

# CROSS ROAD PIPE CULVERTS

LOCATION STATION TO STATION	EXIST CULVERT TYPE	PRECAST CONCRETE PIPE CULVERTS, CLASS A, TYPE 1					PRECAST REINFORCED CONCRETE FLARED ENDSECTIONS						STRUCTURE REMOVAL		PIPE CULVERT REMOVAL	CONC REMOVAL	MANHOLE TYPE A	CONC COLLAR	CAST IN PLACE RC ENDSECTIONS		EXPAN BOLTS 3/4"	POROUS GRANULAR BACKFILL	STONE RIPRAP CLASS A4	REMARKS	
		24"	EQ 24"	30"	EQ 30"	42"	18"	24"	EQ 24"	30"	EQ 30"	42"	REMOVAL NUMBER	EACH	FT	CU YD	EACH	CU YD	24"	30"	EACH	CU YD	SQ YD		
		FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	NUMBER	EACH	FT	CU YD	EACH	CU YD	EACH	EACH	EACH	CU YD	SQ YD		
PERRY COUNTY FAP 869 (IL 14)																									
SN 028-2017 BILL OF MATERIALS LOCATION TOTAL																									
PERRY COUNTY PROJECT TOTALS																									
FRANKLIN COUNTY FAP 869 (IL 14)																									
STA 250+95	30" PIPE			16											8	4.5		1.10		2				19.0	EXTEND LT & RT
STA 273+21	2x2 BOX				56						2		4	1									15.5	14.0	REMOVE & REPLACE (ESTIMATED 5.9 CU YDS)
STA 289+94	2x2 BOX				60						2		5	1									20.8	14.0	REMOVE & REPLACE (ESTIMATED 6.5 CU YDS)
STA 299+38	2x2 BOX				60						2		6	1									32.1	14.0	REMOVE & REPLACE (ESTIMATED 6.0 CU YDS)
STA 308+08	2x1.5 BOX		56								2		7	1									6.9	9.0	REMOVE & REPLACE (ESTIMATED 5.5 CU YDS)
STA 314+05	2x2 BOX				56						2		8	1									10.7	14.0	REMOVE & REPLACE (ESTIMATED 6.1 CU YDS)
STA 331+69	2x2 BOX												9	1									21.4		REMOVE & RELOCATE TO STA 332+20
STA 332+20	--				56						2												12.1	14.0	NEW PIPE CULVERT (ESTIMATED 6.0 CU YDS)
STA 362+06	2x2 BOX				56						2		11	1									10.8	14.0	REMOVE & REPLACE (ESTIMATED 6.1 CU YDS)
STA 372+03	2x2 BOX				56						2		12	1									11.9	14.0	REMOVE & REPLACE (ESTIMATED 6.5 CU YDS)
STA 412+89	3x3 BOX					56						2	14	1									35.7	38.0	REMOVE & REPLACE (ESTIMATED 9.5 CU YDS)
STA 431+09	2x2 BOX				56						2		16	1									9.3	14.0	REMOVE & REPLACE (ESTIMATED 6.3 CU YDS)
STA 441+86	24" PIPE	22													6	3.6		0.88		2			12.0		EXTEND LT & RT
STA 444+60	24" PIPE	16													6	3.8		0.88					12.0		EXTEND LT & RT
STA 447+67	24" PIPE	14													6	3.5		0.88					12.0		EXTEND LT & RT
STA 449+46	30" PIPE			4											4	1.7		0.56					19.0		EXTEND RT
STA 473+52	36" PIPE																						28.0		NO WORK
STA 475+52	30" PIPE			12											8	2.6		1.10					19.0		REMOVE CIP-ES & EXTEND LT & RT
STA 480+69	24" PIPE	4													4	0.5		0.29			8				MODIFY LT
STA 482+55	18" PIPE										1				4			0.32							MODIFY RT
STA 483+51	54" PIPE																								NO WORK
STA 489+50	24" PIPE																								NO WORK
LOCATION TOTAL		56	56	32	456	56	1	5	2	2	16	2			42	20	1	6	2	2	8	187	280		
FRANKLIN COUNTY PROJECT TOTALS		56	56	32	456	56	1	5	2	2	16	2			42	20	1	6	2	2	8	187	280		
PROJECT TOTAL		56	56	32	456	56	1	5	2	2	16	2			42	20	1	6	2	2	8	187	280		

\*MINIMUM FILL HEIGHT IS MEASURED FROM EDGE OF SHOULDER OR CENTERLINE OF ENTRANCE DOWN TO THE TOP OF THE BOX CULVERT

# CROSS ROAD BOX CULVERTS

LOCATION STATION TO STATION	EXIST CULVERT TYPE	*MIN FILL HEIGHT FOOT	AASHTO DESIGN	PRECAST CONCRETE BOX CULVERTS					BOX CULVERT END SECTION		STRUCTURE REMOVAL		CONC REMOVAL	CONC COLLAR	EXPAN BOLTS 3/4"	POROUS GRANULAR BACKFILL	STONE RIPRAP CLASS A4	REMARKS
				2' X 2'	4' X 2'	5' X 4'	6' X 3'	8' X 4'	CULVERT NUMBER	EACH	REMOVAL NUMBER	EACH	CU YD	CU YD	EACH	CU YD	SQ YD	
				FOOT	FOOT	FOOT	FOOT	FOOT	NUMBER	EACH	NUMBER	EACH	CU YD	CU YD	EACH	CU YD	SQ YD	
PERRY COUNTY FAP 869 (IL 14)																		
LOCATION TOTAL																		
PERRY COUNTY PROJECT TOTALS																		
FRANKLIN COUNTY FAP 869 (IL 14)																		
STA 339+23	4x2 BOX	0.6	M273			52				1	2	10	1			6	15	REMOVE & REPLACE (ESTIMATED 9.3 CU YDS)
STA 383+23	9x9 BOX	0.9	M273															SEE SLO FOR SN 028-7119
STA 392+08	4x4 BOX	3.5	M259					74		2	2	13	1			52	34	REMOVE & REPLACE (ESTIMATED 15.5 CU YDS)
STA 426+00	8x4 BOX	0.2	M273						56	3	2	15	1			11	61	REMOVE & REPLACE (ESTIMATED 27.8 CU YDS)
STA 435+69	2x2 BOX	1.3	M273						8	4	2		0	0.8	1.0	8	12	REMOVE APRON & TOE TO EXTEND LT & RT
STA 449+93	5x4 BOX	0.8	M273						4	5	1		0	2.2	1.0	14	53	REMOVE LT APRON & TOE TO EXTEND LT @ RT ANGLE TO ROADWAY
LOCATION TOTAL				8	52	4	74	56						3.0	2.0	22	69	175
FRANKLIN COUNTY PROJECT TOTALS				8	52	4	74	56						3.0	2.0	22	69	175
PROJECT TOTAL				8	52	4	74	56						3.0	2.0	22	69	175

\* MINIMUM FILL HEIGHT IS MEASURED FROM EDGE OF PAVEMENT DOWN TO THE TOP OF THE BOX CULVERT

\*PERRY & FRANKLIN COUNTY