COASTAL CONSTRUCTION GUIDELINES

Construction Principles Characteristic of Sea Coast
Regional Peculiarities of Construction
Guidelines on New Construction Development

The Latvian Country Tourism
Association "Lauku ceļotājs", 2011

Our Coastline!
May pride and respect for this place be our
allies in everything we do!

Congratulations! - You are one of the lucky who can be proud of a genuine pearl, a property on an intact coast. You live here, put down roots, and build up your home, the coastal scenery and environment - living-space for yourself and others. May pride and respect for this place be your allies in everything you do!

We all together own a beautiful, varied, almost 500 km long and currently unspoilt value - the coastline of the Baltic Sea. The simple elegance, shape of buildings and building methods of the traditional construction have originated here and are appropriate for this place. They are authentic and balanced, creating harmony with nature. This is exactly one of the secrets of our coastline enchantment. In order to preserve the coastline and to develop it traditionally tasteful also in future so that it would delight both the residents and the visitors, we, "Laukuceļotājs", suggested writing "Coastal Construction Guidelines".

The guidelines are meant for the land owners, residents and entrepreneurs, all the members of construction process and the coastal municipalities who plan and implement the coastal construction by coordinating the traditional and modern values. They describe general construction principles on the Latvian coast of the Baltic Sea, in each chapter of the historical construction overview shortly characterizing the regional differences and construction peculiarities in Vidzeme, the Northern Kurzeme, and the Southern Kurzeme.

This document is meant for the coastal areas in Latvia outside populated places or the spaced construction areas in populated places but it does not deal with the solutions to the construction of coastal towns and urbanized villages.

The aim of the document is to renew and develop a unified coastal visually emotional image, the specific character of regional and local areas.

The given suggestions shall only be implemented pursuant to the effective legislation.

The guidelines can provide a basis for detailed elaboration of the construction regulations of particular territory in accordance with the territory planning, historical research or other documents available in the territory.

The research of the coastal construction in the Slītere National Park and the recommendations for new construction development, elaborated within the framework of the same project, can be cited as an example for such extended research within one area.

The Latvian Country Tourism Association "Lauku ceļotājs", 2011

The electronic version of the guidelines can be found at http://www.macies.celotajs.lv

Thank you! The development of the guidelines, experience and knowledge were shared by: Juris Dambis, Jānis Dripe, Egons Bērziņš, Pēteris Blūms, Zaiga Gaile, Jānis Lejnieks, Ervins Vēveris, Ieva Zībārte, Liene Griezīte, Karīna Jansone, Arnis Dimiņš.

The guidelines have been elaborated in collaboration with the State Inspection for Heritage Protection of the Republic of Latvia, the Latvia Association of Architects, the Ministry of Environmental Protection and Regional Development and the Riga Technical University, Faculty of Architecture and Urban Planning. The Latvian Association of Coastal Municipalities has adopted the guidelines as a recommendatory document.

The author of the guidelines is arch. Jānis Saknītis

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INTRODUCTION, PURPOSE, SCOPE

Original maritime and coastal scenery can be observed on the coastline - the belt of contiguity between the Baltic Sea and land where such geological processes of the sea coast as erosion and accumulation take place. It is constituted by the beach, bluffs, estuaries, the randu meadows, dunes, lagoon lakes, beacons, breakwaters, harbours, seaports, villages and homesteads where residents' lifestyle and cultural heritage differ from the ones typical of the inland.

Within fifty years from the occupation of Latvia till the restoration of independence the major part of the sea coast was a closed area. Socialism interrupted the inheritance of the coastal economic and cultural life last century. The former economic policy, as well as the front-line status of these territories, has completely broken the traditional coastal homestead life.

The wars of the 20th century and, moreover, the collectivization have destroyed the natural life of fishing villages.

After the restoration of the independence of Latvia, as a result of the land reforms, the owners retrieved their land. An active construction process was commenced in the fishing villages.

New tendencies in the construction of coastal villages have been introduced by the ever increasing flow of holidaymakers, as well as the construction of villas and guest houses that is often unconformable with the traditional construction principles of seaside villages and homesteads.

The above-mentioned processes have an irreversible impact on the scenery of cultural environment and they should not always be valued positively.

The preservation of the nature and cultural heritage is endangered by the chaotic state in the development of recreation areas and the lack of precise regulations on architectural forms. As a result, the specific heritage character of the sea coast area and its difference from the inland construction are lost.

Today part of the former coastal residents has abandoned their land and houses. The construction has been undertaken by the social stratum of residents whose understanding of the coastal scenery and construction values is not inherited but should be acquired and adopted again.

Exactly we, the coastal residents, the prospective and present participants of construction process, are responsible for the preservation of the coastal nature and cultural heritage - whether in future these values will only be found on beaches and in dunes, or in a possibly broader coastal area. It would enhance the uniqueness of these territories which we will proudly call our sea coast.

Architect Jānis Saknītis

1. REVIEW OF COASTAL HISTORICAL CONSTRUCTION

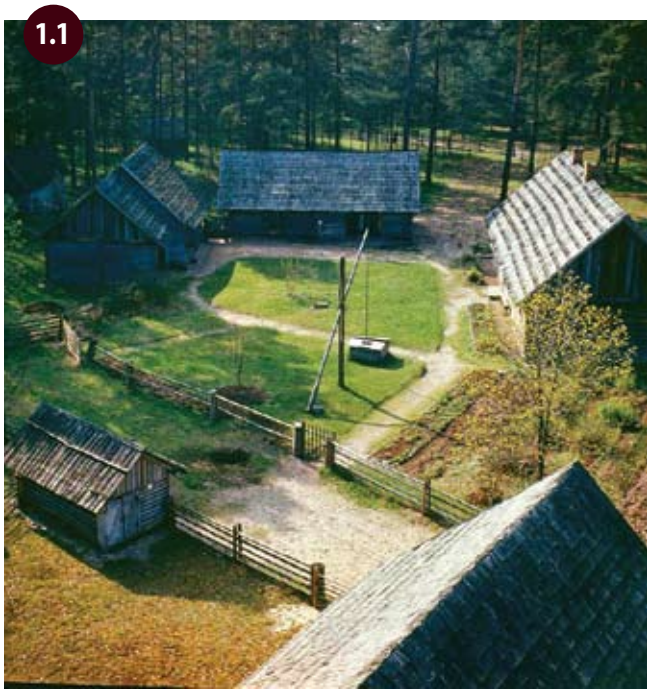
The historical review provides a general insight into the language of the architectural forms of the former generations, and it is a source of inspiration for an in-depth study and creative inheritance of the folk architectural elements from the past nowadays. The period of time under review begins from the destruction of feudalism in the middle of the 18th century and continues till the middle of the 20th century. The period of time, lasting from the middle till the end of the 20th cent., shall be regarded as an interruption of the inheritance of construction traditions.

A traditional fisherman's farm consisted of the following buildings - a dwelling house, a barn, a fish cellar, a pig-shed, a net hut, a fish curing establishment, a cattle-shed, a bathhouse, a vegetable cellar, and a cook-house.

The fishermen from the Vidzeme Coast lived in homesteads within some distance from each other. Kurzeme fishermen's dwelling houses along with the household buildings used to form larger or smaller villages. Coastal villages take a significant place in the traditional coastal scenery and in the national significance cultural and historical heritage. Historically these villages were closely connected to the coastal fishing.

Principles of Yard Formation

The tradition of homesteads, as well as the formation and layout of individual farms, which is based on the aloofness principle, providing for each household need a separate building, is highly significant in coastal villages.


1.1

The core part of a homestead is a dwelling house or a room. Buildings along with yards, fences, wells, roads, vegetable gardens, orchards and bee gardens form an organically solid construction unit which retains the traditions of generations **(Fig. 1.1).**

The homesteads in South Kurzeme and Vidzeme are characteristic of a two yard layout. There is a dwelling house in the centre with a cattle-shed, a stable, sheds on one side and granaries - on the other side. There are two yards between the buildings: the "dirty" yard towards the cattle-shed, the "clean" yard towards the granary.

The clean yard might have had planted trees, decorative bushes, flower beds which were on the border of an orchard and a bee garden. In the dirty yard cattle-sheds and sheds form a joint complex, in which they are more closely interconnected by fences.

Utilized Building Materials

By the 19th century the Latvians only used wood in the construction of their houses **(Fig. 1.2).** One-storey dwelling houses were constructed from fir or pine beams. Buildings were constructed from trimmed beams in block work construction or in pole construction with groundsel cladding.

Vertical upholstery from boards or torn round timber was used to protect the exterior wall constructions against precipitation. In the lake area the walls were also protected by the upholstery of vertically laid reeds.

Everything was made from wood: the doors, the ceiling, the floor, the partition walls, furniture, household utensils and accessories.

Boulders were only laid in the foundations and stoves. Boulders in lime and gravel mortar were laid in the foundations, for simpler buildings - stone corner supports (building corners supported by boulders).

Two-slope or multi-slope roofs were covered with rye straw, lake reeds or shingles. Plank covering in roofing was also used.

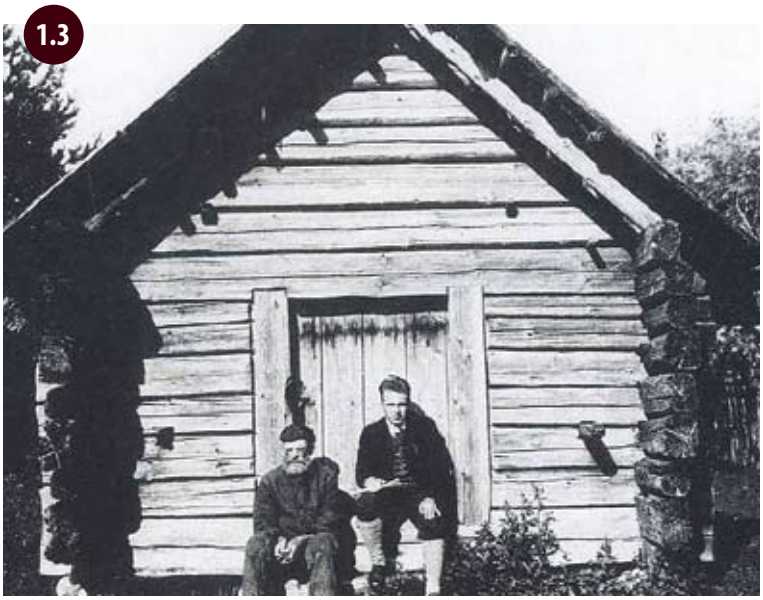
In the 19th cent., when the Latvians gained economic independence, stone buildings were also built in homesteads. Their proportion was not large since the traditions of wooden architecture still remained strong. Furthermore, hewn timber in coastal circumstances absorbs less moisture.

