DESCRIPTION OF GOODS & SERVICES AND ADDITIONAL TERMS & CONDITIONS

DESCRIPTION OF GOODS AND SERVICES:

This Contract is for ready-mixed concrete using Certified Portland Cement and Controlled Low Strength Material (CLSM)/Flowable Fill delivered to areas listed in Exhibit B- Price Schedule and Type IA, Type II and Type IIA Portland Cement meeting the American Association of State Highway and Transportation Officials ("AASHTO") Specification M-85-15.

Form 817

Reference is made in this Contract to the State of Connecticut Department of Transportation (ConnDOT) Form 817 "Standard Specifications for Roads, Bridges and Incidental Construction" (the "Standards"). Performance under this Contract is to be carried out in accordance with the terms and provisions of the Contract as well as the Standards including all supplements and other applicable standards. The Standards are incorporated into this Exhibit A and made a part of this Contract.

The Standards are located in the following link: https://www.ct.gov/dot/cwp/view.asp?a=3609&q=430362

Definitions

Capitalized terms used and not defined in this Exhibit A have the meanings ascribed to them in FORM 817 (as such term is defined herein).

Producer shall be defined as the entity that makes the product.

1. READY-MIXED CONCRETE

(a) Materials

Composition and materials for Classes PCC03340 (A), PCC03360 (C), PCC04460 (F), PCC04081 (S) concrete mixes and Controlled Low Strength Material (CLSM)/Flowable Fill must be in accordance with ConnDOT's Standards, Section M.03. Requirements for High Early-Strength Class PCC04460 (F) Concrete will be as specified above for Class PCC04460 (F) Concrete; however, the cement must be TYPE III or TYPE-III A as approved by ConnDOT. Class PCC04081 (S) Concrete and Controlled Low Strength Material (CLSM)/Flowable Fill material must comply with the technical provisions set forth in this Exhibit A.

• Class PCC04081 (S) Concrete

Where Class PCC04081 (S) Concrete is required, Contractor shall comply with the Standards, Section M.03 as *supplemented herewith to provide a super-plasticized concrete*.

1. General Composition of Concrete Mix (4,000psi required):

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	PROPERTY BY	WATER PER BAG	
TYPE	WT. APPROX.	MAX	GEM. FACTOR
Class PCC04081 (S)	1:2.16:2.20	5.7 (Gals.)	7.0 (Bags/C.Y.)

- 2. <u>Coarse Aggregate:</u> The required grading must be obtained by using 100 percent 3/8" coarse aggregate.
- 3. <u>Cement:</u> Type I or II Portland Cement must be used for Class PCC04081 (S) Concrete.
- 4. <u>Admixtures:</u> The superplasticizer admixture must be a high-range water reducer (HRWR) capable of increasing the slump of the mix from approximately 2½ inches to 6½ inches upon the addition of the amount recommended by the respective manufacturer. The HRWR must conform to ASTM C494 Type F or Type G and shall be approved by the ConnDOT engineer when ConnDOT is the Client Agency. The use of this material must be in strict accordance with the respective manufacturer's written instructions and procedures.
- 5. <u>Composition:</u> Class PCC04081 (S) concrete must contain no less than 6.5 percent and not more than 8.5 percent entrained air at the time of placement.
- 6. <u>Compressive Strength:</u> The Class PCC04081 (S) concrete must have a minimum 4,000 psi compressive strength at twenty-eight (28) days.
- <u>Consistency</u>: Class PCC04081 (S) concrete must have a slump range of 2 inches to 4 inches prior to the addition of the HRWR and from 6 inches to 8 inches of slump after the addition of the HRWR. The addition rates of the air-entraining admixture (A.E.A.) and the HRWR will vary. Frequent field testing of the air content and slump prior to and after addition of the HRWR will be the determining factor of actual addition rates for each admixture.

NOTE: Contractor shall also have measuring graduates marked for the proportioning of the A.E.A. and the HRWR. <u>DO NOT</u> mix the A.E.A. and the HRWR together before adding to the mix; the resultant solution will not work. <u>DO NOT</u> add the A.E.A. and the HRWR at the mixer simultaneously; these admixtures must be added separately in the mixing cycle. All manufactured materials must be stored, mixed and used in strict accordance with the written recommendations of the respective manufacturers.

Construction Methods:

Article 6.01.03 of Form 817 is supplemented by adding the following text. Where this specification deviates from the Standard Specifications for Roads, Bridges, and Incidental Construction (Standards and Supplemental Specifications) the below text must govern.

<u>1 – Composition: Add the following:</u>

Class PCC04081 (S) concrete must conform to the requirements as specified in M.03.01 as amended herein. Class PCC04081 (S) concrete must contain no less than 5.0 percent or (6.5 percent) and no more than 8.0 percent or (8.5 percent) entrained air at the time of placement.

