

THE STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION
MAINTENANCE AND OPERATIONS
CONSTRUCTION PLANS AND SPECIFICATIONS FOR

Open-End, Drainage Repair, New Castle County, FY24-26

CONTRACT NUMBER – T202480207

PROJECT ID – 2024-00038

FEDERAL AID NUMBER – N/A

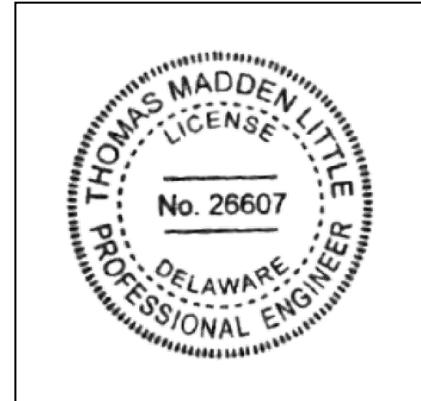
COUNTY: NEW CASTLE

A handwritten signature in black ink, appearing to read "Thomas Madden Little".

CANAL DISTRICT CONTRACTS ENGINEER

4/11/24

DATE



APPROVED FOR ADVERTISEMENT

A handwritten signature in black ink, appearing to read "Anne Brown".

DIRECTOR OF MAINTENANCE AND OPERATIONS

4/15/2024

DATE

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

CONTRACT DESCRIPTION

The purpose of this contract is to repair storm drainage systems where partial or complete failures have occurred. The repair work will include, but not be limited to, the repair or complete replacement of pipes, drainage structures, damaged curb, and associated distressed pavement patching. Some of the drainage system failures have resulted in “cave-ins”/sinkholes of the pavement areas, sidewalk, curb, and/or landscaped areas near the drainage systems. In addition to the repair work, the Contract may include installation of new drainage systems or additional components to existing systems as requested by the Engineer. The work shall be performed on the pipe systems, drainage inlets, curbs, structures, guardrail, or pavement as directed by the Engineer on the individual work orders.

The specific work sites are not listed herein but will be assigned as available by the District Maintenance office via work orders. Work sites may include interstates, freeways, local roads, subdivision streets, etc.

The duration of this open-end contract shall be for a period of three (3) years from the date of the initial “Notice to Proceed” letter.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

GENERAL NOTES

1. All work shall be performed in accordance with the Delaware Department of Transportation Standard Specifications dated January 2024, the DelDOT Special Provisions, the most recent Standard Construction Details, the current Delaware MUTCD (including revisions up to the day of contract advertising) and these plans.
2. Tasking of work is contingent upon authorization of State funding.
3. The Department reserves the right to prioritize, substitute, add, or delete work order locations at any time during the contract.
4. Payment will be monthly for the completed work as outlined in Section 109.8.
5. The Contract shall not expire upon reaching the award amount; it expires when the allotted amount of calendar days has been exhausted. Depending on fund availability, the Contract amount may be increased. Any increase shall not be cause for the contractor to discontinue work nor is the contractor owed the entire award amount if the entire award amount is not met.
6. Item 763000 (Initial Expense / Demobilization) shall only be paid once and shall not be paid again or increased if the value of the Contract exceeds the award amount.
7. No environmental permits are required for this work provided no jurisdictional wetlands or waters are impacted. If there is any question as to whether a water or wetland is jurisdictional, the contractor shall contact the DelDOT Environmental Section at (302) 760-2280 prior to the start of work.
8. Work within waters/wetlands shall not begin on locations requiring environmental permits until all applicable permits have been obtained by DelDOT. Confirm permit status with DelDOT prior to commencement of applicable work.
9. It is anticipated that all work will occur within DelDOT's existing right of way or easement areas. Should the need occur to trespass onto private property; it will be the responsibility of the Engineer to secure such trespass needs.
10. **The Contractor shall provide all residents and businesses adjacent to the work zone a minimum 48-hour prior written notice for all phases of construction work.** This notice shall include the scope of work, work hours, anticipated start and completion dates, contractor name, contact numbers and address, and DelDOT contact numbers. Failure to give notice will result in suspension of work with time charges continuing to be assessed. This work is incidental to Item 763000 (Initial Expense / Demobilization).

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

11. It is anticipated that all work will occur within DelDOT's right of way. Should the need occur to trespass onto railroad property, including the highway-rail crossing; it will be the responsibility of the Project Manager to contact the DelDOT Railroad Coordinator and obtain written authorization before entering.
12. No utility relocation involvement is anticipated. Should any conflicts be encountered during construction requiring adjustment and/or relocation of the agencies' existing facilities, the necessary relocation work shall be accomplished by the respective agencies' forces, as directed by the District Engineer. Any adjustments and/or relocations of municipally owned facilities shall be done by the State's contractor in accordance with the respective agencies' standard specifications as directed by the District Engineer. Payment shall be made using contract unit pricing or where no pricing is available; it shall be negotiated prior to the commencement of work.
13. Underground utilities may be present at all locations. Therefore, all standard practices and procedures regarding utilities shall be followed. The Contractor shall contact Miss Utility of Delaware prior to starting each work order. The Contractor is responsible for the support and protection of all utilities when excavating which shall be incidental to the respective excavation item(s). The Contractor is responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The Contractor is advised to check the site for access purposes for their equipment and make arrangements directly with the utility companies for field adjustments for adequate clearances if necessary.
14. There will not be a winter shutdown on this contract. The Department reserves the right to issue work and charge time from October 16th to April 30th.
15. Upon issuance of each work order assignment the contractor shall submit the required copies of a detailed Progress Schedule as outlined in standard specification 108.4 within 5 calendar days of the issuance of work order assignment. During the contract, the contractor shall submit two-week (or as required) "look ahead" schedules to the Area Engineer **no later than noon of each Thursday**. Details shall include a description of each work activity, the planned days of work, multiple crews or shifts, and scheduled working hours. Failure to comply will result in a suspension of all contract work with time charges continuing to be assessed. The Progress Schedule must also be updated and submitted to the department as changes or delays occur in the contract.
16. Work Orders will vary in size. There will be no maximum or minimum item quantity per work order or work location. Work orders may include single repairs or large areas of repairs, utilizing any combination of repair items at each work location.
17. The Contractor will be advised of work to be performed or deleted via a work order assignment. The work order assignment will outline the work locations, planned items, quantities of work, and will indicate the allowable time to perform work. Once time (Calendar Days) has been assigned to a work order assignment and issued, the Contractor has 2 business days, not including the day of issuance, to dispute the time quantity and provide additional backup documentation for why the

