STATE OF DELAWARE

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

DEPARTMENT OF TRANSPORTATION

BID PROPOSAL

for

CONTRACT T201780204.01

Stormwater BMP Maintenance NCC, FY 2018

New Castle County

ADVERTISEMENT DATE: March 19, 2018

COMPLETION TIME: 180 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 **April 17, 2018**

Contract No.T201780204.01

Stormwater BMP Maintenance NCC FY 2018
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 addresses maintenance needs for 13 Stormwater Facilities (BMPS) within New Castle County and 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 180 Calendar Days. The Contract Time includes an allowance for 15 Weather Days. It is the Department's intent to issue a Notice to Proceed such that work starts on or about July 30, 2018.

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, 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 April 17, 2018 unless changed via addendum.
2. QUESTIONS regarding this project are to be e-mailed to 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 T201780204.01 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. REMINDER; A copy of your firm's Delaware Business License must be submitted with your bid.
9. 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.

9a. 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 finishingof flatwork concrete. Concrete flatwork certification will be effective starting on June 1, 2018.

STATE OF DELAWARE
CONSTRUCTION ITEMS UNITS OF MEASURE

English Code	English Description	Multiply By	Metric Code	Metric Description	Suggested CEC Metric Code
ACRE	Acre	0.4047	ha	Hectare	HECTARE
BAG	Bag	N/A	Bag	Bag	BAG
C.F.	Cubic Foot	0.02832	m^3	Cubic Meter	M3
C.Y.	Cubic Yard	0.7646	m^3	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^3	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^2	Square Meter	M2
S.Y.	Square Yard	0.8361	m^2	Square Meter	M2
SY-IN	Square Yard-Inch	0.8495	m^2-25 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.

TABLE OF CONTENTS

GENERAL DESCRIPTION i
LOCATION i
DESCRIPTION i
COMPLETION TIME i
PROSPECTIVE BIDDERS NOTES i
CONSTRUCTION ITEMS UNITS OF MEASURE iii

GENERAL NOTICES 1
SPECIFICATIONS 1
CLARIFICATIONS 1
ATTESTING TO NON-COLLUSION 1
QUANTITIES 1
PREFERENCE FOR DELAWARE LABOR 1
EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS 1
TAX CLEARANCE 2
LICENSE 2
DIFFERING SITE CONDITIONS 2
RIGHT TO AUDIT 3

PREVAILING WAGES 4
STATE WAGE RATES 5

SPECIAL PROVISIONS 6
401502 - ASPHALT CEMENT COST ADJUSTMENT 7
710502 - CHECK VALVE 8
763501 - CONSTRUCTION ENGINEERING 9
801500 - MAINTENANCE OF TRAFFIC - ALL INCLUSIVE 18
908508 - STABILIZED CONSTRUCTION ENTRANCE MATS 23

UTILITY STATEMENT 24

RIGHT OF WAY CERTIFICATE 41

ENVIRONMENTAL STATEMENT 42

RAILROAD STATEMENT 43

BID PROPOSAL FORMS 44

DRUG TESTING AFFIDAVIT 49

CERTIFICATION 50

BID BOND 52

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 of 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 fourth 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 ENFORCMENT
PHONE (302) 761-8200

Mailing Address:
4425 North Market St., 3rd Fl
Wilmington, DE 19802

Located at:
4425 North Market St., 3rd Fl
Wilmington, DE 19802

PREVAILING WAGES FOR **HEAVY CONSTRUCTION** EFFECTIVE MARCH 15, 2018

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
ASBESTOS WORKERS	22.57	19.85	43.17
BOILERMAKERS	79.62	32.80	60.17
BRICKLAYERS	67.95	23.69	25.44
CARPENTERS	54.81	54.81	43.57
CEMENT FINISHERS	44.52	24.87	18.53
ELECTRICAL LINE WORKERS	75.22	74.83	66.03
ELECTRICIANS	68.70	68.70	68.70
GLAZIERS	20.85	18.11	12.26
INSULATORS	56.53	56.53	56.53
IRON WORKERS	62.73	62.25	59.55
LABORERS	46.20	46.20	46.20
MILLWRIGHTS	71.60	71.60	57.70
PAINTERS	81.41	81.41	81.41
PILEDRIVERS	76.77	40.19	31.28
PLASTERERS	19.64	17.06	11.53
PLUMBERS/PIPEFITTERS/STEAMFITTERS	89.13	79.50	18.27
POWER EQUIPMENT OPERATORS	69.29	64.30	69.29
SHEET METAL WORKERS	31.38	19.47	18.28
SPRINKLER FITTERS	33.82	12.81	10.60
TRUCK DRIVERS	32.64	21.06	22.74

CERTIFIED: 03/15/2018 BY: _____ for
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.

THESE RATES ARE BEING PROVIDED IN ACCORDANCE WITH DELAWARE'S FREEDOM OF INFORMATION ACT.

THEY ARE NOT INTENTED TO APPLY TO ANY SPECIFIC PROJECT.

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

710502 - CHECK VALVE

Description:

This work consists of furnishing and installing a check valve to replace a damaged check valve at the outlet pipe as shown on BMP 244.

