SECTION 02245

LOW DENSITY CONCRETE BACKFILL (FLOWABLE FILL)

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Low density concrete backfill.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. C 150 - Specification for Portland Cement.

1.03 SYSTEM DESCRIPTION

A. Performance Requirements

1. Low Density Concrete Backfill:
   a. Dry in-place density of not less than 30 pounds per cubic foot and not more than 36 pounds per cubic foot.
   b. 28 day compressive strength shall be between 100 psi and 150 psi. (1 bag mix)

1.04 SUBMITTALS

A. Proposed mix design.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Pregenerated foam: One of the following or equal:

1. Mearl Corporation, Roselle Park, N.J., Mearl Geofoam Liquid.

2.02 MATERIALS

A. Low Density Concrete Backfill Components:

1. Type II low alkali Portland cement.

2. Water.

3. Aggregate: Pregenerated foam, vermiculite, or other low weight aggregate material which will conform to the strength and density requirements specified herein.

PART 3 EXECUTION

3.01 INSTALLATION

A. General

1. Low density concrete (flowable fill) may only be used for backfill when approved by the City Engineer.

2. Install low density concrete backfill as a nonstructural backfill material as indicated on the submitted Drawings.

3. Place low density concrete backfill in a manner so that minimal consolidation of the material occurs during and after placement.
   a. Monitor wet density of the placed low density concrete backfill, and submit data on a daily basis.
   b. At no time shall wet density exceed 48 pounds per cubic foot.

B. Metal plates shall be placed over trench for 48 hours to protect concrete.

END OF SECTION