

CITY OF FRANKLIN  
QUARRY MONITORING COMMITTEE\*  
MEETING AGENDA

Franklin City Hall, Council Chambers  
9229 West Loomis Road, Franklin, Wisconsin 53132  
Tuesday, January 28, 2025, 6:00 p.m.

- I. Call to Order, Roll Call and Pledge of Allegiance
- II. Approval of Minutes
  - a. Regular meeting of October 29, 2024.
- III. Citizen Comment Period  
PLEASE NOTE: Each speaker may need to be limited to three minutes, allowing everyone who wishes the opportunity to speak
- IV. Business (Action may be taken on any item)
  - a. Quarterly presentation by Stantec Consulting Services, Inc., 4th quarter of calendar year 2024 (Oct-Dec).
  - b. Discussion about including confidential complaints in monitoring reports.
- V. Meeting scheduling discussion
- VI. Adjournment

*\* Notice is given that a majority of the Common Council may attend this meeting to gather information about an agenda item over which the Common Council has decision-making responsibility. This may constitute a meeting of the Common Council per State ex rel. Badke v. Greendale Village Board, even though the Common Council will not take formal action at this meeting.*

*Notice is further given that upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information, please contact the Franklin City Clerk's office at (414) 425-7500.*

**City of Franklin**  
**Quarry Monitoring Committee Meeting**  
**October 29, 2024**  
**Minutes**

**unapproved**

**I. Call to Order and Roll Call**

Chair Alderman Mike Barber called the October 29, 2024 Quarry Monitoring Committee to order at 6:00 p.m. in the Council Chambers at Franklin City Hall, 9229 W. Loomis Road, Franklin, Wisconsin.

Present was Chair Alderman Mike Barber, Vice Chair Dina Swanson, Alderman Yousef Hasan and members Edward Pings and Jon TenHaken. Also present were Planning Manager Régulo Martínez-Montilva, Kristen Gunderson-Inden of Stantec Consulting Services, and Clint Weninger, Bryanna Bucholtz and Wes Hine of Payne & Dolan.

**II. Approval of Minutes**

Alderman Hasan moved and Member TenHaken seconded a motion to approve the minutes of the August 13, 2024. On voice vote, all voted ‘aye;’ motion carried (5-0-0).

**III. Citizen Comment**

The Citizen Comment period opened at 6:01 pm and closed at 6:04 pm.

**IV. Business**

- a. Quarterly presentation by Stantec Consulting Services, Inc., 3rd quarter of calendar year 2024 (July-September).

Kristen Gunderson-Inden presented.

Member TenHaken moved and Member Pings seconded a motion to suspend the rules. On voice vote, all voted ‘aye;’ motion carried (5-0-0).

Member TenHaken moved and Alderman Hasan seconded a motion to return to the meeting rules. On voice vote, all voted ‘aye;’ motion carried (5-0-0).

Discussion only, no action taken.

- b. Quarry monitoring scope of services for calendar year 2025.

Kristen Gunderson-Inden presented.

Member Pings moved and Member TenHaken seconded a motion to forward to the Common Council. On voice vote, all voted ‘aye;’ motion carried (5-0-0).

**V. SCHEDULE NEXT MEETING**

Next meeting is scheduled for January 28, 2025

## **VI. Adjournment**

Member Pings moved and Alderman Hasan seconded to adjourn the October 29, 2024 Quarry Monitoring Committee meeting at 6:38 pm. On voice vote, all voted 'aye;' motion carried (5-0-0).

DRAFT



**Stantec Consulting Services Inc.**  
12080 North Corporate Parkway, Suite 200  
Mequon WI 53092-2661

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January 16, 2025

Project/File: 193710393

**Regulo Martinez-Montilva**

Planning Manager - Department of City Development  
City of Franklin  
9229 West Loomis Road  
Franklin, Wisconsin 53132  
RMartinez-Montilva@franklinwi.gov

Dear Regulo Martinez-Montilva,

**Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 4th Quarter 2024**

The enclosed information summarizes monitoring activities completed during the fourth quarter of 2024 by Stantec Consulting Services Inc. (Stantec) pertaining to the Franklin Aggregates, Inc. quarry (owned by Payne & Dolan, Inc.) located at 6211 W. Rawson Avenue, Franklin, Wisconsin (the Quarry). Stantec was retained by the City of Franklin to conduct a combination of direct observation (visual) monitoring, seismic monitoring of the quarry operations, and evaluation of citizen complaints. Separate descriptions of services and project background are provided in **Attachments A and B**, respectively. This letter summarizes the results.

