technical, assistance in creating ideas for dealing with their property.

In recent years, the Steering Group's main task has been the identification of tasks in the process needed to prepare the nomination documentation, active participation in formulating the content of the Management Plan, and preparing the conditions for implementing projects defined by the nominated property. It has an active role in establishing the local financial funding for the

conservation of the facades and roofs of all the buildings within the nominated property.

Site manager

The most important person involved in the management system of the nominated property is the site manager. He is the person with direct responsibility for preserving the heritage and managing it in its place in the property. He is the contact person for information about the property's values and the coordinator of outputs, ensuring the conservation, protection, presentation, and promotion of the property, including all educational output.

The site manager will be an important person in the process of national monitoring and the fulfilment of periodic reporting tasks (see also *Chapter 6.b*). Based on his ongoing and detailed knowledge of World Heritage property, he will contribute to the questionnaire data's completeness and the reliability of the information, especially in terms of tracking regional and global trends for properties of a similar nature. The site manager is part of the steering group and leads the established working groups.

● Site Manager (2013 - present): Jaroslav Špička, Deputy Mayor of the town of Žatec.

The Working Group focused on hop buildings and cultural heritage conservation in the nominated property:

● This group endeavours to preserve the hop processing buildings' authenticity, explain the importance of this specific heritage and recommend its appropriate future use;

● The group maintains a list of endangered buildings and proposes a timetable for their restoration in cooperation with the buildings' owners;

● Based on the list of endangered buildings, the group recommends the appropriate candidate buildings for conservation and restoration work supported by the Regeneration Fund of Žatec, and by other funding opportunities administered by members of the town's Development and Regeneration Committee and the staff of the Municipal Office;

● The group functions as an advisory body for the Site Manager and fulfils the Steering Group's tasks;

● The group provides mutual information for all the parties involved in the nomination project, with an emphasis on solving the issues of state administration in the field of heritage protection in the proposed area;

● The group prepares, develops, and recommends comments and suggestions for the town of Žatec

(Management Plan), for the National Heritage Institute and the Ministry of Culture of the Czech Republic, in the protection of the heritage fund in the proposed area under the relevant and applicable legislation (the declaration of cultural heritage, cultural heritage zones, and other protective measures).

The Education Working Group:

- The group provides contact with the wider social environment of the rural and urban component parts, especially in regards to communication with the various target or/and interest groups;
- The group prepares and processes recommendations, or projects, to preserve the hop traditions for future generations. It initiates educational and awareness-raising activities to strengthen local knowledge and identity within the local populace;
- The group functions as an advisory body for the Site Manager of the nominated property and performs the tasks assigned to it by the Steering Group.

The Working Group focused on the promotion of the nominated property:

- The group provides the delivery of information about the nomination process of the property to the public in the form of preparation of media reports, promotional materials, and professional events;

- The group annually prepares a timetable of activities to support the property's nomination and promotion, including financing suggestions and supervising its implementation (cooperates with the Education group);

- The group is responsible for the content of the website of the nominated property;

- The group functions as an advisory body for the nominated property's Site Manager and fulfils tasks assigned by the Steering Group.

The scheme below shows the relationships between all stakeholders and the competent authorities at the local level.

Management Plan

A detailed Management Plan is attached as a separate appendix to this nomination documentation.

The Management Plan is prepared as a basic tool for ensuring the effective protection of the proposed Outstanding Universal Value of the property, its authenticity, and its integrity for the period 2020–2030, based on the property's unique values. In addition to developing these values, it is also based on defined risks that could jeopardise these values. Consistent and gradual implementation of measures, goals, and intentions, which are described in more detail in the proposal part of the MP, will lead to the preservation of the property's values for future generations and, at the same time, help eliminate threats that may arise in the future.

TOWN OF ŽATEC		WORKING GROUPS		
VILLAGE OF ZÁLUŽICE		HOPS RELATED BUILDINGS & HERITAGE CONSERVATION	PROMOTION & PRESENTATION	EDUCATION
STEERING GROUPS & SITE MANAGER				
MUNICIPAL OFFICE	HERITAGE PRESERVATION BODIES	HOP GROWERS	LOCAL NGO FOCUSED ON HOP RELATED HERITAGE AND HISTORICAL HERITAGE	LOCAL CULTURAL INSTITUTIONS
STEERING GROUP MEMBERS REPRESENTING THE INSTITUTIONS AND/OR OWNERS				
Major of the town Major of the village Dpts. of development, financing and budget, grants, building rules, heritage protection, education, tourism	Regional office of Ústecký Region National Heritage Institute	Hop Growers Union of the Czech Republic CHMELARSTVÍ, Cooperative Žatec Hop Research Institute	Chlemborana/Hop Defence Association of Meder's House Association of the friends of Žatec Synagogue Destination agency Dolní Poohří	Hop Museum Regional Museum of K. A. Polánek Temple of Hops and Beer Beer Brewing Museum of the Žatec Region Steknik Chateau

The Management Plan firstly presents the wording of the Outstanding Universal Value of the property, for the preservation and development of which it is primarily intended. The analytical part of the Management Plan is based on the town and property administration documents describing the activities planned in the town by various entities. It describes the state of the nominated property in 2020 during the time when the nomination documentation was being completed. This analytical part will therefore become a reference text for all future monitoring of the property's state and the success of the implementation of the proposed measures. The analytical part is fully compatible with the main part of the nomination documentation, so factual information such as the description and history of the property has not been repeated in detail and are available to the Management Plan users simultaneously. However, the important parts that describe the property's current physical condition and the related risk factors are key information for the proposal measures, so this information is given in the same detail as in *Chapter 4*, with further clarification.

The SWOT analysis, which is a necessary starting point for the proposal part and therefore forms a logical divide between the analysis and the proposed measures, summarises the strengths and weaknesses of the property tracked during the process of the preparation of the nomination, as well as a list of weaknesses, deficits and potential threats.

The proposal part of the Management Plan contains a summary of thematic measures that will be used for a detailed action plan of activities in the short, medium, and long term. The proposal part deals with partial steps leading to the sustainable development of the preserved values and their presentation to the general public. This applies both to the landscape associated with the cultivation of Saaz hops as a whole, as well as to the present preserved buildings used in the past for processing, packaging, and the transport of hops, in Žatec and the hop-related facilities in the villages of Stekník and Trnovany.

The nomination of the property and its possible inscription on the World Heritage List is understood primarily as a means of protection and conservation for all parts of the property, and so this document needs to be accessed. The Management Plan has been developed as a comprehensive material for both the thematically closely related component parts of this serial property. The document is a set of goals, measures, and planned concrete intentions, which are based on the high potentiality of the building, architectural, but also the intangible, heritage of Žatec and the surrounding hop landscape. It can also help raise public awareness of a rich history and create a good framework for presenting these values at an international level. The nominated property can make good use of the already existing basic legal and organisational framework. The division of the

topics of individual measures into thematic groups will help monitor and control the commitments made. The Management Plan is intended for the preparation of specific measures so that their implementation is tied to the set criteria.

As an integral part of the nomination documentation for the inscription on the World Heritage List, the Management Plan presents the basic attributes of the nominated property, Žatec and the Landscape of Saaz Hops, which defines its Outstanding Universal Value and describe the factors that could jeopardise this value in the future. It also proposes measures to eliminating risks and ensure the conservation of the property for the future.

The Management Plan builds on selected theses and objectives from the previous conceptual material prepared for the nomination Žatec - the Town of Hops which still remain valid. The original document is also linked to several other conceptual documents of the town of Žatec, which inspired the Management Plan. This will be gradually updated in relation to this document. In the preparatory phase, the main areas were discussed within the broader working group, distinguishing the Management Plan from other documents completed so far. It is necessary that it contains the same objectives and develops its content in the necessary detail. From the beginning, the basic principles of its work were consulted with the authorities of heritage conservation. The defined goals were realistic in terms of the protected values and the links to cultural heritage management principles.

The town of Žatec, which will provide a position, and background, for the site manager in the event of the property's inscription on the World Heritage List, is fully aware of the necessary cooperation of all key entities at the national, regional, and local levels. Therefore, the Management Plan was created in cooperation with representatives of the public and entities that signed a joint Memorandum of Cooperation, in 2020, in Preparing the Nomination of a Property for Registration and which is attached to this nomination documentation both in the Czech and the English language. The Management Plan was repeatedly consulted on by the working group (Steering Group) during its elaboration. It was subsequently approved by the municipal council, the supreme body of the town of Žatec, and the Zálužice municipal council.

Memorandum of Cooperation in Protection, Preservation and Presentation of Hop Heritage and Hop Growing and Processing Properties in Žatec and its Surroundings

Preamble

Saaz hops and Saaz hop related heritage, its quality and continuity has shaped the architecture of the town of Žatec as well as the hop cultural landscape around the town and beyond.

The ensemble of unique hop-related buildings the concentration and scale of which is unparalleled anywhere in the world and the rare authentic urban and architectural unity of Žatec are the result of an unprecedented boom in hop production in the region which left an important mark in the history of the hop industry. Already in 2007 Žatec was included in the Tentative List of the Czech Republic as a possible candidate for nomination to the World Heritage List.

This Memorandum follows on the achievements of the earlier cooperation positively accelerated by the previous document on cooperation entered into by the town of Žatec, the Ministry of Culture, the National Heritage Institute, Ústecký Region, CHMELARSTVÍ, cooperative Žatec and the Hop Defence (Chmelobrana) and signed on 14 November 2013.

In 2015–2017 the Nomination Dossier titled Žatec – the Town of Hops was developed and submitted for evaluation. In 2018 the World Heritage Committee recommended to the Czech Republic modification of the Nomination Dossier to add components documenting hop growing history in the surrounding landscape of Žatec to those on the architectural heritage in the town. The technical discussions that followed in 2019, and were organised by the town of Žatec jointly with the Ministry

of Culture, the National Heritage Institute, CHMELARSTVÍ, cooperative Žatec and the The Hop Research Institute Co., Ltd., Saaz, came to the conclusion that the cultural, historic and landscape values of the local hop heritage together with the highly valued quality of Saaz hops have a great potential for international recognition subject to a comprehensive Nomination Dossier including rich evidence and pursuing this goal will be developed.

With the aim of extending the approach to the Nomination Dossier for the inscription to the World Heritage List as recommended and with the need to gain support of all stakeholders more partners supporting preservation, protection and presentation of the hop heritage landscape have been invited to join in.

The Parties to this Memorandum are aware of the Outstanding Universal Value, authenticity and integrity of the landscape containing hop heritage which is an important heritage asset of the Ústecký Region and the Czech Republic.

By signing this document, the Parties join the initiative of the town of Žatec and local stakeholders to submit the Nomination Dossier for the inscription of the property mentioned above on the World Heritage List in the forthcoming years and commit to cooperate in protection of its values.



The Hop Defence as the event's organizer of the traditional spring festival – the Chmelfest (Hopfest), Kruhové Sq., Žatec, 2014

Memorandum o spolupráci

při ochraně, zachování a prezentaci chmelařského dědictví a památek na pěstování a zpracování chmele v Žatci a okolí.

Partneři Memoranda:

Město Žatec

Se sídlem: náměstí Svobody 1, 438 01 Žatec

Zastoupené: Mgr. Zdeňkou Hamousovou – starostkou města

IČ: 00265781

a

Obec Zálužice

Ministerstvo kultury

Ministerstvo zemědělství

Ministerstvo pro místní rozvoj

Český národní komitét ICOMOS

Národní památkový ústav

Ústecký kraj

České vysoké učení technické v Praze - Fakulta architektury

Svaz pěstitelů chmele České republiky

CHMELAŘSTVÍ, družstvo Žatec

Chmelařský institut s. r. o.

Chmelobrana Žatec spolek

(společně dále jen „zúčastněné strany“)

uzavírají v souladu s ust. § 1746 odst. 2 zákona č. 89/2012 Sb., občanský zákoník, ve znění pozdějších předpisů, toto Memorandum o spolupráci (dále jen „Memorandum“)

Datum podpisu:

Preamble

Žatecký chmel a žatecké chmelařské dědictví, jeho kvalita a kontinuita, po dlouhá staletí ovlivňovaly stavební podobu města Žatec a měly vliv na utváření chmelařské krajiny v jeho širším okolí.

Soubor zcela unikátních chmelařských staveb, který svou koncentrací a rozsahem nemá ve světě obdoby, a vzácně autentický urbanistický a architektonický celek v Žatci byl svědkem bouřlivého rozvoje chmelařského oboru v široké oblasti, která se významně zapsala do dějin chmelařství. Již v roce 2007 byl proto Žatec zařazen na Indikativní seznam ČR jako nominant pro zápis na Seznam světového dědictví.

Toto Memorandum navazuje na dosavadní výsledky spolupráce, které pozitivně akceleroval předchozí dokument o spolupráci, uzavřený dne 14. listopadu 2013 mezi Městem Žatec, Ministerstvem kultury, Národním památkovým ústavem, Ústeckým krajem, Chmelařstvím, družstvem Žatec a Chmelobranou Žatec.

V průběhu let 2015 – 2017 byla připravena nominační dokumentace s názvem Žatec – město chmele a předložena k hodnocení. V roce 2018 Výbor světového dědictví doporučil ČR přepracování nominace, která by, kromě stavebního dědictví ve městě, obsahovala části dokládající historii pěstování chmele v okolí Žatce. Na základě návazných odborných jednání, která město Žatec v roce 2019 zorganizovalo v součinnosti s Ministerstvem kultury, Národním památkovým ústavem, Chmelařstvím, družstvem Žatec a Chmelařským institutem, bylo potvrzeno, že kulturně historické, krajinné hodnoty zdejšího chmelařského dědictví v kombinaci s respektovanou kvalitou žateckého chmele mají vysoký potenciál pro mezinárodní uznání, pokud bude s tímto cílem připravena tematicky bohatá komplexní dokumentace.

S cílem rozšíření pojetí nominace - zápis na Seznam světového dědictví ve smyslu získaných doporučení a potřeby podpory dotčených subjektů a institucí byli osloveni a ke spolupráci přizváni další partneři, kteří podporují zachování, ochranu a prezentaci území s chmelařským dědictvím.

Signatáři tohoto Memoranda si jsou vědomi světově výjimečné hodnoty, autenticity a integrity území s chmelařským dědictvím, které patří mezi významné památky Ústeckého kraje a České republiky.

Společným podpisem se níže podepsaní signatáři připojují k iniciativám Města Žatce a místních občanských iniciativ směřující k podání nominační žádosti na zápis výše uvedeného statku na Seznam světového dědictví v nejbližších letech a spolupráci při péči o zachování těchto hodnot.

I.

Popis a forma spolupráce

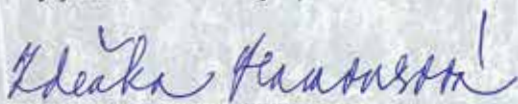
1. Signatáři povzbuzují spolupráci při zpracování nominační dokumentace pro žádost o zápis na Seznam světového dědictví.
2. Signatáři se připojují ke spolupráci při zpracování a pravidelné aktualizaci Management plánu a případných strategických dokumentů zaměřených na řešení společných otázek týkajících se statku navrhovaného k zápisu na Seznam světového dědictví.
3. Signatáři se připojují ke spolupráci v oblasti propagace a prezentace navrhovaného statku světového dědictví a informování veřejnosti o stavu jeho zachování a o projektech, které se ho týkají.
4. Signatáři se budou navzájem informovat o svých záměrech a projektech a budou při nich sledovat zachování výjimečných hodnot statku navrhovaného k zápisu na Seznam světového dědictví.

5. Pro naplnění Memoranda zajistí signatáři účast svých zástupců v řídicí skupině odpovědné za přípravu nominační dokumentace a budoucí správy statku.
6. Zásady spolupráce zde uvedené budou uplatňovány ode dne podpisu zúčastněnými stranami.

II.

Závěrečná ustanovení

1. Memorandum je vyhotoveno ve 13 výtiscích, každý s platností originálu, z nichž každá ze zúčastněných stran Memoranda obdrží jeden výtisk.
2. Platnost Memoranda není časově omezena.
3. Deklarované cíle lze dle potřeby aktualizovat.
4. K podpisu Memoranda přistupují zúčastněné strany s veškerou vážností, svobodně a s upřímným přesvědčením, že zásadám v Memorandu obsaženým se jejich zástupci nezpřonevěří.
5. Zúčastněné strany shodně prohlašují, že na jejich straně byly splněny všechny předpoklady a podmínky pro podpis Memoranda.
6. Pokud bude tato listina vyhotovena ve více jazykových verzích, budou se zúčastněné strany řídit její verzí v českém jazyce.



Město Žatec



Ministerstvo kultury

Ministerstvo pro místní rozvoj

Český národní komitét ICOMOS

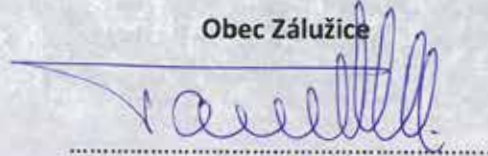
České vysoké učení technické v Praze
Fakulta architektury

Chmelařství, družstvo Žatec

Chmelobrana Žatec spolek

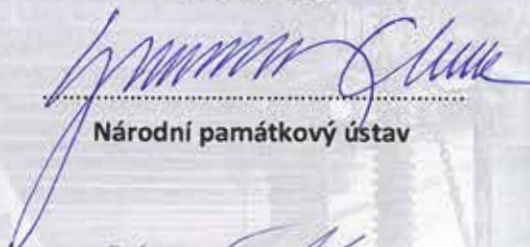


Obec Zálužice



Ministerstvo zemědělství

Ústecký kraj



Národní památkový ústav



Svaz pěstitelů chmele
České republiky



Chmelařský institut s. r. o.

5.f SOURCES AND LEVELS OF FINANCE

Information concerning sources for the financing of the rescue, restoration, documentation, and presentation of the cultural heritage of the nominated property, and in general, is organised according to the provider of specific funding. Projects implemented in the territory of the nominated property, are often realized through the principle of co-financing by the owner's own financial means along with those from international and/or national sources, for example, the government budget, regional and municipal budgets, using endowment funds, even sponsorship gifts from various sources, or participation of the public in mass events such as "save cultural heritage" schemes or crowdfunding campaigns.

Own resources

Even if funding sources are available and haven't been allocated for a given year, a varying percentage of the sum required, financed through the recipient's own resources, is a necessary condition for the pre-financing of all incurred expenses. Most of the costs are refunded only after the finalisation of the whole project or its part. The use of the owner's own resources is also necessary for covering his or her "participation" for the minimum strictly defined parts of the entire expenses of the project, from which the funding is calculated. Other issues are "ineligible expenses," which cannot be included in the financing, but which are usually necessary for the preparation and completion of the realisation of the investment intent.

Resources from credits

Credit generally creates other demands for expenses, but it is still a common and meaningful way in which to finance investments. The credit provides the possibility to quickly obtain the necessary amount of liquid assets for the payment of current expenses, and it can be used to get over a particular period, after which own financing or funding sources will be available.

External funding resources

The proposed part of the Management Plan lists potential sources of external funding, during the period of 2020 to 2030, next to each individually defined measure. This means funding sources coming mostly from public funds. External sources of finance are, in addition to the owner's own financial resources, the key to the implementation of the design part of the Management Plan.

5.f1

OWN AVAILABLE RESOURCES

Budget of the municipality of Zálužice (component part 01)

The budget of the municipality of Zálužice, which includes Stekník and part of the cadastral territory of

the component, is balanced. Expenditure items are also directed to ensuring maintenance of public spaces, public greenery and cultural events.

Budget of the Hop Research Institute (component part 01)

Hop Institute Budget (component part 01)

The budget of the Hop Research Institute generally contributes significantly to the agricultural production of the Research Farm in Stekník, which within the component, operates farming on hop fields, including their maintenance, and farm buildings with technical facilities. The budget also covers activities related to the presentation and promotion of hop heritage.

Budget of the Stekník Chateau (component part 01)

As mentioned above, the chateau is managed by a state-subsidised organization – National heritage Institute. The institution operates according to its own budget, approved by the founder, as one accounting unit. From this budget, an approved operating budget is allocated annually. Additional funds can be obtained from the programme of the Ministry of Culture of the Czech Republic within the State-owned Property Administration. In 2019, an application was submitted for a subsidy for future project documentation of 2.5 million CZK.

Budget of the town of Žatec (component part 02 and 01)

The Management Plan puts the responsibility for the realisation of the majority of defined future activities and measures on the Town of Žatec, and this is why the town budget is crucial.

The village of Trnovany (part of component part 01) is part of the town of Žatec.

The operational resources of the town budget are focused especially on the management of the property and also suggest modification in the system of conservation. The town has spent 500,000 CZK per year for this. Additional finances are spent on other measures, which are financed as overhead costs connected with the general administration of the town of Žatec. Investment resources from the town budget are crucial for the realisation of suggested investment measures. The town budget is frequently used as the obligatory co-financing sum of money on a particular subsidised project.

The budget of the town of Žatec for contributory organizations in the field of culture is: approx. 800 thousand CZK per year (Theater, Museum, Temple of Hops and Beer, Information Centers, Dočesná, local hop festivities). The town of Žatec supports a number of cultural events with a partial amount from the costs donated from its budget annually, for example, Easter

on the Square, Children's Day, Cinema Kinematograf, Farmers' Markets (4 times a year themed celebration), Advent and Carnival).

Contributions from the town budget for small cultural public-benefit activities and events amount to 350 to 400 thousand CZK every year, depending on a budget of the Commission for Culture and Tourism.

The Regeneration Fund of the town of Žatec

In connection with the work of the Steering Group for this nomination project, the necessity of establishing a local fund for promoting the values of the nominated property, independent from the state or/and region, became apparent. After the preparation stage, the Regeneration Fund of the town of Žatec was created from 1st January 2015, (file number 116/14). The statute of the fund and the principles for the provision of contributions from the regeneration fund were updated by the resolution of the Žatec Town Council on 20th June 2019, resolution number 124/19.

Its primary role is to help, at the simplest way, the historic heritage building owners with low sums of money in the repairs of their properties. This fund was created to preserve, restore, and increase the attractiveness of all the buildings within the component part 02 of the nominated property. This means not only the designated cultural heritage assets but all the structures contributing to the extraordinary integrity, authenticity, and other values of Žatec. According to the above mentioned resolution, the town council is obliged to provide financial resources in the amount of at least 1,000,000 CZK each year to applicants for funding the restoration and repairs of buildings within the component part 02 of the nominated property.

By the resolution of the Žatec Town Council No. 226/19 of 12th December 2019, the fund was increased by 3,500,000 CZK for 2020, i.e., for the amount of 4,500,000 CZK for 2020.

A transparent tender system distributes the funding resources for the provision of particular funds. With its simple principles, the Regeneration Fund represents a powerful motivational tool for the owners of parts of the structures within the property and supplements other financial resources.

The principles applied are available on the municipal website:

<https://www.mesto-zatec.cz>

Since its establishing, this programme is very widely used. The most notable examples of renewals in the years 2015 to 2020 include, for example:

- Replacement of roofing of the building of the original Hop Certification Centre No. 290 in Žatec;

- Repair of the facade of the Žatec Brewery and other structures that are part of the Žatec Brewery complex, including the replacement of damaged windows and the restoration of the roof cladding;

- Replacement of roofing and restoration of the facade of burgher house No. 148 in Žatec;

- Restoration of roofing of the former hop warehouses on P. Velkého Square, in Zeyerova Street and on Chmelařské Square in Žatec;

- Repair of the facade and roof of the house No. 1339 in Žatec, serving as a guest house for visitors.

Private resources of owners

Owners pay for the necessary repairs, maintenance, or investments from their own resources. At the same time, there is increasing motivation for private owners to finance joint projects of partner cooperation based on cooperation with the town of Žatec. Principal such owners are CHMELÁŘSTVÍ, cooperative Žatec, and Žatec Brewery.

5.f2 REGIONAL RESOURCES

In the Czech Republic, funding resources provided by local and regional governments can be usually used as available sources for smaller investments. As for Žatec and the Landscape of Saaz Hops (apart from the above-mentioned Regeneration Fund), the Ústecký Region also provides funding in relation to the property. Provided the extraordinary resources can be used for the co-financing of projects of the town and the municipalities in the nominated area. In previous years, the town of Žatec was a more active applicant, due to its administratively demanding structure. However, the newly prepared Management Plan already takes into account these opportunities and makes some recommendations for the rural component stakeholders.

Individual owners can participate in tenders for funding in the following programmes:

Program for the conservation and restoration of cultural heritage of the Ústecký Region

The main objective of this programme is the rescue and restoration of real estate and movable cultural heritage located within the area of the Ústecký Region, which has been declared as cultural assets according to the National Heritage Act No. 20/1987, On the State Heritage Protection, as amended.

<http://www.kr-ustecky.cz/kultura-a-pamatkova-pece/ds-99603/p1=204744>

The town of Žatec successfully applied for funding and renewed the following cultural heritage assets:

2019

The owner of the cultural asset, burgher house No. 108 in Žatec – the restoration of baroque paintings – 150,000 CZK.

2018

The owner of the cultural asset, house No. 119 in Žatec – restoration of the house – 300,000 CZK.

The owner of the cultural asset, house No. 108 in Žatec – Complete repairs of ceilings and floors – 200,000 CZK.

The owner of the house No. 209 in Žatec – repair of the roof, facade, and gallery – 300,000 CZK.

2017

The owner of the cultural asset, house No. 119 in Žatec – restoration of the house – 100,000 CZK.

The owner of the cultural asset, burgher house No. 152 in Žatec – restoration of the facade – 88,000 CZK.

The owners of the cultural asset, house No. 154 in Žatec – restoration of the house – 180,000 CZK.

Programme for the Rescue and Restoration of Small Heritage Assets, which complete the cultural landscape of the Ústecký Region

The main objective of this programme is the financial support of construction and artistic-craft works connected directly with the rescue and restoration of imminently threatened small built cultural heritage assets and pieces of architecture, which contribute to the values of the cultural landscape of the Ústecký Region, e.g. of immovable cultural heritage, which is not declared as cultural heritage assets according to the Act No. 20/1987 Coll., On State Heritage Protection, as amended. These are, for example, small religious structures, column shrines, crosses, freestanding chapels and ways of the cross, freestanding statues and sculptural groups, and other historical and cultural assets with local significance. (Not subject to this support are interior modifications, because they do not meet the general requirements to contribute to the cultural landscape values of the Ústecký Region). This programme can contribute to the larger vicinity of the town of Žatec and to promote small local pieces of heritage within the component part 01 and its buffer zone.

Programme for the Support of Regional Cultural Activities

This programme is intended for the support of cultural and educational events, exhibitions, concerts, and competitions in art companies, such as theatre, dance, music, art lessons, photos, movies, and workshops, which have an international, interregional or regional nature. Eligible activities are those with a focus on music, dance, film or literature festivals, and shows, exhibitions of artwork, theatre projects, sculptural symposiums, and

open-air events and publicity activities for monuments, culture events, anniversaries of villages, and clubs.

The main reasons for establishing this programme was to increase the cultural activities and provide support for local communities and other groups organising cultural events, groups ensuring cultural activities, and cultural representations of the region especially in shows and competitions. It also gives support to traditional folk culture, the development of creativity and esthetical education, active cultural production and amateur artworks, and protection, and development, of local traditions.

It is also aimed at supporting cultural activities, which are connected with the nomination processes of cultural properties for their inclusion on the World Heritage List in Ústecký Region.

The town of Žatec has not used financial support from that scheme so far, but it is regarded as one of the important resources for the future implementation of the Management Plan.

Fund of the Ústecký Region

The (formerly called) Fund of the Governor of the Ústecký Region was established by the resolution of the Regional government of the Ústecký Region No. 10/18Z/2007 from 28th February 2007, in compliance with the Section 5 par. 1 of the Act No. 250/2000 Coll., On budget rules for local budgets, as amended. By the resolution of the Regional government of the Ústecký Region No. 20/27Z/2011 from 21st December 2011, the Fund was renamed to the Fund of the Ústecký Region (from now on only as of the "Fund").

The main purpose of this Fund is to provide financial resources for the support of such projects and events, which cannot be financed from other funding programmes of the Ústecký Region. One of the primary purposes of the Fund is the support of charitable activities within the territory of the Ústecký Region.

The drawing of financial resources is governed by the Principles for the Provision of targeted financial support from the Ústecký Region Fund (after this referred to as the Principles).

During the first half of 2016 the Ústecký Region begun the long-term support of significant activities in the region through the project called "Rodinné stříbro" ("Family Treasure"). To maintain the continuity and preservation of the most significant events, with regional and interregional significance, the region participates in selected cultural activities by the provision of financial support or co-organisation. The Hop Harvest festival, "Dočesná," in Žatec, a traditional hop festival (see *Chapters 2.b and 5.h*), was selected as one of the 26 most significant events of the whole Region and was supported in 2016, 2017, 2018 and 2019.

The complex and structured scheme of regional funding is available on the web site of the Ústecký Region Regional Office: <http://www.kr-ustecky.cz>

5.f3 NATIONAL FINANCIAL RESOURCES RELATING TO THE PROPERTY

The government budget of the Czech Republic helps to realise smaller and mid-sized projects and events thanks to a variety of already existing and annually administered programmes each year. In the Czech Republic, there is a comprehensive system of funding programmes concerning the cultural heritage at the national level. Apart from this, there are also additional resources designated for cultural activities of individual organisations, clubs, or professional associations.

MINISTRY OF CULTURE OF THE CZECH REPUBLIC

Programme of Support for World Heritage

This programme called simply a "Programme of Support for World Heritage" was established by the Ministry of Culture in 2008 in order to meet the specific obligations of the Czech Republic connected with its role as a State Party to the Convention Concerning the Protection of the World Cultural and Natural Heritage, both systematically and in supporting, namely, the promotion and presentation of cultural heritage in the Czech Republic, inscribed on the World Heritage List and on the Tentative List of the Czech Republic. The principles for the drawing of financial resources from this programme are formulated for three main priority areas:

1. Preparation of management plans and their updating, support for nomination documentation.
2. Scientific and research activities, which can enlarge and promote professional knowledge about the history and values of the cultural heritage in question.
3. Presentation, promotion, and education activities related to world heritage properties.

In recent years, the town of Žatec has been awarded several subsidies from this programme, supporting activities related to the town's hop heritage and to prepare this nomination, for the following projects:

Year and Name of the project, subsidy in CZK

2020

Amendments of nomination documentation and its translation into English, subsidy: 169,000 CZK.

Survey and documentation of historical roof structures of burgher houses in Žatec – II. stage, subsidy: 116,000 CZK.
Hop Alphabet – Educational publication for children, subsidy: 112,000 CZK.

Thematic map and interactive web presentation of the hop growing landscape around the town of Žatec and the village of Zálužice-Steknik, subsidy: 66,000 CZK

2019

Due to the participation in the Midstream process, including the ICOMOS consultation mission, all activities were directed to the organisation and processing of additional information (Projects co-financed from above mentioned Ministry of Culture programme were therefore planned for the following year, 2020).

2018

Cultural heritage of hop cultivation and processing and beer production in Žatec – 2nd issue of the successful publication, subsidy: 159,000 CZK.

Survey and documentation of historic roof structures of burgher houses in Žatec – 1st Stage, subsidy: 118,000 CZK.

2017

A walk around the hop growing facilities in Žatec – material for guides and visitors to the town.

Žatec – the Town of Hops - representative book, subsidy: 200,000 CZK.

Žatec – the Town of Hops, representative book, subsidy: 238,000 CZK.

Use and specification of nomination documentation "Žatec – The Town of Hops" – multilingual purposes, subsidy: 58,000 CZK.

2016

Deepening the analysis of architectural, historical and heritage values of the Dreher's brewery in Žatec and a study for its possible further use, subsidy: 68,000 CZK.

2015

Research of film documents from the National Film Archive, priority 2, subsidy: 50,000 CZK.

2014

2nd phase of the Management Plan, priority 1, Proposal part of the Management Plan, subsidy: 210,000 CZK.

2013

1st phase of the Management Plan, Analytical part of the Management Plan, subsidy: 150,000 CZK.

Programme for Regeneration of Urban Heritage Reserves and Zones

Within this programme, there are provided contributions for the restoration of heritage designated as individual cultural heritage assets located in the parts of historical towns, which are declared as urban heritage areas (urban heritage reserves or urban heritage zones). Financial contributions from this programme can be

provided only if the relevant town has prepared its own Regeneration Programme and if there is the financial co-participation (together with the owner) of such towns on the conservation and/or restoration of particular cultural monuments. For the conceptual preparation and possible use of this funding program in Žatec, the Regeneration Programme was prepared and updated (see *Chapter 5.d*). The Regeneration Committee of the town of Žatec is a specific body on the local level, which ensures collective and transparent procedures when defining priorities for the protection of the nominated property and the distribution of funds. The Town Council of Žatec appoints the members of this committee. The urban component is widely protected in its entirety; therefore, the town of Žatec has been active in this collective regeneration process and had received funding from this programme annually. The review of recent years is as follows

2019, total costs 2.1 million CZK, subsidy: 769,000 CZK;
 2018, total costs 2.7 million CZK, subsidy: 590,000 CZK;
 2017, total costs 2.8 million CZK, subsidy: 1,154,000 CZK;
 2016, total costs 2.2 million CZK, subsidy: 815,000 CZK;
 2015, total costs 1.5 million CZK, subsidy: 710,000 CZK;
 2014, total costs 2.7 million CZK, subsidy: 605,000 CZK;
 2013, total costs 2.3 million CZK, subsidy: 695,000 CZK;
 2012, total costs 2.6 million CZK, subsidy: 800,000 CZK;
 2011, total costs 2.0 million CZK, subsidy: 300,000 CZK.

Programme for Conservation of Rural Heritage Reserves, Rural Heritage Zones and Landscape Heritage Zones

This programme is a funding scheme that is a part of a comprehensive heritage conservation to support the restoration and preservation of immovable historical sites, in particular, vernacular historical assets, such as farmsteads, cottages, and chapels, column shrines, but also is in favour of the restoration and preservation of rural churches, rural chateaus, strongholds, technical structures, statues and sculptures, and monuments and gardens which are located on the territory of rural heritage reserves and zones and landscape heritage zones.

As such, this programme is the most suitable for the component part 01 in near future. The component part 01 includes the Stekník Rural Heritage Zone of Stekník (see *Chapter 5.b*). The Management Plan already contains a summary of recommendations for drawing from this programme for the following years.

Programme for the Rescue of the Architectural Heritage

This programme provides contributions for the conservation and/or restoration of historical monuments and other declared cultural heritage assets, which are the most precious part of the architectural heritage, for example castles, monasteries, historic gardens and churches etc., especially for work focused on the rescue of particular cultural assets or the rescue

of such parts, which represent the most important attributes of its values.

The town of Žatec, since 1998 (when a subsidy of 400,000 CZK was received for house No. 518), has not used any further financial support from this scheme so far. Still, it is regarded as one of the most important resources for the future implementation of the Management Plan. (In previous years, some subsidies from this programme were drawn to restore cultural heritage assets in the vicinity of Žatec).

Emergency Programme

From this programme, the Ministry of Culture provides contributions for the rescue and conservation of immovable cultural heritage assets directly endangered, mainly due to long-term neglect and lack of maintenance, static failures in the structural features of a declared cultural heritage asset, roof repairs and in case of unpredictable natural disasters, and weather effects.

The town of Žatec has not used financial support from this scheme so far, but it is regarded as one of the possible resources for the implementation of the Management Plan. However, the programme is successfully used by other owners of immovable cultural heritage assets located in the monitored area, including buildings in the buffer zone, such as:

2018

No. 171 Žatec – static security, 300,000 CZK.
 The Evangelical Church in Žatec – repair of turrets, 480,000 CZK.

2017

The Evangelical Church in Žatec – repair of the main tower, 600,000 CZK.

Programme for the Restoration of Movable Cultural Heritage Assets

Through this programme, contributions for restoring movable cultural heritage assets, especially those representing significant work of art or artisan skills and located in buildings, which are accessible to the public and are used for culture, educational or religious purposes, (mostly paintings and statues in churches, are restored thanks to this programme). The programme can be regarded as one of the resources for the Management Plan for specific parts of the interiors of historic buildings.

Support of the Restoration of Cultural Heritage through Municipalities with Extended Powers

The offices of municipalities with extended powers are historically the basic bodies through which the national administration has funded the preservation of cultural heritage. This funding programme allows the Ministry of Culture to allocate contributions from the government budget for the preservation and restoration of cultural heritage assets, through the municipalities with extended

powers, in order to help them in providing more efficient support to the declared cultural heritage assets that do not fit into other above mentioned programmes of the Ministry of Culture.

The programme can also be regarded as one of the resources of the Management Plan implementation for both component parts.

Programme of Cultural Activities Related to the Heritage Conservation

This programme enables financial support of charitable projects submitted by clubs or other organisations, of which activities help with the protection of the both immovable and movable declared cultural heritage assets in the Czech Republic and with their promotion.

Programme for Support of Rescue Archaeological Research

This programme was founded by the mutual arrangement of the Ministry of Culture and Ministry of Finance as one of the tools for the fulfilment of the international obligations of the Czech Republic in compliance with the European Convention on the Protection of Archaeological Heritage. It aims to support archaeological rescue research performed by the public-benefit bodies established by the Ministry of Culture when they have the relevant authorisation for such activity.

The territory of the nominated property in Žatec has already been the subject of archaeological research and several excavations during the last few decades. This programme can be still regarded as one of the other resources for the Management Plan, especially for specific cases of building activities concerning unbuilt areas.

Support for research activities

Programme for the Support of Applied Research and Development of the National and Cultural Identity during years 2016-2022 (NAKI II)

This programme for the support of applied research and development of the national and cultural identity during 2016–2022 (NAKI II) was approved by the Government Resolution No. 11 from 2nd January 2014. The total expenses for the duration of this programme (2016–2022) are expected to be approx. 2.857 million CZK. Support from the government budget will be in the amount of 100 % of the qualified expenses of the project.

Applicants or recipients of any help from this programme or other participants in the project can only be research organisations. Based on the successful application of 2015, the regional department of the National Heritage Institute in Ústí nad Labem has initiated the research project called "Documentation of historic structures used for the processing of hops," which will run in the period 2016–2020.

The main objective of the project is to gazette the basic documentation of historic structures, mainly the various kinds of buildings used for the processing of hops and which facilities are an important part of the town's urban architecture and its cultural landscape. Through the research of the building fund and archival resources, modifications in the technology of hop processing were monitored. Based on this information a special map and database have been created based on the system platform IISPP/GIS of the NHI and the methodology for the use of currently commonly available devices for the primary documentation of built heritage in this field. The results of the research will also be used within education, and promotion activities focused on the hop-related heritage in Žatec.

THE MINISTRY OF REGIONAL DEVELOPMENT OF THE CZECH REPUBLIC

In order to ensure reaching the objectives of the Strategy of Regional Development of the Czech Republic, there is also programme support financed from national resources, apart from those programmes which are co-financed from the funds of the European Union. Funding titles with a national extent are also:

THE NATIONAL PROGRAMME FOR THE SUPPORT OF TOURISM

The main objective of the National programme for the support of tourism is to create the tool, which will efficiently contribute to the support of tourism. It is a scheme based on the government budget providing subsidies to entrepreneurs and since 2015 also to municipalities for selected activities supporting tourism.

MINISTRY OF AGRICULTURE OF THE CZECH REPUBLIC

The State Agricultural Intervention Fund (SZIF) is an accredited paying agency – a mediator of financial support for national resources and resources from the European Union. The Rural Development Program (PRV), which draws funds from the EAFRD, replaced the Horizontal Rural Development Plan (HRDP) and the Operational Programme Rural Development and Multifunctional Agriculture (OP RVMZ). Under the Common Agricultural Policy, three principles apply in the EU – a common market for agricultural products at everyday prices, favouring EU production to the detriment of external competition, and financial solidarity – funding from a common fund to which everyone contributes. The pillar of financial support provided is direct payments paid by the simplified system, per hectare of cultivated area.

The Rural Development Programme (RDP), launched in 2007, is an excellent opportunity for agriculture. Equally important financial assistance is the market measures of the Common Market Organisation, which addresses fluctuations in market supply and demand and provides farmers with greater security and stability in the marketplace.

In its measures and recommendations, the Management Plan takes into account the possibilities of drawing also from this programme.

5.f4 RESOURCES OF EU

On the national level, the Czech Republic has adopted such principles for the use of the European Union funds, with the help of which it can partly fulfil its obligations arising from the World Heritage Convention.

During the programming period 2014–2020, it was possible to draw resources from structural funds, especially the ERDF, for bigger and more significant projects. The priority areas of the suggested operation programmes were crucial in relation to the suggested measures. The programmes for the programming period 2014–2020 were defined by the Resolution of the Government of the Czech Republic No. 867 from 28th November 2012.

The following programmes were selected for the use within the nominated property and its sustainability:

The Operational Programme for Enterprises and Innovations for Competitiveness

Specific objective 2.3: Increase the usability of the infrastructure for business. Basic information can be found here -

<http://www.czechinvest.org>

In the previous programming period 2007–2013, the town of Žatec completed the project The Temple of Hops and Beer within the funding programme ROP NUTS II Northeast. Between 2009 and 2011, there was the repair of stone pavements near the Museum of Hops, the building of the Hop Lighthouse—an observation tower, and a microbrewery with a restaurant were created through the highly appreciated sensitive conversion of historic hop processing buildings, the Renaissance malt house and a historical warehouse and packing room for hops were revitalised. The total expenses were approximately 252 million CZK; funding was in the amount of 211 million CZK.

For the project **Marketing of tourism, Žatec hop area, The Temple of Hops and Beer** with its completion during 2014 and 2015, funding was received from the structural fund ERDF to the total amount of 777,161 CZK with total expenses of 1,173,000 CZK.

Integrated Regional Operational Programme (IROP)

Specific objective 3.1: Increase the efficiency of presentation, strengthen the protection and development of the cultural heritage.

The objective is to support projects focused on the revitalisation and higher attractiveness of the cultural

properties inscribed on the World Heritage List and on the Tentative List of the Czech Republic, national cultural heritage assets (listed by 1st January 2014).

Authorised applicants for this objective were the owners of cultural heritage, or bodies with the right to administer such heritage (according to the cadastre) other than natural persons, who are not entrepreneurs. The amount allocated from the European Fund for regional development was 3 billion CZK.

In March 2016, the town of Žatec applied to this programme for funding for the project Revitalisation of historical cultural heritage asset, former burgher house No. 52 in Žatec, currently the Municipal Library. (Integrated Regional Operational Programme - Call 13). In the 2nd half of the year 2016, the town of Žatec successfully applied for funding for the project Revitalisation of the cultural heritage asset No 1 in Žatec, The Town Hall. IROP – Call 52.

Other projects currently implemented within IROP:

Rescue of cultural heritage asset, building No. 85 – Museum of Brewing in Žatec

Applicant: Žatecký pivovar, spol. s r. o.; IROP - 13th call.

Real rescue and partial restoration of immovable cultural heritage asset No. 102 - Meder's house in Žatec

Applicant: Spolek Mederova domu; IROP – Call 52

Restoration of the synagogue and rabbinical house in Žatec

Applicant: the owner of this protected historic ensemble; IROP – Call 52.

Operational Programme Environment:

Specific objective 4.4 – Improving the quality of the environment in settlements.

Cooperation Programme SN-CZ 2014–2020 (Free State of Saxony – Czech Republic) – Thematic objective 6, Investment priority C Preservation, promotion and development of natural and cultural heritage, Measure: Investment for the preservation and protection and support of the development of cultural and natural heritage and artistic buildings and cultural projects and other public greenery.

5.f5 FINANCIAL SOURCES FROM CHARITIES AND FOUNDATIONS

Several charities and foundations have developed an active and friendly tradition of financing the culture and restoration of small heritage assets. In the territory of the Ústecký Region, it is possible to draw financial resources in the amount of tenths to hundreds of thousands Czech Crowns for the restoration of cultural heritage – for neglected local heritage assets through the

foundation called Nadace Občanského fora <http://www.nadaceof.cz/>. Protection of cultural, artistic and religious buildings, traditions, and natural and living environment is the objective of the Purkyně Foundation <http://www.purknadace.cz/>.

