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**THE USE OF LIME CONCRETE DRAINS FOR THE DEVICE IN HEAVING SOILS
 AND HUMID SOILS**

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Purpose to the study described in the article was to ensure the hard unsettled base using technogenic waste foundry under cement concrete foundations, roads and airfield pavements, and reinforcement of their fiberglass fittings periodic profile. It was suggested that the device drains from lime concrete with the addition of foundry waste (spent molding sand, slag).

One of the main reasons for the emergence and development of premature deformation of foundations, airfield pavements, and pavements is the use of soil moisture. At present, the construction of many objects is conducted on new technologies with the use of new materials. One of these methods provides a drainage device of non-woven synthetic material or glass [1]. Also, there are recommendations for the use of vertical sand drains [2]. Investigating the causes that give rise to the destruction of building structures, found that the occurrence of deep recesses associated with thinning of ground water or saturated soils during freezing and thawing. To prevent the effects of groundwater seepage waterlogged soils using a perforated tubular Dren with a reverse filter of pure frost rubble. The perforated tubular Dren is advisable to pre-wrap synthetic nonwoven or glass fiber. Accumulates in the tubular Moisture Transport System in the overall drainage system [3]. In recent years, successfully used the construction of interceptor drains of continuous corrugated plastic or aluminum vertical permeable sheets, the bottom of which is a horizontal drain is a perforated tube [4]. The need for measures to drain the soil caused by the appearance of swelling and usually deformation of building structures. Processing methods for their removal are similar in content to the drainage of water-logged soil, i.e. perforated tubular device drains that wraps synthetic nonwoven or glass fiber [5].

Developed a variety of binders, including quick-lime binders. His grasping begins within 2 h; acquires final strength after about 1 day. Cementing includes activated lime pozzolanic materials (ash -unos et al.). Grasping knitting is completed within 1 day, while their strength becomes sufficiently high. Adding sand binders, low cost solutions are prepared [6]. In the production of various products of metallurgical slag-forming mixture and waste that are not in the moment of a qualified application, which creates serious problems and, therefore, raises the problem of developing a method of disposal. Studies carried out by the authors, can be recommended for the device intercepting drains from lime concrete with the addition of foundry waste (spent molding sand, slag) (Fig. 1).

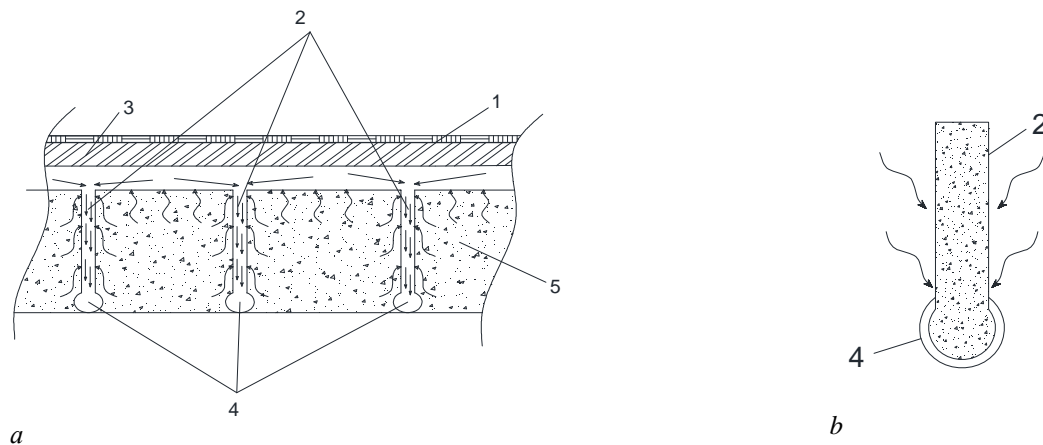


Fig. 1. Drainage from drains from lime concrete foundry waste: *a* – general view; *b* – Section of drains;
 1 - building; 2 – drains from the filter material of lime concrete and foundry waste; 3 – base;
 4 – tube drain is; 5 – waterlogging or heaving soils

This approach vertical drains the device allows you to create a rigid substrate for unsettled cement concrete foundations, roads and airfield pavements. The developed method of using technogenic waste can solve not

only the problem of disposal of foundry waste and create a rigid base unsettled, as well as achieve a positive economic effect.

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