

ENVIRONMENTAL MITIGATION NOTES

SPECIES PLAN NOTES:

AMERICAN BURYING BEETLE NOTE: THE AMERICAN BURYING BEETLE IS A LARGE CARRION BURYING BEETLE THAT OCCURS WITHIN THE ACTION AREA. NO ARTIFICIAL LIGHTING SHALL BE USED DURING CONSTRUCTION. CARCASSES AND ALL FOOD TRASH SHALL BE REMOVED FROM THE PERMANENT AND TEMPORARY ROW THROUGHOUT PROJECT ACTIVITIES. FOLLOWING CONSTRUCTION, TOPSOIL SHALL BE PLACED ON TOP OF ALL AREAS OF GROUND DISTURBANCE, PRIOR TO RE-VEGETATION.

BAT TREE NOTE: THE NORTHERN LONG-EARED BAT IS A THREATENED SPECIES THAT OCCURS WITHIN THE PROJECT'S ACTION AREA. IN ORDER TO MINIMIZE ADVERSE IMPACTS TO THE SPECIES, THE REMOVAL OF TREES AND SHRUBS SHALL BE RESTRICTED TO AREAS WITHIN THE ACTUAL LIMITS OF CONSTRUCTION (TOE OF SLOPE/TOP OF CUT). THE RESIDENT ENGINEER SHALL INSTALL BRIGHT-COLORED FLAGGING/FENCING TO INDICATE TREES THAT ARE NOT TO BE REMOVED AND ENSURE LIMITS OF TREE REMOVAL ARE VISIBLY AND CLEARLY DEFINED FOR THE CONTRACTOR.

BAT LIGHTING NOTE: THE NORTHERN LONG-EARED BAT IS A LISTED BAT SPECIES THAT OCCURS WITHIN THE PROJECT'S ACTION AREA. IF ANY PERMANENT LIGHTING IS INSTALLED OR REPLACED, DOWNWARD-FACING FULL CUT-OFF LENS LIGHTS SHALL BE INSTALLED AND DIRECTED AWAY FROM WOODED AREAS AND STREAMS.

MIGRATORY BIRD NOTE: MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. MANY BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASONS FOR MOST BIRD SPECIES EXTENDS FROM APRIL 1 TO AUGUST 31. THE PROJECT WAS SURVEYED FOR MIGRATORY BIRD NESTS IN OCTOBER 2014. ALTHOUGH NO NESTS WERE OBSERVED, THE SURVEY IS VALID ONLY UNTIL THE START OF THE 2015 NESTING SEASON. THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515 IF ANY BIRD USE OF THE EXISTING STRUCTURES IS OBSERVED. IF BIRDS ARE OBSERVED THEN PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGE/STRUCTURES SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND MARCH 31, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED. THE BRIDGE MAY BE PROTECTED FROM NEW NEST ESTABLISHMENT PRIOR TO APRIL 1, BY MEANS THAT DO NOT RESULT IN BIRD DEATH OR INJURY. OPTIONS INCLUDE THE EXCLUSION OF ADULT BIRDS FROM SUITABLE NEST SITES ON OR WITHIN A STRUCTURE BY THE PLACEMENT OF WEATHER-RESISTANT POLYPROPYLENE NETTING WITH 0.25-INCH OR SMALLER OPENINGS, PRIOR TO APRIL 1. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST.

CULTURAL RESOURCES PLAN NOTES:

LOCATIONS OUTSIDE THE PROJECT AREA IN THE FOLLOWING AREA MUST NOT BE UTILIZED FOR BORROW, EQUIPMENT STAGING, HAUL ROADS, SPOIL DUMPS OR ANY OFF-SITE PROJECT-RELATED ACTIVITY.

TION R18E:

SECTION 7: NE¼ SW¼ NE¼

SECTION 8: N½ NE¼ SW¼

SW¼ SE¼ SW¼

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED NOTES	10/06/17

SUMMARY OF REMOVAL							
SHEET NO.	STATION TO STATION	REMOVAL OF EXIST. PIPE	REMOVAL OF HEADWALL	REMOVAL OF GUARDRAIL	REMOVAL OF RIPRAP	REMOVAL OF ASPH. PMVT.	SAWING PAVEMENT
		* L.F.	* EA.	* EA.	* S.Y.	619(B) S.Y.	619(C) L.F.
R004	STA. 8+80.00 TO STA. 22+00.00	126	2	-	123	4,232	166
R004	STA. 22+00.00 TO STA. 30+40.00	59		204	-	1,618	41
TOTAL		185	2	204	123	5,850	207

