

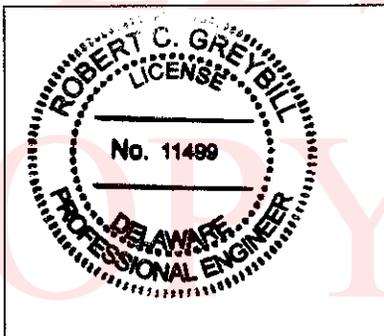
STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION



PLANS AND SPECIFICATIONS FOR

Contract Number T201206402
Federal Aid Project Number: NONE

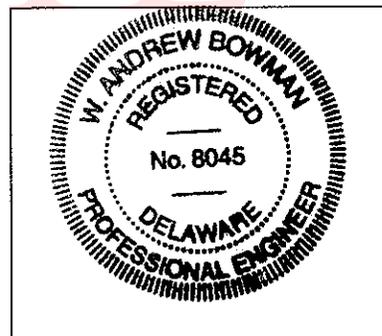
WARM MIX PATCHING, NORTH, OPEN END, FY13



RECOMMENDED:

RC Greybill
Project Engineer

July 26, 2012
Date



APPROVED:

W. Andrew Bowman
North District Engineer,
Maintenance and Operations

7/30/12
Date

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 2 of 16

CONTRACT DESCRIPTION

The purpose of this contract is to repair sections of bituminous concrete pavement on roads in DelDOT North District, New Castle County, Delaware. Work includes saw-cutting, milling, paving, crack sealing, replacing damaged paint striping, and adjusting and repairing drainage inlets and manholes.

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

The duration of this open-end contract shall be for a period of two years from the date of initial "Notice to Proceed" letter, with the option to extend the contract for one (1) additional one-year period

PROJECT NOTES

1. Construction of this contract shall conform to Delaware Department of Transportation Standard Specifications dated August 2001, as amended by the Supplemental Specifications, the Special Provisions, drawing details and Project Notes.
2. An updated Performance Bond shall be submitted at the beginning of each fiscal year. Failure on the part of the Contractor to submit the Performance Bond shall result in the Contract being cancelled.
3. Whenever the word "Contractor" is used in this Contract, it shall refer to the person or persons, company, or corporation furnishing the services required.
4. Whenever the word "Department" or "Engineer" is used, it shall refer to the person or persons representing the Delaware Department of Transportation (DelDOT).
5. Delete Section 104.05 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 104.05 of the DelDOT Standard Specifications dated August 2001 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

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 3 of 16

of Subsection 109.04 of the Specifications. The Contractor will proceed immediately with the work so ordered and such direction shall neither invalidate the Contract, nor release the surety.

6. Tasking of work for Fiscal Year 2014 (beginning July 1, 2013) is contingent upon authorization of State funding.
7. 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.
8. No environmental permits are required for this work provided no jurisdictional wetlands or waters are impacted. If there is a question as to whether or not a water or wetland is jurisdictional, contact the DelDOT Environmental Section at 302-760-2264.
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 DelDOT Project Manager to secure such trespass needs.
10. 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 DelDOT Project Manager to contact the railroad chief engineer and obtain written authorization before entering.
11. The Contractor shall not trespass on private property unless the District has acquired a "Temporary Trespass Agreement" from the property owner. If the work is within a permanent easement, the work shall not begin until the adjacent property owners have been notified. Prior to starting work on private property, the Contractor shall notify affected property owners of proposed work dates. The Contractor shall give the property owners at least three (3) days advanced written notice.
12. The DelDOT Project Manager 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.
13. Work located within Municipalities requires a Town Agreement. Contact DelDOT TEAM Support section at (302) 760-2251 prior to commencing work within Municipalities to process a town agreement.
14. Clearing and grubbing of weeds, trees and shrubs less than 6 inches in diameter shall be incidental to the applicable repair or replacement item. Grubbing activities performed in wetland areas requires environmental permit approvals.
15. The Contractor shall protect all driveways from damage due to Contractor's equipment and shall be responsible for all such damage done by Contractor's equipment.

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 4 of 16

16. 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.

17. Prosecution and progress of work:

The Contractor shall commence work indicated on the work order no later than the tenth business day after issuance unless required materials 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. Subsection 108.02 (Notice to Proceed) of the Standard Specifications is not applicable to this Contract.

