

## REPORT- LV-E Details of Underground Surfaces

WEATHER FILE- SEATTLE BOEING FI WA

NUMBER OF UNDERGROUND SURFACES 59

| SURFACE<br>NAME                  | MULTIPLIER | AREA<br>(SQFT ) | CONSTRUCTION<br>NAME            | U-VALUE<br>(BTU/HR-SQFT-F) |
|----------------------------------|------------|-----------------|---------------------------------|----------------------------|
| P1 South Wall (B.SW1.U1) \$X     | 1.0        | 196.35          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 West Wall (B.SW1.U2) \$X      | 1.0        | 192.50          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 West Wall (B.W2.U3) \$X       | 1.0        | 413.05          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 West Wall (B.WNW3.U4)         | 1.0        | 211.20          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 North Wall (B.WNW3.U5)        | 1.0        | 103.95          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 North Wall (B.N4.U6)          | 1.0        | 176.00          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 South Wall (B.S6.U7) \$X      | 1.0        | 508.75          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 East Wall (B.SE7.U8)          | 1.0        | 165.55          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 South Wall (B.SE7.U9)         | 1.0        | 187.00          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 South Wall (B.WSW11.U10) \$X  | 1.0        | 324.50          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 North Wall (B.WSW11.U11) \$X  | 1.0        | 162.25          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 North Wall (B.WSW11.U12) \$X  | 1.0        | 78.65           | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 West Wall (B.WSW11.U13) \$X   | 1.0        | 354.75          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 North Wall (B.NNE12.U14) \$X  | 1.0        | 1391.50         | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 East Wall (B.NNE12.U15) \$X   | 1.0        | 416.35          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 South Wall (B.SE13.U16) \$X   | 1.0        | 440.00          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 South Wall (B.SE13.U17) \$X   | 1.0        | 255.75          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P1 East Wall (B.SE13.U18) \$X    | 1.0        | 589.60          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 South Wall (BB.SW1.U1) \$X    | 1.0        | 160.65          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 West Wall (BB.SW1.U2) \$X     | 1.0        | 157.50          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 West Wall (BB.WNW2.U3) \$X    | 1.0        | 172.80          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 North Wall (BB.WNW2.U4) \$X   | 1.0        | 85.05           | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 Flr (BB.C3.I5)                | 1.0        | 136.28          | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P3 South Wall (BB.W7.U5) \$X     | 1.0        | 265.50          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 North Wall (BB.W7.U6) \$X     | 1.0        | 341.10          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 West Wall (BB.W7.U7) \$X      | 1.0        | 628.20          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 Flr (BB.NNE8.I27)             | 1.0        | 4995.33         | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P3 North Wall (BB.NNE8.U8) \$X   | 1.0        | 1138.50         | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 East Wall (BB.NNE8.U9) \$X    | 1.0        | 340.65          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 Flr (BB.SSE9.I34)             | 1.0        | 7345.59         | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P3 East Wall (BB.SSE9.U10) \$X   | 1.0        | 617.85          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P3 South Wall (BB.SSE9.U11) \$X  | 1.0        | 1138.50         | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 South Wall (UB.SW10.U12) \$X  | 1.0        | 160.65          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 West Wall (UB.SW10.U13) \$X   | 1.0        | 157.50          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 West Wall (UB.WNW11.U14)      | 1.0        | 172.80          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 North Wall (UB.WNW11.U15)     | 1.0        | 85.05           | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 South Wall (UB.W16.U16) \$X   | 1.0        | 265.50          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 North Wall (UB.W16.U17) \$X   | 1.0        | 341.10          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 West Wall (UB.W16.U18) \$X    | 1.0        | 628.20          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 North Wall (UB.NNE17.U19) \$X | 1.0        | 1138.50         | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 East Wall (UB.NNE17.U20) \$X  | 1.0        | 340.65          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 East Wall (UB.SSE18.U21) \$X  | 1.0        | 617.85          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P2 South Wall (UB.SSE18.U22) \$X | 1.0        | 1138.50         | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 Flr (B.SW1.I1) \$X            | 1.0        | 312.37          | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P4 South Wall (B.SW1.U1) \$X     | 1.0        | 160.65          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 West Wall (B.SW1.U2) \$X      | 1.0        | 157.50          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 Flr (B.WNW2.I2)               | 1.0        | 152.62          | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P4 West Wall (B.WNW2.U3)         | 1.0        | 145.35          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 North Wall (B.WNW2.U4)        | 1.0        | 85.05           | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 North Wall (B.NE3.U5)         | 1.0        | 122.85          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 Flr (B.NE3.I3)                | 1.0        | 362.09          | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P4 East Wall (B.C4.U7)           | 1.0        | 69.30           | 2015 SEC ALL BG Mass Wall Const | 0.070                      |

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|------------------------------|------------|-----------------|---------------------------------|----------------------------|
| P4 Flr (B.C4.I5)             | 1.0        | 266.80          | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P4 Flr (B.SSE5.I7)           | 1.0        | 367.29          | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P4 East Wall (B.N6.U11) \$X  | 1.0        | 324.45          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 Flr (B.N6.I8) \$X         | 1.0        | 5334.83         | 2015 SEC ALL Joist Floor Const  | 0.029                      |
| P4 North Wall (B.N6.U12) \$X | 1.0        | 530.10          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 West Wall (B.N6.U13) \$X  | 1.0        | 655.65          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |
| P4 South Wall (B.N6.U14) \$X | 1.0        | 265.50          | 2015 SEC ALL BG Mass Wall Const | 0.070                      |