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1	TITLE SHEET
2	ESTIMATED BRIDGE QUANTITIES
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2C	DETOUR PLAN
2D	TRAFFIC CONTROL
2E	EROSION CONTROL PLAN

STANDARD ROADWAY DRAWINGS

NO.	CURRENT REV.	DESCRIPTION

ROADWAY DESIGN STANDARDS

RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND

TRAFFIC CONTROL APPURTENANCES

T-M-1	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-4	07-24-14	STANDARD INTERSECTION PAVEMENT MARKINGS
T-S-18	02-14-14	END OF ROADWAY AND DEAD END SIGNS, METAL BARRICADES (TYPE III) & WORK ZONE SPEED SIGNS
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-PBR-1	06-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-WZ-11	03-13-09	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-12	03-13-09	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-40	04-02-12	RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-41	04-02-12	LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-55	06-30-14	SIDEWALK TRAFFIC CONTROL

EROSION PREVENTION SEDIMENT CONTROL

EC-STR-37	06-10-14	SEDIMENT TUBE
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STANDARD BRIDGE DRAWINGS

STD-8-2	11-01-10	LIGHT STANDARD SUPPORT DETAILS
STD-9-1	10-07-08	REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS
STD-11-2	05-01-14	STANDARD CONCRETE CLASSIC RAIL
SBR-2-115	01-04-96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT, AND CONSTRUCTION TYPES "A" THRU "J".
SBR-2-116	01-04-96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT, AND CONSTRUCTION TYPES "A" THRU "J".
SBR-2-119	05-30-96	STRIP SEAL EXPANSION JOINTS REPLACEMENT CONSTRUCTION

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

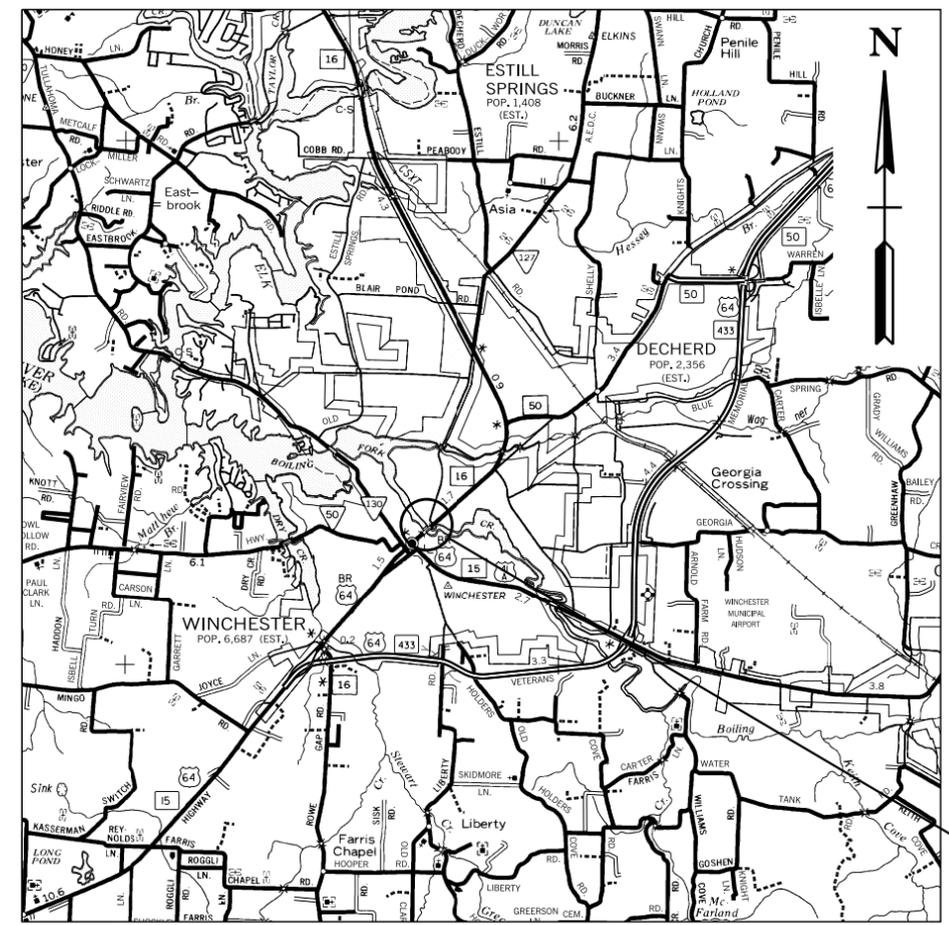
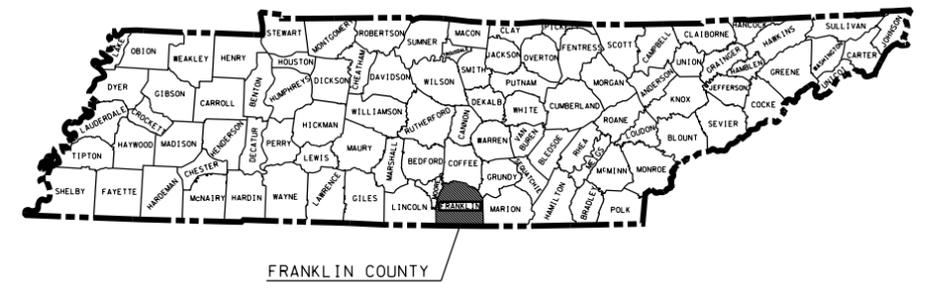
TDOT TRANSPORTATION PROJECT SPECIALIST VALERIE NEWBERRY
 DESIGNED BY NEEL-SCHAFFER, INC.
 DESIGNER BRADLEY BIVENS CHECKED BY HENRY PATE
 P.E. NO. 26004-4242-04
 PIN NO. 119958.00

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF ENGINEERING
FRANKLIN COUNTY

STATE ROUTE 16 (DINAH SHORE BOULEVARD)
 OVER BOILING FORK CREEK

BRIDGE REPAIR

STATE HIGHWAY NO. 16 F.A.H.S. NO.



SCALE: 1" = 1 MILE

ROUTE	ADT	YEAR	POSTED SPEED LIMIT
STATE ROUTE 16	17,706	2015	30

LIST OF BRIDGE DRAWINGS

DWG NO.	LAST REV DATE	TITLE
BR-119-1		LAYOUT OF BRIDGE TO BE REPAIRED
BR-119-2		ESTIMATED BRIDGE QUANTITIES
BR-119-3		GENERAL NOTES
BR-119-4		PHASE I CONSTRUCTION AND DEMOLITION
BR-119-5		PHASE II CONSTRUCTION AND DEMOLITION
BR-119-6		SUPERSTRUCTURE
BR-119-7		DECK OVERLAY REINFORCEMENT
BR-119-8		MISCELLANEOUS DETAILS
BR-119-9		SUBSTRUCTURE REPAIR DETAILS
BR-119-10		BRIDGE REPAIR DETAILS
BR-119-11		EXPANSION JOINT DETRAILS
BR-119-12		BILL OF STEEL

LIST OF REFERENCE DRAWINGS
 (TO BE PRINTED WITH PLANS)

DWG NO.	DESCRIPTION
B-6-49	LIGHT STANDARDS
B-10-80	STANDARD CONCRETE BRIDGES
C-2-85	STANDARD CONCRETE DECK GIRDERS
C-5-32 THRU 36	EXISTING BRIDGE DRAWINGS

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

DATE: _____

APPROVED: John Schroer
 JOHN SCHROER, COMMISSIONER

STATE ROUTE 16 OVER BOILING FORK CREEK
 BRIDGE NO. 26-SR016-12.73

UNOFFICIAL SET
 NOT FOR BIDDING

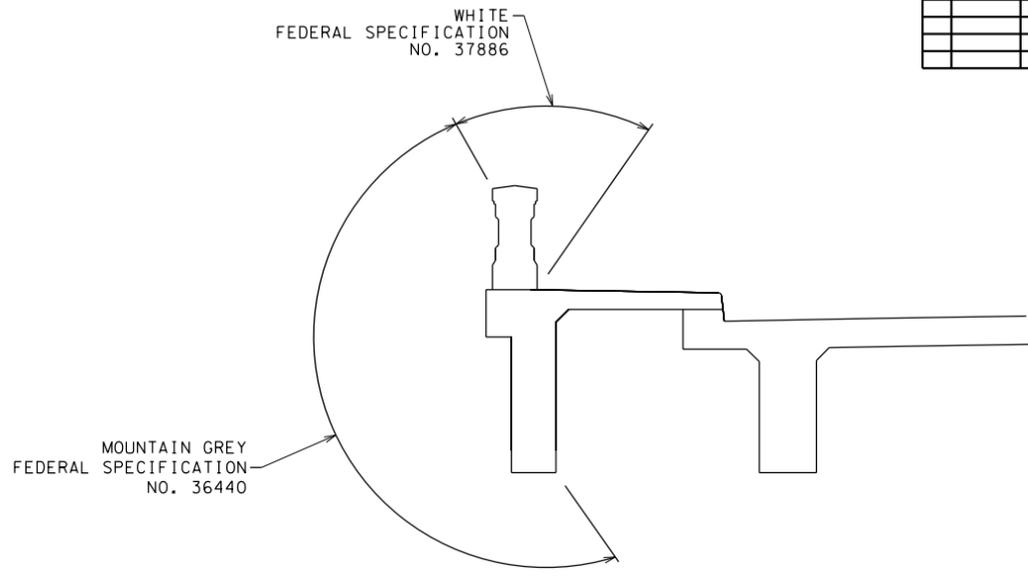
U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 APPROVED: _____
 DIVISION ADMINISTRATOR DATE

R:\8196 TDOT Bridge Repair\12 Franklin SR 16\Dgn\01 - Title Sheet.sht
 8/25/2015 2:03:44 PM



PROJECT NO.	YEAR	SHEET NO.	
26004-4242-04	2015	2	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

ESTIMATED BRIDGE QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
③	603-02.01 REPAINTING EXISTING STEEL STRUCTURES (BR. NO. 26-SR016-12.73)	L.S.	1
④	604-02.03 EPOXY COATED REINFORCING STEEL	LBS.	46,935
	604-03.01 CLASS "A" CONCRETE (BRIDGES)	C.Y.	96
	604-03.02 STEEL BAR REINFORCEMENT (BRIDGES)	LBS.	2,478
⑤	604-03.09 CLASS "D" CONCRETE (BRIDGE DECK)	C.Y.	331
	604-04.01 APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.	435
	604-04.02 APPLIED TEXTURE FINISH (EXISTING STRUCTURES)	S.Y.	664
	604-05.31 BRIDGE DECK GROOVING (MECHANICAL)	S.Y.	1565
① ⑥	604-10.05 CONCRETE	S.F.	180
⑦	604-10.14 REMOVE EXISTING WEARING SURFACE	L.S.	1
①	604-10.30 BRIDGE DECK REPAIR (FULL DEPTH OF SLAB)	S.Y.	10
	604-10.43 PENETRATING WATER REPELLANT CONCRETE SEAL	S.Y.	14
⑨	604-10.45 EXPANSION JOINT REPAIRS (TYPE "F")	L.F.	60.5
①	604-10.50 BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB)	S.Y.	470
	604-10.51 SCARIFYING (EXISTING BRIDGE DECK)	S.Y.	1956
① ⑥	604-10.54 CONCRETE REPAIRS	S.F.	502
②	620-09 STANDARD CONCRETE CLASSIC PARAPET RAIL	L.F.	587
⑩	701-01.01 CONCRETE SIDEWALK (4")	S.F.	80
⑧	714-01.01 STRUCTURAL LIGHTING (BR. NO. 26-SR016-12.73)	L.S.	1
	719-01.08 CLEAN DRAIN	EACH	100



APPLIED TEXTURE FINISH DETAIL

FOOTNOTES:

- ① ITEM MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.
- ② ITEM INCLUDES COST TO REMOVE EXISTING BRIDGE RAIL AND REPLACE WITH NEW CLASSIC PARAPET RAIL.
- ③ INCLUDED ALL COST TO REMOVE DEBRIS AROUND BEARING DEVICES; AND TO CLEAN AND PAINT ALL STRUCTURAL STEEL BEARING DEVICES FOR BENTS 2 THRU 5 (PLATES AND ROLLERS) WITH GREEN EPOXY MASTIC PAINT TO MATCH EXISTING BEARING DEVICE COLOR. (EST. QUANTITY 13,180 LBS.) SEE SHEET BR-119-3
- ④ THE PRICE BID FOR EPOXY COATED REINFORCING SHALL INCLUDE THE COST OF 196 NO. 6 AND 64 NO.5 MECHANICAL COUPLERS & COUPLER BARS IN ITEM 604-02.03.
- ⑤ COST OF ADJUSTING APPROX. 100 DECK DRAINS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "D" CONCRETE.
- ⑥ INCLUDES ALL COSTS TO REPAIR SPALLED AND/OR DELAMINATED AREAS ON ABUTMENTS, PIERS, AND DECK BEAMS USING QUICK SET PATCHING MATERIAL (ITEM NO. 604-10.54) AND/OR HIGH EARLY STRENGTH CONCRETE (ITEM NO. 604-10.05). SEE DRAWINGS BR-119-8 AND BR-119-9 FOR DETAILS AND NOTES.
- ⑦ AVERAGE ASPHALT THICKNESS IS 6".
- ⑧ INCLUDES THE COST OF REMOVING AND STORING EXISTING DECORATIVE LIGHTS, 590 FT. 2" Ø CONDUIT WITH PULL WIRES, 8 JUNCTION BOXES, 32 ANCHOR BOLTS AND ALL NECESSARY MATERIALS FOR INSTALATION OF STRUCTURE LIGHTING, SEE DRAWING BR-119-8 FOR DETAILS.
- ⑨ THE PRICE BID FOR ROADWAY EXPANSION DEVICES AT BENT 1 SHALL INCLUDE THE COST OF REMOVING EXISTING CONCRETE IN DECK AND CURB/SIDEWALK; THE COST OF HIGH EARLY STRENGTH CONCRETE; THE COST OF NEW CURB AND SIDEWALK COVER PLATES, AND ALL OTHER MISCELLANEOUS MATERIALS AND LABOR NECESSARY TO INSTALL THE NEW STRIP SEAL EXPANSION SYSTEM. SEE DRAWING NO. BR-119-11, STANDARD DRAWINGS SBR-2-115, SBR-2-116, AND SBR-2-119 FOR DETAILS OF EXPANSION DEVICES. THE EXPANSION JOINT SHALL BE IN ACCORDANCE WITH SECTION 623.02 OF THE STANDARD SPECIFICATIONS. THE TOTAL REQUIRED MOVEMENT IS 4". SHOP DRAWINGS SHALL BE SUBMITTED TO THE HEADQUARTERS BRIDGE REPAIR OFFICE.
- ⑩ ITEM INCLUDES THE COST TO REMOVE EXISTING SIDEWALK INSTALL NEW SIDE WALK.

NOTES:

ALL COST FOR TEXTURE COATING EXTERIOR BEAMS SHALL BE INCLUDED IN ITEM 604-04.02. ALL COST FOR TEXTURE COATING NEW CLASSIC RAIL SHALL BE INCLUDED IN ITEM 604-04.01. ALL TEXTURE COATINGS SHALL BE IN ACCORDANCE WITH SECTION 604.21 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL USE CONTAINMENT SCREENS OR OTHER MEASURES AS NECESSARY TO PREVENT ANY TEXTURE COATING FROM ENTERING THE ENVIRONMENT. CONTAINMENT MEASURES SHALL BE APPROVED BY THE ENGINEER AND COST SHALL BE INCLUDED IN ITEMS BID ON.

BEFORE APPLYING ANY TEXTURE FINISH, ALL SURFACES SHALL BE COMPLETELY CLEANED OF ALL DEBRIS AND FOREIGN MATERIALS.

IN ADDITION TO THE SURFACES SHOWN IN THE APPLIED TEXTURE FINISHED DETAIL SKETCH, ALL EXPOSED SURFACES OF THE WINGWALL, ABUTMENT BEAMS, CONCRETE BENTS, AND EXTERIOR PORTIONS OF ENDWALLS ARE TO RECEIVE APPLIED TEXTURE FINISH (MOUNTAIN GREY, FED. SPEC. NO. 36440).

A LIST OF APPROVED TEXTURE COATINGS MAY BE OBTAINED FROM THE TDOT DIVISION OF MATERIALS AND TEST.

NO TEXTURE COATING SHALL BE APPLIED PRIOR TO COMPLETION OF PAVING AND HAULING OPERATIONS AT THE BRIDGE SITE, AND ALL CONCRETE REPAIRS HAVE COMPLETELY CURED.

THE WASH WATER IS TO BE FILTERED AND PAINT CHIPS AND DEBRIS COLLECTED PRIOR TO RELEASE OF THE WATER.

