AN ORDINANCE TO AUTHORIZE CONTRACT 17004PW - BITUMINOUS CONCRETE - WITH DIAMOND MATERIALS, LLC.

WHEREAS, pursuant to Section 2-308 and Section 8-200 of the City Charter, City Council may, by Ordinance, authorize contracts for the supply of property or the rendering of services for more than a period of one year; and

WHEREAS, the City publicly advertised the specifications for Contract 17004PW – Bituminous Concrete ("the Contract") – in accordance with Section 8-200 of the City Charter, and subsequently awarded the Contract, a copy of which is attached hereto and incorporated by reference herein as Exhibit "A," to Diamond Materials, LLC ("the Contractor"), the lowest responsible bidder; and

WHEREAS, the term of the Contract is for a period of one (1) year beginning on or about July 1, 2016, with the possibility of two, one-year extensions, on the same terms and conditions, at the option of the City, at a cost of Ninety Two Thousand Three Hundred Seventy Five Dollars (\$92,375.00); and

WHEREAS, it is the recommendation of the Department of Public Works that the City enter into the Contract with the Contractor as stated above, a copy of which Contract, in substantial form, is attached hereto as Exhibit "A."

THE COUNCIL OF THE CITY OF WILMINGTON HEREBY ORDAINS:

SECTION 1. Contract 17004PW – Bituminous Concrete – between the City and Diamond Materials, LLC, a copy of which Contract is attached hereto as Exhibit "A," for a period of one (1) year beginning on or about July 1, 2016, with the possibility of two, one-year extensions, on the same terms and conditions, at the option of the City, at a cost of Ninety Two Thousand Three Hundred Seventy Five Dollars (\$92,375.00), is hereby approved, and the woos4315.

#4203

Sponsor:

Council Member Shabazz Mayor, or his designee, and the City Clerk are hereby authorized to execute as many copies of the Contract, as well as all additional undertakings related thereto, as may be necessary.

SECTION 2. This Ordinance shall be effective upon its passage by City Council and approval of the Mayor.

> First Reading May 5, 2016 Second Reading. . . May 5, 2016 Third Reading ... July 7, 2016

Passed by City Council. July 7, 2016

President of City Council

Approved as to form this 25 th day of April 2016

First Assistant City Solicitor

Approved this <u>12</u> day of <u>July</u>, 2016

SYNOPSIS: This Ordinance authorizes the City to enter into Contract 17004PW - Bituminous Concrete - between the City and Diamond Materials, LLC, for a period of one (1) year beginning on or about July 1, 2016, with the option of two, one-year extensions, on the same terms and conditions, at the option of the City, at a cost of Ninety Two Thousand Three Hundred Seventy Five Dollars (\$92,375.00).

IMPACT STATEMENT

This Ordinance authorizes the City to enter into Contract 17004PW B Bituminous Concrete B between the City and Diamond Materials, LLC, for a period of one (1) year beginning on or about July 1, 2016, with the option of two, one-year extensions, on the same terms and conditions, at the option of the City, at a cost of Ninety Two Thousand Three Hundred Seventy Five Dollars (\$92,375.00).

CITY CONTRACT 17004PW
BITUMINOUS CONCRETE
BETWEEN
CITY OF WILMIINGTON
AND
DIAMOND MATERIALS, LLC



Classified Ad Receipt (For Info Only - NOT A BILL)

Customer:

SD CITY WILM PURCHASING DIV

Address:

800 N FRENCH ST FL 5

WILMINGTON DE 19801

USA

Run Times: 1

Run Dates: 03/01/16

Text of Ad:

NOTICE TO BIDDERS
The City of Wilmington
will receive sealed bids
at the Division of Procurement &
Records, 5th FL,
Louis L. Redding Bldg.,
800 French St., Wilm., DE 19801 for:

17004PW – BITUMINOUS CONCRETE

Bid opening: Thursday, March 17, 2016, at 3:00 p.m., in the 5th Floor Finance Conference Room, Louis L. Redding City/County Building, 800 nch Street, Wilmington, DE 301.

Specifications may be obtained at the above address for the Division of Procurement & Records.

Philip Ceresini Purchasing Agent II Division of Procurement and Records Department of Finance 3/1-NJ

----0001082746-01

Ad No.:

Pymt Method

Net Amt:

No. of Affidavits:

1

INSTRUCTIONS TO BIDDERS

Bids on City Contract <u>17004PW – BITUMINOUS CONCRETE</u> will be publicly opened and read out in the 5th Floor Finance Conference Room, Louis L. Redding City/County Building, 800 French Street, Wilmington, DE 19801 on THURSDAY, MARCH 17, 2016, AT 3:00 p.m.

- 2. Proposals must be in triplicate, sealed in an envelope, and the envelope endorsed "Bid for City Contract 17004PW BITUMINOUS CONCRETE" and addressed to the Department of Finance, Division of Procurement and Records, 5th Floor, Louis L. Redding City/County Building, 800 French Street, Wilmington, Delaware.
- 3. Any bid may be withdrawn prior to the schedule time for opening of bids or authorized postponement thereof. No bid may be withdrawn within thirty (30) calendar days after the actual opening thereof.
- 4. The successful bidder will be required to have or obtain an appropriate business license from the Department of Finance, Revenue Division, City of Wilmington, in order to be awarded the contract. Before obtaining a City of Wilmington Business License, all applicants must show proof of a current State of Delaware Business License.
- 5. The corporation, the successful bidder shall furnish a certificate from the State where it is incorporated, stating that it is a subsisting corporation. The corporation shall also furnish one (1) original and two (2) copies of the excerpts of the corporate minutes, which grant authority to those who sign and attest the contract. The Corporate Seal shall be affixed where signatures are attested.
- 6. The successful bidder will be required to withhold City of Wilmington Wage Tax from their employees and withheld taxes paid to the City of Wilmington pursuant to the provisions of the Wilmington Wage Tax Law. This law applies to people living and/or working in the City of Wilmington.
- The U.S. Department of Commerce monitors Procurement transaction made to minority business enterprises by .e City of Wilmington. The Minority Business Developments Agency's District Office reserves the right to contact the successful minority bidder and/or subcontractor to confirm any participation in the Procurement process.
- 8. The successful bidder certifies that they are not listed on the Federal Government, Excluded Parties List System (www.sam.gov). This will be verified by the City of Wilmington and if listed may be grounds for rejection of the bid or proposal.
- 9. Any person doing business or seeking to do business with the City shall abide by the following Global Sullivan Principles:
 - A. Support universal human rights and particularly, those of employees, the communities within which you operate, and parties with whom you do business.
 - B. Promote equal opportunity for employees at all levels of the company with respect to issues such as color, race, gender, age, ethnicity, or religious beliefs, and operate without unacceptable worker treatment such as the exploitation of children, physical punishment, female abuse, involuntary servitude, or other forms of abuse.
 - C. Respect employee's voluntary freedom of association.
 - D. Compensate employees to enable them to meet at least their basic needs and provide the opportunity to improve their skill and capability in order to raise their social and economic opportunities.

- E. Provide a safe and healthy workplace; protect human health and the environment; and promote sustainable development.
- F. Promote fair competition including respect for intellectual and other property rights, and not offer, pay, or accept bribes.
- G. Work with governments and communities in which you do business to improve the quality of life in those communities -- their educational, cultural, economic, and social well-being -- and seek to provide training and opportunities for workers from disadvantaged backgrounds.
- H. Promote the application of these principles by those with whom you do business.

