



Borough of Chambersburg

*A full service municipality in Franklin County
celebrating over 65 years of consumer owned natural gas service
over 120 years of community electric and a
regional wastewater, water, and municipal solid waste utility*

April 10, 2026

ADDENDUM NO. 2

To the Contract Documents for

Streets for Microsurfacing

for

The Borough of Chambersburg

In accordance with the requirements of the “Instructions to Bidders”, this Addendum shall be attached to and become a part of the Contract Documents for the above referenced project.

1. MS-944 Form – Updated document

Please note that line item #2 has been added to each sheet regarding crack sealing

2. Technical Specification - Updated document

Please note that #17 has been added regarding crack sealing

END OF ADDENDUM NO. 2



ATTACHMENT 1

TO MS - 944 (PROPOSAL AND CONTRACT MS - 944)

County: _____

Municipality: _____

Project Number: _____

LOCATION OF WORK:

Micro Surfacing Benedict Avenue - Cul de Sac to Progress Rd.

DESCRIPTION OF WORK:

Micro Surfacing with Polymer Modified Emulsified Asphalt (Type "A"), Class CQS-1hPM as specified in Bulletin 14. Aggregate from Bulletin 14. Filler if needed from section 703.1 of Pub 408.

ESCALATOR CLAUSE:(if adopted by Municipality.)

THIS PORTION TO BE COMPLETED BY THE MUNICIPALITY

SCHEDULE OF PRICES

1 Item No.	2 Approximate Quantities	3 Unit	4 *Description	5 Unit Price	6 Total
1	7,517	S.Y.	Mico Surfacing with Polymer Modified Emulsified Asphalt (Type "A"), Class CQS-1hPM as specified in Bulletin 14. Aggregate from Bulletin 14. Fillere if needed from section 703.1 of Pub 408. Single Application.		
2	7,500	LBS	Rubberized Crack Sealing applied complete in place in accordance with PennDot Pub 408, Section 469. Rubberized Sealant shall be in accordance with 705.41, ASTM 6890 Type I.		

* DESCRIPTION:

Must include ADT on wearing surfaces
USE OF CUTBACK ASPHALT IS PROHIBITED BETWEEN MAY 1st AND OCTOBER 31st, EXCEPT AS NOTED IN BULLETIN NO. 25.
FOR OPTION OR PHASE BIDS THE TOTALS FOR EACH MUST BE INCLUDED.

	SUBTOTAL	
	SUBTOTAL FROM OTHER ATTACHMENTS	
	BID TOTAL FOR A NON OPTION / PHASE BID	
	OPTION 1 OR PHASE 1 BID TOTAL	
	OPTION 2 OR PHASE 2 BID TOTAL	
	OPTION 3 OR PHASE 3 BID TOTAL	



ATTACHMENT 1

TO MS - 944 (PROPOSAL AND CONTRACT MS - 944)

County: _____ Municipality: _____
 Project Number: _____

LOCATION OF WORK:

Micro Surfacing Oyler Drive - Benedict Ave. to Terminus

DESCRIPTION OF WORK:

Micro Surfacing with Polymer Modified Emulsified Asphalt (Type "A"), Class CQS-1hPM as specified in Bulletin 14. Aggregate from Bulletin 14. Filler if needed from section 703.1 of Pub 408.

ESCALATOR CLAUSE:(if adopted by Municipality.)

THIS PORTION TO BE COMPLETED BY THE MUNICIPALITY

SCHEDULE OF PRICES

1 Item No.	2 Approximate Quantities	3 Unit	4 *Description	5 Unit Price	6 Total
1	1,561	S.Y.	Mico Surfacing with Polymer Modified Emulsified Asphalt (Type "A"), Class CQS-1hPM as specified in Bulletin 14. Aggregate from Bulletin 14. Fillere if needed from section 703.1 of Pub 408. Single Application.		
2	7,500	LBS	Rubberized Crack Sealing applied complete in place in accordance with PennDot Pub 408, Section 469. Rubberized Sealant shall be in accordance with 705.41, ASTM 6890 Type I.		
				SUBTOTAL	
				SUBTOTAL FROM OTHER ATTACHMENTS	
				BID TOTAL FOR A NON OPTION / PHASE BID	
				OPTION 1 OR PHASE 1 BID TOTAL	
				OPTION 2 OR PHASE 2 BID TOTAL	
				OPTION 3 OR PHASE 3 BID TOTAL	

