

**COUNTY OF MADISON
DIVISION OF PURCHASE
MADISON COUNTY OFFICE BUILDING
WAMPSVILLE, NY 13163**

COPY OF LEGAL ADVERTISEMENT

Pursuant to Section 103 of the General Municipal Law, sealed proposals for

**LIQUID BITUMINOUS
LIQUID CALCIUM CHLORIDE
LIQUID MAGNESIUM CHLORIDE
COLD IN-PLACE SURFACE RECYCLING WITH CEMENT
SLURRY-SEAL BITUMINOUS OVERLAY**

will be received at the Office of the Purchasing Agent, Madison County Office Building #4, 138 North Court Street, Wampsville, New York 13163 until **10:00 a.m.** (Local Time) on **Thursday, March 13, 2014.**

Specifications available at www.madisoncounty.ny.gov. Right reserved to reject any or all bids.

Prevailing Wage Rates (PRC) #2014001264 obtained at: www.labor.ny.gov.

A bid security in the form of a bid bond, certified check, bank cashier/teller/treasurer's check, payable to the County of Madison, must accompany each proposal as a guarantee that if the proposal is accepted a contract will be entered into.

Bids for Liquid Calcium Chloride and Liquid Magnesium Chloride require a bid security in the amount of Five Hundred Dollars (\$500.00). Bids for Liquid Bituminous, Cold In-Place Surface Recycling with Cement and Slurry-Seal Bituminous Overlay require a combined bid security in the amount of Five Thousand Dollars (\$5,000).

Bid securities of the unsuccessful bidders shall be returned.

Successful bidders shall submit a Performance Bond and Labor and Materials Bond from an acceptable Surety for One Hundred Thousand Dollars (\$100,000) as a guarantee delivery and performance.

REQUIRED FOR DEPARTMENT: Madison County Highway Department

DELIVERY TO: As Specified

DATED: February 27, 2014

Cindy Urtz
Purchasing Agent

COUNTY OF MADISON
GENERAL CONDITIONS AND
INSTRUCTIONS TO BIDDERS

1. Original bids will be submitted in sealed envelopes at the Purchasing Department, Second Floor, Madison County Office Building, 138 N. Court Street, Wampsville, New York 13163 at **10:00 a.m. on Thursday, March 13, 2014.**
2. A copy of the Specifications and Form of Bid is available at: www.madisoncounty.ny.gov . Prevailing Wage Rates may be obtained at www.labor.ny.gov, PRC # 2014001264.
3. Any deviations from the foregoing Specifications must be itemized in detail to receive consideration. Any Bid containing deviations that are not noted and explained fully will not be considered a complete Bid. Madison County reserves the right to decide whether deviations from Madison County Specifications are equal.
4. The Contract for the purchase of the above Item(s) will be awarded by the Purchasing Agent to the lowest responsible Bidder. In cases where two or more responsible Bidders submit identical Bids as to price, the Purchasing Agent may award the Contract to any of such Bidders. **The Purchasing Agent may reject all Bids and re-advertise for new Bids.**
5. Guarantee supplied with Bid shall be the manufacturer's standard guarantee. Said guarantee shall not begin to take effect until the day of delivery.
6. Bidder must state location and availability of products, including available hours.

7. **PROPOSAL:**

No bid will be accepted from or Contract awarded to any person who is in arrears to the County of Madison upon debt or Contract or who is in default as surety or otherwise, upon any obligation to said County of Madison.

All proposals shall be made on the forms herein provided and in the manner stated. No additional or qualifying clauses shall be written in.

The successful bidder shall agree, upon award of the Contract not to assign or sublet his Contract or any interest therein without first obtaining the written consent of the County Purchasing Agent.

8. In case of default by the Bidder or Contractor, the County of Madison may procure the articles or services from other sources without notice and hold the Bidder or Contractor thereby responsible for any excess cost occasioned.

9. **PAYMENTS**

The County of Madison will pay the Bidder or Contractor the amount of his Bid upon the faithful performance of the Contract and upon the approval of the bills by the Board of Supervisors of the County of Madison. Partial payments for delivered items or quantities of a Bid may be made by the County upon presentation of properly executed claim voucher, unless otherwise stated herein by the County when the materials, supplies, equipment or service have been fully delivered or completed to the full satisfaction of the head of the County Department for which same is being furnished.

10. The Bidder, if awarded an Order or Contract, agrees to protect, defend, and save harmless the County against any demand for payments for the use of any patented material, process, article, or device, that may enter into the manufacture, construction or form a part of the work covered by either Order or Contract; and he further agrees to indemnify and save harmless the County from suits or actions of every nature and description brought against it, for or on account of any injuries or demands received or sustained by any group or parties, by or from any acts of the Contractor, his servants, or agents.

11. The General Code of the State of New York, and all Local Laws insofar as they apply to the Laws of the Competitive Bidding, Contracts, and Purchases, are made a part thereof.
12. Purchases by the County of Madison are not subject to any Federal, State or City Sales Tax. Exemption Certificates will be executed upon request when necessary form is furnished.
13. Price quoted shall be net, less all taxes and shall include delivery, all transportation and delivery charges prepaid to destination.
14. Cash or early payment discounts will not be considered in determining low Bidder.
15. Proposals must be submitted on the **ATTACHED ORIGINAL PROPOSAL FORMS** in a sealed envelope. The envelope shall be endorsed on Face with the name of the firm making the Proposal, the date of its presentation and the title for which the Proposal is made. Proposals at the option of the Bidder, may be mailed to the above address, but must be received by the time and date stipulated.
16. **BIDDERS PLEASE NOTE:** The words "OR EQUAL" shall be considered added to each Specification.
17. The Board reserves the right to require any Bidder to submit a sample either before or after the awarding of the Bid to ascertain whether or not the product will be suitable for the purpose for which it is to be used. Whenever a particular article has been specified by a manufacturer's designation, such designation is made as a general standard, and is not intended to restrict competitive bidding. Any other make may be offered if the product is equivalent to that mentioned as the standard. The Board shall be sole judge as to acceptable equivalency. Samples shall be submitted free of charge upon request and be identified with the Bidder's name and address.
18. Submission of a Proposal will be construed as indication that the Bidder is fully informed as to the materials satisfactorily to the full extent indicated on the PROPOSAL FORMS. His proposal shall include the furnishing of materials, as required, as well as delivery and other transit charges, including individual items placed on back order.
19. The Purchasing Agent reserves the right to award Bids on the basis of individual Items or on total sums of pages or groups, whichever will be for the benefit of the Board. Also, the Purchasing Agent reserves the right to increase or decrease the quantity of any item at the same unit price indicated by a Proposal at the time the Award is made.

CORPORATE COMPLIANCE

20. The County will conduct appropriate screening on all bids received to ensure and verify that the business/entity has not been sanctioned/excluded by Federal or State law enforcement, regulatory or licensing contractor. The County will also verify that entities and businesses that provide and/or perform services for the County have not been the subject of adverse governmental actions and/or excluded from the State or Federal healthcare programs. No bid will be accepted by the County from any business and/or entity who is sanctioned/excluded by Federal or State law enforcement, regulatory or licensing contractor. By signing and submitting this bid proposal, you are attesting to that fact that you and/or the entity, which you represent, have not been sanctioned nor excluded by and of the aforementioned entities.
21. The following five items will automatically render a Bid unacceptable to Madison County:
 - A. Failure to sign Bid Proposal Page.
 - B. Failure to sign Non-Collusive Bidding Certificate.
 - C. Failure to include necessary Bid Deposit.
 - D. Failure to sign and notarize Certification Of Compliance With The Iran Divestment Act
 - E. Failure to submit **ORIGINAL PROPOSAL FORMS**

It shall be fully understood that any deviations from the inclusion of the above Items will be grounds to see the Bid as non-compliant and will not be considered for Award.