10. Award and Execution of Contract

A. Consideration of Proposals. After the proposals are opened and read, they will be compared on the basis of the summation of the products of the approximate quantities shown in the bid schedule by the unit bid prices, unless the proposals states a different basis for comparing bids. In the event of a discrepancy between unit bid prices and extensions, the unit bid price shall govern.

Before awarding the contract, a bidder may be required to show that he/she has the ability, experience, necessary equipment, experienced personnel, and financial resources to successfully carry out the work required by the contract.

The right is reserved to reject any and/or all proposals, to waive technicalities, to advertise for new proposals, or to proceed to do the work otherwise, if in the judgement of the department the best interest of the City will be promoted thereby.

- B. Award of Contract. The award of the contract, if it be awarded, must be within thirty (30) calendar days after the opening of proposals to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by letter mailed to the address shown on his proposals that his bid has been accepted and has been awarded the contract.
- C. Cancellation of Award. The City reserves the right to cancel the award of any contract at any time before the execution of said contract by all parties without any liability against the City.
- D. Right to Audit. The City Auditor or his designee shall have the right to audit the contract and any books, documents, or records relating thereto.

Questions should be directed to Phil Ceresini via email at <u>pceresini@wilmingtonde.gov</u>. Questions will not be accepted within 1 week of bid opening.

THIS CONTRACT DOES NOT REQUIRE A BID BOND OR PERFORMANCE BOND.



CITY OF WILMINGTON, DELAWARE

SPECIFICATIONS FOR CONTRACT BITUMINOUS CONCRETE CONTRACT 17004PW

City of Wilmington
Department of Public Works
Feb 2016

GENERAL:

This contract is for the furnishing and delivering of various types of Bituminous Concrete Mixes as specified and in accordance with these Special Provisions.

The term of this contract will begin on or about July 1, 2016 and end on June 30, 2017. The City of Wilmington will have the option to extend this contract for two (2) additional periods of one (1) year each which will run from the following July 1st until June 30th. All terms and conditions of the contract will remain the same. The City will give 60 days' advance written notice if the contract is to be extended. Materials in this contract shall be supplied "AS REQUIRED" in accordance with the unit prices bid for each item. The quantities that appear on the Proposal Form are approximate only and will be the basis for comparing bids. The City of Wilmington makes no guarantee as to the total quantity of any type of material that will be purchased under this contract. The Proposal Form quantities are only an estimate of the requirements of the City of Wilmington during the period the contract is in effect.

The City will consider both the material price and location of the bidder for each of the materials with respect to "picked up" and "delivered" costs. Based on the best value for each material, the City reserves the right to award this contract all or in part to multiple vendors where it serves the best interest of the Department of Public Works and the City at large.

The City of Wilmington agrees to purchase materials covered by this contract from the contractor/contractors under the terms of this contract.

In the event that the contractor is unable or unwilling by any reason or circumstance or combination of circumstances, to supply material or make deliveries upon request, of the quantity or quality of material as specified, within the period of time hereinafter specified, the City of Wilmington reserves the right to purchase said materials elsewhere. At the City's discretion, if delivery problems continue, the City of Wilmington may temporarily discontinue purchasing the subject item from the successful bidder of this contract and continue to purchase it elsewhere at no penalty to either the City or the contracted supplier. Need of these materials is critical and cannot wait. For prolonged non response from the supplier the City at its discretion may terminate the contract.

The City of Wilmington agrees to give notice to the contractor according to the following schedule for all deliveries made in any working day:

1.	For materials delivered in supplier's truck	s:
••	5 to 50 tons 8 hours	
	50 to 200 tons 24 hours	
2.	For materials delivered in City's trucks:	
7	1 to 50 tons 1 hour	Š
	50 to 200 tons 4 hours	

The contractor agrees to perform in accordance with the above schedule and shall either deliver or load City trucks upon demand provided the notice had been properly given.

The contractor may bill the City as soon as the quantity of materials is received and accepted by the City at the unit prices bid for each item, and under the terms and conditions of this contract.

Certified weight slips shall be the method of measurements and the basis for payment, which price and payment shall be full compensation for deliveries accepted as stated above.

The City of Wilmington retains the right to terminate this contract for the convenience of the City upon 2 weeks written notice.

The successful bidder must have a, state approved, plant located within (5) road miles of the City Public Works Yard located at 1450 New York Avenue, Wilmington, DE 19801.

In the event that delivered material does not meet the specifications requirements, the City of Wilmington may at its option, require the supplier to remove and replace such material, or leave the below standard material in place without payment to the contractor.

By reference, the following specifications are incorporated herein:

Department of Transportation, "Standard Specifications for Road and Bridge Construction, August 2001", as amended on the advertisement date of this contract.

The attached clauses relate in particular to furnishing of material and represent modifications to and/or clarification of the specifications noted above.

In case of conflict, these Special Provisions shall take precedence and shall govern.

DESCRIPTION OF PROJECT. The contractor is advised that this contract is considered a supply contract. The quantities in the proposal are based on estimated needs.

Notice is hereby provided that the City may increase or decrease the quantities purchased as deemed necessary or expedient. An increase or decrease in the quantity will not be regarded as grounds for an increase or decrease in the unit prices.

SCOPE. The contractor shall supply materials listed within the contract and other like material approved by the Engineer to the designated delivery location(s) or picked up by City trucks.

PRICES QUOTED. The prices quoted are that for which the material will be furnished F.O.B. contractor's production facility or point(s) of delivery as indicated and shall include all charges that may be imposed during the life of the contract(s).

Questions can be directed to Mr. Phil Ceresini, Purchasing Agent with the City of Wilmington by e mail at peeresini@wilmingtonde.gov. Questions will be accepted up to one week in advance of the bid opening.

QUANTITY ESTIMATES COLD PATCH/HIGH PERFORMANCE COLD PATCH

.	Description	Quantity	Unit
Item 1	Superpave, Type C, Hot-Mix, 160GYR, PG 64-22, Patching and/or WMA Superpave, Type C, 160GYR, PG 64-22, Patching Pickup	375	Ton
2	Superpave, Type B, Hot-Mix, 160GYR, PG 64-22, Patching and/or WMA Superpave, Type B, 160GYR, PG 64-22, Patching Pickup	50	Ton
		150	Ton
3	Cold Patch, Delivered	300	Ton
4	Cold Patch, Pickup		

City of Wilmington Quarterly Usage Report Form (Sample)

			No.	Cit t Mix C	y of luar	Wilmin terly Us	gton age Re	port				
roject	Name	1	I RO	Citata S			Number					
Supplier Contact N						Report Er Today's C	nd Date:					
Contact F	hone: Involce	Carron elven		quantity	UANA	The state of	Nix Cost	%AC Added	AG Tons	Posted ACIPAGE	AC Adjustment Cost	Total Cost
Date	No.	Item No.	Item Description			Artce		Added			Cost	
					-							
				-								
	4				-							

A copy of the Usage Report will be sent by electronic mail to the Awarded Vendors.

The Usage Report shall be submitted electronically by the vendors in **EXCEL** and sent as an e-mail attachment on a quarterly basis to Rae'nita Shazier @ rshazier@wilmingtonde.gov, Marlyn Dietz of the Department of Public Works at, mdietz@wilmingtonde.gov and Jordan Oncay at, imoncay@wilmingtonde.gov

DESCRIPTION:

The materials used for this work can be Cold Patch, Superpave items or Warm Mix Asphalt Superpave items.

