

**SFU STUDENT UNION BUILDING**  
**3# PRELIMINARY CONCEPTUAL SCHEMES:**  
**AREA + COST CALCULATIONS**

Nov 21, 2008

- **Student Space:**  
 Total Net Area = 75,195 sq.ft  
 Total Gross Area = 116,740 sq.ft (approx.)
- **Art Gallery:**  
 Total Gross Area = 12,000 sq.ft
- **Parking:** To be determined

**OPTION 1: FULL SCHEME – STUDENT UNION + GALLERY**  
**IN NEW BUILDING**

Student space Gross Area = 116,740 sq.ft  
 Art Gallery Gross Area = 12,000 sq.ft

Total requirement gross area required for Student Union Building + Art Gallery  
 = 128,740 sq.ft

Brackets ( ) = Spaces not included calculation.

SUB LEVEL	REF LEVEL	AREA
-	12 (±1241') - Upper Roof	
5	11 (±1229') - Student Space (+ Green Roof)	6,823 Sq.Ft
4	10 (±1218') - Student Space + Art Gallery	39,767 Sq.Ft
3	09 (±1208') - Student Space + Art Gallery	37,611 Sq.Ft
2	08 (±1198') - Student Space + Art Gallery	34,730 Sq.Ft
1+P1	07 (±1188) - Student Space (+ Parking)	<u>9,809 Sq.Ft</u>
	<b>Total Student + Gallery Area =</b>	<b>128,740 Sq.Ft</b>

**Note:** Level # 7 not required for student spaces if Art Gallery (12,000 sq.ft) not located in complex.

**Parking + Loading**

2	08 (±1198')- Loading	3,708 Sq.Ft
P1	07 (±1188) - Parking + (Student spaces)	23,044 Sq.Ft
P2	06 (±1178) - Parking	<u>36,755 Sq.Ft</u>
	<b><u>Sub Total</u></b>	<b>59,799 Sq.Ft</b>

**Approximate Building Area = 199,538 Sq.Ft**

## PRELIMINARY PROJECT COST ESTIMATE

New Construction: Student Space =

Construction cost estimated @ 400% per sq. ft = \$46,696,000

+ 30% Soft Cost and furniture and equipment = **\$60,704,800**

New Construction: Art Gallery Project Cost =

Construction and soft cost estimated = \$1000 per sq. ft = **\$12,000,000**

New Construction: Underground Parking:

Approximate # Parking stalls (to be confirmed)

P1            07 (±1188) = 66 stalls @ \$ 50, 000 per stall = \$3,300,000.00

P2            06 (±1178) = 105 stalls @ \$ 50, 000 per stall = \$5,250,000.00

Approximate Total = **\$8,550,000.00**

Total Project Cost with Underground Parking - \$12, 000,000 + \$60,704,800 +  
8,550,000.00

= **\$ 81,254, 800.00**

**OPTION 2: REDUCED SCHEME – STUDENT UNION IN NEW BUILDING + RENOVATED LEVEL 9 + 10 MBC**

**Student Space Calculation**

New Construction = 100,362 sq.ft

Renovated Space (MBC) = 16,378 sq.ft

Total requirement gross area required for Student Union Building = 116,740 sq.ft

Brackets () = Spaces not included calculation.

<b>SUB LEVEL</b>	<b>REF LEVEL</b>	<b>AREA</b>
-	12 (±1241') - Upper Roof	
4	11 (±1229') - Student Spaces (+ Green Roof)	6,823 Sq.Ft
3	10 (±1218') - Student Spaces	55,955 Sq.Ft
2	09 (±1208') - Student Spaces	37,537 Sq.Ft
1 / P1	08 (±1198') - Sub Program (+ Loading)	<u>16,425 Sq.Ft</u>
	<b>Total Student Area =</b>	<b>116,740 Sq.Ft</b>

Note: Above area calculations includes renovated student spaces in MBC.