22. Purchases under prices quoted in this Bid may be made by any political subdivision in Madison County. Subdivision dealing directly with the successful Bidder.
23. IT Purchases through Federal Schedule 70 – Pursuant to GML 103 (1-b) local governments can bypass the Usual bidding process for IT equipment. They are authorized to purchase information technology and tele-Communications hardware, software and professional services through cooperative purchasing permissible pursuant to federal general services administration information technology schedule seventy.
24. Piggybacking on Other Government Contracts – Pursuant to GML 103 (16), local governments are allowed to “make purchases of apparatus, materials, equipment or supplies, or to contract for services related to the installation, maintenance or repair of apparatus, materials, equipment, and supplies, may make such purchases, or may contract for such services related to the installation, maintenance or repair of apparatus, materials, equipment, and supplies, as may be required by such county, political subdivision or district therein through the use of a contract let by the United States of America or any agency thereof, any state or any other county or political subdivision or district therein if such contract was let in a manner that constitutes competitive bidding consistent with state law and made available for use by other governmental entities.”
25. Purchases Through Other Federal Government Schedules – Pursuant to GML 104 (2) local governments can bypass the usual bidding process making purchases through other federal schedules as provided by the US General Services Administration.
26. **MATERIAL SAFETY DATA SHEETS:** The successful Bidder shall be responsible for the provision of the MSDS's to the County prior to introducing hazardous materials on to the site, assuring compliance before work is started and disseminating any information to the County employees concerning significant chemical hazards that the successful Bidder is bringing to the County's work place. The MSDS's will be maintained by the County as long as those materials are present. It is the responsibility of the successful Bidder to train its own employees.
27. Guaranteed delivery on all items bid must be within thirty (30) working days of orders placed with successful Bidder. If the Vendor fails to deliver all or part of the items ordered within the thirty (30) working day period, the Vendor shall reimburse the County an amount equal to the difference between the Bid Price and whatever cost the County incurs in acquiring the undelivered items from another source.
28. **Quantities:** The annual quantities listed in the Proposal are estimated only, based on requirements filed with the Purchasing Department. The Contract, however, shall be for the quantities actually ordered during the Contract period. Items will be ordered on an "As Needed Basis".
29. The County Purchasing Agent reserves the right to award the bid in part or in total within 45 days of bid.
30. **Length of Bid:** April 1, 2014 through March 31, 2015.
31. **CONTRACT EXTENSION:** The Contract may be renewed under the same terms and conditions for three (3) additional one-year periods. Each additional contract period shall commence and expire on the anniversary date of the bid award.
32. **INSURANCE:** When contracted work is required, at least two business days before execution of the Contract, the Contractor shall furnish necessary certification of any required insurance.

33. **INSURANCE:** The Contractor agrees to obtain and maintain General Liability Insurance including Comprehensive Form, Premises-Operations and Broad Form Contractual with minimum limits of **Three Million Dollars (\$3,000,000) each occurrence** and **Five Million Dollars (\$5,000,000) annual aggregate**.

The Contractor also agrees to obtain and maintain Automobile Liability Insurance for owned, hired and non-owned vehicles with minimum limits of not less than **One Million Dollars (\$1,000,000) Combined Single Limit** for Bodily Injury and Property Damage.

In addition, the Contractor shall obtain and maintain Fire, Theft and other Casualty Insurance for replacement cost value of all furniture, equipment and appliances inventoried and deemed to be the property of the County, State or Federal government.

The required insurance policies shall be endorsed to include Madison County as an additional insured. Also, to include the provision that the issuing company(s) will notify the Certificate of Insurance Holder, who shall be **County of Madison**, located in the County Office Building, Wampsville, NY 13163, by certified mail thirty (30) days prior to any change diminishing coverage, limits, cancellation or non-renewal of the insurance policies. For the duration of this contract, the issuing company(s) shall notify the Certificate of Insurance Holder upon renewal of the policies.

34. **CERTIFICATE OF INSURANCE:** The successful Bidder shall furnish to the **County of Madison**, within ten (10) business days upon receiving notice of Award, a Certificate of Insurance which shall evidence all requirements of insurance(as stated in Item 26), including Workers' Compensation and Employers' Liability Insurance. Said Certificate must contain specific language so as to adequately advise the County of the Contractor's compliance with the aforesaid requirements of insurance, including but not limited to specifically detailing the types, amount and duration of the insurance coverage's and verifying that the issuing company(s) endorsed such policies as hereinabove required so as to include the County of Madison as an additional insured and to notify the County of any change diminishing coverage, limits, cancellation or non-renewal of the insurance policies. Upon any and all renewals of the subject insurance during the duration of this contract, a new Certificate of Insurance shall immediately be sent to the Certificate of Insurance Holder **County of Madison**.

35. **Bid Deposits and Bid Bonds:** All bids require a bid security in the form of a bid bond, certified check, or bank/cashier/teller/treasurer's check payable to the County of Madison, or cash. Bids for Liquid Calcium Chloride and Liquid Magnesium Chloride require a bid security in the amount of Five Hundred Dollars (\$500). Bids for Liquid Bituminous, Cold In-Place Surface Recycling with Cement and Slurry-Seal Bituminous Overlay require a combined bid deposit of Five Thousand Dollars (\$5,000). Bid deposits of the unsuccessful bidders shall be returned. Successful bidders shall submit a Performance Bond and Labor and Materials Bond from an acceptable Surety for One Hundred Thousand Dollars (\$100,000) as a guarantee delivery and performance. Bid deposit of the successful bidder will be returned upon submittal of the bonds.

36. **Wage Rates:** All work must comply with Section 220 of the New York State Labor Law. Wages paid to workers, operators and drivers must comply with the attached Prevailing Wage Schedule.

37. **Best Value Authority:** Pursuant to Local Law No. 5 of the year 2013, the Purchasing Agent may award purchase contracts, including contracts for service work, but excluding any purchase contracts necessary for the completion of a public works contract pursuant to Labor Law Article 8, on the basis of best value, as defined in State Finance 163, to a responsive and responsible bidder or offeror.

38. Contact Person: Mr. F. Joseph Wisinski, Madison County Highway Superintendent
(315) 366-2221

**TECHNICAL SPECIFICATIONS
LIQUID BITUMINOUS**

1. The bidder shall comply with current NYS OGS Specifications for Commodity Group 31555 – 22669 Comprehensive Liquid Bituminous Materials.
2. The County Superintendent or his/her representative shall designate the type or types of materials, grades, temperatures and quantities of materials to be applied on all projects.
3. All emulsified asphalt materials shall meet the requirements of the latest edition of the New York Stated Department of Transportation Specifications, including addenda. All materials supplied shall be tested, inspected and approved for use by the supplier. Test results shall be maintained on file at the source for a minimum of two (2) years and available to County Superintendent for review.
4. The Bidder at the time of bidding will own and operate an emulsion manufacturing plant. The particular plant shall have been owned and operated by the Bidder for at least five years. The plant shall be a permanent facility.
5. The Bidder's emulsion plant shall have approved individual tanks with the following minimum capacities for each item bid: CRS-2, 40,000 gallons, CRS-2P, 40,000 gallons, HFRS-2 – 40,000 gallons, HFRS-2P – 40,000 gallons. Each tank shall be properly numbered, heated, and equipped with necessary thermometers, sampling devices and pumps. The emulsion plant shall have sufficient emulsion storage to insure prompt delivery during the operating season and shall store a sufficient supply of each item.
6. The Bidder shall maintain offices at his location and have a Dispatcher on duty from 7:00 a.m. to 5:00 p.m. Monday through Friday, except on legal holidays. The emulsion plant must have scales or temperature compensating meters capable of accurately determining quantities for loaded distributor and transport trucks of the sizes required for this Contract and the meters or scales must be tested and certified by the local County Sealer of Weights and Measurers. Deliveries may be required on 2 to 8 hours' notice within any 24-hour period.
7. The Bidder shall own, operate, staff, and maintain a working laboratory. The laboratory shall be equipped with all equipment necessary to perform all specified tests on any emulsion sample. As a minimum, this shall include the following equipment:
 - 1) Saybolt-Furol Viscometer; 1) distillation equipment, 2) penetration apparatus; and 3) all necessary equipment and supplies to comply and perform the ASTM tests outlined in Section 3 Supplement. The laboratory shall also include sufficient equipment to test aggregate and mixes as required by NYSDOT Materials Method 5.
8. All sampling, testing, inspection, certifying, and shipping shall be in accordance with NYSDOT Materials Method 8.1 and 8.2. Each load shall be sampled at the point of delivery by County Highway Department personnel. Each transport or distributor shall be equipped with a sampling device. The Bidder will also provide the sample containers.