MATERIALS:

The materials used for this item shall meet the applicable specifications for Cold Patch, Superpave or Warm Mix Asphalt per DelDOT specifications. All applicable specifications shall govern for the Patching items listed below (materials only):

402099- COLD PATCH MATERIALS

401665 - SUPERPAVE, TYPE C HOT-MIX, 160 GYRATIONS, PG 64-22, PATCHING 401666 -SUPERPAVE, TYPE B HOT-MIX, 160 GYRATIONS, PG 64-22, PATCHING

401821 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING 401822 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING

METHOD OF MEASUREMENT:

The quantity of material to be paid for shall be the number of units of material conforming with all the requirements, furnished in accordance with these provisions.

Where applicable weights will only be accepted as showing the actual amount of material, delivered and/or picked up by City forces, if verified by certified and stamped weight slips and signed by a certified weigh master.

BASIS OF PAYMENT:

The quantity of hot-mix hot-laid bituminous concrete and or cold patch will be measured as the actual number of tons for hot-mix and or cold patch delivered or picked up by the City. The weight shall be calculated as specified in DOT Standard Specifications Subsection 109.01. Price shall include the quarterly reporting of material either picked up or delivered to the City of Wilmington.

COLD PATCH / HIGH PERFORMANCE COLD PATCH

DESCRIPTION. Cold-Mix material, including regular cold patch, high performance cold patch, and summer cold patch, shall be a uniform mixture of compatible mineral aggregate and bituminous material further described herein. The aggregate shall be uniformly coated with no stripping of the bituminous material from the aggregate. The mixture shall be capable of being stored in a stockpile for a period of at least six months without hardening or stripping and shall remain workable during all expected weather conditions during this storage.

The specification requirements below are for regular cold patch, high performance cold patch, and summer cold patch except as noted differences.

MATERIALS.

Aggregate - The aggregate employed in the target gradation of the job mix formula (JMF) shall conform to Section 805 of the Standard Specifications and the requirements listed

Test Method	Specification Limits
Toughness, AASHTO T96	40
Percent Loss, Maximum Soundness, AASHTO T104 Percent Loss, Maximum for five cycles	20
Deleterious Materials, AASHTO T1 12	10
Percent, Maximum	

Bituminous Material - The bituminous material shall be an approved cold patch binder. The temperature of the bituminous material shall not exceed 170° F or as otherwise recommended in writing by the supplier. The bituminous material shall be piped directly from the transporting tanker into the mixing plant without an intermediary holding tank.

In addition, the high performance liquid shall meet the following requirements:

	Ten Ten	Specification Limit
- 07	ASTM D1310	200
Flash Point (°F min)	ASTM D2170	350 - 4,000
Cinematic Viscosity@ 140°F cSt (mm²/s)	ASTM D95	0.2
Percentage of Water (% max) Distillate Test (% vol. of original sample) Fo 437°F Fo 500° F Fo 600°F Residue from distillate at 680°F	ASTM D402	0 0-5 0-18 72-95

Test on Residue from Distillate

Test	Specification Limit
ASTM D2170	125 – 425
ASTM D5	180
ASTM D1 13	100
ASTM D2402	99
	ASTM D2170 ASTM D5 ASTM D1 13

Summer cold patch shall be a mixture meeting DNREC requirements for the ozone season of May 1 – September 31.

SUBMISSION AND APPROVAL REQUIREMENTS. The proposed mixing facility must be an approved Del DOT production facility.

The mix design formula of the bituminous material shall be submitted to and approved by the City prior to production. The mix design formula shall be a Del DOT approved mix design. This submittal shall include: aggregate sources, bituminous material source, master ranges for the gradation, and percentage of bituminous material in the mixture.

JOB MIX FORMULA. The job mix formula shall be within the following limits.

Sieve Size	% Passing
3/8" (9.5 mm)	100
No. 4 (4.75 mm)	55 - 90
No. 8 (2.36 mm)	10 - 25
No. 200 (0.075 mm)	0 - 3

Bituminous material shall be added at such a rate so that the effective asphalt binder content of the mixture is a minimum of 5.0 percent (with an allowable production tolerance of 0.4 percent) by weight of the total mixture.

PERFORMANCE REQUIREMENTS. Acceptance of the materials and the produced mixture will be based on, but not necessarily totally on, the following described tests and considerations:

A SECTION AND A SECTION AS	FACASIATION	Specification Limit
Coating Test	TP40-94	> 90% Coated
Stripping Test	TP41-94	> 90% Coated
Draindown Test	TP42-94	< 8%
Workability/Storage ability Test	TP43-94	< 3 @ 40° F
Asphalt Content/Gradation Test	T-308	See Job Mix Formula

The initial approval of the material sources, mix design, plant facilities, or mixture based on the above tests shall in no way preclude further examination and testing if unsatisfactory results or performance are encountered. The acceptance at the time shall not bar future rejection. Performance will be judged at the time of material use.

MIXING REQUIREMENTS. All aggregates shall be free of surface moisture prior to mixing. If some drying is required, heating shall not exceed 160° F.

Mixing shall be continuous until all aggregates are thoroughly coated with the bituminous material. After mixing, the material shall be stockpiled, no higher than 5ft., for a minimum of forty-eight (48) hours at the production facility in order to allow curing to occur. During this period of time, the stockpile will be examined for runoff and workability.

METHOD OF MEASUREMENT. The quantity of material to be paid for shall be the number of units of material conforming to all the requirements, furnished in accordance with these provisions.

Where applicable weights will only be accepted as showing the actual amount of material, delivered and/or picked up by City forces, if verified by certified and stamped weight slips and signed by a certified weigh master.

BASIS OF PAYMENT. The quantity of hot-mix hot-laid bituminous concrete and or cold patch will be measured as the actual number of tons for hot-mix and or cold patch delivered or picked up by the City. The weight shall be calculated as specified in DOT Standard Specifications Subsection 109.01. Price shall include the quarterly reporting of material either picked up or delivered to the City of Wilmington.

401665-SUPERPAVE, TYPE C HOT-MIX, 160 GYRATIONS, PG 64-22, PATCHING 401666-SUPERPAVE, TYPE B HOT-MIX, 160 GYRATIONS, PG 64-22, PATCHING

Description:

The following Subsections of the Standard Specifications shall be applicable: 401.01, 401.03 - 401.10, 401.12, and 401.13. All other subsections have been modified herein.

Materials:

Materials for hot-mix, hot-laid bituminous concrete shall conform to the requirements of Subsections 823.01, 823.05-823.17, and 823.25 - 823.28 of the Standard Specifications and the following.

Asphalt Binder:

The asphalt binder shall meet the requirements of Superpave PG 64-22, PG 70-22, or PG 76-22 performance grade asphalt, as referenced in the Plans, according to M-320, Table 1 and tested according to AASHTO PP6 with the following test ranges:

K irika kalambangan (1. 8. 1)	AASHTO REFERENCE	SPECIFICATION LIM
ANALISMA ROJONIA DE	M-320	Per Grade
Temperature, C	T-315	1.00 - 2.00 kPa
Original DSR, G*/sin (δ)	T-315	2.20 - 5.00 kPa
RTFO DSR, G*/sin (δ)	T-315	1400 - 5000 kPa
PAV DSR, G*/sin (δ)		90.0 - 300.0 kPa
BBR Creep Stiffness	T-313	
BBR — value	T-313	0.300 - 0.440

Substitution of a higher temperature grade will require prior approval by the Engineer.

Recycled Materials:

The percentage allowance of recycled materials (recycled asphalt pavement and/or shingles) shall be controlled through the use of the Del DOT's Materials & Research recycled mixture program available through the Materials & Research Section. The program can be used by the Contractor to determine which materials and combinations of materials can be used to meet the specified material on the contract.

If the Contractor proposes to use a combination of materials that are not covered by this program, the mix design shall be submitted and reviewed by the Engineer.

