

**J.E. COULTER  
ASSOCIATES  
LIMITED**

Consulting Engineers in  
Acoustics, Noise & Vibration

PRESIDENT  
John E. Coulter, B.A.Sc., P.Eng.

VICE-PRESIDENT  
Howard R. Patlik, C.E.T.

Suite 211  
1210 Sheppard Avenue East  
Toronto, Ontario M2K 1E3  
Tel: (416) 502-8598  
Fax: (416) 502-3473  
[www.jecoulterassoc.com](http://www.jecoulterassoc.com)

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**TRANSMITTAL RECORD**

**Date: March 8, 2019**

**To: BPE Development**

**Enclosing Herewith: Report**

**Via: E-mail**

**Title: Noise Impact Feasibility Report  
Unity Farm, Inn & Spa  
2285 Battersea Road  
Glenburnie, Ontario**

**Comments:**

**Distribution: Kiley Patrick**

**Per: Daniela Filiberto**

**NOISE IMPACT FEASIBILITY REPORT  
UNITY FARM, INN & SPA  
2285 BATTERSEA ROAD  
GLENBURNIE, ONTARIO**

**FOR**

**BPE DEVELOPMENT**

**BY**

  
**HOWARD R. PATLIK, C.E.T.**



  
**JOHN E. COULTER, B.A.Sc., P.ENG.**



**J.E. COULTER ASSOCIATES LIMITED  
1210 SHEPPARD AVENUE EAST, SUITE 211  
TORONTO, ONTARIO  
M2K 1E3  
416-502-8598**

**MARCH 7, 2019**

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## 1.0 INTRODUCTION

At the request of BPE Development, J.E. COULTER ASSOCIATES LIMITED has reviewed the proposed event venue at 2285 Battersea Road in Glenburnie, Ontario, with regard to the potential for noise impact on the adjacent residents from the operation of the Unity Farm, Inn & Spa (see Appendix A, Figure 1). The purpose of this report is to outline the feasibility of the proposed use in terms of satisfying the Ministry of the Environment, Conservation and Parks (MECP) noise criteria and the City of Kingston Noise Bylaw (2004-52).

## 2.0 SITE DESCRIPTION

The site is located at 2285 Battersea Road at Unity Road in Glenburnie (see Appendix A, Figure 2). The applicant is proposing to redevelop the existing single-family residential dwelling and larger agricultural property to allow the site to be used for broader commercial uses including corporate event venues, spa, café, rental cabins, lounge, pool area, and boutique inn. The applicant is proposing to renovate and adaptively reuse the existing single-family dwelling and the existing barn as part of the overall development plan (see Appendix A, Figures 3 and 4). The original barn will be a rebuilt corporate centre to resemble a barn. The proposal also includes 40 stand-alone cabins (15 cabins on the southern 17 acre parcel, and 25 cabins on the northern 17 acre parcel) and an agricultural storage building located in the north west corner of the northern parcel" (see Building "AD", Appendix A, Figure 2).

To the west, along the north side of Unity Road, is an existing dwelling. To the south, along the south side of Unity Road, are existing dwellings and a church at the southwest quadrant of Battersea and Unity Roads. To the east are existing dwellings along Battersea Road and Unity Road. Glenburnie Public School is located at the southeast quadrant of Battersea and Unity Roads.

## 3.0 NOISE CRITERIA

MECP publishes *NPC-300* (Environmental Noise Guideline) for consideration of implementation by local municipalities. The Municipal Noise Model By-Law also states a qualitative measure in Table 3-1, Item 9. The recommended restricted time is 11 p.m. through to 7 a.m.

This site is located in an area that is classified by MECP (*NPC-300*, Table B-2) as Class 2 and 3 for the purposes of the noise analysis. Class 2 means an area with an acoustical environment that has qualities representative of both Class 1 (Urban) and Class 3 (Rural) areas:

1. Sound levels characteristic of Class 1 during daytime (0700 to 1900 or to 2300 hours); and
2. Low evening and night background sound level defined by natural environment and infrequent human activity starting as early as 1900 hours (1900 or 2300 to 0700 hours).

A Class 3 area means a rural area with an acoustical environment that is dominated by natural sounds, having little or no road traffic, such as:

1. a small community

2. an agricultural area
3. a rural recreational area such as a cottage or a resort area, or
4. a wilderness area.

During the evening and nighttime, the ambient sound levels will be relatively low at most of the points of reception, such that the traffic on the local roads is not sufficient to warrant a Class 2 designation and thus all receptors are considered to be classified as rural (Class 3).

MECP's noise criteria for outdoor points of reception (i.e., a rear yard) are as follows:

| <b>Table 1: Exclusion Limit Values of One-Hour Equivalent Sound Level (<math>L_{eq}</math>, dBA)<br/>Outdoor Points of Reception</b> |                     |                     |                     |                     |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Time of Day</b>                                                                                                                   | <b>Class 1 Area</b> | <b>Class 2 Area</b> | <b>Class 3 Area</b> | <b>Class 4 Area</b> |
| 07:00 – 19:00                                                                                                                        | 50                  | 50                  | 45                  | 55                  |
| 19:00 – 23:00                                                                                                                        | 55                  | 45                  | 40                  | 60                  |

MECP's noise criteria for the sound level in the plane of an open window are as follows:

| <b>Table 2: Exclusion Limit Values of One-Hour Equivalent Sound Level (<math>L_{eq}</math>, dBA)<br/>Plane of Window of Noise-Sensitive Spaces</b> |                     |                     |                     |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Time of Day</b>                                                                                                                                 | <b>Class 1 Area</b> | <b>Class 2 Area</b> | <b>Class 3 Area</b> | <b>Class 4 Area</b> |
| 07:00 – 19:00                                                                                                                                      | 50                  | 50                  | 45                  | 60                  |
| 19:00 – 23:00                                                                                                                                      | 50                  | 50                  | 40                  | 60                  |
| 23:00 – 07:00                                                                                                                                      | 45                  | 45                  | 40                  | 55                  |

Where the existing traffic on Battersea and Unity roads generate higher sound levels than the MECP minimum exclusion levels, these values can be used. A review of the traffic on Battersea Road and Unity Road indicate the following traffic volumes (24-hour volumes) as provided by the City of Kingston plan (see Appendix A, Figure 6):

*Count Date: April 2016*

1. Battersea Road, north of Unity Road: 4,884 vehicles per day
2. Battersea Road, south of Unity Road: 5,614 vehicles per day
3. Unity Road, east of Battersea Road: 402 vehicles per day
4. Unity Road, west of Battersea Road: 1,997 vehicles per day.

With the large setback of several of the dwellings from these roads and the relatively low traffic volumes, MECP minimum exclusion limits apply as the traffic is not sufficient to generate sound levels greater than MECP's minimum exclusion limits.

#### **4.0 ACOUSTICAL IMPACT ANALYSIS**

Applying MECP's *NPC-300* guideline to the site, the following sound levels are expected. The sound levels were calculated using a 3D model (CadnaA 2019). For the initial analysis, it was assumed the sound of the two loudspeakers each generate 105 dBA at 1m, including a 5 dB adjustment for tonality. This is typical for these types of uses.

For the various mechanical systems proposed for the development, the grade level chiller (rated at 92 dB PWLA) is to be located near the garbage area. The rooftop mechanical equipment in the main building is made up of a rooftop make air unit (Daikin) rated at 78 dBA (Sound Power). There will also be a RTU for the dining room area that projects out on the northeast corner of the main building on the patio area (worst case scenario, maximum rating of 100 dBA Sound Power). The RTU will be placed on the roof next to the main building and will have fencing around it to project the sound upwards.

The cabin HVAC condenser units are assumed to be rated at 70 dBA (Sound Power).

Detailed calculations are provided in Appendix B.

Various receptors were considered in the analysis (see Appendix A, Figure 5):

- R1: dwelling at 808 Unity Road, east of the proposed development
- R2: dwelling at 796 Unity Road, east of the proposed development
- R3: dwelling at 799 Unity Road, east of the proposed development
- R4: dwelling at 2336 Battersea Road, north of the proposed development
- R5: dwelling at 885 Unity Road, south of the proposed development
- R6: dwelling at 874 Unity Road, west of the proposed development
- R7: dwelling at 896 Unity Road, west of the proposed development
- R8: dwelling at 2329 Battersea Road, north of the proposed development
- R9: dwelling to 2341 Battersea Road, north of proposed development
- R10: dwelling to 2347 Battersea Road, north of proposed development
- R11: dwelling to 2359 Battersea Road, north of proposed development.