If there is a verified non-availability of materials, time charges shall commence on the first (1st) working day following the delivery date of said materials.

The work will be scheduled via work orders from the District Maintenance office. Work sites will vary in size and complexity. The work order will list the pay items and quantities of work for each location, and time allotted to perform the work. Location maps showing the boundaries of North District Maintenance area are included for reference. Any questions during construction shall be referred to the Engineer or designated representative.

The Contractor may have up to four (4) active work orders at any one time until all assigned work has been completed. The Contractor may be required to have simultaneous operations up to the limit of four (4) active work orders. The District will attempt to issue the work orders grouped together by location. The Contractor shall be required to work in multiple maintenance areas concurrently to engage in the limit of four (4) work orders simultaneously. The Contractor is required to have a minimum of four (4) viable working crews readily available to work on this contract unless otherwise directed by the Engineer or representative. Each crew is required to have a qualified superintendent as outlined in Section 105.07 of the Standard Specifications and at least two (2) qualified equipment operators.

Failure to complete assigned work orders in the calculated time constitutes "Failure to Pursue the Work" and subjects the Contractor to liquidated damages as outlined in Subsection 108.09 of the Standard Specifications. If work on a specific work order is not completed within the allotted time listed on the work order, liquidated damages will be assessed in accordance with Subsection 108.09 and based on the total value of that work order.

A final inspection will be performed in accordance with Subsection 105.20 on each work order. The work will be accepted by the Department if satisfactorily completed. When seeding is

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

required on the work order, a full stand of grass will be required. The stand shall be established for a minimum of seven days prior to final inspection.

18. Each work order shall be considered a single unit of work. Upon completion of each single unit of work and acceptance by the Department, one itemized invoice will be prepared by the Department for that work. The Contractor shall review and approve the invoice. Payment will be monthly for the completed invoices as outlined in Section 109.07.

19. Time to perform the work assigned per work order shall be developed by the following method and items:

LEGEND: A = TONS OF TYPE "C" HOT-MIX PATCHING IN WORK ORDER.
B = SQUARE YARDS PER INCH OF MILLING IN WORK ORDER.
C = SQUARE YARDS PER INCH OF HOT-MIX PATCHING IN WORK ORDER.
D = TONS OF BCBC PATCHING IN WORK ORDER.
T = TIME ALLOWED TO PERFORM JOB ORDER ROUNDED UP TO THE NEXT WHOLE WORKING DAY.

FORMULA:

T = (A / 125 t) + (B / 2,000 sy/in) + (C / 2,000 sy/in) + (D / 125 t)

SAMPLE CALCULATION:

A= 126 TONS
B= 1,976 SQUARE YARDS PER INCH
C= 2,125 SQUARE YARDS PER INCH
D= 116 TONS

T= (126 / 125) + (1,976 / 2,000) + (2,125 / 2,000) + (116 / 125)

T= 1.008 + 0.988 + 1.0625 + 0.928

T= 3.9865 = 4 working days

20. Removal of all hot-mix, base course material, and unsuitable soil shall be paid under Item 406001 (Hot-Mix Patching).

21. The location of the work to be performed is designated by zones. The zone limits are shown on numbered zone maps included in the Contract documents.

The Department intends to issue work orders so that when one location is completed, the Contractor can immediately move to the next location. 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 Special Provision 763544, 763545, and 763546.

Payment for "Road Location Mobilization" will not be made for crack sealing, pavement striping or pavement symbol work.

