

PART 1 - GENERAL

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|------------------------------------|--|----|--|----|---|----|---|----|--|----|---|
| 1.1 <u>Work</u> | .1 This section describes the work necessary to place granular surface "Class A" (as per PEI DOTIE Specifications (latest edition)), granulars as shown on the drawings and as indicated in the specifications. It includes all labour, equipment and material necessary to execute the work. | | | | | | | | | | |
| 1.2 <u>Related Work</u> | .1 Refer to Section 31 23 10 Excavating, Trenching and Backfilling. | | | | | | | | | | |
| 1.3 <u>Measurement For Payment</u> | .1 Granular surface will be measured in accordance with Section 01 29 00. | | | | | | | | | | |
| 1.4 <u>References</u> | <table border="0"><tr><td style="vertical-align: top; padding-right: 10px;">.1</td><td>ASTM C 117-13, Standard Test Method for Material Finer Than 0.075 mm Sieve in Mineral Aggregates by Washing.</td></tr><tr><td style="vertical-align: top; padding-right: 10px;">.2</td><td>ASTM C 131-14 (No. 200), Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.</td></tr><tr><td style="vertical-align: top; padding-right: 10px;">.3</td><td>ASTM C 136-06, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.</td></tr><tr><td style="vertical-align: top; padding-right: 10px;">.4</td><td>ASTM D 698-12e2, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400ft-lbf/ft³ (600kN-m/m³)).</td></tr><tr><td style="vertical-align: top; padding-right: 10px;">.5</td><td>ASTM D 1557-12e1, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000ft-lbf/ft³ (2,700kN-m/m³)).</td></tr></table> | .1 | ASTM C 117-13, Standard Test Method for Material Finer Than 0.075 mm Sieve in Mineral Aggregates by Washing. | .2 | ASTM C 131-14 (No. 200), Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine. | .3 | ASTM C 136-06, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates. | .4 | ASTM D 698-12e2, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400ft-lbf/ft ³ (600kN-m/m ³)). | .5 | ASTM D 1557-12e1, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000ft-lbf/ft ³ (2,700kN-m/m ³)). |
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- .6 ASTM D 1883-14, Standard Test Method for California Bearing Ratio of Laboratory Compacted Soils.
- .7 ASTM D 4318-10e1, Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
- .8 PEI Department of Transportation, Infrastructure and Energy General Provisions and Contract Specifications for Highway Construction (latest edition).

PART 2 - PRODUCTS

2.1 Materials

- .1 Granular Surface: Material to meet the following requirements:
 - .1 Crushed stone or gravel consisting of hard, durable, angular particles, free from clay lumps, cementation, organic material, frozen material and other deleterious materials.
 - .2 Class "A" granular fill gradation will be within following limits:

ASTM SIEVE SIZE	% PASSING BY MASS
31.5 mm	100
25.0 mm	95 - 100
12.5 mm	50 - 83
4.75 mm	30 - 60
1.18 mm	15 - 40
0.600 mm	1 - 32
0.300 mm	5 - 22
0.075 mm	3 - 9

PART 3 - EXECUTION

- 3.1 Inspection of Underlying Fill
- .1 Do not place granular surface until finished sub-grade surface is inspected and approved by Departmental Representative.
- 3.2 Placing
- .1 Before and after placing granular surface, provide a table of cross section elevations at 15 metre intervals showing the design and as constructed elevations, demonstrating that the surfaces are not uniformly high or low and within grading tolerance.
- .2 Place material only on a clean unfrozen surface, properly shaped and compacted and free from snow and ice.
- .3 Place using methods which do not lead to segregation or degradation of aggregates.
- .4 Place material to full width in uniform layers not exceeding 100mm compacted thickness.
- .5 Shape each layer to a smooth contour and compact to specified density before succeeding layer is placed.
- 3.3 Compacting
- .1 Compact to density not less than 98% maximum dry density in accordance with ASTM D698.
- .2 Shape and roll alternately to obtain a smooth, even and uniformly compacted base.
- .3 Apply water as necessary during compacting to obtain specified density. If material is excessively moist, aerate by scarifying
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with suitable equipment until moisture content is corrected.

- .4 In areas not accessible to rolling equipment, compact to specified density with approved mechanical tampers.

3.4 Finish Tolerances

- .1 Finished surface shall be within plus or minus 10 mm of established grade but not uniformly high or low.
- .2 Correct surface irregularities by loosening and adding or removing material until surface is within specified tolerance.

3.5 Maintenance

- .1 Maintain finished surface in a condition conforming to this section until acceptance.

END OF SECTION