

# STATE OF DELAWARE



This Copy is for information only.  
You must request a CD from  
DeIDOT in order to bid.

## DEPARTMENT OF TRANSPORTATION

### BID PROPOSAL

for

**CONTRACT T201906102.01**

**Pavement and Rehabilitation, North II, Shipley Road, 2019**

New Castle County

ADVERTISEMENT DATE: October 15, 2018

COMPLETION TIME: 85 Calendar Days

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION  
DELAWARE DEPARTMENT OF TRANSPORTATION  
AUGUST 2016

Bids will be received in the Bidder's Room at the Delaware Department of Transportation's Administration Building, 800 Bay Road, Dover, Delaware prior to 2:00 P.M. local time **November 15, 2018**

**Contract No.T201906102.01**

**Pavement and Rehabilitation, North II, Shipley Road, 2019**  
New Castle County

**GENERAL DESCRIPTION**

LOCATION

These improvements are located in New Castle County more specifically shown on the Location Map(s) of the enclosed Plans.

DESCRIPTION

The improvements consist of furnishing all labor and materials for this contract. This project will consist of 2" profile mill, bituminous concrete patching, PCC patching, 2" Type C 64 -22 and signal/ADA upgrades at Shipley Road & Baynard Road Intersection, and pavement markings from the Washington Street ext to Wilson Road. This is due to the deterioration of the roadway and existing signal at Shipley Road and Baynard Road. As well as other incidental construction in accordance with the location, notes and details shown on the plans and as directed by the Engineer.

COMPLETION TIME

All work on this contract must be complete within 85 Calendar Days. It is the Department's intent to issue a Notice to Proceed such that work starts on or about February 15, 2019.

PROSPECTIVE BIDDERS NOTES:

1. BIDDERS MUST BE REGISTERED with DelDOT and request a cd of the official plans and specifications in order to submit a bid. Contact DelDOT at [dot-ask@state.de.us](mailto:dot-ask@state.de.us), or (302) 760-2031. Bids will be received in the Bidder's Room at the Delaware Department of Transportation's Administration Building, 800 Bay Road, Dover, Delaware prior to 2:00 P.M. local time November 15, 2018 unless changed via addendum.
2. QUESTIONS regarding this project are to be e-mailed to [dot-ask@state.de.us](mailto:dot-ask@state.de.us) no less than six business days prior to the bid opening date in order to receive a response. Please include T201906102.01 in the subject line. Responses to inquiries are posted on-line at <http://www.bids.delaware.gov>.
3. THE BID PROPOSAL incorporates a cd containing **Expedite, version 5.9a** and its installation file. Bidders are to use the cd provided to enter their bid amounts into the Expedite file. The Expedite bid file must be printed and submitted in paper form along with the cd and other required documents prior to the Bid due date and time.
4. SURETY BOND - Each proposal must be accompanied by a deposit of either surety bond or security for a sum equal to at least 10% of the bid.
5. DRUG TESTING - Regulation 4104; The state Office of Management and Budget has developed regulations that require Contractors and Subcontractors to implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds pursuant to 29 Del.C. §6908(a)(6). Refer to the full requirements by following the below link: <http://regulations.delaware.gov/register/september2015/final/19%20DE%20Reg%20207%2009-01-15.htm>  
**Regulation was revised for projects advertised beginning 01/01/18.** Please review the revised regulation for details. Note a few of the requirements;  
\* At bid submission - Each Contractor must submit with the bid *a single signed affidavit certifying that the Contractor and Subcontractor(s) has in place or will implement during the entire term of the contract a Mandatory Drug Testing Program that complies with the regulation;*

- \* At least Two business days prior to contract execution - The awarded Contractor shall provide to DelDOT copies of the Employee Drug Testing Program for the Contractor, and any other listed Subcontractors;
  - \* ~~Testing Report Forms shall be submitted to DelDOT monthly.~~ *No longer required.*
  - \* Subcontractors - Contractors that employ Subcontractors on the job site may do so only after submitting a copy of the Subcontractor's Employee Drug Testing Program along with the standard required subcontractor information. A Subcontractor shall not commence work until **DelDOT** has approved the subcontractor in writing;
  - \* Penalties for non-compliance are specified in the regulation.
6. NO RETAINAGE will be withheld on this contract.
  7. EXTERNAL COMPLAINT PROCEDURE can be viewed on DelDOT's Website [here](#), or you may request a copy by calling (302) 760-2555.
  8. AUGUST 2016 STANDARD SPECIFICATIONS apply to this contract. The Contractor shall make himself aware of any revisions and corrections (Supplemental Specifications, if any) and apply them to the applicable item(s) of this contract. The 2016 Standard Specifications can be [viewed here](#).
  - 8a. FLATWORK CONCRETE TECHNICIAN CERTIFICATION TRAINING:  
Section 501.03, 503.03, 505.03, 610.03, 701.03 and 702.03 of the 2016 Standard Specifications require contractor's to provide an American Concrete Institute (ACI) or National Ready Mix Concrete Association (NRMCA) certified concrete flatwork technician to supervise all finishing of flatwork concrete. Concrete flatwork certification will be effective starting on June 1, 2018.

**STATE OF DELAWARE  
CONSTRUCTION ITEMS UNITS OF MEASURE**

<b>English Code</b>	<b>English Description</b>	<b>Multiply By</b>	<b>Metric Code</b>	<b>Metric Description</b>	<b>Suggested CEC Metric Code</b>
ACRE	Acre	0.4047	ha	Hectare	HECTARE
BAG	Bag	N/A	Bag	Bag	BAG
C.F.	Cubic Foot	0.02832	m <sup>3</sup>	Cubic Meter	M3
C.Y.	Cubic Yard	0.7646	m <sup>3</sup>	Cubic Meter	M3
EA-DY	Each Day	N/A	EA-DY	Each Day	EA-DY
EA-MO	Each Month	N/A	EA-MO	Each Month	EA-MO
EA/NT	Each Night	N/A	EA-NT	Each Night	EA/NT
EACH	Each	N/A	EA	Each	EACH
GAL	Gallon	3.785	L	Liter	L
HOUR	Hour	N/A	h	Hour	HOUR
INCH	Inch	25.4	mm	Millimeter	MM
L.F.	Linear Foot	0.3048	m	Linear Meter	L.M.
L.S.	Lump Sum	N/A	L.S.	Lump Sum	L.S.
LA-MI	Lane Mile	1.609	LA-km	Lane-Kilometer	LA-KM
LB	Pound	0.4536	kg	Kilogram	KG
MFBM	Thousand Feet of Board Measure	2.3597	m <sup>3</sup>	Cubic Meter	M3
MGAL	Thousand Gallons	3.785	kL	Kiloliter	KL
MILE	Mile	1.609	km	Kilometer	KM
S.F.	Square Foot	0.0929	m <sup>2</sup>	Square Meter	M2
S.Y.	Square Yard	0.8361	m <sup>2</sup>	Square Meter	M2
SY-IN	Square Yard-Inch	0.8495	m <sup>2</sup> -25 mm	Square Meter-25 Millimeter	M2-25 MM
TON	Ton	.9072	t	Metric Ton (1000kg)	TON
N.A.*	Kip	4.448	kN	Kilonewton	N.A.*
N.A.*	Thousand Pounds per Square Inch	6.895	MPa	Megapascal	N.A.*

\*Not used for units of measurement for payment.

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**GENERAL NOTICES**

SPECIFICATIONS:

The specifications entitled "Standard Specifications for Road and Bridge Construction, August, 2016", hereinafter referred to as the Standard Specifications, and Supplemental Specifications, the Special Provisions, notes on the Plans, this Bid Proposal, and any addenda thereto shall govern the work to be performed under this contract. The Specifications and any Supplemental Specifications can be [viewed here](#).

CLARIFICATIONS:

Under any Section or Item included in the Contract, the Contractor shall be aware that when requirements, responsibilities, and furnishing of materials are outlined in the details and notes on the Plans and in the paragraphs preceding the "Basis of Payment" paragraph in the Standard Specifications or Special Provisions, no interpretation shall be made that such stipulations are excluded because reiteration is not made in the "Basis of Payment" paragraph.

ATTESTING TO NON-COLLUSION:

The Department requires as a condition precedent to acceptance of bids a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract. The form for this sworn statement is included in the proposal and must be properly executed in order to have the bid considered.

QUANTITIES:

The quantities shown are for comparison of bids only. The Department may increase or decrease any quantity or quantities without penalty or change in the bid price.

PREFERENCE FOR DELAWARE LABOR:

Delaware Code, Title 29, Chapter 69, Section 6962, Paragraph (d), Subsection (4)b:

"In the construction of all public works for the State or any political subdivision thereof, or by firms contracting with the State or any political subdivision thereof, preference in employment of laborers, workmen or mechanics shall be given to bona fide legal citizens of the State who have established citizenship by residence of at least 90 days in the State. Each public works contract for the construction of public works for the State or any political subdivision thereof shall contain a stipulation that any person, company or corporation who violates this section shall pay a penalty to the Secretary of Finance equal to the amount of compensation paid to any person in violation of this section."

EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS:

Delaware Code, Title 29, Chapter 69, Section 6962, Paragraph (d), Subsection (7) states;

- a. As a condition of the awarding of any contract for public works financed in whole or in part by State appropriation, such contracts shall include the following provisions:

During the performance of this contract, the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, sexual orientation, gender identity or national origin. The contractor will take positive steps to ensure that applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex, sexual orientation, gender identity or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided by the contracting agency setting forth this nondiscrimination clause.
2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, sexual orientation, gender identity or national origin.
3. The contractor will ensure employees receive equal pay for equal work, without regard to sex. Employee pay differential is acceptable if pursuant to a seniority system, a merit system, a system which measures earnings by quantity or quality of production, or if the differential is based on any other factor other than sex.

TAX CLEARANCE:

As payments to each vendor or contractor aggregate \$2,000, the Division of Accounting will report such vendor or contractor to the Division of Revenue, who will then check the vendor or contractor's compliance with tax requirements and take such further action as may be necessary to insure compliance.