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 6 of 16

22. Butt joints shall be placed as directed by the Engineer. Butt joints cut prior to the day of the pavement overlay shall be ramped with hot mix temporary roadway material (TRM). Pavement milling material will not be allowed for this purpose.
23. Removal of material under Pay Item 406001 (Hot-Mix Patching) shall be performed by use of a milling machine, unless directed otherwise by the Engineer. The Engineer may require use of other removal methods for small patching locations, at the sole discretion of the Engineer. The minimum width for pavement repair is 6 feet, unless directed otherwise by the Engineer. All hot mix materials shall be placed utilizing a hot mix paver.
24. Milled material shall remain the property of the Contractor.
25. Excavated material not needed on the project shall be removed from the site at Contractor's expense.
26. Proper disposal of construction related wastes shall be the sole responsibility of the Contractor.
27. The Contractor shall provide residents 24-hour prior written notice for all phases of contract work. This notice shall be given to all residents whose property is adjacent to the street on which work is to be performed. Failure to give notice will result in a suspension of work.
28. The Contractor shall take care in removing pavement around utilities, butt joints, curb edges and other objects to be paved around when cleaning after a milling operation. Care should be taken so as not to dig deeper than the required depth. Failure to do so will result in the Contractor placing leveling courses at his own expense.
29. Before the start of a milling or paving operations, and where there is existing striping, the Contractor shall be required to provide proof that sufficient material and equipment is available onsite to ensure striping is complete before traffic is allowed on the roadway.
30. All milled patch areas must be backfilled with Superpave B.C.B.C. the same day. The Engineer may consider allowing the Type 'C' Hot Mix to be placed the next day, depending on site specific requirements.
31. When a location is designated for night time paving operations, all paving work, including pavement milling, patching, and restoration, shall be performed at night during the hours established by the Engineer. All related costs for night time work shall be included in the unit bid price for the respective pay items as listed in this Contract.
32. For Pay Item 401823 (wma Superpave BCBC), the maximum allowable lift thickness is 6 inches depth. Minimum allowable lift thickness is 3 inches.
33. Daytime restricted work hours may be required on some work orders, at the discretion of the Engineer.
34. 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.

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 7 of 16

35. Portable light assemblies will be required for all night-time operations and as directed by the Engineer. Payment for the portable light assemblies shall be under Item 743005.
36. Place topsoil, grass seed and erosion protection blanket mulch on embankment. Payment shall be under Items 732004, 734013 and 735533.

MAINTENANCE OF TRAFFIC

37. 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 on Uniform Traffic Control Devices, Part 6, including revisions up to the date of advertisement for bid.

38. The DelDOT Project Manager 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 construction activity. Prior to initiating any work on this contract (or sites), the DelDOT Project Manager 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.

39. Temporary Traffic Control Devices shall be furnished placed by the Contractor in accordance with the most recent version of the Delaware Manual on Uniform Traffic Control Devices (MUTCD). The Contractor shall refer to the configuration requirements for each Typical Application scenario at each work location. The proposed traffic control device configuration will be addressed in the Contractor's Traffic Control Plan.

40. If a **road closure** is required, the Contractor shall be required to submit the proposed detour route to the DelDOT Safety Officer for approval. The Contractor shall coordinate the road closure with the Engineer. The Engineer will coordinate with the DelDOT Safety Section, and be responsible for the necessary emergency notifications. The detour route requires approval by the Engineer prior to closure. The Engineer will coordinate with the DelDOT Team Support Section for notification requirements prior to road closure. A two week lead time for detour plan review shall be required for any requested detour. The Contractor shall be responsible for furnishing and maintaining the Maintenance of Traffic apparatus at the closure (such as Type III barricades, road closure signs, etc) and all advanced warning signs and detour trailblazer signs.

41. **Drums** with fluorescent sheeting will be required in work areas where completion time will extend beyond one daylight operation. All drums shall consist of fluorescent orange and white prismatic retroreflective sheeting. Lights shall not be used on drums.

42. All open excavations shall be secured with plastic **drums** with retroreflective fluorescent orange and white prismatic retroreflective sheeting and orange plastic snow fence. If the construction activity results in a vertical difference or drop-off along, adjacent to, or across a travel way, the Contractor shall eliminate or remedy this hazard by the methods detailed in the Delaware Manual on Uniform Traffic

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 8 of 16

Control Devices (MUTCD), and as directed by the Engineer. The snow fence, tie wire, and associated items shall be incidental to Item 743006 (Plastic Drums).

43. All **flaggers** utilized by the Contractor for this project shall be ATSSA certified by a Department approved certification program. All flaggers shall have certification cards and photo identification with them while working. Absence of a certification card will be justification for flagger dismissal from the site and corresponding suspension of work. All garments worn by flaggers shall comply with applicable regulations for visibility and reflectivity. All construction and Contractor vehicles and self-propelled equipment shall be equipped with an operating roof mounted amber flashing light.