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The Class PCC04081 (S) concrete shall have a minimum 3,000 PSI compressive strength at twenty-eight (28) days.

2 – Consistency: Add the following:

Class PCC04081 (S) concrete must have a slump range of 2 to 4 inches prior to the addition of the HRWR and a maximum of an 8-inch slump after the addition of the HRWR. The addition rates of the air-entraining admixture (A.E.A) and the HRWR will vary. Frequent field testing of the air content and slump prior to and after addition of the HRWR will be the determining factor of actual addition rates for each admixture.

3- Mixing Concrete: Add the following:

For hand mixing of Class PCC04081 (S) concrete, Contractor shall provide scale(s) approved by the ConnDOT engineer in which cement and aggregate can be accurately weighed for the required mix proportions. Contractor shall also have measuring graduates marked in ounces for the proportioning of the A.E.A and the HRWR. Do not mix the A.E.A. and the HRWR together before adding to the mix; the resultant solution will not work. Do not add the A.E.A. and the HRWR at the mixer simultaneously; these admixtures must be added separately in the mixing cycle. All manufactured materials must be stored, mixed, and used in strict accordance with the written recommendations of the respective manufacturers.

4 – Material Storage: Add the following:

Contractor shall store and maintain the A.E.A. and the HRWR materials in clean original containers as delivered by the manufacturer.

• Controlled Low Strength Material (CLSM) /Flowable Fill

Where a Controlled Low Strength Material (CLSM) is required, the Contractor shall supply the following material and a contractor-designed mix:

- a) General Composition of Concrete Mix: The composition of the CLSM must be in accordance with the requirements set forth in Article M.03.01-General Composition of Concrete Mixes of Form 817, as well as the applicable sections of ACI 229R. The Contractor shall submit each proposed mix design, with all supporting data, to the Client Agency engineer for review and approval at least two (2) weeks prior to its use. The setting time of CLSM materials must be designed so as to achieve the strength necessary to comply with the time constraints called for under the Maintenance and Protection of Traffic requirements of the purchase order. The use of chloride accelerators is not permitted.
- b) Compressive Strength: The minimum compressive strength of the CLSM material must be 30 pounds per square inch (psi) and the maximum compressive strength of the CLSM must be 150 pounds per square inch (psi) when tested in accordance with ASTM D4832 after fifty-two (52) days.

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- c) Aggregate: The CLSM mix Design must utilize a nominal maximum size of No. 8 aggregate as specified in M.01.01.
- d) Consistency: The CLSM mix Design must have a minimum of 20% entrained air when tested in accordance with AASHTO T152.

(b) Mixing and Delivery

With every delivery of concrete, Contractor shall furnish a batch ticket indicating the date and time of loading, the batch-mix components by weight, the class of mix, and the additives, if any. Ready-mixed concrete must be mixed and delivered to the point designated on the purchase order by means of one (1) of the following combinations of operations:

- 1. Mixed completely in a stationary mixer with the mixed concrete transported to the point of delivery in a truck agitator or in a truck mixer operating at agitator speed or in non-agitating equipment when accepted by the on-site ConnDOT engineer
- 2. Mixed completely in a truck mixer at the batching point or while in transit. Transit-mixed concrete must conform to the provisions of Section 6.01.03 of ConnDOT's Standards.

Transit-mixed concrete water must be introduced into the mixing drum while the mixer is at the batch plant. Each truck mixer must be equipped with a readily visible device that accurately records the number of drum or blade revolutions at mixing speed.

3. Mixed completely in a truck mixer at the point of delivery following the addition of mixing water. Truck-mixed concrete must conform to the provisions of Section 6.01.03 of ConnDOT's Standards.

Truck-mixed concrete water may be introduced into the mixing drum only after arrival at a level area on the site where the concrete is to be placed and under the supervision of ConnDOT personnel. The mixer will be equipped with a device that records the number of drum or blade revolutions during mixing.

The concrete must be discharged within one and one-half (1½) hours from the time the dry aggregates are loaded into the truck mixer.

Mixing revolutions may not exceed one hundred (100). Mixing beyond one hundred (100) revolutions will be at agitating speeds of not less than 2 nor more than 6 rpm's. Centrally mixed concrete transported in truck mixers must be at agitating speed.

Mixing water must be measured accurately by volume or weight by an approved adjustable measuring device that will measure the required quantity under all operating conditions within a tolerance of one (1) quart or one (1) percent. The flow of water must be stopped automatically when the required quantity has been delivered.

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(c) Unloading

Contractor shall complete all unloading of material within thirty (30) minutes of Contractor's arrival on site at the delivery location. The thirty (30) minute unloading period is a part of the one and one- half $(1 \frac{1}{2})$ hour discharge time limitation as described in the previous section.