*** DESCRIPTION:**

Must include ADT on wearing surfaces
 USE OF CUTBACK ASPHALT IS PROHIBITED
 BETWEEN MAY 1st AND OCTOBER 31st, EXCEPT
 AS NOTED IN BULLETIN NO. 25.
 FOR OPTION OR PHASE BIDS THE TOTALS FOR
 EACH MUST BE INCLUDED.



ATTACHMENT 1

TO MS - 944 (PROPOSAL AND CONTRACT MS - 944)

County: _____ Municipality: _____
 Project Number: _____

LOCATION OF WORK:

Micro Surfacing Lantern Lane - Eisenhower Dr to Hollywell Ave.

DESCRIPTION OF WORK:

Micro Surfacing with Polymer Modified Emulsified Asphalt (Type "A"), Class CQS-1hPM as specified in Bulletin 14. Aggregate from Bulletin 14. Filler if needed from section 703.1 of Pub 408.

ESCALATOR CLAUSE:(if adopted by Municipality.)

THIS PORTION TO BE COMPLETED BY THE MUNICIPALITY

SCHEDULE OF PRICES

1 Item No.	2 Approximate Quantities	3 Unit	4 *Description	5 Unit Price	6 Total
1	14,048	S.Y.	Mico Surfacing with Polymer Modified Emulsified Asphalt (Type "A"), Class CQS-1hPM as specified in Bulletin 14. Aggregate from Bulletin 14. Fillere if needed from section 703.1 of Pub 408. Single Application.		
2	7,500	LBS	Rubberized Crack Sealing applied complete in place in accordance with PennDot Pub 408, Section 469. Rubberized Sealant shall be in accordance with 705.41, ASTM 6890 Type I.		
				SUBTOTAL	
				SUBTOTAL FROM OTHER ATTACHMENTS	
				BID TOTAL FOR A NON OPTION / PHASE BID	
				OPTION 1 OR PHASE 1 BID TOTAL	
				OPTION 2 OR PHASE 2 BID TOTAL	
				OPTION 3 OR PHASE 3 BID TOTAL	

*** DESCRIPTION:**
 Must include ADT on wearing surfaces
USE OF CUTBACK ASPHALT IS PROHIBITED BETWEEN MAY 1st AND OCTOBER 31st, EXCEPT AS NOTED IN BULLETIN NO. 25.
 FOR OPTION OR PHASE BIDS THE TOTALS FOR EACH MUST BE INCLUDED.



ATTACHMENT 1

TO MS - 944 (PROPOSAL AND CONTRACT MS - 944)

County: _____

Municipality: _____

Project Number: _____

LOCATION OF WORK:

Micro Surfacing Parkview Drive - Eisenhower Dr to Hollywell Ave.

DESCRIPTION OF WORK:

Micro Surfacing with Polymer Modified Emulsified Asphalt (Type "A"), Class CQS-1hPM as specified in Bulletin 14. Aggregate from Bulletin 14. Filler if needed from section 703.1 of Pub 408.

ESCALATOR CLAUSE:(if adopted by Municipality.)

