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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING

HENDERSON COUNTY

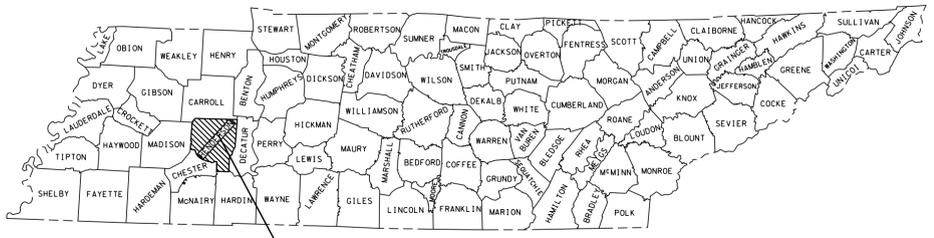
I-40

FROM: L.M. 5.50 (WEST OF S.R. 104, MM 100.5)  
TO: L.M. 12.71 (WEST OF S.R. 22, MM 107.71)

RESURFACING

STATE HIGHWAY NO. I-40 F.A.H.S. NO. N.A.

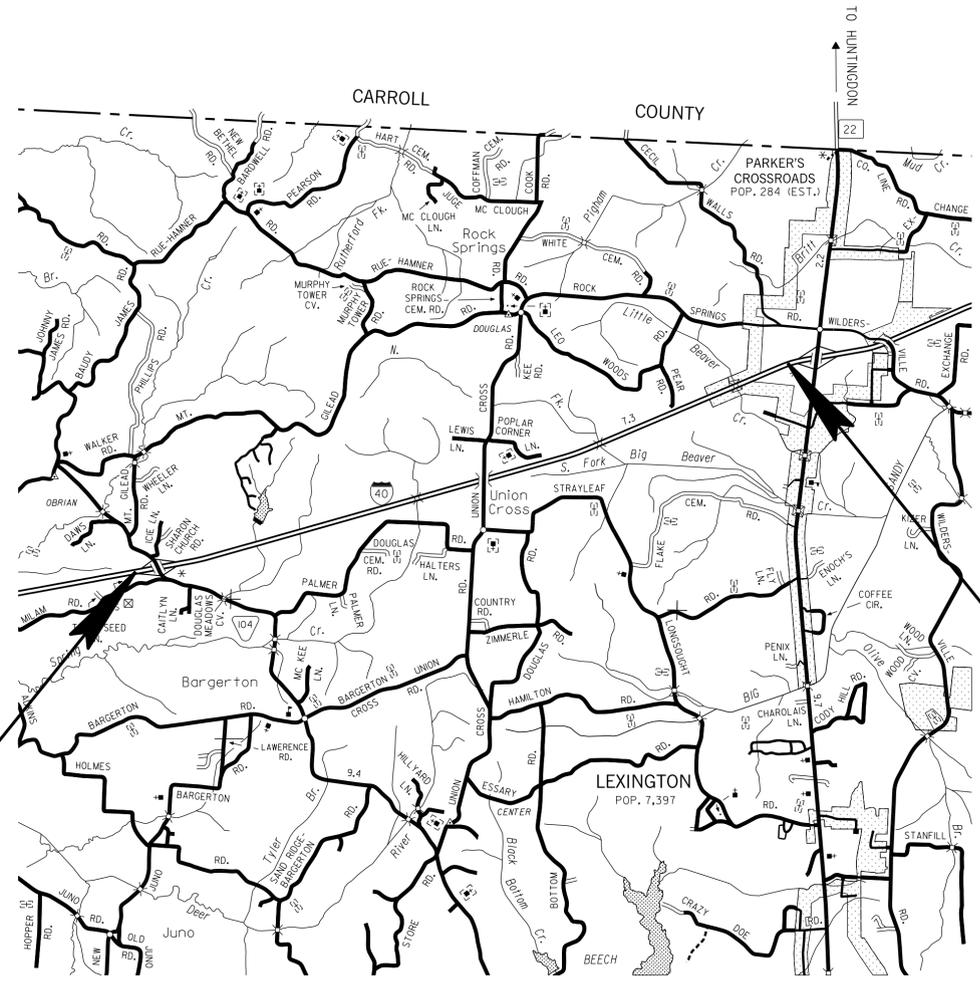
TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	NH-I-40-2(94)	
STATE PROJ. NO.	39001-8174-44	