(d) Ordering

Questions regarding the quantity and/or type of concrete ordered by ConnDOT should be directed to the applicable district contact as identified in this section as purchase orders will be based on a "per project basis." The method of measurement used when ordering is an estimate, and the amount actually received is the amount that is allowed to be invoiced. Purchase orders will be issued for the total project with deliveries to be made on a partial "as needed" basis.

ConnDOT Districts' contacts are as follows:

District 1	1107 Cromwell Avenue, Rocky Hill CT 06067	
	860-258-4516, Attn: Maintenance Planning Unit	
District II	171 Salem Turnpike, Norwich CT 06360	
	860-823-3217, Attn: Maintenance Planning Unit	
District III	140 Pond Lily Avenue, New Haven CT 06515	
	203-389-3030, Attn: Maintenance Planning Unit	
District IV	359 South Main Street, Thomaston CT 06787	
	860-585-2798, Attn: Maintenance Planning Unit	

All orders shall be made in accordance with Attachment 1- Connecticut Department of Transportation Maintenance Section map.

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2. PORTLAND CONCRETE BAGS

(a) Special Requirements

- 1. Contractor shall be an authorized distributor of the product lines offered on Exhibit B, Price Schedule and must remain so for the duration of Contract.
- 2. Contractor shall provide proof of distributorship with bid. Failure to do so may result in disqualification.
- 3. Safety data sheets (SDS) must accompany all orders whether delivered by Contractor or picked up by Client Agency personnel.
- 4. All deliveries must be accompanied by a packing slip that identifies each item being delivered, the quantity, the purchase order number and the Contractor's invoice number.

(b) Sampling

Concrete will be sampled at the mill by the producer and tested to ensure compliance with AASHTO Specification M-85-15. A notarized certified test report that is in compliance with the most current version of FORM 817 Section 1.06.07 must accompany all orders whether delivered by the Contractor or picked up by the Client Agency.

(c) Delivery

- 1. Contractor's primary delivery location will be the Client Agency's central warehouse located at 660 Brook St, Rocky Hill CT 06067.
- All transportation and delivery charges must be fully prepaid by Contractor, free on board (FOB) destination. Contractor shall bear risk of loss during delivery of all Goods. Routine receiving times are 8:00 a.m. to 3:00 p.m. Eastern Time, Monday through Friday.
- 3. Contractor shall utilize trucks that are adapted to forklift unloading from ground level. Forklift capacity must be at least six thousand pounds (6,000 lbs.).
- 4. Contractor is responsible for the delivery of concrete bags in new condition. Any defective or damaged concrete bags must be immediately replaced at no charge to the Client Agency.

3. ADDITIONAL TERMS AND CONDITIONS:

(a) Contract Separately/Additional Savings Opportunities

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DAS reserves the right to either seek additional discounts from the Contractor or to contract separately for a single purchase, if in the judgment of DAS, the quantity required is sufficiently large, to enable the State to realize a cost savings, over and above the prices set forth in Exhibit B, whether or not such a savings actually occurs.

(b) Mandatory Extension to State Entities

Contractor shall offer and extend the Contract (including pricing, terms and conditions) to political subdivisions of the State (which includes towns and municipalities), schools, and not-for-profit organizations.

(c) P-Card (Purchasing MasterCard Credit Card)

Notwithstanding the provisions of Section 4(b)(2) of the Contract, purchases may be made using the State of Connecticut Purchasing Card (MasterCard) in accordance with Memorandum No. 2011-11 issued by the Office of the State Comptroller.

Contractor shall be equipped to receive orders issued by the Client Agency using the MasterCard. The Contractor shall be responsible for the credit card user-handling fee associated with MasterCard purchases. The Contractor shall charge to the MasterCard only upon acceptance of Goods delivered to the Client Agency or the rendering of Services.

The Contractor shall capture and provide to its merchant bank, Level 3 reporting at the line item level for all orders placed by MasterCard.

Questions regarding the state of Connecticut MasterCard Program may be directed to Ms. Kerry DiMatteo, Procurement Card Program Administrator at 860-713-5072.

(d) Subcontractors

DAS must approve any and all subcontractors utilized by the Contractor in writing prior to any such subcontractor commencing any work. Contractor acknowledges that any work provided under the Contract to any state entity is work conducted on behalf of the State and that the Commissioner of DAS or his/her designee may communicate directly with any subcontractor as the State deems to be necessary or appropriate. Contractor shall be responsible for all payment or fees charged by the subcontractor(s). A performance evaluation of any subcontractor shall be provided promptly by the Contractor to DAS upon request.

Contractor must provide the majority of services described in the specifications.

(e) Security and/or Property Entrance Policies and Procedures

Contractor shall adhere to established security or property entrance policies and procedures or both for each requesting Client Agency. It is the responsibility of each Contractor to understand and adhere to

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those policies and procedures prior to any attempt to enter any Client Agency premises for the purpose of carrying out the scope of work described in this Contract.