The foundation Via support rescue projects of small heritage structures with local significance from resources

of the Cultural Heritage Fund <http://www.nadacevia.cz/cz/>. Planting of new greenery of original tree species in the form of alleys of trees and tree avenues is one of the priorities of the ČEZ Foundation www.nadacecez.cz/cs/vyhlasovana-grantova-rizeni.html.



5.g SOURCES OF EXPERTISE AND TRAINING IN CONSERVATION AND MANAGEMENT TECHNIQUES

Administrative decisions in the field of the state heritage protection are implemented by the staff of the Žatec Municipal Office, Department of the Heritage Protection (see *Chapter 5.d*). All persons, who are processing documents for such decisions by a particular administrative body, or who are implementing such decisions have the relevant higher or university level education.

The competencies of individual executive bodies and professional organisations, as well as the owners, are listed in *Chapter 5.d*.

Expert opinions and advising on the methods of repairs and conservation of individual cultural heritage assets in the nominated property are prepared by qualified staff of the National Heritage Institute. (see *Chapter 5.d*) This also applies to any construction activity in the area of the protected area of both components parts, and partly within the scope of the entire buffer zone (see citations in *Chapter 5.d*).

In the Czech Republic the necessity to provide specific education for adults involved in many fields of society has been recognized long ago. Such targeted education is organized by several departments of government, as well as by universities, mainly for offices protecting the various public interests. The state heritage protection is among them.

The National Heritage Institute has been organising a course of historic preservation studies for a long time for people who have finished higher education. Since 2002 a one-year, additional studies course of historic preservation for people with a university education has been available. These studies are included in the general programme of Lifelong Learning. The studies are targeted mainly at the junior staff of the departments of the National Heritage Institute (NHI) and also at interested people from executive authorities or companies who are focused on project designing or the realisation of the restoration of cultural heritage. Experienced staff from the NHI and other external experts from relevant universities, the Ministry of Culture and other organisations, provide the lectures.

The National Heritage Institute is also focused on the education of children, young people, teachers, and specific artisans. The NHI's activities have been enlarged in organising thematic courses on repair and restoration techniques. The multifaceted successful project called *Památky nás baví* (We like cultural heritage assets) took place in 2011-2015 and its results are still presented on this specific website:

<http://www.pamatkynasbavi.cz/o-projektu>.

The results were supplemented with both exhibitions and conferences. A series of published methodological principles aimed at various target groups are available here:

<http://www.pamatkynasbavi.cz/metodiky>

National Heritage Institute (NHI) and its predecessors have prepared several publications, including various methodological materials. Most of them are available in the e-shop (<https://www.npu.cz/e-shop>) or free for download on its web site. The e-shop system enables to find them under the key-word "metodiky" in the filter. The full review of methodological texts since the 1980s with links to those that are available on-line can be found here.

http://wiki.npu.cz/index.php/Edice_Odborn%C3%A9_a_metodick%C3%A9_publikace

A number of methodological materials produced by the NHI also concern landscape, structural, and architectural heritage and will also be used for the nominated property.

The National Heritage Institute also has several specialised methodological centres in its organisational structure. These centres provide space for concentrated research on a particular topic and, at the same time, a background for presenting research findings and passing them on to other experts and the public, most often in the form of exhibitions, lectures, or workshops. Their methodological scope also deals with topics that can be used in the maintenance and enhancement of the nominated property in the future.

The Ministry of Interior, through its contributory organisation, the Institute for Public Administration Prague, regularly organises educational courses, focused on different aspects of their scope of authority, mainly for professional staff of the state administration offices at all levels. This is why the expert course devoted entirely to the field of historical heritage preservation and administration of museum collections has so far been organised for more than 15 years. Also, the lecture series is provided by experienced lectures from the NHI, experts from the Ministry of Culture and other organisations. There is similar training focused on building law and spatial planning issues organised for the staff of executive bodies in this sphere as well.

Jan Evangelista Purkyně University (UJEP), Ústecký Region

Within the Department of History of the Philosophy Faculty of the UJEP in Ústí nad Labem, there is the study programme of Historical Sciences. The studies provide education, not only for future historians and history teachers but also for specialists in the field of historic

preservation and archival science in its bachelor, masters, and even doctorate programmes. The UJEP also has the authorisation to perform habilitation proceedings in this study programme. This faculty also organises a unique programme in the Czech university system called The Documentation of Cultural Heritage (bachelor degree), which provides students with theoretical knowledge and practical skills for the documentation of cultural heritage, especially using modern technology. For the regional mission of the UJEP, there is a significant programme called Cultural-Historic Regional Science (bachelor and master's degree), of which graduates become specialised in archival science and historic preservation, and they have a lot of possibilities to work in various national, local government and public institutions. In this field of the university, there is also the Centre for Documentation and Digitalisation of Cultural Heritage (CDDKD), which actively cooperates with the Faculty of Environment of the UJEP, and it connects humanistically oriented research with technical and natural fields, especially in the field of geoinformatics. It is focused on the use of the latest technology in the documentation of monuments and the documentation and digitalisation of historical resources.

Within the Faculty of Architecture of the Czech Technical University in Prague (FA ČVUT), there are permanently developed programmes focused on historical architecture and the wide variety of built heritage, its theory, history, and the practical preparation of graduates for project designing in an authentic environment. The faculty has also been cooperating with the town of Žatec for a long time.

The Institute of the Cultural Heritage Preservation within FA ČVUT.

The activities of this institute are focused on the teaching of cultural heritage preservation. In regards to its theory and practical exercises, it is focused on the knowledge, protection, and restoration of architectonic and other cultural heritage assets and conservation areas. It gives a particular relation to the conservation and restoration of built heritage. Attention is also paid to the design of new sensitive entries, of current architecture, to the historic environment. Preparation for architects in the responsible treatment of historical structures has been developed on many levels. It is mainly about understanding the role of cultural heritage in the present and creating preconditions for the competent identification of values of cultural heritage. The study is about developing further knowledge about historical materials and construction principles, the appropriate restoration and renovation procedures of various methodological approaches, and especially traditional constructions and technology. The current staff of the institute are closely connected with the National Committee of ICOMOS, so the international principles concerning cultural heritage are very carefully applied within the educational process.

In 2020, the Institute joined the interactive map project called: Thematic map and interactive web presentation of the nominated area Žatec and the Landscape of Saaz Hops.

The map is complementary to this nomination project, therefore it shows boundaries of all protected areas, mainly both components of the nominated property, including the proposed shared buffer zone.

The map is accompanied by a descriptive legend and a set of photographs of selected objects representing the values of the nominated property as well as panoramic shots of the hop landscape; the map also includes brief descriptions. The thematic map was created both in the form of a fixed poster designed for viewing, as well as for large-format or small-format printing. The map shall be presented in the form of a web application enabling its interactive display of the details of individual sites, with the possibility of web connections with other text, graphics or other documentation. The thematic map in the form of a large poster, folded leaflet, brochure or an interactive application is intended for the wide presentation of the nominated property for the professional and general public.

During the last few years, this institute has organised several student projects on the topic of the possible uses of historical hop-related buildings and constructions in Žatec, including a public presentation in the form of a workshop and exhibition. Other projects dealt with the currently empty big historic granary at Stekník or at drying barn at Trnovany. This way, such projects drew wider public attention to the hop related heritage of the nominated property.



The loft of the burgher house with the right to brew beer with the numbers of hop bales recorded on the beam, No. 7, Obránců míru Street, Žatec, 2020

5.h VISITOR FACILITIES AND THEIR STATISTICS

Due to the nature of the serial property and its division into rural and urban component parts, facilities for visitors are mainly concentrated in the town of Žatec. By its nature, the component part 01 is intended primarily for cycling and hiking. So far, the biggest attraction is the Stekník Chateau. Measures under the Management Plan will address the issue of the future tourist infrastructure of the component 01.

The connection between Žatec and hops is widely known, mainly due to the annual seasonal activities that take place in the area, which are also reflected in the national media.

In connection with the historical development of the region, the most important events with a long tradition include the spring Chmelfest (Hopfest) and the autumn Dočesná (Hop Harvest Festival), these are activities directly connected with the celebration of the seasonal periods of hop growing and brewing. Visitors from a wide area and more distant places repeatedly come to these events. The events are popular with representatives of different age and social groups of citizens, including the younger generation. They are traditionally associated with the presentation of traditions as well as music festivities. The Dočesná has a historically documented tradition dating back to the 19th century (see *Chapter 2.b*).

5.h1 TOURIST ATTRACTIONS AND SERVICES, SPECIFIC EQUIPMENT AND ATTRACTIVENESS RELATED TO THE HOP TRADITION

Component part 01 Saaz Hop Landscape:

The hop fields, which spread around the village of Stekník, often carry a much broader message than the average visitor might think. They are connected to the Research Farm of the Hop Research Institute CO., Ltd, in Žatec. The required experiments include verifying the effectiveness of new plant protection products (especially against downy mildew, hop aphids and hop mites), breeding new hop varieties (a world collection of hop genetic resources is available), testing innovative approaches to hop growing, including the use of irrigation and multispectral analysis of data obtained from overflights of uncrewed aerial vehicles over the hop fields. Little is known about the contract research commissioned by renowned breweries specifically from Japan.

The hop fields of the Research Farm and its facilities (picking machines, hop drying kilns) are the starting point for numerous excursions from the professional and general public not only from the Czech Republic but also from abroad. In Žatec and its surroundings, there

are the residences of the most significant hop traders, who like to accompany their business partners, such as brewery representatives, here. The synergistic effect of the demonstration farm contributes to the spread of awareness about the hop plant and the sustainable development of the commodity in general.

The Hop Research Institute and its Research Farm serve not only for the needs of Czech hop growers, but the institution is also involved in the international hop scene. The Institute regularly participates or hosts national and international conferences within the International Hop Growers Association (I. H. G. C.) and symposia under the auspices of the International Society for Horticultural Science.

Cultural events arranged by the town itself represent rich and varied occasions for the cultural and social entertainment of its inhabitants and visitors to the region too. Talks given by artists and people of note, exhibitions, concerts and, thematic and sport, events help to enhance a feeling of unity of the inhabitants with the town and region.

The Society for Horticultural Science (International Humulus Symposium). Conferences are devoted to the protection, agronomy techniques, and economics of hops. The research also includes various educational activities in the form of training of hop picking machine, and kiln, operators, training in the safe handling of plant protection products, with a fixed number of excursions and internships.

The attractiveness of the place is very high, especially for visitors who have never seen hops growing with their own eyes. It can definitely be said that there are just a few places where a main road is lined on both sides by hop structures. The hop panorama is even more impressive for cyclists riding along a cycle path or for all those interested in heading to the chateau. It is also accessible for pedestrians, for whom a relaxing hop trail has been built with an accompanying explanation of this crop and local history.

The Stekník Chateau is the main tourist centre of this hop growing region. On the website, it presents itself as "Stekník in the fields of hops," and the aerial photographs prove this.

<https://www.zamek-steknik.cz/cs/o-zamku/steknik-v-mori-chmelnic>

At present, the chateau offers visitors a total of four sightseeing tours: two with a guide and two self-guided. During the visitor's season, from April to October, also several cultural events for visitors are organised, some of which are annual. Special tours with an explanation of



the restoration process at the chateau are also important, as are permanent and travelling exhibitions. The chateau also provides the possibility of hosting a wedding ceremony in the chapel and chateau garden with a view of the landscape of hop fields.

Hop Trail

The hop trail allows the visitor of this component part an exciting walk to understand the whole process of hop growth and allows a year-round understanding of its features. It was designed in 2019 in a professional cooperation between the Hop Research Institute Co., Ltd. and the Stekník Chateau. The two walking circuits aim to bring hops and their history closer to the public. The whole trail has a detailed web presentation in Czech, English and German, which contains explanations and explicit texts for each proposed stop. The authors of the trail have prepared information in two thematic lines:

The Hop Trail has stops of the following names:

1. Different climate, different hops
2. How hops climb
3. Sex life of hops
4. Hops homeland – floodplain landscape of the river Ohře
5. Hop fields in the landscape
6. Hops as chemical factory



The grand opening of the Hop Trail, Stekník, 2019

7. Tasty together: the coexistence of hops and humans

8. Hops and beer, inseparable allies

The Historical Trail contains the following areas of information:

1. History of the village of Stekník
2. Personalities associated with Stekník
3. The history of the Stekník Chateau
4. Pilgrimage site Stekník
5. Czechoslovak military fortifications

<https://cestouchmele.chizatec.cz/>

The Management Plan envisages the addition of this information in the coming years using the nomination documentation and through the gradual expansion of other services for visitors.

Component part 02 – Žatec

Information centres are available in the territory of component part 02. A tourist information system has been set up within the property and its wider surroundings. It currently includes three walking circuits mapping the inner and remote parts of the town, which lead tourists to the main sites of the nominated property and are focused on all the significant hop growing buildings on the routes. In addition to the main cultural heritage associated with the heritage of hop processing, there are many cultural facilities in Žatec, which complement the attractions of Žatec throughout the day, and year, and provide rich cultural activities completing the spectrum of experiences available. The facilities correspond to the size of the town and its territorial scope and fulfil the expectations and needs of the target user groups.

Cultural events, arranged by the town itself, represent rich and varied occasions for the cultural and social entertainment of its inhabitants and visitors to the region, too. Talks given by artists and people of note, exhibitions, concerts, and thematic and sport events, help to enhance a feeling of unity of the inhabitants, and visitors, with the town and region.

"The smallest hop field in the world"

On the location, where once stood the Church of the Holy Cross, in the northern part of the component part 02 next to Svobody Square, is located another local rarity, the smallest hop field in the world. On this location, many different buildings and even memorials were built over the centuries. In 1930 bronze lion was placed on the empty pedestal as a monument to the victims of World War I. This memorial was disassembled in 1942 because of the order for the collection of non-ferrous metals for war purposes. Since 1967, for more than half a century, hops have been grown on this 70 m² area on a traditional wire construction of the "Saaz hop trellis" type. After several decades of its existence within a living town, this hop field is considered one of the symbols of the town of Žatec. The hops are carefully grown there and celebrated according to all the seasonal needs of this identity-making crop,



presenting to residents and visitors the whole cycle of hop growth in hop fields, which are so characteristic of this area.

The small hop field next to Svobody Square, near the historic town hall, is, therefore, an utterly symbolic place where events take place as part of traditional hop growing festivities, both the spring Chmelfest at the beginning of the season and the Dočesná, when the last hop plants are removed from the structure. This event defines the entire multi-day celebration.

The Temple of Hops and Beer

The Temple of Hops and Beer in Žatec ("Chrám chmele a piva" in Czech) is a visitor and interpretation centre situated in an advantageous position at the southern boundary of the component part 02 (see also *Chapter 2.a*). The establishment of this centre, by the town of Žatec between 2009 and 2012, through the sensitive adaptation of the premises of historic hop warehouses, was the biggest investment action of the town in its modern history. Thematically focusing on the unique hop processing traditions of cultivation and the trade-in hops in the Žatec region proves the prioritisation of the town whose management maintains a uniform view on the specific values of the town. It is focused on tourists of all age groups. It was prepared conceptually so that it forms a compact complex suitable for an all-day visit for the whole family and is open all year round. More information is included on web pages in a number of language versions that are in the continuous process of their completion:

<http://chchp.cz/cz/chram-chmele-a-piva/chram-chmele-a-piva>

The visitor centre of the Temple of Hops and Beer consists of the following parts:

The Hop Lighthouse is, in fact, a viewing tower, enabling the town and region to be viewed from several height levels. The tower includes a unique elevator with 3D projection summarising interesting information related to the history of Žatec, as the town of hops and includes

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Visitors at the Heraldic Hall, the Temple of Hops and Beer, Prokopa Velkého Square, Žatec, 2016

the history of hops. At the top of the tower, there is an observation platform with a view of Žatec and its surrounding landscape and roofscape. Spotlights have been installed at the top of the Hop Lighthouse, which are switched on to announce upcoming festivities in Žatec.

The Hop Labyrinth is an educational and entertainment part of the area situated in the building of an old hop warehouse. It utilises its preserved character and authentic details to give an idea about the functions of the exhibits on display. It is accessible using a footbridge from the Hop Lighthouse and thematically completes the information acquired from the elevator's 3D projection.

The Heraldic Hall is a large hall on the ground floor that is dedicated to the histories of the families of hops producers and traders in the form of a map presentation, many authentic exhibits, and emblems of towns and villages, connected with hop growing.

The Hop Astronomical Clock, installed in the exterior above the entrance to the courtyard, is a unique world object. The Hop Astronomical Clock portal shows an allegory of the hop growing year. It was designed especially for Žatec in close cooperation with expert partners and has become the favourite destination of local people as well as visitors.

Restaurant and microbrewery U Orloje, "At the Astronomical Clock", offers a logical continuation of the sightseeing tour around the whole complex. Beer is brewed here in front of the visitors' eyes, and the

restaurant area is situated in an authentic warehouse interior with a carefully preserved wooden supporting structure and numerous style elements. The ingredients necessary for tasty and healthy beer are illustratively presented here. The appropriately aged beer is tapped directly from the brewery storage tanks. The facility can be used for business negotiations or workshops and may be utilised for thematic conferences.

The restaurant includes children's play areas, both outdoor and in, with a café.

The Monastery Garden, with a total area of over 8,500 m², offers exciting features such as a relaxation area with a playground, fountains, aviaries with birds, a paddock for small animals, a herb garden, a place for cultural performances, and many other interesting details. The garden is located near the Hop Lighthouse and is open daily from 9:00 a.m. till 8:00 p.m., and from 10:00 a.m. till 4:00 p.m. in winter. In the part of the monastery garden, which is dedicated to various examples of crop production, a model hop field of an older type was established, ie. in the form of a wooden poles supporting the hop plants. It complements the information about the history of hop growing in the area.

Within the garden the former **Capuchin monastery** has preserved, in the premises of which a community and cultural centre is to be established. Various cultural events and activities are envisaged to take place here in the future. Exhibitions will take place here (including those that will carry the idea of preserving cultural heritage -



Participants at the meeting of the Hop Knights, Capuchin Monastery Garden, Žatec, 2019



an exhibition of crafts and objects and the Žatec dialect), interest groups, communities, and social services will run their activities here.

The Malt House Gallery, in Masarykova Street, is a unique, authentic building, which was built in the years 1573 to 1574, according to research. The building served as a local malt house until the 1780s when the malting operation was closed after 200 years. In 2010 the building was completely restored with partial reconstructions, offering a visual presentation of the original building, and enabling a more extensive acquaintance of the building thanks to its social function. Today, on the ground floor, the malt house offers an information office that also sells souvenirs, and includes public access to the internet with information about Žatec. Those interested in films will enjoy the permanent exhibition of Žatec on Film, with short excerpts of movies shot in Žatec. There is also a small television studio for children who can try their presenting and acting skills in front of a camera.

Archaeological findings from the construction of the Temple of Hops and Beer are presented in the original kiln. The 1st floor of The Malt House includes a Modern Art Gallery and a lecture hall. The building is greatly used thanks to the activities arranged for different age groups. On the ground floor there is also a large model of the entire component part 02, highlighting all the structures associated with the processing of hops.

Hop Museum Žatec

The Hop Museum Žatec, spread over several, authentic and mutually connected, historical buildings on the southern part of the component part 02, is the largest specialised exhibition of its kind in the world. The area of 4,000 m² presents the development of hop processing from the early Middle Ages up to the present. In addition to the interesting collections of the Hop Museum, the visitors can acquaint themselves with the complex itself, which is a technical, historical cultural heritage asset and an example of industrial special-purpose architecture at the end of the 19th century. The area includes many authentic details and technological components and presents, very illustratively, the process of drying and processing hops, including storage and marking, before dispatching them for merchandising. The exhibition is completed with a collection of period photos and written documents on hop growing and brewing. Also on display are tools, means of mechanisation, and historical machines connected with the growing and processing of hops and the production of beer. The Hop Museum also provides information about notable individuals, who established the tradition of hop breeding in Žatec, developed knowledge in hop processing, and who are followed by the activities of the current generation of hop growers and the activities of the Hop Research Institute.

<http://www.chmelarskemuzeum.cz>.

The preparation of a foreign language version of the website is part of the Management Plan.

Žatec Brewery

Žatec Brewery Co., Ltd. (Žatecký pivovar spol. s.r.o.) lies at the northern end of the component part 02. It continues the tradition of brewing beer in its original place since its foundation at the end of the 18th century. Currently, the brewery offers three types of guided tours to its visitors, where they see the history of the brewery and the process of brewing. Due to the great interest in the process of brewing beer, as the main product with the irreplaceable use of hops, the management of Žatec Brewery has expanded the information in the sightseeing circuits to include the processing of hops.

<http://www.zateckypivovar.cz/cs/>

Beer Brewing Museum of the Žatec Region

Žatec Brewery Co., Ltd. is the owner of a historical monument, historic burgher house No. 85 in Žatec. The house is located on the corner of Žižkovo Square and Horova Street, in the immediate vicinity of the brewery. House No. 85 is built on the site of an original medieval house using the original cellar with a Gothic stone portal.

In 2016, the brewery, under the direction of the Ministry for Regional Development, applied for support from the IROP programme for the revitalisation of selected historical monuments within the brewery site. The Ministry of Regional Development decided to allocate a subsidy of 85 % of the budgeted costs. Using its resources and this subsidy, the brewery completely renovated the house, including the restoration of the cellar and its stone portal. Subsequently, an exhibition of the Žatec brewery has been installed in the interior of the restored building.

The museum's exhibition will captivate visitors with its modern and distinctive design, where quality replaces quantity, and great experiences overshadow the small space of the museum. The interior and exhibition of the museum will fill the visitor with adventure and, at the same time, motivate them for a subsequent tour of the Žatec Brewery.

The museum was opened to the public in August 2020.

<http://www.zateckypivovar.cz/muzeum>

The Museum of Homolupules

The Hussite Bastion is the only standing bastion of the town fortifications from before 1463. In the oldest drawing of Žatec from the beginning of the 17th century, two more robust bastions can be seen on the western side of the town. After 1836, this structure was used for residential purposes. In 1946, it partially collapsed and was newly reconstructed.

Since 2003, it has housed the humorous Museum of Homolupules. This museum was created as a thematically coherent presentation of the fate of a fictional medieval hop nation. Exhibits describe their life and hop culture. The long-term activities of a group of local inhabitants of Žatec are connected with this museum. This group continually promotes hop traditions and was one of the initiators for the nomination of the hop heritage of the Žatec region to the World Heritage List. Over the decades of its activity, the association has developed a whole system of notable events, including uniforms, banners, and other symbols associated with hops. It operates under the name Chmelobrana (Hop Defence Žatec). The presentation of the association enriches all regular, or individual, activities in the town, especially those related to cultural events reminiscent of local hop traditions and heritage. More about the museum and the scope of Chmelobrana can be found here: <http://chmelobrana.cz>

Regional Museum of K. A. Polánka in Žatec

This museum was established by the town of Žatec. It is focused, regionally, on the central part of the river Ohře, the Žatec and Podbořany regions. It bears the name of a teacher and natural scientist from the original Czech Minority Museum founded in 1925, Karel Alois Polánek. The museum is within walking distance to the component part 02, within the buffer zone and can provide general information about the region. Visitors can find permanent exhibitions such as "Prehistory of the central part of the River Ohře region" and "Urban development of the town of Žatec" there. Related to the theme of Žatec, The town of Hops, the museum exhibits a significant collection named "the Room of hop trademarks," which presents the long history of the marking of hops for trading purposes. The collection and exhibition "Žatec time machine" is an interactive exhibition with historical photos of Žatec. The programme is completed with presentations, exhibitions, and lectures.

<http://www.muzeumzatec.cz/hlavni-budova.html>



The Museum of Brewing in Žatec, No. 85, Žižkovo Square, Žatec, 2020

The Regional Museum of K. A. Polánka in Žatec also presents an additional permanent exhibition directly in the area of the component part 02. It can be found in the building named Křížova vila, **The Villa of Dr. Kříž**. The Neo-Renaissance villa of Dr. Kříž bears the name of its last private owner, district counsel Dr. Wilém Kříž. The villa itself is an excellent example of architecture with preserved original interiors. It presents the appearance of a residence of the higher social classes of the town in its most prosperous period. It is accessible to visitors all year round and situated in close vicinity to one of the main sets of buildings involved in hop growing. Visitors can choose to visit the villa itself or the occasional exhibitions, concerts, or lectures in its historical interiors or adjacent garden. Wedding ceremonies are arranged in the large hall of the villa.

<http://www.muzeumzatec.cz/krizova-vila.html>

Another building of the K. A. Polánka Regional Museum in Žatec is **the Old Paper Mill** within the buffer zone. This former factory hall was added to the Moritz Lüdersdorf paper mill in 1909, according to a design by Josef Salomon.

In the years 2014–2015, part of the former Paper Mill underwent extensive functional conversion within the project Rescue of the Former Paper Mill and the Construction of Museum Depositories in Its Part, No. CZ.1.09 / 1.2.00 / 63.01047. The restoration was financed by the European Regional Development Fund. The premises of the former famous cardboard factory began to serve as the depository of the K. A. Polánka Regional Museum in Žatec on 12th November 2015. The permanent exhibition "From the History of the Žatec Industry" and a long-term exhibition on the restoration of the paper mill, as well as memorial plaques commemorating the abolition of compulsory labour in the Žatec region or links from the former chain bridge over the river Ohře, have found their place here. The building also provides space for cultural and educational events.

<http://www.muzeumzatec.cz/>

The Town Hall and its tower

The historical town hall still serves its centuries-old original purpose, and it dominates Svobody Square. The tower of the town hall, built in the year 1362, is 47 meters tall and is also used as an accessible viewing tower with a good view of the town and the landscape of its vast surroundings.

The synagogue

The synagogue building and the adjacent rabbinate are currently being wholly repaired thanks to granting support from the IROP programme. The synagogue will create a multifunctional cultural space. According to current plans, the neighbouring rabbinate will be turned into a museum focused on the history and life of the Jewish community in Žatec.

www.synagoga-zatec.cz

*The Municipal Theatre's foundation was laid in the year of revolution in 1848,
No. 27, Dvořákova Street, Žatec, 2016*



The Municipal Theatre of Žatec

The Municipal Theatre of Žatec was ceremoniously opened in 1849 and is thus older than the National Theatre in Prague. The building in the late Classicist style is one of the first provincial theatres in the Czech lands. The remarkable curtain from 1948 is the work of the academic painter Oskar Brázda. Visitors can regularly watch various drama performances, concerts, and painting exhibitions. Management ensures the operation of the theater itself, a digital cinema, and an open-air cinema. The theatre is the organiser of the leading traditional hop-related event called the Dočesná – the festival of hop and beer.

<http://www.divadlozatec.cz/>

5.h2 TRADITIONAL HOP EVENTS

Component part 01 – Saaz Hop Landscape Hop-growers' Day

The most important annual event is Hop-growers' Day. Hop-growers' Day in Stekník and its hop fields is traditionally (since the 1950s) held at the end of the first week of August. The professional part includes information on the state of vegetation and harvest estimates both in the Czech Republic and abroad. A significant portion of the day is a tour of the stands of

individual varieties with a description of work operations and dates in which they took place, with an emphasis on protection against pests and diseases.

This professional meeting is attended by hop growers from all over the Czech Republic, deputies and directors of departments from the Ministry of Agriculture of the Czech Republic, representatives of the Central Institute for Supervising and Testing in Agriculture or envoys of other professional agricultural associations and chambers. Press, radio, and television media are present as well as hop industry machinery companies and entities providing services and consulting in the field of hop growing.

Saint Lawrence (Sv. Vavřinec)

The cultural phenomenon of Czech hop growing must include the celebrations of the feast of the patron saint of hops, St. Lawrence. According to available information, no other hop country celebrates this holy day. On August 10, the date on which the feast of St. Lawrence is honoured, Czech growers gather for an informal discussion before the hop harvest. It is forbidden to enter hop fields on this day because St. Lawrence is bidding on hops and must not be disturbed for the harvest to be good. Traditionally, hop growers met on this day in one village, and in the last 20 years, this holy day has become a meeting of hop growers in a hop growing region, where the host, a local hop grower, of this hop festival changes every year.

Component part 02 – Žatec Chmelfest (Hopfest)

The Chmelfest is a spring festival connected with the commencement of spring works in the hop fields. Each year it is organised by the society called Chmelobrana Žatec (Hop Defence Žatec), the Žatec Brewery and local societies with the support of the town of Žatec and regional hop companies. During this event, which contains elements of thematic jokes and pranks, the future harvest of hops is blessed, and symbolically a giant barrel of May lager is opened near the hop field next to Žatec's central Svobody Square.
<http://www.chmelfest.cz/>

The Hop Harvest Festival – the Dočesná

The hard work in the hop fields is symbolically ended by a festive final harvesting of the last amount of hops from a hop field in early September. Such festivals are called "Dočesná" in Czech, which means "final harvest" or "to finish harvest" (in the past also: Hopfenerntefest, Hopfenpflücker, or Hopfenkranzfest).

In Žatec, this festival has a proven tradition, in pictures and documents, of more than 180 years, since 1883. In contrast with the Munich Oktoberfest, which is mainly connected with beer consumption, the Dočesná festival especially emphasises hops. The last hop plants and hops from the hop fields are integrated into all the activities during the festival and used as decorations in the town.

This festival logically also includes the presentation and sale of a large variety of beer and local products.

Local societies, cultural institutions, and hop growing villages continue the hop traditions in Žatec and its wider surroundings. Competitions in traditional hop-picking, dancing with a pitcher on the head, and the selection of a Hop Queen and Hop King are also connected with the festival. Pranks, fun, and good beer, from local quality Žatec hops, are always included in the hop celebrations. The traditions of these "final harvests," on farms and in villages, have been kept, without any interruption, to this day.

www.docesna.cz

Even the crisis and measures caused by the global pandemic of COVID-19 did not interrupt the main hop growing event in September 2020. Based on the lead by the town of Žatec, an initiative called "Dočesná jinak" (A bit different Dočesná) was launched. The Town financially supported the local public, and local cultural event, organisers, who provided smaller celebrating cultural and traditional events over a few days. It was thus possible to maintain the tradition of celebrations in a new, more modest but safer concept.

5.h3 TOURIST SERVICES AND INFORMATION SYSTEM OF THE PROPERTY

Component part 01 – Saaz Hop Landscape

Tourist information services are currently provided by the Stekník Chateau, which is the leading visitor destination in the area.

Component part 02 – Žatec

Apart from the information signs installed on posts in the town, as in other historical towns and cities, the tourist routes in Žatec are supplemented with information on cast-iron plaques, which are located directly on significant historical buildings. Plaques are provided with texts in Czech, German and English and are connected with leaflets and brochures of the town, with maps and texts also in Czech, German and English. In the Temple of Hops and Beer, the Hop Museum and the Museum of Homolupules, audio guides are prepared for visitors in Czech, German, English, and Russian, which will guide them through the premises.

Tourist Information Centre (TIC) Žatec

The information centre is located in a historic house on Svobody Square, right next to the smallest hop field. It is accessible all year round, and contains a wide range of information materials, internet access and a relaxation area, where visitors can view the materials in peace and plan their visit of the town.

The Info-centre is a modern facility that offers, in addition to standard services, information about the system of walking routes around and through the town. Also available are: brochures, leaflets, books, maps, souvenirs, touristic information, pre-ranged programmes for groups, the intermediation of guide services, and an overview of accommodation, meals, leisure activities, and cultural and sporting events. The information centre also provides a tour of the town hall tower.

The TIC staff also speak English, German, and Spanish.
<http://www.infozatec.cz>

Destination agency Dolní Poohří

The registered office of the public-benefit corporation of the Ústecký Region for tourism called the Destination Agency Dolní Poohří is also located in Žatec. The activities of this agency are focused on the support of tourism and regional development in the broader area around the lower part of the river Ohře. Its website

includes an interactive map, integrating information about services and attractions. This enables quick orientation both within the property and its wider surroundings. The agency's office is located in the Hop Museum.

<http://www.dolnipoohri.eu/>, www.dolnipoohri.cz

5.h4 STATISTICS OF VISITORS

Many visitors of Žatec region are happy with only having individual tours in town because its architecture enables good recognition of its specifics. This is why the statistics of visitors for this chapter are based solely on the overview of recorded numbers of sold entrance tickets to some buildings indicated in the table. The statistics of attendance show a growing tendency towards, and interest in, the hop heritage and also in the Stekník Chateau, with its recently restored and renovated premises being opened to the public in 2015.

Table of statistics of visitors

YEAR	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Temple of Hops and Beer	4,826	7,236	12,367	15,876	20,314	20,754	19,736	17,401	18,481	20,643
of which Infocentre-Town Hall	3,362	2,651	3,020	6,218	4,586	8,750	9,067	8,336	9,431	10,408
Regional Museum of K. A. Polánka in Žatec	6,587	10,100	8,202	11,436	13,547	13,245	14,893	13,697	16,932	16,516
Hop Museum Žatec	3,538	8,268	5,281	3,373	3,415	3,633	4,238	6,035	5,828	4,822
Žatec Brewery	771	757	1,105	1,048	1,035	978	1,286	2,018	1,745	1,626
Homolupules Museum	711	642	685	856	952	882	960	995	1,058	1,020
Stekník Chateau	-	-	-	1,502	4,000	6,417	12,488	10,972	12,079	15,766

5.h5 TRANSPORT ACCESSIBILITY OF THE PROPERTY

Component part 01 – Saaz Hop Landscape

Accessibility of the centre of component part 01 is possible in several ways. Travel by bus: a direct connection from Louny and Žatec (bus stop at the village of Stekník, 130 metres from the chateau) or a bus link to the village of Trnovany near Žatec (bus route from Louny to Žatec and back), from there it is a pleasant walk, about 1.5 km long, to the chateau, on a road leading between hop fields. It is also possible to take a train and then walk: about 3–4 km on the road or through hop fields with an exit at the station Lišany by Žatec, or an exit in Dolejší Hůrky, then walk in the direction of Hradiště about 2 km and 1 km



Entrance to the Hop Museum, No. 1952, Prokopa Velkého Square, Žatec, 2016

from Hradiště to Stekník in the direction of Žatec. Travel by car: 6 km from Žatec in the direction of Louny (1st class road No. 225), 8 km from Postoloprty in the direction of Žatec, 12 km from Louny in the direction of Žatec (1st class road No. 225).

Component part 02 – Žatec

The town of Žatec has excellent traffic accessibility. It is situated close to the transit junction connecting the Ústecký region with the Plzeň region. As for road traffic, the road of class I, no. I/27 from Plzeň to Most is a vital traffic route. Prague and the German border are easily accessible through the basic road network. The railway network also provides good connectivity of Žatec with important towns and cities in the Czech Republic, such as lines no. 160 Žatec – Plzeň, no. 123 Žatec-západ – Most and no. 124 Lužná u Rakovníka – Chomutov. The town of Žatec is situated about 80 km from the capital city of Prague and the regional capital city of Plzeň. Karlovy Vary, Mariánské Lázně, Litoměřice and Chemnitz in Germany are other larger, widely known and attractive destinations within the distance of 100 km. Žatec is also connected with the capital city of Prague by direct bus links operating several times a day. The journey (with a few stops) takes approximately 90 minutes. The main Czech airport, the Václav Havel Airport, is situated west of Prague just off the motorway, which passes close to Žatec. The visitors who rent a car at the airport can reach Žatec within approximately 50 minutes.

5.h6 ACCOMMODATION AND RESTAURANTS IN THE PROPERTY

Component part 01 – Saaz Hop Landscape

At present, component part 01 does not have accommodation and restaurant capacity. The Management Plan contains some measures that should gradually ensure the conditions for it in the future.

Component part 02 – Žatec

Although Žatec is a relatively small town, the popular traditional hop growing activities, local festive events, and beer have given rise to numerous accommodation facilities and restaurants. From this point of view, Žatec is well prepared to host its visitors. The Hotels Zlatý lev (Golden Lion) and Černý orel (Black Eagle), and also the Hotel U hada (At the Snake), are the most important accommodation providers. These facilities meet the requirements for comfortable accommodation. Their prosperity is connected with the aforementioned Temple of Hops and Beer. Other accommodation providers have smaller capacities. With a successful World Heritage nomination it can be assumed that other facilities of this type will arise, particularly regarding the many dormant buildings, both in the property area and in the close surroundings (see the Management Plan).

NAME/WEB SITE	ADDRESS	CAPACITY
Hotel Zlatý lev www.zlaty-lev.cz	Oblouková 228, 43801 Žatec	54 beds
Hotel Zlatý anděl www.hotelandelzatec.cz	Náměstí Svobody, 438 01 Žatec	50 beds
Hotel Zlatý anděl www.hotelandelzatec.cz	Náměstí Svobody 155, 438 01 Žatec	37 beds
Hotel U Hada www.zatec-hotel.cz	Kruhové náměstí 233, 43801 Žatec	75 beds
Hotel Kapitán www.hotel-kapitan.cz	Náměstí Svobody 119, 438 01 Žatec	16 beds
Penzion U divadla www.penzionudidladlaseznam.webmium.com	Dvořákova 32, 438 01 Žatec	14 beds
Penzion U parku www.penzionuparku.com	Chmelařské náměstí 1339, 438 01 Žatec	20 beds
Penzion U parku www.penzionuparku.com	Kruhové náměstí 1924, 438 01 Žatec	10 beds
Penzion Černý rytíř www.ubytovanizatec.cz	Oblouková 170, 438 01 Žatec	20 beds
Penzion Aranka www.aranka.cz	Francouzská 1398, 438 01 Žatec	20 beds
Penzion Kára www.penzion-kara.eu	Nerudovo náměstí 1494, 438 01 Žatec	22 beds
Ubytovna TJ Sever www.tjseverzatec.cz	Plzeňská 2787, 438 01 Žatec	65 beds
Minihotel V Zahradě	Lva Tolstého 871, 438 01 Žatec	10 beds
Holiday Centrum www.holidaycentrum.cz/cs/penzion-ubytovani	Vikletice 7, 438 01 Chbany	45 beds
Golf hotel Bitozeves www.golfbitozeves.cz/hotel	Bitozeves 12, 440 01 Louny	27 beds
Hotel V Údoli Zlatého potoka www.hotelblsany.cz	Náměstí 17, 439 88 Blšany	33 beds
Source: http://cs.zatec-thum.eu/turistika/ubytovani/		

NAME	ADDRESS	WEB SITE
Restaurace a minipivovar U Orloje	Náměstí Prokopa Velkého 1951, 438 01 Žatec	www.chchp.cz/restaurace-u-orloje-zatec
Mlsná koza	Dvořákova 22, 438 01 Žatec	www.mlsna-koza.cz
U Zlatého beránka	Hošťálkovo náměstí 138, 438 01 Žatec	www.u-zlateho-beranka.webnode.cz
El Toro Steak House	Náměstí Prokopa Velkého, 438 01 Žatec	www.eltorozatec.cz
Restaurace U Medvěda	Oblouková 222, 438 01 Žatec	www.umedvedazatec.cz
Pizzeria Panamera	Nákladní 359, 438 01 Žatec	www.pizzeriapanamera.cz
Ristorante Nautico a Strop GIN Bar Žatec	Kruhové Náměstí 233, 438 01 Žatec	www.restauracenautico-zatec.cz
Jaipur – Indická restaurace	Hotel Zlatý Lev, Oblouková 228, 438 01 Žatec	www.jaipur-zatec.cz
Caffe Vin	Jakubská 274, 438 01 Žatec	https://www.facebook.com/CaffeVin/
Cukrárna Květa	Třída Obránců míru 6, 438 01 Žatec	No web sites
Ramon Café	Třída Obránců míru 8, 438 01 Žatec	www.kofio.cz/kavarna/ramon-cafe/9725
Kavárna S Duší	Náměstí Svobody 53, 438 01 Žatec	https://www.facebook.com/kavarnasdusi https://www.kamarad-lorm.cz/
Hospůdka U nás	Fügnerova 259, 438 01 Žatec	www.restauracezatec.webmium.com
Pivní bar Hříbek	Volyňských Čechů 836, 438 01 Žatec	www.pivnibarzatec.cz
Restaurace Čáp	Příkrá 819, 438 01 Žatec	www.taure.cz
Restaurace Moskva	Podměstí 2126, 438 01 Žatec	www.moskvazatec.cz
Restaurace Ostrov	Svatováclavská 1040, 438 01 Žatec	https://www.facebook.com/Ostrov-100168541725222
Restaurace Švejk	U Oharky 229, 438 01 Žatec	www.restaurace-svejk.cz
Cihelna Sport Relax Club	Černobýla 3076, 438 01 Žatec	www.cihelnaclub.cz
Bar Forbes	Ostrov 2219, 438 01 Žatec	No web sites
Barbar	Bratří Čapků 2801, 438 01 Žatec	www.barbarzatec.cz
Source: http://cs.zatec-thum.eu/turistika/restaurace/		

5.h7 CONFERENCE FACILITIES IN THE PROPERTY

Due to the nature of the property and its component part 02, which is the centre of the area, all conference facilities are located in that component part.

There is a lecture hall, with modern equipment, in the Malt House Gallery in Masarykova Street with a capacity of 60 seats, which can be used for lectures and workshops.

Conferences can also be arranged in a newly established exhibition and lecture hall, with the capacity of 100 seats, within the building of the Old Paper Mill - the current depository of the Regional Museum of K. A. Polánka in Žatec in Volyňských Čechů Street, in walking distance from the visitors centre (more about this building in *Chapter 5.h1*).

The Hop Research Institute (in the buffer zone, west of component part 02) has a large conference hall with a capacity of 200 seats, which is used for seminars, conferences and professional events within the scope of the institute, associated with, for example, beer tasting and a tour of breeding facilities.

5.h8 SPORTS FACILITIES IN THE PROPERTY

COMPONENT PART 01 – SAAZ HOP LANDSCAPE

By its nature, rural component part 01 does not contain any sports venues, and they are not even considered. Due to the nature of the landscape, it offers mainly possibilities for hiking and cycling. Two long-distance cycle paths connect both component parts:

Kadaň – Žatec – Louny cycle path

The main one is the Kadaň – Žatec – Louny cycle path, section No. 4 of the system of trails along the Ohře.

In 2013, a 1.2 km long connecting section was built for this long-distance route in the immediate vicinity of the modern area of the Žatec open-air swimming pool and sports ground with an in-line skating track.

The cycle route continues through the centre of Žatec to the touristic area of the Temple of Hops and Beer with a lookout tower, the Hop Astronomical Clock, the "At the Astronomical Clock" beer hall, the Monastery Garden and the Hop Museum. The route continues in an easterly direction to component part 01, through Trnovany, Stekník, and Hradiště and then proceeds to the town of Louny. For part of the urban area of the town of Žatec, project documentation for the construction of a cycle path and in-line skating track with a total length of 7 km, including a connection to the other bank of the river Ohře with a concentration of sports facilities, has been prepared.

Cycle route Žatec – Thum (Saxony), section No. 6

This cycling route leads from Svobody Square in the centre of Žatec in an easterly direction through the villages of Stekník and Skupice up to Březno near Postoloprty. The route is already 18 kilometres long and connects Žatec with the cycle route No. 3034 Postoloprty – Chomutov.

<http://www.cykloohre.cz/>

COMPONENT PART 02 – ŽATEC

The component part has a wider range of leisure activities. As for longer visits to Žatec, in addition to the goals associated with hop heritage, visitors can utilise other facilities to extend their chances of spending a pleasant time in the town. These facilities can be found outside the nominated property, a walking distance away. Visitors to the town can easily use these wider opportunities.

Many funding possibilities were utilised in the development of the infrastructure of sport and leisure facilities over the last few years. These projects were co-financed from European and national sources and allowed the infrastructure to be modernised and to extend its utilisation.

This was particularly so in the area of public sports fields in the town, where the open swimming pool area experienced significant changes. Multifunctional areas for tennis, volleyball, football, roller skating, and minigolf were built there. A new 1.2 km long asphalt cycle path was opened close to the swimming pool. It is connected directly to the swimming pool area and the sports fields, with a roller-skating circuit. This cycle path is part of the regional trunk of cycling route no. 6 (stage 4 Kadaň – Žatec – Louny). All these facilities are out of the property area, and their activities do not disturb in any way the nominated area.