PROJECT SITE

Standard Roadway Drawings

SHEET NO.	REV.	DESCRIPTION
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-M-1	11-01-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-15-13	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	09-19-91	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS AND PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-6	06-22-12	MARKING DETAIL FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-7	01-12-12	GORE MARKING DETAILS FOR EXPRESSWAY AND FREEWAY INTERCHANGES
T-M-15		ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES
T-WZ-10	04-04-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-13-09	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-16	03-13-09	LANE SHIFT ON DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-21	03-15-11	LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
T-SG-2	07-29-04	LOOP LEAD-INS CONDUIT AND PULL BOXES
T-SG-3	11-11-04	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS



**UNOFFICIAL SET  
NOT FOR BIDDING**

SEALED BY

**BEGIN PROJECT L.M. 5.50  
(WEST OF S.R. 104, MM 100.5)**

**END PROJECT L.M. 12.71  
(WEST OF S.R. 22, MM 107.71)**

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT

TDOT C.E. MANAGER 1 TABITHA CAVANESS, P.E., REG. 4  
 DESIGNER Eric S. Brown CHECKED BY WILLIE COLEMAN  
 P.E. NO. 98043-4175-04  
 PIN: 083814.02



PROJECT LENGTH **7.21 MILES**  
 TOTAL LANE MILES RESURFACED **29.08 MILES**

TRAFFIC DATA	
ADT (2014)	29619

APPROVED: Paul D. Decker  
CHIEF ENGINEER

DATE: \_\_\_\_\_

APPROVED: [Signature]  
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-1-40-2(94)	2

### ESTIMATED ROADWAY QUANTITIES

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ITEM NO.	DESCRIPTION	UNIT	39001-8714-44 QUANTITY	NH-1-40-2(94) QUANTITY	TOTAL QUANTITY
202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	200		200
203-06	WATER	M.G.	30.38		30.38
① 303-02	MINERAL AGGREGATE, TYPE B BASE, GRADING D	TON	4072		4072
② 307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	4016		4016
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	280		280
③ 411-03.10	ACS MIX(PG76-22) GRADING D	TON	844		844
④ 411-03.12	ACS MIX(PG64-22) THIN LIFT D ASPHALT	TON	15655		15655
⑥ 411-03.15	ASP CEM(PG76-22)FOR OGFC MIX	TON	1194		1194
⑦ 411-03.16	AGGREGATE FOR OGFC MIX	TON	18698		18698
411-12.01	SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.		29.08	29.08
⑨ 415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	3583		3583
⑩ 415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	368343		368343
712-01	TRAFFIC CONTROL	LS	1		1
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	810		810
712-05.03	WARNING LIGHTS (TYPE C)	EACH	100		100
⑪ 712-06	SIGNS (CONSTRUCTION)	S.F.	4120		4120
712-08.03	ARROW BOARD (TYPE C)	EACH	4		4
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	2		2
716-01.23	Snowplowable Pvmt Mrks (Bi-Dir)(2 Color)	EACH		1057	1057
716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	1057		1057
⑫ 716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.		259	259
⑫ 716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.		150	150
⑮ ⑬ 716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	75.07		75.07
⑫ 716-12.03	ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE)	L.F.		2578	2578
⑫ 716-12.05	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE)	L.F.		684	684
⑭ 716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.		3547	35.47
717-01	MOBILIZATION	LS	1		1
⑰ 730-03.21	INSTALL PULL BOX (TYPE B)	EACH	2		2
⑰ 730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	24		24
⑰ 730-14.02	SAW SLOT	L.F.	300		300
⑰ ⑱ 730-14.03	LOOP WIRE	L.F.	1220		1220

### FOOTNOTES

- ① INCLUDES 135 TONS FOR BREAKOUT AND 88 TONS FOR RAMPS.
- ② 92 TONS FOR REPLACEMENT OF QUANTITY REMOVED UNDER ITEM 202-03.01, BREAKOUT. 3924 TONS FOR LONGITUDINAL JOINT REPAIR.
- ③ INCLUDES 402 TONS FOR SPOT LEVELING AND 442 TONS FOR ON/OFF RAMPS.
- ④ INCLUDES 1516 TONS FOR GORE AREAS AND ACCELERATION LANES AND ON/OFF RAMPS.
- ⑤ SEE SPECIAL PROVISION NO. 407G FOR MATERIAL TRANSFER DEVICE AND SPECIAL PROVISION NO. 411B AND 411TLD FOR RIDEABILITY SPECIFICATIONS.
- ⑥ INCLUDES 96 TONS FOR GORE AREAS AND ACCELERATION LANES.
- ⑦ INCLUDES 1499 TONS FOR GORE AREAS AND ACCELERATION LANES.
- ⑧ SEE SPECIAL PROVISION NO. 407G FOR MATERIAL TRANSFER DEVICE
- ⑨ QUANTITY FOR LONGITUDINAL JOINT REPAIR
- ⑩ INCLUDES 35667 S.Y. FOR GORE AREAS, ACCELERATION LANES AND ON/OFF RAMPS.
- ⑪ QUANTITY INCLUDES
 