LICENSE:

A person desiring to engage in business in this State as a contractor shall obtain a license upon making application to the Division of Revenue.

CONTRACTOR / SUBCONTRACTOR LICENSE: 29 DEL. C. §6967:

(b) No agency shall accept a proposal for a public works contract unless such contractor has provided a proper and current copy of its occupational and/or business license, as required by Title 30, to such agency.

(c) Any contractor that enters a public works contract must provide to the agency to which it is contracting, within 30 days of entering such public works contract, copies of all occupational and business licenses of subcontractors and/or independent contractors that will perform work for such public works contract. However, if a subcontractor or independent contractor is hired or contracted more than 20 days after the contractor entered the public works contract the occupational or business license of such subcontractor or independent contractor shall be provided to the agency within 10 days of being contracted or hired.

DIFFERING SITE CONDITIONS,

SUSPENSIONS OF WORK and SIGNIFICANT CHANGES IN THE CHARACTER OF WORK:

Differing site conditions: During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the engineer will investigate the conditions, and if he/she determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of his/her determination whether or not an adjustment of the contract is warranted.

No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice. No contract adjustment will be allowed under their clause for any effects caused on unchanged work.

Suspensions of work ordered by the engineer: If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The engineer will notify the contractor of his/her determination whether or not an adjustment of the contract is warranted.

No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.

No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of this contract.

Significant changes in the character of work: The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the work under the contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.

The term "significant change" shall be construed to apply only to the following circumstances:

- (A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or
- (B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

#### RIGHT TO AUDIT

The Department shall have the right to audit the books and records of the contractor or any subcontractor under this contract or subcontract to the extent that the books and records relate to the performance of the contract or subcontract. The books and records shall be maintained by the contractor for a period of 3 years from the date of final payment under the prime contract and by the subcontractor for a period of 3 years from the date of final payment under the subcontract (29 Del.C. §6930).



## **PREVAILING WAGES**

Included in this proposal are the minimum wages to be paid various classes of laborers and mechanics as determined by the Department of Labor of the State of Delaware in accordance with Title 29 Del.C. §6960, relating to wages and the regulations implementing that Section.

## **REQUIREMENT BY DEPARTMENT OF LABOR FOR SWORN PAYROLL INFORMATION**

Title 29 Del.C. §6960 stipulates;

(b) Every contract based upon these specifications shall contain a stipulation that the employer shall pay all mechanics and laborers employed directly upon the site of the work, unconditionally and not less often than once a week and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the specifications, regardless of any contractual relationship which may be alleged to exist between the employer and such laborers and mechanics. The specifications shall further stipulate that the scale of wages to be paid shall be posted by the employer in a prominent and easily accessible place at the site of the work, and that there may be withheld from the employer so much of accrued payments as may be considered necessary by the Department of Labor to pay to laborers and mechanics employed by the employer the difference between the rates of wages required by the contract to be paid laborers and mechanics on the work and rates of wages received by such laborers and mechanics to be remitted to the Department of Labor for distribution upon resolution of any claims.

(c) Every contract based upon these specifications shall contain a stipulation that sworn payroll information, as required by the Department of Labor, be furnished weekly. The Department of Labor shall keep and maintain the sworn payroll information for a period of 6 months from the last day of the work week covered by the payroll.

Bidders are specifically directed to note the Department of Labor's prevailing wage regulations implementing §6960 relating to the effective date of the wage rates, at Section 6.3, which in relevant part states:

"Public agencies (covered by the provisions of 29 Del.C. §6960) are required to use the rates which are in effect on the date of the publication of specifications for a given project. In the event that a contract is not executed within one hundred twenty (120) days from the date the specifications were published, the rates in effect at the time of the execution of the contract shall be the applicable rates for the project."

Contractor may contact:

Department of Labor, Division of Industrial Affairs, 4425 N. Market Street, Wilmington, DE 19802  
Telephone (302) 761-8200.

STATE OF DELAWARE  
DEPARTMENT OF LABOR  
DIVISION OF INDUSTRIAL AFFAIRS  
OFFICE OF LABOR LAW ENFORCEMENT  
PHONE: (302) 761-8200

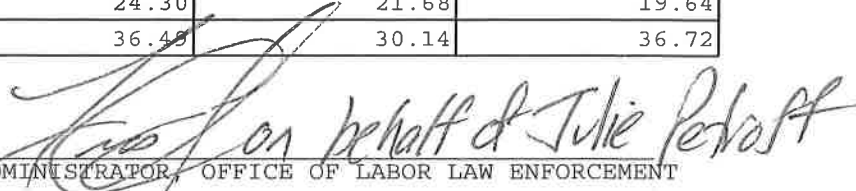
Mailing Address:  
4425 North Market Street  
3rd Floor  
Wilmington, DE 19802

Located at:  
4425 North Market Street  
3rd Floor  
Wilmington, DE 19802

PREVAILING WAGES FOR HIGHWAY CONSTRUCTION EFFECTIVE MARCH 15, 2018

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
BRICKLAYERS	53.89	53.89	53.89
CARPENTERS	54.62	54.81	43.57
CEMENT FINISHERS	34.63	34.85	27.71
ELECTRICAL LINE WORKERS	24.02	46.36	22.69
ELECTRICIANS	68.70	68.70	68.70
IRON WORKERS	63.68	25.48	27.06
LABORERS	43.30	40.70	39.95
MILLWRIGHTS	17.20	16.69	14.41
PAINTERS	68.79	68.79	68.79
PILEDRIVERS	70.92	25.36	28.77
POWER EQUIPMENT OPERATORS	45.46	42.29	38.73
SHEET METAL WORKERS	24.30	21.68	19.64
TRUCK DRIVERS	36.48	30.14	36.72

CERTIFIED: 10/02/2018

BY:   
ADMINISTRATOR, OFFICE OF LABOR LAW ENFORCEMENT

**NOTE:** THESE RATES ARE PROMULGATED AND ENFORCED PURSUANT TO THE PREVAILING WAGE REGULATIONS ADOPTED BY THE DEPARTMENT OF LABOR ON APRIL 3, 1992.

CLASSIFICATIONS OF WORKERS ARE DETERMINED BY THE DEPARTMENT OF LABOR. FOR ASSISTANCE IN CLASSIFYING WORKERS, OR FOR A COPY OF THE REGULATIONS OR CLASSIFICATIONS, PHONE 302 761 8200

NON-REGISTERED APPRENTICES MUST BE PAID THE MECHANIC'S RATE.

**PROJECT:** T201906102.01 pavement and Rehabilitation north II Shipley Road , New Castle County

# **SPECIAL PROVISIONS**

**401502 - ASPHALT CEMENT COST ADJUSTMENT**

For Sections 401, 402, and 403, 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 Posted Asphalt Cement Price will be issued monthly by the Department and will be the industry posted price for Asphalt Cement, F.O.B. Philadelphia, Pennsylvania. The link for the [posting is here](#).

The Project Asphalt Cement Base Price will be the Delaware Posted Asphalt Cement Price in effect on the date of advertisement.

All deviations of the Delaware Posted Asphalt Cement Price from the Project Asphalt Cement Base Price are eligible for cost adjustment. No minimum increases or decreases or corresponding percentages are required to qualify for cost adjustment.

Actual quantity of asphalt cement qualifying for any Asphalt Cement Cost Adjustment will be computed using the weight of eligible asphalt that is shown on the QA/QC pay sheets as a percentage for the delivered material.

If the mix was not inspected and no QA/QC pay sheet was generated, then the asphalt percentage will be obtained from the job mix formula for that mix ID.

The asphalt percentage eligible for cost adjustment shall only be the virgin asphalt cement added to the mix.

There shall be no separate payment per ton cost of asphalt cement. That cost shall be included in the various unit prices bid per ton for those bid items that contain asphalt cement (mentioned above).

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 per ton for the project will be the Delaware Posted Asphalt Cement Price in effect on the date of project advertisement.

If the Contractor exceeds the authorized allotted completion time, the price of asphalt cement on the last authorized allotted work day, shall be the prices used for cost adjustment during the time liquidated damages are assessed. However, if the industry posted price for asphalt cement goes down, the asphalt-cement cost shall be adjusted downward accordingly.

**NOTE:**

Application of Asphalt Cement Cost Adjustment requirements as indicated above shall apply only to those contracts involving items related to bituminous base and pavements, and with bitumen, having a total of 1,000 tons or more of hot-mix bid quantity in case of Sections 401, 402 and 403.

5/05/15

**401580 – RIDE QUALITY OF HOT-MIX PAVEMENT**

**Description:**

The purpose of this Special Provision is to modify Standard Specification Section 401.13 to change the method of determining an acceptable riding surface. This Special Provision replaces the entire existing wording in Section 401.13.

The Contractor shall be responsible for providing smoothness characteristics that will meet the requirements of the Contract. The Contractor shall be responsible for providing equipment, maintenance of traffic (MOT) as required by the Delaware MUTCD, and performing testing in accordance to the processes and procedures set forth in this Special Provision. All costs for testing and MOT shall be incidental to this item. Both the International Roughness Index (IRI) and deviations located within a 10' straightedge are used to characterize smoothness in this Special Provision.

**Definitions:**

*Class 1 Project* - a project that is full depth construction based on contract documents and document modifications.

*Class 2 Project* - a project in which a minimum of two smoothness opportunities are performed based on contract documents and document modifications.

*Class 3 Project* - a project that only one smoothness opportunity is performed based on contract documents and document modifications.

*Deviation* – a hump or depression found to exceed the tolerances defined in this Special Provision within a 10' straightedge.

*ERD File* – a file storing numbers in tabular form for plotting and processing purposes. The ERD file format was developed by the Engineering Research Division of the University of Michigan Transportation Institute (UMTRI).

*Full Depth Construction* – a project that consists of a hot mix asphalt wearing surface placed on a hot-mix asphalt base / binder course or Portland cement concrete, on an aggregate or asphalt / cement stabilized base structure on existing or prepared subgrade materials or borrow.

*Inertial Profiler* – a high speed or lightweight device used to measure the pavement profile with an accelerometer to form an inertial reference and a height sensor to measure pavement height relative to that reference.