These facilities include:

The Žatec Open-Air Swimming Pool and the neighbouring New Sports Arena, which offers multi-purpose courts for tennis, volleyball, and football, illuminated 400 m long asphalt oval for in-line skating and it includes a multi-purpose playground for team sports. There is also a building containing the town sauna and two gyms, with another indoor swimming pool in the southern residential area of the town.

In the southern part of the town is a large modern stadium. The Youth Stadium is equipped with an oval racing track, and pitches and courts for football, basketball and other ball sports, all with new artificial surfaces. The stadium facilities also include two climbing walls and areas for athletic disciplines. In 2018, the sports infrastructure was supplemented by an extensive "Street Workout" Playground for outdoor exercise.

5.i POLICIES AND PROGRAMMES RELATED TO THE PRESENTATION AND PROMOTION OF THE PROPERTY

Excellent organisation of the tools available, including promotion, advertising, and popularisation, is the essential precondition for commonly shared responsibility and conservation of values of the nominated property. The development of opportunities in this field is one of the subject of the Management Plan and competence of one of the working groups.

5.i.1 STRATEGIES AND PROGRAMMES CONCERNING DEVELOPMENT AND SUPPORT OF THE PROPERTY AT THE STATE-WIDE LEVEL

The cultural heritage of the Czech Republic is one of the priorities of the officially organised promotional body.

The Ministry of Regional Development of the Czech Republic is a systematic and coordination body for all the actors engaged in the field of tourism. The Conception of the State Policy of Tourism in the Czech Republic, for the period 2014–2020, is a necessary tool for the activities of this Ministry in the field of tourism. More information is at <https://www.mmr.cz>

The main goal of the Conception is to increase the competitiveness of the entire tourism industry at the national and regional level, maintaining its economic performance and its positive impact on the socio-cultural and environmental development of the Czech Republic.

The way to increase the competitiveness of the entire tourism industry is to meet the following strategic goals of the concept:

- strengthening the quality of the tourism offer, including the cultivation of the business environment;
- building the structure and cultivation of institutions that effectively implement tourism policy;
- improving the quality of human resources as a key factor in innovation processes;
- enhancing access for service providers to tourism markets;
- in line with the principles of sustainable development, intensifying the use of effective tools and innovations in the management and marketing of tourism destinations;
- strengthening the role of tourism in the economic and sectoral policies of the state.

Cultural tourism is one of the most effective types of tourism that is part of the development of foreign tourism and generates quite a sizable income for the Czech Republic. Together with internal tourism, it is a significant resource for the prosperity of regions and individual municipalities, as well as all the businesses that share directly and indirectly in its development.

The Ministry of Regional Development of the Czech Republic is the founder of an organisation called CzechTourism. It is in the methodological centre of Czech tourism promotion and has a comprehensive internet presentation (<http://www.czechtourism.cz/>).

The broader promotion of the country as a tourist destination abroad, and in the Czech Republic, is the fundamental goal of this organisation.

CzechTourism coordinates the state promotion of tourism with activities implemented by businesses and develops medium-term and actual strategies for the marketing of tourism products in the domestic and foreign markets.

CzechTourism, as a member of the European Commission of Tourism (ETC) and together with other European countries, shares in marketing activities in overseas markets. The agency CzechTourism has published two documents for the period 2013–2020 named Marketing Strategy of Tourism 2013–2020 and Marketing Conception of Tourism 2013–2020. The documents include an emphasis on localities on the UNESCO World Heritage List. Besides this the materials cover the activities of the agency and other thematic spheres. World heritage and other UNESCO themes are the focus of increased interest of the agency, and a new working group was formed in 2016. This group consists of representatives of the state heritage preservation bodies, the protection of nature, the Association of the Czech Heritage of UNESCO, and those from the academic sphere. Its goals include the unification of mutual knowledge about topical themes that should be presented and promoted. In the case of the inclusion of the nominated property on the World Heritage List, its extraordinary values will be the subject of increased presentation and further enhancement of cooperation, including engagement in the usual activities of the agency through foreign representation.

The web information portal of the Czech Tourism agency Kudy z nudy (www.kudyznudy.cz – which is a simple play on words meaning "how to get out of boredom"), offers complete information of the nominated property in Czech, English, German, Slovak, and Polish.

The town of Žatec, its hop growing heritage, the Dočesná festival, the main historical buildings as well as the wider surroundings of the town, including the Stekník Chateau,

in the context of its surroundings with hop fields, are presented through several thematic forms of appropriate, brief information.

5.i2 STRATEGIES AND PROGRAMMES CONCERNING PRESENTATION AND PROMOTION OF THE PROPERTY AT THE REGIONAL LEVEL

The Ústecký Region launched, in 2010, a project to revive tourism in the region, named Brána do Čech (which means "the Gateway to Czech"), (<http://www.branadocech.cz/>). The project has its own logo, new internet web portal, and a new way of presentation. It uses materials about the four touristic regions whose conceptual and harmonised performance is ensured by destination agencies named after the individual subregions: Dolní Poohří, Krušné hory, České Švýcarsko, and České středohoří and focuses on them in its presentations. The importance of Žatec is supported by the fact that it is the seat of one of the four agencies, namely Dolní Poohří (see above in *Chapter 5.h*).

The destination agency presents the town of Žatec and its vicinity, and its built heritage, on domestic and foreign tourism trade fairs, and prepares promotional tourist materials.

The conception of development of culture and protection for cultural heritage assets in the Ústecký Region in 2014–2020

The Ústecký Region, with its local government competence, prepared a document named "Conception of development of culture and protection of cultural heritage assets in the Ústecký Region in 2014–2020". This document was accepted by resolution No. 88/18Z/2014 of the Regional Board on 3rd September 2014. This document explicitly expresses the support to continue the process of nomination for the inclusion of the property on the World Heritage List.

The concept also summarises the chances to utilise the programmes of funding for support of activities in the field of cultural heritage preservation and protection and cultural events connected with the preparation of the nomination of the property.

5.i3 STRATEGIES AND PROGRAMMES CONCERNING PRESENTATION AND PROMOTION OF THE PROPERTY AT THE LOCAL LEVEL

In view of the current and future care for the extraordinary values of the nominated property, the activities, and support at the local level are the most important matters. In 2007, when the theme Žatec, the Town of Hops, was

registered successfully on the Tentative List, the intensive preparation of all steps for the nomination of the property began. The town of Žatec purposively shares in projects connected with the wider popularisation of the site and in projects focused on the professional public. Successive steps, and an active presentation of this exciting theme, resulted in significant interest in the town and its cultural heritage. This applies also for the current, enlarged concept of nomination focused on the whole process of growing and processing of hops, including the rural component part. Despite the fact that the town is not big and its budget is rather limited, numerous chances to confirm the importance and popularity of the nomination topic have been found, also with the repeated support of various funds, mainly those administered by the Ministry of Culture (for more, see the *Chapter 5.f3*). Recently, thematic conferences and workshops connected closely with the nomination themes, have been also arranged, such as:

Of the regular six conferences named POOHŘÍ, arranged every year and focused on the promotion of the region, the deepening, and popularisation, of knowledge about its history and cooperation with cultural institutions, two were held in Žatec in the period 2011 to 2019. The proceedings are issued from each conference, which is held in October every year. Expert contributions on the history of hop growing and the history of the town are regularly presented at these professional meetings. <http://www.poohri.org/index.htm>

Nationwide organisations that do not even reside in Žatec choose Žatec as a place for conferences and related excursions for the specific hop growing heritage in the town and the surrounding countryside. Among the more significant events in the field of cultural heritage, the most important were:

The professional conference of the PROPAMÁTKY movement, focused on the restoration and utilisation of historical heritage assets especially monuments. This professional conference, focused now on authentic breweries, was held in Žatec from 14th to 15th November 2013. During this conference, there was also the ceremonial signing of the first "Memorandum on cooperation," which dealt with the scope of the preparations for the original nomination of the property, Žatec, the Town of Hops. The memorandum was signed by the Mayor of the Žatec, the Deputy Minister of Culture, the Councillor for Culture and Heritage Conservation of the Ústecký Region and representatives of CHMELARSTVÍ, cooperative Žatec, and Chmelobrana Žatec (Hop Defence Žatec). <https://www.propamatky.info/cs/hlavni-strana/>

Conference of the Association of Historical Settlements in Bohemia, Moravia, and Silesia

The 23rd annual meeting of the Association of Historic Settlements of Bohemia, Moravia, and Silesia was held in Žatec from 31st March to 2nd April 2016. Leading representatives of historic towns and

cities regularly attend the conference. It serves to exchange experiences with the restoration of building heritage and the implementation of the regeneration programme (see *Chapter 5.d*). The towns and cities regularly compete to hold such a prestigious event, and this time Žatec held the event due to the advanced nomination and that guests could receive a lot of topical information. The conference agenda also included an excursion to see places of interest in the town, tours of hop warehouses, the museum depository, and new exhibitions on the history of the hop industry, the Hop Museum, and the Temple of Hops and Beer.

A presentation of works by students of the Faculty of Architecture of the Czech Technical University, the studio of Professor Girsá, was prepared in the Malt House Gallery (for more on the cooperation with this faculty, see the *Chapter 5.g*). In the last few years, these student designs have been helping to find inspiration for the conversion of historic buildings, including hop warehouses, for various functions.
<https://www.historickasidla.cz/cs/konference/konference-2016/>

Project "Žatec - the Town of Hops" for the lower-elementary schools

The question of how much children, growing up in Žatec, know about their town was at beginning of this project intended for schoolchildren. The aim is to acquaint children with the history of, and the present day, hop growing in the Žatec region. In the pilot project week "Žatec - the Town of Hops," pupils in the 4th grade of the Komenského alej elementary school were selected.

Each student receives their workbook with artistically designed pages, in which they can record their notes, pictures and perform interesting tasks throughout the week. Each pupil is part of a three to five-member work teams. The programme introduces children to hop growing, the village of Stekník with hop fields and harvest centres. There is also a visit to see hop processing in the premises of CHMELÁŘSTVÍ, cooperative Žatec in Mostecká Street. In Žatec, pupils can see buildings related to hop growing, which are involved in the tourist offer of this hop growing metropolis. Subsequently, they work in their classes on the artistic rendering of the entire project week on a colour poster, using their previous notes, photographs taken, and advice from their parents and other family members.

Individual posters are part of the exhibition in the Hop Museum. The implementer of the whole project is the Hop Museum. The project partners are the National Heritage Institute, the Ústí nad Labem Department, the J. E. Purkyně University in Ústí nad Labem, the town of Žatec and the Ústecký Region.

5.i4 OTHER MEANS OF PROMOTION

An indirect form of presentation, of the values of the hop processing heritage of the nominated property, can be found in the cooperation with schools of various types. Children in elementary schools are engaged in activities in the town, in art classes, where the theme of their work is often connected with hops.

In 2019, the Hop Museum Žatec organised a successful first year of the project week for pupils in Žatec primary schools, the primary goal of which is to acquaint children with the history and the present of hop growing in the Žatec region. The results, in the form of posters of individual groups, were evaluated and exhibited in the museum. This activity is expected to continue in the coming years.

In recent years, cooperation has been established with the town management, the Steering Group, and the Institute of the Historic Preservation of FA ČVUT (Faculty of Architecture of the Czech Technical University). In the years 2016-2020, two studios assigned students conceptual work and specific projects focused on the possibilities of



Elementary school pupils during a project week called "Žatec - the Town of Hops", Capuchin Monastery Garden, Žatec, 2019

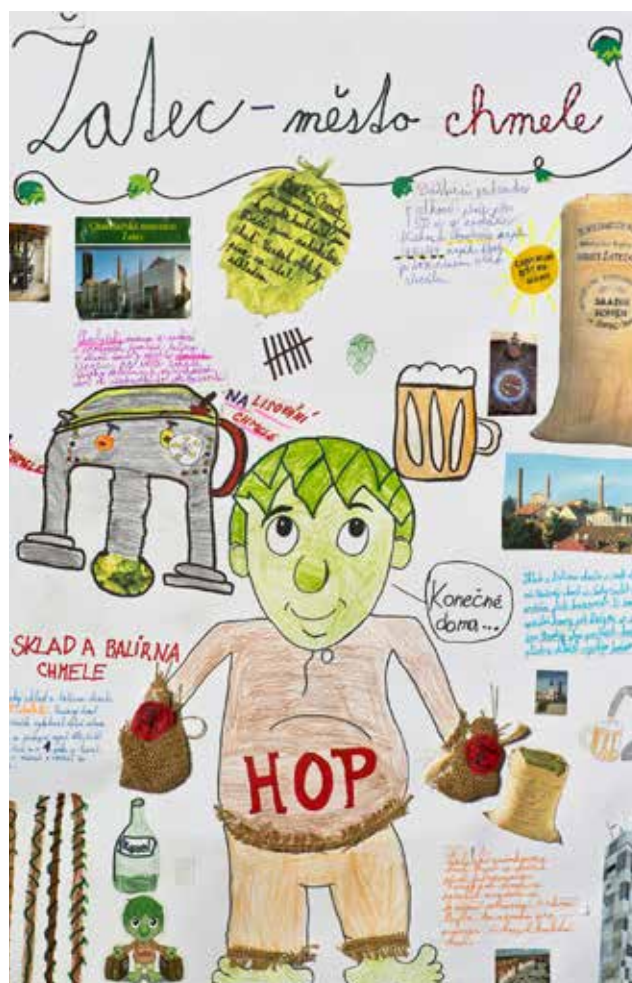
sensitive adaptations, and various functional utilisations, of the historical constructions in Žatec.

Cooperation of the Town with the architecture students was based on discussions on the conversion of hop warehouses. The students of architectonic studios prepared proposals for the further utilisation of the buildings that were then presented for the inspiration of potential owners. Until 2020, the pedagogue of this institute is also a member of the Steering Group. In 2019/2020, an undergraduate and diploma thesis was created, focusing on the history and possible development of visitor services in the rural component part 01, the results of which were used as inspiration for the Management Plan, and selected analytical maps for this nomination documentation.

Two specialised museums exist in the town, and both have shared in the promotion of the nominated property for a long time: (their characteristics are given in *Chapter 5.h1*).

The Hop Museum Žatec is owned by the CHMELÁŘSTVÍ, cooperative Žatec company (about the cooperative, see below). This museum is also a member of an AMG (Association of Museums and Galleries of the CR), which is a professional association of institutions and individuals engaged in museum activities in the Czech Republic. The AMG agenda is particularly focused on the promotion and popularisation of the activities of museums and galleries in the Czech Republic and on holding conferences,

Example of a poster which the pupils finished in the project week, "Žatec - the Town of Hops", Žatec, 2019



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Elementary school pupils during a project week called "Žatec - the Town of Hops", Stekník, 2020

seminars, and editorial activities. A study room has been set up in the central part of the museum, which is used exclusively for as a full-time study area for professionals and students. The study room contains professional publications, magazines, and other publications in Czech, German, and English.

In addition to its primary function of enhancing the quality of permanent exhibitions and guided services, the Hop Museum Žatec is an active participant in other presentation activities and connected to informative web pages of different subjects (for more on this museum, see the *Chapter 5.h*)

The Hop Museum Žatec is engaged in the following marketing projects:

The Regional Museum of K. A. Polánka in Žatec is a subsidiary organisation of the town. The museum is a member of the AMG (Association of Museums and Galleries of the Czech Republic), which is a professional association of institutions and individuals engaged in museum activities in the Czech Republic. The museum organises specialised conferences and thematic exhibitions focused on the history of the town and participates in educational activities with local schools.

The permanent exhibitions also include a unique collection of hop trademarks.

EYCA

The European Youth Card project is a discount programme for young people aged 5 to 30. The discount card can be used for various activities, including a visit to the Hop Museum.

<https://www.eyca.cz/>

Žatec – Feel the Hops

A joint project of the Hop Museum Žatec and the Temple of Hops and Beer through mutual cooperation. Discounts are available when buying a joint ticket to both tourist destinations.

Stekník Chateau

The chateau is presented through the central website of the NHI (www.npu.cz; <https://www.zamek-steknik.cz/cs>) and connected to the information websites of other historic buildings. It is also actively promoted by the rural chateau administration on social networks and in the media. Various web tourist portals are also used for promotion.

Bilingual magazine CZECH HOPS / ČESKÝ CHMEL

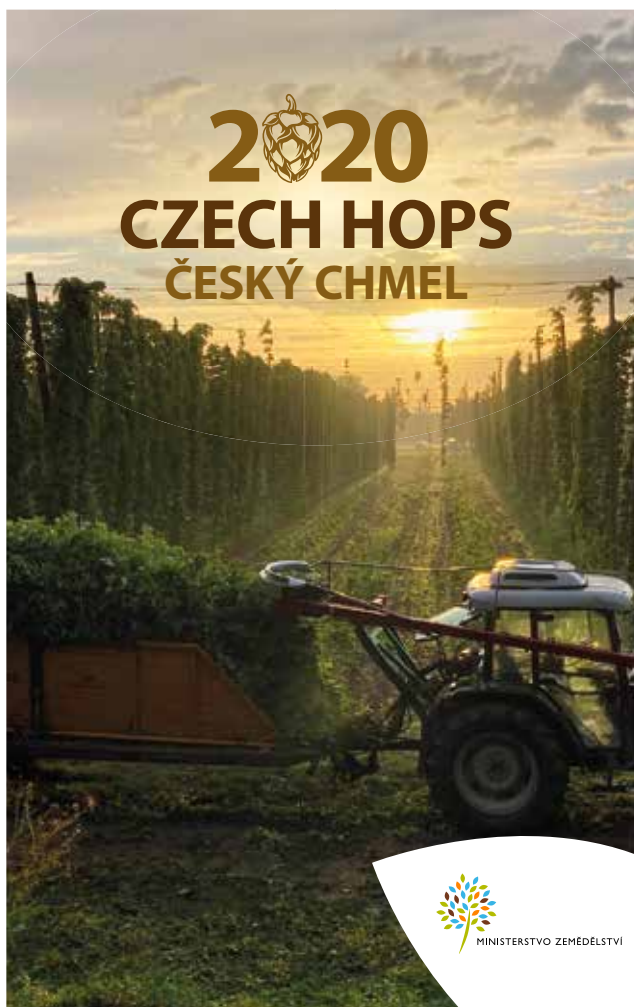
The Czech Republic supports the production of hops and the related activities of the hop growers. A magazine called simply Český Chmel/Czech Hops is wholly focussed on this specific and successful agricultural crop and trade commodity. It has been annually published since 2003 by the Ministry of Agriculture of the Czech Republic in close cooperation with the Hop Growers Union of the Czech Republic.

The magazine is a successful international magazine dedicated to hop cultivation. Its objective is to address not only hop growers and beer brewers but also consumers and provide them with plenty of exciting and useful information. It also gives information on the joint meetings of hop growers and politicians. Readers can get fundamental news on conferences, trade fairs, and other activities from practitioners, academics, and managers. The magazine is also focused on the primary information and developments in the sphere of various topics on the brewing industry. It provides practical information on the organisation and management of production processes, operational safety, marketing, new technology, and trends in beer production.

Digital versions of the magazine can be found here:

<http://www.cz hops.cz>

Most issues of the magazine have articles on the traditional celebrations of spring, hops and beer, the celebrations of St. Lawrence, patron saint of hop growers, the Hop Growers' Day at Stekník, activities of the Hop and Beer Temple and discusses interesting events at the Hop Museum.



Title page of the bilingual magazine "Czech hops", Žatec, 2020



The professional aspects of hop cultivation and processing are closely interconnected with the informal activities within the town. That magazine often refers to the excellent cooperation of the civic association (known as Hop Defence Žatec) with the Žatec Brewery and with the support of the town of Žatec. Last but not least, is the review of an increasing number of people who enjoy the seasonal celebrations of hops in Žatec, and come not just from all over the country but also from across the globe. The last issue was released in November 2020. A few recent articles relating to the best parts of the nominated property are included in *Chapter 7.e – Bibliography*.

Aside from the bilingual yearly magazine, Czech Hops, another, monthly magazine called Chmelařství (Hops-Growing) supports the promotion and presentation of the importance of the hop heritage.

Chmelařství monthly magazine, published since 1953, continues the long tradition of professional periodicals devoted to the growing, processing, and marketing of hops. In 1894 the magazine Chmelařské listy was published, and in 1927 another hop magazine Český chmelař was published. On its websites, this magazine publishes original expert and scientific works, reports, statements and important or interesting information dealing with all aspects in the field of hops.

Other activities for awareness-raising and simple, planned publications, focusing on the possible OUV of the property, are included in the Management Plan for the next few years. The nomination process has helped

to gather new and more detailed information and descriptions. A comparative study and the OUV definition have brought many inspiring ideas on how to promote the nominated property, and the working groups have a sound basis for their continuing work and studies.

LIST OF THE RECENTLY ISSUED PUBLICATIONS PROMOTING THE PROPOSED PROPERTY

Památky na pěstování a zpracování chmele a výroby piva v Žatci (Heritage of hop growing and processing and production of beer in Žatec), Jiří Vaníček, Petr Bažant, 2018

A publication summarising all the essential information about hops processing buildings and traditions in Žatec.

Ústecký kraj na cestě ke světovému dědictví (Ústecký Region on its Way to World Heritage), Jitka Šrejberová, Libor Sváček, 2015

A representative pictorial publication informing generally about World Heritage, the Convention Concerning the Protection of World Cultural and Natural Heritage and presenting clearly the values of properties in the that are on the Tentative list of the Czech Republic. A large portion of the publication is dedicated to Žatec. The publication was also presented ceremonially in the Malt House in Žatec.

Za žateckými architekty (Follow the Žatec Architects), Milada Krausová, 2015

The recent publication "Za žateckými architekty", issued by the Regional Museum of K. A. Polánka in Žatec presents for the first time stories of local architects at the turn of the

20th century. The publication selected the personalities who contributed significantly to the appearance of Žatec as an industrial and hop growing centre.

Žatec, Historie, kultura, lidé (Žatec, History, Culture, People), ed. Ivana Ebelová, Petr Holodňák, 2004

This book, about the history of the town and its hop growing tradition, was issued within the edition series of The History of Czech Cities.

Město Žatec za Velké války (The town of Žatec during the Great War). Forgotten stories not only from the town library by Milada Krausová

The Regional Museum of K. A. Polánka in Žatec (below as "RMŽ") issued this publication by the historian Milada Krausová on the occasion of the centennial anniversary of the beginning of World War I. Forgotten stories not only from the town library.

DĚJINY ŽATECKÉHO GYMNÁZIA "SCHOLA ZATECENSIS" (THE HISTORY OF THE ŽATEC GRAMMAR SCHOOL "SCHOLA ZATECENSIS"),

Jiří Matyáš, Jiří Cihla, Stanislava Hafnerová, Bohumír Roedl, Petr Ulrich

The 6th volume of the RMŽ Study. The book provides a well-organised presentation of the history of the Medieval Latin school in Žatec, followed by the grammar school, so the publication covers a period from the 13th century up to 1990. The publication was written through studying archive sources (a complete section with documents on the Žatec grammar school

is available in the state district archives in Louny) and literature that deals generally with the history of the Czech school system. The book includes a wide spectrum of photographs that relate to the history of the school and originate from the archives of the authors, collections of photographs in the Žatec Museum, and other institutions. Many of the pictures are the personal possessions of former and current teachers and former students so that the history of the school is also documented visually.

LABYRINTEM ŽATECKÉHO PRAVĚKU

(THROUGH A LABYRINTH OF PREHISTORY), Petr Holodňák
The 5th volume of the RMŽ Study. This comprehensively arranged encyclopedia of the prehistory of Žatec includes stories, about discoveries on the Žatec cadastre and archaeological explorations from more than eighty municipalities of the region, in alphabetical order. Furthermore, it contains a chronological overview, of the archaeological cultures and periods represented in the region, Střední Poohří, and of a number of researchers with excellent knowledge on the earliest history of this region. The closing chapters summarise twenty top archaeological finds in the Žatec region and an extensive overview of the bibliography about local finds.

ŽATECKÁ RODINA HOŠTÁLKŮ Z JAVOŘICE

(ŽATEC FAMILY OF HOŠTÁLEK FROM JAVOŘICE), B. Roedl, 4th volume of the RMŽ Study, 1997

Z HISTORIE ŽATECKÉHO MUZEJNICTVÍ (FROM THE HISTORY OF ŽATEC MUSEUM ACTIVITIES),

R. Holodňáková – A. Zinnerová – P. Holodňák – J. Kuprová, 3rd volume of the RMŽ Study, 1997

PAMĚTI MĚSTA ŽATCE (HISTORY OF THE TOWN OF ŽATEC (1527–1609), M. Tošnerová

1st volume of the RMŽ Study, 1996.

ŽATEC-STOPY SLAVNÝCH OSOBNOSTÍ

(ŽATEC-FOOTPRINTS OF FAMOUS PERSONALITIES)

The publication presents brief biographies of fifteen selected personalities from the past of Žatec (Jan ze Žatce, Maxmilián Hošťálek z Javořice, Karl Wenzel, dr. Karel Reiner, Jan Václav Staněk, Jan Karel Vetter, Jan Paul Loschy, Konrád Waldhauser, Josef Hermann Schneider, Josef Reiner, Helmut Preidel, Ferdinand Landesperger, Josef Wara, Karel Alois Polánek and Ludwig Engl).

ŽATEC-OSOBNOSTI VE SVĚDECTVÍ NÁHROBNÍKŮ

(ŽATEC – PERSONALITIES THROUGH WITNESSING TOMBSTONES)

This guide for a non-traditional walking route in the town cemetery of Žatec presents the personalities who significantly influenced life in the town in the past (E. Zuleger, K. Fanta, J. Heiser, M. Lüdersdorf, J. Schöffl, JUDr. Th. Hassmann, H. Hassmann, P. Schönfeld, Th. Schönfeld, JUDr. K. Schönfeld, K. Petrowitz, MUDr. A. Seifert and JUDr. W. Kříž).



Bales of dried hops in the hop packaging room of a hop warehouse are waiting to be processed, Žatec, 2015

5.j STAFFING LEVELS AND EXPERTISE (PROFESSIONAL, TECHNICAL, MAINTENANCE)

Care of the nominated property is provided, primarily, by the individual owners. The presentation of the property is provided by the information centres in the town of Žatec and partly by employees of the Stekník Chateau. The visitors centre or the town core, where most of the information about the history of hops, their processing, and trading can be obtained, is represented by the facilities of the Hop Museum and the Temple of Hops and Beer, which complement each other (see also *Chapter 5.h1*).

Component part 01 – Saaz Hop Landscape

As mentioned above, in this component part, visitor services are currently provided by the Stekník Chateau complex. The presentation of the chateau to the visiting public is given by university-educated employees of the National Heritage Institute. Information about the historical building itself, but also the hop landscape from the field of history, restoration, and more, is available not only from guides but also from the cashiers. The chateau currently has five systematised (permanent) job positions, of which three positions are intended to deal directly with visitors. The staff of the chateau also participated in the content of the educational trail Through the Hop (see *Chapter 5.h1*). The National Heritage Institute also organises additional education and various training for its staff.

The cultivation of hops in component part 01 is conducted at a highly professional level, as the local hop fields are permanently connected with the practice of an expert organisation. It has a hop agriculture mechanisation centre the historic village of Stekník, thus preserving the direct link of the operator to production areas.

Component part 02 – Žatec

The primary source of professional information is provided by the Hop Museum, which is a facility of the CHMELÁŘSTVÍ, cooperative Žatec company (see *Chapter 5.h1 and 5.i4*). The director of the museum is also a member of the Steering Group.

The employees of the Hop Museum in Žatec have at least a secondary education and provide guide services in Czech, Russian, German and English, as well as information about the broader scope of other services. They permanently continue to improve their professional knowledge and participate in the preparation of new exhibitions. They also contribute articles to expert periodicals (Hop Year Book - Chmelařská ročenka, Czech hops - Český chmel, etc.) and various other publications.

The Hop Museum participates in the project "National system of quality of services for tourism in the Czech Republic" managed by the Ministry of Regional



Participants in the celebration of the 20th anniversary of the opening of the Hop Museum during a tour of the museum, Žatec, 2017

Development of the Czech Republic. In the field of sustainable development in tourism, the Hop Museum is the holder of the award "Poohří regional product" in the category of Regional Service. The award belongs to the National Network of the Association of Regional Brands that guarantees its origin, quality, and uniqueness. This award given to the Hop Museum, together with the relevant certificate, is valid until September 2020 and will be extended in October.

The tourist information centre in Žatec (TIC Žatec)

TIC Žatec is a member of ATIC (Association of Tourist Information Centres), which endeavours to enhance the professional quality and knowledge of its members (For more information including foreign language versions see the AIC web pages on <http://www.aticcr.cz/>).

TIC Žatec is a certified tourist information centre and is listed in the unified classification of tourist information centres in the Czech Republic. It meets the standards for class B of this classification. The fulfilment of this standard means, among other things, that the staff of a TIC should participate in relevant educational programmes of the ATIC at least once a year.

The Regional Museum of K. A. Polánka in Žatec

The museum employees have a university education, and most of them also work as lecturers at universities and publish expert studies and essays.

The Hop Research Institute Co., Ltd., Saaz

Žatec is also outstanding due to the Hop Research Institute, which is based on the outskirts of the town. Employees of this institute enhance the authority and professional image of the town to an international extent. The institute is the only facility of its kind in the Czech Republic, a private research organisation supported by the Ministry of Agriculture.

Hop research within Czech hop cultivation has a long tradition and an important position. The beginning of its activity can be traced to 1925, the time when the first hop station was established. In 1950 the Hop Research Institute started operating. The main objective of it is not only hop breeding but also the protection of hops against pests and diseases.

Within the technology of hop cultivation, the Hop Research Institute has made many developments, construction in the wide-spacing planting of hop stock, progressive methods in hop cultivation, developments in machinery, and in hop harvesting and processing. A great deal of attention has been devoted to the hop breeding of Saaz semi-early red bine hops (Saaz variety). Contemporary hop breeding work is aimed at breeding new varieties.

The Hop Research Institute Co., Ltd. is engaged in complex scientific research activities in the field of growing, harvesting, and post-harvest treatment of hops. It performs new breeding, maintenance breeding, and multiplication of Czech hop varieties. Variety testing takes place in an experimental microbrewery. It addresses the greening of production and the environment of hop areas, protection, and quality of hops.

Activities include consulting and training activities for entrepreneurs in the field of hop growing. The Hop Research Institute Co., Ltd. for the implementation of the activities mentioned above, especially field experimentation, has a Research farm located in Stekník near Žatec and a detached workplace in Tršice near Olomouc in Moravia.

From the preceding, it has highly specialised professions. More information on its scope can be found on the bilingual website <http://www.chizatec.cz/en/>.



Reproductive material - with the help of the "in vitro" process, the selected plants are recovered and planted in greenhouses. Hop Research Institute, Žatec, 2019.





Picking hops in the Saaz hop growing region, Oskar Brázda (1887-1977)



6. Monitoring

6. Monitoring

6.a KEY INDICATORS FOR MEASURING STATE OF CONSERVATION

Key indicators for measuring the state of conservation of the property Žatec and the Landscape of Saaz Hops will be monitored and recorded within the Periodic Reporting (from now on also PR). This will be done in established cycles and even within monitoring at a national level.

In the Czech Republic, a system of annual monitoring of the state of conservation of world heritage properties has been in place for a long time. This is based on a uniform national methodology, continuously supplemented on the basis of recommendations from the results of the 2nd cycle of Periodic Reporting and preparation for its 3rd cycle.

Annual monitoring reports of all the WH properties in the Czech Republic, inscribed on the World Heritage List, are stored at the National Heritage Institute (NPÚ; NHI) and the Ministry of Culture of the Czech Republic (MK ČR). For details on the scope of these entities, see *Chapter 5.c.* and on the system, see *Chapter 6.b.*

In the years 2018–2020, essential preparation for the 3rd cycle of PR took place in the Czech Republic, with questionnaires of which the need for determining the attributes of the Outstanding Universal Value (OUV) of world heritage properties had been clearly defined. As part of this preparation, an expert discussion

The attributes described in the table below are based on the proposed definition of an Outstanding Universal Value (OUV)

Attribute name (general classification)	Attribute specification	MONITORED CHARACTERISTICS FOR MONITORING WITHIN THE PROPERTY
Cultural landscape	landscape aspect of hop heritage	<ul style="list-style-type: none"> ● range of productive hop fields ● preserved area of agricultural land ● watercourses, including Woody Riparian Vegetation, and flood control banks ● permanent planting ● historical communication networks
Urbanism	ground plan of settlements, delimitation of districts or functional districts, land structure, blocks, the composition of private and public buildings and spaces, built-up, free and green areas	<ul style="list-style-type: none"> ● preservation of the structure of the villages in component part 01 and urban structure of component part 02; ● preservation of the most important historical buildings and landmarks ● preserved number of hop processing buildings ● preservation and rehabilitation of the communication network, including the restoration of historic road surfaces
Architectural values	architectural dispositions, architectural morphology, artistic and handicraft decoration and equipment, authentic constructions and used materials	<ul style="list-style-type: none"> ● chimneys of hop processing buildings, their number and technical condition ● architectural and material design of buildings, including fixtures for openings (windows, doors, gates, technological openings for manipulation) ● preservation of the original construction system of hop processing structures/constructions
View attributes	panorama, iconic views, vistas with landmarks	<ul style="list-style-type: none"> ● archeological relics (dry riverbeds of the river Ohře, traces of extinct watercourses, archeological relics of long abandoned hop fields, buildings, and roads).
Archaeological attributes	archaeological layers	<ul style="list-style-type: none"> ● preservation of documents of hop technology and specific parts of buildings in their original positions (machines, presses, switchboards, electrical wiring, lighting, elevators) ● number of objects used for hop processing or its presentation (functional warehouses, museums, exhibitions, adventure tourism) ● sustainability of the hop tradition

took place to optimise the detail of the description of attributes for various types of world heritage properties concerning their OUV. Last but not least, the aim was to set uniform terminology to improve the clarity for the local administrations of these properties and the general public.

In 2019, the National Heritage Institute (as a Focal Point for Periodic Reporting) organised site manager training, which presented the results of the expert discussions to date. The site manager of the

nominated property "Žatec and the Landscape of Saaz Hops" has already participated in this training.

The system of national monitoring of cultural properties, inscribed on the World Heritage List, in the Czech Republic, is carried out, with authorisation of the Ministry of Culture, by the National Heritage Institute (from now on referred to as the NHI). This professional organisation of state heritage conservation is also a Focal point for ensuring Periodic Reporting.

For precise definition of OUV, see Chapter 3

INDICATOR	FREQUENCY OF ASSESSMENT	AUTHOR AND STORAGE
State of the authenticity	Annually	NHI, RD in Ústí nad Labem
State of the visual integrity with the surroundings	Annually	NHI, RD in Ústí nad Labem
State of legal protection	Annually	NHI, RD in Ústí nad Labem
Extent and condition of hop fields, communication network	Annually	NHI, RD in Ústí nad Labem
Historical landscape structures - their vegetation, their relationship to water, terrain embankments	Annually	NHI, RD in Ústí nad Labem
Constructional-technical condition of the buildings	Annually	NHI, RD in Ústí nad Labem
State of minor architecture and independent sculpture works of art	Annually	NHI, RD in Ústí nad Labem
State of public spaces (streets, squares, parterre, greenery, etc.)	Annually	NHI, RD in Ústí nad Labem
Functional use of buildings and public spaces	Annually	NHI, RD in Ústí nad Labem
New buildings and demolitions	Annually	NHI, RD in Ústí nad Labem
State of conservation of the archaeological terrain	Annually	NHI, RD in Ústí nad Labem
State of renovation financing	Annually	NHI, RD in Ústí nad Labem
Number of inhabitants inside the property	Annually	NHI, RD in Ústí nad Labem
Visitor rates of selected places	Annually	NHI, RD in Ústí nad Labem
State of the presentation of the property and its form	Annually	NHI, RD in Ústí nad Labem

6.b ADMINISTRATIVE ARRANGEMENTS FOR MONITORING PROPERTY

The binding methodology used for the national monitoring of cultural property, listed in the World Heritage List in the Czech Republic, was approved by the Ministry of Culture and put into practice in 2000. In the Czech Republic, continuous annual monitoring has been systematically carried out for 20 years on a national level, and annual monitoring reports have been prepared for every property inscribed on the World Heritage List. In 2011, the methodology was updated, published in print, and made public on the website of the NHI: see Metodika roční monitorovací zprávy o statku zapsaném na Seznam světového kulturního a přírodního dědictví UNESCO, určené pro národní účely, (Methodology of the annual monitoring report on the property inscribed on the UNESCO World Cultural and Natural Heritage List, intended for national purposes, <https://www.npu.cz/publikace/metodicke-principy-pripravy-nominaci-k-zapisu-na-seznam-svetoveho-dedictvi-unesco.pdf>

At the same time, the findings of global monitoring are used, and the methodological recommendations of the World Heritage Centre on how to deal with the general risks of world heritage properties are followed.

The Unit of Heritage with International Status of the National Heritage Institute – Directorate General, is responsible for coordinating the annual monitoring of cultural properties inscribed on the World Heritage List. This department organises regular meetings, and training of, new processors. It is an active participant in the assembly of site managers, which has been organised by the Ministry of Culture since 2017. At these events, experiences are exchanged, and information is shared, and, where possible, World Heritage Centre materials are monitored and used. The team of processors is relatively stable in terms of personnel, which contributes to sharing experiences and deepening the effectiveness of this activity.

Annual monitoring reports are prepared by the territorially relevant workplaces of the NHI. For the nominated property "Žatec and the Landscape of Saaz Hops," this activity will be performed by the Regional Department of the NHI in Ústí nad Labem, whose employees are already involved in the nomination process and are familiar with the property. This regional office also monitors the newly registered property "Mining Region Erzgebirge/Krušnohoří" listed at the WHL in 2019, so that the authorised monitoring expert is already well versed in the given agenda.

Annual monitoring reports are prepared in the Czech language, based on a continuous collection of background materials. They are submitted to the Ministry of Culture in printed and digital form for each calendar year. The main starting document for these reports is the nomination

documentation for the proposal of its inscription, the definition of the OUV and all Decisions of the World Heritage Committee concerning the property since its inclusion on the World Heritage List. If necessary, the current wording of the Operational Guidelines for the Implementation of the World Heritage Convention, relevant previous annual periodic reports, the Management Plan, and other pertinent materials that can be used for this purpose, are monitored. The staff of the Directorate-General and Focal point ensure operational cooperation in the preparation of the reports.

Work on monitoring this nominated property in the future will be facilitated by the existence of a more detailed inspection of individual hops processing buildings in component part 01, (see *Chapter 4.a*, within which data on their values are summarised). Another aid for responsible monitoring in component part 02 is the permanent team for the implementation of the Regeneration Programme, in determining which objects will be given priority for financial support for repairs (see *Chapter 5.d* and the Management Plan).

Currently, the structure of the annually prepared document includes nine chapters in total, and aims to gather as much information as might be useful for the adoption of the following operational measures:

- Identification of the property (Basic Information);
- Values of the property;
- Protection and administration inside the component parts of the property (boundaries of the adequate protection of the property);
- Protection inside the buffer zone of the property;
- Continuous monitoring;
- Conclusions and recommended measures;
- Contact information;
- Opinions of the content of the AMR (Annual Monitoring Report);
- Signature of the authorised person on behalf of the organisation.

Along with the text sections, continuous photographic, or other documentation, is processed, which is to document essential findings in the treatment of the property. The reports prepared by the NHI are then supplemented by a written statement by the property manager, who evidences the material having been discussed between them and the author of the report.

At the end of the preparation process, the reports are submitted to the Directorate General of the National Heritage Institute, which forwards them, together with the comprehensive summary report for the whole country to the Ministry of Culture, by the established deadline, usually by the end of the first half of following year. The reports thus form up-to-date material that is available for public purposes in a comparable data structure and, in particular, is quickly available to the Ministry of Culture in case of operational communication with the World Heritage Centre, the media, or other entities. This system of searching for priorities is proven and has been established in Žatec for a long time; therefore, it will not be necessary to introduce entirely new measures. In the event of registration of the property on the World Heritage List, the application of national monitoring will be launched. As a result of regular information collection and supplementation in the comments process, awareness of OUV attributes and monitoring indicators will deepen among all the actors. Experience from the performance of state administration, which monitors already preserved cultural, landscape, and urban values based on national regulations, will be strengthened by aspects of compliance with the Convention on the Protection of the World Heritage. The team for the implementation of the designated National Programme at the town level is personally interconnected with the Steering Group and its working groups so that the transmission of information will be ensured.

Chimneys above the hop warehouses shall be the subject of monitoring as they belong to the specific value attributes. Example of hop warehouse No. 3040, Tyršova Street, Žatec, 2019.



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Chimneys above the hop warehouses shall be the subject of monitoring as they belong to the specific value attributes. Example of hop warehouse No. 3040, Tyršova Street, Žatec, 2019.

6.c RESULTS OF PREVIOUS REPORTING EXERCISES

Uniform information has not yet been processed for the property as a whole, but the system of preparation of annual reports is a general standard in the Czech Republic.

Self-governing units (cities, towns, municipalities) publish information on their final accounts on the basis of Act No. 250/2000 Coll., on Budgetary rules of territorial budgets, as amended. According to Section 17, Paragraph 8 of this Act, "A self-governing territorial unit shall publish the final account, including a report on the results of the review of management, on its website within 30 days from the approval date. At the same time, it will publish it on the official notice board in electronic form, and, where it is possible, in its paper form. It shall be made available in this way until the final accounts for the following financial year have been approved."

The state administration submits annual reports under Act No. 106/1999 Coll., on free access to information, as amended. The obligation to submit an annual report lies with the contributory organisations of ministries (in the case of a nominated property, for example, the National Heritage Institute), cities, towns or regions, as they manage finances from their foundations. They also prepare the annual report of non-profit organisations established under Act No. 248/1995 Coll., on public benefit companies, as amended (in the case of a nominated property, for example, the Hop Research Institute, NPO). Similarly, the annual report also consists of foundations and endowment funds, which operate under Act No. 227/1997 Coll., on foundations and endowment funds, as amended.

For the needs of the ministries, the recipients of subsidies prepare other reports according to the nature of various topics.

In terms of landscape heritage, reports corresponding to monitoring indicators have not yet been prepared for the rural component part 01. However, as a landscape heritage zone was being prepared in 2019 to legally stabilise the boundary of component part 01 and the conditions for its protection (see *Chapter 5.b*), professional material was compiled for this purpose. It reported to the Ministry of Culture on the value of the territory and thus the state of its preservation.

In terms of the state of cultural heritage, there are already several reports on the urban component part 02 of various kinds. Since 1995, Žatec has taken part in the Programme for the Regeneration of Urban Heritage Reserves and Urban Heritage Zones (one of the programmes of the Ministry of Culture of the Czech Republic, see *Chapter 5.f*). Following the rules of the programme, receiving any means for financial support for the restoration of historical buildings is conditional

to the submission of reports on the way the subsidies are being used. Previous reports on the results of sub-projects were found to be complete and their content satisfactory; therefore, the Ministry of Culture could repeatedly decide in favour of further allocations of financial means in the years 1996–2020.

The state of conservation of cultural heritage assets, as well as the state of urban districts, declared as Urban Heritage Reserves and Urban Heritage Zones, which form the territory of the urban component part 02 (see *Chapter 2.a*), and state of conservation the proposed Saaz Hop Landscape Heritage Zone and the Stekník Rural Heritage Zone (within the rural component part 01). This is continuously monitored, through operational activity, by the employees of the National Heritage Institute (NHI). Records of these inspections, if they are part of the official meeting, are taken, and summary information is available in the regional department of NHI in Ústí nad Labem.

Monitoring of WH properties, following the guidelines for the preparation of Periodical Reports for the World Heritage Committee, has not been implemented yet, since the property is not inscribed on the World Heritage List.

