

STATE OF DELAWARE  
DEPARTMENT OF TRANSPORTATION



**BID PROPOSAL**

**CONTRACT T202009902**

**DRAGON RUN TIDE GATES REPLACEMENT**

Advertisement Date: November 21, 2024

**INCLUDED IN THIS DOCUMENT:**

**BID PROPOSAL:**

*GENERAL DESCRIPTION*  
*PROSPECTIVE BIDDER'S NOTES*  
*GENERAL NOTICES*  
*PREVAILING WAGES*  
*SPECIAL PROVISIONS*  
*STATEMENTS*  
*SAMPLE AFFIDAVIT - CRAFT TRAINING*  
*QUANTITY SHEET SUMMARY*

**ADDITIONAL BID PROPOSAL ITEMS:**

**ATTACHED OR POSTED DOCUMENTS:**

*PROJECT PLANS*  
*QUESTIONS & ANSWERS (if posted)*  
*STEEL COST FORM*

**PAPER BIDDERS CONTACT DELDOT  
FOR BID SUBMITTAL DOCUMENTS:**

*DRUG TESTING AFFIDAVIT;*  
*CERTIFICATION FORM;*  
*BID BOND FORM;*  
*CD FOR BID PRICE ENTRY & PRINTING*

This Bid Proposal and related documents can be viewed on [bids.delaware.gov](https://bids.delaware.gov) and, for subscribers [bidx.com/de/](https://bidx.com/de/)

**Internet Bids** for Bidders with Bid Express® accounts can be submitted at [BIDX.com/de](https://bidx.com/de/); **OR**;

**Paper Bids with CD** will be received in the Bidder's Room at the DelDOT Administration Building, Dover, DE;

**ALL BIDS DUE PRIOR TO 2:00 P.M. Local Time, DECEMBER 31, 2024**

**GENERAL DESCRIPTION**

**A. BIDS DUE: DECEMBER 31, 2024 PRIOR TO 2:00 P.M. Local Time** – unless changed via Addendum.

**BIDS MUST BE SUBMITTED VIA:**

(a) **Internet** - Bidders with DelDOT Bid Express® accounts can submit bids at [www.bidx.com/de/](http://www.bidx.com/de/).

**OR:**

(b) **Paper Bid Delivered To:** Delaware Department of Transportation, Administration Building  
North Entrance, Bidders Room, 800 Bay Road, Dover, DE 19901

For paper bids, contact DelDOT at [dot-ask@delaware.gov](mailto:dot-ask@delaware.gov) or (302) 760-2031 to request a CD for bidding, required forms, and instructions. Bidders enter their Bid Item prices onto the supplied CD then print the form and deliver in a sealed envelope; the Bid Form, completed CD, and required documents prior to the Bid due date and time.  
(*CD's cannot be used to submit bids to bidx.com*)

*Do not submit both Internet and Paper Bids. If so, the Internet bid and documents will be rejected.*

**BID OPENING:** Bids will be publicly opened and read aloud at the Date and Time of the Bid Opening. The Bid Opening will be held at the 'Paper Bid Delivered To' address shown above. Bidder bears the risk of late delivery, bids received after the stated time will be returned unopened.

Attendance is not required. DelDOT offers a call-in number to hear the Bid Opening telephonically. The telephone number to call is (408) 418-9388.

When prompted, enter Meeting number (access code): 173 970 0618#

It is anticipated the telephone access information will remain the same for all Bid Openings.

**B. PRE-BID MEETING: No**

**C. LOCATION:** New Castle County

These improvements are more specifically shown on the Location Map(s) of the attached Plans.

**D. DESCRIPTION:** The improvements consist of furnishing all labor and materials for this project which consists of the replacement of existing tide gates on Bridge 1-306A on Dragon Run Road. Follow other incidental construction in accordance with the location, notes and details shown on the plans, and as directed by the Engineer.

**E. COMPLETION TIME:** All work on this contract must be complete within 162 Calendar Days.

Extensions of contract time due to weather are specified in the Standard Specifications Section 108.7F, weather days.

It is estimated a Notice to Proceed is issued such that work starts on or about October 6, 2025.

**F. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DELAWARE DEPARTMENT OF TRANSPORTATION, AUGUST 2016** apply to this Bid Proposal and Project. 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 Standard and Supplemental Specifications can be viewed [here](#). Units of Measure can be found at 101.04.

**G. ATTACHMENTS:** Included as part of this Bid Proposal are; *Project Plans; Questions & Answers* (if posted); *Addenda* (if issued), *Referenced Documents, Documents Posted with this Bid Proposal*; and *Bid documents mailed to contractors*.

**H. ADDENDA:** All Addenda are posted on the internet at [bids.delaware.gov](http://bids.delaware.gov), and [bidx.com/de/](http://bidx.com/de/) and are included as part of the Bid Proposal. The Bidder is responsible to check the Website as needed to ensure that the Bidder is aware of Addenda that are included in the Bid Proposal. If Addenda are issued, the final Addendum will be posted no later than the end of the day two business days prior to the bid date. Each Addendum number and issue date must be entered on the submitted Certification Form. This original Bid Proposal will not be updated, you must refer to each Addendum.

**I. QUESTIONS:** E-MAIL TO; [dot-ask@delaware.gov](mailto:dot-ask@delaware.gov)

Questions regarding this project are to be e-mailed to the above address no less than **six business days** prior to the bid opening date in order to receive a posted response. Please include the Contract number in the subject line. Questions and responses are posted at [bids.delaware.gov](http://bids.delaware.gov), and [bidx.com/de/](http://bidx.com/de/). The date of the final posted Questions and Answers document must be entered on the submitted Certification Form.

**J. FLAGGERS:**

- A. Included in the Bid Proposal are the prevailing wages for highway construction 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.
- B. Flaggers must be bid at a minimum equal to the Laborer wage rate and may be bid up to, but not to exceed, 3 times the Laborer wage rate in accordance with the County where the Work is being performed.
- C. The Department will adjust the bid to the minimum for prices bid below the minimum acceptable bid and to the maximum for prices bid above the maximum allowable bid prior to award of the Contract.
  - 1. Flagger overtime must be bid at minimum of 1.45 times and may be bid up to a maximum of 4.35 times, the Laborer wage rate in accordance with the County where the Work is being performed.
  - 2. When a Contract for a Project contains both Federal Davis-Bacon and State of Delaware prevailing wage standards, the employer's minimum wage obligations are determined by whichever standards are higher.
- D. Overtime:
  - 1. Payment for overtime will be considered on a weekly basis for time worked in excess of 40 hours for a continuous 7-day period beginning Monday and ending Sunday inclusive.
  - 2. Time worked on other Projects or Work activities other than flagging will not be counted in the normal 40 hours or the overtime.
- E. The cost of the flagging operation when performed by others who are not the Contractor's employees will not be included in the 50% subcontracting limit as outlined in Section 108.1.

**K. PROSPECTIVE BIDDERS NOTES:****1. NEW CRAFT TRAINING REQUIREMENT ([29 Del. C. §6960A](#)) EFFECTIVE SEPT 9, 2022**

- a) The awarded contractor must include a craft training program for each craft in the project if at the time the contractor executes the contract, all of the following apply:
  - 1. This project requires prevailing wages.
  - 2. The contractor employs 10 or more total employees.
  - 3. This project is not a federal highway project (except for the US 301 project from the MD-DE state line to SR1).
  - 4. There is an apprenticeship program for a craft in the project on the list provided by the [Delaware Dept. of Labor](#).
- b) The awarded contractor must commit that all subcontractors provide craft training if the above applies to the subcontractor.
- c) The contractor must satisfy the craft training requirement before the contract is executed. A contractor or subcontractor may satisfy the craft training requirement by doing any of the following for each craft required:
  - 1. Having at least 1 active apprentice in a craft training program for the craft.
  - 2. Having at least 1 active apprentice who completes a craft training program for the craft within the 6 months before the date the contract was executed.
  - 3. Being a member of a consortium that provides craft training for the craft and all of the following apply to the craft training program for the craft:
    - (a). The consortium requires a regular financial contribution.
    - (b). The contractor or subcontractor has access to the craft training program.
    - (c). There is at least 1 active apprentice in the craft training program.
  - 4. Making a payment under paragraph (e) of this section.
- d) The craft training program under above paragraphs c)1. and c)2. may be provided by the contractor or subcontractor or through agreement with another entity. The active apprentice under paragraphs c)1. and c)2. does not have to work on this project.
- e) A contractor or subcontractor may satisfy the craft training requirement by making a payment in the amount established under § 204 of Title 19, for the craft into the Apprenticeship and Training Fund of the Department Labor. For each calendar year, a contractor or subcontractor satisfies the craft training requirement for all contracts executed during that year when payments made after January 1 equal the following amounts:
  - 1. For employers with 10 through 25 employees, payments that total \$10,000.
  - 2. For employers with more than 25 employees, payments that total \$20,000.

- f) **PENALTY:** If the successful bidder fails to comply with the Craft Training Requirements:
1. The contractor must pay the amount of the payment required under paragraph e) above to the Apprenticeship and Training Fund.
  2. An amount that does not exceed 10 percent of the payment under paragraph f)1. of this section.
  3. A penalty assessed under paragraph f)1. may be fully or partially remitted or refunded by the agency awarding the contract only if the contractor establishes compliance within 60 days of the notice of the penalty. A claim for remission or refund of a penalty may only be granted if an application for the remission or refund is filed within 1 year of the notice of the penalty.
  4. Any contractor or subcontractor who fails to provide required craft training under 29 Del. C. § 6960A may be subject to suspension or debarment.
2. **BIDDERS MUST BE REGISTERED** with DelDOT in order to submit a bid. E-Mail [dot-ask@delaware.gov](mailto:dot-ask@delaware.gov) or call (302) 760-2031 to request registration information.
  3. **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 amount bid.
  4. **DELAWARE'S CONTRACTOR REGISTRATION ACT** - 19 Del.C. §§ 3601 *et seq.*, requires all contractors and subcontractors to register with the Delaware Department of Labor before performing construction services or maintenance. Refer to the GENERAL NOTICES section for further information.
  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 at the following link:**  
<http://regulations.delaware.gov/register/december2017/final/21%20DE%20Reg%20503%2012-01-17.htm>  
 Note a few of the requirements;
    - \* At bid submission - Each bidder must submit with the bid a single signed affidavit certifying that the bidder and its subcontractors has in place or will implement during the entire term of the contract a Mandatory Drug Testing Program that complies with the regulation (*a blank affidavit form is attached*);
    - \* 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, each participating DBE firm, and all other listed Subcontractors;
    - \* 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 program in writing.
  6. **PERFORMANCE-BASED RATING SYSTEM** - 29 Del.C. §6962 (c)(12)(a) requires DelDOT to include a performance-based rating system for contractors. The Performance Rating for each Contractor shall be used as a prequalification to bid at the time of bid. Refer to '*General Notices*' for details.
  7. **NO RETAINAGE** will be withheld on this contract unless through the Performance-Based Rating System.
  8. **EXTERNAL COMPLAINT PROCEDURE** can be viewed on DelDOT's Website, [https://deldot.gov/Business/cr/index.shtml?dc=civil\\_rights\\_eeo](https://deldot.gov/Business/cr/index.shtml?dc=civil_rights_eeo) or request a copy by calling (302) 760-2555.
  9. **DELAWARE BUSINESS LICENSE;** a copy of your firm's Business License must be submitted with your bid.
  10. **SECTION 106.06 BUY AMERICA** Contract Requirement in the Delaware Standard Specifications for Road and Bridge Construction, August, 2016 does not apply to this contract.
  11. **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 contractors to provide an American Concrete Institute (ACI) or National Ready-Mix Concrete Association (NRMCA) certified concrete flatwork technician to supervise all finishing of flatwork concrete.

**12. SIGNAGE LANGUAGE:**

In order to maintain effective communication with the traveling public, only place signs, banners, flags, or other displays within the projects limits that meet the requirements of the latest version of the Delaware Manual on Uniform Traffic Control Devices. Any signs or other materials which deviate from the MUTCD, must be preapproved by the Engineer. The only signage and materials which may be displayed upon vehicles and equipment within the Project area are signs denoting the name of the Contractor and any subcontractors and other signs and/or materials required and approved pursuant to the MUTCD and the Engineer. Contractor shall immediately remove any signs or materials within the Project that does not meet these requirements immediately upon notification by the Engineer. Failure to remove signs or other materials following notification from the Engineer will result in Liquidated Damages being assessed in the manner and amount specified in the Standard Specifications section 108.9.A.

**13. 3-D MODEL DESIGN FILES:** This project contains 3-D Model Design Files that are available upon request only.

**14. STEEL COST PRICE ADJUSTMENT FORM** is posted and part of this Bid Proposal.

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## GENERAL NOTICES

### CONTRACTOR REGISTRATION ACT

On July 1, 2021, the Contractor Registration Act, as codified in 19 Del.C. §§ 3601 *et seq*, took effect. This law requires all contractors to register with the Delaware Department of Labor before performing construction services or maintenance. The Contractor Registration Act applies to all contractors that engage in construction and maintenance within the State of Delaware. Additionally, it requires contractors to have Delaware workers' compensation insurance where required, compliance with labor laws, and proof of a state business license. The Delaware Department of Labor's Office of Contractor Registration is responsible for enforcement of the requirements of the Contractor Registration Act. If you have any questions about the contractor registration process, please call 302-430-7739 or email [Contract.Registry@delaware.gov](mailto:Contract.Registry@delaware.gov). Registration at <https://onestop.delaware.gov/>.

### SPECIFICATIONS :

The Delaware specifications entitled "*Standard Specifications for Road and Bridge Construction August, 2016*", hereinafter referred to as the *Standard Specifications*; and *Revisions* to the Standard Specifications effective as of the advertisement date of this Bid Proposal and hereby included by reference; the *Special Provisions*; *Notes on the Plans*; this *Bid Proposal* including referenced documents; any *Addenda* thereto; and any posted *Questions and Answers*; shall govern the work to be performed under this contract. The Contractor shall make itself aware of these specifications, revisions and corrections, and apply them to the applicable item(s) of this contract.

### 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.

The Department requires the use of various electronic applications for various documentation processes. These processes will be identified, and the Contractor's required use will be detailed during the Preconstruction Meeting. No additional payments will be made to the contractor to use or interface with the applications.

### 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.

### PERFORMANCE-BASED RATING SYSTEM

29 Del.C. §6962 (c)(12)(a) requires a Department of Transportation project, excluding a Community Transportation Fund or municipal street aid contract, to include a performance-based rating system. At the time of bid, the Performance Rating for each Contractor shall be used as a prequalification to bid.

Bidders with Performance Rating scores equal to or greater than 85% shall be permitted to bid. Bidders with scores of less than 85% who comply with the retainage requirements of 29 Del.C. §6962 shall be permitted to bid provided the *Agreement to Accept Retainage* (located on the Certification Page) is executed and submitted with the bid. Lack of an executed

*Agreement to Accept Retainage* will result in the rejection of the bid by the Department. Successful bidders awarded Department contracts who have no performance history within the last five (5) years will be assigned a provisional Performance Rating of 85% at the date of advertisement.

