GENERAL NOTES

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

(2) DESIGN SPECIFICATIONS: AASHTO LRFD SEVENTH EDITION, 2014.

(3) LOADING: HL-93

(4) 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 TO REMOVE UNSOUND CONCRETE. FOR FULL DEPTH OF CONCRETE SLAB REMOVAL EXCEPT OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 90 POUND CLASS. FOR PARTIAL DEPTH OF CONCRETE SLAB REMOVAL AND ANY WORK OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 60 POUND CLASS. 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.

(5) FORMS AND FALSEWORK: ALL CONCRETE FORM WORK AND FALSEWORK SHALL BE REMOVED AFTER REPAIRS ARE COMPLETED. COST OF FORMS, FALSEWORK, AND TEMPORARY SUPPORT REMOVAL SHALL BE INCLUDED IN ITEMS BID ON. THIS WORK SHALL BE COMPLETED BEFORE FINAL PAYMENT IS APPROVED.

(6) FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.22 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.

(7) 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 MATERIAL.

(8) WELDING: CURRENT AASHTO/AWS D1.5M/D1.5 2002 BRIDGE WELDING CODE AND THE STANDARD SPECIFICATIONS. ALL WELDING TO BE COMPLETED BY AWS CERTIFIED WELDERS. SEE SECTION 602 OF THE STANDARD SPECIFICATIONS.

(9) REINFORCING STEEL: SEE SECTION 604 AND 907 OF THE STANDARD SPECIFICATIONS. REINFORCEMENT SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.

(10) GROUTED BARS IN DRILLED HOLES: HORIZONTALLY DRILLED HOLES SHALL BE DRILLED ½" IN DIAMATER LARGER THAN THE BAR, CLEANED, PACKED WITH NON-SHRINK GROUT AND THE BAR ROTATED (NOT DRIVEN) INTO ITS SEAT. VERTICALLY DRILLED HOLES SHALL BE DRILLED ¼" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH EPOXY GROUT AND BAR DRIVEN TO ITS SEAT. ALL GROUTING MATERIALS SHALL BE APPROVED BY TDOT MATERIALS AND TESTS.

(11) ANY DAMAGE TO EXISTING STRUCTURES TO BE LEFT IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

(12) SHOP DRAWINGS: SHALL BE SUBMITTED ACCORDING TO THE STANDARD SPECIFICATIONS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE BRIDGE REPAIR OFFICE OF THE DIVISION OF STRUCTURES.

(13) THE CONTRACTOR SHALL PROVIDE 100% CONVENTIONAL FALL PROTECTION FOR WORKERS ABOVE 15 FEET.

(14) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION. DESIGN CALCULATIONS AND DETAILS OF TEMPORARY SUPPORT SYSTEM OR FALSEWORK REQUIRED SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND SHALL MEET WITH THE FULL SATISFACTION OF THE ENGINEER BEFORE ANY DEMOLITION IS BEGUN. COST OF STABILIZING THE STRUCTURE SHALL BE INCLUDED IN ITEM NO. 602-10.05, BRACING REPAIRS, L.S.

(15) CONCRETE: TO BE CLASS "A" f'c = 3000 PSI EXCEPT AS NOTED OTHERWISE.

(16) NO PNEUMATIC CONCRETE ALLOWED.

(17) CONCRETE CURING: ALL CONCRETE SHALL BE CURED ACCORDING TO THE STANDARD SPECIFICATIONS.

(18) STRUCTURAL STEEL: SHALL CONFORM TO AASHTO M270 GRADE 36 (ASTM A709 GRADE 36) UNLESS OTHERWISE NOTED.

(19) ANCHOR BOLTS SHALL BE ASTM A307 GRADE A, B OR C AND SIZE SHALL MATCH EXISTING BOLTS TO BE REPLACED.

(20) ALL SUBSTRUCTURE WORK SHALL BE PERFORMED FROM THE GROUND OR ABOVE ORDINARY HIGH WATER LINE. NO ENTRY INTO THE STREAM WILL BE ALLOWED FOR SUBSTRUCTURE REPAIR ON THIS BRIDGE.

SPECIAL NOTES

(21) SPECIAL NOTE FOR UTILITIES: IT IS INTENDED THAT THE COST OF MATERIALS AND LABOR NECESSARY FOR ANY MODIFICATION TO UTILITIES SHOULD BE BORNE BY OTHERS AND SHALL NOT BE PAID FOR AS PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH OTHERS IN THE MODIFICATION OR RELOCATION OF UTILITIES WITH NO ADDITIONAL COMPENSATION ALLOWED THE CONTRACTOR.

(22) NO ENTRY INTO THE BUFFALO RIVER WILL BE ALLOWED. ALL WORK OVER STREAM SHALL BE ACCOMPLISHED FROM OVERHEAD USING CRANES AND NO DEBRIS WILL BE ALLOWED TO ENTER THE BUFFALO RIVER.