The Superintendent of Highways may have samples tested by a certified, independent testing laboratory of his choice. All laboratory tests performed shall be done at the expense of the Bidder. The Superintendent of Highways shall randomly select one sample from each lot for testing. In the event of non-compliance for any test value, or unsatisfactory performance of the material on the road, the County Highway Superintendent may test all the samples of the lot.

All samples shall be properly handled, protected from freezing, and tested within 30 days of sampling. Failure to meet appropriate specifications (NYSDOT AND ASTM) is grounds for rejection and non-payment for the delivered materials. When materials furnished do not conform with these specifications, or are deemed unsatisfactory by the County Superintendent of Highways, payment due will be withheld and the supplier will be charged for any damage involved. In any case, payment by the County Highway Department for any materials delivered shall not be construed as acceptance thereof.

9. In the event that the specified product does not mix, pave, or set-up with respect to the highest of standards, the County Superintendent has the right to proceed with the following:

- 1) Obtain the products and services from the second lowest bidder, the successful Bidder will be responsible for the cost differential, 2) Conduct an investigation as to the dissatisfaction of the County's standards 3) if in its best interest the County declares the successful bidder not responsible and contracts with the second lowest bidder the County shall hold the Owner of the Contract responsible to incur any difference in cost.
10. The successful bidder shall employ experienced labor and shall furnish material and equipment for safe and proper operation. All work and operations called for on the part of the successful bidder shall be performed in a first class workman like manner, and in accordance with the best usage of the trade.
11. All distributors, chip spreaders, pugmills to be used on applied contracts will be owned by Bidder. All equipment shall be manned by competent personnel. All transports shall be equipped with hoses and fittings necessary to transfer to pugmill or distributor.
12. Contractor must bid a minimum 25 Ton pneumatic roller without operator at a per day cost to the County. County will supply a competent person to operate.
13. All distributors shall meet NYSDOT Specifications under Section 410-3 'Bituminous Surface Treatment". The equipment used for mixing in place or pug-mill mixing will be of modern design and conform to the current NYSDOT Specifications. The traveling mix plant or pugmill to be used on any project will be available for inspection at any time prior to commencing work.
14. Each load delivered shall have a numbered delivery ticket meeting NYSOGS Commodity 31555 – 22669 specifications showing date, road name or project, gallons, temperature, application rate, and grade of product. Each ticket must be signed by Bidder's driver and the Superintendent of Highways or his representative.
15. The Superintendent of Highways or his representative will make necessary field measurements to ascertain volumes actually delivered or applied. These measurements will be made prior to commencing and upon completion, using a calibrated tank stick gauge, which must be carried on each transport or distributor. The Bidder's driver will provide access to tanks by opening the dome to permit measurement by County personnel.
16. Failure of the Contractor to supply materials within a reasonable time frame when and as needed or as directed by the Superintendent of Highways will be deemed a declaration on the part of the Contractor that he does not intend to perform his Contract and the County may then secure the type or types of material elsewhere. The Contractor will reimburse the County for any differential in charges between their bid and the acceptable supplier for the materials.
17. The Superintendent of Highways reserves the right to make any investigation or inquiry necessary to determine the competence and ability of the Bidder to properly perform the work. If after said investigation the Superintendent of Highways is not satisfied that the Bidder is properly qualified to meet all requirements contained herein and to perform all work in a satisfactory manner, he may recommend to the Public Works Committee that the Bidder be rejected as unsatisfactory.
18. Price adjustment will be allowed as a part of the bid in accordance with current NYSDOT Policy.
19. The suppliers shall provide to Madison County a qualified technical person for each project, at the County Highway Superintendent's request, to assist in training County employees on asphalt emulsion applications, calibrating equipment and recommending to the County Highway Superintendent specific expertise on uses of asphalt emulsions.

Prior to coming on any project, the asphalt emulsion supplier shall provide the Madison County Highway Superintendent with their recommendations for the project. As a minimum this would include target aggregate gradation and quantity and type of asphalt emulsion to be used.

Acceptance of the job mix formula by the Superintendent of Highways is solely for the purpose of quality control, and in no way releases the Contractor from responsibilities.

NOTE 1: ASTM Method D244 except that the mixture of stone and asphalt emulsion shall be capable of being mixed vigorously for 5 minutes, at the end of which period the stone shall be thoroughly and uniformly coated. The mixture shall then be completely immersed in tap water and the water poured off. The stone shall then be not less than 90 percent coated.

NOTE 2: ASTM Method D244 except that the mixture of stone and asphalt emulsion shall be mixed vigorously for 5 minutes, then allowed to stand for 3 hours, after which the mixture shall be capable of being mixed an additional 5 minutes. The mixture shall then be rinsed twice with approximately its own volume of tap water without showing appreciable loss in bituminous film. After the second mixing, the aggregate shall be at least 90 percent coated.

NOTE 3: ASTM D244 except the aggregate shall be natural sand. After weighing the sand into the pan, the sand shall be completely immersed with tap water, rebalance the pan, sand and water, and add 40 grams of the emulsion into the sand and water. Mix the sand under the water vigorously for 5 minutes and then pour the excess water off. The sand shall be at least 90 percent coated.

NOTE 4: 100 grams of produced mixture shall be heated to 250 F in a laboratory oven for 2 hours; stirred and cooled to 200 F; placed in 400 ml of boiling distilled water in a 600 ml glass beaker and stirred with a glass rod at the rate of one revolution per second for 3 minutes, the aggregate shall be at least 90 percent coated with a bituminous film.

NOTE 5: Sand Penetration

APPARATUS:

Scales

Marshall Compactor & Mold

Concrete Sand Meeting NYSDOT-Specification for 703-07

Minus 200 Mesh Sand (Silica Sand from Penn Glass Sand Co. or a local available gravel sand can be used as a reference)

Graduated Cylinder

Spatula & Mixing Bowl

PROCEDURE:

1. Take a sufficient sample of concrete sand and remove all the minus 200 material by wet sieving.
2. Add 200 grams of the minus 200 reference material to 1000 grams of the dried washed sand and blend with spatula in bowl.
3. Add 50 ml of water to aggregate and blend.
4. Compact sample, using 10 lb. hammer with 18 inch drop as described in AASH to Part II T-180 with 50 consecutive drops to each side.
5. Remove sample and allow to air dry in lab.
6. With eyedroppers or other suitable means, apply equal concentrations of MC-30 and AEP-M.
7. Record which penetrates first. The AEP-M shall be considered acceptable if it penetrates faster than MC-30.

NOTE 6: FLOAT TEST – ASTM Method D-139 except that the residue from distillation shall be poured immediately into the float collar at 500 F and not through a No. 50 sieve; or if the residue had been allowed to cool, it shall again be heated to 500 F and poured into the collar. The water bath shall be maintained at the specified test temperature +/- 1 F.

The demulsibility test shall be made within 30 days from the date of shipment.

All other tests run in accordance with standard Methods ASTM.

EQUIPMENT:

1. Asphalt distributors shall meet the specifications in NYSDOT Section 410-3 "Bituminous Surface Treatment". Sufficient distributors and transports shall be provided to ensure continuous operation and minimize idle time by municipal forces. Applied price includes distributors costs.
2. Mixing equipment shall meet NYSDOT Section 405-3 specifications for equipment for Cold Mix Bituminous Pavement. In addition, when mixing more than two aggregates, the aggregate feed system must contain a minimum of two (2) compartments or bins; each compartment or bin shall have adjustable feed gates so that aggregates can be proportioned at the specified rate. The capacities of the cold feed bins shall be sufficient to maintain a continuous flow of material. Each bin shall have a mechanical device for uniform feeding of the aggregate. The mixer unit shall be approved by the Superintendent of Highways or his representative prior to commencing any work. Mixing or blending of aggregates in a stockpile will not be permitted. Applied price includes mixer and operator up to a maximum of 6,000 gallons per day.
3. The aggregate spreader shall be a self-propelled unit capable of uniformly spreading the aggregate at a rate of specified by the Highway Superintendent with an allowable variation not to exceed 0.5 pounds per square yard. The spreader hopper shall have a minimum spread width and can be adjusted in 6 inch increments. The spreader shall be equipped with a self-locking hitch with a minimum of 90 degree vertical movement. The machine shall have sufficient power and traction to pull loader aggregate trucks on any County road and be supplied with one operator. A price per day is solicited for self-propelled chip spreader, with operator.
4. The paver shall be equipped with automatic transverse slope and longitudinal grade screed controls. The paver shall be equipped with a screed that is fully extendible from 10 feet to 18 feet. Heat and vibration shall be provided for the full-extended width. The extenders shall have independent slope control and on the go capabilities to change width and slope.