Notification of Performance Rating. The Department shall post publicly the Performance Rating for all Contractors on the Department's [website](#). DeIDOT will complete performance-based evaluations on the construction company contracted by the Department to build the project (the "Contractor"). Provisions to appeal Performance Ratings are described in the regulations. The regulations are set forth in Section 2408 of Title 2, Delaware Administrative Code, found [here](#).

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 ensure compliance.

LICENSE :

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

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

- (b) No agency shall accept a proposal for a public works contract unless such contractor has provided a proper and current copy of its occupational and/or business license, as required by Title 30, to such agency.
- (c) Any contractor that enters a public works contract must provide to the agency to which it is contracting, within 30 days of entering such public works contract, copies of all occupational and business licenses of subcontractors and/or independent contractors that will perform work for such public works contract. However, if a subcontractor or independent contractor is hired or contracted more than 20 days after the contractor entered the public works contract the occupational or business license of such subcontractor or independent contractor shall be provided to the agency within 10 days of being contracted or hired.

DIFFERING SITE CONDITIONS:

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

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

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

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

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

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

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

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

If the alterations or changes in quantities significantly change the character of the work under the contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be

agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.

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

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

#### RIGHT TO AUDIT

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

#### PREVAILING WAGES

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

#### REQUIREMENT BY DELAWARE 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 [Delaware] 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 Part VI., Section C., 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."

Contractors with questions may contact:

Department of Labor, Division of Industrial Affairs,  
4425 N. Market Street, Wilmington, DE 19802  
Telephone (302) 761-8200  
<https://dia.delawareworks.com/labor-law/>

STATE OF DELAWARE  
DEPARTMENT OF LABOR  
DIVISION OF INDUSTRIAL AFFAIRS  
OFFICE OF LABOR LAW ENFORCEMENT  
PHONE: (302) 318-2769

Mailing Address:  
252 Chapman Road  
Suite 210  
Newark, DE 19702

Located at:  
252 Chapman Road  
Suite 210  
Newark, DE 19702

PREVAILING WAGES FOR HEAVY CONSTRUCTION EFFECTIVE MARCH 15, 2024

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
ASBESTOS WORKERS	28.06	24.68	53.66
BOILERMAKERS	87.82	40.77	74.79
BRICKLAYERS	87.54	75.17	31.62
CARPENTERS	61.06	61.06	49.30
CEMENT FINISHERS	55.35	30.91	23.03
DIVER	100.30	Call DDOL	Call DDOL
DIVER TENDER	113.27	Call DDOL	Call DDOL
ELECTRICAL LINE WORKERS	92.48	92.48	92.48
ELECTRICIANS	81.62	81.62	81.62
GLAZIERS	25.91	22.51	15.25
INSULATORS	67.20	67.20	67.20
IRON WORKERS	75.32	77.39	76.33
LABORERS	55.65	55.65	55.65
MILLWRIGHTS	85.36	85.36	68.57
PAINTERS	93.91	93.91	93.91
PILEDRIVERS	88.62	49.97	38.88
PLASTERERS	24.40	21.22	14.33
PLUMBERS/PIPEFITTERS/STEAMFITTERS	97.88	98.82	24.74
POWER EQUIPMENT OPERATORS	81.29	87.35	81.29
SHEET METAL WORKERS	39.01	24.21	22.74
SPRINKLER FITTERS	42.05	15.92	13.19
TRUCK DRIVERS	43.45	26.11	28.27

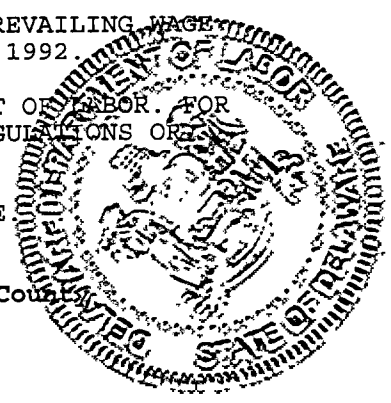
CERTIFIED: 11-19-2024 BY: Salina Chordard / Au Francis Chedets  
ADMINISTRATOR, OFFICE OF LABOR LAW ENFORCEMENT

**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) 318-2769.

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

PROJECT: T202009902 Dragon Run Tide Gates Replacement, New Castle County



Contract T202009902  
Dragon Run Tide Gates Replacement

SPECIAL PROVISIONS

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S.P. Code	SPECIAL PROVISION DESCRIPTION
202560-15	CONTAMINATED MATERIAL
604500-15	COFFERDAMS
615520-15	FABRICATED STAINLESS STEEL GATES
763501-15	CONSTRUCTION ENGINEERING
763598-15	FIELD OFFICE, SPECIAL I
763650-15	STEEL COST PRICE ADJUSTMENT
801500-15	MAINTENANCE OF TRAFFIC, ALL INCLUSIVE

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**202560 - CONTAMINATED MATERIAL**

**Description:**

Contaminated Material is defined as solids or liquids (including soil) potentially contaminated with a hazardous substance, requiring special handling and/or disposal per state or federal regulation.

This work describes the excavation, removal and treatment/disposal of contaminated materials resulting from project construction including utility and other types of excavation activities in accordance with the locations and notes on the Plans, and as directed by the Engineer or the Department's environmental representative. The Contractor will be notified of the Department's environmental representative at the pre-construction meeting.

**Overview of Costs:**

Potential contaminated solids may affect contractor's costs as follows;

Additional cost to normal excavation requirements:

- Cost of 8 mil plastic for placement under and over solid contaminated material,
- Maintaining the segregated contaminated solids staging area.

Reduced cost to normal excavation requirements:

- Not required to, or charged for, transport of contaminated material from site.
- Not required to, or charged for, disposal of contaminated soil.

Potential contaminated liquids will affect contractor's cost as follows;

Additional cost to normal excavation requirements:

- None

Reduced cost to normal excavation requirements:

- None

**Construction Methods and Responsibilities:**

Contractor's Responsibilities for potential contaminated solids:

The Contractor shall be responsible for providing the appropriate equipment and personnel necessary to excavate, stage, and load contaminated material for off-site disposal, as identified from previous site environmental investigations or identified during construction activities. The work will be performed in accordance with the procedures described in the site specific "Contaminated Material and Water Removal Work Plan" prepared by the Department's environmental representative. The Department will provide a copy of this plan after the project is awarded and before any work begins. The Contractor shall adhere to applicable Occupational Safety and Health standards, Guidelines and/or Laws. This will include compliance with 29 CFR Part 1910.

After award of the Contract, the Contractor shall immediately be responsible for notifying the Department's HAZMAT Program Manager's office (760-2463) for scheduling coordination with the environmental representative. The contractor shall submit a proposed schedule of work to the Department for review and approval prior to any commencement of work on this site. The Contractor is required to perform to a high standard of workmanship to assure protection of workers, local water supplies, and the environment. The Contractor shall coordinate with the utility companies prior to excavation. The Department's environmental representative shall be present during all phases of work associated with the excavation and removal of potentially contaminated material. Payment will not be made for any work done when a Department approved Inspector or environmental representative is not present to provide environmental oversight.

Specific tasks to be performed by the Contractor will include excavating soil per the project specifications. The Contractor will segregate "contaminated" soil as designated by the Department or their environmental representative, from "clean" soil and place the "contaminated" soil in a designated on-site staging area constructed by the Contractor. At a minimum the staging area needs to be lined with 8-mil plastic and a berm constructed to minimize storm water run-off. The "contaminated" soil will need to be covered by the Contractor at the end of each work day. The Contractor will be responsible for loading contaminated soil onto trucks arranged by the Department's environmental representative on the days the contaminated soil is shipped off-site to a licensed disposal/treatment facility. The Contractor will backfill and compact the excavated area(s) according to the project specifications and payment will be made under that item of the Contract.

**Department's Responsibilities:**

The Department is responsible for providing and paying; the environmental representative; the transportation of contaminated material for disposal; and the disposal of contaminated material. The "Contaminated Material and Water Removal Work Plan" will identify; the procedures to be used to excavate and stage the contaminated material; the licensed treatment/disposal facility where the Department will ship the contaminated material; the method the material will be transported to the treatment/disposal facility; and any additional health and safety requirements for site personnel.

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The Department's environmental representative will conduct a health and safety briefing prior to commencement of activities on the sites to insure an understanding of all applicable standards, guidelines, laws, procedures, etc. consistent with the successful completion of this type of activity. The Department's environmental representative will conduct air monitoring during any excavation activities at the site to identify and mitigate fire, explosion and vapor hazards.

The Department's environmental representative shall coordinate the excavation activities with all applicable local, state, and federal environmental regulatory agencies. The Department's environmental representative will also oversee the excavation, removal and treatment/disposal of the material in the designated area(s) and perform such tests as field screening for soil contamination utilizing vapor monitoring techniques and collect soil samples for laboratory analysis to meet the requirements of the treatment/disposal facility, DNREC and/or the USEPA. The Department's environmental representative's personnel will subcontract with the disposal/treatment facility to provide transportation and disposal/treatment of all contaminated materials to be removed as part of the project. The Department's environmental representative is responsible for measuring the quantity of contaminated material removed, via certified scale weights, for the Department's records.

### **Method of Measurement:**

The quantity of contaminated material will not be measured. It will be included in the excavation quantity.

### **Basis of Payment:**

No additional payment will be made for the handling of contaminated material included in the excavation quantities. Contractor's costs for handling contaminated material as described herein are to be included in the standard excavation pay items included in this contract, and will constitute full compensation for excavation, constructing and maintaining the segregated soil staging area, placement of the contaminated soil in the staging area, providing plastic and daily covering of the segregated soil staging area, and loading of contaminated soil for removal by the Department. This item is a contingency item and the Department reserves the right to delete from the Contract. The Contractor shall make no claims for additional compensation because of deletion of the item.

08/14/2017

**604500 - COFFER DAMS**

**Description:**

- A. This work pertains to Contract T201807401 and includes performing the following in accordance with the notes on the Plans, this Special Provision and the direction of the Engineer:
1. Preparation and submission of a Water Control Plan.
  2. Effective implementation of designs, construction, and maintenance of all cofferdams and necessary diversion works.
  3. Furnishing, installing, and operating all necessary pumps, piping, and other facilities and equipment.
  4. Removing all temporary works and equipment after they have served their purpose.
- B. The Contractor is responsible for design and construction of the following, but not limited to:
1. All temporary cofferdams and diversion walls installed to facilitate construction of the work in an unwatered and safe condition. This includes structures necessary upstream and downstream of the existing bridge and gate structures, or laterally (left to right) within a culvert. Sheet piles are not permitted at Bridge 1-407 and additional sheet piles are not permitted in the vicinity of existing gasline at Bridge 1-504.
  2. Repairs to the existing sheeting located upstream of Bridge 1-504 as shown on the Drawings and as necessary to facilitate reconstruction of Bridge 1-504 and associated gate system in an unwatered and safe condition. The Contractor may elect to remove the existing sheeting and construct a new cofferdam system at no additional cost to the Department.
  3. Removal of existing sheet piling upstream of Bridge 1-504 and returning the sheeting to Mumford & Miller, 1005 Industrial Road, Middletown, DE 19709 (302-378-7736) upon completion of the work at Bridge 1-504. Bulk and conventional sandbags at this location shall become the property of the Contractor and shall be removed from the site upon completion of the work.
  4. Conventional sandbags and cofferdams at Bridge 1-407 shall become the property of the Contractor and shall be removed from the site upon completion of the work.
  5. Clearing of debris upstream of Bridge 1-504 and 1-407 within the limits of the cofferdam(s).

**Materials:**

The type of cofferdam to be constructed shall be selected by the Contractor. The design and construction shall be in accordance with the applicable requirements of the Standard Specifications. The Contractor may submit for approval, proprietary diversion device(s) such as PORTADAM or AQUA-BARRIER or approved equal. The Contractor is not required to construct a cofferdam similar to any conceptual designs shown on the contract drawings provided their design performs in accordance with these specifications, including applicable involvement of a Professional Engineer Registered in the State of Delaware. If the sheet pile cofferdam upstream of Bridge 1-504 is to be used, the bracing shown on the Drawings shall be constructed as a minimum. If the contractor decides to use an alternative cofferdam at Bridge 1-504, it shall be provided in accordance with these specifications and at no additional cost to the Department. It is the contractor's responsibility to inspect, test, and verify existing conditions as necessary to complete their design or implement bracing. The contractor is solely responsible for their design assumptions; the failure of the material or other physical properties of the existing conditions to meet their design needs and assumptions will not be considered as justification for cost overruns.

- A. The use of sheeting upstream of the Bridge 1-407 structure is prohibited because of the presence of an unlocated gas line.
- B. Cofferdam work upstream of Bridge 1-504 shall be conducted using materials and methods that will not harm an existing unlocated gas line utility in this area. It is the responsibility of the contractor to protect this utility.
- C. Walers and bracing shall conform to ASTM A572, A992, or A913 Grade 50.
- D. Scour Hole Fill: AASHTO #57 aggregate

**Construction Methods:**

- A. Submittals:
  - 1. Submit a Control of Water Plan signed and sealed by an Engineer registered in the state of Delaware, detailing the design and calculations for all cofferdams and bracing at least 30 days before the proposed start of cofferdam construction. The plan shall include a description of methods, schedule, and equipment to be used for installation and construction of cofferdams, diversions, and other surface water control mechanisms. The plan shall be submitted and approved before starting construction of control of water measures.

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2. The Control of Water Plan shall include items listed below that are applicable to each control of water measure:
  - a. A narrative that describes the cofferdam and associated systems to protect the work, the existing dam, existing unlocated gas line upstream of Bridge 1-407 and Bridge 1-504, and other site features from surface and groundwater.
  - b. Arrangement and details for each cofferdam, supporting design calculations, and construction methods to be used for installation of each system.
  - c. Elevations of ground surface, existing and temporary structures, as applicable.
  - d. The proposed method(s) and timing of installation and removal of temporary cofferdams and protection including sequence and equipment description. Multiple phases of cofferdam construction and use are anticipated to complete the work; phasing shall be described in detail.
  - e. Operation plan indicating means and methods to safely convey water through the site without impact to the flow, site, or surrounding property; flows from floods; base (normal) stream flow; groundwater; leakage; or any other water intruding the site.
  - f. Monitoring and action plan indicating means and methods of monitoring cofferdam and control of water performance. Plan shall include means of monitoring reservoir levels, anticipated weather, cofferdam leakage, and stability. Include threshold values for reservoir levels, cofferdam leakage, and stability with actions that will be taken should these thresholds be exceeded.
  - g. Contingency plan for alternative procedures to be implemented if any cofferdam is found to perform unsatisfactorily.
  - h. Materials, location and lead time required to implement the contingency plan.
  - i. Appropriate design calculations to support proposed designs provided in the Shop Drawings.
  - j. The Water Control Plan shall incorporate Designs, Shop Drawings, and Material Specifications for all structural elements proposed.
  - k. The Control of Water Plan shall be prepared, signed, and sealed by a Professional Engineer registered in the State of Delaware with the appropriate technical expertise (hydraulic, geotechnical and/or structural engineering). Designs shall be according to recognized guidelines and standard of care for the type of system being designed.
3. Shop Drawings with supporting calculations for the Contractor-designed cofferdams and diversions shall incorporate the following design criteria:
  - a. Design cofferdams to support earth pressures, water pressures, and forces associated with stream diversion flows, hydrostatic pressures, utility loads, equipment, traffic, and construction loads, including impact, and other surcharge loads in a manner that will allow the safe and expeditious construction of permanent structures, to minimize ground movement or settlement, and to prevent damage to or movement of adjacent structures and utilities.

