THE STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION MAINTENANCE AND OPERATIONS CONSTRUCTION PLANS AND SPECIFICATIONS FOR

PCC Patching, North, Open End, FY20-22

CONTRACT NUMBER – T202006401 FEDERAL AID NUMBER – N/A

PRIMAVERA ID – 19-22006 COUNTY: NEW CASTLE

NORTH DISTRICT DESIGN ENGINEER

11/11/20

DATE



APPROVED FOR ADVERTISEMENT

2020

DIRECTOR OF MAINTENANCE AND OPERATIONS

CONTRACT No: T202006401

CONTRACT DESCRIPTION

The purpose of this contract is to repair and improve sections of Portland Cement Concrete (PCC) Pavement or composite pavements on roads throughout DelDOT North District, New Castle County, Delaware, including all Interstates and major roadways. PCC Patching and repair work shall include, but is not limited to: saw-cutting, removal of existing PCC or composite pavement, placing concrete and dowel bars, partial depth patching, dowel bar retrofit & longitudinal steel retrofit, diamond grinding, bituminous milling and paving, crack and joint sealing, installing pavement markings, adjusting/repairing drainage inlets, manholes, water valves, and other utilities, repairing pavement around patches, repairing and rehabilitating concrete barrier, curb, median, sidewalk, pedestrian connections and any other related work activities to complete each work order.

The specific work sites are not listed herein, but will be assigned as available by the District Maintenance office via work orders.

CONTRACT No: T202006401

PCC Patching, North, Open End, FY20-22

GENERAL NOTES

- 1. All work shall be performed in accordance with the Delaware Department of Transportation Standard Specifications dated August 2020 (as amended by the Supplemental Specifications up to the day of contract advertising), 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. The duration of this open-end contract shall be for a period of 1095 calendar days from the date of initial "Notice to Proceed" letter. The Department reserves the right to request to extend the contract for 1 additional calendar year at the original unit bid prices. The one-year extension must be approved by both parties in writing prior to the expiration of the existing contract. The performance bond shall be submitted with the contract execution and shall be subject to any such agreed upon renewal for extension periods. Initial expense shall only be paid once and shall not be paid a second time upon an extension of the contract. Any additional expenses related to the extension of the contract must be documented and shall be agreed to prior to contract extension.
- 3. Tasking of work is contingent upon authorization of State funding.
- 4. The Department reserves the right to prioritize, substitute, add, or delete work order locations at any time during the contract.
- 5. Payment will be monthly for the completed work as outlined in Section 109.8.
- 6. 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.
- 7. 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.
- 8. Item 801000 (Maintenance of Traffic) shall be paid monthly starting from the date of notice to proceed (NTP). It shall not be paid in full until the contract time has been exhausted. It shall not be paid in full, nor is the contractor owed additional compensation, if the contract reaches or exceeds the award amount before contract time is exhausted.
- 9. No environmental permits are required for this work provided no jurisdictional wetlands or waters are impacted. If there is any question as to whether or not a water or wetland is jurisdictional, the contractor shall contact the DelDOT Environmental Section at (302) 760-2280 prior to the start of work.

- 10. 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.
- 11. 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.
- 12. 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. This work is incidental to Item 763000 (Initial Expense / Demobilization).
- 13. 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 Engineer to contact the DelDOT Railroad Coordinator and obtain written authorization before entering.
- 14. 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.
- 15. 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. The Contractor is responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The Contractor is advised to check the site for access purposes for his equipment, and make arrangements directly with utility companies for field adjustments for adequate clearances if necessary.
- 16. 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.
- 17. Upon issuance of each work order 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. 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.

- 18. 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.
- 19. The Contractor will be advised of work to be performed or deleted via a Work Order. The Work Order 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 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 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 sole discretion determine if additional time is granted. Disputing a time quantity does not constitute a delay in commencement of a work order as described below.
- 20. Prosecution and Progress of Work:

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.

Issuance of each work order constitutes the notice to proceed with the work described on the work order. Time charges commence from the date of the NTP and continue until substantial completion, as determined by the Engineer, of the individual work order.

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 six (6) active work orders 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 start assigned work orders in the allowed time constitutes "Failure to Pursue the Work" and subjects the Contractor to Liquidated damages as outlined in Section 108.8 of the Standard

Specifications. If work on a specific work order is not completed within the allotted time, Liquidated Damages will be assessed in accordance with Subsection 108.9 and based on the total value of that work order.

Each work order shall be considered a separate unit of work. Upon the substantial completion of the work at an individual location, the Engineer may stop time at that location and perform a semi-final inspection for the work order location 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 Final Inspection.