*International Roughness Index (IRI)* – a statistic, based on computations from a measured longitudinal profile using a quarter-car simulation, calculated to represent the amount of roughness in a pavement surface.

*Rolling Ten Foot Straightedge* - a rigid 10' straightedge mounted to measurement wheels and used to indicate both high and low deviations.

*Smoothness Opportunity* – a smoothness opportunity is roadway milling, placement of a leveling course, in place recycling, or placement of a lift of Hot Mix Asphalt. Full depth reclamation is not considered in this Special Provision as a smoothness opportunity. The final wearing surface is considered one smoothness opportunity.

**Equipment:**

The Contractor shall have available, at all times during paving operations, an approved 10' straightedge. The Contractor shall also have available a high speed or lightweight inertial profiling system meeting the standards set forth in AASHTO MP-11 that is capable of collecting data in both wheelpaths simultaneously. Data collected using the inertial profiling system shall be used to calculate both IRI and deviation locations using on-board computer software. Deviations, as defined in this Special Provision, shall be calculated using a rolling 10' straight edge simulation program capable of isolating deviations greater than or equal to 0.25" in 10'. If software is not available to calculate the parameters for a rolling 10' straight edge simulation, the Contractor may be permitted to use, at the Engineer's discretion, a rolling 10' straightedge capable of isolating deviations greater than or equal to 0.25" in 10'.

**Documentation Required**

Prior to the start of corrective actions (milling, overlaying, recycling, etc.), the Contractor shall provide to the Engineer:

1. Manufacturer, Make, and Model of the test system,
2. Equipment Owner,
3. Relevant Certifications,
4. Manufacturer Calibration Procedures, and
5. Relevant Operator Training information.

Testing cannot take place until the Engineer has received this information and provided approval of the proposed test equipment and MOT plan.

**Calibration**

Prior to testing, the Contractor shall verify that the inertial profiling equipment is calibrated by following the manufacturer's calibration procedure in the presence of the Engineer. Vertical and longitudinal calibrations shall be performed. The Engineer will provide calibration blocks for the Contractor's use at the time of calibration. If the equipment does not pass the calibration procedure, it will not be permitted for use.

**Testing:**

Testing of the pavement surface includes measurement and calculation of the IRI parameters and deviations in the longitudinal direction. The Contractor shall notify the Engineer at least three (3) working days prior to data collection for both initial and final testing.

**Transverse Deviations / Cross Slope**

After final rolling and at the Engineer's discretion, the Contractor shall test the surface of each lift and the final wearing surface for deviations in the transverse direction. The Contractor shall have available at all times, and use appropriately, an approved 10' straightedge to be placed perpendicular to the centerline for checking cross slope. Deviations in the transverse direction shall not equal or exceed 0.25".

The discount charge for deviations in the transverse direction is described in Section 'Acceptance and Payment' of this Special Provision. Deviations in the transverse direction shall require corrective actions or will be assessed a deviation discount charge at the discretion of the Engineer.

### **General Testing Requirements for IRI Data Collection**

Data used for calculation of the IRI shall be measured in each wheel path using an approved inertial profiling system. Data collected for IRI calculation shall have longitudinal spacing no greater than 6 inches. Wavelengths exceeding 300 feet shall be removed using long wavelength filters. The International Roughness Index shall be calculated using this data and reported in 0.1 mile (528 foot) segments. Three (3) passes shall be made in each lane and direction requiring testing. The filename given to the data set shall include the contract number, the location number, the lane tested and direction tested. For example, the Eastbound left lane of Contract XX-XXX-XX, Location 1, run 3 shall be named:

XXXXXXXXLoc1LEBr3

Testing shall be performed within seven (7) days of the completion of project paving operations. Areas not subject to IRI testing for all Classes of projects include:

1. 50 feet before the first bridge deck expansion joint to 50 feet after the last expansion joint if the bridge deck is excluded from the HMA overlay.
2. 20 feet longitudinally from the center of an existing obstruction located and visible in the pavement surface such as a manhole or water main. Obstructions located within the test area shall be noted as an event on report printouts using an automated event marking system and should be removed from the calculations prior to report submission.
3. Shoulders, short acceleration and deceleration lanes, and turn lanes less than 1000 feet in length, and median crossovers.

Testing shall be performed in accordance to the following procedures.

1. Clean the roadway path to be measured of all debris and other loose material. Ensure that the roadway surface is dry and free of any standing water.
2. Locate the start of the project limits and mark them to enable automatic start sensors to be activated.
3. Locate the end of the project limits and mark them to enable automatic stop sensors to be activated.
4. Locate any obstructions in the wheelpath / test area and mark them with reflective tape to enable automatic event marking.
5. Establish a pre-test length (150' or the manufacturer's recommended pre-test length, whichever is greater) prior to the start of the project limits.
6. Position the left wheelpath sensor three feet (3') from the left edge marking of each lane tested.
7. Attain a test speed that is within the manufacturers recommendations for the equipment and maintain that test speed throughout the test.

Provide the Department the plot of one profile trace per tested lane and a summary report containing IRI values for each of the three test runs performed in each direction.

### **Initial Testing, IRI**

The original surface for Class 3 projects shall be tested at no cost to the Department prior to performance of any smoothness opportunities in accordance to the methods and parameters in Section 'General Testing Requirements for IRI Data Collection'. Class 1 and Class 2 projects do not require initial testing. Results from initial testing for Class 3 projects shall be submitted to the Engineer within five (5) working days of test completion in the format specified by the Engineer. Results not received within the allotted time frame will be assessed a charge of \$1,000.00 per day at the Engineer's discretion. Three (3)

measurements shall be taken for each lane required to meet this Special Provision. No paving shall be permitted until the Contractor has performed initial testing to the satisfaction of the Engineer.

**Final Testing**

The final surface, after all smoothness operations have been completed, shall be tested in accordance to Section 'General Testing Requirements for IRI Data Collection'. Results of final testing for all projects shall be submitted to the Engineer within five (5) working days of test completion in the format specified by the Engineer. Results not received within the allotted time frame will be assessed a charge of \$1,000.00 per day at the Engineer's discretion. Three measurements shall be taken for each lane to meet the requirements of this Special Provision.

**Final Testing for Excessive Deviations**

All paved areas, whether subject to IRI testing or not, must be tested to locate deviations in each wheelpath in the longitudinal direction and in the transverse direction. A deviation is considered to be a hump or depression greater than or equal to 0.25" within 10'. Longitudinal deviations shall be located using data collected by an inertial profiling system and processed through a rolling 10'- straightedge simulation, a rolling 10' straightedge, or a rigid 10' straightedge. Transverse deviations shall be located using a rigid 10' straightedge at the discretion of the Engineer. Testing shall be performed within seven (7) days of the completion of paving.

**Quality Assurance Testing:**

If the Engineer chooses to perform comparison testing, the Contractor shall provide a lane closure at no cost to the Engineer. The length of the lane closure shall be determined for each project location based on site conditions. The minimum closure shall be 0.25 mile and the maximum closure shall be 1 mile. The lane closure shall be at either end of the project limits and will be determined on a project basis at the Engineer's discretion.

If comparison testing indicates a difference greater than 6 in/mi in IRI measurements per 0.1-mile section, the Contractor and Engineer shall work to resolve the differences. If the differences cannot be resolved the equipment will be rejected for use on the project and all data collected to that point will be deemed invalid for that contract. At that point, the Contractor shall propose an alternative piece of testing equipment for use.

**Data Reporting:**

Test results shall be provided to the Department within five (5) working days of the completion of testing. Results not received within the allotted time frame will be assessed a charge of \$1,000.00 per day at the discretion of the Engineer. The Department recognizes that inertial profiler manufacturers use different formats for reporting capabilities. Printouts on 8 1/2" by 11" paper or strip charts are acceptable.

Data collected using the inertial profiling system shall be provided to the Engineer with the following information clearly displayed on the printout:

1. Profiling Company Name
2. Date of Paving
3. Date of Test
4. Parameters used in the calculation
5. Data file name
6. Testing Personnel



A printout of the pavement profile is required for one (1) of the three (3) runs for each lane and direction tested. A summary chart may be submitted for the remaining test runs. If excessive deviations are calculated using inertial profiling data runs submitted for IRI analysis a summary chart shall be submitted as well. The summary chart shall include the station and wheelpath for deviation reporting. If excessive deviations are manually determined (using a rolling ten-foot straightedge or rigid 10' straightedge), the Engineer will be present during testing and will record the data on site.

Inertial profiling systems have the capability of producing ERD files. An ERD file is requested for each run performed and can be submitted electronically (via email) or on external media (CD). More information about the format of ERD files can be obtained through the Engineer.

**Acceptance and Payment:**

Acceptance of the final pavement will be based on the results of IRI values and the number of deviations. A section that has an IRI value greater than 100.0 in/mi will require corrective actions. Deviations equal to or in excess of 0.25" in 10' shall be corrected at no expense to the Engineer or have a discount charge of \$200.00 per deviation assessed at the discretion of the Engineer.

An IRI number in inches per mile will be used for each 0.1-mile (528 foot) section as the basis for payment of the surface courses designated by each contract. The average value of the three test runs will be used as the IRI value for payment. Payments for each section will be based on estimated tonnage calculated from plan thickness and widths using the average maximum specific gravity ("Rice") value for all surface mix used at that location. If the plan does not indicate the travel lane width, a default value of 12' will be used. The formula used for tonnage estimation is:

$$\text{Estimated Tonnage} = [(L * W * T) * \text{Rice} * 62.4 \text{ (lb/ft}^3\text{)} * (0.0005 \text{ tons/12 in)}]$$

where: L = Length Segment (ft.)  
 W = Width Lane (ft.)  
 T = Plan Thickness (in.)

