

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION



BID PROPOSAL

CONTRACT T201611902

US 40, SALEM CHURCH ROAD TO WALTHER ROAD

Federal Aid No. NH-N032(19)

CFDA: 20.205

Advertisement Date: January 8, 2025

INCLUDED IN THIS DOCUMENT:

BID PROPOSAL:

GENERAL DESCRIPTION
PROSPECTIVE BIDDERS NOTES
GENERAL NOTICES
PREVAILING WAGES
SPECIAL PROVISIONS
STATEMENTS
QUANTITY SHEET SUMMARY

ADDITIONAL BID PROPOSAL ITEMS:

ATTACHED OR POSTED DOCUMENTS:

PROJECT PLANS
QUESTIONS & ANSWERS (if posted)
BREAKOUT SHEETS
DIESEL FUEL FORM
DBE PROJECT PARTICIPANT AFFIDAVIT
DBE UTILIZATION COMMITMENT STATEMENT
BIDDERS LIST

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

DRUG TESTING AFFIDAVIT
CERTIFICATION FORM
BID BOND FORM
CD FOR BID PRICE ENTRY & PRINTING
DBE PROJECT PARTICIPANT AFFIDAVIT
DBE UTILIZATION COMMITMENT STATEMENT
BIDDERS LIST

This Bid Proposal and related documents can be viewed on bids.delaware.gov and 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, FEBRUARY 11, 2025

GENERAL DESCRIPTION

A. BIDS DUE: FEBRUARY 11, 2025 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/.
OR:

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

For paper bids, contact DelDOT at 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. DBE GOAL: 15% Disadvantaged Business Enterprise Goal

D. OJT TRAINEES: 2 See Prospective Bidder's Notes and posted OJT Manual for details.

E. LOCATION: New Castle County

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

F. DESCRIPTION: The improvements consist of furnishing all labor and materials as this project is proposing to add an additional lane in each direction along US40 from Salem Church Road to Walther Road. There will also be pedestrian and bicycle improvements with the addition of a shared-use path for the length of the project. Follow other incidental construction in accordance with the location, notes and details shown on the plans, and as directed by the Engineer.

G. BUY AMERICA REQUIREMENTS APPLY – Build America, Buy America Act, refer to 'GENERAL NOTICES'.

H. COMPLETION TIME: All work on this contract must be complete within 884 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 April 14, 2025.

I. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DELAWARE DEPARTMENT OF TRANSPORTATION, JANUARY 2024 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 101.4.

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

K. ADDENDA: All Addenda are posted on the internet at bids.delaware.gov, and 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.

L. QUESTIONS: E-MAIL TO; 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, and bidx.com/de/. The date of the final posted Questions and Answers document must be entered on the submitted Certification Form.

M. ROAD USER COSTS:

FAILURE TO OPEN PROJECT TO UNRESTRICTED HIGHWAY TRAFFIC ON TIME

Late Opening of Temporary Lane Closures:

Interim Road User Costs (RUCs) for delays in opening travel lanes (including turn/auxiliary lanes) will be assessed according to the below tables. Refer to the Allowable Lane Closure Matrices in the Maintenance of Traffic (MOT) plans for start and end times of allowable closures.

Table 1

US 40 (Pulaski Highway): 2-to-1 Through Lane and/or Turn/Auxiliary Lane Closure RUC's for Late Opening	
Time All Lanes Reopened After End of Allowable Lane Closure Hours	Road User Cost
1 st 15-minute increment	\$1,000
2 nd 15-minute increment	\$2,000
3 rd 15-minute increment	\$3,000
4 th 15-minute increment	\$4,000
5 th 15-minute increment	\$5,000
6 th 15-minute increment	\$6,000
7 th 15-minute increment	\$7,000
8 th 15-minute increment	\$8,000
<i>*After the first two hours beyond the allowable lane closure hour limit, Road User Costs will accrue at \$4,000 per hour, or 15-min portion thereof, up to a maximum day total of \$60,000</i>	

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Table 2

US 40 (Pulaski Highway): 3-to-2 Through Lane and/or Turn/Auxiliary Lane Closure RUC's for Late Opening	
Time All Lanes Reopened After End of Allowable Lane Closure Hours	Road User Cost
1 st 15-minute increment	\$750
2 nd 15-minute increment	\$1,500
3 rd 15-minute increment	\$2,250
4 th 15-minute increment	\$3,000
5 th 15-minute increment	\$3,750
6 th 15-minute increment	\$4,500
7 th 15-minute increment	\$5,250
8 th 15-minute increment	\$6,000
<i>*After the first two hours beyond the allowable lane closure hour limit, Road User Costs will accrue at \$3,000 per hour, or 15-min portion thereof, up to a maximum day total of \$36,000</i>	

Table 3

US 40 (Pulaski Highway): 3-to-1 Through Lane and/or Turn/Auxiliary Lane Closure RUC's for Late Opening	
Time All Lanes Reopened After End of Allowable Lane Closure Hours	Road User Cost
1 st 15-minute increment	\$1,000
2 nd 15-minute increment	\$2,000
3 rd 15-minute increment	\$3,000
4 th 15-minute increment	\$4,000
5 th 15-minute increment	\$5,000
6 th 15-minute increment	\$6,000
7 th 15-minute increment	\$7,000
8 th 15-minute increment	\$8,000
<i>*After the first two hours beyond the allowable lane closure hour limit, Road User Costs will accrue at \$4,000 per hour, or 15-min portion thereof, up to a maximum day total of \$60,000</i>	

Table 4

Salem Church Road, Porter Road, Glasgow Drive, Brookmont Drive, Church Road, Wellington Drive, Walther Road and Glendale Boulevard – Through and/or Turn/Auxiliary Lane Closure RUC’s for Late Opening	
Time All Lanes Reopened After End of Allowable Lane Closure Hours	Road User Cost
1 st 15-minute increment	\$475
2 nd 15-minute increment	\$950
3 rd 15-minute increment	\$1,425
4 th 15-minute increment	\$1,900
5 th 15-minute increment	\$2,375
6 th 15-minute increment	\$2,850
7 th 15-minute increment	\$3,325
8 th 15-minute increment	\$3,800
<i>*After the first two hours beyond the allowable lane closure hour limit, Road User Costs will accrue at \$1,900 per hour, or 15-min portion thereof, up to a maximum day total of \$24,700</i>	

Example of calculation for assessment of Road User Cost for late opening of lane closure:

For the use of the examples below, the lane open time is 7:00AM (refer to the Allowable Lane Closure Matrices in the MOT plans for actual start and end times of allowable closures.

1. Failure to reopen single lane closure (2-to-1 lane reduction) on US 40 until 9:37 AM, local time:

Per Table 1, a RUC of \$11,000 will be assessed.

- 7:00 AM – 8:59 AM = \$8,000 for the first two-hour period
- 9:00 AM – 9:37 AM = \$4,000 x 0.75 hours = \$3,000

2. Failure to reopen single lane closure (3-to-2 lane reduction) until 8:17 AM, local time:

Per Table 2, a RUC of \$4,500 will be assessed.

3. Failure to reopen double lane closure (3-to-1 lane closure) until 7:19 AM, local time:

Per Table 3, a RUC of \$2,000 will be assessed.

4. Failure to reopen lane closure on any named side street until 9:18 AM, local time:

Per Table 4 a RUC of \$4,750 will be assessed.

- 7:00 AM – 8:59 AM = \$3,800 for the first two-hour period
- 9:00 AM – 9:18 AM = \$1,900 x 0.5 hours = \$950

Late Opening of Roadway Closures/Detours:

During Phase 1 construction, the US 40 Eastbound right-turn lane to Porter Road will be closed and detoured for full-depth roadway reconstruction. A RUC of **\$2,100** will be assessed for each calendar day that the US 40 Eastbound right-turn lane to Porter Road is not fully opened to traffic in excess of the allowable closure duration identified in the Plans. The full daily RUC is assessed regardless of what time of day the turn lane is reopened, starting at 6:00 AM. As such, no consideration will be given for partial calendar days.

During Phase 1 construction, the US 40 Westbound right-turn lane to Glasgow Drive will be closed and detoured for full-depth roadway reconstruction. A RUC of **\$2,000** will be assessed for each calendar day that the US 40 Westbound right-turn lane to Glasgow Drive is not fully opened to traffic in excess of the allowable closure duration identified in the Plans. The full daily RUC is assessed regardless of what time of day the turn lane is reopened, starting at 6:00 AM. As such, no consideration will be given for partial calendar days.

During Phase 1 construction, the US 40 Eastbound right-turn lane to Church Road will be closed and detoured for full-depth roadway reconstruction. A RUC of **\$3,000** will be assessed for each calendar day that the US 40 Eastbound right-turn lane to Church Road is not fully opened to traffic in excess of the allowable closure duration identified in the Plans. The full daily RUC is assessed regardless of what time of day the turn lane is reopened, starting at 6:00 AM. As such, no consideration will be given for partial calendar days.

During Phase 1 construction, the US 40 Eastbound right-turn lane to Glendale Boulevard will be closed and detoured for full-depth roadway reconstruction. A RUC of **\$1,000** will be assessed for each calendar day that the US 40 Eastbound right-turn lane to Glendale Boulevard is not fully opened to traffic in excess of the allowable closure duration identified in the Plans. The full daily RUC is assessed regardless of what time of day the turn lane is reopened, starting at 6:00 AM. As such, no consideration will be given for partial calendar days.

During Phase 1A construction, Salem Church Road Northbound at US 40 will be closed and detoured for full- depth roadway reconstruction. A RUC of **\$5,000** will be assessed for each calendar day that Salem Church Road Northbound is not fully opened to traffic in excess of the allowable closure duration identified in the Plans. The full daily RUC is assessed regardless of what time of day the roadway is reopened, starting at 12:00 AM. As such, no consideration will be given for partial calendar days.

During Phase 1C construction, Cornell Drive will be closed and detoured at Salem Church Road for construction of the proposed roundabout. During Phase 1D construction, Salem Church Road Northbound and Southbound will be closed and detoured between Cornell Drive and US 40 for roundabout construction, and the Phase 1C closure/detour of Cornell Drive will remain. A RUC of **\$4,600** will be assessed for each calendar day that Salem Church Road and Cornell Drive are not fully opened to traffic in excess of the allowable closure duration identified in the Plans. The full daily RUC is assessed regardless of what time of day the roadway is reopened, starting at 12:00 AM. As such, no consideration will be given for partial calendar days.

Example of calculation for assessment of Road User Cost for late opening of roadway closure/detour:

- 1) The duration of the US 40 Eastbound right-turn lane to Porter Road detour is one weekend (Friday 9 PM to Monday 6 AM) according to the Plans. If the roadway is reopened at 6:01 AM on Monday, the full amount of the \$2,100 RUC will be assessed.
- 2) The duration of the Phase 1A detour of Salem Church Road Northbound is 10 calendar days according to the plans. If the roadway is reopened at 12:01 AM on day 11, the full amount of the \$5,000 RUC will be assessed.

- 3) The duration of the Phase 1C detour of Cornell Drive is 34 calendar days and the duration of the Phase 1D detour of Salem Church Road and Cornell Drive is 15 calendar days according to the Plans. If Salem Church Road and Cornell Drive are reopened on day 16 of Phase 1D, the full amount of the \$4,600 RUC will be assessed.

Assessment of the RUC will be made through Item 763525 – Road User Cost. The Engineer will be the sole approving authority as to when the project is complete after traffic is returned to the ultimate alignment and when the contractors work activities will permit highway traffic ultimate lane width and shoulder widths.

N. 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.

O. PROSPECTIVE BIDDERS NOTES:

1. **BIDDERS MUST BE REGISTERED** with DeIDOT in order to submit a bid. E-Mail dot-ask@delaware.gov or call (302) 760-2031 to request registration information.
2. **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.
3. **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.
4. **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:**
<https://regulations.delaware.gov/AdminCode/title19/4000/4100/4104.shtml#TopOfPage>

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 DeIDOT 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.

5. **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.
6. **NO RETAINAGE** will be withheld on this contract unless through the Performance-Based Rating System.
7. **EXTERNAL COMPLAINT PROCEDURE** can be viewed on DelDOT's Website, <https://regulations.delaware.gov/AdminCode/title2/2000/2500/2501.shtml#TopOfPage> or you may request a copy by calling (302) 760-2035

REVISED



8. **DBE PROGRAM REQUIREMENTS** (49CFR §26.53(b)(3)(i)(B) requires **ALL BIDDERS** to submit a DelDOT DBE Project Participation Affidavit for each DBE proposed for their team no later than five (5) calendars after bid opening. Affidavits shall be submitted electronically to the DelDOT DBE Program Office at DOT.BidDocs@delaware.gov or via US Mail to DelDOT DBE Program Office ATTN: DBE Program Manager 800 Bay Road, Dover, DE 19901. Bidders must fully comply with the requirements of the Disadvantaged Business Enterprises (DBE) Specification shown below in order for their submitted bid to be deemed responsive and therefore eligible for award. Please note that the Bidder's DBE Project Participation Affidavit is different than what is required to be included in the Bidder's List submitted at the time of bid discussed below.

NEW



9. **DeIDOT CERTIFIED DBE UTILIZATION COMMITMENT STATEMENT** In accordance with 49 CFR Part 26 all bidders must make good faith efforts toward meeting assigned DBE goals on federally assisted projects. Bidders are required to complete and submit this document at the time of bid to provide DelDOT with their anticipated goal attainment and/or any good faith efforts documentation for the project on which they are bidding. Failure to include the DBE Utilization Commitment Statement with your bid will result in your Bid being deemed irregular.

10. **FLATWORK CONCRETE TECHNICIAN CERTIFICATION TRAINING:**

Section 501.3, 503.3, 505.3, 610.3, 701.3 and 702.3 of the 2024 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.

11. **BREAKOUT SHEETS MUST** be submitted with your bid documents. Attach the breakout sheet(s) to the proposal. Failure to submit the breakout sheet with the proposal will result in the Department declaring the proposal as non-responsive and rejecting the bid.

12. **On-The-Job Trainee(s).** The On-the-Job (OJT) Program Plan and all required documents must be submitted online as soon as possible by the apparent low bidder at deldot.delawareojt.gov. Award of the Contract will not take place until acceptable OJT program plans are received and approved by the Department's Office of Civil Rights. Failure of the apparent low bidder to submit acceptable OJT required documents within ten (10) calendar days of bid opening shall create a rebuttable presumption that the bid is not responsive.

13. NOTE that FHWA Form 1273 (attached) has been modified effective October 23, 2023. Changes are [reviewed here](#).

14. 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.

NEW**15. Bidders List Requirement:**

Under [49 CFR 26.11](#) DelDOT must collect bidders list information from **ALL** contractors and subcontractors who seek to work on federally assisted contracts. The submitted information must be complete and must include the required information for the prime and all (DBE and non-DBE) subcontractors, service providers, manufacturers, distributors, and suppliers.

ALL bidders must complete the [Bidders List Form](#) (attached as an exhibit) and submit it at the time of bid. Late submission of this information will not be accepted. Submitted information must include the following for those being proposed to work on the contract if awarded:

- Firm name;
- Firm address including ZIP code;
- Firm's status as a DBE or non-DBE;
- Race and gender information for the firm's majority owner;
- NAICS code applicable to each scope of work the firm sought to perform in its bid;
- Age of the firm; and
- The annual gross receipts of the firm shown as an approximate range (i.e., \$1-3 million)

This information will be maintained as confidential to the extent allowable by federal and state law.

Failure to submit the required bidders list documentation at the time bid will result in the bidder being deemed non-responsive and therefore ineligible for award of the contract.

16. DIESEL FUEL COST PRICE ADJUSTMENT FORM is posted and part of this Bid Proposal.

17. ADDITIONAL INSURED – As part of the contract specification, bid and award, the contractor must add the following entities to the Certificate of Liability Insurance as 'Additional Insured':

- **State Parcel No. 5:** Wawa, Inc., a New Jersey Corporation
- **State Parcel No. 23:** AIN2013 DE NEW CASTLE HUNDRED PULASKI LLC and their Tenant, Delaware CVS Pharmacy, L.L.C.
- **State Parcel No. 44:** Christina School District

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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. Registration at <https://onestop.delaware.gov/>.

BUY AMERICA REQUIREMENT

The Build America, Buy America Act (BABA), enacted as part of the Bipartisan Infrastructure Law (BIL) requires iron, steel, manufactured products, and construction materials used in infrastructure projects funded by Federal financial assistance to be produced in the United States.

In accordance with 23 U.S.C. 313, and 23 CFR 635.410, all iron and steel materials permanently incorporated into this project will be produced in the United States and that all manufacturing processes involving these materials will occur in the U.S., except that a minimal amount of foreign steel or iron materials may be used, provided the cost of the foreign materials does not exceed 0.1 percent of the total Contract cost or \$2,500.00, whichever is greater. If such minimal amount of foreign steel is used, the Contractor shall maintain a record of the costs to ensure that the allowable limit is not exceeded.

Manufactured products are currently exempt from the Buy America requirements included in BABA in accordance with a waiver issued for such products by the FHWA in 1983. The 1983 waiver does not supersede 23 CFR 635.410 which requires all manufacturing processes involving the steel or iron used occur in the U.S., except that a minimal amount of foreign steel or iron materials may be used, provided the cost of the foreign materials does not exceed 0.1 percent of the total Contract cost or \$2,500.00, whichever is greater. If such minimal amount of foreign steel is used, the Contractor shall maintain a record of the costs to ensure that the allowable limit is not exceeded.

All construction materials permanently incorporated into this project are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States. Construction materials which are exempt from BABA requirements include cement and cementitious materials, aggregates such as stone, sand, or gravel, and aggregate binding agents or additives.

DelDOT maintains a list of all pay items, the applicable BABA category designation, and additional guidance at the following address: <https://deldot.gov/Business/prodlists/index.shtml?dc=buyAmerica>.

By signing and submitting this proposal, the bidder certifies that:

“All materials that will be permanently incorporated into this project will meet the Buy America material requirements. At the Department's request, I/we will provide manufacturer's/supplier's documentation verifying domestic origin as defined in the Contract. All Materials accepted on the basis of such Certificate of Compliance may be sampled by the Department and tested at any time. Use of Material on the basis of Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating Material in the Project conforming to the requirements of the Contract. Any Material not conforming to such requirements will be subject to rejection whether in place or not. The Department reserves the right to refuse to permit the use of Material on the basis of Certificate of Compliance.”

SPECIFICATIONS :

The Delaware specifications entitled "*Standard Specifications for Road and Bridge Construction*, with the applicable version defined in the 'GENERAL DESCRIPTION' and hereinafter referred to as the *Standard Specifications*; 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.

DelDOT 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 :

DelDOT 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. DelDOT 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 DelDOT project, excluding a 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 DelDOT. Successful bidders awarded DelDOT 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. DelDOT shall post publicly the Performance Rating for all Contractors on DelDOT's [website](#). DelDOT will complete performance-based evaluations on the construction company contracted by DelDOT 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](#).

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 on a project designated to include federal funds, shall obtain a Delaware business license upon making application to the Division of Revenue. Proof of said license compliance to be made prior to, or in conjunction with, the execution of a contract to which he has been named.

SUBCONTRACTOR LICENSE: 29 DEL. C. §6967:

- (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.

CONFLICT WITH FEDERAL STATUTES OR REGULATIONS:

Delaware Code, Title 29, Chapter 69, Section 6904, Paragraph (a):

"If any provision of this subchapter conflicts or is inconsistent with any statute, rule or regulation of the federal government applicable to a project or activity, the cost of which is to be paid or reimbursed in whole or in part by the federal government, and due to such conflict or inconsistency the availability of federal funds may be jeopardized, such provision shall not apply to such project or activity."

FEDERAL LABOR AND EMPLOYMENT REQUIREMENTS

Federal Regulation 23 CFR § 635.117(b) Labor and employment, states:

"No procedures or requirement shall be imposed by any State which will operate to discriminate against the employment of labor from any other State, possession or territory of the United States, in the construction of a Federal-aid project."

CONVICT PRODUCED MATERIALS:

(a) Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:

- (1) Produced by convicts who are on parole, supervised release, or probation from a prison or

(2) Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.

(b) Qualified prison facility means any prison facility in which convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-aid highway construction projects.

RIGHT TO AUDIT

DelDOT 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)

TO REPORT BID RIGGING ACTIVITIES:

The U. S. Department of Transportation (DOT) operates the below toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

TO REPORT BID RIGGING ACTIVITIES
CALL 1-800-424-9071

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals for Minority Participation In
Each Trade

Goals for Female Participation In
Each Trade

12.3% (New Castle County)

6.9% (Entire State)

14.5% (Kent & Sussex Counties)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the County specified in the General Description section.

REV. 11-3-80

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - i. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - ii. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - iii. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - iv. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Program Office or from the Federal procurement contracting offices. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participating, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).
 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Order of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
 14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours

worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

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TRAINING SPECIAL PROVISIONS

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities", (Attachment 1), and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved.

The number of trainees to be trained under the special provision will be as set forth in the General Description section of this document. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year apprenticeship or training.

The number of trainees shall be distributed among the work classification on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Department of Highways and Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Department of Highways and Transportation and the Federal Highway Administration. The Department of Highways and Transportation and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid

highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work the classification covered by the program. It is the intention of these provisions that the training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other sources does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for off-site training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training; provides the instruction of the trainee; or pays the trainee's wages during the off-site training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainees as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid a least 60 percent of the appropriate minimum journeymen's rate specified in the contract for the first half of the of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees is an approved existing program are enrolled as trainees on this project. In fact case, the appropriate rates approved by the Department of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provisions.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training.

The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

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INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT
& TRANSPORTATION EQUITY ACT

Recipients of Federal-aid highway funds authorized under Titles I (other than Part B) and V of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), or Titles I, III, and V of the Transportation Equity Act for the 21st Century (TEA-21) are required to comply with the regulations of 49 Code of Federal Regulations (CFR) Part 26 - Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

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DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM SPECIFICATION

DeIDOT has established a Disadvantaged Business Enterprise (DBE) program in accordance with the regulations of the United States Department of Transportation (USDOT), 49 CFR Part 26. The Department has received Federal financial assistance from the USDOT and as a condition of receiving this assistance, the Department has signed an assurance that it will comply with 49 CFR Part 26.

It is the policy of DeIDOT to ensure that DBEs, as defined in 49 CFR Part 26, have an equal opportunity to receive and participate in USDOT-assisted contracts. It is also the policy of the DeIDOT:

1. To ensure nondiscrimination in the award and administration of USDOT-assisted contracts;
2. To create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts;
3. To ensure that the DBE program is narrowly tailored in accordance with applicable law;
4. To ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are counted as DBEs;
5. To help remove barriers to the participation of DBEs in USDOT-assisted contracts;
6. To assist in the development of firms that can compete successfully in the marketplace outside the DBE program and;
7. To promote the use of DBEs in all types of federally assisted contracts and procurement activities.

The following definitions apply to this subpart:

Commercially Useful Function (CUF) means a Commercially Useful Function as defined fully in 49 CFR §26.55 which definition is incorporated herein by reference. CUF is discussed further in the next section.

Committed DBE means a DBE that was identified by the contractor, typically on a DBE Project Participation Affidavit, to assist in making a good faith effort to meet an assigned DBE goal. This also includes any substitute DBE that has subsequently been committed work to meet the assigned contract goal.

Days mean calendar days. In computing any period of time described in this part, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal holiday. Similarly, in circumstances where the DeIDOT's offices are closed for all or part of the last day, the period extends to the next day on which the agency is open.

Disadvantaged Business Enterprise or DBE means a for-profit small business concern (1) that is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and, (2) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

DOT-assisted contract means any contract between a recipient and a contractor (at any tier) funded in whole or in part with DOT financial assistance, including letters of credit or loan guarantees, except a contract solely for the purchase of land.

Good Faith Efforts means efforts to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.

Joint Venture means an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

NAICS Code means the North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.

Non-DBE means any firm that is not a DBE or any entity which has not been certified by DeIDOT as a DBE prior to bid closing.

Race-conscious measure or program is one that is focused specifically on assisting only DBEs, including women-owned DBEs.

Race-neutral measure or program is one that is, or can be, used to assist all small businesses. For the purposes of this part, race-neutral includes gender neutrality.

Small Business concern means, with respect to firms seeking to participate as DBEs in DOT-assisted contracts, a small business concern as defined pursuant to section 3 of the Small Business Act and Small Business Administration regulations implementing it (13 CFR part 121) that also does not exceed the cap on average annual gross receipts specified in 49 CFR §26.65(b).

Socially and Economically Disadvantaged Owner (SEDO) means any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is - (1) any individual who a recipient finds to be a socially and economically disadvantaged individual on a case-by-case basis; (2) any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged according to 49 CFR §26.5:

- (i) Black Americans which includes persons having origins in any of the Black racial groups of Africa;
- (ii) Hispanic Americans which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- (iii) Native Americans which includes persons who are enrolled members of a federally or State recognized Indian tribe, Alaska Natives, or Native Hawaiians;
- (iv) Asian-Pacific Americans which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia,

the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Republic of the Northern Mariana Islands, Macao, Fiji, Tonga, Kirbati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong;

(v) Subcontinent Asian Americans which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives, Nepal or Sri Lanka;

(vi) Women;

(vii) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

DBE Participation Goals

DeIDOT has established an overall annual goal for DBE participation on Federal-aid contracts. DeIDOT intends that the goal be met with a combination of race conscious and race neutral efforts. Race-conscious participation occurs when the contractor uses a percentage of DBEs, as defined herein, to meet the contract-specified goal. Race-neutral efforts are those that are, or can be, used to assist all small businesses or increase opportunities for all small businesses.

The regulation, 49 CFR, Part 26, also describes race neutral participation as when a DBE wins a prime contract through customary competitive procurement procedures or is awarded a subcontract on a prime contract that does not carry a DBE contract goal.

DeIDOT will establish specific goals for each particular DOT-assisted project which will be expressed as a percentage of the total dollar amount of contract bid. The specific contract goal for this contract is listed in the General Description section of this document.

The contractor shall make Good Faith Efforts to meet the goal specified herein with DBEs or establish that it was unable to meet the goal despite making good faith efforts to do so. Prime contractors are encouraged to obtain DBE participation above and beyond any goals that may be set for this project.

DBE Project Participation Affidavit

In order to be eligible for award, ALL Bidders shall submit **no later than five (5) calendar days after bid opening** the completed DeIDOT DBE Project Participation Affidavit for each Committed DBE that it intends to use to meet the project DBE goal if the contract is awarded to their firm. This affirms that the Bidder intends to utilize those listed on the form to make a good faith effort toward attaining the DBE goal assigned to this project. Information that will be included shall be as outlined in 49 CFR §26.53(b)(2). This information shall be submitted electronically to the DeIDOT DBE Program Office at DOT.BidDocs@delaware.gov or via US Mail to DeIDOT DBE Program Office ATTN: DBE Program Manager 800 Bay Road, Dover, DE 19901.

All Bidders will be required to complete the form and provide the following information regarding the DBE participation on their teams:

1. The names and addresses of DBE firms that will participate in the contract;
2. A description of the work that each DBE will perform. To count toward meeting a goal, each DBE firm must be certified in a NAICS code applicable to the kind of work the firm will perform on the contract;
3. The dollar amount of the participation of each DBE firm participating;

4. Written documentation of the Bidders commitment to use a DBE subcontractor whose participation it submits to meet a contract goal; and
5. Written confirmation from each listed DBE firm that it is participating in the contract in the kind and amount of work provided in the prime contractor's commitment.

Only those DBE firms certified by DeIDOT's DBE Program Office as a DBE as of the deadline for bid submittal will be considered for DBE credit. It shall be the Bidders responsibility to ascertain the certification status of designated DBEs prior to submitting a bid which seeks to rely upon an entity as a DBE to satisfy DBE participation requirements. A list of certified DBEs with their respective NAICS codes can be located in the [DeIDOT DBE Directory](https://deldotcivilrights.dbesystem.com) which is located on DeIDOT's website at: <https://deldotcivilrights.dbesystem.com>.

If the apparent low bidder fails to submit the required information in the manner herein specified, or if the submitted information reveals a failure to meet the requirements of the specifications shown herein, the apparent low bidder shall be ineligible to receive award of the contract and their bid will be rejected.

Reduction of DBE commitments after affidavit submittal and prior to execution of the contract without written consent of DeIDOT, which consent will only be given for good cause, will result in the bid being rejected or DeIDOT rescinding any award. Scheduling conflicts are not necessarily evidence of good cause as this should have been considered during pre-bid negotiations. The contractor is responsible for ensuring the DBE is available to meet the requirements of the contract at all relevant times.

In an instance where a Bidder indicates that it is unable to meet the assigned DBE goal for a contract, the bidder shall **AT THE TIME OF BID SUBMISSION**, provide all documentation to verify that the Bidder has made Good Faith Efforts (GFE) toward meeting the assigned DBE Goal. Guidance for submitting Good Faith Efforts documentation is identified in the next section of this document and in the [DBE Program Plan](https://deldot.gov/Business/dbe/contentFolder/pdfs/dbeProgram.pdf?cache=1726767277676). <https://deldot.gov/Business/dbe/contentFolder/pdfs/dbeProgram.pdf?cache=1726767277676>

DBE Subcontract Provisions

DeIDOT continues to reserve the right to approve ALL DBE subcontractors and all substitutions of DBE subcontractors prior to award, and during the of completion of the contract. **ALL DBEs subcontracted (whether submitted for participation credit or not) must be submitted to DeIDOT's DBE Program Office for approval.** No contract work shall be performed by a DBE subcontractor until the executed DBE subcontract is approved in writing by DeIDOT and DeIDOT has issued the required Notice to Proceed. Any DBE subcontract relating to work to be performed pursuant to this contract, which is submitted to DeIDOT for approval, must contain all DBE subcontractor information, the requirements contained in this contract, and must be fully executed by the contractor and DBE subcontractor.

Each contract between the prime contractor and each DBE subcontractor shall at the minimum include the following:

1. All pertinent provisions and requirements of the prime contract.
2. Assurance that the contractor and subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract.
3. Description of the work to be performed by the DBE subcontractor.

4. The dollar value of each item of work to be completed by the DBE subcontractor and the bid price of each item of work to be completed by the DBE subcontractor.
5. An attached copy of the most current FHWA 1273- Required Contract Provisions Federal-Aid Construction Contracts.
6. Language indicating that retainage will not be withheld unless the prime contract with DelDOT allows for the withholding of retainage.
7. Language requiring the payment of all funds received from DelDOT for work satisfactorily performed within the time frame contemplated by 49 CFR §26.29.

DelDOT reserves the right to conduct periodic reviews of DBE and non-DBE subcontract documentation to ensure compliance with federal requirements.

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CRITICAL DBE REQUIREMENTS

A bid may be held to be non-responsive and not considered if the required DBE information is not provided. In addition, the Bidder may lose its bidding capability on DelDOT projects and such other sanctions as the DelDOT may impose. It is critical that the bidder understands:

1. In the event that the Bidder is unable to meet the DBE goal as set forth in this specification, in accordance with 49 CFR §26.53 (b)(2)(vi), the Bidder **shall at the time of bid submittal** provide all evidence upon which Bidder intends to rely as evidence of Good Faith Efforts (GFE) to DelDOT which shall include the percentage of the DBE Goal that will be met, if any, on the completed DelDOT DBE Utilization Commitment form made a part of this contract. All Bidders shall review [Appendix A to Part 26 – Guidance Concerning Good Faith Efforts](#) as that provides guidance on what DelDOT will look for and evaluate as GFE by a Bidder to obtain DBE participation. <https://www.ecfr.gov/current/title-49/subtitle-A/part-26/appendix-Appendix%20A%20to%20Part%2026>
2. The contractor shall also at the time of bid submit all documentation that the contractor wishes to have DelDOT consider in determining that the contractor made a Good Faith Effort to meet the assigned contract DBE Goal. DelDOT will not accept Good Faith Efforts documentation other than on the scheduled date and time of the bid opening. However, DelDOT may ask for clarification of information submitted should the need arise.
3. A bid which does not contain either a completely executed DelDOT DBE Utilization Commitment and/or Good Faith Efforts documentation, where appropriate, shall be declared non-responsive and shall not be considered by DelDOT.
4. Failure of the apparent low bidder to present originals of all DBE subcontracts to substantiate the volume of work to be performed by DBE's as indicated in the bid within fifteen (15) calendar days after the bid opening shall create a rebuttable presumption that the bid is not responsive.
5. Bidders are advised that failure to make a Good Faith Effort to meet the assigned and agreed upon DBE goals during the term of the contract may subject them to DelDOT sanctions as identified in the DelDOT DBE Program Plan.
6. In the execution of this contract, the successful bidder agrees to comply with the following contract clauses:

Prompt Payment: The prime contractor/consultant receiving payments shall, within 30 days of receipt of any payment, file a statement with DelDOT on a form to be determined by DelDOT that all subcontractors furnishing labor or material have been paid the full sum due them at the stage of the contract, except any funds withheld under the terms of the contract as required by Chapter 8, Title 17

of the Delaware Code, annotated and as amended. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of DelDOT. This clause applies to both DBE and non-DBE subcontractors.

Retainage: The prime contractor agrees to return retainage to each subcontractor within 15 calendar days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of DelDOT. This clause covers both DBE and non-DBE subcontractors. As guidance, once a subcontractor has satisfactorily completed the physical work, and has given to the prime contractor a certified statement that all laborers, lower tier contractors, and materialmen who have furnished labor and materials to the subcontractor have been paid all monies due them, the prime contractor shall return retainage to the subcontractor within 15 calendar days.

7. In the execution of this contract, the successful bidder agrees to comply with the following contract assurance and will include this same language in each subcontractor contract:

"The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such remedy as the recipient deems appropriate." 49 CFR Section 26.13

8. A prime contractor can receive participation credit toward DBE goals only if the DBE performs a Commercially Useful Function (CUF). According to 49 CFR §26.55 (c)(1) a DBE performs a CUF when it is responsible for execution of the work of a contract and carries out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself that it uses on the project.

In order to determine whether a DBE is performing a commercially useful function, DelDOT will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing, and the DBE credit claimed for its performance of the work, and other relevant factors.

In addition to this specification, bidders must comply with all provisions of the rules and regulations adopted by the United States Department of Transportation for DBE participation in USDOT and DelDOT Programs (49 CFR Part 26) and the DelDOT Disadvantaged Business Enterprise Program Plan; each of which is hereby incorporated and made part of this specification. Bidders are also reminded that they must be responsive and responsible bidders in all other aspects aside from the DBE Program in order to be awarded the contract.

9. In accordance with 49 CFR §26.53(f)(1), DelDOT requires that a prime contractor not terminate a DBE subcontractor without prior written consent from the DelDOT's Office of Civil Rights, which consent will only be provided if the Bidder demonstrates good cause for the termination. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. The contractor shall make all reasonable efforts to avoid terminating or substituting a DBE listed on the DBE Project Participation Affidavit.

* * * * *

GUIDANCE FOR GOOD FAITH
EFFORT

If the apparent low bidder has stated in its bid proposal that it has been unable to meet the DBE goal, that Bidder must demonstrate, through detailed and comprehensive documentation, that good faith efforts have been made to solicit, assist, and use DBE firms to meet the DBE goal prior to the bid. If the Bidder certifies that it has been unable to meet the goal and has made a good faith effort, the Bidder cannot change its position after submission of the bid and claim to have met the established goal. (See 49 CFR §26.53 and Appendix A to Part 26 of 49 CFR- Guidance Concerning Good Faith Efforts).

The contractor shall demonstrate that the efforts made were those that a contractor actively and aggressively seeking to meet the goals established by DelDOT would make, given all relevant circumstances. Evidence of this good faith effort will be submitted with the bid at the time of the bid opening.

In order to be awarded a contract on the basis of good faith efforts, a Bidder must show that it took all necessary and reasonable steps to achieve the DBE goal which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful. Simply faxing and emailing DBEs requesting bids is not sufficient to constitute good faith efforts. DelDOT will consider the quality, quantity, and intensity of the different kinds of efforts the Bidder has made. Mere pro forma efforts are not sufficient good faith efforts to meet the DBE contract requirements.

The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the Bidder when a non-DBE subcontractor was selected over a DBE for work on the contract. A generalized assertion that the contractor received multiple quotes is not sufficient unless copies of those quotes are provided. Bidders are encouraged to review 49 CFR Part 26 Appendix A- Guidance Concerning Good Faith Efforts.

Failure to demonstrate good faith efforts to the satisfaction of the DelDOT will result in the rejection of the bid. In the event that the low bid is rejected, DelDOT will consider award of the contract to the next responsive and responsible bidder.