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- b. Design cofferdams and diversions to resist the maximum loads expected to occur during the work. Cofferdams shall be able to resist full hydrostatic loads to the minimum top elevations specified herein, or indicated on the drawings.
- c. Control of Water Plan shall include means of sealing interface between cofferdams and existing structures and subgrades, and methods to control leakage.
- d. Include member sizing, connection details, and material selection for each structure.
- e. Base (normal) stream flows shall be maintained at all times through the site.
- f. The contractor is not permitted to discharge water to sewers.

Contractor submittals approved by the Engineer shall not alleviate the Contractor's responsibilities for completing the work as specified.

**B. Available Information:**

- 1. Surface water, groundwater, runoff, and other site conditions may be highly variable and difficult to accurately predict.
- 2. Analyses and evaluations have been performed to support the project design and are available to the contractor. These analyses and evaluations may or may not provide satisfactory information to the Contractor for developing the Water Control Plan.
- 3. It is solely the Contractor's responsibility to evaluate the applicability of the available information and to obtain or develop additional information as a basis for development of the Plan.
- 4. A gas line is located immediately upstream of each bridge culvert; therefore, sheeting (excluding existing sheeting) shall not be driven into the lakebed as part of this work. Existing sheeting shall not be driven deeper in the vicinity of the existing gas line.

**C. Protection:**

- 1. Variability of site conditions and runoff events, other measures of water control implemented, and the Contractor's progress all have a significant influence on actual risk levels. The Contractor may elect to construct cofferdams to higher elevations than shown on the Contract Drawings to provide an added level of protection against overtopping at no additional cost to the Department.
- 2. Protect reservoir, creek and wetlands (to remain) from any and all materials used or disturbed during the water control activities, including soils and sediment, fill, admixtures, oil and grease, loose debris, and chemicals.
- 3. The Contractor shall be solely responsible for any and all damage to the Work caused by floods, storms, cofferdam failure, dewatering device failure, and/or floating debris, and shall take every precaution to prevent any damage to the Work which may be caused by rain, floods, storms, and/or floating debris. The Contractor

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shall stage the work such that existing or new gates remain in operation during construction. The Contractor shall operate the operable gates to control the reservoir pool at normal pool EL 9.3. The contractor shall be permitted to lower the lake in advance of storm events only with permission from DelDOT.

4. The Contractor shall be responsible to repair to the satisfaction of the Engineer any damages caused to the Work (permanent or temporary) or adjacent property resulting from the Contractor's failure to provide adequate control of water. This includes replacing fill placed in the existing scour hole as part of this work, at no additional cost to the Department.
5. In the event of flooding and subsequent possibility of cofferdam or diversion structure overtopping or dewatering device failure, the Contractor shall implement measures to minimize damage to construction work.
6. Should overtopping occur, the Contractor shall dewater and clean out the affected areas and undertake all repairs to the construction work. This work shall be completed expeditiously after the high-water event has passed.
7. Temporary cofferdams and diversion works shown on the Contract Drawings are minimums. Additional measures in those and other areas may be needed.

**D. Installation:**

1. The Contractor shall build, maintain, and operate cofferdams, channels, flumes, sumps, connections with existing works, and other diversion and protective works needed to divert concentrated flow and other surface water through the construction site while construction is in progress.
2. The Contractor shall furnish, install, and operate all necessary pumps, piping, cofferdams, and other facilities and equipment needed to divert concentrated flow and other surface water through the construction site while construction is in progress.
3. It is the Contractor's responsibility to maintain the existing steel sheet pile cofferdam upstream of Bridge 1-504 unless an alternative cofferdam is proposed by the Contractor at no additional cost to the Department. Conceptual stabilization of the existing system is presented on the contract drawings. The contractor shall develop, obtain approval for, and install their own stabilization plan for the existing sheeting to the satisfaction of the Engineer.

**E. Removal:**

1. After the cofferdam and diversion works have served their purpose, the Contractor shall remove, level, or grade such works to present a sightly appearance and to prevent any obstruction of the flow of water or any other interference with the operation of or access to the permanent works. Holes drilled or cored as part of this work shall be patched to the satisfaction of the Engineer.

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2. Removal includes stockpiling, spoiling, re-use or disposal of materials used in the Control of Water program. Under no conditions shall the Contractor be allowed to dispose of any such materials in the reservoir, the creek, or the adjacent wetlands.
3. Disposal of materials shall be the responsibility of the Contractor.
4. Upon completion of the work, the existing steel sheeting located upstream of Bridge 1-504 shall be removed from the reservoir and returned to the contractor identified in the work description section above. Bulk and conventional sandbags shall become the property of the Contractor and shall be removed from the site upon completion of the work.
5. Cored uplift relief holes shall be patched using non-shrink grout upon completion of the work.

**Method of Measurement:**

Measurements shall consist of confirmation by the engineer that all required cofferdams have been acceptably designed, approved, installed, maintained, and removed upon completion of the project.

**Basis of Payment:**

The quantity of cofferdams will be paid for at the Contract lump sum. Price and payment will constitute full compensation for furnishing and placing all materials, engineering, labor, equipment, and coordination necessary for cofferdam installation, preparation of signed and sealed drawings (multiple submissions if resubmissions are necessary), filling scour area, bracing of existing sheeting, sandbag cofferdams, pumping, coring, patching of all holes used for cofferdam work, drilling, plates, beams, bolts, welding, removal of existing sheeting and removal of temporary works shall be paid under lump sum item 604500 - Cofferdams.

2/18/2020

**615520 – FABRICATED STAINLESS STEEL GATES**

**Description:**

This work includes design, materials, fabrication, testing, furnishing, and installation of gates, frames, fittings, and appurtenances designed for seating or unseating head orientations.

**Materials:**

A. References

1. American Institute of Steel Construction (AISC)
  - a. AISC (2013) Steel Design Guide 27, Structural Stainless Steel
2. American Society for Testing and Materials (ASTM)
  - a. ASTM A240 – Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
  - b. ASTM A262 – Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels
  - c. ASTM A276 – Standard Specification for Stainless Steel Bars and Shapes
  - d. ASTM A380 – Standard Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems
  - e. ASTM A923 – Standard Test Methods for Detecting Detrimental Intermetallic Phase in Duplex Austenitic/Ferritic Stainless Steels
  - f. ASTM A967 – Standard Specification for Chemical Passivation Treatments for Stainless Steel Parts
  - g. ASTM A1016 – Standard Specification for General Requirements for Ferritic Alloy Steel, Austenitic Alloy Steel, and Stainless Steel Tubes
  - h. ASTM B148 – Standard Specification for Aluminum-Bronze Sand Castings
  - i. ASTM B584 – Standard Specification for Copper Alloy Sand Castings for General Applications
  - j. ASTM C1107 – Standard Specification for Packaged, Dry Hydraulic-Cement Grout (Nonshrink)
  - k. ASTM E527 – Standard Practice for Numbering Metals and Alloys in the Unified Numbering System (UNS)
  - l. ASTM F593 – Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs
  - m. ASTM F594 – Standard Specification for Stainless Steel Nuts
  - n. ASTM D2000 – Standard Classification System for Rubber Products in Automotive Applications
  - o. ASTM D3935 – Standard Specification for Polycarbonate (PC) Unfilled and Reinforced Material
  - p. ASTM D4020 – Standard Specification for Ultra-High Molecular Weight Polyethylene Molding and Extrusion Materials
3. American Welding Society (AWS)
  - a. AWS A2.4 – Standard Symbols for Welding, Brazing, and Nondestructive Examination
  - b. AWS D1.6/D1.6M – Structural Welding Code – Stainless Steel
  - c. AWS QC1 – Standards for AWS Certification of Welding Inspectors
4. American Water Works Association (AWWA)

a. AWWA (2014) C561 – Fabricated Stainless Steel Slide Gates

B. Manufacturer

Manufacturer must be from the preapproved list and have a minimum of 25 years’ experience in the design and manufacture of this type of equipment. Gates must be designed and sealed by a Professional Engineer registered in the State of Delaware.

Preapproved Manufacturers:

Whipps, Inc.  
370 South Athol Road, P.O. Box 1058, Athol, MA 01331  
(978) 249-7924

Steel Fab Inc.  
552 Oak Hill Road, Fitchburg, MA 01420  
(978) 345-0035

Or approved equal.

C. Gate and Accessory Requirements

Gates and their components must have the characteristics and dimensions shown on the Contract Drawings and meet the design requirements set forth in Table 1, as well as the descriptions herein. Fabricate gates and their components from the materials specified in Table 2 and meet all other requirements set forth herein. Unless otherwise specified, materials must meet the latest issue of the relevant ASTM standard. References to Type 2205 stainless steel refer to UNS S-32205 throughout this document.

Design gate components to withstand the maximum head indicated below in the seating direction. All welds must be performed by welders with current AWS D1.6 certification and in accordance with the processes relevant to the materials being joined.

Gate, frame, and component designs must feature details that prevent corrosion by avoiding the retention of dirt and moisture as shown in Figure 2-3 of AISC (2013) *Design Guide 27*.

**TABLE 1: Flap Gate Design Requirements**

Design Seating Head	10 ft
Design Unseating Head	n/a
Factor of Safety	Design the gate for the loads and heads specified with a minimum safety factor of 4 with regard to ultimate tensile, compressive, and shear strength, and a minimum safety factor of 2 with regard to the tensile, compressive, and shear yield strength.
Flap’s Angle of Repose	3° – 5° from vertical
Frame Style	Flanged-back intended for mounting on a wall thimble
Leakage Rate	< 0.1 gpm/ft of wetted seal under seating head

Location*	Left and right cells on the downstream side
Minimum Thickness	¼ inch for gates, frames, reinforcing members, and structural components
Model	Whipps, Inc. Series 450 / Steel-Fab Flap Gate
Mounting Style	Wall thimble with flange offset from the wall's face
Opening Head	When the upstream head exceeds the downstream head by 0.5 ft
Quantity	2

\*Location assumes one is looking downstream (north).

**TABLE 2: Material Requirements**

Anti-Seize and Anti-Galling Compound Lubricant	Coat all threaded components with an anti-seize and anti-galling lubricant suitable for use with stainless steel. Coating must contain a high percentage of PTFE flakes, and be specifically designed to reduce friction and seal stainless steel threaded connections, such as FastLUBE AG by FASTORQ® or approved equivalent.
Bushings	To be self-lubricating, intended for use in saltwater, capable of radial and axial loads, and made of nickel aluminum bronze, C95500, ASTM B148, such as flanged Lubron® AQ 955HT or approved equivalent.
Fasteners	Stainless Steel, Type 2205
Flap	Stainless Steel, Type 2205, ASTM A240
Finish	Areas unaffected by fabrication to have a mill finish of 2B or finer as defined by average surface roughness (R <sub>a</sub> ). Sandblast all welds with virgin, non-ferrous media and passivate in accordance with ASTM A380.
Frame	Stainless Steel, Type 2205, ASTM A240
Flange Gasket	Neoprene, ASTM D2000
Grout	Chloride-free, nonshrink cementitious grout meeting ASTM C1107 for Grade C; to be SikaGrout 212, Five Star EZ Cure Contractor's Grout, or US Spec MP Grout.
Hinge Arms	Stainless Steel, Type 2205, ASTM A240
Hinge Pins	Stainless Steel, Type 2205, ASTM A276
Seal Retainer	Stainless Steel, Type 2205, ASTM A240
Flap Seals	Neoprene or EPDM, ASTM D2000
Stiffeners	Stainless Steel, Type 2205, ASTM A240
Thimble	Stainless Steel, Type 2205, ASTM A240
Components Not Specified Herein	Material selection for components not specified herein must be chosen to avoid steels of a dissimilar grade and be suitable for use in a saltwater environment. Do not mix steels of a dissimilar grade unless specified herein.

D. Components

1. Fasteners: All necessary hardware—nuts, bolts, washers, studs—must have a minimum diameter of ½ inch unless otherwise indicated. Use tamper-resistant fasteners (Torx Insert style or approved equal) where possible. Liberally coat threaded fasteners with approved anti-galling compound.
2. Flap: Design the flap to open under the opening head specified in Table 1. Incorporate a flat plate reinforced with structural or formed members to limit its deflection under design loads to the lesser of 1/16 inch or 1/720 of the gate span. Provide a lifting lug on the bottom of the flap. Etch the following information, or weld a stainless steel plate containing it, onto the flap: manufacturer's name, date of manufacture, gate's opening size, and maximum head rating.
3. Frame: Rigid, one-piece frame constructed from welded stainless-steel plate structural members. Employ stiffening gussets, as needed, to resist distortion under the anticipated loads. Design the frame to be square and true, and to mount onto a flanged wall thimble; flap to rest at the angle specified in Table 1. Provide lifting lugs on the top of the frame to facilitate installation.
4. Flap Disc Linkage/Hinge System: Design the linkage system to prevent the flap from folding inside the seat and wedging in the open position. Use double-pivoted connections attached to fixed pivot points on the flap and frame through double-shear pin connections. Top pivot must allow for adjustment of the gate alignment and sensitivity. Include self-lubricating, inert flanged bushings on all pin-connected hinges in accordance with the materials in Table 2. Construct hinge arms to resist a 5,000 lb load applied at the outer most edge of the open gate in a direction perpendicular to the plane of hinge arm travel. Apply load factors and check results against safety factors as specified.
5. Construct hinge pins of solid stainless-steel rods; threads are permitted on the ends for retaining the pin with a nut. Use a minimum diameter of 1½ inches for all hinge pins. Construct pin retainers (cotter pins, nuts, retaining rings, etc.) to be vibration, corrosion, and tamper resistant; protect them from wearing with adjacent moving parts (through the use of isolation washers or other means).
6. Seals: Mount a resilient seal to the seating surface to meet the leakage requirements specified in Table 1, and to prevent metal-to-metal contact between the flap and frame. Mechanically affix the seal with a seal retainer and stainless steel bolts with a minimum diameter of ¾ inch to accommodate high velocities. Force-fit seals or seals held in place with adhesives are unacceptable. Designs that expose rubber "J" or "P" seals to orifice flow or mount seals on the gate disc are unacceptable. The seal system must be able to accommodate frequent operation without loosening or suffering damage.
7. Thimble: Machine the wall thimble's front flange to match the gate frame mounting hole pattern. Holes must be sized to allow for through bolting of the gate to the thimble flange. The flange, hardware, and thimble must be sized for the anticipated loads. Employ stiffening gussets, as needed, to resist distortion under the anticipated loads. Clearly mark the vertical centerline with permanent marks on the top and bottom of the machined face; provide a permanent mark to indicate the top.

