

--- NEW WORK ---

**P2-372925 - MAUMELLE ECOSYSTEM RESTORATION FEASIBILITY STUDY, ARKANSAS
ALTERNATIVE #7 - REMOVE RC1&2, RESTORE TRIB. A, OPEN SC1, REFOREST SOD FARM
JULY 2021 PRICE LEVELS
CONTRACT CALENDAR**

	DESCRIPTION	DURATION (month)	DESIGN MIDPOINT	START DATE	MIDPOINT	END DATE
	Alternative #7 - Remove RC1&2, Restore Trib A, Reforest Sod farm	14	Aug-22 (2022Q4)	Mar-23 (2023Q2)	Sep-23 (2023Q4)	Apr-24 (2024Q3)

--- NEW WORK ---
P2-146513 - THREE RIVERS FEASIBILITY STUDY, ARKANSAS
ALTERNATIVE 1 - CONTAINMENT STRUCTURE AT ELEV 157
OCTOBER 2017 PRICE LEVELS
DURATIONS

CONTRACT NO.			
Remove RC1 & RC2	EXCAVATION	841	CY
Dozer		250	CY/HR
2 Dozer =		500	CY/HR
500 CY/HR Total =		2	HRS
5 DAY Work Week			
10 HRS/DAY			
50 HRS/WK =		0	WKS
1.25 RAIN/LAY Factor		0	WKS
52 WKS/YR		0.0	WKS
TOTAL MONTHS		0.0	MO

CONTRACT NO.			
Remove RC1 & RC2	CEMENT REMOVAL	24,000	CY
3 CY Excavator Bucket =		125	CY/HR
3 3 CY Excavator =		375	CY/HR
375 CY/HR Total =		64	HRS
5 DAY Work Week			
10 HRS/DAY			
50 HRS/WK =		1	WKS
1.25 RAIN/LAY Factor		2	WKS
52 WKS/YR		0.0	WKS
TOTAL MONTHS		0.4	MO

CONTRACT NO.			
Remove RC1 & RC2	RIPRAP	500	TON
4 CY Excavator Bucket =		150	TON/HR
4 4 CY Excavator =		600	TON/HR
600 TON/HR Total =		1	HRS
5 DAY Work Week			
10 HRS/DAY			
50 HRS/WK =		0	WKS
1.25 RAIN/LAY Factor		0	WKS
52 WKS/YR		0.0	WKS
TOTAL MONTHS		0.0	MO

CONTRACT NO.			
Restore Trib A & SC1	EXCAVATION	700,000	CY
Dozer		250	CY/HR
2 Dozer =		500	CY/HR
500 CY/HR Total =		1400	HRS
5 DAY Work Week			
10 HRS/DAY			
50 HRS/WK =		28	WKS
1.25 RAIN/LAY Factor		35	WKS
52 WKS/YR		0.7	WKS
TOTAL MONTHS		8.1	MO

CONTRACT NO.			
Restore Trib A & SC1	SOIL CEMENT REMOVAL	5,400	CY
3 CY Excavator Bucket =		125	CY/HR
3 3 CY Excavator =		375	CY/HR
375 CY/HR Total =		14	HRS
5 DAY Work Week			
10 HRS/DAY			
50 HRS/WK =		0	WKS
1.25 RAIN/LAY Factor		0	WKS
52 WKS/YR		0.0	WKS
TOTAL MONTHS		0.1	MO

CONTRACT NO.			
Restore Trib A & SC1	RIPRAP	800,000	TON
4 CY Excavator Bucket =		150	TON/HR
4 4 CY Excavator =		600	TON/HR
600 TON/HR Total =		1333	HRS
5 DAY Work Week			
10 HRS/DAY			
50 HRS/WK =		27	WKS
1.25 RAIN/LAY Factor		33	WKS
52 WKS/YR		0.6	WKS
TOTAL MONTHS		7.7	MO

CONTRACT NO.			
Owens Lake	SOIL CEMENT REMOVAL	1,100	CY
3 CY Excavator Bucket =		125	CY/HR
3 3 CY Excavator =		375	CY/HR
375 CY/HR Total =		3	HRS
5 DAY Work Week			
10 HRS/DAY			
50 HRS/WK =		0	WKS
1.25 RAIN/LAY Factor		0	WKS
52 WKS/YR		0.0	WKS
TOTAL MONTHS		0.0	MO