44. The Contractor shall have an American Traffic Safety Services Association (ATSSA) Certified Supervisor assigned to this project. The Contractor's general superintendent for this project or another ATSSA certified member of the Contractor's project staff may be the ATSSA supervisor.

45. **Time restrictions** for working hours will be determined by the District Safety Officer for each specific work location, and stated on the work order. The Contractor shall comply with these time restrictions.

46. The Contractor shall submit a site-specific **Traffic Control Plan** for approval five working days before the start of work at each location. Costs for preparation of Traffic Control Plans for each work location shall be incidental to the Maintenance of Traffic pay items. 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 at each site.

47. All required maintenance of traffic **warning signs** will be paid under Item 743024 (Temporary Warning Signs). All warning signs shall be diamond grade retroreflective on aluminum panels, and fabricated using NCHRP 350 compliant rigid material.

48. 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.

49. The Contractor, with the Engineer's representative, shall **inventory all signs** on all roads to be repaired. Necessary signs shall be maintained in operation during construction, and any other signs shall be properly stored with the Contractor, who shall be responsible for loss or damage. Immediately prior to final inspection, the Contractor and Engineer shall again inventory the traffic signs and account for any lost or damaged signs.

50. A Truck mounted attenuator, Type II (Item 743010) shall be required on roads for shoulder work, travel lane work and other operations as outlined in the Delaware MUTCD, or as directed by the Engineer.

51. No lane closures will be permitted unless applicable work activity is taking place.

52. All repair/maintenance equipment shall be removed from the job sites on a daily basis, except when allowed by the approved Traffic Safety Plan, or as approved by the Engineer. Contractor shall follow guidelines set forth in the Delaware MUTCD for storage of materials.

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 9 of 16

53. Costs for **relocation or adjustment in position** of traffic control devices shall be incidental to the unit bid price for each applicable Maintenance of Traffic pay item.

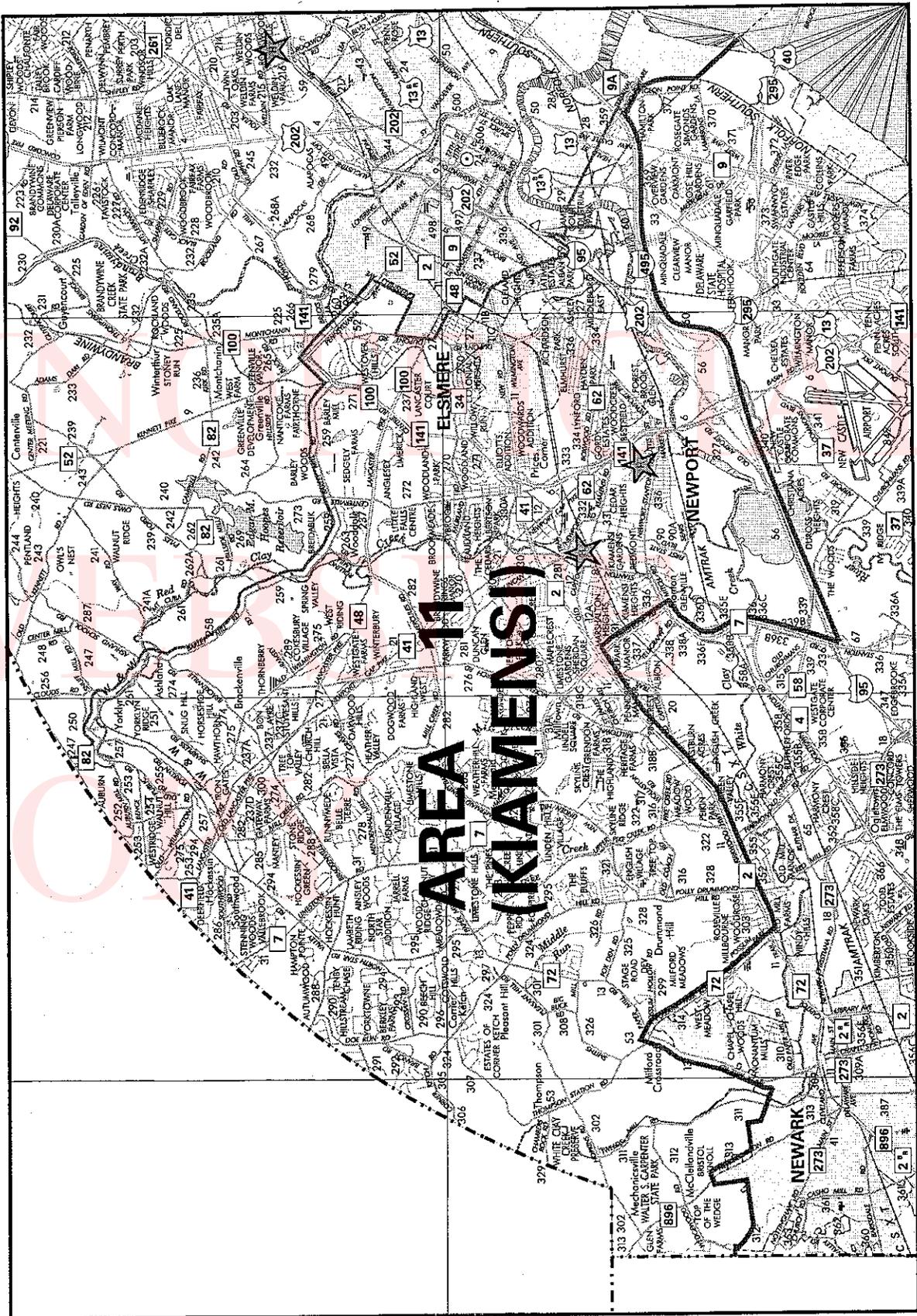
54. All construction personnel shall wear **retroreflective safety vests** at all times. All retroreflective safety vests must be minimum ANSI Class 2.

