BUCKLING RESTRAINED BRACE FRAME (BRBF) VS. SIDEPLATE® MOMENT FRAME

5-Story hospital in high seismic

AREA: 158,000 S.F.

Braced Frames							SidePlate® Moment Frames							Delta
EARTHWORK							**EARTHWORK**							
Shoring	8800 sf	@	$	48 /sf	$	422,400	Shoring	8800 sf	@	$	48 /sf	$	422,400	$ -
Underpinning	150 lf	@	$	1,500 /lf	$	225,000	Underpinning	150 lf	@	$	1,500 /lf	$	225,000	$ -
Mass Excavation	8400 cy	@	$	30 /cy	$	252,000	Mass Excavation	8400 cy	@	$	30 /cy	$	252,000	$ -
Engineered Fill	13430 cy	@	$	40 /cy	$	537,000	Engineered Fill	13430 cy	@	$	40 /cy	$	537,000	$ -
Subtotal Earthwork					**$**	**1,436,000**	**Subtotal Earthwork**					**$**	**1,436,000**	**$ -**
CONCRETE							**CONCRETE**							
Pad Footings	0 cy	@	$	375 /cy	$	-	Pad Footings	311 cy	@	$	375 /cy	$	116,625	$ (116,625)
Grade Beams	2128 cy	@	$	450 /cy	$	957,600	Grade Beams	1525 cy	@	$	450 /cy	$	686,250	$ 271,350
Rebar - Foundations	0 lb	@	$	0.95 /lb	$	-	Rebar - Foundations	26770 lb	@	$	0.95 /lb	$	25,432	$ (25,432)
Rebar - Grade beams	118205 lb	@	$	0.95 /lb	$	112,295	Rebar - Grade beams	94564 lb	@	$	0.95 /lb	$	89,836	$ 22,459
Subtotal Concrete					**$**	**1,069,895**	**Subtotal Concrete**					**$**	**918,142**	**$ 151,752**
STEEL							**STEEL**							
Steel - Hospital	1307 ton	@	$	2,600 /ton	$	3,398,200	Steel - Hospital	1350 ton	@	$	2,600 /ton	$	3,510,000	$ (111,800)
Steel - Connector	25 ton	@	$	3,000 /ton	$	75,000	Steel - Connector	25 ton	@	$	3,000 /ton	$	75,000	$ -
Steel - Exit Corridor	34 ton	@	$	2,800 /ton	$	95,200	Steel - Exit Corridor	34 ton	@	$	2,800 /ton	$	95,200	$ -
Steel - Tie Beams	0 ton	@	$	- /ton	$	-	Steel - Tie Beams	112 ton	@	$	3,000 /ton	$	336,000	$ (336,000)
Braces	1 ls	@	$	360,000 /ls	$	360,000	Braces	0 ls	@	$	- /ls	$	-	$ 360,000
Brace Install	132 ea	@	$	1,750 /ea	$	231,000	Brace Install	0 ea	@	$	- /ea	$	-	$ 231,000
Total Building PSF	17.8 psf						Total Building PSF	19.2 psf						
PROFESSIONAL FEES							**PROFESSIONAL FEES**							
License	0 lf	@	$	- /lf	$	-	License	1 ls	@	$	150,000 /ls	$	150,000	$ (150,000)
Subtotal Steel					**$**	**4,159,400**	**Subtotal Steel**					**$**	**4,166,200**	**$ (6,800)**
ARCHITECTURAL							**ARCHITECTURAL**							
Furring - Brace Frames (At toilet in PR)	0 lf	@	$	95 /lf	$	-	Furring - Brace Frames (At toilet in PR)	-336 lf	@	$	95 /lf	$	(31,920)	$ 31,920
Furring - Gusset Plates	0 ea	@	$	95 /ea	$	-	Furring - Gusset Plates	-485 ea	@	$	95 /ea	$	(46,075)	$ 46,075
Paint	0 sf	@	$	0.75 /sf	$	-	Paint	-14333 sf	@	$	0.75 /sf	$	(10,750)	$ 10,750
Wrap Braces	0 ea	@	$	2.00 /ea	$	-	Wrap Braces	-6944 sf	@	$	2.00 /sf	$	(13,888)	$ 13,888
Subtotal Architectural					**$**	**-**	**Subtotal Architectural**					**$**	**(102,633)**	**$ 102,633**

BENEFITS OF SIDEPLATE

- Larger patient rooms or larger toilet area at patient rooms
- There will be no braces to obstruct views and/or window placement
- Faster erection time
- Less foundation work

TOTAL SAVINGS **$ 240,785**

ADDITIONAL SAVINGS FOR DRILLED PIERS (TUBEX)

For more information: **Toll Free** 800 475 2077 **Tel** 949 305 7889 www.sideplate.com

SIDEPLATE® Setting the Steel Frame Standard™