Materials:

Check Valve: Series TF-2 with Elastomer Cover to be connected to 300 mm corrugated aluminum outlet pipe (2 mm thickness), manufactured by Red Valve or Equal.

Construction Methods:

Construction methods shall conform to manufacturer directions.

Carefully remove damaged check valve without damaging outlet pipe. Check valve shall be connected to outlet pipe with compression clamps as specified by the manufacturer.

Measurement and Payment:

Check valve will be measured and paid for per each valve. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

3/05/2018

763501 - CONSTRUCTION ENGINEERING

Description:

This work consists of construction lay out including; stakes, lines and grades as specified below. Subsection 105.10 Construction Stakes, Lines and Grades of the Standard Specifications is voided.

Based on contract plans and information provided by the Engineer, the Contractor shall stake out right-of-way and easements lines, limits of construction and wetlands, slopes, profile grades, drainage system, centerline or offset lines, benchmarks, structure working points and any additional points to complete the project.

The Engineer will only establish the following:

(a) Original and final cross-sections for borrow pits.
(b) Final cross-sections: Top and bottom pay limit elevations for all excavation bid items that are not field measured by Construction inspection personnel. The Contractor shall notify the Engineer when these pay limit elevations are ready and allow for a minimum of two calendar days for the Engineer to obtain the information.
(c) Line and grade for extra work added on to the project plans.

Equipment. The Contractor shall use adequate equipment/instruments in a good working order.
He/she shall provide written certification that the equipment/instrument has been calibrated and is within manufacturer's tolerance. The certification shall be dated a maximum of 9 months before the start of construction. The Contractor shall renew the certification a minimum of every 9 months. The equipment/instrument shall have a minimum measuring accuracy of [3mm+2ppmxD] and an angle accuracy of up to 2.0 arc seconds or 0.6 milligons. If the Contractor chooses to use GPS technology in construction stakeout, the Contractor shall provide the Engineer with a GPS rover and Automatic Level for the duration of the contract. The GPS rover shall be in good working condition and of similar make and model used by the Contractor. The Contractor shall provide up to 8 hours of formal training on the Contractor's GPS system to a maximum of four Engineer's appointees (DELDOT Construction Inspectors). At the end of the contract, the Engineer will return the GPS rover to the Contractor. If any of the equipment/instruments are found to be out of adjustment or inadequate to perform its function, such instrument or equipment shall be immediately replaced by the Contractor to the satisfaction of the Engineer. Choosing to use GPS technology does not give the contractor authority to use machine control.- Construction Engineering (GPS) Machine Control Grading shall only be used if noted in the General Notes in the plan set outlining the available files that will be provided to the Contractor and "the Release for delivery of documents in electronic form to a contractor" are signed by all parties prior to delivery of any electronic files. Only files designated in the General Notes shall be provided to the contractor. If machine control grading is allowed on the project see the "machine control" section of this specification. GPS technology and machine control technology shall not be used in the construction of bridges.

Engineering/Survey Staff. The Contractor shall provide and have available for the project an adequate engineering staff that is competent and experienced to set lines and grades needed to construct the project. The engineering personnel required to perform the work outlined herein shall have experience and ability compatible with the magnitude and scope of the project. Additionally, the Contractor shall employ an engineer or surveyor licensed in the State of Delaware to be responsible for the quality and accuracy of the work done by the engineering staff. When individuals or firms other than the Contractor perform any professional services under this item, that work shall not be subject to the sub contracting requirements of Subsection 108.01 of the Standard Specifications.

The Contractor shall assume full responsibility for any errors and/or omissions in the work of the engineering staff described herein. If construction errors are caused due to erroneous work done under Construction Engineering the Contractor accepts full responsibility, no matter when the error is discovered. Consideration will not be given for any extension of contract time or additional compensation due to delays, corrective work, or additional work that may result from faulty and erroneous construction stakeout, surveying, and engineering required by this specification.

Construction Methods:

Performance Requirements:

(a) Construction Engineering shall include establishing the survey points and survey centerlines; finding, referencing, offsetting the project control points; running a horizontal and vertical circuit to verify the precision of given control points. Establishing plan coordinates and elevation marks for culverts, slopes, subbase, subsurface drains, paving, subgrade, retaining walls, and any other stakes required for control lines and grades; and setting vertical control elevations, such as footings, caps, bridge seats and deck screed. The Contractor shall be responsible for the preservation of the Department's project control points and benchmarks. The Contractor shall establish and preserve any temporary control points (traverse points or benchmarks) needed for construction. Any project control points (traverse points) or benchmarks conflicting with construction of the project shall be relocated by the Contractor. The Contractor as directed by the Engineer must replace any or all stakes that are destroyed at any time during the life of the contract. The Contractor shall re-establish centerline points and stationing prior to final cross-sections by the Engineer. The Vertical Control error of closure shall not exceed 0.035 ft times. The Horizontal Control precision ratio shall have a minimum precision of 1:20,000 feet of distance traversed prior to adjustment.

(b) The Contractor shall perform construction centerline layout of all roadways, ramps and connections, etc. from project control points set by the Engineer. The Contractor using the profiles and typical sections provided in the plans shall calculate proposed grades at the edge of pavement or verify information shown on Grades and Geometric sheets.