In the 18th century and in the first half of the 19th century, fishermen – farmer's buildings were mainly constructed from hewn beams in block work **(Fig. 1.3 and 1.4)**, which at the corners were joined into smoothcorners or by pole construction, occasionally also clay adobe household buildings, but more rarely - dwelling houses, were constructed.

Smooth log walls, cross corners with the ends placed over were more typical. In the second half of the 19th century a start was made on the construction of household buildings, especially, cattle-sheds and stables, from boulders, but barns - in the construction of wooden carcass with board walls. The usage of bricks in the construction of dwelling houses expanded.

1.2

1.3



1.4

1.5

Roofs

Roofs had four slopes, two slopes with half chamfers at the ends **(Fig. 1.5**), or two slopes. Roof covering was made from straw, in the area of large lakes - from reeds, in the wooded country - pretty often from shingles.

Four-slope pyramidal roofs, which were covered with straw or lake reeds, securing the ridge with gravel - clay fill, were more typical of the South Kurzeme. Roofs of combined covering - straw at the bottom, reeds on the surface, could also be found. **(Fig. 1.6)**

Two-slope roofs covered with shingles **(Fig. 1.7)** (about 6 feet long, battered pine-wood splinters which are used to cover the roof alternately in several layers) or with reeds, seldom with straw, are more characteristic of the North Kurzeme. In the second half of the 19th century the roofs were already frequently covered with tiles, chips, and small boards **(Fig. 1.8).**

High, steeper two-slope roofs with half chamfers at the ends were frequent in Vidzeme. As a result of such roof construction, there was a more spacious attic area where fishing nets were kept in winter.

1.6

1.7

1.8

Traditional Construction and Finish Methods

The buildings were from one to one and a half storey high with two-slope roofs and chamfers at the roof ends. Traditionally these roofs were covered with reed spread or coating of shingles.

The front of buildings was constructed from vertical spreading of wide-dimension boards in "pillar technique" or from mixed spreading.

The foundations of buildings were made from raw boulders which visually enriched the joint sight of a homestead.

Window openings are quite small, with wooden frames and three or four pane division **(Fig. 1.10).**

Log buildings are upholstered with vertical boards. A four-slope reed roof with gable windows – small openings at the ends of the ridge of a four-slope roof **(Fig. 1.9).**

Gable windows were built for fishermen's chimney-less logs (a chimney-less log - a dwelling house without a chimney). While heating a stove, the smoke was discharged into the house, the central room of the building, where the hearth was located. Then the smoke was discharged into the overhead room or attic, and from there through gable windows it flowed out. Gable windows have also been built in to ventilate the buildings.

1.9

In contradistinction to Kurzeme, the construction in Vidzeme is generally characterized by lighter forms, less decorative elements, which besides are more uniform.

The granaries are characterized by large overhangs of the roof, "lined" doors with refined colour application to single out the profile of the small boards of the ornamental bordering, by decoratively shaped wooden columns and rails **(Fig. 1. 11 and 1. 12).**

1.10

1.11

1.12

Mazēkas (small houses)– Cook-Houses

1.13

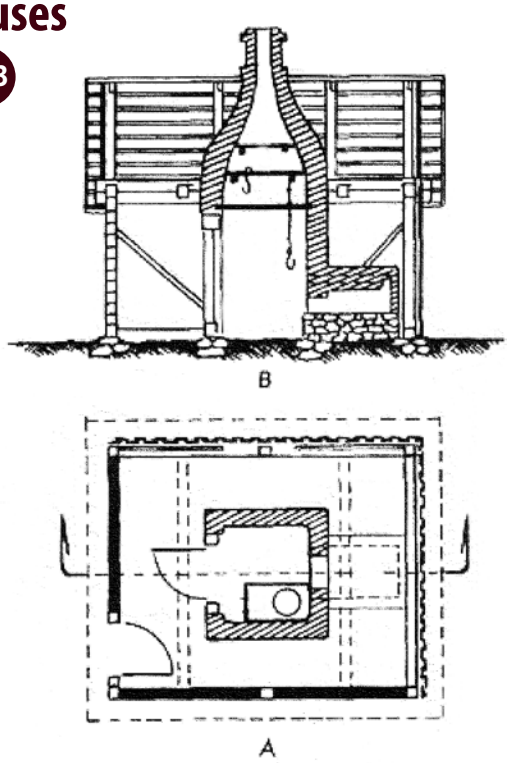


Fig. 1.13: the end of the 19th cent.
A cook-house in "Kvieši", in Jūrkalnes Civil Parish.
A-plan B-section

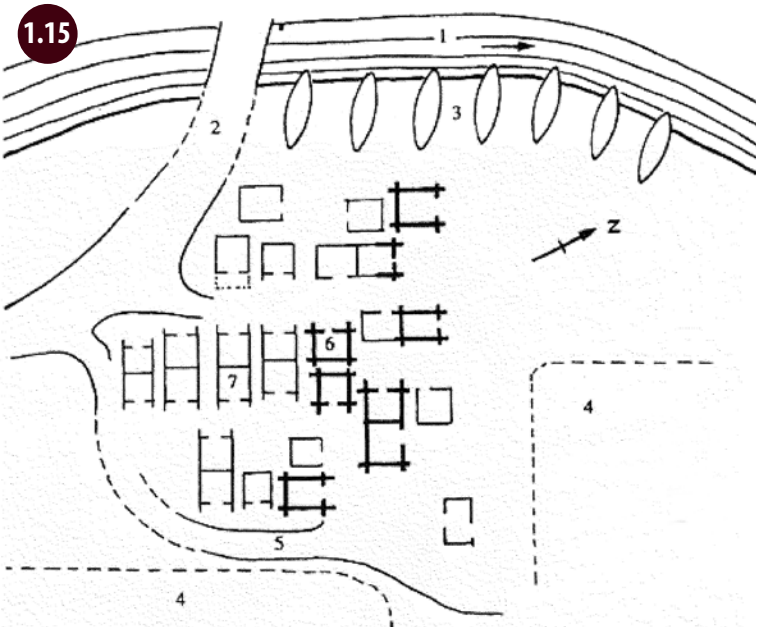
1.14

Liiv fisherman's cook-house - a house without chimney, constructed from the halves of a fishing boat, sawn into two. *Mazēkas* buildings of such type - the second life of old fishing boats - such as a cook-house, a house without chimney, a net hut, a shed or simply a junk store-room, became the visiting card of all coastal fishermen's farms **(Fig. 1. 14).**

Economic Activity on Seashore

Fishermen's villages in Kurzeme are characterized by such peculiarity as fishing boat storage areas - near the seashore, where the fishing boats were placed, net and fishing tackle huts were constructed in close groups. Rows of poles for hanging out nets were usually set up on either side of the fishing boat storage areas.

1.15



The planning scheme of Roja'sfishing boat storage area **(Fig. 1.15),** the 30ties of the 20th cent. A sketch by arch. Ksarevs Andermanis.

Fig. 1.15:
1 – the Roja River,
2 – the road Roja – Kolka,
3 – fishing boats,
4 – pole areas for net drying,
5 – road of the fishing boat storage area,
6 – ancient huts, constructed from groundsels,
7 – net huts with pole carcass and board upholstering

2. PRINCIPAL GUIDELINES OF COASTAL CONSTRUCTION CONSIDERING HISTORICAL HERITAGE

The analysis of historical values provides a basis for this chapter. The principles listed here are dealt with in detail in the following chapters.

Exactly vacant, unchanged environment is acknowledged as the greatest value of the Latvian sea coast. To the utmost tolerant attitude towards the natural environment is observable in the planning and construction process through harmonic adaptation to the scenery and its supplementation.

- **Free division of road network and land plots subject to natural vegetation and relief.** Thepresence of the linear structure is not advisable **(Fig. 2.1)**. Historically the coastal construction developed around the serpentine coastal economic road, forming the structure of the road and its branches "following" the natural hills in the areas of villages.

An orthophoto map, the source: Google map earth

- **Outside space planning, considering the historical principles of yard formation.**

Different economic functions were shared by separate buildings, which determined the formation of a yard in the building plot and also small scale of the buildings.

- **Clean planning of linear shape buildings, considering the proportions of historically formed sizes, depending on the choice of building materials available in nature.**

The general task is to preserve the proportion of the historical volume of construction, small scale of buildings, and tolerant attitude towards the natural environment of the coast.

2.2

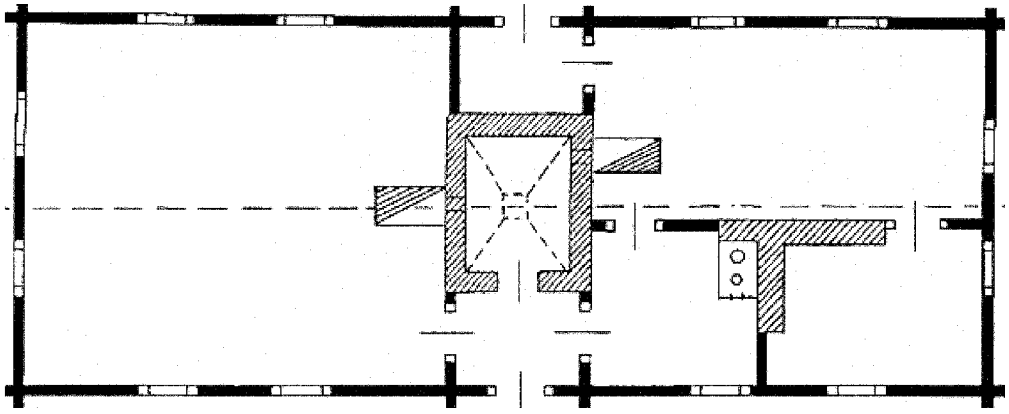


Fig. 2.2. Traditional form of a plan, the middle of the 19th century,Kolkas Civil Parish of that time, "Vecvalki".

- **Wood was the dominant material of the constructive solution of buildings, especially, in the finish.**

Glass, metal, stone were admissible to accent separate parts of the main volume of construction, as well as in outbuildings. The presence of synthetic finishing materials was not permissible.

- **The means of expression characteristic of the construction period are advisable in the application of details.** In the choice ofornaments (roughly hewn stone, window-frames, shutters, cornices of an attic level, cornices, wood-carved protective boards, profiled rafter ends, etc.), it is advisable to take into account the practicality typical of the coastal construction.

