

## CITY OF PHOENIX STREET TRANSPORTATION DEPARTMENT DESIGN & CONSTRUCTION MANAGEMENT DIVISION MATERIALS LABORATORY SECTION

(Date)

(Supplier's Name)

(Supplier's Address)

Dear (Supplier's Contact Name),

## **RE: REQUIREMENTS FOR VOLUMETRIC TRUCK MIX SUBMITTALS**

City of Phoenix Slurry Mixes Only

For calendar year 2022, please submit the following information for all volumetric trucks to be approved through the City of Phoenix Materials Laboratory. At this time, only Slurry Mix Designs are being reviewed for approval and use on City of Phoenix projects.

- 1. All submittals for mix designs shall conform to the requirements of MAG section 725 (Portland Cement Concrete) and MAG 728 (Controlled Low Strength Material).
- 2. Operators must have Volumetric Mixer Operator Certification per Volumetric Mixer Manufacturers Bureau (VMMB) and all personnel involved in operation of equipment must meet all the qualifications as stated in ACI 304.6R, Chapter 4.5.
- 3. Provide Qualification of Volumetric Mixers for Mixing Uniformity for each volumetric mixer.
- 4. Provide clear pictures of VMMB rating plate for each volumetric mixer.
- 5. Certification that the Portland cement conforms to the requirements of ASTM C150 Type II, III, or V, and shall not contain more than 0.60 percent total equivalent alkalis.
- 6. Certification that the Portland Pozzolan Cement conforms to the requirements of ASTM C595 for blended hydraulic cement with moderate sulfate (MS) resistance, Type IP MS, when no other specific type is specified.
- 7. Supplementary Cementitious Materials (SCM) shall not be used as an additional cementitious materials replacement in concrete in combination with Portland Pozzolan Cement without prior approval by the Engineer. If approved by Engineer, SCM (fly ash or natural pozzolan) shall conform to ASTM C618 and ASTM C311.
- 8. Certification through an independent laboratory that all coarse and fine aggregate complies with ASTM C33 and ASTM C1260.
- 9. Certification that the water used for mixing concrete is potable or shall meet the requirements of ASTM C1602, when tested by a qualified independent testing laboratory.



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- 10. Certifications for the following admixtures and additives:
  - a) Water reducing admixtures meeting the requirements of ASTM C494.
  - b) Air entraining admixtures meeting the requirements of ASTM C260.
  - c) Pigments for integrally colored concrete meeting the requirements of ASTM C979.
  - d) Fibers incorporated into concrete mix shall meet the requirements of ASTM C1116.
- 11. Submit ABC Slurry mix designs following the City of Phoenix Product Codes:
  - a) ½ Sack (PHCLSM 0.5)
  - b) 1 Sack (PHCLSM 1.0)
  - c) 1 ½ Sack (PHCLSM 1.5)
  - d) 2 Sack (PHCLSM 2.0)

Flow consistency shall be tested in accordance with ASTM D6103 and shall meet all the requirements stated in MAG 728.3. The flow shall meet the tolerances specified in Table 728-1.

12. Submit strength tests representing each class of slurry as per ACI 301 Section 4. In the event break histories have not been established, send in trial batch strength test results. Submit break histories as they become available.

Should you have any questions, please contact Andrea Lynch at (602) 495-2070.

Sincerely,

Peter Rupal, P.E. Engineering Supervisor

cc: Andrea Lynch