COST TO BE INCLUDED IN REMOVAL OF STRUCTURES & OBSTRUCTIONS

SCHEDULE OF GUARDRAIL								
LOCATION	LANE	TACK COAT	PRIME COAT	SUPER PAVE TYPE S3 (PG 64-22 OK)	SUPER PAVE TYPE S4 (PG 64-22 OK)	BEAM GUARDRAIL W-BEAM SINGLE	GUARDRAIL ANCHOR UNIT TYPE "B"	GUARDRAIL END TREATMENT (GET)
		407 GAL.	408 GAL.	411(B) TON	411(C) TON	623(A) L.F.	623(F) EA.	623(G) EA.
STATION TO STATION	LT.	RT.	GAL.	GAL.	TON	TON	L.F.	EA.
STA. 18+62.64 TO STA. 19+33.56	X		5	20	13	7	125	1
STA. 18+33.56 TO STA. 19+33.56		X	5	20	13	7	100	1
STA. 20+42.06 TO STA. 21+42.06	X		5	20	13	7	100	1
STA. 20+42.06 TO STA. 21+42.06		X	5	20	13	7	100	1
TOTAL			20	80	52	28	425	4

SUMMARY OF MAILBOX INSTALLATION									
LOCATION	TACK COAT	PRIME COAT	SUPER PAVE TYPE S3 (PG 64-22 OK)	SUPER PAVE TYPE S4 (PG 64-22 OK)	MAILBOX INSTALLATION -SINGLE	MAILBOX INSTALLATION -MULTIPLE	MAILBOX	REMOVAL OF MAILBOX INSTALLATION	
	407 GAL.	408 GAL.	411(S3) TON	411(S4) TON	629(A) EA	629(B) EA	629(C) EA	629(D) EA	
STATION	OFFSET	GAL.	GAL.	TON	TON	EA	EA	EA	
15+41.30	3.30' RT.	2	6	4	2	-	1	4	
24+11.58	97.91' RT.	3	13	8	4	-	1	2	
25+69.77	12.28' LT.	3	10	7	4	1	-	1	
TOTAL		8	29	19	10	1	2	7	

SUMMARY OF GRADING				
P&P SHEET NO.	STATION TO STATION	UNCLASSIFIED EXCAVATION	EMBANKMENT +15%	UNCLASSIFIED BORROW
		202(A) CY	* CY	202(D) CY
R004	8+80.00 - 22+00.00	3501	6289	2788
R005	22+00.00 - 30+40.00	582	3940	3358
R006	100+00.00 - 104+00.00	1941	1231	(711)
R007	200+00.00 - 201+53.02	98	99	1
TOTAL		6,122	11,559	5,436

*FOR INFORMATION PURPOSES ONLY

SUMMARY OF FENCE		
STATION TO STATION	SIDE	FENCE SWF (4 BARBED WIRE)
8+00.00 - 9+55.82	LT.	160.00

*INCLUDES 2% FOR GROUND MEASUREMENT

SUMMARY OF DITCH TREATMENT						
P & P SHEET NO.	LOCATION	DESCRIPTION	LT.	RT.	LENGTH	TYPE I PLAIN RIPRAP
					L.F.	601(A) TONS
R004	STA. 10+70.00 TO STA. 12+00.00	SP. DITCH		X	130	94
R004	STA. 11+50.00 TO STA. 12+50.00	SP. DITCH	X		100	72
R007	STA. 25+70.00 TO STA. 28+00.00	SP. DITCH	X		230	166
TOTAL						332

SUMMARY OF SIGNS			
APPROXIMATE STATION LOCATION	SIDE	TYPE	ACTION
17+68.85	RT.	STOP	REMOVE & RESET
21+75.00	LT.	M1-1	INSTALL
21+75.00	LT.	M6-1(R)	INSTALL
21+75.00	LT.	M1-4(2)	INSTALL
21+75.00	LT.	M6-3	INSTALL
22+59.49	RT.	STOP	REMOVE & RESET

SUMMARY OF SURFACING						
P&P SHEET NO.	STATION TO STATION	8" STABILIZED SUBGRADE	TACK COAT	PRIME COAT	SUPERPAVE TYPE S3 (PG 64-22)	SUPERPAVE TYPE S4 (PG 64-22)
		307(K) SY	407(B) GAL	408 GAL	411(B) TON	411(C) TON
R004	8+80.00 TO 22+00.00	3325	245	1164	730	365
R005	22+00.00 TO 30+40.00	2334	172	817	513	257
R006	100+00.00 TO 104+00.00	1112	82	389	244	122
R007	200+00.00 TO 201+38.05	426	32	149	94	47
TOTAL		7197	531	2519	1581	791