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

time quantity is not sufficient. A detailed breakdown of labor/materials/equipment along with the Contractor's time estimate will be required; this information must be received by the Department by the end of the 2nd business day, or the Department will consider the Contractor in agreement with the time estimate. The Engineer will evaluate any request for modification to the time estimate and at his/her sole discretion determine if additional time is granted. If the Contractor disagrees with the final time estimate, they will need to follow the steps outlined in Section 105.15 of the Standard Specifications. Disputing a time quantity does not constitute a delay in commencement of a work order as described below.

18. Any and all construction engineering, including but not limited to survey and/or layout for curb openings, piping and drainage, etc., shall be incidental to the item being installed.
19. Prosecution and Progress of Work:

Issuance of each work order constitutes the Notice to Proceed (NTP) for the individual assignment. Time charges commence from the date of the NTP and continue until substantial completion, as determined by the Engineer.

The Contractor shall commence on work indicated on the work order no later than the fifth (5th) business day after issuance unless required materials, railroad access, or railroad authorizations are not available. Non-availability of materials shall be verified by at least three (3) different sources. Verification shall be formal and supplied by the Contractor in writing. If there is a verified non-availability of materials, time charges shall commence on the first (1st) working day following the delivery date of materials.

The Contractor may have up to two (2) active work order assignments at any time until all assigned work has been completed. The Contractor is required to have a minimum of two working crews readily available to work on this contract simultaneously, with the ability to provide additional working crews if requested by the Engineer. Each crew is required to have a qualified superintendent as outlined in Section 105.7 of the Standard Specifications.

Failure to complete work order assignments in the allowed time subjects the Contractor to Liquidated damages as outlined in Section 108.8 of the Standard Specifications. Liquidated Damages will be assessed in accordance with Subsection 108.9 and based on the total value of that work order assignment.

Each work order assignment shall be considered a separate unit of work. Upon the substantial completion of the work order assignment, the Engineer will stop time at that location and perform an initial inspection for the work order assignment in accordance with Subsection 105.16. The Engineer reserves the right to require the Contractor to add work or make repairs to completed locations until such a location has been accepted by the Department. The Contractor must repair all defects in the work caused by poor workmanship or materials at his/her own expense until the Department accepts the Contract after the Primary Inspection. Failure to start and complete

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

assigned punch list items within the timeframe assigned subjects the Contractor to Liquidated Damages as outlined in Section 108.8 of the Standard Specifications. Liquidated Damages will be assessed based on the total value of the work order assignment.

A Primary Inspection may be completed on an annual basis for work orders completed in a calendar year. Upon satisfactory completion of the Final Punchlist, the Department will accept the location and release the Contractor from responsibility for the Work at that location. If a work order is sufficiently large and complex as determined by the Engineer, a Primary Inspection may be held upon the individual completion of that work order.

20. Delete Section 104.2.B.4 of the DelDOT Standard Specifications, and replace with the following:

The Department reserves the right to, at any time prior to completion of the contract, issue plan revisions, make adjustments in Contract item quantities, or make such alterations considered necessary to satisfactorily complete the Contract.

The Department reserves the right to increase or decrease the quantities of Pay Items specified in the Contract. Such additions or deletions shall not be cause for an increase or decrease in Contract unit bid prices. The "Change" threshold of plus or minus 25%, as described in Subsection 104.2.B.4 of the DelDOT Standard Specifications dated August 2020 shall not apply to this Contract. Quantity increases or decreases of plus or minus 25% or greater shall not be justification for adjustments to unit prices.

The plan revisions and quantity adjustments described above do not invalidate the Contract or release the Contract surety. Payment for these changes shall exclude any amount for loss of anticipated profits alleged to result from the change.

When payment for the Contract work cannot be agreed upon by the Contractor and the Department prior to starting such work ordered, the Department may direct the Contractor to perform the work under Force Account provisions of Subsection 109.4. The Contractor will proceed immediately with the work so ordered and such direction shall neither invalidate the Contract, nor release the surety.

21. Trash, rubbish, debris, or brush that hampers repair / maintenance work in this Contract (as determined by the Engineer), shall be removed within the project limits and shall be incidental to Pay Item 763000 (Initial Expense / Demobilization).

22. Proper disposal of construction related wastes shall be the sole responsibility of the Contractor and shall be performed in accordance with all applicable State regulations. Payment shall be incidental to Pay Item 763000 (Initial Expense / Demobilization).