Shingles:

Only shingles reclaimed from shingle manufacturers such as tabs, punch-outs, and damaged new shingles shall be allowed in the mixture. Post-consumer shingles or used shingles shall not be permitted in the mixture and all shingles shall be free of all foreign material and moisture. Fiberglass-backed and organic felt-backed shingles shall be kept separately and both materials shall not be used in the same mixture at the same time. The shingles shall be broken down in the mixing process with 100% passing the 1/2 in (12.5 mm) sieve. Shipping, handling, and shredding costs are incidental to the price of Superpave item.

Mineral Aggregate:

The mineral aggregate employed in the target gradation of the job mix formula (JMF) shall conform to Section 805 and the following criteria. These criteria apply to the combined aggregate blend.

DESIGN ESAL'S	COARSE AGGREGATE ANGULARITY ¹ (% MIN)		FINE AGGREGATE ANGULARITY ² (% MIN)		CLAY CONTENT ³ (% - MIN)	FLAT AND ELONGATED (% - MAX)	
(MILLIONS)	<100 MM	>100 MM	≤100 MM	>100 MM			
< 0.3	55/-	-/-		-	40		
	75/-	50/-	40	40	40		
0.3 to < 3	1 7	60/-	45	40	45	10	
3 to <10	85/80 ^s	00/-			45	10	
10 < 30	95/90	80/75	45	40			
30	100/100	100/100	45	45	50		

¹Coarse Aggregate Angularity is tested according to ASTM D582 1.

The following source properties apply to the individual aggregates in the aggregate blend for the proposed JMF.

lend for the proposed JMP.	TO SPECIFICATION.
Toughness, AASHTO T96	40
Percent Loss, Maximum	
Soundness, AASHTO T104 Percent Loss, Maximum for five cycles	20
Deleterious Materials, AASHTO T112 Percent, Maximum	10
Moisture Sensitivity, AASHTO T283 Percent, Minimum	80

²Fine Aggregate Angularity is tested according to AASHTO TP-33.

³Clay Content is tested according to AASHTO T176

⁴Flat and Elongated is tested according to ASTM 4791 with a 5:1 aspect ratio.

^{585/80} denotes that 85% of the coarse aggregate has one fractured face and 80% has two or more fractured faces.

Mineral Filler:

The mineral filler shall conform to AASHTO M17.

Mixture Requirements:

Mix Design. Develop and submit a job mix formula for each mixture according to AASHTO R35. Each mix design shall be capable of being produced, placed, and compacted as specified.

Gradation: The FHWA Superpave 0.45 Power Chart with the recommended restricted zone shall be used to define permissible gradations for the specified mixture. Type C shall be either a No.4 (4.75 mm), 3/8" (9.5 mm), or 1/2" (12.5 mm) Nominal Maximum Aggregate Size Hot-Mix. Unless otherwise noted in the Plans, the Type C shall meet the 3/8" (9.5 mm) Nominal Maximum Aggregate Size. Type B Hot-Mix shall be the 3/4" (19.0 mm) Nominal Maximum Aggregate Size and the Bituminous Concrete Base Course (BCBC) shall be the 1" (25.0 mm) Nominal Maximum Aggregate Size. Target values for percent passing each standard sieve for the design aggregate structure shall comply with the Superpave control points and should avoid the restricted zone. Percentages shall be based on the washed gradation of the aggregate according to AASHTO T11.

In addition to the results of the material requirements specified above, the following material properties shall be provided by the contractor: bulk specific gravity G_{sb} apparent specific gravity G_{sa} , and the absorption of the individual aggregate stockpiles to be used, tested according to AASHTO T84 and AASHTO T85 and reported to three decimal places along with the specific gravity of the mineral filler to be used, tested according to AASHTO T100 and reported to three decimal places.

Superpave Gyratory Compactive (SGC) Effort:

The Superpave Gyratory Compaction effort employed throughout mixture design, field quality control, or field quality assurance shall be as indicated below. All mixture specimens tested in the SGC shall be compacted to $N_{\rm M}$ Height data provided by the SGC shall be employed to calculate volumetric properties at $N_{\rm I}$, $N_{\rm D}$, and $N_{\rm M}$

Superpave Gyratory Compactive (SGC) Effort:

DESIGN TRAFFIC LEVEL (MILLION ESAL'S	N INITIAL	N _{DESIGN}	N _{MAXIUM}
0.3 to < 3	7	75	115
$\frac{0.5 \text{ to } < 30}{3 \text{ to } < 30}$	8	100	160
3 10 < 30	9	125	205

Volumetric Design Parameters. The design aggregate structure at the target asphalt cement content shall satisfy the volumetric criteria below:

content shall	REOU	IRED DENSI	TY			NERAL A		GATE	
DESIGN ESAL'S (MILLION)	(% OF THEORETICAL MAXIMUM SPECIFIC GRAVITY)		MAXIMUM SPECIFIC			X. AGGI		(MM)	VOIDS FILLED WITH ASPHALT (% MINIMUM)
	NINITIAL	NDESIGN	Nmax	25.0	19.0	9.5	12.5	4.75	
0.3 to < 3	≤90.5								65.0 - 78.0
3 to < 10		96.0	98.0	12.5	13.5	15.5	14.5	16.5	65.0 - 75.0 ¹
10 < 3	89.0								05.0 - 75.0
30		L		11 750 4	T 1 -3	1 A i	L	(V) at	Nshall be

Air voids (V_a) at N_{design} shall be 4.0% for all ESAL designs. Air voids (V_a) at N_{max} shall be a minimum of 2.0% for all ESAL designs

The dust to binder ratio for the mix having aggregate gradations above the Primary Control Sieve (PCS) Control Points shall be 0.6-1.2. For aggregate gradations below the PCS Control Points, the dust to binder ratio shall be 0.8-1.6. For the No. 4 (4.75 mm) mix, the dust to binder ratio shall be 0.9-2.0 whether above or below the PCS Control Points.

For 3/8" (9.5 mm) Nominal Maximum Aggregate Size mixtures, the specified VFA range shall be 73.0% to 76.0% and for 4.75 mm Nominal Maximum Size mixtures, the range shall be 75 % to 78% for design traffic levels 3 million ESALs.

Gradation Control Points:

The combined aggregates shall conform to the gradation requirement specified in the following table when tested according to T-1 1 and T-27.

Nomin				25.0 MM		gregates Size Con		12.5 MM		MM 9.5 M		MM	4.75	MM
	25.0				-	MAX	MIN	MAX	MIN	MAX				
SIEVE SIZE	MUN	MAX	MIN	MAX	MIN	WAA	IATITA	IVATAX	ITALI	1121				
37.5 MM	100	-	-	<i>#</i>	. *	-		-	-					
25.0 MM	90	100	100		-	-	12	-	-	-				
19.0 MM		90	90	100	100	-	-	-	-	-				
12.5 MM	-	-		90	90	100	100	ä	100	-				
9.5 MM			-	340	-	90	90	100	95	100				
		-	-	-	-		-	90	90	100				
4.75 MM	-	15	22	49	28	58	32	67	-	-				
2.36 MM	19	45	23	49	26	1 30			30	60				
1.18 MM	:#E		-	-	-	-		10	-	+				
0.075 MM	1	7	2	8	2	10	2	10	6	12				

Note: The aggregate's gradation for each sieve must fall within the minimum and maximum limits.

Gradation Classification:

The Primary Control Sieve (PCS) defines the break point of fine and coarse mixtures. The combined aggregates shall be classified as coarse graded when it passes below the Primary Control Sieve (PC S) control point as defined below. All other gradations shall be classified as fine graded.