When making a choice of the solutions for historical ornamental elements, it is recommended that they are used in accordance with the research materials of the architectural heritage of the particular territory. In the territories, for which there are no such materials elaborated, prior to the commencement of the construction project a professional analysis of the ornamental construction elements of the surrounding territory, including the division and painting of the doors and window-frames, must be carried out, simultaneously evaluating the compliance of the dominant character in the surroundings with the historical one.

The application of metal ornamental finish elements, except for casement hinges, shall be avoided.

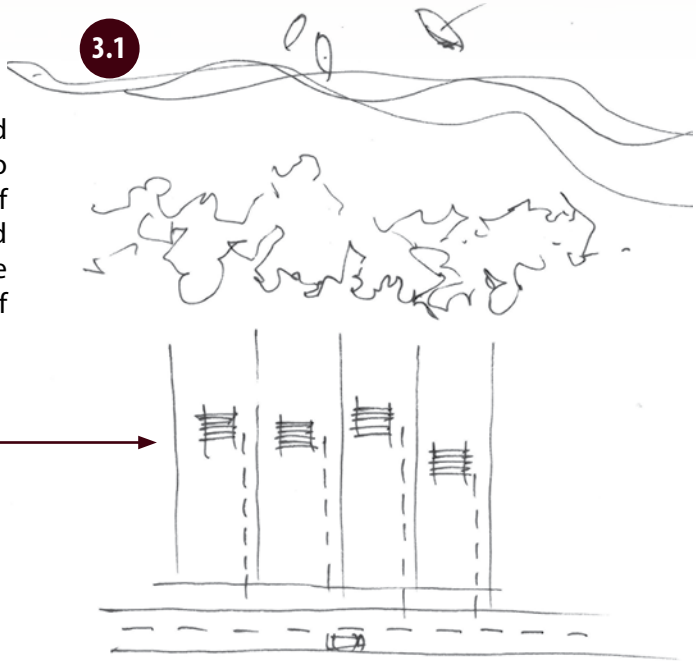
By considering the historically developed archetype of the volume of construction, it is feasible to create modern, contemporary architecture.

The guidelines do not exclude the presence of modern architecture on the coast, whose principles of form development differ from the historical archetype. The main pre-conditions for successful integration of such construction into the coastal scenery could be a small scale of buildings, the tonal solution (chapter "Colour Solutions", p.18) and the usage of finishing materials that are typical of the coast. In cases when such construction has been intended, a more extended coordination process is advisable, involving independent specialists of the field as experts in the discussion of construction plan.

3. DEVELOPMENT OF NEW CONSTRUCTION

Formation of Land Plots

In order to achieve the maximum number of land plots with an exit to the sea, the division of land into narrow strips is allowed in the distribution process of real properties, introducing a dissonant, linear and compact type into the construction of a fishing village **(Fig.3.1).** The construction structure characteristic of the environmentis being crippled.



Too dense construction destroys not only the coastal nature, but also recreation and tourism resources. Land transformation is not advisable - construction must be performed retaining the characteristic features of relief and natural vegetation to the utmost.

Continuous construction along the whole coast is not preferable. Intact environment, appropriate for recreation and entertainment, with the traditional coastal scenery and construction must be preserved on the coast.

Regular planning of outside space must be avoided - the structure shall be subject to the natural relief and vegetation.

In the development of territory planning the cultural and historical scenery of the area, the structure of the traditional construction plan, the construction and construction techniques typical of a fishing village, must be respected.

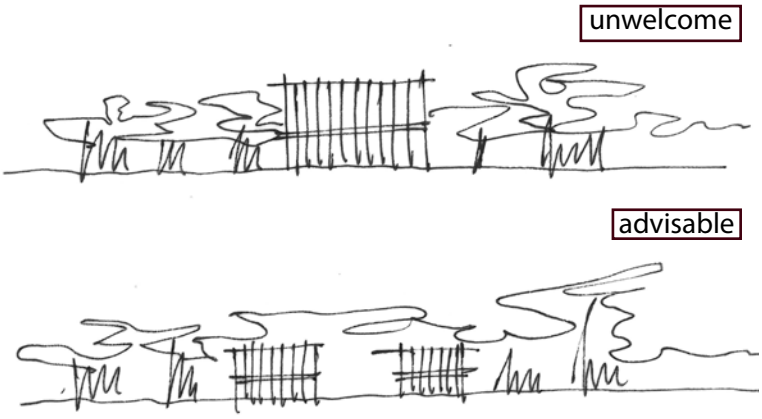
Dense construction areas are provided for the existing villages, assessing the layout of protected habitats and the importance of the nesting grounds of protected birds in the areas adjacent to the villages.

Height of Construction

New construction can be planned by considering the construction principles of farmer-fisherman's homesteads on the coast of the Baltic Sea. The height of the newly constructed buildings is one storey with a built-in garret-floor.

It is not recommended that the height of a building exceeds the height of the silhouette line of coastal wood **(Fig. 3.2)**. The height of a building must become part of the coastal scenery, except for churches, towers, beacons and other structures significant to the public - the dominants of the skyline.

3.2



Yard Formation

Single yard layout (Fig. 3.3 and 3.4).
The dwelling house, garageand other household buildings there all together form a broad, more or less closed yard. The garage, stables, and other auxiliary buildings are located farther from the dwelling house. The bathhouse shall be built in a quieter corner of the garden near the water. If buildings are constructed around a single yard, it shall be made spacious enough and commensurate with the larger buildings. The buildings in a farm should be separated by tall deciduous trees, which simultaneously play a role as the uniting dominant of all buildings.
If the traditional, functional layout of buildings is kept regardless of the non-existence of the functional usage of auxiliary buildings, then such mutual zoning of buildings allows using the territory of the estate wholly, and forms pleasant outside space that harmonically becomes part of the surrounding environment.

Plank covering and surfacing from gravel, pebble and small size broken stone, and "upright covering" of small wooden posts are preferable for the facilitation of paths. Small size concrete or natural cobble stone surfacing is also permissible. The usage of asphalt surfacing is not advisable (permissible).

3.3

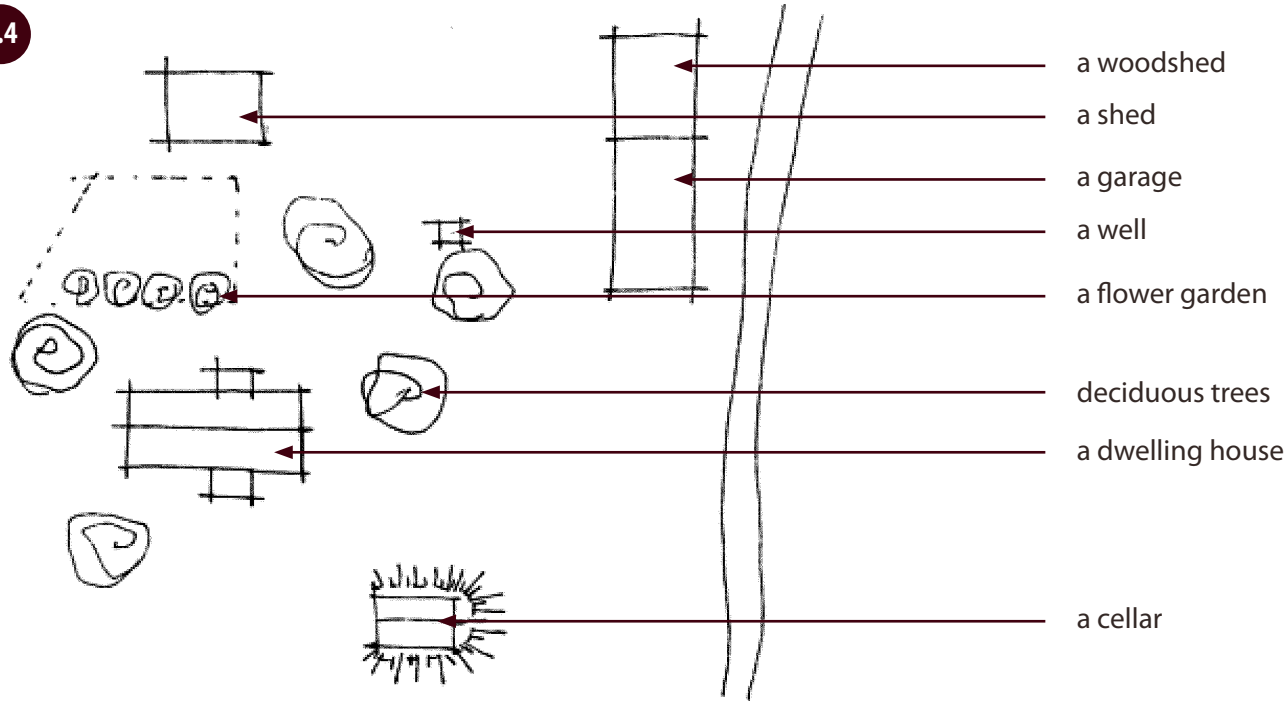
Two yard layout (Fig. 3. 5).
There is a dwelling-house in the centre, on one side there are auxiliary buildings, a garage, a stable, and barns, on the other side - a guest house, a bathhouse, and other recreation objects. There are two yards among the buildings: a household yard, and a representative recreation yard. In the recreation yard a flower garden shall be made, trees and ornamental bushes shall be planted and flower beds on the border with the orchard shall be formed. The household yard comprises a lawn, driveways and household buildings.

The figures **(Fig. 3.4, 3.5)** reflect the principle according to which different household functions are assigned to different buildings in order to maintain the small scale of buildings. The functions and their proportion are determined by an individual builder in compliance with the land use plan.

Nowadays the structure layout of such a yard towards the sky parts is of secondary importance. In compliance with the usage function each particular building must be correctly located in relation to the sky parts.

