GENERAL CONSTRUCTION NOTES

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH

MAINTENANCE OF THROUGH TRAFFIC INCLUDES THE MAINTENANCE OF THE EXISTING ROAD IN CLOSE PROXIMITY TO THE NEW CONSTRUCTION AS SHOWN ON THE PLANS.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING SECTION LINE ROADS TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

FOR PROJECTS THAT INCLUDE WIDENING AND/OR RESURFACING, THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE POTENTIAL DROP-OFF HAZARDS AND SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE OPERATIONS BEGIN. ANY PORTION OF THE CONSTRUCTION OPERATIONS, SUCH AS SUPERPAVE LAYING OPERATIONS, EXCAVATION FOR PAVEMENT WIDENING, OR EXTENSION OF ROADWAY STRUCTURES. SHALL BE LIMITED TO ONE SIDE AT A TIME, AND THE PROCEDURES OUTLINED IN THE PAVEMENT DROP-OFF TREATMENT STANDARD PDT-1 (LATEST REVISION) SHALL BE IMPLEMENTED. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 1 (ONE) DAY'S TIME WITHOUT APPROVAL BY THE ENGINEER. LIGHTS, SIGNS AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.

ALL TREES, BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER SHALL BE CLEANED OUT TO THE RIGHT-OF-WAY LINE, AT EACH STRUCTURE AND BRIDGE, IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY RIGHT-OF-WAY FENCE AS REQUIRED. WHEN THE PORTION OF THE PROJECT THAT REQUIRED THIS FENCE IS COMPLETED. THE TEMPORARY FENCE SHALL BE REMOVED, AND PERMANENT RIGHT-OF-WAY FENCING SHALL BE RESTORED OR INSTALLED IN A MANNER APPROVED BY THE ENGINEER. ALL COST TEMPORARY FENCING SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF

IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED. THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COST OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK, ANY REMAINING EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

PRIME COAT SHALL BE APPLIED TO THE SUBGRADE IMMEDIATELY AFTER FINAI COMPACTION AND SHAPING TO RETAIN MOISTURE FOR PROPER CHEMICAL REACTION OF THE SOIL ADDITIVE.

THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

VEGETATIVE MULCHING: THE VEGETATIVE MULCH SHALL BE ANCHORED IN ACCORDANCE WITH THE "MULCHING-TILLER METHOD", AS SPECIFIED IN 233.04B(2) OF THE STANDARD SPECIFICATIONS.

AREAS ON WHICH SALVAGED TOPSOIL IS TO BE REPLACED SHALL HAVE 18-46-0 FERTILIZER APPLIED, AT THE RATE OF 150 POUNDS PER ACRE, JUST PRIOR TO THE REPLACEMENT OF SALVAGED TOPSOIL.

T.B.S.C. SURFACES SHALL BE SPRINKLED WITH WATER AND ROLLED WITH A PNEUMATIC ROLLER IN A MANNER APPROVED BY THE ENGINEER.

IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT THE CONTRACTOR SHALL NOTIFY THE OKLAHOMA ONE-CALL SYSTEM, INC. 48 HOURS PRIOR TO BEGINNING EXCAVATION. OKLAHOMA ONE-CALL SYSTEM, INC. "CALL OKIE" 1-800-522-6543 OR

⚠ ENVIRONMENTAL MITIGATION NOTES

<u>RIPARIAN VEGETATION REMOVAL RESTRICTION NOTE:</u>
THE REMOVAL OF TREES AND SHRUBS SHALL BE RESTRICTED TO AREAS WITHIN THE ACTUAL LIMITS OF CONSTRUCTION (TOE OF SLOPE/TOP OF CUT).