In the event of a successful nomination, these reports will be prepared by qualified staff at the National Heritage Institute, in this case, by a regionally competent expert from the regional department in Ústí nad Labem. In the NHI, skilled experts are appointed directly for the preparation of such reports, so that continuity of information and contacts with partners on various levels are provided (See also *Chapter 6.b*).

The reports will be forwarded to the authorised local site manager and town selfgoverning management of both component parts for comment and possible corrective action.

Other reports about the condition of the nominated property prepared for international requirements have not been processed for "Žatec and the landscape of Saaz hops," and it is therefore not possible to cite or attach them here.

Potential authors of such reports have already been, in the course of the nomination process, involved actively in the working groups; they participate in various expert general activities related to the world heritage agenda on a national level. In the case of the inscription of the property on the World Heritage List, all possible methodological aid will be provided, for these potential authors, from the beginning, in the form of a team of experienced people from this institution.





Loading hops on a ship, Oskar Brázda (1887-1977)




7. Documentation


7. Documentation

7.a PHOTOGRAPHS AND OTHER AUDIOVISUAL IMAGE INVENTORY AND AUTHORIZATION FORM


All photographs listed in the table are stored/annexed as individual image files in the formats tiff or jpg on a separate memory device. UNESCO is entitled to use and disseminate the photographs. Costs for image rights and use of the images and photographs will not occur or will

be born by the applicant. However, the permission to unlimitedly use and disseminate the photographs does not constitute a transfer of the rights in the photographs to UNESCO for exclusive marketing.


Number	View	Caption
1		<p>Component part 01 – Saaz Hop Landscape</p> <p>An aerial view of the commonly named Imperial Road and hop fields of the Hop Research Institute Co., Ltd., Žatec. View from the village of Stekník to the village of Trnovany and the town of Žatec.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>LABORATOŘ POSTOLOPRTY s.r.o., No. 300 Masarykova St., CZ-439 42 Postoloprty, tel.: +420 415 784 310, e-mail: laborator@zol.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>8/2019</p>


Number	View	Caption
2		<p>Component part 01 – Saaz Hop Landscape</p> <p>Aerial view of the Stekník Chateau surrounded by hop fields of the Hop Research Institute Co., Ltd., Žatec. In the background, the village of Hradiště and České Středohoří (Bohemian Midlands).</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>LABORATOŘ POSTOLOPRTY s.r.o.</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>8/2019</p>


Number	View	Caption
3		<p>Component part 01 – Saaz Hop Landscape</p> <p>View from the village of Zálužice over the river Ohře to the hop fields of the Hop Research Institute Co., Ltd., Žatec in the cadastre of the village Stekník. In the foreground, a detail of the construction of the Saaz hop wire trellis.</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> 8/2019


Number	View	Caption
4		<p>Component part 01 – Saaz Hop Landscape</p> <p>A view of the hop fields of the Hop Research Institute Co., Ltd., Žatec in the cadastre of the village Stekník. Taken in the period near a hop harvest.</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> 8/2019


Number	View	Caption
5		<p>Component part 01 – Saaz Hop Landscape</p> <p>A view of the Stekník Chateau surrounded with the "sea" of hop fields.</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> 8/2019


Number	View	Caption
6		Component part 01 – Saaz Hop Landscape Historic hop drying kiln in the village of Trnovany from 1908.
		Non exclusive session of rights Yes
Format		Photographer Contact details of copyright owner Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz
Digital		Date of Photo (mo/yr) 8/2019


Number	View	Caption
7		Component part 01 – Saaz Hop Landscape Historical four-chamber hop drying kiln in the village of Trnovany, No. 9, in the foreground the Blšanka stream.
		Non exclusive session of rights Yes
Format		Photographer Contact details of copyright owner Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz
Digital		Date of Photo (mo/yr) 2016


Number	View	Caption
8		Component part 01 – Saaz Hop Landscape Hop fields of the Hop Research Institute Co., Ltd., Žatec in the period of hanging hop trellis wires – so called "stringing".
		Non exclusive session of rights Yes
Format		Photographer Contact details of copyright owner Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz
Digital		Date of Photo (mo/yr) 4/2019


Number	View	Caption
9		<p>Component part 01 – Saaz Hop Landscape</p> <p>Hop fields of the Hop Research Institute Co., Ltd., Žatec, the cadastre of the village Stekník, in the period of hop training (hop shoots are trained on the wires).</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> 5/2019


Number	View	Caption
10		<p>Component part 01 – Saaz Hop Landscape</p> <p>Hop fields of the Hop Research Institute Co., Ltd., Žatec in the period of hop training.</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> 6/2019


Number	View	Caption
11		<p>Component part 01 – Saaz Hop Landscape</p> <p>Hop field at the time of full growth in July. In the background a historical sheepfold on the south-eastern edge of Stekník, one of the iconic vistas of the landscape.</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> 2019


Number	View	Caption
12		<p>Component part 01 – Saaz Hop Landscape</p> <p>Morning view of hop fields before their harvest. View of the landscape from Trnovany to Stekník.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2020</p>


Number	View	Caption
13		<p>Component part 01 – Saaz Hop Landscape</p> <p>Hop fields in May, at the time of the beginning of rapid growth of hops on hop wires. In the background is a historical chamber drying kiln in Stekník.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2020</p>


Number	View	Caption
14		<p>Component part 01 – Saaz Hop Landscape</p> <p>The Statue of St. Lawrence, the patron saint of hop growers, at the gate of the entrance to farmstead No. 10 in Stekník.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2005</p>


Number	View	Caption
15		<p>Component part 01 – Saaz Hop Landscape</p> <p>The atmosphere of a traditional Hop-Grower's Day in the courtyard of the Research Farm, farmstead No. 10 in Stekník.</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> Josef Ježek, Chmelařský institut s.r.o. Žatec, tel. +420 602 408 854, e-mail: jezek@chizatec.cz
Digital		<p>Contact details of copyright owner</p>
		<p>Date of Photo (mo/yr)</p> 2020


Number	View	Caption
16		<p>Component part 01 – Saaz Hop Landscape</p> <p>Training hop vines to hop poles using straw from rye.</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> Josef Wara
Digital		<p>Contact details of copyright owner</p>
		<p>Date of Photo (mo/yr)</p> 1 st half of the 20 th century


Number	View	Caption
17		<p>Component part 02 – Žatec</p> <p>The western part of the Prague Suburb with hop processing buildings.</p>
		<p>Non exclusive session of rights</p> Yes
Format		<p>Photographer</p> Libor Sváček, Regional Authority of Ústecký Region, 3118/18 Velká Hradební St, CZ-400 02 Ústí nad Labem, tel. +420 737 203 656 e-mail: srejber.a@kr-ustecky.cz
Digital		<p>Contact details of copyright owner</p>
		<p>Date of Photo (mo/yr)</p> 9/2015


Number	View	Caption
18		<p>Component part 02 – Žatec</p> <p>Svobody Square with the Town Hall and parts of the historical centre of the town from the north east aerial view.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Libor Sváček, Regional Authority of Ústecký Region, 3118/18 Velká Hradební St, CZ-400 02 Ústí nad Labem, tel. +420 737 203 656 e-mail: srejber.a@kr-ustecky.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>9/2015</p>


Number	View	Caption
19		<p>Component part 02 – Žatec</p> <p>The western part of the Prague Suburb with characteristic hop processing buildings as part of the urban landscape (the view from the Hop Lighthouse tower).</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>8/2016</p>


Number	View	Caption
20		<p>Component part 02 – Žatec</p> <p>Historic hop warehouses and buildings of packing rooms around Nerudovo Square in Žatec.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Věra Kučová, No. 26 Evropská St., CZ-160 00 Praha 6, tel.: +420 724 663 560, e-mail: kucova.vera@npu.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>7/2020</p>


Number	View	Caption
21		<p>Component part 02 – Žatec</p> <p>Characteristic "Oeil-de boeufs" (dormers windows) on the roof ventilated the water vapour produced by drying out the hops on the drying trays in the loft (roof space). House No. 7 in Obránců Miru Street in Žatec as an example of dozens of such features.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p> <p>Contact details of copyright owner</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>7/2017</p>


Number	View	Caption
22		<p>Component part 02 – Žatec</p> <p>View from the south of the characteristic panorama of the Prague Suburbs with hop processing buildings and their chimneys ("forest of chimneys").</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p> <p>Contact details of copyright owner</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2017</p>


Number	View	Caption
23		<p>Component part 02 – Žatec</p> <p>The Prague Suburb - a former hop warehouse with chambers for sulphuring the hops and a residential villa of the A. Meindl and G. Epstein company - the characteristic example of the combination of a residential building and a hop processing building of one entrepreneurial family, No. 753 and 1257 Kovářská St.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p> <p>Contact details of copyright owner</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>7/2017</p>


Number	View	Caption
24		<p>Component part 02 – Žatec</p> <p>The Prague Suburb – a former hop warehouse of the J. Schwarzkopf company, No. 945 Alšova St., with an outside fire escape stairs.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>7/2017</p>


Number	View	Caption
25		<p>Component part 02 – Žatec</p> <p>The Prague Suburb – storage of bales of the dry hop in a former hop warehouse, No. 1580 Chmelařské Square.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>8/2016</p>


Number	View	Caption
26		<p>Component part 02 – Žatec.</p> <p>Panorama of Žatec from the north-west.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Contact details of copyright owner</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2016</p>


Number	View	Caption
27		<p>Component part 02 – Žatec</p> <p>View of the northern part of the historical centre of Žatec with its medieval town walls from the west, one of the iconic panoramic views of Žatec.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p> <p>Contact details of copyright owner</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2017</p>


Number	View	Caption
28		<p>Component part 02 – Žatec</p> <p>View of the Žatec Brewery on an elevated promontory from the north, to the left of it the tower of the Church of the Assumption of the Virgin Mary.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p> <p>Contact details of copyright owner</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2017</p>


Number	View	Caption
29		<p>Component part 02 – Žatec</p> <p>The floor of a typical chamber hop drying kiln in the Saaz hop growing region. Dried hops rest in piles, which will then be pressed into cubes on the lower floor and sent for processing to warehouses and packaging rooms in Žatec.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p> <p>Contact details of copyright owner</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2017</p>


Number	View	Caption
30		<p>Component part 02 – Žatec</p> <p>The building of the historical hop warehouse and hop packaging room, No. 1232, on Smetanovo Square in Žatec. An excellent example of the integration of a hop building into the urban structure and architectural morphology of the neighbouring residential houses.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2016</p>

Number	View	Caption
31		<p>Component part 02 – Žatec</p> <p>Early evening view of the alley between the historical warehouses and hop packaging rooms, Nos. 1950 and 1952, on Prokopa Velkého Square in Žatec, currently the core of visitor destinations due to the neighbouring Temple of Hops and Beer and the Hop Museum Žatec.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2016</p>


Number	View	Caption
32		<p>Component part 02 – Žatec</p> <p>The attic of a typical hop warehouse – a motif from the Hop Museum Žatec with a detail of a fan for a sulphur chamber.</p>
		<p>Non exclusive session of rights</p> <p>Yes</p>
Format		<p>Photographer</p> <p>Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz</p>
Digital		<p>Date of Photo (mo/yr)</p> <p>2016</p>

Number	View	Caption	
33		Component part 02 – Žatec View of a sulphur chamber with a typical slatted floor, permeated by smoke from the sulphuring of dried hops and authentic metal gates - an example from the Hop Museum Žatec.	
		Non exclusive session of rights	Yes
Format		Photographer Contact details of copyright owner	Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz
Digital		Date of Photo (mo/yr)	2016

Number	View	Caption	
34		Component part 02 – Žatec The administrative building of the former New Hop Certification Centre, No. 1612, from 1930 on Chmelařské Square, currently the seat of the Central Institute for Supervising and Testing in Agriculture.	
		Non exclusive session of rights	Yes
Format		Photographer Contact details of copyright owner	Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz
Digital		Date of Photo (mo/yr)	2016

Number	View	Caption	
35		Component part 02 – Žatec The mascot of the Hop Museum in Žatec, the hop elf called Hop, surrounded by children from primary school during their visit to the museum.	
		Non exclusive session of rights	Yes
Format		Photographer Contact details of copyright owner	Václav Mach, 73 Mírové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz
Digital		Date of Photo (mo/yr)	2014

Number	View	Caption	
36		<p>Component part 02 – Žatec</p> <p>A scene from the traditional spring event Chmelfest (Hopfest) and a parade through the town.</p>	
		Non exclusive session of rights	Yes
Format		Photographer Contact details of copyright owner	Martin Štross, Fotostudio Spoušť Žatec, tel.: +420 777 240 915, e-mail: fotospoust@email.cz
Digital		Date of Photo (mo/yr)	2004

Number	View	Caption	
37		<p>Czech hops</p>	
		Non exclusive session of rights	Yes
Format		Photographer Contact details of copyright owner	Václav Mach, 73 Mirové Sq., CZ-439 42 Postoloprty, tel.: +420 603 871 077, e-mail: foto.mach@tiscali.cz
Digital		Date of Photo (mo/yr)	8/2016

7.b TEXTS RELATING TO PROTECTIVE DESIGNATION, COPIES OF PROPERTY MANAGEMENT PLANS OR DOCUMENTED MANAGEMENT SYSTEMS AND EXTRACTS OF OTHER PLANS RELEVANT TO THE PROPERTY

7.b1 SUMMARY OF THE PROTECTIVE DESIGNATION

This sub-chapter supplements information of the *Subchapter 5.b* Protective designation. All national legal documents relating to the protection are in the Czech language.

The entire territory of component part 01 will be comprehensively protected as the Saaz Hop Landscape Heritage Zone on under the Measure of a General Nature, the process of declaring a landscape heritage zone was started in the middle of 2020, not yet completed.

The built-up area of the village of Stekník has been protected as a whole by means of a Stekník Rural Heritage Zone since 1995, which has helped to maintain the authentic urban structure of the whole village, and the extent of repairs and use of materials for all buildings in this area has been professionally consulted and monitored. In this protected area of the village of Stekník, there are already five individually protected cultural heritage assets, which means that even the interior maintenance and details can be controlled. Those are important buildings associated with the history of hop growing and processing, as well as the Stekník Chateau.

The Stekník Rural Heritage Zone (RHZ) was established by Decree Ref. No. 249/1995 Coll., issued by the Ministry of Culture on September 22nd, 1995, on the Establishment of Historic Areas in Selected Towns and Urban Areas as Heritage Zones.

The component part 02 covering historical centre of the town (Žatec Urban Heritage Reserve) and the Prague Suburb (Žatec Urban Heritage Zone) is protected according two decrees of the Ministry of Culture as follows:

The Žatec Urban Heritage Reserve (UHR)

The Žatec Urban Heritage Reserve was established by Decree Ref. No. 16.417/87-VI/1, issued by the Ministry of Culture of the Czechoslovak Socialist Republic on December 29, 1987 with the establishment of the old historic cores of the towns Kutná Hora, Český Krumlov, Jindřichův Hradec, Slavonice, Tábor, Žatec, Hradec Králové, Jičín, Josefov, Litomyšl, Pardubice, Znojmo, Nový Jičín, Olomouc, village of Kuks with the adjacent complex of the former hospital and set of sculptures in Bethlehem, the set of technical monuments Stará huť in the Josefov Valley near Olomoučany, and the archaeological sites Libodřický mohylník, Slavníkovská

Libice, Třísov, Tašovice, Bílina, České Lhotice, Staré Zámky u Líšně and Břeclav – Pohansko, being declared heritage reserves on December 21st, 1987 (came into force on December 17, 1987).

The Decree, among other, states:

"An Urban Heritage Reserve is defined by the set of cultural heritage assets it contains, however, the subjects of state heritage control in the UHR are not only the cultural heritage assets themselves but also the historic street layout, the corresponding urban structure and the urban interiors, including public spaces surfaces. Any modifications of the urban spaces must be consistent with the historic environment of the heritage reserve. Therefore, to this extent, the established conditions also apply to properties inside the heritage reserve that are not cultural heritage assets themselves."

The Žatec Urban Heritage Zone (UHZ)

The Žatec Urban Heritage Zone was established by Decree No. 108/2003 Coll., issued by the Ministry of Culture on April 1st, 2003, on the Establishment of Historic Areas in Selected Towns and Urban Areas as Heritage Zones, and determining the conditions for its protection, as of 4th January 1987 which came into force on September 1, 2003.

The Decree, among other, states:

"This is a historic area that has significant cultural value. A number of preserved heritage assets related to the processing of hops, including other valuable buildings, form an extremely valuable whole. The town landmarks are best appreciated from long-distance views and views of the wider area."

In the immediate vicinity of component part 02, the Municipal Office in Žatec, as a body of state heritage conservation, exercises increased supervision over the protection of the panoramic values of the historic town and its Prague Suburb. This is based on two mutually shared protective belts, which were declared for the urban component in two stages, in connection with the strengthening of legal protection of urban heritage in Žatec.

Protective belts have been declared according the Art. 17 of the National Heritage Act No. 20/1987, are applied for both the Urban Heritage Reserve and the Urban Heritage Zone (see Map 09.2).

Protective belt of the Žatec Urban Heritage Reserve

The decision issued by the District National Committee in

Louny on establishing a protective belt of the Urban Heritage Reserve of Žatec Ref. No. Kult/1124/87 was declared on 17th December, 1987 and extended by the decision of the District Office in Louny, on the extension of the protective belt of the Urban Heritage Reserve in Žatec ref. No. RK-1172/95/401, from 17th August 1995.

The Decision, among other, states:

"The reason of establishing the protective belt is to provide protection for the Urban Heritage Reserve from any building development disturbances. The state heritage care authority can take appropriate measures in the event of inappropriate changes to the external appearance of buildings in the protected area."

The protective belt of the Žatec Urban Heritage Zone

The protective belt of the Urban Heritage Zone was defined by a Zoning and Planning Decision by the Municipal Office, Building Department – Environment Žatec, Ref. No. 31941/2015, issued on 30th November

2015 by the Territorial Decision of the Žatec Municipal Office ref. MUZA 31941/2015 and came into force on 3rd March 2016.

The Decision, among other, states:

"The reason for the establishment of this protective belt is to protect outstanding urban and architectural values (with respect to significant visual characteristics) and the specific features of historic buildings in Žatec, which are formally protected as a whole within an Urban Heritage Zone. The subject of protection is the preserved urban structure, material character of buildings and specific height configuration with the silhouette of the town as well as volumes, materials, proportions, type of roofing and details of the roofscape. The roofscape is exceptional thanks to the unconventional design of the roofs of buildings related with the drying and processing of hops, as well as to the large number of preserved historic chimneys."

The maps No. 09., No 09.1 and No. 09.2 complement the information on the property boundaries and show the national designation to the: individually protected cultural heritage assets, boundaries of the Saaz Hops Heritage Zone Landscape (covering the whole of the component part 01 – in process), Stekník Rural Heritage Zone (within that Landscape Heritage Zone), Žatec Urban Heritage Reserve, Žatec Urban Heritage Zone and of the above mentioned protective belts, (together with the relevant parts of the buffer zone according the scale of those individual maps).

The buffer zone

The territory of the buffer zone includes areas of several municipalities, all of them, together with Zálužice (for component part 01) an Žatec (for component part 02) have their own local land use plans in force. The map No. 10 shows the scope of individual selfgoverning municipalities with their own land use plans.

By the Act No. 183/2006 Coll., On Spatial Planning and Building Rules (Building Act) (see *Chapter 5.c*), all local plans must respect other protective and regulatory limits in force, based on the protection of a variety of public interests. These limits have been included in the Principles of Spatial Development of the Ústecký Region, which is the binding spatial planning documentation, which is materially superior to all land use plans within the Ústecký Region.

The buffer zone integrates the already existing protection regulations in the area (e.g. part of the local military, inaccessible and undeveloped, training area, and zones of the air defence, which itself requires strict control of all building heights in the area, flood plains along the river Ohře, major bio corridors, limits stemming from the local airport south-west of Žatec, etc). The map No. 11 shows those limits and regulations based on the Principles of Spatial Development of the Ústecký Region.



Statue of St. Lawrence, patron saint of hop growers, Žatec region, 2016

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VYHLÁŠKA

Ministerstva kultury

ze dne 22. září 1995

o prohlášení území historických jader vybraných obcí a jejich částí za památkové zóny

Ministerstvo kultury stanoví podle § 6 zákona České národní rady č. 20/1987 Sb., o státní památkové péči, ve znění pozdějších předpisů:

§ 1

Území historických jader obcí a jejich částí s dochovanými soubory lidové architektury:

Bechyňská Smoleč (okr. Tábor), Beranov (okr. Karlovy Vary), Boňov (okr. Třebíč), Brocno (okr. Litoměřice), Břehov (okr. České Budějovice), Březinka (okr. Mladá Boleslav), Břežany (okr. Klatovy), Budičovice (okr. Písek), Bukovec (okr. Česká Lípa), Debrno (okr. Praha-západ), Dlouhomilov (okr. Šumperk), Dobřív (okr. Rokycany), Dolany (okr. Plzeň-sever), Dolní Lažany (okr. Cheb), Dolní Nezly (okr. Litoměřice), Dolní Rychnov (okr. Sokolov), Drahenice-Račany (okr. Příbram), Dýšina (okr. Plzeň-sever), Hlince (okr. Plzeň-sever), Horní Jadruž (okr. Tachov), Hradešice (okr. Klatovy), Chalupy (okr. Prachatice), Chotiněves (okr. Litoměřice), Chodský Újezd (okr. Tachov), Jablčeno (okr. Rokycany), Jakubovice (okr. Šumperk), Jarov (okr. Plzeň-sever), Javorník-Kopánky (okr. Hodonín), Jestřebice (okr. Mělník), Jiřetice (okr. Strakonice), Kamenická Stráň (okr. Děčín), Kanice (okr. Domažlice), Karlov (okr. Jičín), Klenčí pod Čerchovem (okr. Domažlice), Kloub (okr. Strakonice), Kluky (okr. Mladá Boleslav), Koječín (okr. Strakonice), Kojšovice (okr. Karlovy Vary), Komorní Lhotka (okr. Frýdek-Místek), Korno (okr. Beroun), Kosmová (okr. Karlovy Vary), Královské Poříčí (okr. Sokolov), Krasovice (okr. Písek), Kravaře (okr. Česká Lípa), Krnín (okr. Český Krumlov), Křtětice (okr. Strakonice), Kvás-kovice (okr. Strakonice), Květov (okr. Písek), Kyšice (okr. Plzeň-sever), Lažistě (okr. Prachatice), Lensedly (okr. Praha-východ), Lhota (okr. Plzeň-sever), Lhotka (okr. Přerov), Libotyně (okr. Prachatice), Lipnice (okr. Plzeň-jih), Lobeč (okr. Mělník), Loukov (okr. Mladá Boleslav), Lysovice (okr. Vyškov), Mahouš (okr. Prachatice), Malá Morávka (okr. Bruntál), Mirkovice (okr. Český Krumlov), Mítov (okr. Plzeň-jih), Mořinka (okr. Beroun), Nedvědice (okr. Tábor), Nové Smrkovice (okr. Jičín), Nynice (okr. Plzeň-sever), Olešná (okr. Beroun), Olešovice (okr. Plzeň-sever), Ostřetice (okr. Klatovy), Ounuz (okr. Tábor), Pačín (okr. Tachov), Palonín (okr. Šumperk), Pernek (okr. Český Krumlov), Petrovice (okr. Havlíčkův Brod), Plzeň 1 – k. ú. Bolevec (okr. Plzeň-město), Plzeň 4 – k. ú. Bukovec (okr. Plzeň-město), Plzeň 4 – k. ú. Červený Hrádek (okr. Plzeň-město), Plzeň 4 – Lobzy (okr. Plzeň-měs-

to), Plzeň 4 – k. ú. Újezd (okr. Plzeň-město), Plzeň-Křimice (okr. Plzeň-město), Pocinovice (okr. Domažlice), Podmokly (okr. Rokycany), Pojedy (okr. Nymburk), Poleň (okr. Klatovy), Popovice (okr. Karlovy Vary), Prostiboř (okr. Tachov), Putim (okr. Písek), Radčice (okr. Plzeň-město), Radějov (okr. Plzeň-sever), Rašovice (okr. Litoměřice), Rataje (okr. Olomouc), Řesanice (okr. Plzeň-jih), Senička (okr. Olomouc), Sitné (okr. Mělník), Skalsko (okr. Mladá Boleslav), Slatina (okr. Litoměřice), Sloup (okr. Česká Lípa), Smrkovice (okr. Písek), Soběnice (okr. Litoměřice), Sovenice (okr. Nymburk), Srdov (okr. Litoměřice), Stará Ves (okr. Přerov), Stará Ves-Žďárský Potok (okr. Bruntál), Stekník (okr. Louny), Stráž (okr. Domažlice), Střehom (okr. Mladá Boleslav), Střezivojice (okr. Mělník), Studená (okr. Plzeň-sever), Studeňany (okr. Jičín), Svínky (okr. Tábor), Svobodné Hamry (okr. Chrudim), Šatov (okr. Znojmo), Trhanov (okr. Domažlice), Třešňový Újezdec (okr. Prachatice), Tumbož (okr. Česká Lípa), Tukleky (okr. Písek), Tuřany-Brněnské Ivanovice (okr. Brno-město), Týmákov (okr. Plzeň-jih), Ubušín (okr. Žďár nad Sázavou), Vápenky (okr. Hodonín), Varvažov (okr. Písek), Vejvanov (okr. Rokycany), Velenice (okr. Česká Lípa), Velké Hydčice (okr. Klatovy), Velké Karlovice, místní část Podřatá (okr. Vsetín), Veselka (okr. Blansko), Vidím (okr. Mělník), Vinice (okr. Nymburk), Vitějovice (okr. Prachatice), Vratěnín (okr. Znojmo), Vysoká Lípa (okr. Děčín), Zadní Chodov (okr. Tachov), Zahrádka (okr. Písek), Zahrádka (okr. Plzeň-jih), Zechovice (okr. Strakonice), Zvěřetice (okr. Prachatice), Zvonovice (okr. Vyškov), Žebrákov (okr. Písek) se prohlašují za památkové zóny (dále jen „zóna“).

§ 2

Hranice území zón a jejich rozsah jsou vymezeny v příloze této vyhlášky a jsou graficky vyznačeny v mapách, které jsou uloženy u Ministerstva kultury, Státního ústavu památkové péče, Památkového ústavu středních Čech, Památkového ústavu v Brně, Památkového ústavu v Českých Budějovicích, Památkového ústavu v Olomouci, Památkového ústavu v Ostravě, Památkového ústavu v Pardubicích, Památkového ústavu v Plzni, Památkového ústavu v Ústí nad Labem a u okresních úřadů a obcí, na jejichž území se zóny nacházejí.

§ 3

Príslušný orgán územního plánování zajistí vyzna-

čení území zóny v příslušné územně plánovací dokumentaci a v územně plánovacím podkladu pro její pořízení, popřípadě při pořizování jejích změn a doplňků.

§ 4

Tato vyhláška nabývá účinnosti dnem vyhlášení.

Ministr:

Tigrid v. r.

verozápadně podél silnice směr Nový Bor p. č. 1788 až ke kapli, na p. č. 753 se lomí a vrací se podél p. č. 752, 751, kolmo překračuje cestu p. č. 1789 a dále podél p. č. 750, 749, 758/1, 745/1, lomí se k severu podél p. č. 373 a pokračuje podél cesty p. č. 1826 až k p. č. 938/3, kterou směrem západním obíhá, lomí se k severu a východu až k cestě p. č. 1825, podél které opět pokračuje k severu. Na jejím severním konci na cestě p. č. 1904 se hranice uzavírá.

SMRKOVICE, okr. Písek (15123)

Rozsah památkové zóny ve Smrkovicích je vymezen hranicí, která začíná na severozápadě na křižovatce cest p. č. 948/12 a 949/1, pokračuje po severní straně cesty p. č. 949/1, podél p. č. 291, přetíná cestu p. č. 950 a 263/2, směřuje dále podél p. č. 10, 1, 14, 13, 16, 12/2, přetíná cestu p. č. 951 a stáčí se spolu s ní k jihu, pokračuje pak podél p. č. 53, 36/3, 36/2, kolem p. č. 38/4 se obrací k západu, protíná cestu p. č. 960/1, sleduje p. č. 961 až ke křižovatce cest p. č. 921 a 948/12, kde se zalamuje k severu a dospívá podél cesty p. č. 948/12 do svého výchozího bodu.

SOBĚNICE, okr. Litoměřice (15164)

Rozsah památkové zóny v Soběnicích je vymezen hranicí, která začíná na severu u p. č. 90, pokračuje dál podél p. č. 119/3, 119/2, 103/1, 104, 101, 67, 1145, 91, 62, 111, na východě přetíná komunikaci na hranici p. č. 1062/1, dále vede podél p. č. 87/1, 709/4, 709/3, 47, 46, 78, 79, na jihu probíhá podél komunikace p. č. 1068, 60/6, přetíná komunikaci p. č. 861/6, podél p. č. 865/3, 868/4, 868/2, podél příjezdové komunikace se stáčí k severu, přetíná na jižním okraji p. č. 1062/1, stáčí se k západu a vede podél p. č. 1059/1, 1060/1, přetíná silnici a dále podél p. č. 52/3, 52/1, 49, přes p. č. 1064 k jejímu severnímu okraji, dále na sever podél p. č. 1, 30/1, 29, 25, 15, 10, 9, 2/4, 2/1, 1, stáčí se k severu podél 1084/2, přetíná kolmo p. č. 117 a k výchozímu bodu u p. č. 90.

SOVENICE, okr. Nymburk (15261)

Rozsah památkové zóny v Sovenicích je vymezen hranicí, která začíná na severu na p. č. 488/5 a jde po p. č. 19, 21/3, 488/4, 22/2, 33/3, 34/2, 25/3, 16/1, 29/1, 488/3, 53/1, 54, 20/1, 20/2, přechází komunikaci p. č. 647 na p. č. 22, pokračuje podél p. č. 65/2, 65/1, 69, 64/4, 74/2, 77/1, 80/1, 86/8, 86/1 a 31/3. Napojuje se na komunikaci p. č. 636/1 a pokračuje podél p. č. 140, 637/1, 80, 55, 636/6, 57, 58/1, 2, 59, 641, 148/1, přetíná p. č. 76, v úrovni p. č. 76 se lomí a kolmo přechází p. č. 129/2, komunikaci p. č. 647, p. č. 636/5 a pokračuje po p. č. 8, 17/2, 488/5, kde se hranice uzavírá.

SRDOV, okr. Litoměřice (15305)

Rozsah památkové zóny v Srdově je vymezen hranicí, která začíná na severovýchodě u p. č. 593,

kolmo přetíná p. č. 882/1, pokračuje podél p. č. 559/2, 530/2, 534/5, 533, 532/1, kolmo přetíná silnici na Hradec p. č. 883, pokračuje podél p. č. 323, 326/1, 882/2, 341, částí 889/1, 343/4, 343/1, 343/3, částí 346/5, 365, 364/1, 362/1, 29/1, 371/2, 372, 404/1, pokračuje podél p. č. 414/2 až k silnici směr Habřina, kterou kolmo přetíná, a lomí se k východu podél p. č. 389, 36/1, 380, 40/1, 40/2, 94/1, 146, 331, 147/2, 316, 314/2, 313/2. Na jejím jižním konci kolmo přetíná silnici směr Liběšice a pokračuje podél p. č. 277/2, 277/1, 176/3, 272. Podél p. č. 939 se lomí k severu, kolmo přetíná p. č. 940/1 a podél p. č. 881 pokračuje k severovýchodnímu cípu p. č. 551, kde se hranice uzavírá.

STARÁ VES, okr. Přerov (15393)

Rozsah památkové zóny ve Staré Vsi je vymezen hranicí, která začíná na severu u p. č. 83, zde se lomí k západu a probíhá podél p. č. 86, potom po komunikaci p. č. 196, kterou v severní části obce přetíná, a probíhá pak po severním okraji p. č. 237 a 241, obíhá p. č. 280, 281 a 300, na východě vede podél p. č. 322, 705, 323, 333, 332, 330, 328, zde mění směr k jihu a vede podél p. č. 119 a 366, které obíhá, na jihu vede po silnici p. č. 430, lomí se k severu a dále po silnici p. č. 778, lomí se k západu a prochází po komunikaci p. č. 519, dále podél p. č. 514, 505, 499, 498, 494, 501, 488, 475, tuto parcelu přetíná a probíhá k severu podél p. č. 486. Zde protíná místní komunikaci p. č. 520 a směřuje k severu podél p. č. 528 a 527, zde se lomí západním směrem po komunikaci Přerov – Holešov p. č. 778, lomí se k jihu po silnici p. č. 541, 593, na západě vede podél p. č. 574, prochází podél p. č. 575, 589, 588, 595, zde opět protíná komunikaci Přerov – Holešov a podél p. č. 6 a 7 směřuje k severu, zde se pak lomí západním směrem a probíhá po místní komunikaci podél p. č. 8, 10, 32, 31, 30 a po komunikacích p. č. 118 a 119 směřuje k výchozímu bodu.

STARÁ VES-ŽDÁRSKÝ POTOK, okr. Bruntál (15391)

Rozsah památkové zóny ve Staré Vsi-Ždárském Potoce je vymezen hranicí, která začíná na severu na rohu cesty p. č. 279 naproti p. č. 240/12, překračuje p. č. 240/1, potok p. č. 273, p. č. 239/1, 238/1, 238/2, podél p. č. 238/11, 1194/2, 238/12 až k p. č. 249/3, na východě podél p. č. 238/10, 1229/2, přes p. č. 1233/1, dále po toku Stříbrného potoka p. č. 1811 po soutok s Podolským potokem p. č. 1809/1, proti proudu potoka k p. č. 1121, které obíhá, na jihu podél cesty p. č. 1763, 1768, 1766, podél p. č. 1166, lomí se podél p. č. 1065, obíhá p. č. 994, vede podél silnice č. 11 (p. č. 264/5), na západě podél potoka p. č. 275 a p. č. 51/3 k výchozímu bodu.

STĚKNÍK, okr. Louny (19087)

Rozsah památkové zóny ve Stekníku je vymezen hranicí, která je na severu ohraničena silnicí p. č. 549, pak se lomí na severním okraji p. č. 19/1 a vede podél

p. č. 19/1, 30, 17, 15/1, 13, 8, 458/6, 458/7, 458/9, vede zpět k p. č. 458/7, pokračuje podél p. č. 36, 3, 1/2. Zde se opět lomí a pokračuje na jižní straně obce podél vodoteče p. č. 228, kolmo překračuje silnici, pokračuje podél vodoteče p. č. 61, dále pokračuje podél silnice p. č. 525 směrem k severu a podél p. č. 58, 57, 56, 21/2, lomí se k 21/1, pokračuje podél p. č. 55 a 20 zpět k výchozímu bodu.

STRÁŽ, okr. Domažlice (15634)

Rozsah památkové zóny ve Stráži je vymezen hranicí, která začíná na severu u komunikace p. č. 910/2, vede podél této komunikace, pokračuje podél silnice p. č. 915/1, přechází silnici k p. č. 52, na východě vede podél p. č. 52, 72/1, 70/2, 69/2, obíhá p. č. 871 a 869/3, na jihu přechází komunikaci p. č. 965, obíhá p. č. 842/1, vede podél p. č. 838, 944, 835/1, 74/2, 13, na západě přechází cestu p. č. 838, obíhá p. č. 80, pokračuje podél p. č. 335, 915/1, 836/5, 331/1, 328, přechází cestu p. č. 916/2, 327/2, na severu vede podél p. č. 935, 47, 42, 41/1, 39, 35, 32, 30, 26/2 k výchozímu bodu.

STŘEHOM, okr. Mladá Boleslav (04250)

Rozsah památkové zóny ve Střehomi je vymezen hranicí, která začíná na severu na p. č. 359, jde po p. č. 313, 351/2, 84, přetíná p. č. 718 a napojuje se na p. č. 719, 339/1, 720, 106, 726/1, lomí se po p. č. 76, 392/1 a pokračuje po p. č. 768, 408, 407, 405, 735, přetíná komunikaci p. č. 730 na komunikaci p. č. 706, p. č. 1, 376/1 (rybník), dále přetíná kolmo p. č. 252/1 a 715 a napojuje se na p. č. 357/1 a 359, kde se hranice uzavírá.

STŘEZIVOJICE, okr. Mělník (02773)

Rozsah památkové zóny ve Střezivojicích je vymezen hranicí, která začíná na severu na p. č. 27/1, přechází komunikaci p. č. 1243, pokračuje podél p. č. 55, kolem p. č. 52 se stáčí k východu, pokračuje podél komunikace p. č. 1237, přechází komunikaci p. č. 1236, pokračuje kolem p. č. 59/1, 1253/1, 1235/2, na východě vede podél p. č. 68, 63/3, 63/1, 10/4, 10/1, 68/1, 70, 1253/3, 77, obíhá p. č. 80/2, na jihu pokračuje podél p. č. 80/1, 1248/2, přetíná komunikaci p. č. 1248/1, pokračuje podél p. č. 83/1, 84/1, 84/2, 86/4, 92/1, 92/3, 70, 108, 203/3, kde se napojuje na komunikaci p. č. 1249, a dále probíhá podél p. č. 181/20, 181/8, 181/14, 181/12, 181/5, 181/13, obíhá p. č. 150, na západě přechází komunikaci p. č. 1243, po jejímž okraji vede až na p. č. 32, dále obíhá p. č. 118/1, pokračuje podél p. č. 122/1, 129, podél komunikace p. č. 1240 se napojuje na p. č. 32/1 a podél p. č. 28/1 se vrací k výchozímu bodu 27/1.

STUDENÁ, okr. Plzeň-sever (05458)

Rozsah památkové zóny ve Studené je vymezen hranicí, která začíná v severozápadní části obce u p. č. 1045/2, obíhá jej, přechází komunikaci

p. č. 917 a na severu pokračuje podél p. č. 1, 64, 58/1, 56, 46, obíhá p. č. 44, na východě vede podél p. č. 39, přechází komunikaci p. č. 917, pokračuje podél p. č. 475/2, 36/2, obíhá p. č. 1051/2, na jihu pokračuje podél p. č. 1052/4, 1052/2, 1052/3, přechází komunikaci p. č. 886/2, pokračuje podél p. č. 863/2, na západě vede podél p. č. 1040/3, 1040/2, obíhá p. č. 1042/2 a podél p. č. 34 a 37 vede k výchozímu bodu.

STUDEŇANY, okr. Jičín (13783)

Rozsah území památkové zóny ve Studeňanech je vymezen hranicí, která začíná na severu p. č. 11/2, obíhá p. č. 7, vede podél p. č. 30, obíhá p. č. 1, pokračuje podél p. č. 132/3, vede podél silnice p. č. 536/1, na východě obíhá p. č. 93/2, 94, 95, přes p. č. 324/1 k p. č. 83/1, které obíhá, pokračuje dál podél potoka p. č. 567, přechází jej, obíhá p. č. 74, pokračuje podél p. č. 72, 47, 71, 70, 320/1, podél komunikace, kterou u p. č. 316/5 přechází, na jihu obíhá p. č. 299/2, přechází cestu, pokračuje dál podél p. č. 302, 301, přechází místní komunikaci a pokračuje podél p. č. 231/1, přes silnici, na západě obíhá p. č. 103, vede podél p. č. 229/5, 229/8, přes p. č. 228 a potok p. č. 570, podél cesty p. č. 533, pokračuje podél p. č. 25/3 a 14 k výchozímu bodu.

SVINKY, okr. Tábor (18340)

Rozsah území památkové zóny ve Svinkách je vymezen hranicí, která začíná na severu u p. č. 1/2, pak přechází komunikaci p. č. 562/1, pokračuje na východě podél p. č. 41/9, 41/4, 41/5, 41/6, 41/7, 41/8, 23, 32/2, 32/1, 41/10, poté přechází komunikaci p. č. 570, na jihu p. č. 223/5, 234/2, 235/2, 235/3, 254/1, 51, 582, 255/3, 255/1, 262/1, 272/3, prochází p. č. 272/2, na západě přechází komunikaci p. č. 264, dále jde podél p. č. 44, 18/4, 45, 47, 18/1, 17, 9, dále překračuje silnici p. č. 570, na severu jde podél p. č. 7, zasahuje do p. č. 3/1, dále p. č. 1/3 a hranice končí u výchozího bodu u p. č. 1/2.

SVOBODNÉ HAMRY, okr. Chrudim (18790)

Rozsah území památkové zóny ve Svobodných Hamrech je vymezen hranicí, která začíná na západě u řeky Chrudimky p. č. 240, která tvoří západní, severní a východní hranici zóny, na jihu pokračuje podél p. č. 30/1, přechází p. č. 242, obíhá p. č. 1/1, pokračuje podél p. č. 1/3, přetíná p. č. 225/2, přechází silnici p. č. 249, vede podél ní k p. č. 19/1, pokračuje podél p. č. 15, obíhá p. č. 19/3 a podél p. č. 245 vede k výchozímu bodu.

ŠATOV, okr. Znojmo (16207)

Rozsah památkové zóny v Šatově je vymezen hranicí, která začíná na západě u komunikace p. č. 1407, na severu obíhá p. č. 296, část návsi p. č. 284, dále podél p. č. 274, 273, 272, 270, 271, obíhá p. č. 265, pokračuje podél cesty u vinohradů p. č. 1445 až k p. č. 146,

Okresní národní výbor
Odbor kultury

Louny

č.j. kult/1124/87 ze dne 17. 12. 1987

R O Z H O D N U T Í -----

o zřízení památkového ochranného pásma městské památkové rezervace **Ž a t e c**

Odbor kultury Okresního národního výboru v Lounech, jako výkonný orgán státní památkové péče, v souladu s návrhem Krajského střediska státní památkové péče a ochrany přírody v Ústí nad Labem, s posudkem Státního ústavu památkové péče a ochrany přírody v Praze a po dohodě s odborem výstavby a územního plánování ONV Louny, odborem výstavby MěNV Žatec a odborem školství a kultury MěNV Žatec, vydává ve smyslu § 5 odst. 1 zákona č. 22/58 Sb. o kulturních památkách a vyhlášky MŠK ČSR č. 118/1959 Ů.l. o památkových ochranných pásmech, v souladu s § 33 odst. 2 zákona č. 50/1976 Sb. o územním plánování a stavebním řádu toto

r o z h o d n u t í : -----

Okresní národní výbor, odbor kultury v Lounech, určuje památkové ochranné pásmo pro městskou památkovou rezervaci Žatec, prohlášenou výnosem MŠK ČSR pod č.j. 36568/61 - V/2 ze dne 31. srpna 1961.

A. Vymezení památkového ochranného pásma:

Hranice obvodu památkového ochranného pásma /dále jen "pásma"/ se vymezuje na severní straně katastrálního území Žatec na levém břehu řeky Ohře pozemkovou parcelou /k.č. 7032/1/, kde přechází na pravý břeh a pokračuje východní stranou nového silničního průtahu /k.č. 7144/ až k "Denisevě" ulici /k.č. 8/3/, až po hranici parcely /k.č. 4345/1/ k cestě, která vede okolo zahrádek situovaných pod hradbami /k.č. 6818/. Po této cestě pokračuje ulicí "U plynárny" /k.č. 6707/ dále jde po východní straně ulice "Fügnerova" /k.č. 4465/3, 4465/1/ pokračuje ulicí "Tyršovou" /k.č. 6777/1/ na "Komenského alej" /k.č. 6960/2/ po severní straně ulice "Komenského alej" /k.č. 6960/2/ až k ulici "Fučíkově" /k.č. 6787/1/, dále uhlopříčně /západ - severovýchod/ přes "Chmelařské náměstí" na rohu Chmelařského náměstí pokračuje západní stranou ulice "Alšovy" /k.č. 6794/3/ přetíná uhlopříčně /západ - severovýchod/ nám. "Jana Nerudy" /k.č. 6794/1/ až k ulici "Nákladní" /k.č. 6810/1/, uličkou směrem k ulici "Nájkově" /k.č. 6813/2/, přes ulici "Nájskovou" /k.č. 6807/1/ pokračuje západní stranou spojovací uličky pod paneláky /k.č. 300/3/, kolmo přetíná ulici "Erbenovu" a běží po západní straně ulice "Preslově" /k.č. 312/3/ dále severní stranou ulice "P. Bezruč" /k.č. 367/3/ po hranici "Podměstí" parcely /k.č. 6824/10/ západní stranou ulice "Zbyslavový" /k.č. 444/012/ a dále po západní straně silnice "Nákladní" až ke kovovému mostu /k.č. 6832/1/ přes řeku Ohři k výchozímu bodu na levém břehu řeky /k.č. 7032/1/.