The following are the types of efforts that *may* be considered as Good Faith Efforts to meet DBE participation requirements. This list is not an exclusive or exhaustive, and DelDOT may consider other factors and types of efforts that may be relevant:

1. Contacting DelDOT's DBE Program Office prior to the submission of bids, either by email or by telephone, to inform them of the Bidder's difficulty in meeting the DBE goals on a given project and requesting assistance. The Bidder must document its contact with the DBE Program Office and indicate the type of contact, the date and time of the contact, the name of the person(s) contacted, and any details related to the communication. The contact must be made in sufficient time before bid submission to allow the DBE Program Office a meaningful opportunity to offer effective assistance. The Bidder will **not** be considered to have made good faith efforts if the Bidder failed to contact the DBE Program Office in advance of bid closing or if the Bidder fails to contact the DBE Program Office sufficiently in advance of bid submission for the DBE's that bidder intends to solicit to have a meaningful opportunity to respond to the solicitation.
2. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goal will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units (for example smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. Selection of portions of work are required to at least equal the goal for DBE utilization specified in this contract.

3. Soliciting interest as early in the process as practicable to allow DBEs a meaningful opportunity to respond to the solicitation and submit a timely offer for the subcontract. Bidders should provide written notification at least ten (10) calendar days prior to the opening of a bid, soliciting DBE interest in participating on the contract as a subcontractor, supplier, manufacturer, or distributor for specific items of work.
4. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist DBEs in responding to solicitation.
5. Negotiating in good faith with interested DBEs. It is the Bidders responsibility to make a portion of the work available to the DBE subcontractors, and to select those portions of work or material needs consistent with the available DBE subcontractors, suppliers, manufacturers, or distributors so as to facilitate DBE participation. Evidence of such negotiation includes:
 - a. Description of the means by which firms were solicited (i.e. by telephone, e-mail, written notice, advertisement).
 - b. The names, addresses, telephone numbers of DBE's contacted, the dates of initial contact; and whether initial solicitations of interest were followed-up by contacting the DBEs to determine with certainty whether the DBEs were interested.
 - c. A description of the information provided to DBE firms regarding the plans, specifications, and estimated quantities for portions of the work to be performed.
 - d. A statement of why additional agreements with DBE's were not reached in order to meet the projected goal.
 - e. Listing of each DBE contacted but not contracted and the reasons for not entering a contract.
6. Making efforts to assist DBEs that need assistance in obtaining bonding, insurance, or lines of credit required by the contractor.
7. Detailing the reasons why certified DBEs are not available or not interested.
8. Effectively using the services of available minority/women community organizations; minority/women contractor's groups; local, state and federal business assistance offices; and other organizations that provide assistance in recruitment and placement of DBEs.

The following are examples of actions that may not be used as justification by the contractor for failure to meet DBE contract goals:

1. Failure to contract with a DBE solely because the DBE was unable to provide performance and/or payment bonds.
2. Rejection of a DBE bid or quotation based on price alone.
3. Rejection of a DBE because of its union or non-union status.
4. Failure to contract with a DBE because the contractor normally would perform all or most of the work in the contract.

DelDOT may contact rejected DBEs as part of its investigation. However, nothing listed here shall be construed to require the Bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.

In determining whether a Bidder has made good faith efforts, DelDOT will review the documented efforts of the contractor and will review the performance, taking into account the ability of other Bidders in meeting the contract DBE goal.

DelDOT will evaluate the submittal to determine whether in fact good faith efforts have been demonstrated consistent with the specifications and the Federal regulations, 49 CFR 26, Appendix A.

Administrative Reconsideration Procedures (49 CFR §26.53(d)):

Within five (5) calendar days of being informed by DelDOT that it has not documented sufficient good faith efforts, a Bidder may request an administrative reconsideration. The Bidder should make this request in writing to the attention of DelDOT's Director of Finance, 800 Bay Road, Dover, Delaware 19901, and email a copy to dot-ask@delaware.gov. The Reconsideration Official will not have played any role in the original determination that the Bidder did not document sufficient good faith efforts.

As part of this reconsideration, the Bidder will have the opportunity to provide written documentation or argument concerning the issue of whether it made adequate good faith efforts toward meeting the assigned DBE goal. The Bidder will have the opportunity to meet in person with the Reconsideration Official, to discuss the issue of whether it met the goal or made adequate good faith efforts to do so. The final decision made by the Reconsideration Official will be communicated to the Bidder in writing. In accordance with 49 CFR §26.53(d)(5) the result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

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**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention*. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents*. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers*. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements*. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures*. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits*. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio*. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates*. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity*. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

CARGO PREFERENCE ACT

Requirements in the Federal-aid Highway Program

(a) Agreement Clauses. “Use of United States-flag vessels:

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(b) Contractor and Subcontractor Clauses. “Use of United States-flag vessels: The contractor agrees—

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

NOTE:

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

* * * * *

APPENDICES TO THE TITLE VI ASSURANCE

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, (Federal Highway Administration (FHWA), or Federal Transit Authority (FTA)), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts and the Regulations, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA), as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) may determine to be appropriate, including, but not limited to:
 - withholding payments to the contractor under the contract until the contractor complies;
 - and/or cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through five in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts and the Regulations. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX E

During the performance of this contract, the contractor or consultant, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970,(42 U.S.C. § 460 I), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);

Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part27;

The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);

Airport and Airway Improvement Act of 1982,(49 USC §471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);

The Civil Rights Restoration Act of 1987,(PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964,The Age Discrimination Act of 1975and Section 504 of the Rehabilitation Act of 1973,by expanding the defrnition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 - 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;

The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. S 41123) (prohibits discrimination on the basis of race, color, national origin, and sex);

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs; policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

* * * * *

PREVAILING WAGES

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

REQUIREMENT BY DEPARTMENT OF LABOR FOR SWORN PAYROLL INFORMATION

Title 29 Del.C. §6960 stipulates;

- (b) Every contract based upon these specifications shall contain a stipulation that the employer shall pay all mechanics and laborers employed directly upon the site of the work, unconditionally and not less often than once a week and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the specifications, regardless of any contractual relationship which may be alleged to exist between the employer and such laborers and mechanics. The specifications shall further stipulate that the scale of wages to be paid shall be posted by the employer in a prominent and easily accessible place at the site of the work, and that there may be withheld from the employer so much of accrued payments as may be considered necessary by the Department of Labor to pay to laborers and mechanics employed by the employer the difference between the rates of wages required by the contract to be paid laborers and mechanics on the work and rates of wages received by such laborers and mechanics to be remitted to the Department of Labor for distribution upon resolution of any claims.
- (c) **Every contract based upon these specifications shall contain a stipulation that sworn payroll information, as required by the Department of Labor, be furnished weekly. The Department of Labor shall keep and maintain the sworn payroll information for a period of 6 months from the last day of the work week covered by the payroll.**

Bidders are specifically directed to note the Department of Labor's prevailing wage regulations implementing §6960 relating to the effective date of the wage rates, at 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."

PREVAILING WAGE REQUIREMENTS

It is DelDOT's understanding that the Davis-Bacon Act is not a preemptive statute in the broad sense, and does not preempt or displace State of Delaware prevailing wage requirements.

When a contract for a project contains both Federal Davis-Bacon and State of Delaware prevailing wage standards because of concurrent Federal and State coverage, the employer's minimum wage obligations are determined by whichever standards are higher.

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 HIGHWAY CONSTRUCTION EFFECTIVE MARCH 15, 2024

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
BRICKLAYERS	65.24	65.24	69.05
CARPENTERS	65.85	61.06	49.30
CEMENT FINISHERS	70.64	43.32	44.16
ELECTRICAL LINE WORKERS	35.67	57.63	28.21
ELECTRICIANS	81.62	81.62	81.62
IRON WORKERS	86.81	31.66	33.63
LABORERS	54.96	50.59	49.65
MILLWRIGHTS	21.38	20.75	17.93
PAINTERS	81.29	81.29	81.29
PILEDRIVERS	95.51	31.53	88.62
POWER EQUIPMENT OPERATORS	82.31	52.56	48.15
SHEET METAL WORKERS	30.20	26.96	24.40
TRUCK DRIVERS	51.73	37.48	45.64

CERTIFIED:

09/25/2024

BY:

[Signature]
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: T201611902 US 40, Salem Church Road To Walther Road, New Castle County

	Rates	Fringes
CARPENTER.....	\$ 50.06	4.32
CEMENT MASON/CONCRETE FINISHER...	\$ 33.03	5.25
ELECTRICIAN.....	\$ 65.99	0.00
FORM WORKER.....	\$ 49.77	3.37
IRONWORKER, REINFORCING.....	\$ 55.67	0.00
LABORER: Common or General.....	\$ 36.33	3.50
LABORER: Mason Tender - Cement/Concrete.....	\$ 43.30	1.66
OPERATOR: Bulldozer.....	\$ 37.55	16.19
OPERATOR: Loader.....	\$ 38.36	4.31
OPERATOR: Mechanic.....	\$ 28.11	11.18
OPERATOR: Milling Machine.....	\$ 38.29	11.15
TRAFFIC CONTROL: Flagger.....	\$ 37.49	0.00
TRUCK DRIVER: Dump Truck.....	\$ 29.31	9.84

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", "SA?", or "SC?" denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this

classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio.

The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c) (1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination.

The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board).

Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

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END OF GENERAL DECISION

SPECIAL PROVISIONS

S.P. Code	SPECIAL PROVISION DESCRIPTION
401502-20	ASPHALT CEMENT COST ADJUSTMENT
401510-20	TACK COAT
401580-20	RIDE QUALITY OF BITUMINOUS PAVEMENT
401699-20	QUALITY CONTROL/QUALITY ASSURANCE OF BITUMINOUS CONCRETE
601500-20	PIPE VIDEO INSPECTION
602502-20	CONVERTING EXISTING CATCH BASIN TO MANHOLE
615519-20	RELOCATING BUS STOP SHELTER
701507-20	CURB RETAINING WALL
701510-20	CURB/SIDEWALK OPENING
705521-20	PATTERNED PORTLAND CEMENT CONCRETE SIDEWALK, 8"
705528-20	TEMPORARY PEDESTRIAN CONNECTION
707500-20	CHANNEL BED FILL
710500-20	INSTALLATION OF WATERMAIN AND ACCESSORIES
711500-20	ADJUST AND REPAIR EXISTING SANITARY MANHOLE
711508-20	ADJUST AND REPAIR EXISTING SANITARY VALVES
763501-20	CONSTRUCTION ENGINEERING
763503-20	TRAINEE
763520-20	ELECTRONIC TICKETING
763525-20	ROAD USER COST
763597-20	UTILITY CONSTRUCTION ENGINEERING
763598-20	FIELD OFFICE, SPECIAL I
763626-20	DIESEL FUEL COST PRICE ADJUSTMENT
813500-20	PEDESTRIAN CHANNELIZING BARRICADE SYSTEM
832500-20	SPLICING OF ELECTRICAL CABLE, UNDERGROUND
832501-20	SPLICING OF ELECTRICAL CABLE, ABOVEGROUND
842502-20	PROVIDE AND INSTALL ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 (200 AMP)
850522-20	LUMINAIRE (LED), 400 WATTS, HPS EQUIVALENT
908504-20	COIR FIBER MATTING
908506-20	STREAM RESTORATION SEEDING
908510-20	MOWING

401502 - ASPHALT CEMENT COST ADJUSTMENT

For Sections 304, 401, 402, 403, 404, and 405, payments to the Contractor shall be adjusted to reflect increases or decreases in the Delaware Posted Asphalt Cement Price when compared to the Project Asphalt Cement Base Price, as defined in these Special Provisions.

The Delaware Posted Asphalt Cement Price will be issued monthly by the Department and will be the industry posted price for Asphalt Cement, F.O.B. Philadelphia, Pennsylvania. The link for the posting is https://deldot.gov/Business/bids/index.shtml?dc=asphalt_cement_english.

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

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

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

If the mix was not inspected and no QA/QC pay sheet was generated, then the asphalt percentage will be obtained from the job mix formula for that mix ID. The asphalt percentage eligible for cost adjustment shall only be the virgin asphalt cement added to the mix.

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

The Asphalt cement cost adjustment will be calculated on grade PG 64-22 asphalt regardless of the actual grade of asphalt used.

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

Contract No. T201611902

NOTE:

Application of Asphalt Cement Cost Adjustment requirements as indicated above shall apply only to those contracts involving items related to bituminous base and pavements, and with bitumen, having a total of 1,000 tons or more of hot-mix bid quantity in case of Sections 401, 402 and 403; and 15,000 gallons or more in case of Sections 304, 404 and 405.

12/14/2020

401510 – TACK COAT

Description:

The Department will not measure and will make no payment for this item. This language replaces Section 1011 of the Standard Specifications.

SECTION 1011 -TACK COAT

1011.1 Description.

Provide material in accordance with 1011.2 for thin lift maintenance applications, or as directed by the engineer. Provide material in accordance with Section 1011.3 and selected from the approved product list and in accordance with manufacturer recommendations for all other applications.

1011.2 Asphalt Cement (PG Graded).

Provide PG-64-22 (PG 64S-22) as tack coat in lieu of emulsified asphalts.

1011.3 Emulsified Asphalts.

1. Anionic emulsified asphalt in accordance with M140 except the sieve test requirement for field samples collected at the point of use shall be a maximum of 0.4 percent.
2. Cationic emulsified asphalt in accordance with M208 except the sieve test requirement for field samples collected at the point of use shall be a maximum of 0.4 percent.
3. Polymer-modified cationic emulsified asphalts in accordance with M316 except the sieve test requirement for field samples collected at the point of use shall be a maximum of 0.4 percent.
4. Non-Tracking emulsified asphalt in conformance with Table 1011.3-1.

Property	Test Method	Requirement
Saybolt Viscosity at 77 F, (SFS)	AASHTO T59	15-100
Storage Stability Test, 24 hours, (%)	AASHTO T59	1 maximum
Residue by Distillation or Residue by Evaporation, (%)	AASHTO T59	50 minimum
Sieve Test, No. 20, (%)	AASHTO T59	0.4 maximum for field samples
Penetration at 77 F, 100 g, 5 s, (dmm)	AASHTO T49	10-40
Solubility in Trichloroethylene, (%)	AASHTO T44	97.5 minimum

6/11/2024

401580 - RIDE QUALITY OF BITUMINOUS PAVEMENT

Description:

This specification outlines requirements for an acceptable ride surface in addition to requirements established in DelDOT Standard Specifications. The Contractor is responsible for providing smoothness characteristics that meet these requirements. The Contractor is responsible for providing equipment, maintenance of traffic (MOT) as required by the Delaware MUTCD, and performing testing in accordance to this specification. All costs for testing and MOT are incidental to this item. Both the International Roughness Index (IRI) and deviations located within a 10' straightedge are used to characterize smoothness in this Special Provision.

Definitions:

Class 1 Project - a project that consists of full depth construction. Full depth construction is considered to be when contract documents or modifications provide opportunity for preparation of the subgrade prior to paving.

Class 2 Project - a project that consists of a minimum of two smoothness opportunities.

Class 3 Project - a project that consists of one smoothness opportunity.

Deviation - a hump or depression that exceeds defined tolerances.

Smoothness Opportunity - a smoothness opportunity is considered to be any of the following; roadway milling, placement of a leveling course, in-place recycling, or placement of a lift of bituminous concrete. The final wearing surface is considered one smoothness opportunity.

Equipment:

The Contractor must have a 10' straightedge available during all paving operations.

The Contractor must also have a high speed or lightweight inertial profiling system that meets requirements of AASHTO M328 capable of collecting data in both wheelpaths simultaneously.

Contract No. T201611902

Prior to the start of corrective actions, the Contractor must provide to the Engineer:

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

Testing:

The Contractor is responsible for testing the pavement surface using an approved inertial profiler in accordance to manufacturer and AASHTO R57 from the start of paving limits to the end of pavement limits. Testing must be performed 3 times in each lane paved in the direction of traffic flow. Testing must be performed within seven (7) days of completion of project paving operations in each location.

The Contractor is responsible for providing information relative to locations that are to be excluded from calculation of the International Roughness Index. These areas must still meet 10' straightedge requirements.

Areas that are to be tested but will be removed prior to IRI analysis are:

1. 50 feet prior to the first bridge deck expansion joint and 50 feet after the last expansion joint if a bridge deck is excluded from smoothness operations.
2. 50' longitudinally from the center of an existing obstruction within the test area such as a manhole, water main, or catch basin that impedes paving operations.
3. 50' longitudinally from transverse joints that separate it from existing pavement not included on this contract.

Areas that are not to be profiled but are still subject to 10' straightedge requirements are:

1. Shoulder areas
2. Parking lots
3. Ramps, Streets, or Acceleration / Deceleration lanes less than 1000' in length.

Contract No. T201611902

Submission Requirements:

Test results must be submitted to the Engineer within five working days of completion of testing. Results not received within the allotted time frame will be assessed a charge of \$1,000.00 per day at the discretion of the Engineer.

The Contractor is required to submit summary table IRI reports from their test equipment for 1 run for each lane and direction of paving. This report must also include:

1. Profiling Company Name
2. Date of Test
3. Contract Number
4. Location Description
5. Testing Personnel

The Contractor is required to submit ERD files for each of the 3 tests run in each lane and direction of paving to the Engineer for analysis. The Contractor must provide to the Engineer written documentation indicating the start and end of bridges and the center of obstructions relative to the stationing used on the testing that are not subject to IRI analysis.

Acceptance and Payment:

Acceptance of the final pavement will be based on Engineer calculated IRI values using ProVAL software upon removal of allowable areas of exemption and the number of deviations found in the pavement surface. The IRI measurements will be calculated in 0.1 mile (528 foot) sections for payment purposes. The average value of the three test runs will be used and the average value will be rounded to the nearest tenth. Payments for each section will be based on estimated tonnage calculated from plan thickness and widths using the average maximum specific gravity ("Rice") for all surface mix used at that location.

Deviations equal to or in excess of 0.25" in 10' are to be corrected at the Contractor's expense or will have a discount charge of \$200.00 per deviation.

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

Where: L = Length Segment (ft.)

W = Lane Width (ft.)

Contract No. T201611902

T = Plan Thickness (in.)

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

Where: UP = Contract Unit Price (Dollars)

PA = Pay Adjustment (Table A)

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

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

It is possible to receive incentive for IRI measurements and a discount charge for excessive deviations on the same project. If a 528' section has an IRI value resulting in a deduction of at least 84% of the section pay, the deviation discount charge for that section is disregarded and the IRI discount charge is the only action taken for that section.

Table A: Payment Adjustments for IRI	
Class 1	
IRI per 0.1 mile Segment (in./mi.)	Pay Adjustment
≤ 50	103%
> 50 and < 145	100+ 0.2(65- IRI)
≥ 145	84%
Class 2	
IRI per 0.1 mile Segment (in./mi.)	Pay Adjustment
≤ 60	106%
> 60 and < 170	100+ 0.2(90- IRI)
≥ 170	84%

Contract No. T201611902

Correction to the paving surface, such as diamond grinding with approved equipment, patching, or other measures may be taken at the Contractor's expense and at the Engineers discretion to correct pavement surfaces assessed a discount charge. The Engineer may require corrective actions including remove & replace if the deviation discount charge exceeds 50% of the cost of materials or the IRI pay adjustment is 84%. Deviations must be corrected if it is determined that they are at a height or depth that may create a safety concern.

4/10/2019

401699 - QUALITY CONTROL/QUALITY ASSURANCE OF BITUMINOUS CONCRETE

.01 Description

This item shall govern the Quality Assurance Testing for supplying bituminous asphalt plant materials and constructing bituminous asphalt pavements and the calculation for incentives and disincentives for materials and construction. The Engineer will evaluate all materials and construction for acceptance. The procedures for acceptance are described in this Section. Include the costs for all materials, labor, equipment, tools, and incidentals necessary to meet the requirements of this specification in the bid price per ton for the bituminous asphalt. Payment to the Contractor for the bituminous asphalt item(s) will be based on the Contract price per ton and the pay adjustments described in this specification.

.02 Bituminous Concrete Production – Quality Acceptance

(a) Material Production - Tests and Evaluations.

All acceptance tests shall be performed by qualified technicians at qualified laboratories following AASHTO or DelDOT procedures and shall be evaluated using Quality Level Analysis. The Engineer will conduct acceptance tests. The Engineer will directly base acceptance on the acceptance test results, the asphalt cement quality, the Contractor's QC Plan work, and the comparisons of the acceptance test results to the QC test results. The Engineer may elect to utilize test results of the Contractor in some situations toward judging acceptance.

Supply and capture samples, as directed by the Engineer under the purview of the Engineer from delivery trucks before the trucks leave the production plant. Hand samples to the Engineer to be marked accordingly. The sample shall represent the material produced by the Contractor and shall be of sufficient size to allow the Engineer to complete all required acceptance tests. The Engineer will direct the Contractor when to capture these samples, on a statistically random, unbiased basis, established before production begins each day based upon the anticipated production tonnage. The captured sample shall be from the Engineer specified delivery truck. The Contractor may visually inspect the specified delivery load during sampling and elect to reject the load. If the contractor elects to reject the specified delivery truck, each subsequent load will be inspected until a visually acceptable load is produced for acceptance testing. All visually rejected loads shall not be sent to a Department project.

The first sample of the production day will be randomly generated by the Engineer between loads 0 and 12 (0-250 tons). Subsequent samples will be randomly generated by the Engineer on 500-ton sub-lots for the production day. Samples not retrieved in accordance with the Contractor's QC plan will be deemed unacceptable and may be a basis for rejection of material produced. Parallel tests or dispute resolution tests will only be performed on material captured at the same time and location as the acceptance test sample. Parallel test samples or Dispute Resolution samples will be created by splitting a large sample or obtaining multiple samples that equally represent the material. The Engineer will perform all splitting and handling of material after it is obtained by the Contractor.

The Contractor may retain dispute resolution samples or perform parallel tests with the Engineer on any acceptance sample.

The Engineer will evaluate and accept the material on a lot basis. All the material within a lot shall have the same JMF (mixture ID). The lot size shall be targeted for 2000 tons or a maximum period of three days, whichever is reached first. If the 2000th ton target lot size is achieved during a production day, the lot size shall extend to the end of that production day. The Contractor may interrupt the production of one JMF in order to produce different material; this type of interruption will not alter the determination of the size or limits of material represented by a lot. The

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Engineer will evaluate each lot on a subplot basis. The size for each subplot shall be 100 to 500 tons and testing for the sub lots will be completed on a daily basis. For each subplot, the Engineer will evaluate one sample.

The target size of sub-lots within each lot, except for the first sample of the production day, is equal-sized 500 ton sub lots and will be based upon anticipated production, however, more or fewer sublots, with differing sizes, may result due to the production schedule and conditions. If the actual production is less than anticipated, and it's determined a sample will not be obtained (based upon the anticipated tonnage), a new sample location will be determined on a statistically random, unbiased basis based upon the new actual production. If the actual production is going to be 50 tons or greater over the anticipated sub lot production, a new sample location will be determined on a statistically random, unbiased basis based upon the new actual production. The Engineer will combine the evaluation and test results for all of the applicable sublots in order to evaluate each individual lot.

If the Engineer is present, and the quantity exceeds 25 tons, a statistically random sample will be used for analysis. When the anticipated production is less than 100 tons and greater than 25 tons, and the Engineer is not present, the contractor shall randomly select a sample using the Engineer's random location program. The captured sample shall be placed in a suitable box, marked to the attention of the Engineer, and submitted to the Engineer for testing. A box sample shall also be obtained by the contractor at the same time and will be used as the Dispute Resolution sample if requested by the Engineer. The Contractor shall also obtain one liquid asphalt sample (1 pint) per grade of asphalt used per day and properly label it with all pertinent information.

The Engineer will conduct the following tests in order to characterize the material for the pavement compaction quality and to judge acceptance and the pay adjustment for the material:

- AASHTO T312 - Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
- AASHTO T166, Method C (Rapid Method) - Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface Dry Specimens
- AASHTO T308 - Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- AASHTO T30 - Mechanical Analysis of Extracted Aggregate
- AASHTO T209 - Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt (HMA)
- ASTM D7227 - Standard Practice for Rapid Drying of Compacted Asphalt Specimens using Vacuum Drying Apparatus

(b) Pavement Construction - Tests and Evaluations.

The Engineer will directly base acceptance on the compaction acceptance test results, and on the inspection of the construction, the Contractor's QC Plan work, ride smoothness as referenced in the contract documents, lift thickness as referenced in the contract documents, joint quality as referenced in the contract documents, surface texture as referenced in the contract documents, and possibly the comparisons of the acceptance test results to the independent test results. For the compaction acceptance testing, the Engineer will sample the work on a statistically random basis and will test and evaluate the work based on daily production.

Notify the Engineer of any locations within that road segment that may not be suitable to achieve minimum (93%) compaction due to existing conditions prior to paving the road segment. Schedule and hold a meeting in the field with the Engineer in order to discuss all areas that may potentially be applicable to Table 5a before paving starts. Areas that will be considered for Table 5a will be investigated in accordance with the method described in Appendix B. If this meeting is not held prior to paving, no areas will be considered for Table 5a. Areas of allowable exemptions that will not be cored include the following: partial-depth patch areas, driveway entrances, paving locations of less than 100 tons, areas around manholes and driveway entrances, and areas of paving that are under 400 feet in continuous total length and/or 5 feet in width.

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The exempt areas around manholes will be a maximum of 4 feet transversely on either side from the center of the manhole, and 20 feet longitudinally on either side from the center of the manhole. The exempt areas around driveway entrances shall be the entire width of the driveway, and 3 feet from the edge of the longitudinal joint next to the driveway. Areas of exemption that will be cored for informational purposes only include: areas where the mat thickness is less than three times the nominal maximum aggregate size as directed by the Engineer, violations of Section 401.08 in the Standard Specifications as directed by the Engineer, and areas shown to contain questionable subgrade properties as proven by substantial yielding under a fully legally loaded truck. Failure to obtain core samples in these areas will result in zero payment for compaction regardless of the exempt status.

The Engineer will evaluate and accept the compaction work on a daily basis. Payment for the compaction will be calculated by using the material production lots as referenced in **.02 Acceptance Plan (a) Material Production - B Tests and Evaluation** and analyzing the compaction results over the individual days covered in the material production lot. The compaction results will be combined with the material results to obtain a payment for this item.

The minimum size of a compaction lot shall be 100 tons. If the compaction lot is between 101 and 1000 tons, the Engineer shall randomly determine four compaction acceptance test locations. If the compaction lot is between 1001 and 1500 tons, the Engineer shall randomly determine six compaction acceptance test locations. If the compaction lot is between 1501 and 2000 tons, the Engineer shall randomly determine eight compaction acceptance test locations. If the compaction lot is greater than 2000 tons, the Engineer shall randomly determine two compaction acceptance test locations per 500 tons.

If a randomly selected area falls within an Engineer approved exemption area, the Engineer will select one more randomly generated location to be tested per the requirements of this Specification. If that cannot be accomplished, or if an entire location has been declared exempt, the compaction testing shall be performed as per these Specifications, but a note will be added to the results that the location was an Engineer approved exempt location.

Testing locations will be a minimum of 1.0 feet from the newly placed longitudinal joint and 50 feet from a new transverse joint. Cut one six (6) inch diameter core through the full lift depth at the exact location marked by the Engineer. Cores submitted that are not from the location designated by the Engineer will not be tested and will be paid at zero pay. Notify the Engineer prior to starting paving operations with approximate tonnage to be placed. The Contractor is then responsible for notifying the appropriate Engineer test personnel within 12 hours of material placement. The Engineer will mark core locations within 24 hours of notification. After determination of locations, the Contractor shall complete testing within two operational days of the locations being marked. If the cores are not cut within two operational days, the area in question will be paid at zero pay for compaction testing.

Provide any traffic control required for the structural number investigation, sampling, and testing work at no additional cost to the Department. Commence coring of the pavement after the pavement has cooled to a temperature of 140°F or less. Cut each core with care in order to prevent damaging the core. Damaged cores will not be tested. Label each core with contract number, date of construction, and number XX of XX upon removal from the roadway. Place cores in a 6-inch diameter plastic concrete cylinder mold or approved substitute for protection. Separate cores in the same cylinder mold with paper. Attach a completed QC test record for the represented area with the corresponding cores. The Engineer will also complete a test record for areas tested for the QA report and provide to Materials & Research. Deliver the cores to the Engineer for testing, processing, and report distribution at the end of each production day. Repair core holes per Appendix A, Repairing Core Holes in Bituminous Asphalt Pavements. Core holes shall be filled immediately. Failure to repair core holes at the time of coring will result in zero pay for compaction testing for the area in question.

The Engineer will conduct the following tests on the applicable portion of the cores in order to evaluate their quality:

- AASHTO T166, Method C (Rapid Method) B Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface Dry Specimens
- AASHTO T209 - Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt

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- ASTM D7227 - Standard Practice for Rapid Drying of Compacted Asphalt Specimens using Vacuum Drying Apparatus

The Engineer will use the average of the last five test values of the same JMF (mixture ID) material at the production plant in order to calculate the average theoretical maximum specific gravity of the cores. The average will be based on the production days test results and as many test results needed from previous days production to have an average of five samples. If there are less than five values available, the Engineer will use the JMF design value in addition to the available values to calculate the average theoretical maximum specific gravity.

.03 Payment and Pay Adjustment Factors

The Engineer will determine pay adjustments for the bituminous asphalt item(s) in accordance with this specification. The Engineer will determine a pay adjustment factor for the material produced and a pay adjustment factor for the pavement construction. Pay adjustments for material and construction will be calculated independently. When the pay adjustment calculation for either material or construction falls to zero payment per tables 4, 5, or 5a, the maximum pay adjustment for the other factor will not exceed 100.

Pay Adjustment factors will only be calculated on in place material. Removed material will not be used in payment adjustment calculations.

Material Production Pay Adjustments will be calculated based upon 70% of the contract unit price and calculated according to section .03(a) of this specification. Pavement construction Pay Adjustments will be calculated based upon 30% of the contract unit price and calculated according to section .03(b) of this specification.

(a) Material Production - Pay Adjustment.

Calculate the material pay adjustment by evaluating the production material based on the following parameters:

Table 2 - Material Parameter Weight Factors		
Material Parameter	Single Test Tolerance (+/-)	Weight Factor
Asphalt Content	0.4	0.30
#8 Sieve (>=19.0 mm)	7.0	0.30
#8 Sieve (<=12.5 mm)	5.0	0.30
#200 Sieve (0.075mm Sieve)	2.0	0.30
Air Voids (4.0% Target)	2.0	0.10

Using the JMF target value, the single test tolerance (from Table 2), and the test values, the Engineer will use the following steps to determine the material pay adjustment factor for each lot of material:

1. For each parameter, calculate the mean value and the standard deviation of the test values for the lot to the nearest 0.1 unit.
2. For each parameter, calculate the Upper Quality Index (QU):
 $QU = ((JMF\ target) + (single\ test\ tolerance) - (mean\ value)) / (standard\ deviation).$
3. For each parameter, calculate the Lower Quality Index (QL):
 $QL = ((mean\ value) - (JMF\ target) + (single\ test\ tolerance)) / (standard\ deviation).$

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4. For each parameter, locate the values for the Upper Payment Limit (PU) and the Lower Payment Limit (PL) from Table 3 - Quality Level Analysis by the Standard Deviation Method. (Use the column for “n” representing the number of sublots in the lot. Use the closest value on the table when the exact value is not listed).
5. Calculate the PWL for each parameter from the values located in the previous step:
 $PWL = PU + PL - 100$.
6. Calculate each parameter's contribution to the payment adjustment by multiplying its PWL by the weight factor shown in Table 2 for that parameter.
7. Add the calculated adjustments of all the parameters together to determine the Composite PWL for the lot.
8. From Table 4, locate the value of the Pay Adjustment Factor corresponding to the calculated PWL. When all properties of a single test are within the single test tolerance of Table 2, Pay Adjustment factors shall be determined by Column B. When any property of a single test is outside of the Single Test Tolerance parameters defined in Table 2, the Material Pay Adjustment factor shall be determined by Column C.
9. For each lot, determine the final material price adjustment:

Final Material Pay Adjustment =
 (Lot Quantity) x (Item Bid Price) x (Pay Adjustment Factor) x 70%. This final pay calculation will be paid to the cent.

In lieu of being assessed a pay adjustment penalty, the Contractor may choose to remove and replace the material at no additional cost to the Department. When the PWL of any material parameter in Table 2 is below 60, the Engineer may require the removal and replacement of the material at no additional cost to the Department. Test results on removed material shall not be used in calculation of future PWL calculations for Mixture ID.

The test results from the Engineer on production that is less than 100 tons will be combined with the two most recently completed Engineer tests with the same Mixture ID to calculate payment for the lot encompassing the single test. If that cannot be accomplished, the approved JMF will be used to calculate payment for the lot encompassing the single test. Payment for previously closed lots will not be affected by the analysis.

When a sample is outside of the allowable single test tolerance for any Materials criteria in Table 2, that sample will be isolated. For payment purposes, the test result of the out of acceptable tolerance sample will be combined with the two previous acceptable samples of the same JMF and analyzed per this specification. The material that is considered out of the acceptable tolerance will only include the material within the represented sub-lot (i.e., a maximum of 500 tons). If the previous acceptable test result is from the previous production day, only the material produced on the second production day will be considered out of tolerance. All future sub lots will not include the isolated test. The pay factors for the out of tolerance sample lot will be calculated using column C of table 4.

If, during production, a QA sample test result does not meet the acceptable tolerances and the Contractors QC sample duplicates the QA sample test result, the Contractor can make an appropriate change to the mixture (within the JMF boundaries), and request to have that sample further isolated. After the Contractor has made appropriate changes, the Contractor will visually inspect each produced load. The first visually acceptable load will be sampled and tested. If that sample test result shows compliance with the specifications, the material that is considered out of the acceptable tolerance will include the material from the previous acceptable test result to the third load after the initially sampled and tested sample. If the sample does not meet the specification requirements, the Engineer will no longer accept material. Production may resume when changes have been made and an acceptable sample and test result is obtained.

Table 3 B Quality Level Analysis by the Standard Deviation Method							
PU or PL	QU and QL for An@ Samples						
	n = 3	n = 4	n = 5	n = 6	n = 7	n = 8	n = 9
100	1.16	1.50	1.79	2.03	2.23	2.39	2.53
99	-	1.47	1.67	1.80	1.89	1.95	2.00

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98	1.15	1.44	1.60	1.70	1.76	1.81	1.84
97	-	1.41	1.54	1.62	1.67	1.70	1.72
96	1.14	1.38	1.49	1.55	1.59	1.61	1.63
95	-	1.35	1.44	1.49	1.52	1.54	1.55
94	1.13	1.32	1.39	1.43	1.46	1.47	1.48
93	-	1.29	1.35	1.38	1.40	1.41	1.42
92	1.12	1.26	1.31	1.33	1.35	1.36	1.36
91	1.11	1.23	1.27	1.29	1.30	1.30	1.31
90	1.10	1.20	1.23	1.24	1.25	1.25	1.26
89	1.09	1.17	1.19	1.20	1.20	1.21	1.21
88	1.07	1.14	1.15	1.16	1.16	1.16	1.17
87	1.06	1.11	1.12	1.12	1.12	1.12	1.12
86	1.04	1.08	1.08	1.08	1.08	1.08	1.08
85	1.03	1.05	1.05	1.04	1.04	1.04	1.04
84	1.01	1.02	1.01	1.01	1.00	1.00	1.00
83	1.00	0.99	0.98	0.97	0.97	0.96	0.96
82	0.97	0.96	0.95	0.94	0.93	0.93	0.93
81	0.96	0.93	0.91	0.90	0.90	0.89	0.89
80	0.93	0.90	0.88	0.87	0.86	0.86	0.86
79	0.91	0.87	0.85	0.84	0.83	0.82	0.82
78	0.89	0.84	0.82	0.80	0.80	0.79	0.79
77	0.87	0.81	0.78	0.77	0.76	0.76	0.76
76	0.84	0.78	0.75	0.74	0.73	0.73	0.72
75	0.82	0.75	0.72	0.71	0.70	0.70	0.69
74	0.79	0.72	0.69	0.68	0.67	0.66	0.66
73	0.75	0.69	0.66	0.65	0.64	0.63	0.63
72	0.74	0.66	0.63	0.62	0.61	0.60	0.60
71	0.71	0.63	0.60	0.59	0.58	0.57	0.57
70	0.68	0.60	0.57	0.56	0.55	0.55	0.54
69	0.65	0.57	0.54	0.53	0.52	0.52	0.51
68	0.62	0.54	0.51	0.50	0.49	0.49	0.48
67	0.59	0.51	0.47	0.47	0.46	0.46	0.46
66	0.56	0.48	0.45	0.44	0.44	0.43	0.43
65	0.52	0.45	0.43	0.41	0.41	0.40	0.40
64	0.49	0.42	0.40	0.39	0.38	0.38	0.37

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63	0.46	0.39	0.37	0.36	0.35	0.35	0.35
62	0.43	0.36	0.34	0.33	0.32	0.32	0.32

Table 3 B Quality Level Analysis by the Standard Deviation Method							
PU or PL	QU and QL for An@ Samples						
	n = 3	n = 4	n = 5	n = 6	n = 7	n = 8	n = 9
61	0.39	0.33	0.31	0.30	0.30	0.29	0.29
60	0.36	0.30	0.28	0.27	0.27	0.27	0.26
59	0.32	0.27	0.25	0.25	0.24	0.24	0.24

Table 4 - PWL Pay Adjustment Factors		
PWL	Pay Adjustment Factor (%) Column B	Pay Adjustment Factor (%) Column C
100	+5	0
99	+4	-1
98	+3	-2
97	+2	-3
96	+1	-4
95	0	-5
94	-1	-6
93	-2	-7
92	-3	-8
91	-4	-9
PWL<91	PWL - 100	PWL - 100

(b) Pavement Construction - Pay Adjustments.