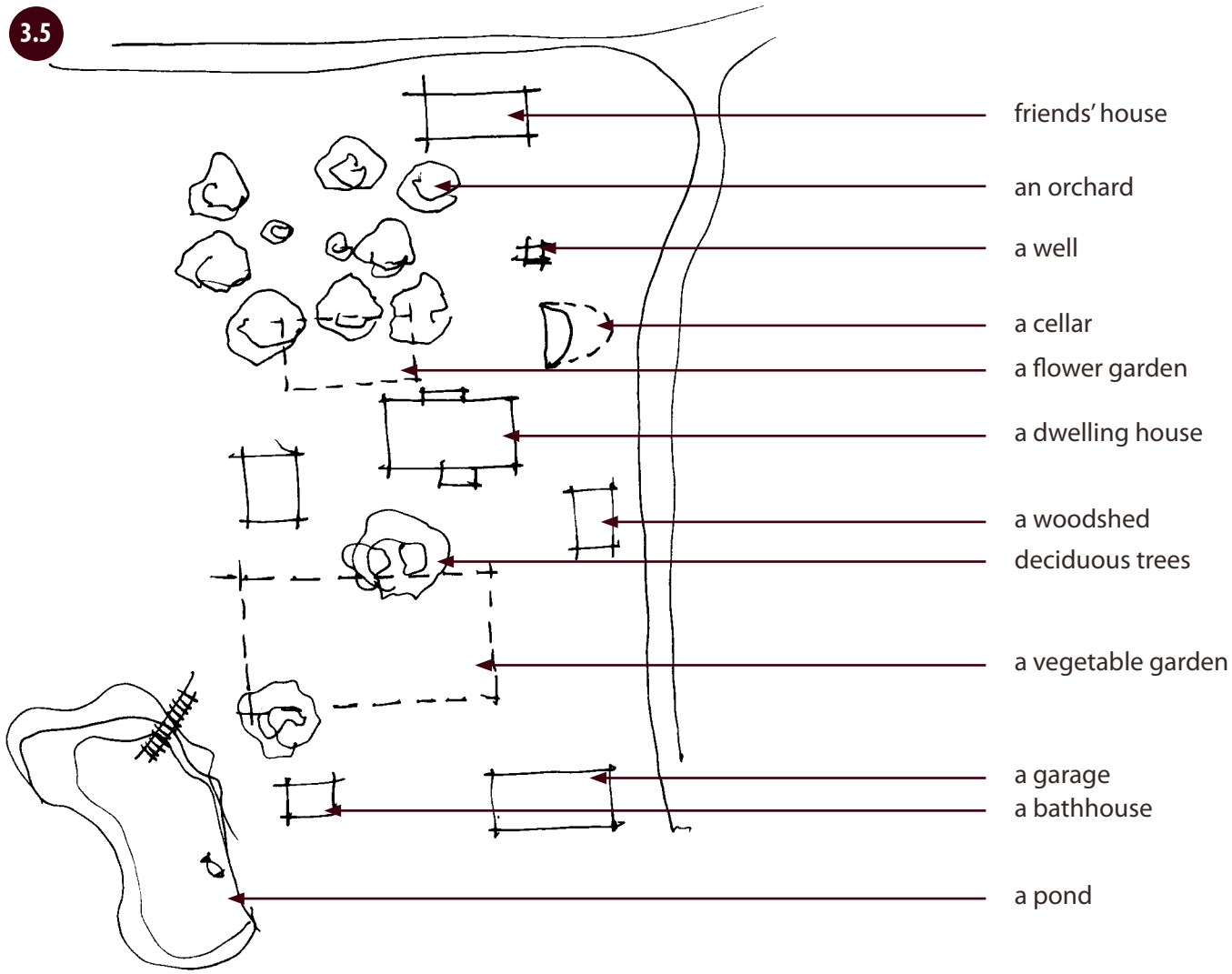
An example of single yard layout **(Fig. 3.4)**

3.4



An example of two yard layout **(Fig. 3.5)**

3.5



Form and Scale of Construction Volume

When developing a construction design, it is advisable to supplement it with photo fixation materials of the cultural environment, which would provide a basis for the inclusion of construction in the historical environment and nature scenery.

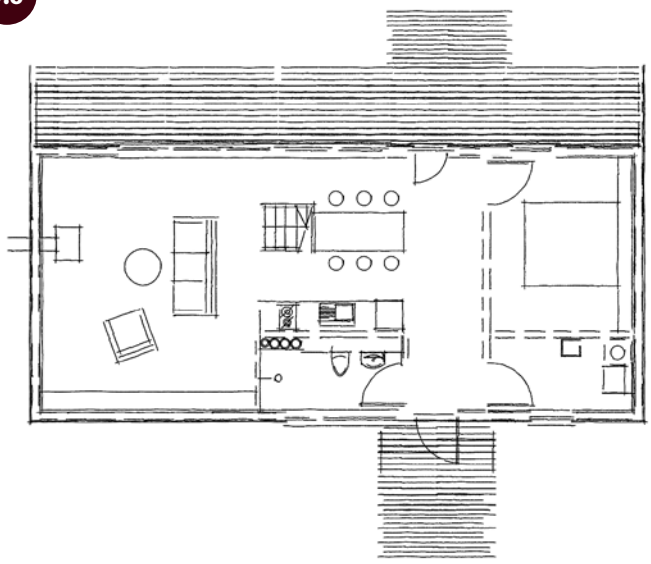
Different functions are assigned each to a separate building. The functions of household and auxiliary buildings and garage shall not be integrated into the volume of a dwelling house, which then determines the scale of a building. **(Fig. 3. 6)**

3.6

3.7

Small scale of building which naturally becomes part of the surrounding environment - one and a half storey construction. **(Fig. 3. 7)**

3.8



A regular form layout, preferring a rectangle or "L" configuration layout **(Fig. 3. 8)**, project 2007.

Proportions of Construction Volume

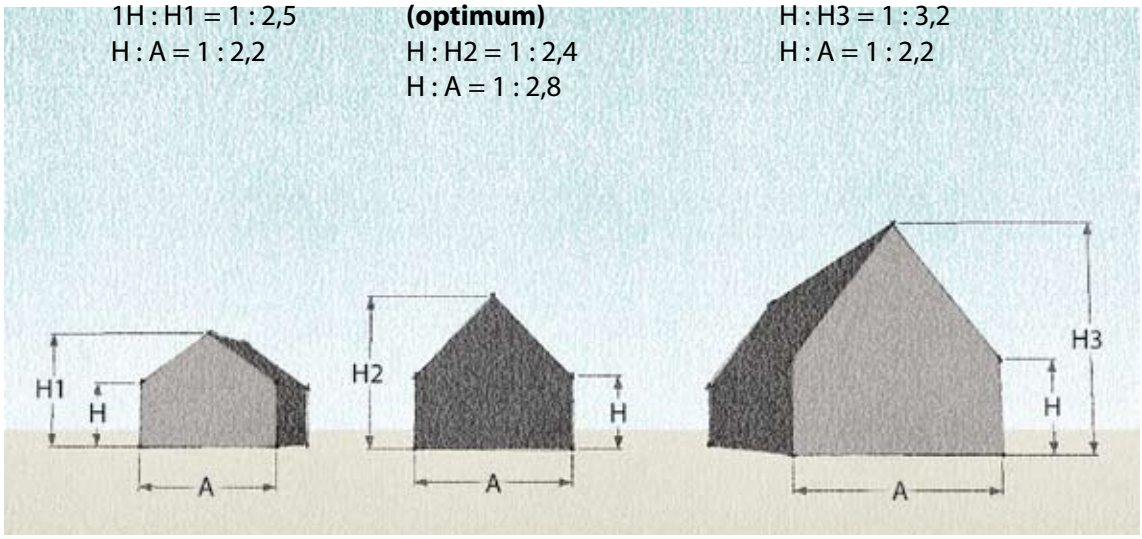
Fig. 3.9 The preferred proportions of construction volumes, based on the analysis of historical construction volumes, are indicated.

1. and 3. Variant - the limit of proportional relationship
2. Variant - the optimum proportions of volume.

Variant 1
1H : H1 = 1 : 2,5
H : A = 1 : 2,2

Variant 2
(optimum)
H : H2 = 1 : 2,4
H : A = 1 : 2,8

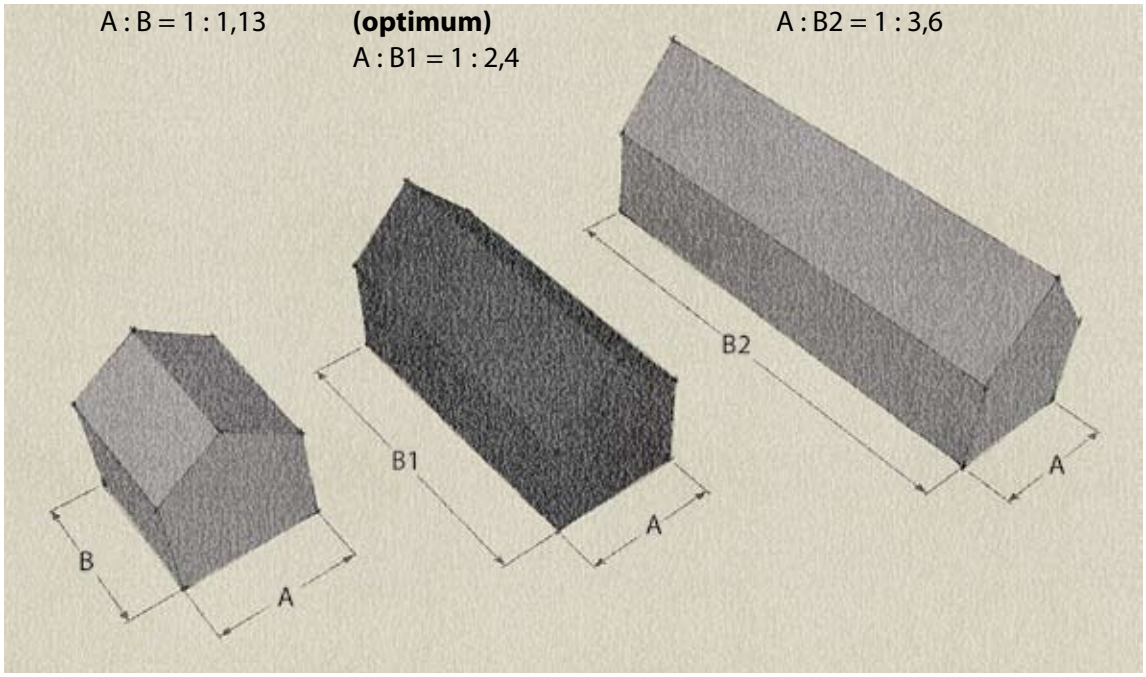
Variant 3
H : H3 = 1 : 3,2
H : A = 1 : 2,2



Variant 1
A : B = 1 : 1,13

Variant 2
(optimum)
A : B1 = 1 : 2,4

Variant 3
A : B2 = 1 : 3,6



Finish

Natural materials, mainly wood, shall be used in the finish of buildings. The usage of plastering in the finish of walls is also permissible. **(Fig. 3. 10)**

Glass, metal, painted finishing materials may be used as accents that are added to the principal volume of building - porches, entrance units, etc.

3.10

Roofs

(Fig. 3.11) The most common are two-slope roofs or two-slope roofs with gable windows at the ends, less frequently - four-slope or one-slope roofs.

Coastal construction is not characterized by flat two-slope roofs.