Hranice pásma je vyznačena v mapové příloze, která je součástí tohoto rozhodnutí.

Rozhodnutí o prohlášení památkového ochranného pásma oznámí Okresní národní výbor, odbor kultury v Lounech příslušnému středisku Geodézie n.p. pro okres Louny k vyznačení hranice do odpovídajících mapových a evidenčních /písemných/ operátů, kde se rovněž poznamená rozhodnutí o zřízení pásma. Příslušný orgán územního plánování vyznačí hranice pásma ve všech kategoriích a stupních územně plánovací dokumentace a ve všech dalších plánech, jimiž se řídí výstavba a přestavba území a stavební činnost v něm. Rozhodnutí o zřízení pásma včetně mapové přílohy jsou uloženy u:

- odboru kultury Středočeského KNV v Ústí nad Labem
- odboru výstavby a územního plánování ONV Louny
- odboru kultury ONV Louny
- odboru školství a kultury MěNV Žatec
- odboru výstavby MěNV Žatec
- Krajského střediska státní památkové péče a ochrany přírody v Ústí nad Labem
- Státního ústavu památkové péče a ochrany přírody v Praze,
- Geodézie n.p., středisko geodézie pro okres Louny, kde je také možno do nich nahlédnout.

V souladu s § 3 vyhl. č. 118/1959 Ú.č. o památkových pásmech budou vlastníci nebo trvalí uživatelé nemovitostí ležících v památkovém ochranném pásmu městské památkové rezervace Žatec seznámeni s tímto rozhodnutím způsobem v místě obvyklým. Doklad o vyhlášení bude založen u odboru kultury ONV Louny.

B. Podmínky ochrany:

- 1/ Při pořizování územně plánovací, přípravné a projektové dokumentace, při územním a stavebním řízení, při provádění staveb a stavebních úprav, zásazích do terénních útvarů a městské zeleně je nutno dbát, aby nebyla změněni půdorysné, hmotové a výškové konfigurace zástavby a přírodních prvků v území ochranného pásma oslabena nebo porušena urbanistická kompozice, měřítka a hodnoty panoráma městské památkové rezervace a jejího vnějšího prostředí.
- 2/ Předem je nutno projednat zásadní změny ve způsobu obhospodařování a využití nemovitostí v ochranném pásmu, které by měly dopad na vzhled a charakter území pásma.
- 3/ Působení všech případných nově navrhovaných stavebních souborů a výškových objektů, které se pohledově uplatňují ve vztahu k městské památkové rezervaci, bude podřízeno požadavkům ochrany její siluety.
- 4/ V části ochranného pásma vymezeného ulicemi, které jsou popsány v odstavci A, je na mapové příloze tohoto rozhodnutí, bude zachována historická urbanistická struktura zástavby, její měřítka a charakter uličních interiérů.
- 5/ Vlastnická práva ani desavadní způsob obhospodařování nemovitostí v ochranném pásmu nejsou vydáním tohoto rozhodnutí dotčeny. Vlastníci, případně uživatelé objektů jsou povinni udržívat je v řádném stavu.
- 6/ Při změně vlastníků nebo uživatelů nemovitostí ležících v ochranném pásmu, přecházejí podmínky ochrany i na nové ^{ne}obyvatele nebo uživatele.
- 7/ Všechny zásahy, opatření a změny, které se buď přímo nebo ve svých důsledcích dotýkají hodnot MPR a s ní souvisejícího prostředí, je nutno projednat s výkonným orgánem státní památkové péče, kterým je odbor kultury ONV v Lounách a s Krajským střediskem státní památkové péče a ochrany přírody v Ústí nad Labem. Lze je provádět pouze s jejich souhlasem a za podmínek jimi stanovených.

- 8/ Dohled nad dodržováním podmínek ochrany v ochranném pásmu zajišťuje ONV v Lounech, odbor kultury, jako výkonný orgán státní památkové péče a ochrany přírody v Ústí nad Labem a okresním konzervátorem státní památkové péče.
- 9/ Vyjímky z podmínek ochrany, popřípadě další změny povolují ONV v Lounech, odbor kultury v souladu s § 2 vyhl. MŠK ČSR č. 118/1959 Ů.l. o památkových ochranných pásmech.
- 10/ Platnost tohoto rozhodnutí není časově omezena. Zanikne-li důvod vyhlášení pásma, bude toto oznámeno novým rozhodnutím odboru kultury ONV Louny.

Odůvodnění:

- 1/ Důvodem prohlášení ochranného pásma MPR Žatec je zabezpečit ochranu památkové rezervace před rušivými vlivy vyvolanými stavební činností a jinými změnami v okolí památkové rezervace.
- 2/ Charakteristika území ochranného pásma: Území ochranného pásma téměř opisuje na straně severní, východní a západní MPR Žatec, z důvodů terénních, kdy rozloha MPR Žatec je svým převýšením nad okolním terénem samostatně chráněná. Pouze na straně jižní, kde je terén rovinný s velmi hustou zástavbou z minulého století je začleněno do ochranného pásma větší území, protože zde je třeba věnovat větší pozornost obnově, dostavbě či přestavbě této části města, v souvislosti s modernizací. Dále i z toho důvodu, že tato hustá zástavba má svoje hodnoty průmyslových děrbných celků a individuálně jako sloh secesní či tak zvaná "moderna".

Poučení:

Proti tomuto rozhodnutí je možno podat odvolání do 15 dnů po jeho doručení k odboru kultury Středočeského KNV v Ústí n.L. prostřednictvím odboru kultury ONV Louny.

- 6 -

Odkladný účinek se s ohledem na ustanovení § 55 odst. 2 zák. č. 71/67 Sb. o správním řízení vylučuje, protože jakákoliv činnost odporující tomuto rozhodnutí by mohla způsobit nenahraditelné škody na kulturních památkách a jejich prostředí a byla by v rozporu s veřejným zájmem.

Vedoucí odboru kultury ONV



Příloha:

Jako příloha se účastníkům řízení zasílá mapový podklad s vyznačenou hranicí ochranného pásma. Mapová příloha obsahuje 2 listy státní mapy 1 : 5 000 odvozené, žatec 0-3, 0-4.

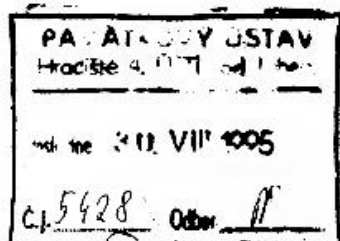
Rozdělovník k rozhodnutí:

- 1/ Středočeský KHV, odbor kultury v Ústí nad Labem
- 2/ ONV, odbor výstavby a územního plánování v Lounech
- 3/MěNV, odbor školství a kultury v Žatci
- 4/ MěNV, odbor výstavby v Žatci
- 5/Krajské středisko státní památkové péče a ochrany přírody v Ústí nad Labem
- 6/ Státní ústav památkové péče a ochrany přírody v Praze Václavské nám. 1
- 7/ Geodézie n.p., středisko geodézie v Lounech
- 8/ Vlastníci, uživatelé, správci nemovitostí, které leží v ochranném pásmu budou vyrozuměni veřejnou vyhláškou
- 9/ Odbor kultury ONV Louny

OKRESNÍ ÚŘAD V LOUNECH

REFERÁT kultury

PSČ 440 27



VÁŠ LOPIS ZNAČKY/ZE DNE

NAŠE ZNAČKA

VYRIZUJE/LINKA

LOUNY dne

VEC:

RK-1172/95/401

Parma, 211

17.8.1995

Rozšíření ochranného pásma MPR v Žatci

R o z h o d n u t í

Referát kultury Okresního úřadu v Lounech jako výkonný orgán státní památkové péče v souladu s návrhem Ministerstva kultury České republiky č.j. 15462/94 a posudku Státního ústavu památkové péče v Praze č.j. 5076/94 a po dohodě s Újezdním stavebním úřadem v Žatci vydává toto rozhodnutí :

V ý r o k

Referát kultury Okresního úřadu v Lounech rozšiřuje ochranné pásmo Městské památkové rezervace v Žatci vyhlášené rozhodnutím zdejšího orgánu pod č.j. kult.-1124/87 ze dne 17.12.1987 o následující část :

Na Nerudově náměstí o.p.p. číslo : 552/1, 551/1, 554

V Příkré ulici o.p.p. číslo : 555/2, 615/1, 615/2

V Nákladní ulici o.p.p. číslo : 1902, 1903, 2118

Na Husit. nám. o.p.p. číslo : 449, 455/2, 771/1, 771/2

771/3, 774

TELEFON
2421-9

DANKOVNÍ SPOJENÍ
KB Žatec, č. ú. 1126-481/0100

IČO
080 446

5559

Na shora vymezeném území se stanoví tyto podmínky ochrany :

- 1) Při pořizování územně plánovací, přípravné a projektové dokumentace, při územním a stavebním řízení, při provádění staveb a stavebních úprav, zásazích do terénních útvarů a městské zeleně je nutno dbát, aby nebyla změnami půdorysné, hmotové a výškové konfigurace zástavby a přírodních prvků v území ochranného pásma oslabena nebo porušena urbanistická kompozice, měřítko a hodnoty panorama městské památkové rezervace a jejího vnějšího prostředí.
- 2) Předem je nutno projednat zásadní změny ve způsobu obhospodařování a využití nemovitosti v ochranném pásmu, které by měly dopad na vzhled a charakter území pásma.
- 3) Působení všech případných nově navrhovaných stavebních souborů a výškových objektů, které se pohledově uplatňují ve vztahu k městské památkové rezervaci, bude podřízeno požadavku ochrany její siluety.
- 4) V části ochranného pásma vymezeného ulicemi, které jsou popsány shora a které jsou na mapové příloze tohoto rozhodnutí, bude zachována historická urbanistická struktura zástavby, její měřítko a charakter uličních interiérů.
- 5) Vlastnická práva ani dosavadní způsob obhospodařování nemovitosti v ochranném pásmu nejsou vydáním tohoto rozhodnutí dotčeny. Vlastníci, případně uživatelé objektů jsou povinni udržovat je v řádném stavu.
- 6) Při změně vlastníků nebo uživatelů nemovitostí ležících v ochranném pásmu, přecházejí podmínky ochrany i na nové nabyvatele nebo uživatele.
- 7) Všechny zásahy, opatření a změny, které se buď přímo nebo ve svých důsledcích dotýkají hodnot MPR a s ní souvisejícího prostředí, je nutné projednat s výkonným orgánem

Okresní úřad Louny - referát kultury

Pod nemocnicí 2380, 440 27 Louny

MK ČR rozš.ochr.p. MPR Ža RK-1172/95/401 17.8.95 str.3

státní památkové péče, kterým je referát kultury Okresního úřadu v Lounech. Lze je provádět pouze s jeho souhlasem a za podmínek jím stanovených.

- 8) Dohled nad dodržováním podmínek ochrany v ochranném pásmu zajišťuje OkÚ v Lounech - referát kultury, jako výkonný orgán státní památkové péče a Památkový ústav v Ústí n.L.
- 9) Platnost tohoto rozhodnutí není časově omezena. Zanikne-li důvod vyhlášení pásma, bude toto oznámeno novým rozhodnutím referátu kultury OkÚ v Lounech.

o d ů v o d n ě n í

Doba uplynulá od vyhlášení ochranného pásma městské památkové rezervace ukázala, že je v zájmu jeho ochrany nutné toto pásmo mírně rozšířit a to o shora uvedené parcely. Případná výstavba či rekonstrukce stávajících staveb by mohla především pohledově narušit dané prostředí. Proto je v zájmu urbanistické části ochrany MPR, aby dotčeným orgánem státní správy v těchto případech byl i výkonný orgán státní památkové péče, který může ovlivnit výsledný obraz těsného sousedství památkové rezervace.

P o u č e n í o o d v o l á n í

Proti tomuto rozhodnutí je možno podat odvolání k Ministerstvu kultury České republiky prostřednictvím referátu kultury Okresního úřadu v Lounech a to podáním učiněným do 15-ti dnů ode dne jeho doručení.

Účastník řízení:

- SÚPP Praha

Na vědomí:

- MK ČR Praha
- PÚ Ústí n.L.
- ÚSÚ Žatec
- MěÚ Žatec, odb.rozv.města,
odbor vnitřních věcí
- ÚAPP Most
- RRR OkÚ Louny



Jiří Voruda
ved. RK OkÚ v Lounech

108

VYHLÁŠKA

ze dne 1. dubna 2003

o prohlášení území s historickým prostředím ve vybraných městech a obcích
za památkové zóny a určování podmínek pro jejich ochranu

Ministerstvo kultury po projednání s příslušnými krajskými úřady stanoví podle § 6 odst. 1 zákona č. 20/1987 Sb., o státní památkové péči, ve znění zákona č. 132/2000 Sb. a zákona č. 320/2002 Sb.:

§ 1

Území historických částí měst a obcí Bavorov (okres Strakonice), Budišov nad Budišovkou (okres Opava), Červená Řečice (okres Pelhřimov), Český Krumlov-Plešivec (okres Český Krumlov), Dobruška (okres Rychnov nad Kněžnou), Frenštát pod Radhoštěm (okres Nový Jičín), Havlíčkova Borová (okres Havlíčkův Brod), Hradec nad Moravicí (okres Opava), Hrádek nad Nisou (okres Liberec), Husinec (okres Prácheň), Chotěboř (okres Havlíčkův Brod), Kostelec nad Labem (okres Mělník), Ledec nad Sázavou (okres Havlíčkův Brod), Litvínov-Osada (okres Most), Lomnice nad Popelkou (okres Semily), Lysá nad Labem (okres Nymburk), Malešov (okres Kutná Hora), Maškov (okres Chomutov), Mirovice (okres Písek), Mšeno (okres Mělník), Načeradec (okres Benešov), Ondřejov (okres Praha-východ), Ostrava-Poruba (okres Ostrava-město), Ostrava-Přívoz (okres Ostrava-město), Ostrava-Vítkovice (okres Ostrava-město), Pecka (okres Jičín), Pilníkov (okres Trutnov), Plzeň-Bezovka (okres Plzeň-město), Plzeň-Lochotín (okres Plzeň-město), Potštát (okres Přerov), Praha-Staré Střešovice (hlavní město Praha), Praha-Tejnka (hlavní město Praha), Rataje nad Sázavou (okres Kutná Hora), Rokytnice v Orlických Horách (okres Rychnov nad Kněžnou), Rychnov nad Kněžnou (okres Rychnov nad Kněžnou), Rýmařov (okres Bruntál), Sedlice (okres Strakonice), Stárkov (okres Náchod), Strážov (okres Klatovy), Týnec nad Labem (okres Kolín), Unhošť (okres Kladno), Zákupy (okres Česká Lípa), Žacléř (okres Trutnov) a Žatec (okres Louny) se prohlašují za památkové zóny (dále jen „zóna“).

§ 2

Hranice území zón jsou vymezeny v příloze k této vyhlášce a jsou graficky vyznačeny v mapách, které budou uloženy do 90 dnů ode dne nabytí účinnosti této vyhlášky u Ministerstva kultury, odborné organizace státní památkové péče, příslušných krajských úřadů a obecních úřadů obcí s rozšířenou působností, a u dalších měst a obcí, pokud se na jejich území zóny nacházejí.

§ 3

K zajištění památkové ochrany zóny a jejího historického prostředí, které s architektonickými soubory, jednotlivými nemovitými kulturními památkami, strukturou pozemků, pozemními komunikacemi, vodními plochami, vodními toky, trvalými porosty a realizovanými kompozičními záměry vykazují významné kulturní hodnoty, mohou orgány státní památkové péče při svém rozhodování stanovit podmínky, které vycházejí z:

- a) výsledků stavebně historických, urbanistických, archeologických a památkových průzkumů území,
- b) výsledků stavebně historických a restaurátorských průzkumů jednotlivých objektů,
- c) kulturních hodnot historického prostředí ve vztahu k využití dotčených objektů, prostorů a částí území a k zachování a obnově historických dřevin,
- d) historického charakteru, vzájemného prostorového uspořádání, dominant a měřítka jednotlivých objektů a jejich skupin a
- e) zachování archeologických nálezů.

§ 4

Tato vyhláška nabývá účinnosti dnem 1. září 2003.

Ministr:

Dostál v. r.

pozemku k severnímu rohu p. p. č. 735, který obchází z východu a jihu. Dále pokračuje po severovýchodní hraně komunikace p. č. 1103/1 až ke styku s komunikací p. č. 1119. Tu lemuje z jihovýchodní strany, lomí se k jihu podél levého břehu potoka p. č. 1732/5, 1732/1 a 1275. Na mostě se lomí k severozápadu podél jižní hrany komunikací p. č. 1182, 522, 1025 a lomí se k severu po západní hraně p. p. č. 1016, 1014 a 278. Lomí se krátce k západu po jižní hraně p. p. č. 275, 274 a 273, po jejíž západní hraně pokračuje k severu. Dále pokračuje k severu po západní hraně p. p. č. 270, 269, 268, 980, 962, 961, 960, 959, 958, 945, 938, 937, 936, 934, 933 a 2029 až do výchozího bodu.

Žacléř (19424), okres Trutnov, Královéhradecký kraj

Hranice začíná na hlavní průjezdní komunikaci na severním rohu st. p. č. 143, směřuje k východu podél severní strany p. p. č. 85, zde se lomí na jih po východní straně p. p. č. 85, 84, 83/1, 82, stáčí se k východu po severní straně p. p. č. 945/1. Přechází ulici Mladých horníků p. p. č. 969/3, sleduje její východní stranu až k severnímu rohu p. p. č. 1, zde se lomí k východu po severní straně p. p. č. 69/1, 1144, 1009/2, které obchází z východu a jihu až ke komunikaci J. E. Purkyně, po jejímž západním okraji se lomí k severu. Na severním rohu p. p. č. 3 se lomí k západu a sleduje jižní hrany p. p. č. 15/6, 15/4, 23/2, 23/1, 24, 31/2, přechází průjezdní komunikaci p. č. 1103/6 a směřuje k jihu po jejím západním okraji až na jižní okraj p. p. č. 49/1. Z tohoto bodu přechází na jihovýchodní roh st. p. č. 24, kterou obchází ze západu a ze severu, lomí se na sever a znovu na západ po jižní straně p. p. č. 1108, 1110/2, st. p. č. 261. Lomí se k východu a znovu k severu a ze západní strany lemuje p. p. č. 186/1, 182, 189 a komunikaci p. č. 1108. Přechází průjezdní komunikaci p. č. 1103/6 a lomí se po její východní straně na sever k výchozímu bodu.

Žatec (19473), okres Louny, Ústecký kraj

Hranice začíná na severu v ulici Příkré p. p. č. 6800/1 a vede východně po směru hodinových ručiček osou ulice Příkré, Nákladní p. p. č. 6810/1, přetíná Kruhové náměstí p. p. č. 6775/1 a dále osou ulice U odborů p. p. č. 6781/3, 6781/1, láme se k jihu po ose ulice Fügnerovy p. p. č. 6781/1, láme se k východu a vede po ose ulice Tyršovy p. p. č. 6777/1 jihovýchodním směrem. Mění směr k západu a vede osou ulice Pražské p. p. č. 6960/1, dále osou Komenského alejí p. p. č. 6960/2 až k ulici Masarykově p. p. č. 6787/1. Zde se hranice stáčí k severu na jihozápadní roh p. p. č. 505/1 a pokračuje směrem západním po jižní hranici st. p. č. 505/1, p. p. č. 221, 220/1, st. p. č. 508, 510/2, 1133/2, p. p. č. 233/4, 233/3, st. p. č. 511, p. p. č. 6789, 6730/13, 6730/16, st. p. č. 974, 975 a p. p. č. 6730/14. Na západním rohu tohoto pozemku se láme východním směrem a pokračuje po severních stranách p. p. č. 6730/15, st. p. č. 1577/2, opět p. p. č. 6730/15, 6730/12, st. p. č. 3129, p. p. č. 6730/6, st. p. č. 973, p. p. č. 6730/4, 6731/1 a 6731/10. Zde se hranice stáčí k jihovýchodu po hranicích p. p. č. 6731/9 a 6731/3, opisuje po severní a východní straně p. p. č. 246/1 a kolmo překračuje ulici Pod známkovnou p. p. č. 6798 směrem k severozápadnímu rohu p. p. č. 246/5. Dál pokračuje východním směrem po severních stranách p. p. č. 246/5, st. p. č. 1977/1, p. p. č. 252/4, st. p. č. 533/3, p. p. č. 252/2 a st. p. č. 539. Zde se stáčí k severu a kolmo překračuje ulici Chmelařskou p. p. č. 6794/1 směrem na jihozápadní roh p. p. č. 909, kterou obchází ze západu a severu. Pokračuje k východu po severní hranici p. p. č. 909, st. p. č. 549, 550/1, 552/3, 552/1 k místu, kde severním směrem překračuje komunikaci p. č. 6794/1 a po západní straně st. p. č. 554 a p. p. č. 6753 směřuje do ulice Příkré, kde se hranice uzavírá.

VYPRAVENO DNE: - 2 - 12 - 2015

Městský úřad Žatec
Stavební a vyvlastňovací úřad, životní prostředí
 Památková péče
 Náměstí Svobody 1, 438 24 Žatec

Spis zn.: MUZAS/20446/2015/PP/Ši
 Č. j.: MUZA 31941/2015
 Vyřizuje: Ing. Petra Šilhavá
 Tel.: 415736453
 E-mail: silhava@mesto-zatec.cz

Datum: 30. 11. 2015



ÚZEMNÍ ROZHODNUTÍ O VYMEZENÍ OCHRANNÉHO PÁSMO MĚSTSKÉ PAMÁTKOVÉ ZÓNY ŽATEC

Městský úřad Žatec, stavební a vyvlastňovací úřad, životní prostředí, jako místně a věcně příslušný orgán státní památkové péče ve smyslu § 29 odst. 2 zákona č. 20/1987 Sb., o státní památkové péči, ve znění pozdějších předpisů (dále jen „zákon o státní památkové péči“), vydává ve smyslu § 17 odst. 3 zákona o státní památkové péči a prováděcí vyhlášky MK ČR č. 66/1988 Sb., v souladu s ustanovením § 83 zákona č. 183/2006 Sb., o územním plánování a stavebním řádu, toto

rozhodnutí:

Městský úřad Žatec, stavební a vyvlastňovací úřad, životní prostředí, v souladu s návrhem Krajského úřadu Ústeckého kraje Ústí nad Labem ze dne 9. 7. 2015 a s vyjádřením Národního památkového ústavu, územní odborné pracoviště v Ústí nad Labem, č. j. NPÚ-351/77405/2015/PP/OS/Ha ze dne 9. 11. 2015, vymezuje ochranné pásmo městské památkové zóny Žatec, zřízené vyhláškou MK ČR č. 108/2003 Sb. ze dne 1. dubna 2003.

A. Vymezení ochranného pásma

Rozsah ochranného pásma se v souladu s vyhláškou č. 66/1988 Sb., kterou se provádí zákon o státní památkové péči, vymezuje následovně.

Návrh hranice ochranného pásma městské památkové zóny Žatec je vymezen na východě křižovatkou ulic Fügnerova a Jungmannova odkud probíhá jihovýchodním směrem kolem kostela sv. Jakuba ke křižovatce ulic Tyršova a Pražská, obchází č. p. 2905 a pokračuje jižním směrem ulicí Šafaříkova na křižovatku s ulicí Dukelská. Z Dukelské ulice se napojuje ulicí Studentská, která tvoří jižní hranici pásma, prochází kolem areálu nemocnice na křižovatku s ulicí Čeradická, na západní straně prochází parkem ulicí Boženy Kunětické - Vikové, ulicí Svatováclavská se stáčí severním směrem a vede zpět k hranici městské památkové zóny ulicí Příkrá na křižovatku s ulicí Nákladní.

Ochranné pásmo je vedeno po vnějších hranicích parcel st. p. č. 402/1, 402/2, 403, 405, 512, 514/1, 514/2, 514/3, 514/4, 514/5, 521/1, 521/2, 521/3, 521/4, 526/1, 526/2, 526/3, 526/4, 527, 541/1, 541/2, 543/1, 543/2, 544, 545, 547/1, 547/2, 553, 554, 555/1, 555/2, 831/2, 832/1, 832/2, 833, 901/2, 902, 904, 905, 937/1, 937/2, 937/3, 938, 942/1, 942/3, 962/1, 962/2, 962/3, 963, 976/1, 976/2, 976/3, 976/4, 987, 988/1, 1001/1, 1001/2, 1001/3, 1012, 1016, 1017/1, 1017/2, 1017/3, 1018/1, 1018/2, 1018/3,

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6800/2, 6800/4, 6800/5, 6807/2, 6960/3, 6960/4, 6960/5, 6960/6, 6960/7, 6960/8, 6960/13, 6960/14, 6960/15, 6961/1, 6967/6, 6967/7, 6967/9, 6967/10,

6967/12, 6967/13, 7019/3, 7052, 7055, 7058/1, 7062, 7063, 7092, 7093, 7107/1, 7107/2, 7107/3, 7107/4, 7118, 7119, 7123, 7124, 7150, 7198, 7212, 7248, 7273 vše v katastrálním území Žatec. Na území ochranného pásma MPZ se nachází nemovitá kulturní památka - Muzeum, rejstříkové číslo 12760/5-5596.

Zákres hranice ochranného pásma v katastrální mapě je nedílnou součástí tohoto rozhodnutí.

B. Podmínky ochrany

B. 1. Důvody zřízení ochranného pásma

Důvodem zřízení tohoto pásma je snaha ochránit výjimečné urbanistické a architektonické hodnoty (s ohledem na pohledovou exponovanost) a specifické rysy historické zástavby Žatec, která je formálně chráněna jako městská památková zóna (dále jen „MPZ“). Tyto hodnoty musí být chápány v kontextu historického urbanismu městského útvaru, ale také v kontextu jeho začlenění v rámci širšího krajinného rámce.

Předmětem ochrany je dochovaná urbanistická struktura, hmotové řešení zástavby a její výšková konfigurace se siluetou města; hmota, proporce, typ krytiny a detaily střešní krajiny, která je specifická díky netradičnímu řešení střešních partií objektů, souvisejících se sušením a zpracováním chmele i velkému počtu dochovaných historických komínů; a veřejná zeleň.

B. 2. Vymezení podmínek pro činnost v ochranném pásmu

Při pořizování územně plánovací dokumentace a projektové dokumentace staveb budou plně respektovány podmínky pro činnost v ochranném pásmu městské památkové zóny Žatec:

- při pořizování a zpracování veškeré územně plánovací, přípravné a projektové dokumentace a plánovaných zásazích do terénních útvarů ochranného pásma je nutno dbát, aby nebyly změnami půdorysné hmotové a výškové konfigurace zástavby porušeny kvality dochované urbanistické skladby MPZ (poměr zastavěných a nezastavěných ploch, umístění stavby v rámci parcely, zachování veřejných prostranství, komunikací a zeleně).
- novými zásahy; změnami výškové hladiny stávající i nové zástavby, nesmí být dotčeny či poškozeny významné pohledové osy a průhledy na dominantní památky a jejich skupiny, charakteristické dálkové pohledy na město, silueta města, hlavní kompoziční osy městského intravilánu ani dálkové výhledy z výškových objektů uvnitř městské památkové zóny. Za nevhodné je považováno bourání historických komínů (t. j. komínů vyšších než 5 m, které jsou součástí výrobních či průmyslových objektů postavených před rokem 1945). Rovněž nesmí být narušena či poškozena kontinuita historických vazeb města se širším okolím a konfigurace terénu (zachování stávající úrovně terénu).
- působení všech případných nově navrhovaných stavebních souborů a výškových objektů (nejen staveb, ale také reklamních zařízení, stožárů vysokého napětí apod.), které se pohledově uplatňují ve vztahu k městské památkové zóně, bude podřízeno požadavku ochrany siluety MPZ.

Zamýšlené práce, ke kterým je nezbytné si předem vyžádat závazné stanovisko orgánu státní památkové péče, definuje § 14 odst. 2 a § 17 odst. 3 zákona o státní památkové péči, ve znění pozdějších předpisů.

B. 3. Vyloučení povinnosti vyžádat si předem závazné stanovisko dle § 14 odst. 2 zákona o státní památkové péči

Vyloučení povinnosti vyžádat si předem závazné stanovisko nad rámec prací, u kterých je tato povinnost vyloučena ve výše uvedených paragrafech zákona o státní památkové péči, se s ohledem na předmět ochrany týká:

- umístování staveb a zařízení s užitnou plochou menší než 150 m² a staveb a ostatních zařízení (reklamní zařízení, stožáry, komínky, apod.), jejichž výška je menší než 15 m,
- změny barevnosti fasád, provádění nástaveb, přístaveb u stávající zástavby, jejíž výška nepřevyšuje či po realizaci přístavby nepřesáhne 15 m.

Vyloučení povinnosti vyžádat si předem závazné stanovisko k výše uvedeným pracím v ochranném pásmu je navrhováno z důvodu, že tyto práce nemají vliv na vymezený předmět ochrany a vlastníci objektů v ochranném pásmu by neměli být zatěžováni požadavky nad rámec požadavků sloužících k zajištění veřejného zájmu.

B. 4. Předpokládaná doba trvání ochranného pásma

Platnost ochranného pásma není časově omezena.

Odůvodnění

Dnem 12. 10. 2015 bylo zahájeno územní řízení, vedené z moci úřední, pod spis. zn: MUZAS/20446/2015/PP/Ši ve věci vymezení ochranného pásma MPZ na pozemcích v katastrálním území Žatec, uvedených ve výroku tohoto rozhodnutí.

Územní řízení o vymezení ochranného pásma je vedeno dle § 17 odst. 3 zákona o státní památkové péči, který zní: „*Jde-li o ochranu nemovitě národní kulturní památky, památkové rezervace nebo památkové zóny nebo jejich prostředí, vymezí obecní úřad obce s rozšířenou působností ochranné pásmo na návrh krajského úřadu po vyjádření odborné organizace státní památkové péče. Povinnost vyžádat si závazné stanovisko podle § 14 odst. 2 je vyloučena, jde-li o stavbu, změnu stavby, udržovací práce, umístění nebo odstranění zařízení, jejichž provedením se nezasahuje žádným způsobem do vnějšího vzhledu nemovitosti v tomto ochranném pásmu, která není kulturní památkou.*“

Zahájení řízení bylo oznámeno a současně všichni účastníci řízení byli pozváni k veřejnému ústnímu projednání. Jedná se o řízení s velkým množstvím účastníků, proto byla v souladu se zákonem č. 500/2004 Sb., správní řád, zvolena forma veřejné vyhlášky.

Dne 9. 11. 2015 proběhlo ústní projednání, při kterém byl účastníkům podrobně popsán celý proces vymezení ochranného pásma MPZ. Přítomným byly vysvětleny důvody tohoto vymezení a zodpovězeny následující připomínky přítomných.

Za OSBD Louny, IČ 00005797, se sídlem Studentská 2628 Žatec - jakým způsobem se bude postupovat při umístění antén a satelitů na střechách domů? Bude nutné stávající odstranit?

Umístění antén a satelitů na střechách domů **nebude** podléhat povinnosti vyžádat si závazné stanovisko ani nebude nutno stávající zařízení odstraňovat.

JUDr. Václav Aubrecht, Šafaříkova 2542 Žatec - prosím o maximální vymezení podmínek, kdy nebude nutno vyžadovat závazné stanovisko státní památkové péče (např. solární kolektory, výtahové šachty apod.).

Povinnost požadovat závazné stanovisko státní památkové péče **nebude** v případě úprav stávajících objektů, spočívajících ve výměně oken, vnějším zateplení, opravě fasád, výměnách krytiny, apod. Osazení solárních kolektorů a výtahových šachet **bude řešeno pouze** v případě, že budou umístěny na objekt **vyšší než 15 m**. V tomto případě nastane povinnost vyžádat si závazné stanovisko státní památkové péče, což ovšem neznamená, že tyto práce nelze v daném území provádět. Orgán státní památkové péče stanoví podmínky, při jejichž splnění lze dané práce realizovat.

Barevnost fasád se bude také řešena pouze u staveb vyšších než 15 m s tím, že cílem není striktně nařizovat konkrétní barevné provedení, ale vyloučit možnost provedení nátěru fasád u těchto výškových staveb v křiklavých odstínech (např. fosforově zelená, výrazná oranžová apod.).

Vyloučení povinnosti vyžádat si předem závazné stanovisko k pracím uvedeným v bodě B. 3. je v ochranném pásmu navrhováno z důvodu, že tyto práce nemají vliv na vymezený předmět ochrany a vlastníci objektů v ochranném pásmu by neměli být zatěžováni požadavky nad rámec požadavků sloužících k zajištění veřejného zájmu.

Vyčlenění prací, které nebudou podléhat vyžádání závazného stanoviska, navrhl Krajský úřad ústeckého kraje rovněž z důvodu snížení administrativní zátěže orgánu státní památkové péče obce s rozšířenou působností.

K zamýšleným pracím se písemně vyjádřil dne 9. 11. 2015 zástupce NPÚ ÚOP v Ústí nad Labem pod číslem jednacího NPÚ-351/77405/2015/PP/OS/Ha.

Rozsah ochranného pásma je stanoven tak, aby zachycoval nejbližší okolí, a jedná se spíše o minimální nutný rozsah. Na západní straně je do ochranného pásma zahrnut svah terénního ostrohu Zeyerovy ulice vč. malé části Podměstí. Na východní straně pojímá OP pouze zástavbu Tyršovy ulice, tvořenou vilami z přelomu 19. a 20. století a prvních desetiletí 20. století. Vymezené ochranné pásmo má za úkol chránit uplatnění MPZ v dálkových pohledech a tuto úlohu bude schopné plnit, proto bylo rozhodnuto v této věci tak, jak je uvedeno ve výroku rozhodnutí.

Městský úřad Žatec, stavební a vyvlastňovací úřad, životní prostředí, vycházel při svém rozhodování ze všech dostupných podkladů a zjištění a řídil se platnými právními předpisy a nařízeními.

Poučení

Proti tomuto rozhodnutí je možno dle ustanovení § 81 odst. 1, § 83 a § 86 odst. 1 správního řádu podat odvolání do 15 dnů ode dne jeho oznámení k odboru kultury a památkové péče Krajského úřadu Ústeckého kraje Ústí nad Labem, podáním u zdejšího správního orgánu.

Odvoláním lze napadnout výrokovou část rozhodnutí, jednotlivý výrok nebo jeho vedlejší ustanovení. Odvolání jen proti odůvodnění rozhodnutí je nepřípustné.

Odvolání se podává s potřebným počtem stejnopisů tak, aby jeden stejnopis zůstal správnímu orgánu a aby každý účastník dostal jeden stejnopis. Nepodá-li účastník potřebný počet stejnopisů, vyhotoví je správní orgán na náklady účastníka.



Bc. Tomáš Trávníček

vedoucí stavebního a vyvlastňovacího úřadu, životního prostředí



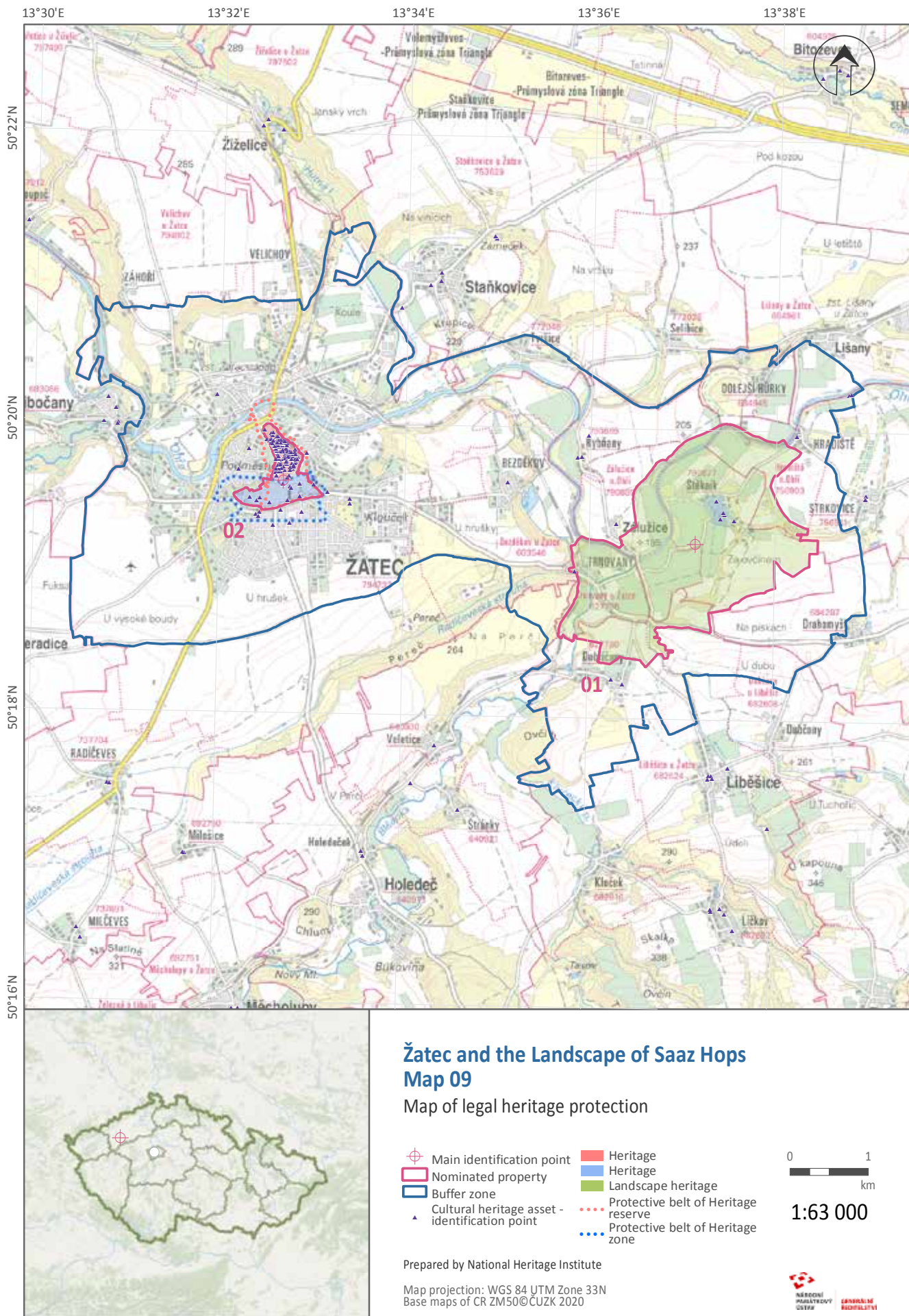
7.b2 ADDITIONAL MAPS ILLUSTRATING THE TEXT TO PROTECTIVE DESIGNATION AND OTHER REGULATIONS, ADMINISTRATIVE RESPONSIBILITIES, AND VALUE ATTRIBUTES OF NOMINATED PROPERTY

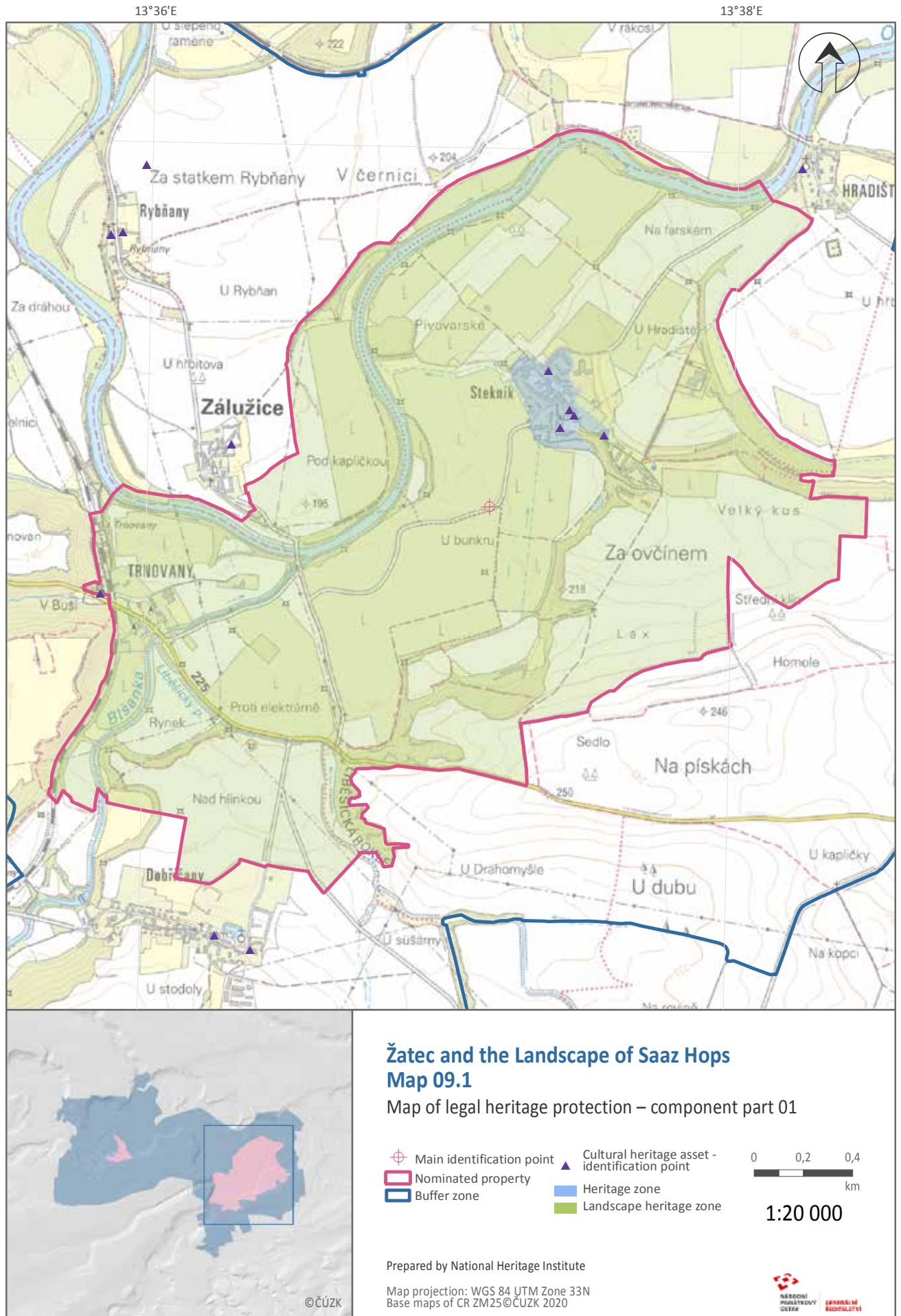
the *Chapter 1.e*, showing both wider context and both component parts in necessary detail where suitable. This set of maps is indicating the legal protection of landscape, areas and individual buildings within the nominated landscape and urban structure.

They are annexed here as supporting information both to the descriptive chapters and chapters relating to the legal protection.