The Engineer will determine the pavement construction pay adjustment by evaluating the construction of the pavement, based on the following parameter:

- Degree of compaction of the in-place material

Using the test values for the cores, the Engineer will use the following steps to determine the pavement construction pay adjustment for each lot of work.

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1. Calculate the core bulk specific gravity values from the subplot tests values, to the nearest 0.001 unit. Obtain the Theoretical maximum Specific Gravity values from the corresponding laboratory subplot tests.
2. Calculate the Degree of Compaction:
Degree of Compaction =
((Core Bulk Specific Gravity) / (Theoretical Maximum Specific Gravity)) x 100% recorded to the nearest 0.1%.
3. The average compaction for the sublots shall be averaged together for the compaction level of the lot. The lots compaction test level shall be averaged and recorded to the nearest whole percent.
4. Locate the value of the Payment Adjustment Factor corresponding to the calculated degree of compaction from Table 5 or Table 5a.
5. Determine the pavement construction price adjustment by using the following formula:
Construction Pay adjustment = (Lot Quantity) x (Bid Price) x (Pay Adjustment Factor) x 30%.

Table 5: Compaction Price Adjustment Highway Locations		
Degree of Compaction (%)	Range	Pay Adjustment Factor (%)
>= 97.0	>= 96.75	-100*
96.5	96.26 - 96.74	-5
96.0	95.75 - 96.25	-3
95.5	95.26 - 95.74	-2
95.0	94.75 - 95.25	0
94.5	94.26 - 94.74	0
94.0	93.75 - 94.25	1
93.5	93.26 - 93.74	3
93.0	92.75 - 93.25	5
92.5	92.26 - 92.74	3
92.0	91.75 - 92.25	0
91.5	91.26 - 91.74	0
91.0	90.75 - 91.25	-5
90.5	90.26 - 90.74	-15
90.0	89.75 - 90.25	-20
89.5	89.26 - 89.74	-25
89.0	88.75 - 89.25	-30
88.5	88.26 - 88.74	-50
=<88.0	=<88.25	-100*

* or remove and replace it at Engineer's discretion

Table 5A: Compaction Price Adjustment Other ¹ Locations		
Degree of Compaction	Range	Pay Adjustment Factor (%)
>= 97.0	>= 96.75	-100*
96.5	96.26 – 96.74	-5
96.0	95.75 – 96.25	-3
95.5	95.26 – 95.74	-2
95.0	94.75 – 95.25	0
94.5	94.26 – 94.74	0
94.0	93.75 – 94.25	0
93.5	93.26 – 93.74	1
93.0	92.75 – 93.25	3
92.5	92.26 – 92.74	1
92.0	91.75 – 92.25	0
91.5	91.26 – 91.74	0
91.0	90.75 – 91.25	0
90.5	90.26 – 90.74	0
90.0	89.75 – 90.25	0
89.5	89.26 – 89.74	0
89.0	88.75 – 89.25	-1
88.5	88.26 – 88.74	-3
88.0	87.75 – 88.25	-5
87.5	87.26 – 87.74	-10
87.0	86.75 – 87.25	-15
86.5	86.26 – 86.74	-20
86.0	85.75 – 86.25	-25
85.5	85.26 – 85.74	-30
85.0	84.75 – 85.25	-40
84.5	84.26 – 84.74	-50
=< 84.0	=<84.25	-100*

* or remove and replace at Engineer's discretion

¹ This chart is to be used for areas where the structural value of the area to be paved is less than 1.75 as determined by the Engineer. See Appendix B - Method for Obtaining Cores for Determination of Roadway Structure. This chart is applicable to rehabilitation work only; full depth construction will not be considered for Table 5a.

.04 Dispute Resolution

Disputes or questions about any test result shall be brought to the attention of the Contractor and the Engineer within two operational days of reported test results. The following dispute resolution procedures will be used. The Engineer and the Contractor will review the sample quality, the test method, the laboratory equipment, and the laboratory technician. If these factors are not the cause of the dispute, a third-party dispute resolution will be used.

Third party resolution testing can be performed at either another Contractor's laboratory, the Engineer's laboratory, or an independent accredited laboratory. Unless otherwise mutually agreed upon by DAPA and the Engineer, the Engineer's qualified laboratory in Dover and qualified personnel shall conduct the necessary testing for third party Dispute Resolution after the Engineer has provided reasonable notice to allow the Contractor to witness this testing. When disputes over production testing occur, the samples used for Dispute Resolution testing will be those samples the properly captured, labeled, and stored, as described in the second paragraph of the section of these specifications titled **.02 Acceptance Plan, (a) Material Production - Tests and Evaluations**. If no samples are available, the original testing results will be used for payment calculations.

Dispute Resolution samples for air void content will be heated by a microwave oven.

If there is a discrepancy between the Engineer's acceptance test result and the Contractor's test result, the Contractor may ask for the Dispute Resolution sample to be tested. The Contractor may request up to two dispute resolution samples be tested per calendar year without charge. Any additional Dispute Resolution samples run at the Contractors request where the results substantiate the acceptance test result will be assessed a fee of \$125. Any additional Dispute Resolution samples that substantiate the Contractors test result will not be assessed the fee.

When disputes over compaction core test results occur, the Engineer's acceptance core will be used for the dispute resolution sample. The Contractor will be advised on when the testing will occur as referenced above to witness the testing. The results of the dispute resolution testing shall replace all of the applicable disputed test results for payment purposes.

Appendix A - Repairing Core Holes in Bituminous Asphalt Pavement

Description.

This appendix describes the procedure required to repair core holes in a bituminous concrete pavement.

Materials and Equipment.

The following material shall be available to complete this work:

- Patch Material - DelDOT approved High Performance Cold Patch material shall be used.

The following equipment shall be available to complete this work:

- Sponge or other absorbent material - Used to extract water from the hole.
- Compaction Hammer - mechanical (electrical, pneumatic, or gasoline driven) tamping device with a flat, circular tamping face smaller than 6 inches in diameter.

Construction Method.

After core removal from the hole, remove all excess water from within the hole, and prevent water from re-entering the hole.

Place the patch material in lifts no greater than 3 inches and compact with mechanical tamping device. If the hole is deeper than 3 inches, use two lifts of approximately equal depths so that optimum compaction is achieved. Make sure that the patch surface matches the grade of the existing roadway. Make every effort to achieve the greatest possible compaction

Performance Requirements.

The Engineer will judge the patch on the following basis:

- The patch shall be well compacted
- The patch surface shall match the grade of the surrounding roadway surface.

Basis of Payment.

No measurement or payment will be made for the patching work. The Contractor must gain the Engineer's acceptance of the patching work before the Engineer will accept the material represented by the core.

Appendix B - Method for Obtaining Cores for Determination of Roadway Structure

The Contractor is responsible for obtaining cores in areas that they propose are eligible for compaction price adjustments according to Table 5a in this specification. Table 5a is not applicable for new full-depth pavement box construction. Cores submitted for this process shall be obtained according to the following process.

1. Contact Materials & Research (M&R) personnel to determine if information about the area is already available. If M&R has already obtained cores in the location that is being investigated, the contractor may opt to use the laboratory information for the investigation and not core the area on their own.
2. If M&R does not have information concerning the section of the roadway, the contractor needs to contact M&R to arrange for verification of coring operations. Arrangements shall be made to allow for an individual from M&R to be on the site when the cores are obtained. Cores will be turned over to M&R for evaluation.
3. The Contractor is responsible for providing all traffic control and repairing core holes in accordance to 401699 Appendix A - Repairing Core Holes in Bituminous Asphalt Pavements.
4. Cores are to be taken throughout the entire project for the area in question. Cores will be spaced, from the start of the project in increments determined based on field and project specifics. Cores will be evenly distributed throughout the project location. The cores will be taken in the center of the lane in question.
5. Additional cores may be taken at other locations, if surface conditions indicate that there may be a substantial difference in the underlying section. The location of these cores should be documented and submitted to M&R.
6. Cores shall be full depth and include underlying materials. If there is a stone base included in the pavement section, at a minimum 1 core must have information concerning the thickness of the base. This is determined by augering to the subgrade surface.
7. The calculations used to determine the structural capacity of the roadway is as follows. If the contractor finds, upon starting the coring process, that the areas are of greater thickness than applicable to Table 5a, they may terminate the coring process on their own and retract the request.

Structural Number Calculations

Each pavement box material is assigned a structural coefficient based upon AASHTO design guides. The structural coefficient is used to determine the total strength of the pavement section.

Materials used in older pavement sections are assigned lower structural coefficients to compensate for aging of the materials. The coefficients used to determine the structural number of an existing pavement are:

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Existing Material	Structural Coefficient
HMA	0.32
Asphalt Treated Base	0.26
Soil Cement	0.16
Surface Treatment (Tar & Chip)	0.10
GABC	0.14
Concrete	0 - 0.7*

* The Structural Coefficient of Concrete is dependent upon the condition of the concrete. Compressive strengths & ASR analysis are used to determine condition - contact the Engineer if this situation arises.

Newly placed materials use a different set of structural coefficients. They are as follows:

New Material	Structural Coefficient
HMA	0.40
Asphalt Treated Base (BCBC)	0.32
Soil Cement	0.20
GABC	0.14

Example:

Location includes placement of a 1.25" Type C overlay on 2.25" Type B. Existing roadway is cored and is shown to consist of 2" HMA on 7" GABC.

Calculation:

For the Type B lift the calculation would be:

Existing HMA	2 * 0.32	=	0.64
GABC	7 * 0.14	=	0.98
			<u>1.62</u>

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For the Type C lift the calculation would be:

Newly Placed B	$2.25 * 0.4$	=	0.90
Existing HMA	$2 * 0.32$	=	0.64
GABC	$7 * 0.14$	=	0.98
			<u>2.52</u>

11/3/20

601500 - PIPE VIDEO INSPECTION

DESCRIPTION:

This work consists of the video inspection of the storm drain systems, and/or sanitary sewer systems (all pipe sizes included) in accordance with these Specifications, and the details and locations shown on the Plans and by the Engineer.

CONSTRUCTION METHODS:

- A. Number and inspect the entire system(s) involved by means of a closed-circuit television. Inspect one section at a time in the presence of the Department's inspector.
- B. The television camera, specifically designed and constructed for such inspection shall produce color video. The camera lighting shall allow a clear picture of the entire periphery of the pipe and remain operative in 100% humidity conditions. The camera shall Pan and Tilt with capability to scan 360° to view the entire joint. The video system (i.e. camera, television monitor, and other components) shall produce video quality to the satisfaction of the Department. Remove and replace any video system equipment producing video quality found unsatisfactory to the Department.
- C. Document the condition of the entire pipe run by moving the camera through the pipe in either direction. At each joint the camera shall stop and pan the entire circumference of the joint. Between joints, the camera shall move at a nominal speed of 10 to 15 feet per minute never exceeding 30 feet per minute. Manual winches, power winches, television cable, and power rewinds or other devices shall not obstruct the camera view or interfere with proper documentation of the pipe condition.
- D. An experienced and qualified technician shall conduct the video pipe inspections. The technician shall have the capability of controlling the movement of the television camera, adjusting the brightness of the built-in lighting system, and focusing the television camera by remote control. The Department emphasizes the importance of accurate distance measurements. A distance meter and location indicator shall appear on the monitor and video indicating the exact location of the camera in the pipe between two (2) structures.
- E. The television camera shall transmit to a color monitor of not less than 12 in., measured diagonally across the screen. The State inspector must have full visual access of the monitor while in use.
- F. Documentation:
 - 1. Television Inspection Logs: Submit typed reports to the Department for each location clearly showing the relation to the video meter at each problem point observed during inspection. In addition, record other points of significance such as locations of catch basins, junction boxes, manholes, open joints, areas of settlement, misaligned pipe, unplugged lift holes, unusual conditions such as a change of pipe size or type within a run, roots, laterals, storm sewer connections, broken or spalled pipe, presence of scale or corrosion and other discernible features. Supply a copy of such records to the Department.

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2. For the purposes of documentation of a storm drain system, use the following criteria to determine if a joint shall be considered an open joint:

ALL PIPE TYPES	MAXIMUM JOINT OPENING ALLOWED
12-36" ROUND	0.75"
42" & LARGER	1.25"
ALL ELIPTICAL	1.50"

3. DVD Recordings: Supply a minimum of two visual and audio recordings of the drainage and/or sanitary system. Submit a minimum of one video for each location, but do not combine separate locations on the same DVD. The video recording shall playback at the same speed that it was recorded. Submit good quality labeled DVDs in a hard plastic case to become property of The Delaware Department of Transportation.
4. Submit electronically in Excel format the report and list the Delaware State Plane NA D 83 Coordinates for each structure within the drainage system including catch basins, manholes, and all inlet and outlet ends of pipes. Record each structure's Northing and Easting coordinates along with street address and list by structure number. Forward the Excel report to the Department's NPDES electronically after review by the construction staff.

METHOD OF MEASUREMENT:

- A. The Department will measure the quantity of pipe video inspection by the linear foot as indicated on the video monitor and verified by the Engineer.

BASIS OF PAYMENT:

- A. The Department will pay for pipe video inspection at the contract unit price per linear foot. Price and payment will constitute full compensation for:
 1. Providing all materials;
 2. equipment;
 3. obtaining coordinate and elevations;
 4. typed reports;
 5. DVD recordings
 6. safety equipment;

2/3/2022

602502 - CONVERTING EXISTING CATCH BASIN TO MANHOLE

DESCRIPTION:

This work consists of providing all materials and constructing a manhole from an existing catch basin.

MATERIALS:

A. PCC, Class A or B	Section 1022
B. Expansion Joint Material	Section 1042
C. Bar Reinforcement	Section 611 and Section 1037
D. Curing Compound	Section 1022
E. Welding	AASHTO / AWS D1.1 Welding Code
F. Castings	Section 1039.7
G. Steps	AASHTO M199 and ASTM C478
H. Polypropylene	ASTM D4101
I. Borrow, Type C	Section 1001
J. Rectangular Precast Structures	ASTM C913

CONSTRUCTION METHODS:

Construct in accordance with section 602.3

METHOD OF MEASUREMENT:

The Department will measure as each the quantity of catch basins converted to manholes and accepted.

BASIS OF PAYMENT:

- A. The Department will pay the quantity of catch basins converted to manholes. Price and payment will constitute full compensation for:
1. sawcutting;
 2. reinforcing steel;
 3. frames and covers;
 4. excavating within the template of the item;
 5. removal and disposal of existing materials;
 6. providing and placing materials;

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7. forms and forming;
8. supplying, placing, finishing, and curing PCC;
9. joints;
10. expansion joint material;
11. sealing;
12. backfilling;
13. all labor, equipment, tools, and incidentals necessary to complete the item.

1/20/22

615519 - RELOCATING BUS STOP SHELTER

Description:

This work consists of relocating an existing bus stop shelter to a newly reconstructed bus stop with shelter pad as shown in the plans.

Materials:

- | | |
|---------------------|-----------------------------|
| A. Anchor bolts | ASTM A36 |
| a. Galvanized | ASTM A153 |
| B. Nuts and Washers | Grade 18-8, stainless steel |

Construction:

- A. Remove the existing bus stop shelter as one unit.
- B. If an existing trash receptacle is located adjacent to the existing bus stop shelter, remove the trash receptacle separate from the bus stop shelter.
- C. Store the bus stop shelter and trash receptacle in accordance with Section 106.6.
- D. Ensure the bus stop shelter pad is constructed with a bolt pattern that matches the locations on the existing bus stop shelter.
- E. Install the bus stop shelter on the new concrete pad for approval by the engineer.
- F. Install trash receptacle as shown in the plans or as directed by the engineer.
- G. Maintain the bus stop in service at all times, unless approved otherwise by DART or the engineer.

Method of Measurement:

The Department will measure as each the quantity of bus stop shelters relocated and accepted.

Basis of Payment:

- A. The Department will pay the quantity of relocating bus stop shelter at the unit price per each. Price and payment constitutes full compensation for:
 - 1. Removing and storing existing bus stop shelter and trash receptacle;
 - 2. providing and installing the anchor bolts; and
 - 3. all incidentals required to complete the Work.
- B. The Department will pay for:
 - 1. PCC Sidewalk, 8" in accordance with Section 705.

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- C. The Department will not pay for any components that are damaged during construction. Replace any damaged components in kind, to the satisfaction of the engineer.

7/01/2024

701507 – CURB RETAINING WALL

Description:

This work consists of providing all materials and constructing the curb retaining wall.

Materials:

A. GABC	Section 1005
B. Concrete Structures	Section 610
C. Concrete Reinforcement	Section 611
D. Curing Compound	Section 1022
E. 1/2-inch Preformed Expansion Joint Material	Section 1042
F. Bituminous Joint Sealant	Section 1042

Construction Methods:

Place curb retaining wall in accordance with the Plans and the Standard Construction Details.

Method of Measurement:

The Department will measure the quantity of curb retaining wall in linear foot.

Basis of Payment:

- A. The Department will pay for curb retaining wall at the contract unit price per linear foot. Price and payment will constitute full compensation for:
1. Providing and placing materials;
 2. excavating within the template of the item;
 3. backfill and backfilling;
 4. foundation preparation;
 5. compaction;
 6. providing forms and forming; and

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7. removal of surplus material and replacement of cracked or damaged curb retaining wall.

B. The Department will pay for:

1. Excavation and embankment outside the template of the item in accordance with Section 202.
2. Rock removal in accordance with Section 202.
3. Undercut excavation in accordance with Section 202.
4. PCC removal in accordance with Section 211.
5. Sawcutting in accordance with Section 762.

03/13/2023

701510 - CURB/SIDEWALK OPENING

Description.

This work consists of providing all materials and constructing curb/sidewalk openings.

Materials.

- | | | |
|----|---|------------------------------|
| A. | PCC, Class B | Section 1022 |
| B. | Curing Compound | Section 1022 |
| C. | 1/2-inch Preformed Expansion Joint Material | Section 1042 |
| D. | Bituminous Joint Sealant | Section 1042 |
| E. | Bar Reinforcement | Section 611 and Section 1037 |

Construction.

Construct curb/sidewalk in accordance with Section 701.3 and 705.3

Method of Measurement.

The Department will measure the quantity of curb/sidewalk openings as the actual number installed in place and accepted.

Basis of Payment.

The Department will pay for curb/sidewalk openings at the contract unit price per each. Price and payment will constitute full compensation in accordance with Section 701.5 and 705.5.

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705509 - PATTERNED PORTLAND CEMENT CONCRETE SIDEWALK, 4"

705519 - PATTERNED PORTLAND CEMENT CONCRETE SIDEWALK, 6"

705521 - PATTERNED PORTLAND CEMENT CONCRETE SIDEWALK, 8"

Description:

This work consists of constructing patterned PCC sidewalk.

Materials:

- | | |
|---|----------------|
| A. PCC, Class B | Section 1022 |
| B. 1/2-Inch Preformed Expansion Material | Section 1042 |
| C. Joint or Crack Sealant Material | Section 1045 |
| D. Internally Incorporated Concrete Pigment Admixture | ASTM C979 |
| E. Release Agent | |
| 1. Provide a clear release agent formulated to prevent bonding of texturing tools to the concrete surface and that is compatible with the sealant manufacturer recommendations. | |
| F. Topically Applied Non-Film Forming, Amorphous Colloidal Silica Based Finishing Aid | |
| 1. SkaCem-190, or equal. | |
| G. Silane-Based Concrete Sealer | Section 1045.3 |

Construction:

- A. Contractor Requirements and Submissions
 - 1. Submit patterned concrete contractor qualifications verifying successful completion of at least 3 separate patterned concrete projects within the last 5 years to the engineer for approval.
 - 2. Provide a minimum 3-foot x 3-foot sample size of each pattern and color of patterned concrete proposed for use to the engineer for approval.
 - 3. Any necessary field changes to the color will be directed by the engineer.
- B. Incorporate concrete pigment admixture directly into the concrete.
- C. Construct concrete in accordance with section 705.3.
- D. Apply non-film forming, amorphous colloidal silica-based finishing aid in accordance with manufacturers recommendations.
- E. Spray release agent onto the patterning tool. Reapply release agent as needed during patterning.
- F. While concrete is still in plastic stage of set, imprint the engineer approved pattern and texture.
- G. Cure concrete in accordance with section 501.3.6.B.

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- H. Prepare patterned PCC surface for silane-based concrete sealer application in accordance with section 613.3.B.
- I. Apply silane-based concrete sealer to patterned PCC surface in accordance with section 613.3.D.

Method of Measurement:

The Department will measure patterned sidewalk quantity as square feet of patterned sidewalk completed and accepted.

Basis of Payment:

- A. The Department will pay the quantity of patterned sidewalk at the contract unit price per square feet. Price and payment constitute full compensation for:
 - 1. Excavation within the template of the item including the foundation;
 - 2. removal and disposal of existing materials;
 - 3. foundation preparation;
 - 4. providing and placing all materials;
 - 5. compaction;
 - 6. forms and forming;
 - 7. supplying, coloring, placing, finishing, patterning, sealing, and curing PCC;
 - 8. joints;
 - 9. expansion joint material;
 - 10. surface preparation ahead of sealing;
 - 11. sealing;
 - 12. backfill and backfilling;
 - 13. removing surplus materials; and
 - 14. removing and replacing cracked or damaged sidewalk as directed by the engineer.
- B. The Department will pay for:
 - 1. Excavation and embankment outside the template of the item in accordance with Section 202 at the direction of the engineer or in accordance with the contract;
 - 2. rock removal in accordance with Section 202;
 - 3. undercut excavation in accordance with Section 202;
 - 4. PCC removal in accordance with Section 211;
 - 5. saw cutting in accordance with Section 762;
 - 6. GABC in accordance with Section 301; and
 - 7. bituminous pavement patching in accordance with Section 401 in addition to the curb item.
- C. The Department will not pay for any modifications due to color selection during the sample approval process.

705528 - TEMPORARY PEDESTRIAN CONNECTION

DESCRIPTION:

This work consists of constructing and maintaining temporary pedestrian connections at required locations.

MATERIALS:

A. Graded Aggregate	Section 1005
B. Asphalt Cement	Section 1012
C. Asphalt Production	Section 1014
D. PCC, Class B	Section 1022
E. Curing Compound	Section 1022
F. Wood	Section 1041
G. 1/2-Inch Preformed Expansion Joint Material	Section 1042
H. Joint or Crack Sealant Material	Section 1042
I. Truncated detectable warning surface – meeting the requirements of the DeIDOT PAS Manual	

Prefabricated pedestrian connection systems that meet the accessibility requirements may be used with approval of the engineer.

SUBMITTALS:

- A. Submit proposed temporary pedestrian connection locations and materials to be used during each stage of construction to the engineer for approval. Perform no fabrication or installation until approved by the engineer.
- B. Provide a concrete flatwork technician with an ACI or NRMCA certification, or a certification from another Department approved certification program, to supervise all required concrete finishing. Provide the certification to the engineer before placing concrete.

ACCESSIBILITY REQUIREMENTS:

- A. Temporary pedestrian connections are required wherever an accessible pedestrian route crosses a curb or experiences a change of grade requiring a temporary pedestrian connection.
- B. Constructed temporary pedestrian connections must meet the accessibility standards contained in the current edition of the DeIDOT PAS Manual. These accessibility standards include the following.
 - 1. Continuous clear width.
 - a. Provide a minimum continuous clear width of temporary pedestrian connections through medians and pedestrian refuge islands of 5 - feet.
 - b. Provide a minimum continuous clear width of temporary pedestrian connections not through medians and pedestrian refuge islands of 4 - feet.
 - 2. Turning spaces.
 - a. Provide turning spaces at locations where the pedestrian must change their primary direction of travel. Turning spaces on pedestrian connections occur at the following locations.
 - i. Perpendicular curb ramps – at the top of the curb ramp.
 - ii. Parallel curb ramps – at the bottom of the curb ramp.
 - iii. Diagonal curb ramps – at the top of the curb ramp.
 - iv. Combination curb ramps – between the parallel curb ramp used to lower the elevation of the approach pedestrian access route and the perpendicular ramp which connects to the pedestrian street crossing.
 - v. Depressed corners – location will vary by application.

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- b. Provide a turning space running slope which is limited to 2.0 percent maximum.
 - c. Turning space cross slope will vary based on pedestrian connection type and subsequent location of the turning space.
 - i. Provide a turning space cross slope of 2.0 percent maximum at locations where the turning space does not adjoin the pedestrian street crossing.
 - ii. At locations where the turning space adjoins the pedestrian street crossing, the cross slope is limited as follows.
 - (1.) Limit cross slope to 2.0 percent maximum when the pedestrian street crossing has a cross slope less than 2.0 percent.
 - (2.) The cross slope of the turning space may match the cross slope of the pedestrian street crossing when the cross slope of the pedestrian street crossing exceeds 2.0 percent.
 - d. Size.
 - i. Provide a 4 - feet x 4 - feet minimum turning space at unconstrained turning space locations. Unconstrained turning spaces are turning spaces where no feature adjacent to the turning space projects more than 2 inches above the pedestrian access route.
 - ii. Provide a 5 - feet x 4 - feet minimum turning space at constrained turning space locations. Constrained turning spaces are turning spaces where a feature adjacent to the turning space projects more than 2 inches above the pedestrian access route. The orientation of the 5 - feet dimension varies by location.
 - (1.) Perpendicular curb ramp – the long dimension in the direction of the ramp run.
 - (2.) Parallel curb ramp – the long dimension in the direction of the pedestrian street crossing.
 - (3.) Diagonal curb ramp – the long dimension in the direction of the ramp run.
3. Ramp runs.
- a. Ramp running slope.
 - i. Provide a ramp running slope as flat as practical and which does not exceed 8.3 percent if the ramp length is under 15 - feet in length.
 - ii. Ramps that are 15 - feet in length may have a running slope that exceeds 8.3 percent.
 - b. Ramp cross slope will vary based on pedestrian connection type and location of the ramp run.
 - i. Provide a ramp cross slope less than 2.0 percent when the ramp run does not adjoin the pedestrian street crossing.
 - ii. At locations where the ramp run adjoins the pedestrian street crossing, the cross slope is limited as follows.
 - (1.) Limit cross slope to 2.0 percent maximum when the pedestrian street crossing has a cross slope less than 2.0 percent.
 - (2.) The cross slope of the ramp run may match the cross slope of the pedestrian street crossing when the cross slope of the pedestrian street crossing exceeds 2.0 percent.
4. Provide a temporary pedestrian connection surface that is firm, stable, and slip resistant.
5. Grade breaks:
- a. Provide grade breaks at the top and bottom of curb ramp runs perpendicular to the direction of the ramp run.
 - b. Surfaces that meet at grade breaks must be flush.
6. Where vertical deviations are permitted, they are limited based on the change in level between the two adjacent surfaces:
- a. Changes in level between 0 inches to ¼ inches are permitted to be vertical.
 - b. Bevel at a slope no steeper than 2:1 (H:V) for changes in level between ¼ inches to ½ inches.

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- c. Ramp at a slope no steeper than 8.3 percent for changes in level greater than 1/2 inches.
- 7. Provide flared sides on perpendicular curb ramps and blended transitions where the ramp or blended transition edge abuts a walkable surface. Flared sides are to have a maximum slope of 10.0 percent measured at the back of the depressed curb.
- 8. Provide a counter slope at the gutter pan or street at the foot of the curb ramp run, blended transition, and turning space at no more than 5.0 percent maximum.
- 9. Truncated dome detectable warnings:
 - a. Provide dome pattern, dome spacing, dome size, and contrast that meets the DeDOT PAS Manual requirements.
 - b. Provide a detectable warning surface that extends 2 - feet minimum in the direction of travel and extends the full width of the curb ramp, blended transition, or turning space.
 - c. Location of the detectable warning will vary by facility.
 - i. Perpendicular curb ramp – place detectable warning surface as follows:
 - (1.) Place detectable warning surface at the back of curb at locations where the ends of the bottom grade break are in front of the back of curb.
 - (2.) Place detectable warning surface within one dome spacing of the bottom grade break at locations where the distance from either end of the bottom grade brake to the back of curb is 5 - feet or less.
 - (3.) Place detectable warning surface at the back of curb at locations where the bottom grade brake to the back of curb is more than 5 - feet.
 - ii. Parallel curb ramp – detectable warning surface at the back of curb on the turning space at the flush transition between the street and sidewalk.
 - iii. Blended Transitions – detectable warning surface at the back of curb at the flush transition between the street and sidewalk.
- 10. Align the pedestrian connection and the crosswalk so that a 4 - feet x 4 -feet clear space area located below the bottom grade break of curb ramp and blended transition is contained wholly within the crosswalk. Only diagonal curb ramps require that the clear space be located outside of the parallel vehicle travel lane and that a segment of curb 2 - feet long minimum be located on each side of the diagonal curb ramp's flared sides and be within the marked crossing.
- 11. Provide positive drainage to prevent water and debris accumulation.

CONSTRUCTION METHODS:

- A. Construction methods will vary based upon construction material utilized.
 - 1. Place concrete in accordance with section 501.3.
 - 2. Place asphalt in accordance with section 403.
- B. Maintain temporary pedestrian connections in a manner that preserves the accessibility of the feature and of the pedestrian access route it serves. Maintenance may require temporary pedestrian connection relocation or repositioning due to space limitations during the contract duration.
- C. Remove temporary pedestrian connections at the completion of the project or at the direction of the engineer. Restore the area to its previous condition unless directed otherwise by the engineer. All material used to construct the temporary pedestrian connection will be the property of the contractor.

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METHOD OF MEASUREMENT:

- A. The Department will measure the quantity of temporary pedestrian connections as the number each installed and accepted.
- B. The Department will not measure the maintenance and removal of temporary pedestrian connections.

BASIS OF PAYMENT:

- A. The Department will pay the quantity of temporary pedestrian connections at the contract unit price per each. Price and payment will constitute full compensation for the providing and placing of materials, maintenance, and removal of temporary pedestrian connections.
- B. Temporary pedestrian connections stolen or damaged shall be replaced at the Contractor's expense.

6/23/2022

707500 - CHANNEL BED FILL

Description:

This work consists of placing channel bed fill.

Materials:

- A. Provide aggregate material meeting the following requirements:
1. Natural, rounded, unwashed and uncrushed aggregate material meeting the gradation of Table 1 when tested in accordance with AASHTO T-11 and T-27.
 - a. Aggregate material meeting this requirement may be located within the excavation area of the project. This material may be salvaged by separating and stockpiling the material meeting the requirements of Table 1 and Notes 1&2.
 - b. Angular quarried aggregate is unacceptable.

Table 1

Percent Passing	Light ³	Medium ⁴	Heavy
5-inch	100	90-100 ¹	Gradation to be noted on Plan sheets
1-inch	70-100 ¹	0-20 ²	
3/4-inch	30-95		
3/8-inch	0-10 ²		

Notes:

- ¹ Salvaged materials may contain material exceeding this size and be acceptable.
² Salvaged materials may contain up to 20% passing the 3/8-inch sieve but not to exceed 10% passing the #200 sieve when tested in accordance with AASHTO T-11.
³ Unless noted otherwise on plan sheets, light gradation shall be used in locations in Sussex County
⁴ Unless noted otherwise on plan sheets, medium gradation shall be used in locations in Kent and New Castle Counties.

Construction:

Place channel bed fill to the dimensions and at the locations shown on the plans or as established by the engineer.

Method of Measurement:

The Department will measure the quantity channel bed fill as the number of cubic yards of material placed and accepted.

Basis of Payment:

- A. The Department will pay for channel bed fill at the contract unit price per cubic yard. Price and payment will constitute full compensation for:
1. Providing and placing all materials;

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2. salvaging and stockpiling;
 3. hauling;
 4. removal and disposal; and
 5. all incidentals required to complete the Work.
- B. The Department will pay for excavation in accordance with section 203.

11/6/2023

710500 – INSTALLATION OF WATER MAINS AND ACCESSORIES

Description:

Provide, transport, install and test the water main, line, laterals and accessories in accordance with the Contract and as directed by the engineer. Adjust or relocate existing water services, water meter vault, connections, and appurtenances to locations shown in the Contract. Perform the Work in accordance with these Specifications and the requirements of the standards and specifications of the owner of the Utility (“Owner”). In case of conflict between the Contract and the standards and specifications of the Owner, the standards and specifications of the Owner will govern the Work.

The water line Owner is Artesian Water Company. Cost to comply with Owners Specifications are considered incidental to this item.

Materials:

- A. Backfill, Borrow Type C Section 209 and 1001
- B. Borrow, Type F Section 209 and 1001
- C. Stone, Delaware No. 3 Section 1004
- D. Water Services Section 710
- E. Provide materials for pipe, pipe fittings, and all other water main accessories as specified in the Owner’s Specifications. The Owner shall have right to inspect and reject the materials if their specification requirements are not met.

Special Requirements:

- A. All work shall be performed by a qualified Contractor with experience in installing water mains and services within municipalities.
- B. Contact the Owner’s representative, Wayne Tyler at (302) 453-6987 at least 2-weeks prior to the start of construction. The designated representative must observe and approve all water utility work.
- C. Coordinate all water service construction activities with the Owner. Provide the Owner with reasonable time to respond to requests for information and coordination. Submit to Owner for approval, three weeks prior to beginning the Work, a plan describing the logical sequence for water service shut-downs and tie-ins.
- D. The Owner and the engineer retain the sole right of determining the times that the Work can occur and the sequence of the Work. Do not begin Work until both the Owner and the engineer grant permission to proceed. Notify the Owner a minimum of two Business Days before beginning Work to allow the Owner to arrange inspection. Immediately notify both the engineer and the Owner of all delays to the scheduled Work.
- E. The Contractor will be permitted to close specific water mains and services for a period not exceeding two hours after obtaining approval from the Owner in order to make connections as shown in the Plans. The schedule for making connections will be so arranged that the water users will be out-of-service for a minimum period of time. The Contractor will receive no additional compensation for working during off-peak hours.
- F. Before any shutdown, give the Owner and local 911 Center and Fire Department two Business Days’ notice; and the Contractor must also provide written notice to all water users in the area, a minimum of two Business Days in advance of the closing of any water valves which may interrupt customer water service. Shutdowns are not permitted if tapping sleeves and valves are specified for making the connections.

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- G. Do not operate any valve or other control on the existing system for any purpose. The proper Owner's personnel will operate all existing system devices.
- H. Hydrant connections are prohibited.
- I. Field verifies all utilities prior to the start of construction.
- J. Provide a shop drawing of the PCC water meter vault to the Engineer and Owner prior to production for approval.
- K. Provide a Work Plan 14 days prior to starting the work that includes:
 - 1. Duration of necessary water service interruptions, if any;
 - 2. Coordination with Owner when the vault is to be delivered;
 - 3. Coordination with Owner when the vault is to be installed;
 - 4. Pressure and Sterilization procedure.

Construction:

A. Excavation:

- 1. Excavate and backfill trenches per the Owner's Specifications.
 - a. Excavate pipe trenches so that the bottoms of the trenches are smooth and at grade and will provide bearing for the full length of pipes placed in them.
 - b. Excavate trenches so that the elevations of water pipes and fittings placed in the trenches match the elevations provided in the Plans.
 - c. Excavate trenches for water service connections to the minimum standard depth required by the Owner's specifications or to such depth as required to connect to existing mains or service pipes.
- 2. The engineer and the Owner have the right to limit the amount of trench opened in advance of pipe to be placed, and the amount of pipe placed in advance of backfilling. Upon notice by either the Owner or the engineer, immediately refill open trenches as directed.
 - a. Claims for extra compensation due to immediate demands for backfilling, even if such backfilling compels the Contractor to temporarily stop other Work, will not be considered.
- 3. If the Contractor stops Work on any trench or excavation for any reason and the excavation is left open for an unreasonable length of time, as determined by the engineer, refill such trench or excavation as directed by the engineer, at the Contractor's expense and at no extra cost to the Owner or the State. Do not re-excavate the trench until the engineer determines that the Contractor is ready and able to progress the Work.
- 4. Dewater the excavation as required to keep all excavations free from water or other liquids during the progress of the Work.