UNOFFICIAL SET

 NOT FOR BIDDING

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 ESTIMATED BRIDGE QUANTITIES

 BRIDGE NO 26-SR016-12.73
 DINAH SHORE BLVD. (SR-16)
 OVER
 BOILING FORK CREEK
 FRANKLIN COUNTY
 2015

DESIGNED BY JMT DATE 4/2014
 DRAWN BY JMT DATE 4/2014
 SUPERVISED BY BEB DATE 4/2014
 CHECKED BY HP DATE 4/2014

GENERAL NOTES:

SPECIFICATIONS:

STANDARD ROAD AND BRIDGE SPECIFICATION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (JANUARY 1, 2015 EDITION)

LOADING:

HL-93 LIVE LOADING; DEAD LOAD INCLUDES 35 LB/SQ.FT. FOR FUTURE WEARING SURFACE.

DESIGN SPECIFICATIONS:

AASHTO LRFD 5TH EDITION 2010 WITH INTERIMS.

CLASS "A" CONCRETE:

TO BE CLASS "A" (CAST IN PLACE), f'c=3000 PSI CONCRETE, EXCEPT AS NOTED OTHERWISE.

CLASS "D" CONCRETE:

CONCRETE FOR BRIDGE DECK SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS.

BRIDGE DECK SURFACE FINISH:

TO BE IN ACCORDANCE WITH NOTE "C" IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.

REINFORCING STEEL:

SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. SEE SECTION 604 & 907 OF THE STANDARD SPECIFICATIONS.

BRIDGE RAIL SYSTEM:

BUILD BRIDGE RAILINGS ACCORDING TO STANDARD DRAWING STD-11-2 AND DETAILS ON SHEET BR-119-8. THE BRIDGE RAIL SHALL BE FORMED AND CAST PLUMB, NOT PERPENDICULAR TO THE SLAB OR SIDEWALK. THE DIMENSIONS AT THE TRAFFIC FACE SHALL BE KEPT CONSTANT, WITH VARIATION FOR CROSS SLOPE ACCOMMODATED AT THE REAR FACE.

NOTE:

THE CONTRACTOR SHALL PROVIDE 100% CONVENTIONAL FALL PROTECTION FOR WORKERS PERFORMING REPAIRS ABOVE 15 FEET.

GROUTED BARS IN DRILLED HOLES:

HORIZONTALLY DRILLED HOLES (AND VERTICALLY DRILLED HOLES IN BENTS) SHALL BE DRILLED 1/2" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH NON-SHRINK GROUT, AND THE BAR ROTATED (NOT DRIVEN) TO ITS SEAT. OTHER VERTICALLY DRILLED HOLES SHALL BE DRILLED 1/4" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH EPOXY GROUT AND THE BAR SHALL BE DRIVEN TO ITS SEAT. ALL GROUTING MATERIAL SHALL BE APPROVED BY T.D.O.T. MATERIALS AND TESTS.

SHOP DRAWINGS:

SEE SECTION 105.02 OF THE STANDARD SPECIFICATIONS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE HEADQUARTERS BRIDGE INSPECTION AND REPAIR OFFICE IN LIEU OF THE DIVISION OF STRUCTURES.

VALUE ENGINEERING ALTERNATE BRIDGE DESIGN CRITERIA:

ALTERNATE BRIDGE DESIGNS MAY NOT DIMINISH THE FUNCTIONAL OR STRUCTURAL EQUIVALENCY OF THE BRIDGE AND MUST MEET OR EXCEED BOTH THE SERVICE LEVEL AND ULTIMATE CAPACITIES OF THE CONTRACT PLANS STRUCTURE. ADDITIONALLY, THE WATERWAY OPENING AND FLOOD CLEARANCES MAY NOT BE REDUCED; FOR GRADE SEPARATIONS THE HORIZONTAL CLEARANCES MAY NOT BE REDUCED NOR MAY THE VERTICAL CLEARANCES BE LESS THAN THE MINIMUM ACCEPTABLE FOR THE TYPE FACILITY CROSSED.

REQUIREMENTS AND RESTRICTIONS FOR PHASE CONSTRUCTION:

ONE 10'-6" MIN. TRAFFIC LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

HIGH EARLY STRENGTH CONCRETE:

THE MIX IS TO MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, CLASS "A", EXCEPT THE CEMENT CONTENT SHALL BE A MINIMUM OF 714 lbs., THE WATER CEMENT RATIO SHALL BE A MAXIMUM 0.40, NO FLY ASH REPLACEMENT WILL BE PERMITTED, AND THE MINIMUM 28 DAY STRENGTH SHALL BE 3,500 psi. TRAFFIC SHALL NOT BE PERMITTED ON ANY OF THE REPAIR AREAS UNTIL THE TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 3,000 psi AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS.

QUICK SET PATCHING MATERIAL:

QUICK-SET PATCHING MATERIAL SHALL BE A POLYMER MODIFIED CEMENTIOUS PATCHING MATERIAL. SEE TDOT QUALIFIED PRODUCTS LIST 13, SECTION B.6, FOR ACCEPTABLE PATCHING MATERIALS.

MECHANICAL BAR COUPLERS:

MECHANICAL BAR SPLICERS MUST BE ON THE QUALIFIED PRODUCTS LIST 27 MAINTAINED BY THE DIVISION OF MATERIALS AND TESTS. THE BAR SPLICER SHALL MEET AASHTO STANDARD SPECIFICATIONS FOR MECHANICAL CONNECTION. WHEN EPOXY COATING IS REQUIRED, THE EXPOSED THREADS SHALL BE REPAIRED AFTER SPLICING ACCORDING TO SECTION 907 OF THE STANDARD SPECIFICATIONS. THE COST OF FURNISHING THE BAR SPLICERS, (AND EPOXY COATING WHEN REQUIRED) INCLUDING ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE INSTALLATION, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 604-02.03.

SPECIAL NOTES TO CONTRACTOR:



CONTRACTOR SHALL USE EXTREME CARE AND TAKE ANY MEASURE NECESSARY TO ENSURE THAT NO DEBRIS IS DROPPED INTO THE CREEK BELOW. THIS SHALL BE ACCOMPLISHED BY THE USE OF BASKETS, NETTING, WRAPPING, WORK PLATFORM, OR OTHER SIMILARLY EFFECTIVE MEANS. A CONTAINMENT SYSTEM MUST BE IN PLACE BEFORE WORK COMMENCES ON THE SUBSTRUCTURES OR BRIDGE DECK. ANY DEBRIS WHICH IS ALLOWED TO DROP BELOW THE BRIDGE SHALL NOT BE ALLOWED TO ENTER THE WATER AND SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR IMMEDIATELY. COST OF REMOVING AND DISPOSING OF CONSTRUCTION DEBRIS SHALL BE INCLUDED IN OTHER ITEMS BID ON.



THE CONTRACTOR IS RESPONSIBLE FOR AND SHOULD TAKE ALL PRECAUTIONS TO ENSURE STABILITY OF THE STRUCTURE DURING ALL REPAIRS.

THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND QUANTITIES BEFORE ORDERING ANY MATERIALS.

THE CONTRACTOR SHALL CHECK LOCATION OF ALL EXISTING SUBSTRUCTURES AND VERIFY REPAIR LENGTHS BEFORE ORDERING REINFORCING STEEL.

CONCRETE SEALER

CONCRETE SEALER SHALL BE APPLIED TO SUBSTRUCTURES COINCIDING WITH EXPANSION JOINT LOCATIONS BEFORE APPLYING TEXTURE COATING. CONCRETE SEALER SHALL BE APPLIED TO THE TOP AND VERTICAL SURFACES OF BENT 1 CAP. CONCRETE SHALL BE CLEAN AND DRY BEFORE APPLYING THE CONCRETE SEAL, AND THE THICKNESS OF THE SEAL SHALL BE AS RECOMMENDED BY THE SEALANT MANUFACTURER. ACCEPTABLE CONCRETE SEALERS ARE INCLUDED IN THE QUALIFIED PRODUCTS LIST FOR NON-PENETRATING CONCRETE SEALS MAINTAINED BY THE DIVISION OF MATERIALS AND TESTS. THE SEALER SHALL BE CLEAR OR SIMILAR TO THE COLOR OF EXISTING CONCRETE SURFACES TO BE SEALED. THE COST OF THE SEALER, COMPLETE AND IN PLACE, SHALL BE BID UNDER ITEM NUMBER 604-10.43.

FINISHING CONCRETE SURFACES:

CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.21 OF THE TENNESSEE STANDARD SPECIFICATIONS. A CLASS I FINISH FOLLOWED BY AN APPLIED TEXTURE FINISH SHALL BE USED IN LIEU OF A CLASS II FINISH. NO TEXTURE FINISH SHALL BE APPLIED PRIOR TO COMPLETION OF PAVING AND HAULING OPERATIONS AT THE BRIDGE SITE, AND ALL CONCRETE REPAIRS HAVE COMPLETELY CURED. THE APPLIED TEXTURE FINISH SHALL BE MEASURED AND PAID FOR UNDER ITEM NO. 604-04.01 AND 604-04.02.

FORMS AND FALSEWORK:

CONCRETE FORM WORK, FALSEWORK, AND TEMPORARY SUPPORTS SHALL BE REMOVED FROM THE JOB SITE AFTER WORK IS COMPLETED. COST OF FORMS, FALSEWORK, AND TEMPORARY SUPPORT SHALL BE INCLUDED IN ITEMS BID ON. THIS WORK SHALL BE COMPLETED BEFORE FINAL PAYMENT IS APPROVED.

APPROVAL OF MATERIALS:

NO FABRICATION SHALL BE STARTED UNTIL ALL THE MATERIALS INVOLVED HAVE BEEN APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TESTS WITH A COPY OF THE TEST REPORTS ALSO GOING TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF STRUCTURES, BRIDGE INSPECTION AND REPAIR OFFICE.

DEMOLITION:

THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ANY PARTS OF THE STRUCTURE THAT ARE NOT TO BE REMOVED SPECIFICALLY. THE CONTRACTOR IS NOT ALLOWED TO USE A HYDRAULIC RAM MOUNTED ON A BACKHOE (COMMONLY CALLED A HOE RAM) OR OTHER SIMILARLY HEAVY EQUIPMENT FOR CONCRETE REMOVAL. PNEUMATIC HAMMERS MAY BE USED, AS SPECIFIED, TO REMOVE UNSOUND CONCRETE. SAWING OR CUTTING OF THE CONCRETE IS ACCEPTABLE SO LONG AS ANY SPECIFIED PROJECTION OF THE EXISTING REINFORCING STEEL IS MAINTAINED. ALL DEVICES PROPOSED FOR CONCRETE DEMOLITION SHALL MEET THE APPROVAL OF THE ENGINEER.

DEBRIS AND SEDIMENT REMOVAL:

THE CONTRACTOR SHALL TAKE SPECIAL CARE TO REMOVE TRASH, DEBRIS, AND VEGETATION FROM BENEATH THE BRIDGE AND FROM THE TOP OF BENTS PRIOR TO AND DURING CONSTRUCTION. THIS INCLUDES ORGANIC DEBRIS WASHED BY THE CREEK AND DEPOSITED AGAINST THE BRIDGE OR WITHIN WORK AREAS. THIS ALSO INCLUDES REMOVING ALL SEDIMENT, DEBRIS, AND TRASH FROM ALL DECK DRAIN OPENINGS TO PROVIDE PROPER DRAINAGE. THE COST OF ALL SEDIMENT, TRASH, AND DEBRIS REMOVAL SHALL BE INCLUDED IN OTHER ITEMS BID ON.

PROJECT NO.	YEAR	SHEET NO.	
26004-4242-04	2015	2A	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

CLEANING AND PAINTING OF STRUCTURAL STEEL AND REINFORCING STEEL:

UPON REMOVAL OF DETERIORATED CONCRETE, ALL EXPOSED REINFORCING STEEL SHALL BE CLEANED AND PAINTED IMMEDIATELY AFTER CLEANING TO PREVENT RE-RUSTING. AREAS SHALL BE RE-CLEANED IF RUSTING OCCURS BEFORE PAINTING. PAINT SHALL BE AN EPOXY MASTIC PAINT AND SHALL BE APPLIED IN A THIN LAYER TO MAINTAIN A GOOD BOND BETWEEN THE REINFORCING STEEL AND THE CONCRETE. ALL MATERIAL AND LABOR COSTS FOR CLEANING AND PAINTING OF EXISTING REINFORCING STEEL SHALL BE INCLUDED IN THE COST OF ITEM 604-10.54, CONCRETE REPAIRS OR ITEM 604-10.05, HIGH EARLY STRENGTH CONCRETE REPAIRS.

ALL STEEL BEARINGS SHALL BE CLEANED AND PAINTED IMMEDIATELY AFTER CLEANING TO PREVENT RE-RUSTING. AREAS SHALL BE RE-CLEANED IF RUSTING OCCURS BEFORE PRIMING. PAINT SHALL BE A GRAY EPOXY MASTIC PAINT. COST TO BE INCLUDED IN COST OF ITEM NO. 603-02.01.

CLIFF AND BARN SWALLOW NOTES:

NO DISTURBANCE OF CLIFF AND BARN SWALLOW NESTS, EGGS, OR BIRDS (YOUNG OR ADULTS) IS PERMITTED DURING APRIL 15 THROUGH JULY 31. NEST REMOVAL OR DESTRUCTION AND THE IMPLEMENTATION OF MEASURES PREVENTING FUTURE NEST BUILDING (E.G., OBSTRUCTING A STRUCTURE USING NETTING) ARE PERMITTED DURING AUGUST 1 THROUGH APRIL 14.

EXCEPTIONS ARE AS FOLLOWS:

1. TDOT MAY REMOVE OR DESTROY NEST AND PREVENT NEST BUILDING PROVIDED NO EGGS ARE PRESENT PRIOR TO APRIL 15. ABSENCE OF EGGS MUST BE DOCUMENTED USING APPROPRIATE MEANS FOR DETERMINATION, INCLUDING SITE VISITS AND PHOTOGRAPHS.
2. TDOT MAY REMOVE OR DESTROY NEST PROVIDED NO BIRDS (YOUNG OR ADULTS) ARE PRESENT IN ANY NEST PRIOR TO JULY 31. ABSENCE OF BIRDS MUST BE DOCUMENTED USING APPROPRIATE MEANS FOR DETERMINATION, INCLUDING SITE VISITS, PHOTOGRAPHS, AND OBSERVATIONS OF NO BIRDS USING NESTS.

SPECIAL NOTE FOR UTILITIES:

IT IS INTENDED THAT THE COST OF MATERIALS AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF UTILITIES SHALL BE BORNE BY OTHERS AND SHALL NOT BE PAID FOR AS A PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH OTHERS IN THE INSTALLATION OF UTILITIES WITH NO ADDITIONAL COMPENSATION ALLOWED THE CONTRACTOR AS A RESULT. CARE SHALL BE TAKEN WHILE REMOVING AND REPAIRING BRIDGE COMPONENTS SO AS NOT TO DISTURB OR DAMAGE ANY UTILITIES.

WINCHESTER UTILITIES (WATER AND SEWER)
219 SECOND AVENUE, N.W.
WINCHESTER, TN 37398
CONTACT:
(931)-967-2238

WINCHESTER UTILITIES (ELECTRIC)
219 SECOND AVENUE, N.W.
WINCHESTER, TN 37398
CONTACT:
(931)-967-2238

AT&T (BELL SOUTH) ENGINEERING
116 SOUTH CANNON AVENUE
MURFREESBORO, TN 37129
CONTACT:
615-848-2082

**UNOFFICIAL
SET**

 NOT FOR
BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
GENERAL NOTES

BRIDGE NO 26-SR016-12.73
DINAH SHORE BLVD. (SR-16)
OVER
BOILING FORK CREEK
FRANKLIN COUNTY
2015

DESIGNED BY JMT DATE 4/2014
DRAWN BY JMT DATE 4/2014
SUPERVISED BY BEB DATE 4/2014
CHECKED BY HP DATE 4/2014

TYPE	YEAR	PROJECT NO.	SHEET NO.
	2015	26004-4242-04	2B

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
105-01	CONSTRUCTION STAKES, LINES AND GRADES	L.S.	1
① 307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	50
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	1
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	1
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1
① 411-01.10	ACS MIX (PG64-22) GRADING D	TON	175
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	2,400
705-08.11	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	2
④ 712-01	TRAFFIC CONTROL	L.S.	1
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	248
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
712-05.01	WARNING LIGHTS (TYPE A)	EACH	2
712-06	SIGNS (CONSTRUCTION)	S.F.	404
712-07.02	TEMPORARY BARRICADES (TYPE II)	L.F.	25
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	25
② 712-09.01	REMOVABLE PAVEMENT MARKING LINE	L.F.	5,850
⑤ 716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	L.F.	130
③ 716-13.01	SPRAY THERMO PLASTIC PAVEMENT MARKING (60 MIL) (4" LINE)	L.M.	0.568
① 717-01	MOBILIZATION	L.S.	1
⑥ 730-41.25	REWORK OF CONTROLLER	EACH	1
740-11.02	TEMPORARY SEDIMENT TUBE 12IN	L.F.	240

FOOTNOTES:

- ① ITEM MAY BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER.
- ② INCLUDES 1,920 L.F. 4" REMOVABLE SINGLE SOLID WHITE LINE, 3,630 L.F. 4" REMOVABLE DOUBLE YELLOW LINE, AND 300 L.F. REMOVABLE DOTTED WHITE LINE.
- ③ INCLUDES 1,490 L.F. 4" SINGLE SOLID WHITE LINE AND 1,150 L.F. DOUBLE SOLID YELLOW LINE.
- ④ ITEM INCLUDES REMOVAL OF PAVEMENT MARKINGS. CONTRACTOR SHALL COORDINATE WITH ENGINEER TO DETERMINE LIMITS OF PAVEMENT MARKING REMOVAL. ALL REMOVAL OF EXISTING PAVEMENT MARKINGS SHOULD BE OBLITERATED PER TDOT STANDARDS SO THAT THEY ARE NO LONGER VISIBLE TO DRIVER.
- ⑤ ITEM INCLUDES 130' FOR TEMPORARY CROSSWALK TO BE USED DURING CONSTRUCTION.
- ⑥ ITEM INCLUDES FIELD ADJUSTMENTS TO SIGNAL CONTROLLER SETTINGS AS NEEDED AT PORTER STREET AND DINAH SHORE BOULEVARD (S.R. 16) TO ALLOW FOR EFFICIENT OPERATION DURING CONSTRUCTION:
 - A. THE PROJECT ENGINEER SHALL CONFIRM THAT THE PORTER STREET PHASE ALLOWS PEDESTRIANS ADEQUATE CLEARANCE TIME TO CROSS S.R. 16 (28 SECONDS OF CLEARANCE TIME)
 - B. THE PROJECT ENGINEER SHALL INCREASE MAINLINE (S.R. 16) GREEN TIME AS NEEDED IF STANDING QUEUES ARE OCCURRING ON S.R. 16 BECAUSE OF THE LANE REDUCTION DURING CONSTRUCTION.