The series of maps for this chapter complements the set included in the *Chapter 1.e*. For the most clarity, it has been prepared in the same detail and basic scales as in

MAP N°	DESCRIPTION	SCALE	RELATION TO THE PARTICULAR CHAPTER	SIZE	COPYRIGHT / DEPOSITION
MAP 09	Map of legal heritage protection	1 : 63,000	5.b	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020, © ESRI 2020
MAP 09.1	Map of legal heritage protection – component part 01	1 : 20,000	5.b	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 09.2	Map of legal heritage protection – component part 02	1 : 7,000	5.b	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 10	Map of municipalities and areas covered with their land use plans	1 : 63,000	5.b, 5.c, 5.d	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020, © ESRI 2020
MAP 11	Map of selected limits from the Principles of Spatial Development of the Ústecký Region	1 : 63,000	5.d	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020, © AOPK ČR © 2020 VÚV T.G.Masaryka © ESRI 2020
MAP 12	Map of Saaz hop growing region	1 : 470,000	2.a, 2.b, 3.2.a, 5.b	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020 © ESRI 2020
MAP 13	Map of the main attributes – component part 01	1 : 20,000	2.a, 3.1, 3.3, 6	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020
MAP 14	Map of the main attributes – component part 01	1 : 12,000	2.a, 3.1, 3.3, 6	A4	(cc BY-SA 4.0) NPÚ 2020 © ČÚZK 2020

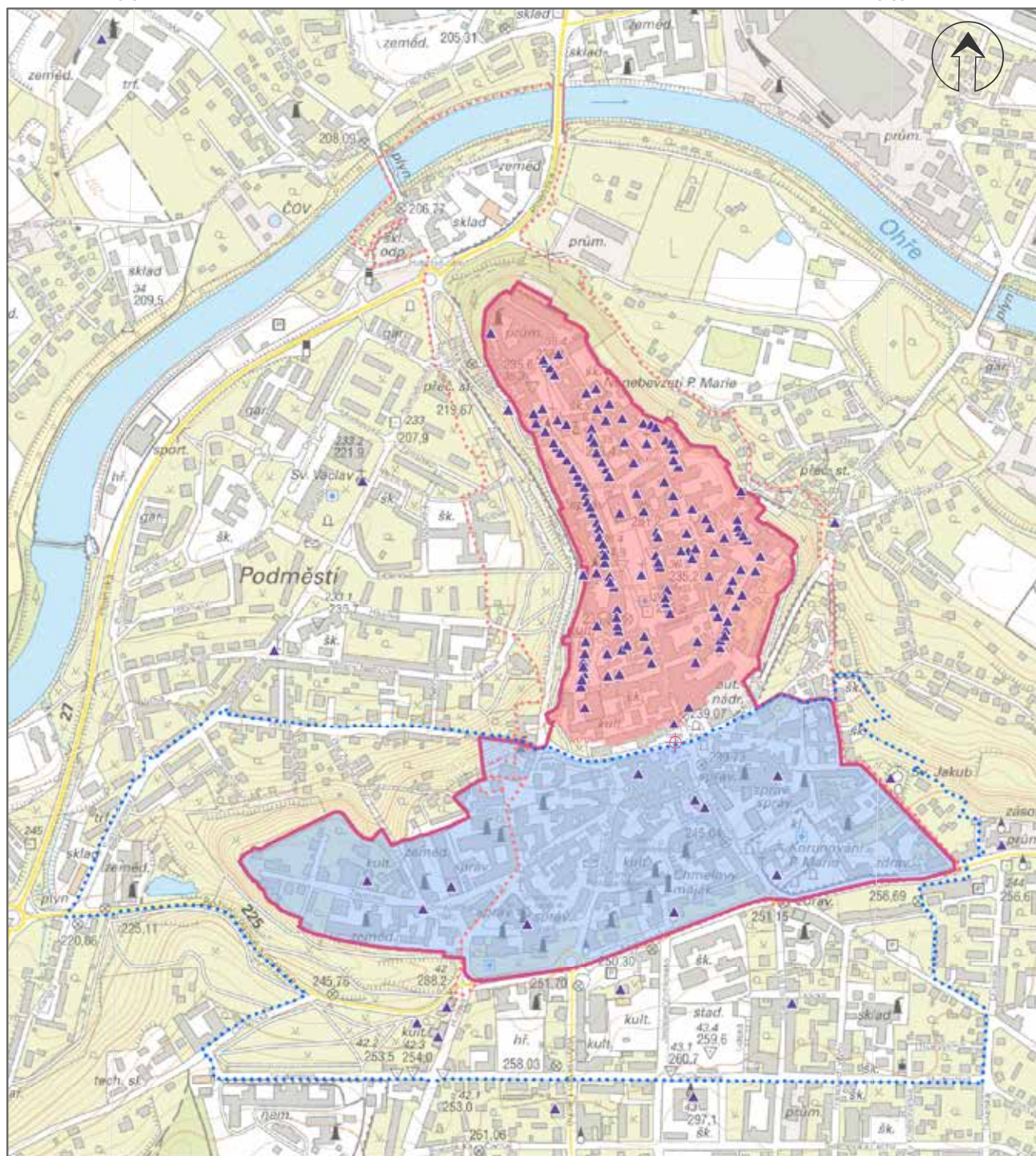




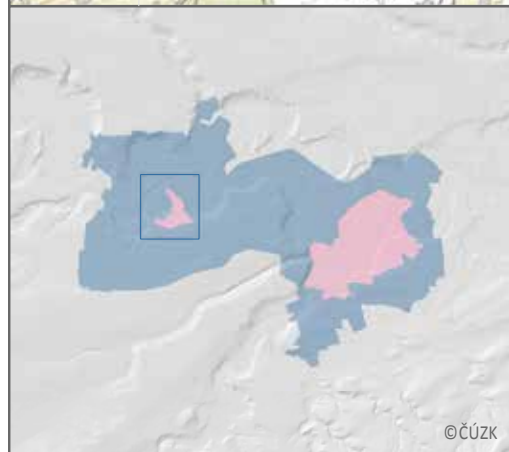
13°32'E

13°33'E

50°20'N



349



Žatec and the Landscape of Saaz Hops Map 09.2

Map of legal heritage protection – component part 02

- | | | |
|--|-------------------------------------|--------------|
| ⊕ Main identification point | Heritage reserve | 0 0,1 0,2 km |
| □ Nominated property | Heritage zone | |
| □ Buffer zone | Protective belt of Heritage reserve | |
| ▲ Cultural heritage asset - identification point | Protective belt of Heritage zone | |

1:9 000

Prepared by National Heritage Institute

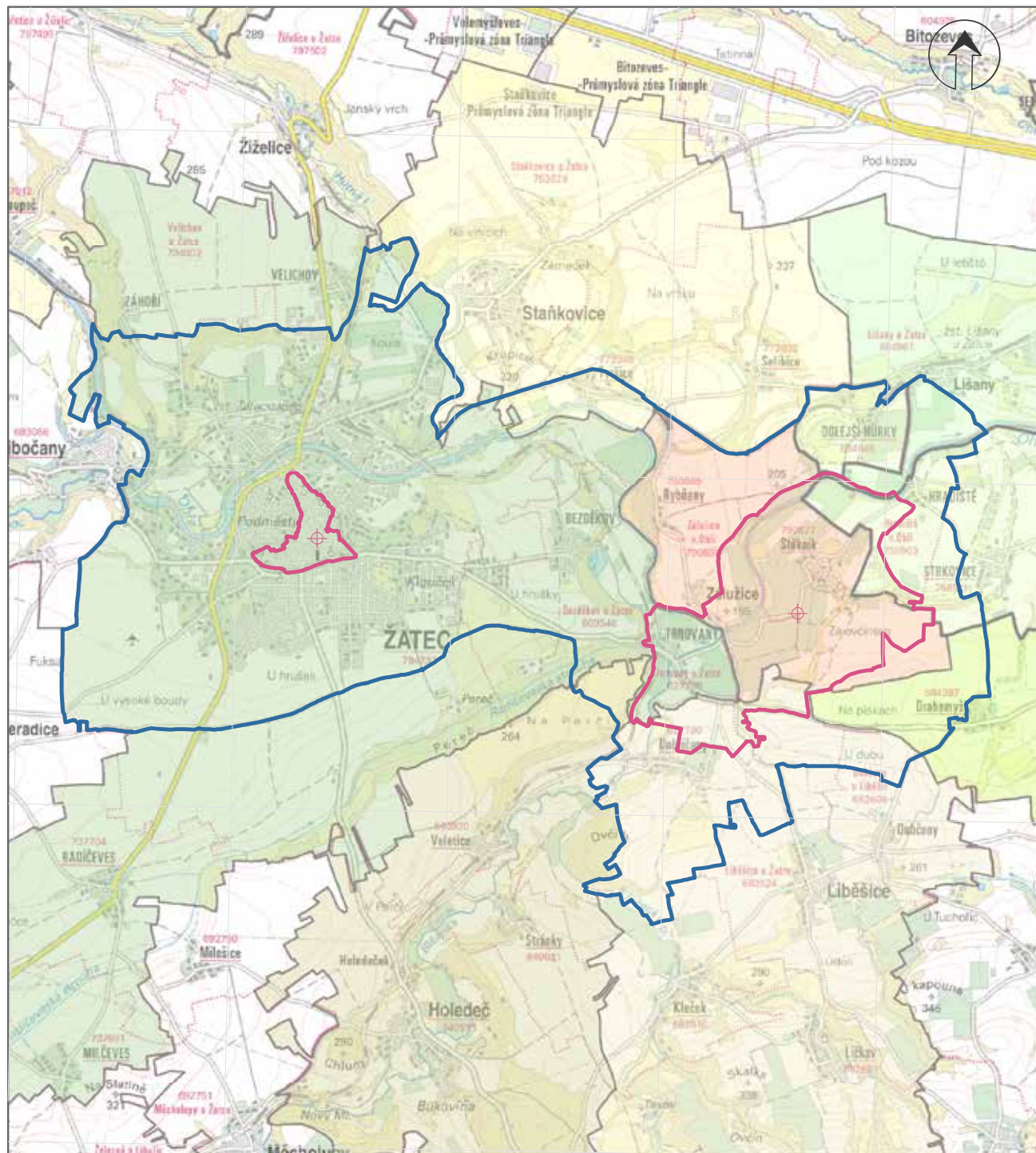
Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020



©ČÚZK

13°30'E 13°32'E 13°34'E 13°36'E 13°38'E

50°22'N
50°20'N
50°18'N
50°16'N



Žatec and the Landscape of Saaz Hops Map 10

Map of municipalities and areas covered with their land use plans

- Main identification point
- Nominated property
- Buffer zone
- Boundary of a municipality with extended powers
- Boundary of a municipality

Municipalities relevant to the territories of the property and the buffer zone:

- Holeděč
- Liběšice
- Lipno
- Lišany
- Postoloprty
- Staňkovice
- Zálužice
- Žatec

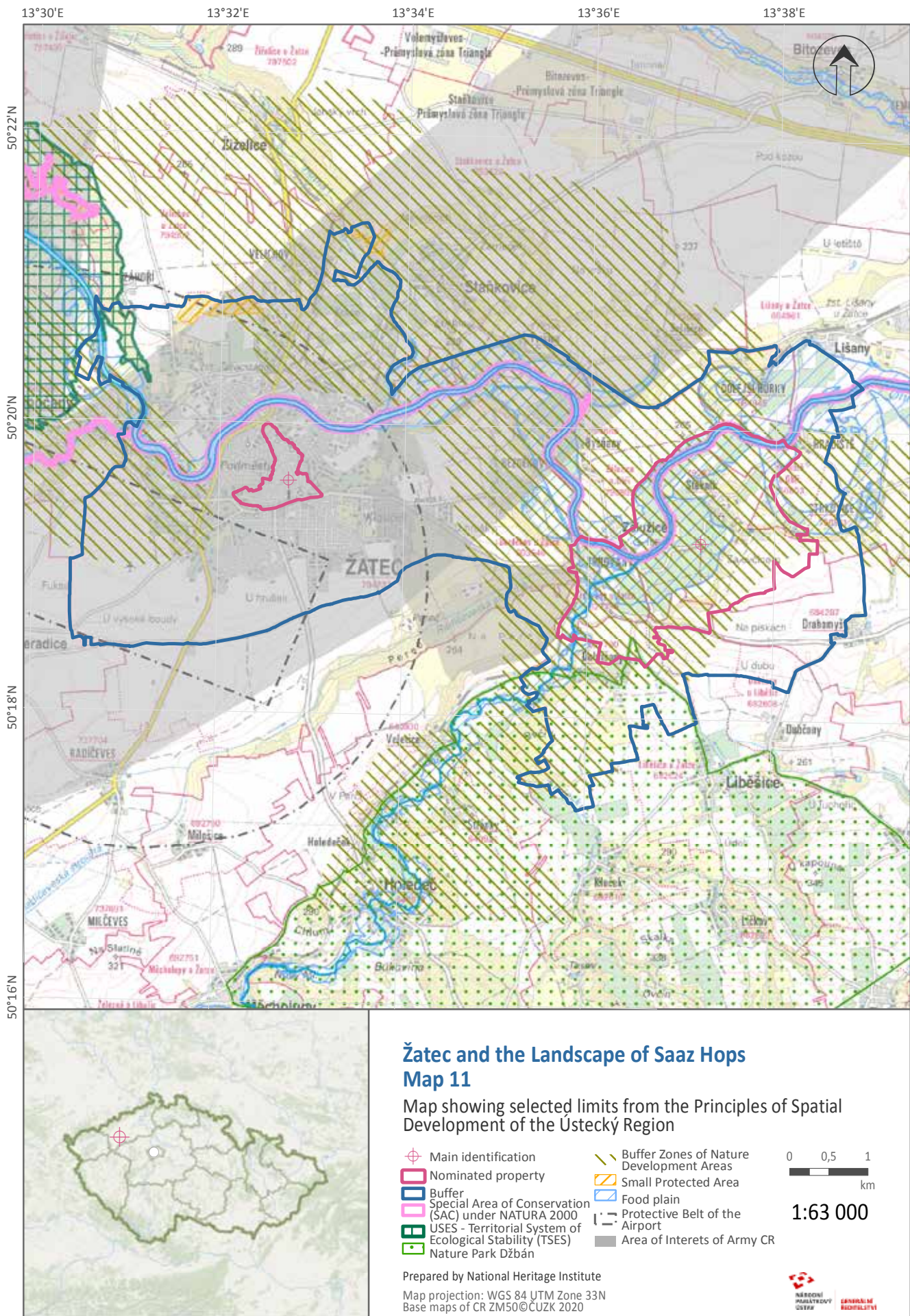
0 0,5 1
km

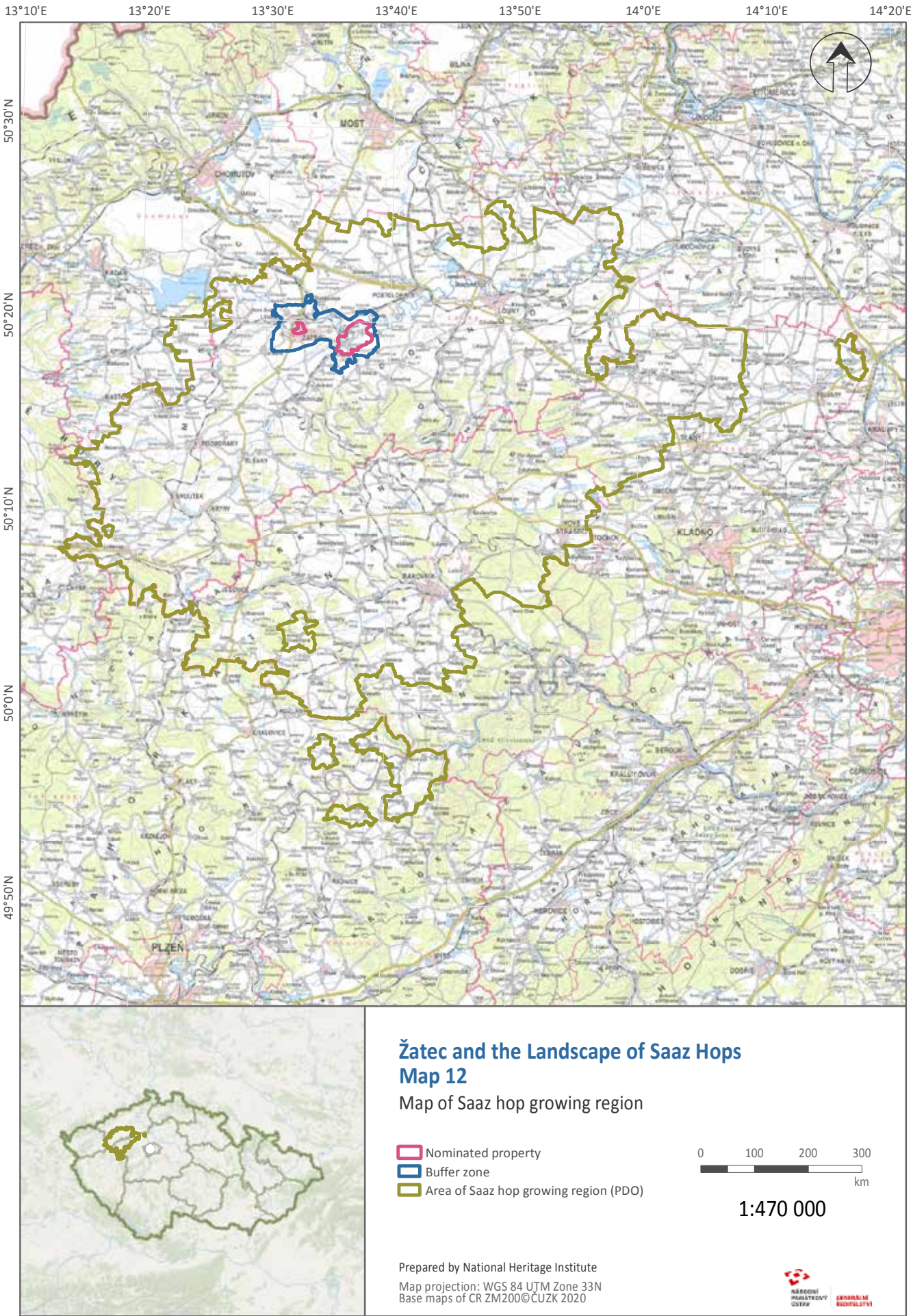
1:63 000

Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM50©CUZK 2020



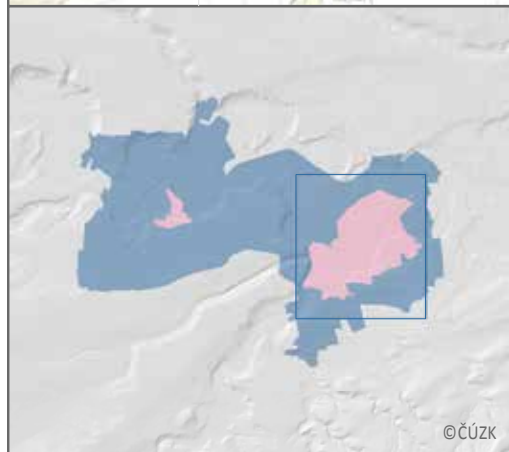
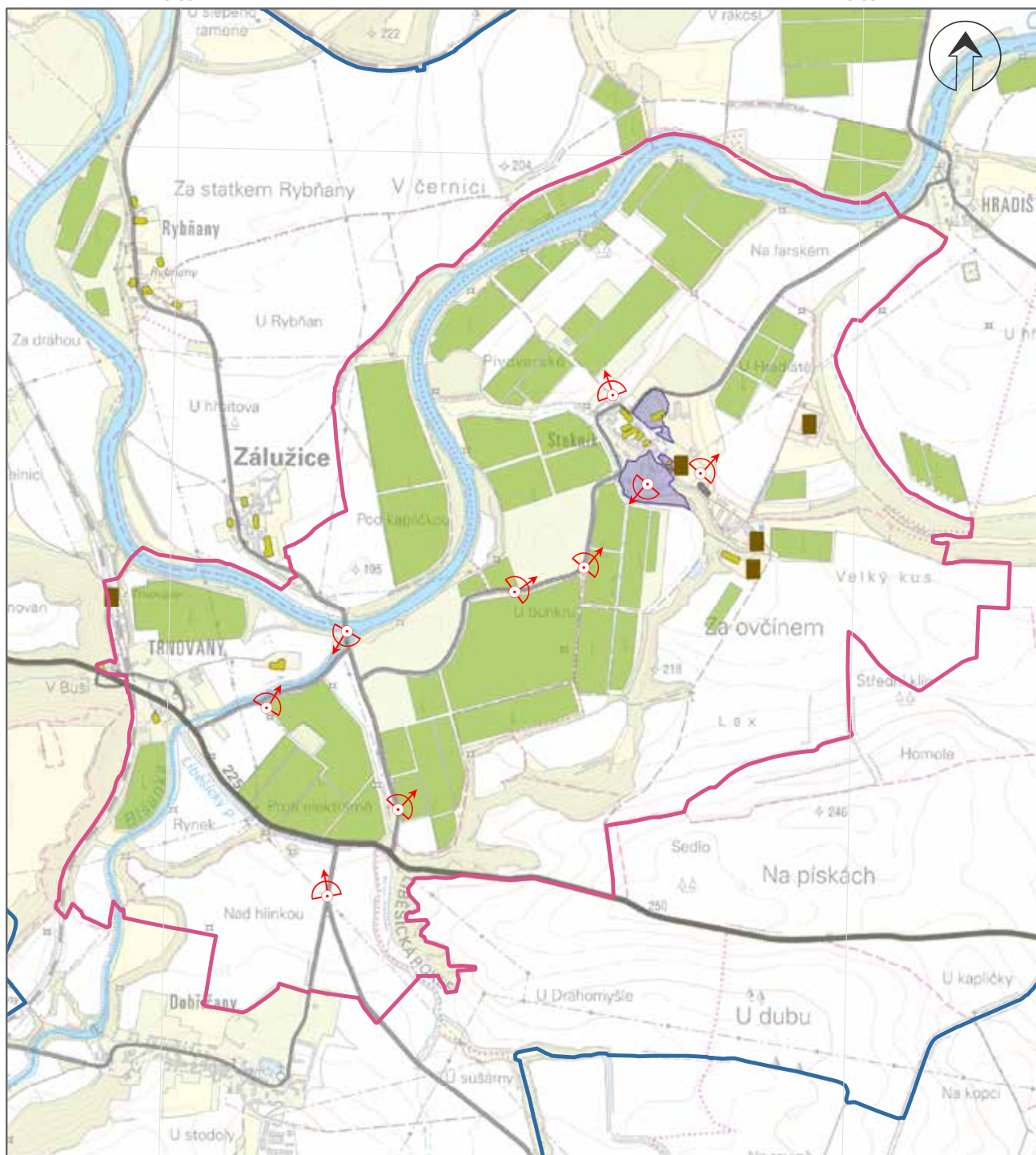




13°36'E

13°38'E

50°20'N



Žatec and the Landscape of Saaz Hops Map 13

Map of the main attributes – component part 01

- Nominated property
- Buffer zone
- Cultural heritage asset
- ↗ Point of iconic view
- Road network
- Hops - related buildings
- Contextual buildings
- Hop fields

0 2 4
km

1:20 000

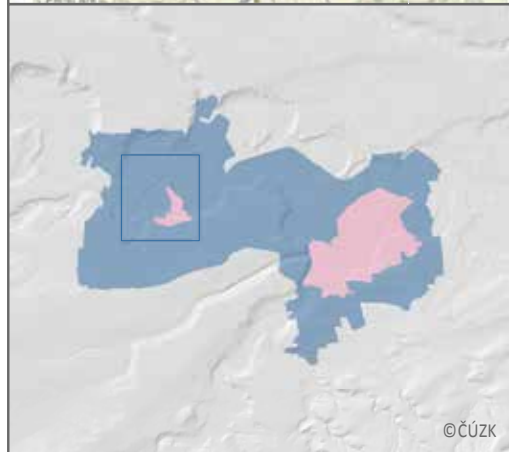
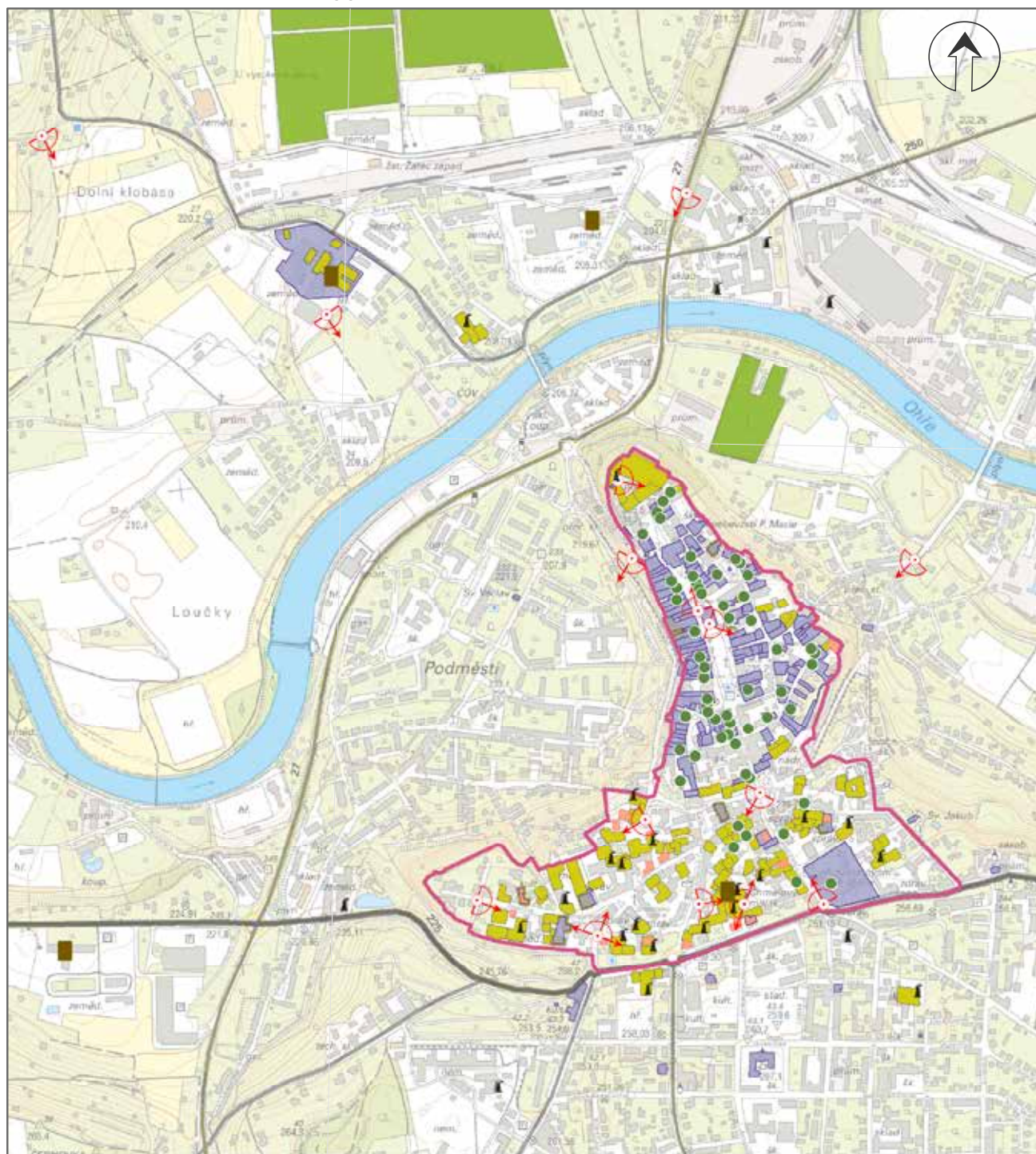
Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM25©ČÚZK 2020



13°32'E

50°20'N



Žatec and the Landscape of Saaz Hops Map 14

Map of the main attributes – component part 02

- | | |
|-------------------------|--------------------------|
| Nominated property | Chimneys |
| Buffer zone | Contextual buildings |
| Cultural heritage asset | Hops lofts |
| Point of iconic view | Villas |
| Road network | Hops - related buildings |
| | Hop fields |

0 0,2
km

1:12 000

Prepared by National Heritage Institute

Map projection: WGS 84 UTM Zone 33N
Base maps of CR ZM10©ČÚZK 2020

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7.c FORM AND DATE OF MOST RECENT RECORDS OR INVENTORY OF PROPERTY

7.c1 ADDITIONAL OUTCOMES OF THE PROJECT NAKI DG16P02B021 DOCUMENTATION OF THE HISTORICAL BUILDINGS FOR HOP PROCESSING (2017–2020) – COMPONENT PART 01

This chapter is supplementary to the information given in the *Chapter 5.f3*, part "Support for research activities" (for more, see the *Chapter 7.c2*).

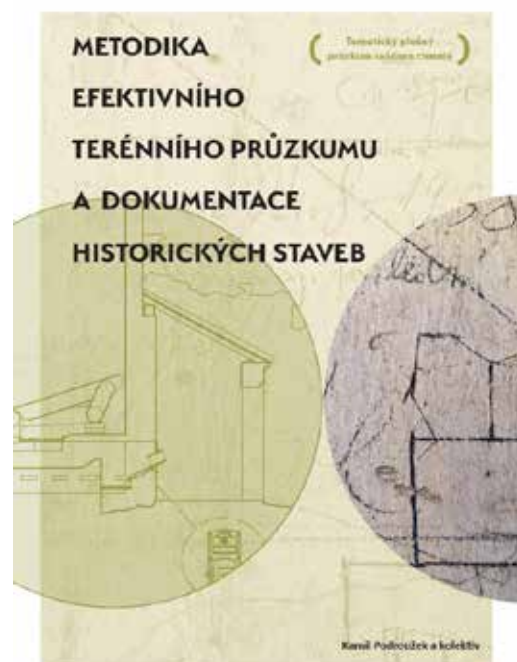
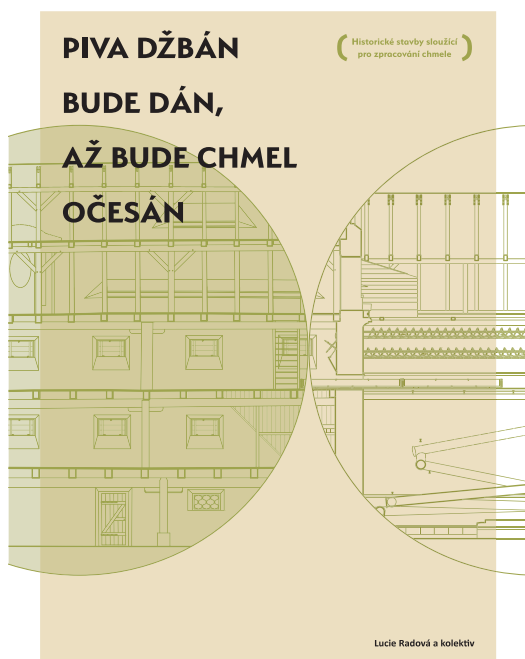
The main focus of the project NAKI DG16P02B021 (Documentation of the Historical Buildings for Hops Processing) which was implemented by the Regional Office of the National Heritage Institute was to perform a basic documentation of the historical buildings for hops processing in the countryside of the whole Czech Republic. These buildings are part of architectural assets bound to the specific natural conditions occurring only in some regions (see the Comparative Analysis, 3.2.a). These conditions constitute an important part of the urbanism of towns and cultural countryside. Since that project, there has not been given any scientific attention to the development, function, constructions or the technological equipment used on such buildings. In addition, these buildings (except for several ones) are not legally protected. With respect to size, these buildings are of a great financial burden to their owners and have lately been subject to a large scale of demolition. Out of more than 5,500 of these buildings evidenced in the beginning of the 20th century in Saaz hop growing region

itself only hundreds have been preserved. Hence, the documentation performed within the project has been regarded the last possibility of recording these buildings for the future. As part of the basic documentation of the buildings, the identification, photo-documentation, the documentation of the specific construction solutions, technological equipment and technological state of proving the hops processing, the land surveying, the construction measurements and sample collection for dendro-chronical dating of selected buildings was performed. The archive research was part of the study as well.

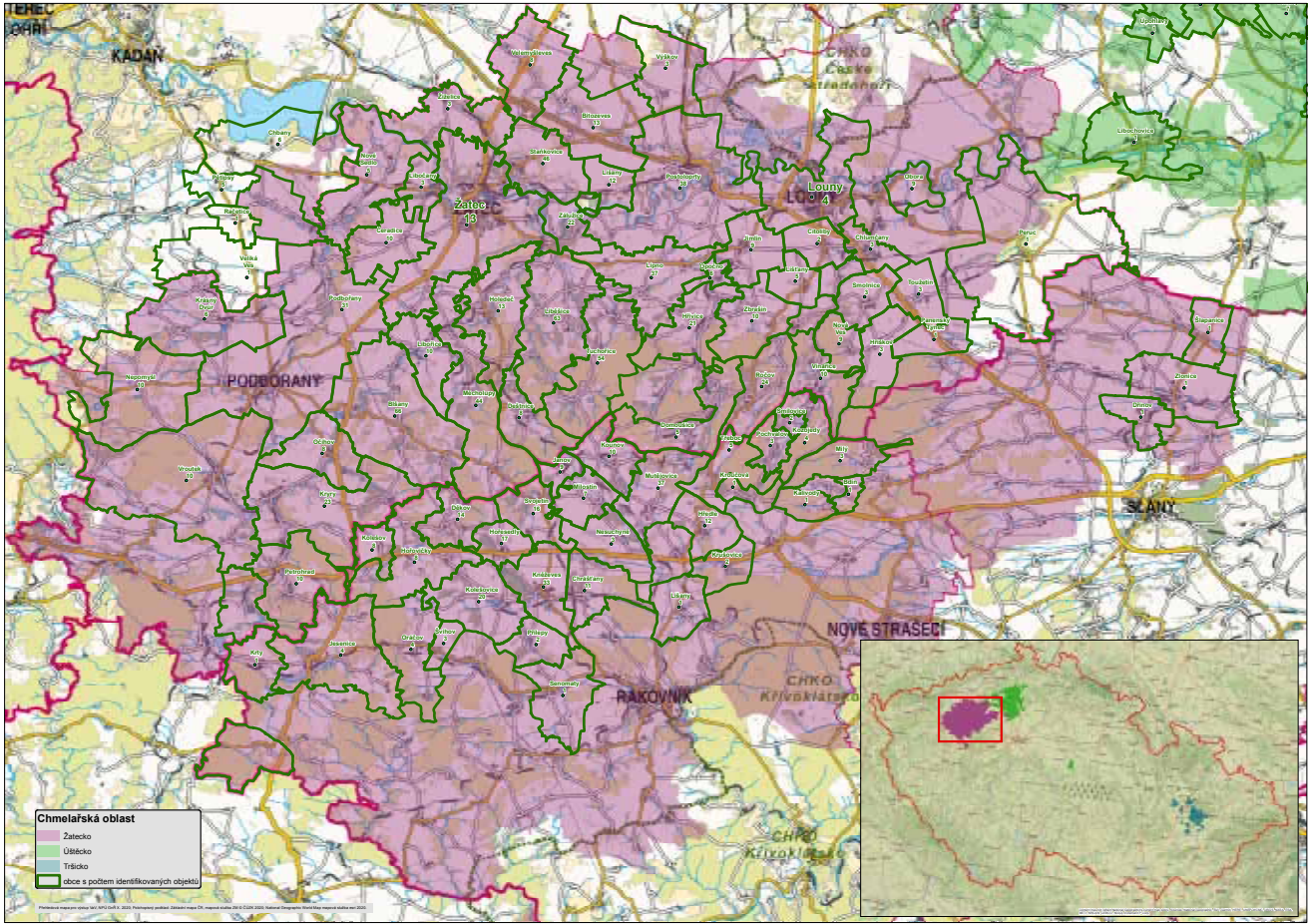
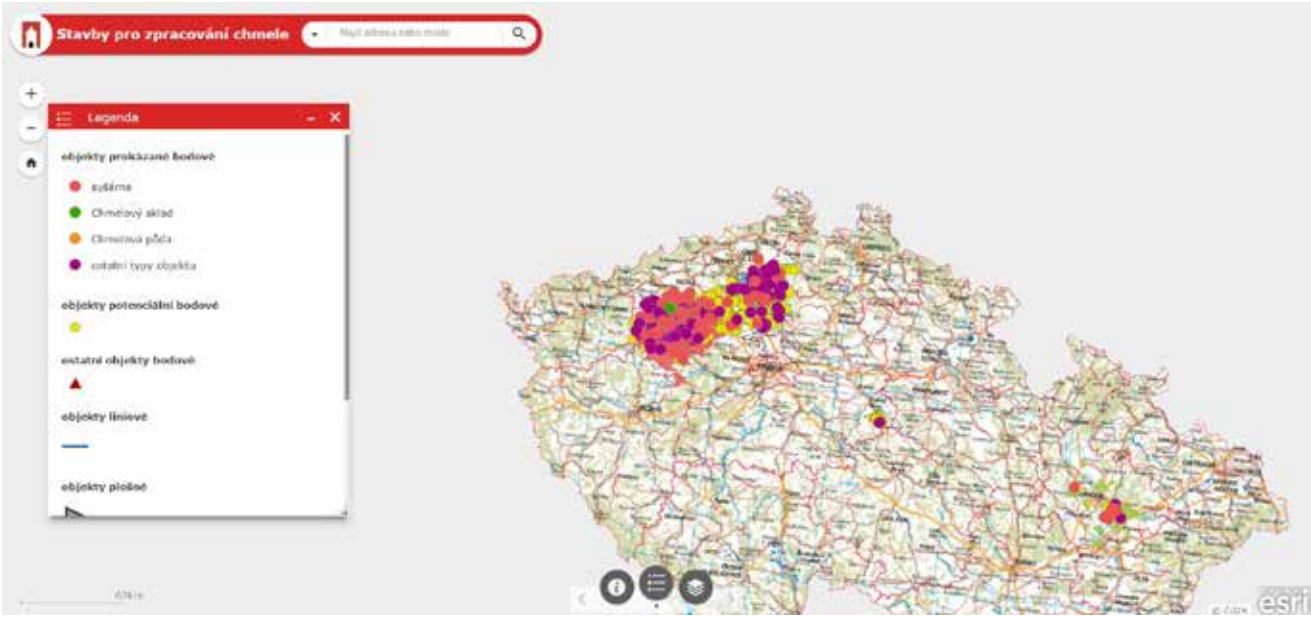
Based on this evidence a special map (see bellow) and IISPP/GIS NPÚ (Integrated Heritage Information System of National Heritage Institute), basic database was established. A highly easy-to-use system was created using sophisticated technology - phones with cameras and GPS modules, tablet PCs, remote network access to the external scanned document storage and remotely accessible GIS and MIS map databases.

This system enables operational field documentation. Moreover, based on this experience a methodology called Metodika efektivního terénního průzkumu a dokumentace historických staveb (Methodology of effective field research and documentation of historic buildings) was created that describes the use of this widely available technology in basic field historical built documentation. The full version of this publication is available here (in Czech).

https://www.npu.cz/uop/usti-nad-labem/projekty/chmel/lipenc113a114/chmel%20metodika_8.pdf



Two printed outcomes of the research: the exhibition catalog and the methodology



The area of research the Documentation of the Historical Buildings for Hops

7.c2 SELECTED ROOF STRUCTURES OF BURGHER HOUSES IN ŽATEC – COMPONENT PART 02

This chapter is supplementary to the information given in the *Chapter 2.a* (Examples of hop roof spaces of burgher houses).

Processing an inventory of the roof structures

In the roof spaces of many burgher houses and other buildings in Žatec (component 02), the hops were dried naturally due to the airflow. Many houses still contain elements evidencing this process. During the preparing the nomination, these important aspects were studied in a more detail. At the request of the Municipal Authority in Žatec, the first stage of a basic inventory of the technical condition of roof structures in certain burgher houses, both owned by the Municipality of Žatec and by accommodating private owners in the centre of the historic urban heritage reserve of Žatec, was carried out in November 2018. A total of 40 buildings were visited and documented around the Svobody Square, the Hošťálkovo Square, the 5. května Square, Žižkovo Square and in the Dvořákova Street and Obránců Míru Street (see the annexed map).

The selected structures (mostly burghers house) represented typical buildings in terms of their location in the urban heritage reserve, of their size, structural layout and history. In addition to learning about their basic structure and typology, another aim was to attempt to find and document traces of the functional use of loft spaces for the drying of substantial volumes of hops during the period preceding the development of industrial high-capacity drying buildings, as had been indicated in archival sources.

More than 100 buildings were selected with this in mind, of which fewer than half have been investigated, providing basic general knowledge.

A basic survey, documentation and evaluation of the individual roof structures were carried out during the process of drawing up the inventory. During the field survey a visual inspection of all accessible roof structures, reference photographic documentation and supporting field sketches were carried out. Findings from the field survey were prepared for each individual structure in the form of so called passports, which included a clear identification of the building, a general typological classification of the roof structure in question, a structured description of that roof structure and its details, an expert estimation of the age of the structure under review or its exact dendrochronological dating, historical and conservation evaluation, suggestions for maintenance and use and recommendations for further research and documentation. An integral part of this process was a basic photographic documentation of

the whole building and individual elements, along with a professional description.

The aim was to systematically record data to enable comparison and statistical evaluation to determine the most important and at the same time shared historical values and the subsequent needs for possible further evaluation and documentation. At the same time, the survey was aimed at creating an effective tool for the management, maintenance and use of these buildings and their roof spaces by the competent bodies of the Žatec municipal authority and an effective tool for the protection of such structures by the state heritage conservation authorities (However, the assessment in the "historical evaluation" section and the recommendations in the "maintenance and use suggestions" and "suggestions for further surveys" sections express the objective opinion of the authors based on the knowledge they have acquired, but they cannot replace the autonomous assessment and opinion of the competent heritage conservation authorities).

A survey of historical roof structures of selected buildings in Žatec was carried out thanks to the support of the Ministry of Culture under the Programme Support for UNESCO World Cultural Heritage (in the Czech Republic) for 2018. The second phase of the project is currently (October 2020) in progress.

Evaluation of the roof structures, 1st phase

An inventory was made of 48 historic structures from 40 buildings, probably dating from the 17th to the 21st century.

Dendrochronological dating of the roof structures has not yet been performed so the dating was carried out with a certain degree of assumption based on an evaluation of their type and craftsmanship. The only dendrochronological dating previously carried out was for the roof of house No. 144. However, the inventory process has provided a basic insight into the state of the preserved building stock of historical roof structures in the town houses in the Žatec urban heritage reserve and the structural development of the town.

Due to the fires that regularly razed the centre of the historic city until the late 18th century, we can unfortunately not find a stratum of older roof structures dating back before the Baroque era. Significant fires are recorded in 1681, 1738, 1767, 1784 and 1793.

The roof structure of house No. 7 appears to be the oldest, probably dating from the second half of the 17th century, according to the structural development of the house, and include the most common type of a roof structure occurring in the subsequent three centuries in town houses in Žatec. Collar beam trusses longitudinally bound at one or two levels by longitudinally oriented supporting structures (der stehender Stuhl in German

language). This type of a roof structure probably provided sufficient load-bearing capacity for the relevant roofing and allowed for the functional use of the roof space.

The oldest stratum of roof structures formed after the fires in the second half of the 18th century includes both roof structures with standing supporting structures (Nos. 52 and 88) and roof structures with advanced types of so called lying supporting structures (der liegender Stuhl in German language), such as at buildings Nos. 137 and 30. This pre-Classical period extended until the turn of the 18th and 19th centuries, where several other roof structures of these types developed. Standing supporting structures in Nos. 8, 10, 42, 41, or a lying supporting structure in No. 37. At the same time in the roof structures from this and the following period there is an effort to strengthen the roof trusses and their longitudinal binding in the plane of the roof by an interesting method of doubling the rafters in full trusses through spacers and skew struts.

Throughout the course of the 19th century, the most common type of collar beam roof structures had one or more levels of longitudinal binding with standing supporting structures, which are varied, combined, enlarged or lightened. It was only after 1850, during the second half of the century and in the early 20th century, in the context of the Industrial Revolution, that new types of collar beams and purlin rafters with clamps and bolts emerged, as in Nos 27, 25 and 24, also related to the construction of these large public buildings. This trend continued in the 20th century and has culminated in the most simplified roof structures built during the repairs of buildings at the turn of the 20th and 21st century (No. 149, 150, 151).

Traces of functional use with a focus on hop drying methods and technologies

In the case of a large number of roof structures, especially from older times, we have been able to find evidence of the use of roof spaces for drying and storing certain materials, most likely hops.