(c) The Contractor shall advise the Engineer of any horizontal or vertical alignment revisions needed to establish smooth transitions to existing facilities. The Contractor must immediately bring to the attention of the Engineer any potential drainage problem within the project limits. The Engineer must approve any proposed variation in profile, width or cross slope.

(d) The Contractor shall establish the working points, centerlines of bearings on bridge abutments and on piers, mark the location of anchor bolts to be installed, check the elevation of bearing surfaces before and after they are ground and set anchor bolts at their exact elevation and alignment as per Contract Plans. Before completion of the fabrication of beams for bridge superstructures, the Contractor shall verify by accurate field measurements the locations both vertically and horizontally of all bearings and shall assume full responsibility for fabricated beams fitting and bearing as constructed. After beam erection and concurrently with the Department project surveyors or their designated representative, the Contractor shall survey top of beam elevations at a maximum of 10-ft stations and compute screed grades. These shall be submitted to the Engineer for review and approval before the stay in place forms are set. Construction stakes and other reference control marks shall be set at sufficiently frequent intervals to assure that all components of the structure are constructed in accordance with the lines and grades shown on the plans. The Contractor will be responsible for all structure alignment control, grade control and all necessary calculations to establish and set these controls.

(e) The Contractor, using contract plans, shall investigate proposed construction for possible conflicts with existing and proposed utilities. The Contractor shall then report such conflicts to the Engineer for resolution. All stakes for utility relocations, which will be performed by others, after the Notice to Proceed has been given to the Contractor, shall be paid for under item 763597 - Utility Construction Engineering.

(f) The Contractor shall be responsible for the staking of all sidewalk and curb ramp grades in accordance with the plans and the Departments Standard Construction Details. The Contractor shall review the stakeout with the Engineer prior to construction. The Engineer must approve any deviation from plans, Department Standard Construction Details and Specifications in writing. The Contractor shall be responsible for any corrective actions resulting from problems created by adjustments if they fail to obtain such approval.

(g) If wetland areas are involved and specifically defined on the Plans the following shall apply:

i. It is the intent of these provisions to alert the Contractor, that he/she shall not damage or destroy wetland areas, which exist beyond the construction limits. These provisions will be strictly enforced and the Contractor shall advise his/her personnel and those of any Subcontractor of the importance of these provisions.

ii. All clearing operations and delineation of wetlands areas shall be performed in accordance with these Special Provisions. Before any clearing operation commences the Contractor shall demarcate wetlands at the Limits of Construction throughout the entire project as shown on the Plans labeled as Limits of Construction or Wetland Delineation to the satisfaction of the Engineer.

iii. The material to be used for flagging the limits of construction shall be orange vinyl material with the wording "Wetland Boundary" printed thereon. In wooded areas, the flagging shall be tied on the trees, at approximate 20-foot intervals through wetland areas. In open field and yard areas that have been identified as wetlands, 6 foot posts shall be driven into the ground at approximate 50-foot intervals and tied with the flagging. The flagging shall extend approximately 12 inches in length beyond the post. Posts shall be oak with cross sectional dimensions of 1 ½ inches to 2 inches by 1 ½ inches to 2 inches or ¼ inch rebar.

iv. If the flagging has been destroyed and the Engineer determines that its use is still required, the Contractor shall reflag the area at no cost to the Department. If the Contractor, after notification by the Engineer that replacement flagging is needed, does not replace the destroyed flagging within 48 hours, the Engineer may proceed to have the area reflagged. The cost of the reflagging by the Engineer will be charged to the Contractor and deducted from any monies due under the Contract.

v. At the completion of construction, the Contractor shall remove all posts and flagging.

vi. The Contractor shall be responsible for any damages to wetlands located beyond the construction limits, which occurs from his/her operations during the life of the Contract. The Contractor shall restore all temporarily disturbed wetland areas to their preconstruction conditions. This includes restoring bank elevations, streambed and wetland surface contours and wetlands vegetation disturbed or destroyed. The expense for this restoration shall be borne solely by the Contractor.

(h) Whenever the Engineer will be recording data for establishment of pay limits, the Contractor will be invited to obtain the data jointly with the Engineer's Survey Crew(s) in order to agree with the information. If the Contractor's representative is not able to obtain the same data, then the information obtained by the Engineer shall be considered the information to be used in computing the quantities in question.

Submittals. All computations necessary to establish the exact position of all work from the control points shall be made and preserved by the Contractor. All computations, survey notes, electronic files, and other records necessary to accomplish the work shall be made available to the Department in a neat and organized manner at any time as directed by the Engineer. The Engineer may check all or any portion of the stakeout survey work or notes made by the Contractor and any necessary correction to the work shall be made as soon as possible. The Contractor shall furnish the Engineer with such assistance as may be required for checking all lines, grades, and measurements established by the Contractor and necessary for the execution of the work. Such checking by the Engineer shall not relieve the Contractor of his/her responsibility for the accuracy or completeness of the work. Copies of all notes must be furnished to the engineer at the completion of the project.