BAT BRIDGE REMOVAL/MODIFICATION NOTE:
THE INDIANA BAT AND NORTHERN LONG EARED BAT ARE MIGRATORY, INSECT EATING BATS
PROTECTED BY THE ENDANGERED SPECIES ACT. THESE SPECIES CAN USE BRIDGES AS SUMMER
ROOSTING SITES. IF THE BRIDGE REMOVAL OR MODIFICATION IS TO OCCUR BETWEEN APRIL 1 AND NOVEMBER 15, THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515 TO CONDUCT A BAT SURVEY. THE SURVEY CAN BE CONDUCTED ONLY BETWEEN MAY 15 AND AUGUST 15. IF LISTED BAT SPECIES ARE DETECTED, THE ODOT BIOLOGICAL RESOURCES PROGRAM WILL CONSULT WITH US FISH AND WILDLIFE SERVICE. WORK ON THE BRIDGE WILL BE RESTRICTED AND MAY BE PROHIBITED FOR ALL OR PART OF THE DURATION OF THE BAT'S MATERNITY ROOSTING SEASON. ANY DELAY DUE TO THIS WILL NOT BE COMPENSATED.

△ENVIRONMENTAL MITIGATION NOTES (CONTINUED)

BAT TREE REMOVAL NOTE:
THE INDIANA BAT AND NORTHERN LONG-EARED BAT, ARE INSECTIVOROUS MIGRATORY BAT
SPECIES PROTECTED BY THE ENDANGERED SPECIES ACT. SUITABLE SUMMER ROOSTING HABITAT OCCURS WITHIN THE PROJECT'S ACTION AREA. IN ORDER TO AVOID ADVERSE IMPACTS TO BATS, A SURVEY WILL BE CONDUCTED BY THE ODOT BIOLOGIST BETWEEN MAY 15 AND AUGUST 15. NO TREES SHALL BE REMOVED UNTIL THE SURVEY IS COMPLETE. IF EITHER SPECIES ARE DETECTED, THE REMOVAL OF ROOST TREES SHALL BE PERMITTED ONLY BETWEEN NOVEMBER 16 AND MARCH 31. ANY DELAY DUE TO THIS WILL NOT BE COMPENSATED.

AMERICAN BURYING BEETLE (ABB) NOTE:
THE AMERICAN BURYING BEETLE IS A LARGE CARRION BURYING BEETLE THAT IS LISTED AS ENDANGERED UNDER THE ENDANGERED SPECIES ACT. IN ORDER TO AVOID ADVERSE IMPACTS, NO ARTIFICIAL LIGHTING SHALL BE USED DURING CONSTRUCTION. CARCASSES AND ALL FOOD TRASH SHALL BE REMOVED FROM THE PERMANENT AND TEMPORARY RIGHT-OF-WAY THROUGHOUT PROJECT ACTIVITIES.

BALD EAGLE NOTE:
A BALD EAGLE SURVEY WAS COMPLETED FOR THIS PROJECT IN FEBRUARY 2016. NO NESTS WERE OBSERVED WITHIN THE EXPECTED IMPACT AREA. SURVEY RESULTS ARE VALID ONLY FOR THE NESTING SEASON (DECEMBER 1 THROUGH MAY 31) IN WHICH THE SURVEY WAS PERFORMED. IF CONSTRUCTION ACTIVITIES ARE NOT COMPLETED BY DECEMBER 1, 2016 THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515 TO SCHEDULE AN ADDITIONAL SURVEY BETWEEN DECEMBER 2016 AND JANUARY 2017. IF NESTS ARE FOUND, A BUFFER OF AT LEAST 660 FEET SHALL BE MAINTAINED BETWEEN PROJECT ACTIVITIES AND ANY NESTS (INCLUDING ACTIVE AND ALTERNATE NESTS). IF THE BUFFER CANNOT BE MAINTAINED, ALL CLEARING, EXTERNAL CONSTRUCTION AND LANDSCAPING ACTIVITIES, WITHIN 660 FEET OF THE NEST, WILL BE CONDUCTED BETWEEN JUNE 1 AND NOVEMBER 30 (OUTSIDE THE NESTING SEASON).