4	ROAD WORK NEXT 8 MI.	(G20-1)	(48" X 24")
10	END ROAD WORK	(G20-2)	(48" X 24")
4	MERGE LEFT	(W4-2)	(48" X 48")
4	MERGE RIGHT	(W4-2)	(48" X 48")
84	UNEVEN LANES	(W8-11)	(48" X 48")
4	ROAD WORK 1 MILE	(W20-1)	(48" X 48")
10	ROAD WORK AHEAD	(W20-1)	(48" X 48")
4	ROAD WORK 1500 FT.	(W20-1)	(48" X 48")
4	ROAD WORK 1000 FT.	(W20-1)	(48" X 48")
4	ROAD WORK 500 FT.	(W20-1)	(48" X 48")
4	FRESH OIL	(W21-2)	(48" X 48")
4	RIGHT LANE CLOSED 1,500 FT.	(W20-5)	(48" X 48")
4	RIGHT LANE CLOSED 1,000 FT.	(W20-5)	(48" X 48")
4	RIGHT LANE CLOSED 500 FT.	(W20-5)	(48" X 48")
4	LEFT LANE CLOSED 1,500 FT.	(W20-5)	(48" X 48")
4	LEFT LANE CLOSED 1,000 FT.	(W20-5)	(48" X 48")
4	LEFT LANE CLOSED 500 FT.	(W20-5)	(48" X 48")
84	SHOULDER WORK	(W21-5)	(48" X 48")
24	MOTORCYCLE GROOVE SIGN	(TN-64)	(48" X 48")
4	MERGE NOW	(SPECIAL)	(48" X 48")
4	LANE SHIFT RIGHT	(W1-4AR)	(48" X 48")
- ⑫ FOR FINAL PAVEMENT MARKING ONLY.
- ⑬ FOR USE AS TEMPORARY LINE MARKINGS.
- ⑭ FOR FINAL PAVEMENT MARKINGS. CONTRACTOR SHALL USE THE RIBBON METHOD FOR APPLICATION.
- ⑮ INCLUDES 3.64 MILES FOR LONGITUDINAL JOINT REPAIR
- ⑯ ITEM INCLUDES AN EXTRA 160' (20' PER LOOP) THAT IS TO REMAIN IN PULL BOX FOR INSTALLATION BY TRAFFIC COUNTER PERSONNEL.

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SET  
NOT FOR  
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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**ESTIMATED  
ROADWAY  
QUANTITIES**

⑰

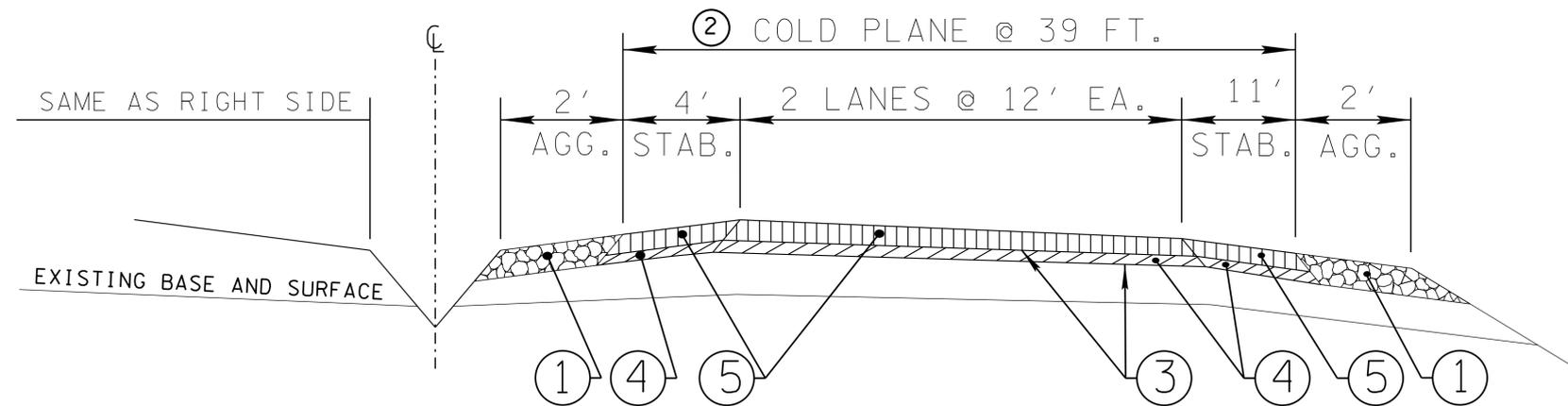
TRAFFIC COUNTER TABULATION				
INTERSECTION	LOOP WIRE 730-14.03 (LIN. FT.)	SAW SLOT 730-14.02 (LIN. FT.)	2" CONDUIT (PVC) 730-12.02 (LIN. FT.)	INSTALL PULL BOX (TYPE B) 730-03.21 EACH
I-40 @ L.M. 6.58 (APPROX.)	1220	300	24	2
TOTALS	1220	300	24	2