CONTRACT NO.			
Owens Lake	CONSTRUCTION	180	TON
4 CY Excavator Bucket =		150	TON/HR
3 4 CY Excavator =		450	TON/HR
450 TON/HR Total =		0	HRS
5 DAY Work Week			
10 HRS/DAY			
50 HRS/WK =		0	WKS
1.25 RAIN/LAY Factor		0	WKS
52 WKS/YR		0.0	WKS
TOTAL MONTHS		0.0	MO

Rock:

TYPE	NAME	PRODUCTION (ton/hr)
	Slow	40
	Normal or Fast	70-75

Earth (dragline):

TYPE	NAME	PRODUCTION (cy/hr)
	2 CY Standard	100
	3 CY Standard	125
	4.5 CY Standard	250

Reference: Caterpillar Performance Handbook, Edition 36 (April 2006)

Excavator Models, Chp 4 Cycle Time Estimating Charts	Effective Cycle	Bucket Size	Fill Size	Cycle Time	Operator Skill/Eff	Machine Availability	Gen Op Efficiency
Model 330C	108.6563	1.83	0.75	222.22	0.75	0.95	0.50
Model 345C	171.7834	3.00	0.75	214.29	0.75	0.95	0.50
Model 365C	260.5714	5.00	0.80	171.43	0.80	0.95	0.50

Truck:

NAME	CAPACITY (ton)
Standard	20-25

Railcar:

TYPE	NAME	LENGTH (ft.in)	BREADTH (ft.in)	DRAFT (ft.in)	CAPACITY (ton)
	50FT Standard	50.7	9.6	10.11	70-100
	60FT Standard	60.9	9.4	10.1	70-100

Barge:

TYPE	NAME	LENGTH (ft)	BREADTH (ft)	DRAFT (ft)	CAPACITY (ton)
Common	Standard	175	26	9	1000
	Jumbo	195-200	35	9	1600
	Super Jumbo	250-290	40-52	9	2100-3300
Covered Hopper	Standard	175	26	9	1000
	Jumbo	195-200	35	9	1600

CONTRACT NO.			
PA 4B	ACB	10,950	CY
185	Railcars =	60	DAY
739	Truck =	37	DAY
16	Barges =	36	DAY
	<u>DELIVERY</u>	4.7	MO
	Normal Lay =	50	CY/HR
1	Normal Lay =	50	CY/HR
50	CY/HR Total =	219	HRS
5	DAY Work Week		
10	HRS/DAY		
50	HRS/WK =	4	WKS
1.25	RAIN/LAY Fact	5	WKS
52	WKS/YR	0.1	WKS
	<u>MONTHS</u>	1.3	MO
	TOTAL MONTHS	6.0	MO

Remove RC1&2

per Mii

40 hrs/week

Access Road

Clear & grub	0.32 AC	7.83 HRS	0.19575 weeks
gravel road	367 CY	60.65 HRS	1.51625 weeks
Excavate concrete	377 CY	498 HRS	12.45 weeks
Excavate soil	842 CY	49 HRS	1.225 weeks
Riprap bank protection	500 TON	73 HRS	1.825 weeks

Rest. Trib A & recon. SC1

per Mii

40 hrs/week

Access Road

Clear & grub	0.86 AC	10.9 HRS	0.2725 weeks
gravel road	767.8 CY	126.8 HRS	3.17 weeks
Excavate soil	6350 CY	365.7 HRS	9.1425 weeks
Excavate pipe	78 LF	14.4 HRS	0.36 weeks
Fill Soil	37.5 CY	12.3 HRS	0.3075 weeks
			9.81
Soil stabilization	91,120 SF	9.1 HRS	0.2275 weeks
Plant trees			
rip soil	66 AC	121.7 HRS	3.0425 weeks
plant trees	19,932 EA	184.6 HRS	4.615 weeks
water			

Plant Sod farm

Plant trees

rip soil	74 AC	136.5 HRS	3.4125 weeks
plant trees	22,348 EA	266.1 HRS	6.6525 weeks

48.187

total weeks
42.25

1688
42.2

43560	74
2,874,960.00	3,223,440.00
2874.96	3,223.44