A Final Inspection will 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 Final Inspection may be held upon the individual completion of that work order.

21. 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.

- 22. 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).
- 23. 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.)

- 24. Excavated material not needed on the project shall be removed from the site at Contractor's expense.
- 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. Portable Light Assemblies will be required for all night time operations and as directed by the Engineer. Payment for portable lighting shall be under pay item 804001 (Provide and Maintain Portable Light Assembly.)

PROJECT NOTES

- 28. The location of the work to be performed is designated by zones. The zone limits are shown on the numbered zone maps included in the Contract documents. The Department will make every attempt to minimize the distance between successive locations. The Contractor shall be paid for "Road Location Mobilizations" as defined in Specials Provisions 763544, 763545, 763546, 763547 and 763548. Payment for "Road Location Mobilization" will not be made for crack sealing, pavement striping, or pavement symbol work.
- 29. An assumed PCC Pavement depth of 11 (eleven) inches shall be used for proposed quantities given within the contract. Removal of existing slab depth over 11", up to 16" will be incidental to items 503001 and 503002. Replacement of additional slab depth over 11" shall be paid using item 503004, Patching PCC Pavement (Undercutting).
- 30. Saw cutting for items 503001 and 503002, Patching PCC Pavement will be paid under item 762001, Saw Cutting, Concrete, Full Depth. Patches greater than 11" in depth shall be saw cut, full depth. No additional payment will be made for saw cutting patches deeper than 11". Item 762001 shall include cutting the entire depth of the patch to be replaced regardless of the actual depth of the patch.
- 31. 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.

- 32. 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.
- 33. Unless otherwise directed by the engineer, all PCC patching completed on composite roadways shall utilize concrete to the existing pavement grade. Bituminous pavement shall not be used to eliminate grade differences.
- 34. Bituminous paving and patching quantities contained in this contract are to be used for bituminous roadway patching, composite roadways where the Engineer directs the Contractor to replace the bituminous overlay, bituminous shoulder replacement, PCC roadways and other concrete repairs with adjacent bituminous concrete, etc.
- 35. All warm mix bituminous paving materials shall be placed utilizing a paving machine, unless otherwise directed by the Engineer.
- 36. 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.
- 37. The Contractor shall take care in removing existing pavement around utilities, curb edges, drainage inlets, and other objects. Care should be taken to not dig deeper than the required depth. Failure to do so will result in the Contractor placing leveling course at the Contractor's expense.
- 38. Finished surfaces shall be tested using a 10-foot straightedge, by placing the straightedge half on existing pavement and half on the new patch. Any surface deviations, greater than as specified in Section 503 of the standard specifications, shall be corrected at the Contractor's expense via diamond grinding or at the discretion of the Engineer.
- 39. Item 501502 (Diamond Grinding P.C.C. Pavement And Precast Pavement) will be used to correct or improve existing pavement surfaces.
- 40. Repairing or rehabilitating existing PCC Barrier, PCC Retaining Walls, etc. shall be repaired in accordance with Section 628. All spall repairs will be considered deep spall repair and paid under Items 628041 (Deep Spall Repair) or Item 628042 (Rehabilitation of PCC Masonry). Installation of new PCC barrier shall be negotiated.
- 41. Repairing PCC median Islands shall be paid under items 705001 (PCC Sidewalk, 4") and 705002 (PCC Sidewalk, 6").

- 42. An assumed width of 4' should be used for Item 701026 (PCC Monolithic Median). Replacement of PCC Monolithic Medians smaller or larger than 4' width will be paid by applying a multiplier based on actual width divided by 4' (i.e. 6' wide monolithic median would be paid as 1.5 times Item 701026 and 2' wide monolithic median would be paid as 0.5 times Item 701026.)
- 43. PCC Curb, Type 1-2, 1-4, 1-6, shall be paid under Item 701013 (PCC Curb, Type 1-8).
- 44. 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).
- 45. PCC Curb, Type 2 shall be paid under item 701019 (I.PCC Curb and Gutter, Type 2).
- 46. 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).
- 47. Any and all costs associated with removing and re-setting guardrail is incidental to Item 720030 (Relocating Guardrail.)
- 48. Where there is existing striping being removed, the Contractor shall be required to provide proof that sufficient material and equipment is available onsite to ensure the temporary striping is completed in a timely manner, before traffic is allowed on the roadway.
- 49. DelDOT will not compensate the Contractor for erroneous pavement markings. Any erroneous pavement markings placed by the Contractor shall be corrected immediately by the Contractor at Contractor's expense. Erroneous markings or shadows that exceed one (1) inch in width shall be removed by either sand or water blasting as directed by the Engineer. No other removal methods will be allowed. Any damage to the pavement caused by the removal of erroneous markings shall be repaired/replaced to the satisfaction of the Engineer at Contractor's expense.
- 50. Temporary striping shall be placed at locations that require permanent striping at the end of each work day before traffic can return to unrestricted roadway use. Placement of temporary markings shall receive prior approval from the Engineer. Temporary pavement striping must match the permanent striping in all regards. Temporary pavement markings shall be paid at the applicable contract unit price. The Contractor is responsible for maintaining the temporary markings in good condition, such that the pavement is properly delineated at all times. Any refreshing of the markings will be at the Contractor's expense.
- 51. Removal of Temporary Markings shall be incidental to installation of temporary markings.
- 52. Final pavement markings shall conform to all existing patterns, and shall be placed within five (5) calendar days (maximum) after placement of the final course of paving material. Failure to comply will result in suspension of all other contract work, with time charges continuing to be assessed. If the Contractor fails to document the existing pavement markings in an acceptable

