

Index Of Sheets

SEE SHEET NO. 1A FOR INDEX

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

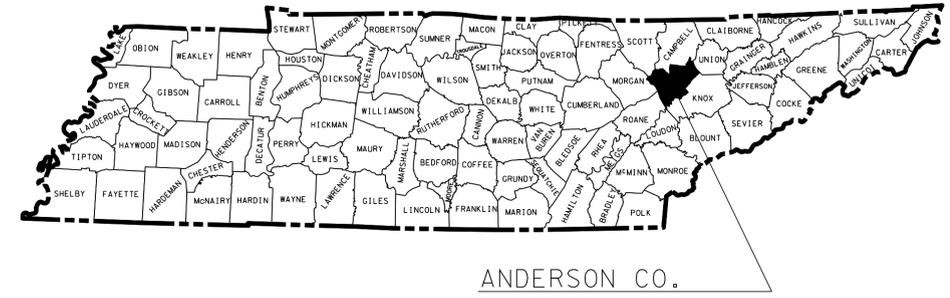
TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.	STP-M-9115(17)	
STATE PROJ. NO.	01953-3570-54	

ANDERSON COUNTY

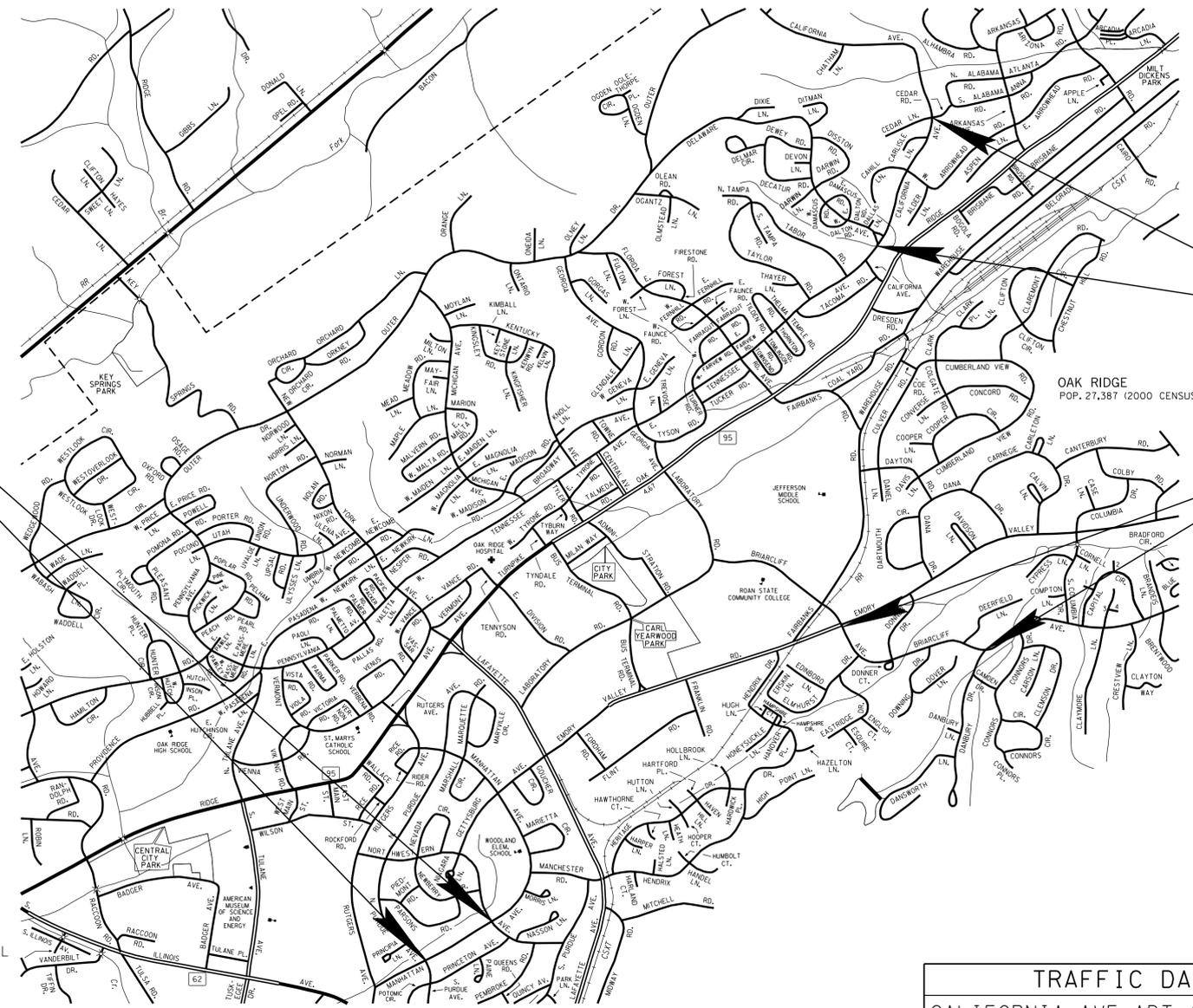
VARIOUS STREETS IN OAK RIDGE

RESURFACE

STATE HIGHWAY NO. N/A F.A.H.S. NO. N/A



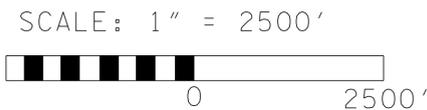
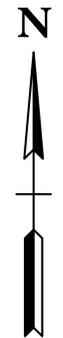
PROJECT LIMITS	
BRIARCLIFF AVE. IN OAK RIDGE	FROM: EMORY VALLEY RD.(L.M. 0.09) TO: DANBURY DRIVE (L.M. 0.57)
CALIFORNIA AVE. IN OAK RIDGE	FROM: DELAWARE AVE.(L.M. 0.00) TO: CEDAR ROAD (L.M. 0.40)
MANHATTEN AVE. IN OAK RIDGE	FROM: PURDUE AVE.(L.M. 0.17) TO: NORTHWESTERN AVE. (L.M. 0.39)



NO EQUATIONS
NO EXCLUSIONS

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BIDDING**

MANHATTEN AVE.



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 JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

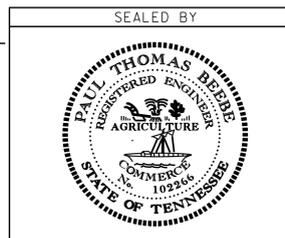
TRANS. PROJ. SP. ERIC WILSON
DESIGNER KENNY KERLEY CHECKED BY PAUL BEEBE
P.E. NO. 01953-1570-54 (DESIGN)
PIN 115817.02

BRIARCLIFF AVE. LENGTH	0.48 MILES
CALIFORNIA AVE. LENGTH	0.40 MILES
MANHATTEN AVE. LENGTH	0.22 MILES
TOTAL PROJECT LENGTH	1.10 MILES
TOTAL LANE MILES RESURFACED	2.27 MILES