**Construction:**

- A. General Requirements
  - 1. Verify existing conditions before starting work.
  - 2. Contractor is responsible for any damages to the gate during shipping, storage, and installation.
  - 3. Employ designs that prevent corrosion by avoiding the retention of dirt and moisture as shown in Fig. 2-3 of AISC (2013) *Design Guide 27*.
  
- B. Submittals
  - 1. Submit detailed Shop Drawings to the Engineer for approval; they must include:
    - a. Demonstrated compliance with all provisions of the Contract Drawings and specifications, including a copy of this specification, with each paragraph check-marked or noted to indicate compliance or deviation, respectively.
    - b. All dimensions and clearances, profiles, sizes, connection attachments, connections, size and type of fasteners, and accessories. Bill of material must include the number, kind, size, length, weight, and assembly mark of each member, including bolts and fittings.
    - c. Accurate dimensions of gate discs, flanges, mounting bolts and holes, frames, stems, stem guides, stem protectors, enclosures, boxout requirements, operating components, and their relation to relevant existing site features.
    - d. Field Measurements: Check actual dimensions of existing or proposed construction to which equipment must fit by accurate field measurement before fabrication; include recorded measurements on Shop Drawings. If adjustments to the specified dimensions appear to be required, report the discrepancies to the Engineer for clarification. If adjustments are required, they must be done at no additional cost to the Department. Payment for this item is considered incidental to Item 763501 – Field Engineering.
    - e. Indicate welded connections using standard AWS A2.4 symbols. Indicate net weld lengths and provide welding sequence when required.
    - f. Material identification for all base metals, weld filler, fasteners, and required anti-galling and anti-seize compounds.
    - g. Detailed attachment of the gate frames to mounting frames, flanges, or walls, as required.
    - h. Calculation results sealed by a Professional Engineer registered in the State of Delaware justifying the size of gate discs, stiffeners, frames, and thimble design. Finite element results are acceptable.
    - i. Provide in electronic file format.
    - j. Weld Procedure Specifications and their associated procedures.
    - k. Qualification Records for all proposed welding processes.
      - For every individual performing and inspecting welds:
        - i. Welder or Welding Operator Qualification Test Records for the proposed welding processes.
        - ii. Welding Continuity Records (WCR) for the proposed welding processes. Acceptable WCR must indicate no more than 6 months have elapsed between instances of a particular weld type.

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- iii. Proof of AWS-certified Welding Inspectors' certification.
    - l. Copies of all weld inspection records.
    - m. Description of proposed passivation method and materials in accordance with ASTM A380. Copies of all weld passivating solution cut sheets.
    - n. Description of the Manufacturer's means and methods to limit iron contamination of stainless steel during fabrication.
  2. Submit to the Engineer all data required to handle, assemble, and install the gates and accessories, including, but not limited to:
    - a. Delivery and Storage Plan: Describe how the gates will be moved from the Manufacturer's plant to the job site. Plan should cover the transportation, off-loading, and on-site storage of the gates. Describe the measures intended to prevent theft, damage, distortion, and contamination, as well as the means to provide adequate support of the gates during all stages. The Contractor is responsible for securing the site during construction and protecting materials from theft or damage.
    - b. Leakage Testing Plan: Submit a testing plan to the Engineer for approval before commencing leakage testing of the gates. Plan must conform to AWWA (2014) C561. Test results, and any subsequent test results, must be submitted to the Engineer within 24 hours of completion; Contractor may not demobilize until the Engineer has accepted and approved of the test results.
  3. Before fabrication, submit Certified copies of mill test reports for all materials referenced in this section showing their respective chemical and physical properties.
  4. Submit a Warranty for a duration of not less than 1 year from the substantial completion date. The Warranty must guarantee the equipment and installation are free of defects in material and workmanship. Contractor agrees to repair or replace all defective parts, materials, or installations during the Warranty period at no cost to the Department.
  5. Submit the Manufacturer's installation, operation, and maintenance procedures in hard copy (1 copy) and electronic format titled, "Operations and Maintenance Manual," to the Engineer for review. Include the following for each gate:
    - a. Installation procedures and materials
    - b. Operation procedures and materials
    - c. Maintenance procedures and materials
    - d. A list of recommended spare parts
    - e. Frequency of specific maintenance tasks
    - f. Recommended products for use during maintenance and cleaning
    - g. Troubleshooting guide
    - h. Contact information for Manufacturer's representative in case technical support or replacement parts are required
    - i. Record Drawings, including materials list and their respective standards
- C. Quality Assurance
1. An AWS-certified Welding Inspector, as defined by AWS QC1, must visually inspect all welds in accordance with AWS D1.6/D1.6M.
  2. Check stainless steel for:
    - a. Susceptibility to intergranular attack (austenitic grades): Tests must include Practices A, B, and E within ASTM A262. Submit detailed procedures for the tests to the Engineer for approval prior to the start of

work. The maximum acceptable corrosion rate under Practice B must be 0.004 inch per month, rounded off to the third decimal place. Material passing Practice E will be acceptable. If the certified mill report indicates that such a test has been satisfactorily performed, the Manufacturer is not required to repeat the test.

- b. Presence of detrimental intermetallic phases (duplex): Test in accordance with Practices A, B, and C within ASTM A923. Submit detailed procedures for the tests to the Engineer for approval prior to the start of work. If the certified mill report indicates that such a test has been satisfactorily performed, the Manufacturer is not required to repeat the test.

**D. Welding (Shop and Field)**

- 1. Perform welds in accordance with AWS D1.6/D1.6M, including, but not limited to, technique, appearance, quality, and methods of correcting defective work.
- 2. Perform preheating to prevent buckling, as needed and as permitted, with materials specified.
- 3. Welding Surfaces: Keep free of loose scale, rust, grease, paint, and other foreign material; mill scale may remain, which will withstand vigorous wire brushing with non-ferrous, virgin stainless steel brush. Disregard a light film of linseed oil.
- 4. Do not weld when temperature of base metal is lower than 0 degrees F.
- 5. Finished members must be true to line and free from twists.
- 6. Prepare welds and adjacent areas so there are:
  - a. No undercutting or reverse ridges on the weld bead.
  - b. No sharp peaks or ridges along the weld bead.
- 7. Grind embedded pieces of electrode or wire flush with adjacent surface of weld bead.
- 8. Remove weld splatter.

**E. Cleaning and Passivation**

- 1. Clean and passivate as the final step after fabrication.
- 2. Clean welds, cuts, and scrapes using virgin, non-ferrous abrasives, and passivate using a solution specifically manufactured for the grade(s) of stainless steel on which it will be applied. Use as directed by the manufacturer and in accordance with ASTM A380.
- 3. Passivation is defined as the removal of exogenous iron or iron compounds from the surface of stainless steel by means of chemical dissolution, most typically by a treatment with an acid solution that will remove the surface contamination, but will not significantly affect the stainless steel.
- 4. Re-passivate all passivated surfaces damaged during welding, fabrication, shipping, and installation in accordance with ASTM A380 and Manufacturer's specification. Remove all iron-containing alloys and re-passivate prior to installation.

**F. Inspection During Fabrication**

- 1. Electronically notify the Department and the Engineer when the Manufacturer intends to fabricate each portion of the proposed work.
- 2. The Engineer reserves the right to perform a shop inspection of the finished

work. The Engineer will notify the Contractor 2 weeks before performing a shop inspection.

- a. All work must be completely finished and assembled prior to the date of the inspection. If the Engineer arrives at a shop inspection and the work is not completely finished, assembled, and ready for inspection with all components installed and assembled as they will be in their final operating condition in the field, the Engineer can require a rescheduling of the inspection.
- b. If a shop inspection is rescheduled due to work being incomplete, at their sole discretion the Department may deduct all associated expenses incurred for the rescheduled shop inspection from the Contractor's next invoice.

**G. Surface Preparation**

1. Prepare existing concrete surfaces prior to mounting of gates by:
  - a. Chipping, grinding, or otherwise removing concrete or buildup to produce a uniform, planar, level, or vertical surface (as required) free of concrete fins, protrusions, or biologic or mineral buildup. Mount rubber or other compressible gasket sealed frames to planar surfaces.
  - b. Complete final cleaning of the surface using a high-pressure (3000 to 5000 psi) pressure washer with a rotary (turbo) nozzle. For rubber or other compressible gasket-sealed frames, surface irregularities less than ½ inch must be filled with cementitious or epoxy filler as permitted by the Manufacturer and Engineer.
2. The mating surfaces must be free of loose or otherwise deleterious materials that would inhibit bonding.

**H. Installation**

1. Install all components in accordance with the Manufacturer's installation procedures. Contractor is responsible for handling, storing, and installing the fabricated frames, gates, and accessories in accordance with the Manufacturer's drawings and recommendations.
  - a. Install items plumb and level where appropriate, accurately fitted, and free from distortion or defects. Completed installations must be rigid, substantial, and neat in appearance.
  - b. Provide temporary bracing to maintain true alignment and prevent warpage until completion of erection and installation of permanent attachments or placement of concrete.
  - c. Examine surfaces for defects that would impair installation, and perform surface preparation to the satisfaction of the Engineer. Defects include, but are not limited to, non-planar faces, protrusions, distortions, chips, depressions, and cracks.
  - d. Obtain approval from the Engineer prior to modifying manufactured pieces not otherwise scheduled.
2. Avoid warping the gate frame and maintain tolerances between seating faces. Ensure that gates and their components are plumbed, shimmed, and accurately aligned. Cover and protect gate surfaces and mounting frames from contamination and damage during construction. Correct any damage to the gate

or mounting frames prior to installation or operation at no additional cost to the Department.

3. Grout used for leveling plates, other structural members, and filling existing or proposed blockouts must be installed in accordance with Manufacturer's recommendations. Fill the annulus between the intended objects fully and completely with grout. Provide temporary ports, where required, to facilitate inspection or placement of grout. Obtain port location approval from the Engineer prior to performing the work. After grouting is completed, remove the grouting equipment, formwork and hardware, and supplies from the site, including unused materials and wastes that are unsightly or would interfere with the operation of gates or other equipment and infrastructure. Clean surfaces of any contaminants or loose materials prior to placing grout.
4. After the entire assembly has been installed, adjusted, and properly lubricated, operate each flap gate for one complete cycle (close-open-close). Correct identified issues at no additional cost to the Department.

I. Leakage Test

1. After installation, perform a field leakage test during high tide. Notify the Manufacturer of the test in sufficient time to have a representative present at the test.
2. Measure the seating and unseating head from the top surface of the water to the center of the gate. The gate leakage, when subjected to specified heads, must not exceed the leakage rate specified in Table 1. Perform corrective actions, up to and including complete gate removal and replacement, as needed, to pass the leakage test at no additional cost to the Department.
3. The Contractor is responsible for designing and installing temporary means to collect and monitor gate leakage during the test, and all subsequent tests required because of a failed test.

**Method of Measurement:**

The Department will not measure Fabricated Stainless-Steel Gates.

**Basis of Payment:**

The Department will pay for Fabricated Stainless-Steel Gates at the Contract lump sum price. Price and payment will constitute full compensation for all gates, thimbles, operators, mounting and assembly hardware, labor, materials, tools, workmanship, installation, anchor drilling and installation, adhesives, coatings, gaskets, seals, testing, adjustment, repair (up to and including full replacement of the work), re-testing, delivery, temporary works, and all other items of work necessary to complete the required installation.

10/31/2024

**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.

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- (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) The Contractor shall be responsible for the staking of all drainage inlets in accordance with the plans and the Department Standard Construction Details. The offsets and top of grate elevations need to be calculated for each type of drainage inlet specified in the contract plans by the Contractor in order to line up the drainage inlet's flow line with the specified curb or ditch flow line as shown

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in the Contract Documents. The Engineer must approve any deviations 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.

- (h) 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.

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- 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.
  
- (i) 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.

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- (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

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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.

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- 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:

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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.

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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.

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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:**

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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.

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**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.

6/29/21

**763598 – FIELD OFFICE, SPECIAL I**

**Description:**

This work consists of furnishing, erecting, equipping, maintaining, and removing a singlewide modular office and adjacent parking area. The field office and parking area are for the exclusive use of Department personnel, engineers, designers, , consultants, and inspectors.

**Materials:**

Furnish a new field office and an adjacent parking lot so they meet the requirements set forth in Table 1 and described herein. Construct and install both to conform to all applicable city, county, state, and federal codes. Construct a stair and deck platform at each exterior door with hand and safety rails designed to last the life of the Contract. Rails must conform to the requirements of the Architectural Accessibility Board and other federal, state, and local boards, bodies, and/or courts having jurisdiction in the Contract limits. Remove the field office from the premises when directed by the Department.

**TABLE 1. General Field Office Requirements**

Doors Leading to Exterior	Minimum of 2 insulated doors; equip each with a keyed passage lock and a keyed deadbolt lock.
Electrical Outlets	Located a minimum of every 10 ft along each wall with a minimum of 2 outlets per room.
Exit Sign	1 lighted "EXIT" sign for each exterior passage door.
Exterior Dimensions	Minimum 50'-0" long x 12'-0" wide.
Fire Extinguisher	1 per exterior door; may be chemical or dry powder and be UL Classification 10-B:C (min.) and be suitable for Types A:B:C fires.
First Aid Kit	Commercial- or industrial-type first aid and safety kit suitable for project conditions and hazards, including snakebites.
Floor Space	Minimum of 600 sq. ft.
Height (Floor to Ceiling)	8'-0" nominal.
Insulation	Exterior walls, ceiling, and floor must be insulated.
Internet Access	Via a broadband connection with Wi-Fi access utilizing WPA2 security. Options include cable modem, DSL, or similar service; dial-up is not acceptable. Position the Wi-Fi router to provide sufficient coverage in the field office with a minimum 50-ft radius. Provide 2 data jacks in locations indicated on the office plan accepted by the Department. Provide usernames and passwords for authorized wireless users as determined by the Department Construction Project Manager. Ascertain the means by which the Internet source will be provided. Provide Internet download and upload speeds of at least 100 Mbps at all times. Coordinate the Internet source with the Department Construction Project Manager to assure compatibility with the Department's hardware/software

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	requirements. Provide and maintain an operational wireless access point. At the Department's sole discretion, a 4G LTE wireless hotspot may be acceptable.
Keys	Minimum of 2 complete sets; give to the Engineer's representative.
Lighting	One 4,000-lumen overhead light centrally located and evenly spaced every 10 ft along the interior ceiling, with a minimum of 1 overhead light per room.
Microwave	New; minimum 900 watts.
Other Material Requirements	Free of asbestos and all other hazardous materials.
Parking Spaces	4 functional spaces, each measuring 9'-0" x 20'-0".
Refrigerator	New; minimum 2.6 cubic ft.
Smoke Detector	New; minimum 1 working combination smoke and carbon dioxide detector per room.
Water Cooler	New potable water cooler with hot and cold taps; minimum 5-gallon capacity; maintain a supply of at least 5 gallons of extra water at all times.
Windows	Minimum of 6 insulated windows total; minimum glass area of 1,150 sq. inches per window. Equip each window with a horizontal mini-blind covering the full glass area, a screen, and a locking device. Cover exterior of each window with steel bar grids.

