UDK 625.8

IMPROVEMENT OF THE "REGENSBURG" SQUARE IN ODESA

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Abstract. The work is dedicated to the development of the project and proposals for the improvement of the "Regensburg" Square, located in the city of Odesa. Special attention is planned to be paid to the pedestrian zone. It is proposed to make a covering of colored small-sized slabs with a changed geometric shape of the lower base. The proposed shape of the lower base of the slabs will lead to an increase in the quality characteristics of the coatings, and the multi-colored surface pattern will make pedestrian areas aesthetically beautiful.

"Regensburg" Square is located in the center of Odesa between Staroportofrankivska and Mechnikova Streets, next to Pishonivska Street. In 2021, the work on its improvement was started, but construction work has not been carried out for several years. Now this square is in a neglected state, Fig. 1.

Fig. 1. State of the "Regensburg" park in the spring of 2024

A visual inspection of the territory of the square was carried out. Sidewalks look unattractive. In some places, they are asphalted, in some they are made of paving slabs, Fig. 2, but they are in an unkempt state, and in some there is no covering at all. The unattractive view of the square causes concern among the city's residents, especially those who live or often visit it. Thus, we can conclude that it is necessary to carry out works on the improvement of the "Regensburg" square.

The purpose of this work is to develop a project and make proposals for the improvement of the territory of the "Regensburg" Square to improve its aesthetic appeal and increase its service life.

The main attention of this work will be paid to covering paths from small-sized paving slabs [1-2]. It is proposed to cover pedestrian areas in the form of a symmetrical rectangular pattern with multi-colored slabs inside. It is planned that it will be concrete slabs, because such slabs are environmentally friendly and aesthetically attractive. The technology of manufacturing concrete slabs is not difficult, and the material itself can withstand heavy loads. The main advantages of

concrete covering are: reliability, durability and economy (since the service life of concrete is 25 years).

Fig. 2. Paving path in "Regensburg" Square

In addition to grey slabs, 2 pigments will be used in other slabs: red and yellow, as these colors are easily visible and are characteristic of Odesa and Odesa region. Slabs of each color have their own size. It is planned that the red slabs will be longer in length than the yellow ones, since this color has a greater contrast with the grey slabs, and thus will add dynamism to the pedestrian area.

It is planned to apply the following dimensions: for yellow slabs – 600mm×150mm×50mm, and for red – 800mm×150mm×50mm.

It is recommended to make slabs, the lower base of which contains toothed pyramidal elements. This form of the lower base will prevent the horizontal shift of individual covering elements [3]. When laying slabs due to the changed geometric shape of the lower base, additional compaction of the lower layers of road clothing from loose fine-grained materials will occur, which will increase the load-bearing capacity of the coating. We suggest using a slab with toothed pyramidal elements on the lower side of the slab base, which is shown in Fig 3. The height of the pyramidal elements is planned to be equal to 50 mm, and the angle at the top in the cross section will be equal to 90^0.