The percentage of improvement for Class 3 projects will be calculated using the following equation:

$$\% \text{ Improvement} = [(\text{Initial IRI} - \text{Final IRI}) / \text{Initial IRI}] * 100$$

The applicable pay adjustments for IRI will be taken from Table A (Class 1 and 2 Projects) and Table B (Class 3 Projects)

$$\text{IRI Bonus / Penalty} = \text{Estimated Tonnage} * \text{UP} * (\text{PA} - 100) / 100$$

where: UP = Contract Hot Mix Unit Price (Dollars)  
 PA = Pay Adjustment (Percent)

The total pay adjustment for paving work performed on each location will be:

$$(\sum \text{IRI Adj for each section}) - \text{Total Deviations} * 200$$

It will be possible to receive bonus for IRI measurements and a discount charge for excessive deviations on the same project. If a 528' section has an IRI value resulting in a deduction of at least 30% of the section pay (i.e. IRI >100 in/mi), the deviation discount charge for that section is disregarded and the IRI discount charge is the only action taken for that section.

**Table A: Payment Adjustments for Class 1 and Class 2 Projects**

IRI per 0.1 mile Section (in./mi.)	Payment Adjustments	
	Class 1	Class 2
40.0 and under	103	104
40.1 - 55.0	101	102
55.1 – 65.0	100	101
65.1 – 75.0	99	100
75.1 – 100.0	96	97
>100	70	70

Class 3 projects will be paid based on the percent improvement for each 528’ section from the average of the three initial profile traces taken prior to any work action as shown in the Table B.

**Table B: Payment Adjustments for Class 3 projects**

Percent Improvement from Initial test	Payment Adjustments for Class 3 Projects
> 60.0%	103
45.1 – 60.0%	102
25.1 – 45.0%	101
0 – 25.0%	100
<0%	70

Corrections to the paving surface, such as diamond grinding with approved equipment, patching, or other measures may be taken at the Contractor’s expense and at the Engineer’s discretion to correct pavement surfaces assessed a discount charge. Areas corrected using these methods will not be eligible for bonus payment, but may be assessed a charge based on the resulting surface after correction. The Engineer reserves the right to require corrective actions such as remove & replace or diamond grinding if the must correct discount charge exceeds 50% of the cost of materials or the IRI exceeds 100 in/mi. The Engineer may also require corrective actions if the deviations are at a height or depth which will create a safety concern on the roadway.

3/9/09

**401696 – ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE**

**Description:**

To compensate for work associated with paving the tie-ins at entrances, driveways and intersecting streets when such work cannot be completed as part of the mainline (roadway, auxiliary lanes, shoulder) paving operation. The surcharge limits will extend from the outermost roadway element to the point of tie-in as directed by the Engineer with the following exceptions.

No Surcharge will be paid:

1. When the tie-in does not exceed three feet from the outermost roadway element.
2. For paving any portion of a tie-in which exceeds 100 feet from the outermost roadway element. The entire tie-in section will be performed under normal paving operations.
3. When the intersecting street is to be paved under the same Contract.
4. For paving of auxiliary lanes and crossovers in the median of divided highways.

**Method of Measurement:**

The quantity of entrance, driveway and intersecting street paving surcharge will be measured as the actual number of tons of bituminous concrete placed and accepted in entrances, driveways and intersecting streets as described in this item.

**Basis of Payment:**

The quantity of entrance, driveway and intersecting street paving surcharge will be paid for at the Contract unit price per ton. Price and payment will constitute full compensation for the additional labor and equipment costs involved with the reduced production associated with such work.

10/12/17

**801500 - MAINTENANCE OF TRAFFIC - ALL INCLUSIVE**

**Description:**

This item shall consist of furnishing, installing, maintaining and/or relocating the necessary temporary traffic control devices used to maintain vehicular, bicycle and pedestrian traffic, including persons with disabilities in accordance with the Americans with Disabilities Act, as amended. All work shall be performed in a manner that will provide reasonably safe passage with the least practicable obstruction to all users, including vehicular, bicycle and pedestrian traffic.

All requirements of the Delaware Manual on Uniform Traffic Control Devices (MUTCD), Part 6, herein referred to as the Delaware MUTCD. (latest edition with all revisions made up to the date of Advertisement of this project) shall apply for all temporary traffic control devices. Any, and all, control, direction, management and maintenance of traffic shall be performed in accordance with the requirements of the Delaware MUTCD, notes on the Plans, this specification, and as directed by the Engineer.

The Contractor shall be aware that the Case Diagrams and safety measures outlined in the Delaware MUTCD are for common construction situations and modifications may be warranted based on the complexity of the job. The Contractor shall submit justification for modifications to the Temporary Traffic Control Plan (TTCP) to the Engineer for approval prior to implementation.

The Department reserves the right to impose additional restrictions, as needed, for the operational movement and safety of the traveling public. The Department reserves the right to suspend the Contractor's operations until compliance with the Engineer's directive for remedial action, based on but not limited to the following reasons:

1. The Contractor's operations are not in compliance with the Delaware MUTCD, the specifications or the Plans.
2. The Contractor's operations have been deemed unsafe by the Traffic Safety Engineer or District Safety Officer.

**Materials and Construction Methods:**

The Contractor shall submit a Temporary Traffic Control Plan (TTCP) or a Letter of Intent to use the Plan recommended Delaware MUTCD Case Diagram(s) at or prior to the pre-construction meeting. The Contractor shall submit the TTCP for all Contractor and subcontractor work to be performed on the project for the Department's approval before the start of work.

When specified by a note in the Plans, the Contractor shall be required to have an American Traffic Safety Services Association (ATSSA) certified Traffic Control Supervisor on the project. The authorized designee must be assigned adequate authority, by the Contractor, to ensure compliance with the requirements of the Delaware MUTCD and provide remedial action when deemed necessary by the Traffic Safety Engineer or the District Safety Officer. The ATSSA certified Traffic Control Supervisor's sole responsibility shall be the maintenance of traffic throughout the project. This responsibility shall include, but is not limited to, the installation, operations, maintenance and service of temporary traffic control devices. Also required is the daily maintenance of a log to record maintenance of traffic activities, i.e., number and location of temporary traffic control devices; and times of installation, changes and repairs to temporary traffic control devices. The ATSSA Traffic Control Supervisor shall serve as the liaison with the Engineer concerning the Contractor's maintenance of traffic.

The name, contact number and certification for the designated Traffic Control Supervisor shall be submitted at or prior to the pre-construction meeting. The cost of the ATSSA certified Traffic Control Supervisor shall be incidental to this item.

Temporary traffic control devices shall be maintained in good condition in accordance with the brochure entitled "Quality Guidelines for Temporary Traffic Control Devices", published by the American Traffic Safety Services Association (ATSSA). Any temporary traffic control devices that do not meet the quality guidelines shall be removed and replaced with acceptable devices. Failure to comply will result in work stoppage with time charges continuing to be assessed.

Any existing signs that conflict with any temporary or permanent construction signs shall be covered as needed or as directed by the Engineer. The cost for temporarily covering conflicting signs shall be incidental to this item.

Access to all transit stops located within the project limits shall be maintained unless otherwise directed by the Plans or the Engineer. Maintaining access shall include maintaining an area for the transit vehicle and also an accessible path for pedestrians to safely access the transit stop.

The Contractor shall notify the Engineer, in writing, no less than fourteen (14) calendar days prior to the start of any detour(s) and road closures. The Engineer will notify the following entities:

- Local 911 Center
- Local School Districts
- Local Post Offices
- DelDOT's Transportation Management Center (TMC)
- Town Managers
- Local Police
- DelDOT's Public Relations
- Delaware Transit Corporation (DTC)

Immediately prior to the implementation of any lane or road closures, the Engineer shall notify the DelDOT TMC at (302) 659-4600. Notifications shall also be provided when the closures are lifted. The Engineer shall notify TMC and the District Safety Officer if any lane closures cannot be removed prior to the end of the allowable work hours.

The Contractor shall notify the local 911 center if access to a fire hydrant is temporarily restricted. The Contractor shall provide written confirmation to the Engineer that the local 911 center has been notified.

If a detour is required during any part or the entire period of this Contract, an approved detour plan shall be obtained from the Department's Traffic Safety Section. All signs, barricades and other temporary traffic control devices required as part of the approved detour plan shall be installed and maintained by the Contractor on the route that is closed and on the detour route. Road closures without an approved detour plan shall not be allowed. If a road is closed without an approved detour plan, the Contractor's operations shall be stopped immediately.

The Contractor shall provide and maintain ingress and egress for each property abutting the construction area and each property located between the diversion points of any detour and the actual construction site. Construction activities which may temporarily or otherwise interfere with property access shall be coordinated in advance with the affected property owners.

The Contractor shall conduct construction operations in a manner which will minimize delays to traffic, and shall meet the following requirements:

1. If work is being performed within 200 feet in any direction of an intersection that is controlled by a traffic signal, the flagger(s) shall direct the flow of traffic in concert with the traffic signals in construction areas to avoid queuing, unless active work prohibits such action. The flagger shall direct traffic to prevent traffic from queuing through an intersection (i.e., blocking an intersection). Only a Traffic Officer may direct traffic against the operation of a traffic signal and only until the operation occurring within the intersection is completed.
2. When a lane adjacent to an open lane is closed to travel, the temporary traffic control devices shall be set 2 feet (0.61 m) into the closed lane from the edge of the open lane, unless an uncured patch exists or actual work is being performed closer to the open lane with minimum restriction to traffic.
3. Except for “buffer lanes” on high volume and/or high speed roadways, lanes shall not be closed unless construction activity requiring lane closure is taking place, or will take place within the next hour. Lanes shall be reopened immediately upon completion of the work. Moving operations will require the lane closures be shortened as the work progresses and as traffic conditions warrant to minimize the length of the closure. The Contractor shall conduct construction operations in a manner so as to minimize disruption to traffic during peak hours and periods of heavy flow. The Department reserves the right to stop or change the Contractor's operations, if in the opinion of the Engineer, such operations are unnecessary at that time or the operations are unnecessarily impeding traffic.
4. Work in the vicinity of traffic signals, shall be scheduled to minimize the time during which the signal is operated without detectors, and prior approval from the Engineer shall be required. TMC shall be notified in advance of cutting a loop detector, and be immediately notified once the loop detector has been reinstalled. The Contractor shall provide sufficient advance notice of the loop detector work with the Engineer to ensure the aforementioned requirements are met.