23. Excavated material not needed on the project shall be removed from the site at Contractor's expense.

24. If any soils or groundwater are found to be potentially contaminated, the Contractor shall stop work and contact the Project Supervisor for direction. The Contractor shall refer to item 202560 (Contaminated Material). Item 202560 will not be a Pay Item, it is added to the contract for reference only.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

25. Clearing and grubbing of trees, shrubs, and other vegetation less than 6 inches in diameter shall be incidental to Item 763000 (Initial Expense / Demobilization). Grubbing activities performed in wetland areas requires environmental permit approvals.
26. Grass and soil areas within State right-of-way that have been damaged by equipment during this contract, shall be restored with topsoil, seed, and mulch at Contractor's own expense, and in accordance with the requirements for Items 908004 (Topsoil, 6" Depth) and 908014 (Permanent Grass Seeding, Dry Ground).
27. Item 908004 (Topsoil, 6" Depth) shall be screened so that no material greater than 0.5" is present in the material used for backfill. Topsoil shall be installed immediately after the forms are removed or backfill is placed at each location.
28. There shall be no additional compensation or time, nor is it deemed outside the nature of the Contract, for work to occur between houses or other obstructions that require one-way in, one-way out access. It is to be expected that there will only be one-way in, one-way out access at each location on this Contract. The Contract primarily does work within permanent easements in New Castle County, which are characterized by tight access, lack of ability to store excavated material next to the trench, and close proximity to homes. There shall be no additional time or compensation for any of the reasons listed above.
29. Portable Light Assemblies will be required for all nighttime operations and as directed by the Engineer. Payment for portable lighting shall be under pay item 804001 (Provide and Maintain Portable Light Assembly). Night work may be required in certain locations, no additional payment outside Item 804001 (Provide and Maintain Portable Light Assembly) is warranted or applicable.

PROJECT NOTES

30. The Contractor shall protect all driveways and/or roads from damage due to the Contractor's equipment, and shall be responsible for all such damage done by the Contractor's equipment. If the Contractor removes a driveway and/or road access, then the Contractor will be responsible for maintaining the driveway and/or road access by the end of each day until a permanent access has been installed. All costs associated with maintaining driveways and/or road access shall be incidental to the item being installed. This includes the use of steel plates, temporary filling trenches with material, and excavating the temporary fill material out of the trench.
31. It is the responsibility of the Contractor to supply all necessary incidentals to complete the applicable work, including but not limited to electricity, water, etc. Procuring water, electrical, etc. from the work site is prohibited.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

32. All costs associated with connecting a new drainage pipe to a new drainage inlet/junction box/manhole is incidental to the applicable drainage pipe item. All costs associated with connecting a new drainage pipe to an existing drainage inlet/junction box/manhole with an equal or smaller outside diameter as the existing pipe is incidental to the applicable pipe item.

Connecting a new drainage pipe to an existing drainage inlet/junction box/manhole with a larger outside diameter than the existing pipe shall be paid for via 0.5 multiplied by the unit cost of Item 602130 (Adjusting and Repairing Existing Drainage Inlet).

33. Item 601002 (Heavy Cleaning of Drainage Pipe) will only be paid while the Contractor is actively engaged in heavy cleaning at the work location. Time spent filling water truck(s), disposing of waste, etc. will not be included in payment. There will, however, be a standard 30-minute grace period once the truck leaves the work site until it returns. The Contractor may provide additional information to justify a longer grace period in certain locations, but this must be approved by the Engineer at his/her discretion prior to work starting at the location otherwise the 30-minute grace period will be used.

Item 601002 (Heavy Cleaning of Drainage Pipe) will be used and paid at the contract unit price per hour regardless of the amount or type of debris or time required to clean the pipe.

34. Payment for removal and disposal of existing drainage structures (inlets, junction boxes, manholes, etc.) shall be incidental to the unit price bid for the applicable new drainage structure item.

35. Installation of new drainage structures that have a depth less than or equal to 5 feet, as measured from the top of the grate to the top of the footer, shall be paid at the applicable unit price for the new drainage structure. Installation of the new drainage structures with the depth greater than 5 feet will be negotiated or performed by Force Account procedures.

36. In order to be eligible to be paid for a new drainage inlet, the Contractor must replace the footer, box, cover slab, top unit, frame and grate.

37. Adjust and Repair of inlets, manholes, and junction boxes may include but will not be limited to the following:

- Rebuilding multiple walls with concrete block or concrete from the footer up.
- Rebuilding and/or pouring a new inlet cover slab and top unit.

Adjusting and Repairing inlets/manholes/junction boxes greater than 10 feet shall be negotiated or performed by Force Account procedures. The depth of the repair, as determined by the Engineer and measured from the top of grate to the bottom of the repair, is the determination for the proper multiple and/or negotiation. Not the depth of the structure.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