OUACHITA ROCK POCKETBOOK, SCALESHELL AND WINGED MAPLELEAF MUSSELS PLAN NOTES: THE OUACHITA ROCK POCKETBOOK, SCALESHELL AND WINGED MAPLELEAF ARE FRESHWATER MUSSELS PROTECTED BY THE ENDANGERED SPECIES ACT. THE SPECIES HAVE BEEN KNOWN TO OCCUR IN THE KIAMICHI RIVER AT BOTH UPSTREAM AND DOWNSTREAM OF THE PROJECT SITE. IN ORDER TO AVOID ADVERSE IMPACTS TO THESE SPECIES. THE FOLLOWING CONSERVATION MEASURES SHALL BE CONSCIENTIOUSLY IMPLEMENTED.

THE ODOT BIOLOGIST WILL CONDUCT A MUSSEL SURVEY AS CLOSE AS POSSIBLE IN DATE TO THE START OF CONSTRUCTION. (NO LESS THAN 6 MONTHS PRIOR TO START OF CONSTRUCTION.) ANY MUSSELS FOUND WILL BE MOVED OUT OF THE CONSTRUCTION AREA BY THE ODOT BIOLOGIST BEFORE CONSTRUCTION CAN BEGIN.
2. DISTURBANCE TO AREAS OUTSIDE OF THE REQUIRED CONSTRUCTION FOOTPRINT SHALL BE

MINIMIZED TO THE GREATEST EXTENT PRACTICABLE. ADDITIONALLY, THE REMOVAL OF NATURAL STREAM FEATURES (SUCH AS RIFFLES AND POOLS) SHALL BE LIMITED TO ONLY WHAT IS NECESSARY FOR PROJECT CONSTRUCTION, AND THE AMOUNT OF VEGETATION CLEARED SHALL BE IMITED TO ONLY WHAT IS NECESSARY PROJECT CONSTRUCTION.

3. STREAM FLOW SHALL BE MAINTAINED AT ALL TIMES AND ISOLATED POOLS SHALL NOT BE

ALLOWED TO DEVELOP.

WATER SHALL NOT BE PUMPED FROM THE KIAMICHI RIVER FOR ANY PURPOSE.
STAGING AREAS FOR THE STORAGE OF EQUIPMENT, HAZARDOUS MATERIALS, FUELS LUBRICATING OILS, AND OTHER CHEMICALS SHALL BE LOCATED A MINIMUM DISTANCE OF 100 FEET FROM THE KIAMICHI RIVER BANK. SEDIMENT AND EROSION CONTROLS SHALL BE INSTALLED AROUND THESE STAGING AREAS TO INHIBIT DISCHARGE OF MATERIALS FROM THESE SITES. REFUELING OF CONSTRUCTION EQUIPMENT SHALL ALSO BE CONDUCTED AT LEAST 100 FEET FROM THE BANK OF THE KIAMICHI RIVER

WORK ROADS AND DRILL PADS WITHIN THE WETTED PORTION OF THE KIAMICHI RIVER OR THE ORDINARY HIGHWATER MARK (OHWM), WILL NOT RESULT IN EROSION AND SEDIMENTATION OF THE RIVER OR ALTERATION OF THE RIVER BED OR BANK SUBSTRATES. WORK ROADS AND DRILL PADS WITHIN THE OHWM SHALL BE MADE OF CRUSHED, NON-EROSIVE ROCK MATERIAL THAT IS FREE OF ANY FINES, CLAY OR SILTS AND OF SUFFICIENT SIZE TO PREVENT DOWNSTREAM MOVEMENT. WORK ROADS PLACED WITHIN THE KIAMICHI RIVER BELOW THE OHWM WILL NOT EXTEND ACROSS MORE THAN 50% OF THE FLOWING CHANNEL AT ANY GIVEN TIME.