UNOFFICIAL
WEBSITE
COPY

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

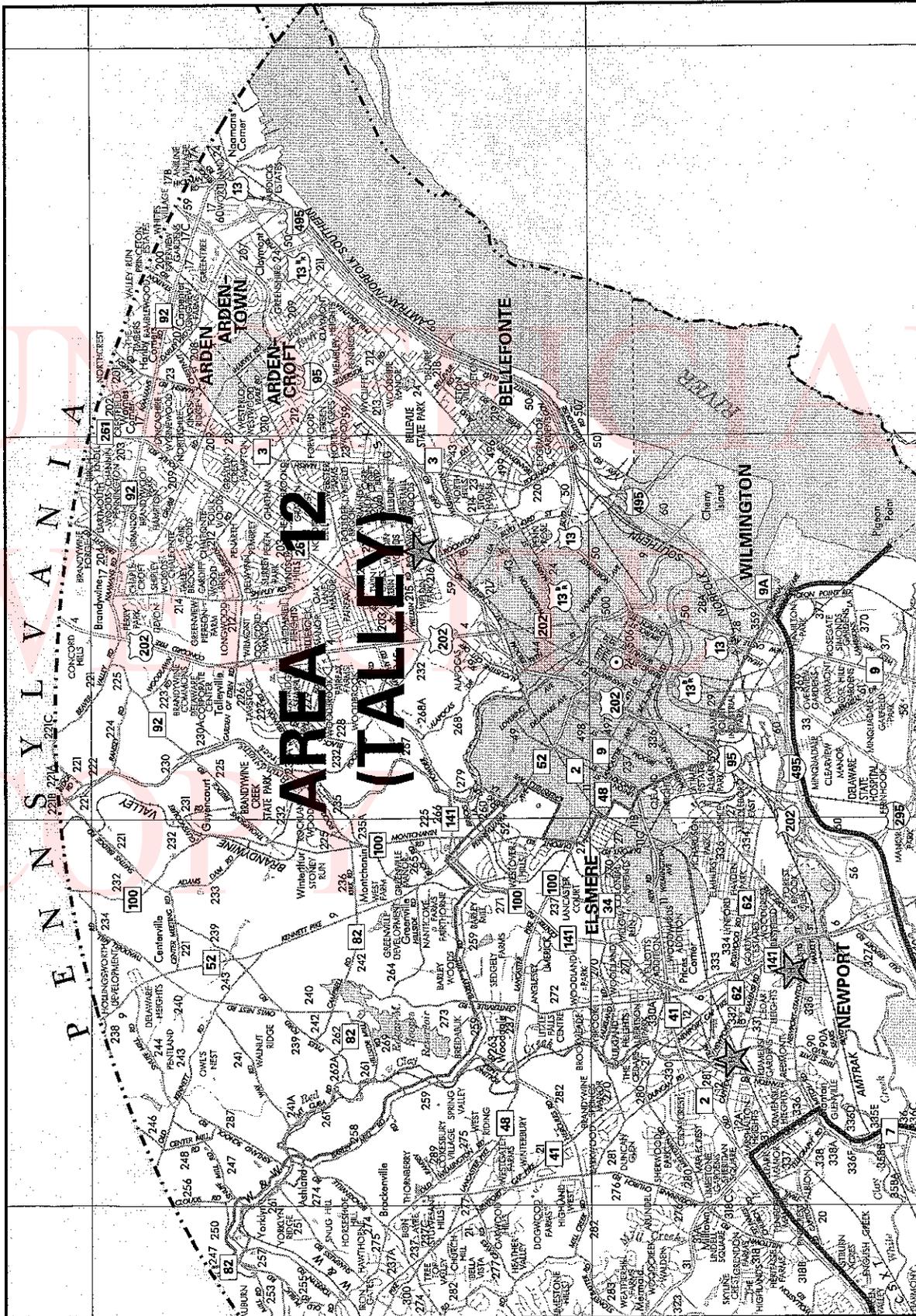
Warm Mix Patching, North, Open End, FY13



DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13



DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 12 of 16



MOBILIZATION ZONE - 1

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 13 of 16



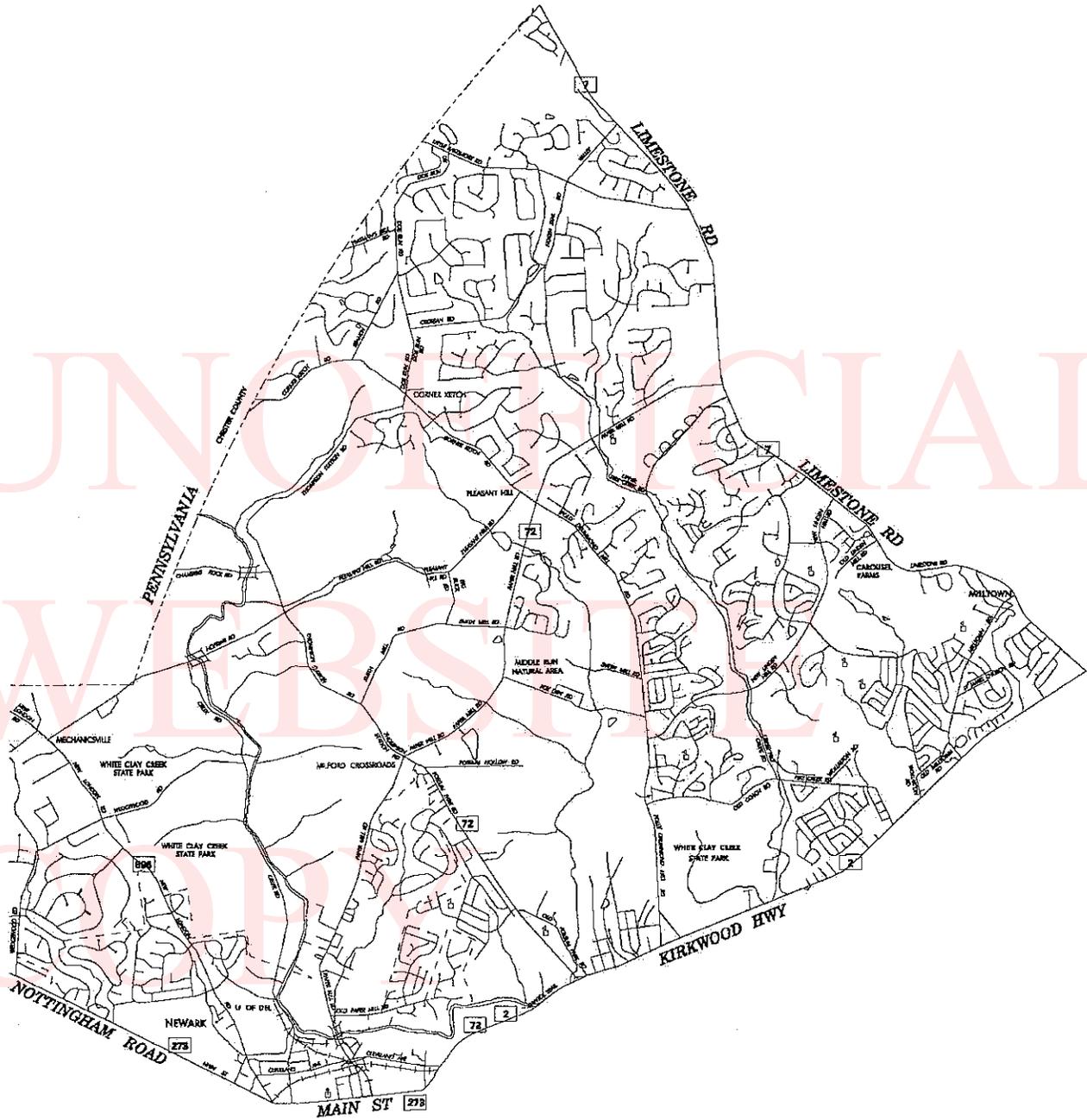
MOBILIZATION ZONE - 2

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 14 of 16

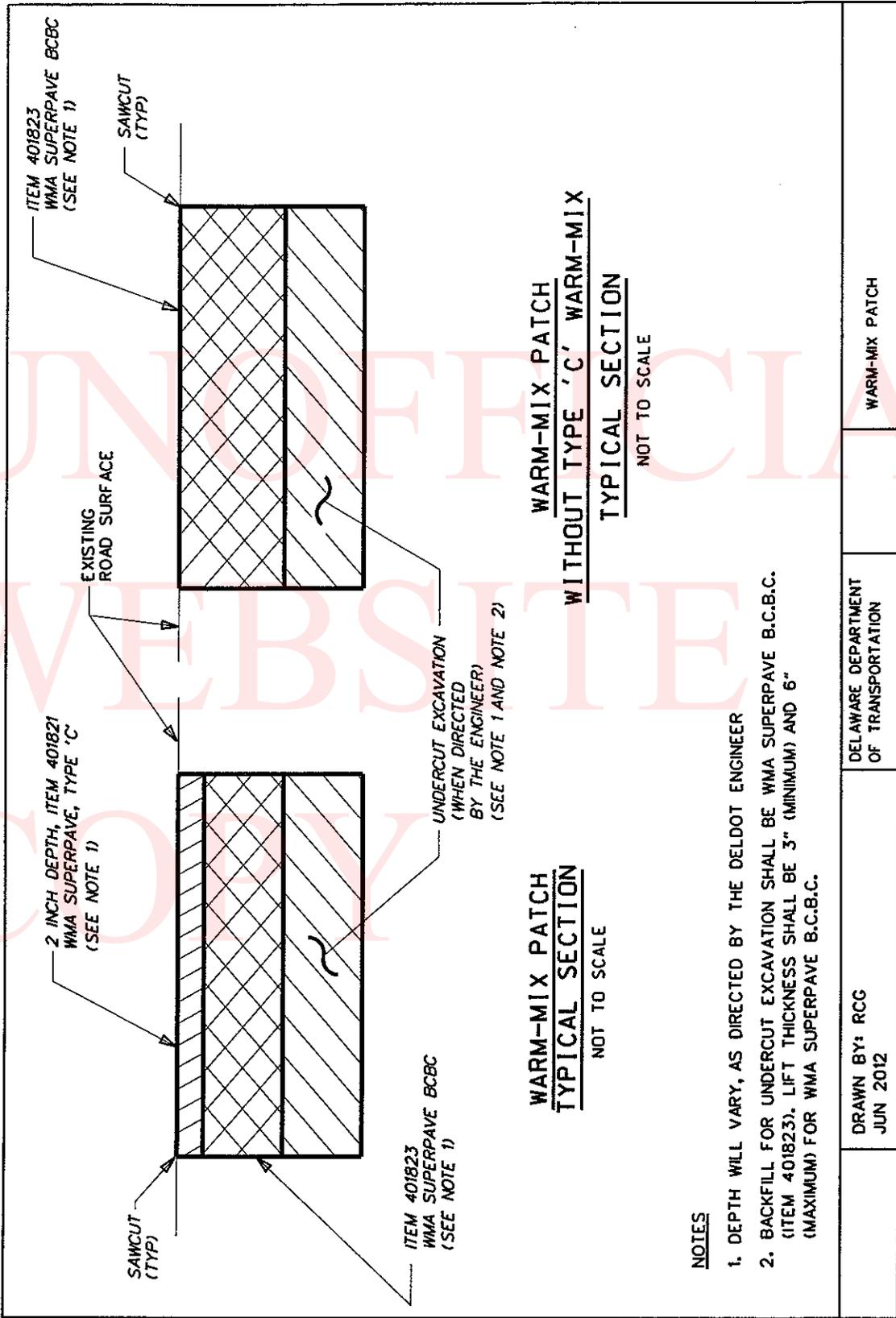


MOBILIZATION ZONE - 3

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13



NOTES

1. DEPTH WILL VARY, AS DIRECTED BY THE DELDOT ENGINEER
2. BACKFILL FOR UNDERCUT EXCAVATION SHALL BE WMA SUPERPAVE B.C.B.C. (ITEM 401823). LIFT THICKNESS SHALL BE 3" (MINIMUM) AND 6" (MAXIMUM) FOR WMA SUPERPAVE B.C.B.C.

DRAWN BY: RCG JUN 2012	DELAWARE DEPARTMENT OF TRANSPORTATION	WARM-MIX PATCH
---------------------------	--	----------------

DELAWARE DEPARTMENT OF TRANSPORTATION

Contract No. T201206402