38. When directed by the Engineer, the Contractor shall use high early strength concrete in order to achieve sufficient strength per Section 503.3.7 to open the repair area to traffic within 6 hours. Repair areas may include curb, sidewalk, aprons, medians, drainage inlets, manholes, etc. The Department will pay for the use of high early strength concrete via a 1.25 multiplier on the applicable unit bid price for the item installed.
39. In locations that include a double grated drainage inlet, the payment for repair shall be item 602131 (Adjusting and Repairing Existing Double Drainage Inlet(s)). In locations that include a triple grated drainage inlet the payment for repair shall be two (2) times the rate of item 602130 (Adjusting and Repairing Existing Drainage Inlet).
40. There shall be no additional compensation for short load concrete. The minimum requested load is 1 CY for 610009 or 610019. If a plant requires a minimum that is greater than 1 CY, payment will only be made for 1 CY.
41. If required during the placement or repair of PCC items, preformed expansion joint material shall be placed at designated locations as directed by the Engineer. Payment for furnishing and placing the preformed expansion joint material shall be incidental to the PCC pay items.
42. Constructing new and/or reconstructing existing concrete structures (headwalls, wingwalls, barrier, aprons, swales, etc.) including their footer, all formwork, and other incidentals to complete the work, will be paid as 610009 (PCC Masonry, Class B) or 610019 (High Early Strength Concrete) with steel reinforcement paid as 611001 (Bar Reinforcement, Epoxy Coated). Excavation and shaping for new construction and/or reconstructing existing concrete structures will be paid as 202000 (Excavation and Embankment) and/or 207000 (Structural Excavation).
43. As directed by the Engineer, the Contractor shall remove bituminous concrete to limits specified at each location, in accordance with Section 402. The Engineer may extend the limits or assign locations for bituminous patching to correct grades and improve drainage, repair areas of distressed pavement, create smooth transitions to adjacent roadway, etc. If limits are increased beyond the Standard Construction Details or item templates, and the Department requests a milling and paving machine, the mobilization costs shall fall under Item 763544 (Road Location Mobilization, Zone 1). Zone 1 is modified for this contract to encompass all of New Castle County as depicted in the Area Maps below. There shall be no payment for mobilization if the Contractor decides to mobilize a milling or paving machine to complete work within the standard detail or template.
44. Warm mix patches that are over 1 ton require the use of a roller. Any costs associated with this are incidental to the applicable warm mix item.
45. The Contractor shall acquire all necessary materials and equipment prior to starting work at a specific location. The equipment and material shall remain accessible through to the completion of work at that particular location unless prior approval from the Engineer is given.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

46. There shall be no additional compensation for rented equipment when performing bid item work. Bid units shall cover any costs associated with renting equipment.
47. Grass and soil areas within State right-of-way that have been damaged by equipment during this Contract shall be restored with topsoil, seed and mulch at Contractor's expense.
48. There shall be no additional compensation for mobilizing to a location. Mobilization is incidental to the applicable repair item. There shall be no additional compensation for leaving and subsequently returning to a site at a later date due to site conditions, site obstructions, material availability, or utility conflicts.
49. De-watering, which will be performed as per Section 902, includes removal of water from springs, sump pumps, groundwater, roof drains, minor creeks, etc. from the work zone and/or pipe trench, and is incidental to the applicable work item (Inlet, pipe, etc).

Diversions of constantly flowing closed drainage systems up to pipe sizes of 36" (or the equivalent SF hydraulic opening for elliptical pipe) is incidental to the applicable work items.

Stream diversions, which will be performed as per Section 909, of constantly flowing open channels identified by the Delaware Resources Registry as "blue line streams" and diversions of constantly flowing closed drainage systems with pipe sizes greater than or equal to 36" (or the equivalent SF hydraulic opening) shall be paid as per below:

- All costs associated with furnishing, installing, maintaining, and removing sandbags shall be incidental to Item 909002 (Sandbag Diversion).
- All costs associated with furnishing, installing, maintaining, and removing polyethylene sheeting shall be incidental to Item 909002 (Sandbag Diversion)
- All costs associated with installing and maintaining a sump pit, as per the Delaware Standard Construction Details, shall be incidental to Item 906003 (Sump Pit).
- Pumps/hoses shall be negotiated or performed under Force Account procedures as listed in 109.04.

50. There shall be no additional compensation for the use of a trench box. It is expected that a trench box will be needed at every location and the costs associated with its use are incidental to the items being installed.
51. Removal and disposal of existing pipe culverts shall be paid under Item 207000 (Culvert and Structure Excavation and Backfill), calculated using inside and outside dimensions of pipe wall

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

thickness. No additional payment will be made to remove and properly dispose of existing pipes. In the event that all fill has washed away, the volume of the pipe minus the open inside volume shall be calculated and paid per CY.

52. Stabilized Construction Entrances (SCE) shall be constructed as per Section 908 and the Standard Construction Details. Any and all costs associated with creating, maintaining, and removing these entrances will be compensated by a 1.5 multiple on the unit cost for Item 302002 (No. 3 Stone) and 708003 (Geotextiles, Riprap). Use of temporary pipe to cross a ditch or swale shall be incidental to Item 302002 and 708003.
53. Any and all costs associated with temporarily supporting utilities such as temporarily supporting a hydrant/valve/pole with straps, creating a deadman to temporarily move/support a utility line, and bracing/supporting pipes within excavations are incidental to the items being installed.
54. Any and all costs associated with excavating around a utility line to create “slack” in order to install a drainage structure, pipe, etc. is paid under 204000 (Test Holes).
55. There shall be no additional compensation for installing a junction box in lieu of a drainage inlet under the appropriate drainage inlet item.
56. Any costs associated with vibration monitoring or pre-assessing foundations of structures/buildings/homes (such as time spent taking pictures to document the condition inside and outside prior to the start of construction) is incidental to the contract. The decision of when to perform these activities is at the sole discretion of the contractor.
57. The contractor is solely responsible for any concerns about surcharge impacts from equipment, material, etc. on foundations of adjacent structures/buildings/homes. Any costs associated with evaluating the impacts of equipment, material, etc. is incidental to the contract. An independent review by a Delaware Licensed Professional Engineer (Delaware PE) is required in the event that there is concern from the Contractor that a location is not feasible. Any costs associated with a review by a Delaware Licensed Professional Engineer is incidental to the contract. Failure to pursue a Delaware PE in a timely manner will result in time charges resuming and liquidated damages being assessed.
58. Re-establishing or re-ditching of an existing ditch/swale shall be paid under Item 203000 (Channel Excavation). Creating a new ditch/swale will also fall under Item 203000 (Channel Excavation). There will be no additional compensation for removal of rip rap, unsuitable material, etc. from the ditch/swale.
59. Removal/relocation and re-setting of existing chain link, wooden slat, wooden split-rail, or decorative fence up to 6 FT tall shall be paid under Item 727030 (Fence Relocation). Relocation/removal and re-setting of existing chain link, wooden slat, wood split-rail, or decorative fence 6 FT – 10 FT tall shall be paid via a 1.5 multiple on the unit price for 727030. Any fence taller