manner, the Contractor shall be required to provide at their own expense, a new pavement marking plan, signed and sealed by a Professional Engineer in the State of Delaware.

53. Permanent Pavement Striping, Epoxy Resin Paint, Black, 3" shall be paid under Item 817019 (Permanent Pavement Striping, Epoxy Resin Paint, Black, 5".)

MAINTENANCE OF TRAFFIC

- 54. 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.
- 55. All shoulder or travel lane closures shall be performed at times directed by the Engineer with direction from the North District Safety Officer. Any deviation from the time restriction must be approved by the North District Engineer and North District Safety Officer prior to the commencement of work.
- 56. 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.
- 57. Upon selection of a location, the DelDOT Safety Section must be notified a minimum of three weeks in advance of the work in order to determine the type of and prepare a Transportation Management Plan (TMP) for the location. Should a Type "B" TMP be required, all time restrictions given in the TMP will be followed. Should a Type "A" TMP be required, above time restrictions will be followed or as directed by the Engineer with direction from the North District Safety Officer
- 58. 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 furnishing 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).

- 59. 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.
- 60. The Engineer is responsible for ensuring any required documents and analysis as part of the adopted Work Zone Safety and Mobility Procedures and Guidelines has been completed prior to any work starting on this contract.
- 61. 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.
- 62. No lane closures or shoulder closures will be permitted unless applicable work activity is taking place.
- 63. All repair/maintenance equipment shall be removed from the job sites on a daily basis, except when approved by the Engineer. Contractor shall follow guidelines set forth by the Delaware MUTCD for storage of materials.
- 64. 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 801000 (Maintenance of Traffic).

- 65. 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.
- 66. 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 travelway, 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.
- 67. Payment for relocation and re-positioning of Traffic Control devices shall be incidental to the respective unit price Pay Items for Maintenance of Traffic included in this Contract. There shall be no additional compensation for relocation or re-positioning of traffic control devices.
- 68. 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.
- 69. All permanent warning signs shall be retroreflective, and constructed of rigid material complying with NCHRP 350 and/or MASH requirements.
- 70. 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 maintenance of traffic pay items as listed in the original contract.
- 71. 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.

- 72. 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.
- 73. 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.
- 74. 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.
- 75. 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 unless it is otherwise designated to be used in the contract plans. Use cold patch, bitumionous 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 shall be paid under the bituminous concrete milling item.

Millings or GABC shall be used at the following locations where access to a business residence, or edge drop off needs to be maintained unless otherwise noted in the plans or directed by the Engineer to use bitumionus concrete or cold patch. All milling and GABC will be rolled and compacted to help prevent the material from unraveling.

- a. Driveways
- b. Entrances
- c. Low volume access ramps (Identified in the contract documents)
- d. Edge drop-offs adjacent to live roadway (lane, shoulder, or turn lane) and the proposed road construction
- e. Edge of roadway dropoff

Grading and maintaining base course that is being used for roadway wedge/fillet between travel lanes and pavement box, edge of travel way, driveway or entrance access shall be incidental to Item No. 801000 - Maintenance of Traffic. The base course material shall be placed at no greater than the slope specified in table 6G-1 and shall be compacted. Excess base course material shall be pushed ahead and used in the next segment and shall be incidental to the particular base course pay item. No separate payment shall be made for Millings or GABC temporary roadway

material (TRM) used to protect edge drop-offs, unless the material is eventually utilized as part of a permanent roadway at which time the material would be paid for under the respective contract material item. Vertical differences shall be corrected in accordance with table 6G-1 of the Delaware MUTCD.