LIQUID BITUMINOUS MATERIALS:

The Bituminous Materials shall meet the general requirements of NYSDOT Section 702, "Bituminous Materials".

CONTRACTOR QUALIFICATIONS:

Operator of plant facilities shall have a minimum of two (2) year's experience in the production of the type of material specified to insure proper mixtures and satisfactory service. The bidder shall supply, with the bid, documentation showing that he has manufactured and supplied all items being bid in at least four (4) successful projects in the previous year. This documentation will show customer, location, quantities, and date of completion and person to contact for verification. Any bid which is not documented as above, will be considered unresponsive to this specification and will be rejected. The bidder at the time of bidding shall own the equipment with which he intends to complete the contract, if so awarded.

METHOD OF MEASUREMENT:

The quantity to be paid for will be the number of gallons measured at a temperature of 60° F.

PAYMENT:

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to incorporate the bituminous material in the work for the specified method of application.

GUARANTEE:

A two (2) year guarantee for defective or inferior bituminous material and/or workmanship shall apply to all bituminous material supplied and guarantees are fully covered in the "Agreement" attached hereto which will be entered into with the successful Bidder.

Upon completion, the Successful Bidder will provide a two (2) year maintenance bond to the County Highway Department and each political subdivision purchasing under this Contract.

PRICE ADJUSTMENT – BITUMINOUS MATERIALS:

- A. Asphalt price adjustments allowed will be based on the January 1, 2014 average of the F.O.B. terminal price per ton of unmodified PG 64-22 binder without ant-stripping agent (base average F.O.B. terminal price)

The January 1, 2014 average is \$569.00

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

In the event that one or more of the New York State Department of Transportation pre-approved sources discontinue posting a price for asphalt cement, the base average F.O.B. terminal price shall not be recalculated.

- B. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the “Adjustment Date”, during the contract period. However asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month following the adjustment date.
- C. The unit price of liquid bituminous material purchased from this bid based on this bid’s specifications will be subject to adjustment based on the following formula:

$$\boxed{\begin{array}{c} \text{Price} \\ \text{Adjustment} \\ \text{(per gallon)} \end{array}} = \boxed{\frac{\begin{array}{c} \text{New Monthly Average} \\ \text{FOB Terminal Price} \end{array} - \begin{array}{c} \text{Base Average} \\ \text{Terminal Price} \end{array}}{235}} \times \boxed{\begin{array}{c} \text{Total} \\ \text{Allowable} \\ \text{Petroleum \%} \end{array}}$$

Positive Price Adjustment number shall be added to original per gallon Price.
 Negative Price Adjustment number shall be subtracted from original per gallon Price.

New Monthly Average F.O.B. Terminal Price

The average F.O.B. terminal price for unmodified PG 64-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation per New York State Department of Transportation Standard Specification.

Base Average F.O.B. Terminal Price

The average F.O.B. terminal price of unmodified PG 64-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation as of January 1, 2014.

- D. Bituminous Concrete and Cold Mixes: The unit prices of bituminous concrete and cold mixes purchased from any award based on this specification, will be subject to adjustment based on the following formulas:

$$\text{Price adjustment} = \frac{\text{New Average F.O.B. Base Average (per ton)}}{\text{Terminal Price} - \text{Base Price}} \times \text{Total \% Asphalt}$$

235

**TECHNICAL SPECIFICATIONS
LIQUID CALCIUM CHLORIDE**

1. Price bid is for delivery to any point in the County.
2. Quantities are indeterminate and will be based on the County's needs for the season.
3. The Bidder's distributing equipment shall be modern pressure distributor designed, maintained, equipped and operated so that the Calcium Chloride material can be applied uniformly on variable widths of surfaces up to twenty-four (24) feet at readily determined and controlled rates per square yard. The distributor shall be equipped with a power unit for the pump so that application is by pressure, not gravity. Spray bars shall be adjustable laterally and vertically. The distributors shall be owned and operated by the Bidder.
4. Materials Specifications:

Calcium Chloride	32-34% +/- 1% (as specified)
Alkali Chloride as NaCl	2% Max
Magnesium as MgCl	0.01%

Typical (in lbs. per gallon)

Calcium Chloride	3.8
Sodium Chloride	0.2
Magnesium Chloride	0.004
Calcium Sulfate	0.004
Water	<u>7.162</u>
	11.17

The Calcium Chloride shall meet the requirements of Standard Specifications for A.S.T.M. Designation D98. The bidder will supply with the bid a letter from the supply source stating that the Bidder is an approved supplier for Madison County.

**TECHNICAL SPECIFICATIONS
LIQUID MAGNESIUM CHLORIDE**

1. Price bid is for delivery to any point in the County.
2. Quantities are indeterminate and will be based on the County's needs for the season.
3. Product must contain no less than 25% Magnesium Chloride, by weight as $MgCl_2$.
4. Weight per gallon will be established according to the specific gravity and percentage of Magnesium Chloride contained in the product bid as indicated by the bidder.
5. The pH shall be 6.0-9.0.
6. Sampling shall be done in accordance with ASTM D345. Product shall be tested using generally accepted industry standard analytical procedures as appropriate.
7. A 3% solution of the corrosion inhibited chemical product shall have a corrosion rate of at least 70% less than that of a 3% solution of Sodium Chloride to be acceptable. [Determined by NACE (National Association of Corrosion Engineers) – Standard TM-01-69 as modified by PNS (Pacific Northwest Snowfighters)].
8. This chemical product shall not contain greater than 1.0% (V/V) Total Settable Solids and shall have ninety nine percent (99.0%) of the Solids Passing through a Number 10 sieve after being stored at 0°F +/-2°F for 168 hours.
9. An independent certified analysis conducted within the last 3 years showing compliance with all the above requirements must be submitted with the bid.
10. Deviation from any of the specifications may result in the rejection of the entire delivery load or loads at the discretion of the County. All costs associated with rejected deliveries shall be borne by the bidder.
11. Product may be dyed a characteristic color that will allow ready visual identification of the product or any material treated with the product. Any dye used shall remain in solution without precipitation during all normal use and storage conditions. Dye utilized shall be non-toxic, non-staining, and environmentally benign.

**TECHNICAL SPECIFICATIONS
COLD IN PLACE SURFACE RECYCLING WITH CEMENT**

DESCRIPTION

This work shall consist of pulverizing the existing bituminous surface to the specified width to a depth of 2" (inches), mixing an asphalt emulsion and Portland Cement with the pulverized material, then spreading and compacting said mixture. All of the above operations shall be done in-place with no trucking of RAP allowed except for the small amount needed to remove surpluses or make up deficiencies due to pavement conditions.

MATERIALS

Bituminous Material:

Liquid bituminous material required for remixing with the recycled pavement material shall be a slow setting asphalt emulsion, Item 702-4401, grade CSS-1, or Item 702-4501, grade CSS-1H, meeting the requirements of Section 702, Bituminous Materials of the New York State Department of Transportation's Standard Specifications. The bituminous material shall be obtained from a storage facility that has been approved in the twelve months prior to the material's use by the NYS Department of Transportation. The contractor based on an approved mix design may substitute alternate bituminous materials (see enclosed specifications for Asphalt Emulsions).

Portland Cement:

To be used is either Type I or Type II meeting ASTM C150-86 AASHTO M85-89 standard specifications.

Aggregates:

Additional aggregates if required for cold-in-place surface recycling of pavements shall be crushed stone or crushed gravel conforming to the requirements of Section 703-02, coarse Aggregate, or fine aggregate conforming to the requirements of Section 702-01, fine Aggregate of the Standard Specifications. The gradation and source of the aggregates shall be specified by the contractor and included in the proposed mix design.

The pulverized bituminous material shall meet the following gradation requirements.

<u>SIEVE SIZE</u>	<u>%PASSING</u>
1"	100
3/4"	90-100

MIX DESIGN

A mix design shall be submitted to the purchasing agency in accordance to the design procedure method. No work shall commence until the design has been approved by agency.

The mix design submitted shall consist of the reclaimed material percentage of the liquid bituminous material, percentage of Portland Cement and percentage of additional aggregate if required.