B. Installation:

- 1. Thoroughly clean all pipes, fittings, valves, hydrants and appurtenances before placement and keep clean until acceptance of the Work. No work may be performed except under the supervision of the Owner's inspector.
- 2. At the close of the work each Day, tightly close the end of each pipe to prevent dirt, foreign substances or small animals from entering the pipe until the work is resumed.

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3. Carefully handle and lower pipes and fittings into the trench. Take special care to ensure that all pipes are well bedded on solid foundations.
4. Where the manufacturer's recommended pipe joint deflection is exceeded, place mechanical joint bends to realign the pipe to the satisfaction of the Owner and the engineer.
5. Do not place pipe on a frozen foundation or if frost is likely to penetrate the bottom of an excavation.

C. Pressure Testing:

1. Conduct pressure tests in accordance with the Owner's specifications.

D. Sterilization of Main, Line, Laterals and Accessories:

1. Conduct sterilization procedures and sterilization tests in accordance with the Owner's specifications.

E. Abandoning and/or Removing Existing Water Mains:

1. Coordinate with the Owner's inspector to have the existing water system isolated within the limits of construction prior to work starting.
2. Close new proposed isolation valve and the existing isolation valve to isolate the existing water main section designated for removal, cut and cap both ends, and remove existing water main and appurtenances to the limits shown on the Plans.
3. Salvage and return the existing water meter to Artesian's maintenance yard located at 664 Churchmans Road Newark DE, 19702.
4. Dispose of all removed water main materials in an approved and acceptable manner.

F. Excavate and grade to ensure the top of the vault is fully covered while leaving the vault doors exposed for access at existing ground elevation.

G. Final Location Drawings

1. Within 30 days after completion of the Work, submit an accurate print or prints showing the horizontal and vertical location of mains, bends and other appurtenances to the engineer and the Owner. These drawings shall be signed and sealed by a Professional Engineer licensed in the State of Delaware.

Method of Measurement:

The Department will not measure installation of water mains and accessories.

Basis of Payment:

A. The Department will pay for Installation of Water Mains and Accessories at the contract lump sum price. Price and payment constitutes full compensation for:

1. Providing, and placing all materials;
2. adjusting, relocating or repairing the services,
3. testing and sterilization of the water main system;
4. repairing leaks and defects, including defects due to settlement;
5. connecting to existing water main systems and services;
6. maintaining service as required;

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7. excavating and backfilling;
 8. disposing of excess excavated material;
 9. joint restraints,
 10. pipe bedding,
 11. sheeting and shoring, temporary support of existing utilities,
 12. dewatering;
 13. abandoning, removing and disposal of existing facilities,
 14. cutting and capping new or existing lines,
 15. tracing wire, and detector tape,
 16. preparing and submitting all submissions, and
 17. all incidentals required to complete the Work.
- B. The Department will not pay for remediation work required by the Department or the Owner.
- C. Guarantee all workmanship, materials and Work performed is in strict accordance with the Contract, for a period of 2 years from and after the date of acceptance by the Department. Remediate to the satisfaction of the engineer, all work and materials, which fail to meet the guarantee. The Department will make no payments for this Work, including necessary traffic control.
- D. A percentage of the total Lump Sum will be paid based on the work performed in each pay period. The percentage will be calculated by multiplying the total units of each completed Breakout Item times the appropriate unit price; then adding the total dollars of completed work, divided by the total Lump Sum bid price for item 710500. Final payment may result in less than 100% of the total Lump Sum based on actual work performed. Should the Lump Sum total be exceeded, additional funds will be added by Change Order based on the best available estimate at the time. Failure to fully complete the Breakout Sheet for this Item will result in the bid being declared non-responsive.

7/1/2024

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711500 - ADJUST AND REPAIR EXISTING SANITARY MANHOLE

Description.

This work consists of adjusting and repairing existing sanitary manholes.

Materials.

- | | |
|---------------------------------------|--------------------------------|
| A. Manhole frames, lids, and castings | Section 711 and Section 1039.7 |
| B. PCC, Class B | Section 1022 |
| C. Bar Reinforcement | Section 1037 |

Construction.

- A. Vertically adjust the sanitary manhole to be flush with the pavement or surrounding surface in accordance with the contract or as directed by the engineer.
- B. Repair any damage to the existing sanitary manhole to the satisfaction of the engineer and utility owner in accordance with Section 711.3
- C. If there is a conflict between the Department's specifications and the specifications of the utility owner, the utility owners specifications take precedence.

Method of Measurement.

The Department will measure the adjustment and repair of existing sanitary manholes as the number of each accepted.

Basis of Payment

The Department will pay for adjust and repair existing sanitary manholes at the contract unit price per each and in accordance with Section 711.5.

8/15/2024

711508 – ADJUST AND REPAIR EXISTING SANITARY VALVES

Description:

This work consists of adjusting and repairing the existing sanitary valves.

Materials:

- | | |
|-------------------|--------------|
| A. PCC, Class B | Section 1022 |
| B. Borrow, Type C | Section 1001 |

Construction Methods:

- A. Perform the work in accordance with the contract and the utility owner's specifications. In cases of conflict between the contract and the utility owner's specifications, the utility owner's specifications take precedence.
- B. Adjust the top of the sanitary valve.
 1. Saw cut existing bituminous concrete or PCC pavement a minimum of 2 feet from face of the utility service.
 2. Excavate materials from the perimeter in accordance with section 207.3. Dispose of waste materials in accordance with section 106.8.
 3. Remove existing castings. Clean and set castings aside for reuse or replacement in accordance with the contract. If the engineer determines the casting is damaged and not suitable for reuse, provide a new casting as provided by the utility owner.
 4. Place forms for the top unit.
 5. Rebuild existing masonry found to be in poor condition using materials conforming with the original structure and acceptable to the utility owner.
 6. Encase in PCC, Class B.
 7. Dispose of removed utility as directed by the utility owner.

Method of Measurement:

- A. The Department will measure the quantity of adjust and repair existing sanitary valve as the number of each adjusted or repaired and accepted.

Basis of Payment:

- A. The Department will pay for adjust and repair existing sanitary valve at the contract unit price of each. Price and payment will constitute full compensation for:
 1. Providing and placing all materials;
 2. maintaining service during construction;
 3. saw cutting existing bituminous concrete or PCC Pavement;
 4. excavating;
 5. adjusting and repairing the sanitary valve;
 6. disposing of excess excavated material; and
 7. backfilling and backfill material.

7/5/22

763501 - CONSTRUCTION ENGINEERING
763597 – UTILITY CONSTRUCTION ENGINEERING

DESCRIPTION:

- A. This work consists of construction lay out. Subsection 105.10 Construction Stakes, Lines and Grades will be replaced by this spec.
- B. The Department will only establish the following:
 - 1. Original and final cross-sections for borrow pits.
 - 2. Final cross-sections:
 - a. Top and bottom pay limit elevations for all excavation bid items that are not field measured by construction inspection personnel.
 - b. 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.
 - 3. Line and grade for extra work added on to the Plans.
- C. When applicable, this work will also consist of providing construction and right-of-way/easement information to utility companies performing work (as defined in the Utility Statement) within the LOC.

MATERIALS:

Not applicable.

CONSTRUCTION METHODS:

- A. Equipment
 - 1. Use and 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. 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.
 - 2. If the use of GPS technology in construction stakeout is chosen, provide the engineer with a GPS rover and automatic level for the duration of the contract. The GPS rover must be in good working condition and of similar make and model. Provide formal training on the GPS system being used to a maximum of 4, of the engineer's appointees. The formal training must be up to 8-hours or to the satisfaction of the engineer. At the end of the contract, the engineer will return the GPS rover. If any of the equipment/instruments are found to be out of adjustment or inadequate to perform its function, they shall be immediately replaced to the satisfaction of the engineer.

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3. Choosing to use GPS technology does not give the authority to use machine control. Construction Engineering (GPS) Machine Control Grading shall only be used if noted in the contract outlining the available files that will be provided 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 contract shall be provided. 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.

B. Engineering/Survey Staff

1. Provide and have available an adequate engineering staff that is competent and experienced to set lines, grades, and compatibility with the scope of the project. Additionally, 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 subcontracting requirements of Section 108.1. Assume full responsibility for any errors and/or omissions in the work of the engineering staff.

C. Performance Requirements

1. Construction Engineering shall include establishing:
 - a. the survey points and survey centerlines;
 - b. finding, referencing, offsetting the project control points;
 - c. running a horizontal and vertical circuit to verify the precision of given control points.
2. Establishing plan coordinates and elevation marks for:
 - a. culverts,
 - b. slopes,
 - c. subbase,
 - d. subsurface drains,
 - e. paving,
 - f. subgrade,
 - g. retaining walls,
 - h. any other stakes required for control lines and grades.
3. Setting vertical control elevations for:
 - a. footings,
 - b. caps,
 - c. bridge seats and deck screed.

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4. Preserve the Department's project control points and benchmarks. 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. Replace any or all stakes that are destroyed at any time during the life of the contract as directed by the engineer. 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-feet. The horizontal control precision ratio shall have a minimum precision of 1:20,000 feet of distance traversed prior to adjustment.
5. Perform construction centerline layout of all roadways, ramps, connections, and driveways from project control points set by the engineer. Use the profiles and typical sections provided in the plans shall calculate proposed grades at the edge of pavement or verify information shown on the Plans.
6. Advise the engineer of any horizontal or vertical alignment revisions needed to establish smooth transitions to existing facilities. 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.
7. Establish the working points at 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 in accordance with the contract. Before completion of the fabrication of beams for bridge superstructures, verify the locations, both vertically and horizontally, of all bearings and 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, survey top of beam elevations at a maximum of 10-foot stations and compute screed grades. Submit the beam elevations 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 intervals as established by the engineer to assure that all components of the structure are constructed in accordance with the lines and grades shown on the plans. Take full responsibility for all structure alignment control, grade control and all necessary calculations to establish and set these controls.
8. Investigate proposed construction for possible conflicts with existing and proposed utilities. Report any conflicts to the engineer for resolution.
9. Stake all sidewalk and curb ramp grades in accordance with the contract. Review the stakeout with the engineer prior to construction. The engineer must approve any deviation from the Contract in writing.

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10. Stake all drainage inlets in accordance with the Contract. The offsets and top of grate elevations need to be calculated for each type of drainage inlet specified in the contract in order to line up the drainage inlet's flow line with the specified curb or ditch flow line as shown in the contract. The engineer must approve any deviations from the Contract in writing.
11. If wetland areas are involved and specifically defined on the plans the following shall apply:
 - a. Do not enter, damage, or destroy wetland areas, which exist beyond the LOC. These provisions will be strictly enforced, and all personnel shall understand the importance of these provisions.
 - b. Delineate wetlands at the LOC throughout the entire project, before any clearing operations commence as shown on the plans to the satisfaction of the engineer.
 - c. Use orange vinyl flagging material with "Wetland Boundary" printed on the flagging. In wooded areas, tie the flagging on the trees, at approximate 20-foot intervals through wetland areas. In open field and yard areas that have been identified as wetlands, drive 6-foot posts into the ground at approximate 50-foot intervals and tie with the flagging. The flagging shall extend approximately 12-inches in length beyond the post. Use oak posts with cross sectional dimensions of 1 1/2-inches to 2-inches by 1 1/2-inches to 2-inches or 1/4-inch rebar.
 - d. If the flagging has been destroyed and the engineer determines that its use is still required, reflag the area. Flagging shall be replaced within 48-hours of notification that replacement is needed. After 48-hours the engineer may proceed to have the area reflagged.
 - e. Remove all posts and flagging at Project acceptance.
 - f. Assume any responsibility for any damages to wetlands located beyond the LOC, which occurs from his/her operations during the life of the contract. Restore all temporarily disturbed wetland areas to their preconstruction conditions.
12. 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.

D. Submittals

1. All computations, survey notes, electronic files, and other records necessary to accomplish the work shall be preserved and 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 and any necessary correction to the work shall be made as soon as possible. Provide the engineer with such assistance as may be required for checking all lines, grades, and

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measurements necessary for the execution of the work. Checking by the engineer shall not relieve responsibility for the accuracy or completeness of the work. Copies of all notes must be provided to the engineer at the completion of the Project.

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

E. Machine Control Grading

1. Machine control grading to be used on the project if authorized by the engineer.
2. 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.
3. Materials:
 - a. Provide all equipment required to perform GPS machine control grading, including equipment needed by to verify the work to the engineer.
 - b. Use manufacturer's GPS machine control equipment and system to achieve the grading requirements in accordance with the Contract.

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4. Construction
 - a. Convert the electronic data provided by the Department into the format required for the equipment.
 - b. The Department will provide no additional electronic data.
 - c. Perform at least one 500-foot test section with the selected GPS system to demonstrate 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. Failure to demonstrate this ability to the satisfaction of the engineer, construct the project using conventional surveying and staking methods.
 - d. DeIDOT Responsibilities:
 - i. The Department will set initial vertical and horizontal control points in the field for the project as indicated in the contract.
 - ii. The Department will provide the project specific localized coordinate system.
 - iii. The Department may provide data in an electronic format as indicated in the general notes.
 - (1.) The information provided shall not be considered a representation of actual conditions to be encountered during construction. Providing this information does not relieve the responsibility of making an investigation of conditions to be encountered. This includes site visits and basing the bid on information obtained from these investigations, and the professional interpretations and judgments of the Contractor.
 - (2.) The Department will develop and provide electronic data for use as part of the Contract in the format as indicated in the Plans.
 - iv. The Department will provide the following electronic files:
 - (1.) ASCII data files with coordinates and elevations for proposed points as selected by the engineer.
 - (2.) Existing digital terrain model in .dtm file format compatible with software currently used by the Department.
 - (3.) Proposed digital terrain model in .dtm file format compatible with software currently used by the Department.
 - (4.) Design file in .dgn file format, that contains 3D features lines for the proposed design, 3D feature lines are for the proposed top surface elevation only.
 - v. The engineer will perform spot checks of the machine control grading results, surveying calculations, records, field procedures, and actual staking. If the work is not being

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performed in a manner that will assure accurate results, the engineer may order the work to be redone to the requirements of the contract. The engineer may also require the use of conventional surveying and staking.

- e. Contractor's responsibilities:
- i. No less than 2-weeks before the scheduled preconstruction meeting, 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.
 - ii. If the need to establish new control points, traverse from existing control points and verify to be accurate by conventional surveying techniques.
 - iii. Assume all risks and liabilities of any assumptions or manipulations marked from the electronic information provided or if chosen to develop a separate digital terrain model.
 - iv. Ensure that the electronic data provided will function in their machine control grading system.
 - v. 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. Provide a total of 8-hours of formal training on the GPS machine control system to the engineer and up to 3 additional Department appointees per rover.
 - vi. Review and apply the data provided by the Department to perform GPS machine control grading.
 - vii. Convert the electronic data provided by the Department into a format compatible with their system.
 - viii. At the beginning of each work day check and if necessary, recalibrate the GPS machine control system in accordance with the manufacturer's recommendations, or more frequently as needed to meet the requirements of the project.
 - ix. Meet the accuracy requirements as detailed per the Department's standards.
 - x. 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 not to exceed 1000-foot intervals. 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

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the engineer prior to construction activities. Assume responsibility for all errors resulting from these efforts and correct deficiencies to the satisfaction of the engineer.

- xi. Provide stakes at all alignment control points, at every 500-foot stationing, and where required for coordination activities involving environmental agencies and utility companies.
- xii. Set hubs, at a minimum of 500-foot intervals, at the top of finished grade at all hinge points on the cross section 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, and wetland mitigation sites. These control points shall be established using conventional survey methods for use by the engineer to check the accuracy of the construction.
- xiii. Preserve all reference points and monuments that are identified and established by the engineer for the Project.
- xiv. Provide control points and conventional grades stakes at critical points such as, PC's, PT's, superelevation points, and other critical points required for the construction of drainage and roadway structures.
- xv. 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.
- xvi. 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 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. Operate and maintain all elements of the Machine Grade Control continuously once the operations begin until otherwise approved by the engineer.

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5. Contract Control Plan:

- a. Develop and submit a Contract Control Plan for use of Machine Control Grading. Contract control includes all primary and secondary horizontal and vertical control which will be used for the construction contract. Upon the completion of the initial survey reconnaissance and control verification, but prior to beginning primary field operations, submit a Contract Control Plan document. The Contract Control plan shall be signed and sealed by a Delaware licensed Land Surveyor or Delaware Professional Engineer who oversees its preparation for acceptance by the engineer. The plan shall include the following:
 - i. A control network diagram of all existing horizontal and vertical control recovered in the field as contract control.
 - ii. 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.
 - iii. 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.
 - iv. 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.
 - v. 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.
 - vi. 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.
 - vii. If chosen 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 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.

F. Utility construction methods:

1. The engineer must approve all requests for Utility Construction Engineering before the work begins.

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2. Instruct utility companies to submit their requests to the engineer. The engineer will decide if the requested work meets the criteria for Utility Construction Engineering or is normal Construction Engineering and pass the requests along with the decision.
3. The survey crew size shall be adequate to efficiently perform the work required and must be approved by the engineer.
4. Work covered under Utility Construction Engineering will fall into two categories:
 - a. Engineering/surveying work that is not necessary for construction of the Project, staking the clear zone line, providing cut/fill grades at proposed utility pole locations, staking back of drainage structures, and staking right-of-way lines where construction of the Project (exclusive of utilities) is within the right-of-way.
 - b. Engineering/surveying work that is necessary for construction but must be provided for utility companies well in advance of the need and will likely need to be redone later, as determined by the engineer. This can be any of the Construction Engineering work that when done early cannot be expected to remain undisturbed until needed for construction of the Project (non-utility).

METHOD OF MEASUREMENT:

- A. The Department will not measure construction engineering.
- B. The Department will measure the quantity of utility construction engineering as the number of hours the survey crew is in the field actively engaged in utility construction engineering work.

BASIS OF PAYMENT:

- A. The Department will pay the lump sum unit bid price for this work. Price and payment constitute full compensation for:
 1. the work associated with construction engineering;
 2. providing all equipment and instruments;
 3. providing and placing stakes;
 4. flagging and any reflagging;
 5. reconstruction of work;
 6. all costs related to the development of separate digital terrain model;
 7. reestablishing reference points; and
 8. wetland restoration.
- B. The Department will pay for utility construction engineering at the contract unit price per hour actively engaged in performing the work. Price and payment will constitute full compensation for:
 1. Office work;
 2. providing all labor;

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3. equipment;
 4. instruments;
 5. stakes; and
 6. other materials necessary to complete the Work.
- C. The Department will make monthly payment in proportion to the amount of work done as determined by the engineer.
- D. The Department will not make any adjustment in payment for any issues with equipment to operate the GPS machine control system for any construction items or be justification for granting contract time extension.
- E. The Department will not make any consideration 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.
- F. The Department will not make any adjustments for all liability, costs, or delays if the Contractor chooses to develop a separate digital terrain model.

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763503 - TRAINEE

DESCRIPTION:

The work will consist of providing training in the construction crafts in accordance with the requirements stated in the General Notices of this proposal under the Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246).

METHOD OF MEASUREMENT:

The quantity of trainee hours will be measured as the actual number of hours the trainee is actively engaged in construction activities.

BASIS OF PAYMENT:

The Department will pay for trainee at a fixed rate of \$0.80 per hour toward the hourly rate.

763520 - ELECTRONIC TICKETING

Description:

This work consists of providing electronic data for material weight tickets delivered to the project. This work also consists of placing an identifying vehicle number on the driver side and the passenger or rear sides of the delivery vehicle. This does not preclude or dismiss any requirement for paper tickets required by the Standard Specifications or other rules and regulations.

General Requirements:

- A. Send electronic tickets (eTicket) to the Department’s Electronic Ticketing Portal <https://tickets.deldot.gov> as they are generated. The Department will reject any load that does not have a corresponding eTicket unless the cause is beyond the contractor’s control. In such circumstances paper tickets may be permitted at the discretion of the engineer.
- B. Payment for material weight delivered to the project will be based upon the eTickets marked “*Delivered*”, less waste, excess material weight as noted in 105.12 of the Standard Specifications, and any audit corrections.
- C. Do not reissue or reprint tickets that have been marked “*Delivered*” or “*Rejected*” without first notifying the engineer. The engineer may reject a reissued or reprinted ticket at their discretion. When a reissued or reprinted ticket is rejected, payment will be based upon the original ticket.

Data Integration:

Request a list of the Department’s naming nomenclature. Include in the request an identification of what system the supplier utilizes for its load read-out weighing system. If necessary, create an Application Programming Interface (API) to integrate with the Department’s eTicketing Portal. Utilize the API to provide electronic data from the load read-out weighing system at the material source that is readable by the Department’s eTicketing Portal. Update the load read-out weighing system and API as necessary to maintain connection the Department’s eTicketing Portal.

The data shall be provided as follows:

Reference Field No.	Description	Examples	Data Type	Required
1	Ticket Number	5126349, 101R, 539-19	String	Yes

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2	Contract Number	T202011001	String	Yes
3	Contract Name (Job)	Walnut Street Streetscape Improvements	String	Yes
4	Contractor Name (Customer)	Mumford & Miller, Inc.; A Del Construction	String	Yes
5	Supplier Name	River Asphalt; Allan Myers Materials	String	Yes
6	Supplier Plant	Plant #1 Dagsboro; Dover Asphalt	String	Yes
7	Job Number (Location)	Task 1; Location 5	String	Yes
8	Weigh Master Name	Johnny Scales	String	Yes
9	Weigh Master ID	1234567	String	Yes
10	Left Intentionally Blank			No
11	Mix Design ID (Product)	1628p; AM-WILM-29 76-22	String	Yes
12	Material Type (Product Description)	9.5mm top; 19MM 76-22 NON CARB	String	Yes
13	Item No. (Product Code)	401005; 401016	String	Yes
14	Load Number	75	Number	Yes
15	Identifying Vehicle Number	T-1	String	Yes
16	Hauler	John Doe Trucking	String	Yes
17	Legal Gross Vehicle Weight	73,280	Number	Yes
18	Loading Date & Time	2020-06-15T13:45:30	String	Yes
19	Gross Weight	72,980	Number	Yes
20	Net Weight	27,900	Number	Yes
21	Truck Tare Weight	45,080	Number	Yes
22	Void	280	Number	No
23	Daily Running Total	44.43	Number	Yes

All provided weights shall be accurate to 0.01 tons.

Loads which do not have the required data shall be rejected.

Setup and Calibration:

Conduct a test of each supplier's integration with the Department's eTicketing Portal prior to shipping material. Complete test at least 14 days prior to shipping material unless otherwise approved by the engineer. The test must involve at least four calibration eTickets from each supplier approved for use on the project. The calibration eTickets must accurately reflect the categories 1-7 shown above; all other categories shall be marked "TEST". After the engineer confirms the calibration eTickets have been entered into the Department's eTicket Portal, void the eTickets with the reason "Calibration Testing".

Uptime:

Uptime reliability of the material supplier's ticketing system must be 99.5% over any 30-day rolling period. Uptime is defined as the ability for the Department to receive electronic tickets within a maximum of 10 minutes from when the ticket was created.

Load Identification:

Ensure the identifying vehicle numbers on the delivery vehicle correspond to the ticket. Place the numbers on the delivery vehicles such that at least one can be safely read from within the work area. Delivery vehicles without identifying vehicle numbers shall be rejected.

Method of Measurement:

The Department will not measure electronic ticketing.

Basis of Payment:

- A. The cost associated with creating and maintaining an API, providing electronic ticketing data, and placing identifying vehicle numbers on the delivery vehicles is incidental to the item being placed.
- B. The Department will make no payment for material that is rejected.

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763525 – ROAD USER COST

Description:

Road User Cost shall be assessed to compensate failure to open the project to unrestricted highway traffic on time in accordance with the contract's General Description.

Method of Measurement:

The Department will not measure Road User Cost.

Basis of Payment:

The assessment will be determined by the Road User Cost documentation in the General Description of the Contract.

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763598 – FIELD OFFICE, SPECIAL I

763599 - FIELD OFFICE, SPECIAL II

Description:

This work consists of providing, erecting, equipping, maintaining, and removing modular offices and adjacent parking areas. These field office units may be situated in different locations. Each field office and parking area are for the exclusive use for Department personnel, engineers, designers, consultants, and inspectors.

Materials:

- A. Each modular office and adjacent parking lot must meet the requirements in Table 1, Table 2, Table 3 and as described below:
1. 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.
 2. 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.
 3. Contain interior and exterior paneling, lighting, and plumbing fixtures.
 4. Provide suitable indoor toilet facilities in accordance with the requirements of state and local Boards of Health, or of other bodies or courts having jurisdiction in the area.
 5. Connect to the local water and sanitary lines. If public utilities are not available, utilize freshwater and wastewater holding tanks to provide with running water.
 6. Provide an adequate positive locking system on the inside of the restroom doorway to ensure privacy.
 7. 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.
 8. Equip 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.
 9. Provide 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 power can be established.
 10. Perform or arrange all necessary utility connections and/or their maintenance.
 11. Provide maintenance of the heating, exhaust fan, and air conditioning equipment by validated service contracts for the length of the contract.

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12. 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.
13. Provide and maintain the interior with new furnishings. All furnishings must be approved by the engineer prior to installation in the modular 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:
 - a. 12 folding chairs;
 - b. 1 large conference table for a minimum of 12 people;
 - c. 2 trash cans with lids and new plastic liners at each disposal interval – 1, 30+ gallons, 1, 10+ gallons;
 - d. 2 dry erase boards a minimum of 4-foot x 3-foot each with markers and erasers;
 - e. 1 floor mat at each entrance;
 - f. 1 long-handled large-size broom with synthetic bristles and dustpan;
 - g. 2 rough plan racks;
 - h. 2 legal size filing cabinets with 4 drawers;
 - i. 1 legal size fire-resistant filing cabinet with lock and key with 4 drawers and meeting underwriters' approval for not less than one hour test.
14. Provide and maintain the following office equipment for each modular field office; engineer must approve the equipment prior to installation in the field office. Deliver the equipment in new and working condition:
 - a. 2 all-in-one print/copy/scan/fax machine capable of producing 35-pages per minute, double-sided, on 8 1/2-inch x 11-inch and 11-inch x 17-inch paper. Machine must be wireless capable and network capable and be able to print/copy/scan in color and in black and white;
 - b. 2 combination electrical surge, spike, and noise protection devices.
15. Provide all consumables required for the office equipment and furnishings for the length of the contract. These consumables must be provided on request and include 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.
16. Provide an alarm system in each field office for security with electronic, direct connection to a security service provider. The security systems shall have interior motion, window, and entrance detectors and built in manual fire alarms. The Contractor shall provide validated monitoring and service contracts for the length of the Contract for each field office. These contracts shall allow a Department authorized project person to deal directly with the security service provider to request service and/or repair.
17. Provide and maintain a new telephone equipment system meeting the following requirements:
 - a. 3 lines with a call forward busy feature with 1 line being dedicated to communication with the general public;

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- b. 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;
 - c. Locate telephone lines as directed by the engineer;
 - d. Allow a Department-authorized project person to deal directly with the telephone company to report outages and/or request repair;
 - e. 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.
- B. Construct a field office parking lot for each modular field office in accordance with all applicable city, county, state, and federal codes.
- 1. The parking area and entrance pathways shall be a minimum of 6-inch graded aggregate subbase.
 - 2. Provide a stabilized construction entrance in accordance with Section 908 adjacent to the parking area within 25-feet of the water service connection.
- C. 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.
- D. Maintenance of the modular field office and its adjacent parking area includes the following:
- 1. Remove snow and/or ice from the parking area and from the entrance pathways to the field office within 12-hours of each occurrence.
 - 2. Maintain and replace all provided items, furnishings, and equipment.
 - 3. Provide bottled water and drinking cups for the water cooler.
 - 4. Provide lavatory supplies, trash bags, and janitorial supplies.
 - 5. Provide replacement items for all lighting fixtures.
 - 6. Maintain all utilities including telephone system.
 - 7. Provide janitorial and waste disposal services twice a week.
 - 8. Clean up trash and debris from the parking lot once a week.
 - 9. 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.
- E. Field Office, Special Type I consists of 1 single wide trailer measuring 50-foot length by 12-foot width.
- F. Field Office, Special Type II consists of 1 single wide trailer measuring 50-foot length by 12-foot width and 1 double wide trailer measuring 50-foot length by 24-foot width.
- G. Remove the field office from the premises when directed by the Department.

TABLE 1. General Field Office Requirements for Each Modular Office

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.
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.
Height (Floor to Ceiling)	8'-0" nominal.
Insulation	Exterior walls, ceiling, and floor must be insulated.
Internet Access	Via a broadband connection with WiFi access utilizing WPA2 security. Options include cable modem, DSL, or similar service; dial-up is not acceptable. Position the WiFi router to provide sufficient coverage in the field office with a minimum 50-ft radius. Provide 2 data jacks in locations indicated on the approved 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 requirements. Provide and maintain an operational wireless access point. At the Department's sole

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	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	12 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.
Water Service Connections	At least 1 outside water service connection shall be provided at each field office. Each water connection shall have a 3/4" frost proof hose bib with vacuum breaker and shall include 100 linear feet of 5/8" minimum diameter reinforced, industrial or commercial grade, soft rubber hose per connection.

TABLE 2. Field Office Requirements for Single Wide Modular Field Office

Exterior Dimensions	The single-wide field office shall have minimum exterior dimensions of 50'-0" length by 12'-0" width.
Floor Space	The single-wide field office shall be new and have a minimum floor space of 600 square feet.
Furnishing Requirements	2 full-size office desks. Each with filing drawer and fully adjustable ergonomic design swivel chair with armrests and 5-leg base having wheel casters.

TABLE 3. Field Office Requirements for Double Wide Modular Field Office

Exterior Dimensions	The double-wide field office shall have minimum exterior dimensions of 50'-0" length by 24'-0" width.
Floor Space	The double-wide field office shall be new and have a minimum floor space of 1,200 square feet.
Furnishing Requirements	6 full-size office desks. Each with filing drawer and fully adjustable ergonomic design swivel chair with armrests and 5-leg base having wheel casters.

Construction:

A. General Requirements:

1. The Engineer will issue a Notice to Proceed and stipulate the date on or before which the Contractor is expected to begin work in accordance with Section 108.2. Have the office units, their entrances, and their adjacent parking areas and all materials and equipment ready for use at least 7 calendar days prior to the date on which the work is expected to begin as stipulated in the Notice to Proceed and before any construction operations begin. Contract time charges will begin on the day work actually starts or on the date stipulated in the notice to proceed, whichever is earlier. There will be no delays in beginning the contract time charges due to delays in preparing the field office complex.
2. The Contractor is responsible for obtaining all required licenses and permits for installation, and placement of the field office and its parking area.
3. The field office must be available for use by the Department continuously throughout the duration of the Project.

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B. Submittals:

1. Submit a specific location layout drawing and construction details for the proposed field office and its parking area for approval by the engineer.
2. 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.

Basis of Payment:

- A. 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:
1. Providing, placing, and maintaining all materials;
 2. installation and maintenance of stabilized construction entrance;
 3. submittals and all drawings;
 4. removal and restoration of each field office area, entrance, and adjacent parking area to original conditions;
 5. removing hazardous material and/or underground tanks;
 6. obtaining licenses and permits; and
 7. all incidentals required for the Work.

01/31/2024

763626 - DIESEL FUEL COST PRICE ADJUSTMENT

Description:

This section defines the criteria for payments to the Contractor to reflect increases or decreases in the cost of diesel fuel consumed in the performance of applicable construction work.

Contract Applicability:

To have the Diesel Fuel Cost Price Adjustment provisions apply to this project, a properly completed Diesel Fuel Cost Price Adjustment Option form must be submitted to the Department with the Bidder's bid proposal. If a properly completed Diesel Fuel Cost Price Adjustment Option form is not provided by the bidder, the Department will consider the option to apply the Diesel Fuel Cost Price Adjustment provisions for the project to be declined. No further opportunity to elect Diesel Fuel Cost Price Adjustment for the project will be made available.

Price Adjustment Provisions:

A. These price adjustment provisions apply to contract items in the contract schedule of prices as grouped by category. Specific pay items to be adjusted are attached as an appendix to this Special Provision. General category descriptions and the fuel usage factors which are applicable to each are as follows:

1. Categories:

Category	Description	Applicability
A	Earthwork	The combined total of applicable item plan quantities must exceed 5,000 CY.
B	Subbase and Aggregate Base Courses	The combined total of applicable item plan quantities must exceed 500 tons.
C	Bituminous Materials (Bases and Pavements)	The combined total of applicable item plan quantities must exceed 500 tons.
D	Rigid Materials (Bases and Pavements)	The combined total of applicable plan quantities must exceed 5,000 CY.
E	Structures	Contract items will be based upon the total value of work performed for each structure including any associated work, i.e. items not grouped under Categories A thru D.

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2. Diesel Fuel Usage Factors:

Category	Description	Factor	Units
A	Earthwork	0.34	Gallons per CY
B	Subbase and Aggregate Base Course	0.64	Gallons per Ton
C	Flexible Bases & Pavements	2.98	Gallons per Ton
D	Rigid Bases & Pavements	0.98	Gallons per CY
E	Structures	6.76	Gallons per \$1,000 of work performed

Category	Conversion	Factor
B	SY to ton	90 lbs/sy-in
C	SY to ton	112.5 lbs/sy-in
D	SY to CY	Inches of depth/36

3. Delaware Posted Diesel Fuel Price will be issued monthly by the Department at https://deldot.gov/Business/bids/index.shtml?dc=diesel_fuel.

- a. The Project Base Price Index (FB) is the index price posted by the Department on the project advertisement date in \$/gallon.
- b. The Fuel Price Index for adjustment (FP), will be the index price posted by the department monthly in \$/gallon.

Price Adjustment Determination:

A. The following criteria and conditions will be considered in determining a price adjustment for diesel fuel cost fluctuations on a monthly basis.

1. Unit Price Adjustment Calculation.

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- a. When the ratio FP/FB is calculated to be less than 0.95 or calculated to be greater than 1.05, the Department will adjust unit bid price prices in accordance with the following formula:

$$AUP = (FP-FB)(F)+(UBP)$$

where:

AUP = Adjusted Unit Price

FP = Fuel Price Index for the month in which prices are adjusted for applicable construction work.

FB = Project Base Price Index

F = Diesel Fuel Usage Factor (See above chart in section 1.2 for usage factors.)

UBP = Unit Bid Price specified in the Contractor's Bid Proposal

Payment of Adjusted Unit Prices:

- A. The unit bid prices of work items affected by the fuel escalation will be adjusted by change order, either up or down. The Diesel Fuel Price Index will be used for all the applicable items performed during the monthly period.
- B. If the Contractor exceeds the authorized allotted completion time, the adjusted item prices on the last authorized allotted calendar day or working day shall be the prices used during the time liquidated damages are assessed. However, if the posted price for diesel fuel goes down, the item prices shall be adjusted downward accordingly.
- C. Upon completion of the work and determination of final pay quantities, an adjusting work order will be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for FP used in the price adjustment formula will be the average of all FP's previously used for computing price adjustments.
- D. The Department reserves the right to inspect the records of the prime contractor and its subcontractors and material suppliers to ascertain actual pricing and cost information for the diesel fuel used in the performance of applicable items of work.
- E. When applicable items of work, as specified herein, are added to the contract as Extra Work in accordance with the provisions of Section 104.2.E, no price adjustment will be made for fluctuations in the cost of diesel fuel consumed in the performance of the extra work, unless otherwise approved by the Engineer. The current price for diesel fuel is to be used when preparing required backup data for extra work to be performed at a negotiated price. For extra work performed on force account basis, reimbursement for material and equipment along with specified overhead and profit markups will be considered to include full compensation for the current cost of diesel fuel.

Any Price Increases or Price Rebates that are calculated based on items of work performed by subcontractors will be added to or deducted from payments due to the Contractor in the appropriate pay period. The Contractor shall

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then accurately record on the appropriate CN-103 form the additions or deductions into adjusted contract value. The Contractor shall make payment to the subcontractor(s) who actually performed the work in accordance with DelCode Title 17, Chapter 8.

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Appendix – Item 763626 Diesel Fuel Cost Adjustment

	Item No's
Category A: Earthwork Excavation & Embankment, Borrow (total qty must exceed 5,000 CY)	202000, 202003, 204000, 207000, 207001, 207023, 208000, 209001, 209002
Category B: Subbase and Agg. GABC, PTB, Soil Cement Base (total qty must exceed 500 T)	301001, 301002, 302002
Category C: Flexible Bases and Pavements Warm Mix Asphalts (total qty must exceed 500 T)	401014, 401016, 401029, 401030, 401036, 401046, 403000
Category D: Rigid Bases and Pavements Concrete, P.C.C. Patching (total qty must exceed 5,000 CY)	N/A
Category E: Structures Bridges, Large P.C.C. Structures	N/A

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Basis of Payment:

A. The Department will pay for pedestrian channelizing barricade system at the contract unit price per linear foot per day. Price and payment will constitute full compensation for:

1. Providing certification;
2. providing, placing, maintaining, and relocating barricades as required; and
3. all incidentals required to complete the Work.