This evidence includes:

- Masonry fire access stairs;
- Metal fire doors closing the roof space;
- Freight access dormer windows;
- A large number of ventilating small dormer windows within the roof structure laid in several rows;
- Carefully made boarded floors at each level of the roof structures;
- Oblique or vertical planks in the plane of the roof forming "boarded limits" in order to avoid material dried on the floors from falling through;

- Solidly-built single staircase that can be closed by hinged lockable doors;
- Handling holes in the higher levels of the floors within a roof space;
- Traces of counting of sacks (bales) with the dried material in the form of typical "crossed out groups of five".

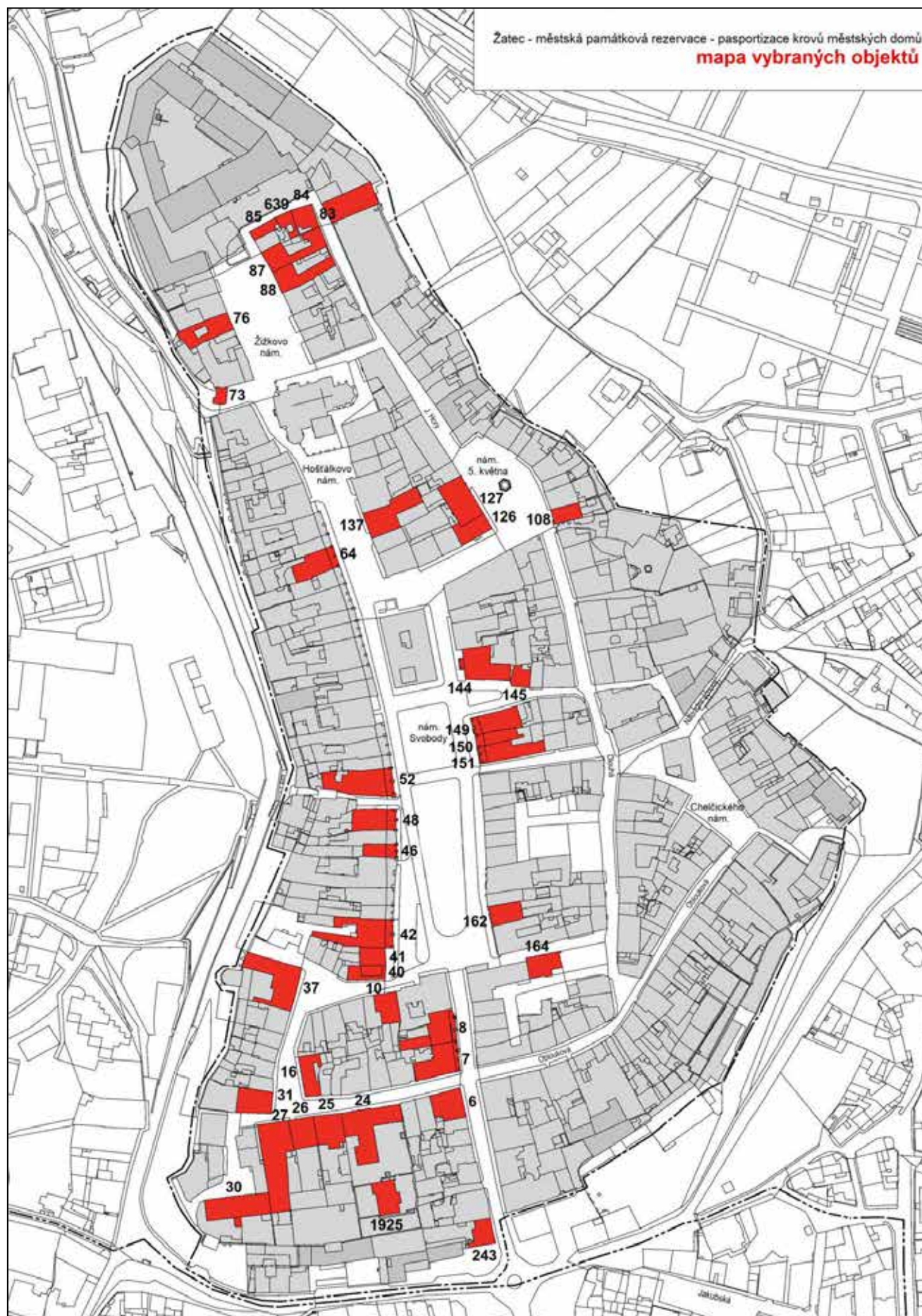
Suggestions and recommendations

Based on knowledge we have obtained and other potential findings, this can be recommended over following years to carry out:

- basic dendrochronological dating of selected structures and precise dating;
- a survey to complement the lessons learned from historical building history surveys found from archival sources;
- continue the expansion of the basic inventory of historical roof structures in other buildings within the urban heritage reserve of Žatec;
- a complex historical survey of the roof structure should be carried out for selected buildings, including detailed measurements, documentation of details of the craftsmanship and detailed dendrochronological analysis;
- in selected structures, their conditions should be inspected, recent unprofessional repairs dismantled, and the roof structure restored to its original appearance and function. When repairs are carried out, the existing design should be respected in full and considerate technical and craft techniques should be applied;
- the possibilities of making available selected roof structures for the wide lay public in the field of tourism and on the extended rate also as a study opportunity for professionals should be examined;
- findings and documented evidence of that hops related aspects of roof structures should be widely presented in the form of printed materials and web presentations, professional studies and/or information leaflets, in a suitable manner.

Conclusion

After finishing the second phase of this research (2020) due to the positive results achieved so far, it is planned to examine the remaining buildings selected and to gradually extend the inventory to all the buildings in the urban heritage reserve to obtain a comprehensive understanding of the state of protection of the historic roof structures in this area and their functional use. Over time, a complex "atlas of the historical roof structures of the Žatec urban heritage reserve" will be created.



7.c3 THE DETAILED DESCRIPTION OF HOP GROWING AND HOP PROCESSING BUILDINGS

THE DETAILED DESCRIPTION OF HOP GROWING AND HOP PROCESSING BUILDINGS IN COMPONENT PART 01

STEKNÍK

Stekník, building plot No. 1 (No. 27)

– house with "oeil-de-boeuf" dormers

Part of the village Stekník, municipality of Zálužice, district Louny

Cadastral area Stekník

The detached building is situated in the south-eastern part of the village. The building, with a rectangular ground plan, is made of marl and the saddle roof is covered with baked clay plain tiles. There are six "oeil-de-boeuf" dormers in two rows on the south-western roof plane, and the chimney projects from the ridge of the roof at the north-eastern gable. "Oeil-de-boeuf" dormers are proof that the harvested hops were dried in the loft spaces of the building.

Stekník, building plot No. 2 (No. 26)

– rural hop drying kiln

Part of the village Stekník, municipality of Zálužice, district Louny

Cadastral area Stekník

A two-storey brick building for artificial drying hops with a ground plan in the shape of the letter "L" is located in the southeastern part of the village. It is part of the property of farmstead No. 26 and it stands in its eastern corner. The wing oriented along the southeast side of the plot is higher, the roofs above both parts are saddled. The heating chamber is located in the north-west wing.

Stekník, building plot No. 19/1 (No. 9)

– rural hop drying kiln

Part of the village Stekník, municipality of Zálužice, district Louny

Cadastral area Stekník

The building is located in the north-eastern part of the village and is part of a more extensive farmstead. The hop drying kiln itself stands at the southern side of the complex. The constructions are of mixed material; the first storey part is made of brick, the roof part of the heating chamber at the western gable is half-timbered with a brick filling. The roof of the hop drying kiln is saddled, half-hipped on the east side, with roofing of baked clay plain tiles, the saddle roof above the heating chamber at the west side of the building has corrugated metal roofing. Other characteristic elements related to hop processing that are present are: two large chimneys

attached to the eastern facade wall, a rectangular vent in the gable of the eastern facade and a ridge extension on the western wall of the building. In this case, the drying technology was built into an older ground-floor farm building, from the first half of the 19th century, at the beginning of the 20th century.

Stekník, building plot No. 26/1 (No. 23)

– rural hop drying kiln

Part of the village Stekník, municipality of Zálužice, district Louny

Cadastral area Stekník

The farmstead is located in the north-western part of the village square, to which the main facade of the residential building is oriented. It is seamlessly connected to the farm building used for the storage and redrying of hops. The single-chamber body of a kiln was added to its western side of the building - a brick building with a rectangular recessed ground plan, opposite the adjacent building, under a saddle roof with sheet metal roofing has the eastern side of the building divided into three height levels. Above the stone pedestal, there are two small oblong holes. There is a larger oblong hole in the central part and in the upper a smaller oblong hole. On the eastern wall there is a date of 1924. There is a vertical enclosed vent with a small rectangular opening above the stone of the northern side of the building. On the simple northern facade, the traces of the former shed roof of a no-longer standing building is visible; the chimney body protrudes from the wall's mass.

The interior preserves the original technology of the Linhart patent heating chamber with diagonally laid pipes, a system of ventilation ducts situated under the floor, and hop drying trays that could have been tilted. The area for feeding the fire in front of the oven is in a ground-floor space covered with a shed roof, annexed from inside the yard to the heating unit's south wall. South-west of the hop drying kiln, there is a barn within the farmstead area, which can also be expected to have been partially used for hop storage, as evidenced by the system of ventilation holes in the gable.

Stekník, building plot No. 28/1 (No. 21)

– rural hop drying kiln in the yard

Part of the village Stekník, municipality of Zálužice, district Louny

Cadastral area Stekník

The hop related building within this farmstead complex stands on the west side of the plot. It has a rectangular ground plan, single storey when viewed from the yard, multi-storey when viewed from the west. It has a saddle roof with roofing made of baked clay plain tiles. The facade leading to the yard is provided with a smooth plaster with white paint; on the back (south-west), there is an ochre plaster without paint. A massive body of a brick heating chamber, with an almost square ground

plan' with a saddle roof extends from this wall. The roof covering of the whole building consists of baked clay plain tiles, a loading dormer installed on the roof surface oriented into the yard, and the roof of the entire building is separated from the roofs of the adjoining barns by fire gables. The wall oriented into the yard ground floor contains a large gate on the first storey provided with sliding metal panels. At the level of the attic knee wall there are two rectangular ventilation windows.

Stekník, building plot No. 29/1 (No. 20)

– residential house with a rural hop drying kiln

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The dwelling part of this farmstead is relatively small in volume. Farm buildings are situated along the three sides of the plot and significantly exceed the volume of the house whose main facade is oriented in the village square. These are single storey buildings with higher attic knee wallings with rectangular ventilation openings, originally with saddle roofs covered with baked clay plain tiles (roofs are missing above two buildings today).

The buildings are of brick; those are former stables and barns, whose loft spaces, as well as the roof spaces above the dwelling part of the house, were used for redrying and storage of hops. The single-chamber high body of the kiln is in the western part. The two-storey building has the first storey with rectangular window and door openings in the pattern of 1–2. The heating chamber with a heating facility was situated in the rearmost part of the property, furthest away from the dwelling building. It is immediately followed by service and storage spaces.

Stekník, building plot No. 30/1 (at No. 19)

– rural hop drying kiln

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The building is located in the south-eastern part of the village square. The areas intended for storage and drying of hops are seamlessly connected to a two-storey house oriented by the main gable to the village square. The ground plan of the building is, therefore, significantly longitudinal, covered by a saddle roof with roofing made of plain tiles. The heating chamber is situated in the rearmost part of the ground plan; being recessed into the building's ground plan. Its existence is indicated by both the chimney body, protruding from the house's southern gable, and a wooden evaporator, located right next to the chimney above the heating chamber. Other features are two "oeil-de-boeuf" dormers set on the eastern roof plane and four identical dormers located on the western roof plane. The roof of the rear part has a significant overhang towards the yard. In this area, sheltered from bad weather, hops were stored and handled.

Stekník, building plot No. 31/2 (No. 44)

– house with a rural hop drying kiln

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The structure located on the southwest corner of the village square is rectangular, single storey and made of marl with a brick attic parapet. The roof of the house is saddled and covered with plain tiles. There are three pairs of ventilation openings in the sides of the of the eastern and western attic knee walls. On the west side of the farmstead, there is a hop drying kiln. The roof is also saddled with different slopes, covered with plain tiles. The northern facade of the building has three pairs of ventilation openings in the attic knee wall, with a dovetail placed into the middle one at a later date. The heating chamber is recessed, the chimney is set at the south of the roof ridge.

Stekník, building plot No. 41,

Baroque granary with a rural hop drying kiln

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The building was formerly a three-storey Baroque granary covered with a saddle mansard roof with burnt tile roofing. To its north-western wall a two-storey single-chamber body of the kiln with an adjoining ground-floor boiler room was later added.

The granary has two construction phases. The older, High Baroque, phase belongs to the period when the granary was built, probably between 1709-1715 under Adolf Karel Kulhánek of Klauenstein. Tis gave the building the main appearance with five opening axes in its longitudinal walls. In the second construction phase, between 1765-1770, under František Václav Kulhánek of Klauenstein and Postupsch, the granary was extended to the length representing already eleven axes in the longitudinal walls. The extension replicated the original concept and both dimensions (the height and width of the original building) as well as its High Baroque composition, have been preserved.

The conversion of the granary into a hop drying kiln took place, under the large farmstead's possession by the Hennet family, between 1891–1907. The kiln was equipped with the drying kiln technology of Linhart Rakovník patent. A pair of cast iron boilers marked with cast iron plaques with the inscription "Rakonitzer Maschinen fabrik & Eisengeisserei Joh. Linhart", with an adjoining ribbed radiator and system of hot air heating pipes of the heating chamber, has been preserved.

Furthermore, square suction openings have been preserved in the north-eastern perimeter wall of the heating chamber with the folding middle tiers from

"Patent system Linhart." Below them are drawers, two in a row in three rows, in each of two drying chambers, extendable into the granary space on the third floor, and the adjoining system of guide ceiling wires for handling. The wooden cube of the hop bucket conveyor, which passes vertically through the communication tract of the heating chamber part from the first storey to the loft and opens into the mostly walled window of the north-western gable of the granary, together with the electric motor brackets, have also been preserved. Furthermore, a winch is preserved at the handling opening in the south-eastern gable of the granary as well as a single-leaf iron fire door on the the first storey, and baling openings in the drying floors in the loft.

Stekník, building plot No. 43 (No. 34)

– rural hop drying kiln

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The solitary farm building is located on the southeastern edge of the village. The two-storey granary has the ground floor walls made of marl stone; the second storey perimeter walls made of bricks. The hop drying kiln is elevated, and of plastered brick. The granary has a saddle roof with a south-western half-hip with the roofing consisting of plain tiles. The hop drying kiln has a saddle roof with protruding bodies of the heating chamber fans and a handling dormer.

Stekník, building plot No. 5 (No. 17)

– building with a barn

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The building, located on the south-eastern side of the village square' has a ground plan in the shape of the letter "L." The barn is two-storey, made of marl, the barn's attic knee wall is complemented by low ventilation windows, and has six vents in the gable.

The image of the village of Stekník public space is enriched with several gateways located mainly around the village square and on the incoming roads to the village. In many cases the gateways artistically portray references to a hop heritage:

Stekník, building plot No. 8/1 (No. 15) – gateway

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The gateway is located on the southeast side of the village square. It stands detached next to the main facade of the house No. 15, at the head of the plot in the north-west, and has a rectangular ground plan. The gateway is characteristic with a slightly compressed arch and

a dynamically convex-concave silhouette of the upper part. It is brick, the top of the wall is covered with burnt bricks. At the top of the gate, there is a sculptural hop cone. The gate door is wooden of original shape. There are two pillars between the side pedestrian gate and the main entrance gate. The gate is coloured in medium-light ochre.

Stekník, building plot No. 15/1 (No. 12) – gateway

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The gateway is located on the north-east side of the village square, on the north-west side of the house, between buildings with plot No. 15/1 and with plot No. 18.

The gateway is brick with an extension, with an original wooden gate. At the superstructure top, there is a stone hop cone. The crown of the masonry is covered with plain tiles. The plinth part has the colour of dark ochre; the paint of the gate itself is light gray-green. In its upper part, the gate has the convex concave shape with hop cones in the corners. In the middle, there is an extension with a polygonal, offset top. In the middle of the extension, the stucco motif of hop cones is applied as a gateway decoration.

Stekník, building plot No. 18 (No. 10) – gateway

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The gateway is located on the north-east side of the village square, roughly in the middle. It is located on the south-eastern side next to the house No. 10

The gateway is brick with a double-leaf wooden historical gate. A stone hop cone is installed at the top of the gateway. The top of the masonry is covered with plain tiles. The plinth part has a dark ochre colour paint; the gate itself is light gray-green.

Stekník, building plot No. 19/1 (No. 9) – gateway

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The gateway is located on the north-east side of the village square. It is located on the south-east side next to the house No. 9

The plinth part has the colour of dark ochre paint, and the gate itself is light ochre. The historic wooden gate has been preserved. At the top of the segmental extension, which is covered with plain tiles, there is a stone statue of St. Lawrence (patron saint of hop growers) and on the sides, stone vases. In the middle of the gateway, there is a coat of arms executed in stucco. This is the alliance coat of arms of Jan František Kulhánek, Count, free lord

of Klaudenstein, in Stekník, Mradice and Nové Sedlo, the Imperial King General (* August 29, 1728, † January 7, 1799, Nové Sedlo), and his wife Marie Františka, Countess of Hohenembs.

The top of the other masonry of the gateway is covered with plain tiles. On the gateway sides, there are two axially equally located door openings terminated by a segment. On the right side, there is a blind opening; on the left side, the opening is equipped with an entrance opening with a wooden door.

Stekník, building plot No. 27/1 (No. 22) – gateway

Part of the village Stekník, municipality of Zálužice, district Louny
Cadastral area Stekník

The gateway is located in the north-west corner of the village square. It serves to enter the yard of the farmstead No. 22, in the plot's north-western corner.

The gateway is made of marl and brick. The top of masonry is covered with slightly sloping plain tiles. The facade of the gateway, with a semicircular passage is lined by rustic work. The gateway with a triangular extension is topped with a stone hop cone situated in a volute-shaped bowl.

TRNOVANY

Trnovany, building plot No. 65/2 (No. 8) – hop drying kiln FRANZ-MINA HASSMANN

Part of the village Trnovany, municipality of Žatec, district Louny
Cadastral area of Trnovany u Žatce

The detached complex on the village's southern edge by the main road between Žatec and Louny consists of a mill with a dwelling part and a hop drying kiln.

The building with a rectangular ground plan built of quarried marlstone combined with exposed brick masonry is two-storey with a three-storey bay, covered with a saddled roof with burnt plain tiles. At the southern end, a saddle loading dormer passes through the western roof plane; a saddle roof also covers the bay. In the ridge, the evaporator's prismatic body with a sheet metal cladding and a lantern passes through the roof plane. Facades are articulated with coupled window openings with pointed heads and framed with brick lesenes. The northern facade of the three-storey bay has a circular opening framed by bricks in its middle panel at the gable level. Above the opening is dating of 1908, executed in bricks, and below the opening, there is the inscription FRANZ-MINA and below that the inscription HASSMANN.

The entrance to the hop drying kiln resembling the driveway, is situated in the western facade. The heating chamber is also accessible from the west. The interior, consists of built-in wooden floors, accessible by ladder stairs. The vertical transport of hops to the loft was made

possible by a loading boarded dormer with a winch, which protruded at the building's western face's southern end. The transport downwards was provided through openings in the boarded floors. The double-heating chamber occupies the entire northern bay of the building. The boilers of the heating chamber are not preserved. In the heating chambers remained the hop drying trays manipulation facility, folding middle tiers and, at the upper storey level, movable tiers of drying trays. A central evaporator projecting above the roof plane has been preserved in the trusses.

Thanks to the demanding Neo-Gothic design of the facades of the building, it is one of the most beautiful hop drying kilns to be seen, standing in a traditional hop growing and hop producing locality immediately adjacent to Žatec.

Trnovany, building plot No. 78 (No. 9)

– four-chamber body of the kiln with a farmyard

Part of the village Trnovany, municipality of Žatec, district Louny
Cadastral area of Trnovany u Žatce

The detached farmstead complex with a "letter L" ground plan is located in the western part of the village. It includes (except for the hop drying kiln) a house, stables, and a barn. The hop drying kiln is multi-storey, with a rectangular ground plan, a saddle roof and dormers connected to the individual drying chambers with wooden evaporators. The visually open landscape exposed southern facade of the hop drying kiln faces the main road leading to Stekník. The second storey mass is slightly recessed opposite that of the ground storey, patterned by three brick chimneys related to a set of four heating chambers. The top of the marlstone masonry is finished with triangular brick gables of dormers and chimneys. Each gable above the drying chamber is equipped with boarded ridge evaporator.

The interior is dominated by four recessed heating chambers arranged in the hop drying kiln's rear structural tract. The front part of the layout is for service and communication - wooden stairs provide vertical communication. The heating chambers are equipped with Linhart patent technology with four cast iron boilers. Levers operate the folding middle tiers of drying trays; there are three moveable tiers of drying trays in each chamber. The roof structure above the hop drying kiln are collar beam trusses.

THE DETAILED DESCRIPTION OF HOP-RELATED CULTURAL HERITAGE ASSETS IN COMPONET PART 02

1) The main hop related cultural heritage assets of the historical centre of žatec

Hop drying kiln No. 30 in Dvořákova Street

Large residential terraced burgher house on the south side of the western end of Dvořákova Street, in the south-western part of the town centre. The house has a long saddle roof on the south side with a perpendicularly placed separate saddled roof of an added rectangular heating chamber body. There are plain tiles on the south side of the roof and ceramic interlocking tiles on the north. The roof structure is a collar roof trusses and use one-level collar beams with a queen post (der liegender Stuhl in the German language) - it is a rare roof construction with advanced types of so-called lying supporting structures with preserved details related to the use of the loft spaces for drying hops. In the middle of the north side, there are visible traces of a removed large loading dormer. The original truss wood is hand-hewn. On the south side, the loft is directly connected to the kiln heating chamber, which is more frequent in rural environment in the Saaz region.

Hop warehouse and hop packaging room, No. 116

The imposing, residential Art Nouveau house, with its frontispiece oriented into Dlouhá Street, hides a typical brick multi-storey warehouse of hops in the rear wing, with an internal wooden bearing frame structure. It is an example of how there was a later expansion of hop-processing buildings even into the historical town centre. The residential building still fulfils its function; however, the warehouse in the courtyard is currently unused.

Hop warehouse, No. 226

The hop warehouse in Oblouková Street, currently unused, is a structural part of the Hotel Černý Orel (the Black Eagle Hotel).

Hop warehouse behind the house No. 231

The four-storey hop warehouse with a hipped roof stands behind the burgher house No. 57 on Svobody Square. It was built on the site of the original fortification; due to its construction, part of the walls was demolished. It was operationally accessible from medieval town wall walkway of Nákladní Street. The internal bearing structure consists of a wooden skeleton combined with vaulted spaces on the first storey.

Jakob Heller's hop warehouse, No. 233

The building was erected in 1881 by the builder J. Petrovský, on the border of the historical centre and the Prague Suburb. Currently, it adjoins Kruhové Square. From 2006 to 2008, the storage area was converted into a hotel.

Hop warehouse of the family of František Kellner, No. 918

A five-storey hop warehouse on Chelčické Square with a sulphur chamber and a preserved brick polygonal chimney. In 1887, it was built by J. L. Kohn. A neighbouring imposing villa also belongs to the storage facility. In 1900, J. L. Kohn sold the whole complex to František Kellner, an important Czech hop trader.

Hop warehouse, No. 2924

The two-storey brick warehouse building located in Nádražní Schody Street has a valuable preserved facade with Neo-Classical articulation. Part of the building is embedded in the slope of a hill.

Hop warehouse, No. 2925

The two-storey hop warehouse built of stone has brick gables and a saddle roof. Its inner wooden bearing frame structure is well-preserved and is unusual as it contains, circular supporting columns, Neo-Classical articulation of its facades refer to the neighbouring building, No. 2924.

Hop warehouse, No. 3088

A typical, three-storey hop warehouse in Oblouková Street has been sensitively converted into a residential building.

2) The main hop-related buildings of the Prague Suburb

The urban structure of the Prague Suburb reflects its gradual growth and contains groups of industrial hop-processing buildings. They origin mainly from the 19th and the 20th century and are usually combined with the main mass of residential buildings of the individual owners of the hop drying kilns and warehouses. These are located within the town's organism, along the street line. A combination of industrial and housing functions, within the scope of the individual proprietary units, provides a truly unique atmosphere for this section of the nominated property, that of the business environment from the second half of the 19th century and the beginning of the 20th century. With their composition and their decorations' composition, the frontispieces still demonstrate how the individual hop growing family businesses created new structural complexes according to their financial abilities. It also shows how they integrated a residential function with the operation of hop drying kilns, hop packaging rooms, and hop warehouses. The preserved hop-processing buildings are brick and multi-storeyed, with a specific construction and typology. To this day, the drying kilns and sulphur chambers, supplemented with tall chimneys, have been to a greater part preserved. The tall chimneys of the former hop sulphur chambers and the original warehouses, which are in many places still used for their original purpose, are today an inseparable part of the Žatec local landscape and they put the finishing touches to its unique panorama. They are evidence of Žatec's standing as both the former, and the current, metropolis of world hop growing and as a significant centre of processing and trade in hops.

Similarly, as in the town's historical centre, the most important buildings are located near the main squares. Also, in the Prague Suburb, we can observe groups of significant hop-processing buildings by the local squares and the streets that flow out from them.

During the pre-industrial period, the hops were stored and dried in barns located on the premises of individual housing units and in the houses' lofts. Following the mid-19th century, in connection with growing production, however, this storage method was not suitable anymore, and independent warehouses were built. Even today there are more than 100 of them within the town's cadastral area; 70 of them are located directly within the Urban Heritage Zone.

The warehouses are sensitively integrated within the urban fabric of the town; they respect the street lines, oblong windows are set in their frontispieces and facades are decorated with stucco decorations. Various formations project from the roofs, which mostly cover lift shafts or original hand lifts, and tall chimneys that drew away the smoke from the sulphuring and drying chambers often tower over their roofs.

At present, 21 chimneys have been preserved, including the unique double-chimney above the warehouse No. 3040 in Tyršova Street. Interiors of warehouses are typical of their large inner spaces designated for storing hops and rooms that serve for the processing of hops themselves (sulphuring and drying chambers). Their dominant features are wooden constructions consisting of transverse beams supported by columns on several levels.

The craftsmanship treatment may be very plain; however, in richer owners' warehouses, it is executed in a more demanding manner with more complex profiling of columns. An exceptional part of the interiors today are their original technologies. A unique element is, e.g., the mechanical press in warehouse No. 1025, in Nerudovo Square.

The following description is structured according to the most important public open spaces and/or important streets, indicated with their current names, with the emphasis on buildings associated with the hop-processing heritage:

Relatively distinctive is within the component part 02 are the groups of hop processing buildings around Chmelařské Square and Zeyerova Street (A), Prokopa Velkého Square (B), and in the area of Nerudovo Square and Chmelová Street (C). Other large groups of hop-processing buildings are situated in the built-up area around the present-day Smetanovo Square and Kovářská Street (D), Masarykova Street, and Volyňských Čechů Street (E). In the eastern part of the Prague Suburb, there is a larger group of hop-processing buildings in the area of Obránců Míru Street and Jakubská and Tyršova Street (F).

A – THE AREA OF CHMELAŘSKÉ SQUARE AND ZEYEROVA STREET

Hop warehouse and hop packaging building Sonnenschein & Landesmann, No. 1907

The building was constructed in 1896; the investors were Julius Sonnenschein & Samuel Landesmann, hop merchants in Prague and Nuremberg. An auxiliary warehouse No. 977 belonged to this hop warehouse. Sulphur chambers and a drying kiln have been preserved.

The building is constructed on an oblong ground plan with a smooth frontispiece divided by ten axes of windows with smooth chambranles. The ground-floor and the second storey have a pilaster strip (lesene) frame filled with a coarser plaster. There is a gate on the ground-floor with segments on both sides. The building has no cellar. The roof is flat, with a greater overhang, without a cornice. The windows are wooden with a transome; they open inside, have four wings, and six or four panes.

The interior is simple and characteristic of a hop warehouse. It consists of a three-nave hall with a beam, a built-in wooden construction with columns of a circular cross-section, with moulded saddles, upon which joists are laid and towards which roof beams are perpendicularly placed with a board and beam ceiling. The staircase is made of wood. On the southern side of the warehouse, an eight-sided chimney unit is a part of the disposition inside. In this warehouse, the chimney above the roof level has not been preserved. On the southern side, a newer, modern lift has been installed. Three residential flats have been built inside the warehouse on the the first storey and the 2nd floor on the western side.

Hop warehouse and the hop packaging building of Heinrich Melzer, No. 1192

The building was constructed in 1888 by Heinrich Melzer, an important hop growing commission trader, who had a business office also in Nuremberg. In 1945, this building was owned by the Christl brothers, and after 1948, storage of hops for purchasing was located here. The original chimney has been preserved, along with the drying kiln nets and the sulphur chambers, valves, inspection openings, hoppers, transporting belts, presses, the lathe, and other equipment of the maintenance workshop, an equipped engine room with engines as well as other things. Currently, hops are still stored in the building. The two-wing five-storey hop warehouse was built on the ground plan in the shape of the letter "L." The frontispiece towards the eastern side is divided by pilasters. The windows have a simple chambranle. Above the first floor runs a two-floor cornice with a simple moulding. The entire frontispiece ends with a three-times dodged main cornice with a simple moulding.

The windows are original, wooden, oblong ones with seven panes; the other ones have six panes. The roof of both wings is mansard with dormers with ceramic

tile roofing. The interior consists of a built-in wooden construction, with columns of a square cross-section with a moulded foot, with moulded saddles, upon which joists are laid and perpendicularly to them, the roof beams, and the wooden board and beam ceiling. The main staircase is brick with stone steps. In both the northern and the southern wing, a modern lift has been installed.

Hop warehouse and the hop packaging house of Sonnenschein & Landesmann, No. 977

The building was constructed in 1896. Together with other neighbouring buildings, the warehouse formed a single operational unit (it belonged to the house with street number 1907).

The two-storey building stands on a square ground plan. It stands out from the group of other hop warehouses with its Art Nouveau architectural design. Both the eastern and the southern original frontispieces (including the older colour scheme) are divided by simple, smooth pilastres, which have a part of the pilastre surface on the lower floor fluted, on three fields each by two window axes. These are lined with a simple smooth chambranle. The interior of the building is characterised by an inserted beam, a built-in wooden construction. This warehouse building has no chimney. A modern lift has installed inside. Part of the ground-floor rooms have preserved ceilings with a stucco decoration. It was a sales warehouse where buyers went for hops. This corresponds to a relatively representative design of both the exterior and interior of the building.

Hop warehouse in the courtyard of house No. 687

The two-storey warehouse built in 1890 for A. Böhm is adjacent to the older building of the former Baroque economic unit, which is one of the oldest preserved buildings in this area. The main frontispiece with three window axes is smooth, with a continuous sill cornice and a simple cornice above the windows. The saddle roof has its ridge parallel to the street. The chimney of the hop drying kiln and sulphur chamber have been preserved.

Hop warehouse and hop drying kiln of Eduard Stein, No. 3017

The building belonged to the Fritz Zenter-Stein company founded in 1897. The current form of the warehouse is from its rebuilding in 1908, when at the same time, a Linhart patent system hop drying kiln was built. The chimney and the technological equipment have not been preserved. At present, it is used as a warehouse of toys. The building has been preserved in its authentic colour scheme on the eastern frontispiece, with the original richly ochrous, even brickly, colour scheme combined with grey. The building's frontispiece is divided by seven axes of windows. It is decorated with pilasters between the windows, set on a cornice that runs level with a horizontal construction above the cellar. Chambranles highlight the windows on the second and third floors. The saddle roof has a minimal slope, and the ridge is parallel to the main frontispiece.

Hop warehouse No. 1580

The architect Johann Salomon built the building in 1928. Subsequently, in 1937, a hop warehouse was added. Up until 2014, the production of hop pellets and hop grinding took place here. All the technological equipment has been preserved. The building is used for hop storage in cases the capacity of a modern air-conditioned hop warehouse in Mostecká Street is insufficient.

The administration building of the Public Hops Certification Centre, No. 1612

The building was built in the years 1930-1932. The original design of architect Johann Salomon from 1928 was modernised by a pair of architects J. Zelenka and J. Gregor. The building was created after the first law was passed in 1921, establishing the obligation to certificate the origin of hops. Thanks to this obligation, which applies to all hop-growers, the Old Public Hops Certification Centre (still standing in Tyršova Street) ceased to have sufficient capacity. Therefore, a complex of buildings was established on Chmelařské Square in the 1920s, and the individual associations dedicated to the cultivation and trade in hops, as well as several warehouses and the New Public Hops Certification Centre, made their headquarters in it. This became the place where hops were taken from the whole area and where each of the bales obtained a specific certificate of origin. The New Public Hops Certification Centre became a real centre of Saaz hop growing and hop-processing. This corresponds not only to the architecture of the building itself but also to its equipment and craftsmanship. The original office furniture, sofas, artificial stone tiles, and terrace floor surfaces are preserved, as are details such as lamps, gratings, a safe, wood panelling, and stair railings.

The New Public Hops Certification Centre's administrative building is followed by operating facilities, in which the actual marking and registration of hops took place. The unit's front part is a ground-floor brick building with a saddled roof with an oblong skylight. Its frontispiece is sectioned by a pilaster strip (lesene) frame into nine fields with large industrial windows. The main facade is decorated by an axially-placed gable in the central section, terminated with a low triangle. The warehouse's rear building has an upper floor with a higher attic knee wall and similar frontispiece sectioning as the front building. The main interior of the front building is a large hall, designated for hop marking, with a space open all the way to the roof spaces. At the rear, there is a typical wooden skeleton with joints, and beams with a board and beam ceiling (a ceiling with cross beams covered with planks from the top).

B – THE AREA OF PROKOPA VELKÉHO SQUARE

Hop warehouse and the sulphur chamber of the Christl Brothers, No. 1950

The building comes from 1897. The technology for

sulphuring the hops and the building construction, with a very good authenticity, have been preserved. An interesting element is the static design of the ceilings with the omission of central columns. Today, the Temple of Hops and Beer tourist complex is located in the original warehouse building.

The building is connected to the modern observation tower, the Hop Lighthouse tower, of the Temple of Hops and Beer which is 47 metres-high, built in 2010 according to the project of the architects Huml and Vaniček from Žatec and containing a staircase and an lift with a multimedia projection. On the northern facade, the Hop Astronomical Clock has been installed above a carriageway. It is the work of the same architectural studio and by the artist Petr Podzemský. It is the newest, and at the same time, the third largest astronomical clock in the Czech Republic. The astronomical clock symbolises the hop growing tradition of the town and the surrounding region.

The connected brick four-storey historic hop warehouse building with the wooden frame structure is partially embedded in the steep terrain. The frontispiece of the outbuilding is designed in a modest fashion; the concept of windows arrangement and the detail are of good architectonic quality. The original windows and the gate have been preserved. The roof is saddled, and it is dominated by a protruding engine room of the lift, sensitively executed with a vertical wooden panelling. Built-in sulphur chambers with a factory chimney have been preserved in the courtyard.

Hop warehouse of the Pfister & Wüstl company, Nos. 305 and 1952

Operationally connected and formerly independent warehouses and packaging rooms of hops of independent business companies come from 1881 and 1873 (No. 305). Within the suburb's organism, this is an interesting whole of irregular shape, hexagonal in its ground plan. It also retains much of its technological equipment related to the processes of drying, sulphuring of hops in the sulphur chamber, pressing of hops into sacks, and packaging. The technology of the sulphur chambers and the original presses have been preserved. The tall chimney has been preserved in its original condition. After restoration in 1997, the buildings are now in excellent condition, and today, they serve in housing the Hop Museum. A new, modern entrance hall has been built on an area vacant after the original storage building burnt down.

Hop warehouse and hop packaging room of Heinrich Kellner, behind No. 326

The brick three-storey building comes from 1894. The sulphur chambers' technology and an original press have been preserved, along with building constructions with possessing the very high level of authenticity. Today the building is partially used as a furniture shop which is located on the first storey. Its symmetrically designed

main facade faces towards Prokopa Velkého Square. The interior of both floors is largely undivided and includes an authentic construction, consisting of wooden columns of a square section profiled joists, and a wooden board and beam ceiling. In the cellar, columns are reinforced with an iron console anchored into the column and the beam. Some columns have a circular cross-section.

Hop warehouse with Josef Bondy's villa No. 828

The buildings date from 1884. The parcel's perfect utilisation allowed for construction in the rear wing – a hop warehouse was built here, which is connected to the representative residential villa, integrated into the existing terraced building. The warehouse is located in the yard behind the villa; its interior is simple and typical for the storage of hops. It consists of a wooden construction with columns of circular cross-section. The space is free; only at the rear wall the heating chamber's body is inwards protruding.

Hop warehouse of Schiller & Schwarz, No. 974

The four-storey brick building from the workshop of the architect Alois Daut comes from 1896. There is no better example of the original period approach to the incorporation of hop warehouses into the older urban structure of the town. In this particular case, the author had to abide by the prescribed triangle parcelling, despite this not being very convenient for its internal arrangement.

Another hop-processing building was supposed to follow the warehouse; however, it was never built. The neighbouring building on the northeast side, which was originally to be demolished and substituted, documents the height of the original building in the area of Prokopa Velkého Square. The chimney proves that there once existed the technology for processing and preserving hops, which were also processed and not just stored here. The interior with the typical bearing wooden structures of individual storeys is preserved in its original form.

C – THE AREA OF NERUDOVO SQUARE AND CHMELOVÁ STREET

Hop warehouse and hop packaging building in Alšova Street, south of No. 945

The date of the building is unknown. The building is a characteristic example of integrating a hop-processing building into the street block in the vicinity of a residential building. It is a mass-wise and architectonically distinctive building, which with its whole width, is the centre of attention in the street. The frontispiece is divided by three window axes, and a cornice runs above the ground-floor. The central part of the frontispiece is highlighted by a bay, in which an authentic wooden frame gate with a horizontal boarding set into an opening with segmental head has been preserved on the first storey.

Hop warehouse and hop packaging building of Josef Schwarzkopf, No. 945

The three-storey brick building was finished in 1895 following the designs of architect Wilhelm Fuchs and afterwards, it was rebuilt in 1908, 1925, and 1936. The warehouse is a distinctive example of the integration of a hop-related building into the street block and an example of an authentic articulation on its northern frontispiece. In this case, the main facade is oriented northwards, which was the optimal solution with respect to its operation. On the northern facade, there are two distinctive iron fire staircases. Approximately in the central part of the building's mass, the original hop drying kiln, with a chimney, has been preserved, including the nets, valves, inspection openings and the original door. Even a secondarily installed and still functional lift has been preserved.

Hop warehouse and hop packaging building of Josef Schwarzkopf, No. 383

The three-storey brick mono-functional hop building on a square outline was completed in 1910, following the plans of architects Wilhelm Fuchs and Hildebert Kolbe. It was rebuilt in 1913. The building is an example of a construction that thoroughly respects the given street line. Operation-wise, the warehouse was connected with house No. 945.

Hop warehouse and hop packaging building of Edmund Stern and Karel Ungar, No. 1194

The simple four-storey, purely storage building in a corner position was completed, in 1901, following the plans by the architect Josef Petrovský. The main frontispiece is typical of the Žatec buildings with its vertical plaster bands in the facade which connect the windows of the individual floors. In this manner, the delicate proportions of the facade are provided for in the massive building.

The interior is dominated by a large hall with a grandiose beam frame bearing structure. Columns with a square cross-section have profiled foots upon which joists are laid, which support the perpendicularly running ceiling beams and the wooden board and beam ceiling. The columns also have profiled attachments, which connect the small column, saddle, and the joist. Two wooden staircases are located in the opposite north-eastern and south-western part of the warehouse. A modern lift is built-in in the central part of the warehouse.

Hop warehouse and hop packaging building of David Abeles, No. 1025

The original five-storey building by the architect Josef Petrovský was completed in 1883. It has been rebuilt several times (Salomon 1896, Fuchs 1899, Kolbe 1928). The original sulphur chambers have been preserved, along with the original press and technical details of the building, for example, the extraction ventilator.

Hop warehouse and hop packaging building of František and Carl Jettmar, No. 380

The two-storey brick building was completed in 1886. The building is an example of the connection of a residential building with a smaller warehouse building with shared operating yard. The residential building serves its function; it has an architectonically highly valuable four-axes main facade of a Neo-Renaissance type. In the courtyard, there is a three-storey brick out-building with two wings. It is an original hop warehouse with a sulphur chamber and a chimney placed in the wings' crossings. The interior of the warehouse consists of an undivided wooden frame, with wooden floors. The internal staircases are wooden and in an open space. The sulphur chambers have been preserved in the building, along with drying hurdles, a chimney, and other technological details. This warehouse with a residential villa, is a typical example of an arrangement of a villa with a passage and hop warehouse placed at the back, in a yard. On the first storey in the residential building, there were business offices, hop growing tools shops and other equipment. On the first floor there was the apartment of the warehouse owner and rooms for servants.

D – THE AREA OF SMETANOVO SQUARE AND KOVÁŘSKÁ STREET

Hop warehouse and hop packaging building of Vinzenz Zuleger, No. 1232

This significant four-storey corner building in Kovářská Street is the work of the architect Johann Salomon. This is one of the most interesting hop processing buildings in Žatec. It was built in 1913 and is proof of the quality of the architectonic design of an industrial hop-processing building, set in the fabric of a built-up town area. The brick building has a mansard roof and distinctive dormers with decorative gables. The interior of the building is divided by wooden columns. The sulphur chamber forms an extension of the western wall of the warehouse. The building's main facade is decorated with plaster imitating ashlar on the ground storey level, on the second storey with bossage strips. The windows are set in behind the face, lined with a flat chambranle. The second and the third storeys windows are vertically joined into continual belts. In the mansard roof, All the facades of the gables in the mansard roof facing the streets have Barocisizing undulating outline, but the plaster is without architectonic decorations. On the western side, towards the courtyard, a factory chimney of a circular cross-section for extraction from sulphuring chambers of the hop warehouse is located. The windows are original, wooden and to the 1st floor, rectangular. The main facade is divided by a more massive ledge above the first storey, another, simpler and smaller one above the 2nd floor, and it ends with the main cornice above the 3rd floor. The mansard roof is covered with ceramic tile roofing.

The interior has the simple character of a hall, typical for a hop warehouse. It consists of a wooden beam bearing construction with massive columns of a square cross-section and simply profiled saddles, bands, and joists upon them, perpendicular ceiling beams, and a wooden board and beam ceiling. The columns have chamfered edges up to the height of approx. 1.5 metres. The whole layout of the warehouse, located on an irregular parcel, was very efficiently solved. The main staircase is wooden, situated on the southern side. Part of the ground-floor on the north-eastern side is made as a reinforced concrete structure with columns, joists, and a flat ceiling. In this section there is a large, wooden, and sliding original gate. In the northern part of the building, a newer lift has been installed. Part of the first storey by the entrance has a flat ceiling, and contained the operational offices. The building is one of a few that have a partial basement; the brick stone structure of the cellar is vaulted with brick plastered segments set into metal I-profiles. The sulphur chambers have been preserved in the building, along with valves, drawbars and small chains, inspection openings, and hoppers, including a tall brick chimney.

Hop warehouse, hop packaging building, and residential villa of the Gustav Epstein & Artur Mendl company, Nos. 1257 and 753

This building has six storeys, while the sixth floor is untraditionally embedded in the roof space of a large mansard roof. Brick perimeter walls are reinforced with pillars, visible on the frontispiece between the rows of oblong windows. The building was constructed in 1913 as a whole of a large warehouse and a villa. Both the warehouse and the neighbouring villa of the same owners were built according to the designs of the architects Fuchs & Kolbe. This is currently one of the architectonically most interesting warehouses, with a hop packaging building and a sulphur chamber, in Žatec. Presses for hops from 1964 have been preserved in the building along with complete sulphur chambers with their chimney.