It is required that all temporary traffic control work and related items shall either be performed entirely by the Contractor's own organization, or totally subcontracted. Maintenance of equipment shall not be subject to this requirement.

Any deficiencies related to temporary traffic control that are reported to the Contractor in writing shall be corrected within 24 hours or as directed by the Engineer. Failure to comply will result in non-payment for those devices that are found to be deficient for the duration of the deficiency. Serious deficiencies that are not corrected immediately shall result in suspension of work until items identified are brought back into compliance.

At the end of each day's work, the Contractor shall correct all pavement edge drop-offs in accordance with Table 6G-1 in the Delaware MUTCD. This corrective work shall be accomplished with Temporary Roadway Material (TRM) unless an alternate method is specified in the Plans. All ruts and potholes shall be filled with TRM as soon as possible but no later than the end of each work day. Placement and Payment of TRM shall be completed in accordance with Section 403 of the Standard Specifications. If temporary elimination of a drop-off hazard cannot be accomplished, then the area should be properly marked and protected with temporary traffic control devices such as temporary barricades, warning signs, flashing lights, etc. as required by Section 6G.21 of the Delaware MUTCD.

All open trench excavation accessible by vehicular traffic must be backfilled prior to the end of each working day. Steel plates shall not be used except in emergency situations and only with prior written approval from the Engineer unless otherwise directed by the Plans.

The Contractor shall submit, at or prior to the preconstruction meeting, detailed drawings including but not limited to existing striping lengths, lane and shoulder widths, turn lane lengths, locations of stop bars, turn arrows, crosswalks and railroad crossings. The drawings shall depict the existing pavement markings for each project location. These drawings will be reviewed by the Department's Traffic Section to determine the need for modification(s) for compliance with the Delaware MUTCD. Temporary pavement markings, on the final pavement surface, shall match the Plan dimensions and layout or the approved drawings of the permanent markings in compliance with Section 3 of the Delaware MUTCD. All conflicting or errant striping shall be removed as directed by the Engineer in compliance with the specifications for Item 817031 - Removal of Pavement Striping.

At the end of each day's operation and before traffic is returned to unrestricted roadway use, temporary striping shall be utilized when the existing pavement is milled and hot mix will not be placed the same day or more than a single course of hot mix is to be placed or permanent roadway striping cannot be placed on the same day as the placement of the final course of hot mix. Placement of temporary striping shall receive prior approval from the Engineer and the contractor shall apply temporary pavement markings in accordance with the requirements of Section 817 of Delaware Standard specifications and the Delaware MUTCD. Payment for temporary pavement striping shall be made at the unit price bid for item 817 - Temporary Striping. Payment for final striping will be included in the applicable striping item.

The Contractor shall have temporary striping/delineating materials (such as raised markers, tape, and other approved materials) available at the job site for verification by the Department prior to starting the hot-mix paving operation on roads to be immediately opened to traffic. These materials shall be used by the Contractor for temporary markings if he/she fails to apply temporary marking paint, etc., as required by the Delaware MUTCD. No paving operations on roads to be immediately opened to traffic will be allowed unless such verification has been made for the availability of the materials at the job site.

Travel lane and ramp closings on multilane highways and Interstates shall not be permitted during the following holiday periods:

- December 24 through December 27 (Christmas Day)
- December 31 through January 3 (New Years Day)
- Friday prior to Easter through Easter Sunday
- Thursday prior to Memorial Day through the Tuesday following Memorial Day
- Dover International Speedway Race Weekends (Thursday prior to the race event through the day after the race event)
- July 3 through July 5 (Independence Day)
- Thursday prior to Labor Day through the Tuesday following Labor Day
- Wednesday prior to Thanksgiving Day through the Monday following Thanksgiving Day

Additional time restrictions may apply as noted in the project plans or as directed by the Engineer. Any requests to waive any restrictions must be made in writing to the Engineer for review and approval. A copy of the request shall be provided to the District Safety Officer for review.

**Certification:**

Temporary traffic control devices used on all highways open to the public in this State shall conform to the Delaware MUTCD. All devices shall be crashworthy in accordance with the National Cooperative Highway Research Program (NCHRP) Report 350, the memorandum issued August 28, 1998 by The USDOT

Federal Highway Administration, and/or in accordance with the latest edition of the Manual for Assessing Safety Hardware (MASH), published by the American Association of State Highway and Transportation Officials (AASHTO).

The Contractor shall submit certification for temporary traffic control devices or vendors used specifically on this project at or prior to the pre-construction meeting.

Certification of compliance with NCHRP report 350 and/or MASH is required for the following categories of temporary traffic control devices:

**Category I** contains small and lightweight channelizing and delineating control devices which includes cones, tubular markers, flexible delineator post and drums, all without any accessories or attachments.

**Category II** includes temporary traffic control devices that are not expected to produce significant vehicular velocity changes to impacting vehicles. These devices which shall weigh 100 pounds or less, include Type I, II and III barricades, portable sign supports with signs, and intrusion alarms. Also included are drums, cones, and vertical panels with accessories or attachments.

**Category III** includes temporary traffic control devices that are expected to cause significant vehicular velocity changes to impacting vehicles. These devices which weigh more than 100 pounds include temporary barrier, temporary impact attenuators, and truck-mounted attenuators.

**Category IV** includes portable or trailer-mounted devices such as arrow panels, variable message signs, temporary traffic signals and temporary area lighting.

For Category I devices, the manufacturer or Contractor may self-certify that the devices meet the NCHRP-350 and/or MASH criteria. The Contractor shall supply the Federal Highway Administration's NCHRP-350 and/or MASH acceptance letter for each type of device that falls under Category II and III devices.

**Basis of Payment:**

Payment will be made at the Lump Sum price for "Maintenance of Traffic", for which price and payment constitutes full compensation for all maintenance of traffic activities accepted by the Engineer, which shall include the cost of furnishing and relocating permanent and temporary traffic control signs, traffic cones or drums, submission of temporary traffic control plan(s), submission of existing pavement marking drawings, submission of all required certifications, labor, equipment and incidentals necessary to complete the item. Payment to furnish and maintain other temporary traffic control devices including but not limited to Portable P.C.C. Safety Barrier, Truck Mounted Attenuators, Portable Changeable Message Signs, Arrow Panels and Portable Light Assemblies will be made at the contract unit price for each item.

**NOTE**

If the Contractor does not complete the Contract work within the Contract completion time (including approved extension time), the Contractor shall be responsible for providing the necessary temporary traffic control devices that are required to complete any remaining work. The costs of such temporary traffic control shall be borne by the Contractor. No additional payment will be made to the Contractor to maintain traffic in accordance with the Delaware MUTCD, contract plans and specifications. Temporary traffic control items include, but not be limited to, warning lights, warning signs, barricades, plastic drums, P.C.C. safety barrier, flaggers, traffic officers, arrow panels, message boards, and portable impact attenuators.

10/5/16



**817500 - PREFORMED THERMOPLASTIC DECORATIVE PAVEMENT SYSTEM**

**Description:**

This work consists of preparing the application area, supplying and placing sealer and the preformed thermoplastic material with the specified color and pattern at the location(s) shown on the Plans and as directed by the Engineer.

**Materials:**

The material must be a resilient preformed thermoplastic product, where the top surface contains nonskid/non-slip material. The material must be resistant to the detrimental effects of motor fuels, lubricants, hydraulic fluids etc. The material shall be capable of being installed on bituminous and/or portland cement concrete pavements by the use of an infrared heater or a blue-flame radiant heater. The use of a compactor or similar equipment shall not be permitted.

The material must be capable of conforming to pavement contours, breaks and faults through the action of traffic at normal pavement temperatures. It shall not be necessary to use a grid template or to make pattern grooves or other indentations in the asphalt or concrete surface prior to installing the material. The final product shall have strong adhesion to the underlying pavement, and be durable and abrasion resistant.

The individual pieces in each material segment (typically 24 in. by 36 in.) must be factory assembled with a compatible material and interconnected so that in the field it is not necessary to assemble the individual pieces within a material segment. The material must be able to be applied in temperatures down to 45°F without any special storage, preheating or treatment of the material before application

The material must be able to be applied to asphalt and concrete surfaces without preheating the application surface to a specific temperature. The material must be capable of being affixed to green concrete (concrete that has set but not appreciably hardened) and not require the portland cement concrete application areas to be cured or dried out. The material must be capable of being affixed to bituminous and/or portland cement concrete pavements by the use of the heat of an infrared heater or blue-flame heater. Heating indicators must be evenly distributed on the surface of the material in order to ensure correct application. The material must cover the entire application area. Once applied, no part of the pavement surface must be visible in the application area.

**Specifications:**

The Material must be composed of an ester modified rosin impervious to degradation by motor fuels, lubricants etc. in conjunction with aggregates, pigments, binders, and non-skid/non-slip material. Pigments and non-skid/nonslip material must be uniformly distributed throughout the material. The thermoplastic material conforms to AASHTO designation M249-98, with the exception of the relevant differences due to the material being supplied in a preformed state, being non-reflective, and potentially being of a color different from white or yellow.

**Pigments:**

White: The material shall be manufactured with sufficient titanium dioxide pigment to meet FHWA Docket No. FHWA-99-6190 Table 5 and Table 6 as revised and corrected.

Red, Blue, and Yellow: The material shall be manufactured with sufficient pigment to meet FHWA Docket No. FHWA-99-6190 Table 5 and Table 6 as revised and corrected. The pigment system must be heavy-metal free.

Other Colors: The pigment system must be heavy-metal free.

**Miscellaneous Specifications:**

Heating indicators: The top surface of the material shall have regularly spaced indents. These indents shall act as a visual cue during application that the material has reached a molten state so satisfactory adhesion and proper embedment of non-skid/non-slip material has been achieved, and a post-application visual cue that the application procedures have been followed.

Skid Resistance: The surface of the preformed thermoplastic material shall contain factory applied non-skid material with a minimum hardness of 7 (Mohs scale). Upon application the material shall provide a minimum skid resistance value of 55 BPN when tested according to ASTM E 303.

