Cost Estimate (sample)

FLOOR AREA

shape of space (all dimensions in feet)	area formula used	area of space (rounded <i>up</i> to nearest square foot)	# of such spaces	total floor area for spaces of this shape
b = 100'	rectangle with rounded corners: $A \approx b \cdot h$	$A = (100)(35) = 3500 \text{ ft}^2$	5	$5(3,500) = 17,500 \text{ ft}^2$
b = 122'	hexagon (6 triangles): $A = 6 \cdot \left(\frac{1}{2} \cdot b \cdot h\right)$	$A = 6 \cdot [(.5)(122)(106)] = 38,796 \text{ ft}^2$	1	38,796 ft ²
r = 74'	circle: $A = \pi \cdot r^2$	$A = (3.14)(74)^2 = 17,195 \text{ ft}^2$	2	$2(17,195) = 34,390 \text{ ft}^2$
	total floor area of all buildings:		$17,500 + 38,796 + 34,390 = 90,686 \text{ ft}^2$	
	total estimated cost of buildings (@ \$350/sq. ft.)			(90,686)(350) = \$31,740,100

GROUND LEVELING

shape/location leveled area	area formula used	area of space	cost per ft ²	total cost for leveling
semicircle near lake (r = 50')	$A = \frac{1}{2} \cdot \pi \cdot r^2$	$A = (.5)(3.14)(50)^2 = 3,925 \text{ ft}^2$	\$100/sq. ft.	(3,925)(100) = \$392,500

ATHLETIC FIELDS

shape & location of field	area formula used	area of space	cost per ft ²	total cost for field
rectangle in "the flats" (b = 400', h = 100')	$A = b \cdot h$	$A = (400) \cdot (100) = 40,000 \text{ ft}^2$	\$150/sq. ft.	(40,000)(150) = \$6,000,000

TOTAL ESTIMATED COST FOR CONSTRUCTION: \$31,740,100 + \$392,500 + \$6,000,000 = \$38,132,600