Warm Mix Patching, North, Open End, FY13

Page 16 of 16

Quantity Summary

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
401821	WMA, Superpave Type "C", 160 Gyr., PG 64-22 Patching	Ton	3,000
401823	WMA, Superpave B.C.B.C., 160 Gyr., PG 64-22 Patching	Ton	15,000
402000	Hot-Mix Bituminous Concrete (TRM)	Ton	200
406001	Hot-Mix Patching	SY-IN	322,000
406507	Crack Sealing	LF	25,000
710001	Adjusting and Repairing Existing Drainage Inlet	Each	10
710002	Adjusting and Repairing Existing Manhole	Each	10
732004	Topsoil (Ton)	Ton	200
734013	Permanent Grass Seeding, Dry Ground	SY	1,000
735533	Soil Retention Blanket Mulch, Type 3	SY	1,000
743003	Arrow Panels, Type C	EA-DY	365
743004	Furnish and Maintain Portable Changeable Message Sign	EA-DY	250
743005	Furnish and Maintain Portable Light Assembly	EA-DY	50
743006	Plastic Drums	EA-DY	6000
743010	Furnish and Maintain Truck-Mounted Attenuator, Type II	EA-DY	200
743023	Temporary Barricade, Type III	LF-DY	400
743024	Temporary Warning Signs	EA-DY	2,000
* 743050	Flagger, New Castle County, State	Hour	4000
* 743062	Flagger, New Castle County, State, Overtime	Hour	800
746774	Supply and Installation of Loop Detector Wire	LF	1,000
746776	Loop Detector Splice	EA	50
748015	Permanent Pavement Striping, Symbol/Legend Alkyd-Thermo	SF	300
748019	Temporary Markings, Paint, 4"	LF	10,000
748026	Temporary Markings, Paint Symbol / Legend	SF	300
748548	Permanent Pavement Striping, Epoxy Resin Paint, 5" Line	LF	10,000
750000	Adjust Water Valve Boxes	Each	10
761001	Butt Joints, Hot Mix	SY	750
762001	Saw Cutting, Hot Mix	LF	10,000
763544	Road Location Mobilization, Zone 1	Each	20
763545	Road Location Mobilization, Zone 2	Each	20
763546	Road Location Mobilization, Zone 3	Each	20

* Fixed Price Items