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

than 10 FT shall be negotiated or performed under force account. Fence height shall be measured from top of grade to top of post or slat.

60. Sizes of Corrugated Polyethylene Pipe, Type S not listed as a Bid Pay Item will be paid as the next largest size on the contract (i.e., 12" pipe will be paid as 15", 21" pipe will be paid as 24")
61. Sizes of Reinforced Concrete Pipe, Class IV not listed as a Bid Pay Item will be paid as the next largest size on the contract (i.e., 12" pipe will be paid as 15", 21" pipe will be paid as 24")
62. PCC Curb, Type 1-2, 1-4, 1-6, shall be paid under Item 701013 (PCC Curb, Type 1-8).
63. I.PCC Curb and Gutter, Type 1-2, 1-4, 1-6, shall be paid under Item 701018 (I.PCC Curb and Gutter, Type 1-8).
64. I.PCC Curb and Gutter, Type 3-2, 3-4, 3-6, shall be paid under Item 701023 (I.PCC Curb and Gutter, Type 3-8).
65. For Pay Item 401029 (SUPERPAVE TYPE C, PG 64-22, PATCHING) the maximum allowable lift thickness is 2 inches, and the minimum allowable lift thickness is 1.25 inches. For Pay Item 401030 (SUPERPAVE TYPE B, PG 64-22, PATCHING) the maximum allowable lift thickness is 6 inches, and the minimum allowable lift thickness is 2.25 inches.
66. Patching of graded aggregate base course within roadway (including shoulders and travel lanes) shall be performed to match existing full depth pavement section with respect to course thickness and pavement structural number. The cost of fine grading, compacting, and preparing existing shoulders for paving shall be incidental to section 401.
67. All roadway excavation in or adjacent to travel ways shall be properly backfilled at the end of each day prior to traffic returning to unrestricted travel per Section 6G.20 and Table 6G-1 of the DE MUTCD. This includes all utilities and/or obstacles within or adjacent to the travel ways as outlined in the DE MUTCD.
68. Any and all costs associated with removing and re-setting guardrail is incidental to Item 720030 (Relocating Guardrail.)
69. Permanent epoxy resin paint, 3", shall be paid under Item 817019 (Permanent Pavement Striping, Epoxy Resin Paint, Black, 5")

MAINTENANCE OF TRAFFIC

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

70. All work shall be performed in a manner that will reasonably provide the least practicable obstruction to all road users, including vehicular, pedestrian, and bicycle traffic, and shall conform to the requirements of the Delaware Manual of Uniform Traffic Control Devices (MUTCD), part 6, including revisions up to the date of advertisement for bids.
71. Traffic Officers are not required at each location unless specifically required by the MUTCD.
72. The Contractor shall submit all traffic control devices expected to be used on the contract using the standard Source of Supply template prior to the preconstruction meeting. Written approval must be received prior to the commencement of work.
73. All shoulder or travel lane closures shall be performed at times directed by the Engineer with direction from the Canal District Safety Officer. Any deviation from the time restriction must be approved by the Canal District Engineer and Canal District Safety Officer prior to the commencement of work.
74. No lane closures will be permitted on holidays or holiday weekends, unless approved by the Engineer with consultation with DelDOT Safety Section. This requirement applies to all roads impacted in this Contract.
75. If a road/ramp closure is required, the Contractor shall be required to submit the proposed detour route to the DelDOT Safety Officer for approval. Payment for detour plan preparation shall be included in the bid price for Item 763000 (Initial Expense / Demobilization). The Department will coordinate with the Safety Section and be responsible for the necessary notifications. The detour route requires approval by the Department prior to closure. A two-week detour review lead time shall be required for any requested detour. The Contractor shall be responsible for providing and maintaining the Maintenance of Traffic apparatus at the closure (i.e., Type III Barricade, Road Closed signs, etc.) and all signs. The Contractor shall be responsible for placement of detour trailblazers. Payment will be under Item 810001 (Temporary Warning Signs and Plaques). Signs that are required to be in place for longer than 72 consecutive hours need to be permanently mounted. Payment for mounting/take down of permanently mounted signs will be paid for under Item 819018 (Installation or Removal of Traffic Sign(s) on Single Post). 819018 will be paid once and it includes all costs associated with removal and take down of the detour/traffic sign. Signs on skids/windmasters or signs attached to existing infrastructure are not considered permanently mounted and shall not be eligible for payment under Item 819018.
76. The Engineer shall be responsible for coordinating with the Traffic Section relating to any impacts to Traffic Section facilities (including but not limited to traffic loops, junction wells, etc.) at least four weeks in advance of the start of the activity. Prior to initiating any work on this contract (or sites), the Engineer shall be responsible for preparing and submitting for approval of the Safety Section, a Maintenance of Traffic Plan. Sufficient time shall be provided for the review and approval of the plan. The Maintenance of Traffic Plan shall include proposed time restrictions on the closure of travel lanes subject to the approval of the Safety Section.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