The most frequently used roofing materials - wood, plank covering with damp-proof-course sub-covering and shingles, less frequently - a reed roof (if the material is available in the neighbourhoods). The covering of bitumen shingles and non-profiled metal leading sheets, painted in compliance with the coastal construction colour passport, is also permissible.

(Fig. 3.12). Modern construction volume has been developed by using the traditional roofing materials in the finish of building façades and by preserving the historical forms. In the course of time the wooden finish of a building will acquire thin, silvery grey patina, typical of the coast.

The building of horizontal roofs shall be avoided - taking into account the small scale of buildings, such solution is strange to the character of coastal construction.

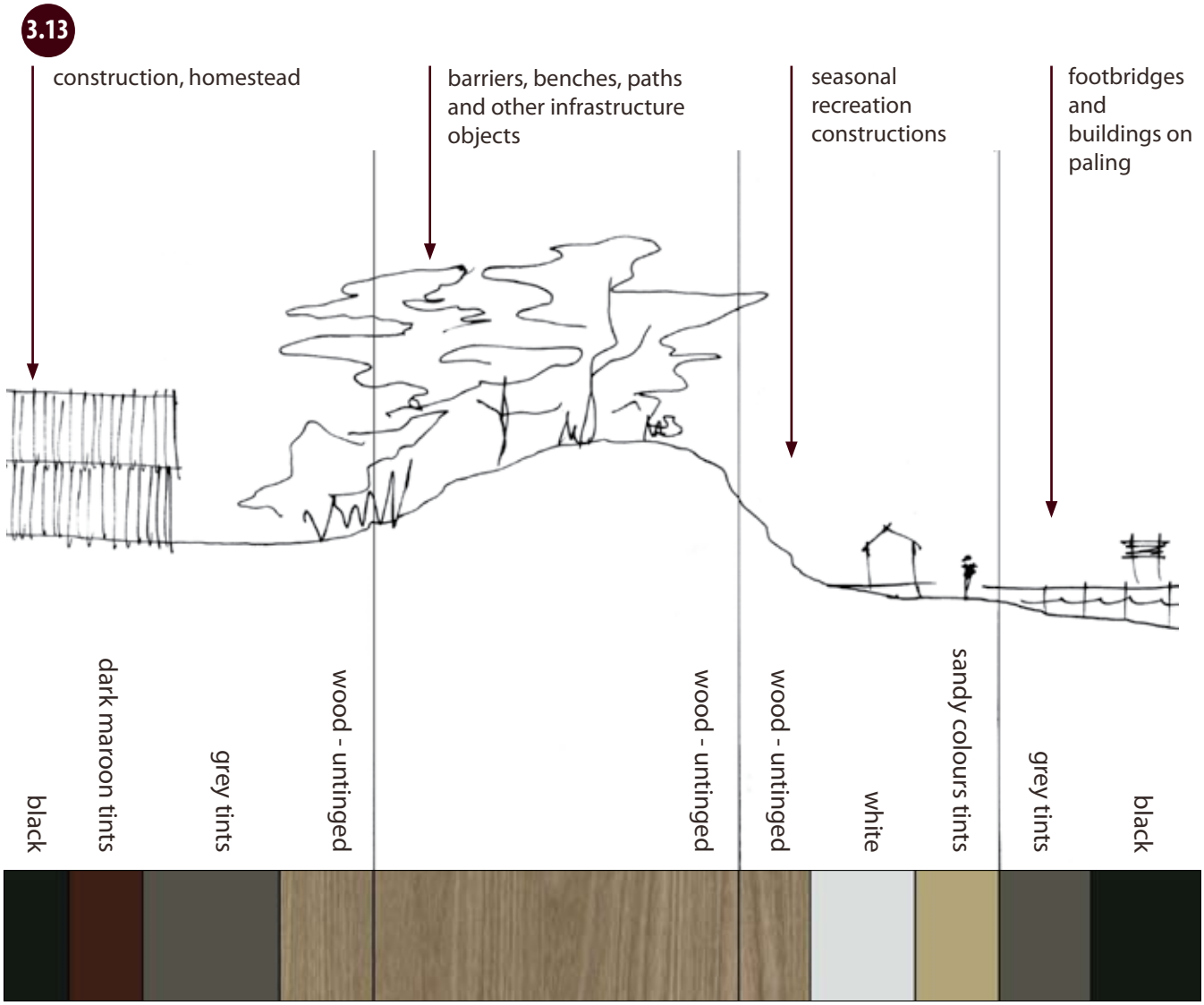
A practical disadvantage of horizontal roofs - they pile up pine needles, the gutters get clogged.

3.11

3.12

Colour Solutions

Fig. 3.13. The recommended, traditional colour solution for coastal construction. The layout of buildings is shown schematically, construction shall be performed pursuant to the effective legislation.



It is advisable to use the traditional colour tints and textures typical of coastal construction which once were created by applying the mixture of natural pigments and linseed oil. The usage of natural pigments ensures a palette of natural, mutually perfectly matching tints. The composition of colour creates partly matte texture of colour.

Fig. 3.13 shows the colour tints that can be used within the whole spectrum of nuances, resulting from the principal tint. Nowadays especially broad range of nuances is available for the grey basal tint. The recommended colour solutions shall be applied within the whole coastal area, fitting in the tonal mood dominant in the surroundings of the particular construction. It is not advisable to use bright, shiny (synthetic) tones.

Fig. 3.14 – Not advisable usage of colours, as well as the layout of the construction volume, their proportions and the fence solutions that are not characteristic of coastal construction.

Development of Unified, Architectonically Qualitative Environment

Building design according to the traditional construction principles does not only imply the design of "small fishermen's huts".

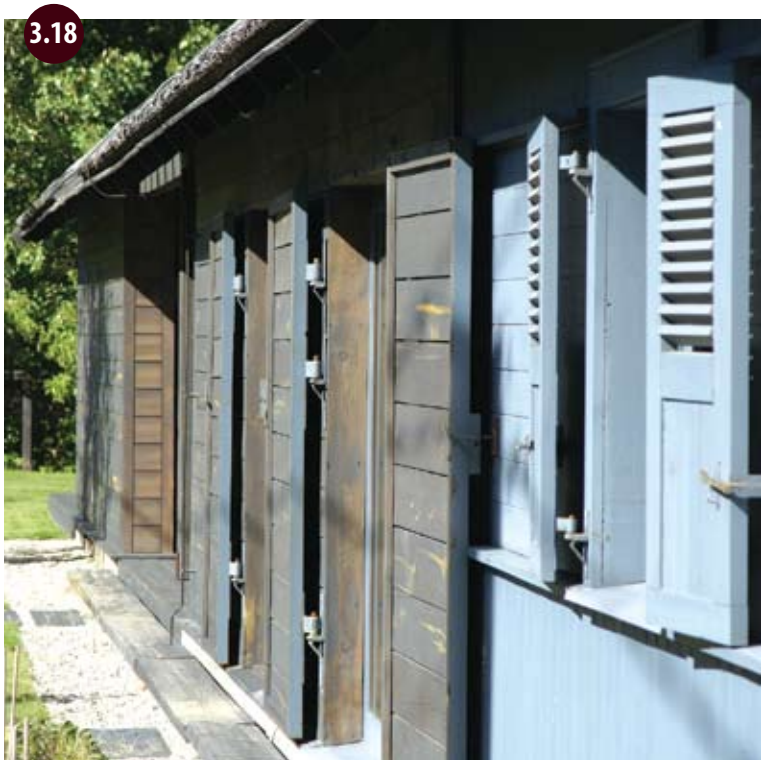
Depending on the context of environment, the traditional archetype of the coastal construction volume (the historically developed traditional size of a building) provides for the area of a floor up to 350m^2. **(Fig. 3.15)**


3.15

To avoid the situation when the scale of a newly constructed building conforms to the general archetype of the construction volume of coastal construction but at the same time it is dissonant against the surrounding construction, it is advisable to analyse the scale of the construction adjacent to the newly constructed building in detail without exceeding it markedly.


3.16


3.17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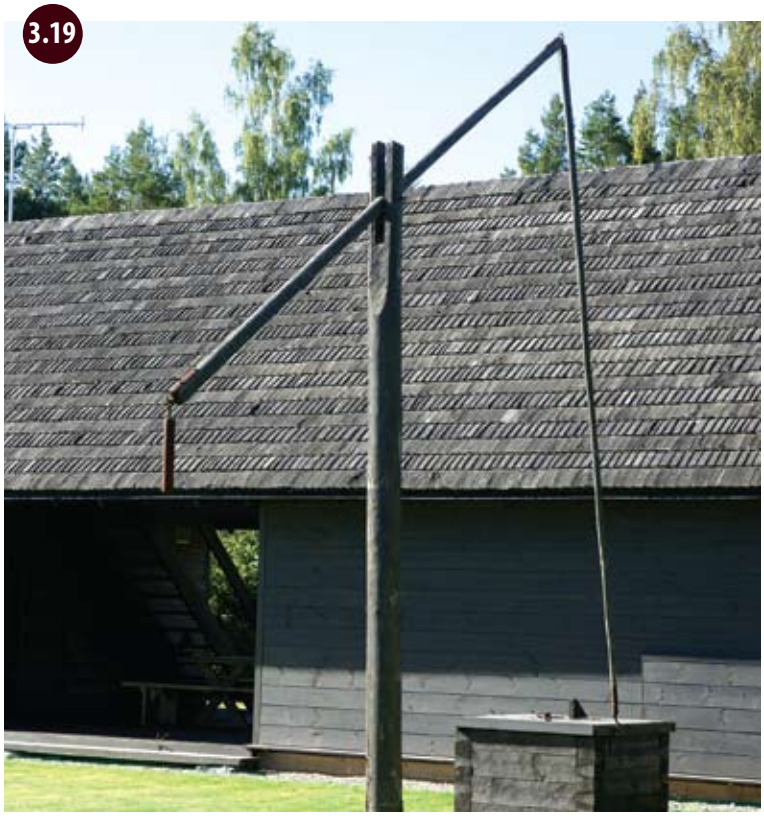
3.19



Qualitative environment rooted in traditions is formed by the architectural aggregate in which the unifying and common architectural means of expression (form, finish, character of details, etc.) exceed the differing ones.