\*ANY QUESTIONS PLEASE CONTACT STANLEY DUNN @ (615) 350-4571

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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-1-40-2(94)	3

# TYPICAL SECTION



FROM: L.M. 5.50 TO L.M. 12.71

## PROPOSED PAVEMENT SCHEDULE

①	MINERAL AGGREGATE BASE @ 2"± THICK FOR SHOULDERS ITEM 303-02 MINERAL AGGREGATE, TYPE "B" BASE, GRADING "C OR D"
②	COLD PLANING @ 2.00"± THICK (APPROX. 210.00 LBS./S.Y.) ITEM 415-01.02 COLD PLANING BITUMINOUS PAVEMENT
③	TACK COAT (TC) ITEM 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.07 GAL./S.Y. FOR GENERAL USE) (AT 0.1 GAL./S.Y. FOR MILLING/COLD PLANE)
④	ASPHALTIC CONCRETE SURFACE (ACS) @ 0.80"± THICK (APPROX. 85.00 LBS./S.Y.) ITEM 411-03.12 ACS MIX (PG64-22) THIN LIFT D ASPHALT
⑤	ASPHALTIC CONCRETE (ACS) @ 1.25"± THICK (APPROX. 110.00 LBS./S.Y.) ITEM 411-03.16 AGGREGATE FOR OGFC MIX ITEM 411-03.15 ASPHALT CEMENT (PG-76) (ACS) FOR OGFC MIX
⑥	BITUMINOUS BASE COURSE (BLACK BASE) @ 8"± THICK (APPROX. 920.0 LBS./S.Y.) ITEM 307-01.01 ASPHALT CONCRETE MIX (PG64-22)(BPMB-HM) GRADING "A" (THIS ITEM IS TO BE USED FOR BREAKOUT ONLY)
⑦	ASPHALTIC CONCRETE SURFACE (ACS) @ 1.25"± THICK (APPROX. 132.50 LBS./S.Y.) ITEM 411-03.10 ACS MIX (PG76-22) GRADING "D" (THIS ITEM IS TO BE USED FOR SPOT LEVELING AND RAMPS ONLY)

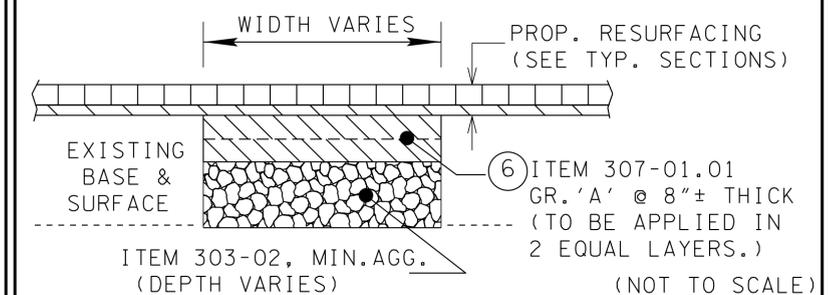
## VERTICAL CLEARANCES

NOTICE TO CONTRACTOR:

WBL/EBL

@ L.M. 5.73 AND L.M. 9.28

## DETAIL OF BREAKOUT



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DEPARTMENT OF TRANSPORTATION

**TYPICAL  
SECTIONS**  
(NOT TO SCALE)

# GENERAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-1-40-2(94)	4

## GRADING

ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE, OR LOCAL AGENCY.

## UTILITIES

THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

## MISCELLANEOUS

NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

## PAVEMENT MARKINGS

TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.20 PAINTED PAVEMENT MARKINGS (6" LINE), L.M.

PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATIONS IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

## PAVING

THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.

## RESURFACING

IN ALL CASES, THE LENGTH OF THE PAVEMENT TRANSITION, THE THICKNESS AND WIDTH OF THE RESURFACING AND ANY ADDITIONAL PAVEMENT MATERIALS SHALL BE AS DIRECTED BY THE TDOT ENGINEER.

## CONSTRUCTION WORK ZONE & TRAFFIC CONTROL NOTES

ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF THE HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO BE PARKED WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

## EROSION PREVENTION AND SEDIMENT CONTROL

### DISTURBED AREA

AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.

NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT. OFF-SITE BORROW OR WASTE AREAS ARE TO BE INCLUDED IN THE TOTAL DISTURBED AREA IF THE BORROW OR WASTE AREA IS EXCLUSIVE TO THE PROJECT PER TDOT'S WASTE AND BORROW MANUAL.

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DEPARTMENT OF TRANSPORTATION

**GENERAL  
NOTES**

# SPECIAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-1-40-2(94)	4A

SURFACE IS TO BE CROWNED AS DIRECTED BY THE ENGINEER.

ALL SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE RELOCATED OUTSIDE LIMITS OF CONSTRUCTION BY THE CONTRACTOR. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL RESTORE THE SIGNS TO ORIGINAL LOCATION. COST TO BE INCLUDED IN ITEM NO. 712-06.

IF THE CONTRACTOR ELECTS TO UTILIZE SIGN POST ANCHORS (STUBS) FOR SIGN ERECTION, THESE SHALL BE REMOVED WHEN THE SIGNS ARE REMOVED TO AVOID FUTURE DAMAGE TO MOWERS OR OTHER MACHINERY.

UNDER THE DIRECTION OF THE ENGINEER, THE CONTRACTOR MAY BE REQUIRED TO APPLY PAINTED MARKINGS IN THE PAVEMENT AREAS NOT SPECIFICALLY DETAILED IN THE PLANS. PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM NO. 716-05.20.

UNDER THE DIRECTION OF THE ENGINEER, THE CONTRACTOR MAY BE REQUIRED TO APPLY PLASTIC MARKINGS IN THE PAVEMENT AREAS NOT SPECIFICALLY DETAILED IN THE PLANS. PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM NO. 716-12.02.

ITEM 303-02 TO BE PLACED BEFORE PLACING SURFACING MATERIAL.

THE CONTRACTOR WILL BE REQUIRED TO CLEAN AND BLADE GRASS FROM SHOULDERS BEFORE PLACING ITEM 303-02. MATERIAL BLADED FROM SHOULDERS TO BE PICKED UP AND DISPOSED OF AS DIRECTED BY THE ENGINEER. COST TO BE INCLUDED IN ITEM 303-02.

MATERIAL TRANSFER DEVICE SHALL BE USED FOR ALL MIXES.

ONLY 4 ARROW BOARDS WILL BE PAID FOR DURING THE LIFE OF THIS PROJECT. IF THE CONTRACTOR'S WORK PHASES REQUIRED ADDITIONAL ARROW BOARDS, THEIR COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

THE INSIDE SHOULDERS WILL BE PAVED CONCURRENTLY WITH THE INSIDE TRAFFIC LANE.

THE RAISED REFLECTOR SHALL BE REMOVED BEFORE COLD PLANING.

THE BITUMINOUS MATERIAL DESIGNATED TO RESTORE THE COLD PLANING AREA WILL BE PLACED WITHIN 48 HOURS OF THE COMMENCEMENT OF COLD PLANING OPERATIONS. COLD PLANING OPERATIONS WILL BE LIMITED TO AN AREA EQUAL TO THAT WHICH CAN BE COVERED WITH BITUMINOUS MATERIAL WITHIN THE TIME LIMITS SPECIFIED. EVEN IF COLD PLANING OPERATIONS MUST BE SUSPENDED UNTIL PAVING CATCHES UP.

THE DEPARTMENT SHALL RESERVE THE RIGHT TO REOPEN LANES AS NECESSARY WHEN TRAFFIC CONDITIONS ARE DEEMED UNACCEPTABLE (EXCESSIVE QUEUE LENGTHS AND DELAY TIMES). THE CONTRACTOR SHALL BE REQUIRED TO FULLY COOPERATE WITH THE PROJECT SUPERVISOR WHEN REQUESTED TO MAKE CHANGES TO THE TRAFFIC CONTROL.