Slip Resistance: Upon application the material shall provide a minimum static friction of coefficient of 0.6 when tested according to ASTM C 1028 (wet and dry), and a minimum static coefficient of friction of 0.6 when tested according to ASTM D 2047.

Thickness: The material must be supplied at a minimum thickness of 125 mil (3.18 mm).

Environmental Resistance: The material must be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

The Contractor shall submit industry or manufacturer/supplier technical information available for the material and system proposed for use. This information should include material recommendations, certifications and installation instructions as appropriate for the proposed system based on environmental and traffic conditions.

**Construction Methods:**

A manufacturer's representative shall be present on-site during the placement of the system.

*The system shall be placed only within the Plan designated areas. These areas shall be prepared by air lancing the surface to remove dirt, loose particles, and any other substance that may reduce the system's ability to adhere to the existing surfaces. Once clean, the surface shall be heated by an infrared heater or a blue-flame radiant heater to remove any moisture within the existing pavement. It is imperative that the surface be dry in order for the adhesive to function properly.*

Once the installation area has been prepped a sealant shall be placed on the substrate, per the manufacturer's specifications, and the material placed over the sealant. The material shall be applied using an infrared heater as recommended by the manufacturer.

The system may be constructed only when environmental conditions meet the requirements of these specifications, or of the material manufacturer/supplier, whichever is more stringent. The following conditions must be met:

- Air temperature, both current and that forecast throughout the cure time shall be above 45°F.

The contractor shall ensure that the edge of the material is flush with the adjacent pavement so that it will not have a lip that could be caught by snow plow or other maintenance activities.

The final texture, color and pattern of the surface shall conform to the Plan details. A 24 inch by 36 inch color sample and pattern shall be supplied to the Department for approval prior to installation

The constructed area shall be closed to traffic until the system has cured and cooled sufficiently to resist damage to the system. Cure time shall be one (1) hour or as directed by the Engineer or manufacturer's representative.

**Method of Measurement:**

The quantity of preformed thermoplastic decorative pavement system will be measured as the actual number of square feet of preformed thermoplastic decorative pavement system placed and accepted in conformance with the Plans, Specifications and manufacturer's recommendation.

The Engineer will not measure areas of correction for payment.

**Basis of Payment:**

The quantity of preformed thermoplastic decorative pavement system will be paid for at the Contract unit price per square foot. Price and payment will constitute full compensation for preparing the area; supplying and placing the sealant and thermoplastic pavement markings; and for all labor, equipment, and incidentals required to complete the work.

4/22/16



STATE OF DELAWARE  
**DEPARTMENT OF TRANSPORTATION**  
800 BAY ROAD  
P.O. Box 778  
DOVER, DELAWARE 19903

JENNIFER COHAN  
SECRETARY

27 SEPTEMBER, 2018  
UTILITY STATEMENT  
STATE CONTRACT # T201906102  
F.A.P. # NONE  
P6# 19-06102  
PAVEMENT & REHABILITATION,  
NORTH II, 2019  
NEW CASTLE COUNTY,

**LOCATION** - Shipley Rd from Washington St Extension to Wilson Rd

**General Scope of work** – 2" profile mill, bituminous concrete and PCC patching, 2" type C hot-mix, ADA/signal upgrades, and upgrades to pavement markings and signing.

The following utility companies may own and/or maintain facilities within the project limits:

CITY OF WILMINGTON  
COMCAST  
DELDOT  
DELMARVA POWER  
DELMARVA POWER GAS  
MCI TELECOMMUNICATIONS  
NEW CASTLE DEPT SPECIAL SERVICES  
VERIZON  
ZAYO

Utility adjustments and/or relocations shall be performed as narrated, but are not limited to the following:



**CITY OF WILMINGTON – TRAFFIC SIGNALS, WATER & SEWER:**

The City of Wilmington – Traffic Signals, maintains ITMS, and/or signal systems throughout the project limits. The Contractor must use care when working in these areas. Any adjustments to the City of Wilmington – Traffic Signals facilities shall be performed by the State's contractor in accordance with the Standard Specifications and City details as directed by the District Engineer. The contractor shall report any impacts to any vehicle detection system to the Traffic Management Center (TMC) (Cell #77) (24 HR 302-659-4600), 7 calendar days before any loop system is impacted by construction activities.

The City of Wilmington – Water, maintains a water main throughout this location with services. The Contractor must use care when working in these areas. There are water valve risers in the roadway and sidewalk that will require adjustment. Any adjustments to City of Wilmington valves facilities shall be performed by the contractor after a fourteen (14) calendar day notice from the contractor to the City of Wilmington.

The City of Wilmington -Sewer, maintains a sanitary sewer throughout this location with service laterals. The Contractor must use care when working in these areas. There are sewer cleanout risers and manholes in the roadway and sidewalk that will require adjustment. Any adjustments to City of Wilmington Sewer facilities shall be performed by the contractor after a fourteen (14) calendar day notice from the contractor to the City of Wilmington.

**No working/existing City of Wilmington facilities can be taken out of service.  
These facilities will remain in place and active during the duration of this contract.**

**COMCAST:**

Comcast maintains overhead and underground facilities within this location. The contractor must use care when working in these underground areas as well as overhead cable crossings. Any adjustments to Comcast facilities shall be performed by the utility after a minimum of fourteen (14) calendar day notice from the contractor. The time to complete any relocations/adjustments will depend on the nature of the work.

**No working/existing Comcast facilities can be taken out of service.  
These facilities will remain in place and active during the duration of this contract.  
Comcast emergency 24 hour hotline customer service: 1-800-934-6489.**

**Del DOT:**

Del Dot maintains ITMS, fiber, lighting and/or signal systems throughout the project limits. The Contractor must use care when working in these areas. Any adjustments to Del DOT facilities shall be performed by the State's contractor in accordance with the Standard Specifications as directed by the District Engineer. The contractor shall report any impacts to any vehicle detection system to the Traffic Management Center (TMC) (Cell #77) (24 HR 302-659-4600), 7 calendar days before the loop system is impacted by construction activities.

**DELMARVA POWER GAS:**

Delmarva Power-Gas maintains steel and plastic gas mains throughout this location with services. The Contractor must use care when working in these areas. There are gas valve risers and manholes with-in the PCC sidewalk and roadway. Any adjustments to Delmarva Power-Gas facilities shall be performed by the utility after a seven (7) calendar day notice from the contractor.

**No working/existing Delmarva Power-Gas facilities can be taken out of service.  
These facilities will remain in place and active during the duration of this contract.**

**DELMARVA POWER – ELECTRIC:**

Delmarva Power maintains overhead and underground facilities within this location. The contractor must use care when working in these underground areas as well as overhead cable crossings. There are electric manholes with-in the PCC sidewalk and roadway. Any adjustments to Delmarva facilities shall be performed by the utility with fourteen (14) calendar day notice from the contractor.

**No working/existing Delmarva facilities can be taken out of service.**

**These facilities will remain in place and active during the duration of this contract.**

**To report a downed wire, call 1-800-898-8042.**

Delmarva Power has a written requirement regarding working near overhead power lines.

Customer/Contractor Acknowledgement

Performing Work within Dangerous Proximity of High Voltage Lines

“You are hereby notified by Delmarva Power that **NO** work can be performed at this location within dangerous proximity to Delmarva’s overhead lines and that you are required by law to comply with applicable OSHA regulations and the applicable state High Voltage Safety Act. Performance of any activity or causing any person, equipment or things to come within dangerous proximity of Delmarva’s overhead lines creates an extreme risk of severe injury or death. You are further notified that no activities may be conducted within dangerous proximity of Delmarva’s overhead lines until mutually agreeable measures to prevent contact with overhead lines have been reached with Delmarva and Delmarva has provided you with written authorization to perform the activities. Additionally any work involving the use of a crane with intentions to remain outside of dangerous proximity, but within 20 feet of the Company’s overhead lines, requires an Encroachment Prevention Plan in order to satisfy OSHA”

**VERIZON:**

Verizon maintains overhead and underground facilities within this location. The contractor must use care when working in these underground areas as well as overhead cable crossings. There manholes with in the PCC sidewalk and roadway. Any adjustments to Verizon facilities shall be performed by the utility after fourteen (14) calendar notice from the contractor. The time to complete any relocations/adjustments will depend on the nature of the work.

**No working/existing Verizon facilities can be taken out of service.**

**These facilities will remain in place and active during the duration of this contract.**

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**General Utility Notes**

Outside of the companies and facilities discussed above, no additional utility involvement is anticipated. Should any conflicts be encountered as a result of the contractor’s means and methods during construction requiring adjustment and/or relocation, the necessary relocation work shall be accomplished by the respective utility company and funded by the State’s Contractor as directed by the District Engineer. The State Contractor shall coordinate any potential conflicts with utility companies and provide adequate notice prior to performing work.

Any utility conflicts that are not readily discernable shall be coordinated by the State Contractor once the conflict is recognized. The time to complete any relocations/adjustments found to be necessary during construction of the highway project will depend on the nature of the work.

Once the State's contractor has given the Utility the advance notice required above, it is the responsibility of the State's contractor to have the work area prepared and accessible for the Utility to perform the tasks listed above. If the site conditions are not ready and the state contractor has given notice to the utility on when the work is to be accomplished, the State's Contractor shall be responsible for any extra cost incurred by the utility company and the State Contractor shall also be responsible for any time delays. Between when the required notice is given to the Utility and when the work is performed and completed, the coordination and scheduling of the Utility is the sole responsibility of the State's Contractor. All costs related to the coordination and scheduling of the utilities is incidental to the contract.

Any adjustments and/or relocations of municipally or county owned sewer or water facilities shall be performed by the State's Contractor in accordance with the respective agency's standard specifications as directed by the District Engineer. The State contractor shall coordinate any potential conflicts of municipally or county owned sewer or water facilities with facility owners and provide adequate notice to the municipally or county and to the District Engineer prior to performing work.