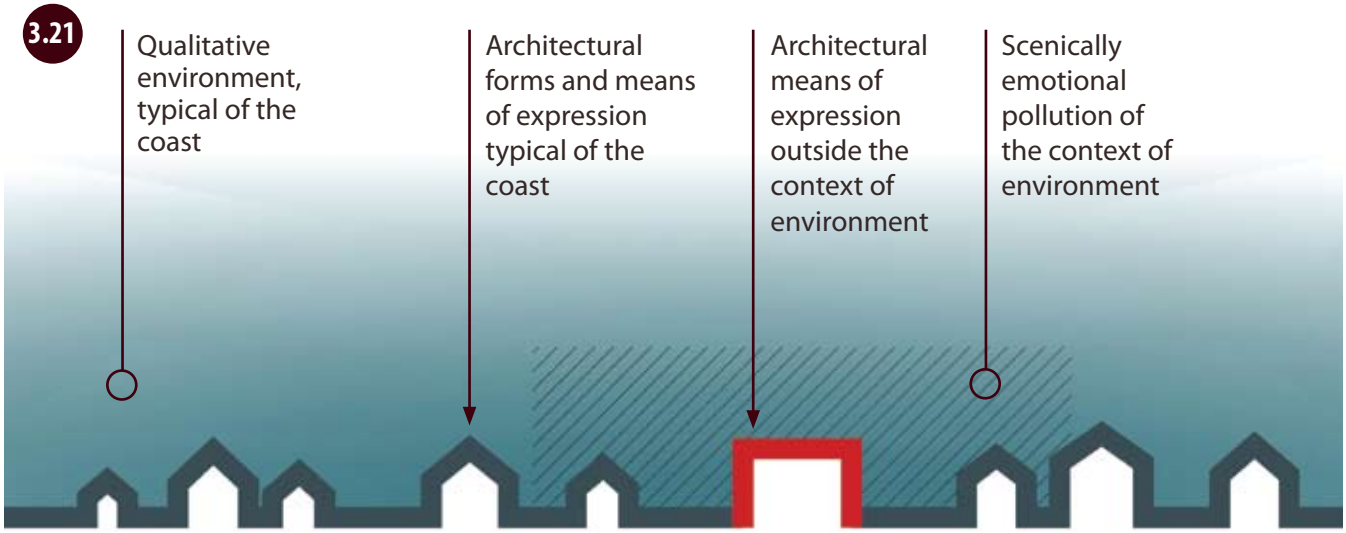
The integration of a newly-constructed building into such context of environment enhances the common quality of coastal space, as well as the architectonic value of the newly constructed building itself **(Fig. 3.16, 3.17, 3.18, 3.19).**

3.20

The inhabitation (long-term usage) of residential containers and trailers in a coastal homestead is not of construction "architecture" degrades the coastal environment. **(Fig. 3.20).**

The usage of loudly dissonant architectural means of expression is not permissible. **(Fig. 3.21)**
The inclusion or non-inclusion of a building in the context of environment directly influences the value of adjacent properties. Qualitative architecture considers the context of environment; its singularity is subtly nuanced.

3.21



4. FENCES

The principal material for fence construction is wood. The less processed (except for chemical processing) the better. Planed timber has damaged wood-pulp fibre structure therefore it absorbs the protective chemicals of wood-pulp worse.

Historically all materials, available in the neighbourhood – stone and wood – were used in fence construction. The sandy land of the Kurzeme coast is not rich in stones therefore stone fences were mostly built in the publicly significant objects.

On the stony Vidzeme sea coast the belts of stone layers marked the borders of agricultural lands. Unlike in Kurzeme, the fences usually did not enclose Vidzeme fishermen's farms completely.

Low wattle or riku fences (Fig. 4.3) or wooden fences fit well in the traditional cultural environment.

4.1

4.2

4.3

In order to use the local natural resources efficiently, wooden fences of different constructions were built in one farm **(Fig. 4.1 and 4.3).**

The application of high and impenetrable fencing, fences made from metal or plastic network is not permissible **(Fig. 4.2).**

Regarding more ancient types of fences, nowadays it is not advisable to use the dense post and groundsel fences.

Stylistics and Tonality

One of the most essential characteristics of the coastal fence architecture is a fence made from non-calibrated materials.

The fences must be stylistically matched with the building and the fence architecture of adjacent land plots, by observing a united height of fences within the borders of adjacent territories.

The construction of wattle fences **(Fig. 4.7)** does not require many materials – it is enough to have posts with attached two poles which are hammered down with straight, round, barked firs.

The construction of pole fence is even simpler and cheaper **(Fig.4.6)**. The poles of fence are fixed into the cogs made in the post. The poles can be simply placed over the cross-bars, which connect the pair of pickets. Nowadays poles are replaced by boards in fence construction **(Fig. 4.4, 4.5).**

In public construction areas the fences must be appropriate for their functional usage, to the utmost preserving the public space and access to buildings. It is not advisable to paint wooden fences, retaining their natural tint. In the restoration of the colour of wooden fences black and grey tints shall be used.

4.4

4.5

4.6

4.7


4.8

The use of pole fences along roads and pasture is mostly widespread. **(Fig. 4.8, 4.9).**

Nowadays the need to protect plantations, yards, and sowings from domestic and wild animals has become a secondary function of fences. Generally the fence is an aesthetic marker of territorial borders, supplementing the scenic construction ensemble.


4.9

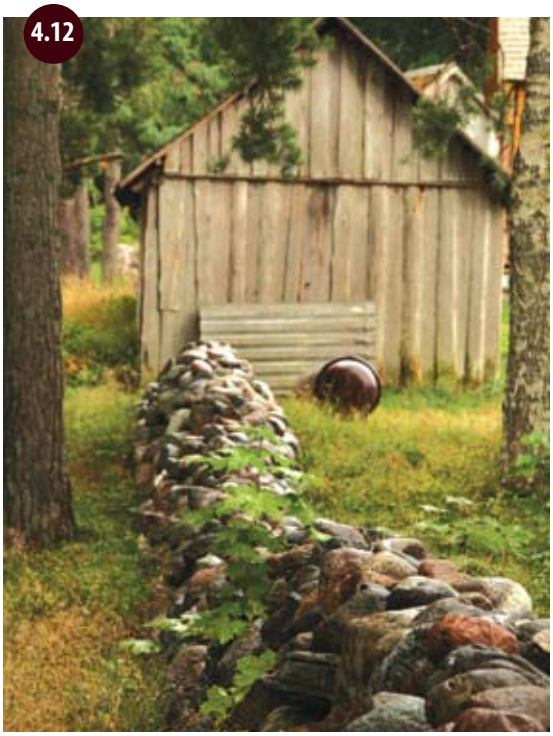
According to the historically functional principles of fence construction, finer fences, such as riku, wattle, or twine fences, were built nearer to the house since small cattle and fowl was grazing there. Farther from the house, around cattle pasture inclined timber or pole fences were constructed.

A contemporary solution for pole fences – the poles is replaced by the boards, not processed with antiseptics. **(Fig. 4.10).**

Fences are constructed from the materials that are available most easily, including washed ashore fishing tools and paddles, thus promoting the efficient use of the local natural resources.


4.10


4.11


4.12

A contemporary solution for pole fences **(Fig. 4.11)** combined with a fence from stone layers on the stony Vidzeme sea coast. The fences from stone layers are the most characteristic of the Vidzeme coast **(Fig. 4.12).**

5. PRINCIPLES OF RENOVATION AND RECONSTRUCTION OF EXISTENT CONSTRUCTION

In case of historical construction the original door leaves and windows must be preserved and restored, or otherwise they shall be made according to the historical pattern and measurements taken in advance. Environment friendly and traditional building materials and architectonic solutions typical of the cultural landscape shall be provided for the construction of new outbuildings.

The reconstruction of a granary and a barn into a dwelling house (Mazirbe) **(Fig. 5.1, 5.2)** provides an example of a tolerant change of building functions. In the construction volume not typical of the living function it can only be spotted from the large, glassed-in gates.

The facilitation of outer space corresponds to the old shell of building (a barn).

To the utmost tolerant attitude towards the existent environment and minimal interference.

In order to preserve the historical character of windows and to comply with the modern comfort requirements, the advisable way of window construction is an outer window with traditional glass in wooden frame and the original division of panes. The inside one is a glass packet in wooden frame where the division into panes is imitated by lining.

5.1

5.2

5.3

Fig.5.3. A good tonal solution. The practicality in detail solutions characteristic of the coastal construction has been observed in the reconstruction of a dwelling house.

5.4

Fig.5.4. The time-expired, last century roofing material No 1 – slate sheets – fit well in the colour gamut of coastal construction.

The asbestos-less slate roofing can also be used in the conservation of the buildings under reconstruction.

Pasteboard roofing is also permissible as a cheaper, temporary solution of roof covering.

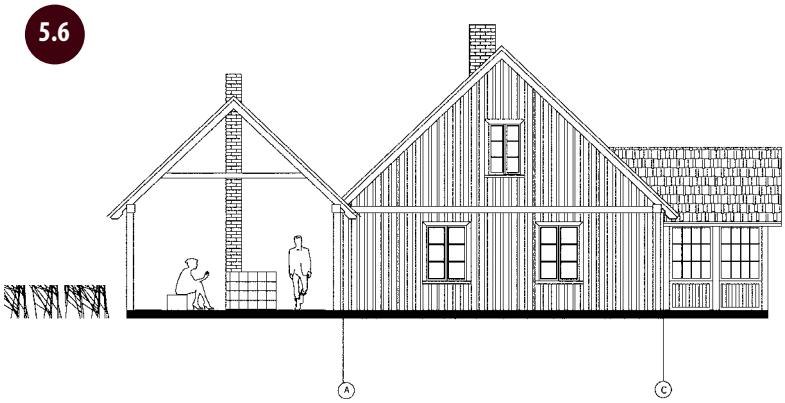
5.5

Fig.5.5. An example of inconspicuous transformation of a former household building into a dwelling house. The vertical board upholstering characteristic of household buildings is maintained.