06/11/2024

832500 - SPLICING OF ELECTRICAL CABLE, UNDERGROUND

832501 - SPLICING OF ELECTRICAL CABLE, ABOVE GROUND

DESCRIPTION:

This work consists of splicing various types and sizes of electrical cables not including Fiber Optic types.

MATERIALS:

- | | |
|------------------------|--------------|
| A. Underground Splices | Section 1074 |
| B. Overhead Splices | Section 1074 |

CONSTRUCTION METHODS:

- A. The minimum size and type is 4 conductor #18 wire and maximum is 26 conductor #14. The number and color code of the conductors to be spliced shall be designated by the Engineer.
- B. The splicing may be in an underground installation or on span wire or messenger wire. If a splice is found to be faulty within 90 days of installation, it shall be replaced.
- C. Each conductor to be spliced shall have sufficient insulation removed, with wire strippers or other approved tool, to expose 1/2-inch of the copper conductor. The use of any tool or method which might nick the conductor is specifically prohibited. Each conductor not to be spliced shall be inspected and trimmed as necessary to ensure that the copper conductor does not extend beyond the insulation.
- D. Mechanical connection of conductors shall be accomplished by using the specified crimp-type terminal, as directed by the engineer, so that a good mechanical connection shall be affected.
- E. Conductors to be soldered shall be placed side by side with the exposed copper aligned. The copper shall then be twisted clockwise with pliers until a good mechanical connection is affected. The splice shall be coated with flux, heated with a soldering iron, and soldered in a manner which minimizes insulation damage. After each soldered connection is completed, it shall be properly insulated.
- F. After each conductor to be spliced is connected in the proper fashion, all conductors both used and not used shall be returned to their original configuration as before the sheath was removed.

G. Underground:

1. The sheath of each cable to be removed shall be limited so that the splicing kit will extend beyond the sheaths. After the electrical and mechanical connection is completed and before the splicing kit is applied, a test shall be made to ensure that all circuits are complete and operable. A 3M Scotchcast Kit #82A-1, ILSCO #USPA350SSDB, or approved equal shall be installed as per manufacturer's instructions.
2. The splice will not be accepted and shall be replaced if there are any air bubbles or voids inside the splicing kit after the resin has cured. The funnels shall be removed as per the manufacturer's instructions.

H. Overhead:

1. Conductors to be electrically connected shall be placed side by side with the exposed copper aligned. The copper shall then be twisted clockwise with pliers until a good mechanical connection shall be affected.
2. A proper size wire nut shall be installed, and hand tightened. If necessary to cover all the copper, minor trimming may be done. The copper splice shall be 5/16 of an inch long when trimmed. Care shall be taken to ensure that no insulation is caught up in the copper area of the splice.
3. It is essential that the splice be kept dry. Therefore, care must be taken during taping and by placement of the completed splice to prevent water from entering the splice between or around the cables.
4. Termination of Cable Run (Butt Splice)
 - a. The sheath of each cable shall be removed as necessary. When all conductors to be joined have been completed, the splice shall be prepared for taping. The cables shall be placed in a butt position and all wires and wire nuts shall be positioned to ensure that no shorts exist and that the splice area is reduced to as small a diameter as possible. Taping shall begin with rubber tape two inches over the intact sheath. Taping shall proceed toward the other cable overlapping half of the tape width until a point two inches on the other cable sheath has been reached. Taping shall then be repeated in the other direction starting one tape width wider than the previous wrap. Where necessary to cover all areas of the splice, overlapping shall be increased as necessary. Every area of the splice shall have rubber tape at least four layers (two fully overlapped passes) deep. The rubber tape shall be covered with plastic tape applied in the same fashion.
5. Taps or Tee Splices
 - a. The sheath of the through cable shall be removed for a distance of 8 inches centered on the point of splice. The sheath of the branch cable(s) shall be removed for a distance of 4 inches. The through cable conductors which are to be joined to the conductors of the branch cable(s) are to be separated out from the others and cut. No other conductors shall be cut for any purpose. Depending upon the need, the branch cable(s) may be placed beside one of the through cables and the splicing proceed or the through cable may be doubled back so that the parts of the through cable and the branch cable(s) are placed side by side. When all conductors to be joined have been completed, the splice shall be prepared for taping. The cables shall be placed in approximately their final position and an inspection for shorts shall be made.

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After all wire nuts and wires are properly positioned, taping shall begin on the through cable 2 inches from the end for the sheath. It shall proceed with 1/2 inch width overlap across the splice area and onto the other through sheath for a distance of 2 inches. The taping shall start at the end point and return back across the splice to the branch cable(s). It shall proceed along the branch cable(s) and onto the sheath for a distance of one inch.

- b. A return along the branch back to the main cable shall be made and the remaining part of the splice shall be taped continuing as before.
- c. Every area of the splice shall have rubber tape at least four layers (two fully overlapped passes) deep. The cables shall be placed in their final position and taped with two fully overlapped passes of plastic tape. Plastic tape need not cover the interior areas covered by the rubber tape.
- d. The splice shall be placed so that the branch cable(s) enters the splice from below to prevent water from flowing along the branch cable(s) into the splice area.

METHOD OF MEASUREMENT:

The Department will measure the quantity of splices per each splice measured above ground or below ground that is completed in place and accepted.

BASIS OF PAYMENT:

The Department will pay for the splicing of electrical cable at the contract unit price per each splice measured above ground or below ground. Price and payment will constitute full compensation for all labor equipment and tools.

8/10/21

842501 - PROVIDE & INSTALL ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 (100 AMP)

842502 - PROVIDE & INSTALL ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 (200 AMP)

Description.

This work consists of providing and installing traffic signals, ITS devices and lighting service pedestals and safety switches in accordance with the Contract and as directed by the engineer. Electrical service equipment consists of the equipment necessary to connect a utility company service to a traffic signal or ITS device controller cabinet, traffic monitoring station cabinet, or other traffic control device cabinet or lighting control cabinet. Provide electrical service equipment at the phasing and amperage specified in the Contract. This work includes coordinating the connection with the local utility company. While the 100 Amp Service may be specified for both Traffic and Highway Lighting, the 200 Amp Service is typically specified for Highway Lighting Only.

Materials.

Provide materials in accordance with Section 842.2.

Construction.

- A. Perform all work in compliance with NEC, NFPA, and NESC Standards and with utility company requirements. Install the electric service pedestal as shown in the Plans. Locate line side safety switch and meter adjacent to service drop location, fuse and size line side safety switch to service. The load side safety switch should not be fused. Mark the safety switch with a weatherproof stamp. Label the switch: "Signal", "Camera", "Repeater", "VMS", "Detector" "RWIS" or "Lighting", denoting the device it serves. Tighten all conduits and hardware connections with the appropriate wrenches or tools.
- B. Measure the ground resistance of each rod before connecting the rod to the grounding conductor. If the measured resistance exceeds 25-ohms, exothermically weld a 10-foot extension to the top of the first rod and drive to its full depth. Measure the earth resistance again. If it still exceeds 25-ohms, contact the engineer for instruction.
- C. Service Pedestal Installation
 1. Area for service pedestal should be excavated. Where a pole base is to be placed in existing concrete pavement such as a sidewalk, saw cut the concrete in a square pattern or remove to the nearest joint. Install conduit using a conduit adapter to connect sweeps to underground conduit and conduit leading to the safety switch and meter. Install an appropriate length of 2-inch galvanized conduit (threaded and reamed on both ends) on the end of the 90-degree sweeps at the base of the pedestal so that the end of the conduit will be 3-feet above the finished grade of the area.
- D. Install square tube steel posts in 12-inch x 12-inch x 36-inch concrete footings. Provide a 3-inch clearance on the base of footing. Backfill around the conduit and concrete footings and dispose of excess or unsuitable materials to grade of the bottom of concrete footings. Place backfill after 24-hours of installation, in accordance with Section 202.

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- E. Remove all excess material. Suitable Material may be used elsewhere on the Project as directed by the engineer. Set square tube steel posts and determine the finished length of the tubular steel posts by adding the total height of the meter and safety switch to 5-feet. Install ground rod in accordance with the Contract. The ground resistance of each rod must be measured before connecting the rod to the grounding conductor. If the measured resistance exceeds 25-ohms, exothermically weld a 10-foot extension to the top of the first rod and drive to its full depth. Measure the earth resistance again. If it still exceeds 25-ohms, contact the engineer for instruction.
- F. Attach pedestal aluminum board/panel to square tube steel posts using 6 (3 for each post) 5/16-inch x 2 1/2-inch long Grade 5 stainless steel hex bolts, flat washers and nylon lock nuts. Attach meter socket to the board/panel with four 5/16-inch x 3/4-inch stainless steel hex bolts and nylon lock nuts. Attach the circuit breaker box to the board/panel with four 5/16-inch x 3/4-inch stainless steel hex bolts and nylon lock nuts.
- G. Arrange inspection by a Delaware licensed electrical inspection agency (or Contractor's licensed staff) for all lighting system work including but not limited to service, branch circuits, junction wells, underground conduit, all grounding and bonding and any electrical work performed on the project. Submit certification for the chosen Delaware licensed electrical inspection agency or contractor's staff to the engineer for approval prior to starting work.

Method of Measurement.

- A. The Department will measure the quantity of electrical utility services in number of electric services installed, complete, in place, and accepted.

Basis of Payment.

- A. The Department will pay for electrical services installed at the contract price per each of the size and type specified, installed, complete in place, tested, and accepted. Price and payment constitutes full compensation for:
 - 1. Providing and placing all materials;
 - a. Enclosures;
 - b. panel boards;
 - c. ground rods;
 - d. circuit breakers;
 - e. internal wiring;
 - f. wiring devices;
 - g. wiring up to 10-feet each underground from the service pedestal to the utility pole and up to 50-feet each vertical (up the service pedestal and up the utility pole combined and including all required coils);
 - h. concrete collar;
 - i. meter sockets;
 - j. meter;
 - k. shunts;
 - l. cover plates;
 - m. wiring;
 - n. square tubing;
 - o. back panel;

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2. inspection by Delaware licensed electrical agency; and
3. all incidentals required to complete the Work.

8/22/24

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850520 - LUMINAIRE (LED), 150 WATTS HPS EQUIVALENT

850521 - LUMINAIRE (LED), 250 WATTS HPS EQUIVALENT

850522 - LUMINAIRE (LED), 400 WATTS HPS EQUIVALENT

850523 - LUMINAIRE (LED), 640 WATTS HPS EQUIVALENT (HIGH MAST ONLY)

850524 - LED WALL PACK, 250 WATTS HPS EQUIVALENT

850525 - LED WALL PACK, 400 WATTS HPS EQUIVALENT

850526 - LED WALL PACK, 75 WATTS HPS EQUIVALENT

850527 - LED WALL PACK, 150 WATTS HPS EQUIVALENT

Description.

This work consists of providing and installing an LED light fixture (luminaire) on pole (not inclusive in this item) with wattage, lamp type and distribution type.

Materials.

The LED Wattages above are based on the equivalent output to HPS lighting. Refer to maximum LED Wattages below.

Provide a complete fixture with a heavy-duty, cast-aluminum housing, door with extruded aluminum heat sink, tool-less entry, hinged removable power tray door for easy maintenance, and have fastening hardware that is stainless steel or zinc plated steel. The fixture shall meet ANSI 136.31 3.0 G vibration requirements. Fixture shall have a two-bolt slip fitter system for mounting on a 1 1/4-inch to 2 3/8-inch mounting arm connection. A grey powder coat finish shall be applied to the fixture unless otherwise shown on the plans, or as directed by the engineer.

The fixture shall also meet the following criteria:

1. Lamps: LED
2. Wattage:
 - a. 50 Watt Maximum for Item No. 850526
 - b. 90 Watt Maximum for Item No. 850520 and 850527

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- c. 175 Watt Maximum for Item No. 850521 and 850524
 - d. 250 Watt Maximum for Item No. 850522 and 850525
 - e. 450 Watt Maximum for Item No. 850523
3. Voltage: 120V - 277V
4. CRI: 70 Minimum
5. Lumens:
- a. 3,000 to 5,000 for Item No. 850526
 - b. 8,000 to 12,000 for Item No. 850520 and 850527
 - c. 16,00 to 20,000 for Item No. 850521 and 850524
 - d. 27,000 to 31,000 for Item No. 850522 and 850525
 - e. 40,000 to 50,000 for Item No. 850523
6. Rated L70 Lamp Life: 100,000-hours minimum when operated at 77-degrees F.
7. Distribution: Type II or Type III (unless otherwise indicated).
8. Color Temperature: 3,000 K - 4,500 K.
9. Drive Current: 850-mA maximum.
10. Driver: 0-10V dimming.
11. IP66 Rating for optical portion of the housing.
12. 10kV/10kA minimum internal surge suppression module, meeting UL 1449/ANSI C62.41.2 Category C.
13. 3 Pin NEMA Photocontrol Receptacle with a Shorting Cap.

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Luminaire mounting height shall be as indicated on drawings. Luminaire shall provide point illumination of not less than the given values in the table that follows:

Point 1

Luminaire	Foot-candle Point Table	
	Point 1	Point 2
Luminaire (LED), 75 Watts HPS Equivalent	0.10	0.11
Luminaire (LED), 150 Watts HPS Equivalent	0.16	0.22
Luminaire (LED), 250 Watts HPS Equivalent	0.27	0.37
Luminaire (LED), 400 Watts HPS Equivalent	0.46	0.55
Luminaire (LED), 640 Watts HPS Equivalent	0.55	0.60

coordinates are 90 feet longitudinal distance. Point 2 coordinates are 90-foot longitudinal and 30-foot transverse. The point values given in the table are based on a 30-foot mounting height with a Light Loss Factor of 1. The point values produced by the submitted fixture shall be included with the fixture submittal.

Metal Parts shall be free of burrs and sharp corners and edges. Doors, frames, and other internal access shall be smooth operating and free of light leakage under operating conditions.

Factory applied labels shall comply with UL 1598. Labels shall be located where they will be readily visible to service personnel, but not seen from normal viewing angles when lamps are in place. Labels shall include the following lamp characteristics:

1. CCT and CRI for all luminaires

Luminaire finish shall be manufacturers standard paint applied to factory-assembled and tested luminaire before shipping.

Construction.

- A. Install luminaires in accordance with the manufacturer's installation instructions and shall follow the following installation requirements:

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1. Comply with NECA 1.
 2. Fasten luminaire to pole.
 3. Install luminaires at height indicated on drawings and level and square with finished grade.
 4. Perform an illumination test.
- B. Luminaire identification decals shall be installed to the luminaire housing in accordance with NEMA conventions. Ensure the decal is readily visible from the ground and meets ANSI C136.15-2015 Roadway and Area Lighting Equipment-Luminaire Field Identification standard.
- C. After installation of luminaires and control devices and after electrical circuitry has been energized, test units to confirm proper operation.
- D. Inspect each installed luminaire for damage. Replace damaged luminaires and components.
- E. Luminaires will be considered defective if they do not pass tests and inspections. Provide fixture cutsheets, details, and the IESNA LM-79 and LM-80 test reports to the engineer for shop drawing review before purchasing.
- F. Provide documentation that demonstrates that the proposed model of LED luminaire has been tested for electromagnetic compliance following the measurement protocols specified in ANSI standard C63.4-2003 and required by 47 CFR 15.31.
- G. If the Contract require each light fixture to be provided with an independent photoelectric control device, provide a photocell with each lighting fixture in place of the shorting cap. Provide photoelectric control using solid state circuitry, cadmium sulfide type with hermetically sealed silicone rectifier rated 120-volt, 60-cycle AC and 1000-watts maximum load. Provide photoelectric control with "Fail On" functionality such that in the event of a photocell becoming inoperative, the light fixture will remain in a permanent "On" state through day and nighttime hours. Photo control shall be twist lock type, with suitable mounting bracket with locking type receptacle.
- H. The photoelectric control shall be set to operate, by default factory setting or by field adjustment, using the following criteria:
1. Turn on the light fixture at a minimum vertical illumination value of 3-foot-candles.
 2. Turn off the light fixture at a maximum vertical illumination value of 6-foot-candles.
- I. All electrical materials shall conform to the requirements of the National Electrical Code of the National Fire Protection Association, and to all local and state laws and/ordinances governing such installations.

Method of Measurement.

The Department will measure the quantity of LED luminaires as the number luminaires provided, installed, and accepted.

Basis of Payment.

- A. The Department will pay for LED luminaires at the contract unit price of each luminaire installed, and accepted. Price and payment will constitute full compensation for:
1. All materials, including the luminaires; and
 2. incidentals required to complete the Work.

2/9/23

908504 – COIR FIBER MATTING

DESCRIPTION:

This work consists of stabilizing the channel banks using coir fiber matting.

MATERIALS:

A. Woven coir matting

1. matting of degradable natural fibers meeting the following minimum specifications:
 - a. Material: Woven coir matting
 - b. Minimum Thickness: 0.30-inches
 - c. Minimum Weight: 25-oz/SY
 - d. Maximum Allowable Water Velocity: 16-ft/sec
 - e. Maximum Open Area: 40 percent

B. Wood stakes

1. Untreated wood, 1 inch by 2 inches by 18 inches minimum length, free from knots over 1/2 inches diameter, with point at one end.

CONSTRUCTION METHODS:

- A. Provide the engineer with a specification and source of the coir fiber matting for review and approval 2 weeks prior to intended use.
- B. Complete grading, topsoil and seeding before coir fiber matting is installed. The bank surface shall be a smooth soil surface free from stones, clods, or debris.
- C. Place the matting within 24 hours after seeding operations have been completed.
- D. Unroll coir fiber matting in the direction of the flow of water. Lay matting smoothly in firm, uniform contact with the soil surface, without stretching or tenting.
- E. Key-in matting along toe of channel in accordance with the plans.
- F. Overlap coir fiber matting with the upslope portion on top. Overlap edges at least 12 inches., and ends at least 9 inches. Do not install longitudinal overlaps in channel bottoms.
- G. The overlapped mat shall be firmly fastened in place with wood stakes driven vertically into the soil and protruding 3 inches from the surface. Wood stakes shall be placed a maximum of 2 feet on center along overlapping matting.

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- H. Drive wood stakes through a hole into the coir fiber matting vertically into the soil throughout matting at diagonal distances no greater than 3 feet between wood stakes.
- I. Secure the edges of the matting along the edge of slope by excavating a 1 foot deep trench and securing the edge of the matting within the trench with anchor stakes placed every 2 feet on center. Then backfill and tamp the trench. Extend the matting a minimum of 1 foot beyond the limits of grading at the top of the slope, or to a location along the slope indicated by the engineer.
- J. If any area of the coir fiber matting degrades before the disturbed area is fully stabilized, replace the matting and reseed the affected area.

METHOD OF MEASUREMENT:

The Department will measure the quantity of coir fiber matting in square yards installed an accepted.

BASIS OF PAYMENT:

- A. The Department will pay for coir fiber matting at the contract unit price per square yard. Price and payment constitute full compensation for:
 - 1. providing, handling, and maintaining all materials;
 - 2. stockpiling;
 - 3. preparation;
 - 4. excavation;
 - 5. grading;
 - 6. compaction;
 - 7. anchors;
 - 8. replacement of unaccepted matting; and
 - 9. removal and disposal of excess material.

9/27/2021

908506 - STREAM RESTORATION SEEDING

Description.

This work consists of providing, seeding, and establishment of Stream Restoration Seed Mix as indicated on the plans.

Materials.

- A. Water Section 1021
- B. Topsoil Section 908
- C. Stream Restoration Seed Mix

Common Name (<i>Latin name</i>)	OVERALL MIX SEED RATE	Min. 30 LBS/AC PLS
	LBA/AC PLS	% OF MIX
Virginia Wildrye (<i>Elymus virginicus</i>)	7.5	25%
Riverbank Wildrye (<i>Elymus riparius</i>)	7.5	25%
Autumn Bentgrass (<i>Agrostis perennans</i>)	7.5	25%
Deertongue (<i>Dicanthelium clandestinum</i>)	4.5	15%
Soft Rush (<i>Juncus effusus</i>)	0.6	2%
Fox Sedge (<i>Carex vulpinoidea</i>)	0.6	2%
Swamp Milkweed (<i>Asclepias incarnata</i>)	0.3	1%
Mist Flower (<i>Eupatorium coelestinum</i>)	0.3	1%
Boneset (<i>Eupatorium perfoliatum</i>)	0.3	1%
New England Aster (<i>Aster novae-angliae</i>)	0.3	1%
Cardinal Flower (<i>Lobelia cardinalis</i>)	0.3	1%
Tall White Beardtongue (<i>Penstomen digitalus</i>)	0.3	1%

1. Individual seed species shall have a maximum weed seed percentage of 0.75-percent, a minimum purity of 95-percent, and a minimum percentage germination of 90-percent.
2. All seed shall be fresh, clean, from new crop seed, and delivered to the site in original unopened tagged packages in accordance with the Delaware Code and respective State laws.
3. Temporary Seed Mix
 1. Common Oat (*Avena sativa*) or Grain Rye (*Secale cereal*).

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2. Maximum weed seed percentage of 0.15-percent, a minimum purity of 98-percent, and a minimum percentage germination of 90-percent.
4. The seed mixes above shall be free of prohibited weed species listed in Section 908.

Construction.

- A. Provide seed tags at the time of delivery which indicate the LB/AC PLS for each individual species.
- B. Submit manufacturer's guidelines to the engineer, prior to installation.
- C. Permanent Seeding
 1. Supply seeding rates on the basis of 100 percent Pure Live Seed (PLS) per acre.
 2. Adjust seed quantities for each species in the mix to meet the 100 percent LB/AC PLS rate listed in the table above.
 3. Stabilize soil seeded with Stream Restoration Seed Mix using Coir Fiber Matting as specified in the Plans.
 4. Apply seed using a broadcast spreader in two passes in opposite directions to ensure uniform distribution. Broadcast rates for seed mixtures vary. Follow the seed supplier recommendations for broadcast rates for the seed mixtures
 5. A carrier, sand or similar, may be added to the permanent seed mixtures to ensure even distribution of the broadcast seeds. Mix the carrier with the seed at a rate recommended by the seed supplier.
- D. Temporary Seeding
 1. All areas of Stream Restoration Seed Mix shall be overlain by a temporary seed of applied at a rate of 30 pounds per acre.
 2. Broadcast seed temporary seed mix separately after placement of the permanent seed. Do not mix temporary seed mix with the permanent seed mixtures during broadcast seeding.
 3. Apply temporary seed mix in a separate pass after spread of the permanent seed.
- E. Remove and dispose of noxious or invasive plant species listed by the Delaware Department of Agriculture.
- F. Application of the Stream Restoration seeding mix is preferred to occur between the following dates: March 1st to May 1st and September 1st to October 31st.
 1. If application does not occur within these dates, apply temporary seeding in accordance with Section 908 Temporary Grass Seeding and as appropriate depending on the seeding season.
- G. Do not add lime, fertilizer or other amendments to the mix.
- H. Topsoil
 1. Place topsoil to a depth of 4-inches in all areas specified for seeding with Stream Restoration Seed Mix.
 2. Complete all topsoil placement and grading before seeding.
 3. All topsoil shall meet the requirements of Section 908 and the following:

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- i. No less than 3-percent and no more than 10-percent organic matter as determined in accordance with AASHTO T 194.
- ii. Acidity range of pH 6.0 to pH 7.5.
- iii. The method of testing topsoil shall be in accordance with the requirements of AASHTO T 88, Modified; AASHTO T 89, Method B; and AASHTO T 90.
- iv. Meets the following gradation requirements:

Gradation Requirements	
Sieve Size	Minimum Percent Passing by Weight
2" (50 mm)	100
No. 4 (4.75 mm)	90
No. 10 (2.0 mm)	80

- I. Areas to be seeded shall be maintained at approved grades and shall not be smooth rolled.
- J. Prepare the seed bed by tilling, discing, or harrowing the finished grade to a depth of 3-inches.
- K. For areas, if grading or placement of topsoil has just been completed and the soil is loose and friable, not eroded or crusted, surface raking only may be permitted at the approval of the engineer.
- L. In areas where herbicide has been applied, but where no other treatment has been specified, using a weed trimmer or other suitable method approved by the engineer, cut existing vegetation to a minimum of 2-inches and a maximum height of 6-inches. Remove all excess debris, to an extent approved by the engineer; and then perform seed establishment as applicable for that area.
- M. The seed bed shall be completed by a final shallow raking (1/4-inch) or scarification of the soil surface with a chain link fence to ensure adequate seed - soil contact. Incorporate the Seed to a depth not more than 1/4-inches.
- N. Watering
 - 1. Spray or sprinkle water at a rate of 25,000 gallons per acre or 0.57 gallons per square foot.
 - 2. Water for establishment:
 - i. Complete the first watering within 72-hours of seed placement.
 - ii. Complete the second watering 7-days after the first watering.
 - iii. Complete a third and final watering 7-days after the second watering.
 - iv. Watering periods may be adjusted at the discretion of the Department based upon local weather conditions.

Method of Measurement.

- A. The Department will measure the quantity of Stream Restoration Seeding in square yards of surface area placed and accepted.
 - 1. Acceptance of Stream Restoration Seeding will not be made earlier than 6-weeks after the first watering of the seed mix area.

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Basis of Payment.

- A. The Department will pay for Stream Restoration Seeding at the contract unit price per square yard. Price and payment will constitute full compensation for:
1. providing and submitting all documentation;
 2. foundation preparation;
 3. providing, placing, and establishment of materials;
 4. seeding;
 5. watering; and
 6. incidentals required to complete the Work.
- B. A maintenance bond is required for this work in accordance with Section 908.5.1.
- C. The Department will pay for:
1. Topsoil in accordance with Section 908.
 2. Temporary Seeding in accordance with Section 908.
 3. Coir Fiber Matting in accordance with Special Provision 908504.
- D. Perform all work necessary to achieve and maintain an acceptable seed bed prior to seeding as directed by the engineer at no additional cost to the Department.

6/5/2024

Contract No. T201611902

908510 - MOWING

908511 - MOWING MEDIAN

908512 - MOWING ROADSIDE

DESCRIPTION:

This work consists of mowing roadside, median, and/or any designated areas to a height between approximately 4” and 6”, unless otherwise indicated on the plans.

MATERIALS:

- A. Mechanical equipment will be used for mowing operations. With prior approval on the engineer, the equipment will be sufficiently equipped with safety devices to protect the operator, motorists, and pedestrians from moving hazards. Perform hand mowing on inaccessible areas at the direction of the engineer.

METHOD OF MEASUREMENT:

- A. The Department will measure the quantity of Mowing, Mowing Roadside, and/or Mowing Median in linear feet, and in acres for other designated areas.
- B. Mowing Roadside will be measured along the approximate center line of the adjacent pavement for mowing areas between the right of way and pavement.
- C. Mowing Median will be measured along the approximate center line of the median area to be mowed.
- D. No measurements will be made for mowing traffic separation islands in intersections.

BASIS OF PAYMENT:

- A. The Department will pay for Mowing Roadside and/or Mowing Median at the contract unit price per linear foot and the Department will pay for Mowing at the contract unit price per acre, as specifically applicable to this contract. Price and payment will constitute full compensation for:
 - 1. labor;
 - 2. tools;
 - 3. equipment;
 - 4. fuels;
 - 5. lubricants;
 - 6. safety devices;

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7. necessary traffic controls;
 8. location moves; and
 9. incidentals necessary for the performance of the work.
- B. Mowing of traffic separation islands in intersections will not be paid for separately, but are considered incidental to Mowing Roadside or Mowing Median.
- C. For new construction contracts, there will be no payment for the final clean up mowing as required in Subsection 104.12 of the Standard Specifications.

4/11/22

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
August 12, 2024
State Contract No. T201611902
F.A.P. No. NH-N032(19)
Project ID #04-00144
US 40, Salem Church Road to Walther Road
New Castle County

The following utility companies maintain facilities within the project limits:

- Artesian Water Company
- AT&T
- Comcast Cable of New Castle County
- Crown Castle
- Delmarva Power – Electric
- Delmarva Power – Gas
- Delmarva Power – Electric Transmission
- Eastern Shore Natural Gas
- Lumen
- New Castle County Sewer
- Verizon Delaware LLC

The following is a breakdown of the utilities involved, adjustments and/or relocations as required.

ARTESIAN WATER COMPANY

The Artesian Water Company maintains multiple underground water facilities throughout the project area along US 40 and Salem Church Road. The existing facilities along US 40 are as follows:

EXISTING FACILITIES (SIZE/MATERIAL)	BEGIN STATION	END STATION
16-INCH DIP	STA. 294+00/ 38' RT. (Line runs parallel with US 40)	STA. 334+22/ 24' RT.
12-INCH DIP	STA. 294+75/ 27' LT.	STA. 294+75/ 36' LT.
16-INCH DIP	STA. 303+03/ 29' RT.	STA. 303+04/ 78' LT.
16-INCH DIP	STA. 303+31/ 27' RT.	STA. 303+31/ 78' LT.

EXISTING FACILITIES (SIZE/MATERIAL)	BEGIN STATION	END STATION
6-INCH DIP	STA. 310+48/ 17' RT.	STA. 410+45/ 42' RT.
1-INCH SERVICE	STA. 313+21/ 35' LT.	STA. 313+31/ 20' RT.
¾-INCH SERVICE	STA. 314+87/ 20' RT.	STA. 414+78/ 60' RT.
12-INCH DIP	STA. 111+34/ 44' RT. (Line runs parallel with Salem Church Rd)	STA. 128+30/ 42' RT.
¾-INCH SERVICE	STA. 120+53/ 25' LT.	STA. 120+54/ 25' RT.
¾-INCH SERVICE	STA. 120+55/ 25' LT.	STA. 120+55/ 25' RT.
1-INCH SERVICE	STA. 122+05/ 25' LT.	STA. 122+05/ 25' RT.
¾-INCH SERVICE	STA. 124+45/ 37' RT.	STA. 124+49/ 35' LT.
¾-INCHSERVICE	STA. 125+22/ 32' RT.	STA. 125+26/ 30' LT.
¾-INCH SERVICE	STA. 125+92/ 47' RT.	STA. 125+93/ 28' LT.
8-INCH SERVICE	STA. 126+45/ 46' RT.	STA. 126+45/ 54' LT.
¾-INCH SERVICE	STA. 127+72/ 33' LT.	STA. 127+75/ 45' RT.
¾-INCH SERVICE	STA. 128+25/ 36' LT.	STA. 128+31/ 38' RT.
¾-INCH SERVICE	STA. 128+97/ 37' LT.	STA. 129+01/ 24' RT.
¾-INCH SERVICE	STA. 316+11/ 20' RT.	STA. 416+06/ 50' RT.
6-INCH DIP	STA. 318+23/ 22' RT.	STA. 418+02/ 44' RT.
¾-INCH SERVICE	STA. 319+51/ 23' RT.	STA. 419+39/ 55' RT.
¾-INCH SERVICE	STA. 320+45/ 23' RT.	STA. 420+31/ 52' RT.
¾-INCH SERVICE	STA. 321+50/ 23' RT.	STA. 421+31/ 51' RT.
¾-INCH SERVICE	STA. 323+18/ 21' RT.	STA. 423+03/ 56' RT.
¾-INCH SERVICE	STA. 323+65/ 23' RT.	STA. 423+53/ 49' RT.
¾-INCH SERVICE	STA. 325+10/ 21' RT.	STA. 424+94/ 50' RT.
8-INCH SERVICE	STA. 329+19/ 19' RT.	STA. 329+20/ 37' LT.
12-INCH SERVICE	STA. 331+65/ 25' RT.	STA. 431+49/ 32' RT.
12-INCH DIP	STA. 331+65/ 25' RT. (Line runs parallel with US 40)	STA. 491+65/ 26' RT.
1-INCH SERVICE	STA. 333+78/ 24' RT.	STA. 333+77/ 51' LT.
12-INCH DIP	STA. 334+22/ 24' RT.	STA. 434+09/ 27' RT.
12-INCH DIP/CAST	STA. 334+22/ 24' RT. (Line runs parallel with US 40)	STA. 389+45/ 28' RT.
8-INCH SEVICE	STA. 439+99/ 20' RT.	STA. 439+96/ 65' RT.
8-INCH CAST	STA. 340+13/ 103' LT. (Line runs parallel with Brookmont Dr)	STA. 340+16/ 30' RT.
¾-INCH SERVICE	STA. 444+55/ 18' RT.	STA. 444+57/ 50' RT.
1-INCH SERVICE	STA. 345+28/ 34' LT.	STA. 345+27/ 44' LT.
2-INCH SERVICE	STA. 345+28/ 27' RT.	STA. 345+30/ 64' LT.
¾-INCH SERVICE	STA. 447+18/ 17' RT.	STA. 447+21/ 44' RT.
8-INCH DIP	STA. 448+93/ 19' RT. (Line runs parallel with Church Rd)	STA. 449+05/ 85' RT.

EXISTING FACILITIES (SIZE/MATERIAL)	BEGIN STATION	END STATION
12-INCH DIP	STA. 349+27/ 28' RT. (Line runs parallel with Wellington Dr)	STA. 349+17/ 52' LT.
1-INCH SERVICE	STA. 350+26/ 27' RT.	STA. 450+08/ 44' RT.
¾-INCH SERVICE	STA. 451+24/ 23' RT.	STA. 451+24/ 48' RT.
8-INCH SREVICE	STA. 454+82/ 22' RT.	STA. 454+81/ 45' RT.
8-INCH SERVICE	STA. 459+68/ 21' RT.	STA. 459+67/ 41' RT.
8-INCH DIP	STA. 376+87/ 26' RT.	STA. 376+89/ 47' LT.
8-INCH SERVICE	STA. 480+11/ 24' RT.	STA. 480+13/ 71' RT.
8-INCH DIP	STA. 487+94/ 24' RT.	STA. 487+95/ 69' RT.
12-INCH CAST	STA. 389+45/ 28' RT.	STA. 491+59/ 81' RT.
6-INCH AC	STA. 490+62/ 96' RT.	STA. 490+86/ 96' RT.
8-INCH AC	STA. 490+64/ 94' RT.	STA. 490+65/ 116' RT.
2-INCH GALV	STA. 491+43/ 92' RT.	STA. 491+59/ 84' RT.