PCS CONTROL PO	INT FOR MD	TURE NOMI (% PASSIN	NAL MAXIMU IG)	JM AGGREGA	TES SIZE
Nominal maximum Aggregates Size	25.0 mm	19.0 mm	12.5 mm	9.5 mm	4.5 mm
Primary Control Sieve	4.75 mm	4.75 mm	2.36 mm	2.36 mm	1.18 mm
PCS Control Point	40	47	39	47	30-60

Plant Production Tolerance

Volumeric Property	Superpave Criteria
Air Voids (V _a) at (%) N _m	2.0 (min)
Air Voids (V _a) at Ndesign (%)	5.5 (max)
Voids in Mineral Aggregate (VMA) at Ndesign 25.0 mm Bituminous Concrete Base Course 19.0 mm Type B Hot-Mix 12.5 mm Type C Hot-Mix 9.5 mm Type C Hot-Mix 4.5 mm Type C Hot-Mix	-1.2 +2.0

Design Evaluation:

The contractor shall furnish a Job Mix Formula (JMF) for review and approval. The Engineer may elect to evaluate the proposed JMF and suitability of all materials. All materials requested by the Engineer shall be provided at the contractor's expense upon request. To verify the complete mixture design and evaluate the suitability of all materials, the following approximate quantities are required:

5.25 gal (20 liters) of the asphalt binder;

0.13 gal (0.5 liters) sample of liquid heat-stable anti-strip additive;

254 lb. (115 kg) of each coarse aggregate;

154 lb. (70 kg) of each intermediate and fine aggregate;

22 lb. (10 kg) of mineral filler; and

254 lb. (115 kg) of RAP, when applicable.

The proposed JMF shall include the following:

Plot of the design aggregate structure on the FHWA Superpave 0.45 power chart showing the maximum density line, Superpave control points, and recommended restricted zone.

Plot of the three trial asphalt binder contents at \pm 0.5% gyratory compaction curves where the percent of maximum specific gravity (% of G_{mm}) is plotted against the log base ten of the number of gyrations (log (N)) showing the applicable criteria for Ni, N_d, and Nm.

Plot of the percent asphalt binder by total weight of the mix (Pb) versus the following:

% of G_{mm} at N_d , VMA at N_d , VFA at N_d , Fines to effective asphalt binder (P be) ratio, and unit weight (kg/m) at both N_d and N_m .

Summary of the consensus property standards test results for the design aggregate structure, summary of the source property standards test results for the individual aggregates in the design aggregate structure, target value of the asphalt binder content, and a table of G_{mm} of the asphalt mixture for the four trial asphalt binder contents determined according to AASHTO T209.

The JMF shall also include the NCAT Ignition Oven calibration for the specific materials utilized for this mix.

Method of Measurement and Basis of Payment:

The quantity of hot-mix hot-laid bituminous concrete and or cold patch will be measured as the actual number of tons for hot-mix and or cold patch delivered or picked up by the City. The weight shall be calculated as specified in DOT Standard Specifications Subsection 109.01. Price shall include the quarterly reporting of material either picked up or delivered to the City of Wilmington.

401821 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING 401822 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING

Description:

Warm mix asphalt (WMA) is the generic term used to describe the reduction in production, paving, and compaction temperatures achieved through the application of one or more WMA technologies.

WMA may be produced by one or a combination of several technologies involving asphalt foaming processes and equipment or additives that facilitate the reduction of the temperature at which the mix can be placed and satisfactorily compacted thereby permitting the mix to be produced at reduced temperatures from a comparable mix without the Warm Mix Technology.

The following Subsections of the Standard Specifications shall be applicable: 401.01, 401.03 - 401.10, 401.12, and 401.13. All other subsections have been modified herein.

Materials:

If the Contractor proposes to use a combination of materials that are not covered by this Specification, the mix design shall be submitted and reviewed by the Engineer 30 calendar days prior to use.

Conform to the requirements of Subsections 823.01, 823.05-823.17, and 823.25 - 823.28 of the Standard Specifications and the following for bituminous materials:

Asphalt Binder:

The asphalt binder shall meet the requirements of Superpave performance-grade asphalt binder, as referenced in the Plans, according to M 320¹, Table 1 and tested according to AASHTO R29 with the following test ranges:

Temperature, C	M-320	Per Grade
Original DSR, G*/sin (δ)	T-315	1.00 - 2.00 kPa
RTFO DSR, G*/sin (δ)	T-315	>/= 2.20 kPa
PAV DSR, $G^*/\sin(\delta)$	T-315	≐ 5000 kPa</th
BBR Creep Stiffness	T-313	= 300.0 kPa</td
BBR m — value	T-313	>/= 0.300

Note 1:The exception to M 320 is that the original DSR shall be 1.00 to 2.20 kPa Substitution of a higher temperature grade will require prior approval by the

Engineer. The highest low temperature grade virgin binder to be used is -22.

Depending on the level of RAP used, the low temperature properties, per T 313, may be different than stated in M 320 or the previous table.

Recycled Materials:

The percentage allowance of recycled asphalt pavement shall be controlled through the use of Del DOT's, Materials & Research recycled mixture program available through the Materials & Research Section. The program can be used by the Contractor to determine which materials and combinations of materials can be used to meet the specified material on the contract.

No recycled asphalt shingles shall be used in WMA.

Mineral Aggregate:

Conform to Section 805 and the following criteria. These criteria apply to the combined aggregate blend.

DESIGN ESAL'S	ANGULARITY ¹ ANGU		FINE AGO ANGUL (% I		CLAY CONTENT ³ (% - MIN)	FLAT AND ELONGATED 4 (% - MAX)
(MILLIONS)	≤100 MM	>100 MM	≤100 MM	>100 MM	(70 11111)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
< 0.3	55/-	-/-	146	-	40	9.
0.3 to < 3	75/-	50/-	40	40	40	
3 to <10	85/80 ⁵	60/-	45	40	45	10
10 < 30	95/90	80/75	45	40	45	10
30	100/100	100/100	45	45	50	

¹ Coarse Aggregate Angularity is tested according to D582 1.

The following source properties apply to the individual aggregates in the aggregate blend for the proposed JMF.

EF CREATE STREET THE STREET THE OD STREET	SPECTEUCATIONS
Toughness, AASHTO T96 Percent Loss, Maximum	40
Soundness, AASHTO T104 Percent Loss, Maximum for five cycles	20
Deleterious Materials, AASHTO T112 Percent, Maximum	10
Moisture Sensitivity, AASHTO T283 Percent, Minimum	80

Supply all polish values to the Engineer upon request. The polish value of the composite aggregate blend for any roadway with a minimum average daily traffic volume (ADT) of 8000 vehicles and a posted speed of 35 mph (60 kph) or greater shall be greater than 8.0 when tested according to Maryland State Highway Administration 'MSMT 411 - Laboratory Method of Predicting Frictional Resistance of Polished Aggregates and Pavement Surfaces'. RAP shall be assigned a value of 4.0.

Mineral Filler:

Conform to M17.

²Fine Aggregate Angularity is tested according to TP33.

³ Clay Content is tested according to T176.

⁴Flat and Elongated is tested according to ASTM 4791 with a 5:1 aspect ratio.

^{585/80} denotes that 85% of the coarse aggregate has one fractured face and 80% has two or more fractured faces.