SUMMARY OF DRIVES									
SHEET NO.	STATION AND LOCATION	WIDTH & LENGTH	RADIUS	ADD'L LENGTH BEYOND RETURN	TACK COAT	PRIME COAT	SUPER PAVE TYPE S3 (PG 64-22 OK)	SUPER PAVE TYPE S4 (PG 64-22 OK)	
		W X L FT			407 GAL	408 GAL	411(B) TON	411(C) TON	
R004	11+10.00 RT.	25.00 X 54.00	15	39.00	5.00	14.00	37.00	19.00	
R004	11+12.00 LT.	12.00 X 41.00	15	26.00	2.00	6.00	15.00	8.00	
R004	14+95.00 LT.	12.00 X 40.00	15	25.00	2.00	6.00	15.00	8.00	
R004	17+88.33 RT.	20.00 X 70.00	15	55.00	5.00	14.00	38.00	19.00	
R005	25+94.00 LT.	12.00 X 29.00	15	14.00	2.00	5.00	12.00	6.00	
R005	26+94.00 LT.	12.00 X 29.00	15	14.00	2.00	5.00	12.00	6.00	
R007	200+44.71 RT.	12.00 X 35.00	15	20.00	2.00	5.00	13.00	7.00	
TOTAL					18.00	50.00	129.00	66.00	

SUMMARY OF DRAINAGE STRUCTURES															
STR. NO.	P & P SHEET NO.	STATION	DESCRIPTION	FL IN	FL OUT	UNCL. EXC.	STR. EXC.	CLASS AA CONC.	REINF. STEEL	ARCH PIPE 28"x18"	ARCH PIPE 43"x26"	CGSP 18"	CET A4	CET BB4	CET CC4
						202(A) CY	501(A) C.Y.	509(A) C.Y.	511(A) L.B.	613(A) L.F.	613(A) L.F.	613(B) L.F.	613(M) EA.	613(M) EA.	613(M) EA.
1	R004	11+12.00	CONST. 18"x42' CGSP w/ CETS	606.62	606.49							42.0	2.0		
2	R004	11+10.00	CONST. 18"x52' CGSP w/ CETS	606.21	605.31							52.0	2.0		
3	R004	12+00.00	CONST. 8"x3"x40 L.F. RCB w/ HDWLS	603.18	602.93	204.0	4.0	31.2	3092.0						
4	R004	17+88.33	CONST. 18"x62' CGSP w/ CETS	607.08	603.00							62.0	2.0		
5	R006	102+27.50	CONST. 10"x3"x40 L.F. RCB w/ HDWLS	598.89	598.73	221.0	4.0	39.4	4042.0						
6	R005	23+01.90	CONST. 2-43"x26"x120' RCPA w/ CETS	597.50	592.50						240.0				2.0
7	R007	200+15.00	CONST. 2-28"x18"x58' RCPA w/ CETS	601.15	600.55					116.0				2.0	
8	R007	201+24.66	CONST. 2-28"x18"x72' RCPA w/ CETS	601.96	601.68					144.0				2.0	
9	R005	26+43.69	CONST. 18"x142' CGSP w/ CETS	605.36	601.98							142.0	2.0		
TOTAL						425.0	8.0	70.6	7134.0	260.0	240.0	298.0	8.0	4.0	2.0

SUMMARY OF EROSION CONTROL									
STATION TO STATION	TEMPORARY SILT FENCE	TEMPORARY SILT DIKE	SOLID SLAB SODDING	VEGETATIVE MULCHING	TYPE IA PLAIN RIPRAP	TYPE IA FILTER BLANKET	FERTILIZING (10-20-10)	WATERING	MOWING
	221(C) L.F.	221(F) L.F.	230(A) S.Y.	233(A) AC.	601(B) TON	601(C) TON	* TON	* KGAL	241 AC.
STA. 10+00 TO STA. 30+40	1,611	240	12,095	2.50	107	33	1.21	490	2.50
TOTAL	1,611	240	12,095	2.50	107	33	1.21	490	2.50

* COST TO BE INCLUDED IN SOLID SLAB SODDING PAY ITEM.

DESIGN	GCS		EW115 TEXANNA CREEK	MCINTOSH CO.
DRAWN	GLH		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
CHECKED	GCS		SUMMARY SHEET	
APPROVED				
SQUAD	KCS			
STATE JOB NO. 29374(04)			SHEET NO. AX01	