**ROCK EMBANKMENTS: (4-19-16)**

**Description**

Construct rock embankments in accordance with the contract. Use core material as necessary or required where piles will be driven through rock embankments and as shown in the plans. Rock embankments are required to construct embankments in water at locations shown in the plans and as directed.

**Materials**

Refer to Division 10 of the *Standard Specifications*.

|  |  |
| --- | --- |
| **Item** | **Section** |
| Geotextile for Rock Embankments, Type 2 | 1056 |
| Rip Rap Materials | 1042 |
| Select Materials | 1016 |

Provide Type 2 geotextile for filtration geotextiles. Use Class VII select material for rock embankments. Use Class VI select material (standard size No. 57) for core material and Class A and B rip rap and No. 57 stone to fill voids in rock embankments. Obtain aggregates from sources participating in the Department’s Aggregate QC/QA Program in accordance with Section 1006 of the *Standard Specifications* or use similar size onsite material approved by the engineer.

**Construction Methods**

Construct rock embankments in accordance with the slopes, dimensions and elevations shown in the plans and Section 235 of the *Standard Specifications*. If piles will be installed through rock embankments, place Class VII so there will be at least 5 ft between rock and piles. Place Class VII so smaller rocks are uniformly distributed throughout rock embankments. Provide a uniform surface free of obstructions, debris and groups of large rocks that could cause voids in embankments. When placing Class VII in lifts, place core material to top of the current lift before placing the next lift of Class VII.

Before placing embankment fill material or filtration geotextiles over rock embankments, fill voids in the top of rock embankments with rip rap and No. 57 stone. Place and compact Class B rip rap first followed by Class A rip rap. Then, fill any remaining voids with No. 57 stone so geotextiles are not torn, ripped or otherwise damaged when installed and covered. Compact rip rap and No. 57 stone with tracked equipment or other approved methods. Install filtration geotextiles on top of Class VII, rip rap and No. 57 stone in accordance with Article 270-3 of the *Standard Specifications* before placing embankment fill material.

**Measurement and Payment**

*Rock Embankments*, *Rip Rap, Class A and B* and *#57 Stone* will be measured and paid in tons. Select material and rip rap will be measured by weighing material and rip rap in trucks in accordance with Article 106-7 of the *Standard Specifications*. The contract unit prices for *Rock Embankments*, *Rip Rap, Class A and B* and *#57 Stone* will be full compensation for providing, hauling, handling, placing, compacting and maintaining select material and rip rap.

*Geotextile for Rock Embankments* will be measured and paid in square yards. Geotextiles will be measured along the top of rock embankments as the square yards of exposed geotextiles before placing embankment fill material. No measurement will be made for overlapping geotextiles. The contract unit price for *Geotextile for Rock Embankments* will be full compensation for providing, transporting and installing geotextiles.

Payment will be made under:

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| --- | --- | --- |
| **Pay Item** |  | **Pay Unit** |
| Rock Embankments | Ton |
| Rip Rap, Class A | Ton |
| Rip Rap, Class B | Ton |
| #57 Stone | Ton |
| Geotextile for Rock Embankments | Square Yard |

**PE SEAL NAME**

**PE #**