TRAFFIC DATA	
CALIFORNIA AVE ADT (2015)	2023
BRIARCLIFF AVE ADT (2015)	1547
MANHATTEN AVE ADT (2015)	4305
POSTED SPEED	30-35 MPH

CALIFORNIA AVE.

BRIARCLIFF AVE.



APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE: _____

APPROVED: [Signature]
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

7-MAR-2015 8:17 \\J001WF01.tdot.state.tn.us\GIS\Shared\DESIGN\PROJECTS\RESURF\Wetrou\bonResurf\2015\OakRidgeStreets\Briarcliff-Manhattan.dgn

INDEX

DESCRIPTION	SHT. NO.
TITLE SHEET	1
INDEX AND STANDARD ROADWAY DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PROPOSED PAVEMENT SCHEDULE	3
GENERAL NOTES	4
SPECIAL NOTES	5

STANDARD ROADWAY DRAWINGS

ROADWAY DESIGN STANDARDS

DWG. NO.	REV.	DESCRIPTION
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD01-SE-2	10-15-02	URBAN SUPERELEVATION DETAILS

ROADWAY AND PAVEMENT APPURTENANCES

DWG. NO.	REV.	DESCRIPTION
RP-H-3	01-30-15	HANDICAP RAMP AND TRUNCATED DOME SURFACE DETAILS
RP-H-4	01-30-15	PERPENDICULAR CURB RAMP
RP-H-5	01-30-15	PARALLEL CURB RAMP

TRAFFIC CONTROL APPURTENANCES

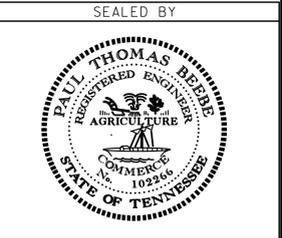
DWG. NO.	REV.	DESCRIPTION
T-M-1	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-4	07-24-14	STANDARD INTERSECTION PAVEMENT MARKINGS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP-M-9115(17)	1A

