MIX DESIGNS HAVE BEEN SUBMITTED TO THE VERMONT AOT FOR APPROVAL. CLOSURE POUR CONCRETE MIX DESIGNS WILL BE SUBMITTED SEPARATELY

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIAL AND RESEARCH SECTION - STRUCTURAL CONCRETE UNIT

STRUCTURAL CONCRETE MIX DESIGN SUBMISSION

Agency Use Only	
Mix ID	HP00-A-0
Mix Design #	
Approved by	
Approved Date	
Spec Book Year	2013

Concrete class: HPC A
Additional Description:
Ready Mix Supplier: CARROLL CONCRETE - CHARLESTOWN, NH
Designed By: Scott Jordan
Design strength: 5000 PSI
Design by dry weight or saturated surface dry: SSD

Mix designs are valid for a 12 month period from date of approval or unless there is a change in material, material property or design parameter.

Cement: 701.02	Source: / Brand Name:		Specific Gravity			lb/cy	0.00 cf
Cement Type III: 701.04	Source: / Brand Name:		Specific Gravity			lb/cy	0.00 cf
Blended Cement: 701.06	Source: LAFARGE - TERCEM - MONTREAL, EAST PLANT / Brand Name:		Specific Gravity	3.020	611	lb/cy	3.24 cf
Cement with Slag: 701.07	Source: / Brand Name:		Specific Gravity			lb/cy	0.00 cf
Pozzolan: 725.03(a)	Source: / Brand Name:		Specific Gravity			lb/cy	0.00 cf
Fly Ash: 725.03(a)	Source: / Brand Name:		Specific Gravity			lb/cy	0.00 cf
Silica Fume: 725.03(b)	Source: / Brand Name:		Specific Gravity			lb/cy	0.00 cf
Slag: 725.03(c)	Source: / Brand Name:		Specific Gravity			lb/cy	0.00 cf
Water					31 gals	258.7 lb/cy	4.14 cf
Air Content Target					7.0 %		1.89 cf
Coarse Aggregate 3/8" 704.02A	Source:	Absorption	Specific Gravity			lb/cy	0.00 cf
Coarse Aggregate 3/4" 704.02B	Source: COLD RIVER MATERIALS PIT - N WALPOLE, NH	Absorption 0.80	Specific Gravity	2.830	1719	lb/cy	9.73 cf
Coarse Aggregate 1 1/2" 704.02C	Source:	Absorption	Specific Gravity			lb/cy	0.00 cf
Fine Aggregate: 704.01	Source: NEWPORT SAND & GRAVEL - NEWPORT, NH	Absorption 1.00	Specific Gravity Fineness Modulus	2.660 2.69	1328	lb/cy	8.00 cf
Air Entrainment Admixture 725.02(b)	Source: MASTER BUILDERS INC - MESQUITE, TX / Brand Name: Micro Air		Specific Gravity		1.5	oz/cy	
Retarder Admixture: 725.02(c)	Source: MASTER BUILDERS INC - MESQUITE, TX / Brand Name: Pozzolith 100XR		Specific Gravity		1	oz/cwt	
High Range Water Reducer Admixture: 725.02(h)	Source: MASTER BUILDERS INC - MESQUITE, TX / Brand Name: Glenium 7500		Specific Gravity		3	oz/cwt	
Other Admixtures:			Specific Gravity			oz/cwt	0.00 cf
	Source: / Brand Name:		Specific Gravity				0.00 cf
	Source: / Brand Name:		Specific Gravity				0.00 cf
	Source: / Brand Name:						
			TOTAL	46.510	3917	lb	27.00 cf

Maximum Water/Cementitious Ratio: 0.44
Maximum Water (gal/cy): 32.2
Slump Min/Max (inch): 4.0 min, 7.0 max
Air Content Min/Max (%): 5.0 min, 9.0 max
Design Unit Wt. (lb/cf): 145.06

Notes:

2013 Construction season 2011 specification 5000-psi precast 11-19-13

REVISION # 1 11-19-13
REVISION # 2 12-6-13

COLD RIVER BRIDGES, LLC
10 LANBRO LANE
TEL 603-756-9300 WALPOLE, NH FAX 603-756-9303

CAVENDISH ER BRF 0146(13)

CONCRETE MIX DESIGN

SHEET NUMBER 16

DATE: 11-19-13 SCALE: 1/4"=1'