#### **General Notes**

1. The Contractor's attention is directed to Section 105.09 Utilities, Delaware Standard Specifications, August 2016. The Contractor shall contact Miss Utility (1-800-282-8555) two working days prior to any excavation. The Contractor is responsible for the support and protection of all utilities when excavating. The Contractor is responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The Contractor is advised to check the site for access and operating purposes for his equipment and, if necessary, make arrangements directly with the utility companies for field adjustments for adequate clearances.
2. The information shown in the Contract Documents, including the Utility Statement and the Utility Schedule contained herein, concerning the location, type and size of existing and proposed utilities, their locations, and construction timing has been compiled by the preparer based on information furnished by each of the involved Utility Companies. It shall be the responsibility of the State's Contractor to verify all information and coordinate with the Utility Companies prior to and during construction, as specified in Section 105.09 of the Standard Specifications.
3. It is understood and agreed that the Contractor has considered in his bid all permanent and temporary utility appurtenances in their present and relocated positions as shown on the plans or described in the Utility Statement or are readily discernible and that no additional compensation will be allowed for any delays, inconvenience, or damage due to any interference from the utility facilities and appurtenances or the operation of moving them, except that the Contractor may be granted an equitable extension of time unless the delay is caused by the Contractor's delay in having the site conditions ready for the utility relocation work after the Contractor has provided the advance notice that the site conditions would be ready for the utility relocation work. The contractor's means and method of construction are not taken into account when known utility conflicts are identified. If the Contractor's means and method of construction create a utility conflict the Utility Statement will prevail in discussions with the utility and the Contractor. The State's Contractor shall be responsible for any costs associated with any temporary

outages; holding, bracing and shielding of utility facilities; temporary relocations; or permanent relocations that are not specifically identified in this utility statement or shown in the contract plan set.

4. Coordination and cooperation among the Utility Companies and the State's Contractor are of prime importance. Therefore, the Contractor is directed to contact the following Utility Company representatives with any questions regarding this work prior to submitting bids and work schedules. Proposed work schedules should reflect the Utility Companies' proposed relocations. The Utility Companies do not work on weekends, nights or legal holidays.

NAME	COMPANY	PHONE	EMAIL
Joanne Liao	City of Wilmington – Water & Sewer	jliao@wilmingtonde.gov	302-576-3064
Brian A. Mitchell	City of Wilmington – Signals	bmittchell@WilmingtonDE.gov	302-576-3089
Keith Allridge	Comcast	keith@americomm-llc.com	717-776-1073
Knol McRae	Comcast	Knol_mcrac@cablc.comcast.com	302-661-4462
Angel Collazo	Delmarva Power Electric	Angel.collazo@delmarva.com	302-454-4370
Kristin Stanfil	Delmarva Power Gas	Kristin.stanfil@delmarva.com	302-429-3706
John Alessandrini	MCI	john.alessandrini@verizonbusiness.com	610-337-6707
Dan Netta	New Castle County	dnetta@nccde.org	302-395-5817
George Zang	Verizon Delaware Inc	George.w.zang@verizon.com	302- 422-1238
Chris Ricciuti	AboveNet - DBA Zayo	chris.ricciuti@zayo.com	484-696-3903

5. As outlined in Chapter 3 of the DelDOT Utilities Manual, individual utility companies are responsible for obtaining all required permits from municipal, State and federal government agencies and railroads. This includes but is not limited to water quality permits/DNREC Water Quality Certification, DNREC Subaqueous Lands/Wetlands permits, DNREC Coastal Zone Consistency Certification, County Floodplain permits (New Castle County only), U.S. Coast Guard permits, US Army Corps 404 permits, sediment and erosion permits, and railroad crossing permits.
6. Individual utility companies are required to restore any areas disturbed in conjunction with their relocation work. If an area is disturbed by a utility company and is not properly restored, the Department may have the State's Contractor perform the necessary restoration. Any additional costs incurred as a result will be forwarded to the utility company.



7. 16 Del. C. § 7405B requires notification to and mutually agreeable measures from the public utility operating the electric line for any person intending to carry on any function, activity, work or operation within dangerous proximity of any high voltage overhead electric lines. All contractors/other utilities must also maintain a minimum distance of 10' - 0" from all overhead energized lines. Additional clearance may be required from high voltage transmission lines.
8. In conjunction with bid preparation and prior to starting work, the State's Contractor shall confirm with all respective Utility Companies noted in this Utility Statement to have advance utility relocations that the advance relocations have in fact been accomplished as summarized herein.
9. Any existing facilities that are comprised of hazardous materials will be removed by the Utility Company unless otherwise outlined in the contract documents or language above. Any existing facilities containing hazardous materials will be purged by the Utility Company unless otherwise outlined in the contract documents or language above.

**DIVISION OF TRANSPORTATION SOLUTIONS**

  
\_\_\_\_\_  
Delaware Department of Transportation  
Utility Section  
[Chuck.Ferguson@state.de.us](mailto:Chuck.Ferguson@state.de.us)

  
\_\_\_\_\_  
Date

STATE OF DELAWARE  
DEPARTMENT OF TRANSPORTATION  
PO BOX 778  
DOVER, DELAWARE 19903

CERTIFICATE OF RIGHT-OF-WAY STATUS

STATE PROJECT NO. T201906102

F.A.P. NO. N/A for R/W

PAVEMENT & REHABILITATION, NORTH II, SHIPLEY ROAD, 2019

NEW CASTLE COUNTY

Certificate of Right-of-Way Status – 100%

Level 1

As required by 23 CFR, Part 635, and other pertinent Federal and State regulations or laws, the following certifications are hereby made in reference to this highway project:

All project construction or work shall be performed within existing rights of way and permanent easements; and

All necessary real property interests, including control of access rights when pertinent, were acquired as part of previous highway projects, and include legal and physical possession; and,

This project does not cause any persons to be displaced as defined in 49 CFR, Part 24; and,

The State has the right to remove, salvage, or demolish any improvements or personal property that may be located within project limits.

RIGHT OF WAY SECTION



Robert Cunningham  
Chief, Right of Way

August 21, 2018



STATE OF DELAWARE  
**DEPARTMENT OF TRANSPORTATION**  
800 BAY ROAD  
P.O. BOX 778  
DOVER, DELAWARE 19903

JENNIFER COHAN  
SECRETARY

August 20, 2018

ENVIRONMENTAL REQUIREMENTS

FOR  
State Contract No. 201906102  
Federal Aid No.: N/A

Contract Title: Pavement & Rehabilitation, North II (ShIPLEY Road from Washington St. Ext. to Wilson Road)

Due to the nature of the proposed construction activities, permits are not required for this project. However, the following construction requirements and special provisions have been developed to minimize and mitigate impact to the surrounding environs. These requirements by DelDOT, not specified within the contract, are listed below. These requirements are the responsibility of the contractor and are subject to risk of shut down at the contractor's expense if not followed.

GENERAL REQUIREMENTS:

1. All construction debris, excavated material, brush, rocks, and refuse incidental to such work shall be placed either on shore above the influence of flood waters or on some suitable dumping ground.
2. That effort shall be made to keep construction debris from entering adjacent waterways or wetlands. Any debris that enters those areas shall be removed immediately.
3. The disposal of trees, brush, and other debris in any stream corridor, wetland, surface water, or drainage area is prohibited.
4. DelDOT Environmental Studies Section must be notified ((302)760-2264) if there are any changes to the project methods, footprint, materials, or designs, to allow the Department to coordinate with the appropriate resource agencies (COE, DNREC, and SHPO), for approval.



STATE OF DELAWARE  
 DEPARTMENT OF TRANSPORTATION  
 800 BAY ROAD  
 P.O. Box 778  
 DOVER, DELAWARE 19903

JENNIFER COHAN  
 SECRETARY

**RAILROAD STATEMENT**

For

State Contract No.: T201906102

Federal Aid No.: N/A

Project Title: Pavement and Rehabilitation, North II, Shipley Rd, 2019

**The following railroad companies maintain facilities within the contract limits:**


- |  |   |
|--|---|
| <input type="checkbox"/> Amtrak              | <input type="checkbox"/> Maryland & Delaware  |
| <input type="checkbox"/> CSX                 | <input type="checkbox"/> Norfolk Southern     |
| <input type="checkbox"/> Delaware Coast Line | <input type="checkbox"/> Wilmington & Western |
| <input type="checkbox"/> East Penn           | <input checked="" type="checkbox"/> None      |
| <input type="checkbox"/> Delmarva Central    |   |

DOT Inventory No.: \_\_\_\_\_ No. Trains/Day: \_\_\_\_\_ Passenger Trains (Y / N): \_\_\_\_\_

**In accordance with 23 CFR 635, herein is the railroad statement of coordination (check one):**

- No Railroad involvement.
- Railroad Agreement unnecessary but railroad flagging required. The contractor shall follow requirements stated in the DeIDOT Maintenance of Railroad Traffic Item in the Special Provisions. Contractor shall coordinate railroad flagging with DeIDOT's Railroad Program Manager at (302) 760-2183.
- Railroad Agreement required. The necessary Railroad Agreement is pending. The Contractor cannot begin work until the Agreement is complete and fully executed. Railroad related work to be undertaken and completed as required for proper coordination with physical construction schedules. The Contractor shall follow requirements stated in the DeIDOT Maintenance of Railroad Traffic Item in the Special Provisions. Contractor shall coordinate railroad flagging with DeIDOT's Railroad Program Manager at (302) 760-2183.

**Approved As To Form:**

  
 \_\_\_\_\_  
 Robert A. Perrine  
 DeIDOT Railroad Program Manager

31 July 18  
 \_\_\_\_\_  
 DATE

# **BID PROPOSAL FORMS**

**CONTRACT     T201906102.01**

UNLESS OTHERWISE DIRECTED, SUBMIT ALL FOLLOWING PAGES TO:

DEPARTMENT OF TRANSPORTATION  
BIDDERS ROOM (B1.11.01)  
800 BAY ROAD  
DOVER, DELAWARE 19901

Identify the following on the outside of the sealed envelope:

- Contract Number T201906102.01
- Name of Contractor

CONTRACT ID: T201906102.01 PROJECT(S): T201906102

All figures must be typewritten.