GENERAL NOTES

UTILITY NOTES:

- 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.
- 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. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- 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 SPECIAL EQUIPMENT WILL BE INCLUDED IN THE BID PRICE FOR OTHER ITEMS OF CONSTRUCTION.
- 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 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. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
- 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 NOTE:

- 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 MARKING NOTES:

- 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. 712-09.01, REMOVABLE PAVEMENT MARKING LINE PER LINEAR FOOT.
- PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" SPRAY THERMO PLASTIC (60 MIL) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-13.01 SPRAY THERMO PAVEMENT MARKINGS (60 MIL) (4" LINE). LM. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS 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.
- BEFORE OPENING THE LANE SHIFT TO TRAFFIC, THE TRANSITIONAL MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 712-09.01, REMOVABLE PAVEMENT MARKING LINE. (L.F.) ALL EXISTING MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING MARKINGS AND RAISED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN ITEM NO. 712-01 TRAFFIC CONTROL, LUMP SUM.

PAVEMENT NOTES:

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

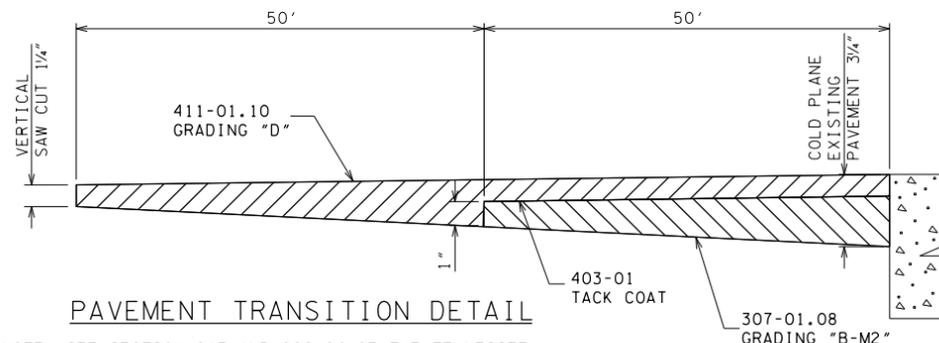
CONSTRUCTION WORK ZONE AND TRAFFIC CONTROL NOTES:

- ADVANCE 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. COST 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 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. 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.
- 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.
- ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SPECIAL NOTES

TRAFFIC CONTROL NOTE:

- TRAFFIC CONTROL PLAN - SEE SHEET 2C AND STD. DWG. NOS. T-WZ-32, T-WZ-34, & T-WZ-35.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING CONDUIT, JUNCTION BOXES, PULL BOXES AND ANCHOR BOLTS. THE CONTRACTOR SHALL REMOVE, STORE AND RE-INSTALL EXISTING LIGHT FIXTURES. THE UTILITY COMPANY IS RESPONSIBLE FOR THE WIRING OF LIGHT FIXTURES.



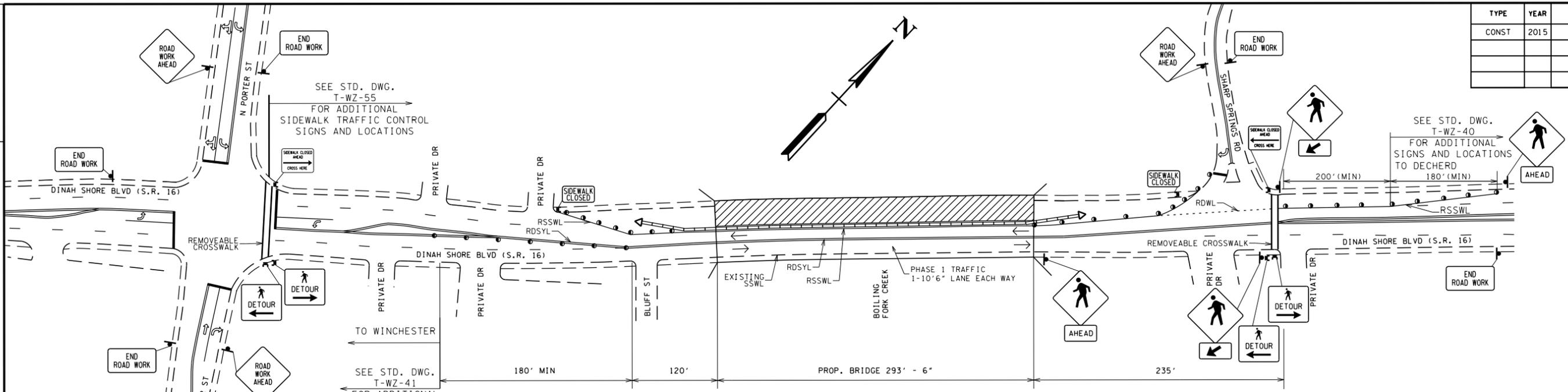
PAVEMENT TRANSITION DETAIL

NOTE: SEE SECTION 617 AND 906.04 OF THE TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED JANUARY 1, 2015.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ESTIMATED QUANTITIES, GENERAL NOTES, AND SPECIAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	26004-4242-04	2C



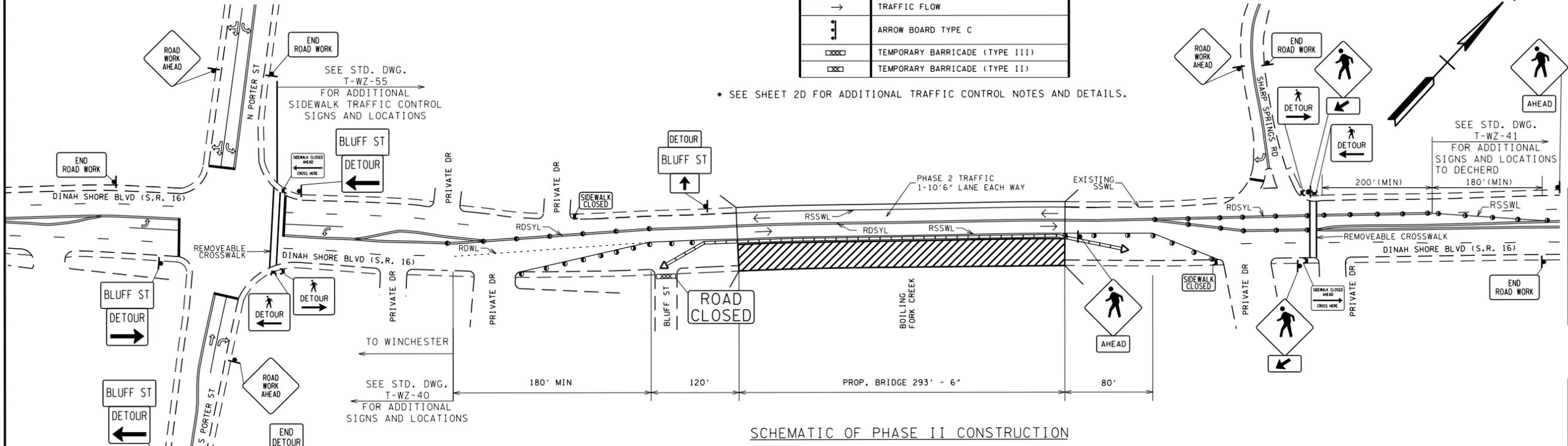
SCHEMATIC OF PHASE I CONSTRUCTION

- PHASE I NOTES:**
1. PROVIDE TRAFFIC CONTROL PLAN TO MAINTAIN 2-10'6" LANES ON BRIDGE AT ALL TIMES.
 2. PEDESTRIAN DETOUR AND SIDEWALK CLOSURE SHALL FOLLOW STD. DWG. T-WZ-55 AND SECTION 6D.01 OF THE MUTCD.
 3. PROJECT ENGINEER SHALL FIELD ADJUST SIGNAL CONTROLLER SETTINGS AS NEEDED AT PORTER ST AND DINAH SHORE BLVD (S.R. 16) TO ALLOW FOR EFFICIENT OPERATION DURING CONSTRUCTION:
- A. THE PROJECT ENGINEER SHALL CONFIRM THAT THE PORTER ST SIGNAL PHASE ALLOWS PEDESTRIANS ADEQUATE GREEN TIME TO CROSS S.R. 16. CONTRACTOR TO ADJUST MIN GREEN SETTING TO 20 SECONDS.
- B. THE PROJECT ENGINEER SHALL INCREASE MAINLINE (S.R. 16) GREEN TIME AS NEEDED IF STANDING QUEUES ARE OCCURRING ON S.R. 16 BECAUSE OF THE LANE REDUCTION DURING CONSTRUCTION.

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY ATTENUATOR
	SIGN (CONSTRUCTION)
	SIDEWALK SIGN (CONSTRUCTION)
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	DENOTES: WORK ZONE
	TRAFFIC FLOW
	ARROW BOARD TYPE C
	TEMPORARY BARRICADE (TYPE III)
	TEMPORARY BARRICADE (TYPE II)

* SEE SHEET 2D FOR ADDITIONAL TRAFFIC CONTROL NOTES AND DETAILS.

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SCHEMATIC OF PHASE II CONSTRUCTION

- PHASE II NOTES:**
1. ALL PHASE I NOTES APPLY, REPOSITION PEDESTRIAN DETOUR SIGNS AS SHOWN.
 2. BLUFF ST SHALL BE CLOSED AT S.R. 16 DURING PHASE II OF CONSTRUCTION. CONTRACTOR SHALL INSTALL LIMITED DETOUR SIGNS AS SHOWN, WITH ADDITIONAL DETOUR SIGNS ADDED IF PROJECT ENGINEER DETERMINES THEY ARE WARRANTED.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN

7/17/2015 10:24:19 AM R:\8196 TDOT Bridge Repair\12 Franklin SR 16\Drawn\05 - 02C - Traffic ControlSR-16.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	26004-4242-04	2D

TRAFFIC CONTROL SIGNS					
CODE	SIZE	DESCRIPTION	TOTAL	QUANTITY	UNIT
G20-2	36" x 18"	END ROAD WORK	5	22.5	SQ. FT.
CUSTOM	36" x 18"	BLUFF ST	5	22.5	SQ. FT.
M4-9L	30" x 24"	DETOUR W/ ARROW - LEFT	2	10.0	SQ. FT.
M4-9R	30" x 24"	DETOUR W/ ARROW - RIGHT	1	5.0	SQ. FT.
M4-8	24" x 12"	DETOUR	1	2.0	SQ. FT.
M4-8a	24" x 18"	END DETOUR	1	3.0	SQ. FT.
M4-9B	30" x 24"	PED DETOUR	4	20.0	SQ. FT.
R9-11	24" x 18"	SIDEWALK CLOSED AHEAD	2	6.0	SQ. FT.
R9-9	24" x 12"	SIDEWALK CLOSED	2	4.0	SQ. FT.
M6-3	21" x 15"	DIRECTIONAL ARROW - STRAIGHT	1	2.2	SQ. FT.
R11-2	48" x 30"	ROAD CLOSED	1	10.0	SQ. FT.
R11-3A	60" x 30"	ROAD CLOSED LOCAL TRAFFIC ONLY	1	12.5	SQ. FT.
W11-2*	36" x 36"	PEDESTRIAN CROSSING	4	36.0	SQ. FT.
W16-7P*	24" x 12"	DOWNWARD DIAGONAL ARROW	2	4.0	SQ. FT.
W16-9P*	24" x 12"	AHEAD (PLAQUE)	2	4.0	SQ. FT.
W20-1	48" x 48"	ROAD WORK AHEAD	3	48.0	SQ. FT.
W20-1	48" x 48"	ROAD WORK 1500 FT	2	32.0	SQ. FT.
W20-1	48" x 48"	ROAD WORK 500 FT	2	32.0	SQ. FT.
W20-1	48" x 48"	ROAD WORK 1000 FT	2	32.0	SQ. FT.
W20-5L	48" x 48"	LEFT LANE CLOSED 1/2 MILE	1	16.0	SQ. FT.
W20-5L	48" x 48"	LEFT LANE CLOSED 1500 FT.	1	16.0	SQ. FT.
W4-2L	48" x 48"	LEFT LANE MERGE SYMBOL	1	16.0	SQ. FT.
W20-5R	48" x 48"	RIGHT LANE CLOSED 1/2 MILE	1	16.0	SQ. FT.
W20-5R	48" x 48"	RIGHT LANE CLOSED 1500 FT.	1	16.0	SQ. FT.
W4-2R	48" x 48"	RIGHT LANE MERGE SYMBOL	1	16.0	SQ. FT.
TOTAL 712-06 SIGNS (CONSTRUCTION)			404		SQ. FT.

*SIGN TO BE BLACK ON ORANGE.

TRAFFIC CONTROL QUANTITIES			
ITEM NUMBER	DESCRIPTION	QUANTITY	UNIT
712-01	TRAFFIC CONTROL	1	L.S.
712-05.01	WARNING LIGHTS (TYPE A)	2	EACH
712-06	SIGNS (CONSTRUCTION)	404	S.F.
712-07.02	TEMPORARY BARRICADES (TYPE II)	25	L.F.
712-07.03	TEMPORARY BARRICADES (TYPE III)	25	L.F.

TRAFFIC CONTROL NOTES:

- TEMPORARY TRAFFIC SIGNAL LAYOUT SHOWN ON THIS SHEET IS FOR GUIDANCE ONLY. CONTRACTOR SHALL FOLLOW TDOT STANDARD DRAWINGS TO ESTABLISH TRAFFIC CONTROL PLAN USING TEMPORARY TRAFFIC SIGNAL (T-WZ-11, T-WZ-12, T-WZ-40 AND T-WZ-41).
- UNLESS OTHERWISE NOTED, REFER TO TDOT STD. TRAFFIC CONTROL DRAWINGS TO DETERMINE TYPICAL FLEXIBLE DRUM SPACING AND PORTABLE BARRIER WALL TAPER LENGTH.
- CONTRACTOR SHALL REMOVE EXISTING WHITE EDGE LINE SHOULDER STRIPING ON BRIDGE BEFORE IMPLEMENTING TWO-LANE, TWO-WAY TRAFFIC CONTROL. CONTRACTOR SHALL COORDINATE WITH ENGINEER TO DETERMINE LIMITS OF SHOULDER LINE REMOVAL. ALL REMOVAL OF EXISTING PAVEMENT MARKINGS SHOULD BE OBLITERATED PER TDOT STANDARDS SO THAT IT IS NO LONGER VISIBLE TO DRIVER, PAID UNDER PAY ITEM 712-01 (TRAFFIC CONTROL).
- PROVIDE TRAFFIC CONTROL PLAN TO MAINTAIN 2-10'7.5" LANES ON BRIDGE AT ALL TIMES.
- PEDESTRIAN DETOUR AND SIDEWALK CLOSURE SHALL FOLLOW STD. DWG. T-WZ-55 AND SECTION 6D.01 OF THE MUTCD.