STATEMENT OF WORK FOR WATER FACILITY ADJUSTMENTS: Shown below is an itemized list of identified and potential conflicts between the state road project and existing water facilities. Each conflict lists the location, offset, action required/ requested by Artesian and reimbursable status. The conflicts have been identified as follows:

Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
293+07	293+07	R 22' To L 29'	At Station 293+07 (R 22'), open cut and install approx. 50-ft of 24" Steel Casing across US 40 West.	Advanced Utility Work	-	3
293+07	293+07	R 26' To L 34'	Tie into existing 16-in DIP with a new 16-in Tapping Sleeve & Tapping Valve at Station 293+07 (R 26'). Install approx. 70-ft of 16-in DIP through Casing to a new 24-in X 16-in Tee at Station 293+07 (L 34'). Install new 16-in Butterfly Valve at Station 293+07 (L 30').	Advanced Utility Work	-	4
293+07	292+89	L 34' To L 34'	From aforementioned 24-in X 16-in Tee, install approx. 18-ft of 24-in DIP to a new 24-in End Cap at Station 292+89 (L 34'). Install a new 24-in Butterfly valve at Station 293+00 (L 34') and install a new 2" blow off assembly at Station 292+92 (L 34').	Advanced Utility Work	-	2
293+69	295+09	L 33' To L 31'	At Station 293+69 (L 33'), Bore and Jack approx. 140-ft of 36-in Steel Casing across Becks Woods Drive.	Advanced Utility Work	-	5
293+07	298+40	L 34' To L 33'	From 24-in X 16-in Tee at Station 293+07 (L 34'), install approx. 530-ft of new 24-in DIP through 36-in Steel Casing along the north side of US 40 West to a new 24-in Butterfly Valve at Station 298+40 (L 33'). Install a new 24-in Butterfly Valve at Station 293+14 (L 35').	Advanced Utility Work	-	11
298+40	302+98	L 34' To L 51'	From 24-in Butterfly Valve at Station 298+40 (L 34'), Install approx. 480-ft of new 24-in DIP along the north side of US 40 West to a new 24-in X 16-in	Advanced Utility Work	-	10

Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
			Tee at Station 302+98 (L 51'). Install bends at designated locations.			
302+98	302+98	L 51' To L 92'	From aforementioned 24-in X 16-in Tee at Station 302+98 (L 51'). Install approx. 40-ft of 16-in DIP and tie into existing 16-in DIP Station 302+98 (L 92') with a new 16-in Sleeve.	Advanced Utility Work	-	1
303+07	303+07	L 51'	Install new 24-in Butterfly Valve at Station 303+07 (L 51').	Advanced Utility Work	-	1
303+14	303+14	L 51' To L 92'	Install new 24-in X 16-in Tee at Station 303+14 (L 51'). Install approx. 40-ft of 16-in DIP and tie into existing 16-in DIP Station 303+14 (L 92') with a new 16-in Sleeve.	Advanced Utility Work	-	1
303+14	305+12	L 51' To L 50'	Install approx. 192-ft of 24-in DIP along the northern side of Route US 40 West from Station 303+14 (L 51') to a new 24-in X 20-in Reducer at Station 305+05 (L 50'). Install a new 20-in Butterfly Valve at Station 305+12 (L 50').	Advanced Utility Work	-	4
305+12	305+33	L 50' To L 43'	From aforementioned 20-in Butterfly Valve, install approx. 24-ft of 20-in DIP to a new 20-in 45° Vertical Bend. Install new bends at designated locations. Install a new 20-in Sleeve at Station 305+30 (L 43').	Advanced Utility Work	-	1
305+33	318+68	L 43' To L 56'	At Sta. 305+33 (L 43'), Directional Drill approx. 1,345-ft of 20-in FPVC to a new 20-in 45° Vertical Bend at Sta. 318+68 (L 56').	Advanced Utility Work	-	20
318+68	318+86	L 56' To L 56'	From aforementioned 20-in 45° Vertical Bend, install approx. 18-ft of 20-in DIP to a new 24-in X 20-in Reducer at Sta. 318+86 (L 56'). Install a new 20-in sleeve at Sta. 318+72 (L 56') and a new 20-in Butterfly Valve at Sta. 318+77 (L 56').	Advanced Utility Work	-	1
318+86	321+35	L 56' To L 56'	From new 24-in X 20-in Reducer at Sta. 318+86 (L 56'), install approx. 249-ft of 24-in DIP to a new 24-in 90° Bend at Sta. 321+35 (L 56'). Install a new 24-in Butterfly Valve at Sta. 321+30 (L 56').	Advanced Utility Work	-	5
321+35	421+20	L 56' To R 44'	From aforementioned 90° Bend, Bore & Jack approx. 130-ft of 36-in Steel casing across US 40 West & US 40 East. Install approx. 157-ft of 24-in DIP through the Casing to a 24-in X 24-in Tee at Station 421+20 (R 44'). Install a new 24-in Butterfly Valve at Station 421+20 (R 39').	Advanced Utility Work	-	8
421+20	425+76	R 44' To R 41'	At Station 421+20 (R 44') install approx. 457-ft of 24-in DIP along the southerly side of US 40 East to a new 24-in 45° Bend at Station 425+76 (R 41'). Install new 24-in Butterfly Valve at Station 421+25 (R 44'). Install a new 24-in Bends at designated locations.	Advanced Utility Work	-	10

Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
425+76	428+19	R 41' To R 39'	From aforementioned 24-in 45° Bend, install approx. 265-ft of 24-in DIP to a new 24-in 45° Bend at Sta. 428+19 (R 39'). At Sta. 426+55 (R 67'), install approx. 60-ft of 36-in Steel Casing across Lidl entrance. Install new 24-in Bends at the designated locations.	Advanced Utility Work	-	7
428+19	438+42	R 39' To R 40'	From new 24-in 45° Bend at Sta. 428+19 (R 39'), install approx. 1,022-ft of 24-in DIP along the southerly side of US40 East to a new 24-in 45° Bend at Sta. 438+42 (R 40'). Install new 24-in Butterfly Valves at Sta. 431+90 (R 44') & 438+16 (R 40').	Advanced Utility Work	-	20
438+42	440+78	R 40' To R 37'	From Sta. 438+42 (R 40'), install approx. 252-ft of 24-in DIP to a new 24-in X 8-in Tee at Sta. 440+78 (R 37'). Install new 24-in Bends at the designated locations.	Advanced Utility Work	-	5
440+78	444+16	R 37' To R 39'	From aforementioned 24-in X 8-in Tee, install approx. 321-ft of 24-in DIP to a new 24-in X 20-in Reducer. From new reducer, install approx. 17-ft of 20-in DIP to a new 20-in 45° Bend at Sta. 444+16 (R 39'). Install a new 20-in Butterfly Valve at Sta. 444+08 (R 39'). Install new 24-in Bends at the designated locations.	Advanced Utility Work	-	7
444+16	460+88	R 39' To R 57'	At Station 444+16 (R 39'), directional drill approx. 1,658-ft of 20-in Fusible PVC to a new 20-in 45° Bend at Station 460+72 (R 57'). Install approx. 16-ft of 20-in DIP to a new 24-in X 20-in Reducer at Sta. 460+88 (R 57'). Install a new 20-in Butterfly Valve at Station 460+80 (R 57').	Advanced Utility Work	-	25
460+88	465+51	R 57' To R 58'	From aforementioned 24-in X 20-in Reducer, install approx. 463-ft of 24-in DIP to the start of new 36-in Steel Casing at Sta. 465+51 (R 58').	Advanced Utility Work	-	9
465+51	468+39	R 58' To R 57'	At Station 465+51 (R 58'), Bore and Jack approx. 280-ft of 36-in Steel Casing across Rockwood Road.	Advanced Utility Work	-	6
465+51	468+55	R 58' To R 57'	From aforementioned Bore & Jack, install approx. 304-ft of 24-in DIP through new 36-in Steel Casing to a new 24-in Butterfly Valve at Sta. 468+55 (R 57'). Install new 24-in Bends at the designated locations.	Advanced Utility Work	-	6
468+55	476+75	R 57' To R 59'	From aforementioned 24-in Butterfly Valve, install approx. 821-ft of new 24-in DIP along the southerly side of US 40 E to a new 24-in X 8-in Tee at Sta. 476+75 (R 59'). Install a new 24-in Butterfly Valve at Sta. 476+70 (R 59').	Advanced Utility Work	-	16
476+75	489+04	R 59' To R 60'	From new 24-in X 8-in Tee at Sta. 476+75 (R 59'), install approx. 1,229-ft of 24-in DIP along the southerly side of US 40E to a new 24-in X 8-in Tee at Sta. 489+04 (R 60'). Install new 24-in Butterfly Valves at Sta. 476+81 (R 59') and 488+98 (R 60').	Advanced Utility Work	-	20
489+04	489+87	R 60' To R 61'	From 24-in X 8-in Tee at Sta. 489+04 (R 60'), install approx. 84-ft of 24-in DIP to the start of new 36-in Steel Casing at Sta. 489+87 (R 61'). Install a new 24-in Butterfly Valve at Sta. 489+10 (R 61').	Advanced Utility Work	-	1

Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
489+87	491+18	R 61' To R 61'	At Station 489+87 (R 61'), Bore and Jack approx. 130-ft of 36-in Steel Casing across Glendale Blvd.	Advanced Utility Work	-	3
489+87	491+37	R 61' To R 62'	From aforementioned Bore & Jack, install approx. 150-ft of 24-in DIP through new 36-in Steel Casing to a new 24-in X 12-in Tee at Sta. 491+37 (R 62'). Install a new 24-in Butterfly Valve at Sta. 491+34 (R 62').	Advanced Utility Work	-	3
491+37	491+55	R 62' To R 62'	From new 24-in X 12-in Tee, install approx. 18-ft of 24-in DIP to a new 24-in End Cap at Sta. 491+55 (R 62'). Install a new 24-in Butterfly Valve at Sta. 491+41 (R 62').	Advanced Utility Work	-	1
491+37	491+37	R 62' To R 80'	Install a new 24-in X 12-in Tee at Sta. 491+37 (R 62'). Install approx. 18-ft of 12-in DIP and tie into existing 12-in Cast with a new 12-in 90° at Sta. 491+37 (R 80'). Install a new 12-in Butterfly Valve at Sta. 491+37 (R 66'). Cup and Cap existing 12-in Cast at Station 491+26 (R 81').	Advanced Utility Work	-	1
421+20	420+93	R 39' To R 43'	At Sta. 421+20 (R 39'), install approx. 6-ft of 24-in DIP to a 24-in X 12-in Reducer at Sta. 421+14 (R 44'). Install approx. 21-ft of 12-in DIP to a new 12-in X 8-in Reducer at Sta. 420+93 (R 43').	Advanced Utility Work	-	1
420+93	417+15	R 43' To R 40'	From new 12-in X 8-in Reducer, install approx. 378-ft of 8-in DIP along the southerly side of US 40 East to a new 8-in End Cap at Station 417+15 (R 40'). Install a new 8-in Gate Valve at Sta. 420+74 (R 43'), 417+23 (R 40'), and 417+31 (R 40').	Advanced Utility Work	-	8
417+28	414+85	R 40' To R 78'	Tap into new 8-in DIP at Sta. 417+28 (R 40') and install approx. 172-ft of 2-in PE along the southerly side of US 40 East. Directional Drill approx. 83-ft of 2-in PE through 4-in conduit across Porter Road to Station 414+85 (R 78').	Advanced Utility Work	-	4
440+78	340+94	R 41' To L 52'	At Sta. 440+78 (R 41'), Jack & Bore approx. 150-ft of 16-in Steel Casing and install approx. 158-ft of 8-in DIP through the Casing to a new 8-in 90° Bend at Sta. 340+94 (L 52'). Install a new 8-in Gate valve at Sta. 440+78 (R 33') & Station 340+90 (L 52').	Advanced Utility Work	-	7
340+94	340+13	L 52' To L 99'	From 8-in 90° Bend at Sta. 340+94 (L 52'), install approx. 107-ft of 8-in DIP through Proposed Easement along the northeasterly corner of US 40 West and Brookmont Drive. Tie into existing 8-in Cast at Sta. 340+13 (L 99'). Install new 8-in Bends at designated locations. Cut and Cap existing 8-in Cast at Sta. 340+12 (L 95').	Advanced Utility Work	-	2
340+95	345+35	L 49' To L 62'	At Sta. 340+95 (L 49'), tap into new 8-in DIP and Directional Drill approx. 452-ft of 2-in PE along the northerly side of US 40 West to Sta. 345+35 (L 62') and tie into existing 1-in & 2-in Services.	Advanced Utility Work	-	6

Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
449+37	449+22	R 20' To R 107'	At Sta. 449+37 (R 20'), back tap and install approx. 21-ft of 12-in DIP to a new 12-in X 12-in Tee at Sta. 449+37 (R 41'). Install approx. 5-ft of 12-in DIP to a new 12-in X 8-in Reducer at Sta. 449+37 (R 46'). Install approx. 63-ft of 8-in DIP through Private Easement and tie into existing 8-in DIP with a new 8-in 45° Bend at Sta. 449+22 (R 107'). Cut and cap ex. 8-in DIP at Sta. 448+92 (R 23') & Sta. 449+20 (R 102'). Install new bends at designated locations.	Advanced Utility Work	-	4
449+37	349+60	R 41' To L 53'	From aforementioned 12-in X 12-in Tee, install approx. 10-ft of 12-in DIP to a new 12-in 90° Bend at Sta. 449+46 (R 41'). Jack & Bore approx. 165-ft of 20-in Steel Casing across US 40. Install approx. 169-ft of 12-in DIP through the Casing to a new 12-in 45° Bend at Station 349+60 (L 53').	Advanced Utility Work	-	7
349+60	349+16	L 53' To L 72'	From 12-in 90° Bend at Sta. 349+60 (L 53'), install approx. 51-ft of 12-in DIP through Private Easement along the northeasterly corner of US 40 West & Wellington Drive and tie into ex. 12-in DIP with a new 12-in 90° Bend at Sta. 349+16 (L 72'). Cut and Cap ex. 12-in DIP at Sta. 349+21 (L 65'). Install bends at designated areas.	Advanced Utility Work	-	1
476+76	476+76	R 59' To L 47'	From new 24-in X 8-in Tee at Sta. 476+76 (R 59'), Open cut and install approx. 105-ft of 8-in DIP through 70-ft of 16-in Steel Casing across US 40 East. Tie into ex. 8-in DIP with a new 8-in Sleeve at Sta. 476+76 (L 47'). Cut and cap ex. 8-in DIP at Sta. 476+73 (L 46'). Install bends in designated areas.	Advanced Utility Work	-	4
434+11	434+15	L 45' To L 45'	Cut and Cap existing 16-in DIP at Sta. 434+11 (L 45') and 12-in Cast at Sta. 434+15 (L 45').	Advanced Utility Work	-	1
489+04	489+04	R 60' To R 110'	From new 24-in X 8-in Tee at Sta. 489+04 (R 60'), install approx. 50-ft of 8-in DIP to a new 8-in 90° Bend at Sta. 489+04 (R 110'). Install a new 8-in Gate Valve at Sta. 489+04 (R 64').	Advanced Utility Work	-	1
489+04	490+67	R 110' To R 127'	From aforementioned 8-in 90° Bend install approx. 175-ft of 8-in DIP along the southerly side of Edward Court and tie into existing 8-in AC with a new 8-in transition coupling at Station 490+67 (R 127'). Install a new 8-in X 8-in tee at Sta. 490+25 (R 111'). Install bends at designated areas.	Advanced Utility Work	-	4

Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
490+68	491+26	R 106' To R 81'	Cut and Cap ex. 8-in AC at Sta. 490+68 (R 106') and ex. 12-in Cast at Sta. 491+26 (R 81').	Advanced Utility Work	-	1

Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
491+48	491+48	R 80'	Line-stop Operation to be performed to install a new 12-in Butterfly valve at Sta. 491+48 (R 80').	Advanced Utility Work	-	1
309+02	309+54	R 17' To R 17'	Install (4) 16-in 45° vertical and horizontal bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
311+41	311+77	R 18' To R 18'	Install (4) 16-in 45° vertical and horizontal bends to avoid conflict with proposed drainage. Install a new 16-in Butterfly Valve at Sta. 311+81 (R 18').	Advanced Utility Work	-	1
318+38	318+73	R 22' To R 22'	Install (4) 16-in 45° vertical and horizontal bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
320+92	321+22	R 23' To R 23'	Install (4) 16-in 45° vertical and horizontal bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
324+23	324+56	R 23' To R 23'	Install (4) 16-in 45° vertical and horizontal bends to avoid conflict with proposed drainage. Install new 16-in Insertion Valve at Sta. 324+03 (R 24').	Advanced Utility Work	-	1
332+31	332+62	R 24' To R 24'	Install (4) 16-in 45° vertical and horizontal bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
436+04	436+36	R 25' To R 24'	Install (4) 12-in 45° Vertical and horizontal Bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
442+78	443+18	R 19' To R 19'	Install (4) 12-in 45° Vertical and horizontal bends to avoid conflict with proposed drainage. Install a new 12-in Insertion Valve at Sta. 443+41 (R 19').	Advanced Utility Work	-	1
447+26	447+67	R 17' To R 16'	Install (4) 12-in 45° Vertical and horizontal bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
449+84	452+85	R 21' To R 22'	Install approx. 305-ft of 12-in DIP and new 45° vertical & horizontal bends to avoid conflict with proposed drainage. Install a new 12-in insertion valve at Sta. 452+93 (R 22').	Advanced Utility Work	-	8
471+64	471+85	R 23' To R 23'	Install (4) 12-in 45° vertical and horizontal bends to avoid conflict with proposed drainage. Install new 12-in insertion valve at Sta. 471+95 (R 23').	Advanced Utility Work	-	1
483+73	484+02	R 23' To R 24'	Install (4) 12-in 45° Vertical and horizontal Bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
486+49	486+78	R 25' To R 26'	Install (4) 12-in 45° Vertical and horizontal Bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
315+36	315+51	L 46' To L 36'	Install (4) 12-in 45° Vertical and horizontal Bends to avoid conflict with proposed drainage.	Advanced Utility Work	-	1
303+03	303+09	R 18' To R 18'	Cut and Cap ex. 16-in DIP at Sta. 303+03 (R 18') & Sta. 303+09 (R 18').	Advanced Utility Work	-	1
126+39	126+39	R 46'	Install 12-in Tapping Sleeve and Valve at Sta. 126+39 (R 46') for existing service to be tied into by Owner.	Advanced Utility Work	-	1

Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
316+12	316+12	R 20'	Disconnect Service at the Corporation Stop. Service not being reestablished.	Advanced Utility Work	-	1
444+57	444+57	R 18'	Service to be dropped to avoid drainage conflict.	Advanced Utility Work	-	1
SEE BELOW	SEE BELOW	-	20 Services to be Re-established with a new service line, Curbstop, and private Meter Pit.	Advanced Utility Work	-	19
ALL	ALL	-	Properly purge and seal existing water mains within the project limits that will be retired as a result of the relocations. Pull valve boxes on all valves and blowoffs to be abandoned.	Advanced Utility Work	-	2
-	-	-		TBD	TBD	315 Total Days

SERVICES TO BE RE-ESTABLISHED:

- Station 313+31: 3/4" Long Service Line, Curbstop, and Meter Pit
- Station 414+79: 3/4" Long Service Line, Curbstop, and Meter Pit
- Station 419+40: 3/4" Long Service Line, Curbstop, and Meter Pit
- Station 420+26: 3/4" Long Service Line, Curbstop and Meter Pit
- Station 421+35: 3/4" Long Service Line, Curbstop and Meter Pit
- Station 425+23: 8" Long Service line w/ (2) 2" services & (1) 6" Service tapped off it.
- Station 431+49: 12" Long Service Line
- Station 333+78: 1" Long Service Line, Curbstop, and Meter Pit
- Station 345+29: 2" Long Service Line, Curbstop, and Meter Pit
- Station 345+28: 1" Short Service Line, Curbstop, and Meter Pit
- Station 450+09: 1" Long Service Line, Curbstop, and Meter Pit
- Station 451+25: 1" Short Service Line, Curbstop, and Meter Pit
- Station 498+10: 1" Short Service Line, 3/4" Curbstop, and Meter Pit
- Station 124+47: 3/4" Long Service Line, Curbstop, and Meter Pit
- Station 125+24: 3/4" Long Service Line, Curbstop, and Meter Pit
- Station 127+21: 3/4" Long Service Line, Curbstop, and Meter Pit
- Station 128+99: 3/4" Long Service Line, Curbstop, and Meter Pit

CONSTRUCTION TIMING AND PHASING: Artesian's contractor will complete these relocations in advance of the roadway construction. Artesian's contractor began their work March 2024 and the work is expected to take 315 working days to complete.

ABANDONMENT: Existing mains are to be withdrawn from service once the new mains are installed and activated. Retired mains are to be purged and sealed once the relocation work is completed. Artesian's contractor will remove any valve boxes, hydrants, and blow-off assemblies that are to be abandoned.

MOT: Artesian’s contractor will apply the appropriate traffic cases from the latest version of the Delaware Manual on Uniform Traffic Control Devices (MUTCD) in accordance with the MOT plans provided by DelDOT. Artesian will coordinate its traffic control plan and work within the timeframes established by the assigned Area Engineer and Traffic Safety Officer.

CONSTRUCTION METHODS: Artesian requires that the state contractor submit, for our review and/or reference, all proposed construction methods being used within 25 feet of our existing water facilities.

SPECIAL PERMITTING: At this time, we assume that we will not be required to file a General Sediment and Storm Water Management Permit for utility construction and that should we be required to file a sub-aqueous application for utility crossings, we will promptly file and commence construction upon receipt.

STATE’S CONTRACTOR WORK: There are twenty-four (24) water valve boxes that will need to be adjusted/removed to accommodate the proposed construction. This work is to be included in the highway contract with all necessary work to be performed by the State’s Contractor. The water valve boxes are located as follows:

STATION/OFFSET	PROPOSED BASELINE	EXISTING FACILITIES (SIZE/MATERIAL)
STA. 315+56/ 20’ RT.	US 40 WESTBOUND	16-INCH
STA. 315+62/ 25’ RT.	US 40 WESTBOUND	12-INCH
STA. 315+62/ 16’ RT.	US 40 WESTBOUND	12-INCH
STA. 315+81/ 19’ RT.	US 40 WESTBOUND	16-INCH
STA. 329+19/ 19’ RT.	US 40 WESTBOUND	8-INCH
STA. 329+41/ 53’ LT.	US 40 WESTBOUND	8-INCH
STA. 439+98/ 22’ RT.	US 40 EASTBOUND	8-INCH
STA. 340+11/ 44’ LT.	US 40 WESTBOUND	8-INCH
STA. 444+57/ 47’ RT.	US 40 EASTBOUND	¾-INCH
STA. 444+57/ 50’ RT.	US 40 EASTBOUND	¾-INCH
STA. 345+26/ 35’ LT.	US 40 WESTBOUND	1-INCH
STA. 345+28/ 34’ LT.	US 40 WESTBOUND	2-INCH
STA. 345+74/ 44’ LT.	US 40 WESTBOUND	UNKNOWN
STA. 448+92/ 30’ RT.	US 40 EASTBOUND	8-INCH
STA. 349+27/ 26’ RT.	US 40 WESTBOUND	12-INCH
STA. 454+81/ 45’ RT.	US 40 EASTBOUND	8-INCH
STA. 454+81/ 55’ RT.	US 40 EASTBOUND	8-INCH
STA. 375+40/ 58’ LT.	US 40 WESTBOUND	6-INCH
STA. 375+42/ 59’ LT.	US 40 WESTBOUND	2-INCH
STA. 486+88/ 26’ RT.	US 40 EASTBOUND	12-INCH
STA. 487+94/ 28’ RT.	US 40 EASTBOUND	8-INCH
STA. 126+45/ 50’ RT.	SALEM CHURCH ROAD	8-INCH
STA. 126+45/ 61’ RT.	SALEM CHURCH ROAD	8-INCH
STA. 126+63/ 43’ RT.	SALEM CHURCH ROAD	UNKNOWN

There are five (5) private water meters that are in conflict with the proposed construction. These water meters will be either removed and/or relocated by the State’s Contractor as shown in the Utility Relocation Plans and noted below.

STATION/OFFSET	PROPOSED BASELINE	EXISTING FACILITIES (SIZE/MATERIAL)	ACTION
STA. 416+06/ 50’ RT.	US 40 EASTBOUND	1-INCH SERVICE METER	REMOVE
STA. 345+27/ 44’ LT.	US 40 WESTBOUND	1-INCH SERVICE METER	RELOCATE
STA. 345+29/ 44’ LT.	US 40 WESTBOUND	2-INCH SERVICE METER	RELOCATE
STA. 125+93/ 28’ LT.	SALEM CHURCH RD	¾-INCH SERVICE METER	REMOVE
STA. 126+45/ 55’ RT.	SALEM CHURCH RD	8-INCH PCC METER VAULT	REMOVE AND RELOCATE

Artesian’s review is based upon information contained in DelDOT's Revised Final Plans for contract T201611902, received on 05/22/2024, 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.

Note: The Contractor is not permitted to draw water from any hydrant for any use, without the written permission of the Artesian and proper metering and backflow prevention equipment in place.

Under no circumstances shall any valve box be paved over, filled, or knocked out of vertical alignment during construction.

No working/existing Artesian Water Company facilities can be taken out of service.

**These facilities will remain in place and active during the duration of this contract.
 24-hour emergency phone number - 1-800-332-5114.**

AT&T

AT&T owns and maintains underground fiber optic conduit and junction wells along the north side of US 40 WB, varying 25’ to 50’ off the proposed baseline entering the project limits at Sta. 306+00 LT and exiting the project limits at Sta. 397+00 LT. These facilities are 1” to 2” plastic conduits that contain between 2 to 5 cables as determined by test holes obtained throughout the project area.

AT&T owns and maintains underground fiber optic conduit and junction wells along Salem Church Road. Entering the project limits on the east side of Porter Rd (Sta. 110+00 40'RT), the underground path crosses US 40 at Sta. 316+50, then continues along the west side of Salem Church Rd (varying 25' to 50'RT off baseline) before crossing at Sta. 119+75 and continuing along the east side of Salem Church Rd (varying 1' to 2' off the edge of existing roadway) to exit the project limits. These facilities are two (2) 1 1/2" plastic conduits.

AT&T will relocate one (1) communications junction well at the following location to accommodate proposed construction:

STATION	OFFSET	PROPOSED BASELINE	PROPOSED LOCATION
126+63	18' LT.	SALEM CHURCH ROAD	STA. 126+35 / 46' LT.

AT&T will adjust one (1) manhole structure at the following location to accommodate proposed construction:

STATION	OFFSET	PROPOSED BASELINE
316+70	43' LT.	US 40 WESTBOUND

AT&T will relocate six (6) cable markers at the following locations to the back of proposed right-of-way to accommodate proposed construction. This work is to be done during highway construction by the State's Contractor. The cable markers are located as follows:

STATION	OFFSET	PROPOSED BASELINE	PROPOSED LOCATION
316+60	38' LT.	US 40 WESTBOUND	STA. 316+60 / 55' LT.
316+67	46' LT.	US 40 WESTBOUND	STA. 316+67 / 55' LT.
321+38	48' LT.	US 40 WESTBOUND	STA. 321+38 / 60' LT.
326+25	44' LT.	US 40 WESTBOUND	STA. 326+25 / 64' LT.
333+68	44' LT.	US 40 WESTBOUND	STA. 333+68 / 47' LT.
382+44	34' LT.	US 40 WESTBOUND	STA. 382+44 / 51' LT.

AT&T will adjust one (1) cable marker at the following location to accommodate proposed construction. This work is to be done during highway construction by the State's Contractor.

STATION	OFFSET	PROPOSED BASELINE
380+03	38' LT.	US 40 WESTBOUND

The Contractor is responsible for contacting AT&T at least **48 hours** in advance of any excavation within 10 feet of existing underground AT&T facilities along US 40. AT&T will have a representative on-site during any construction activities near their existing underground facilities.

AT&T's review is based upon information contained in DelDOT's Final Plans for contract T201611902, received on 02/28/2022, 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.

These relocations/adjustments will be completed by AT&T forces during the roadway construction contract and are expected to take approximately **thirty (30) calendar days** to complete following **twenty-eight (28) 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.

No existing AT&T facilities can be taken out of service.

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

COMCAST CABLE

Comcast Cable owns and maintains underground coaxial and aerial fiber optic facilities on Delmarva Power owned utility poles along the south side of US 40 EB. Comcast will relocate underground and aerial facilities that are currently connected to existing Delmarva Power poles to be relocated.

Comcast maintains the following aerial facilities within the project limits:

1. Comcast maintains aerial facilities entering the project limits on the south side US 40 EB at Sta. 293+00 RT to Sta. 293+87 RT pole #44314/38653.
2. Comcast's facilities continue along the south side of US 40 EB from Sta. 293+87 RT to Sta. 406+02 (WB Sta. 306+02) pole #44398/38735 RT.
3. Comcast maintains aerial facilities along the south side of US 40 EB from Sta. 406+02 RT to Sta. 492+73 RT pole #45174/39132 then continues east along the south side of US 40 EB beyond the project limits.
4. Comcast maintains aerial facilities from Sta. 293+83 LT pole #44304/38666 to Sta. 295+71 LT pole #44312/38675.
5. Comcast maintains aerial facilities crossing US 40 at Sta. 295+71 RT from pole #44312/38675 to Sta. 295+71 LT pole #44324/38666.
6. Comcast maintains aerial facilities entering the project limits along the west side of Porter Road to Pole #44473/38784 at Sta. 110+27 26' LT. The aerial facilities continue to pole #44470/38787 at Sta. 110+78 RT. (US 40: Sta. 414+83 45' RT).
7. Comcast maintains aerial facilities crossing US 40 to Salem Church Road at Sta. 110+78 RT (US 40: Sta. 414+83 45' RT) where they continue north to Sta. 130+50 to leave the project limits.
8. Comcast maintains aerial facilities crossing US 40 EB at Sta. 427+86 (WB: Sta. 327+32) LT pole #44587/38842 to US 40 WB at Sta. 327+64 RT (EB Sta. 427+16) to continue north along Glasgow Drive beyond the project limits.

9. Comcast maintains aerial facilities crossing US 40 from DPL Pole #92 at EB Sta. 446+53 47' RT (EB: Sta. 346+68 LT) extending north to DPL Pole #44750/38934 at WB Sta. 346+79 44' LT (WB: Sta. 446+62 RT).
10. Comcast maintains aerial facilities along US 40 WB from pole #44777/398948 Sta. 349+93 LT to pole #unknown Sta. 353+30 43' LT.
11. Comcast maintains aerial facilities crossing at pole #Unknown at Sta. 353+30 LT. to pole #44814/38949 at Sta. 453+18 45' RT.

Comcast will relocate the following aerial facilities:

1. Comcast will relocate existing aerial facilities on the South side of US 40 EB from pole #44457/38780 at Sta. 413+25 43' RT extending East across Porter Rd to pole #44486/38795 at Sta. 416+65 43' RT.
2. Comcast will relocate existing aerial facilities on the West side of Porter Rd from pole #44473/38784 at Sta. 110+25 25' LT extending Northwest across US 40 to pole #44458/38797 at Sta. 112+58 42' LT on Salem Church Rd.
3. Comcast will relocate existing aerial facilities on the South side of US 40 EB from pole #44580/38838 at Sta. 426+40 58' RT extending East to pole #44596/38846 at Sta. 428+60 56' RT.
4. Comcast will relocate existing aerial facilities on the South side of US 40 EB from Pole #44587/38842 at Sta. 427+65 54' RT to new pole at Sta. 427+21 56' RT to cross US 40 extending Northwest along Glasgow Dr to existing pole #44567/38868.
5. DPL Pole #44782/38933 at Sta. 449+28 45' RT is being removed. Comcast does not anticipate a sag issue with the proposed span length of 140 ft; however, Comcast will adjust their connection between Verizon Pole #44772/38928 at Sta. 448+21 43' RT and Verizon Pole #44784/38934 at Sta. 449+62 45' RT if needed.
6. Comcast will relocate existing aerial facilities on the South side of US 40 from pole #45138/39113 at Sta. 488+80 45' RT extending East to pole #VZ 201 67 (45164/39127) at Station 491+48 45' RT.
7. Comcast will relocate existing aerial facilities on the South side of Salem Church Rd from pole #44378/38885 at Sta. 124+32 30' LT extending Northwest along Salem Church Rd to pole #44346/38922 at Station 128+70 32' RT.

Comcast will complete these changes. These above relocations/adjustments are expected to take approximately **thirty (30)** calendar days to complete after Comcast has been given a minimum of **sixty (60)** 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 Contract, clearing and grubbing has been performed. Comcast relocations will begin once DP&L has completed their work.

Comcast maintains the following underground facilities within the project limits:

1. Comcast maintains underground facilities from Sta. 294+90 LT to Sta. 304+80 LT.
2. Comcast maintains underground facilities from DPL Pole #44575/38856 at Sta. 327+31 79' LT extending east along US 40 to DPL Pole #44628/38876 at Sta. 333+73 38' LT.
3. Comcast maintains underground facilities from DPL Pole #44750/38934 at Sta. 346+79 44' LT extending west along US 40 WB to Sta. 344+58 turning north to continue beyond the project limits.
4. Comcast maintains underground facilities on US 40 WB from pole #44777/398948 Sta. 349+93 LT to extend north onto private property.

Comcast will relocate the following underground facilities to avoid proposed construction:

1. Comcast will relocate underground fiber and coax cable facilities from a proposed handhole at Sta. 344+61 81' LT to DPL Pole #44750/38934 at Sta. 346+79 44' LT.
2. Comcast will relocate underground fiber and coax cable facilities from Sta. 327+40 LT to a proposed DPL Pole #44628/38876 at Sta. 333+81 50' LT.

There is one (1) surface pedestal hand that will need to be relocated to accommodate the proposed construction. This work is to be included in the highway contract with all necessary work to be performed by Comcast forces. The surface pedestal is located as follows:

STATION	OFFSET	PROPOSED BASELINE	PROPOSED LOCATION
333+74.15	38.21' LT.	US 40 WESTBOUND	STA. 333+46 / 49' LT.

There is one (1) fiber vault that will need to be adjusted to accommodate the proposed construction. This work is to be included in the highway contract with all necessary work to be performed by Comcast forces. The fiber vault is located as follows:

STATION	OFFSET	PROPOSED BASELINE
348+26.13	55.98' LT.	US 40 WESTBOUND

These above relocations/adjustments will be completed by Comcast forces during the roadway construction contract and are expected to take approximately **thirty (30) calendar days (total of sixty (60) calendar days)** to complete following **sixty (60) 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. The state's contractor shall stakeout the proposed underground relocations and schedule a field meeting with Comcast to review.

Comcast's review is based upon information contained in DeIDOT's Final Plans for contract T201611902, received on 02/28/2022, 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.

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

CROWN CASTLE

Crown Castle owns and maintains aerial facilities on Delmarva Power owned utility poles along US 40 and Salem Church Road. Crown Castle will need to relocate aerial facilities that are currently connected to existing Delmarva Power poles to be relocated.

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

1. Crown Castle maintains aerial facilities along the south side of US 40 EB from Verizon Pole #44314/38653 at Sta. 293+86 119' RT extending east and west beyond project limits.
2. Crown Castle maintains aerial facilities along the west side of Salem Church Road throughout the project limits. These aerial facilities cross US 40 to DPL Pole #44470/38787 at Sta. 414+83 45' RT, which is near the southern project limits at the intersection of US40/Salem Church Road.
3. Crown Castle maintains aerial facilities crossing US 40 from Pole #45055/39071 at Sta. 479+60 50' RT extending North beyond project limits.

Crown Castle maintains the following buried/underground facilities within the project limits:

1. Crown Castle maintains underground facilities from DPL Pole #45103/39096 at Sta. 485+00 46' RT extending south beyond project limits.

Crown Castle will relocate the following aerial facilities:

1. Crown Castle will relocate existing aerial facilities on the South side of US 40 EB from relocated pole #44457/38780 at Sta. 413+20 51'RT extending East across Porter Rd to relocated pole #44486/38795 at Sta. 417+00 46'RT.
2. Crown Castle will relocate existing aerial facilities on the West side of Porter Rd from relocated pole #44470/38787 at Sta. 110+63 33'LT extending Northwest across US 40 to pole #44458/38797 at Sta. 112+58 42'LT on Salem Church Rd.
3. Crown Castle will relocate existing aerial facilities on the South side of US 40 EB from pole #44580/38838 at Sta. 426+40 58'RT extending East to pole #44596/38846 at Sta. 428+60 56'RT.
4. Crown Castle will remove existing aerial facilities from DPL pole #44782/38933 at Sta. 449+28 45' RT that is being removed. Crown Castle will adjust aerial connections as needed between Verizon Pole #44772/38928 at Sta. 448+21 43' RT and Verizon Pole #44784/38934 at Sta. 449+62 45' RT.
5. Crown Castle will relocate existing aerial facilities on the South side of US 40 from pole #45138/39113 at Sta. 488+80 45'RT extending East to pole #VZ 201 67 (45164/39127) at Station 491+48 45'RT.
6. Crown Castle will relocate existing aerial facilities on the South side of Salem Church Rd from pole #44378/38885 at Sta. 124+32 36'LT extending Northwest along Salem Church Rd to relocated pole #44346/38922 at Station 128+73 32'LT.

These relocations/adjustments will be completed by Crown Castle forces during the roadway construction contract and will require **sixty (60) calendar days** to complete the proposed communication work following a minimum of **twenty-eight (28) calendar days** advance notice of from DelDOT that utility poles have been relocated and DPL has completed all required electric work.

Crown Castle's review is based upon information contained in DelDOT's PS&E Plans for contract T201611902, received on 08/08/2024, phone conversation with WRA on 08/08/2024, 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.

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 maintains the following aerial facilities within the project limits:

1. Delmarva Power maintains aerial facilities along the south side of US 40 EB from Verizon Pole #44314/38653 at Sta. 293+86 119' RT extending east and west beyond project limits.
2. Delmarva Power maintains aerial facilities along the north side of US 40 WB from DPL Pole #44304/38666 at Sta. 293+83 47' LT to DPL Pole #44323/38685 at Sta. 296+59 34' LT.
3. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #44324/38666 at Sta. 295+74 122' RT to DPL pole #Unknown at Sta. 295+72 38' LT.
4. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #44324/38666 at Sta. 300+85 115' RT to DPL pole #44351/38716 at Sta. 300+69 39' LT and to DPL pole #44352/38713 at Sta. 300+97 40' LT.
5. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #44420/38754 at Sta. 408+87 45' RT to DPL Pole #44407/38761 at Sta. 308+37 42' LT.
6. Delmarva Power maintains aerial facilities crossing US 40 from DPL Pole #44470/38787 at Sta. 414+83 45' RT continuing north along the west side of Salem Church Road and extending beyond project limits.
7. Delmarva Power maintains aerial facilities along the west side of Porter Road from DPL Pole #44470/38787 at Sta. 414+83 45' RT extending south beyond project limits.
8. Delmarva Power maintains aerial facilities crossing US 40 from DPL Pole #44587/38842 at Sta. 427+83 56' RT continuing north along the east side of Glasgow Drive and extending beyond project limits.
9. Delmarva Power maintains aerial facilities along the north side of US 40 WB from DPL Pole #44575/38856 at Sta. 327+31 79' LT to DPL Pole #44576/38855 at Sta. 327+82 56' LT.
10. Delmarva Power maintains aerial facilities along the north side of US 40 WB from DPL Pole #44589/38863 at Sta. 329+75 80' LT to DPL Pole #44635/38881 at Sta. 334+69 36' LT.

11. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #44642/38868 at Sta. 433+97 54' RT to DPL Pole #44628/38876 at Sta. 333+73 38' LT and extending north beyond project limits.
12. Delmarva Power maintains secondary aerial facilities along the north side of US 40 WB from DPL Pole #44673/38898 at Sta. 337+89 37' LT continuing east to a DelDOT span wire pole at Sta. 339+21 41' LT and then extending north along the west side of Brookmont Drive beyond project limits.
13. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #44740/38913 at Sta. 444+61 47' RT to DPL Pole #44732/38925 at Sta. 344+71 40' LT extending north beyond project limits.
14. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #44757/38921 at Sta. 446+53 47' RT to DPL Pole #44750/38934 at Sta. 346+79 44' LT continuing east along the north side of US 40 WB to DPL Pole #44776/38941 at Sta. 349+38 40' LT.
15. Delmarva Power maintains aerial facilities along the east side of Church Road from DPL Pole #44782/38933 at Sta. 449+28 45' RT extending south beyond project limits.
16. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #44814/38949 at Sta. 453+16 45' RT to DPL Pole #44808/38963 at Sta. 353+30 43' LT continuing west along the north side of US 40 WB to DPL Pole #44777/38948 at Sta. 349+92 60' LT.
17. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #44909/38997 at Sta. 464+03 50' RT to DPL Pole #44910/39013 at Sta. 364+47 51' LT.
18. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #45055/39071 at Sta. 479+60 50' RT to DPL Pole #45047/39081 at Sta. 379+68 64' LT.
19. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #45084/39086 at Sta. 482+69 49' RT to DPL Pole #45073/33098 at Sta. 382+33 68' LT extending north beyond project limits.
20. Delmarva Power maintains aerial facilities from Verizon Pole #45138/39113 at Sta. 488+81 46' RT extending south beyond project limits.
21. Delmarva Power maintains aerial facilities crossing US 40 from Verizon Pole #45151/39120 at Sta. 490+21 44' RT continuing north along the west side of Walther Road and extending beyond project limits.
22. Delmarva Power maintains aerial facilities along the north side of US 40 WB from DPL Pole #45128/39124 at Sta. 388+73 38' LT to DPL Pole #45145/39136 at Sta. 390+86 44' LT.
23. Delmarva Power maintains aerial facilities crossing Salem Church Road from DPL Pole #44413/38842 at Sta. 118+90 37' LT extending east beyond project limits.
24. Delmarva Power maintains aerial facilities crossing Salem Church Road from DPL Pole #44368/38897 at Sta. 125+88 26' LT to DPL Pole #44373/38801 at Sta. 125+91 57' RT.

Delmarva Power Electric maintains the following underground facilities within the project limits:

1. Delmarva Power maintains underground facilities from DPL Pole #44304/38666 at Sta. 293+83 47' LT extending north beyond project limits.
2. Delmarva Power maintains underground facilities from DPL Pole #Unknown at Sta. 295+72 38' LT extending north beyond project limits.
3. Delmarva Power maintains underground facilities from DPL Pole #44323/38685 at Sta. 296+59 34' LT continuing along the north side of US 40 WB and then extending north at Sta. 302+20 beyond project limits.

4. Delmarva Power maintains underground facilities from DPL Pole #44501/38802 at Sta. 418+10 48' RT extending south beyond project limits.
5. Delmarva Power maintains underground facilities from DPL Pole #44576/38855 at Sta. 327+82 56' LT extending north beyond project limits.
6. Delmarva Power maintains underground facilities from DPL Pole #44691/38890 at Sta. 439+26 51' RT extending north along the west side of Brookmont Drive beyond project limits and extending south beyond project limits.
7. Delmarva Power maintains underground facilities from Verizon Pole #44699/38894 at Sta. 440+08 50' RT extending north along the east side of Brookmont Drive beyond project limits.
8. Delmarva Power maintains underground facilities from Verizon Pole #44699/38894 at Sta. 440+08 50' RT to Verizon Pole #44707/38898 at Sta. 440+96 49' RT.
9. Delmarva Power maintains underground facilities from DPL Pole #44750/38934 at Sta. 346+79 44' LT continuing east along the north side of US 40 WB and then extending north along the west side of Wellington Drive beyond project limits.
10. Delmarva Power maintains underground facilities from Verizon Pole #44784/38934 at Sta. 449+62 45' RT extending south beyond project limits.
11. Delmarva Power maintains underground facilities from DPL Pole #44811/38948 at Sta. 452+96 44' RT extending south beyond project limits.
12. Delmarva Power maintains underground facilities from Verizon Pole #44814/38949 at Sta. 453+16 45' RT extending south beyond project limits.
13. Delmarva Power maintains underground facilities from DPL Pole #44777/38948 at Sta. 349+92 60' LT extending north beyond project limits.
14. Delmarva Power maintains underground facilities from Verizon Pole #44836/38953 at Sta. 455+36 51' RT extending southwest beyond project limits.
15. Delmarva Power maintains underground facilities from Verizon Pole #44846/38965 at Sta. 456+80 49' RT extending south beyond project limits.
16. Delmarva Power maintains underground facilities from DPL Pole #44910/39013 at Sta. 364+47 51' LT extending northwest beyond project limits.
17. Delmarva Power maintains underground facilities from Verizon Pole #44929/39007 at Sta. 465+86 50' RT extending south beyond project limits.
18. Delmarva Power maintains underground facilities from Verizon Pole #44957/39021 at Sta. 468+89 50' RT continuing west along the south side of US 40 EB and then extending south along the east side of Rockwood Road beyond project limits.
19. Delmarva Power maintains underground facilities from DPL Pole #45047/39081 at Sta. 379+68 64' LT extending north beyond project limits.
20. Delmarva Power maintains underground facilities from Verizon Pole #45063/39068 at Sta. 480+52 50' RT extending south beyond project limits.
21. Delmarva Power maintains underground facilities from Verizon Pole #45070/39072 at Sta. 481+35 50' RT extending east along the south side of US 40 EB and then continuing south at Sta. 482+55 beyond project limits.
22. Delmarva Power maintains underground facilities from Verizon Pole #45103/39096 at Sta. 485+00 46' RT extending south beyond project limits.
23. Delmarva Power maintains underground facilities from Verizon Pole #45119/39104 at Sta. 486+83 45' RT extending south beyond project limits.

24. Delmarva maintains underground facilities from DPL Pole #44373/38801 at Sta. 125+91 57' RT extending east along the east side of Salem Church Road, crossing Cornell Drive, and continuing east beyond project limits.

Delmarva owns twenty-six (26) utility poles at the following locations, which conflict with the proposed design:

POLE NUMBER	STATION	OFFSET	PROPOSED BASELINE	ACTION
#44407/38761	308+36.59	42.23' LT	US 40 WB	Install new pole to Sta. 308+48.48 48.94' LT. Relocate guy wire to Sta. 308+46.13 57.48' LT.
#44457/38780	413+18.95	36.91' RT	US 40 EB	Install a 55' pole at Sta. 413+19.68 51.24' RT and a 60' pole at Sta. 414+12.93 56.51' RT.
#44470/38787	414+83.32	45.47' RT	US 40 EB	Relocate pole to Sta. 414+88.45 58.64' RT. Install guy wires at Sta. 414+91.07 65.83' RT and Sta. 414+92.43 69.90' RT.
#44473/38784	110+26.86	25.86' LT	Porter Road	Install a 60' pole at Sta. 110+02.06 25.23' LT and guy wire at Sta. 110+17.17 25.07' LT.
NEW POLE & GUY WIRE	415+99.45	53.44' RT	US 40 EB	Install new pole at Sta. 415+99.45 53.44' RT and guy wire at Sta. 416+00.76 67.00' RT.
#44486/38795	416+67.43	33.43' RT	US 40 EB	Relocate pole to Sta. 416+99.53 45.59' RT and guy wire to Sta. 417+14.53 46.08' RT.
#44575/38856	327+30.72	78.65' LT	US 40 WB	Relocate pole to Sta. 327+35.71 80.97' LT. Install guy wire at Sta. 327+48.19 91.76' LT.
#44587/38842	427+83.00	55.78' RT	US 40 EB	Relocate pole to Sta. 427+20.44 56.38' RT. Install guy wire at Sta. 427+20.48 72.88' RT. Remove existing push pole at Sta. 427+77.24 44.70' RT.
#44628/38876	333+73.16	38.40' LT	US 40 WB	Relocate pole to Sta. 333+81.29 50.34' LT.
#44635/38881	334+69.28	36.21' LT	US 40 WB	Relocate pole to Sta. 334+69.17 47.13' LT.
#44673/38898	337+89.10	37.00' LT	US 40 WB	Relocate pole to Sta. 337+89.63 46.79' LT.
#44782/38933	449+28.05	44.59' RT	US 40 EB	Remove pole to avoid proposed signal pole.

POLE NUMBER	STATION	OFFSET	PROPOSED BASELINE	ACTION
#44784/38934	449+62.25	44.66' RT	US 40 EB	Adjust aerial facilities to connect with existing DPL Pole #44784/38925 at Sta. 449+15.73 82.11' RT.
NEW POLE	449+97.70	44.08' RT	US 40 EB	DPL will add a 45' pole.
#45103/39096	485+00.32	45.52' RT	US 40 EB	Adjust pole to eliminate the push pole at Sta. 484+99.42 67.99' RT.
#45128/39124	388+73.26	37.97' LT	US 40 WB	Relocate pole to Sta. 388+73.26 56.38' LT and guy wire to Sta. 388+58.27 55.88' LT.
#45138/39113	488+81.12	46.27' RT	US 40 EB	Remove guy wire only. Pole will be installed on the south side of Edward Court to support the existing pole.
#45138/39132	389+93.44	60.38' LT	US 40 WB	Adjust aerial facilities to connect with the adjacent relocated poles.
#45151/39120	490+21.30	43.82' RT	US 40 EB	Relocate pole to Sta. 489+95.00 68.67' RT and guy wire to Sta. 489+95.99 83.64' RT.
#45145/39136	390+85.83	44.02' LT	US 40 WB	Relocate pole to Sta. 390+85.83 56.50' LT and guy wire to Sta. 391+00.82 55.87' LT.
#45164/39127	491+51.15	45.62' RT	US 40 EB	Adjust aerial facilities to connect with the adjacent relocated pole and new signal infrastructure.
NEW POLE & GUY WIRE	124+31.91	25.11' RT	Salem Church Road	Install new span guy pole at Sta. 124+31.91 25.11' RT and guy wire at Sta. 124+30.41 40.03' RT.
#44368/38897	125+88.18	25.78' LT	Salem Church Road	Relocate pole to Sta. 125+95.79 48.66' LT and guy wire to Sta. 125+96.78 63.62' LT.
#44353/38913	127+52.93	27.12' LT	Salem Church Road	Relocate pole to Sta. 127+59.44 45.19' LT and guy wire to Sta. 127+60.16 60.17' LT.
NEW POLE & GUY WIRE	128+78.65	26.22' RT	Salem Church Road	Install new span guy pole at Sta. 128+78.65 26.22' RT and guy wire at Sta. 128+78.99 41.22' RT.
#44346/38922	129+05.87	34.77' LT	Salem Church Road	Relocate pole to Sta. 128+73.19 32.16' LT.

Delmarva will relocate/remove four (4) electric meters at the following locations to accommodate proposed construction:

STATION	OFFSET	PROPOSED BASELINE
327+32.75	74.48' LT	US 40 WESTBOUND

STATION	OFFSET	PROPOSED BASELINE
327+40.59	65.43' LT	US 40 WESTBOUND
438+87.12	42.39' RT	US 40 EASTBOUND
349+28.46	41.46' LT	US 40 WESTBOUND

Delmarva Power will provide the following new 120v/240v power feeds:

1. Delmarva Power will install two (2) power feeds at DPL pole #44486/38795 (STA. 416+67, 45'RT) for the proposed signal/CCTV and proposed lighting at the US 40 and Salem Church Road/Porter Road intersection. Both power feeds will be installed in advance of construction.
2. Delmarva Power will install one (1) power feed for the existing signal/CCTV from the existing DPL pole #44575/38856 (STA. 327+31, 79'LT) to the proposed utility pole (STA. 327+36, 81'LT). Service to the existing US 40 and Glasgow Drive traffic signal shall be maintained at all times. This power feed will be installed in advance of construction.
3. Delmarva Power will install one (1) power feed at DPL pole #44699/38894 (STA. 440+08, 50'RT) at the US 40 and Brookmont Drive intersection. Service to the existing US 40 and Brookmont Drive traffic signal shall be maintained at all times.
4. Delmarva Power will install one (1) power feed at VZ pole #201-67 (STA. 491+51, 46'RT) at the US 40 and Walther Road intersection. Service to the existing US 40 and Walther Road traffic signal shall be maintained at all times.

Delmarva Power provided plan markups for relocating/removing poles and existing aerial wires. Outages are not anticipated and have not been coordinated. Should the State Contractor prefer an outage, they shall coordinate with Delmarva Power and will be responsible for all costs and time delays. Delmarva Power will be responsible for supplying any borrow quantities needed to complete their relocations.

Any adjustments required in the field by the state or private owners are not included. Delmarva Power can begin the ordering of materials and scheduling of work once written authorization to begin construction is received by DelDOT. Delmarva Power will supply all borrow, type C quantities to complete their work and submit to DelDOT for reimbursement.

Delmarva Power will require **eighty (80) calendar days** to complete the proposed distribution work following **twenty-eight (28) calendar days** advance notice of completion of clearing and grubbing, cuts and fills made, staking of rights-of-way, staking of poles, and back of curbs, completion of the Utility Pre-Construction Meeting for this contract scheduled by DelDOT Construction Department, and the procurement of any easements by DelDOT. Work duration is subject to change due to supply shortages and crew availability.

Delmarva Power's review is based upon information contained in DelDOT's Final Plans for contract T201611902, received on 02/28/2022, 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.

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.

DelDOT has not planned for or coordinated with Delmarva Power -Electric Distribution for any temporary power outages, relocations, physical pole support for excavation nor arranged for the installation of insulation of any power line during this contract other than as outlined in the above description. Due to varying construction possibilities; if a contractor's means-and-methods should require support from Delmarva Power 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. All costs associated with any temporary power outages, relocations, physical pole support for excavation 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 in part or in total; or during the time periods requested by the Contractor for construction purposes. Any proposed coordination with Delmarva Power shall be included in the contractor's CPM schedule. In addition, Delmarva Power will determine if these outages can be accommodated.

General

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

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 to satisfy OSHA”

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

DELMARVA POWER - GAS

Delmarva Power maintains underground facilities along US 40 within the project area. The existing facilities along US 40 are as follows:

EXISTING FACILITIES (SIZE/MATERIAL)	BEGIN STATION	END STATION
8-INCH	STA. 408+79/ 37’ RT. (Main runs parallel with US 40)	STA. 420+06/ 33’ RT.
8-INCH	STA. 109+80/ 28’ LT. (Main runs parallel with Porter Rd)	STA. 110+69/ 32’ LT.
6-INCH	STA. 127+28/ 49’ RT. (Line runs parallel with Salem Church Rd & then runs parallel with US 40)	STA. 390+86/ 51’ LT.
LATERAL SERVICE	STA. 127+54/ 49’ RT.	STA. 127+54/ 96’ RT.
8-INCH	STA. 319+97/ 27’ LT.	STA. 419+86/ 34’ RT.
LATERAL SERVICE	STA. 329+71/ 27’ LT.	STA. 329+84/ 55’ LT.
1-INCH	STA. 330+25/ 28’ LT.	STA. 330+25/ 53’ LT.
LATERAL SERVICE	STA. 333+84/ 28’ LT.	STA. 333+84/ 53’ LT.
LATERAL SERVICE	STA. 345+69/ 27’ LT.	STA. 345+42/ 58’ LT.
10-INCH	STA. 352+70/ 49’ LT.	STA. 452+62/ 36’ RT.
LATERAL SERVICE	STA. 363+36/ 52’ LT.	STA. 363+35/ 55’ LT.

Under this statement, **Delmarva Power Gas Delivery** will be referenced as **DPG**. All measurements are **approximate** and will be referenced off of the station markings provided on the construction plans along the Route 40 (Pulaski Highway) westbound lanes.

The gas main to be relocated under this project is a backbone line that cannot be taken out of service at any time.

DPG requires field stakes to be placed by **DelDOT** identifying the proposed gas main alignment, perpendicular pipe crossing centerlines (invert of pipe marked on stake), cut/fill levels (marked on stakes), other structure locations and back of curb locations at cased crossings. These stakes should be

offset at least 10 ft. from the proposed gas main spaced at 25 ft. intervals. Field stakes are to be placed at least one week prior to the start of construction for the **DPG Contractor** to review and to minimize the potential for damage to and/or removal of the stakes.

DPG Gas anticipates 150 calendar days to complete this relocation work.

PROPOSED DPG MAIN ALIGNMENT DESCRIPTION:

The following work will be included in the advanced utility contract.

- **Beginning at Station 315+50 offset left 80 ft.** – New 8” poly gas main to existing 8” poly gas main tie-in point
- **Station 315+50 offset left 80 ft. to Sta. 316+14 offset left 48 ft** – New 8” poly gas main will be installed in a diagonal alignment with the proposed curb line.
- **Station 316+14 to Sta. 319+95 offset left 48 ft.** – New 8” poly gas main will be installed parallel to the Right of Way.
- **At Station 319+95 offset left 48 ft. to Sta. 319+95 offset left 26 ft.** – New 8” poly gas main tie-in with existing/perpendicular 8” poly gas main.
- **Station 319+95 offset left 48 ft. to Sta. 326+30 offset left 47 ft.** – New 8” poly gas main will be installed parallel of the Right of Way. All pipe crossings under commercial facility entrance drives will be directionally drilled without casing pipe.
- **Station 326+30 offset left 47 ft. to Sta. 327+68 offset left 47 ft.** – New 12” HDPE casing pipe will be directionally drilled under roadway (Glasgow Drive) with a new 8” poly gas carrier main inserted through it.
- **Station 327+68 offset left 47 ft. to Sta. 339+19 offset left 46 ft.** - New 8” poly gas main will be installed parallel of the Right of Way. All pipe crossings under commercial facility entrance drives and parking lots will be directionally drilled without casing pipe.
- **At Stations 329+80, 330+25 and 333+84 offset left 47 ft.,** three (3) existing perpendicular near side gas services will be tied over from the existing to the new gas main.
- **At Station 339+19 offset left 46 ft. from Sta. 339+35 offset left 76 ft.** – An existing 4” poly gas main along Brookmont Drive will be tied-over to the new 8” poly main. Alignment of the 4” poly main will be field determined based on existing subsurface conditions.
- **Station 339+19 offset left 46 ft. to Sta. 339+28 offset left 46 ft.** - New 8” poly gas main will be installed parallel of the Right of Way.
- **Station 339+28 offset left 46 ft. to Sta. 340+64 offset left 46 ft.** – New 12” HDPE casing pipe will be directionally drilled under roadway (Brookmont Drive) with a new 8” poly gas carrier main inserted through it.
- **Station 340+64 offset left 46 ft. to Sta. 348+35 offset left 54 ft.** - New 8” poly gas main will be installed parallel of the Right of Way. All pipe crossings under commercial facility entrance drives and parking lots will be directionally drilled without casing pipe.
- **At Station 345+50 offset left 49 ft.,** one (1) existing perpendicular near side gas service will be tied over from the existing to the new gas main.
- **Station 348+35 offset left 54 ft. to Sta. 349+03 offset left 54 ft.** - New 12” HDPE casing pipe will be directionally drilled under roadway (Wellington Drive) with a new 8” poly gas carrier main inserted through it.

- **Station 349+03 offset left 54 ft. to Sta. 349+74 offset left 48 ft.** - New 8” poly gas main will be installed parallel of the Right of Way. The 8” main will shift to align with the existing 6” poly gas main based on subsurface conditions.
- **Ending at Station 349+74 offset left 48 ft.** - New 8” poly gas main will tie-in with existing 6” poly gas main.

There are four (4) gas valve boxes that will need to be adjusted to accommodate the proposed construction. This work is to be done during highway construction by the State’s Contractor. The gas valve boxes are located as follows:

STATION/OFFSET	EXISTING FACILITIES (SIZE/MATERIAL)	PROPOSED BASELINE
STA. 375+60/ 54’ LT.	LATERAL SERVICE	US 40 WESTBOUND
STA. 376+05/ 51’ LT.	6-INCH	US 40 WESTBOUND
STA. 389+84/ 44’ LT.	6-INCH	US 40 WESTBOUND
STA. 127+04/ 80’ RT.	LATERAL SERVICE	SALEM CHURCH ROAD

All existing **DPG** gas main and service pipe retired as a result of the new 8” poly main installation will be purged of gas, capped off and abandoned in place.

Delmarva Gas will abandon four (4) gas valve boxes to accommodate proposed construction. The gas valve boxes are located as follows:

STATION/OFFSET	EXISTING FACILITIES (SIZE/MATERIAL)	PROPOSED BASELINE
STA. 315+84/ 37’ LT.	6-INCH	US 40 WESTBOUND
STA. 315+91/ 33’ LT.	6-INCH	US 40 WESTBOUND
STA. 319+96/ 26’ LT.	6-INCH	US 40 WESTBOUND
STA. 319+97/ 26.5’ LT.	6-INCH	US 40 WESTBOUND

The State’s Contractor will remove the abandoned gas valve boxes noted above prior to completing the proposed paving along westbound US 40 in that area. The State’s Contractor shall contact DPG a minimum of five (5) days prior to completing this work in order to allow DPG to field verify it is safe to remove said valve boxes.

DPG will complete all their relocation work in advance of the highway construction work. Advanced utility relocation work is scheduled to start in summer 2024.

Delmarva Power’s review is based upon information contained in DelDOT’s Revised Final Plans for contract T201611902, received on 05/22/2024, 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.

Caution: 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.

If gas equipment such as pipe, tracer wire, valve boxes, etc. are damaged or you smell gas, call **DPL's emergency number at 302-454-0317 (24 hours a day)** from a safe location.

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

DELMARVA POWER – ELECTRIC TRANSMISSION

Delmarva Power Electric Transmission maintains aerial facilities crossing US 40 from approximately Sta. 380+50 to Sta. 382+50.

There are no anticipated impacts to the existing Delmarva Power Transmission facilities as part of the proposed construction.

Delmarva Power's review is based upon information contained in DelDOT's Final Plans for contract T201611902, received on 02/28/2022, and all data available as of this date.

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 Delmarva Power and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

The State's Contractor is advised to use caution when working in the vicinity of this facility and to maintain a minimum of 25 feet from all Delmarva Power Electric Transmission lines and structures (poles).

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

EASTERN SHORE NATURAL GAS

Eastern Shore Natural Gas maintains underground facilities along US 40 within the project area. The existing facilities along US 40 and Salem Church Road are as follows:

BEGIN STATION	END STATION	PROPOSED BASELINE	EXISTING FACILITIES (SIZE/MATERIAL)
STA. 109+80/ 17' RT. (Line runs parallel with Salem Church Rd)	STA. 131+75/ 13' RT	SALEM CHURCH ROAD	10-INCH

There are no anticipated impacts to the existing gas mains of Eastern Shore Natural Gas as part of the proposed construction.

Any proposed excavation proposed near Eastern Shore’s mains requires the presence of an Eastern Shore representative. The installation of Pipe 12, Station 314+89/ 116’ LT is deemed clear of conflict with Eastern Shore’s main. However, an Eastern Shore representative shall be present for the preparation for and installation of this proposed drainage feature.

Eastern Shore will relocate the following facilities:

Existing 2” casing vent piping will need to be extended out from the existing casing vent at Sta. 112+14 54’ RT to the relocated vent at Sta. 112+15 80’ RT to accommodate the proposed construction.

Eastern Shore Natural Gas will require **ten (10) calendar days** to complete the proposed gas marker relocation following **twenty-eight (28) calendar days** advance notice of completion of clearing and grubbing, cuts and fills made, staking of rights-of-way and back of curbs, completion of the Utility Pre-Construction Meeting for this contract scheduled by DelDOT Canal District Construction Department, the procurement of any easements by DelDOT.

Eastern Shore Natural Gas’s review is based upon information contained in DelDOT's Revised Semifinal Plans for contract T201611902, received on 04/08/2021, 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.

Caution: When saw cutting in close proximity to gas facilities, the contractor is recommended to verify the depth of the communication gas mains 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 existing Eastern Shore Natural Gas facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.

LUMEN

Lumen owns and maintains underground coaxial and fiber optic facilities that run along the median of US 40, varying 20' to 50' off the proposed US 40 WB baseline from Sta. 306+00 RT to Sta. 391+50 RT. The existing facilities containing 1 1/2" plastic conduit. All adjustments or relocations to Lumen facilities will be completed by Lumen forces during the highway construction contract.

Shown below is a list of identified conflicts between the state road project and existing Lumen facilities. Each conflict will require Lumen facilities to be lowered to avoid proposed drainage features. The conflicts have been identified as follows:

STATION	OFFSET	PROPOSED BASELINE	EXISTING FACILITIES (SIZE/MATERIAL)	FROM STA. TO STA.
309+29	25' RT.	US 40 WESTBOUND	(9) 1.5" PLASTIC CONDUITS	309+14 to 309+44
318+59	29' RT.	US 40 WESTBOUND	(9) 1.5" PLASTIC CONDUITS	318+44 to 318+74
328+49	35' RT.	US 40 WESTBOUND	(7) 1.5" PLASTIC CONDUITS	328+34 to 328+64
329+91	30' RT.	US 40 WESTBOUND	(8) 1.5" PLASTIC CONDUITS	329+76 to 330+71
330+56	30' RT.	US 40 WESTBOUND	(8) 1.5" PLASTIC CONDUITS	329+76 to 330+71
332+45	29' RT.	US 40 WESTBOUND	(11) 1.5" PLASTIC CONDUITS	332+30 to 332+60
353+82	43' RT.	US 40 WESTBOUND	(8) 1.5" PLASTIC CONDUITS	353+67 to 353+97
360+56	47' RT.	US 40 WESTBOUND	(9) 1" PLASTIC CONDUITS	360+41 to 360+71
371+89	29' RT.	US 40 WESTBOUND	(7) 1.5" PLASTIC CONDUITS	371+74 to 372+04
383+96	32' RT.	US 40 WESTBOUND	(12) 1.5" PLASTIC CONDUITS	383+81 to 384+11

Lumen will relocate their existing facilities listed above by lowering the conduit to a depth of at least 12" below the proposed conflict. The depth of relocation will vary.

Lumen will adjust one (1) manhole, raising the rim elevation to meet the proposed roadway surface at the following location:

STATION	OFFSET	PROPOSED BASELINE
438+75	39' LT.	US 40 EASTBOUND

The Contractor is responsible for contacting Lumen at least **48 hours** in advance of any excavation within 10 feet of existing underground Lumen facilities along US 40. Lumen will have a representative on-site during any construction activities near their existing underground facilities.

These relocations/adjustments will be completed by Lumen forces during the roadway construction contract and are expected to take approximately **sixty (60) calendar days** to complete following **twenty-eight (28) 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.

Lumen’s review is based upon information contained in DelDOT's Final Plans for contract T201611902, received on 02/28/2022, 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.

Caution: When saw cutting in close proximity to communication facilities, the contractor is recommended to verify the depth of the communication conduits 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 existing Lumen facilities can be taken out of service.
These facilities will remain in place and active during the duration of this contract.

NEW CASTLE COUNTY SEWER

New Castle County maintains underground sanitary sewer facilities within the project area along US 40 and Salem Church Road as noted below.

BEGIN STATION	END STATION	PROPOSED BASELINE	EXISTING FACILITIES (SIZE/MATERIAL)
STA. 292+92/ 37' LT.	STA. 293+37/ 38' LT.	US 40 WESTBOUND	1 ½-INCH PVC
STA. 110+37/ 78' RT.	STA. 113+01/ 17' LT.	SALEM CHURCH RD	3-INCH PVC
STA. 112+88/ 41' LT.	STA. 113+01/ 30' LT.	SALEM CHURCH RD	8-INCH
STA. 116+78/ 32' LT.	STA. 116+84/ 23' LT.	SALEM CHURCH RD	8-INCH PVC
STA. 117+49/ 16' LT.	STA. 117+85/ 29' LT.	SALEM CHURCH RD	8-INCH VCP
STA. 118+45/ 31' LT.	STA. 123+86/ 18' LT.	SALEM CHURCH RD	3-INCH CIP
STA. 118+57/ 31' LT.	STA. 119+63/ 19' LT.	SALEM CHURCH RD	8-INCH VCP
STA. 123+86/ 18' LT.	STA. 126+87/ 7' LT.	SALEM CHURCH RD	8-INCH VCP
STA. 126+81/ 96' RT. (Line runs parallel with Cornell Dr)	STA. 126+87/ 7' LT.	SALEM CHURCH RD	8-INCH PVC
STA. 126+87/ 7' LT.	STA. 131+72/ 19' LT.	SALEM CHURCH RD	10-INCH VCP
STA. 427+14/ 71' RT.	STA. 427+65/ 53' RT.	US 40 EASTBOUND	8-INCH
STA. 427+65/ 53' RT.	STA. 427+65/ 79' LT.	US 40 EASTBOUND	8-INCH
STA. 427+65/ 79' LT.	STA. 427+15/ 62' LT.	US 40 EASTBOUND	8-INCH
STA. 443+00/ 48' RT.	STA. 448+62/ 34' RT.	US 40 EASTBOUND	8-INCH
STA. 448+41/ 45' RT.	STA. 448+62/ 34' RT.	US 40 EASTBOUND	8-INCH
STA. 448+62/ 34' RT.	STA. 449+06/ 51' RT.	US 40 EASTBOUND	15-INCH
STA. 448+90/ 73' RT.	STA. 449+06/ 51' RT.	US 40 EASTBOUND	15-INCH
STA. 448+90/ 73' RT. (Line runs parallel with Church Rd)	STA. 448+94/ 88' RT.	US 40 EASTBOUND	12-INCH
STA. 448+62/ 34' RT.	STA. 490+40/ 32' RT.	US 40 EASTBOUND	15-INCH
STA. 449+06/ 51' RT.	STA. 450+99/ 49' RT.	US 40 EASTBOUND	15-INCH
STA. 450+99/ 49' RT.	STA. 451+07/ 33' RT.	US 40 EASTBOUND	15-INCH
STA. 454+41/ 37' RT.	STA. 454+41/ 43' RT.	US 40 EASTBOUND	8-INCH
STA. 456+36/ 35' RT.	STA. 456+36/ 40' RT.	US 40 EASTBOUND	8-INCH
STA. 459+18/ 64' RT.	STA. 459+33/ 35' RT.	US 40 EASTBOUND	8-INCH
STA. 466+41/ 38' RT.	STA. 466+42/ 79' RT.	US 40 EASTBOUND	12-INCH
STA. 376+78/ 40' LT.	STA. 476+60/ 16' LT.	US 40 WESTBOUND	8-INCH
STA. 478+43/ 35' RT.	STA. 478+43/ 106' RT.	US 40 EASTBOUND	8-INCH
STA. 389+86/ 22' LT.	STA. 390+16/ 35' LT.	US 40 WESTBOUND	10-INCH
STA. 490+50/ 71' RT.	STA. 490+89/ 72' RT.	US 40 EASTBOUND	10-INCH
STA. 390+03/ 81' LT. (Line runs parallel with Walther Rd)	STA. 490+50/ 82' RT.	US 40 WESTBOUND	18-INCH
STA. 490+40/ 32' RT. (Line runs parallel with US 40)	STA. 491+65/ 28' RT.	US 40 EASTBOUND	12-INCH

BEGIN STATION	END STATION	PROPOSED BASELINE	EXISTING FACILITIES (SIZE/MATERIAL)
STA. 327+06/ 116' LT. (Line runs parallel with Glasgow Dr)	STA. 327+15/ 62' LT.	US 40 WESTBOUND	8-INCH
STA. 327+15/ 62' LT.	STA. 327+80/ 17' LT.	US 40 WESTBOUND	8-INCH
STA. 327+80/ 17' LT.	STA. 427+66/ 53' RT.	US 40 WESTBOUND	8-INCH

There are twenty-one (21) sanitary sewer manholes that will need to be adjusted to accommodate the proposed construction. This work is to be included in the highway contract with all necessary work to be performed by the State's Contractor. The sanitary sewer manholes are located as follows:

STATION/OFFSET	PROPOSED BASELINE	EXISTING FACILITIES (SIZE/MATERIAL)
STA. 448+62/ 34' RT	US 40 EASTBOUND	8-INCH/15-INCH
STA. 449+06/ 51' RT	US 40 EASTBOUND	15-INCH
STA. 451+07/ 33' RT	US 40 EASTBOUND	15-INCH
STA. 451+55/ 36' RT	US 40 EASTBOUND	15-INCH
STA. 454+41/ 37' RT	US 40 EASTBOUND	8-INCH/15-INCH
STA. 456+36/ 35' RT	US 40 EASTBOUND	8-INCH/15-INCH
STA. 457+40/ 35' RT	US 40 EASTBOUND	15-INCH
STA. 484+42/ 34' RT	US 40 EASTBOUND	15-INCH
STA. 487+45/ 41' RT	US 40 EASTBOUND	15-INCH
STA. 390+16/ 35' LT	US 40 WESTBOUND	10-INCH/18-INCH
STA. 490+40/ 32' RT	US 40 EASTBOUND	12-INCH/15-INCH/18-INCH
STA. 117+86/ 19' LT	SALEM CHURCH ROAD	8-INCH VCP
STA. 118+53/ 23' LT	SALEM CHURCH ROAD	3-INCH CIP
STA. 118+69/ 18' LT	SALEM CHURCH ROAD	8-INCH VCP
STA. 119+63/ 19' LT	SALEM CHURCH ROAD	8-INCH VCP
STA. 123+86/ 18' LT	SALEM CHURCH ROAD	3-INCH CIP/8-INCH VCP
STA. 126+87/ 7' LT	SALEM CHURCH ROAD	8-INCH VCP/8-INCH PVC/10-INCH VCP
STA. 129+86/ 19' LT	SALEM CHURCH ROAD	10-INCH VCP
STA. 327+15/ 62' LT	US 40 WESTBOUND	8-INCH
STA. 327+80/ 17' LT	US 40 WESTBOUND	8-INCH

There is one (1) sanitary valve box that will need to be adjusted to accommodate the proposed construction. This work is to be included in the highway contract with all necessary work to be performed by the State's Contractor. The sanitary valve box is located as follows:

STATION/OFFSET	PROPOSED BASELINE	EXISTING FACILITIES (SIZE/MATERIAL)
STA. 118+78/ 20' LT.	SALEM CHURCH ROAD	3-INCH CIP

The State's Contractor will complete all New Castle County sanitary adjustments as needed during the construction phase.

New Castle County's review is based upon information contained in DelDOT's Revised Final Plans for contract T201611902, received on 05/22/2024, 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.

All adjustments to New Castle County's existing facilities will be done by the State's Contractor in accordance with the Standard Details and Standard Specifications of New Castle County and as shown in the contract documents. The Contractor shall contact New Castle County Dept. Special Services at (302) 395-5756, five (5) calendar days prior to any relocation work beginning. The Contractor shall determine the number of days required and show that in the contract schedule. The work is not considered complete until accepted by New Castle County.

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 New Castle County facilities can be taken out of service.
These facilities will remain in place and active during the duration of this contract.

VERIZON OF DELAWARE INC

Verizon of Delaware, Inc. owns and maintains aerial, underground coaxial, and fiber optic facilities on Delmarva Power owned utility poles along US 40. Verizon will need to relocate underground facilities that are currently connected to existing Delmarva Power poles to be relocated.