Warm Mix Additives:

For any WMA technology requiring addition of any material by the producer during production, the following information will be submitted with the proposed JMF for review and approval at least 30 calendar days prior to production:

1. WMA technology and/or additive information.

2. WMA technology manufacturer's recommendation for usage.

3. WMA technology target dosage rate and tolerance envelope. Support tolerance envelope with test data demonstrating acceptable mix production properties conforming to all sections of this specification.

4. WMA technology manufacturer's material safety data sheets (MSDS).

5. Documentation of past WMA technology field application including points of contact.

6. Temperature ranges for mixing and compacting.

7. Laboratory test data, samples, and sources of all mix components, and asphalt binder viscosity-temperature relationships.

The contractor shall follow the manufacturer's recommendation for incorporating additives and WMA technologies into the mix. The contractor shall also comply with the manufacturer's recommendation regarding receiving, storage, and delivery of additives.

If the producer performs blending of the WMA technology in their tank, a separate Quality Control plan shall be submitted by the producer to the City for review and approval at least 30 calendar days prior to production.

Mixture Requirements:

Mix Design. Develop and submit a job mix formula for each mixture according to R35. Each mix design shall be capable of being produced, placed, and compacted as specified. Apply all mix design requirements for Superpave to the development of the WMA mix design.

Gradation: The FHWA Superpave 0.45 Power Chart shall be used to define permissible gradations for the specified mixture. Type C shall be either a No.4 (4.75 mm), 3/8" (9.5 mm), or 1/2" (12.5 mm) Nominal Maximum Aggregate Size Hot-Mix. Unless otherwise noted in the Plans, the Type C shall meet the 3/8" (9.5 mm) Nominal Maximum Aggregate Size. Type B Hot-Mix shall be the 3/4" (19.0 mm) Nominal Maximum Aggregate Size and the Bituminous Concrete Base Course (BCBC) shall be the 1" (25.0 mm) Nominal Maximum Aggregate Size. Target values for percent passing each standard sieve for the design aggregate structure shall comply with the Superpave control points and should avoid the restricted zone. Percentages shall be based on the washed gradation of the aggregate according to T11.

Thin WMA, Type C shall be a No. 4 (4.75 mm) Nominal Maximum Aggregate Size Only.

In addition to the results of the material requirements specified above, the following material properties shall be provided by the Contractor: bulk specific gravity G_{sb} apparent specific gravity G_{sa} , and the absorption of the individual aggregate stockpiles to be used, tested according to T84 and T85 and reported to three decimal places along with the specific gravity of the mineral filler to be used, tested according to T100 and reported to three decimal places.

Superpave Gyratory Compactive (SGC) Effort:

The Superpave Gyratory Compaction effort employed throughout mixture design, field quality control, or field quality assurance shall be as indicated below. All mixture specimens tested in the SGC shall be compacted to N_M Height data provided by the SGC shall be employed to calculate volumetric properties at $N_{\rm I}$, $N_{\rm D}$, and $N_{\rm M}$

Superpave Gyratory Compactive (SGC) Effort:

DESIGN TRAFFIC LEVEL (MILLION ESAL'S	N _{INITIAL}	N _{DESIGN}	N _{MAXIUM}
0.3 to < 3	7	75	115
3 to < 30	8	100	160
30	9	125	205

Volumetric Design Parameters. The design aggregate structure at the target asphalt cement content shall satisfy the volumetric criteria below:

DESIGN ESAL'S	(% OF	REQUIRED DENSITY (% OF THEORETICAL MAXIMUM SPECIFIC VOIDS-IN-MINERAL AGGREGATE (% MINIMUM)				GATE	Voids Filled with		
(MILLION)	(GRAVITY)	l l		X, AGGR	EGATE ((MM)	ASPHALT (% MINIMUM)	
	NINITIAL	NDESIGN	NMAX	25.0	19.0	9.5	12.5	4.75	
0.3 to < 3	≤90.5								65.0 - 78.0
3 to < 10 10 < 3 30	89.0	96.0	98.0	12.5	13.5	15.5	14.5	16.5	65.0 - 75.0 ¹

Air voids (V_a) at N_{design} shall be 4.0% for all ESAL designs. Air voids (V_a) at N_{max} shall be a minimum of 2.0% for all ESAL designs

The dust to effective binder ratio for the mix having aggregate gradations above the Primary Control Sieve (PCS) Control Points shall be 0.6-1.2. For aggregate gradations below the PCS Control Points, the dust to binder ratio shall be 0.8-1.6. For the No. 4 (4.75 mm) mix, the dust to binder ratio shall be 0.9-2.0 whether above or below the PCS Control Points.

For 3/8" (9.5 mm) Nominal Maximum Aggregate Size mixtures, the specified VFA range shall be 73.0% to 76.0% and for 4.75 mm Nominal Maximum Size mixtures, the range shall be 75 % to 78% for design traffic levels 3 million ESALs.

Gradation Control Points:

The combined aggregates shall conform to the gradation requirement specified in the following table when tested according to T11 and T27.

Nomin	al Maxim									
	25.0	MM	19.0	19.0 MM		MM	9.5	MM	4.75 MM	
SIEVE SIZE	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
37.5 MM	100		-	:2:	-	8	-	-	-	-
25.0 MM	90	100	100	-	-	-	-	(=:		=
19.0 MM	-	90	90	100	100	at .	3	-	•	
12.5 MM	:#:	T:	-	90	90	100	100	120	100	1=2
9.5 MM		-	*	-	i i	90	90	100	95	100
4.75 MM	(2	=		-	+		(=)	90	90	100
2.36 MM	19	45	23	49	28	58	32	67	14	(2)
1.18 MM	-	-		9	2	-27	-	i k	30	60
0.075 MM	1	7	2	8	2	10	2	10	6	12

Note: The aggregate gradation for each sieve must fall within the minimum and maximum limits.

Gradation Classification:

The Primary Control Sieve (PCS) defines the break point of fine and coarse mixtures. The combined aggregates shall be classified as coarse graded when it passes below the Primary Control Sieve (PCS) control point as defined below. All other gradations shall be classified as fine graded.

PCS CONTROL PO	INT FOR MIX	TURE NOMI (% PASSIN		M AGGREGA	TES SIZE
Nominal maximum Aggregates Size	25.0 mm	19.0 mm	12.5 mm	9.5 mm	4.5 mm
Primary Control Sieve	4.75 mm	4.75 mm	2.36 mm	2.36 mm	1.18 mm
PCS Control Point	40	47	39	47	30-60

Plant Production Tolerances:

Volumeric Property	Superpave Criteria
Air Voids (V _a) at (%) N _m	2.0 (min)
Air Voids (V _a) at N _{design} (%)	5.5 (max)
Voids in Mineral Aggregate (VMA) at Ndesign	
25.0 mm Bituminous Concrete Base Course 19.0 mm Type B Hot-Mix	-1.2 +2.0
12.5 mm Type C Hot-Mix	
9.5 mm Type C Hot-Mix	
4.5 mm Type C Hot-Mix	

Design Evaluation:

The contractor shall furnish a Job Mix Formula (JMF) for review and approval. The Engineer may elect to evaluate the proposed JMF and suitability of all materials. All materials requested by the Engineer shall be provided at the contractor's expense to the Central Laboratory in Dover in a timely manner upon request. To verify the complete mixture design and evaluate the suitability of all materials, the following approximate quantities are required:

5.25 gal (20 liters) of the asphalt binder; 0.13 gal (0.5 liters) sample of liquid heat-stable antistrip additive; 254 lb. (115 kg) of each coarse aggregate; 154 lb. (70 kg) of each intermediate and fine aggregate; 22 lb. (10 kg) of mineral filler; and 254 lb. (115 kg) of RAP, when applicable.

