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Artificial Reservoirs in Landscape Design

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ABSTRACT: Water gives the garden coolness and freshness. The water is soothing and fascinating. Modern landscape design is based on several principles of including artificial reservoirs in the overall design of the garden. Springs, streams, cascades, waterfalls and fountains are the decorative water structures that make up the main base of water objects of landscape design.

KEYWORDS: source, waterfall, fountain, cascade, idea.

I. INTRODUCTION

There are several types of artificial reservoirs in landscape design. These are a spring, a stream, a waterfall, a cascade, a fountain and a pond. Let's consider each of these water bodies separately, excluding ponds.

Main part

The source is a jet of water, differing in pressure and design. The source may be a small trickle gently murmuring between the stones or coming directly from the ground. The source may also be the beginning of a large artificial streambed. The springs are located in secluded corners of the garden and are designed for close contemplation. Even the simplest and smallest spring can give the garden a special charm and comfort. If you decorate the source with aquatic ornamental plants and complement the picture with a composition of stones and small stone sculptures, then it can become a key note in a Japanese garden. The springs fit perfectly into landscape and landscape gardens.

A stream is an artificial reservoir with winding banks that change the width and angle of convergence throughout its entire length. The steeper the relief drops, the narrower the stream is made. On a more or less flat area, the stream is made wide enough. A stream, as well as a spring, is the prerogative of a landscape garden. A properly designed stream can become a special highlight of the garden. To cross streams, they make decorative bridges, or arrange decorative crossings of their large stones in shallow water.

In the bed of the stream, islands of stones look spectacular, which are forced to bend around a fast murmuring stream of water. The streambed can be decorated with pebbles of different fractions or natural stone. Ornamental aquatic plants are planted along the bank of the stream. The more moisture-loving the plant is, the closer it should be to the streambed. The streambed requires periodic cleaning. The original idea is to create a dry stream.

Cascade - arranged at small height differences. Laying stones in a special way, they form a stream of water, which tends downwards in small drops. Creating an artificial cascade is a rather laborious process, since it is very difficult to predict in advance how the water flow will behave and how to emphasize the impetuosity of the flow most advantageously. The stones are laid in different planes and alternating them in different ways. During the construction of the cascade, choose the most spectacular option and fix the stones.

Waterfall - arranged in a stream that flows in an area with a large slope. It is possible to create an artificial waterfall on a flat terrain, but in this case a large amount of excavation work will be required. But the aesthetic impression of the waterfall is much





superior to the experience of the cascade. Contemplation of the waterfall inspires strength and gives cheerfulness.

The cascade, on the contrary, pacifies and adjusts to a quiet mood. The waterfall design implies a large amount of landscape work and requires significant investment. A number of landscape design works are required for the construction of the waterfall. After the design, a vertical layout of the relief is made, electricity is supplied, pipes are laid, pumps and filters are installed. A small waterfall can be made by yourself.

Fountain - does not need a special introduction. Large fountains create foam jets that rise up powerfully, and small fountains release thousands of small drops of water into the air, forming a rainbow. It is always cool next

to the fountain, even on the hottest summer day. The fountain gives the garden chic and fits perfectly into any landscape. Depending on the style of the garden, the fountain can be in the form of a huge bowl, or in the form of a small sculpture-statue. Variations of water jets, splashes of foam streams are so diverse that the description of the types of fountains requires a separate description. An unforgettable impression is left by a favorably illuminated fountain. Properly selected lighting of an artificial decorative pond can bring variety and emphasize the stylistic solution of the garden. The fountain, as a rule, is the main landscape element in the overall landscape design.

The creation of a harmonious and highly artistic object of landscape art is possible only with the use of the experience of past generations, compositional and technical techniques. When working on a project, a landscape architect should have a good idea of the task assigned to him. He must choose the most acceptable solution in the stylistic sense, organically fit a new or reconstructed object into the surrounding landscape, taking into account the peculiarities of the terrain.

In landscape design, style is a certain interpretation of the basic rules and techniques of planning, the color scheme of the garden, the selection of plants and their combination, the type of decorative paving, small architectural forms. The most important task is to create a harmonious, comfortable space where beauty reigns. There are historical and modern design styles that are endowed with certain features and traits. landscape or English style. The rapid development of the regular style occurred in the classical Baroque era from the second half of the 15th century to the beginning of the 18th century. The semantic load of the objects of garden and park construction can be expressed as abundance, luxury, entertaining enlightenment.

The layout of the landscape in the Art Nouveau style is characterized by geometric shapes, lack of symmetry, contrasting color combinations, lack of decorations, emphasized functionality, the use of modern materials for the manufacture of furniture, restrained character. Modernity is characterized by lightness, clarity of lines, bold decisions in the choice and combination of colors and materials. Paving of slabs laid out with a geometric pattern. Light and dark tones alternate in it, inserts of pebbles are allowed.

The Hi-Tech (high technology) style originated in the 1970s. Hi-tech is primarily a synthesis of architecture and science, while functionality is often sacrificed for the sake of design. The garden has dynamic forms, their asymmetry is allowed. Zones in such a garden can be very conditional. Main features: straight lines, simple shapes, minimalism. In such a garden, preference should be given to plants with decorative foliage and architectural crown.



Building materials for such a garden are, first of all, glass, metal, concrete, plastic. The color is silver, metallic, gray, white. Appeal to the elements of Cubism and constructivism.

An excellent solution for a fountain for a garden will be a cascade made of natural stone with a small stream. Such a cascade is made by ledges, the water flows down in small waterfalls. When installing an artificial waterfall or cascade, it is important to choose the pump power that will ensure uniform and sufficient movement of water over the stones. Fountains imitating a natural stream are perfect for a garden. For the device of such a fountain, ready-made



materials are used - hoses, a pump and special nozzles that simulate a natural spring and create a certain stream of water.

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