OAK RIDGE ANDERSON CO.
01953-3570-54

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX AND
STANDARD
ROADWAY
DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP-M-9115(17)	2

OAK RIDGE ANDERSON CO.
01953-3570-54

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	Briarcliff Ave	California Ave	Manhattan Ave	TOTAL QUANTITY
203-01	ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	—	—	928	928
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	—	—	1339	1339
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	—	—	335	335
① 307-01.15	ASC MIX (PG64-22) (BPMLC-HM) GRADING CS	TON	176	143	59	378
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	—	—	5	5
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	7	5	2	14
② 411-01.10	ACS MIX(PG64-22) GRADING D	TON	585	476	197	1258
③ 415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	8817	7175	—	15992
④ 701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	—	—	32	32
712-01	TRAFFIC CONTROL	LS	0.4	0.4	0.2	1
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	—	—	50	50
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	57	51	40	148
712-05.01	WARNING LIGHTS (TYPE A)	EACH	—	—	4	4
⑤ 712-06	SIGNS (CONSTRUCTION)	S.F.	209	195	181	585
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	—	—	50	50
⑥ 716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	L.F.	—	—	23	23
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	—	—	23	23
⑦ 716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	2	2	1	5
716-13.01	SPRAY THERMO PVMT MRKNG (60 mil) (4IN LINE)	L.M.	4	3	2	9
717-01	MOBILIZATION	LS	0.4	0.4	0.2	1

FOOTNOTES

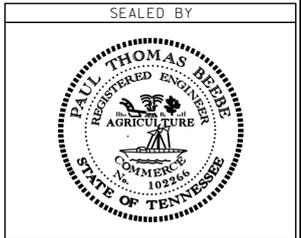
- ① INCLUDES 12 TONS FOR SIDE STREETS ON BRIARCLIFF AVE. INCLUDES 12 TONS FOR SIDE STREETS ON CALIFORNIA AVE.
- ② INCLUDES 40 TONS FOR SIDE STREETS ON BRIARCLIFF AVE. INCLUDES 40 TONS FOR SIDE STREETS ON CALIFORNIA AVE.
- ③ INCLUDES 604 S.Y. FOR SIDE STREETS ON BRIARCLIFF AVE. INCLUDES 604 S.Y. FOR SIDE STREETS ON CALIFORNIA AVE.
- ④ TO BE LOCATED 2 @ L.M. 0.17 (LT. & RT.) AND 2 @ L.M. 0.39(LT. & RT.).OR AS DIRECTED BY TDOT OPERATIONS DISTRICT ENGINEER.
- ⑤ QUANTITY INCLUDES THE FOLLOWING SIGNS:

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NO.	DESCRIPTION	CODE	SIZE	QUANTITY (SF)
27	ROAD WORK	W20-1	48"X48"	432
2	LANE CLOSED	W20-5	48"X48"	32
2	LANE ENDS	W4-2	48"X48"	32
2	ROAD WORK NEXT 1 MILE	G20-1	36"X18"	9
2	ADVISORY SPEED	W13-1	24"X24"	8
2	END ROAD WORK	G20-2	36"X18"	9
6	UNEVEN LANES	W8-11	30"X30"	38
*2	ROAD CLOSED TO THRU TRAFFIC	R11-4	60"X30"	25
TOTAL:				585

THIS CONSTRUCTION SIGNING IS TO BE USED AS A GUIDE. OTHER SIGNS MAY BE REQUIRED AS DIRECTED BY THE T.D.O.T. OPERATIONS DISTRICT ENGINEER.
*ROAD CLOSED TO THRU TRAFFIC SIGN TO BE USED WITH TYPE III BARRICADE ON MANHATTEN AVE.

- ⑥ THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- ⑦ TO BE USED FOR TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS.