77. Traffic control devices shall be provided and placed in accordance with the Delaware Manual on Uniform Traffic Control Devices (MUTCD). The Contractor shall prepare and submit a Traffic Control Plan for each site to DelDOT for approval. The Traffic Control Plan must clearly indicate orientation of traffic control devices to be used for each site. The plan must be approved by the DelDOT Safety Officer and DelDOT Engineer prior to commencement of work on each location. Maintenance of Traffic Typical Applications is described in the Delaware MUTCD. The Contractor shall be responsible for determining the applicable Typical Application for each work application. The proposed Traffic Control Plan must be submitted to DelDOT a minimum of ten (10) working days prior to commencement of work at each location.
78. No lane closures or shoulder closures will be permitted unless applicable work activity is taking place.
79. The Contractor shall be required to have an American Traffic Safety Services Association (ATSSA) certified Traffic Control Supervisor on the project. The ATSSA supervisor may be the Contractor's general superintendent for this project or another ATSSA certified member of the Contractor's project staff. The ATSSA certified Traffic Control Supervisor's responsibility shall be the maintenance of traffic throughout the project. This responsibility shall include, but is not limited to, the installation, operations, maintenance and service of temporary traffic control devices. Also required is the daily maintenance of a log to record maintenance of traffic activities, i.e., number and location of temporary traffic control devices; and times of installation, changes, and repairs to temporary traffic control devices. He/she shall also serve as the liaison with the Department concerning the Contractor's maintenance of traffic. The name and contact information for the ATSSA certified Traffic Control Supervisor shall be provided to the Engineer at the Preconstruction Meeting. A copy of the certifications for the ATSSA certified Traffic Control Supervisors proposed for the project shall be submitted to the Department with the Contractor's bid package. The responsibilities of the ATSSA certified supervisor shall be for the duration of the Open-End Contract. Payment for the ATSSA certified traffic control supervisor shall be under Item 763000 (Initial Expense / Demobilization).
80. No separate payment shall be made for use of traffic cones. Traffic cones and/or work associated with their use, such as set up, removal, cleaning, etc., shall be incidental to the work for which they protect.
81. All open excavations shall be secured with plastic drums with retroreflective fluorescent orange and white prismatic sheeting. If the construction activity results in a vertical difference along, adjacent to, or across a travel way, the Contractor shall eliminate or remedy this hazard by the methods detailed in Table 6G-1 of the Delaware Manual on Uniform Traffic Control Devices (DEMUTCD), or as directed by the Engineer.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

82. Payment for relocation and re-positioning of Traffic Control devices shall be incidental to the respective unit price pay items included in this Contract. There shall be no additional compensation for relocation or re-positioning of traffic control devices.
83. Costs for adjustment in position of traffic control devices due to variances from the standard Maintenance of Traffic (MOT) typical application numbers, or for any other reason, shall be included in the unit price for each respective MOT pay item.
84. The safety measures outlined within this Contract and the Delaware MUTCD are not necessarily sufficient in every instance to guarantee the protection of the traveling public or the persons working on the project. Therefore, the provisions of this Contract do not relieve the Contractor of the sole responsibility for the safety of all persons working within or traveling through the work zone throughout the duration of the project. The Contractor shall implement any additional safety measures that are not expressly required by the Contract and are necessary to ensure the safety of all persons. The Contractor shall submit to the Engineer justification for deviations from the Traffic Control Plan or Traffic Management Plan. Final approval of the deviations or additions shall rest with the Engineer with guidance from the Traffic Safety Section. All costs for this work shall be incidental to the applicable pay items as listed in the original contract.
85. The Department reserves the right to stop the Contractor's operations, if in the opinion of the Engineer the Contractor's operations are not in compliance with the Delaware MUTCD, the specifications, or the Plans. The Department also reserves the right to stop the Contractor's operations if the Engineer deems the operations to be unsafe.
86. The use of flaggers is prohibited on interstates, freeways, expressways, and associated ramps.
87. The Department will not make payment to the Contractor for any and all temporary traffic control devices where the Contractor sets up temporary traffic control to perform work but fails to perform any work.
88. Immediately prior to the implementation of any lane or roadway closures, the Engineer shall notify the DelDOT TMC at (302) 659-4600. Notifications shall also be given to the TMC when the closure is lifted. The Engineer shall notify the TMC and the DelDOT Safety Officer if lane closures cannot be removed prior to the end of the allowable work hours.
89. Any deficiencies related to temporary traffic control that are reported to the Contractor in writing shall be corrected within 24 hours or as directed by the Engineer. Corrective actions on severe deficiencies shall be taken immediately unless otherwise directed by the Engineer. Failure to comply will result in non-payment for those devices that are found to be deficient for the duration of the deficiency. Serious deficiencies that are not corrected immediately could result in possible suspension of work until items identified are brought back into compliance and/or the holding of the pay estimate until the serious deficiencies are corrected.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