The field office must be of weatherproof construction; tightly floored and roofed with air space above the ceiling for ventilation; and fully skirted with rigid, watertight covering overlapping the bottom of the exterior siding to the existing ground. The field office must be supported above the ground and safely secured to its support if the support is an in-ground anchored foundation or by tie-downs to the ground. The field office must have interior and exterior paneling, lighting, and plumbing fixtures.

Provide suitable indoor toilet facilities conforming to the requirements of the state and local Boards of Health, or of other bodies or courts having jurisdiction in the area. Connect the field office to the local water and sanitary lines. If public utilities are not available, utilize freshwater and wastewater holding tanks to provide the field office with running water. Provide an adequate positive locking system on the inside of the restroom doorway to ensure privacy. When separate facilities for men and women are not available or required, place a sign with the wording "Rest Room" (letter height 1-inch minimum) over the doorway. Maintain the facilities in clean and good working condition; keep rest room stocked with adequate lavatory and sanitary supplies at all times during the period of the Contract.

Equip the field office with heating and cooling capabilities to provide comfortable working conditions; this includes an exhaust fan, heating equipment, and air conditioning connected to an operational power source. Furnish electrical, water, fuel, or other utility necessary to fully power HVAC equipment. If electrical service is not readily available from the utility provider, provide and maintain a temporary generator (including fuel) until such time when power can be established. Contractor is responsible for performing or arranging for all necessary utility connections and/or their maintenance. Provide maintenance of the heating, exhaust fan, and air conditioning equipment by validated service contracts for the length of the Contract. Provide maintenance of the potable water supply equipment, refrigerator, and microwave by validated service contracts for the length of the Contract. Service contracts must allow a Department-authorized individual to deal directly with the service organization to request repair or maintenance.

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Provide and maintain the interior of the field office with new furnishings. All furnishings must be approved by the Engineer prior to installation in the field office. Office furnishings remain the property of the Contractor at the conclusion of the project. Place the following furnishings as directed by the Engineer:

- (1) 2 full-size office desks
- (2) 2 fully adjustable ergonomic design swivel chairs with armrests and 5-leg base having wheel casters
- (3) 12 folding chairs
- (4) 1 large conference table for a minimum of 12 people
- (5) 2 trash cans with lids and new plastic liners at each disposal interval – (1) 30+ gallons, (1) 10+ gallons
- (6) 2 dry erase boards a minimum of 4' x 3' each with markers and erasers
- (7) 1 floor mat at each entrance
- (8) 1 long-handled large-size broom with synthetic bristles and dust pan

Provide and maintain the following office equipment; Engineer must approve the equipment prior to installation in the field office. The required equipment will enable the Department to synchronize project record keeping and office functions. Deliver the equipment in new and working condition:

- (1) 1 all-in-one print/copy/scan/fax machine capable of producing 35 pages per minute, double-sided, on 8½" x 11" and 11" x 17" paper. Machine must be wireless capable and network capable, and be able to print/copy/scan in color and in black and white.
- (2) 2 combination electrical surge, spike, and noise protection devices

Provide all consumables required for the office equipment and furnishings for the length of the Contract. These consumables must be furnished on request and include, but not be limited to, paper, tape, toner/printer ink, cleaning kits, and batteries. Provide maintenance of all office equipment by a validated service contract for the length of the Contract. Service contracts must allow a Department-authorized individual to deal directly with the service organization to request repair.

Provide and maintain a new telephone equipment system meeting the following requirements. 3 lines with a call forward busy feature with 1 line being dedicated to communication with the general public. 1 telephone answering machine having all-digital recording, 14-minute message capacity, selectable message time, voice prompt assistance, day/time stamp, call screening, two-digit LED message indicator, toll saver, power failure memory back-up, and message interrupt from any station. Locate telephone lines as directed by the engineer. Allow a Department-authorized project person to deal directly with the telephone company to report outages and/or request repair. Install and perform initial setup of the specified telephone system. Initial installation, setup costs, and final disconnection shall be the responsibility of the Contractor. All subsequent monthly billings, after initial installation and setup, for each field office telephone system shall be received and paid by the Contractor.

Construct a field office parking lot for each modular field office in accordance with all applicable city, county, state, and federal codes. The parking area and entrance pathways shall be a minimum of 6-inch graded aggregate subbase. Provide a stabilized construction entrance in accordance with Section 908 adjacent to the parking area within 25-feet of the water service connection.

Construct a stair and deck platform at each exterior door with hand and safety rails designed to last the life of the contract. Rails must conform to the requirements of the Architectural Accessibility

## Contract No. T202009902

Board and other federal, state, and local boards, bodies, and/or courts having jurisdiction in the contract limits.

Maintenance of the field office and its adjacent parking area includes the following:

- (1) Removing snow and/or ice from the parking area and from the entrance pathways to the field office within 12 hours of each occurrence.
- (2) Maintaining and replacing all provided items, furnishings, and equipment.
- (3) Providing bottled water and drinking cups for the water cooler.
- (4) Providing lavatory supplies, trash bags, and janitorial supplies.
- (5) Providing replacement items for all lighting fixtures.
- (6) Maintaining all utilities.
- (7) Providing janitorial and waste disposal services twice a week.
- (8) Cleaning up trash and debris from the parking lot once a week.

### **Construction:**

#### A. General Requirements

- a. The field office must be ready for use no later than 30 calendar days after the date of the fully executed Contract and before construction begins, unless site mobilization is delayed for Department-approved reasons. In the event of approved delay, the field office must be ready for use no later than 10 calendar days after initial mobilization.
- b. The Contractor is responsible for obtaining all required licenses and permits for installation, and placement of the field office and its parking area. The costs of obtaining such licenses and permits are incidental to the "Field Office, Special I" item.
- c. The field office must be available for use by the Department continuously throughout the duration of the project.

#### B. Submittals

- a. Submit a specific location layout drawing and construction details for the proposed field office and its parking area for approval by the Engineer.
- b. Submit a copy of all validated field office, equipment, and maintenance service assistance and/or monitoring agreements and/or contracts as mentioned herein to the Department's administrative office on or before the first day the field office is ready for use.

### **Method of Measurement:**

The Department will not measure Field Offices. Partial months will be paid at the rate of 0.033 months per day.

### **Basis of Payment:**

The Department will pay for Field Office at the contract unit price per each month that the field office is acceptably provided as determined by the engineer. Partial months will be paid at the rate of 0.033 months per day. Price and payment will constitute full compensation for furnishing of all materials, labor, tools, equipment, and incidentals necessary to provide and maintain the field office and its adjacent parking area, and to restore the field office area and adjacent parking area to match the original site condition upon completion of the work. All costs associated with electric, water, and/or other fuels for HVAC equipment, Wi-Fi, snow and/or ice removal, maintenance contracts, and other items specified are incidental to the "Field Office, Special I" item; this includes all connection fees, disconnection fees,

monthly fees, installation fees, service fees, other billings, and billing labor. No separate payment will be made for costs related to removing hazardous material and/or underground tanks to install the office or the parking area.

10/31/2024

**763650 – STEEL COST PRICE ADJUSTMENT**

**Description:**

This section defines the criteria for payments to the contractor to reflect increases or decreases in the cost of steel used on specific items of work identified in the contract in accordance with this provision.

**Contract Applicability:**

To have the steel cost price adjustment provision apply to this contract, a properly completed steel cost price adjustment option form must be submitted to the Department with the bidder's bid proposal. If a properly completed steel cost price adjustment option form is not provided by the bidder, the Department will consider the option to apply the steel cost price adjustment provisions for the project to be declined. No further opportunity to elect steel cost price adjustment for the contract will be made available.

**Price Adjustment Provisions:**

- A. This price adjustment provision is eligible for consideration for the following steel items:
  - 1. Structural steel (rolled beams, plate girders, diaphragms, plate bearings, etc.);
  - 2. reinforcing steel (plain, galvanized, and epoxy coated);
  - 3. overhead sign structures;
  - 4. guardrail, posts;
  - 5. standard sign or lighting supports;
  - 6. railing;
  - 7. steel encasement pipe;
  - 8. steel piles (pipe and H-piles);
  - 9. steel strand (used for prestressed or post-tensioned finished elements);
  - 10. sheet piles;
  - 11. ductile iron pipe and fittings (water & sewer); and
  - 12. stay in place forms, building cladding (exterior and interior rolled panels, etc.)
  
- B. Inventoried materials or fasteners of any kind are not eligible for consideration. Fasteners include bolts, nuts, washers, rivets, and welding rods.
  
- C. This provision applies only to material cost changes of steel that occur between the date of bid advertisement and the date the material is shipped or invoiced to the contractor, subcontractor, or supplier/fabricator placing the steel into the finished component, whichever occurs first. To be eligible for this price adjustment, place purchase order(s) for eligible steel items for price adjustment identified in the contract within 30 days of the notice to proceed. To apply a steel cost price adjustment to the contract, all eligible items must be submitted. Failure to submit one of the eligible items will result in the steel cost price adjustment for all items being waived.

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- D. Store, label, or tag steel items which are eligible for adjustment such that they are recognizable by color marking, and identifiable by project for inspection and audit verification.
  
- E. This provision allows for price adjustment for embedded steel used for prestressed or post-tensioned precast components where providing steel is included in the unit price of the finished bid item. Steel used for post-tensioned or prestressed elements shall be evaluated for price adjustment in the same manner as other steel material eligible under the requirements of this provision. price adjustment shall only apply to the tonnage or poundage of steel strand used in the prestressed or post-tensioned element.
  
- F. Submit material price quotes, bid papers, or other documentation to the Department, before executing the contract, for the bid items applicable for price adjustment. Submitted documentation shall support the completion of the form establishing the average price per pound for the eligible steel bid item. The Department will only accept the information in the format provided at the end of this provision. Certify that all items of documentation are original and were used in the computation of the amount bid for the represented eligible pay items for the month bids were advertised. Use the documentation to support the base line material price (base price) of the steel item only. No adjustment will be made for changes in other components of the contract unit bid price, including, fabrication, shipping, storage, handling, and erection.
  
- G. Failure to submit specifically required information such as purchase order, price data, bill of lading, material information or other requested information as noted herein will result in the contractor not being eligible for price adjustment of steel items.
  
- H. This provision will not apply to items added after contract is executed. But will apply to quantity added to original contract items.
  
- I. Steel shortages may be justification for an excusable, non-compensable delay in accordance with section 108.7.B. Such shortages will not constitute grounds for claims for standby equipment, extended office overhead, or other costs associated with such delays.
  
- J. The need for application of the adjustments herein to non-bid items will be determined by the engineer on an individual basis and, if appropriate, will be specified on the change order.
  
- K. Any apparent attempt to unbalance bids in favor of items subject to price adjustment may result in rejection of the bid proposal.

**Price Adjustment Applicability**

Price adjustment of each qualifying item under consideration will be subject to the following conditions:

- A. There must be an increase or decrease in the cost of eligible steel materials in excess of 5% from the base price when compared with the latest producers price index (price index) in effect at the time material is shipped or invoiced to the contractor, subcontractor, or supplier/fabricator placing the steel into the finished component, whichever occurs first.

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- B. The Price Index the Department is using is based on The U.S. Department of Labor, Bureau of Labor Statistics, Producers Price Index (PPI) which measures the average price change over time of the specific steel eligible item from the perspective of the seller of goods. The specific PPI to be used to adjust the price for the eligible steel items is shown in the table below. The PPI is subject to revision four months after original publication; therefore, price adjustments and payments will not be made until the index numbers are finalized.
- C. The following table indicates the PPI steel category index items and the corresponding I.D. numbers to which the steel items will be compared:

<b>Steel Item</b>	<b>Bureau of Labor Statistics PPI Series I. D. Number WPU#</b>
Reinforcing steel (plain, galvanized, and epoxy coated)  Steel Strand (Prestressed & Post-	WPU101704  ( <a href="https://data.bls.gov/timeseries/WPU101704">https://data.bls.gov/timeseries/WPU101704</a> )
Plate girders & rolled beams (Standard & High strength, diaphragms, plate bearings, etc.)  Steel piling (H-pile, pipe piles & sheet piles)	Average of WPU1017 & WPU101  ( <a href="https://data.bls.gov/timeseries/WPU1017?data_tool=XGtable">https://data.bls.gov/timeseries/WPU1017?data_tool=XGtable</a>  & <a href="https://data.bls.gov/timeseries/WPU101?data_tool=XGtable">https://data.bls.gov/timeseries/WPU101?data_tool=XGtable</a> )
Steel encasement pipe  Overhead sign structures, posts, poles, sign or lighting supports, & railing	WPU101706  ( <a href="https://data.bls.gov/timeseries/WPU101706">https://data.bls.gov/timeseries/WPU101706</a> )
Guardrail	Average of WPU1017 & WPU101707  ( <a href="https://data.bls.gov/timeseries/WPU1017?data_tool=XGtable">https://data.bls.gov/timeseries/WPU1017?data_tool=XGtable</a> &  <a href="https://data.bls.gov/timeseries/WPU101707">https://data.bls.gov/timeseries/WPU101707</a> )
Ductile Iron Pipe & Fittings	WPU10150211  ( <a href="https://data.bls.gov/timeseries/WPU10150211">https://data.bls.gov/timeseries/WPU10150211</a> )
Stay-in-place forms, building cladding (exterior and interior rolled panels, etc.)	WPU101707

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<b>Steel Item</b>	<b>Bureau of Labor Statistics PPI Series I. D. Number WPU#</b>
	( <a href="https://data.bls.gov/timeseries/WPU101707">https://data.bls.gov/timeseries/WPU101707</a> )

**Price Adjustment Determination:**

The price adjustment will be determined by computing the percentage of change in index value beyond 5% above or below the index on the advertisement date to the index value on the date the steel material is shipped or invoiced to the contractor, subcontractor, or supplier/fabricator placing the steel into the finished component, whichever occurs first. Weights and date of shipment must be documented by a bill of lading provided to the Department. The final price adjustment dollar value will be determined by multiplying the percent increase or decrease in the index (beyond 5%) by the represented quantity of steel shipped by the base price per pound subject to the limitations herein.