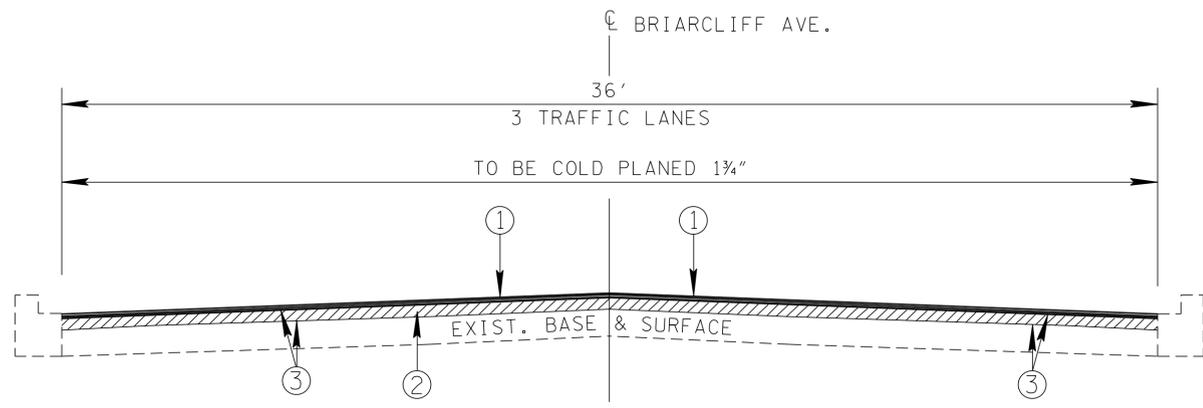
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**ESTIMATED
ROADWAY
QUANTITIES**

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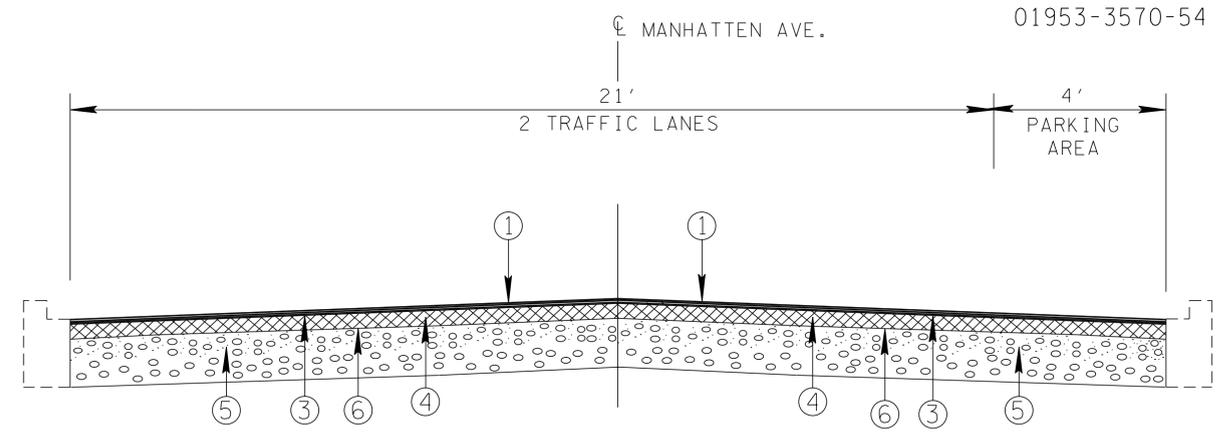
TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP-M-9115(17)	3