The analysis reviewed the following:

#### **Corporate Venue Building (Phase 1A)**

The corporate event venue building is part of Phase 1A and is located where the existing large barn is to be removed (see Building "I", Appendix A, Figure 2). It is expected to incorporate internally amplified sound for its various functions. The proponent is planning to construct the building from Insulated Concrete Forms (ICF). This assembly typically has a Sound Transmission Class (STC) rating of 48 to 55. The analysis assumed two scenarios: one where the entrance doors are open closest to the residences so that the amplified sound travels through; the other assumes all doors and windows are closed and the building is ventilated (i.e., air conditioning or central ventilation).

The analysis also includes the sound levels generated by all of the anticipated HVAC units at the inn and corporate event space building and ancillary buildings, and the 40 stand-alone cabins.

## Outdoor Patio Area

The outdoor patio area was analyzed where loudspeakers (2) may be used. The intent is to operate any loudspeaker system at low levels, so as not to disturb the clients of the inn as well as the surrounding neighbours. For the initial analysis, it was assumed the sound of two loudspeakers each generate 82 dBA at 1m (95 dBA Sound Power), including a 5 dB adjustment for tonality.

## Summary

Tables 3 and 4, below, detail each source and the anticipated sound levels at the points of reception.

| <b>Table 3: Projected Sound Levels (Quietest Hour)</b><br><b>Daytime/Evening (0700-2300 Hours)</b> |                                        |           |           |           |           |           |            |           |            |           |           |            |            |
|----------------------------------------------------------------------------------------------------|----------------------------------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|-----------|------------|------------|
| <b>Sources</b>                                                                                     | <b>Sound Level (dB L<sub>eq</sub>)</b> |           |           |           |           |           |            |           |            |           |           |            |            |
|                                                                                                    | <b>R1</b>                              | <b>R2</b> | <b>R3</b> | <b>R4</b> | <b>R5</b> | <b>R6</b> | <b>R6B</b> | <b>R7</b> | <b>R7B</b> | <b>R8</b> | <b>R9</b> | <b>R10</b> | <b>R11</b> |
| Corp Venue HVAC                                                                                    | 26.4                                   | 23.1      | 24.6      | 23.8      | 24.0      | 24.4      | 27.4       | 21.6      | 27.0       | 28.2      | 23.8      | 15.2       | 8.8        |
| Grade Level Chiller                                                                                | 24.6                                   | 18.7      | 16.4      | 30.2      | 11.3      | 18.3      | 24.7       | 27.9      | 30.8       | 29.7      | 32.3      | 27.5       | 25.3       |
| Rooftop HVAC                                                                                       | 36.4                                   | 30.1      | 34.4      | 33.1      | 34.2      | 36.6      | 40.1       | 33.3      | 38.5       | 33.1      | 30.1      | 22.9       | 24.3       |
| Cabin HVAC                                                                                         | 10.8                                   | 7.6       | 10.6      | 15.7      | 9.7       | 22.4      | 13.7       | 5.8       | 9.9        | 18.6      | 18.6      | 14.9       | 18.1       |
| Outdoor Patio Speakers                                                                             | 41.6                                   | 31.9      | 38.0      | 27.9      | 36.8      | 35.4      | 42.0       | 30.8      | 33.7       | 36.5      | 26.2      | 16.2       | 12.3       |
| <b>TOTAL SOUND LEVEL (dB L<sub>eq</sub>)</b>                                                       | <b>43</b>                              | <b>35</b> | <b>40</b> | <b>36</b> | <b>39</b> | <b>39</b> | <b>44</b>  | <b>36</b> | <b>41</b>  | <b>39</b> | <b>36</b> | <b>30</b>  | <b>30</b>  |
| Noise Criteria (dB L <sub>eq</sub> )                                                               | 45                                     | 45        | 45        | 45        | 45        | 45        | 45         | 45        | 45         | 45        | 45        | 45         | 45         |
| Noise Impact (dB)                                                                                  | -2                                     | -10       | -5        | -9        | -6        | -6        | -1         | -9        | -4         | -6        | -9        | -15        | -15        |
| Meets Criteria?                                                                                    | YES                                    | YES       | YES       | YES       | YES       | YES       | YES        | YES       | YES        | YES       | YES       | YES        | YES        |

Based on the analysis (Table 3) with the outdoor patio operating with amplified music and vocals during the day or evening, and all doors and windows closed and the event building being air conditioned, the sound levels would meet MECP's *NPC-300* noise guideline.

| <b>Table 4: Projected Sound Levels (Quietest Hour)<br/>Nighttime (2300-0700 Hours)</b> |                                        |           |           |           |           |           |           |           |           |            |            |
|----------------------------------------------------------------------------------------|----------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|
| <b>Sources</b>                                                                         | <b>Sound Level (dB L<sub>eq</sub>)</b> |           |           |           |           |           |           |           |           |            |            |
|                                                                                        | <b>R1</b>                              | <b>R2</b> | <b>R3</b> | <b>R4</b> | <b>R5</b> | <b>R6</b> | <b>R7</b> | <b>R8</b> | <b>R9</b> | <b>R10</b> | <b>R11</b> |
| Corp Venue HVAC                                                                        | 23.4                                   | 20.1      | 21.6      | 20.8      | 21.0      | 21.4      | 18.6      | 25.2      | 20.8      | 12.2       | 5.8        |
| Grade Level Chiller                                                                    | 21.6                                   | 15.7      | 13.4      | 27.2      | 8.3       | 15.3      | 24.9      | 26.7      | 29.3      | 24.5       | 22.3       |
| Rooftop HVAC                                                                           | 33.4                                   | 27.1      | 31.4      | 30.1      | 31.2      | 33.6      | 30.3      | 30.1      | 27.1      | 19.9       | 21.3       |
| Cabin HVAC                                                                             | 7.8                                    | 4.6       | 7.6       | 12.7      | 6.7       | 19.4      | 2.8       | 15.6      | 15.6      | 11.9       | 15.1       |
| Outdoor Patio Speakers                                                                 | Off                                    | Off       | Off       | Off       | Off       | Off       | Off       | Off       | Off       | Off        | Off        |
| <b>TOTAL SOUND LEVEL<br/>(dB L<sub>eq</sub>)</b>                                       | <b>34</b>                              | <b>29</b> | <b>32</b> | <b>33</b> | <b>32</b> | <b>34</b> | <b>32</b> | <b>33</b> | <b>33</b> | <b>28</b>  | <b>28</b>  |
| Noise Criteria (dB L <sub>eq</sub> )                                                   | 40                                     | 40        | 40        | 40        | 40        | 40        | 40        | 40        | 40        | 40         | 40         |
| Noise Impact (dB)                                                                      | -6                                     | -11       | -8        | -7        | -8        | -6        | -8        | -7        | -7        | -12        | -12        |
| Meets Criteria?                                                                        | YES                                    | YES       | YES       | YES       | YES       | YES       | YES       | YES       | YES       | YES        | YES        |

Based on the analysis (Table 4) with all mechanical systems operating during the nighttime, the sound levels would meet MECP's *NPC-300* noise guideline.

## 5.0 NOISE CONTROL MEASURES

The criterion used in this case (*NPC-300*), applied to a predictable worst-case scenario. MECP has a definition of the case to be evaluated as the "worst-case predictable" situation. At numerous meetings and hearings, this clause has been variously interpreted by acoustical specialists as meaning everything from worst-case conceivable to the loudest average hourly levels on most days. Similar problems can occur in the qualitative portion of the City of Kingston's noise bylaw regarding how the term "audible" should be interpreted. Some acoustical engineers have interpreted this word to mean that the sound is too loud if it is at all detectable. Another interpretation is that the sound must be audible enough to dominate the listener's acoustic impression of the neighbourhood. This second interpretation is consistent with the balance of the quantitative part of the Model Noise Bylaw and is the interpretation that has been applied by this office.