NOTES CONCERNING JACKING OPERATION (BR. NO. 43-910-4.10)

(23) THE CONTRACTOR SHALL FURNISH STRUCTURAL DESIGN PLANS OF PROPOSED JACKING AND TEMPORARY SUPPORTS TO THE ENGINEER IN THE BRIDGE INSPECTION AND REPAIR OFFICE FOR REVIEW. THE DESIGN AND PLANS FOR THE JACKING AND SUPPORT SEQUENCE AND SYSTEM SHALL BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TENNESSEE. JACKING OF THE STRUCTURE WILL NOT BE ALLOWED UNTIL JACKING PLAN HAS BEEN APPROVED.

(24) THE CONTRACTOR SHALL JACK THE EXISTING BRIDGE AT ABUTMENT NO. 2 AND TEMPORARILY SUPPORT THE STRUCTURE WHILE REPAIRS ARE MADE TO THE BEAMS, BEARING DEVICES, DIAPHRAGMS AND RISER BLOCKS AS NOTED IN THE PLANS OR DESIGNATED IN THE FIELD BY THE ENGINEER. TEMPORARY SUPPORTS SHALL BE DESIGNED AND CONSTRUCTED TO SUPPORT THE COMBINED DEAD LOAD PLUS LIVE LOAD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE TOP OF SLAB GRADE LINES AND CROSS SLOPE. IF NECESSARY, REJACKING AND USE OF STEEL SHIMS TO MAINTAIN GRADE LINES AND CROSS SLOPE SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL COST.

(25) CONTRACTOR IS NOT TO LEAVE BRIDGE SITTING ON JACKS OVER NIGHT.

(26) STRUCTURE IS TO BE CAREFULLY MONITORED DURING JACKING OPERATIONS SO AS NOT TO DAMAGE ANY PORTION OF THE STRUCTURE.

(27) ALL COST OF JACKING AND TEMPORARY SUPPORT IS TO BE INCLUDED IN ITEM NO. 604-10.24, JACKING CONCRETE SPANS, L.S.

(28) JACKING OF THE STRUCTURE SHALL BE LIMITED TO THE MINIMUM DISTANCE REQUIRED TO RELEASE LOAD FROM EXISTING SUPPORTS ALLOWING FOR COMPLETION OF WORK. ALL CONCRETE BEAMS SHALL BE RAISED UNIFORMLY BY JACKING. AT NO TIME WILL JACKING OF ANY SINGLE BEAM BE PERMITTED. ANY DAMAGE TO THE STRUCTURE AS A RESULT OF OVERJACKING OR DIFFERENTIAL JACKING SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. JACKING OPERATION SHALL NOT BE DETRIMENTAL TO EXPANSION JOINTS OR ADJACENT CONCRETE IN THE BRIDGE DECK.

(29) JACKING WILL ONLY BE CONDUCTED VERTICALLY. THE SPANS WILL NOT BE SHIFTED LATERALLY.

(30) LOAD WILL NOT BE TRANSFERRED FROM TEMPORARY SUPPORT TO FINAL BEARING UNTIL ALL REPAIRS ARE COMPLETE.

(31) PRIOR TO JACKING, CONTRACTOR SHALL NOTE ORIENTATION OF EXPANSION BEARING DEVICES AT ABUTMENT NO. 2 AND RESET AS EXISTING OR AS DIRECTED BY THE ENGINEER BEFORE TRANSFERRING LOAD BACK TO BEARING DEVICES.

(32) SPECIAL CARE SHALL BE TAKEN DURING JACKING OPERATIONS IN ORDER TO NOT DAMAGE ANY UTILITIES. IF UTILITIES WILL BE DISTURBED, CONTRACTOR SHALL COORDINATE JACKING OPERATIONS WITH OWNER OF UTILITY.

(33) ALL JACKING AND TEMPORARY SUPPORTS SHALL BE PERFORMED FROM UNDERNEATH THE BRIDGE. NO JACKING OR TEMPORARY SUPPORTS WILL BE ALLOWED FROM THE DECK.

(34) BASED ON PRELIMINARY OBSERVATION AND UTILITY PLAN RESEARCH, AN EXISTING STEEL HIGH PRESSURE NATURAL GAS LINE HANGS ON THE BRIDGE AND PASSES THROUGH THE BACKWALL AT ABUTMENT NO. 2. EXTREME CARE SHALL BE TAKEN WHILE JACKING THE BRIDGE DECK. COORDINATE JACKING OPERATIONS WITH UTILITY OWNER PRIOR TO BEGINNING CONSTRUCTION.

CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.
43009-4407-04	2015	2A

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

DAVID W. THOMPSON REGISTERED ENGINEER AGRICULTURE ENGINEER No. 19232 STATE OF TENNESSEE

6/10/2015

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE GENERAL
AND SPECIAL NOTES

BRIDGE NO. 43-910-4.10
BAKERSVILLE ROAD OVER BUFFALO RIVER
HUMPHREYS COUNTY
2015

BR-119-62

DESIGNED BY D. THOMPSON/D. KEATON DATE _____
DRAWN BY ANGELA MOORE DATE _____
SUPERVISED BY DARRELL JAMES DATE _____
CHECKED BY JAMIE GILLESPIE DATE _____

JAMES + ASSOCIATES INC.