- 76. If the Contractor does not complete the contract work within the contract <u>completion time</u> 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.
- 77. 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.

• 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 ¼ in. in grade or terrain that could cause tripping or be a barrier to wheelchair use.

ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY
202000	EXCAVATION AND EMBANKMENT	CY	75.00
202004	UNDERCUT EXCAVATION, PATCHING	CY	150.00
207000	CULVERT AND STRUCTURE EXCAVATION AND BACKFILL	CY	20.00
209004	BORROW, TYPE C	СҮ	100.00
211001	REMOVAL OF PCC PAVEMENT, CURB AND SIDEWALK	SY	300.00
301002	GABC PATCHING	CY	150.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	750.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	750.00
402000	BITUMINOUS CONCRETE PATCHING	SY-IN	10,000.00
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	TON	25.00
501502	DIAMOND GRINDING P.C.C. PAVEMENT AND PRECAST PAVEMENT	SF	100,000.00
503001	PATCHING PCC PAVEMENT, 6' TO 15', TYPE A	SY	7,000.00
503002	PATCHING PCC PAVEMENT, 15' TO 100', TYPE B	SY	7,000.00
503004	PATCHING PCC PAVEMENT, (UNDERCUTTING)	SY-IN	1,200.00
503006	DOWEL BARS	EA	6,000.00
503513	DOWEL BAR RETROFIT	EA	425.00
503514	LONGITUDINAL STEEL RETROFIT	EA	100.00
503543	NIGHTTIME P.C.C. PATCHING SURCHARGE, NEW CASTLE COUNTY	SY	2,000.00
504001	CRACK AND JOINT SEALING LESS THAN ¾-INCH WIDE	LF	25,000.00
504002	Crack and Joint Sealing, ¾-INCH to 1 ¾-INCH Wide	LF	500.00

QUANTITY SUMMARY

CONTRACT No: T202006401

PCC Patching, North, Open End, FY20-22

505000	PCC PATCHING, PARTIAL DEPTH	SY/IN	500.00
602035	MANHOLE, ROUND	EA	1.00
602100	DRAINAGE INLET GRATE(S)	EA	5.00
602101	DRAINAGE INLET FRAME(S)	EA	5.00
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EA	40.00
602132	ADJUSTING AND REPAIRING EXISTING MANHOLE	EA	20.00
628041	DEEP SPALL REPAIR	CF	100.00
628042	REHABILITATION OF PCC MASONRY	CY	10.00
701013	PCC CURB, TYPE 1-8	LF	200.00
701018	I.PCC CURB AND GUTTER, TYPE 1-8	LF	200.00
701019	I.PCC CURB AND GUTTER, TYPE 2	LF	200.00
701023	I.PCC CURB AND GUTTER, TYPE 3-8	LF	100.00
701026	PCC MONOLITHIC MEDIAN	LF	100.00
705001	PCC SIDEWALK, 4"	SF	500.00
705002	PCC SIDEWALK, 6"	SF	500.00
705007	DETECTABLE WARNING SURFACE	SF	10.00
705008	PEDESTRIAN CONNECTION, TYPE 1	SF	160.00
705009	PEDESTRIAN CONNECTION, TYPE 2,3 AND/OR 4	SF	160.00
707001	RIPRAP, R-4	SY	25.00
708003	GEOTEXTILES, RIPRAP	SY	25.00
709001	PERFORATED PIPE UNDERDRAINS, 6"	LF	400.00
709011	UNDERDRAIN OUTLET PIPE, 6"	LF	200.00
710002	ADJUST WATER VALVE BOXES	EA	3.00
720030	RELOCATING GUARDRAIL	LF	90.00
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	SY-IN	300.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	100.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	25,000.00
762004	BUTT JOINTS	SY	20.00
763000	INITIAL EXPENSE / DEMOBILIZATION	LS	1.00
763544	ROAD LOCATION MOBILIZATION, ZONE 1	EA	4.00
763545	ROAD LOCATION MOBILIZATION, ZONE 2	EA	4.00
763546	ROAD LOCATION MOBILIZATION, ZONE 3	EA	4.00
763547	ROAD LOCATION MOBILIZATION, ZONE 4	EA	4.00
763548	ROAD LOCATION MOBILIZATION, ZONE 5	EA	4.00
801000	MAINTENANCE OF TRAFFIC	LS	1.00
802003	ARROW PANELS, TYPE C	EA-DY	300.00
803001	PROVIDE AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EA-DY	300.00
804001	PROVIDE AND MAINTAIN PORTABLE LIGHT ASSEMBLY	EA-DY	25.00