7. AFTER EACH WORK ROAD AND DRILL PAD IS NO LONGER NEEDED, FILL MATERIAL SHALL BE

AND THE NATURAL CONTOURS OF THE KIAMICHI RIVER CHANNEL AND BANK RESTORED TO THE MAXIMUM EXTENT PRACTICABLE.

VEHICLES OR OTHER MOTORIZED EQUIPMENT SHALL BE CONFINED AT ALL TIMES TO AREAS OUTSIDE OF THE WETTED PORTION OF THE KIAMICHI RIVER, WITH THE EXCEPTION OF ACTIVITIES TO WORK ROAD CONSTRUCTION AND USE.

EXCAVATED MATERIALS AND OTHER CONSTRUCTION WASTE MATERIALS AND DEBRIS SHALL BE STOCKPILED AT LEAST 25 FEET AWAY FROM ANY STREAM BANK, AND REMOVED AND DISPOSED

OF PROPERLY FOLLOWING COMPLETION OF THE PROJECT.

10. APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE IMPACTS FROM STORM WATER DISCHARGES, IN CONFORMANCE WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY REGULATIONS. SHALL BE CONSCIENTIOUSLY IMPLEMENTED THROUGHOUT THE PROPOSED CONSTRUCTION PERIODS. A SEDIMENT AND EROSION CONTROL PLAN SHALL BE IMPLEMENTED DURING CONSTRUCTION. TEMPORARY SEDIMENT/EROSION CONTROL STRUCTURES SHALL BE RETAINED UNTIL VEGETATION IS WELL ESTABLISHED, AND REMOVED FOLLOWING FINAL SITE STABILIZATION.

<u>MIGRATORY BIRD NOTES:</u>
MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. THESE BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR THE BIRDS RUNS FROM APRIL 1 TO AUGUST 31. ANY ACTIVITIES WHICH WOULD DESTROY ACTIVE NESTS OR HARM EGGS OR BIRDS WOULD VIOLATE THE MIGRATORY BIRD TREATY ACT. MIGRATORY BIRD USE OF BRIDGE NBI NO. 04239 & 04232 AND/OR CULVERT AT STA. 130+00LT. HAVE BEEN OBSERVED DURING THE INITIAL SURVEY CONDUCTED AS PART OF THE BIOLOGICAL STUDIES IN FEBRUARY 2016. MIGRATORY BIRD USE OF THE REMAINING BRIDGES AND CULVERTS WAS NOT OBSERVED DURING THE INITIAL SURVEY. MIGRATORY BIRDS MAY OCCUPY THESE STRUCTURES IN THE FUTURE NESTING SEASONS. THE RESIDENT ENGINEER WILL EVALUATE THE CONTRACTOR'S PROPOSED WORK METHODS AND CONCLUDE WHETHER THE PROPOSED WORK WOULD POSE DISRUPTION TO ANY NESTING BIRDS BEFORE WORK NEAR THE STRUCTURE IS AUTHORIZED. IF THE PROPOSED WORK WILL HARM ANY NESTING BIRDS, THE BRIDGE MAY BE NETTED PRIOR TO APRIL 1 OR THE WORK DELAYED UNTIL THE NESTING SEASON IS COMPLETE. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST.