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
③ 712-01	TRAFFIC CONTROL	LS	1
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
712-06	SIGNS (CONSTRUCTION)	S.F.	404
① 712-09.01	REMOVABLE PAVEMENT MARKING LINE	L.F.	5850
④ 716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	L.F.	130
② 716-13.01	SPRAY THERMO PVMT MRKNG (60 mil) (4IN LINE)	L.M.	0.568
717-01	MOBILIZATION	LS	1
⑤ 730-41.25	REWORK OF CONTROLLER	EACH	1

FOOTNOTES

- INCLUDES 1,920 L.F. 4" REMOVABLE SINGLE SOLID WHITE LINE, 3,630 L.F. 4" REMOVABLE DOUBLE YELLOW LINE, AND 300 L.F. REMOVABLE DOTTED WHITE LINE.
- INCLUDES 1,490 L.F. 4" SINGLE SOLID WHITE LINE AND 1,150 L.F. DOUBLE SOLID YELLOW LINE.
- ITEM INCLUDES REMOVAL OF PAVEMENT MARKINGS. CONTRACTOR SHALL COORDINATE WITH ENGINEER TO DETERMINE LIMITS OF PAVEMENT MARKING REMOVAL. ALL REMOVAL OF EXISTING PAVEMENT MARKINGS SHOULD BE OBLITERATED PER TDOT STANDARDS SO THAT THEY ARE NO LONGER VISIBLE TO DRIVER.
- ITEM INCLUDES 130' FOR TEMPORARY CROSSWALK TO BE USED DURING CONSTRUCTION.
- ITEM INCLUDES FIELD ADJUSTMENTS TO SIGNAL CONTROLLER SETTINGS AS NEEDED AT PORTER STREET AND DINAH SHORE BOULEVARD (S.R. 16) TO ALLOW FOR EFFICIENT OPERATION DURING CONSTRUCTION:
 - THE PROJECT ENGINEER SHALL CONFIRM THAT THE PORTER STREET PHASE ALLOWS PEDESTRIANS ADEQUATE CLEARANCE TIME TO CROSS S.R. 16 (28 SECONDS OF CLEARANCE TIME)
 - THE PROJECT ENGINEER SHALL INCREASE MAINLINE (S.R. 16) GREEN TIME AS NEEDED IF STANDING QUEUES ARE OCCURRING ON S.R. 16 BECAUSE OF THE LANE REDUCTION DURING CONSTRUCTION.

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DEPARTMENT OF TRANSPORTATION

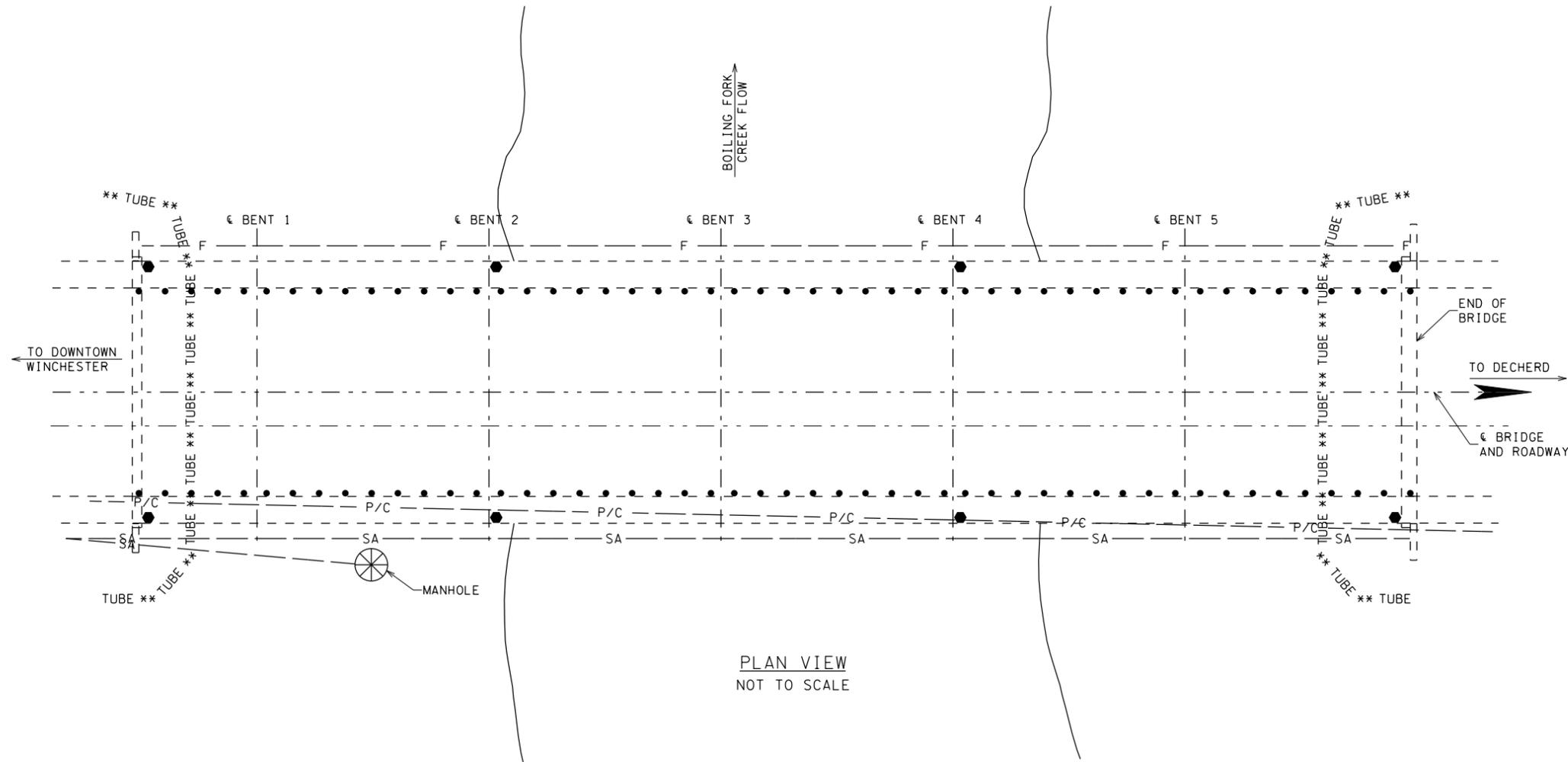
**TRAFFIC
CONTROL
PLAN**

TYPE	YEAR	PROJECT NO.	SHEET NO.
	2015	26004-4242-04	2E

LEGEND

** TUBE ** TUBE 12" TEMPORARY SEDIMENT TUBE

EROSION PREVENTION & SEDIMENT CONTROL QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QTY
740-11.02	TEMPORARY SEDIMENT TUBE 12IN	L.F.	240



PLAN VIEW
NOT TO SCALE

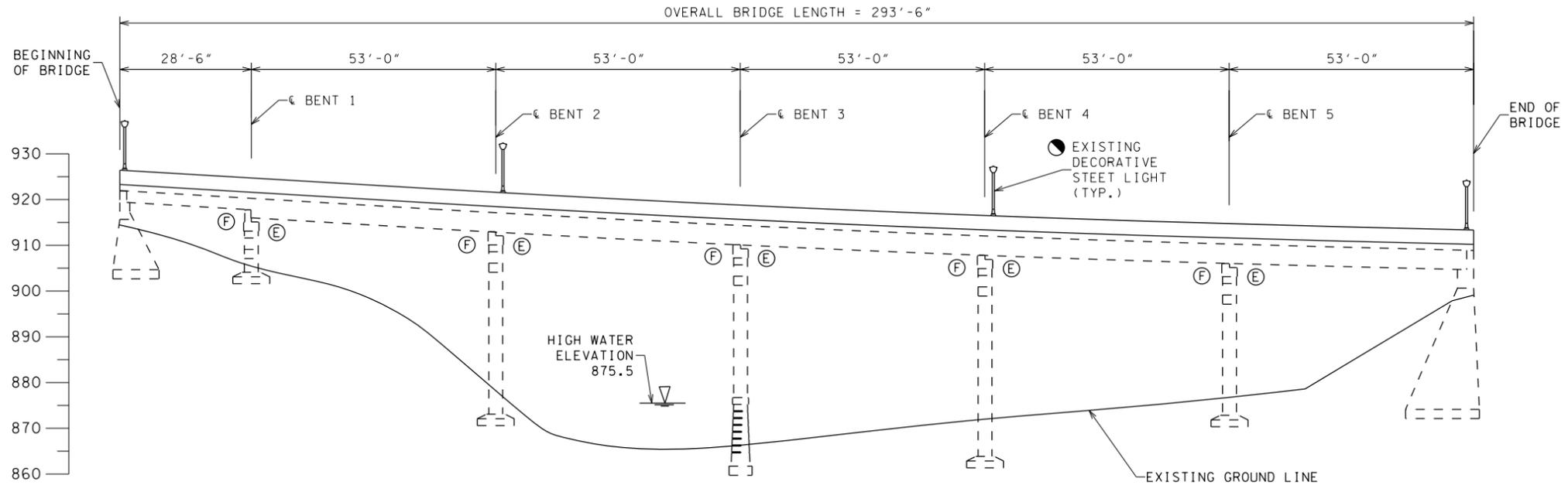
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EROSION
CONTROL
PLAN**

PROJECT NO.	YEAR	SHEET NO.	
26004-4242-04	2015		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



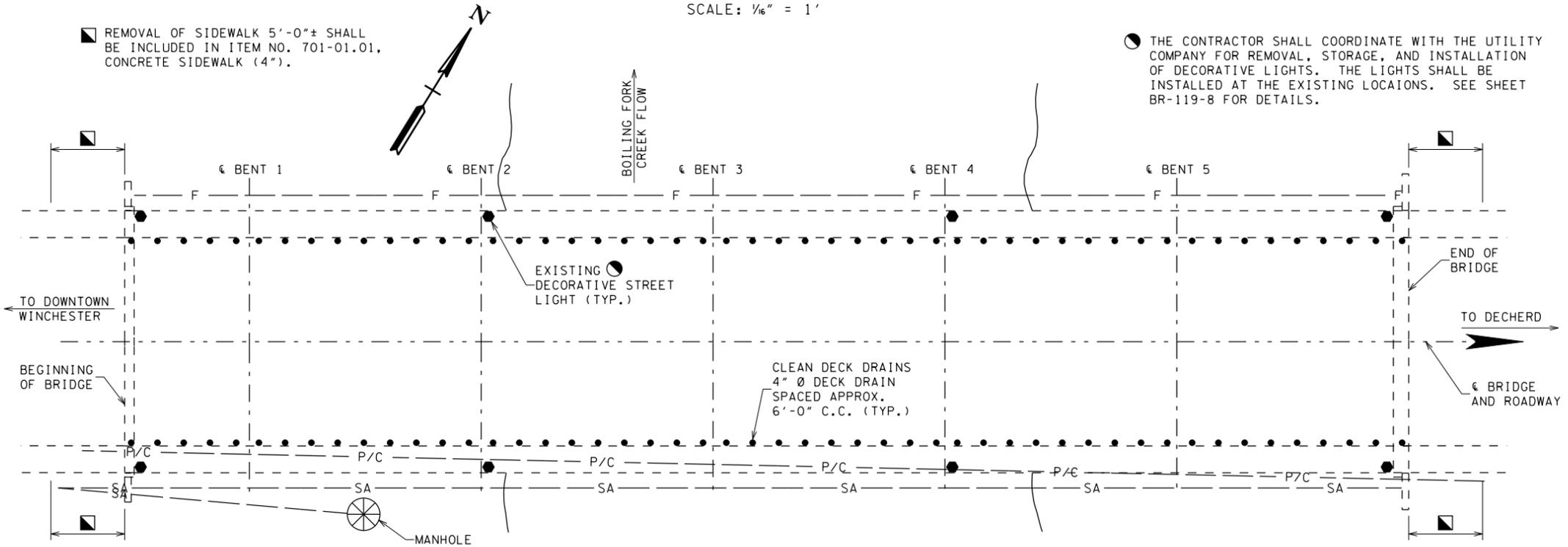
ELEVATION VIEW
SCALE: 1/8" = 1'

REMOVAL OF SIDEWALK 5'-0"± SHALL BE INCLUDED IN ITEM NO. 701-01.01, CONCRETE SIDEWALK (4").

THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY FOR REMOVAL, STORAGE, AND INSTALLATION OF DECORATIVE LIGHTS. THE LIGHTS SHALL BE INSTALLED AT THE EXISTING LOCATIONS. SEE SHEET BR-119-8 FOR DETAILS.

SCOPE OF WORK:

1. DETOUR TRAFFIC ACCORDING TO TRAFFIC CONTROL PLAN TO MAINTAIN 2-WAY TRAFFIC ON BRIDGE AND TO KEEP ADJACENT BUSINESSES ACCESS OPEN AS REQUIRED DURING CONSTRUCTION.
2. CLOSE SIDEWALKS AND DETOUR PEDESTRIANS ACCORDING TO TRAFFIC CONTROL PLAN AS REQUIRED DURING CONSTRUCTION.
3. INSTALL EROSION AND SEDIMENT CONTROL MEASURES ACCORDING TO EROSION CONTROL PLAN ON SHEET 2E.
4. REMOVE EXISTING ASPHALT WEARING SURFACE ON BRIDGE DECK.
5. SCARIFY 1" TOP OF CONCRETE BRIDGE DECK AND SIDEWALK.
6. REPAIR REMAINING CONCRETE DECK WITH FULL AND PARTIAL DEPTH DECK REPAIR.
7. REMOVE DIRT, DEBIRS, AND VEGETATION FROM EXISTING DECK DRAINS.
8. INSTALL A STRIP SEAL EXPANSION JOINT AT BENT 1 ACCORDING TO SBR-2-115, SBR-2-116, SBR-2-119, AND DRAWING NO. BR-119-8.
9. INSTALL LINK SLAB AT BENT 2 THRU BENT 5 ACCORDING TO DETAILS ON DRAWING BR-119-8.
10. INSTALL NEW 4 1/2" CONCRETE OVERLAY ON DECK AND SIDEWALK. USE MECHANICAL THREADED COUPLERS FOR PHASE CONSTRUCTION.
11. INSTALL NEW STD-11-2 STANDARD CONCRETE CLASSIC RAIL, RE-INSTALL EXISTING DECORATIVE STREET LIGHTS, AND RE-ATTACH OF EXISTING UTILITIES.
12. TRANSITION SIDEWALK/RAMP AT BRIDGE ENDS TO BE ADA COMPLIANT.
13. INSTALL APPROACH GUARDRAIL AND/OR PEDESTRIAN HANDRAIL AS REQUIRED.
14. REPAIR SPALLED/DELAMINATED CONCRETE BEAMS, CAPS, ABUTMENTS, ETC.
16. CLEAN AND PAINT STEEL BEARINGS.
17. INSTALL TOE WALL AT ABUTMENTS 1 AND 2 ACCORDING TO DETAILS ON SHEET BR-119-9.



PLAN VIEW
SCALE: 1/8" = 1'

LIST OF BRIDGE DRAWINGS

DWG NO.	LAST REV. DATE	DESCRIPTION
BR-119-1		LAYOUT OF BRIDGE TO BE REPAIRED
BR-119-2		ESTIMATED BRIDGE QUANTITIES
BR-119-3		GENERAL NOTES
BR-119-4		PHASE I CONSTRUCTION AND DEMOLITION
BR-119-5		PHASE II CONSTRUCTION AND DEMOLITION
BR-119-6		SUPERSTRUCTURE
BR-119-7		OVERLAY REINFORCEMENT
BR-119-8		MISCELLANEOUS DETAIL
BR-119-9		SUBSTRUCTURE REPAIR
BR-119-10		BRIDGE REPAIR DETAIL
BR-119-11		EXPANSION JOINT DETAIL
BR-119-12		BILL OF STEEL

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LIST OF REFERENCE DRAWINGS
(TO BE PRINTED WITH PLANS)

DWG NO.	DESCRIPTION
B-6-49	LIGHT STANDARDS
B-10-80	STANDARD CONCRETE BRIDGES
C-2-85	STANDARD CONCRETE DECK GIRDERS
C-5-32 THRU 36	EXISTING BRIDGE DRAWINGS

LEGEND

- 4" Ø DECK DRAINS
- EXISTING DECORATIVE STREET LIGHT
- SA — SANITARY SEWER
- - - F - - - FIBER OPTIC CABLE

STANDARD BRIDGE DRAWINGS

DWG NO.	LAST REV. DATE	DESCRIPTION
STD-9-1	10-07-08	REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS
STD-11-2	05-01-14	STANDARD CONCRETE CLASSIC RAIL
SBR-2-115	01-04-96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT, AND CONSTRUCTION TYPES "A" THRU "J".
SBR-2-116	01-04-96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT, AND CONSTRUCTION TYPES "A" THRU "J".
SBR-2-119	05-30-96	STRIP SEAL EXPANSION JOINTS REPLACEMENT CONSTRUCTION DETAILS TYPE "E" AND TYPE "F"