Two areas are addressed in terms of noise control measures: the venue building and the outdoor patio area.

### Corporate Venue Building (Phase 1A)

With the corporate venue building (see Building "I", Appendix A, Figure 2), no noise impacts are expected. To meet MECP's noise guideline and the City of Kingston Noise Bylaw, the venue building must be operated with all doors and windows closed. The building must also be

provided with an air-conditioning or ventilation system so that the doors and windows can remain closed. There would be no need for any external noise control measures such as earth berms or fences at the perimeter of the site to shield the off-site dwellings.

The exterior façades of the buildings need to be constructed with materials sufficient to meet a Sound Transmission Class (STC) rating of 45 (minimum). The proposed ICF construction is more than adequate with closed windows and doors.

With a ventilation system where the doors and windows are allowed to remain open, the sound levels at the off-site housing will be in excess of MECP's *NPC-300* noise guideline. The venue sound system will have to employ built-in sound limiters. As well, doors must be strategically placed so that they are directed away from the residents.

### **Outdoor Patio**

The intent is to have low-level amplified music in the outdoor patio so that it does not impact both the clientele at the facility and the surrounding neighbours. By maintaining the amplified sound levels for each speaker (assuming a maximum of two loudspeakers) at 82 dBA at 1m in the outdoor patio area, MECP and the City of Kingston noise guidelines would be met.

It is noted that the City of Kingston Noise Bylaw (2004-52) indicates any sound that is "audible" can be considered a potential noise impact. Even with the loudspeaker generating about 80 dBA at 1m (similar to a TV speaker), this would be audible at the nearest receptors (R1, R5, R6, R7) because of the low ambient sound levels, especially in the evening.

## **6.0 CONCLUSIONS**

We would conclude that the proposed operation at the Unity Farm, Inn & Spa would, if unmitigated, not generate a noise impact exceeding MECP's *NPC-300* noise guideline at the surrounding neighbours. The outdoor patio, mechanical equipment, future corporate event building were all found to meet the noise criteria. To ensure compliance with *NPC-300* for the potential future phase of the corporate event building, noise control measures have been recommended (i.e., sufficient exterior wall and ceiling construction, air conditioning, limiters on loudspeaker systems). The use of open doors and windows will likely result in an exceedance of the guidelines.

The outdoor patio with amplified loudspeakers when set to a maximum level of 87 dBA at 1m are expected to meet both MECP's *NPC-300* and the City of Kingston Noise Bylaw because of the very low ambient sound levels, particularly during the evening and night.

## 7.0 RECOMMENDATIONS

To meet MECP's *NPC-300* noise criteria and the City of Kingston Noise Bylaw (2004-52), the following measures are recommended:

1. It is recommended that music played in the outdoor patio be limited to 87 dBA @1m.
2. It is recommended that a final review at Site Plan be undertaken to ensure the detailed architectural and mechanical plans (windows, walls, doors and roofing), ventilation systems and site layout meet the requirements of MECP and the City of Kingston Noise Bylaw.

### POTENTIAL FUTURE PHASE (CORPORATE EVENT BUILDING)

1. Exterior windows are to be rated at STC 36 (6mm commercial double glazing).
2. The sound system is to include a sound limiter system so that the set maximum level cannot be exceeded. A *house* sound system will help reduce the potential issue compared with outside groups bringing their own equipment. Access to the sound limiter device should only be available to upper management. An in-house loudspeaker system can be set up to accommodate this. If groups bring in their own sound system, management will need to ensure they cannot exceed the sound output limit.
3. The corporate event building is to be air conditioned or otherwise ventilated so that doors and/or windows can remain closed. Open doors and windows will generate noise impacts, especially when music is played into the latter part of the evening and night.
4. Where possible, entrance and exit doors should be placed so that they are not directed toward the off-site housing. This will help to limit sound from transmitting directly to them. Local screens (i.e., fencing and/or landscaping) close to the doors can be considered to help reduce any potential noise issues.
5. The exterior building façade (walls and ceiling) of the corporate venue building are to be constructed with an assembly rated at a minimum Sound Transmission Class (STC) of 45 (such as ICF construction) in the areas where music is to be played. This is applicable to both the walls and roofing. Once detailed architectural drawings are available, a final review of the exterior wall and roofing can be completed to ensure the MECP's noise criteria are met.

## APPENDIX A: FIGURES

**FIGURE 1**



Certificate of Practice Number: 2438  
4 Catherine Street, Suite 206, Kingston, ON K7K 1Z7  
Tel: 613 541 0776 Fax: 613 541 0804  
info@szaarch.com www.szaarchitects.ca

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**DRAWING LEGEND**

- A. EMERGENCY ENTRANCE & DELIVERIES
- B. RENOVATED FARMHOUSE INN
- C. INN RECEPTION & RESTAURANT
- D. SPA QUIET ROOM, TREATMENT ROOM & YOGA STUDIO
- E. SPA COURTYARD
- F. MAIN INN RECEPTION/ENTRANCE & FIRE DEPARTMENT ENTRANCE
- G. FIRE HYDRANT LOCATION
- H. INN & SPA PARKING (123 SPACES)
- I. CORPORATE VEHICLE, GIFT SHOP & SUITES
- J. RELOCATED SMALL BARN MAINTENANCE SHED
- K. OUTDOOR PATIO
- L. FLOWER CUTTING OR AGRICULTURE
- M. SUNFLOWER FIELDS OR AGRICULTURE (1 ACRE)
- N. OUTDOOR CAROLING AND SEATING
- O. EXISTING STONE PILLARS
- P. VINEYARD OR AGRICULTURE (6 ACRES)
- Q. SIGN
- R. BUS PARKING (13)
- S. VEGETABLE CUTTING OR AGRICULTURE
- T. POND
- U. TENDRY WATER TREATMENT BUILDING
- V. APPROXIMATE LOCATION OF NEIGHBOURING HOUSE
- W. APPROXIMATE LOCATION OF SEPTIC SYSTEM
- X. LILACS OR AGRICULTURE
- XX. TREES AND SHRUBS
- XXX. TREES AND SHRUBS AND FENCE
- Y. RESERVED
- Z. NEW MAINTENANCE SHED (RECONSTRUCTED BARN WITH RECLAIMED BARN BOARD CLADDING)
- AA. EMPLOYEE PARKING (18)
- AB. SERVICE PARKING (12)
- AC. NEW WELL LOCATION
- AD. NEW AGRICULTURE STORAGE BUILDING
- AE. TURKANOOND
- AF. APPROXIMATE LOCATION OF WETLAND
- AG. GRAVEL LOT
- AH. SNOW STORAGE
- AI. GOLF CART PATH
- AJ. MAIN BUILDING CHILLER

CABINS 1-5 (PHASE 1)

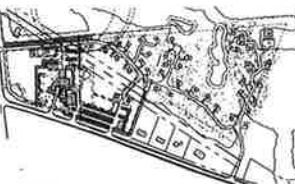
CABINS 6-15 (PHASE 2)

CABINS 16-40 (PHASE 3)

**ENTRANCE LEGEND**

- E1. UNITY ENTRANCE
- E2. MAIN GUEST ENTRANCE
- E3. APPROX. LOCATION OF EXISTING BARN ENTRANCE & FIRE DEPARTMENT ACCESS
- E4. APPROX. LOCATION OF EXISTING FIELD ENTRANCE & FIRE DEPARTMENT ACCESS
- E5. PHASE 3 BACK ACCESS

- APPROXIMATE LOCATION OF WETLAND (AS PROVIDED BY BPE)
- ELECTRICAL EASEMENT
- BUILDING
- FUTURE VINEYARD (OR AGRICULTURE)
- 6m WIDE FIRE ACCESS ROUTE (12m TURNING RADIUS TO CENTRE OF ROAD)
- APPROXIMATE LOCATION OF TREE LINE
- EXIT DOOR LOCATION



