UNIVERSITY OF MICHIGAN
ARCHITECTURE, ENGINEERING AND CONSTRUCTION

ARCHITECTURE & ENGINEERING
326 East Hoover, Mail Stop B
Ann Arbor, MI 48109-1002
Phone: 734-764-3414
Fax: 734-936-3334

BuildingName
The Description of the Project
P00000000 0000

SPECIFICATION DIVISION 31

NUMBER SECTION DESCRIPTION

DIVISION 31 EARTHWORK
SECTION 312323 – FILL

END OF CONTENTS TABLE

DIVISION 31 EARTHWORK
SECTION 312323 – FILL

PART 1 - GENERAL

THIS SECTION SPECIFIES ENGINEERED COMPACTED GRANULAR FILL MATERIAL. USE ONLY WHEN FILL MUST BE ENGINEERED, NOT FOR ORDINARY BELOW-SLAB USE.

1.1 SUMMARY

A. Extent of engineered granular fill indicated on drawings.

B. Type of engineered granular fill is compacted sand and gravel, installed in layers and tested for compliance with requirements.

1.2 QUALITY ASSURANCE

A. Employ an approved Geotechnical Testing Laboratory to evaluate and confirm compaction effort by testing for moisture content, and density of materials in place. For each 6 inch lift, test 6 locations at intervals not exceeding 25 feet. Immediately obtain test results, and re-compact and re-test areas not conforming to specified compaction requirements prior to placing additional fill materials.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Comply with the following Michigan Department of Transportation "1984 Standard Specifications for Construction" Section 8.02.06 for Granular Material Class I:

1. Sieve Analysis: ASTM C 136
2. Total Percent Passing - Dry Weights:
   a. For 2-inch: 100 percent.
   b. For 1/2-inch: 45-85 percent.
   c. For No. 4: 20-85 percent.
   d. For No. 30: 5-3 percent.
3. Percent Loss by Washing - Dry Weights: ASTM C 117; 0-5 percent.

B. Provide Granular Materials consisting of one, or any combination of, the following:

1. Sand; gravel; crushed stone; foundry sand; iron blast-furnace slag; reverberatory-furnace slag.
2. Provide foundry sand free of combustible materials and containing negligible quantities of iron.

C. The following materials are not permitted:

1. Cementitious shale.
2. Crushed concrete.

PART 3 - EXECUTION

3.1 PLACEMENT AND COMPACTION

A. Place fill materials in layers not exceeding 6 inches and compacted with portable pneumatic tampers and vibratory compactors to not less than 95 percent of maximum dry density as determined in accordance with ASTM D 1557 (modified Proctor).

END OF SECTION 312323