90. The use of millings and GABC in the travel way, temporary travel way, high volume entrances and access ramp for the purpose of providing a temporary roadway surface, pothole repair, tapered edge for utilities, butt joints, and longitudinal drop-offs (milling and paving operations) is prohibited. Use cold patch, bituminous concrete, bituminous concrete wedge, or taper mill, as noted in the Contract Documents or approved by the Engineer. Payment for cold patch, bituminous concrete, or bituminous concrete wedge shall be paid under item 401030 (Superpave Type B, PG 64-22, Patching).
91. If the Contractor does not complete the contract work within the contract completion time as listed on the Work Order (including approved time extensions), the Contractor shall be responsible for providing the necessary temporary traffic control devices that are required to complete any remaining work. The cost of such temporary traffic control shall be borne by the Contractor. No additional payment will be made to the Contractor to maintain traffic in accordance with the Delaware MUTCD, specifications, and these Project Notes. Temporary traffic control items shall include, but not be limited to, warning lights, warning signs, barricades, plastic drums, P.C.C. safety barrier, flaggers, traffic officers, arrow panels, message boards, portable light assemblies, and portable impact attenuators.
92. Pedestrian Maintenance of Traffic: This work shall consist of providing and maintaining an accessible pedestrian route throughout the project's limits in accordance with the Americans with Disabilities Act of 1990 (ADA) Title II, paragraph 35.130.

The contractor shall be required to review each curb ramp location and submit the appropriate maintenance of traffic detail and devices to the Engineer for each location at least 2-weeks before construction for review, comment, and approval.

The following considerations shall be taken into account when addressing accessible pedestrian maintenance of traffic:

- All pedestrians, including persons with disabilities, shall be provided with a reasonably safe, convenient, and accessible path that replicates as much as practicable the existing pedestrian facilities.
- Maintain access to all business and residents at all times.
- Provide pedestrian access thru or around the work zone. If a detour is deemed necessary, the Contractor must submit the detour route to the Engineer for review and approval by the Traffic Safety Section. The detour route must meet or exceed the current conditions.
- Work should be phased so that all areas of an intersection/sidewalk path are not under construction at the same time unless a clear path is provided and identified.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

- Traffic control devices and other construction materials and features shall not intrude into the usable width of the sidewalk, temporary pathway, or other pedestrian facility.
- Signs and other devices mounted lower than 7 ft above the temporary pedestrian pathway shall not project more than 4 in. into accessible pedestrian route.
- A smooth, continuous hard surface shall be provided throughout the entire length and width of the pedestrian route throughout construction.
- There shall be no curbs or vertical elevation changes greater than $\frac{1}{4}$ in. in grade or terrain that could cause tripping or be a barrier to wheelchair use.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

QUANTITY SUMMARY

ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY
202000	EXCAVATION AND EMBANKMENT	CY	1,000.00
203000	CHANNEL EXCAVATION	CY	400.00
204000	TEST HOLE	CY	80.00
207000	STRUCTURAL EXCAVATION AND BACKFILL	CY	2,000.00
207010	ROCK EXCAVATION FOR STRUCTURES AND TRENCHES	CY	35.00
208000	FLOWABLE FILL	CY	75.00
209004	BORROW, TYPE C	CY	1,750.00
209006	BORROW, TYPE F	CY	20.00
211001	REMOVAL OF PCC PAVEMENT, CURB, AND SIDEWALK	SY	1,500.00
211500	TREE REMOVAL, GREATER THAN 6" TO 15" DIAMETER	EACH	15.00
211501	TREE REMOVAL, GREATER THAN 15" TO 25" DIAMETER	EACH	5.00
211502	TREE REMOVAL, GREATER THAN 25" TO 37" DIAMETER	EACH	3.00
211503	TREE REMOVAL, GREATER THAN 37" TO 49" DIAMETER	EACH	3.00
211504	TREE REMOVAL, GREATER THAN 49" DIAMETER	EACH	1.00
301001	GRADED AGGREGATE BASE COURSE, TYPE B	CY	750.00
302002	DELAWARE NO. 3 STONE	TON	75.00
302005	DELAWARE NO. 57 STONE	TON	600.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	500.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	100.00
402000	BITUMINOUS CONCRETE PATCHING	SYIN	300.00
601000	CLEANING DRAINAGE PIPE, 15"-24" DIAMETER	LF	5,000.00
601001	CLEANING DRAINAGE PIPE, GREATER THAN 24" DIAMETER	LF	2,500.00
601002	HEAVY CLEANING OF DRAINAGE PIPE	HOUR	100.00
601003	PRESSURE GROUTING PIPE JOINTS, 15"-24" DIAMETER	EACH	50.00
601004	PRESSURE GROUTING PIPE JOINTS, GREATER THAN 24" DIAMETER	EACH	25.00
601032	RCP, 15", CLASS IV	LF	750.00
601033	RCP, 18", CLASS IV	LF	400.00
601035	RCP, 24", CLASS IV	LF	300.00
601039	RCP, 36", CLASS IV	LF	400.00
601041	RCP, 48", CLASS IV	LF	75.00
601043	RCP, 60", CLASS IV	LF	40.00
601220	CORRUGATED POLYETHYLENE PIPE, TYPE S, 15"	LF	750.00
601221	CORRUGATED POLYETHYLENE PIPE, TYPE S, 18"	LF	75.00
601223	CORRUGATED POLYETHYLENE PIPE, TYPE S, 24"	LF	600.00