**Parking + Loading**

1/ P1	08 (±1198') - Partial Parking Level	22,488 Sq.Ft
1	08 (±1198') - Loading	<u>3,708Sq.Ft</u>
	<b>Sub Total</b>	<b>26,196 Sq.Ft</b>

## MBC RENOVATION CALCULATION

### Existing Area considered in space trade:

Admin space - Level # 10 = 15,531 sq. ft  
SFU circulation - Level # 10 = 2,489 sq. ft  
18,020 sq. ft

Student Space - Level # 09 = 20,404 sq.ft

### Renovated Area:

New Student Space Level # 10 -16,378 sq.ft (space lost = 2384 sq.ft)  
New Renovated Admin Level # 09 -20,404 sq.ft (space gain = 4873 sq.ft)  
SFU circulation Level # 10 - 1,642 sq.ft

*The SFSS space difference may be sold to University or the student space expanded.*

## PRELIMINARY PROJECT COST ESTIMATE

New Construction Area = 100,362 sq.ft

New Construction cost of 100,362 sq.ft Estimated @ \$400 per sq. ft =  
\$40,144,800.00 \$ 250 per sq.ft (including soft cost) = **\$52,188,240.00**

### Renovation Area

Level 10 # Student space =18,020 sq.ft  
Level 09 # Admin. =20,404 sq.ft  
Total Renovation Area = 38,424 sq.ft

Renovation cost of 38,424 sq.ft of Level 9 +10 in MBC  
Estimated @ \$250 per sq.ft (including soft cost) = **\$9,606,000.00**

### Underground Parking Cost

Approximate # Parking Stalls (to be confirmed)

1/ P1 08 (±1188) = 56 stalls @ \$ 50, 000 per stall = **\$2,800,000.00**

### Total Project Cost

New Building + Renovated MBC \$52,188,240.00 + \$9,606,000.00  
= **\$61,794,240.00**

With Underground Parking - \$2,800,000.00 + \$61, 794, 240  
= **\$ 64, 594,240.00**

**OPTION 3: COMBINED SCHEME – STUDENT UNION IN NEW BUILDING +  
REDUCED RENOVATED LEVEL 9 + 10 MBC**

**Student Space Calculation**

New Construction = 104,293 sq.ft

Renovated Space (MBC) = 12,447 sq.ft

Total requirement gross area required for Student Union Building = 116,740 sq.ft

Brackets () = Spaces not included calculation.

<b>SUB LEV</b>	<b>REF LEVEL</b>	<b>AREA</b>
-	12 (±1241') - Upper Roof	
4	11 (±1229') - Student Spaces (+ Green Roof)	6,822 Sq.Ft
3	10 (±1218') - Student Spaces (+ Admin MBC)	52,013 Sq.Ft
2	09 (±1208') - Student Spaces (+ Admin MBC)	44,226 Sq.Ft
1	08 (±1198') - Services Space (+ Loading)	<u>13,678 Sq.Ft</u>
	<b>Total</b>	<b>116,740 Sq.Ft</b>

**Parking**

P1	08 (±1198') - Partial Parking Lev.	25,253 Sq.Ft
P2	08 (±1198') - Loading	<u>3,708 Sq.Ft</u>
	Sub Total	28,961 Sq.Ft
	Total Area	145,701 Sq.Ft

## MBC RENOVATION CALCULATION

### Existing Area considered in space trade:

Admin space - Level # 10 = 12, 447 sq. ft

Student Space - Level # 09 = 13,716 sq.ft

### Renovated Area:

New Student Space Level # 10 -12, 447 sq.ft (space lost = 1269 sq.ft)

New Renovated Admin Level # 09 -13,716 sq.ft (space gain = 1269 sq.ft)

*The SFSS space difference may be sold to University or the student space expanded.*

## PRELIMINARY PROJECT COST ESTIMATE

New Construction Area = 104,293 sq.ft

New Construction cost of 100,362 sq.ft Estimated @ \$400 per sq. ft = \$41,717,200.00  
\$ 250 per sq.ft (including soft cost) = **\$54,232,360.00**

### Renovation Area

Level 10 # Student space =12,447 sq.ft

Level 09 # Admin. =13,716 sq.ft

Total Renovation Area = 26,163 sq.ft

Renovation cost of 26,163 sq.ft of Level 9 +10 in MBC  
Estimated @ \$250 per sq.ft (including soft cost) = **\$6,540,750.00**

### Underground Parking Cost

Approximate # Parking Stalls (to be confirmed)

1/ P1 08 (±1198') = 73 stalls @ \$ 50, 000 per stall = **\$3,650,000.00**

### Total Project Cost

New Building + Renovated MBC \$54,232,360.00 + \$6,540,750.00  
= **\$60,773,110.00**

With Underground Parking - \$2,800,000.00 + \$61, 794, 240  
= **\$ 64,423,110.00**