



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, Secretary & CEO
Jonathan L. Gulliver, Acting Highway Administrator



July 18, 2017

Mr. Chris Dauphinais
President
Dauphinais Concrete
P.O. Box 461
Sutton, MA 01590

Dear Sir,

The following cement concrete mix design submittals have been reviewed by this section and are approved as specified below, subject to performance at the plant, on the project or in the laboratory. Any changes will require new mix design submittals and trial batches.

Approved Plant Location and Mix Design Sheet Identification No.:

DAUPHINAIS CONCRETE - DOUGLAS, MA: 17-01-20-10-47-55

Approved Cementitious & Mitigating Materials:

C1: TYPE I / II LEHIGH - CANAKKALE, TURKEY | SLAG: TYPE 120 LAFARGE NEWCEM - BALTIMORE, MD | SF: GRACE FORCE 10,000 D - CAMBRIDGE, MA

Approved Aggregates:

FINE PINE SAND AND GRAVEL - DOUGLAS, MA | 3/8" CUMBERLAND QUARRY - CUMBERLAND, RI | 3/4" CUMBERLAND QUARRY - CUMBERLAND, RI | 1.5" CUMBERLAND QUARRY - CUMBERLAND, RI

Approved Admixtures:

AD1 TYPE F W. R. GRACE - ADVA 140M | AD2 TYPE C260 W. R. GRACE - DAREX II AEA | AD3 TYPE C W. R. GRACE - DARASET 400 | AD4 TYPE F W. R. GRACE - EXP 950 | AD5 TYPE C W. R. GRACE - DCI S | AD6 TYPE B,D W. R. GRACE - RECOVER | AD7 TYPE S W. R. GRACE - DARAFILL CLSM

Approved Mix Designs:

- 1.) 3000 PSI | 3/4" | C1: 259 LBS. | SLAG: 259 LBS. | WATER: 31 GAL. | AD1: 35 OZ. | AD2: 1.3 OZ.
- 2.) 3500 PSI | 1.5" | C1: 268 LBS. | SLAG: 268 LBS. | WATER: 30 GAL. | AD1: 37.2 OZ. | AD2: 1.3 OZ.
- 3.) 4000 PSI | 3/8" | C1: 331 LBS. | SLAG: 331 LBS. | WATER: 36 GAL. | AD1: 46 OZ. | AD2: 2.3 OZ.
- 4.) 4000 PSI | 3/4" | C1: 329 LBS. | SLAG: 329 LBS. | WATER: 35 GAL. | AD1: 46 OZ. | AD2: 2 OZ.
- 5.) 4000 PSI | HP | 3/4" | C1: 293 LBS. | SLAG: 257 LBS. | SF: 35 LBS. | WATER: 28 GAL. | AD2: 5.5 OZ. | AD4: 25 OZ. | AD5: 384 OZ. | AD6: 11 OZ.

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- 6.) 4000 PSI | 1.5" | C1: 303 LBS. | SLAG: 303 LBS. | WATER: 33 GAL. | AD1: 42 OZ. | AD2: 1.5 OZ.
- 7.) 5000 PSI | 3/4" | C1: 353 LBS. | SLAG: 353 LBS. | WATER: 34 GAL. | AD1: 49.4 OZ. | AD2: 2.1 OZ.
- 8.) 5000 PSI | HP | 3/8" | C1: 358 LBS. | SLAG: 315 LBS. | SF: 43 LBS. | WATER: 35 GAL. | AD2: 6.5 OZ. | AD4: 30 OZ. | AD5: 384 OZ. | AD6: 14 OZ.
- 9.) 5000 PSI | HP | 3/4" | C1: 343 LBS. | SLAG: 301 LBS. | SF: 41 LBS. | WATER: 33 GAL. | AD2: 6 OZ. | AD4: 29 OZ. | AD5: 384 OZ. | AD6: 13 OZ.
- 10.) | CDF | C1: 80 LBS. | WATER: 35 GAL. | AD7: 1 OZ.
- 11.) | CDF | C1: 200 LBS. | WATER: 35 GAL. | AD7: 1 OZ.

Sincerely,



John E. Grieco, P.E.

Director of Research and Materials

RFM/tw/wk ^{WK}

Attachments

C: District 3 Materials Engineer

R&M Job File