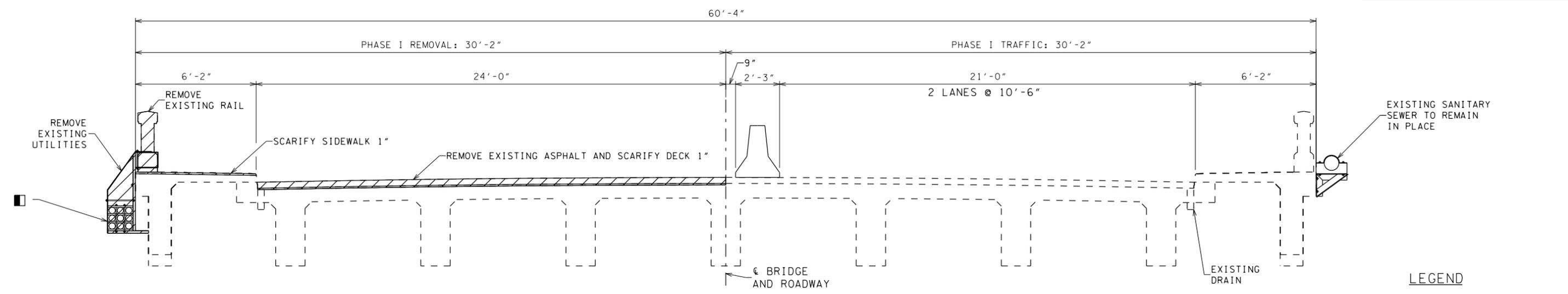
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE TO BE REPAIRED

BRIDGE NO 26-SR016-12.73
DINAH SHORE BLVD. (SR-16)
OVER
BOILING FORK CREEK
FRANKLIN COUNTY
2015

DESIGNED BY JMT DATE 4/2014
DRAWN BY JMT DATE 4/2014
SUPERVISED BY BEB DATE 4/2014
CHECKED BY HP DATE 4/2014

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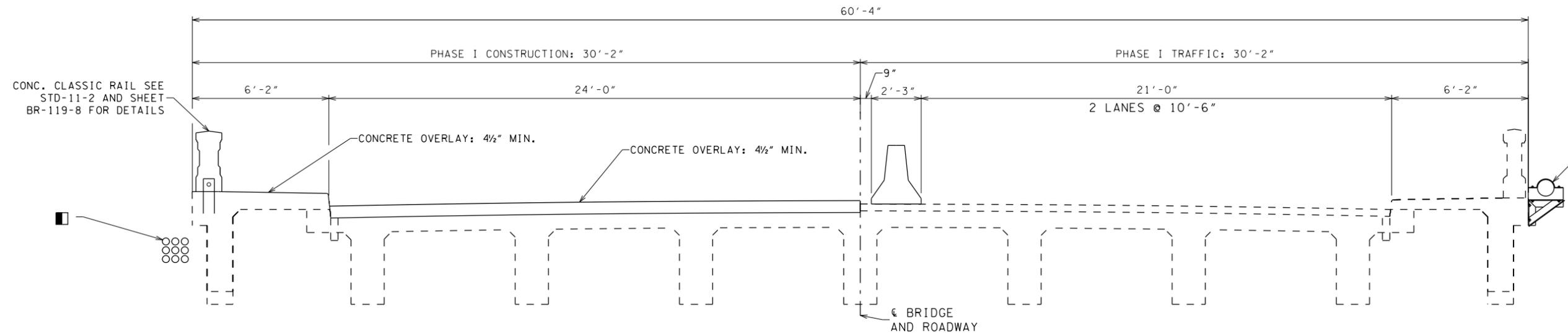


TYPICAL CROSS SECTION
 PHASE I REMOVAL
 LOOKING FORWARD ON SURVEY

LEGEND

	PORTABLE BARRIER
	AREA TO BE REMOVED

CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR REMOVAL AND RELOCATION OF UTILITIES.



TYPICAL CROSS SECTION
 PHASE I CONSTRUCTION
 LOOKING FORWARD ON SURVEY

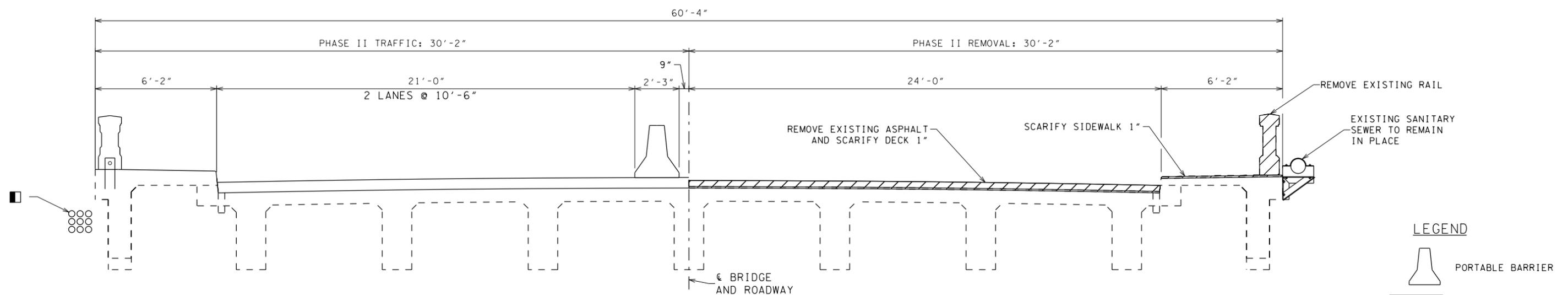
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 NOT FOR BIDDING

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 PHASE I CONSTRUCTION
 AND DEMOLITION
 BRIDGE NO 26-SR016-12.73
 DINAH SHORE BLVD. (SR-16)
 OVER
 BOILING FORK CREEK
 FRANKLIN COUNTY
 2015

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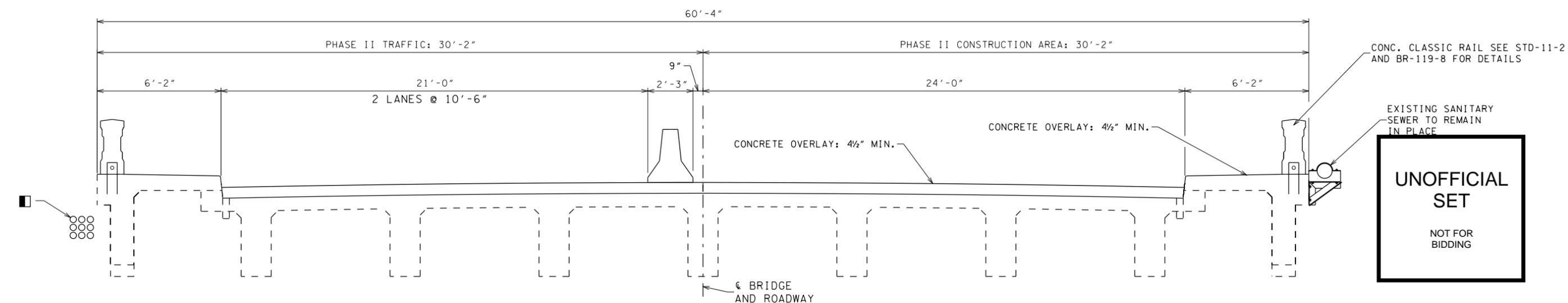
PROJECT NO.	YEAR	SHEET NO.
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TYPICAL CROSS SECTION
PHASE II REMOVAL
LOOKING FORWARD ON SURVEY

CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR REMOVAL AND RELOCATION OF UTILITIES



TYPICAL CROSS SECTION
PHASE II CONSTRUCTION
LOOKING FORWARD ON SURVEY

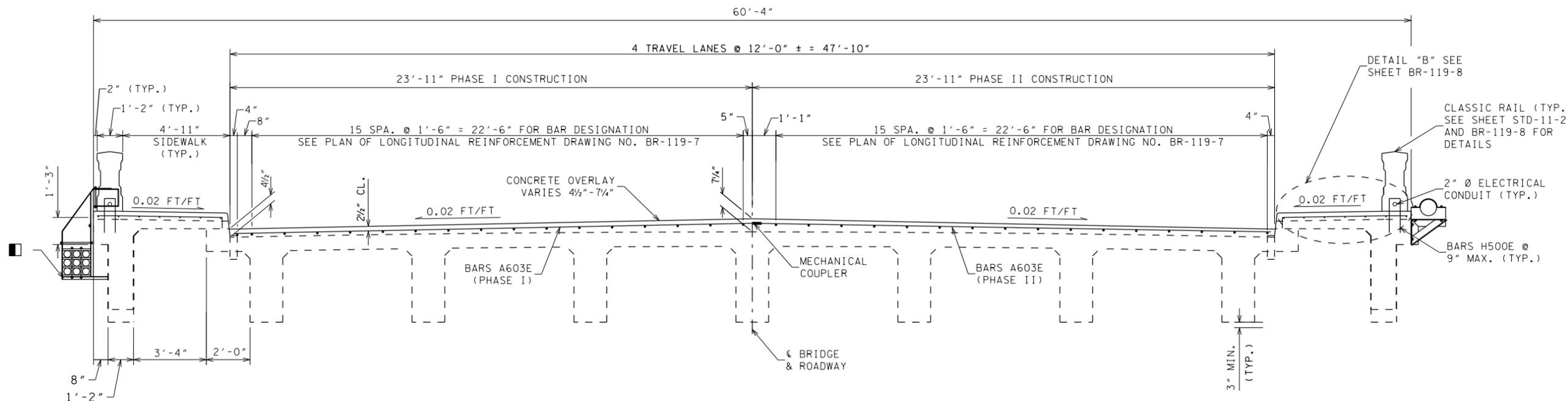
UNOFFICIAL SET
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PHASE II CONSTRUCTION
AND DEMOLITION

BRIDGE NO 26-SR016-12.73
DINAH SHORE BLVD. (SR-16)
OVER
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FRANKLIN COUNTY
2015

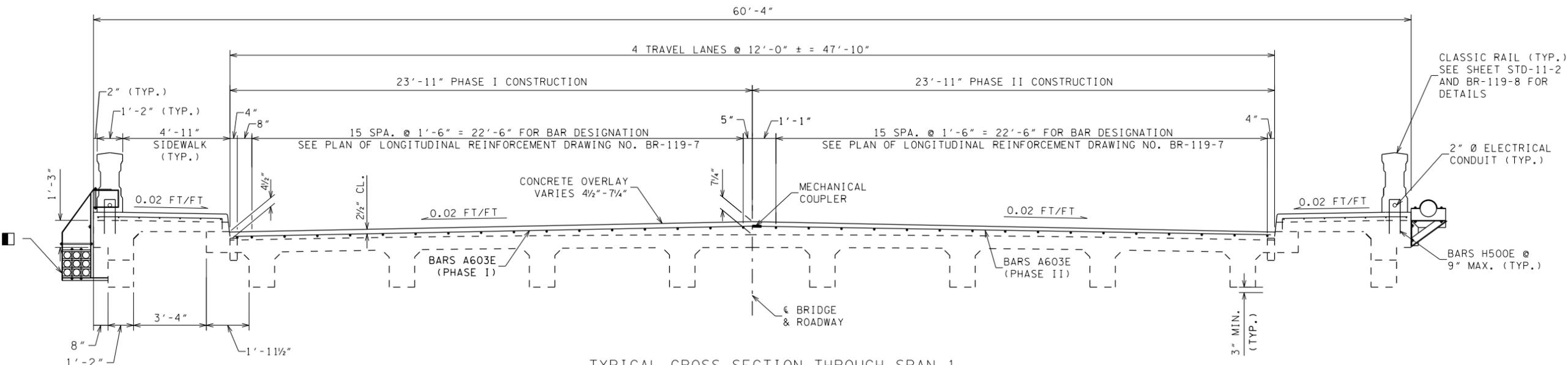
DESIGNED BY: JMT DATE: 4/2014
DRAWN BY: JMT DATE: 4/2014
SUPERVISED BY: BEB DATE: 4/2014
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TYPICAL CROSS SECTION THROUGH SPANS 2-6
LOOKING FORWARD
SCALE: 3/8" = 1'

****SPECIAL NOTE REGARDING ELEVATIONS****
THE ENGINEER MAY ADJUST THE PLANS ELEVATIONS SO THAT THE CONCRETE OVERLAY IS AT A MINIMUM THICKNESS OF 4 1/2 INCHES.



TYPICAL CROSS SECTION THROUGH SPAN 1
LOOKING FORWARD
SCALE: 3/8" = 1'

- NOTES:**
1. ALL COST TO FURNISH AND INSTALL ALL SLAB STEEL INCLUDING COUPLERS SHALL BE PAID FOR UNDER ITEM NO. 604-02.03, EPOXY COATED REINFORCING STEEL, LBS.
 2. ALL COST TO FURNISH AND INSTALL MIN. 4 1/2" CONCRETE OVERLAY SHALL BE PAID FOR UNDER ITEM NO. 604-03.09, CLASS "D" CONCRETE (BRIDGE DECK), C.Y.
 3. CONTRACTOR SHALL FIELD ADJUST DECK DRAINS TO FINISHED GRADE. COST TO BE INCLUDED IN ITEM NO. 604-03.09, CLASS "D" CONCRETE (BRIDGE DECK), C.Y. SEE DETAILS THIS SHEET AND DRAWING BR-119-1.
 4. CONTRACTOR MAY ADJUST REINFORCING STEEL AS NEEDED TO ACCOMMODATE LOCATIONS OF EXISTING DECK DRAINS.

- CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR REMOVAL AND RELOCATION OF UTILITIES.
- ▲ PVC FLANGE FITTING. CONCRETE OVERLAY TO BE PLACED ON TOP OF FLANGE TO SECURE THE DRAIN EXTENSION.
- 3" I.D. SCH. 40 PVC PIPE INSERTED INTO EXISTING 4" I.D. DRAIN. THE PIPE SHALL EXTEND A MINIMUM OF 3" BELOW THE BOTTOM OF BEAMS.
- NEW CONCRETE OVERLAY THICKNESS VARIES 4 1/2" TO 7 1/4" SEE DETAILS ON THIS SHEET.

UNOFFICIAL SET
NOT FOR BIDDING

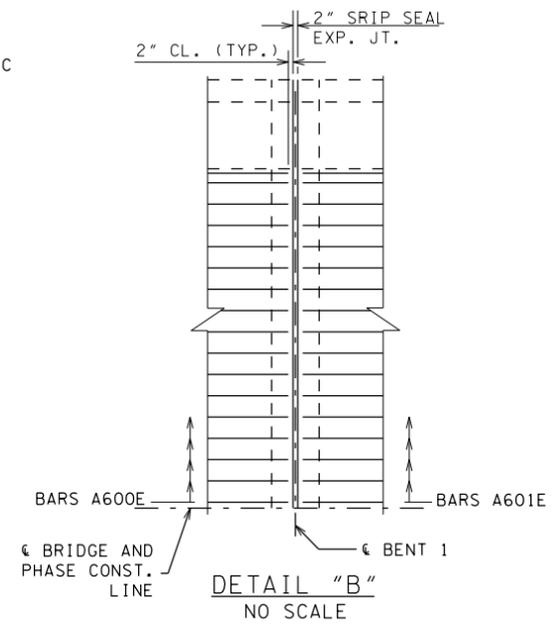
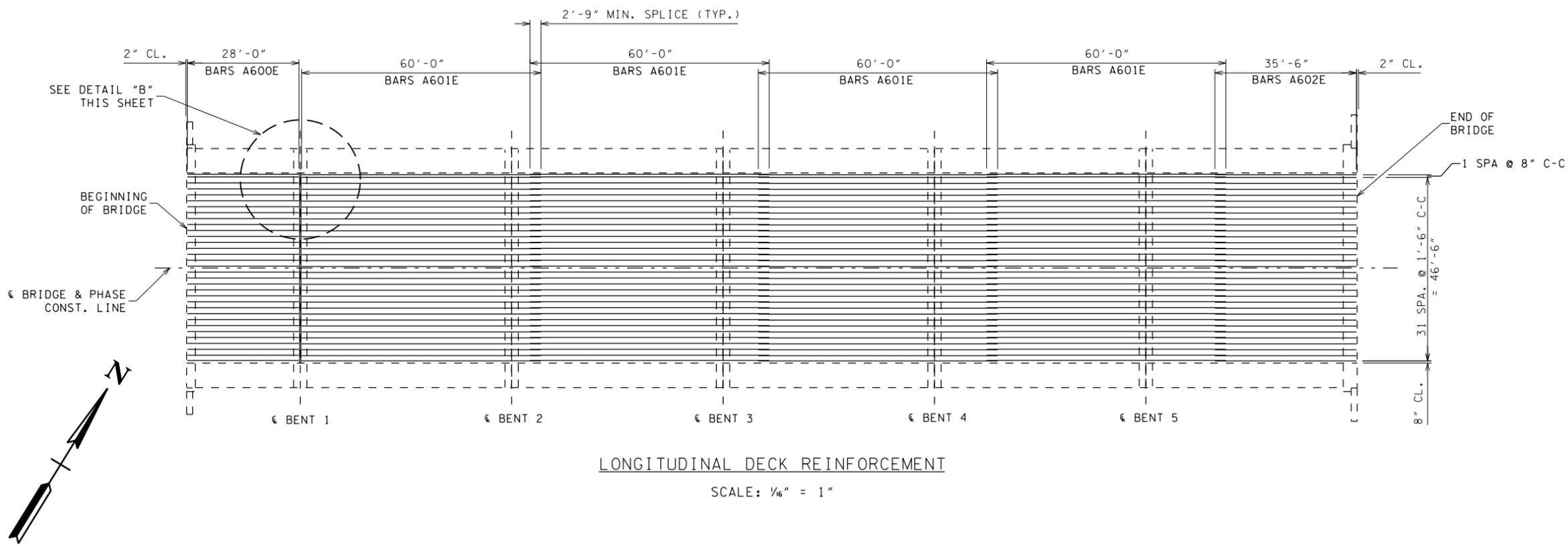
ESTIMATED QUANTITIES