The Contractor shall submit any of the following at the Engineer's request:

(a) Proposed method of recording information in field books to ensure clarity and adequacy.
(b) A printout of horizontal control verification, as well as coordinates, differences and error of closure for all reestablished or temporary Control Points.
(c) A printout of vertical control verification, with benchmark location elevation and differences from plan elevation.
(d) Sketch of location of newly referenced horizontal control, with text printout of coordinates, method of reference and field notes associated with referencing control - traverse closure report.
(e) Description of newly established benchmarks with location, elevation and closed loop survey field notes - bench closure report
(f) All updated electronic and manuscript survey records.
(g) Stakeout plan for each structure and culvert.
(h) Computations for buildups over beams, screed grades and overhang form elevations.
(i) A report showing differences between supplied baseline coordinates and field obtained coordinates, including a list of preliminary input data.
(j) Any proposed plan alteration to rectify a construction stakeout error, including design calculations, narrative and sealed drawings.
(k) Baseline for each borrows pit location.
(l) Detailed sketch of proposed overhead ground mounted signs or signals showing obstructions that may interfere with their installation.
(m) Copies of cut sheets.

Machine Control Grading

This Section of the specification shall only be used if machine control is authorized for use on the project.

Description:

This specification contains the requirements for grading operations utilizing Global Positioning Systems (GPS).

Use of this procedure and equipment is intended for grading the subgrade surface; it is not intended for the use in constructing final surface grades. The Contractor may use any manufacturer's GPS machine control equipment and system that results in achieving the grading requirements outlined in section 202 of the standard specifications. The Contractor shall convert the electronic data provided by the Department into the format required by their system. The Department will only provide the information outlined in this document and no additional electronic data will be provided.

The Contractor shall perform at least one 500 foot test section with the selected GPS system to demonstrate that the Contractor has the capabilities, knowledge, equipment, and experience to properly operate the system and meet acceptable tolerances. The engineer will evaluate and make the determination as to whether additional 500 foot test sections are required. If the Contractor fails to demonstrate this ability to the satisfaction of the Department, the Contractor shall construct the project using conventional surveying and staking methods.

Materials:

All equipment required to perform GPS machine control grading, including equipment needed by DelDOT to verify the work, shall be provided by the Contractor and shall be able to generate end results that are in accordance with the requirements of Division 200 - EARTHWORK of the Standard Specifications.

Construction:

A. DelDOT Responsibilities:

1. The Department will set initial vertical and horizontal control points in the field for the project as indicated in the contract documents, (plans set). If the Contractor needs to establish new control points they shall be traversed from existing control points and verified to be accurate by conventional surveying techniques.

2. The Department will provide the project specific localized coordinate system.

3. The Department will provide data in an electronic format to the Contractor as indicated in the General Notes.

    a. The information provided shall not be considered a representation of actual conditions to be encountered during construction. Furnishing this information does not relieve the Contractor from the responsibility of making an investigation of conditions to be encountered including, but not limited to site visits, and basing the bid on information obtained from these investigations, and the professional interpretations and judgments of the Contractor. The Contractor shall assume the risk of error if the information is used for any purpose for which the information is not intended.

    b. Any assumption the Contractor makes from this electronic information shall be at their risk. If the Contractor chooses to develop their own digital terrain model the Contractor shall be fully responsible for all cost, liability, accuracy and delays.

    c. The Department will develop and provide electronic data to the Contractor for their use as part of the contract documents in a format as indicated in the General

    Notes. The Contractor shall independently ensure that the electronic data will function in their machine control grading system.

4. The Files that are provided were originally created with the computer software applications MicroStation (CADD software) and INROADS (civil engineering software). The data files will be provided in the native formats and other software formats described below. The contractor shall perform necessary conversion of the files for their selected grade control equipment. The Department will furnish the Contractor with the following electronic files:

a. CAD files

i. Inroads -Existing digital terrain model (.DTM)
ii. Inroads -Proposed digital terrain model (.DTM)
iii. Microstation -Proposed surface elements - triangles

b. Alignment Data Files:
i. ASCII Format

5. The Engineer shall perform spot checks of the Contractor's machine control grading results, surveying calculations, records, field procedures, and actual staking. If the Engineer determines that the work is not being performed in a manner that will assure accurate results, the Engineer may order the Contractor to redo such work to the requirements of the contract documents, and in addition, may require the Contractor to use conventional surveying and staking, both at no additional cost to the Department.

B . Contractor's Responsibilities

1. The Contractor shall provide the Engineer with a GPS rover and Automatic Level, for use during the duration of the contract. At the end of the contract, the GPS rover and Automatic Level will be returned to the Contractor. The Contractor shall provide a total of 8 hours of formal training on the Contractor's GPS machine control system to the Engineer and up to three additional Department appointees per rover.

2. The Contractor shall review and apply the data provided by the Department to perform GPS machine control grading.

3. The Contractor shall bear all costs, including but not limited to the cost of actual reconstruction of work, that may be incurred due to application of GPS machine control grading techniques. Grade elevation errors and associated corrections including quantity adjustments resulting from the contractor's use of GPS machine control shall be at no cost to the Department.

4. The Contractor shall convert the electronic data provided by the Department into a format compatible with their system.