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

601225	CORRUGATED POLYETHYLENE PIPE, TYPE S, 36"	LF	100.00
601227	CORRUGATED POLYETHYLENE PIPE, TYPE S, 48"	LF	15.00
601229	CORRUGATED POLYETHYLENE PIPE, TYPE S, 60"	LF	40.00
601500	PIPE VIDEO INSPECTION	LF	7,500.00
601506	DIG AND WRAP PIPE FAILURES, PIPE SEPARATIONS, ETC.	EA	50.00
602001	DRAINAGE INLET, 24" X 24"	EACH	5.00
602002	DRAINAGE INLET, 34" X 18"	EACH	5.00
602003	DRAINAGE INLET, 34" X 24"	EACH	10.00
602004	DRAINAGE INLET, 48" X 30"	EACH	5.00
602005	DRAINAGE INLET, 48" X 48"	EACH	5.00
602006	DRAINAGE INLET, 66" X 30"	EACH	5.00
602009	DRAINAGE INLET, 72" X 24"	EACH	5.00
602010	DRAINAGE INLET 72" X 48"	EACH	5.00
602031	MANHOLE, 48" X 48"	EACH	5.00
602100	DRAINAGE INLET GRATE(S)	EACH	15.00
602101	DRAINAGE INLET FRAME(S)	EACH	15.00
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EACH	200.00
602131	ADJUST AND REPAIR EXISTING DOUBLE DRAINAGE INLET(S)	EACH	75.00
602132	ADJUSTING AND REPAIRING EXISTING MANHOLE	EACH	50.00
602133	REPAIRING EXISTING JUNCTION BOX	EACH	5.00
610009	PCC MASONRY, CLASS B	CY	50.00
610019	HIGH EARLY STRENGTH CONCRETE	CY	25.00
612506	PIPE POINT REPAIR, 15" - 24" DIAMETER	LF	30.00
612507	PIPE POINT REPAIR GREATER THAN 24" DIAMETER	LF	15.00
701013	PCC CURB, TYPE 1-8	LF	300.00
701018	INTEGRAL PCC CURB AND GUTTER, TYPE 1-8	LF	300.00
701019	INTEGRAL PCC CURB AND GUTTER, TYPE 2	LF	750.00
701023	INTEGRAL PCC CURB AND GUTTER, TYPE 3-8	LF	225.00
701031	CURB OPENING, 2' OPENING	EA	5.00
701032	CURB OPENING, 4' OPENING	EA	5.00
701513	PCC VALLEY GUTTER, 8"	SY	50.00
705001	PCC SIDEWALK, 4"	SF	2,000.00
705002	PCC SIDEWALK, 6"	SF	1,500.00
705007	DETECTABLE WARNING SURFACE	SF	50.00
705008	PEDESTRIAN CONNECTION, TYPE 1	SF	75.00
705009	PEDESTRIAN CONNECTION, TYPE 2, 3 AND/OR 4	SF	200.00
707015	RIP RAP, R-4	TON	750.00
707016	RIP RAP, R-5	TON	75.00
707017	RIP RAP, R-6	TON	25.00

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No: T202480207

Open-End, Drainage Repair, New Castle County, FY24-26

707018	RIP RAP, R-7	TON	15.00
707020	PRESACKED CONCRETE RIPRAP	CY	20.00
708003	GEOTEXTILES, RIPRAP	SY	2,500.00
709001	PERFORATED PIPE UNDERDRAINS, 6"	LF	300.00
720030	RELOCATING GUARDRAIL	LF	150.00
727006	TEMPORARY CONSTRUCTION FENCE	LF	1,000.00
727030	FENCE RELOCATION	LF	250.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	7,500.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	350.00
763000	INITIAL EXPENSE/DE-MOBILIZATION	LS	1.00
763544	ROAD LOCATION MOBILIZATION, ZONE 1	EA	15.00
763546	ROAD LOCATION MOBILIZATION, ZONE 3	EA	1.00
802003	ARROW PANELS TYPE C	EADY	25.00
803001	PROVIDE & MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EADY	250.00
804001	PROVIDE & MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	EADY	50.00
805001	PLASTIC TRAFFIC CONTROL DRUMS	EADY	15,000.00
806001	TRAFFIC OFFICERS	HOUR	20.00
808002	PROVIDE & MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	EADY	150.00
810001	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	3,500.00
811001	FLAGGER, NEW CASTLE COUNTY	HOUR	700.00
811013	FLAGGER, NEW CASTLE COUNTY, OVERTIME	HOUR	25.00
813001	TEMPORARY BARRICADES, TYPE III	LFDY	4,500.00
817003	TEMPORARY MARKINGS, PAINT, 4"	LF	300.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	75.00
817031	REMOVAL OF PAVEMENT STRIPING	SF	50.00
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	EACH	150.00
905001	SILT FENCE	LF	1,200.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EA	15.00
905005	INLET SEDIMENT CONTROL, CURB INLET	EA	15.00
906002	DEWATERING BAG	EA	10.00
906003	SUMP PIT	CY	10.00
908004	TOPSOIL, 6" DEPTH	SY	10,000.00
908016	PERMANENT GRASS SEEDING, SUBDIVISION	SY	10,000.00
908020	EROSION CONTROL BLANKET MULCH	SY	7,500.00
909002	SANDBAG DIVERSION	CF	3,000.00