THIS PORTION TO BE COMPLETED BY THE MUNICIPALITY

SCHEDULE OF PRICES

Item No.	Approximate Quantities	Unit	*Description	Unit Price	Total
1	2,944	S.Y.	Mico Surfacing with Polymer Modified Emulsified Asphalt (Type "A"), Class CQS-1hPM as specified in Bulletin 14. Aggregate from Bulletin 14. Filler if needed from section 703.1 of Pub 408. Single Application.		
2	7,500	LBS	Rubberized Crack Sealing applied complete in place in accordance with PennDot Pub 408, Section 469. Rubberized Sealant shall be in accordance with 705.41, ASTM 6890 Type I.		
				SUBTOTAL	
				SUBTOTAL FROM OTHER ATTACHMENTS	
				BID TOTAL FOR A NON OPTION / PHASE BID	
				OPTION 1 OR PHASE 1 BID TOTAL	
				OPTION 2 OR PHASE 2 BID TOTAL	
				OPTION 3 OR PHASE 3 BID TOTAL	

*** DESCRIPTION:**

Must include ADT on wearing surfaces
USE OF CUTBACK ASPHALT IS PROHIBITED BETWEEN MAY 1st AND OCTOBER 31st, EXCEPT AS NOTED IN BULLETIN NO. 25.
 FOR OPTION OR PHASE BIDS THE TOTALS FOR EACH MUST BE INCLUDED.



ATTACHMENT 1

TO MS - 944 (PROPOSAL AND CONTRACT MS - 944)

County: Franklin

Municipality: Chambersburg

Project Number:

DESCRIPTION OF WORK:

Microsurfacing for Multiple Streets

THIS PORTION TO BE COMPLETED BY THE MUNICIPALITY

SCHEDULE OF PRICES

Item No.	Description	Total
1	Subtotal for Entire Project	

* DESCRIPTION:

Must include ADT on wearing surfaces
 USE OF CUTBACK ASPHALT IS PROHIBITED
 BETWEEN MAY 1st AND OCTOBER 31st, EXCEPT
 AS NOTED IN BULLETIN NO. 25.
 FOR OPTION OR PHASE BIDS THE TOTALS FOR
 EACH MUST BE INCLUDED.

SUBTOTAL FOR ENTIRE PROJECT:

TECHINICAL SPECIFICATIONS

1. The Contractor shall furnish, erect, and maintain all necessary barricades and signing commensurate with standard safety practices applicable to on-street construction and in compliance with PennDOT Publication 213 entitled "Work Zone Traffic Control".
2. The Contractor is responsible for placing no parking signs 24 hours in advance of the work.
3. The Contractor is responsible for no less than one road closed at any given time.
4. Contractor shall coordinate with Borough Engineering department to ensure proper drainage of asphalt wearing course and shoulder areas prior to the commencement of paving activities.
5. The Contractor shall be responsible for damage to private and public property adjacent to the work area and for damages to utilities within the work area.
6. The Borough shall reserve the right to increase or decrease quantities of any bid item at the unit bid price submitted.
7. The Contractor is responsible for ensuring all manhole covers, utility covers, and inlets grates are covered and protected to prevent micro surfacing from adhering to the covers.
8. Disposal of excavated materials is the responsibility of the Contractor. No excavated materials are to be taken to the Borough Farm unless approval is received from the Borough.
9. The Contractor shall furnish the Borough Engineering Department with the name and telephone number of an individual who shall respond to and correct unsafe conditions within the limitations of the Contract during all non-working hours. A traffic control plan must be submitted to the Borough for approval one week prior to the commence of work.
10. The Contractor shall be responsible for purchase, pickup, delivery, and placement of all materials, unless otherwise listed.
11. The Contractor, after starting, must continue working on project until completed unless otherwise agreed to in writing by the Borough.
12. Bidders are urged to arrange for an on-site inspection of this project prior to submitting a bid.
13. The Contractor cannot close the street during construction except with permission of the Borough Engineering Department. The service center must be contacted before the start of each work day. No Parking signs must be placed 24 hours in advance to street construction. No more than one road shall be closed at any given time. When school is in session, the service center must be contacted one business day in advance to allow the Borough time to notify the schools.
14. All work shall be completed by October 5, 2026
15. Contractor must contact Brian Fogal, Engineering Supervisor, at 717-729-2165 or bfogal@chambersburgpa.gov to coordinate locations on Borough-owned private property for staging and delivery of materials.
16. The Contractor is responsible to apply the micro surfacing in accordance with PennDOT Publication 408 section 483 (section attached).
17. Crack Sealing must be completed before micro surfacing can be applied.