5. The Contractor's manipulation of the electronic data provided by the Department shall be performed at their own risk.

6. The Contractor shall check and if necessary, recalibrate their GPS machine control system at the beginning of each workday in accordance with the manufacturer's recommendations, or more frequently as needed to meet the requirements of the project.

7. The Contractor shall meet the accuracy requirements as detailed in the Standard Specifications.

8. The Contractor shall establish secondary control points at appropriate intervals and at locations along the length of the project. These points shall be outside the project limits and/or where work is performed. These points shall be at intervals not to exceed 1000 feet. The horizontal position of these points shall be determined by conventional survey traverse and adjustments from the original baseline control points. The conventional traverse shall meet or exceed the Department's Standards. The elevation of these control points shall be

established using differential leveling from the project benchmarks, forming a closed loop. A copy of all new control point information including closure report shall be provided and approved by the Engineer prior to construction activities. The Contractor shall be responsible for all errors resulting from their efforts and shall correct deficiencies to the satisfaction of the Engineer and at no additional cost to the Department.

9. The Contractor shall provide stakes at all alignment control points, at every 500 foot stationing, and where required for coordination activities involving environmental agencies and utility companies at the Contractor's expense. Work that is done solely for utility companies and that is beyond the work performed under item 763501 - Construction shall follow and be paid for under item 763597 -Utility Construction Engineering.

10. The Contractor shall at a minimum set hubs at the top of finished grade at all hinge points on the cross section at 500 foot intervals on the main line and at least 4 cross sections on side roads and ramps as directed by the engineer or as shown on the plans. Placement of a minimum of 4 control points outside the limits of disturbance for the excavation of borrow pits, Stormwater Management Ponds, wetland mitigation sites etc. These control points shall be established using conventional survey methods for use by the Engineer to check the accuracy of the construction.

11. The Contractor shall preserve all reference points and monuments that are identified and established by the Engineer for the project. If the Contractor fails to preserve these items the Contractor shall reestablish them at no additional cost to the Department.

12. The Contractor shall provide control points and conventional grades stakes at critical points such as, but not limited to, PC's, PT's, superelevation points, and other critical points required for the construction of drainage and roadway structures.

13. No less than 2 weeks before the scheduled preconstruction meeting, the Contractor shall submit to the Engineer for review a written machine control grading work plan which shall include the equipment type, control software manufacturer and version, and proposed location of the local GPS base station used for broadcasting differential correction data to rover units.

14. The Contractor shall follow the guidelines set forth in the "Geometric Geodetic Accuracy Standards and Specifications for Using GPS Relative Positioning Techniques" and follow a minimum of Second Order Class 1, (2-I) classification standards.

Automated equipment operations have a high reliance on accurate control networks from which to take measurements, establish positions, and verify locations and features. Therefore, a strong contract control network in the field which is the same or is strongly integrated with the project control used during the design of the contract is essential to the successful use of this technology with the proposed Digital Terrain Model (DTM). Consistent and well designed site calibration for all machine control operations (as described below under Contract Control Plan) are required to ensure the quality of the contract deliverables. The Contract Control Plan is intended to document which horizontal and vertical control will be held for these operations. Continued incorporation of the Base Station(s) as identified in the Contract Control Plan is essential to maintaining the integrity of positional locations and elevations of features. The Contract Control Plan shall be submitted to the Department for review and approval by the Departments Survey Section 3 weeks prior to the start of any machine control work. The Contractor shall operate and maintain all elements of the Machine Grade Control continuously once the operations begin until otherwise approved by the Engineer.

Contract Control Plan:

The Contractor shall develop and submit a Contract Control Plan for all contracts which use Machine Control Grading. Contract control includes all primary and secondary horizontal and vertical control which will be used for the construction contract. Upon the Contractor's completion of the initial survey reconnaissance and control verification, but prior to beginning primary field operations, the Contractor shall submit a Contract Control Plan document (signed and sealed by the Delaware licensed Land Surveyor or Delaware Professional Engineer who oversees its preparation) for acceptance by the
Engineer, which shall include the following:

1. A control network diagram of all existing horizontal and vertical control recovered in the field as contract control.

2. Include a summary of the calculated closures of the existing control network, and which control has been determined to have been disturbed or out of tolerance from its original positioning.

3. An explanation of which horizontal and vertical control points will be held for construction purposes. If necessary include all adjustments which may have been made to achieve required closures.

4. An explanation of what horizontal and vertical control (including base stations) was set to accomplish the required stakeout or automated machine operation. Include how the position of these new control points was determined.

5. Describe the proposed method and technique (technology and quality control) for utilizing the control to establish the existing and/or proposed feature location and to verify the completed feature location and/or measured quantity.

6. A listing of the horizontal and vertical datums to be used and the combined factor to be used to account for ellipsoidal reduction factor and grid scale factor.

7. If the Contractor chooses to use machine control as a method of measuring and controlling excavation, fill, material placement or grading operations as a method of measuring and controlling excavation, fill, material placement or grading operations, the Contractor Control Plan shall include the method by which the automated machine guidance system will initially be site calibrated to both the horizontal and vertical contract control, and shall describe the method and frequency of the calibration to ensure consistent positional results.