Procedure

1. Cores are taken from road section to be recycled.
2. The test cores are broken and crushed to represent material from production. A portion is used as samples that are extracted for gradation and AC content.
3. The material is tested for gradation requirements to meet the gradation in the table below.
4. 4" Marshall Plugs are made from the crushed core material at (3) emulsion and (3) cement contents.
5. Material is weighed out into samples weighing 1050 grams.

6. Water is added to material that with the addition of emulsion will equal 4%, and mixture is blended until water is well dispersed.
7. Cement is added at the predetermined amount and blended until dispersed.
8. Emulsion is then added in predetermined amount and mixture is blended until well coated. All mixing is done with RAP material at ambient temperature. Emulsions are heated to normal usage temperatures.
9. Samples are placed in 4" Marshall Molds and compacted on both sides at 50 blows.
10. Samples are extruded from molds and left to dry at room temperature for 24 hours.
11. After 24 hours the samples are weighed and tested for density.
12. After an additional 24 hours of drying at room temperature the samples are placed in Marshall Apparatus and stability is obtained. Minimum stability required 1000.

Design Guidelines:

The recycled mixture consists of reclaimed material, additional aggregate, liquid bituminous material, additives and water.

The minimum design liquid bituminous material content is 3% for asphalt emulsions, and 2% for performance graded binders. The liquid bituminous material is calculated as a percentage of the dry mass of millings:

$$[\text{mass of liquid bituminous material} / \text{mass of millings}] \times 100 = \% \text{ liquid bituminous material}$$

Recycled mixtures may be designed with or without additional aggregate, depending on the existing pavement's gradation. When additional aggregate is used, the minimum content is 5.0% and the maximum content is 20.0%, regardless of the recycled mixture's design gradation. The percentage of additional aggregate is calculated as a percentage of the dry mass of millings:

$$[\text{mass of additional aggregate} / \text{mass of millings}] \times 100 = \% \text{ additional aggregate}$$

Design the recycled mixture to conform to the following gradation.

<u>SIEVE SIZE</u>	<u>% PASSING</u>
1"	100
3/4"	100
1/2"	90-100
1/4"	45-75
1/8"	25-65
#20	10-39
#40	6-37
#80	2-16
#200	1-6

Final mix design submittal will be based on the optimum Marshall stability and density results from testing done on nine sets Marshall plugs.

CONSTRUCTION REQUIREMENTS

1. The existing bituminous material shall be cold recycled in a manner that does not disturb the underlying material in the existing roadway.
2. Recycling operations shall not be performed when the atmospheric temperature is below 45 degrees Fahrenheit or when the weather is foggy or rainy, or when weather conditions are such that proper mixing, spreading and compacting of the recycled material cannot be accomplished in the judgment of the project engineer.

3. When commencing recycling operations, the asphalt emulsion and Portland Cement shall be added to the pulverized bituminous material at the initial design rate determined by the contractor's laboratory. The exact application rate of asphalt emulsion and cement will be determined and varied by the contractor as required by existing pavement conditions. An allowable tolerance of plus or minus 0.2 percent of the initial design rate or project engineer directed rate of application shall be maintained at all times. The contractor may add water to the pulverized material to facilitate uniform mixing with the asphalt emulsion and cement. Water may be added prior to or concurrently with the emulsion. Said water shall not cause an adverse effect on the addition or the recycled material.

In some instances, aggregate maybe incorporated into the recycled mix to improve the gradation of the in-place mixes. These aggregates shall be crushed stone or gravel conforming to Section 703-02 of the NYS DOT Specifications, or fine aggregate conforming to Section 703-01.

4. The contractor shall demonstrate his ability to obtain a minimum density of 95 percent of a laboratory specimen prepared in accordance with AASHTO T-245 (50 blows). The project engineer may require a re-demonstration of rolling capabilities when a change in the recycled materials is observed, whenever a change in the rolling equipment is made or if densities are not being obtained with the rolling pattern being used.

After the recycled material has been spread and compacted an additional hour of curing will be allowed prior to the area being opened to traffic. Before placing bituminous surfacing, the recycled material shall be allowed to cure such that the free moisture content is reduced to 1.5% or less or for a minimum of five days.

EQUIPMENT

1. The contractor shall furnish a self-propelled down-cutting milling machine capable of pulverizing the existing bituminous materials to the specified depth in one pass. This machine shall be equipped with a fine texture cutter head that has twice as many teeth as a standard milling drum. The tooth spacing on this drum is 5/16th of an inch which produces an inch minus RAP to meet the gradation a required for this specification. Said machine shall have a minimum rotor cutting width of 10 feet with the capability of widening to 11 and 12 feet. Standard automated profile and depth controls must maintain a desired profile of the lane at a constant cutting depth.

The asphalt emulsion and cement shall be applied to and mixed with the RAP in a separate twin shaft Pugmill capable of blending the pulverized bituminous material, emulsion and cement into a homogeneous mixture.

A cement transport vehicle equipped with a dispensing hopper capable of applying cement at a rate predetermined by the laboratory mix design and a water wetting system used to minimize any fugitive dust.

A positive displacement pump, capable of accurately metering the required quantity of emulsion down to a rate of 4 gallons per minute, shall be used. Said pump shall be equipped with positive interlock system with the quantity of emulsion based on the weight of pulverized RAP material as determined by a belt scale on the conveyor carrying the RAP to the mixing chamber. The pump will automatically shut off when no material is being fed to the mixing chamber.

Each mixing machine shall be equipped with a meter capable of registering the rate of flow and total delivery of the emulsion introduced into the mixture.

2. Placing of the recycled bituminous base course shall be accomplished with a self-propelled bituminous paver having sufficient hopper capacity (20 Ton minimum) to temporarily store surges of materials due to variations in the pavement and milling depths. The bituminous recycled material shall be spread in one continuous pass, without segregation.

In instances where a large surplus of RAP is produced, the equipment shall have provisions for off-loading this processed material prior to its being mixed with the emulsion. Where deficiencies of material exist due to pavement conditions such as rutting or thin pavement, the off-loaded RAP may be added back into the process.

3. The number, weight, and type of rollers shall be sufficient to obtain the required compaction while the mixture is in a workable condition except that the pneumatic roller(s) shall be 25 ton minimum weight.

Initial rolling is usually done with rubber tired roller(s) and continued until no displacement is observed or until the pneumatic rollers have "walked out". Final rolling to eliminate pneumatic tire marks and achieve density shall be done by steel wheel roller(s), either in static or vibratory mode, as required to achieve required density. In some cases, steel rollers may do initial rolling to set cross-slope and/or minimize rubber tire roller marks.

Rollers shall not be started or stopped on uncompacted recycled material. Rolling shall be established so that starting and stopping will be on previously compacted recycled material or on the existing bituminous roadway or shoulder.

Any type of rolling that result in cracking, excessive movement, or other types of pavement distress shall be discontinued until such time as the problem can be resolved. Discontinuation and commencement of rolling operations shall be at the sole discretion of the project engineer.

CONTRACTOR REQUIREMENTS

1. The contractor shall have a minimum of four years experience in cold in-place pavement recycling, including at least three years experience with a recycling train including satisfactory performance on a project completed under Asphalt Recycling and Reclaiming Association (ARRA); State Department of Transportation; or similarly stringent specifications. The contractor shall own the equipment with which he intends to complete the contract, if so awarded.

2. The contractor shall own, operate and maintain a working laboratory. The laboratory shall be equipped with all apparatus necessary to perform any specified tests on the asphalt emulsion, the reclaimed asphalt pavement (RAP), and briquette molding and testing procedures. The laboratory shall be operated by a full-time, qualified technician and shall be available for inspection and/or use by designated municipal personnel.

OPTIONAL MAINTENANCE PROTECTION OF TRAFFIC

The Contractor shall submit a per square yard price for Maintenance and Protection of Traffic. When requesting mix designs from the Contractor, the municipality may at their option, include Maintenance and Protection of Traffic by the contractor for the specific project anticipated. Traffic shall be maintained in accordance with Sections 619-1 through 619-3 of the Standard Specifications and the Manual of Uniform Traffic Control Devices (MUTCD).

METHOD OF MEASUREMENT

1. Cold in-place surface recycling shall be measured by the square yard.
2. The asphalt emulsion will be measured by the gallon.
3. Portland Cement will be measured by the ton.
4. Aggregate will be measured by the ton.