SECTION 483—POLYMER-MODIFIED EMULSIFIED ASPHALT PAVING SYSTEM (MICRO SURFACING)

483.1 DESCRIPTION—This work is the construction of a polymer-modified emulsified asphalt paving system, commonly known as micro-surfacing, to fill ruts and/or resurface existing pavements.

Micro-surfacing material is classified into three mix types as follows:

(a) **Type A.** Used to seal cracks, fill voids and shallow (less than 1/2 inch) ruts, and provide a scratch course or surface seal. Use a double application, when specified, to meet total design pounds per square yard for surface courses.

483.2 MATERIAL—

(a) **Emulsified Asphalt Material.** Class CQS-1hPM as specified in Bulletin 25. Obtain material from an approved producer and source listed in Bulletin 15 and provide quality control testing and certification as specified in Sections 106.03(b) and 702.1(b)1.

1. Polymer Modifier. Provide a latex based modifier capable of making a micro-surfacing mix which cures fast enough to allow traffic to be placed on the pavement within 1 hour, without damaging the surface.

(b) **Aggregate.** Provide coarse or fine aggregates from sources listed in Bulletin 14. Provide fine aggregate Type B or better meeting the quality requirements of Table A, Section 703.1(c) and coarse aggregates meeting the quality requirements of Table B, Section 703.2(a). The final gradation must meet the final gradation specified in Table A of this specification. For wearing courses, provide aggregate with at least the SRL designation specified. To achieve the specified SRL, the Contractor may provide a blend of two aggregates if the blend has an SRL designation equal to or better than that specified. Blends are 50% by weight of each aggregate. Blend the aggregates using an approved method.

(c) **Filler.** Supply filler, when required to maintain the percent by weight passing the 75 μm (No. 200) sieve, as specified in Section 703.1(c)1 consisting of any approved, non-air entrained, Type 1, Portland cement free of lumps or hydrated lime as specified in Section 723.1.

(d) **Water.** Section 720.2 and free of harmful soluble salts.

(e) **Other Additives.** Supplied by the manufacturer to control mix set time in the field due to varying ambient environmental conditions.

(f) **Mixture Composition.** Size, uniformly grade, and combine aggregate fractions in such proportions that the total aggregate and filler in the JMF conform to the composition by weight percentages specified in Table A. Perform the tests identified in Table B for each mix design and provide the test results to document each mix design's characteristics.

Submit a certified mix design(s) using a Micro-Surfacing Mix Design and Materials Analysis Form TR-483 to the DME/DMM at least 2 weeks before its use in the work. Clearly show for each mix design the proportions of aggregate, filler, percent polymer-modified emulsified asphalt and asphalt residue, based on the dry weight of the aggregate, and the design cure time. Ensure all the materials used in the mix design represent the materials proposed for use on the project. If minor adjustments are required during construction, based on field conditions, provide the changes in writing to the Representative.

1. QC Plan and JMF. Prepare a QC Plan, as specified in Section 106, and submit it for review at the start of the project and at least annually thereafter. Include the number of applications and the mix design used with each

application in the QC Plan. Do not start work until the QC Plan has been reviewed and the JMF has been submitted.

When unsatisfactory results or other conditions make it necessary, a new JMF may be required. If a change in sources of materials is made, submit a revised JMF to the DME/DMM before using any new material.

2. Uniformity. Produce each mix type within the ranges specified in Table C.

TABLE A

SIEVE SIZE	COMPOSITION, TOTAL PERCENT BY MASS (WEIGHT PASSING)		
	TYPE A	TYPE B	TYPE RF
12.5 mm (1/2 inch)	100	100	100
9.5 mm (3/8 inch)	100	95 - 100	90 - 100
4.75 mm (No. 4)	85 - 100	65 - 85	55 - 75
2.36 mm (No. 8)	50 - 75	46 - 65	40 - 55
1.18 mm (No. 16)	40 - 65	28 - 45	24 - 40
600 µm (No. 30)	25 - 45	19 - 34	19 - 34
300 µm (No. 50)	13 - 25	10 - 23	10 - 20
75 µm (No. 200)	5 - 15	5 - 15	5 - 15

Note: Material finer than the 75 µm (No. 200) sieve will be determined as per PTM No. 100.

