## RUSSTECHNICAL NOTES

## **BATCHMAN TIPS**

- 1. When *removing* air entrainment from an air entrained mix design to produce a non-air entrained mix, always add 100 lbs. /yard of sand to prevent an under yield.
- 2. When *removing* a water reducer from a mix design, 50 lbs. /yard of cement should be added in order to maintain compressive strength in mix designs normally incorporating water reducer.
- 3. When *removing* a water reducer from a mix designs, increase air entrainment dosage by 20% to keep air content normal.
- 4. For each additional 1% of air content in the concrete, compressive strength of the concrete is *reduced* by approximately 5%.

Example: 8% air content instead of 5% would decrease a 4,000 psi mix design by 600psi.

- 5. One pound of cement produces approximately 10 psi of compressive strength.
- 6. For each 1 ounce/cwt. of water reducer used (minimum dose is 3 ounces/cwt.) produces approximately 100 psi of compressive strength.
- 7. When switching from large coarse aggregate to small aggregate, always *reduce* air entrainment dosage by approximately 30%.