The proposed JMF shall include the following:

Plot of the design aggregate structure on the FHWA Superpave 0.45 power chart showing the maximum density line, Superpave control points, and recommended restricted zone.

Plot of the three trial asphalt binder contents at $\pm 0.5\%$ gyratory compaction curves where the percent of maximum specific gravity (% of G_{mm}) is plotted against the log base ten of the number of gyrations (log (N)) showing the applicable criteria for Ni, N_d, and Nm.

Plot of the percent asphalt binder by total weight of the mix (P_b) versus the following: % of G_{mm} at N_d , VMA at N_d , VFA at N_d , Fines to effective asphalt binder (P be) ratio, and unit weight (kg/m^2) at both N_d and N_m .

Summary of the consensus property standards test results for the design aggregate structure, summary of the source property standards test results for the individual aggregates in the design aggregate structure, target value of the asphalt binder content, and a table of G_{mm} of the asphalt mixture for the four trial asphalt binder contents determined according to AASHTO T209.

The JMF shall also include the NCAT Ignition Oven calibration for the specific materials utilized for this mix.

Construction:

Production Plants. The contractor shall modify and/or operate their production plant as required by the manufacturer to introduce the WMA technology.

Weather Limitations. Place mix only on dry, unfrozen

surfaces. The minimum ambient temperature

shall be 32 degrees F.

The following table of ambient temperatures for various binder grades and lift thicknesses for placement with the following parameters:

Minimum surface temperature of 32 degrees F

Maximum production temperature of 275 degrees F

Maximum wind speed of 8 miles per hour

Lift Thickness	PG Binder			
(in)	76-22	70-22	64-22	
1.50	50F	45F	40F	
2.00	40F	38F	35F	
3.00	32F	32F	32F	

Construction outside of these conditions will be at the discretion of the Engineer.

Method of Measurement and Basis of Payment:

The quantity of WMA bituminous concrete will be measured as the actual number of tons for hot-mix and or cold patch delivered or picked up by the City. The weight shall be calculated as specified in DOT Standard Specifications Subsection 109.01. Price shall include the quarterly reporting of material either picked up or delivered to the City of Wilmington.

ASPHALT CEMENT COST ADJUSTMENT

For this contract, payments to the Contractor shall be adjusted to reflect increases or decreases in the Delaware Posted Asphalt Cement Price when compared to the Project Asphalt Cement Base Price, as defined in these Special Provisions.

The Delaware Department of Transportation will issue the Delaware Posted Asphalt Cement Price monthly and will be the industry posted price for Asphalt Cement, F.O.B. Philadelphia, Pennsylvania which shall be used for the Asphalt Cement Cost Adjustment.

The Project Asphalt Cement Base Price will be the anticipated Delaware Posted Asphalt Cement Price expected to be in effect at the time of receipt of bids.

Actual quantity of asphalt cement qualifying for any Asphalt Cement Cost Adjustment will be computed on the asphalt percentage from the approved mix formula and the actual quantity of product delivered and accepted by the City.

The asphalt cement cost adjustment will be calculated on grade PG 64-22 asphalt regardless of the actual grade of asphalt used. The Project Asphalt Cement Base Price for the project will be \$ 365.00 per English Ton. The asphalt cement cost adjustment will be calculated on the difference between the monthly Delaware Posted Asphalt Cement Price and any portion, either in excess of 105% or less than 95%, of the Project Asphalt Cement Base Price.

Criteria for Eligibility of Cost Adjustment

The following conditions shall be met before a cost adjustment will be made:

The posted Asphalt Cement Price varies by more than +/- five (5) percent from the Project Asphalt Cement Base Price, and the material fully met specifications.

NOTE:

Delivery tickets shall include percentage of virgin asphalt cement added to the mix.

Invoices shall include a separate line item for asphalt cement with a breakdown of percent of virgin asphalt added for each mix picked up or delivered with a complete asphalt cement cost breakdown.

<u>17004PW</u>

PROPOSAL FORM

DATE: MARCH 11, 2016	
City of Wilmington Business License Number is	2494

This proposal is submitted with the knowledge that the Department of Finance, Division of Procurement and Records, reserves the right to reject any and all proposals, when in its judgment, it is in the best interest of the City of Wilmington to do so.

We, the undersigned, hereby agree to furnish and or deliver, per specifications, the item(s) listed below to the City of Wilmington, between July 1, 2016, and June 30, 2017, inclusive.

Item	Description	Quantity	Unit	Unit Price	Total Price
1	Superpave, Type C, Hot-Mix, 160GYR, PG 64-22, Patching and/or WMA Superpave, Type C, 160GYR, PG 64-22, Patching Pickup	375	Ton	\$_55. ¹²	\$ 20.625.
2	Superpave, Type C, Hot-Mix, 160GYR, PG 64-22, Patching and/or WMA Superpave, Type C, 160GYR, PG 64-22, Patching Delivered	50	Ton	\$_55.°5	\$ 2.750 . ⁶
3	Superpave, Type B, Hot-Mix, 160GYR, PG 64-22, Patching and/or WMA Superpave, Type B, 160GYR, PG 64-22, Patching Pickup	50	Ton	\$_ <u>á</u> 0.5	\$ 2,500.72
4	Superpave, Type B, Hot-Mix, 160GYR, PG 64-22, Patching and/or WMA Superpave, Type B, 160GYR, PG 64-22, Patching Delivered	25	Ton	s_50.3	\$ 1.250.°
5	Cold Patch, Delivered	150	Ton	s_145.5	\$ 41.750
6	Cold Patch, Pickup	300	Ton	s_145.05	\$ 43.500.04

TOTAL OF ITEMS 1 THROUGH 6

s 92.375."

Bidders are to supply contact name, telephone number and e mail address. The City will use this information to order materials.

TODD	LESTER 312-462-8919 Hester diamindmuterials.com	
	Name Telephone No. Email address	
FIRM	CORPORATION/PARTNERSHIP/INDIVIDUAL PER:	
	TOOD LESTER MATERIALS SUPERINTENDENT	
	NAME (Typed or Printed) TITLE:	
	SH yew h.	
ADDRESS: _	SIGNATURE	
	242 N. JAMES St Suite 112	
	NEWPORT, DE 19804	
PHONE:	362-658-6524	
FED. I.D. #:	51-0373659	
FAX:	302-658-0684	
EMAIL:	Mester a diaminal muterials. com	



DEPARTMENT OF PUBLIC WORKS OPERATIONS DIVISION Wilmington, Delaware

MEMORANDUM

TO:

John D'Amelio

Division of Procurement and Records

FROM:

Marlyn W Dietz W

Director of Operations

Public Works Department

DATE:

28 March 2016

SUBJECT:

Contract 17004PW - Bituminous Concrete Mixes - Recommendation of Award

We have reviewed the bids for this bid opening and have tabulated it as follows:

BIDDER

AMOUNT BID

Diamond Materials

\$92,375.00

Contractors Materials

\$115,725.00

Refined Products

\$95,300.00

American Asphalt (Cold Patch Only)

\$19,350.00

Based on the above proposals we recommend that bid be awarded to Diamond Materials. They are the lowest bidder who met all specifications.