TABLE B

MICRO-SURFACING MIX DESIGN PROPERTIES		
Property	Test Method	Test Requirements
Wet Cohesion:	ISSA TB 139 30 Minutes	12 kg-cm min
	ISSA TB 139 60 Minutes	20 kg-cm min or near spin
Wet Track Abrasion Loss:	ISSA TB 100 1 Hour Soak	50 g/ft ² max
	ISSA TB 100 6 Day Soak	75 g/ft ² max
Mix Time:	ISSA TB 113	120 seconds min
Classification of Compatibility:	ISSA TB 144	11 grade points min
Wet Stripping:	ISSA TB 114	Pass (90% min)
Loaded Wheel Test:	ISSA TB 147	Vertical 10% max, Lateral 5% max

Note: Provide aggregate with a minimum sand equivalency of 65 as determined by AASHTO T 176. If the sand equivalency is < 65, the aggregate may be approved as long as the Plasticity Index (PI) is zero. Test the PI as per AASHTO T 89 and AASHTO T 90 and meets the methyl blue test.

TABLE C

MIX TYPE	MINIMUM SURFACING APPLICATION THICKNESS (inch)	ASPHALT RESIDUE (% by Weight of Aggregate)	SINGLE APPLICATION RATE (Pounds per Square Yard)	DOUBLE APPLICATION RATE (Pounds per Square Yard)
A	1/4	6.0 - 8.5	25-30	35-40
B	3/8	5.5 - 7.5	35- 40	40- 55
RF	N/A	5.5-7.5	22-38	

Note A: Provide mix set additive for each mix type as required.
 Note B: Filler for each mix type to be from 1% to 2%± 0.5% by weight of dry aggregate depending on weather conditions.
 Note C: It is permissible to increase asphalt content for slag and other absorptive aggregates at the discretion of the DME/DMM.

(g) Mixture Acceptance. Provide a certified calibration sheet for the mixing equipment for each mix design to be used within 60 days before its use on the project. Record mixing equipment meter readings of material control devices

on a Run Sheet, daily, for each mix design. Calculate the percent cement or hydrated lime, total emulsion, asphalt residue based on the dry weight of the aggregate, and the yield square yard.

Certify the mixture composition and application rate based on quality control tests and Run Sheet calculations. Send certifications to the Inspector-In-Charge within 1 working day following any quality control testing. Certify mixtures and each shipment of material delivered to the job site as specified in Section 106.03(b)3.

(h) Asphalt Tack Coat. Section 460.2

(i) Certification. Section 106.03(b)3.

Certify each shipment of material delivered to the job site.

483.3 CONSTRUCTION—

(a) Preplacement Meeting. Hold a preplacement meeting on site or at a location that is acceptable to the Representative with both Contractor and PennDOT personnel present before placing any material on the project. Identify any areas of concern in the pavement that may show any signs of fatigue or excessive rutting at the pre-placement meeting. Also review the Specification, QC Plan, source of supply list, and the Aggregate Delivery Plan. It may be necessary to hold more than one preplacement meeting on larger projects with multiple State Routes.

(b) Weather Limitations. Apply when entire surface is in a condition to allow satisfactory penetration and adhesion and the atmospheric temperature is 50F minimum during the entire placement. Under no circumstances will the 50F minimum temperature requirement to be waived even for night work. Do not apply mixture if rain is imminent or if freezing temperatures are expected within 24 hours after application. Remove and replace rained on mixture before it sets. Do not apply from September 16 to April 30 in Districts 1-0, 2-0, 3-0, 4-0, 10-0, and 5-0 (Monroe, Carbon, and Schuylkill Counties only) and from October 1 to April 30 in Districts 6-0, 8-0, 9-0, 11-0, 12-0, and 5-0 (Berks, Lehigh, and Northampton Counties only). No exceptions to weather limitations will be allowed, unless directed in writing by the District Executive.