$A = B \times P \times Q$	
Where:	
A =	Steel price adjustment in lump sum dollars
B =	Average weighted price of steel submitted with bid on project in \$/lb
P =	Adjusted percentage change in PPI average from billing date to advertisement minus 5% (0.05) threshold
Q =	Total quantity of steel in pounds shipped to fabricator for the specific project

Price increase/decrease will be computed as follows:

<b>Sample Calculation of a Price Adjustment (increase)</b>		
Project advertised on	Tuesday, April 28, 2009	
Project has structural steel in the amount of:	<b>450,000</b>	lbs.
Orders placed in timely manner and according to contract.		
Contractor's Freight on Board (F.O.B.) supplier price for the structural steel in	<b>\$ 0.28</b>	/lb
Adjusted** BLS Producers Price Index most recently published average at time of advertisement:	<b>157.0</b>	
** final change after 4 months		
All steel shipped to fabricator in same month: October-09 October 2009.		
Adjusted BLS Producers Price Index (PPI) most recently published average for month of		173.7
Adjustment formula is $A = B \times P \times Q$		
Where: A =	Steel price adjustment in lump sum dollars	
B = \$ 0.28/lb	Average weighted price of steel submitted with bid on project in \$/lb = \$0.28/lb	
P = 0.0564	Adjusted percentage change in PPI average from billing date to bid date minus 5% threshold = $(173.7-157.0)/157.0 - 0.05 = 0.0564$	
Q = 450,000 lbs.	Total quantity of steel shipped to fabricator in October 2009 for this project in pounds = 450,000 lbs.	
A = \$ 7,102.55	$0.28 \times 0.0564 \times 450,000$	
A = \$ 7,102.55	Lump Sum adjustment paid to Contractor	

<b>Sample Calculation of a Price Adjustment (decrease)</b>		
Project advertised on April 27, 2009.		
Project has structural steel.	<b>450,000</b>	lbs.
Orders placed in timely manner and according to contract.		
Contractor's F.O.B. supplier price for the structural steel in bid:	<b>\$ 0.28</b>	/lb
Adjusted** BLS Producers Price Index most recently published average at time of		<b>173.7</b>
** final change after 4 months		
All steel shipped to fabricator in same month, October-09		

**Contract No. T202009902**

Adjusted BLS Producers Price Index (PPI) most recently published average for month of		<b>157.0</b>
Adjustment formula is $A = B \times P \times Q$		
Where:	A =	Steel price adjustment in lump sum dollars
	B = \$ 0.28/lb	Average weighted price of steel submitted with bid on project in \$/lb = \$0.28/lb
	P = -0.0461	Adjusted percentage change in PPI average from billing date to bid date minus 5% threshold = $(157.0-173.7)/173.7+0.05 = -0.0461$
	Q = 450,000 lbs.	Total quantity of steel shipped to fabricator in October 2009 for this project in lb = 450,000 lb
	A = \$ (5,808.60)	$0.28 \times -0.0461 \times 450,000$
	A = \$ (5,808.60)	Lump Sum credit from Contractor

**Basis of Payment:**

The Department will adjust monthly progress payments up or down as appropriate for cost changes in steel used on specific items. The price adjustments will be made as a lump sum payment for eligible steel products placed and accepted.

7/20/2022

**801500 – MAINTENANCE OF TRAFFIC, ALL INCLUSIVE**

**DESCRIPTION:**

This work consists of providing temporary traffic control to maintain vehicular, bicycle, and pedestrian traffic through the project work zone.

**MATERIALS:**

- A. Crashworthy temporary traffic control devices in accordance with current AASHTO MASH standards.
- B. Category I through Category III temporary traffic control devices - Certification of compliance with MASH required.
- C. Category I devices - The manufacturer or contractor may self-certify that the devices meet the MASH criteria.
- D. Category II and III devices - MASH eligibility letter, including all applicable attachments required for each type of device.
- E. Submit documentation requesting approval of temporary traffic control devices 14 days before the start of work. Submission requirements and instructions for source information are listed on DeLDOT's website: <https://deldot.gov/Business/prodlists/index.shtml>. The Department approves temporary traffic control devices based on:
  - 1. Self-Certification
  - 2. Approved products lists

**CONSTRUCTION METHODS:**

- A. Place temporary traffic control devices in accordance with the contract and DE MUTCD. Follow the manufacturer's installation instructions.
- B. Maintain temporary traffic control devices throughout the project duration. Replace damaged temporary traffic control devices within 24 hours of notification or when directed by the engineer.
- C. Maintain temporary traffic control devices at a minimum in a "marginal" condition in accordance with the brochure entitled "Quality Guidelines for Temporary Traffic Control Devices," available from the American Traffic Safety Services Association (ATSSA). The engineer may reject a temporary traffic control device that does not meet the "marginal" condition.
- D. Temporary traffic control devices are the contractor's property unless otherwise indicated in the contract.

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**E. General Temporary Traffic Control and Traffic Maintenance.**

1. Maintain a work zone that protects the travelling public and persons working on the project. If necessary, implement additional safety measures not expressly required by the contract to ensure the safety of all persons.
2. The contractor may adjust longitudinal dimensions for maintenance of traffic configurations to fit field conditions.
3. Inventory existing signs within the contract limits
  - a. Maintain existing signs that must remain in place during the project as noted in the contract or as directed by the engineer.
  - b. Remove other existing signs and store.
4. Always maintain access within the project limits for businesses and residences
  - a. Coordinate temporary driveway or entrance closures for tie-in purposes with the engineer and the property owner in advance of the closures.
5. Regarding bus stops, unless otherwise directed by the contract or the engineer:
  - a. Maintain an area for the bus vehicle to safely pick-up and drop-off passengers.
  - b. Provide an accessible path for pedestrians to safely access the bus stop.
6. Maintain existing access for bicycles and pedestrians. If temporary sidewalk closures are necessary, install pedestrian detours in accordance with the DE MUTCD. Damage to existing sidewalk will be repaired at the Contractor's expense. Clear sidewalks of all construction debris at the end of each workday.
7. Conduct construction operations in a manner that minimizes delays to traffic.
  - a. Follow the requirements of the memorandum titled, "Temporary Traffic Control within Intersections," of the DE MUTCD for work within intersections or in close proximity to intersections.
  - b. Schedule work in the vicinity of traffic signals to minimize the time during which the signal operates without detection.
  - c. Set temporary traffic control devices on the work zone side of the pavement marking, if possible, when closing a lane adjacent to an open lane.
  - d. Do not close lanes unless a construction activity requiring a lane closure is taking place or will take place within 1 hour of closure, except for buffer lanes on high volume or high-speed roadways. Reopen lanes immediately upon completing the work. Shorten the lane closure for moving operations as work progresses, and as traffic conditions warrant, to keep the length of the closure to a minimum. Conduct construction operations in a manner that minimizes disruption to traffic during peak hours and periods of heavy traffic flow. The Department will stop the contractor's operations if, in the opinion of the engineer, such operations are unnecessarily impeding traffic.

**F. Notification to the engineer for road closures and detours.**

1. Submit notification no less than 14 calendar days before the start of detours and road closures.
2. Obtain the approval of the chief traffic engineer, or designee, a minimum of 48 hours in advance of proposed restrictions beyond those specified in the contract.

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- G. Written notice to property owners, businesses, and residents.
  - 1. Provide written notice 48 hours in advance of the start of construction work including the following:
    - a. The scope of work, working hours, anticipated start and completion dates, and a summary of construction activities that might interfere with property access.
    - b. A schedule and access coordination plan.
    - c. The contractor’s name, address, and a Department contact phone number.
- H. Provide written verification to the engineer that the property owners and residents were notified.
- I. Failure to give proper notice may result in suspension of work in accordance with Section 104.8 of the standard specifications.
- J. Before obstructing a fire hydrant, notify the local 911 center and provide the engineer with written confirmation of the notice.
- K. Keep lanes open for a period of time that depends on the day of the week that the legal or observed holiday falls. The following schedule determines the periods of time the lanes must remain open, unless otherwise allowed by the contract:

<b>TABLE 1: DAY OF HOLIDAY LANE CLOSURES</b>	
<i>Day of holiday or event</i>	<i>Time all lanes must be open to traffic</i>
Sunday	12:00 PM Friday through 5:59 AM Monday
Monday	12:00 PM Friday through 11:59 PM Monday
Tuesday	12:00 PM Monday through 11:59 PM Tuesday
Wednesday	12:00 PM Tuesday through 11:59 PM Wednesday
Thursday	12:00 PM Wednesday through 11:59 PM Thursday
Thursday (Thanksgiving)	6:00 AM Wednesday through 11:59 PM Sunday
Friday	12:00 PM Thursday through 5:59 AM Monday
Saturday	12:00 PM Friday through 5:59 AM Monday

- L. Do not close travel lanes or roads within 1 mile of a designated polling place during the primary and general elections that fall during an even numbered year.
- M. Follow all additional restrictions that may apply as noted in the contract or as directed by the engineer.
- N. The Department will consider failure to comply with the requirements of this section as justification for suspension of work in accordance with Section 104.8 of the standard specifications. The Department will continue assessing time charges until the contractor corrects the deficiencies.
- O. Non-compliance includes:
  - 1. Failure to correct deficiencies within 24 hours of written deficiency notices related to temporary traffic control.
  - 2. Non-compliance with the DE MUTCD or the contract.
  - 3. Unsafe operations.
  - 4. Placement of non-compliant temporary traffic control devices.

**METHOD OF MEASUREMENT**

The Department will not measure this item.

**BASIS OF PAYMENT**

- A. The Department will pay for temporary traffic control at the lump sum contract price. Price and payment will constitute full compensation for:
1. Maintenance of traffic activities accepted by the engineer;
  2. supply, installation, and maintenance of all maintenance of traffic devices, including, but not limited to:
    - a. temporary warning signs and plaques;
    - b. plastic drums; and
    - c. traffic cones.
  3. submitting TTCPs;
  4. submitting certifications;
  5. correcting edge drop-offs;
  6. a certified ATSSA traffic control supervisor; and
  7. suppling and installing temporary roadway material (TRM).
- B. No additional payment will be made to move temporary traffic control devices in accordance with the TTCPs or as necessary to address safety issues as included in this item.

6/21/21

## **STATEMENTS**

Included on the following pages:

**UTILITY STATEMENTS**

**RIGHT-OF-WAY STATEMENTS**

**ENVIRONMENTAL STATEMENTS**

**RAILROAD STATEMENTS**



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

NICOLE MAJESKI  
SECRETARY

**UTILITY STATEMENT**

March 15, 2022

Revised March 22, 2022

2<sup>nd</sup> Revision October 17, 2024

**State Contract No. T202009902**

**F.A.P. No. None**

**Project I.D. No. 20-07402**

**Dragon Run Tide Gates Replacement**

**New Castle County, Delaware**

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

CROWN CASTLE  
DELMARVA POWER ELECTRIC DISTRIBUTION  
DELMARVA POWER GAS  
VERIZON

Utility adjustments and/or relocations shall be performed as narrated in advance of the project's construction, but are not limited to the following:

**CROWN CASTLE**

Crown Castle owns and maintains Aerial cables throughout the project limits.

**Crown Castle maintains the following aerial facilities within the project limits:**

1. Crown Castle maintains aerial facilities on the north side of Fifth Street extending east and west beyond the project limits.

**Anticipated Aerial Relocation:**

1. Crown Castle will temporarily de-lash several span cables and release existing backlashes of aerial cables for enough slack in the cable to facilitate the temporary lowering. These cables will be placed on the ground up near the existing guardrail for the duration of the work being performed on the north side of the bridge. Crown Castle will install and secure approximately 37 sections of cable protective matting over the lowered facilities.

During which time the DelDOT contractor will be responsible for securing and protecting these cables until work is completed and Crown Castle is able to raise and reattach.

Crown Castle will complete these changes. These relocations/adjustments are expected to take approximately **two (2) calendar days** to complete once the road has been closed and after the company has been given a minimum of **30 calendar days advance** notice from the State's contractor prior to the work beginning.

Crown Castle will leave the project site until the bridge construction is completed. Upon notification from the State contractor approximately **thirty (30) days** advance notice, Crown Castle will return to move their facilities back to their original location.

1. Crown Castle will move the temporary aerial facilities back to the original aerial span after the proposed DelDOT work has been completed, but before final restoration has been completed.

These relocations/adjustments are expected to take approximately **two (2) calendar days** to complete the move of the temporary aerial facilities back to the original aerial span after the proposed DelDOT work has been completed and Crown Castle is given **30 calendar day's advanced** notice that work can be started.

These relocations/adjustments are expected to take approximately **a total of four (4) calendar days** to complete after the company has been given a minimum of thirty (30) calendar days **advance** notice from the State's contractor prior to the work is schedule beginning. In addition, relocations/adjustments will not begin until the Utility Pre-Construction Meeting for this contract, clearing has been performed, and receipt of "NTP".

**The contractor shall coordinate the contractor's means and methods and the utility protection schedule with DelDOT and the utility companies prior to the removal of the communication facilities from the pole line. The contractor is solely responsible for the in-place protection of the telecommunication facilities until the utility is restored to its original location. Payment for this work shall be incidental to the MOT Item (801500 – Maintenance of Traffic, All Inclusive).**

Crown Castle's review is based upon information contained in DelDOT's Final Plans for contract T20209902, received on 10/15/2021, and all data available as of this date.

Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

The contractor must use care when working in these underground areas as well as in the vicinity of overhead cable. The time to complete any relocations/adjustments found to be necessary, as directed by the engineer, during the construction of the highway contract will depend on the nature of the work.

Should the utility apertures be in conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

Should any conflicts be encountered as a result of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

**No existing Crown Castle facilities can be taken out of service.**

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

### **DELMARVA POWER – ELECTRIC DISTRIBUTION**

Delmarva Power – Electric Distribution owns and maintains Aerial cables along and throughout the project limits.

Delmarva Power Electric maintains the following aerial facilities within the project limits of the bridge.

**Delmarva Power maintains the following aerial facilities within the project limits:**

1. DPL Electric maintains aerial 3-phase on existing poles located on the left (north side) of the construction alignment within the limits of bridge over Dragon Run.

**Anticipated Delmarva Power Electric Relocations:**

1. Delmarva Power will begin prep work on the circuits will take place approximately fourteen (14) calendar days before the State's contractor is to begin work.
2. Delmarva Power will provide a temporary outage between pole #47051/37262 at Sta. 79+75 and pole #47081/37250. **Delmarva Power will drop the 3-ph overhead wires from pole #47051/37262 to pole #47081/37250** located approximately 100' beyond the project limits prior to the bridge construction.
3. Delmarva Power has committed to provide an outage on the (1) 3-phase 12kV primary circuit for a duration of two (2) week in the fall of 2025 **(10/27/2025 – 11/11/2025)**.
4. The outage will take place between the hours of 6:00 am through 6:00 am. The State's contractor is to coordinate with Delmarva Power Electric for this scheduled outage and provide a **forty -five (45) calendar day advance notice** for to schedule the outage.
5. The State's contractor shall use caution and avoid any physical contact with the overhead guy wire or guy pole and anchor.