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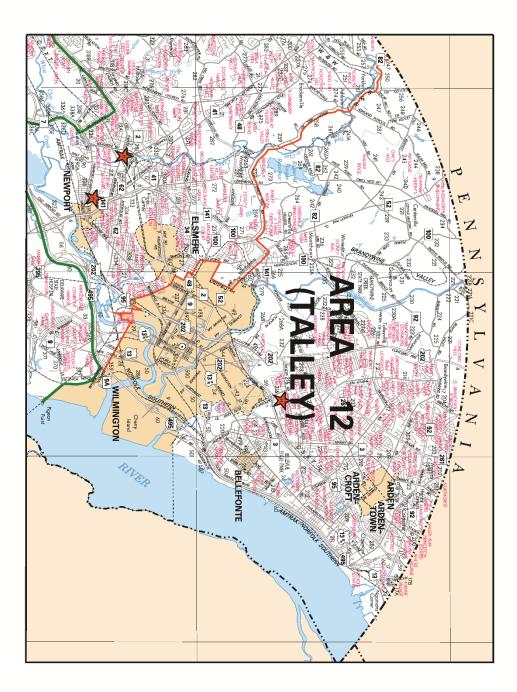
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805001	PLASTIC TRAFFIC CONTROL DRUMS	EA-DY	25,000.00
806001	TRAFFIC OFFICERS	HR	250.00
808002	PROVIDE AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	EA-DY	550.00
810001	TEMPORARY WARNING SIGNS	EA-DY	3,000.00
811001	FLAGGER, NEW CASTLE COUNTY, STATE	HOUR	5,000.00
811013	FLAGGER, NEW CASTLE COUNTY, OVERTIME	HOUR	100.00
813001	TEMPORARY BARRICADES, TYPE III	LF-DY	1,000.00
817002	PERMANENT PAVEMENT, SYMBOL/LEGEND, ALKYD- THERMOPLASTIC	SF	500.00
817003	TEMPORARY MARKINGS, PAINT, 4"	LF	8,000.00
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	SF	400.00
817009	TEMPORARY MARKINGS, TAPE, 4"	LF	3,000.00
817010	TEMPORARY MARKINGS, TAPE, WORDS/SYMBOLS	SF	400.00
817012	RETROREFLECTIVE PERFORMED PATTERNED MARKINGS, SYMBOL/LEGEND	SF	100.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	7,000.00
817019	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK, 5"	LF	1,500.00
846001	PROVIDE AND INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	LF	100.00
905001	SILT FENCE	LF	100.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EA	150.00
905005	INLET SEDIMENT CONTROL, CURB INLET	EA	150.00
908004	TOPSOIL, 6" DEPTH	SY	100.00
908007	TOPSOILING	SY	100.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	100.00
908020	EROSION CONTROL BLANKET MULCH	SY	100.00

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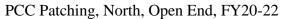
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MOBILIZATION ZONE - 1

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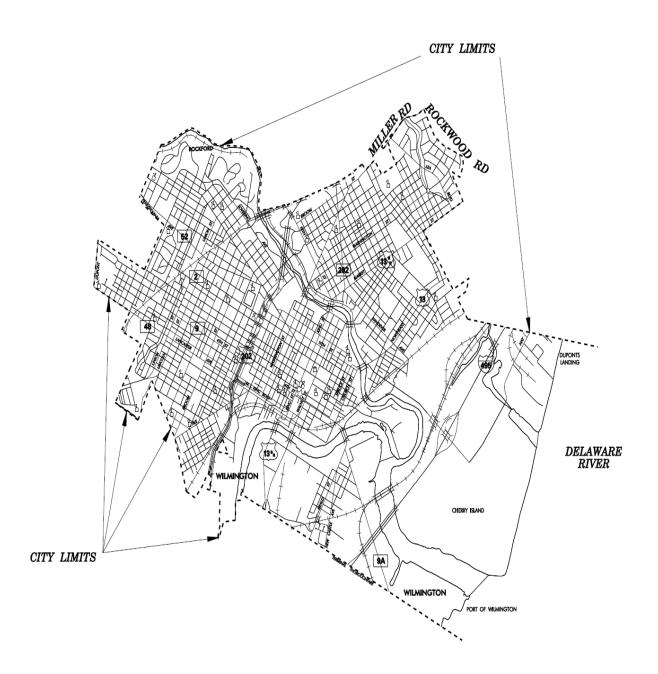


MOBILIZATION ZONE - 2

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MOBILIZATION ZONE – 3



MOBILIZATION ZONE – 4



MOBILIZATION ZONE – 5