ASPHALT PRICE ADJUSTMENT

Asphalt price adjustments allowed will be based on the January 2014 Average F.O.B. Terminal Price per ton for unmodified PG 64-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be accordance with the New York State Department of Transportation Standard Specification.

The January 2014 Average is \$569.00 per ton.

BASIS OF PAYMENT

Will be a combination of the actual number of square yards of recycling, the actual number of tons of Portland Cement and aggregate if needed, and the actual number of gallons of asphalt emulsion and tack coat used.

SPECIFICATIONS
EMULSION FOR COLD IN PLACE SURFACE RECYCLING

	CSS-1 (702-4401)		CSS-1H (702-4501)	
	MIN	MAX	MIN	MAX
<u>Tests on Emulsion</u>				
Viscosity, Saybolt Furol, 77F, sec	20	100	20	100
Storage Stability Test, 1 day	--	1	--	1
Particle Charge Test	positive		positive	
Sieve Test, %	--	.10	--	.10
Residue by Distillation, %	57	--	57	--
<u>Tests on Residue From Distillation Test</u>				
Penetration, 77F, 100 g, 5 sec	100	250	40	90
Solubility in trichloroethylene, %	97.5	--	97.5	--
Ductility, 77F, 5 cm/min, cm	40	--	40	--

**TECHNICAL SPECIFICATIONS
SLURRY-SEAL BITUMINOUS OVERLAY**

DESCRIPTION:

This work shall consist of producing and installing a cold mix emulsified asphalt overlay material over existing pavements. The finished surface shall provide a smooth dense topping that is free of blemishes and ravel. The overlay shall fill minor depressions, cracks and voids and be non-bleeding. The cured surface shall be dense, with no excess voids, exhibit excellent skid resistance and adhere firmly to the existing surface.

MATERIALS:

1. Materials shall meet applicable specifications for emulsions and aggregates as prescribed by the following:

AASHTO- American Association of State Highway Transportation Officials
ASTM - American Society for Testing and Materials
ISSA - International Slurry Surfacing Association

New York State Standard Specifications Construction and Materials, New York State Department of Transportation, dated May 1, 2008.

2. Liquid Asphalt Emulsion – Cationic Type Liquid asphalt emulsion used shall conform to ISSA-TB102, Cationic Quick Set (CQS) Emulsion. Physical Properties shall be as follows:

	<u>Minimum</u>	<u>Maximum</u>
Partical Charge – Cationic	Positive	
Viscosity, Saybolt Furol at 77 deg F, (25 deg C), Sec	-----	100
Storage Stability Test, 1 day	-----	1.0
Sieve Test, Retained on No 20 seive	-----	0.1%
Cement Mixing Test, emulsion broken	-----	NA
Asphalt distillation percent by weight	57%	-----
Tests on distillation residues:		
Penetration at 77 deg F, 1. F, (25 deg C)		
100 g, 5 sec	40	90
Ductility at 60 deg F, (I 5.5 deg C), 5 cm per min., cm	40	-----
Solubility in Trichloroethylene	96%	-----

3. Aggregates: The mineral aggregate used shall be 100% crushed limestone screenings. The aggregate shall be clean and free of deleterious material. Gradation shall meet specifications for New York State O.G.S. Specifications.

Aggregates shall be tested for conformance to the applicable AASHTO, ASTM, and ISSA specifications for the type of mix to be produced as prescribed in the Job Mix Formula. Certified lab analysis of the aggregate shall be available for review prior to the commencement of work.

<u>TEST</u>	<u>QUALITY</u>	<u>SPEC</u>
AASHTO T176 ASTM D2419	Sand equivalent	45 min
AASHTO T104 ASTM C88	Soundness	15% max using Na2S04 or 25% max using MgS04
AASHTO T96 ASTM	Abrasion Resistance	35% max

Stockpiling of the aggregate shall be done so as to prevent contamination with deleterious oversize material. Segregation will not be permitted.

A screening plant will be required at the stockpile so there are no problems created by having oversize materials in the mix.

4. Additives: Additives may be used to accelerate or retard the break-set of the slurry seal, or improve the resulting finished surface. The use of additives in the slurry mix, or individual materials, shall be made initially in quantities predetermined by the mix design with field adjustments, if required, after approval by the County Highway Superintendent.
5. Water: Water used in the production process shall conform to the requirements of Section 712-01. The water shall be potable and free of any harmful chemical components.
6. Mineral Filler: Mineral filler may be used to improve the workability of material control set time, increase density and enhance emulsion coalescence. The filler shall be used in minimum amounts as required and shall be of the type set forth in the Job Mix Formula.

LABORATORY EVALUATION:

1. General - Before work begins the contractor shall submit a signed mix design covering the specific materials to be used on the project. This design will be performed by a laboratory who has experience in designing Emulsified Asphalt Slurry Seal Surfacing. After the mix design has been approved no substitution will be permitted unless approved by the County Highway Superintendent.
2. Mix Design - The contractor shall submit to the County Highway Superintendent for approval a complete mix design prepared and certified by the laboratory. Compatibility of the aggregate, emulsion, mineral filler and other additives shall be verified by the mix design. The mix design shall be made with the same aggregate gradation that the contractor will provide on the project.

Recommended tests and values are as follows:

<u>TEST</u>	<u>DESCRIPTION</u>	<u>SPEC</u>
ISSA T106	Slurry seal consistency	2-3 cm
ISSA TB-139	Wet cohesion 30 minutes minimum for (Quick Traffic Systems) 60 minutes minimum	12 kg-cm minimum 20 kg-cm minimum
ISSA TB-109	Excess asphalt by LWT Sand adhesion for (Heavy traffic areas only)	50g/ft ² maximum or (538 g/m ² maximum)
ISSA TB-114	Wet stripping	Pass 90% minimum
ISSA TB-100	Wet track abrasion loss One hour soak	75g/ft ² maximum (807g/m ²)
ISSA TB-113	Mix time	Controllable to 180 Seconds minimum

All component materials used in the mix design shall be representative of the materials proposed by the contractor to be used on the project.

The percentages of each individual material required shall be shown in the laboratory report. Adjustments may be required during the construction, based on field conditions. The County Highway Superintendent will give final approval for all such adjustments.

The County Highway Superintendent shall approve the mix design and all slurry seal materials and methods prior to use. The component materials shall be within the following limits:

Residual Asphalt	Type II	7.5% - 13.5%
	Type II I	6.5% - 12.0%
Mineral Filler	0.5% - 2.0% based on dry weight of aggregate	
Additives	As needed	
Water	As needed to achieve proper mix consistency. Total mix liquids should not exceed the loose aggregate voids. ISSA T106 should be used to check optimum liquids.	

3. Rate of Application - The slurry seal mixture shall be of proper consistency at all times so as to provide the application rate required by the surface condition. The average application rate, as measured by the County Superintendent, shall be in accordance with the following table:

Type II	Urban and residential 18 – 20 lbs. Per Square Yard
Type III	Primary and Interstate Routes 20 – 25 lbs. Per Square Yard

EQUIPMENT

1. General- All equipment, tools and machines used in performance of this work shall be maintained in satisfactory working condition at all times to ensure a high quality product.
2. Mixing Equipment – Truck mounted units will be bid separate from continuous run machines. Continuous run machines are those that are equipped to self load materials while continuing to lay slurry seal and will be able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler and water to a twin shafted pugmill mixer and discharge the mixed product on a continuous flow basis. The machine shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler, control additive and water to maintain an adequate supply to the proportioning controls. The mixing equipment shall be equipped to allow the operator to have full control of the forward and reverse speed during application of the slurry seal. It shall be equipped with a self-loading device, opposite side driver stations and forward and reverse speed controls.
3. Proportioning Devices – Individual volume or weight controls for proportioning each material to be added to the mix (i.e. aggregate, mineral filler, emulsified asphalt and additives) shall be provided and properly marked. The proportioning devices are usually revolution counters or similar devices and are used in material calibration and determining the material output at any time.
4. Spreading Equipment – The mixture shall be spread uniformly by means of a conventional surfacing spreader box attached to the mixer and equipped to agitate and spread the material evenly throughout the box. A front seal shall be provided to insure no loss of the mixture at the road contact point. The rear of the seal shall act as final strike-off and shall be adjustable. The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike-off. The spreader box shall have suitable means provided to side shift the box to compensate for variations in the pavement geometry. A burlap drag, (or other approved drag) may be attached to the rear of the spreader box to provide a uniform highly textured mat.
5. Auxiliary Equipment – Suitable surface preparation equipment, traffic control equipment, hand tools and any other support equipment shall be provided as necessary to perform the work.