604-02.03 EPOXY COATED REINFORCING STEEL LBS.	604-03.09 CLASS "D" CONCRETE (BRIDGE DECK) C.Y.
38,223	307

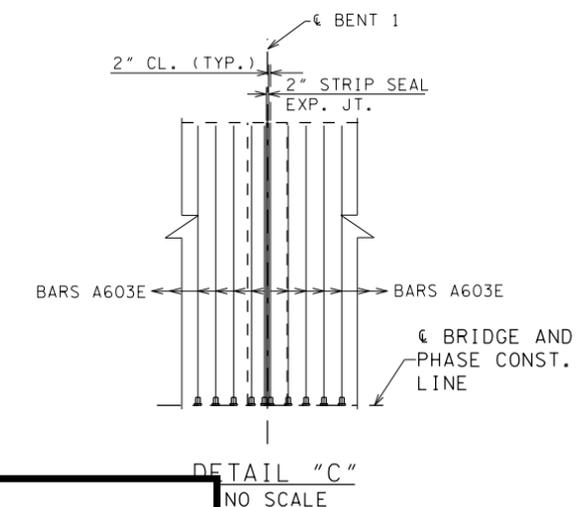
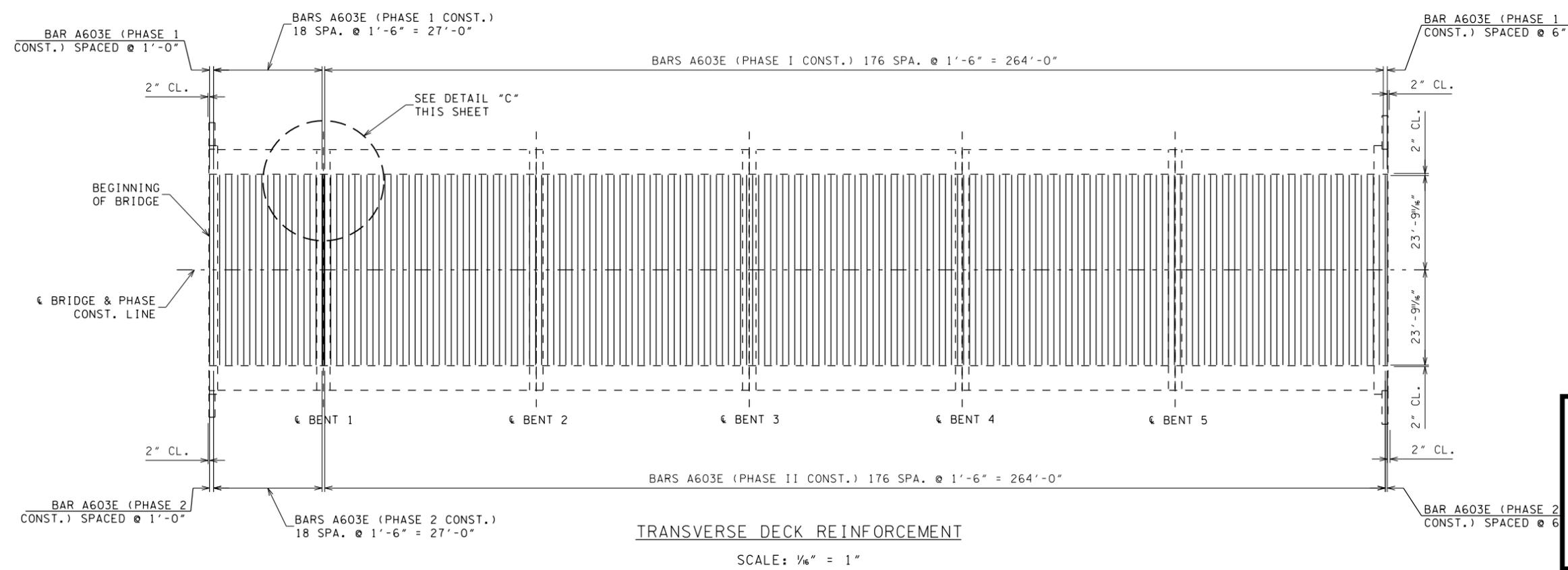
DESIGNED BY: JMT DATE: 4/2014
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CHECKED BY: HP DATE: 4/2014

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE
BRIDGE NO 26-SR016-12.73
DINAH SHORE BLVD. (SR-16)
OVER
BOILING FORK CREEK
FRANKLIN COUNTY
2015

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NOTE: DETAIL "B" AND DETAIL "C" ARE SYMMETRICAL ABOUT € OF BRIDGE AND PHASE CONSTRUCTION LINE.



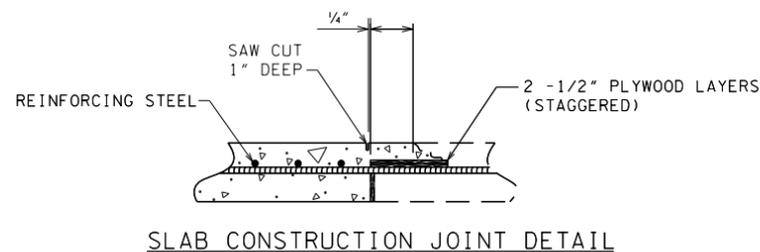
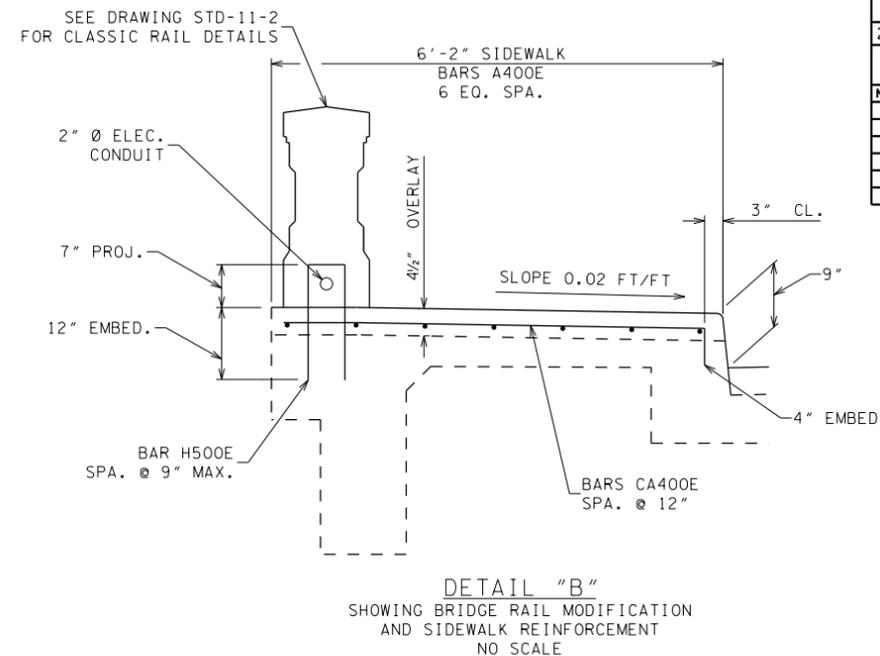
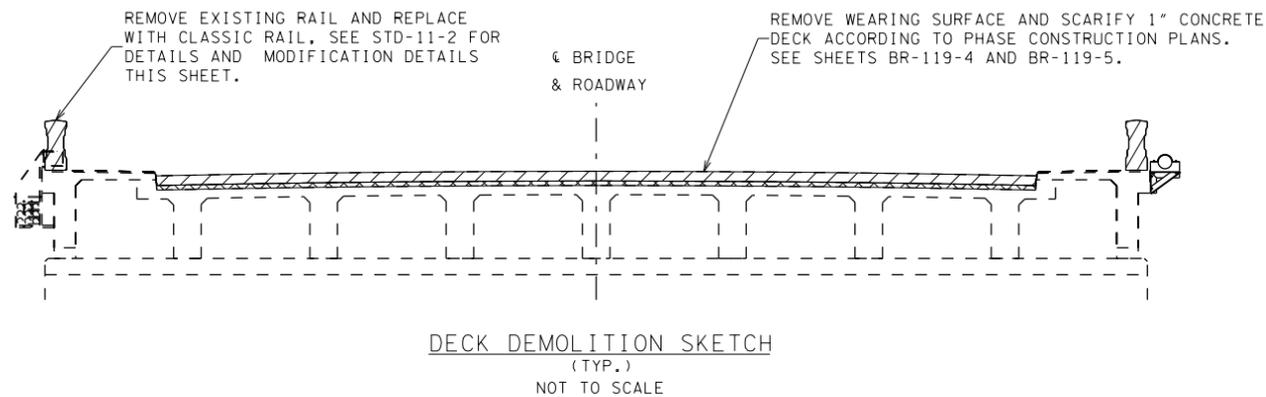
UNOFFICIAL SET
NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
OVERLAY REINFORCEMENT
BRIDGE NO 26-SR016-12.73
H SHORE BLVD. (SR-16)
OVER
BOILING FORK CREEK
FRANKLIN COUNTY
2015

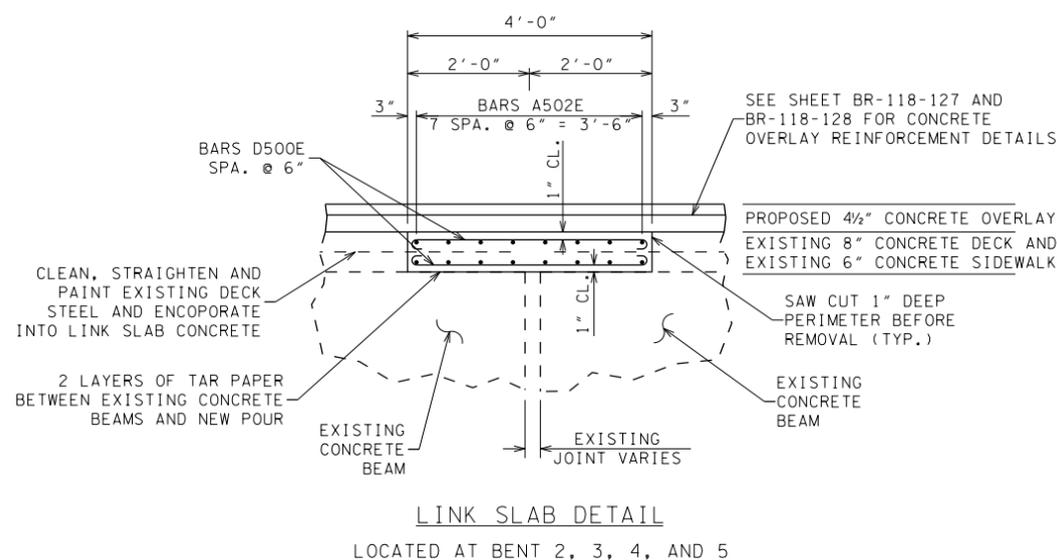
NOTES:
1. FOR TYPICAL SECTIONS, SEE BR-119-6.

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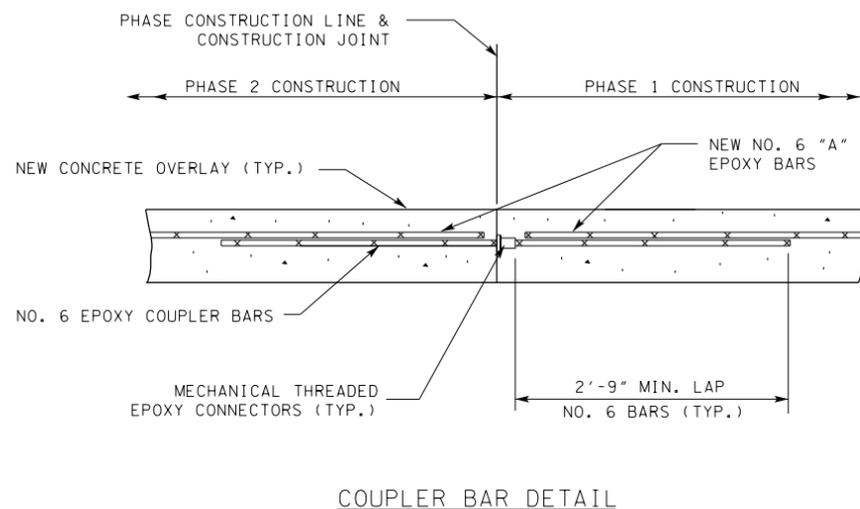


NOTE: SLAB CONSTRUCTION JOINTS MAY BE LOCATED AT THE CONTRACTOR'S OPTION EXCEPT NO JOINT MAY BE LOCATED CLOSER THAN 1/5 SPAN LENGTH FROM AN INTERIOR SUPPORT. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS DURING PLACEMENT OF SLAB TO PREVENT THE EXTERIOR BEAM FROM TWISTING. NO EQUIPMENT SHALL BE PERMITTED ON THE BRIDGE UNTIL ALL POURS ARE MADE AND THE CONCRETE IS PROPERLY CURED. ALL SLAB CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE SLAB CONSTRUCTION JOINT DETAIL SHOWN ABOVE.

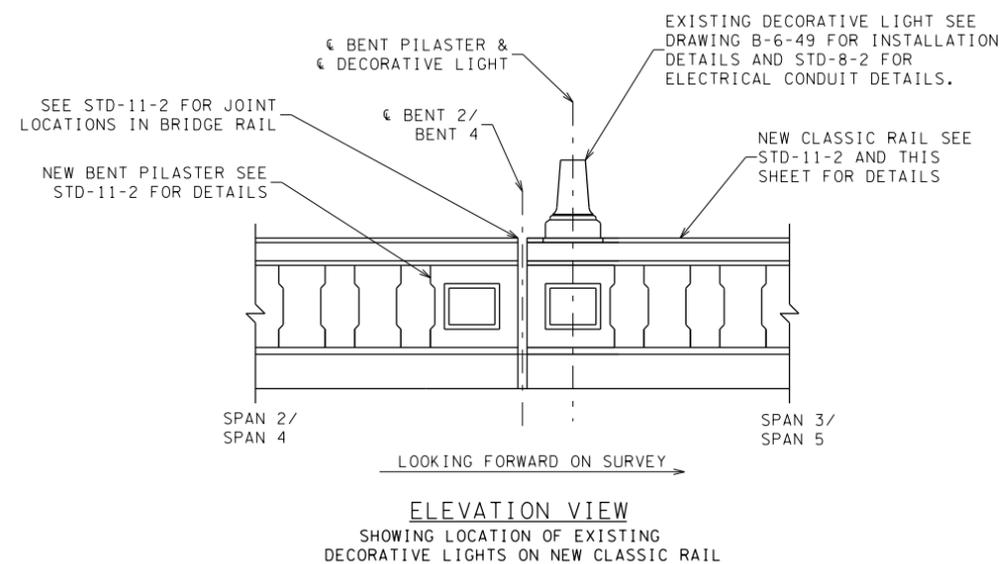


LINK SLAB ESTIMATED QUANTITIES (EACH)

604-02.03 EPOXY COATED REINFORCING STEEL LBS.	604-03.09 CLASS "D" CONCRETE (BRIDGE DECK) C.Y.
2,178	6



NOTE:
COST OF MECHANICAL THREADED CONNECTORS WITH COUPLER BARS TO BE INCLUDED UNDER ITEM NO. 604-02.03, EPOXY COATED REINFORCING STEEL, LBS.