(c) Aggregate Delivery Plan. Before the start of work, submit an Aggregate Delivery Plan to the DME/DMM for approval. Include in the plan the number of trucks that will be used to haul aggregates to the micro-surfacing machine in order to keep it moving continuously to limit starting and stopping.

All aggregates being delivered to the micro-surfacing machine must be screened directly into the truck.

All screening plants must be equipped with a scalping screen with a 3/8 inch maximum square opening for Type A and with a 1/2 inch maximum square opening for Type B and Type RF.

(d) Mixing Equipment. Produce mixture in a self-propelled, front feed, continuous-loading mixing machine equipped with a chain-dragged conveyor belt aggregate delivery system interconnected with a positive displacement, water-jacketed gear pump to accurately proportion ingredients. Truck mounted units may be allowed on projects less than 20,000 square yards except for limited access highways and for all municipal projects. Locate filler feed so that the proper amount of cement is coating the aggregate before charging into the mixer. Provide a spray bar to completely wet the aggregate dropping down into the pug mill with additive and water.

Provide a continuous-flow, twin shafted, multi-bladed pug mill at least 50 inches long. Introduce polymer-modified emulsified asphalt beyond the first quarter point of the mixer to ensure thorough mixing of aggregate, cement, additive, and water before polymer-modified emulsified asphalt is added. Meet manufacturer's recommendations for blade size and side clearance. Provide readily accessible material control devices, placed so that the Inspector is able to determine the amount of each material being used at any time. Calibrate each material control device before production of each mix type. Equip the machine with a water pressure system and nozzle spray bar to provide a water spray ahead of and outside the spreader box, when required.

(e) Spreading Equipment. Spread the mixture uniformly by means of a mechanical type squeegee box attached to the mixer and equipped with paddles mounted on adjustable shafts to continually agitate and distribute the material throughout the box. Provide sufficient turbulence to prevent the mix from setting up in the box, forming excessive side build-up, or forming lumps. Attach flexible front and rear seals, in contact with the road, to prevent loss of mixture from the box. Furnish rut filling equipment with movable steel strike-off bar. Operate spreading equipment to prevent loss of the mixture on super elevated curves and to leave a uniform, skid-resistant application of aggregate and asphalt on the surface. Operate spreading equipment to achieve a uniform consistency without skips, lumps, or

tears in the finished surface.

(f) Conditioning of Existing Surface. Section 413.3(g)1 and as follows:

Immediately before placing mixture, clean the surface of vegetation, loose materials, dirt, mud, and other objectionable items. Ensure all pavement markings and legends are completely removed before placing any mixture. Before placing mixture on existing concrete surfaces, apply tack coat over the entire area as specified in Section 460. Do not apply tack coat on existing asphalt surfaces. Apply water to dampen entire surface immediately before placing mixture.

(g) Spreading and Finishing. Section 413.3(h) and as follows:

Spread the mixture to seal cracks, fill voids, and to leave a uniform surface. When filling ruts, take care to restore the designed profile of the pavement cross section. Avoid excess crowning (over filling) of rutted areas. Use squeegees and lutes in areas inaccessible to the spreader box.

Carry a sufficient amount of material at all times, in all parts of the spreader box, to obtain complete coverage. Water may be sprayed into the spreader box, to facilitate spreading, without harming the mix. Lumps, balls, or unmixed aggregate in the finished surface is not allowed.

Adjustments to the additive may be required to slow mixture set time where hand spreading is needed. When hand spreading, pour mixture in a small windrow along one edge of the surface to be covered and spread uniformly by hand squeegee or lute.

Make a neat seam where two passes join. Immediately remove excess material from the ends of each run.

1. General Requirements. Ensure mixture properly sets within one hour of placement. If mixture takes longer than one hour to properly set, the Representative will give the Contractor a warning and an opportunity to immediately correct mixture application and set time. If the mixture takes longer than one hour and twenty minutes to properly set, stop placement operations immediately.