MESSAGE BOARDS SHALL BE USED NEAR INTERCHANGES AND/OR OTHER DESIGNATED AREAS IN ADVANCE OF THE WORK ZONE TO ALERT MOTORISTS OF POSSIBLE DELAYS AND RECOMMEND THE USE OF ALTERNATE ROUTES. THE MESSAGES SHALL BE UPDATED AS OFTEN AS NECESSARY SO THAT THE MOTORISTS OBTAIN CURRENT TRAFFIC INFORMATION. MESSAGE BOARDS SHALL BE RELOCATED AS NECESSARY AS THE WORK PROGRESSES. THE CONTRACTOR SHALL BE REQUIRED TO IDENTIFY AN INDIVIDUAL WORKING ON THE PROJECT THAT WILL BE RESPONSIBLE FOR KEEPING THE MESSAGES CURRENT AND RELOCATING MESSAGE BOARDS AS REQUESTED BY TDOT. THE PROJECT SUPERVISOR SHALL HAVE THE AUTHORITY TO APPROVE ALL MESSAGES AND REQUIRED CHANGES AT ANY TIME DUE TO CHANGING TRAFFIC CONDITIONS.

THE CONTRACTOR SHALL COMPLY WITH SECTION 712 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REGARDING TEMPORARY TRAFFIC CONTROL AND THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THIS IS A NIGHT JOB ALL LANES OPEN TO TRAFFIC FROM 7:00 P.M. TO 6:00 A.M. MONDAY THRU FRIDAY.

THE BITUMINOUS MATERIAL DESIGNATED TO RESTORE THE COLD PLANING AREA WILL BE PLACED WITHIN 48 HOURS OF THE COMMENCEMENT OF COLD PLANING OPERATIONS. COLD PLANING OPERATIONS WILL BE LIMITED TO AN AREA EQUAL TO THAT WHICH CAN BE COVERED WITH BITUMINOUS MATERIAL WITHIN THE TIME LIMITS SPECIFIED. EVEN IF COLD PLANING OPERATIONS MUST BE SUSPENDED UNTIL PAVING CATCHES UP.

THE CONTRACTOR WILL BE REQUIRED TO PAVE IMMEDIATELY BEHIND COLD PLANING OPERATIONS TO ENSURE THAT THE MILLED SURFACE WILL BE COVERED WITH BITUMINOUS/CEMENT THE SAME WORK DAY, AND ABIDE BY DROP-OFF POLICY.

## RESURFACING

TRAFFIC WILL BE ALLOWED TO TEMPORARILY DRIVE ON THE MILLED SURFACE OF THE ROADWAY UNDER THE FOLLOWING CONDITION ONLY:

- A: THE MILLED SURFACE IS FINE TEXTURED. THE FINE TEXTURE SHALL BE OBTAINED BY A MILLING MACHINE UTILIZING A MILLING HEAD WITH TEETH SPACING 3/8" OR LESS OPERATING AT LESS THAN 80 FEET PER MINUTE.
- B: THE SURFACE SHALL BE SWEEPED AND CLEANED ON ALL LOOSE MATERIALS.
- C: THE DIFFERENCE IN ELEVATION BETWEEN THE MILLED SURFACE AND THE ADJACENT LANE SHALL NOT EXCEED 1 1/2 INCHES.
- D: THE MILLED SURFACE SHALL BE PAVED WITHIN 48 HOURS.
- E: RAIN OR INCLEMENT WEATHER IS NOT EXPECTED OR FORECASTED WITHIN 48 HOURS AFTER MILLING.
- F: ALL APPLICABLE SIGNING IS INSTALLED IN ACCORDANCE WITH THE MUTCD SIGNING SHALL INCLUDE MOTORCYCLE WARNING SIGN (TN-64) PLACED IN ADVANCE OF ANY MILLED AREAS.
- G: IF RAVELING OR DETERIORATION OF THE MILLED SURFACE IS OCCURRING WHILE TRAFFIC IS DRIVING ON THE MILLED SURFACE, THEN THIS PRACTICE WILL NOT BE ALLOWED AND PAVING SHALL BE COMPLETED IMMEDIATELY AFTER MILLING.
- H: ONLY ONE LANE IN EACH DIRECTION SHALL HAVE A MILLED SURFACE AT ONE TIME.

## PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL

- A. DIFFERENCE IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC. CAUSED BY BASE, PAVING OR RESURFACING:
  - 1. DIFFERENCE IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 2 INCHES.
    - a. WARNING SIGNS, UNEVEN PAVEMENT (W8-11) AND/OR SHOULDER DROP-OFF (W8-9A), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
    - b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
    - c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
    - d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER, THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.

## SPECIAL EROSION PREVENTION AND SEDIMENT CONTROL

THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS, BEFORE CLEANING OUT OR REMOVAL/REPLACEMENT OF DITCHES, SIDE DRAINS, AND CROSS DRAINS, TO ENSURE THAT THE DRAINAGE FEATURES/ WATERCOURSES ARE NOT STREAMS OR WETLANDS. IF THE CONTRACTOR/ TDOT INSPECTOR IS UNSURE WHETHER THE DRAINAGE FEATURES ARE STREAMS OR WETLANDS, THE INSPECTOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION TO OBTAIN THE APPROPRIATE PERMITS.

DUE TO THE TYPE OF WORK IT IS OUR UNDERSTANDING THAT THE PROJECT WILL NOT DISTURB MORE THAT ONE ACRE. IF THE DISTURBED AREA IS MORE THAN ONE ACRE, PLEASE CONTACT THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION BECAUSE A NPDES PERMIT WILL BE REQUIRED.

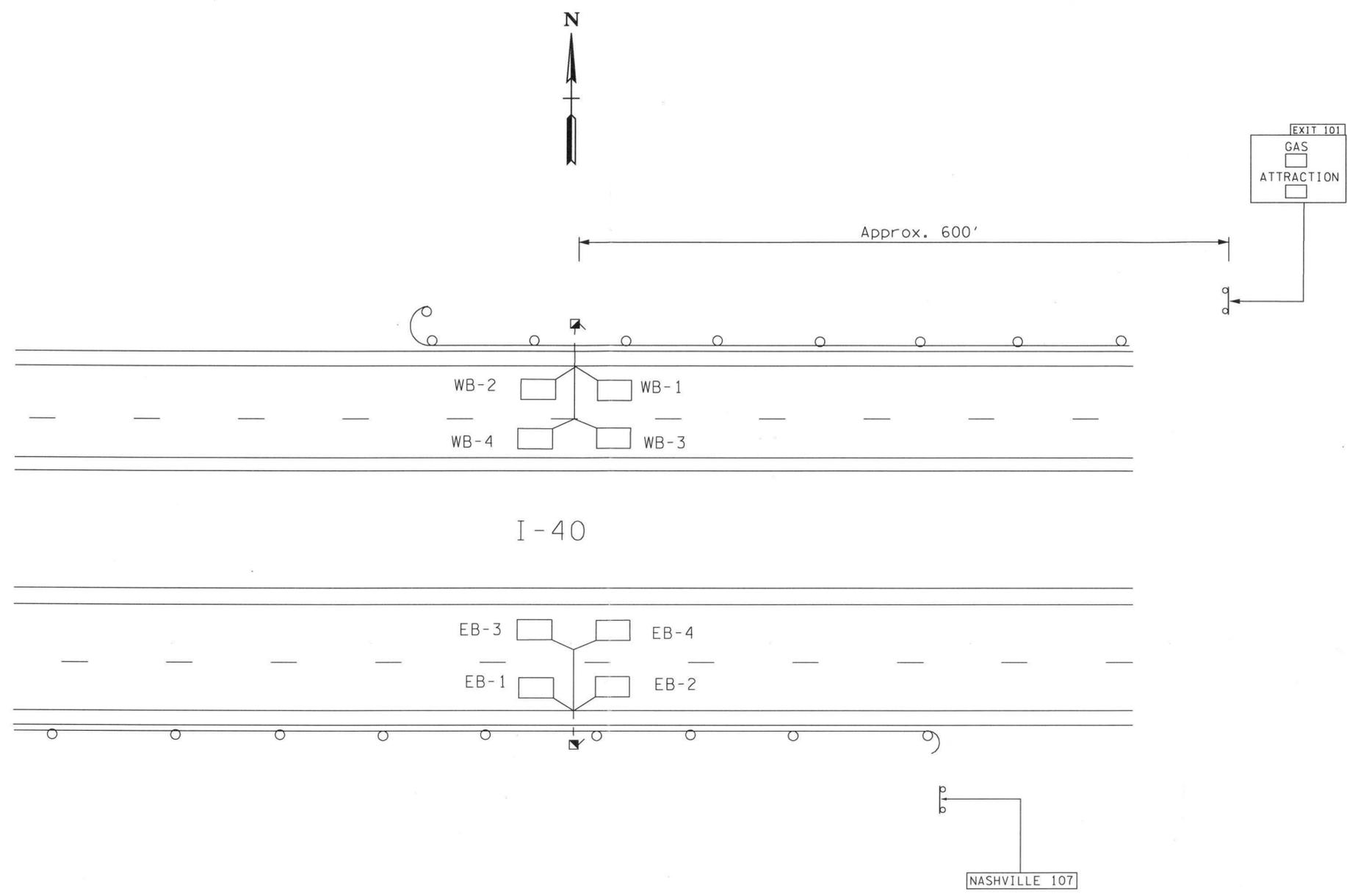
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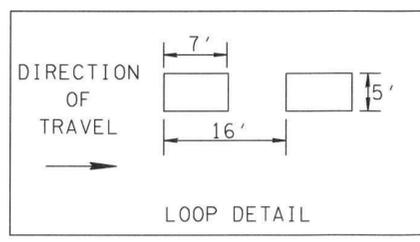
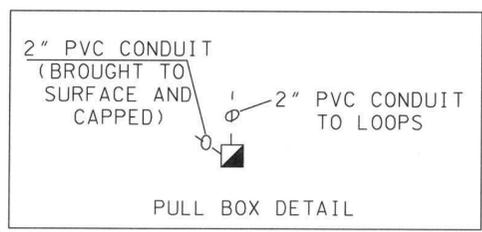
**SPECIAL  
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2014	NH-I-40-2(94)	5
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I-40, HENDERSON COUNTY AT L.M. 6.58 (APPROX.)  
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STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC  
 DETECTION  
 LOOPS DETAIL**