CALIBRATION:

Each mixing unit to be used in performance of the work shall be calibrated in the presence of the County Highway Superintendent, or designee, prior to construction. Previous calibration documentation covering the exact materials to be used may be acceptable, provided they were made during the calendar year. The documentation shall include an individual calibration of each material at various settings, which can be related to the machines metering devices. No machine will be allowed to work on the project until the calibration has been completed and/or accepted.

QUALIFICATIONS OF BIDDER:

1. The bidder shall comply with current New York State OGS Specifications for Commodity Group 31555 – 22669 Comprehensive Liquid Bituminous Materials
2. The bidder shall own and operate the asphalt emulsion manufacturing plant that produces the emulsion that is to be used in the slurry seal project. The plant shall have been inspected and approved by the New York State Department of Transportation in the previous 12 months prior to this bid.
3. The bidder shall own, operate and maintain a working laboratory. The laboratory shall be staffed by a full time technician trained in all phases of asphalt t testing. The laboratory shall be a New York State Department of Transportation approved lab for emulsion testing and shall have evidence of acceptance by New York State Department of Transportation. All emulsion tests shall be done in accordance with the American Association of State Highway Transportation Officials (AASHTO). The bidder's laboratory shall include all equipment to test bituminous mixes and aggregates.
4. The laboratory shall have evidence that it has split sampled with at least one other Department of Transportation lab on at least 12 samples in the previous year and that the testing results were with specifications for specific emulsion tested.
5. The bidder must demonstrate evidence of experience levels with the continuous flow application equipment on projects of substantial size. The bidder must submit with the bid a list of three projects in the last two years utilizing this equipment and of greater that 75,000 square yards per project.
6. The bidder shall submit evidence upon award that their laboratory contains all necessary testing equipment to design and produce the Job Mix Formula to include the following:
 - Modified ASTM D3910-80 Cohesion Tester
 - Hobart N-50 Wet Track Abrasion Tester
 - Loaded Wheel Testing Machine
 - All of the Schultze-Breauer Testing Apparatus
 - Flexural Tension Tester with Cooling Chamber
 - Three-track Wheel Tracking Machine
7. The bidder must produce the emulsion product intended for use. Detailed test results of the emulsion shall be submitted to the contracting agency along with the Job Mix Formula.

Upon request, the contractor shall submit certified lab results on two samples of emulsion produced by the bidder in the previous six months.

8. The bidder shall submit upon award a study performed in the contractor's New York State approved laboratory of the effects of % filler content, emulsifier content and PH levels. The results of the study shall be 30, 60 and 90 minute wet cohesion set times of varied mix design, which shall be categorized and plotted. A minimum of 100 mix designs will be shown. The test performed shall be done on the Modified ASTM D3910-80A Cohesion Tester.

The bidder shall also submit results of wet track abrasion tests performed on varying mix design for "the one hour soak and six day soak modified N-50", wet track abrasion test, in accordance with International Slurry Surfacing Association TB-100.

The purpose of these studies is to show that the contractor has the technology and capability to properly design and produce the asphalt emulsion and obtain the optimum mix design achievable for the slurry seal project.

The results of the studies shall be certified that the laboratory tests were performed by the bidder.

WEATER LIMITATIONS:

The slurry seal shall not be applied if either the pavement or air temperature are below 50° F and falling, but may be applied when both pavement and air temperature are above 45° F and rising. No slurry seal shall be applied when there is a danger that the finished product will freeze before 24 hours. The mixture shall not be applied when weather conditions prolong opening to traffic beyond a reasonable time.

TRAFFIC CONTROL:

The contractor shall be responsible for protection and maintenance of traffic and uncured slurry seal. Suitable methods such as barricades, flagmen, pilot cars, etc. shall be used to protect the uncured slurry and will be the responsibility of the contractor.

TEMPORARY PAVEMENT DELINEATION:

The contractor shall furnish and apply temporary pavement delineation according to the latest edition of New York State Department of Transportation Specifications and the M.U.T.C.D. When so ordered by the County the contractor shall remove such temporary delineation. The cost of providing this item shall be included in the unit cost bid. Such temporary delineation shall be placed precisely in the center of the resurfaced pavement.

SURFACE PREPARATION:

Immediately prior to applying the slurry seal the surface shall be cleared of all loose material, oil spots, vegetation and other objectionable material. Any standard cleaning method will be acceptable. Manholes, valve boxes, drop inlets and other service entrances shall be protected from the slurry seal by a suitable method. The County Highway Superintendent shall approve the surface preparation prior to surfacing.

APPLICATION:

1. General – When required by local conditions the surface shall be pre-wetted by fogging ahead of the spreader box. The rate of application of the fog spray shall be adjusted during the day to suit temperatures, surface texture, humidity and dryness of the pavement.

The slurry seal shall be of the desired consistency upon leaving the mixer. A sufficient amount of material shall be carried in all parts of the spreader at all times so that a complete coverage is obtained. Overloading of the spreader shall be avoided.

No lumping, balling or unmixed aggregate shall be permitted.

No streaks such as those caused by oversized aggregate shall be left in the finished surface. If excess oversize develops the job will be stopped until the contractor proves to the County Highway Superintendent that the situation has been corrected. Screening of the aggregate will be required just prior to loading it into the units going from the stockpile area to the lay-down operation.

2. Joints – No excess build-up, uncovered areas or unsightly appearance shall be permitted on longitudinal or transverse joints. The contractor shall provide suitable width spreading equipment to produce a minimum number of longitudinal joints throughout the project. When possible, longitudinal joints shall be placed on lane lines. Half passes and odd width passes will be used only in minimum amounts. If half passes are used they shall not be the last pass of any paved area.
3. Mix Stability – The slurry seal shall possess sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. It shall be free of excess water and emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

4. Hand Work – Areas, which cannot be reached with slurry seal machines, shall be surfaced using hand squeegees to provide complete and uniform coverage. The area to be hand worked shall be lightly dampened prior to mix placement and the slurry worked immediately. Care shall be exercised to leave no unsightly appearance from handwork. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during machine applying process.
5. Lines – Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide good appearance.
6. Rolling – Rolling is usually not necessary for slurry seal surfacing on roadways. Airports and parking areas should be rolled by a self-propelled 10 ton pneumatic roller with a tire pressure of 50 PSI (3.4 ATMS) and equipped with a water spray system. The surfaced areas shall be subjected to a minimum of two (2) full coverage passes by the roller. Rolling should not commence until the slurry has cured enough so that it will not pick up on the tires of the roller.
7. Clean up – All areas such as manways, gutters, and intersections shall have the slurry seal removed as specified by the County Highway Superintendent. The contractor shall remove any debris associated with the performance of the work on a daily basis.

QUALITY CONTROL:

1. Inspection – To insure quality, inspectors assigned to projects must be familiar with the materials, equipment and application of slurry seal. Local conditions and specific project requirements must be considered when determining the parameters of field inspection.
2. Materials – The County Highway Superintendent may take samples of the aggregate and asphalt emulsion used in the project for testing by an independent laboratory. The County Highway Superintendent shall notify the contractor immediately if any test fails to meet specifications. The cost of such testing shall be the responsibility of the contractor.
3. Slurry Seal – The County Highway Superintendent may take samples of the slurry seal directly from the slurry units at a minimum rate of one sample per mixing unit per each day's use for testing by an independent laboratory.

The County Highway Superintendent shall notify the contractor immediately if any test fails to meet specifications. The cost of such testing shall be the responsibility of the contractor.

The County Highway Superintendent may use the recorders and measuring facilities of the slurry seal unit to determine application rate, asphalt emulsion content, mineral filler and additives content for individual loads.

It shall be the responsibility of the contractor to check stockpile moisture content and to set the machine accordingly to account for aggregate bulking.

4. Non-Compliance – If any two tests fail on the stockpile material the job shall be stopped. It shall be the responsibility of the contractor, at his own expense, to prove to the County Highway Superintendent that the conditions have been corrected. If any two successive tests on the mix from the same machine fail the use of the machine shall be suspended. It will be the responsibility of the contractor, at his own expense, to prove to the County Highway Superintendent that the problems have been corrected and that the machine is working properly.

