S.D. Ireland
Concrete Construction Corporation
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CONCRETE MIX DESIGN

6000 psi

SCC

SDI MIX CODE: P60TER

DATE: July 18, 2013 **PLANT:** Burlington, VT

PROJECT: General DOT Precast - 2013

FINE AGGREGATE#1: ASTM C 33	Source:	Hinesburg Sand & Gravel
	Specific Gravity:	2.65 (Abs.: 1.34%)
	Fineness Modulus:	2.92
FINE AGGREGATE#2: Fine Grade	Source:	Hinesburg Sand & Gravel
	Specific Gravity:	2.65 (Abs.: 1.34%)
	Fineness Modulus:	1.49 (17.8% replacement)
COARSE AGGREGATE: ASTM C 33	Source:	S.D. Ireland, Brownell Quarry
	Specific Gravity:	2.80 (Abs.: 0.30%)
	Description	3/4" 100% Crushed Stone (Size #67)

CEMENT: Ternary Blend Cement; Lefarge North America Lakes and Seaway Re St. Constant, Quebec (Sp. Gvty. 3.02)

ADMIXTURES: Water Reducer (HRWR): Glenium 7500; BASF
Air Entraining Agent: Darex II AEA; Grace Concrete Chemicals

CONSTITUENTS (LBS. /YD³)

		Abs.Vol.
Coarse Aggregate (SSD)	1750	10.02
Fine Aggregate #1(SSD)	829	5.01
Fine Aggregate #2 (SSD)	180	1.09
Cement	800	4.25
Water	304.6	4.88
Air Content (Entrained)	6.5%	1.75
Total	3864	27.00ft³

***ADMIXTURE(S) DOSEAGE (OZ. /YD³)**

Glenium 7500 (HRWR)	44 - 64
Darex II AEA	2.5

*Admixture dosage rates are subject to change.

MIX PROPERTIES

Water Cement Ratio: 0.38
Entrained Air Content: 5.0 % – 9.0%
Spread: 20" to 27"
Dry Unit Weight: 144.2 ± pcf

Approved by James Wild, VAOT Structural Concrete Engineer 7/19/13