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

1. Verizon maintains aerial facilities along the Southeast side of US 40 Pulaski Hwy from Pole #44314\38653 at Sta. 293+87 R120 extending Northeast and Southwest beyond the project limits.
2. Verizon maintains aerial facilities crossing US 40 Pulaski Hwy from Pole #44324/38666 at Sta. 295+72 R120 extending Northwest to Pole #Unknown at Sta. 295+72 L38.
3. Verizon maintains aerial facilities crossing US 40 from Pole #44470/38787 at Sta. 414+85 R46 extending Northwest along Salem Church Road and beyond the project limits.
4. Verizon maintains aerial facilities crossing Salem Church Rd from Pole #44441/38813 at Sta. 114+85 L40 extending Northeast to Pole #Unknown at Station 114+15 R60.
5. Verizon maintains aerial facilities on the Southwest side of Salem Church Rd from Pole #44401/38857 at Station 120+82 L40 extending Southwest beyond the project limits.
6. Verizon maintains aerial facilities on the South side of US 40 from Pole #44470/38787 at Station 414+68 R50 extending Southeast along Porter Road and beyond the project limits.
7. Verizon maintains aerial facilities crossing US 40 from Pole #44587/38842 at Station 427+85 R50 extending Northwest along Glasgow Drive and beyond the project limits.

8. Verizon maintains aerial facilities on the South side of US 40 from Pole #44782/38933 at Sta. 449+35 R45 extending Southeast along Church Road beyond the project limits.
9. Verizon maintains aerial facilities crossing US 40 from Pole #VZ 201 68 at Sta. 490+21 R44 extending Northwest along Walther Road and beyond the project limits.

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

1. Verizon maintains underground facilities along the North side of US 40 westbound from MH 700 at Station 294+61 L22 extending Northeast and Southwest beyond the project limits.
2. Verizon maintains buried facilities on US 40 from Pole #Unknown at Sta. 295+70 L37 crossing Becks Wood Dr extending Northwest beyond the project limits.
3. Verizon maintains buried facilities from MH 697 at Sta. 309+10 L28 extending Northeast along US 40 to Pole #44458/38797 at Sta. 112+50 L42 on Salem Church Rd.
4. Verizon maintains UG\buried facilities from MH 696 at Station 313+05 L25 extending Northwest along Salem Church Rd to Pole #44448/38807 at Station 113+95 L44.
5. Verizon maintains buried facilities on the South side of Salem Church Rd. from a Verizon Pedestal at Station 114+95 L58 extending Northwest to Private Driveway beyond project limits.
6. Verizon maintains buried facilities on the South side of Salem Church Rd from Pole #44423/38829 at Station 117+22 L40 extending Southwest beyond the project limits.
7. Verizon maintains buried facilities along the North side of Salem Church Rd. from a Verizon Pedestal at Station 114+00 R60 extending Northwest to a VZ HH at Station 116+22 R27 extending North on a Private Road and beyond project limits.
8. Verizon has abandoned cables along the North side of Salem Church Rd from Verizon Pedestal at Station 114+00 R60 extending East and West beyond the project limits.
9. Verizon maintains buried facilities on the North side of US 40 from MH 692 from Station 332+52 L20 to Verizon Pedestal at Station 333+45 L38 extending North to Customer Prem.
10. Verizon maintains buried facilities on the North side of US 40 from MH 691 at Station 340+00 L20 extending North along Brookmont Dr. and beyond the project limits.
11. Verizon maintains underground facilities on the South side of US 40 from MH 1149 at Station 441+21 R53 extending East to MH 690 ½ at Station 447+29 R27.
12. Verizon maintains underground facilities on the South side of US 40 from Pole #92 at Station 446+52 R47 extending Northeast to MH 690 ½ at Station 447+29 R27.
13. Verizon maintains underground facilities on the South side of US 40 from MH 690 ½ at Station 447+29 R27 extending Northeast turning Southeast along Church Rd. and beyond the project limits.
14. Verizon maintains underground facilities from MH 690 ½ at Station 447+29 R27 crossing US 40 extending Northwest to MH 690 at Station 347+55 L20.
15. Verizon maintains underground facilities on US 40 from MH 690 at Station 347+55 L20 extending Northwest along Wellington Drive and beyond the project limits.
16. Verizon maintains underground facilities on US 40 from MH 690 at Station 347+55 L20 extending Northeast to a VZ Pedestal at Station 349+90 L63 extending West along Wellington Dr and beyond the project limits.
17. Verizon maintains buried facilities and abandoned cable on North side of US 40 from a VZ Pedestal at Station 344+72 L40 extending Northeast to MH 133 at Station 348+15 L28.
18. Verizon maintains buried facilities from a Verizon HH at Station 346+81 L43 extending Northwest beyond the project limits.

19. Verizon maintains buried facilities along the North side of US 40 from a Verizon HH at Station 361+02 L47 extending East along US 40 to Walther Rd. then continuing Northwest along Walther Rd. and beyond the project limits.
20. Verizon maintains buried facilities on US 40 from Pole #45138/39113 at Station 488+82 R45 extending Southeast to a Verizon Pedestal at Station 488+80 R70 continuing Southwest to an existing Verizon Pedestal at Station 485+15 R75.

Verizon of Delaware Inc. proposed changes to aerial facilities include, but are not limited to:

1. Verizon will relocate existing aerial facilities on the South side of US 40 from Pole# 44443/38771 at Station 411+70 R52 extending East across Porter Rd. to Pole# 444867/38795 at Station 417+00 R46.
2. Verizon to relocate existing Pole# 44473/38784 on the West side of Porter Rd at station 110+25 L25 south to approximate station 110+02 L25.
3. Verizon will relocate existing aerial facilities on the West side of Porter Rd. from relocated Pole# 44470/38787 at Station 110+63 L33 extending South to relocated Pole# 44473/38784 at Station 110+02 L25.
4. Verizon will relocate existing aerial facilities from Pole# 44587/38842 at Station 427+65 R54 to proposed station 427+20 R56 extending North crossing US40 then along Glasgow Dr. to Pole# 44567/38868.at station 327+10 L196.
5. Verizon will place new aerial cable along the South side of US40 from Pole# 92 at station 446+53 R47 to Pole# 44782/38933 at station 449+28 R44 then extending South beyond the project limits.
6. Verizon proposes to place aerial facilities from Pole# 45138/39113 on the corner of Walther Rd and US40 at station 389+94 L60 extending South crossing US40 to proposed Pole# VZ 20168 at station 489+95 R69.
7. Verizon will remove the aerial facilities crossing US40 from Pole#45138/39113 at station 389.94 L60 extending south crossing US40 to Pole# VZ 20168 at station 489+95 R69.
8. Verizon will relocate existing aerial facilities along the South side of US40 from Pole# 45138/39113 at Station 488+80 R45 extending East to Pole# VZ 20167 at station 491+48 R45.
9. Verizon proposes to place a guy pole on the North side of US40 at approximate station 388+93 L49 and placing an OH guy from the proposed Pole to Pole# 45138/39113 at Station 488+80 R45.
10. Verizon proposes to place a guy pole on the North side of US40 at approximate station 388+63 L50 and placing an OH guy from the proposed Pole to Pole# VZ 20167 at station 491+48 R45.
11. Verizon will relocate existing aerial facilities on the west side of Salem Church Rd. from Pole# 44378/38885 at Station 124+32 L30 extending Northwest along Salem Church Rd to Pole# 44346/38922 at station 128+70 R32.

Verizon of Delaware Inc. proposed changes to underground facilities include, but are not limited to:

1. Verizon will abandon 2 buried cables on the North side of US 40 from MH 697 at station 309+09 L28 extending East to Pole# 44458\38797 at station 112+59 L43 on Salem Church Rd.
2. Verizon proposes to place a 4" conduit crossing US40 from MH696 at station 313+05 L25 to Pole# 44457/38780 at station 413+20 R51
3. Verizon proposes to relocate an existing Handhole at the corner of US40 and Brookmont Dr from station 340+38 L52 moving North to approximate station 340+29 L77.

4. Verizon will remove pedestal and abandoned buried facilities on the Northwest side of US 40 from MH 692 at station 332+53 L22 extending Northeast to a VZ Pedestal at station 333+45 L37.
5. Verizon will remove pedestal and abandoned buried facilities on the Northwest side of US 40 from VZ Pedestal at station 344+50 L22. (V10B UR 07)
6. Verizon will abandon 2 buried cables along the South side of US40 from MH690.5 at station 447+29 R28 extending East then continuing South along the West side of Church beyond the project limits.
7. Verizon will remove the pedestal at station 448+42 R41.
8. Verizon will abandon a buried cable along the South side of US40 from a Pedestal at station 485+14 R75 to a Pedestal at station 488+79 R83.
9. Verizon will remove Pedestals along the South side US40 at stations 485.14 R75, 487+70 R79, and 488+79 R83.
10. Verizon will abandon a buried cable on the South side of US40 from Pole#45138//39113 at station 488+81 R46 extending South beyond the project limits.
11. Verizon to allow DelDOT contractor to adjust MH collars to new grade as needed.

Contractor to use caution while digging and placing Pipes and Inlets at these locations:

- | | |
|----------------|--|
| 1. 309+28 L28 | 12-4" Duct Bank and P-2 |
| 2. 311+60 L22 | 12-4" Duct Bank and P-6 |
| 3. 318+58 L20 | 12-4" Duct Bank and P-12 |
| 4. 321+09 L22 | 12-4" Duct Bank and P-17 |
| 5. 324+42 L20 | 12-4" Duct Bank and P-102 |
| 6. 443+00 R32 | 4-4" Duct Bank and DI-363, P-362, P-363 |
| 7. 360+58 L22 | 12-4" Duct Bank and DI-391, P-389 & Underdrain |
| 8. 360+58 L33 | 1 Buried Cable and P-396, P-397 |
| 9. 371+90 L22 | 12-4" Duct Bank and P-405 |
| 10. 371+90 L33 | 1 Buried Cable and DI-404, P-404 |
| 11. 384+00 L20 | 12-4" Duct Bank and P-452A, P-452B |
| 12. 384+00 L25 | 1 Buried Cable and P-500 & Underdrain |
| 13. 386+75 L22 | 12-4" Duct Bank and P-502 |
| 14. 386+75 L25 | 1 Buried Cable and DI-501, P-502 |
| 15. 399+05 L05 | 1Buried Cable and P-575, DI-576 |

There are twenty-six Verizon (26) manholes that will need to be adjusted vertically to accommodate the proposed construction. This work will be completed in conjunction with the highway contract with all necessary work to be performed by the State's Contractor. The manholes are located as follows:

STATION	OFFSET	PROPOSED BASELINE
300+61.72	21.69' LT.	US 40 WESTBOUND
307+08.61	25.60' LT.	US 40 WESTBOUND
309+08.56	27.71' LT.	US 40 WESTBOUND
313+05.10	24.69' LT.	US 40 WESTBOUND
317+52.80	20.74' LT.	US 40 WESTBOUND
324+14.44	21.86' LT.	US 40 WESTBOUND
324+19.41	21.88' LT.	US 40 WESTBOUND

STATION	OFFSET	PROPOSED BASELINE
325+02.59	21.18' LT.	US 40 WESTBOUND
332+53.30	22.07' LT.	US 40 WESTBOUND
340+03.21	21.89' LT.	US 40 WESTBOUND
441+17.43	52.80' RT.	US 40 EASTBOUND
441+24.17	52.37' RT.	US 40 EASTBOUND
447+25.93	27.42' RT.	US 40 EASTBOUND
447+32.72	27.86' RT.	US 40 EASTBOUND
347+52.51	20.94' LT.	US 40 WESTBOUND
348+13.37	29.28' LT.	US 40 WESTBOUND
348+20.57	29.24' LT.	US 40 WESTBOUND
353+52.92	22.30' LT.	US 40 WESTBOUND
361+01.95	22.42' LT.	US 40 WESTBOUND
368+52.31	22.94' LT.	US 40 WESTBOUND
372+52.65	22.37' LT.	US 40 WESTBOUND
380+02.36	22.58' LT.	US 40 WESTBOUND
383+55.55	22.56' LT.	US 40 WESTBOUND
383+60.27	22.70' LT.	US 40 WESTBOUND
387+52.98	21.88' LT.	US 40 WESTBOUND
393+52.69	21.46' LT.	US 40 WESTBOUND

These relocations/adjustments will be completed by Verizon forces during the roadway construction contract and are expected to take approximately **sixty (60) calendar days** to complete following **thirty (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's review is based upon information contained in DelDOT's Revised Final Plans for contract T201611902, received on 05/22/2024, 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.

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.

No 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 during construction requiring adjustment and/or relocation the necessary relocation work shall be accomplished by the respective utility company, 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 at the direction of the District Engineer. 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 owned sewer or water facilities shall be performed by the State's Contractor in accordance with the respective agencies' standard specifications as directed by the District Engineer. The State contractor shall coordinate any potential conflicts of municipally owned sewer or water facilities with facility owners and provide adequate notice to the municipally and to the District Engineer prior to performing work.

GENERAL NOTES

1. The Utility Companies and their Contractors do not normally work on nights, weekends or legal holidays.
2. The Contractor's attention is directed to Section 105.09 Utilities, Delaware Standard Specifications, dated January 2024. The Contractor shall contact Miss Utility (1-800-282-8555) two working days prior to any excavation. The Contractor is responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The State's Contractor is advised to check the site for access purposes for his equipment and, if necessary, make arrangements directly with utility companies for field adjustments to provide adequate clearances.
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 Contractor shall be responsible for any costs associated with any temporary outages; holding, bracing and shielding of utility facilities; temporary relocations; or permanent relocations that are not specifically identified in this utility statement or shown in the contract plan set.

4. The State's Contractor is responsible for rough grading as required by the roadway construction prior to the Utility Company's placing their proposed facilities, unless otherwise indicated on the plans and/or outlined elsewhere in the Contract Documents.
5. Coordination and cooperation among the Utility Companies and the State's Contractor are of prime importance. Therefore, the State's Contractor is directed to contact the following Utility Company representatives with any questions regarding the proposed work prior to submitting bids and work schedules. Work schedules should reflect the Utility Companies' proposed relocations.

NAME	COMPANY	PHONE	EMAIL
Wayne Tyler	Artesian Water Company	(302)453-6987	wtyler@artesianwater.com
Jay Everly	TREC Group Inc. (AT&T)	(215)870-2318	jay@trecgroup.com
Brad Hanes	Precision Fiber Design (Lumen)	(484)359-4643	bhanes@precisionfd.com
Darren Marsteller	Comcast Cable of New Castle County	(717)405-4280	dmarsteller@americomm-llc.com
David Hayward	Crown Castle	(267)718-1964	david.hayward@crowncastle.com
Tom Smith	Delmarva Power – Electric	(302)283-5757	Thomas.Smith1@delmarva.com
Fikayo Falade	Delmarva Power - Gas	(302)401-9869	Fikayo.Falade@exeloncorp.com
Justin Hubschmitt	Delmarva Power – Transmission	(302)753-4423	Justin.hubschmitt@exeloncorp.com
Mark Parker	Eastern Shore Natural Gas	(302)213-7270	mcparker@esng.com
Dan Netta	New Castle County Office of Special Services (Sanitary Sewer)	(302)395-5817	dan.netta@newcastlede.gov
George Zang Joe Keenan Darren Coppersmith	Verizon Delaware LLC	(302)422-1238	george.w.zang@verizon.com joseph.keenan@cyient.com darren.coppersmith@kci.com

6. The information shown in the Contract Documents, including this Utility Statement and the Utility Schedule contained herein, concerning the location, type and size of existing and proposed utilities locations, and 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.

7. 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.
8. 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.
9. 16 Del. C. § 7405B requires notification to and mutually agreeable measures from the public utility operating the electric line for any person intending to carry on any function, activity, work or operation within dangerous proximity of any high voltage overhead electric lines. All contractors/other utilities must also maintain a minimum distance of 10'-0" from all energized lines. Additional clearance may be required from high voltage transmission lines.
10. 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.
11. The State's Contractor shall be responsible for any costs associated with any temporary outages; holding, bracing and shielding of utility facilities; temporary relocations; or permanent relocations that are not specifically identified in this utility statement or shown in the contract plan set.

PREPARED AND RECOMMENDED BY:

PREPARED AND RECOMMENDED BY:




Whitman, Requardt & Associates, LLP
Consulting Engineers
Todd Oliver

toliver@wrallp.com
Email

8/12/2024
Date

APPROVED AS TO FORM:



Delaware Department of Transportation
Deborah L. Kukulich

deborah.kukulich@delaware.gov
Email

August 12, 2024
Date

US 40 Widening, Salem Church Road to Walther Road
 Contract No. T201611902
 Utility Construction Schedule

ACTIVITY	CY 2023												CY 2024												CY 2025												CY 2026												CY 2027												CY 2028																						
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC											
ROADWAY CONSTRUCTION													PS&E - Adv. Utility Relocations												NTP - Roadway construction begins on March 3, 2025																																																										
																									463 CD												March 2025 - June 2026: Phase 1																																														
																									17 CD: June 2025: Phase 1A																																																										
																									51 CD: July 2025 - Sept 2025: Phase 1B																																																										
																									54 CD: Sept 2025 - Nov 2025: Phase 1C																																																										
																									35 CD: Nov 2025 - Dec 2025: Phase 1D																																																										
																																					393 CD												June 2026 - July 2027: Phase 2																																		
																																																	28 CD July 2027 - Aug 2027: Phase 3																																		
																																																												Construction complete Aug 2027																							
UTILITY CONSTRUCTION													315 CD												Feb 2024 - Dec. 2024: Water Relocations																																																										
																									30 CD March 2025: Underground Adjustments/Relocations																																																										
																									60 CD July 2025 - Sept. 2025: Aerial Relocations																																																										
																									60 CD May 2025 - July 2025: Aerial Relocations																																																										
																									80 CD												March 2025 - May 2025: Aerial Relocations																																														
													150 CD												August 2024 - Oct 2024 : Underground Gas Relocations																																																										
																									10 CD: March 2025: Gas Marker Relocation																																																										
																																					60 CD November 2025 - December 2025: Underground Cable Relocations																																														
																																					30 CD April 2025: Sewer Manhole adjustments (by State's Contractor)																																														
																																					60 CD: May 2025 - July 25: Aerial Relocations																																														

- LEGEND**
- Roadway Construction
 - Utility Activity
 - ▲ Construction Phase Milestone

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

CERTIFICATE OF RIGHT-OF-WAY STATUS

STATE PROJECT NO. T201611902

F.A.P. NO. NH-N032(19)

US 40, SALEM CHURCH ROAD TO WALTHER ROAD

NEW CASTLE COUNTY

Certificate of Right-of-Way Status - Conditional

Status - Level 3

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

The acquisition or right of occupancy and use of some remaining parcels is not complete, but all occupants of the residences on such parcels has had replacement housing made available to them in accordance with 49 CFR 24.04. The State shall ensure that any occupants of residences, businesses, farms, or non-profit organizations and who have not yet moved from the right-of-way are protected against unnecessary inconvenience and disproportionate injury or any action coercive in nature.

In order to maintain our construction schedule that has been communicated to the public, we need to move forward with advertisement, which will allow the Notice to Proceed (NTP) for physical construction to be issued on or about March 3, 2025. This is a conditional certification, and we will have either full possession or a right of entry prior to issuance of the NTP. The contractor awarded the contract will be restricted from all work on the parcels listed below until such time they are notified by the State.

Pursuant to 23 CFR 635.309(c)(3)(iv) When the State requests authorization under a conditional certification to advertise for bids or to proceed with physical construction where acquisition or right of occupancy and use of a few parcels has not been obtained, full explanation and reasons therefor, including identification of each such parcel, will be set forth in the State's request along with a realistic date when physical occupancy and use is anticipated as well as substantiation that such date is realistic.

The parcels which are not available are:

Parcel-4

Owner-Nisky Trust

Availability Date-December 31, 2024

State reason/explanation for exception: New plans were sent to the owner to share with the tenant. The entrance is moving farther west on Rt. 40 to minimize construction traffic at the entrance to the car wash. Acquisition documents are with their attorney and accountant to coordinate a time to sign the documents.

Parcel-31

Owner-Walther

Availability Date-December 31, 2024

State reason/explanation for exception: Still far apart on the compensation and resolving billboard issues. Due to 'the complexities, it appears that condemnation will be our only option. Condemnation paperwork has been sent to Legal Counsel to start the condemnation process.

Parcel-41

Owner-Anglin

Availability Date-December 31, 2024

State reason/explanation for exception: Working with owner's attorney to get paperwork signed. Attorney is not responding to us and if we do not receive a call back by next week, a 10-day letter will be sent.

All necessary real property interests have been or shall be acquired in accordance with current FHWA/State directives covering the acquisition of real property.

No occupants were permanently displaced for this project and the State has physical possession and the right to remove, salvage, or demolish any personal property acquired as part of this project.

Anticipated full possession and clearance of all parcels is **December 31, 2024.**

RIGHT OF WAY SECTION



Monroe C. Hite, III
Chief of Right of Way

November 4, 2024

Updated from August 20, 2024



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

NICOLE MAJESKI
SECRETARY

September 17, 2024

ENVIRONMENTAL REQUIREMENTS

FOR

State Contract No. T201611902

Federal Aid No.: NH-N032(19)

Contract Title: **US 40 Widening, Salem Church Road/Porter Rd to Walther Rd.**

In accordance with the procedural provisions for implementing the National Environmental Policy Act of 1969, as amended, the referenced project has been processed through the Department's Environmental Review Procedures and has been classified as a Class II Action/ Level D

Class II Action / Level D
CE action: **23 CFR 771.117 (d)(13)**

Environmental (NEPA) Approval Date: 11/2/2021
Reevaluation date: 6/6/2024

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 #23 NAP-2022-00803-87
Expires: March 14, 2026
- Delaware Department of Natural Resources and Environmental Control (DNREC) Wetlands & Subaqueous Lands Section (WLSL) – Special Exemption (a) and (b) EX-250/22
- Delaware Coastal Zone Management (CZM) – Issued with NWP
- DNREC Water Quality Certification (WQC) - Issued – Project is not located in a Critical Resource Water

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 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- n/a

Cultural Resources

- The Delaware State Historic Preservation Office concurred with a finding of No Historic Properties Affected in a letter dated July 26, 2024.
- 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 and 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) 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.

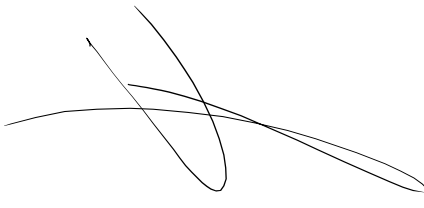
Stream Restoration and Riprap Treatment

- 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.



9/17/2024

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



Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T201611902

Project Descripton: US 40, Salem Church Road to Walther Road

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
811013	FLAGGER, NEW CASTLE COUNTY, OVERTIME	HOUR	1090
817031	REMOVAL OF PAVEMENT STRIPING	SF	27068
817038	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 6"	LF	214
817042	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 6"	LF	134131
817043	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 12"	LF	390
818001	SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL, TYPE IV, RETROREFLECTIVE SHEETING	SF	940
818003	SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL, TYPE XI, RETROREFLECTIVE SHEETING	SF	299
819011	GALVANIZED TELESCOPING STEEL SIGN POSTS, 12' X 2", COMPLETE W/ BASEPOSTS AND HARDWARE	EACH	163
819016	INSTALLATION OF 4" DIAMETER HOLE, LESS THAN OR EQUAL TO 6" DEPTH	EACH	3
819017	INSTALLATION OF 4" DIAMETER HOLE, GREATER THAN 6" DEPTH	EACH	1
832006	PROVIDE AND INSTALL 1-CONDUCTOR #2 AWG STRANDED COPPER, TYPE USE-2	LF	70
832010	PROVIDE AND INSTALL 1-CONDUCTOR #10 STRNDED COPPER, TYPE USE-2	LF	6270
832035	REMOVAL OF CABLE FROM CONDUIT OR TRAFFIC/LIGHTING POLE	LF	1375
832500	SPLICING OF ELECTRICAL CABLE, UNDERGROUND	EACH	45
832501	SPLICING OF ELECTRICAL CABLE, ABOVEGROUND	EACH	10



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Item Number	Description	Unit	Quantity
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	SF	29708
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	50
817027	RAISED/RECESSED PAVEMENT MARKER	EACH	435
817029	REMOVAL OF RAISED/RECESSED PAVEMENT MARKER LENS	EACH	240
817030	REMOVAL OF RAISED/RECESSED PAVEMENT MARKER HOUSING	EACH	240
831004	PROVIDE AND INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	10450
831006	PROVIDE AND INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (TRENCH)	LF	250
832007	PROVIDE AND INSTALL 1-CONDUCTOR #4 AWG STRANDED COPPER, TYPE USE-2	LF	16040
832008	PROVIDE AND INSTALL 1-CONDUCTOR #6 STRANDED COPPER, TYPE USE-2	LF	18065
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	4551
701027	PCC CURB, TYPE 1-2 ROUNDABOUT	LF	201
301001	GABC	CY	10941
301002	GABC, PATCHING	CY	295
302002	DELAWARE NO. 3 STONE	TON	1407
401014	SUPERPAVE TYPE B, PG 64-22	TON	9135
401016	SUPERPAVE TYPE B, PG 76-22	TON	6963



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Item Number	Description	Unit	Quantity
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	151
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	706
401036	SUPERPAVE TYPE C, PG 64-22, WEDGE	TON	5181
401046	SUPERPAVE TYPE C, PG 76-22 (NON-CARBONATE STONE)	TON	7867
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	TON	400
503001	PATCHING PCC PAVEMENT, 6' TO 15', TYPE A	SY	472
201000	CLEARING AND GRUBBING	LS	1
601144	REINFORCED CONCRETE FLARED END SECTION, 24"	EACH	2
601146	REINFORCED CONCRETE FLARED END SECTION, 30"	EACH	2
602003	DRAINAGE INLET, 34" X 24"	EACH	95
602004	DRAINAGE INLET, 48" X 30"	EACH	25
602005	DRAINAGE INLET, 48" X 48"	EACH	23
602009	DRAINAGE INLET, 72" X 24"	EACH	6
602010	DRAINAGE INLET, 72" X 48"	EACH	10
602011	DRAINAGE INLET, 72" X 72"	EACH	3
602012	DRAINAGE INLET, SPECIAL	EACH	17
602030	MANHOLE, 48" X 30"	EACH	8



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Item Number	Description	Unit	Quantity
602031	MANHOLE, 48" X 48"	EACH	5
602036	MANHOLE, SPECIAL	EACH	7
602100	DRAINAGE INLET GRATE(S)	EACH	1
602101	DRAINAGE INLET FRAME(S)	EACH	1
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EACH	193
602132	ADJUSTING AND REPAIRING EXISTING MANHOLE	EACH	2
602502	CONVERTING EXISTING CATCH BASIN TO MANHOLE	EACH	5
607012	CONCRETE MASONRY UNIT MODULAR BLOCK RETAINING WALLS	SF	1105
615519	RELOCATING BUS STOP SHELTER	EACH	2
701011	PCC CURB, TYPE 1-4	LF	777
701012	PCC CURB, TYPE 1-6	LF	399
701013	PCC CURB, TYPE 1-8	LF	208
701014	PCC CURB, TYPE 2	LF	8191
701018	I.PCC CURB AND GUTTER, TYPE 1-8	LF	982
701021	I.PCC CURB AND GUTTER, TYPE 3-4	LF	11198
701025	PCC CURB TYPE 2 ROUNDABOUT	LF	1975
834006	POLE BASE, TYPE 6	EACH	35



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Item Number	Description	Unit	Quantity
834007	POLE BASE EXTENSION	CF	110
835003	CABINET BASE TYPE P	EACH	3
842502	PROVIDE AND INSTALL ELECTRIC UTILITY SERVICE EQUIPMENT 120/240 (200 AMP)	EACH	1
601011	REINFORCED CONCRETE PIPE, 15", CLASS III	LF	6480
601032	REINFORCED CONCRETE PIPE, 15", CLASS IV	LF	1049
601033	REINFORCED CONCRETE PIPE, 18", CLASS IV	LF	49
601141	REINFORCED CONCRETE FLARED END SECTION, 15"	EACH	3
601142	REINFORCED CONCRETE FLARED END SECTION, 18"	EACH	2
601500	PIPE VIDEO INSPECTION	LF	500
705521	PATTERNED PCC SIDEWALK, 8"	SF	2938
707500	CHANNEL BED FILL	CY	28
708003	GEOTEXTILES, RIPRAP	SY	285
709001	PERFORATED PIPE UNDERDRAINS, 6"	LF	14796
763598	FIELD OFFICE, SPECIAL I	EAMO	30
801000	MAINTENANCE OF TRAFFIC	LS	1
802003	ARROW PANELS TYPE C	EADY	1410



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Item Number	Description	Unit	Quantity
803001	PROVIDE AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EADY	285
804001	PROVIDE AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	EADY	2115
805001	PLASTIC TRAFFIC CONTROL DRUMS	EADY	464480
806001	TRAFFIC OFFICERS	HOURL	444
808002	PROVIDE AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	EADY	1410
810001	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	54219
811001	FLAGGER, NEW CASTLE COUNTY	HOURL	5450
813001	TEMPORARY BARRICADES, TYPE III	LFDY	34948
813500	PEDESTRIAN CHANNELIZING BARRICADE SYSTEM	LFDY	28800
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	27191
817003	TEMPORARY MARKINGS, PAINT, 4"	LF	145589
843001	ELECTRICAL TESTING	LS	1
846001	PROVIDE AND INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	LF	5765
846002	PROVIDE AND INSTALL A 1-1/2 INCH GALVANIZED RIGID METAL CONDUIT DETECTOR SLEEVE WITH LOOP WIRE	LF	200
847002	INSTALL OR REMOVAL OF BASE OR PAD MOUNTED CABINET	EACH	1
847004	LIGHTING CONTROL AND DISTRIBUTION ENCLOSURE (120/240;100 AMP)	EACH	1



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Item Number	Description	Unit	Quantity
850522	LUMINAIRE (LED), 400 WATTS, HPS EQUIVALENT	EACH	28
851002	ALUMINUM LIGHTING STANDARD WITH SINGLE DAVIT ARM, 35' POLE	EACH	22
851007	RELOCATED EXISTING LIGHT STANDARD	EACH	8
905001	SILT FENCE	LF	3721
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	22
202000	EXCAVATION AND EMBANKMENT	CY	25107
202003	UNDERCUT EXCAVATION	CY	2511
204000	TEST HOLE	CY	44
701032	CURB OPENING, 4' OPENING	EACH	6
601104	REINFORCED CONCRETE ELLIPTICAL PIPE, 27" X 42", CLASS III	LF	16
601105	REINFORCED CONCRETE ELLIPTICAL PIPE, 29" X 45", CLASS III	LF	37
601002	HEAVY CLEANING OF DRAINAGE PIPE	hour	24
601031	REINFORCED CONCRETE PIPE, 12" CLASS IV	LF	44
601035	REINFORCED CONCRETE PIPE, 24", CLASS IV	LF	318
601174	REINFORCED CONCRETE FLARED END SECTION, 27"X42"	EACH	1
601175	REINFORCED CONCRETE FLARED END SECTION, 29"X45"	EACH	1
601219	CORRUGATED POLYETHYLENE PIPE, TYPE S, 12"	LF	4



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Item Number	Description	Unit	Quantity
601220	CORRUGATED POLYETHYLENE PIPE, TYPE S, 15"	LF	16
602133	REPAIRING EXISTING JUNCTION BOX	EACH	1
610020	CONCRETE ENCASEMENT	CY	10
626010	ALUMINUM PEDESTRIAN RAILING	LF	381
207002	PIPE, CULVERT, AND STRUCTURE EXCAVATION	CY	14619
211002	REMOVAL OF GUARDRAIL AND FENCE	LF	229
601010	REINFORCED CONCRETE PIPE, 12" CLASS III	LF	149
601012	REINFORCED CONCRETE PIPE, 18", CLASS III	LF	2773
601013	REINFORCED CONCRETE PIPE, 21", CLASS III	LF	2237
601014	REINFORCED CONCRETE PIPE, 24", CLASS III	LF	1270
601016	REINFORCED CONCRETE PIPE, 30", CLASS III	LF	237
601102	REINFORCED CONCRETE ELLIPTICAL PIPE, 22" X 34", CLASS III	LF	693
707010	RIPRAP, R-4	CY	142
851005	ALUMINUM LIGHTING STANDARD WITH DOUBLE DAVIT ARM, 35' POLE	EACH	3
908009	TOPSOILING, 4" DEPTH	SY	802
908504	COIR FIBER MATTING	SY	802
909005	STREAM DIVERSION	LS	1



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Item Number	Description	Unit	Quantity
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	EACH	421
819019	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS	SF	433
824003	FLEXIBLE DELINEATOR, PERMANENT	EACH	10
830001	CONDUIT JUNCTION WELL, TYPE 1, 20" X 20" PRECAST CONCRETE	EACH	47
830002	CONDUIT JUNCTION WELL, TYPE 4, 20" X 42-1/2" PRECAST CONCRETE	EACH	25
830003	CONDUIT JUNCTION WELL, TYPE 5, 24" X 16" PRECAST CONCRETE	EACH	4
830004	CONDUIT JUNCTION WELL, TYPE 7, 36" X 60" PRECAST POLYMER CONCRETE	EACH	9
830008	ADJUST OR REPAIR EXISTING CONDUIT JUNCTION WELL	EACH	21
830010	REMOVAL OF EXISTING JUNCTION WELL	EACH	65
831002	PROVIDE AND INSTALL UP TO 4" SCHEDULE 80 HDPE CONDUIT (BORE)	LF	6865
831003	PROVIDE AND INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (OPEN CUT)	LF	100
905005	INLET SEDIMENT CONTROL, CURB INLET	EACH	167
906002	DEWATERING BAG	EACH	1
906003	SUMP PIT	EACH	1
907017	COMPOST FILTER LOGS	LF	1009
908010	TOPSOILING, 6" DEPTH	SY	48674
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	40416



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Item Number	Description	Unit	Quantity
908015	PERMANENT GRASS SEEDING, STORMWATER	SY	8259
908017	TEMPORARY GRASS SEEDING	SY	40511
908020	EROSION CONTROL BLANKET MULCH	SY	8163
908021	TURF REINFORCEMENT MATTING, TYPE 1	SY	358
908023	STABILIZED CONSTRUCTION ENTRANCE	SY	3192
908024	STABILIZED CONSTRUCTION ENTRANCE, TOPDRESSING	TON	704
908506	STREAM RESTORATION SEEDING	SY	802
908510	MOWING	ACRE	15
909001	SANDBAG DIKE	CF	100
909006	STILLING WELL	CY	1
910006	OUTLET STRUCTURE	EACH	2
910007	OUTLET STRUCTURE	LS	1
910008	STORMWATER MANAGEMENT POND	CY	13563
211000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
701507	CURB RETAINING WALL	LF	466
207001	PIPE, CULVERT, AND STRUCTURE BACKFILLING	CY	8712
207023	STRUCTURAL BACKFILL, BORROW TYPE C, PROVIDING ONLY	CY	8000



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Item Number	Description	Unit	Quantity
208000	FLOWABLE FILL	CY	17
209001	BORROW, TYPE A	CY	140
701510	CURB/SIDEWALK OPENING	EACH	3
702000	TRIANGULAR CHANNELIZING ISLANDS	SF	2704
705001	PCC SIDEWALK, 4"	SF	8964
705002	PCC SIDEWALK, 6"	SF	19685
705005	PCC SIDEWALK, 8"	SF	2022
705008	PEDESTRIAN CONNECTION, TYPE 1	SF	7539
705010	PEDESTRIAN CONNECTION, TYPE 5	SF	531
705013	TRUNCATED DOME DETECTABLE WARNING SURFACE	SF	2290
705528	TEMPORARY PEDESTRIAN CONNECTION	EACH	4
706000	MONUMENT	EACH	26
705009	PEDESTRIAN CONNECTION, TYPE 2, 3, AND/OR 4	SF	6186
706002	RIGHT-OF-WAY MARKER, CAPPED REBAR	EACH	34
707001	RIPRAP, R-4	SY	257
710002	ADJUST WATER VALVE BOXES	EACH	17
710491	RELOCATING WATER METER	EACH	4



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710500	INSTALLATION OF WATERMAIN AND ACCESSORIES	LS	1
711500	ADJUST AND REPAIR EXISTING SANITARY MANHOLE	EACH	25
711508	ADJUST AND REPAIR EXISTING SANITARY VALVES	EACH	1
760002	BIKE-FRIENDLY RUMBLE STRIPS, BITUMINOUS PAVEMENT	LF	1560
760006	RUMBLE STRIPS, BITUMINOUS PAVEMENT	LF	7035
760012	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH	SYIN	117719
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	32745
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	1293
763000	INITIAL EXPENSE/DE-MOBILIZATION	LS	1
763001	BASELINE SCHEDULE TYPE 1	LS	1
763002	MONTHLY UPDATE SCHEDULE TYPE 1	EAMO	28
763501	CONSTRUCTION ENGINEERING	LS	1
763503	TRAINEE	HOUR	3500
763597	UTILITY CONSTRUCTION ENGINEERING	HOUR	250
834002	POLE BASE, TYPE 3A	EACH	10
834003	POLE BASE, TYPE 3B	EACH	7
834005	POLE BASE, TYPE 4A	EACH	25



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209002	BORROW, TYPE B	CY	3013