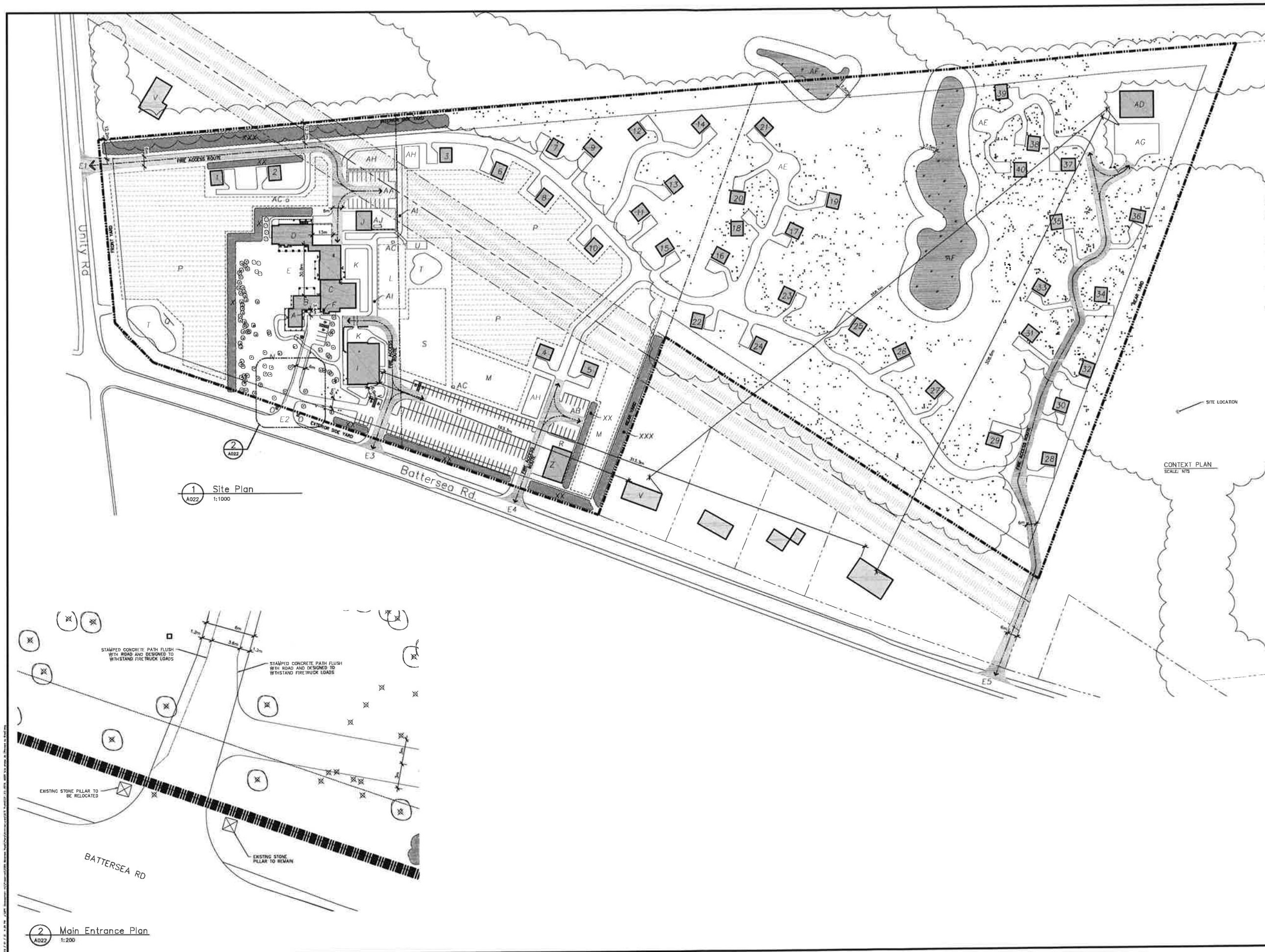
**PHASING PLAN**

SCALE: 1:8000

| Revision | Description       | Date |
|----------|-------------------|------|
| Project  | Unity Inn & Spa   |      |
| Location | 2285 Battersea Rd |      |
|          | Glenburnie, ON    |      |
| Client   | BPE Development   |      |

Drawing  
Site Plan Phase 3

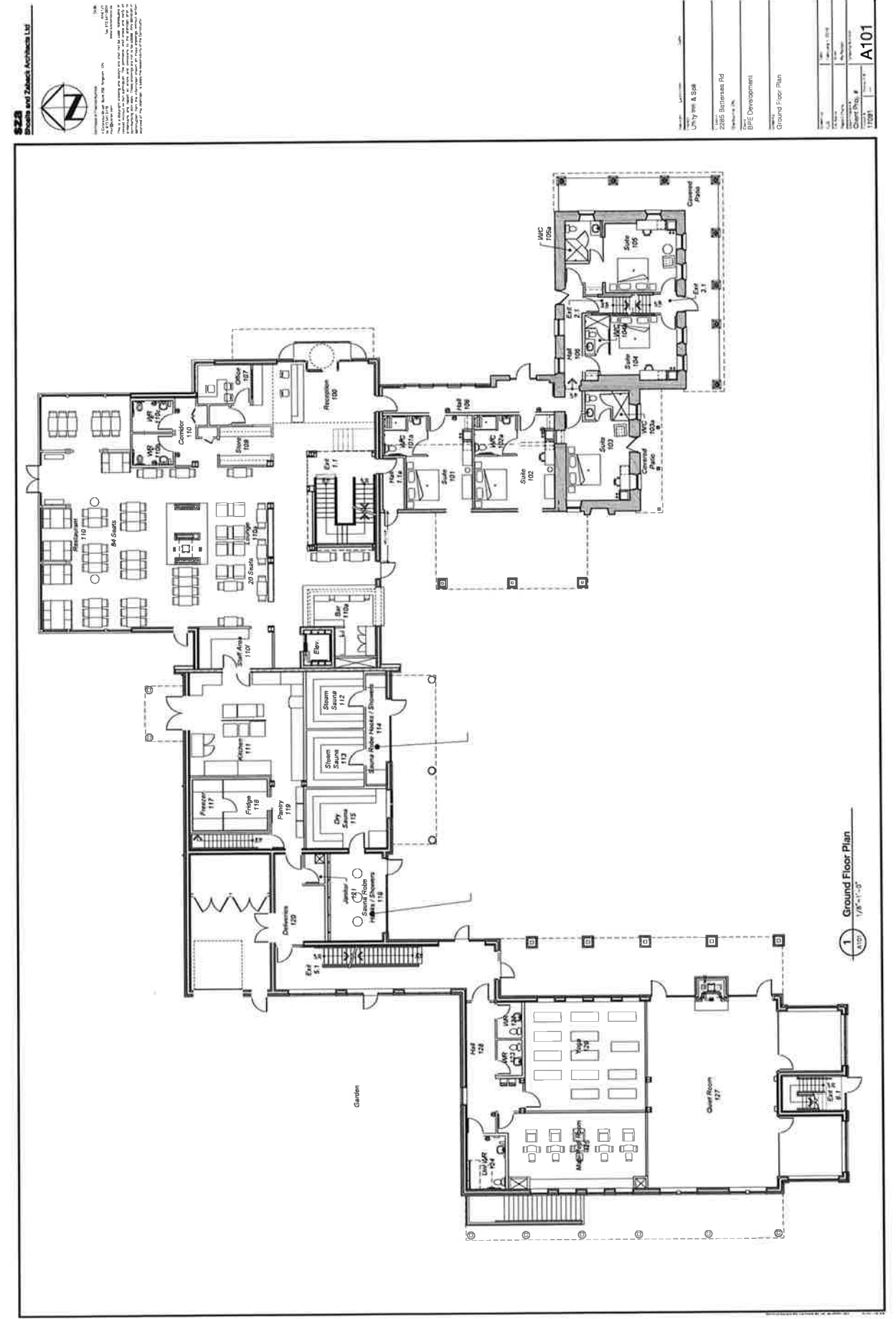
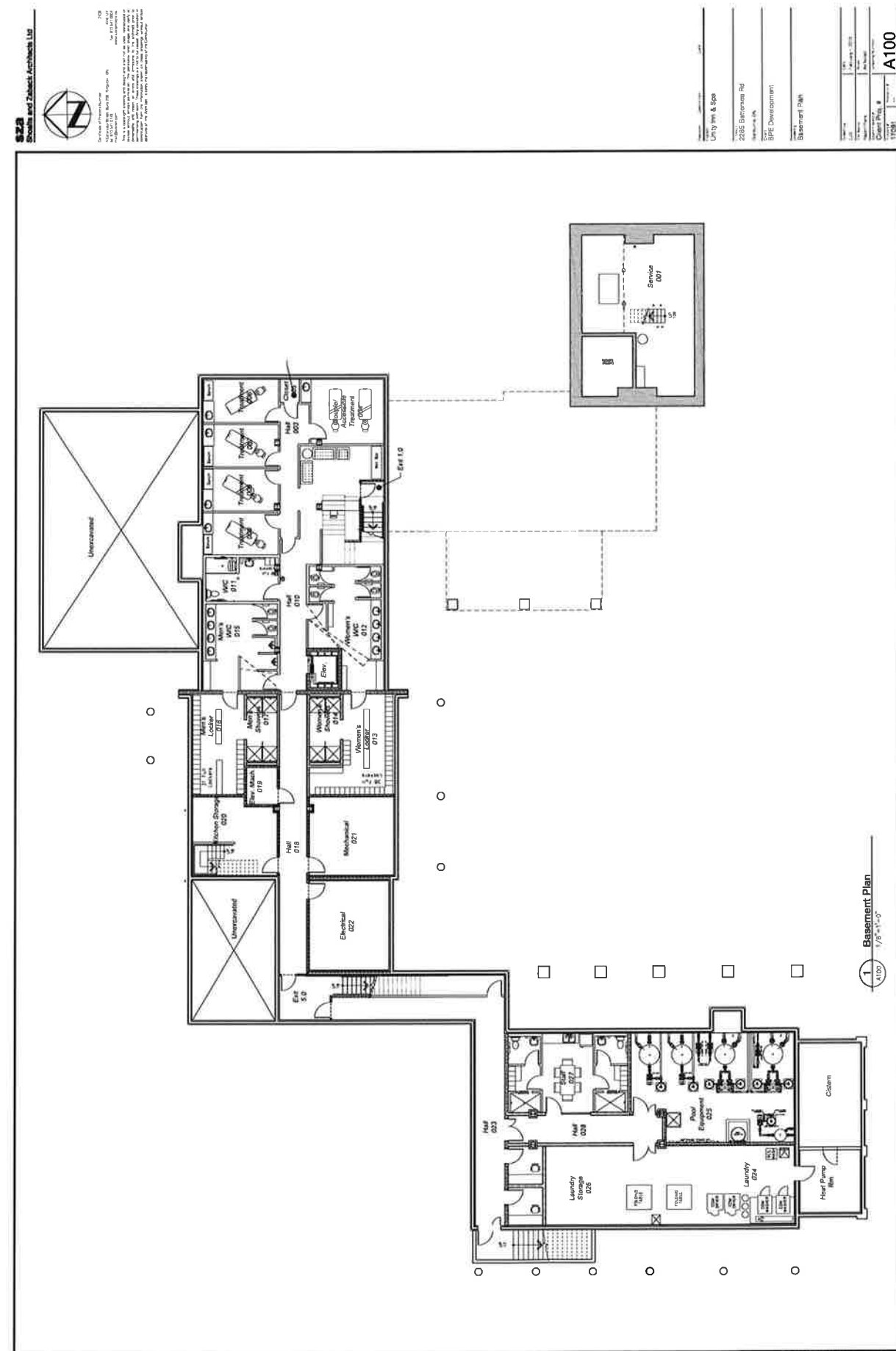
|                            |                          |
|----------------------------|--------------------------|
| Drawn by                   | Date                     |
| 01-23-2019, A020 Site plan | January 31, 2019         |
| Client Project #           | Scale                    |
| Client Proj. #             | 1:1000 (Revised by Brad) |
| Project #                  | Drawing Number           |
| 17091                      | A022                     |