The particularity of the premises is a brick baroque-style gate between the villa No. 1257 and the warehouse No. 753 in the street block. The gate with a span of about six metres has an elliptical shape and is supported with pillars. The gate has an intricate outline and rich decoration with reliefs of hop vines. The gateway is covered with plain roof tiles. On both sides of the gateway, there are small pedestrian gates lined with profiled mouldings. The representative villa, with a landscaped garden, the original gazebo and an adjoining warehouse building on the eastern side represents an impressive, architecturally compact unit in the visually exposed part of this component.

Hop warehouse and hop packaging building of R. Christl, No. 1945

The two-storey building with an oblong ground plan and exceptionally well-preserved, authentic interior sectioning was built according to the project of architect

Alois Daut, and it dates from 1882 to 1884. The windows have moulded chambranles highlighted with a central key stone, and there are parapet sill under the windows. A newer lift has been installed in the western part. Also, a hop drying kiln, including the drying hurdles and a sulphur chamber, has been preserved, together with parts of the heating chamber technology and the radiator system, and other smaller equipment. An architectonically interesting element is the preserved chimney with an octagonal cross-section, which passes directly through the ridge of the saddle roof.

E – THE AREA OF MASARYKOVA STREET AND VOLYŇSKÝCH ČECHŮ STREET

Hop warehouse and hop packaging building of Hermann Utschig, No. 1401

The warehouses' premises, which consisted of several buildings, have been well preserved in its mass, but many technical details have disappeared both from the facade and the interior. However, the well-crafted interior construction has been preserved. Today, the building is used as a shop for simple building materials.

Hop warehouse, No. 80

The warehouse is an impressive industrial four-storey building, which stands exceptionally outside of the street line. It was built by Ladislav Rouček, who also became its first owner. It is presumed that the residential building was oriented towards the street line, but that was later demolished together with other industrial buildings during the construction of the neighbouring post office building.

Former Renaissance Malt House, No. 356

The malt house building represents a completely unique structure from a historical point of view. Most of its today's structures date from 1574 to 1574, when the original Gothic barn was rebuilt into a malthouse. Around 1805, the already delapidated malt house was converted into a residential home connected with the production of paints. The extensive building with an inner yard was completely renovated between 2009 and 2013 and adapted into a multi-purpose town cultural facility, which respectfully presents the maximum of what has been preserved from the unique operation of the original malt house. In the rear wing, the existence of a malt-kiln was archeologically documented, a place with an oven for the drying of malt in the courtyard section. A well was found by archaeologists and afterwards also restored. Sources speak about the existence of other malt houses in the neighbouring buildings, Nos. 354, and 357. Written sources from the early modern period document more than 40 such objects in the town; in addition to their malting, they also served for drying fruit and hops. The restoration of the malt house significantly strengthened the authentic evidence of the typological richness of buildings related to the hop growing and processing heritage of Žatec.

F – THE AREA OF OBRÁNCŮ MÍRU, JAKUBSKÁ AND TYRŠOVA STREETS

Hop warehouse of J. L. Kohn, No. 250

This building of a former hop drying kiln with a chimney from 1878 has recently undergone a more extensive conversion, and it is currently used for small-scale metal production. It is a corner warehouse building with an interesting concept of the facade and a distinctive design in its corner part.

Hop warehouse of Möritz Löbl, No. 1148

The large, three-storey building with a bevelled corner has sulphur chambers with a chimney located between its two wings. The building, constructed by the architect Wilhelm Fuchs in 1904, currently serves as a furniture shop. Sulphur chambers have been preserved between the wings of the building.

Hop warehouse and hop packaging building of the Jakob Abeles & son company, No. 313

Remarkably well-preserved, three-storey industrial hop-processing building from 1900 by the architect Wilhelm Fuchs belongs among those, in which a high degree of authenticity has been preserved. The group of buildings is an example of a solution where the two-storey villa of the owner with business offices was located next to the street line and the hop packaging buildings and warehouses that formed the background facilities were located in the rear wing of such a unit. A chimney has been preserved in the hop-processing building, along with an original sulphur chamber and a hand-crafted door, a heating chamber and an original press with all its necessary equipment. The residential house is decorated with gilded hop motives.

Hop warehouse, No. 3039

The warehouse is an example of a simple, plain hop processing building. The Classicist facade had to respect the structure and the architectural vocabulary of the neighbouring buildings. The steel structure of the roof has been preserved.

The Old Public Hops Certification Centre, No. 290

On a distinctively rectangular ground plan, the brick two-storey building was built in the place of a former malt house. Initially, a hop certification centre operated here. In 1928, it was relocated into the new building in Chmelařské Square, behind No. 1612. Consequently, the building was used as a hop warehouse. The saddle roof of the building is covered with burnt roof tiles. The facade is smooth, divided on the corners with a stucco bossage, and around the windows with a moulded chambranle and a straight ledge above windows. The building is horizontally articulated by the mezzanine ledge and with a slightly projecting continuous sill ledge.

The interior of both floors is, for the greater part, undivided with a structure that consists of wooden

columns with saddles and a wooden board and beam ceiling. On the ground floor, the joist is supported by modern iron columns. The roof structure uses collar beams with a queen post and suspension trusses with a small hanging post. The roof structures are made from hewn timber. A wooden winch used to move stored hops is preserved in the roof space.

Hop warehouse, hop packaging building, and hop drying kiln of the J. Paulus & Co. company, No. 1937

The originally large premises of hop buildings, from 1893, were built following the order of Josef Hobel. Due to insufficient maintenance by its owner, the premises are currently neglected and in a dilapidated condition, similarly to building No. 810.

DETAILED DESCRIPTION OF THE MOST IMPORTANT VILLAS OF ENTREPRENEURS IN HOP GROWING AND PROCESSING IN COMPONENT PART 02

Villa No. 304, Komenského Alley, Prague Suburb

The villa belonged to the hop warehouse No. 1950 (which is directly connected to it on the north side); the owners were the Christl brothers, Karl, Rudolf, and Anton. A one-storey house from 1904 with a garret and a basement has a highly valuable Neo-Renaissance frontispiece of distinctive quality among period villas. Its original design stands out from many period buildings. The distinctly designed southern facade from Komenského Street has an accentuated central part. There is an wide arcade loggia on both the ground floor and the first floor with three fields divided by columns, which are on the first storey Tuscan and on the first floor Ionian forms. The main entrance is located in the axis of the facade.

Villa No. 313, Obránců Míru Av., Prague Suburb

To this villa, owned by David Abeles, belonged a hop warehouse in the yard. The two-storey residential house, from 1900, has a Neo-Renaissance facade complemented by Art Nouveau motifs. The facade design is at a very high architectural level. On the first storey on the left, there is a passage with an entrance to the courtyard. A massive projecting cornice closes the facade. Between the brackets, there is a painting with alternating motifs of hop leaves and hop cones. The building has a saddle roof in the front with a ridge parallel to the street front. The Neo-Renaissance gate to the passage is an example of the excellent craftsmanship of the house. The passage interior is architecturally treated using a bossage, a ledges of tiny pilasters, wooden beams, and stucco decorated ceilings.

Villa No. 315, Obránců Míru Av., Prague Suburb

This villa belonged to a hop warehouse in the yard, which no longer exists. The house from 1882, in the Neo-Renaissance style, is one of the most valuable and best-preserved, magnificent residential buildings in the Prague Suburb. The house has a rectangular ground plan with

the main facade facing the street. The facade is practically in its original form, and even in the interiors, only a minimum of interventions have been made. Not only the layout has been preserved, but also an extraordinary set of high-quality fillings, rich stucco, and floor layers. Thanks to this, the building belongs to the valuable sources of knowledge of architecture development at the end of the 19th century and proof of knowledge about the aesthetics of that period. The subject of protection by the state heritage conservation bodies is the house itself and its external appearance, but also the protection of all its historical constructions, details, and, above all, the handicraft - artistic parts.

Villa No. 342, Zeyerova Street, Prague Suburb

The villa belonged to a large hop warehouse in the yard, No. 1192, owned by Heinrich Melzer. The residential villa with a distinctive mansard roof is one-storey structure with a garret. Storeys are visually separated by a ledge and the second storey is slightly recessed. The main entrance is from the east side. The windows on the first storey have segmental heads. The villa has a mansard half-hipped roof covered with burnt plain tiles.

House No. 380, Nerudovo Square, Prague Suburb

The house belonged to a hop warehouse in the yard; the owners were František and Carl Jettmar. The house from 1886 has an architecturally high-value facade of the Neo-Renaissance type. It is a one-storey residential house on the northwest corner from the second half of the last century. The western facade to the square has the main entrance on the far right in a broad segment of the vaulted passage. The frontispiece of the 1st floor is divided by double fluted pilasters, between which there is a frieze with wreaths and coats of arms. Behind the main entrance is a passage to the courtyard. The main cornice is projecting. Today, the interiors of the ground floor and first floor are without artistic and craft details. The main building is architecturally of high value.

Villa No. 828, Tyršova Street, Prague Suburb

The villa belonged to a hop warehouse in the yard, owned by Josef Bondy. It is a one-storey representative villa from 1884 with a artistically designed Neo-Renaissance facade. The main northern frontispiece to the street has a central triaxial bay, terminated by a triangular gable. The pilasters at the middle window on the 1st floor of the bay were replaced by girls' figures. The main entrance is in the first axis from the right to the passage. The main cornice is projecting. The roof is saddled with a ridge parallel to the street. The house's interiors are very valuable, with a large share of plastering work and arts and crafts.

Hop warehouse, hop packaging building and residential house of Franz Herzig, No. 1015, Volyňských Čechů Street, Prague Suburb

The construction was completed in 1886 and is an example of a direct connection between the owner's corner two-storey residential house, with the originally

Neo-Renaissance facade, and the warehouse building. The hop warehouse is now used as an exhibition space for small pet breeders. The residential building is preserved, including its original layout, entrance staircase, and representative rooms with rich stucco decoration.

Villa No. 1257, Kovářská Street, Prague Suburb

The villa belonged to the hop warehouse No. 753, standing right next to the villa and connected by a decorated gateway. The owners were Gustav Epstein and Artur Mendl. The one-storey representative villa from 1913, is a villa with a basement and a garret in the mansard roof and is an example of a representative architectonic style prevalent at the time of its origin, with a historical reminiscence of Baroque-style details. The facade facing Kovářská Street has an emphasised central part, which is a shallow, three-sided, three-axial, polygonal bay window. Above the rectangular windows, there are small oval windows. The bay window ends with the main cornice. The mansard roof has a brick gable with a saddle roof, windows to the attic, pilasters, and a triangular tympanum in the facade's axis. The interiors do not contain more demanding arts and crafts designs. The brick Baroque-style gateway is located in the street line between villa No. 1257 and warehouse No. 753. The gateway has a span of about six metres and is covered with plain roof tiles. On both sides of the drive way, there are small gates in moulded chambranle. The building was built from the ground up as a representative villa with a landscaped garden on the south side of the complex and with a hop warehouse building was situated on the east side. The whole looks balanced and fits in architecturally well into the environment.

The Villa of Dr. Wilhelm Kříž, No. 344, Zeyerova Street

The villa was built in 1865 and slightly modified in 1895. It bears the name of its last owner, an important personality, the district court councillor JUDr. Wilém Kříž. It is an excellent example of housing for a rich upper class family in Žatec, whose prosperity was connected with the services of hop traders. The Neo-Renaissance frontispiece is richly decorated; the villa has been preserved in its original form, including the authentic, exceptionally valuable interior.

DETAILED DESCRIPTION OF THE MOST SIGNIFICANT BUILDINGS REFLECTING THE SOCIO-ECONOMIC EFFECT OF WEALTH GENERATED BY HOPS IN COMPONENT PART 02

The Žatec Municipal Theatre, No. 27, Dvořákova Street

The economic growth of the town in the 19th century, stimulated by hop growing, also led to developments in the town's cultural life. It is reflected in the construction of the local theatre, one of the oldest stone theatres in Bohemia. The foundation stone was laid on July 8, 1848.

The building was financed by local citizens (among them were practically all the largest hop growers) and the town through an interim committee's association. The designer was the engineer Schulze, the builder Anton Grimm. In 1871, gas lighting was introduced into the theatre. In 1910, an extensive internal remodelling was carried out, including an artistically demanding painting of the auditorium. The hop tradition is also demonstrated on its curtain, which was painted in 1946 by Oskar Brázda. At present, the theatre is still fully functional and serves its purpose well.

The Elysium Cinema, No. 230, Obránců míru Street

The Elysium cinema, today the Lučan cinema, was built in 1928-1932, with great emphasis on the quality of the interior; the projection hall was utterly equipped with vegetative paintings. The rich cultural and social life of the town is also evidenced by the fact that in the 1920s there were two separate cinema buildings in Žatec (the second building disappeared during World War II).

Bank, No. 236, Obránců míru Street

The magnificent building of the former Austro-Hungarian State Bank was built by the builders Fuchs & Kolbe in collaboration with the architect J. Salomon before the First World War (before 1914). The combined roof covers the dominant two-storey mass with an "E"-shaped ground plan. A pair of bay windows complete the main facade. The appearance of the building is completed by classicising decoration with the influence of modernity.



The street corner building of the "Golden Lion" (Zlatý lev) hotel from 1929, Obránců míru Street, Žatec, 2016

HOTELS

Hotel Zlatý anděl, The Golden Angel Hotel, No. 45, Svobody Square

The Golden Angel was one of the most luxurious accommodation, catering, and social facilities in Žatec. Its long-term owner was the company of the well-known Žatec merchant, industrialist, and brewer Anton Dreher. The owners leased their business to many operators. After World War II, the famous hotel became public property. Since then, as evidenced by the chronicler's records of the town of Žatec, it slowly fell into disrepair. The hotel underwent a complete renovation in 2018 and is now used for accommodation again.

Hotel Družba, No. 56, Svobody Square

Originally the Hanslik hotel of Friedrich Proft from 1900, it was rebuilt in 1927-1930. The magnificent building was used to accommodate incoming hop merchants, which corresponded to the representative concept of social spaces of the hotel, in which marble panelling was massively applied. However, even the hotel's rich owner was unable to give up the high income generated by hop growing, which is why also a hop warehouse is part of the hotel complex. Its the first storey served as a garage for parking cars.

Hotel Zlatý lev, The Golden Lion Hotel, No. 228, Oblouková Street

The original hotel building in Oblouková Street, from 1902, already in the 1920s did not have sufficient capacity due to the increasing interest of visitors to the town, so in 1931-1932 another building was added to it. The building still serves its original purpose today.

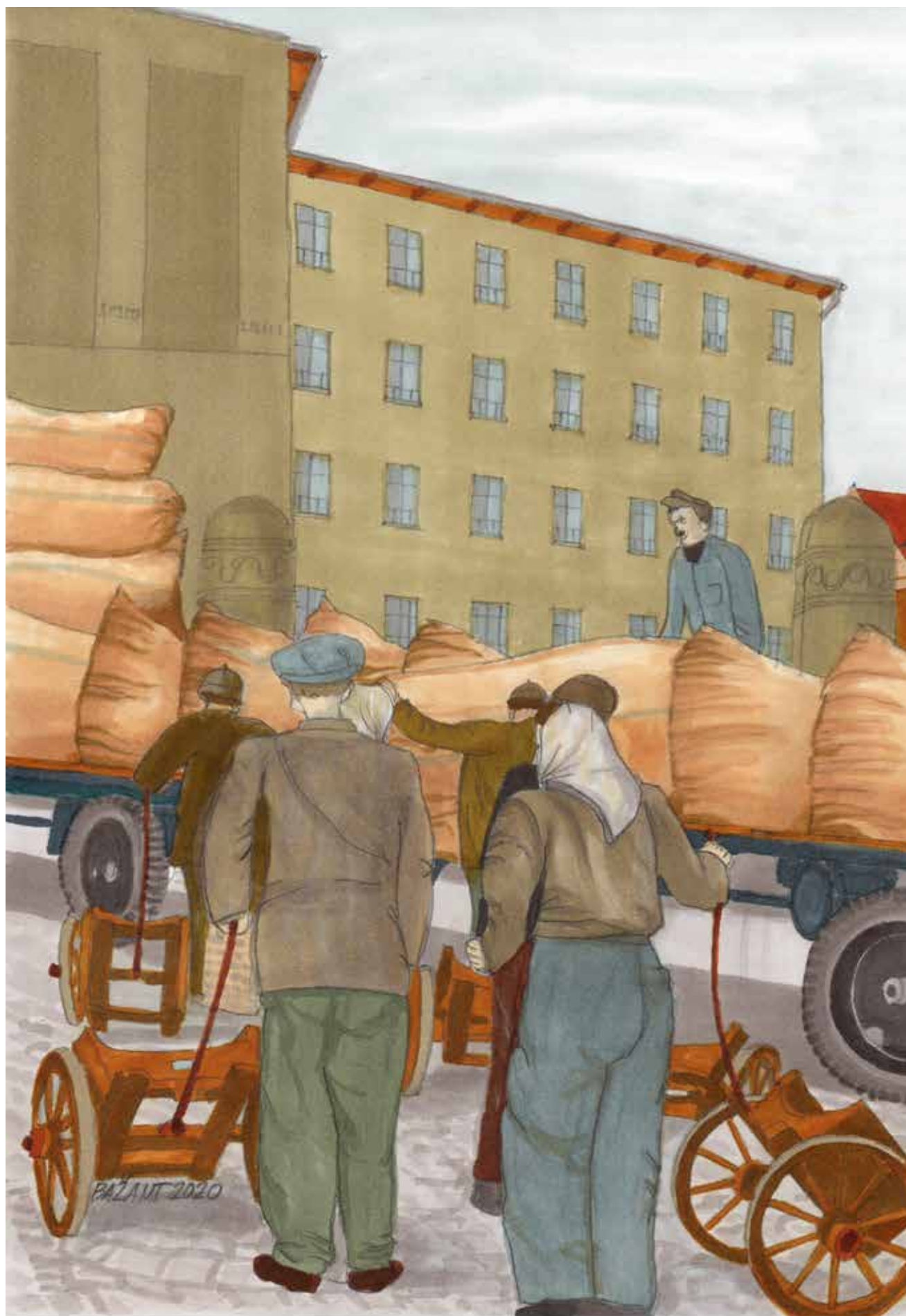
WORK IN A HOP WAREHOUSE AND PACKAGING ROOM

At the turn of the 19th and 20th centuries, work on hop fields was very diverse and physically demanding. This was also true of the work in hop drying kilns and especially in hop warehouses and packaging rooms.

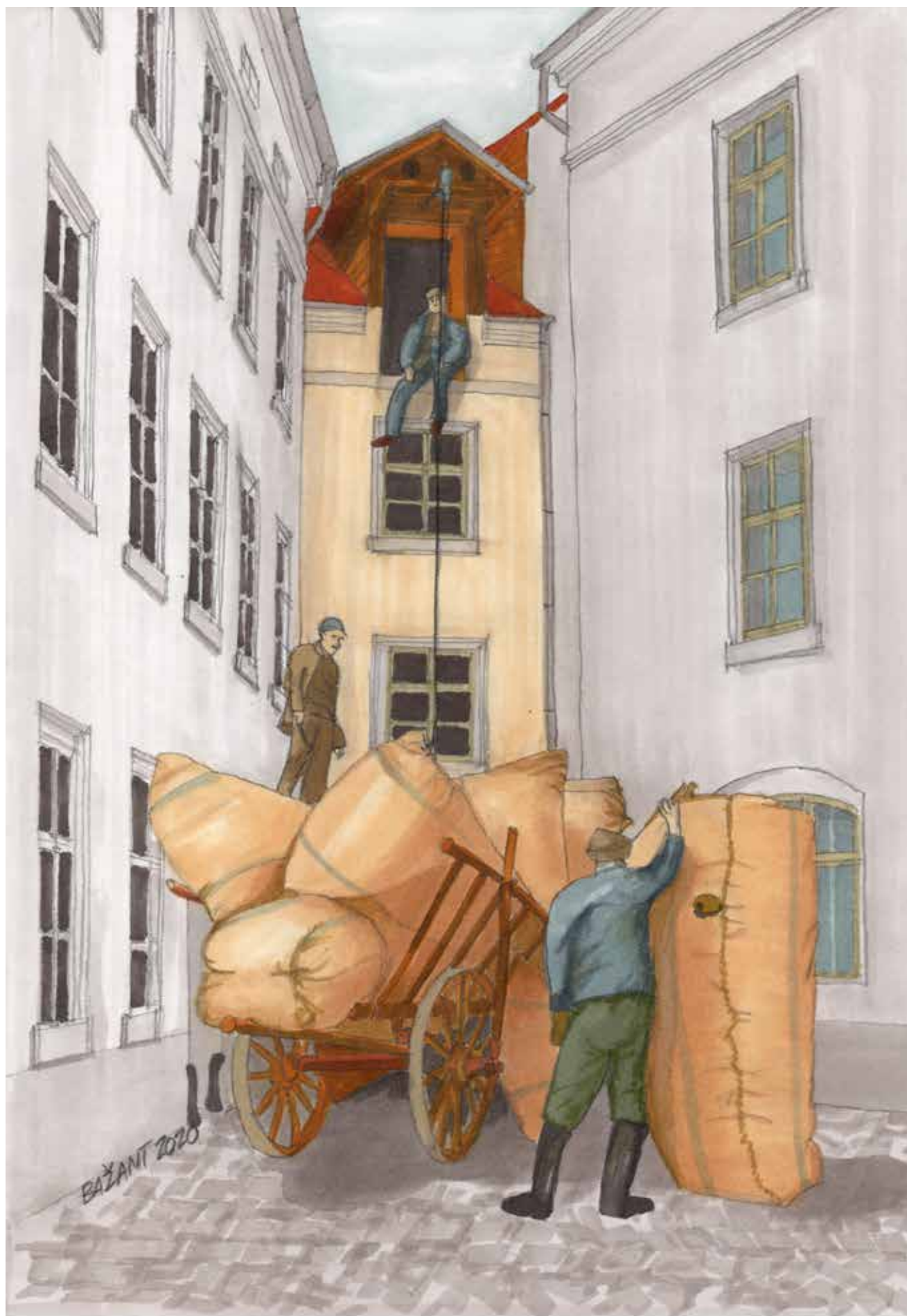
To better understand this diversity, several drawings were created in 2020, documenting the most important hop processing stages in a hop warehouse and packaging room. The phenomenon of hops has always been in search of artistic expression, and hops have often been dealt with by well-known artists.

This time the artist is Mr. Petr Bažant, who has been dealing with the history of hop buildings for a long time.

Further drawings of his are in the exhibitions of the Hop Museum Žatec.

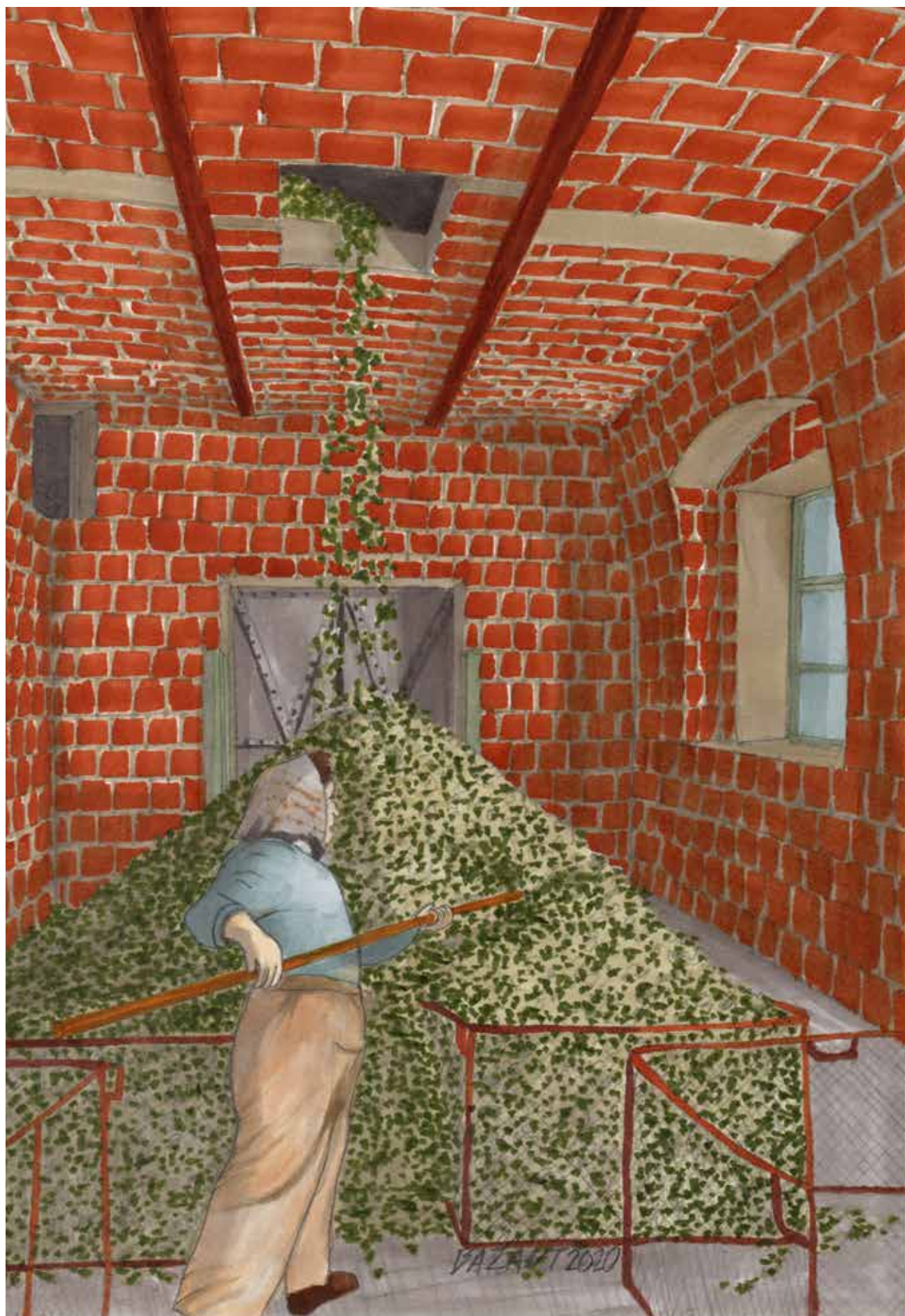


Vertical transportation of hop bales to the top floor of the warehouse using a motorised winch



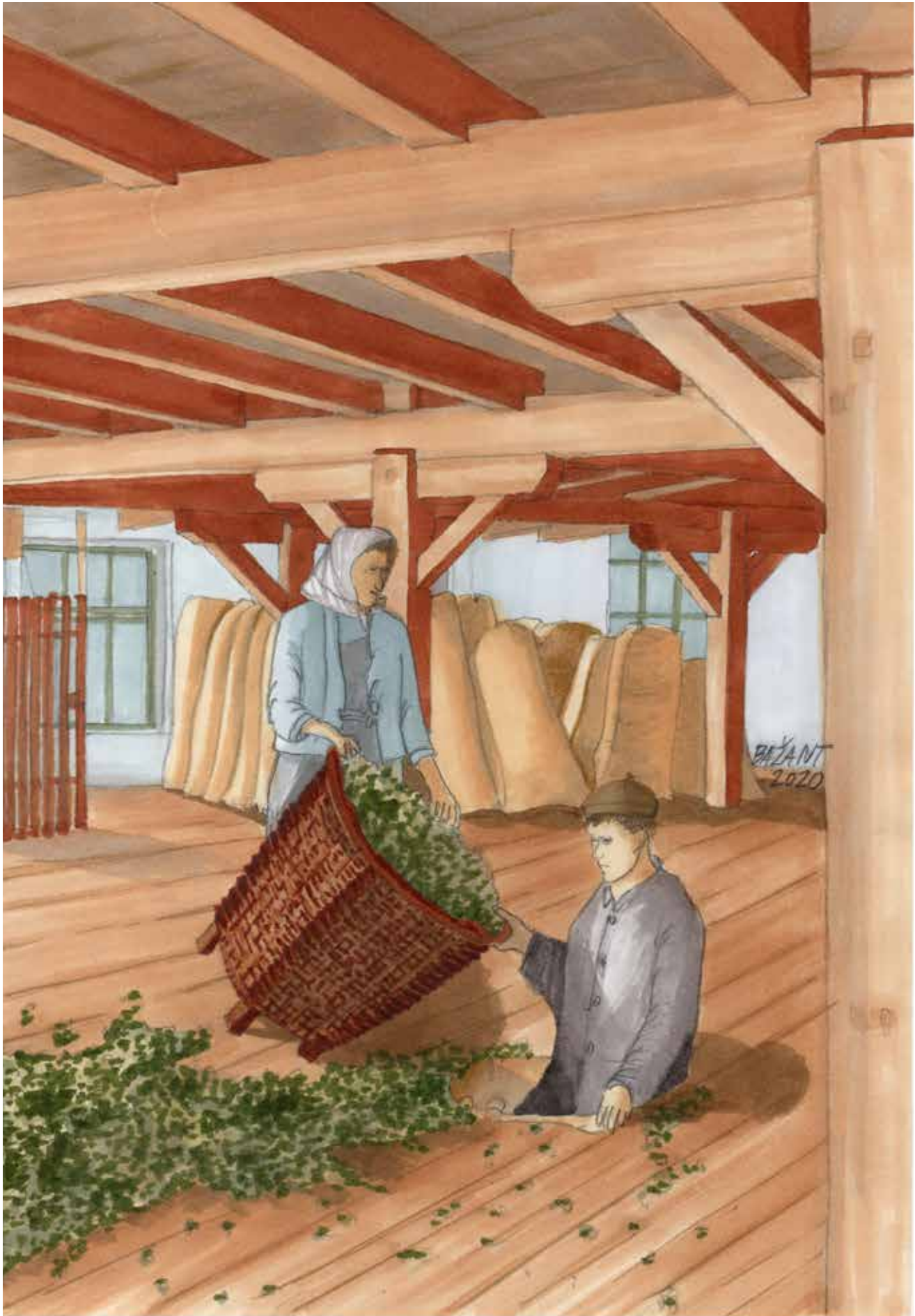






Pressing the sulphured hops into export bales by physically stomping on them







7.d ADDRESS WHERE INVENTORY, RECORDS AND ARCHIVES ARE HELD

A) DOCUMENTATION IN RELATION TO INDIVIDUAL CULTURAL HERITAGE ASSETS

Národní památkový ústav, generální ředitelství (National Heritage Institute, Directorate General)

Valdštejnske náměstí 3
CZ-118 01 Praha 1 - Malá Strana
Web address:
www.npu.cz

Národní památkový ústav, územní odborné pracoviště v Ústí nad Labem (National Heritage Institute, Regional Department in Ústí nad Labem)

Podmokelska 1/38
CZ-400 07 Ústí nad Labem - Krasné Březno
Web address:
www.npu.cz/cs/uop-usti-nad-labem

Krajský úřad Ústeckého kraje (Regional Authority of the Ústecký Region)

Velká Hradební 3118/48
CZ-400 02 Ústí nad Labem
Web address:
www.kr-ustecky.cz

B) DOCUMENTATION OF PUBLIC PROCEDURES WITHIN THE AREA OF THE COMPONENT PARTS, IN RELATION TO INDIVIDUAL CULTURAL HERITAGE ASSETS AND TO THE SPATIAL AND LAND USE PLANNING

Městský úřad Žatec (Municipal Office Žatec)

Nam. Svobody 1, 438 01 Žatec
All Land use plans within the nominated property are publicly available at this link
Web address:
<https://www.mesto-zatec.cz/radnice/odbory-uradu/stavebni-a-vyvlastnovaci-urad-zivotni-prostredi/urad-uzemniho-planovani/>

C) ARCHIVES AND COLLECTIONS

Národní památkový ústav (National Heritage Institute)

Valdštejnske náměstí 3
CZ-118 01 Praha 1 - Malá Strana
Web address:
<http://www.npu.cz>

Národní archiv (National Archive)

Archivní 2257/4
CZ-149 00 Praha 4
Web address:
<http://www.nacr.cz>

Národní knihovna (National Library)

Klementinum 190
CZ-110 00 Praha 1
Web address:
<http://www.nkp.cz>

Zemědělská, lesnická a potravinářská knihovna Antonína Švehly (Antonín Švehla Agricultural, Forestry and Foodstuff Library)

Slezská 100/7
CZ-120 00 Praha 2
Web address:
<https://kas.uzei.cz/>

Národní muzeum (National Museum)

Vačkovské náměstí 1700/68
CZ-110 00 Praha 1
Web address:
<http://www.nm.cz>

Národní technické muzeum (National Technical Museum)

Kostelní 42
CZ-170 78 Praha 7
Web address:
<http://www.ntm.cz>

Státní oblastní archiv v Litoměřicích (State Regional Archive Litoměřice)

Krajská 48/1
CZ 412 01 Litoměřice
Web address:
<http://www.soalitomereice.cz/>

Státní okresní archiv Louny (State District Archive Louny)

Mírové náměstí 57
CZ-440 01 Louny
Web address:
<http://www.soalitomereice.cz/content/soka-louny>

Chmelařské muzeum Žatec**(Hop Museum Žatec)**

naměstí Prokopa Velkeho 1952

CZ-438 01 Žatec

Web address:

<http://www.chmelarskemuzeum.cz/>

Severočeská vědecká knihovna p.o.**(The North Bohemian Research Library)**

W. Churchilla 3

CZ-400 01 Ústí nad Labem

Web address:

<http://www.svkul.cz>

Chrám chmele a piva, p.o.**(Temple of Hops and Beer)**

naměstí Prokopa Velkeho 1951

CZ-438 01, Žatec.

Web address:

<http://chchp.cz/cz/chram-chmele-a-piva/>

Chmelařský institut s. r. o.**(Hop Research Institute Co, Ltd.)**

Kadaňska 2525

CZ-438 46 Žatec

Web address:

<http://chizatec.cz>

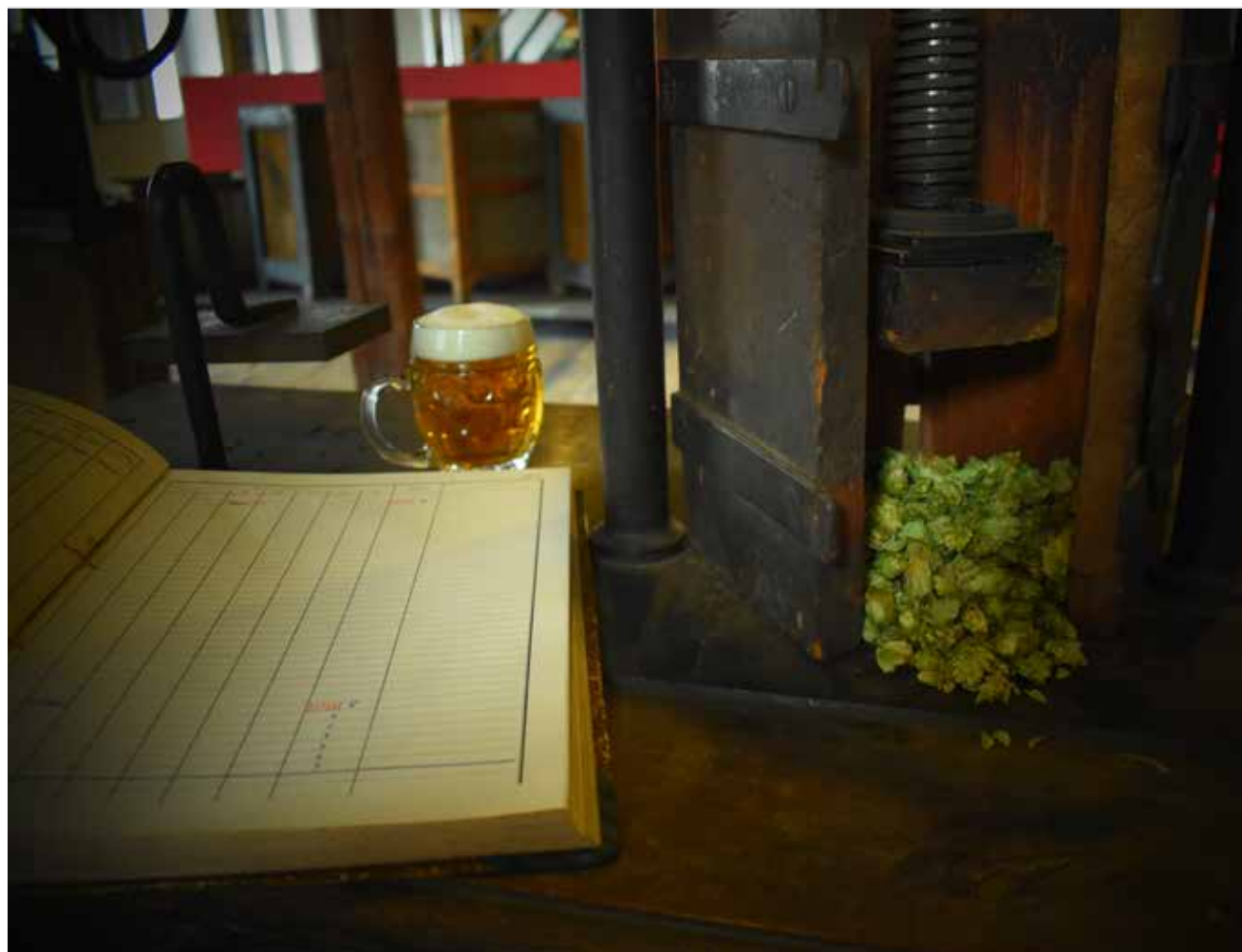
Regionální muzeum K. A. Polánka**(Regional Museum K. A. Polánka)**

Husova 678

CZ-438 01 Žatec

Web address:

<http://www.muzeumzatec.cz/>



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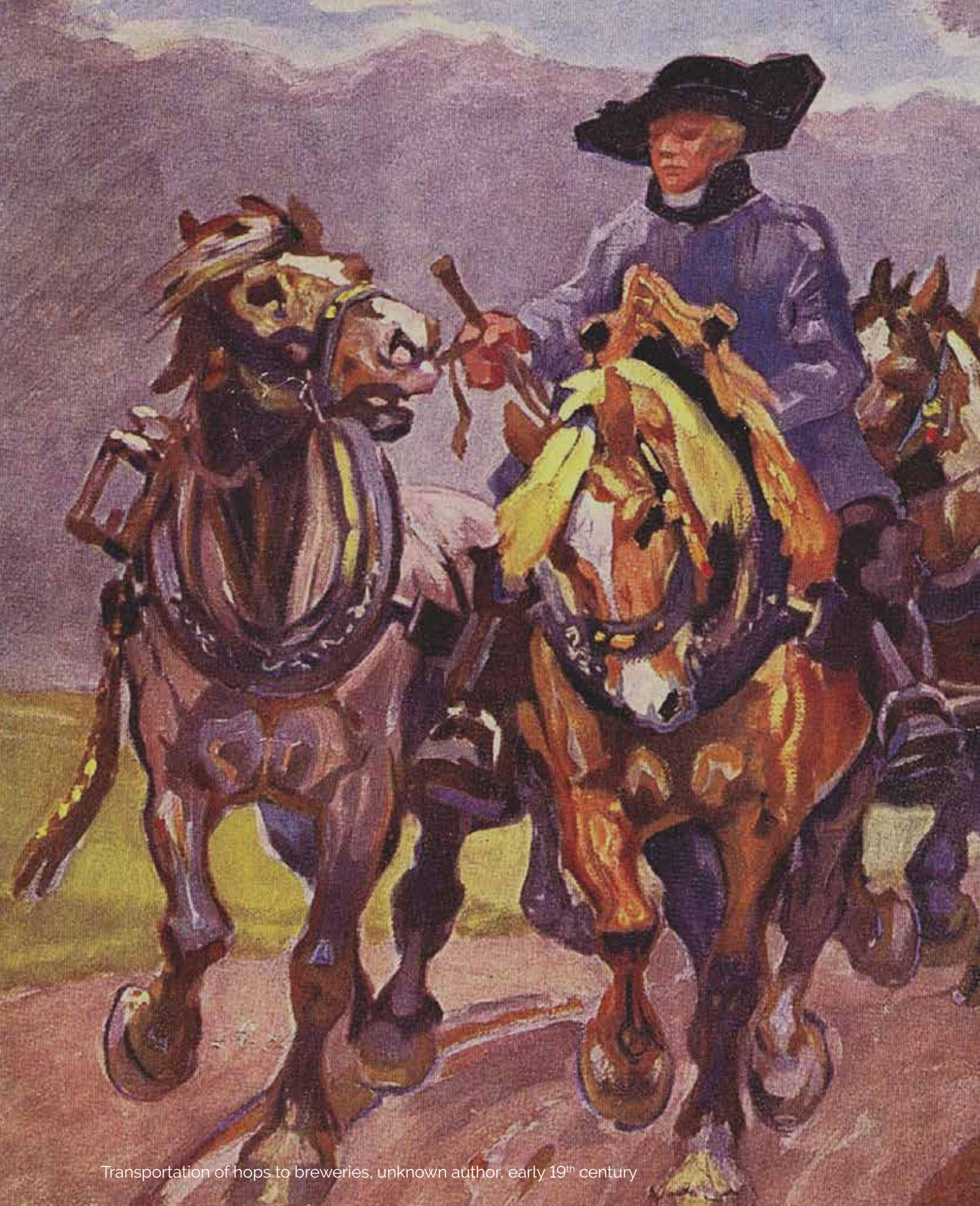
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Kvasný průmysl (1955–still)





Transportation of hops to breweries, unknown author, early 19th century



8. Contact Information
of responsible authorities

8. Contact Information of responsible authorities

8.a PERSONS RESPONSIBLE FOR PREPARATION OF THE NOMINATION DOSSIER

The Nomination Dossier, including the Management Plan, was managed and developed by members of the Steering Group established by the Municipality of Žatec. It was prepared in close cooperation with skilled professionals in the World Heritage agenda, experts in the history of hops and both tangible and intangible heritage and with wide group of relevant stakeholders. Material was consulted both with the Czech National Committee of ICOMOS and the Ministry of Culture.

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Temple of Hops and Beer (Chrám Chmele a Piva CZ, p. o.)

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8.d OFFICIAL WEB ADDRESS

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Žatec, view from the southwest, Josef Šembera, 1837



9. Signature on behalf of the State Party

9. Signature on behalf of the State Party

Signed in Prague, date

Mr. Lubomír Zaorálek
Minister of Culture of the Czech Republic

ACKNOWLEDGEMENT

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Print

Tiskárna Carter Reproplus s.r.o.

The letter included below and supporting the efforts of the nomination project was sent to the Mayor of Žatec during the Mid-stream process in summer 2019. It is a reason why it refers to the previous name "Žatec – the Town of Hops" as the current official name of the nominated property "Žatec and the Landscape of Saaz Hops" has been updated after careful discussion among the Steering Group members in 2020.

COMITÉ INTERNATIONAL DE LA CULTURE DU HOUBLON
INTERNATIONAL HOP GROWERS' CONVENTION - INTERNATIONALES HOPFENBAUBÜRO

City of Žatec
Mgr. Zdeňka Hamousová, Mayor
Náměstí svobody 1
438 24 Žatec
Czech Republic

Date: 26.08.2019

Nomination of „Žatec – the Town of Hops“ on the UNESCO's list

Dear Mrs. Hamousová,

the International Hop Growers' Convention (IHGC) represents 34 national hop producing associations and hop merchants' companies from 20 countries worldwide.

The Czech Republic is a long-term active member of our global organization. In addition, the 58th Congress of the International Hop Growers' Convention will be held in 2021 in the Czech Republic.

Hop growing in the Czech Republic has a very rich history. Mainly Žatec/Saaz has been the area of a hop growing for hundreds of years. There is also a very specific nature of its local hop architecture heritage. This is a unique place of a world hop growing.

Therefore - on its meeting in Ljubljana, Slovenia on August 1, 2019 - the IHGC Executive Committee agreed to support the efforts of City of Žatec to be listed on the Heritage List of UNESCO.

Yours sincerely,

O.B. of the IHGC President
Mr. Leslie A. Roy



Dr. Martin Pavlovič
General Secretary