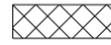
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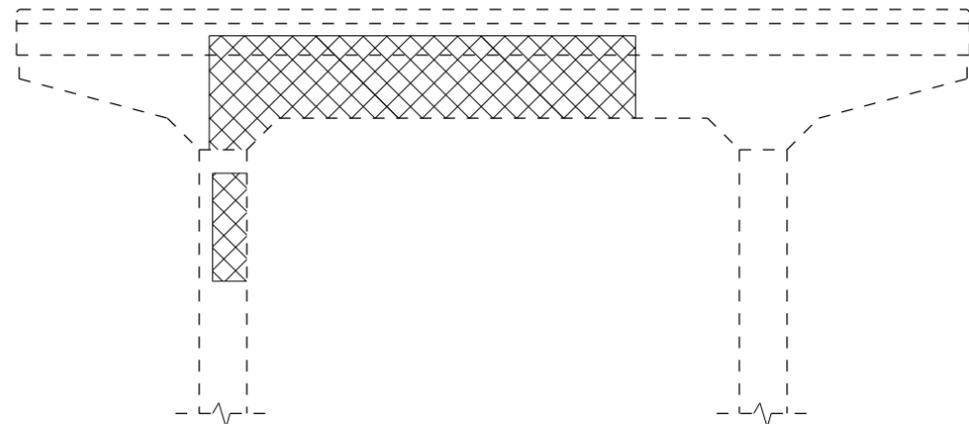
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS DETAILS
BRIDGE NO 26-SR016-12.73
DINAH SHORE BLVD. (SR-16)
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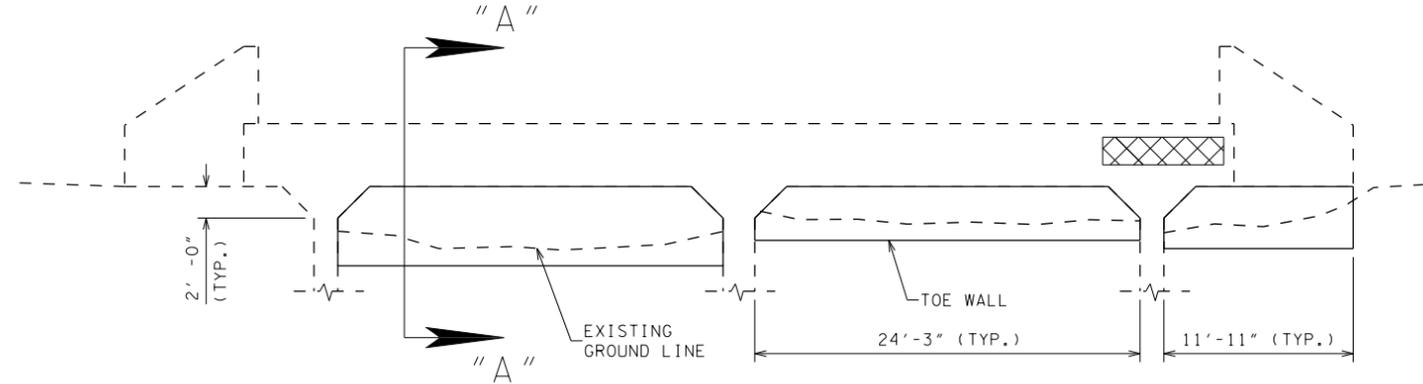
LEGEND

 AREAS OF CONCRETE REPAIR TO RECEIVE QUICK SET PATCHING MATERIAL AND/OR HIGH EARLY STRENGTH CONCRETE

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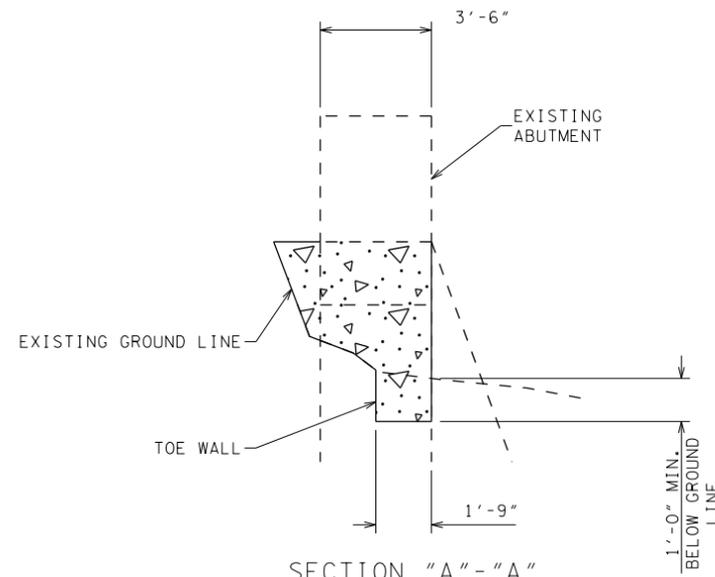
TYPICAL BENT
NO SCALE



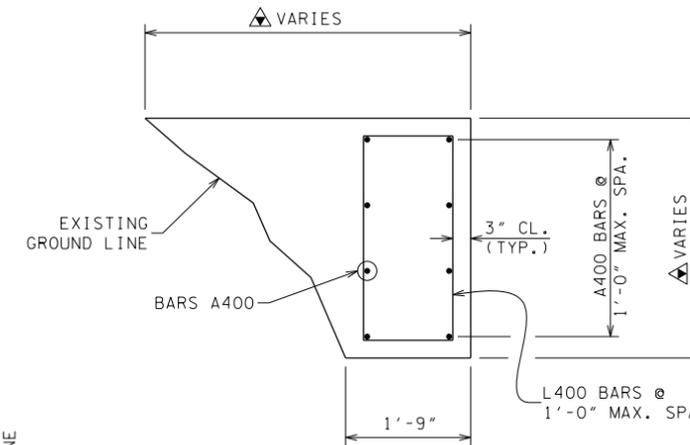
TYPICAL ABUTMENT
NO SCALE

PROCEDURE FOR CONCRETE REPAIRS DEEPER THAN 3 INCHES:

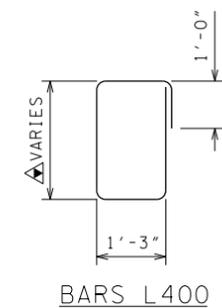
1. SAW CUT RECTANGULAR AREA (ONE INCH DEEP) FOR LENGTH (HORIZONTALLY AND VERTICALLY) AS NEEDED TO OBTAIN MINIMUM SPLICE LENGTH SHOWN IN NOTE 3.
2. CLEAN EXISTING REINFORCING STEEL PRIOR TO PERFORMING SPLICE REPAIRS.
3. SPLICE NEW IN-KIND REINFORCING STEEL AS DIRECTED BY ENGINEER.
4. IF A PORTION OF EXISTING BAR HAS EXCESSIVE LOSS OF SECTION, A NEW BAR SHALL BE SPLICED TO THE EXISTING BAR WITH THE FOLLOWING DIMENSIONS:
FOR #9 BAR, MINIMUM SPLICE LENGTH OF 44 INCHES IN BOTH DIRECTIONS.
FOR #5 BAR, MINIMUM SPLICE LENGTH OF 15 INCHES IN BOTH DIRECTIONS.
5. POUR BACK TO ORIGINAL LINES WITH HIGH EARLY STRENGTH CONCRETE ACCORDING TO DETAILS ON SHEET BR-119-10 AND MANUFACTURER'S SPECIFICATIONS.



SECTION "A"- "A"
NO SCALE



SECTION "A"- "A"
SHOWING TOE WALL DETAIL
NO SCALE



△ THE CONTRACTOR SHALL VERIFY DIMENSIONS BEFORE ORDERING CONCRETE AND REINFORCING STEEL.

GENERAL CONCRETE REPAIR NOTES:

1. CONCRETE REPAIR AREAS SHALL BE LOCATED BY THE ENGINEER.
2. REPAIR AREAS OF SPALLED OR DELAMINATED CONCRETE ON PIERS AND ABUTMENTS WITH QUICK SET PATCHING MATERIAL AND/OR HIGH EARLY STRENGTH CONCRETE.
3. THE AREAS TO BE REPAIRED SHALL BE SUFFICIENTLY LARGER THAN THE SPALLED AREAS TO ENSURE THAT PATCHES EXTEND INTO SOUND CONCRETE. SEE BRIDGE REPAIR DETAILS ON SHEET BR-XXX-XX FOR LIMITS OF CONCRETE REPAIR.
4. UNSOUND CONCRETE SHALL BE REMOVED TO A MINIMUM DEPTH OF 3/4" BEHIND EXISTING REINFORCEMENT.
5. COST OF REMOVING ALL UNSOUND AND DETERIORATED CONCRETE, PLACING OF NEW CONCRETE, AND ALL LABOR AND MATERIALS NECESSARY FOR COMPLETING THE WORK SHALL BE PAID FOR UNDER ITEM NO. 604-10.54, CONCRETE REPAIR, S.F. OR 604-10.05
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS, INCLUDING TEMPORARY SHORING WHEN FULL BOTTOM OF CAP IS REQUIRED TO BE REPAIRED. COST OF SHORING TO BE INCLUDED IN OTHER ITEMS BID ON.
7. SEE DRAWING BR-119-10 FOR MORE DETAILS OF SPALLED CONCRETE REPAIR.
8. SEE DRAWING BR-119-10 FOR EPOXY INJECTION NOTES.

ESTIMATED QUANTITIES		
SUBSTRUCTURE ELEMENT	604-10.05 CONCRETE S.F.	604-10.54 CONCRETE REPAIR S.F.
ABUTMENT 1	10	25
PIER 1	75	289
PIER 2	—	14
PIER 3	5	34
PIER 4	10	20
PIER 5	80	107
ABUTMENT 2	—	13
TOTAL	180	502

TOE WALL ESTIMATED QUANTITIES FOR EACH ABUTMENT

604-03.02 STEEL BAR REINFORCING LBS.	604-03.09 CLASS "A" CONCRETE C.Y.
1,239	48

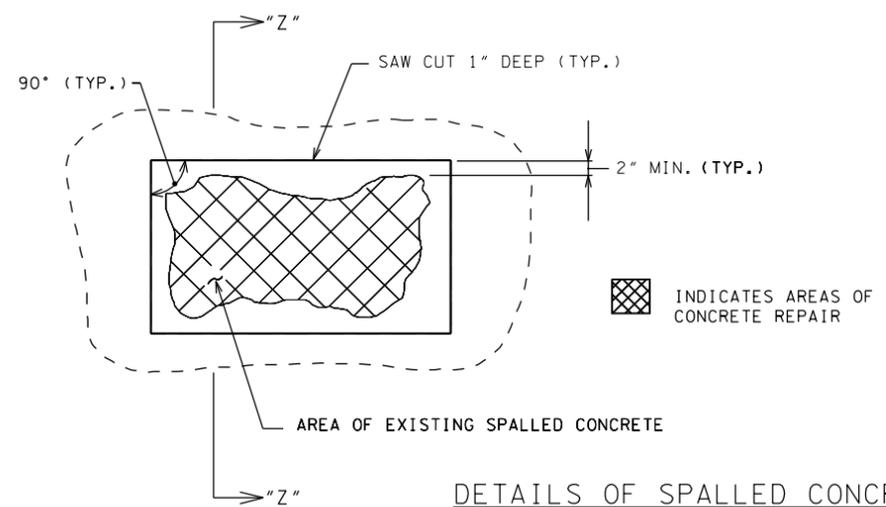
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SUBSTRUCTURE REPAIR DETAILS

BRIDGE NO 26-SR016-12.73
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DETAILS OF SPALLED CONCRETE SURFACE AND REPAIR

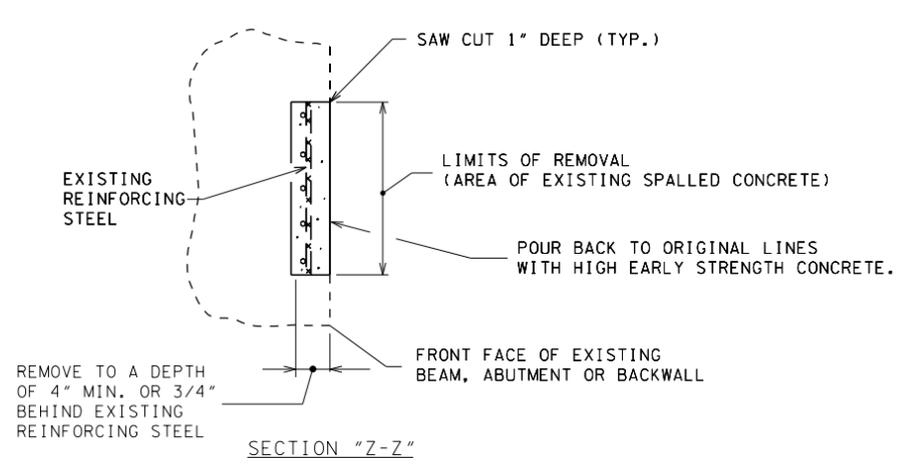
NOTES:
 EXTREME CARE SHALL BE TAKEN WHEN REMOVING THE DETERIORATED CONCRETE SO AS NOT TO DAMAGE THE EXISTING REINFORCING STEEL. ALL EXPOSED REINFORCING SHALL BE COMPLETELY CLEANED TO THE SATISFACTION OF THE ENGINEER BEFORE REPOURING.

FOR CONCRETE NOTE, SEE GENERAL NOTES ON DRAWING BR-119-3.

LIMITS AND LOCATION OF REPAIRS TO BE DESIGNATED BY THE ENGINEER. ALL UNSOUND CONCRETE IN THESE AREAS SHALL BE REMOVED AND REPOURED WITH PATCHING MATERIAL. THE MINIMUM DEPTH OF REPAIR SHALL BE 4 INCHES. DEPTH MAY BE INCREASED TO EXTEND INTO SOUND CONCRETE AS DIRECTED BY THE ENGINEER. EDGES OF THE REPAIR AREAS SHALL HAVE A MINIMUM 1 INCH SAW CUT PERPENDICULAR TO THE FACE OF THE CONCRETE.

PATCHING MATERIAL FOR REPAIRS LESS THAN 3 INCHES DEEP SHALL BE POLYMER MODIFIED CEMENTITIOUS STRUCTURAL PATCHING MATERIAL FROM THE TENNESSEE DEPARTMENT OF TRANSPORTATION QUALIFIED PRODUCTS LIST 13, SECTION B.6. PATCHING MATERIAL FOR REPAIRS DEEPER THAN 3 INCHES SHALL BE RAPID SET HIGH EARLY STRENGTH CEMENTITIOUS PATCHING MATERIAL. PATCHING MATERIALS SHALL BE FROM THE TENNESSEE DEPARTMENT OF TRANSPORTATION QUALIFIED PRODUCTS LIST 13, SECTION B.1.

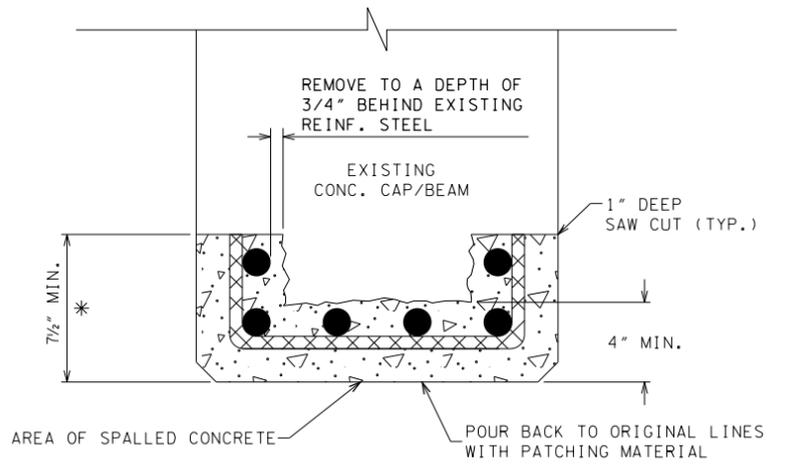
SAW CUT EXISTING CONCRETE SURFACES SO AS TO OBTAIN SQUARED CORNERS.



NOTES:

POWER DRIVEN HAND TOOLS USED FOR THE REMOVAL OF UNSOUND CONCRETE ARE SUBJECT TO THE FOLLOWING RESTRICTIONS:
 1) PNEUMATIC HAMMERS HEAVIER THAN A 35 LB. CLASS SHALL NOT BE USED.
 2) CHIPPING HAMMERS OF THE 15 LB. CLASS SHALL BE USED TO REMOVE CONCRETE FROM BEHIND THE REINFORCING STEEL.
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS. DETAILS OF ANY TEMPORARY SUPPORT SYSTEM (IF REQUIRED) SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND SHALL MEET WITH THE FULL SATISFACTION OF THE ENGINEER BEFORE REPAIRS HAVE BEGUN. COST TO BE INCLUDED IN ITEMS BID ON.

COST OF REMOVING DETERIORATED CONCRETE, CLEANING EXISTING REINFORCING STEEL, FORMING, PATCHING MATERIAL AND ALL ADDITIONAL MATERIALS AND LABOR NECESSARY TO COMPLETE REPAIRS SHOWN IN THIS DETAIL TO BE INCLUDED UNDER ITEM NO. 604-10.54, CONCRETE REPAIRS, S.F. OR ITEM NO. 604-10.05, CONCRETE REPAIRS, S.F.



* DENOTES: LIMIT AND LOCATIONS OF REPAIR TO BE DESIGNATED BY THE ENGINEER.
 NOTE: TEMPORARY SHORING MAY BE REQUIRED WHEN FULL BOTTOM IS TO BE REPAIRED. COST OF SHORING TO BE INCLUDED IN OTHER ITEMS BID ON.