1 Site Plan  
A022 1:1000

2 Main Entrance Plan  
A022 1:200

FIGURE 2



**FIGURE 3**

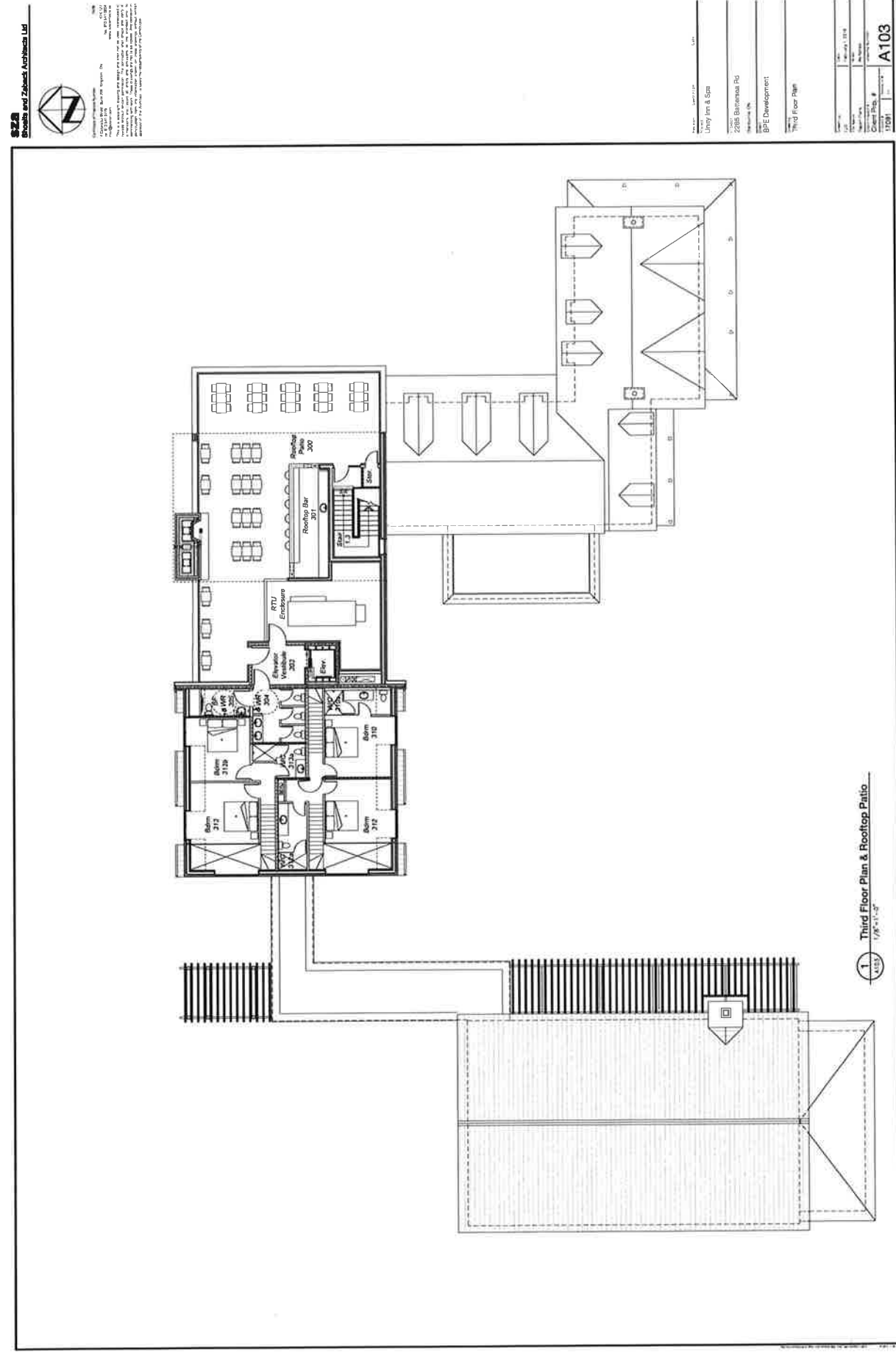
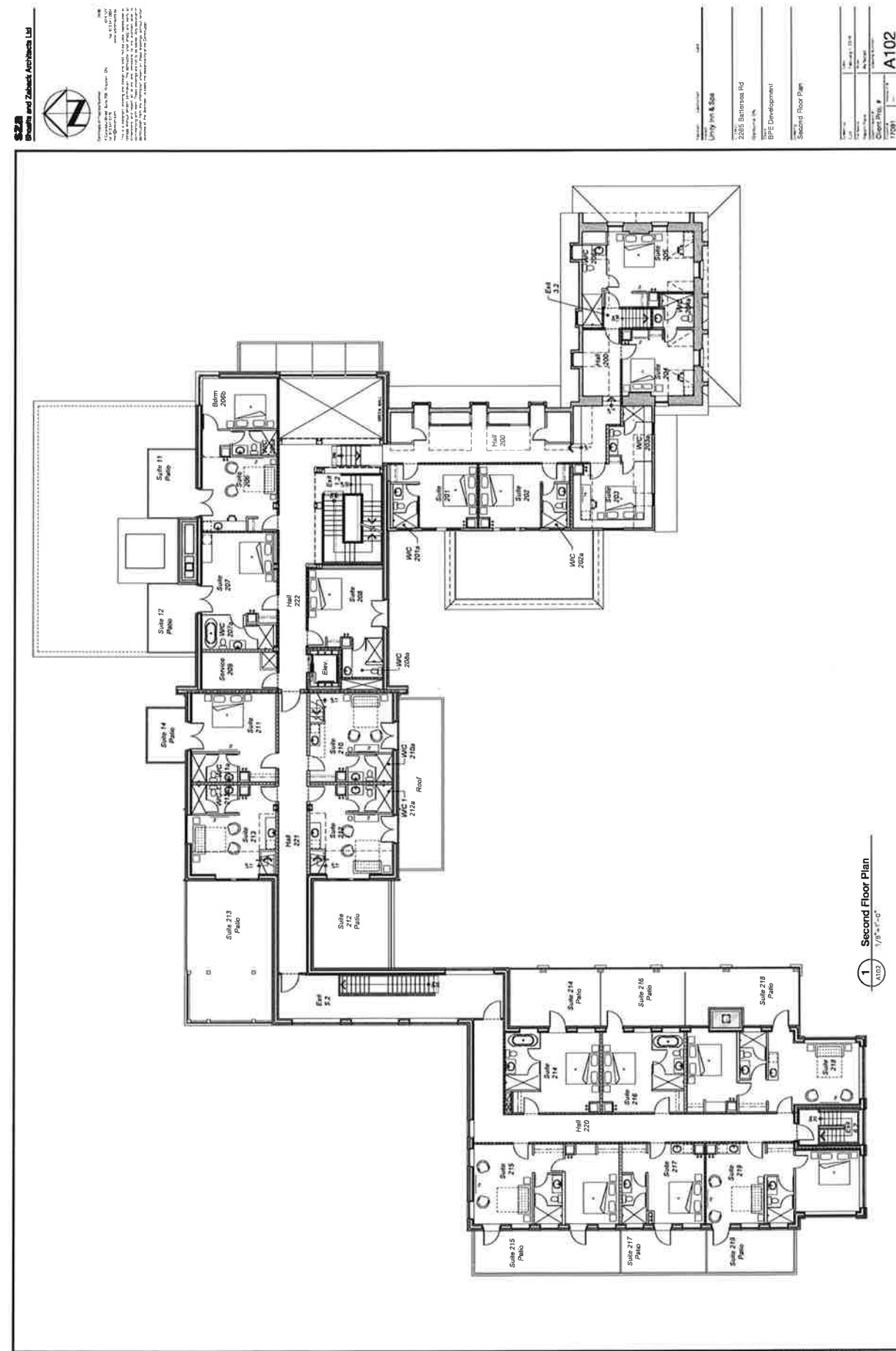




