

NOISE MANAGEMENT PLAN

June 2022 - June 2025

BROWARD COUNTY CONVENTION CENTER HOTEL

1850 - 1950 Eisenhower Boulevard Fort Lauderdale, FL 33316

John T. Travers 5/25/2022

The County has released funding and approval for the next phase of BCCC improvements. This request follows the past guidelines used for extended working hours.

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Broward County Convention Center Hotel – Noise Management Plan

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1 Description of Work

- Extended Hours for Concrete Pours, Glazing, MEPF Systems, Masonry, Steel Detailing, and Steel Erection at the Broward County Convention Center. The work would commence at 7 AM and be completed by 10PM (15 Hours) Monday through Saturday. On Sunday, the work would commence at 10AM and be completed by 7 PM.
- The equipment with the most amount of noise will be utilized during daylight hours only (Reference the Noise and Vibration Predictions below and Appendix 7.6 which shows the noise generated from the construction will reduce to below the ambient noise level adjacent to the local residences due to distance from the construction to residence). The average duration of concrete pours will be approximately 8-12 hours Monday through Saturday and approximately 9 hours on Sunday. The Steel erection will take place only during daylight hours and welding/detailing will take place only during daylight hours and welding/detailing will take place on off hours (no sound control equipment will be utilized prior to 7 AM and after 10 PM). No person shall operate or cause to be operated any equipment used in construction, repair, alteration or demolition work on buildings, structures, streets, alley, or alteration or demolition of work on buildings, structures, streets, alleys, or appurtenances thereto with sound-control devices less effective than those provided on the original equipment prior to 7 AM and after 10 PM.
 - See attached estimated schedule for the description of work (Reference Appendix
 7.7)

Table 1: Description of Work Schedule				
Subcontractor Work	Daylight to Dusk (Monday – Saturday, Sunday)	Monday – Saturday: 7 AM – 10 PM (15 Hours) Sunday: 10 AM – 7 PM (9 Hours)		
Steel Erection	Yes	Only during Daylight		
Steel Detailing	Yes	Yes		
Masonry	Yes	Yes		
MEPF Systems	Yes	Yes		
Glazing	Yes	Yes		
Concrete Pours	Yes	Yes		
Civil	Yes	Yes		

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- Site Plan & Location Map (Reference Appendix 7.1)
- Legal Description:
 - 1850 Eisenhower Boulevard: PORT EVERGLADES PLAT NO 2 108-31 B POR OF PAR A DESC AS:COMM SW COROF NE1/4 OF SE1/4 OF SEC 14-50 42,NLY 289,ELY 95 TO POB,ELY 220 NLY 792,WLY 220,SLY 411,WLY 15, SLY 110,ELY 15,SLY 271 TO POB
 - 1950 Eisenhower Boulevard: PORT EVERGLADES PLAT NO 2 108-31 B PARCEL A LESS POR DESC:COMM SW COR OF NE1/4 OF SE1/4 OF SEC 14-50-42,NLY 289,ELY 95 TO POB, ELY 220,NLY 792,WLY 220,SLY 411, WLY 15,SLY 110,ELY 15,SLY 271 TO POB,& LESS POR PAR A DESC AS COM NW COR PAR A,E 80 TO POB,CONT E 832,S 288.81,W 114.03,N 88.96,W 475.01,N 29.73,W 235,N 168.61 TO POB

Justification for Work:

- Early morning concrete pours will help alleviate construction traffic during the day. They will also allow the concrete to cure faster from the heat of the sun all day. Additionally, the size of the pours will become larger, more effective, and more efficient by allowing concrete trucks to travel back and forth from the plant to the jobsite.
- Early morning concrete pours will assist with the acceleration of the overall project schedule and subsequently lessen the impact of construction on surrounding residential neighborhoods and businesses by keeping the project within the original completion date. In addition, this will help control the historical and unprecedented escalation by putting work in place in an accelerated manner. Also, this will help with the excessive rainfall from the past few rainy seasons and help mitigate rain delays as we are entering rainy season.
- o The project estimates that the building will be dried in (Building envelope will be complete) no later than April of 2024. This will significantly reduce any noise outside of the project as the majority of the work will be inside the building. The shortest distance from the work to the nearest residential condo is 225 feet (Reference Appendix 7.8). The distance from the work to the nearest residence should not be any more significant than 17th street itself (reference Noise Monitoring Report Appendix 7.6)

- Commencement Date and Duration of Work:
 - The off hours will commence June of 2022 and continue through the duration of the project, June of 2025.
 - Concrete Pours, Glazing, MEPF Systems, Masonry, Steel Detailing and Steel Erection activities will be in accordance with the attached estimated schedule.