TYPICAL BEAM AND/OR BENT CAP REPAIR

NOTES:

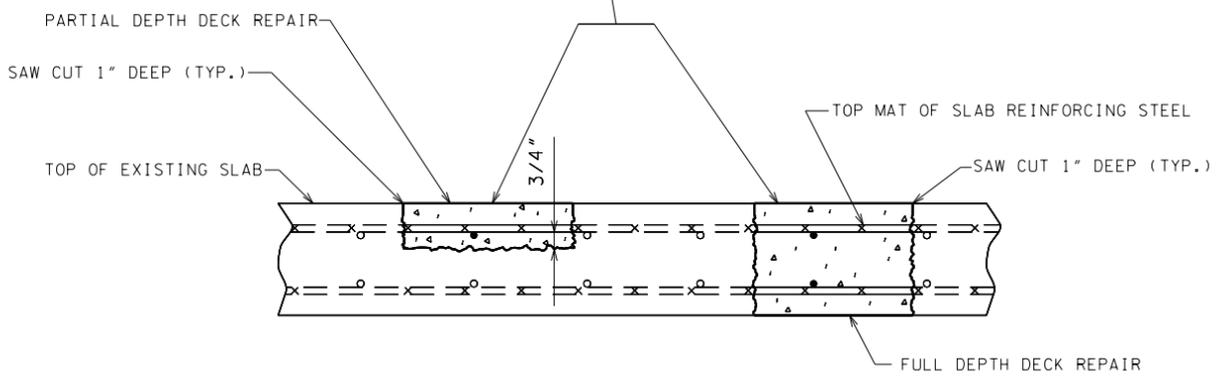
1. REMOVE CONCRETE IN ALL DELAMINATED AREAS TO A DEPTH OF 3/4" BELOW THE TOP BAR OF THE TOP MAT OF REINFORCING STEEL. ALL REINFORCING STEEL IN AREAS OF DECK REPAIR SHALL BE COMPLETELY CLEANED. AREAS OF CONCRETE REMOVAL SHALL BE DESIGNATED BY PERSONNEL FROM THE HEADQUARTERS, BRIDGE INSPECTION AND REPAIR OFFICE. INSPECTIONS TO DETERMINE AREAS OF DECK REPAIR SHALL BE SCHEDULED WITH THE BRIDGE REPAIR OFFICE AT LEAST THREE (3) DAYS IN ADVANCE.

2. DECK REPAIR WILL BE PAID FOR UNDER ITEM NO. 604-10.50, BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB), S.Y. AND ITEM NO. 604-10.30, BRIDGE DECK REPAIR (FULL DEPTH OF SLAB), S.Y. DURING PARTIAL DEPTH REPAIRS, SHOULD DETERIORATED CONCRETE BE ENCOUNTERED WHICH APPEARS TO RUN FULL DEPTH IN THE SLAB, THE ENGINEER MAY DESIGNATE THESE AREAS TO BE REPAIRED UNDER ITEM NO. 604-10.30.

3. POWER DRIVEN HAND TOOLS USED FOR THE REMOVAL OF UNSOUND CONCRETE IN MAKING PARTIAL AND FULL DEPTH REPAIRS ARE SUBJECT TO THE FOLLOWING RESTRICTIONS: 1) PARTIAL DEPTH REPAIRS; PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 60 LBS CLASS SHALL NOT BE USED. 2) FULL DEPTH REPAIRS; PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 90 LBS CLASS SHALL NOT BE USED. ALSO ALL DECK REPAIR OVER BEAMS WILL BE RESTRICTED TO 60 LBS PNEUMATIC HAMMERS. 3) CHIPPING HAMMERS OF THE 15 LB CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL.

4. CARE SHALL BE TAKEN WHEN REMOVING ANY AREAS OF SLAB NEAR THE 1" SAW CUT LINE. A 1" MIN. VERTICAL DEPTH SAW CUT LINE IS REQUIRED AROUND THE FULL PERIMETER OF PATCH PRIOR TO PLACEMENT OF CONCRETE.

CONCRETE FOR DECK REPAIR SHALL BE HIGH EARLY STRENGTH CONCRETE, f'c = 3500 p.s.i. @ 28 DAY STRENGTH. TRAFFIC SHALL NOT BE PERMITTED ON ANY OF THE REPAIR AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 3000 p.s.i. MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS.



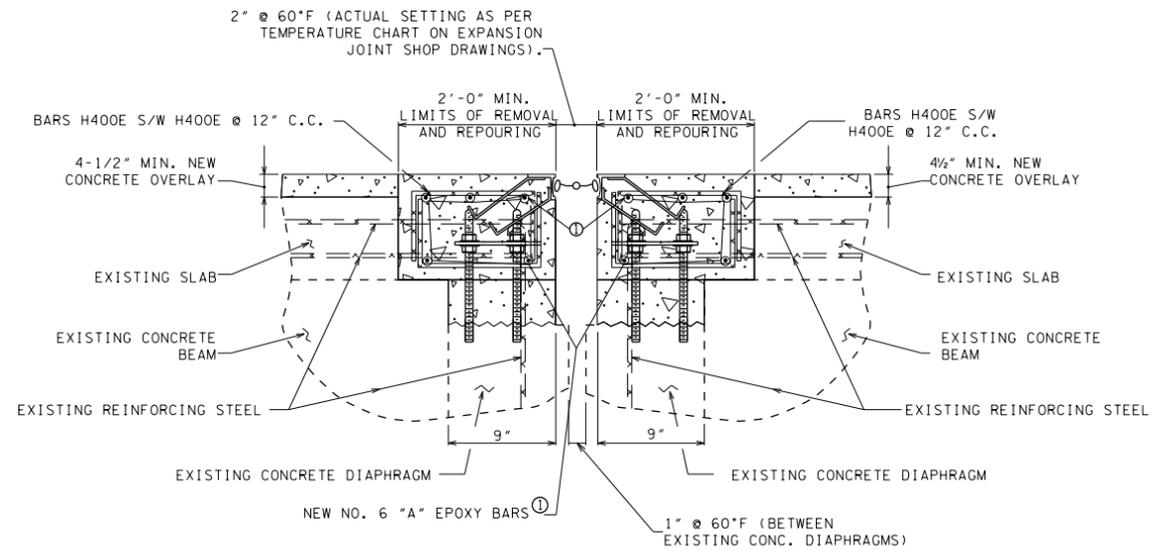
DETAIL SHOWING FULL AND PARTIAL DEPTH DECK REPAIR

UNOFFICIAL SET
 NOT FOR BIDDING

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BRIDGE REPAIR DETAILS
 BRIDGE NO 26-SR016-12.73
 DINAH SHORE BLVD. (SR-16)
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EXPANSION JOINT REPLACEMENT DETAIL - TYPE "F" ②③
 (BENT NO. 1)
 (NOT TO SCALE)

- ① NEW NO. 6 "A" EPOXY BARS TO BE CONTINUOUS. FIELD DRILL HOLES (1/4" LARGER THAN THE BARS) THROUGH STEEL PLATES. IF THE CONTRACTOR ELECTS TO SPLICE THE "A" NO. 6 BARS, TO FACILITATE INSTALLATION, A MINIMUM SPLICE OF 2'-3" SHALL BE PROVIDED.
- ② PENETRATING WATER REPELLANT CONCRETE SEALER SHALL BE APPLIED TO THE TOP AND VERTICAL SURFACES OF BENT 1 CAP. THE COST OF THE SEALER, COMPLETE AND IN PLACE, SHALL BE BID UNDER ITEM NUMBER 604-10.43. REFER TO GENERAL NOTES, DRAWING BR-119-3.
- ③ FOR MORE DETAILS, REFER TO TDOT STANDARD DRAWINGS SBR-2-115, SBR-2-116, & SBR-2-119.

NOTES:
 ALL NEW EXPANSION JOINTS SHALL BE INSTALLED UP THE FULL HEIGHT OF THE INSIDE FACE OF THE EXISTING SIDEWALKS OR CURBS. ALL NEW EXPANSION JOINTS SHALL BE PLACED UP THE FACE OF THE PARAPETS AS SHOWN IN DETAILS ON THESE DRAWINGS. ANY NECESSARY CONCRETE REMOVAL AND REPOURING IN THE CURB, SIDEWALK OR EXISTING CONCRETE PARAPET SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXPANSION JOINT REPAIR. ALL VERTICAL PORTIONS OF THE NEW EXPANSION JOINTS SHALL BE ANCHORED INTO THE CONCRETE CURBS, SIDEWALKS, OR PARAPETS AS SHOWN IN THESE PLANS. THE USE OF DRILLED GROUTED, OR DRILLED AND MECHANICAL INSERTS FOR THE ANCHORING OF THE VERTICAL PORTIONS OF THE EXPANSION JOINTS IS PROHIBITED.

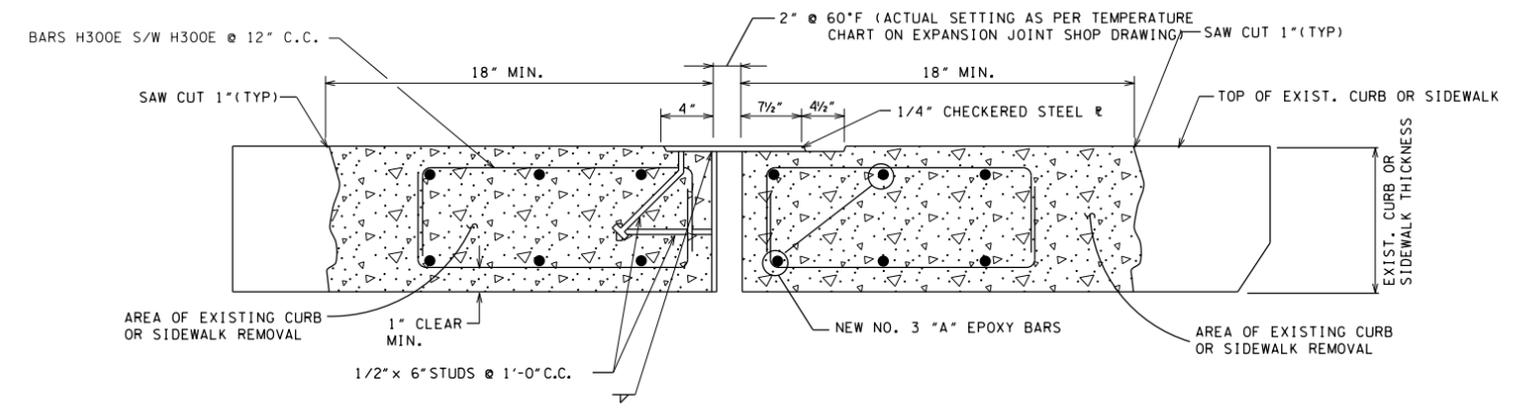
ALL CONCRETE POURS SHALL BE WELL CONSOLIDATED BEHIND AND AROUND THE EXPANSION JOINT STEEL REPAIRS.

ALL EXISTING JOINT OPENINGS SHALL BE THOROUGHLY CLEANED OF FOREIGN MATERIAL AND EXISTING JOINT MATERIAL BEFORE PLACING THE NEW EXPANSION JOINTS.

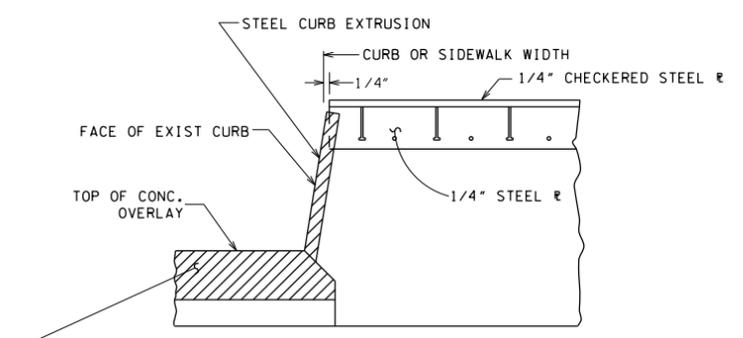
COST OF EXISTING CONCRETE REMOVAL IN THE EXPANSION JOINT REPAIR AREAS, NEW HIGH EARLY STRENGTH CONCRETE, FORMING, AND ALL MISCELLANEOUS MATERIALS AND LABOR NECESSARY TO INSTALL THE NEW EXPANSION JOINT SYSTEM COMPLETE AND IN PLACE TO BE INCLUDED IN THE PRICE BID FOR EXPANSION JOINT. COST OF ALL REPAIRS & MATERIALS NEEDED FOR COMPLETE INSTALLATION ON EXPANSION JOINT SHALL BE INCLUDED IN ITEM NO. 604-10.45.

REFER TO STANDARD DRAWINGS SBR-2-115, SBR-2-116 AND SBR-2-119 FOR MORE DETAILS OF EXPANSION JOINT REPAIR/REPLACEMENT AT BENTS 1.

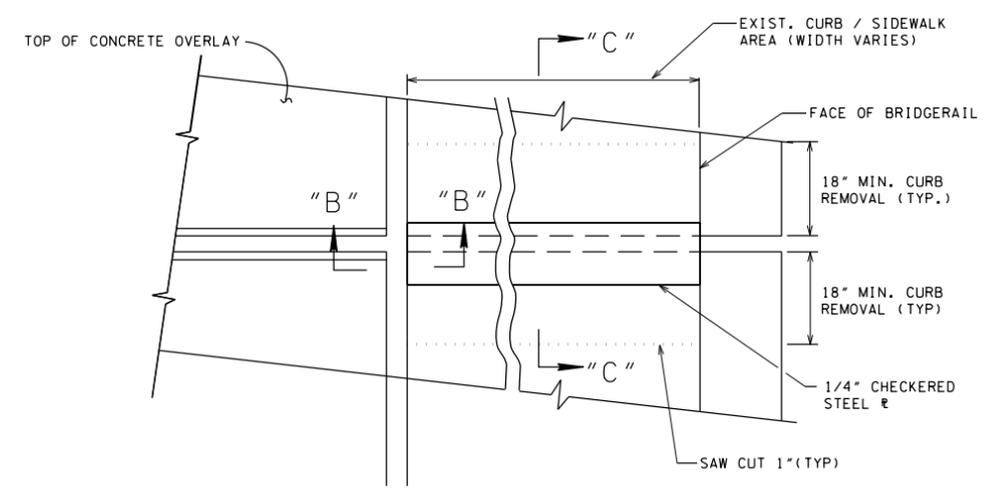
THE COST OF MODIFICATIONS OF THE EXISTING BRIDGE DETAILS NECESSARY TO PROPERLY INSTALL THE EXPANSION JOINT SHALL BE INCLUDED IN THE PRICE BID FOR THE JOINT. COST OF ALL REPAIRS AND MATERIALS NEEDED FOR COMPLETE INSTALLATION OF EXPANSION JOINT SHALL BE INCLUDED IN ITEM NO. 604-10.45.



SECTION "C-C"



SECTION "B-B"



PLAN OF EXISTING CURB OR SIDEWALK
 (SHOWING NEW STEEL COVER PLATE)

UNOFFICIAL SET
 NOT FOR BIDDING

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 EXPANSION JOINT DETAILS
 BRIDGE NO 26-SR016-12.73
 DINAH SHORE BLVD. (SR-16)
 OVER
 BOILING FORK CREEK
 FRANKLIN COUNTY
 2015

DESIGNED BY	JMT	DATE	4/14
DRAWN BY	JMT	DATE	4/14
SUPERVISED BY	BEB	DATE	4/14
CHECKED BY	HP	DATE	4/14

PROJECT NO.	YEAR	SHEET NO.	
26004-4242-04	2015		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

SUPERSTRUCTURE							
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS			LENGTH
				A	B	C	
A400E	SIDEWALK	4	14	28'-0"			28'-0"
A401E	SIDEWALK	4	56	60'-0"			60'-0"
A402E	SIDEWALK	4	14	35'-6"			35'-6"
CA400E	SIDEWALK OVERLAY	4	588	5'-8"	0'-6"		6'-2"
A600E	DECK OVERLAY	6	33	28'-0"			28'-0"
A601E	DECK OVERLAY	6	132	60'-0"			60'-0"
A602E	DECK OVERLAY	6	33	35'-6"			35'-6"
A603E	DECK OVERLAY	6	396	23'-9"			23'-9"
H500E	BRIDGE RAIL	5	784	0'-6"	1'-7"		3'-8"

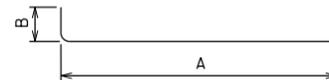
REQUIRED: 196 NO. 6 MECHANICAL COUPLERS WITH RELATED SPLICE BAR.

LINK SLAB (EACH)							
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS			LENGTH
				A	B	C	
A502E	LINK SLAB	5	32	30'-6"			30'-6"
D500E	LINK SLAB	5	248	3'-8"			4'-8"

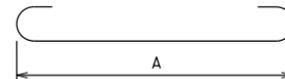
REQUIRED: 16 NO. 5 MECHANICAL COUPLERS WITH RELATED SPLICE BAR.



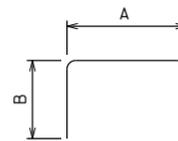
BARS A



BARS CA



BARS D



BARS H

REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	4	02

NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK DETAILS SHALL APPLY, EXCEPT AS NOTED.

NOTE: THE SUFFIX E FOR BARS SO MARKED DENOTES EPOXY COATED REINFORCEMENT.

**UNOFFICIAL
SET**

NOT FOR
BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BILL OF STEEL

BRIDGE NO 26-SR016-12.75
DINAH SHORE BLVD. (SR-16)
OVER
BOILING FORK CREEK
FRANKLIN COUNTY
2015

DESIGNED BY: JMT DATE: 4/14
DRAWN BY: JMT DATE: 4/14
SUPERVISED BY: BEB DATE: 4/14
CHECKED BY: HP DATE: 4/14