An example of building reconstruction in Saunaga

Façade of reconstructed building

5.6

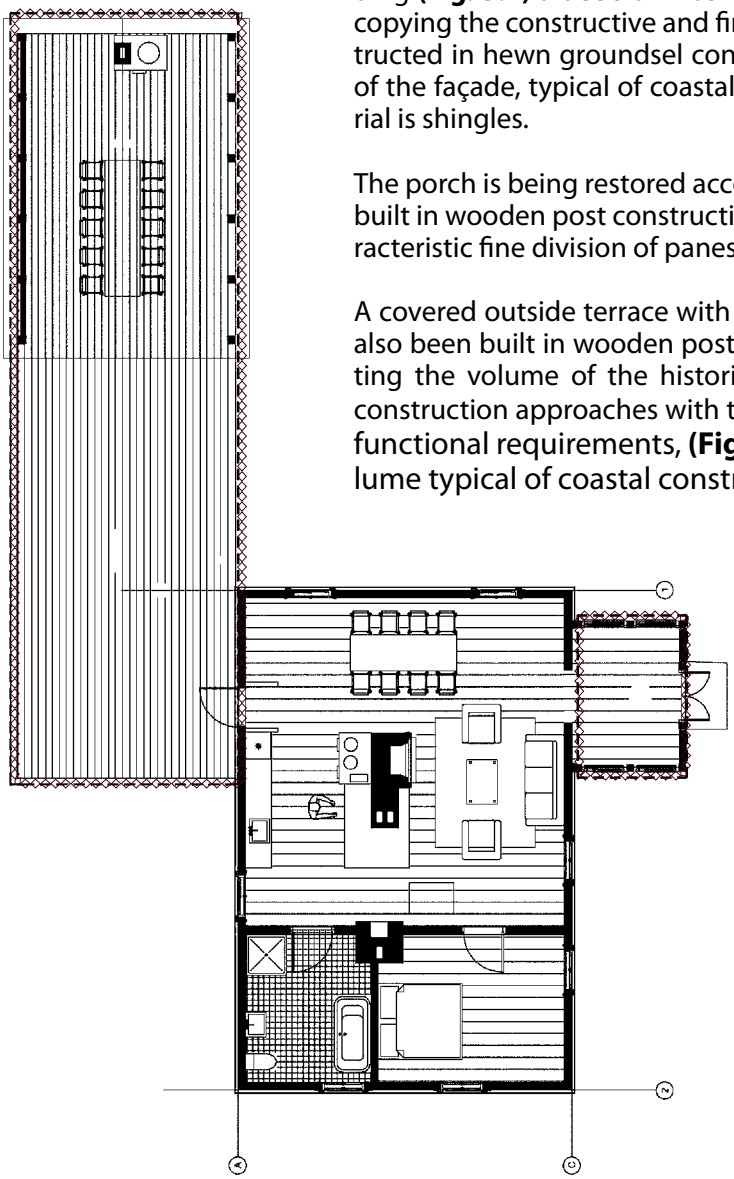


Current situation

5.7

Plan of reconstructed building

5.8



After the inspection of the present constructions of the tumbledown building **(Fig. 5.7)** a decision was made to pull it down and build anew, fully copying the constructive and finish solutions. The building has been constructed in hewn groundsel construction with vertical board upholstering of the façade, typical of coastal construction **(Fig. 5.6)**. The roofing material is shingles.

The porch is being restored according to the historical pattern. It has been built in wooden post construction with large wooden windows in the characteristic fine division of panes.

A covered outside terrace with a large dining table and a cook-house has also been built in wooden post construction, contemporarily supplementing the volume of the historical building. By combining the historical construction approaches with the planning, compliant with the modern functional requirements, **(Fig. 5.8)** a contemporary construction volume typical of coastal construction has been designed.

Outline of newly constructed parts of building

Examples of the reconstruction of Soviet time industrial and military heritage

The reconstruction of a pumping station into a dwelling house.

The wreck of the pumping station prior to the reconstruction **(Fig.5.9)** and the dwelling house afterwards **(Fig.5.10).**

A backup petrol station of the Soviet army, the reconstruction of the observation tower.

Fig.5.11 – present situation
Fig.5.12 – reconstruction project

Within the limits of the existent amounts and by transforming the shape of the roof into a traditional one, rest-houses, a summer tea pavilion and a tower for bird observation have been constructed.

Transformation of an apartment house into a mansion **(Fig.5.13)**. Upon the configuration of the existent foundations, a small private house has been designed instead of the apartment house.

6. RECREATION AREAS, QUALITY REQUIREMENTS FOR PUBLIC SPACE

When the permit to construct a seasonal building is received, it advisable to construct it following a unified architectonic pattern and pursuant to the effective legislation.

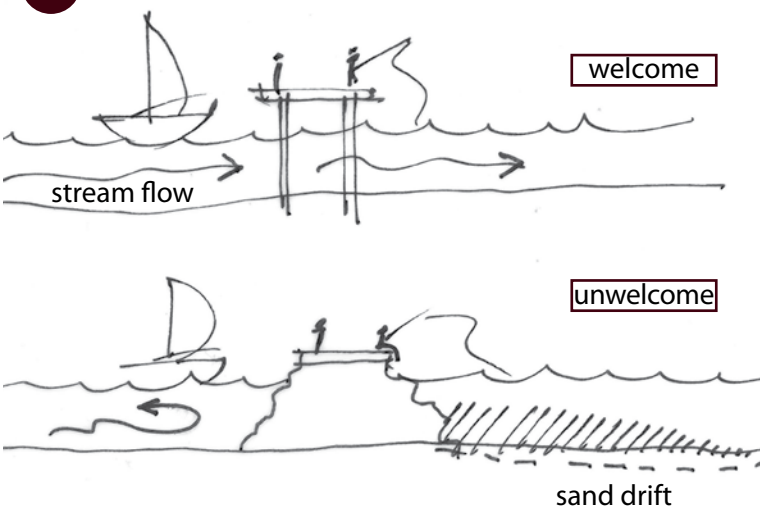
The coast built up with parking lots, WC, wooden footbridges, small shops and restaurants must be available to all members of society, not only those who have built a house there.

6.1

Shops, inventory lease, restaurants, cafes, dressing cabins, and other recreation objects shall be formed as edums (a special area) **(Fig.6.1** – historical sedums).

Depending on the function, load, and volume, larger or smaller, more enclosed or separate buildings are formed as architectonic citation of net huts.

6.2



It is advisable to lay out illuminated paths with scenery platforms near the cafes, restaurants, guest-houses and parking lots, which would attract visitors and bring aesthetic enjoyment in winter, too.

One should avoid the interference with the natural ecosystem, especially, with the geomorphological processes **(Fig.6.2).**

Scenic Perception

Fig.6.3 - The visual and ecological interference with the scenery shall be avoided by choosing a less sensitive, scenically weighed up layout for recreation objects, to the utmost integrating them into the surrounding environment.

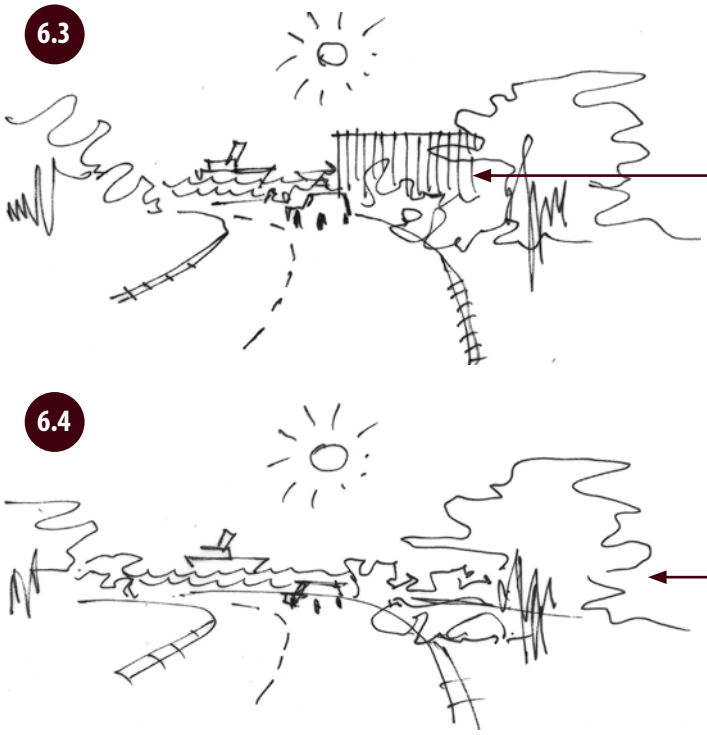


Fig.6.3, 6.4 - The layout of buildings that obstructs the natural viewpoints of the sea shall be avoided.

Anthropogenic Load

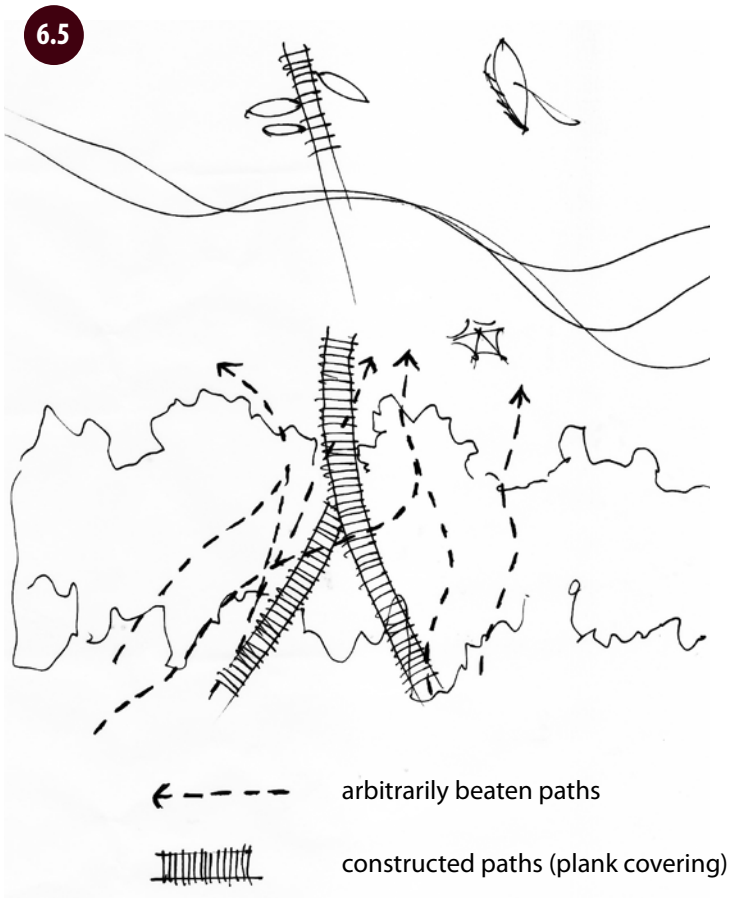


Fig.6.5 - The flow of tourism, purposefully diverted to paths and footbridges, as well as well-considered construction of parking lots facilitates the preservation of the fragile ecosystem of the coast.

Significant ecological damage and risks of erosion are caused by the anthropogenic load brought about by people. In order to reduce this impact, the most popular pedestrian paths shall be facilitated by wooden footbridges, thus merging several shorter accession roads into one – the most convenient.

Different publicly significant objects which would create new work places and facilitate the tourism and the active tourism zones shall be built farther from the coast by providing them with special areas and infrastructure.