2 Contractor Contacts

Balfour Beatty Construction - Broward County Convention Center Hotel Project Team - Table 2

Table 2: BBC Contact List						
Name	Position	Contact Number				
Michael Hite	Operations Director	(214) 878-3994				
Howard Rice	Project Executive	(954) 654-3826				
Marcus Niceley	Project Manager	(419) 360-3200				
Jim Calvert	Senior Superintendent	(786) 774-8366				
Shawn Gallery	Superintendent	(218) 330-8545				

3 Equipment

- The equipment used for construction work is the quietest reasonably available.
- Equipment that may generate noise during concrete pours are as follows:
 - o Cranes
 - Concrete Trucks
 - Concrete Pumps
 - Concrete Vibrators
 - o Back-up Alarm on Construction Equipment
 - o Material Delivery Trucks
 - Civil Equipment
- The duration of use of equipment and/or period of work will vary depending on each activity. Noise generated will be intermittent based on specific activity taking place (i.e. back-up warning alarm from trucks, concrete vibrators, pump trucks, etc...)

4 Noise and Vibration Predictions

- Equipment Noise Emission Levels (Lmax Noise (dba) 50 ft):
 - o Concrete Trucks 85
 - o Concrete Pumps 82
 - o Concrete Vibrators 80

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- Back-up Alarm 97 112 use white noise when safety permits
- o Crane 85
- The aforementioned equipment predicated noise emissions can be reviewed in the Appendices below or on the U.S. Department of Transportation Highway Administration website (Link <u>HERE</u>). Reference Appendix 7.4

5 Noise and Vibration Control Measures

- We have installed a noise monitoring device located adjacent to the nearest residential condo to demonstrate that the noise generated during the off hours outside of 8 AM to 7 PM are less than or equal to the noise generated from 17th Street and the surrounding areas. Reference attached GeoSonics report for noise monitoring (Appendix 7.6).
- Only the equipment necessary for early work will be utilized beyond the current off hours plan.
 - Concrete Truck back-up alarms will be switched to ambient white noise to lessen noise emissions by 18 dBA when safety protocols allow.
 - On-site traffic patterns will be coordinated to minimize backing up movement.
 - Deliveries will be sequenced appropriately to reduce the amount of idling Trucks.
 - Deliveries will be scheduled to come through the port to limit traffic on 17th
 Street and Grande Ave. Reference Appendix 7.5.
- We do not anticipate any heavy vibration during the concrete pours and no pile work will be conducted during this time frame.

6 Complaint Response

- 6.1 Procedure and recording of complaints
 - The Balfour Beatty Construction Broward County Convention Center Team will be responsible for logging and responding to all complaints
 - Any complaints can be made via phone or in writing to:

Balfour Beatty Construction ATTN: Michael Hite 7901 S.W. 6th Court, Ste. 200 Plantation, FL 33324 Balfour Beatty Construction ATTN: Howard Rice 7901 S.W. 6th Court, Ste. 200 Plantation, FL 33324

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(214) 878-3994 MHite@balfourbeattyus.com (954) 654-3826 Hrice@balfourbeattyus.com

6.2 Community Notification

- Balfour Beatty Construction will post a Community Notification around the project site on the perimeter fence. (Reference Appendix 7.2/7.3).
- The project will also utilize the Fort Lauderdale Office of Neighbor Support to ensure maximum outreach.
- Notifications will identify early morning concrete pours and will be posted prior to the commencement of work.

7 Appendices

- 7.1 Site Plan & Location Map
- 7.2 Community Notification
- 7.3 Community Notification Distribution Area
- 7.4 Equipment Predicated Noise Emissions
- 7.5 Roadmap for Concrete Trucks
- 7.6 NV5 Signed Engineered Calculation and Noise Monitoring Report
- 7.7 Construction Schedule
- 7.8 Distance to Condo