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-1-40-2(94)	6

# SPECIAL TRAFFIC COUNTER SPECIFICATIONS

THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL RELATED EQUIPMENT. THE CONTRACTOR SHALL MAKE SURE EACH DETECTION LOOP IS OPERATIONAL AT THE COMPLETION OF THE PROJECT. THE STATE'S PROJECT PLANNING DIVISION'S TRAFFIC COUNTER PERSONNEL WILL MAKE THE TRAFFIC COUNTER FULLY OPERATIONAL.

ALL LOOPS SHALL BE FIVE FEET BY SEVEN FEET (5' X 7') AND TYPICAL IN SIZE WITH THREE (3) TURNS OF LOOP WIRE.

LEAD WIRES TO ALL LOOPS SHALL BE RUN THROUGH 2-INCH CONDUIT FROM THE SHOULDER OF THE ROADWAY TO AN IN-GROUND PULL BOX. THE PULL BOX SHOULD BE LOCATED AS CLOSE AS POSSIBLE AND BEHIND THE GUARDRAIL. LOOP LEAD-INS AND CONDUIT SHALL BE MARKED ON THE ROADWAY SURFACE SO THAT ANY GUARDRAIL POST INSTALLATION OR OTHER CONSTRUCTION WILL NOT DISTURB THIS UNDERGROUND WORK.

THE EXTRA TWENTY FEET (20') OF LOOP WIRE FOR EACH OF THE LOOP SHALL BE STORED IN THE PULL BOX FOR FUTURE INSTALLATION BY TRAFFIC COUNTER PERSONNEL. A BULL STRING SHALL BE INCLUDED IN THE STUB OUT CONDUIT.

EACH LOOP DETECTOR LEAD-IN SHALL BE MARKED WITH LANE IDENTIFICATION, DENOTING THE LANE AND POSITION IN THE LANE FOR EACH LOOP (SUCH AS NB-1 FOR NORTHBOUND 1, ECT.).

FOR QUESTIONS CONCERNING ANY OF THE INSTALLATION OF THE COUNTER EQUIPMENT, PLEASE CONTACT STANLEY DUNN AT 615-350-4571 OR AT STANLEY.DUNN@TN.GOV. CONTRACTOR SHALL NOTIFY STANLEY DUNN TO REPORT THAT WORK HAS BEEN COMPLETED SO THAT HE CAN FINISH THE INSTALLATION.

THE CONTRACTOR SHALL SUPPLY STANLEY DUNN WITH THE X/Y COORDINATED (BASED ON WGS COORDINATES) OF EACH PULL BOX.

LOCATE PULL BOXES APPROX. 1' BEHIND THE GUARDRAIL BETWEEN THE POST.

## SPECIAL TRAFFIC

EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNAL ITEMS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.

DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.

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**SPECIAL  
TRAFFIC COUNTER  
SPECIFICATIONS**