Facilitation Elements of Outer Space

Fig. 6.6, 6.8, 6.9, 6.10, 6.11 – Information signs, benches, auto barriers, a construction, confining parking lots – all of them are made from non-planed pine wood (only uncoloured chemical processing), which in the course of time acquires fine polish from sand and wind and a sublime, silvery grey tint.

6.6

6.8

6.9

6.7

6.10

6.11

Fig. 6.7 – A good example – information stands in Kolkasrags. Already in the past the owners offered their old fishing boats to live a second life as small buildings such as cook-houses and chimneyless rooms. The usage of fishing boats and their parts in the contemporary design of outer space architectural elements only creates the mood characteristic of the coast.

It is advisable to use the washed ashore wood in the facilitation elements as widely as possible.

7. ESTABLISHMENT OF UNIFIED INFRASTRUCTURE

In order to develop a unified system of coastal infrastructure not only for the road network but also for the construction of utilities, the collaboration at the level of coastal municipalities and the creation of a unified planning instrument is required.

The infrastructure must undertake the anthropogenic load, ensuring that the residents have access to the coast. The aim is to facilitate the beach, to construct and to put in order driveways, parking lots, recreation areas, pedestrian paths and bikeways, as well as exits to the sea, also building the slopes next to the stairs for perambulator and disabled people. If parking lots are built and barriers placed, the entry of motor transport into the dunes will be stopped.

Establishment of Unified Road Network

Motor roads are one of the factors that promote development **(Fig.7.1)**. Therefore it is essential to improve the condition of the existent motor roads in the territories with large potential for development, at the same time evaluating the maximum permissible capacity of visitation in the particular coastal area. It is not recommended that high intensity roads are built in the nature protection areas with low residential density and a small feasibility to host tourists and holidaymakers.
In the majority of municipalities the state motor ways, providing access to the coastal villages, have gravel surfacing and are in a very poor condition, especially, during the touring season, when the traffic intensity increases, their technical condition deteriorates. Quite frequently the tourists choose not to visit these places due to troublesome driving conditions, which in general is a disincentive factor for development.

7.1

7.2

Construction of Bikeways

It is necessary to develop unified bikeway network along the whole sea coast by using the existent infrastructure, for example, the former railways or the historical coastal roads **(Fig. 7.2)**, which are not used for the purposes of road transport anymore.

In places where the bikeway construction area crosses the borders of the land, owned by private land owners, the beach area shall be used for cycling. If the beach is not appropriate for cycling, bikeway sections shall be built on the dune side of the beach. Such solution is only permissible in those coastal areas that are not endangered by coastal erosion.

8. PROTECTIVE ZONES

(Law on Protective Belts http:www.likumi.lv)

The coast is the belt along the sea, favoured by us and our guests, whose usage has already undergone the contradiction of differing interests at least for the last few centuries. It is not possible to preserve such territory without strict stipulations – both for the visitors and the land owners. The protective zone of the coast has been established in order to decrease the impact of pollution upon the Baltic Sea, to preserve the protective functions of forests, to prevent the expansion of erosion processes, to protect the coastal scenery, to ensure the preservation and protection of the coastal natural resources, the resources required for recreation and tourism, and other publicly significant areas, and their balanced long-term usage.

The coast accommodates a couple of ten particularly protected nature areas, which are also included in the common network of protective areas of the European Union under the name „Natura 2000" . The most significant of them are the Randu Meadows and Vidzeme Stony Seacoast Nature Reserves, the Piejūra and Engure Lake Nature Parks, Ķemeri and Slītere National Parks, etc. These areas protect not only unique nature values such as the habitats endangered at the European level, but also the cultural heritage and individual cultural monuments. The conditions of the visitation and construction of these areas are provided by the laws and regulations on nature protection (for further information see the Ministry of Environmental Protection and Regional Development (VARAM) website: www.varam.gov.lv).

The protective zone shall be perceived as the "live" line of the wildlife which reacts to the existent ecosystem and economic activity within each coastal kilometre. The land borders of the coastal protective zone are determined along the marked outlines in nature, for example, roads, forest ranges, firebreaks, ditches, transmission lines, the borders of land properties, or along an imaginary line.

When planning construction, it is advisable to analyse the type of the coast, adjacent to the particular building plot (G. Eberhards, J. Lapinskis. Baltijas jūras Latvijas krasta procesi. (Latvian Coast Processes in the Baltic Sea), 2008). There are three types of coasts that characterize the dynamics of their erosion or accumulation: 1) the accumulation coasts where the sand accumulates and forms dunes; 2) the abrasion coasts which are washed off and become eroded; 3) the coasts of dynamic balance in which both accumulation and erosion processes take place. The width of the protective zone of coastal dunes in the erosion endangered places is determined by taking into account the dynamics of coastal erosion.

The maintenance and development of the root system of natural vegetation (afforestation) is the only way of the preservation of the coastline. Grass in the foredunes, moss, lichen, and bushes in the grey dunes and dune forests – it is a natural border of the seacoast, the living space for many animals and the most essential coastal value to all of us. However, as a result of conscious disregard of construction constraints, exactly this value disappears and we all, including the potential coastal residents, are losers. According to the forecast of recent research, Latvia is going to lose more than 310 ha of the coastal area within next 15 years. Erosion will affect 258 km or 51.5% of the total length of the coastline. **The fulfilment of this forecast depends on the activity or inactivity by each of us.**

8.1

Erosion after the storm in 2005.
Meleķi Bay, Vidzeme Seacoast

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- The archives of the State Heritage Protection Inspectorate.
- The project materials and photos of the implemented projects by architects J.Dripe, Z. Gaile, V.Sarma, E.Krauklis, J. Sauka, M. Banders, L. Griezīte, and A. Martinsons.
- LCTA "Lauku ceļotājs" photo archive.
- The public records of the Latvian Ethnographic Open Air Museum.

The guidelines comply with the following international conventions and recommendations:

- UNESCO Konvencija par pasaules kultūras un dabas mantojuma aizsardzību, ratified in RL 26.02.1997.UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 16.11.1972.).
- Likums „Par Eiropas Padomes Vispārējo kon-venciju par kultūras mantojumu vērtību sabiedrībai",02.03.2006. The Framework Conven-tion on the Value of Cultural Heritage for Society, Eiropas Padome (Faro, 27.10.2005).
- Likums "Par Eiropas ainavu konvenciju", 29.03.2007. The European Landscape Conven-tion, Eiropas Padome (Florence, 20.10.2000).
- Common recommendations for spatial planning of the coastal zone in the Baltic Sea Region, VA-SAB, 22.10.1996.

The guidelines comply with the local regulations and planning documents:

- Law on Protective Belts, 05.02.1997.
- Principal Guidelines for Coastal Spatial Development in 2011 – 2017, RAPLM, 2011.
- Spatial (Territorial) Planning of Riga Planning Region in 2005 – 2025. Riga Planning Region, 2007.
- Spatial (Territorial) Planning of Kurzeme Planning Region in 2006 – 2026. Kurzeme Planning Region, 2008.

Information on the Internet:

- http://whc.unesco.org - UNESCO conventions.
- http://unesco.lv/ - Latvian National Commission for UNESCO.
- http://www.vasab.org - Spatial Planning Initiative of the Baltic Sea Region: Vision and Strategies around the Baltic Sea.
- http://www.likumi.lv - the vortal of „Latvijas Vēstnesis" legal enactments.
- http://www.varam.gov.lv - Ministry of Environment Protection and Regional Development.
- http://www.mantojums.lv - State Heritage Protection Inspectorate.
- http://www.rpr.gov.lv - Riga Planning Region.
- http://www.kurzemesregions.lv - Kurzeme Planning Region.

The guidelines were developed by LCTA "Lauku ceļotājs" in 2011

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or request: lauku@celotajs.lv

"The guidelines, elaborated on the initiative of the Latvian Country Tourism Association "Lauku ceļotājs", concern a very significant theme for the cultural scenery of Latvia, and in future they will serve as a good instrument for the development of harmonious environment. The language, which discovers and admires the values, tells us how to preserve them, suggests solutions, and has the greatest power – such mood has been achieved in the guidelines. The elaborated document complies with the internationally defined principles, reflected in the conventions, charters and recommendations. However, we should always remember that the environmental values can only be determined as a result of comprehensive exploration, research and analysis, which is followed by extensive consultations and discussions but their retention is only feasible through the understanding of values in a dialogue and coordinated action by all stakeholders.

The most significant support for the existence of Latvia is given by the language, the country with its treasures, positive and creative people and culture. Over centuries we leave behind us only the culture. The rest is lost and will not be important in the long term. The cultural and nature heritage is constituted by the aggregate of accumulated resources that has been inherited from the past and, regardless of the property ownership, is valuable for the whole society. In the course of time the understanding of the conception of cultural heritage more and more appreciates the man and human values. The essence of the preservation of the cultural and nature heritage is based on the general principles of ethics, placing the quality of human life in the centre, admitting and even promoting the development, regarding each new object of good quality as the potential heritage for future generations.

The essence of these principles is responsibility that is a well-thought-out, long term action, in which the concept of responsibility is more oriented towards the ability to provide answers for the future society. We must perform the actions that will be acceptable and necessary to our descendants. This is why the balanced, thought-out and responsible development of the seacoast makes not only our society, but the society of the whole region of the Baltic Sea, believe and provides people with opportunities to enjoy qualitative living space in a stable system and understanding of human values" .

Juris Dambis, Dr.arch., Director of State Heritage Protection Inspectorate

"COASTAL CONSTRUCTION GUIDELINES, developed by concerned and professional people, is an excellent document – it serves as a guide and interpreter on the way towards orderly coastal space, and it enhances the feeling of confidence and responsibility of the coastal residents.

The document disciplines and recommends, it helps the municipal officials to interpret the existent laws and binding regulations in detail. The document provides a basis for dialogue in complicated situations".

Jānis Dripe, Architect, Advisor to the Minister of Culture in the Affairs of Architecture and Creative Industries

"The string of the fishing villages on Kurzeme coast is the most valuable element of the cultural scenery in our country, which has remained comparatively intact due to the fact that it was a closed military area without developed construction of summer cottages for many years. This value must be preserved and protected from incidental, premature, chaotic and environment degrading construction which is characteristic of the new village around cities, especially, Riga.

We must still learn a lot from the developed countries in Western Europe, where the construction develops with strict respect for the historical environment, scale, construction outline, and the use of traditional materials. It is feasible to create qualitative and modern newly constructed buildings, if one researches and comprehends the essence of the historical construction archetype, which is a source for creative work. This has been proved by a fairly large number of positive instances".

Zaiga Gaile, Architect