ROADWAY PAY QUANTITY NOTES UPDATED ENVIRO. NOTES

- PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.
- AN ESTIMATED QUANTITY OF 8,866 C.Y. TOPSOIL TO BE RESERVED FOR REPLACEMENT OF APPROXIMATELY 5" ON COMPLETED FORESLOPES, DITCHES, AND BACKSLOPES, THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTIONS TO ALLOW FOR PLACEMENT OF TOPSOIL TO FINAL GRADE, SHALL BE INCLUDED IN THE PRICE BID.
- PRICE BID TO INCLUDE COST OF 18-46-0 FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRE.
- PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER SQ. YD.
- (R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS
- (R-16) QUANTITY BASED ON TWO APPLICATIONS.
- (R-25) ESTIMATED AT 120 LBS. PER CU. FT.
- (R-28) PRIME COAT SHALL BE APPLIED AT AN ESTIMATED RATE OF 0.35 GAL. PER SQ. YD. WHEN APPLIED TO SUBGRADE, AND 0.25 GAL. PER SQ. YD. WHEN APPLIED TO AGGREGATE BASE. THE ACTUAL CUTBACK PRIME COAT REQUIRED FOR PLACEMENT OPERATIONS WILL BE DETERMINED BY THE CONTRACTOR, AND SHALL CONSIDER THE RESIDUE FROM DISTILLATION PERCENTAGE SHOWN IN SECTION 708.03 OF THE STANDARD SPECIFICATIONS.
- (R-32) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.
- (R-34) PRICE BID TO INCLUDE COST OF FOG SEAL, MEETING THE REQUIREMENTS OF SECTION 407 OF THE STANDARD SPECIFICATIONS.
- (R-48) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, HEADWALLS (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES, AND OTHER STRUCTURES WITHIN
- (R-49) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.
- (R-50) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06
- (R-52) INCLUDES 2% FOR GROUND MEASUREMENT.
- (R-53) ALL GATES AND GATE END POSTS FOR STRANDED WIRE FENCE (SWF) SHALL BE CONSTRUCTED AT THE SAME WIDTH AS THE EXISTING, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- COST TO INCLUDE TEMPORARY SEDIMENT REMOVAL, REMOVE SILT WHEN 50% FULL. (1)
- ESTIMATED AT 200 POUNDS OF 10-20-10 FERTILIZER PER 1000 SQ. YD. OF SODDING. PRICE INCLUDED IN COST OF SOLID SLAB SOD.
- (3) CLASS C CONCRETE INCLUDES 2.53 C.Y. FROM SUMMARY OF DITCH TREATMENT, 11.3 C.Y. FROM M.S.E. RETAINING WALL "A" AND 14.17 C.Y. TO BE USED AS DIRECTED BY
- SEE SHEETS 25-29 FOR M.S.E. WALL "A". (4)
- (5) MECHANICAL STABILIZED EARTH (MSE) WALLS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA. DESIGN CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO ODOT BRIDGE DIVISION FOR APPROVAL, PRIOR TO CONSTRUCTION, SEE MSE WALL PLAN AND ELEVATION SHEETS FOR LOCATIONS AND LIMITS. SEE SECTION 510.04(E), SECTION 2 OF THE 2009 STANDARD SPECIFICATIONS. ALL COSTS ASSOCIATED IN THE DESIGN AND CONSTRUCTION, AND ANY INCIDENTAL ITEMS FOR THE MSE WALLS SHALL BE INCLUDED IN THIS PAY ITEM.
- SEE M.S.E. WALL PLAN AND ELEVATIONS SHEETS FOR LIMITS OF FORMLINER. COST SHALL BE INCLUDED IN THE PRICED BID FOR M.S.E RETAINING WALL.
- (7) COST TO INCLUDE ALL MATERIALS NEEDED FOR INSTALLATION.
- (8) GEOGRID REINFORCEMENT INCLUDES 10,000 S.Y. TO BE USED AS DIRECTED BY THE FNGINFFR.
- (9) THIS ITEM INCLUDES THE CONSTRUCTION AND MATERIALS TO CONSTRUCT A SOLID TR4 RAIL ON THE TOP OF THE M.S.E. WALL.

	DESIGN	KS		OKLAHOMA DEPARTMENT OF TRANSPORTATION POE & ASSOCIATES
	DRAWN	KS		POE & ASSOCIATES
				DAY SHANTIFIES AND MOTES
	CHECKED	BW		PAY QUANTITIES AND NOTES
				/DO / DW / \/\
	APPROVED	RA		(ROADWAY)
		8	7	
	SQUAD			STATE JOB NO. <u>26346(04)</u> SHEET NO. <u>6</u>

US-27I OVER KIAMICHI RIVER

PUSHMATAHA COUNTY