2. Mixture Set Time. Remove and replace mixture if mixture set time takes longer than one hour and twenty minutes.

(h) Compaction. Before opening to traffic, compact using a pneumatic-tire roller as specified in Section 108.05(c)3.f, except having tire pressures of 40 pounds per square inch to 60 pounds per square inch. Roll the entire surface area of the placed mixture. On a double application, roll the entire surface area of the placed mixture for each application.

(i) Sampling and Testing. At least 2 weeks before the start of work, under the direction and supervision of the Representative, obtain samples of the aggregates from stockpiles designated and constructed for each mixture type and each project. Obtain a minimum sample size of 3 pounds using guidelines for stockpile sampling specified in PTM No. 607. Immediately deliver the samples to the Representative for testing. Passing aggregate acceptance test results are required before placement of the mixture. All acceptance samples will be obtained and all acceptance tests will be performed by the Representative according to PTM No. 616 and PTM No. 100 using the following frequency:

- **When the projected quantity of aggregate for the specified mixture type is less than 500 tons.** The entire quantity will be designated as one lot and divided into three equal sublots for sampling. Under the direction and supervision of the Representative obtain a sample from each subplot and immediately deliver the samples to the Representative for testing. One of the three subplot samples will be randomly selected and tested according to PTM No. 1 by the Representative and tested for compliance with Table A. If the sample tested meets the specification, the entire lot will be considered acceptable for delivery to the designed project. If the sample fails, the remaining two samples will be tested and the Representative will determine the percent within limits (PWL) according to Section 106.03(a)3. If results indicate a PWL for the material less than 90, the Representative will reject the stockpile. After the entire rejected lot has been blended, screened, or replaced, retesting for acceptance of the aggregate will be performed. If retesting is performed, all subplot samples will be tested as specified in Section 703.5(b)2. All acceptance testing will be performed by the Representative. All test results will be recorded on a TR-4126A aggregate report form.

- **When the projected quantity of aggregate for the specified mixture type is 500 tons or greater.** The aggregates will be divided into equal lots at the discretion of the aggregate supplier, but in no case will the lot exceed 1000 tons. Each lot will be divided into three equal sublots. Under the direction and supervision of the Representative obtain a sample for each subplot. All three samples for each lot will be tested and the Representative will determine the percent within limits (PWL) according to Section 106.03(a)3. If results indicate a PWL for the material less than 90, the Representative will reject the stockpile. If the test results for each lot meets the specification and are in compliance with Table A, the entire lot is acceptable for shipment to the project. If the test results fail to meet the specifications, the lot will be rejected. Retesting for lot acceptance will be performed as described above. All acceptance testing will be performed by the Representative. All test results will be recorded on a TR-4126A aggregate report form.

(j) Blending Aggregates on the Project. Requests to blend aggregates on the project to meet gradation requirements from Table A and the method of blending must be approved in writing by the DME/DMM before the start of work. Include on the QC Plan a detailed description of equipment used to blend aggregates, a list of supplier codes for aggregates being blended, and the percentages of each aggregate being blended. Set up a portable laboratory at the blending site equipped to perform PTM No. 616 and PTM No. 100 tests for acceptance of aggregates on the project. The Contractor's aggregate technician must be a PennDOT certified aggregate technician before performing any aggregate testing at the staging area in the presence and direction of the Representative. Aggregates will be accepted as specified in Section 483.3(i). Provide aggregate for use in all mixture Types including each application of a double application of a mixture Type having the SRL designation indicated in the bid proposal. An aggregate designation or blends, equal to or better than that specified, may be supplied.

(k) Test Strip. On the first day of work the Representative will identify a location to perform the test strip. The test strip will be prohibited on a limited access highway. Construct a test strip to demonstrate the mixture's ability to be laid in multiple stone thicknesses and to be opened to traffic within one hour after placement. Construct the test strip in the same manner and condition as required on the project. Construct the test strip over one-full lane width and between 100 feet and 550 feet long. Apply the mixture at an application rate representative of the application rate for the project. Test the mixture according to ISSA Test Method TB 102 in the presence of the Representative. The Representative will evaluate and approve the test strip based on its ability to be opened to traffic within one hour and on its ability to have a set time of 10 minutes, maximum, as determined by ISSA Test Method TB 102.