APPROVED:

Jeffery Starkey

COMMISSIONER OF PUBLIC WOR

CC:

Phil Ceresini

Jennifer Malcolm

M. Husser

Vince Carroccia Ranier Hamilton



CERTIFICATE OF AWARD OF CONTRACT

I hereby certify that Contract No. <u>17004PW</u> is on this <u>29th</u> of <u>March</u>, <u>2016</u> awarded to <u>Diamond</u> <u>Materials</u>, <u>LLC</u> in the amount of <u>\$92,375.00</u> as per Proposal dated <u>3/11/2016</u> and that this award is made in compliance with <u>Wilm. Code</u> (Charter), Section 8-200, to wit:

- 1. Plans and specifications for the work, supplies, or materials were filed with the Department of Finance, Division of Procurement and Records for public inspection on 3/1/2016
- The advertisement calling for sealed bids on this contract was published in the <u>News Journal</u> on <u>3/1/2016</u> stated that bids would be opened at <u>3:00 p.</u> m. on <u>3/17/2016</u>
- 3. All sealed bids received were publicly opened in the office of the Department of Finance, Division of Procurement and Records in the presence of the City Auditor and Department not represented desiring to make the purchase at 3:00 p.m. on 3/17/16. Other persons present at the opening of the bids were: Phil Ceresini, Tina Romano-Austin, Brian Stickels
- 4. Bids were submitted by the following contractors in the following amounts:

Contractor 1. Diamond Materials, LLC 2. American Asphalt Co., 3.Refined Products 4.Contractors Material	Address Newport, DE West Collingswood, NJ New Castle, DE New Gastle, DE	Date of Bid 3/17/16 3/17/16 3/17/16	Amount \$92,375.00 \$19,350.00* \$95,300.00
1. Contractors material	New Castle, DE	3/17/16	\$ 115,725.00

*Did not bid all items

5. City License Number		
consideration, I determined that the	n of Commissioner of Public Works ne contractor to whom this award is made anation I have received the following write	de was the lowest responsible
Author	Employment Position	<u>Date</u>
<u>Jeffery Starkey</u> Marlyn W. Dietz	Commissioner of Public Works Director of Operations	3/28/16 3/28/16
Approved as to Form		
First Assistant City Solicitor	Department of Finan	ce, Division of Procurement

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "DIAMOND MATERIALS, LLC" IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE FOURTH DAY OF AUGUST, A.D. 2014.

2678877 8300

141002884

AUTHENTY CATION: 1590105

DATE: 08-04-14

You may verify this certificate online at corp.delaware.gov/authver.shtml

242 N James St., Suite 102 Newport, DE 19804 (302) 658-6524 FAX (302) 658-0684



DIAMOND MATERIALS LLC

CERTIFIED COPY OF RESOLUTIONS

I, the undersigned, Secretary of Diamond Materials, LLC a Delaware Limited Liability Company, hereby certify that the following Resolutions excerpted from the Minutes of the LLC were duly adopted by unanimous consent of the Board of Directors of the LLC, on the 1st day of June 2016.

RESOLVED, that the President, Richard E Pierson Jr. and Executive Vice President, Paul Lester of this Corporation be and hereby is authorized to execute and deliver on behalf of this Corporation a contract and other contract documents by and between this LLC a contract and other contract documents by and between this LLC and the City of Wilmington, Delaware, Department of Finance, 17004PW "Bituminous Concrete Mixes", for the contract price of \$92,375.00 and.

FURTHER RESOLVED, that the Secretary of this Corporation be Karen Atanasio and she hereby is authorized to attest to the said contract and other documents.

I further certify that the foregoing Resolutions have not been rescinded or modified and remain in full force and effect.

I further certify that the following are the names of all officers qualified to sign for the LLC:

President:

Richard Pierson, Jr

Executive Vice President

Paul Lester

Vice President:

Michael Davis

Treasurer

Michael Pierson

Asst. Treasurer

Toni Sartori

Secretary:

Karen Atanasio

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the LLC this 1st day of June, 2016 A.D.

Level Palencies Secretary

Corporate Seal

Phone: (302) 658-6524



Fax: (302) 658-0684

Asphalt • Paving • Excavation • Pipework • Concrete • Demolition 242 N. James Street • Suite 102 • Newport, Delaware 19804

www.diamondmaterials.com

MINUTES OF ANNUAL MEETING OF BOARD OF DIRECTORS

The 2014 annual meeting of the Board of Directors of Diamond Materials, LLC was called to order by Richard E Pierson Jr. the President of the LLC/Partnership, as chairman, on June 1st, 2015 at 10:000'clock a.m. at 242 N James St. Suite 102, Newport, DE, pursuant to notice of meeting or waiver of notice thereof, which are annexed as part of these minutes.

The following Directors were present: Richard E Pierson Jr., and Michael K Pierson.

The president and Treasurer rendered a general report of the business and finances of the Corporation and the secretary reported any changes of shareholders since the last report.

As the next order of business, the following persons were elected to the offices set opposite their respective names, to hold office and exercise the powers and responsibilities specified in the By-Laws of the Corporation.

Position

Name

President

Richard E Pierson, Jr.

Vice President

Paul Lester

Treasurer

Michael K Pierson

Asst. Treasurer

Toni Sartori

Secretary

Karen Atanasio

It was stated for recording in these minutes that all annual and other reports required by law for the preceding year had been completed and duly filed.

There being no further business presented, the meeting was duly adjourned.

Richard E Pierson Jr., President

SUSCRIBED AND SWORN TO before me this 16 day of June 2013 5

Notary P

My Commission expires on Coul 4th 2817

JACQUELINE LOUISE STEFFEN NOTARY PUBLIC OF NEW JERSEY My Commission Expires 4/9/2017

--- - C O N T R A C T----

THIS AGREEMENT, made the 5th day of April in the year Two
Thousand Sixteen by and between the City of Wilmington, a municipal corporation of the State of
Delaware, acting through the agency of the Department of Finance, Division of Procurement and
Records, party of the first part (hereinafter designated the Owner), and Diamond Materials, LLC
of the second part (hereinafter designated the Contractors.

WITNESSETH, that the Contractor, in consideration of agreements herein made by the Owner, agrees with the Owner as follows:

Article 1. The Contractor shall and will furnish and deliver per specifications, on contract 17004PW "Bituminous Concrete Mixes" for the Department of Public Works in accordance with Advertisement for Bids by the Department of Finance, Division of Procurement and Records date 3/1/2016 and specifications identified as Contract No. 17004PW and by the signatures of the parties hereto, are, together with the said Advertisement for Bids, Instructions to Bidders, Forms of Proposal, and/or other documents pertinent thereto, hereby acknowledge and incorporated into these presents and are to be taken as a part of this Contract.

Article 2. It is understood and agreed by and between the parties hereto that the amount of this Contract is in the amount of Ninety Two Thousand Three Hundred Seventy Five --00/100 ------Dollars (\$92,375.00) as per Proposal dated 3/11/2016 to the Department of Finance,
Division of Procurement and Records.

Article 3. In the performance of this Contract, the Contractor shall not discriminate or permit discrimination against any person because of his race, color, religion or his national origin.

Article 4. This Agreement shall bind the heirs, executors, administrators, successors and assigns to the respective parties hereto.

In witness whereof the party of the first part has, by recommendation of the Commissioner of Public Works Department caused the hand of Dennis P. Williams, Mayor, and the corporate seal of the City of Wilmington, attested by the City Clerk, to be hereunto affixed; and the party of the second part has caused the hand of its' President, (or his authorized representative) and its' corporate seal, attested by the Secretary or assistant Secretary, to be hereunto affixed.

Dated the day and year first above written is	n the City of Wilmington, County of New Castle, State
of Delaware.	
Signed, Sealed and delivered in the presence of: What witness	THE CITY OF WILMINGTON By:
July Co. Witness	ATTEST: City Clerk Diamond Materials, LLC. By: Au A (Seal)
	ATTEST: Kun Duning
Approved as to Form on this	
Day of, 2016	

First Assistant City Solicitor