8. Issues with equipment including inconsistent satellite reception of signals to operate the GPS machine control system will not result in adjustment to the "Basis of Payment" for any construction items or be justification for granting contract time extension.

Method of Measurement:

The quantity of Construction Engineering will not be measured.

Basis of Payment:

Payment will be made at the Lump Sum price bid for the item "Construction Engineering". The price bid shall include the cost of furnishing all labor, equipment, instruments, stakes and other material necessary to satisfactorily complete the work as herein described under this item for all roads and structures that are a part

of the contract. Adjustment in payment will be made for the deletion or addition of work not shown in the contract documents. Monthly payment will be made under this item in proportion to the amount of work done as determined by the Engineer.

2/28/2018

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 ATTSA 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

908508 - STABILIZED CONSTRUCTION ENTRANCE MATS

Description:

This work consists of furnishing and installing thick polyethylene mats to serve as stabilized construction entrance at the location shown on the design plans.

Materials:

Mats: 4’ x 8’ mats made of ½” thick polyethylene with treads on at least one side.

Construction Methods:

Construction methods shall conform to the project plans, and as directed by the Engineer.

Place stabilized construction entrance mats at locations for stabilized construction entrances as shown on plan sheets. Remove stabilized construction entrance mats upon completion of BMP maintenance.

Measurement and Payment:

Stabilized construction entrances will be measured and paid for by square yards. Individual mats shall be connected to adjacent mats as specified by the manufacturer. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

3/05/2018

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

JENNIFER COHAN
SECRETARY

UTILITY STATEMENT
July 3, 2017
STATE CONTRACT # T201780204
P6 # 17-78945
F.A.P # N/A
STORMWATER BMP MAINTENANCE NCC FY 2018
MULTIPLE LOCATIONS

Location: BMP 85 & 86

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

Delmarva Power - Electric
Delmarva Power - Gas
Comcast
New Castle Department of Special Services (Sanitary Sewer)
Verizon
Suez Water Delaware Inc.

Delmarva Power - Electric:
The Company maintains aerial transmission and potentially underground and aerial distribution facilities within the project limits. It is anticipated that there will be no impact on any existing facilities. All electric facilities will remain active for duration of the contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Delmarva Power – Gas:
The Company maintains facilities within the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of the contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Comcast:
The Company maintains facilities within the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

New Castle Department of Special Services (Sanitary Sewer):
The Company maintains facilities within the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Verizon:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Suez Water Delaware Inc.:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities shall remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 95

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

Atlantic Broadband
Delmarva Power - Electric

Atlantic Broadband:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by

the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Location: BMP 101

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

Atlantic Broadband
Delmarva Power - Electric
Eastern Shore Natural Gas

Atlantic Broadband:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Eastern Shore Natural Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near ESNG facilities.

Location: BMP 129

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

Delmarva Power - Electric
Eastern Shore Natural Gas
Verizon

Delmarva Power - Electric:
The Company maintains aerial facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the

company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Eastern Shore Natural Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near ESNG facilities.

Verizon:
The Company maintains aerial facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 137

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

Artesian Water Company
Delmarva Power - Electric
Delmarva Power – Gas
Comcast
Zayo
New Castle Department of Special Services (Sanitary Sewer)
Verizon

Artesian Water Company:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains aerial and potentially underground facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Delmarva Power – Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be

encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Comcast:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Zayo:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

New Castle Department of Special Services (Sanitary Sewer):
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Verizon:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 138

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

Delmarva Power - Electric
Eastern Shore Natural Gas
New Castle Department of Special Services (Sanitary Sewer)

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Eastern Shore Natural Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near ESNG facilities.

New Castle Department of Special Services (Sanitary Sewer):
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 141

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

Atlantic Broadband
Delmarva Power - Electric
Eastern Shore Natural Gas
Tidewater Utilities

Atlantic Broadband:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Eastern Shore Natural Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near ESNG facilities.

Tidewater Utilities:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be

encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 142

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

Artesian Water Company
Delmarva Power - Electric
Delmarva Power – Gas
Comcast
New Castle County Department of Special Services (Sanitary Sewer)
Qwest Communications
Suez Water Delaware Inc.

Artesian Water Company:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains aerial transmission and potentially aerial and underground distribution facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Delmarva Power – Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Comcast:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

New Castle County Department of Special Services (Sanitary Sewer):
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Qwest Communications:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Suez Water Delaware Inc.:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 179

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

Artesian Water Company
Delmarva Power - Electric
Delmarva Power – Gas
Comcast
New Castle County Department of Special Services (Sanitary Sewer)

Artesian Water Company:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of project. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Delmarva Power-Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Comcast:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

New Castle County Department of Special Services (Sanitary Sewer):
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 182

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

Artesian Water Company
Cavalier
Delmarva Power - Electric
Delmarva Power – Gas
Comcast
Zayo
New Castle County Department of Special Services (Sanitary Sewer)

Artesian Water Company:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Cavalier:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Delmarva Power – Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Comcast:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Zayo:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

New Castle County Department of Special Services (Sanitary Sewer):
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 183

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

Artesian Water Company
AT&T
Delmarva Power - Electric
Delmarva Power – Gas
Comcast
Zayo
New Castle County Department of Special Services (Sanitary Sewer)
Verizon

Artesian Water Company:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

AT&T:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Delmarva Power – Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Comcast:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Zayo:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

New Castle County Department of Special Services (Sanitary Sewer):
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be

accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Verizon:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 185

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

Atlantic Broadband
Artesian Water Company
Delmarva Power - Electric
Eastern Shore Natural Gas

Atlantic Broadband:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Artesian Water Company:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains aerial facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Eastern Shore Natural Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near ESNG facilities.