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01953-3570-54



TYPICAL CROSS-SECTION OF IMPROVEMENT

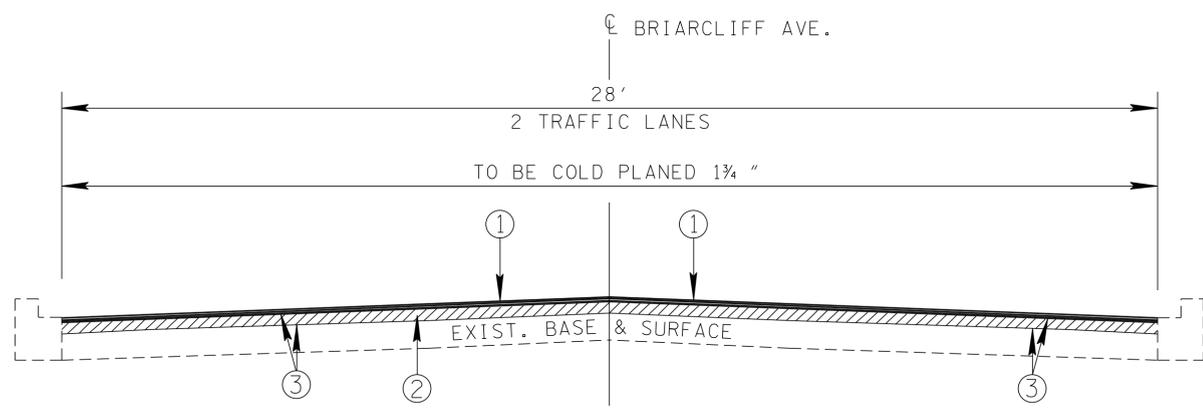
LOG MILE 0.09 TO LOG MILE 0.16



TYPICAL CROSS-SECTION OF IMPROVEMENT

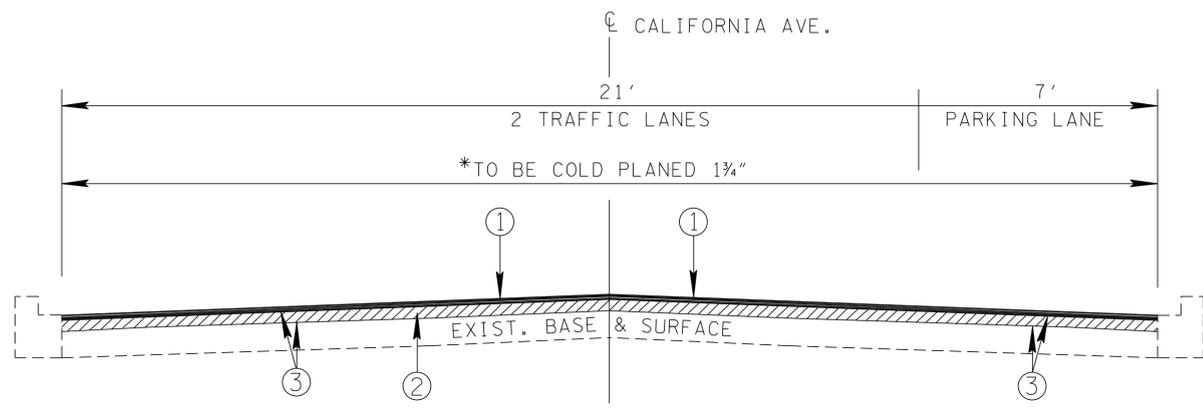
LOG MILE 0.17 TO LOG MILE 0.39*

*SEE CONSTRUCTION WORK ZONE & TRAFFIC CONTROL NOTE #4 ON SHEET 5



TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 0.16 TO LOG MILE 0.57



TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 0.00 TO LOG MILE 0.40

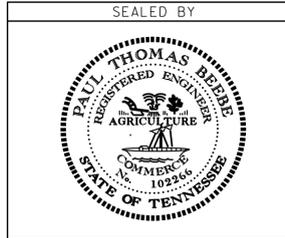
PAVEMENT SCHEDULE

① ASPHALTIC CONCRETE SURFACE (HM) 1 1/4" TH. (APPROX. 132.5 LBS./SQ. YD.) 411-01.10 ACS MIX (PG64-22) GRADING D
② BITUMINOUS PLANT MIX BASE (HM) APPROX. 40 LBS./SQ. YD.) 307-01.15 ACS MIX (PG64-22) (BPMLC-HM) GRADING CS
③ TACK COAT @ 0.07-0.10 GAL./SQ. YD. 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)
④ BITUMINOUS PLANT MIX BASE (HM) 2" TH. (APPROX. 226 LBS./SQ. YD.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2
⑤ MINERAL AGGREGATE BASE - 8" THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
⑥ PRIME COAT @ 0.35 GAL./SQ. YD. 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC)

NOTE: BRIDGE OVER CULVERT AT L.M. 0.34 ON BRIARCLIFF AVE.

*WHEN COLD PLANING WHERE GUTTER HAS BEEN PAVED OVER, TAPER FROM 1 3/4" AT CENTER TO 2 1/4" DEPTH AT EDGE OF PAVEMENT.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TYPICALS
SECTIONS &
PAVEMENT
SCHEDULE**

GENERAL NOTES

GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (2) 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

- (1) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING ANY NECESSARY SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (2) 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

- (1) 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

- (1) 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 DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.
- (2) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" SPRAY THERMOPLASTIC (60 mil) 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. 716-13.01, SPRAY THERMO PVMT MRKNG (60 mil) (4IN 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 OPERATION 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.