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

SECTION 0001 Category 0001

0010	211001 REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	92.000 SY				
0020	301008 RECYCLED ASPHALT PAVEMENT	50.000 TON				
0030	401005 SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	2300.000 TON				
0040	401031 SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	1500.000 TON				
0050	401696 ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	110.000 TON				
0060	402000 BITUMINOUS CONCRETE PATCHING	25900.000 SYIN				
0070	403000 BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	40.000 TON				
0080	503001 PATCHING PORTLAND CEMENT CONCRETE PAVEMENT, 6' TO 15', TYPE A	250.000 SY				
0090	503006 DOWEL BARS	560.000 EACH				

CONTRACT ID: T201906102.01 PROJECT(S): T201906102

All figures must be typewritten.

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0100	504001 CRACK AND JOINT SEALING LESS THAN 3/4 INCH WIDE	7700.000 LF				
0110	505000 PORTLAND CEMENT CONCRETE PATCHING, PARTIAL DEPTH	40.000 SYIN				
0120	602130 ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	1.000 EACH				
0130	602132 ADJUSTING AND REPAIRING EXISTING MANHOLE	9.000 EACH				
0140	701012 PORTLAND CEMENT CONCRETE CURB, TYPE 1-6	53.000 LF				
0150	705001 PORTLAND CEMENT CONCRETE SIDEWALK, 4"	1372.000 SF				
0160	705002 PORTLAND CEMENT CONCRETE SIDEWALK, 6"	165.000 SF				
0170	705007 SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	39.000 SF				
0180	710002 ADJUST WATER VALVE BOXES	16.000 EACH				
0190	760010 PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	38500.000 SYIN				

DELAWARE DEPARTMENT OF TRANSPORTATION  
SCHEDULE OF ITEMS

PAGE: 3  
DATE:

CONTRACT ID: T201906102.01 PROJECT(S): T201906102

All figures must be typewritten.

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0200	762000 SAW CUTTING, BITUMINOUS CONCRETE	805.000 LF				
0210	762001 SAW CUTTING, CONCRETE, FULL DEPTH	1155.000 LF				
0220	763000 INITIAL EXPENSE/DE-MOBILIZATION	LUMP		LUMP		
0230	801500 MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LUMP		LUMP		
0240	803001 FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	50.000 EADY				
0250	806001 TRAFFIC OFFICERS	500.000 HOUR		75.00000		37500.00
0260	808002 FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	50.000 EADY				
0270	811001 FLAGGER, NEW CASTLE COUNTY STATE	1100.000 HOUR				
0280	811013 FLAGGER, NEW CASTLE COUNTY, STATE, OVERTIME	100.000 HOUR				
0290	817002 PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	873.000 SF				



DELAWARE DEPARTMENT OF TRANSPORTATION  
SCHEDULE OF ITEMS

PAGE: 4  
DATE:

CONTRACT ID: T201906102.01 PROJECT(S): T201906102

All figures must be typewritten.

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0300	817003 TEMPORARY MARKINGS, PAINT, 4"	66950.000 LF				
0310	817004 TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	1620.000 SF				
0320	817007 RETROREFLECTIVE PREFORMED PATTERNED MARKINGS, 12"	80.000 LF				
0330	817012 RETROREFLECTIVE PREFORMED PATTERNED MARKINGS, SYMBOL/LEGEND	20.000 SF				
0340	817013 PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	32660.000 LF				
0350	817018 PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK, 3"	2705.000 LF				
0360	817031 REMOVAL OF PAVEMENT STRIPING	455.000 SF				
0370	817500 PREFORMED THERMOPLASTIC DECORATIVE PAVEMENT SYSTEM	382.000 SF				
0380	819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	173.000 EACH				

CONTRACT ID: T201906102.01 PROJECT(S): T201906102

All figures must be typewritten.

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0390	830001 CONDUIT JUNCTION WELL, TYPE 1, 20" X 20" PRECAST CONCRETE	3.000 EACH				
0400	830002 CONDUIT JUNCTION WELL, TYPE 4, 20" X 42-1/2" PRECAST CONCRETE	1.000 EACH				
0410	831002 FURNISH AND INSTALL UP TO 4" SCHEDULE 80 HDPE CONDUIT (BORE)	215.000 LF				
0420	831004 FURNISH AND INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	135.000 LF				
0430	831006 FURNISH AND INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (TRENCH)	90.000 LF				
0440	834001 POLE BASE, TYPE 3	3.000 EACH				
0450	834005 POLE BASE, TYPE 4A	2.000 EACH				
0460	835003 CABINET BASE TYPE P	1.000 EACH				
0470	846001 FURNISH AND INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	815.000 LF				

CONTRACT ID: T201906102.01 PROJECT(S): T201906102

All figures must be typewritten.

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0480	905005 INLET SEDIMENT CONTROL, CURB INLET	1.000 EACH				
0490	908004 TOPSOIL, 6" DEPTH	2400.000 SY				
0500	908014 PERMANENT GRASS SEEDING, DRY GROUND	2400.000 SY				
	SECTION 0001 TOTAL					
	TOTAL BID					

CANNOT BE  
 USED FOR  
 BIDDING



**AFFIDAVIT  
OF  
EMPLOYEE DRUG TESTING PROGRAM**

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite, including subcontractors, that complies with this regulation:

**Contractor Name:** \_\_\_\_\_

**Contractor Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Authorized Representative (typed or printed):** \_\_\_\_\_

**Authorized Representative (signature):** \_\_\_\_\_

**Title:** \_\_\_\_\_

Sworn to and Subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

My Commission expires \_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_.

**THIS PAGE MUST BE SIGNED, NOTARIZED, AND RETURNED WITH YOUR BID.**

(This form is required from the prime contractor only)

**CERTIFICATION**  
Contract No. T201906102.01

The undersigned bidder, \_\_\_\_\_  
whose address is \_\_\_\_\_  
and telephone number is \_\_\_\_\_ hereby certifies the following:

I/We have carefully examined the location of the proposed work, the proposed plans and specifications, and will be bound, upon award of this contract by the Department of Transportation, to execute in accordance with such award, a contract with necessary surety bond, of which contract this proposal and said plans and specifications shall be a part, to provide all necessary machinery, tools, labor and other means of construction, and to do all the work and to furnish all the materials necessary to perform and complete the said contract within the time and as required in accordance with the requirements of the Department of Transportation, and at the unit prices for the various items as listed on the preceding pages.

The foregoing quantities are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the amount of any item or portion of the work as may be deemed necessary or expedient. Any such increase or decrease in the quantity for any item will not be regarded as a sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided in the contract.

Accompanying this proposal is a surety bond or a security of the bidder assigned to the Department of Transportation, for at least ten (10) percentum of total amount of the proposal, which deposit is to be forfeited as liquidated damages in case this proposal is accepted, and the undersigned shall fail to execute a contract with necessary bond, when required, for the performance of said contract with the Department of Transportation, under the conditions of this proposal, within twenty (20) days after date of official notice of the award of the contract as provided in the requirement and specifications hereto attached; otherwise said deposit is to be returned to the undersigned.

I/We are licensed, or have initiated the license application as required by Section 2502, Chapter 25, Title 30, of the Delaware Code.

By submission of this proposal, each bidder and each person signing on behalf of any bidder, certifies as to its own organization, under penalty of perjury, that to the best of each signer's knowledge and belief:

1. The prices in this proposal have been arrived at independently without collusion, consultation, communication, or Agreement with any other bidder or with any competitor for the purpose of restricting competition.
2. Unless required by law, the prices which have been quoted in this proposal have not been knowingly disclosed and will not knowingly be disclosed by the bidder, directly or indirectly, to any other bidder or competitor prior to the opening of proposals.
3. No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a proposal for the purpose of restricting competition.

=====  
I/We acknowledge receipt and incorporation of addenda to this proposal as follows:

No.	Date	No.	Date	No.	Date	No.	Date	No.	Date
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

**BIDDERS MUST ACKNOWLEDGE RECEIPT OF ALL ADDENDA**

**MUST INSERT DATE OF FINAL QUESTIONS AND ANSWERS ON WEBSITE:** \_\_\_\_\_



**AFFIRMATION:**

Within the past five (5) years, has your firm, any affiliate, any predecessor company or entity, owner, Director, officer, partner or proprietor been the subject of a Federal, State, Local government suspension or debarment?

**YES** \_\_\_\_\_ **NO** \_\_\_\_\_ if yes, please explain \_\_\_\_\_

-----  
Sealed and dated this \_\_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two thousand \_\_\_\_\_ ( 20\_\_\_\_ ).

CANNOT BE USED FOR BIDDING

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal

By: \_\_\_\_\_  
Authorized Signature

Attest \_\_\_\_\_  
Title

SWORN TO AND SUBSCRIBED BEFORE ME this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Notary  
Seal

\_\_\_\_\_  
Notary

**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_

of \_\_\_\_\_ in the County of \_\_\_\_\_ and State of \_\_\_\_\_  
as **Principal**, and \_\_\_\_\_ of \_\_\_\_\_ in the County of

\_\_\_\_\_ and State of \_\_\_\_\_ as **Surety**, legally authorized to do business in the  
State of Delaware ("**State**"), are held and firmly bound unto the **State** in the sum of \_\_\_\_\_

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_), or \_\_\_\_\_ percent not to exceed \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_) of amount of bid on

Contract No. T201906102.01, to be paid to the **State** for the use and benefit of its Department of  
Transportation ("**DelDOT**") for which payment well and truly to be made, we do bind ourselves, our and  
each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole  
firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden **Principal**  
who has submitted to the **DelDOT** a certain proposal to enter into this contract for the furnishing of  
certain materiel and/or services within the **State**, shall be awarded this Contract, and if said **Principal**  
shall well and truly enter into and execute this Contract as may be required by the terms of this Contract  
and approved by the **DelDOT**, this Contract to be entered into within twenty days after the date of official  
notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be  
void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_\_ day of \_\_\_\_\_ in the year of our Lord  
two thousand and \_\_\_\_\_ ( 20\_\_ ).

SEALED, AND DELIVERED IN THE  
presence of

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal

By: \_\_\_\_\_  
Authorized Signature

Attest \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of **Surety**

Witness: \_\_\_\_\_

By: \_\_\_\_\_  
\_\_\_\_\_  
Title