Do not continue with work until the Representative has approved the test strip. The Representative does not have the authority to waive or eliminate the test strip requirement. If this work is to be performed a test strip is mandatory. The test strip will be payable as specified in Section 483.4.

(l) Defective Work. As specified in Section 105.12 and as follows:

Unless otherwise directed in writing by the District Executive, satisfactorily correct pavement not meeting the following criteria:

1. Application Rate. Calculate yield at the end of each day's application. Areas where application rates deviate from the acceptable ranges in Table C will be considered defective work. Failure to meet the acceptable ranges in Table C will require an additional minimum 15 pounds per square yard application or the District Executive, with the concurrence of the Director of the Bureau of Project Delivery, may allow the Contractor to leave the defective lot in place. The Department will pay for the defective lot at 50% of the contract unit price.

2. Finished Surface. Provide a finished, uniform surface texture meeting the following requirements:

- No areas of excess emulsified asphalt (flushing) greater than 5% of the finished surface area. Areas of excess emulsified asphalt are characterized by a smooth, shiny surface that may be tacky to the touch. Bleeding at joints is not allowed.
- No tear and/or drag marks greater than 1 inch wide and 3 inches long.
- No more than 12 tear and/or drag marks greater than 1/2 inch wide and 4 inches long per 10 feet of a lane.
- No clumps and/or other foreign objects greater than 1 1/2 inch in diameter.

- No completed sections of micro-surfacing which exhibit washboard or ripple patterns exceeding 100 linear feet. If these areas exist they will be considered defective work, as determined by the Representative, and will require surface correction.
- No longitudinal streaks with greater than a 1/4 inch ridge, bump or depression, as measured with a 10 foot long straightedge.

3. Longitudinal Joints. Make a neat seam where two longitudinal passes join with no greater than a 1/4 inch bump, ridge, or depression as measured with a 12 foot straightedge. Do not overlap longitudinal joints more than 4 inches, except on irregular roadway widths when approved by the Representative.

4. Longitudinal Edges. Place material to the final widths specified. Make a neat longitudinal edge along the roadway lane, shoulder, and/or curb lines. Place edges flush with curbs. Place edges with no more than ± 3 inches horizontal variance in any 100 feet of roadway.

5. Transverse Profile. Fill ruts to have no depressions as measured with a 12 foot long straightedge.

(m) Opening to Traffic. Do not allow traffic on newly completed surface course until mix has set sufficiently to prevent pick-up and until directed by the Representative.

483.4 MEASUREMENT AND PAYMENT—

(a) Micro-Surfacing.

1. Area Basis. Square Yard

2. Weight Basis. Ton

Under the direction and supervision of the Representative complete measurements based on the combined tonnages of aggregate, filler, and polymer-modified emulsified asphalt actually used; computed as follows:

- **Aggregate.** Measure aggregate quantity using the calibrated, dry weight from the aggregate control device. Make a deduction for moisture naturally occurring in the aggregate by using PTM No. 513.
- **Filler.** Compute filler quantity from the fines feeder control device.
- **Polymer-modified emulsified asphalt.** Compute polymer-modified emulsified asphalt quantity by weight used.

(b) Asphalt Tack Coat. Section 460.4



Borough of Chambersburg

*A full service municipality in Franklin County
celebrating over 65 years of consumer owned natural gas service
over 120 years of community electric and a
regional wastewater, water, and municipal solid waste utility*

NOTICE OF RECEIPT

I have received the Addendum No. 2 for

the Streets for Microsurfacing

Company

Contact Person

Date Received

Mail to: Amber Kelly
Borough of Chambersburg
100 South Second Street
Chambersburg, PA 17201
or Fax: 717-261-3240
email: akelly@chambersburgpa.gov