PAVEMENT RESURFACING

- (1) WHERE DIRECTED BY THE TDOT ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SHAPE PUBLIC SIDE ROADS, BUSINESS ENTRANCES, AND PRIVATE DRIVES, AS WELL AS CLEANING OF EXISTING DRAINS BEFORE PLACING MATERIALS. ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (2) ON CURB AND GUTTER SECTIONS, PUBLIC ROAD INTERSECTIONS SHALL BE RESURFACED TO THE END OF THE RADIUS. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD SHALL BE PROVIDED.
- (3) ON URBAN TYPICAL SECTIONS, (CURB AND GUTTER), RESIDENTIAL DRIVEWAYS AND BUSINESS ENTRANCES SHALL HAVE MINIMUM WIDTH OF MATERIAL NOT LESS THAN ONE FOOT USED IN THE TRANSITION TO FEATHER THE PAVEMENT EDGE.

- (4) 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

- (1) 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.
- (2) 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.
- (3) 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.
- (4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (5) 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 A 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.
- (6) 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 PARK 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.
- (7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION PREVENTION AND SEDIMENT CONTROL

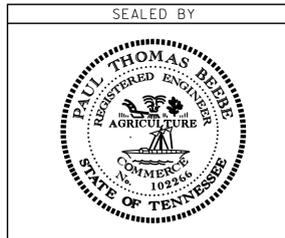
LITTER, DEBRIS, WASTE, PETROLEUM

- (1) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.
- (2) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP-M-9115(17)	4

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**GENERAL
NOTES**

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SPECIAL NOTES

UTILITIES

- (1) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT.
- (2) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITES FROM DAMAGE DURING CONSTRUCTION OF THE PROJECT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING ANY NECESSARY SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER CONSTRUCTION ITEMS.
- (3) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE. OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS.
- (4) 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. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC AT 1-800-331-1111 WILL BE REQUIRED.
- (5) UTILITY OWNERS
ELECTRIC: CITY OF OAK RIDGE
WATER/SEWER: CITY OF OAK RIDGE
GAS: OAK RIDGE UTILITY DISTRICT
CABLE: XFINITY (COMCAST)
TELEPHONE: AT&T

MISCELLANEOUS

- (1) THE CONTRACTOR WILL BE REQUIRED TO REMOVE AND RESET MAILBOXES AND POSTS WHERE NECESSARY. COST TO BE INCLUDED IN PRICE BID FOR OTHER CONSTRUCTION ITEMS.
- (2) ALL GUARDRAIL, GUARDRAIL POSTS AND SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE REMOVED AND STORED BY STATE FORCES.
- (3) ALL SIGNING AND PAVEMENT MARKINGS ARE TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (4) PAVED SHOULDERS SHALL BE BROOMED, AGGREGATE SHOULDERS SHALL BE CLIPPED, AND DITCHES SHALL BE CLEANED BY THE CONTRACTOR. ALL COST ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN COST OF OTHER ITEMS.

PAVEMENT MARKINGS

- (1) THE CONTRACTOR WILL BE REQUIRED TO ESTABLISH AND LOCATE ALL "NO PASSING ZONES" IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS WELL AS TO PROVIDE THE LAYOUT OF ALL PAVEMENT MARKING REQUIRED ON THE PROJECT. THE METHOD OF DETERMINING THE "NO PASSING ZONES" IS TO BE APPROVED BY THE T.D.O.T. SUPERVISOR, WITH ADVICE FROM THE REGIONAL TRAFFIC OFFICE, BEFORE PAVING OPERATIONS BEGIN.

PAVEMENT

RESURFACING

- (1) SURFACE IS TO BE CROWNED AS DIRECTED BY THE T.D.O.T. OPERATIONS DISTRICT ENGINEER.
- (2) ALL SURPLUS PATCHING, JOINT MATERIAL AND CRACK SEALANT IS TO BE REMOVED BEFORE PLACING THE FIRST LAYER OF ASPHALT.
- (3) STATE FORCES WILL REMOVE ALL RAISED PAVEMENT MARKERS, IF ANY, BEFORE RESURFACING IS BEGUN.