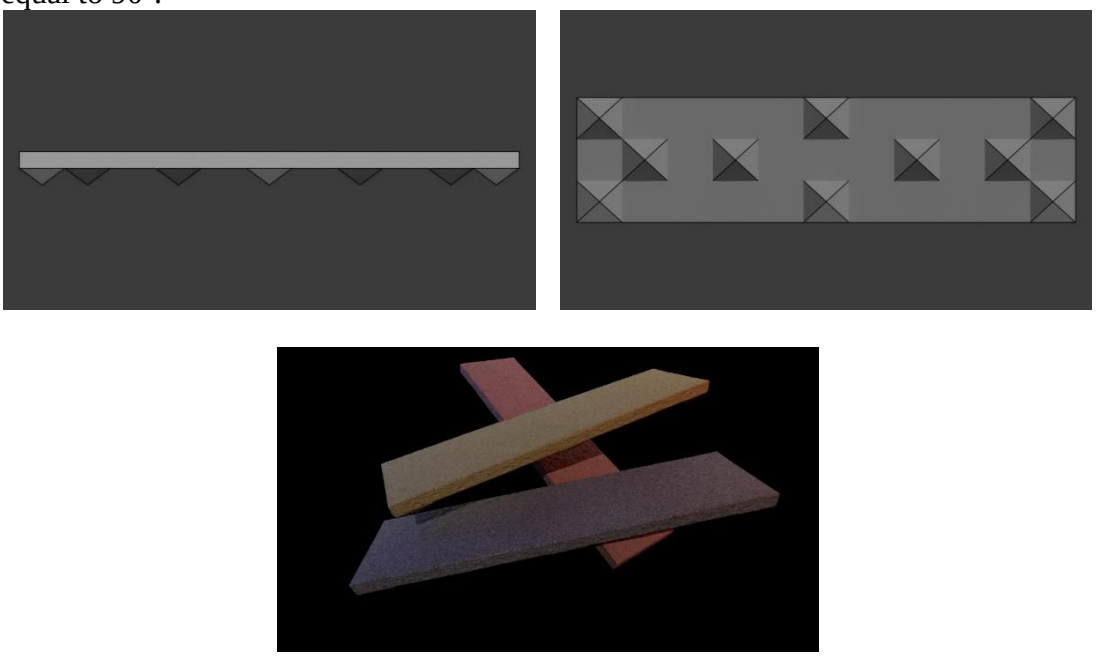

Fig. 3. Proposed slabs for covering pedestrian areas

Based on the analysis of pedestrian movement directions (3), the location of trees (8) and the surrounding area, we propose a new concept of the "Regensburg" Square, presented in Fig. 4. Educational institutions are located on the streets adjacent to the square, so we chose teenagers and

students as the main group of users of the square. The plan shows benches (6) with trash cans (7) in sufficient quantity and two gazebos (4) to ensure quality passive recreation. In the middle are two fountains (5) with a decorative purpose. We decided to decorate the main sidewalk area (1) with our proposed slabs for covering pedestrian areas (Fig. 3). After all, as it was mentioned above, this paving, thanks to a special design with toothed pyramidal elements in the lower base of the slabs, will ensure the reliability and long maintenance-free service life of the covering, which will withstand any weather conditions and increased load.

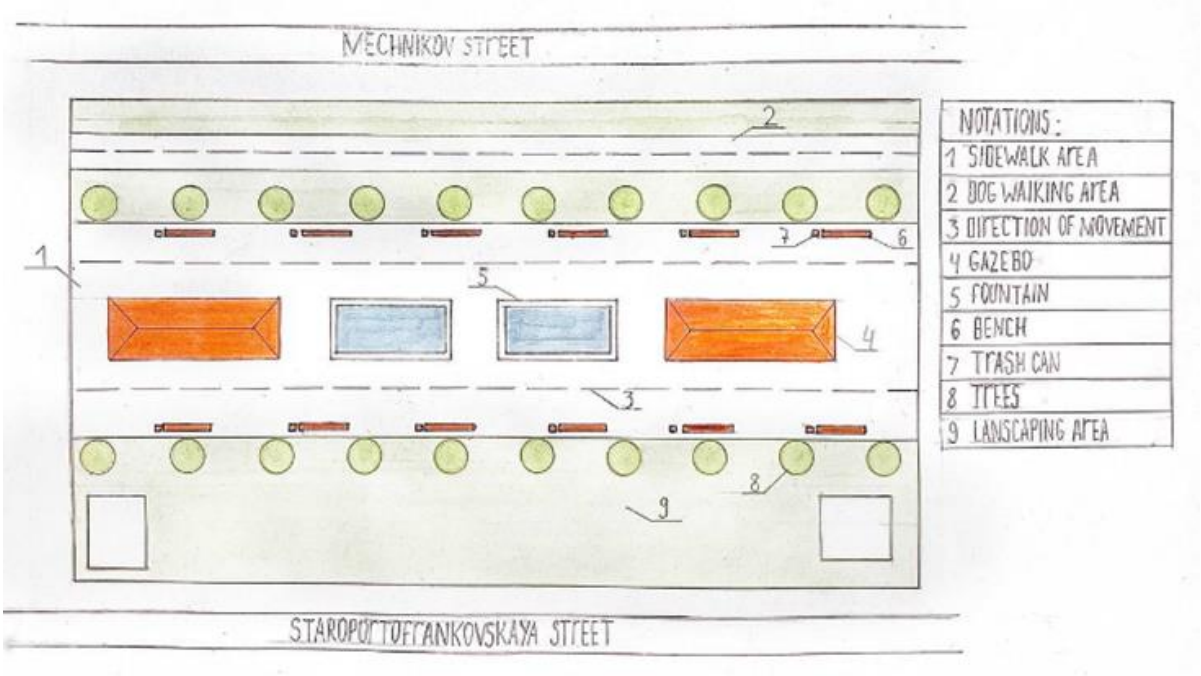

Fig. 4. Plan of "Regensburg" Square

Due to the large area of the landscaping area (9), dog owners will choose this square for walks with their pets. Therefore, in the given decision, it is proposed to make a separate zone for walking dogs, which will not interfere with visitors to the park (2). The best option for covering this area is a lawn, because this type of covering is soft, ecological, enlivens the area and lowers the temperature in the area by several degrees, which is important in the heat.

Conclusions and results: Today, the "Regensburg" Square is in a neglected state, despite the large flow of children and teenagers due to the close location of educational institutions. The solution offered by us is fresh and modern, satisfying such needs as rest, walking with pets or just comfortable movement in the park. The new model increases the flow of people and reduces danger, revitalizing the area in question and the surrounding area. The proposed covering of pedestrian zones will provide aesthetic appeal, as well as reliability and durability, thanks to which the square will be able to function for decades more.

References:

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