LIQUID BITUMINOUS

BID PRICING PAGE

ITEM	<u>MATERIAL</u>	<u>GRADE</u>	<u>PRICE PER GALLON APPLIED</u>
1.	702-4401	CSS-1	\$_____/gal.
2.	702-4501	CSS-1h	\$_____/gal.
3.	702-3102	HFRS-2	\$_____/gal.
4.	702-3801	HFRS-2p	\$_____/gal.
5.	702-3301	HFMS-2	\$_____/gal.
6.	702-3301	HFMS-2h	\$_____/gal.
7.	702-4101	CRS-2	\$_____/gal.
8.	702-4702	CRS-2p	\$_____/gal.
9.	702-90	Tack-Coat	\$_____/gal.
10.	702-90	Fog Seal	\$_____/gal.

BIDDER NAME: _____

AUTHORIZED SIGNATURE: _____

TITLE: _____

ADDRESS: _____

E-MAIL Address: _____

TELEPHONE: _____ FAX: _____

LIQUID CALCIUM CHLORIDE and LIQUID MAGNESIUM CHLORIDE

BID PRICING PAGE

	<u>DESCRIPTION</u>	<u>PRICE/PER GALLON</u>
11.	Calcium Chloride Applied to Municipal Roads	\$_____/gal.
12.	Liquid Magnesium Chloride	\$_____/gal.

BIDDER NAME: _____

AUTHORIZED SIGNATURE: _____

TITLE: _____

ADDRESS: _____

E-Mail Address: _____

TELEPHONE: _____ FAX: _____

**COLD IN-PLACE SURFACE RECYCLING WITH CEMENT
OVER 10,000 S.Y. / 1 inch to 5 inch DEPTH**

BID PRICING PAGE

- 13. Recycling with Cement \$ _____/Square Yard
- 14. Additional Aggregate as required \$ _____/Ton
- 15. Portland Cement as required/Type 1 or 2 \$ _____/Ton

BIDDER NAME: _____

AUTHORIZED SIGNATURE: _____

TITLE: _____

ADDRESS: _____

E-Mail Address: _____

TELEPHONE: _____ FAX: _____

EQUIPMENT RENTAL RATES

BID PRICING PAGE

<u>ITEM</u>	<u>EQUIPMENT</u>	<u>COST/PER DAY</u>
16.	Milling Machine	\$_____/per day
17.	Pugmill	\$_____/per day
18.	Cold Mix Paver	\$_____/per day
19.	Pneumatic Roller/with Operator	\$_____/per day
20.	Pneumatic Roll/without Operator	\$_____/per day
21.	Steel Drum Roller/with Operator	\$_____/per day
22.	Steel Drum Roller/without Operator	\$_____/per day
23.	Self Propelled Chip Spreader	\$_____/per day
24.	Re-Profiling Machine 96 inch head	\$_____/per day
25.	Re-Profiling Machine 120 inch head	\$_____/per day

BIDDER NAME: _____

AUTHORIZED SIGNATURE: _____

TITLE: _____

ADDRESS: _____

E-Mail Address: _____

TELEPHONE: _____ FAX: _____

SLURRY SEAL BITUMINOUS OVERLAY

BID PRICING PAGE

SLURRY

- 26. Type 2 Slurry Seal / Truck Mounted \$ _____/Square Yard
- 27. Type 2 Slurry Seal / Continuous Machine \$ _____/Square Yard
- 28. Type 3 Slurry Seal / Truck Mounted \$ _____/Square Yard
- 29. Type 3 Slurry Seal / Continuous Machine \$ _____/Square Yard

BIDDER NAME: _____

AUTHORIZED SIGNATURE: _____

TITLE: _____

ADDRESS: _____

E-Mail Address: _____

TELEPHONE: _____ FAX: _____

CERTIFICATION OF COMPLIANCE WITH THE IRAN DIVESTMENT ACT

As a result of the Iran Divestment Act of 2012 (Act), Chapter 1 of the 2012 Laws of New York, a new provision has been added to the State Finance Law (SFL), § 165-a, effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list (prohibited entities list) of “persons” who are engaged in “investment activities in Iran” (both are defined terms in the law). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act’s effective date, at which time it will be posted on the OGS website.

By submitting a bid in response to this solicitation or by assuming the responsibility of a Contract awarded hereunder, Bidder/Contractor (or any assignee) certifies that once the prohibited entities list is posted on the OGS website, it will not utilize on such Contract any subcontractor that is identified on the prohibited entities list.

Additionally, Bidder/Contractor is advised that once the list is posted on the OGS website, any Contractor seeking to renew or extend a Contract or assume the responsibility of a Contract awarded in response to the solicitation, must certify at the time the Contract is renewed, extended or assigned that it is not included on the prohibited entities list.

During the term of the Contract, should Madison County receive information that a person is in violation of the above-referenced certification, Madison County will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then Madison County shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

Madison County reserves the right to reject any bid or request for assignment for an entity that appears on the prohibited entities list prior to the award of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the prohibited entities list after contract award.

Signed

Title

Company Name

Sworn to before me this

_____ day of _____, 2014

Notary Public

PROPOSAL OR BID

In compliance with the foregoing Invitation for Bids, and subject to all the conditions thereof the Undersigned offers and agrees, if this Bid be accepted within a reasonable time from date of opening Bids, to enter into a Contract in accordance with the price and/or prices stated herein.

The awarding of this Bid by the Madison County Purchasing Agent to the successful Bidder, shall constitute a Bidding Contract between the parties, the successful Bidder agreeing to comply with all the Provisions of the Bidder's Specifications, the Legal Advertisement, General Conditions, Instructions to Bidders and Specifications applying, from part of this Proposal.

PRICING

REFER TO PRICING PAGE

Signature with the Title of person authorized to sign and the names of any other parties interested in this Proposal. (See instructions to Bidders).

SIGN HERE: _____

NAME OF COMPANY: _____

BY: _____

TITLE: _____

CAUTION – HAVE YOU PROPERLY SIGNED YOUR BID?

If certified check or cash is required, have you enclosed same herewith?

DATE: _____

ADDRESS: _____

TELEPHONE: _____

NON-COLLUSIVE BIDDING CERTIFICATION
(SEE GENERAL MUNICIPAL LAW – SECTION 103-D)

BY SUBMISSION OF THIS BID, THE BIDDER AND EACH PERSON SIGNING ON
BEHALF OF THE BIDDER, CERTIFY UNDER PANALTY OF PERJURY TO THE
BEST OF KNOWLEDGE AND BELIEF:

1. The prices in this Bid, have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor;
2. Unless otherwise required by Law, the prices which have been quoted in the Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder, prior to opening, directly or indirectly, to any other Bidder or to any competitor; and
3. No attempt has been made or will be made by the Bidder to induce any other person, partnership, or corporation to submit a Bid for the purpose of restricting competition.

THE FOREGOING STATEMENT IS AFFIRMED AS TRUE UNDER PENALTY OF PERJURY.

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

DATE: _____

**MADISON COUNTY
DIVISION OF PURCHASE
COUNTY OFFICE BUILDING
WAMPSVILLE, NEW YORK 13163**

NON-BIDDER'S RESPONSE

For the purpose of maintaining an accurate bidder's list and facilitating your response to our bid proposals, Madison County is interested in ascertaining reasons for prospective bidder's failure to respond to invitations to bid.

If you are not responding to this bid, please indicate your reasons by checking any appropriate items below and returning this form to the above address. Your cooperation will be greatly appreciated.

We are not responding to this bid proposal for this reason:

- Items or materials are not manufactured by us or not available to our company.
- Our items or materials do not meet these specifications.
- Specifications not clearly understood or applicable (too vague, too rigid, etc.).
- Quantities too small.
- Insufficient time allowed for preparation of bid.
- Incorrect address used. Our correct mailing address is:

Other reasons: _____

Please Respond:

We are unable to bid at this time but would like to continue to receive bid proposals.

We are unable to bid and wish to be removed from the interested Bidders List.

FIRM NAME: _____

ADDRESS: _____

SIGNATURE: _____

TITLE: _____ **DATE:** _____

BID NAME: _____ **REF. NO.:** _____