FIGURE 5



FIGURE 6

## **APPENDIX B: SOUND CALCULATIONS**

### **SAMPLE COMPUTER PRINTOUTS**

**SOUND LEVELS – DAYTIME (ALL SOURCES ON)**

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver

Name: R1  
ID: R1  
X: 18383601.08 m  
Y: 4908704.39 m  
Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 2   | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.6 | 0.4  | -0.1 | 1.8  | 0.0   | 0.0  | 0.0  | 0.0  | 36.4  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 6   | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 53.9 | 1.5  | 0.2  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 39.5  |
| 10  | 18383462.72 | 4908723.88 | 3.00 | 2     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.9 | 2.2  | -0.0 | 4.0  | 0.0   | 0.0  | 0.0  | 7.4  | 22.5  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 13  | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.3 | 1.8  | -0.3 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 37.2  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 18  | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 58.8 | 1.5  | 0.8  | 2.7  | 0.0   | 3.8  | 0.0  | 0.0  | 24.6  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 21  | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 54.9 | 0.3  | -0.0 | 3.4  | 0.0   | 0.0  | 0.0  | 0.0  | 26.4  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver  
 Name: R2  
 ID: R2  
 X: 18383659.74 m  
 Y: 4908740.35 m  
 Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 1   | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.7 | 0.5  | -0.0 | 5.8  | 0.0   | 0.0  | 0.0  | 0.0  | 30.1  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 4   | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.9 | 1.8  | 0.1  | 6.5  | 0.0   | 0.0  | 0.0  | 0.0  | 29.7  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 11  | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.7 | 2.1  | -0.1 | 6.6  | 0.0   | 0.0  | 0.0  | 0.0  | 27.7  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 23  | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 57.1 | 0.4  | -0.0 | 4.5  | 0.0   | 0.0  | 0.0  | 0.0  | 23.1  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver  
Name: R3  
ID: R3  
X: 18383631.33 m  
Y: 4908555.65 m  
Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 3   | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.3 | 0.6  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 34.3  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 8   | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 2.1  | 0.3  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 34.1  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 12  | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 2.3  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 33.2  |
| 19  | 18383417.64 | 4908724.77 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 2.3  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 1.2  | 31.8  |
| 22  | 18383417.64 | 4908724.77 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 61.5 | 2.6  | 0.0  | 0.0  | 0.0   | 6.0  | 0.0  | 3.3  | 21.6  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 27  | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 0.5  | -0.0 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 24.6  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver

Name: R4  
 ID: R4  
 X: 18383628.45 m  
 Y: 4908940.30 m  
 Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5   | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 0.5  | -0.6 | 2.1  | 0.0   | 0.0  | 0.0  | 0.0  | 33.0  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 9   | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 2.3  | 0.1  | 5.4  | 0.0   | 0.0  | 0.0  | 0.0  | 27.5  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 97  | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 60.6 | 1.7  | 0.5  | 1.5  | 0.0   | 0.0  | 0.0  | 0.0  | 27.8  |
| 103 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 60.6 | 1.7  | 0.5  | 1.5  | 0.0   | 0.0  | 0.0  | 1.1  | 26.6  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 113 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 0.5  | -0.3 | 2.5  | 0.0   | 0.0  | 0.0  | 0.0  | 23.8  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver

Name: R5  
 ID: R5  
 X: 18383247.07 m  
 Y: 4908557.39 m  
 Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 179 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.4 | 0.5  | -0.2 | 1.2  | 0.0   | 0.0  | 0.0  | 0.0  | 34.1  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 188 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.6 | 2.1  | 0.1  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 34.2  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 194 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 2.3  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 33.2  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 206 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.6 | 0.6  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 24.0  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver  
Name: R6  
ID: R6  
X: 18383297.78 m  
Y: 4908657.75 m  
Z: 2.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 232 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 54.8 | 0.3  | 2.1  | 1.2  | 0.0   | 0.0  | 0.0  | 0.0  | 36.5  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 237 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 53.8 | 1.4  | 0.7  | 1.0  | 0.0   | 5.8  | 0.0  | 0.0  | 32.4  |
| 245 | 18383417.64 | 4908724.77 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 55.5 | 1.6  | 0.8  | 1.6  | 0.0   | 5.1  | 0.0  | 6.0  | 24.3  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 264 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.0 | 1.7  | 0.2  | 1.0  | 0.0   | 4.4  | 0.0  | 0.0  | 31.7  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 272 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 57.0 | 0.4  | 2.1  | 1.1  | 0.0   | 0.0  | 0.0  | 0.0  | 24.4  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver  
Name: R6B  
ID: R6B  
X: 18383295.81 m  
Y: 4908693.83 m  
Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 234 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 53.7 | 0.3  | 0.0  | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 40.0  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 238 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 53.0 | 1.4  | 0.3  | 1.1  | 0.0   | 0.0  | 0.0  | 0.0  | 39.3  |
| 241 | 18383417.64 | 4908724.77 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 53.7 | 1.4  | 0.3  | 1.4  | 0.0   | 0.0  | 0.0  | 4.9  | 33.3  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 246 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 52.3 | 0.9  | 0.7  | 1.5  | 0.0   | 12.0 | 0.0  | 0.0  | 24.7  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 252 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 55.6 | 1.7  | -0.3 | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 37.1  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 257 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.2 | 0.4  | 0.0  | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 27.4  |