Location: BMP 244

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

Artesian Water Company
AT&T
Delmarva Power – Electric
Delmarva Power – Gas
Comcast
Level 3 Communication
New Castle County Department of Special Services (Sanitary Sewer)
Delaware Pipeline Company
Verizon

Artesian Water Company:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All water facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

AT&T:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Delmarva Power – Gas:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All gas facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Comcast:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be

accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Level 3 Communication:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

New Castle County Department of Special Services (Sanitary Sewer):
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Delaware Pipeline Company:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All pipelines and associated facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Verizon:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

Location: BMP 431

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

Delmarva Power - Electric
Town of Middletown DPW

Delmarva Power - Electric:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. All electric facilities will remain active for duration of contract. Should any additional conflicts be encountered during construction requiring adjustment and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the respective company's forces, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor. See general notes outlining requirements for working near electric facilities. The state contractor shall coordinate with DPL and adhere to/maintain the required safety envelope.

Town of Middletown DPW:
The Company maintains facilities with the project limits. It is anticipated that there will be no impact on the existing facilities. Should any additional conflicts be encountered during construction requiring adjustment

and/or relocation to the aforementioned utility's existing facilities, the necessary relocation work shall be accomplished by the state contractor, as directed by the Engineer following adequate coordination with and proper advanced notice to the company by the state contractor.

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, outages 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 as determined by the utility company 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 after the State's 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 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 owned sewer or water facilities with facility owners and provide adequate notice to the municipally and to the District Engineer prior to performing work.

General Notes

1. **The Contractor's attention is directed to Section 105.09 Utilities, Delaware Standards Specifications, August 2001. The Contractor shall contact Miss Utility (1-800-282-8555) two working days prior to 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 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 discernable 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 contact plan set.

4. Coordination and cooperation among the Utility Companies and the State's Contactor 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.

Mr. Carmen Hunter	Artesian Water Company	302-453-7153
Mr. Wesley Page	Atlantic Broadband	410-827-6441
Mr. Louis Marello	AT&T	914-397-3744
Mr. Harry Sheppard	Cavalier	302-224-7121
Mr. Keith Allridge	Comcast	717-776-1073
Mr. Darrell A. Eller	Delaware Pipeline Company	302-834-6078
Mr. Angel Collazo	Delmarva Power – Electric (Distribution)	302-454-4370
Mr. Matthew Savage	Delmarva Power – Electric (Transmission)	302-454-4475
Ms. Kristin Stanfill	Delmarva Power Gas	302-429-3364
Mr. Jason Scott	Eastern Shore Natural Gas	302-213-7273
Mr. Tim Eskridge	Level 3 Communication	610-785-1469
Mr. David Clark	New Castle County (Sanitary Sewer)	302-395-5705
Mr. George McElvain	Qwest Communications	303-992-9931
Mr. John Licht	Suez Water Delaware (United Water)	302-252-3036
Mr. Josh Turner	Tidewater Utilities	302-734-7500 x1026
Mr. J. Morris Deputy	Town of Middletown DPW	302-378-2711
Mr. George Zang	Verizon Delaware, LLC	302-422-1238
Mr. Chris Ricciuti	Zayo	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 energized lines. Additional clearance may be required form high voltage transmission lines.

8. **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. The state contractor shall discuss work with electric companies to determine required safety envelope.**

9. **Requirements while near Eastern Shore's Pipeline:**

   Note: These requirements are general in nature and not specific. These requirements are not intended to be all-inclusive. Actual field conditions may change the requirements. Contractor should consult with their engineer prior to initiating construction and abide by all Federal, State, and Local rules and regulations.

   Please coordinate construction activity with your assigned line locator according to the general guidelines below. Your line locator can help determine if additional contacts are required with Eastern Shore Engineering Department before start of excavation activity.

