

# Dolphin Mall Expansion Project

A Structural Material Estimate Prepared by Travis Anderson Smith

Item	Quantity	Weight	Length	Total Weight	\$ Cost Per Unit	Unit	Total Cost
<b>Substructure</b>							<b>Total Cost \$ 24,582.56</b>
<b>Demolition Preparation For Foundations</b>							<b>Total Cost \$ 5,170.00</b>
P6 Column Footing 8'x15'x3'	4						
Perimeter Saw Cut	n/a	n/a	120.00	n/a	10.00	Linear Foot	\$ 1,200.00
Cross Saw Cut	n/a	n/a	96.00	n/a	10.00	Linear Foot	\$ 960.00
P6M Column Footing 8'x17'x3'	1						
Perimeter Saw Cut	n/a	n/a	34.00	n/a	10.00	Linear Foot	\$ 340.00
Cross Saw Cut	n/a	n/a	61.00	n/a	10.00	Linear Foot	\$ 610.00
P1 Column Footing 8'x8'x2'	3						
Perimeter Saw Cut	n/a	n/a	48.00	n/a	10.00	Linear Foot	\$ 480.00
Cross Saw Cut	n/a	n/a	96.00	n/a	10.00	Linear Foot	\$ 960.00
P1M Column Footing 8'x9'x2'	1						
Perimeter Saw Cut	n/a	n/a	18.00	n/a	10.00	Linear Foot	\$ 180.00
Cross Saw Cut	n/a	n/a	44.00	n/a	10.00	Linear Foot	\$ 440.00
<b>Concrete</b>							<b>Total Cost \$ 10,017.66</b>
P1 w/ 10% waste (3ea)	14.22	n/a	n/a	n/a	113.85	Cubic Yard	\$ 1,618.95
P1M w/ 10% waste (1ea)	5.33	n/a	n/a	n/a	113.85	Cubic Yard	\$ 606.82
P6 w/ 10% waste (4ea)	53.33	n/a	n/a	n/a	113.85	Cubic Yard	\$ 6,071.62
P6M w/ 10% waste (1ea)	15.11	n/a	n/a	n/a	113.85	Cubic Yard	\$ 1,720.27
<b>Rebar</b>							<b>Total Cost \$ 9,394.90</b>
P1 w/ 15% waste (3ea)	n/a	1.04	2436.00	2540.00	0.71	Pounds	\$ 1,799.34
P1M w/ 15% waste (1ea)	n/a	1.04	854.00	890.00	0.71	Pounds	\$ 630.48
P6 w/ 15% waste (4ea)	n/a	1.04	5926.00	6180.00	0.71	Pounds	\$ 4,377.91
P6M w/ 15% waste (1ea)	n/a	1.04	1674.00	1745.00	0.71	Pounds	\$ 1,236.16
Wall Ftg 4'6" Hook	n/a	0.67	2855.00	1907.14	0.71	Pounds	\$ 1,351.02
<b>Superstructure</b>							<b>Total Cost \$ 178,253.20</b>
<b>Columns</b>							<b>Total Cost \$ 15,548.23</b>
W10x77	2.0	77.0	41.0	6314.00	2.46	Pounds	\$ 15,548.23
<b>Beams</b>							<b>Total Cost \$ 14,331.75</b>
W30x99	1.0	99.0	40.0	3960.00	2.46	Pounds	\$ 9,751.50
W16x31	3.0	31.0	20.0	1860.00	2.46	Pounds	\$ 4,580.25
<b>Joists</b>							<b>Total Cost \$ 134,096.23</b>
24K265/150	9.0	21.5	40.0	7740.00	2.46	Pounds	\$ 19,059.75
24K265/150	4.0	21.5	34.5	2967.00	2.46	Pounds	\$ 7,306.24
24K265/150	3.0	18.5	29.5	1637.25	2.46	Pounds	\$ 4,031.73
24K265/150	1.0	18.5	25.0	462.50	2.46	Pounds	\$ 1,138.91
16KCS3	1.0	11.3	25.0	282.50	2.46	Pounds	\$ 695.66
16K265/150	2.0	12.2	20.0	488.00	2.46	Pounds	\$ 1,201.70
16K3	2.0	11.0	20.0	440.00	2.46	Pounds	\$ 1,083.50
14K265/150	2.0	4.4	14.8	129.80	2.46	Pounds	\$ 319.63
14K1	2.0	4.2	14.8	124.32	2.46	Pounds	\$ 306.14
12K1	4.0	4.1	10.0	164.00	2.46	Pounds	\$ 403.85
BV20G90	1.0	11.9	15.0	178.50	2.46	Pounds	\$ 439.56
BV20G90	66.0	11.9	20.0	15708.00	2.46	Pounds	\$ 38,680.95
BV20G90	14.0	11.9	21.0	3498.60	2.46	Pounds	\$ 8,615.30
BV20G90	30.0	11.9	31.0	11067.00	2.46	Pounds	\$ 27,252.49
20K265/150	2.0	15.9	25.0	795.00	2.46	Pounds	\$ 1,957.69
20K265/150	1.0	15.9	30.0	477.00	2.46	Pounds	\$ 1,174.61
20K4	1.0	15.7	24.0	376.80	2.46	Pounds	\$ 927.87
HW	75.0	4.8	19.0	6840.00	2.46	Pounds	\$ 16,843.50
XW1	28.0	5.8	5.5	893.20	2.46	Pounds	\$ 2,199.51
2.5JS2	6.0	5.9	5.3	185.85	2.46	Pounds	\$ 457.66
<b>Roof</b>							<b>Total Cost \$ 14,277.00</b>
1-1/2" 20 Guage Metal Roof Deck	6310	2.34	n/a	14765.40	1.95	Square Foot	\$ 12,304.50
Shear Studs(1 per 8ft)	789	n/a	n/a	n/a	2.50	Stud	\$ 1,972.50
<b>Total Structural Steel Cost</b>							<b>\$ 202,835.76</b>