Point Source, ISO 9613, Name: "HVAC", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 271 | 18383407.67 | 4908756.09 | 5.10 | 0     | D   | A     | 77.6  | 0.0 | 0.0    | 0.0  | 0.0  | 53.1 | 0.5  | 0.6  | 1.1  | 0.0   | 0.0  | 0.0  | 0.0  | 22.3  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver

Name: R7  
ID: R7  
X: 18383190.78 m  
Y: 4908747.69 m  
Z: 2.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 295 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.1 | 0.4  | 2.2  | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 33.2  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 300 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 56.2 | 1.2  | 1.3  | 0.8  | 0.0   | 6.6  | 0.0  | 0.0  | 25.9  |
| 306 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 61.7 | 1.9  | 1.5  | 0.9  | 0.0   | 0.0  | 0.0  | 2.5  | 23.6  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 309 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.2 | 2.0  | 0.9  | 1.4  | 0.0   | 4.2  | 0.0  | 0.0  | 28.4  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 317 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 2.3  | 0.7  | 1.5  | 0.0   | 4.0  | 0.0  | 0.0  | 26.8  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 321 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.6 | 0.5  | 2.2  | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 21.6  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver

Name: R7B  
ID: R7B  
X: 18383223.58 m  
Y: 4908748.87 m  
Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 383 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.8 | 0.4  | 0.0  | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 36.8  |
| 387 | 18383417.89 | 4908756.26 | 5.50 | 1     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.3 | 0.5  | 0.0  | 1.0  | 0.0   | 0.0  | 0.0  | 1.0  | 33.2  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 393 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 54.5 | 1.1  | 0.7  | 0.8  | 0.0   | 6.7  | 0.0  | 0.0  | 28.2  |
| 401 | 18383369.66 | 4908783.84 | 2.65 | 2     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 62.5 | 2.0  | 0.9  | 0.9  | 0.0   | 0.0  | 0.0  | 4.1  | 21.7  |
| 406 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 60.8 | 1.8  | 0.9  | 1.0  | 0.0   | 0.0  | 0.0  | 3.0  | 24.7  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 413 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.8 | 1.8  | 0.3  | 1.5  | 0.0   | 4.3  | 0.0  | 0.0  | 30.2  |
| 416 | 18383417.64 | 4908724.77 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.3 | 2.2  | 0.4  | 1.4  | 0.0   | 4.5  | 0.0  | 1.5  | 25.8  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 423 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.6 | 2.1  | 0.2  | 1.5  | 0.0   | 4.5  | 0.0  | 0.0  | 28.1  |
| 428 | 18383462.72 | 4908723.88 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.7 | 2.5  | 0.2  | 1.4  | 0.0   | 4.5  | 0.0  | 1.5  | 24.2  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 434 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 0.5  | 0.0  | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 25.0  |
| 436 | 18383460.07 | 4908773.75 | 8.70 | 1     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.6 | 0.6  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 1.0  | 22.8  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver  
Name: R8  
ID: R8  
X: 18383535.58 m  
Y: 4908931.01 m  
Z: 2.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 426 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 57.5 | 0.4  | 0.8  | 0.0  | 0.0   | 3.3  | 0.0  | 0.0  | 33.1 |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 431 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 57.8 | 2.0  | -1.1 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 36.3 |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 437 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 2.1  | -0.6 | 0.0  | 0.0   | 12.3 | 0.0  | 0.0  | 22.7 |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 443 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 57.9 | 1.4  | 0.8  | 0.0  | 0.0   | 4.5  | 0.0  | 0.0  | 27.5 |
| 448 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 58.0 | 1.4  | 0.7  | 0.0  | 0.0   | 5.3  | 0.0  | 1.0  | 25.7 |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 452 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 55.8 | 0.3  | 0.6  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 28.2 |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver

Name: R9  
 ID: R9  
 X: 18383556.19 m  
 Y: 4908989.31 m  
 Z: 3.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 472 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 0.5  | 0.0  | 0.0  | 0.0   | 4.7  | 0.0  | 0.0  | 30.0  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 478 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.0 | 2.3  | -1.0 | 0.0  | 0.0   | 9.8  | 0.0  | 0.0  | 23.9  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 484 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.5 | 2.4  | -0.3 | 0.0  | 0.0   | 10.0 | 0.0  | 0.0  | 22.4  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 494 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 1.6  | 0.8  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 29.8  |
| 506 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 1.6  | 0.7  | 0.0  | 0.0   | 0.0  | 0.0  | 1.0  | 28.8  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 510 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 0.5  | -0.4 | 0.0  | 0.0   | 2.7  | 0.0  | 0.0  | 23.8  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver

Name: R10  
 ID: R10  
 X: 18383568.23 m  
 Y: 4909026.65 m  
 Z: 2.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 507 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.8 | 0.6  | 2.0  | 0.0  | 0.0   | 8.8  | 0.0  | 0.0  | 22.8  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 526 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 60.9 | 1.8  | 1.3  | 0.0  | 0.0   | 2.5  | 0.0  | 0.0  | 25.5  |
| 535 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 61.0 | 1.8  | 1.3  | 0.0  | 0.0   | 3.8  | 0.0  | 1.0  | 23.2  |

DAYTIME SOUND LEVELS (ALL SOURCES ON)

Receiver

Name: R11  
 ID: R11  
 X: 18383592.31 m  
 Y: 4909084.10 m  
 Z: 4.50 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 603 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 62.4 | 0.7  | -0.2 | 0.0  | 0.0   | 7.8  | 0.0  | 0.0  | 24.2 |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 622 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 62.5 | 2.0  | 0.8  | 0.0  | 0.0   | 4.1  | 0.0  | 0.0  | 22.7  |
| 627 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 62.5 | 2.0  | 0.8  | 0.0  | 0.0   | 4.1  | 0.0  | 1.0  | 21.7  |

**SOUND LEVELS – NIGHTTIME (MECHANICAL SYSTEMS ON)**

# NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

## Receiver

Name: R1  
ID: R1  
X: 18383601.08 m  
Y: 4908704.39 m  
Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 2   | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.6 | 0.4  | -0.1 | 1.8  | 0.0   | 0.0  | 0.0  | 0.0  | 36.4  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 6   | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 53.9 | 1.5  | 0.2  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 39.5  |
| 10  | 18383462.72 | 4908723.88 | 3.00 | 2     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.9 | 2.2  | -0.0 | 4.0  | 0.0   | 0.0  | 0.0  | 7.4  | 22.5  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 13  | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.3 | 1.8  | -0.3 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 37.2  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 18  | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 58.8 | 1.5  | 0.8  | 2.7  | 0.0   | 3.8  | 0.0  | 0.0  | 24.6  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 21  | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 54.9 | 0.3  | -0.0 | 3.4  | 0.0   | 0.0  | 0.0  | 0.0  | 26.4  |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver

Name: R2

ID: R2

X: 18383659.74 m

Y: 4908740.35 m

Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 1   | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.7 | 0.5  | -0.0 | 5.8  | 0.0   | 0.0  | 0.0  | 0.0  | 30.1  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 4   | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.9 | 1.8  | 0.1  | 6.5  | 0.0   | 0.0  | 0.0  | 0.0  | 29.7  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 11  | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.7 | 2.1  | -0.1 | 6.6  | 0.0   | 0.0  | 0.0  | 0.0  | 27.7  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 23  | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 57.1 | 0.4  | -0.0 | 4.5  | 0.0   | 0.0  | 0.0  | 0.0  | 23.1  |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver  
 Name: R3  
 ID: R3  
 X: 18383631.33 m  
 Y: 4908555.65 m  
 Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 3   | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.3 | 0.6  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 34.3  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 8   | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 2.1  | 0.3  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 34.1  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 12  | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 2.3  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 33.2  |
| 19  | 18383417.64 | 4908724.77 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 2.3  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 1.2  | 31.8  |
| 22  | 18383417.64 | 4908724.77 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 61.5 | 2.6  | 0.0  | 0.0  | 0.0   | 6.0  | 0.0  | 3.3  | 21.6  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 27  | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 0.5  | -0.0 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 24.6  |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver  
Name: R4  
ID: R4  
X: 18383628.45 m  
Y: 4908940.30 m  
Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5   | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 0.5  | -0.6 | 2.1  | 0.0   | 0.0  | 0.0  | 0.0  | 33.0  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 9   | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 2.3  | 0.1  | 5.4  | 0.0   | 0.0  | 0.0  | 0.0  | 27.5  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 97  | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 60.6 | 1.7  | 0.5  | 1.5  | 0.0   | 0.0  | 0.0  | 0.0  | 27.8  |
| 103 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 60.6 | 1.7  | 0.5  | 1.5  | 0.0   | 0.0  | 0.0  | 1.1  | 26.6  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 113 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 0.5  | -0.3 | 2.5  | 0.0   | 0.0  | 0.0  | 0.0  | 23.8  |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver

Name: R5

ID: R5

X: 18383247.07 m

Y: 4908557.39 m

Z: 4.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 179 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.4 | 0.5  | -0.2 | 1.2  | 0.0   | 0.0  | 0.0  | 0.0  | 34.1 |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 188 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.6 | 2.1  | 0.1  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 34.2 |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 194 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 2.3  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 33.2 |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 206 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.6 | 0.6  | -0.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 24.0 |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver  
Name: R6  
ID: R6  
X: 18383297.78 m  
Y: 4908657.75 m  
Z: 2.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 232 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 54.8 | 0.3  | 2.1  | 1.2  | 0.0   | 0.0  | 0.0  | 0.0  | 36.5 |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 237 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 53.8 | 1.4  | 0.7  | 1.0  | 0.0   | 5.8  | 0.0  | 0.0  | 32.4 |
| 245 | 18383417.64 | 4908724.77 | 3.00 | 1     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 55.5 | 1.6  | 0.8  | 1.6  | 0.0   | 5.1  | 0.0  | 6.0  | 24.3 |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 264 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 56.0 | 1.7  | 0.2  | 1.0  | 0.0   | 4.4  | 0.0  | 0.0  | 31.7 |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 272 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 57.0 | 0.4  | 2.1  | 1.1  | 0.0   | 0.0  | 0.0  | 0.0  | 24.4 |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver

Name: R7

ID: R7

X: 18383190.78 m

Y: 4908747.69 m

Z: 2.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 295 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.1 | 0.4  | 2.2  | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 33.2  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 300 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 56.2 | 1.2  | 1.3  | 0.8  | 0.0   | 6.6  | 0.0  | 0.0  | 25.9  |
| 306 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 61.7 | 1.9  | 1.5  | 0.9  | 0.0   | 0.0  | 0.0  | 2.5  | 23.6  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 309 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.2 | 2.0  | 0.9  | 1.4  | 0.0   | 4.2  | 0.0  | 0.0  | 28.4  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 317 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 2.3  | 0.7  | 1.5  | 0.0   | 4.0  | 0.0  | 0.0  | 26.8  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 321 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.6 | 0.5  | 2.2  | 1.0  | 0.0   | 0.0  | 0.0  | 0.0  | 21.6  |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver  
Name: R8  
ID: R8  
X: 18383535.58 m  
Y: 4908931.01 m  
Z: 2.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 426 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 57.5 | 0.4  | 0.8  | 0.0  | 0.0   | 3.3  | 0.0  | 0.0  | 33.1 |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 431 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 57.8 | 2.0  | -1.1 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 36.3 |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 437 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 2.1  | -0.6 | 0.0  | 0.0   | 12.3 | 0.0  | 0.0  | 22.7 |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 443 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 57.9 | 1.4  | 0.8  | 0.0  | 0.0   | 4.5  | 0.0  | 0.0  | 27.5 |
| 448 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 58.0 | 1.4  | 0.7  | 0.0  | 0.0   | 5.3  | 0.0  | 1.0  | 25.7 |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 452 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 55.8 | 0.3  | 0.6  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 28.2 |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver  
Name: R9  
ID: R9  
X: 18383556.19 m  
Y: 4908989.31 m  
Z: 3.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 472 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 59.7 | 0.5  | 0.0  | 0.0  | 0.0   | 4.7  | 0.0  | 0.0  | 30.0  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 2", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 478 | 18383462.72 | 4908723.88 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.0 | 2.3  | -1.0 | 0.0  | 0.0   | 9.8  | 0.0  | 0.0  | 23.9  |

Point Source, ISO 9613, Name: "Outdoor Venue - Loudspeaker 1", ID: "S\_VENUE"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 484 | 18383417.64 | 4908724.77 | 3.00 | 0     | D   | A     | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.5 | 2.4  | -0.3 | 0.0  | 0.0   | 10.0 | 0.0  | 0.0  | 22.4  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 494 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 1.6  | 0.8  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 29.8  |
| 506 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 59.9 | 1.6  | 0.7  | 0.0  | 0.0   | 0.0  | 0.0  | 1.0  | 28.8  |

Point Source, ISO 9613, Name: "Corporate Venue HVAC", ID: "HVAC"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 510 | 18383460.07 | 4908773.75 | 8.70 | 0     | D   | 500   | 85.0  | 0.0 | 0.0    | 0.0  | 0.0  | 58.5 | 0.5  | -0.4 | 0.0  | 0.0   | 2.7  | 0.0  | 0.0  | 23.8  |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver

Name: R10

ID: R10

X: 18383568.23 m

Y: 4909026.65 m

Z: 2.00 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 507 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 60.8 | 0.6  | 2.0  | 0.0  | 0.0   | 8.8  | 0.0  | 0.0  | 22.8  |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 526 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 60.9 | 1.8  | 1.3  | 0.0  | 0.0   | 2.5  | 0.0  | 0.0  | 25.5  |
| 535 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 61.0 | 1.8  | 1.3  | 0.0  | 0.0   | 3.8  | 0.0  | 1.0  | 23.2  |

NIGHTTIME SOUND LEVELS (ALL MECHANICAL SOURCES ON)

Receiver  
 Name: R11  
 ID: R11  
 X: 18383592.31 m  
 Y: 4909084.10 m  
 Z: 4.50 m

Point Source, ISO 9613, Name: "RTU", ID: "HVAC\_MAIN"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 603 | 18383417.89 | 4908756.26 | 5.50 | 0     | D   | 500   | 95.0  | 0.0 | 0.0    | 0.0  | 0.0  | 62.4 | 0.7  | -0.2 | 0.0  | 0.0   | 7.8  | 0.0  | 0.0  | 24.2 |

Point Source, ISO 9613, Name: "Chiller", ID: "CHILLER"

| Nr. | X           | Y          | Z    | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr   |
|-----|-------------|------------|------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|------|
|     | (m)         | (m)        | (m)  |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | (dB) |
| 622 | 18383369.66 | 4908783.84 | 2.65 | 0     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 62.5 | 2.0  | 0.8  | 0.0  | 0.0   | 4.1  | 0.0  | 0.0  | 22.7 |
| 627 | 18383369.66 | 4908783.84 | 2.65 | 1     | D   | A     | 92.1  | 0.0 | 0.0    | 0.0  | 0.0  | 62.5 | 2.0  | 0.8  | 0.0  | 0.0   | 4.1  | 0.0  | 1.0  | 21.7 |

## **APPENDIX C: REFERENCES**

1. Ministry of the Environment, "Model Municipal Noise Control By-Law, Final Report", August 1978.
2. Ministry of the Environment, "Publication NPC-300, Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning", August 2013.
3. Cadna/A Computer Aided Noise Abatement, Version 2019.