- (4) COLD PLANING IS TO BE DONE IMMEDIATELY PRIOR TO THE COMMENCEMENT OF PAVING OPERATIONS. COLD PLANED SURFACES ARE NOT TO BE LEFT EXPOSED FOR MORE THAN FIVE (5) CALENDAR DAYS BEFORE BEING OVERLAYED BY THE FIRST COURSE OF ASPHALT. IF NECESSARY, COLD PLANING OPERATIONS ARE TO BE SUSPENDED TO ALLOW PAVING OPERATIONS TO CATCH UP. AFTER COLD PLANING AND PRIOR TO ALLOWING USE BY TRAFFIC, THE CONTRACTOR WILL RAMP ASPHALT AROUND EXISTING UTILITIES TO ELIMINATE HAZARD TO VEHICLES. ALL COLD PLANING REQUIRED ON CITY STREETS OR SIDE ROADS WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM NO. 415-01.01.
- (5) ALL DEPTHS FOR COLD PLANING TO BE ±½" TOLERANCE.
- (6) ON ALL SUPERELEVATED CURVES, THE CONTRACTOR SHALL INSURE THAT THE SHOULDER ROLLOVER RATES SHOWN IN THE T.D.O.T. STANDARD ROADWAY DRAWINGS ARE ACHIEVED.
- (7) THIS PROJECT IS EXCLUDED FOR RIDEABILITY AS PER SPECIAL PROVISION NO. 411C.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) DURING ALL PERIODS OF CONSTRUCTION INACTIVITY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL LANES OPEN IN ACCORDANCE WITH THE T.D.O.T. PAVEMENT DROP-OFF POLICY. THIS WILL REQUIRE THE REMOVAL OF ALL TRAFFIC CONTROL DEVICES ASSOCIATED WITH ANY LANE CLOSURE AT THE END OF WORK DAY AND THE REINSTALLATION OF THE DEVICES AT THE BEGINNING OF THE NEXT WORK DAY.
- (2) 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.
- (3) ALL RESURFACING AND COLD PLANING OPERATIONS SHALL BE SUSPENDED BETWEEN THE HOURS OF 7:00 A.M. AND 8:00 A.M. AND 4:30 P.M. AND 6:00 P.M. DUE TO "PEAK HOUR TRAFFIC VOLUMES."
- (4) IN ORDER TO RECONSTRUCT LANES ON MANHATTEN AVENUE, THE ROADWAY WILL BE CLOSED AND OPEN TO LOCAL TRAFFIC ONLY. LANES WILL BE REDUCED TO ONE LANE TRAFFIC FOR LOCAL TRAFFIC ONLY IN ORDER TO PLACE STONE AND PAVEMENT LAYERS IN THE ADJACENT TRAVEL LANE. WORK FOR THE LIMITS OF CONSTRUCTION THROUGH BINDER WILL ONLY BE ALLOWED DURING SUMMER MONTHS WHEN SCHOOL IS CLOSED. COMPENSATION FOR SAFENING OF THE ROADWAY AT THE CLOSE OF EACH WORKING DAY ALONG WITH FLAGMEN COSTS WILL NOT BE PAID FOR DIRECTLY BUT INCLUDED IN COST OF OTHER ITEMS

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

- (1) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE.

SEDIMENT CONTROL

- (2) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED.

STREAM/WETLAND

- (3) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING OR TRANSPORTATION AREAS.

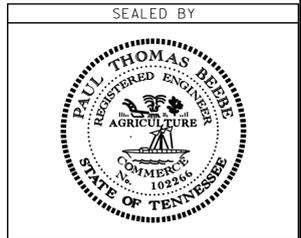
NPDES

- (4) DUE TO THE TYPE OF WORK IT IS OUR UNDERSTANDING THAT THE PROJECT WILL NOT DISTURB MORE THAN 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.
- (5) 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.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP-M-9115(17)	5

OAK RIDGE ANDERSON CO.
01953-3570-54

**UNOFFICIAL
SET
NOT FOR
BIDDING**



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**SPECIAL
NOTES**

SPECIAL NOTES (CONT.)

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL

A. DIFFERENCES 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. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 2 INCHES:
 - a. WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), 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.

2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES. TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.

- a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
- b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) 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.
- c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3.5 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL 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.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED

HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:
 - a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

- b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.
- c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.
- d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN WITH PLAQUE (W8-17 AND W8-17P). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES. SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 3/4 INCH AND NOT EXCEEDING 2 INCHES.

WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) 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.

2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:

- a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:

- a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
- b. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

- C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

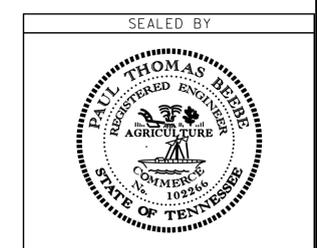
SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP-M-9115(17)	6

OAK RIDGE ANDERSON CO.
01953-3570-54



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES

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