## Section 255. — MECHANICALLY-STABILIZED EARTH WALLS

01 NOV 2024 – FP-24

WFL Specification 01 NOV 2024 2550010

Include the following when work is required under this Section. Edit instruction as required.

Material

### 255.02

Add the following to the material list:

Common Backfill 704.01

Construction Requirements

255.04 Wall Erection

Delete the second sentence of footnote (1) in Table 255-1 and substitute the following:

For example, 65 feet wall height multiply 6.5×value.

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Use on projects with MSE walls designed by the Government when a manufacturer’s representative is NOT required to be on site during startup. Coordinate with Geotech to determine the need for a manufacturer’s representative. Edit heading as required.

### 255.04 Wall Erection

Delete the first paragraph and substitute the following:

Erect the wall according to the plans and approved drawings. Construct MSE walls to the tolerance shown in Table 255-1.

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Include the following on projects with:

 Wire-faced MSE wall, or;

 Gabion-faced MSE wall

Note: If the project has gabion-faced MSE wall, then include SCR 253.06.

### 255.05 Backfilling.

Add the following:

Use gabion rock larger than the welded wire opening dimension within 18 inches of the wall face. Consolidate gabion rock by rodding or other approved means to produce a uniform, tight gabion rock mass.

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Include the following when work is required under this Section.

### 255.06 Acceptance.

Add the following:

Select granular backfill will be evaluated under Subsections 106.02 and 106.04.

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Include the following when work is required under this Section.

Measurement

### 255.07

Delete Table 255-2 and substitute the following:

Table 255-2

Sampling, Testing, and Acceptance Requirements

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Remarks |  | Not required when using Government- provided source | " | " | " | " | " | " | " | " |
| Reporting Time |  | Before using in work | " | " | " | " | " | " | " | " |
| Split Sample |  | Yes | " | " | " | " | " | " | " | " |
| Point of Sampling |  | Source of material | " | " | " | " | " | " | " | " |
| Sampling Frequency |  | 1 per soil type | " | " | " | " | " | " | " | " |
| Test Methods Specifications | **Source** | AASHTO T 27 & T 11 | AASHTO T 96 | AASHTO T 236 and Subsection 704.08(a)(2) | AASHTO T 104 | AASHTO R 58, T 89, & T 90 | AASHTO T 288 | AASHTO T 289 | AASHTO T 290 | AASHTO T 291 |
| Category |  | − | − | − | − | − | − | − |  | − |
| Characteristic |  | Gradation | LA abrasion | Angle of internal friction | Soundness using sodium sulfate | Plasticity index | Resistivity(1) | pH(1)(2) | Sulfate content(1)(3) | Chloride content(1)(3) |
| Type of Acceptance (Subsection) |  | Measured and tested for conformance (106.04 & 105) |  |  |  |  |  |  |  |  |
| Material or Product (Subsection) |  | Select granular backfill -704.03 |  |  |  |  |  |  |  |  |

Table 255-2 (continued)

Sampling, Testing, and Acceptance Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Remarks |  | − | − | (1) Required for MSE walls with metallic reinforcements.(2) Required for MSE walls with geosynthetic reinforcements.(3) Tests for sulfate and chloride content are not required when resistivity is greater than 5000 ohm centimeters.(4) Minimum of 5 points per proctor. |
| Reporting Time |  | Before using in work | Before placing next layer |
| Split Sample |  | Yes | No |
| Point of Sampling |  | Source of material | In-place |
| Sampling Frequency |  | 1 per soil type | 2 per lift |
| Test Methods Specifications | **Production** | AASHTO T 99, Method C(4) | AASHTO T 310 or other approved procedures |
| Category |  | − | − |
| Characteristic |  | Moisture- density | Density |
| Type of Acceptance (Subsection) |  | Measured and tested for conformance (106.04) |
| Material or Product (Subsection) |  | Select granular backfill (704.03) |