Delmarva Power will require **fourteen (14) calendar days** to removal of wire. Delmarva will leave the project site until the two (2) week outage duration has expired.

1. DPL will return and reinstall aerial wires to their original location at the end of the schedule outage has expired.

Delmarva Power will require **fourteen (14) days** for re-installing wires after work in the area of the aerial lines have been completed.

**Any outage scheduled is dependent on weather conditions (unreasonably hot weather for example) or any kind of emergency. These facilities may be re-activated if the need arises.**

Any proposed coordination with Delmarva Power – Distribution for the outage shall be included in the contractor’s CPM schedule.

**No working/existing Delmarva Power’s facilities can be taken out of service outside of the schedule outage outlined above.**

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

Delmarva Power will require a total of **twenty-eight (28) calendar days** to complete the proposed work in advance of the project construction following **forty -five (45) calendar days advance notice** of completion for each location of clearing and grubbing, cuts and fills made, staking of rights of way and completion of the Utility Pre-Construction Meeting for this contract and the procurement of easements by DelDOT and receipt of “NTP”. Delmarva Power will complete this work in advance of the project construction.

Delmarva Power’s review is based upon information contained in DelDOT's Final Plans for contract T202009902, received on 10/15/2021, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

Should any conflicts be encountered as a result of the contractor’s means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State’s Contractor as described by the District Engineer. See General Utility Notes below.

Should the utility apertures be in conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

DelDOT has not planned for or coordinated with Delmarva Power – Distribution for any other temporary power outages, relocations, physical pole support for excavation nor arranged for the installation of insulation of any power line during this contract outside of what is outlined above. Due to varying construction possibilities; if a contractors means-and-methods should require additional support from Delmarva Power – Distribution to fulfill the requirement of 16 Del. C. § 7405B, OSHA Regulations Table A of § 1926.1408, other applicable federal, state or local law or regulation or the Contractor’s company policy; it shall be at the Contractor’s sole expense and the contractor shall directly coordinate this request with Delmarva Power – Electric Distribution. All costs associated with any temporary power outages, relocations, physical pole support for excavation (other than listed above) or the installation of insulation of any power line during this contract shall be incidental, including the cost of the coordination, to the work being performed.

The Department makes no guarantees that the request for any temporary power outages, relocation or the installation of insulation of any power line during this contract will be granted by Delmarva Power – Distribution in part or in total; or during the time periods requested by the Contractor for construction purposes. Any proposed coordination with Delmarva Power – Distribution shall be included in the contractor’s CPM schedule. In addition, Delmarva Power will determine if these outages can be accommodated.

***16 Del. C. § 7405B requires notification to and mutually agreeable measures from the public utility from any person intending to carry on any function, activity, work or operation within dangerous proximity of any high voltage overhead lines. All contractors/other utilities must also maintain a distance of 10’-0” from all overhead energized lines.***

### **General**

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

***Customer/Contractor Acknowledgement: Performing Work within Dangerous Proximity of High Voltage Lines:***

*“You are hereby notified by Delmarva Power that NO work can be performed within dangerous proximity to Delmarva’s overhead lines and that you are required by law to comply with applicable OSHA regulations and the applicable state High Voltage Safety Act. Performance of any activity or causing any person, equipment, or things to come within dangerous proximity of Delmarva’s overhead lines creates an extreme risk of severe injury or death. You are further notified that no activities may be conducted within dangerous proximity of Delmarva’s overhead lines until mutually agreeable measures to prevent contact with overhead lines have been reached with Delmarva and Delmarva has provided you with written authorization to perform the activities.*

*Additionally, any work involving the use of a crane with intentions to remain outside of dangerous proximity, but within 20 feet of the Company’s overhead lines, requires an Encroachment Prevention Plan in order to satisfy OSHA.”*

Delmarva Power relocations shown on highway plans are an approximate proposed location. Actual location of electric facilities could change due to field conditions or any unforeseen conflict.

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

**For exact location of electric facilities, please contact Miss Utility at (800) 282-8555.**

### **DELMARVA POWER (DPL) GAS DELIVERY**

Delmarva Power Gas Delivery (DPG) owns and operates the following within the project limits:

1. DPL Gas currently maintains a 4" steel OHP gas main along the right (south side) of the construction alignment.

DPG does not anticipate any relocations during this project and is not planning any modifications to the gas main during the proposed construction of the tide gates.

DPG's review is based upon information contained in DelDOT's Final Plans for contract T202009902, received on 10/15/2021, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

Should the utility apertures be in conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

Should any conflicts be encountered as a result of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

The contractor must use care when working in these underground areas as well as in the vicinity of overhead cable. The time to complete any relocations/adjustments found to be necessary, as directed by the engineer, during the construction of the highway contract will depend on the nature of the work.

**When saw cutting in close proximity to gas facilities, the contractor is recommended to verify the depth of the gas main before saw cutting and/or excavation to ensure shallow pipe is not encountered. The contractor shall exercise caution when excavating along the curb lines at these locations.**

**No DPG working or existing gas facilities can be taken out of service.**

**Unless otherwise noted, these facilities will remain in place and active during the duration of this contract.**

**If you smell natural gas, leave the area immediately and then call 302-454-0317, 24 hours a day.**

**VERIZON DELAWARE INC.**

Verizon of Delaware Inc. maintains the following aerial facilities within the project limits:

1. Verizon maintains aerial facilities on the north side of Fifth Street extending east and west beyond the project limits.

Verizon of Delaware Inc. maintains the following buried/underground facilities within the project limits:

1. Verizon maintains a 4" conduit with facilities on the south side of Fifth St. extending east and west beyond project limits.

**Anticipated Aerial Relocation:**

1. Verizon will temporarily detach and lower aerial cables from pole# 47501/37262 at station 79+75 L32 and pole# 47068/37259 at station 81+69 L32. These aerial cables are to be placed on the ground up near the existing guardrail for the duration of the work being

performed on the north side of the bridge. During which time the DelDOT contractor will be responsible for securing and protecting these cables until work is completed and Verizon is able to raise and reattach.

Verizon of Delaware Inc. will complete these changes. These relocations/adjustments are expected to take approximately 7 calendar days to complete after the company has been given a minimum of 30 calendar days advance notice that work shall begin and the right-of-way and proposed work has been laid out in the field by the State's contractor and required tree trimming and clearing has been performed.

Verizon will leave the project site until the bridge construction is completed. Upon notification from the State contractor approximately fourteen (14) days advance notice, Verizon will return to move their facilities back to their original location.

2. Verizon is able to raise and reattach facilities back to the original aerial span after the proposed DelDOT work has been completed, but before final restoration has been completed.

These relocations/adjustments are expected to take approximately **seven (7) calendar days** to complete the move of the temporary aerial facilities back to the original aerial span after the proposed DelDOT work has been completed and Verizon is given **(14) calendar day's advanced** notice that work can be started.

Verizon will complete these changes. These relocations/adjustments are expected to take a total of approximately **fourteen (14) calendar days** to complete once the road has been closed any clearing has been completed, and after the company has been given a minimum of **30 calendar day's advance** notice from the State's contractor prior to the work beginning. In addition, relocations/adjustments will not begin until the Utility Pre-Construction Meeting for this contract and receipt of "NTP".

**The contractor shall coordinate the contractor's means and methods and the utility protection schedule with DelDOT and the utility companies prior to the removal of the communication facilities from the pole line. The contractor is solely responsible for the in-place protection of the telecommunication facilities until the utility is restored to its original location. Payment for this work shall be incidental to the MOT Item (801500 – Maintenance of Traffic, All Inclusive).**

Verizon's review is based upon information contained in DelDOT's Final Plans for contract T202009902, received on 10/15/2021, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

The contractor must use care when working in these underground areas as well as in the vicinity of overhead cable. The time to complete any relocations/adjustments found to be necessary, as

directed by the engineer, during the construction of the highway contract will depend on the nature of the work.

Should any conflicts be encountered as a result of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

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

**General Utility Notes:**

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

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

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

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

**General Notes:**

- 1. The Contractor's attention is directed to Section 105.09 Utilities, Delaware Standard Specifications, August 2016. The Contractor shall contact Miss Utility (1-800-282-8555) two working days prior to any excavation. The Contractor is responsible for the support and protection of all utilities when excavating. The Contractor is responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The Contractor is advised to check the**

site for access purposes for his equipment and, if necessary, make arrangements directly with the utility companies for field adjustments for adequate clearances.

2. The information shown in the Contract Documents, including the Utility Statement and the Utility Schedule contained herein, concerning the location, type and size of existing and proposed utilities, their locations, and construction timing has been compiled by the preparer based on information furnished by each of the involved Utility Companies. It shall be the responsibility of the State's Contractor to verify all information and coordinate with the Utility Companies prior to and during construction, as specified in Section 105.09 of the Standard Specifications.
3. It is understood and agreed that the Contractor has considered in his bid all permanent and temporary utility appurtenances in their present and relocated positions as shown on the plans or described in the Utility Statement or are readily discernible and that no additional compensation will be allowed for any delays, inconvenience, or damage due to any interference from the utility facilities and appurtenances or the operation of moving them, except that the Contractor may be granted an equitable extension of time. 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 Contract shall be responsible for any costs associated with any temporary outages; holding, bracing and shielding of utility facilities; temporary relocations; or permanent relocations that are not specifically identified in this utility statement or shown in the contract plan set.

NAME	COMPANY	PHONE	EMAIL
Bill Muehlberger	Crown Castle	(585)-362-0019	<a href="mailto:Bill.Muehlberger@crowncastle.com">Bill.Muehlberger@crowncastle.com</a>
Tom Smith	Delmarva Power Electric	(667) 313-7195	<a href="mailto:Thomas.smith1@Delmarva.com">Thomas.smith1@Delmarva.com</a>
Fikayo Falade	Delmarva Power Gas	(302) 401-9869	<a href="mailto:fikayo.falade@exeloncorp.com">fikayo.falade@exeloncorp.com</a>
George Zang	Verizon	(302)-422-1238	<a href="mailto:george.w.zang@verizon.com">george.w.zang@verizon.com</a>
Joe Keenan	Verizon	(610)-283-7515	<a href="mailto:Joseph.Keenan@Cyient.com">Joseph.Keenan@Cyient.com</a>

4. Coordination and cooperation among the Utility Companies and the State's Contractor are of prime importance. Therefore, the Contractor is directed to contact the following Utility Company representatives with any questions regarding this work prior to submitting bids and work schedules. Proposed work schedules should reflect the Utility Companies' proposed relocations. The Utility Companies do not work on weekends or legal holidays.
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 highway 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 distance of 10'-0" from all overhead energized 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.
9. In conjunction with bid preparation and prior to starting work, the State's Contractor shall confirm with all respective Utility Companies noted in this Utility Statement to have advance utility relocations that the advance relocations have in fact been accomplished as summarized herein.

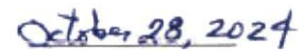
#### DIVISION OF TRANSPORTATION SOLUTIONS



Utility Section, DeIDOT

[Deborah.Kukulich@delaware.gov](mailto:Deborah.Kukulich@delaware.gov)

Email



Date

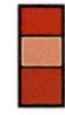
T202009902 Dragon Run Tide Gate Repairs  
 Deborah Kukulich  
 March 15, 2022  
 Revised: October 14, 2024

COMPANY	Aug-25				Sep-25				Oct-25				Nov-25				Dec-25				Jan-26				Feb-26				Mar-26									
	3-9	10-16	17-23	24-30	31-6	7-13	14-20	21-27	28-4	5-11	12-18	19-25	26-31	2-8	9-15	16-22	23-29	30-6	7-13	14-20	21-27	28-3	4-10	11-17	18-24	25-31	1-7	8-14	15-21	22-28	1-7	8-14	15-21	22-28				
State Constructor	Tide Gate Construction																																					
Delmarva Power Electric																																						
Crown Castle																																						
Verizon																																						

DPL - Advance Notice  
 Crown Castle - Advance Notice  
 Verizon - Advance Notice



DPL - Construction/Outage  
 Crown Castle - Construction  
 Verizon - Construction



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

**CERTIFICATE OF RIGHT-OF-WAY STATUS**

**STATE PROJECT NO. T202009902**

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

**DRAGON RUN TIDE GATES REPLACEMENT**

**NEW CASTLE COUNTY**

**Certificate of Right-of-Way Status – 100%**

**Status - 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 necessary real property interests have been acquired in accordance with current FHWA/State directives covering the acquisition of real property; and,

All necessary rights-of-way, including control of access rights when pertinent, have been acquired including legal and physical possession; and,

All project rights of way are currently available in accordance with the project right-of-way plans; and,

**Any residential displaced individuals or families have been relocated to decent, safe and sanitary housing, or adequate replacement housing has been made available in accordance with the provisions of the current Federal Highway Administration (FHWA) directive(s) covering the administration of the Highway Relocation Assistance Program; and,**

All occupants have vacated the lands and improvements; and,

The State has physical possession and the right to remove, salvage, or demolish any improvements acquired as part of this project, and enter on all land.

**RIGHT OF WAY SECTION**



**Monroe C. Hite, III  
Chief of Right of Way**

July 30, 2024



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

NICOLE MAJESKI  
SECRETARY

October 29, 2024

**STIPULATED ENVIRONMENTAL STATEMENT**

**ENVIRONMENTAL REQUIREMENTS**

FOR

State Contract No. T202009902

Federal Aid No.: N/A

PERMIT REQUIREMENTS:

The proposed construction work for this project requires permit approval from the agencies listed below. It is the responsibility of the contracting agency -- the Delaware Department of Transportation, Division of Transportation Solutions -- to obtain the necessary permits to ensure that the contractor complies with the requirements and conditions established by the regulatory agencies. Written authorization from the permitting agencies is required and paperwork for on-site posting is anticipated. The proposed work for this project will be authorized under the permits listed below:

REQUIRED PERMITS AND APPROVAL STATUS:

- U.S. Army Corps of Engineers (USACE) – Nationwide Permit (NWP) # 25 – NAP-2022-01129-85, Issued on 11/17/2022, **expires 3/14/2026**
- Delaware Department of Natural Resources and Environmental Control (DNREC) Wetlands & Subaqueous Lands Section (WLSL) – Letter of Authorization – LA-262/22 – **PENDING**

- Delaware Coastal Zone Management (CZM) – Issued
- DNREC Water Quality Certification (WQC) - Issued – Project is not located in a Critical Resource Water
- New Castle County Floodplain Permit- Floodplain Approval- **PENDING**

#### SPECIFIC REQUIREMENTS:

Compliance with all requirements of the permits is the responsibility of the contractor, who will follow all special conditions or requirements as stated within those permits. The contractor will be subject to penalties, fines, and the risk of shut down as mandated by laws governing permitting agencies if such conditions and requirements are violated or ignored. Therefore, all special conditions, general requirements, and/or other required provisions specified within the permits must be followed. Those obligations are indicated or listed within the permit package, which can be obtained from the DelDOT Contract Administration Office.

