

EXPANDED SHALE CLAY AND SLATE LIGHTWEIGHT AGGREGATES IN MSE STRUCTURES

MONDAY, MARCH 23 | 11:00 AM - 1:00 PM PACIFIC | VIRTUAL

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Members \$50
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Expanded shale, clay and slate (ESCS) lightweight aggregates are mature products with many diverse applications. One of those is using ESCS as a lightweight fill material in the reinforced zone of MSE structures on sites with challenging soil conditions.

MSE walls have been successfully used for many years throughout the highway infrastructure market. One of the applications for ESCS is using it as select backfill in MSE walls when problematic soils are encountered. Many ground improvement solutions are available to remedy poor soil conditions when it is necessary to build an MSE wall over low-bearing capacity and settlement prone soils. Using ESCS for load reduction in these situations is frequently a viable and cost-efficient solution. This webinar will discuss the design considerations for MSE walls using ESCS as a lightweight fill and evaluate its properties for compatibility. MSE walls with lightweight fill have been successfully built on many projects across the USA and the webinar will include relevant case studies.

The session will conclude with a discussion on electrochemical properties of ESCS from laboratory and field tests, appropriate testing methods for assessing the electrochemical properties of ESCS to describe corrosivity and the performance of carbon or galvanized steel in lightweight aggregate backfills, and lifecycle assessment.



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