   1. **It shall be the contractor's responsibility to use the Miss Utility One Call System.**
   2. **It shall be the contractor's responsibility to contact and coordinate with Eastern Shore before starting any construction above or near the pipeline. Eastern Shore may elect to have standby personnel on the job site during construction activity.**
   3. **It shall be the contractor's responsibility to contact and coordinate with Eastern Shore before moving heavy equipment above or near the pipeline. Eastern Shore may require extra cover, berm or ramp, timber mats, etc. These measures are to be determined by Eastern Shore depending on field conditions.**
   4. **If the pipeline is exposed and suspended, it shall be the responsibility of the contractor to coordinate with Eastern Shore the appropriate supporting measures. These measures are to be determined by Eastern Shore depending on field conditions.**
   5. **If the pipeline is exposed, it shall be the responsibility of the contractor to protect the pipeline from construction activity and the traveling public.**
   6. **A minimum clearance of 12" shall be maintained between Eastern Shore's pipeline and other underground utilities and structures. If this cannot be maintained, Eastern Shore shall determine an appropriate means of protection to the pipeline.**

IN EVENT OF PIPELINE EMERGENCY CALL ESNG 24 HOUR GAS CONTROL CENTER AT 302-734-6720 or TOLL FREE AT 1-877-650-1257

DIVISON OF TRANSPORTATION SOLUTIONS

Gary Matthews

Utilities Section, DelDOT

7/7/17

Date

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

CERTIFICATE OF RIGHT-OF-WAY STATUS

STATE PROJECT NO. T201780204

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

STORMWATER BMP MAINTENANCE NCC FY 2018

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

July 19, 2017

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

JENNIFER COHAN
SECRETARY

October 3, 2017

ENVIRONMENTAL REQUIREMENTS

FOR
State Contract No. T201780204
Federal Aid No.: N/A

Contract Title: Stormwater BMP Outfall Maintenance

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 (302) 760-2264 must be notified 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.: T201780204

Federal Aid No.: N/A

Project Title: Stormwater BMP Maintenance NCC FY-2018

The following railroad companies maintain facilities within the contract limits:

- ☐ Amtrak
- ☐ CSX
- ☐ Delaware Coast Line
- ☐ East Penn
- ☐ Delmarva Central
- ☐ Maryland & Delaware
- ☐ Norfolk Southern
- ☐ Wilmington & Western
- ☑ None

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 DelDOT Maintenance of Railroad Traffic Item in the Special Provisions. Contractor shall coordinate railroad flagging with DelDOT's Railroad Program Manager at (302) 760-2183.

☐ Railroad Agreement required. The necessary Railroad Agreement is pending. The Contractor cannot begin work untill 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 DelDOT Maintenance of Railroad Traffic Item in the Special Provisions. Contractor shall coordinate railroad flagging with DelDOT's Railroad Program Manager at (302) 760-2183.

Approved As To Form:

Robert A. Perrine
DelDOT Railroad Program Manager

28April,2017
DATE

BID PROPOSAL FORMS

CONTRACT T201780204.01

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 T201780204.01
- Name of Contractor

CONTRACT ID: T201780204.01 PROJECT(S): T201780204

All figures must be typewritten.

CONTRACTOR :_____

SECTION 0001 STORMWATER MAINTENANCE

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0010	201000 CLEARING AND GRUBBING	LUMP	LUMP			
0020	202000 EXCAVATION AND EMBANKMENT	2271.000 CY				
0030	203000 CHANNEL EXCAVATION	222.000 CY				
0040	601142 REINFORCED CONCRETE FLARED END SECTION, 18"	1.000 EACH				
0050	601146 REINFORCED CONCRETE FLARED END SECTION, 30"	1.000 EACH				
0060	601191 PVC PIPE, 6"	7.000 LF				
0070	707001 RIPRAP, R-4	47.000 SY				
0080	707002 RIPRAP, R-5	20.000 SY				
0090	708003 GEOTEXTILES, RIPRAP	38.000 SY				

CANNOT BE USED FOR BIDDING

CONTRACT ID: T201780204.01 PROJECT(S): T201780204

All figures must be typewritten.

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0100	710485 DEWATERING RISER	8.000 EACH				
0110	710502 CHECK VALVE	1.000 EACH				
0120	763000 INITIAL EXPENSE/DE-MOBILIZATION	LUMP	LUMP			
0130	763501 CONSTRUCTION ENGINEERING	LUMP	LUMP			
0140	801500 MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LUMP	LUMP			
0150	811004 FLAGGER, NEW CASTLE COUNTY, HEAVY CONSTUCTION, STATE	130.000 HOUR				
0160	906002 DEWATERING BAG	8.000 EACH				
0170	908003 TOPSOIL, 4" DEPTH	1979.000 SY				
0180	908014 PERMANENT GRASS SEEDING, DRY GROUND	2319.000 SY				
0190	908015 PERMANENT GRASS SEEDING, WET GROUND	1523.000 SY				

CANNOT BE USED FOR BIDDING

CONTRACT ID: T201780204.01 PROJECT(S): T201780204

All figures must be typewritten.

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0200	908020 EROSION CONTROL BLANKET MULCH	1979.000 SY				
0210	908021 TURF REINFORCEMENT MATTING, TYPE 1	1470.000 SY				
0220	908022 TURF REINFORCEMENT MATTING, TYPE 2	990.000 SY				
0230	908508 STABILIZED CONSTRUCTION ENTRANCE MATS	728.000 SY				
0240	909002 SANDBAG DIVERSION	517.000 CF				
	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:

CANNOT BE USED FOR BIDDING

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 _____.

<u>THIS PAGE MUST BE SIGNED, NOTARIZED, AND RETURNED WITH YOUR BID.</u>

(This form is required from the prime contractor only)

CERTIFICATION
Contract No. T201780204.01

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.

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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. T201780204.01, 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.

CANNOT BE USED FOR BIDDING

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