Additional requirements by DelDOT not specified within the permits, but listed below, are also the responsibility of the contractor. Noncompliance with these requirements may result in shut down of the project at the contractor's expense.

- 1.The contractor shall employ measures during construction to prevent spills of fuels or lubricants. If a spill should occur, efforts shall be undertaken to prevent its entry into wetlands, aquatic, or drainage areas. Any spills entering wetlands, aquatic, or drainage areas shall be removed immediately. The Division of Water Resources (DNREC), Wetlands & Aquatic Protection Branch, 302-739-4691, shall be notified of any spill(s) within six (6) hours of their occurrence. That office will determine the effectiveness of spill and contamination removal and specify remediation efforts as necessary.
- 2.All construction debris, excavated material, brush, rocks, and refuse incidental to the work shall be placed either on shore above the influence of flood waters or on some suitable disposal site approved by the department.
- 3.The disposal of trees, brush, and other debris in any stream corridor, wetland surface water or any drainage ditch is prohibited.
- 4.There shall be no stockpiling of construction materials or temporary fills in wetlands or subaqueous lands unless otherwise specified on project plans and approved by permitting agencies that govern them. It is the contractor's responsibility to coordinate and secure those additional permits/amendments in deviating from the plan.
- 5.Construction debris shall be kept from entering adjacent waterways, wetlands, ground cover, or drainage areas. Any debris that enters these areas shall be removed immediately. Netting, mats, or establishing confined work areas in stages may be necessary to address these issues.

6. Refuse material resulting from routine maintenance of worker equipment and heavy machinery is prohibited from being disposed or deposited onto or into the ground. All used oils and filters must be recycled or disposed of properly.
7. Use of harmful chemical wash water to clean equipment or machinery is discouraged. If undertaken, the residue water and/or material must be collected or contained such that it will be disposed of properly. It shall not be deposited or disposed of in waterways, streams, wetlands, or drainage areas.
8. The contractor shall follow all requirements as indicated in the Environmental Compliance Sheet. It is be the contractor's responsibility to ensure that workers also follow this requirement. As part of the restrictions, please note the timetables reflected in the contract for the in-stream/water work for endangered species protection.
9. Fill material shall be free of oil and grease, debris, wood, general refuse, plaster and other pollutants, and shall contain no broken asphalt.

#### ENVIRONMENTAL COMPLIANCE SHEET:

#### **Construction Restrictions**

#### **FISHERIES:**

1. To protect aquatic species (including eggs) from impingement and/or entrainment, temporary intakes related to construction occurring from March 1 to October 31 must be equipped with 2 millimeter (mm) wedge wire screens with a maximum intake velocity of 0.5 feet per second (ft/sec). Payment for the screens will be incidental to item 909005 - Stream Diversion. Contractor may choose from any of the following approved products, and alternative products will not be considered:
  - a. (<https://www.lakos.com/product/pc-series-self-cleaning-intake-screen/>) Lakos Filtration Solutions: PC-Self Cleaning Intake Screen
  - b. (<https://www.federalscreen.com/intake-screens>) Federal Screen Products inc. Intake Screen
  - c. (<https://www.hendrickcorp.com/screen/markets/water-intake-water-treatment/>) Hendrick Screen Company: Passive Water Intake Wedge Wire Screens
  - d. ([https://www.bigbrandwater.com/self-cleaning-pump-intake-screens-pc-915\\_p\\_17721.html](https://www.bigbrandwater.com/self-cleaning-pump-intake-screens-pc-915_p_17721.html)) Big Brand Water Filter, Inc: Self-Cleaning Pump Intake Screens PC-915
2. Dredged and/or excavated materials, including any fine-grained materials removed from inside culverts, shall either be moved to an upland location and stabilized to prevent reentry into the waterway or disposed of at a previously approved disposal site. Refer to section 106.08.
3. Ensure that raw concrete does not contact the water.

4. No in-water work March 1-June 30.

### **Cultural Resources**

- The Delaware State Historic Preservation Office concurred with a finding of No Historic Properties Affected in a letter dated September 15, 2021
- Contractor access beyond the LOC (as identified on the construction plans) without prior approval from FHWA and DelDOT Environmental Studies staff is prohibited. Should it be necessary to add additional access locations or staging/stockpiling areas, or otherwise modify the project scope, methods, or LOC, DelDOT Environmental Studies staff ([DOT\\_EnvironmentalStudies@delaware.gov](mailto:DOT_EnvironmentalStudies@delaware.gov) and [John.Mccarthy.2@delaware.gov](mailto:John.Mccarthy.2@delaware.gov), (302) 760-4887) must be contacted.

### **Protection of Resources**

- Keep clearing in wetland areas to a minimum absolutely necessary for construction access. Support all equipment traversing wetlands and subaqueous land on mats. Payment for mats will be made under item 621500 – temporary timber mat. In wetland areas that are cleared, no grubbing except where necessary to construct project components such as foundations and riprap protection is permitted. Cut vegetation flush with the ground (i.e. No disturbance of the root mat). Restore temporarily disturbed wetland areas to grade and seed with item 908017 - temporary grass seeding (annual ryegrass).
- Use silt fence or construction safety fence along the limits of construction in all areas where water/wetlands are being impacted (as shown on environmental compliance sheets), and also in any area where water/wetlands exist within 20 feet of the limit of construction (as shown on construction plan sheets). Any contractor access beyond the limit of construction is strictly prohibited.
- Use sandbags or compost filter log (CFL) to secure silt fence at areas adjacent to wooded uplands/ all wetlands in lieu of trenching unless proper erosion and sediment control cannot be maintained. Remove sandbags and CFLS (and contents) in their entirety when no longer needed. Sandbags/CFLS used to secure the silt fence is incidental to item 905001 - silt fence. The environmental studies section (302-760-2259 or [dot\\_environmentalstudies@delaware.gov](mailto:dot_environmentalstudies@delaware.gov)) can provide further guidance regarding this method of installation.
- Clearly mark all trees to be removed with paint prior to the erosion and sediment control meeting.

### **Stream Restoration and Riprap Treatment**

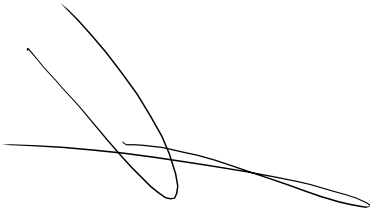
- Follow the special provision for item 707500 – channel bed fill in regards to the salvaging of on-site natural stream bottom material or the furnishing of off- site material. If sufficient sources for channel bed fill do not exist on-site, any new material must

conform to the requirements of item 707500 – channel bed fill. Recess all riprap in the channel bottom (i.e. Below the water line) one foot below stream bed elevation and choke with borrow type ‘b’ so that all of the voids in the riprap are filled with specified material. Payment under item 209002 – borrow, type b. Cover the riprap with a minimum of 12” channel bed fill. Match the final channel elevations with existing elevations at the upstream and downstream project limits. Through the structure, elevations will be as noted on the plans. Payment under item 707500 – channel bed fill.

- Restore other areas of the channel bottom affected by construction (including, but not limited to, the location of sump pits, stabilized outfalls, temporary pipes and/or sandbag dikes and diversions) to existing conditions. Fill any cavities or scour holes resulting from construction activities with channel bed fill. Payment under item 707500 – channel bed fill.
- When all erosion and sediment control measures are removed and the stream returns to its natural flow conditions, the flow must remain above ground and above the riprap (i.e. The flow cannot be “lost” in the riprap or beneath the structure). If this is not achieved, the contractor will be required to take corrective action at the contractor’s expense.
- Choke all riprap on the stream bank, outside the channel bed, with delaware #57 stone. Place just enough choke material to prevent the loss of channel bed fill or topsoil (depending on location as indicated below) through the riprap.
  - o Beneath the bridge: after placing delaware #57 stone, perform a final choke of channel bed fill so that the riprap peaks are barely visible. Payment under item 707500 – channel bed fill. Delaware #57 stone is incidental to the riprap item.
  - o All other locations: finish filling the voids with topsoil so that the riprap peaks are barely visible. Place an additional 6-inch topsoil layer on top of the riprap. Slope seeding will be done with item 908019 – streambank seed mix, seeding. Following the seeding operation, install item 908020 – erosion control blanket (ECB) mulch, or other blanket as shown on the plans. ECB at toe of slope can be either trenched in or stapled at 6” on center. Complete all work, starting with the initial choking with topsoil through the seeding and mulching prior to any rain event. Delaware #57 stone is incidental to the riprap item. All other items will be paid for under their respective items.
- The topsoil/seed/mulch can be placed before or after the removal of the stream diversion. If the placement occurs after stream diversion removal, use a turbidity curtain to minimize in-stream sedimentation. Payment will be incidental to item 909005 – stream diversion.

The contractor shall pay special attention to specific construction requirements as indicated in the US Army Corps of Engineer Permit as well as the Environmental Compliance (EC) Sheet.

DelDOT Environmental Studies Section 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 at DOT\_EnvironmentalStudies@delaware.gov and/or 302-760-2259.



10/29/2024

Van Adams  
Natural Resource Supervisor  
Environmental Stewardship Office  
Delaware Department of Transportation



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

NICOLE MAJESKI  
 SECRETARY

**RAILROAD STATEMENT**

**For**

**State Contract No.:** T202009902

**Federal Aid No.:** N/A

**Project Title:** Dragon Run Tide Gates Replacement

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

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

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

**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 Coordinator at (302) 659-4664.
  
- Railroad Agreement required. The Contractor cannot begin work until the Agreement is complete and fully executed. Railroad related work to be undertaken and completed as required for proper coordination with physical construction schedules. The Contractor shall follow requirements stated in the DelDOT Maintenance of Railroad Traffic Item in the Special Provisions. Contractor shall coordinate railroad flagging with DelDOT's Railroad Program Coordinator at (302) 659-4664.

**Approved As To Form:**

*Lei Xu*

DelDOT Railroad Program Coordinator

7/1/2024

DATE

# SAMPLE AFFIDAVIT OF CRAFT TRAINING COMPLIANCE

(Actual form for signature will be provided to the awarded contractor)

(PROJECT NAME)  
(CONTRACT NUMBER)

## AFFIDAVIT OF CRAFT TRAINING COMPLIANCE

We, the contractor, hereby certify that we and all applicable subcontractors will abide by the contractor and subcontractor craft training requirements outlined below for the duration of the contract. Craft training must be provided by a contractor and/or subcontractor for each craft on a project for which there are Delaware Department of Labor approved and registered training programs or, if the contractor and/or subcontractor meets the requirements under Title 29, Chapter 69, Section 6960A.(b)(1)c.1.-3., payment may be made in accordance with Title 29, Chapter 69, Section 6960A.(b)(1)d. A list of crafts for which there are approved and registered training programs is maintained by the Delaware Department of Labor and can be found at:

<https://laborfiles.delaware.gov/main/det/apprenticeship/DE%20Craft%20Training%20Occupation%20List%20Effective%20March%201%202022.pdf>. If you have questions regarding craft training programs, please submit all questions in writing to the Delaware Department of Labor at: [apprenticeship@delaware.gov](mailto:apprenticeship@delaware.gov). *This Affidavit of Craft Training Compliance must be submitted prior to contract execution.*

In accordance with Title 29, Chapter 69, Section 6960A.(a)(1), a contract relating to a public works project under § 6962 of Title 29 must include a craft training program for each craft in the project if at the time the contractor executes a public works contract, all of the following apply:

- a. A project meets the prevailing wage requirement under Section 6960 of Title 29.
- b. The contractor employs 10 or more total employees.
- c. The project is not a federal highway project, except for the project under Section 6962(c)(11) of Title 29.
- d. There is an apprenticeship program for a craft in the project on the list of crafts under Section 204(b)(2) of Title 19.

Pursuant to Title 29, Chapter 69, Section 6960A.(a)(2), *a contractor must commit that all subcontractors provide craft training* if paragraph (a)(1) of this section applies to the subcontractor. Failure to provide required craft training or payment on the project may subject the successful contractor and/or subcontractor(s) to penalties as outlined in Title 29, Chapter 69, Section 6960A.(d)(1)-(3).

**Craft(s):** \_\_\_\_\_

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

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

**Contractor Program  
Registration Number(s)** \_\_\_\_\_

On this line also indicate whether DE, Other State (identify) or US Registration Number

SAMPLE AFFIDAVIT OF CRAFT TRAINING COMPLIANCE .... *Continued*

Or

A payment has been made in the amount established under Section 204(b)(2)b.2. of Title 19, for the craft into the Delaware Department of Labor’s Apprenticeship and Training Fund.

Or

Craft Training requirements are not applicable because:

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

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

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

State of Delaware )

County of \_\_\_\_\_ )

ss:

Before me, a notary public, in and for said county and state, personally appeared, \_\_\_\_\_, who acknowledged to me that she/he did execute the foregoing instrument on behalf of \_\_\_\_\_.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

Commission Expires \_\_\_\_\_

**THIS PAGE MUST BE SIGNED AND NOTARIZED TO BE CONSIDERED.**



Delaware Department of Transportation  
Quantity Sheet Summary

Proposal ID: T202009902

Project Description: Dragon Run Tide Gates Replacement

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
202000	EXCAVATION AND EMBANKMENT	CY	24
211000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
302002	DELAWARE NO. 3 STONE	TON	9
604500	COFFERDAMS	LS	1
605026	FURNISH STEEL H PILES, HP 14" X 102"	LF	83
605126	INSTALL STEEL H PILES, HP 14" X 102"	LF	83
608011	STEEL SHEET PILES, PZC 18	SF	902
610000	PORTLAND CEMENT CONCRETE MASONRY, CLASS A	CY	40
611001	BAR REINFORCEMENT, EPOXY COATED	LB	3830
615520	FABRICATED STAINLESS STEEL GATES	LS	1
628070	DRILLING HOLES AND INSTALLING DOWELS	EACH	139
707017	RIPRAP, R-6	TON	26
708003	GEOTEXTILES, RIPRAP	SY	41
727000	CHAIN LINK FENCE	LF	35
727010	CHAIN LINK FENCE GATE	EACH	3
763000	INITIAL EXPENSE/DE-MOBILIZATION	LS	1
763501	CONSTRUCTION ENGINEERING	LS	1

**This page is for information only. Do not use this page to submit a Bid.**



Delaware Department of Transportation  
Quantity Sheet Summary

Proposal ID: T202009902

Project Description: Dragon Run Tide Gates Replacement

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
763598	FIELD OFFICE, SPECIAL I	EAMO	5
801500	MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LS	1
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EADY	40
811001	FLAGGER, NEW CASTLE COUNTY STATE	HOUR	40
811013	FLAGGER, NEW CASTLE COUNTY, STATE, OVERTIME	HOUR	10
905001	SILT FENCE	LF	31

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