**Direct Observation (Visual) Monitoring**

Copies of completed observation forms are prepared and posted to the project Teams site for review by City representatives. Copies of individual reports are not provided with this summary report.

Three observations events were completed during the monitoring period. Unannounced inspections were completed on October 2, October 14, and November 6; no announced inspections were performed on this quarter. The street sweeper was observed in use on Rawson Avenue during two of the three site visits. Typically, minor dust was observed from trucks exiting to the east on Rawson Avenue during the visits. No other issues were observed.

**Seismic Monitoring**

As contracted by the City, Stantec provided remote vibration monitoring using two seismographs co-located with two existing Payne & Dolan (Vibra-Tech) monitors at 7301 S. 51st Street (VT1 and S1) and 5800 W. Allwood Drive (VT4 and S2). The monitoring provides continuous (24/7) remote monitoring. Payne & Dolan also has monitors at 7526 S. 51st Street (VT2) and southeast of the quarry (VT3). Summaries of blasting data, comparing the Payne & Dolan unit recordings to the Stantec (Sauls Seismic) unit recordings, were prepared for the quarter, and are presented in **Attachment C. Figure 1** illustrates the locations of the blasts in the quarter.

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 4th Quarter 2024

Highlights of the seismic data include the following:

- Between October 1 and December 31, 2024, a total of 32 blasting events occurred. 26 of 32 (81%) of these blasts were confirmed by the Stantec monitors.
- Per the Planned Development District agreements (PDD), 85% of the quarry's blasts within any calendar year must be below the maximum permissible vibration (of 0.30 inches per second (in/sec)), measured at the closest residence or inhabited structure not owned or controlled by the quarry. This is more stringent than State of Wisconsin regulations which require quarry operators to report any ground vibration levels to the Wisconsin Department of Natural Resources (WDNR) that are above 0.75 in/sec.
  - None of the blasting events measured by Payne & Dolan or Stantec had a vibration greater than 0.30 in/sec this quarter. 98% of the quarry's blasts year to date were below this level. This is in conformance with the PDD.
- Per the PDD, airblast resulting from P&D blasting shall not exceed 123 dB on at least 85% of its blasts within any single calendar year, measured at the residence or inhabited structure closest to the site of the blast which is not owned or controlled by the Operator. Notwithstanding any other provision in this subsection, the Operator shall not exceed the airblast limitation imposed by Wis. Adm. Code, SPS Ch. 307.
  - None of the blasting events measured by Payne & Dolan or Stantec had an air overpressure (AO) greater than 123dB this quarter. 99% of the quarry's blasts year to date were below this level. This is in conformance with the PDD.
- The corresponding blast data measured by Stantec with the Sauls Seismic monitors generally aligned with the readings at each Payne & Dolan sponsored Vibra-Tech monitor. There were some larger differences in the AO and frequency readings. It should be noted that in addition to the fact the monitors are produced by different manufacturers, there are a variety of variables that can influence actual readings. The Sauls Seismic monitors were swapped out and recalibrated in July 2024 and are due for calibration in April 2025 by the equipment vendor; calibration is typically completed annually.
- In general, the largest blast readings at each monitor appear to correlate with the proximity of the nearest adjacent blast location.

### **Blast Complaint Evaluation**

A compilation of all blast events and complaints received by Stantec for the period October 1 through December 31, 2024, is provided as **Attachment C**. Note that Attachment C does not provide the actual complainant details (name, address, and phone number) if known; it was decided to have this information remain confidential in this report. However, complainant identity may be released upon public records request to the City of Franklin. The locations of all blasts and complaints are shown on **Figure 1**. The following highlights the results of the complaint evaluation:

#### **Complaints - General**

- 11 complaints (formally submitted)
- 1 complaints (informally submitted – phone call only)
- 0 complaints – regarding material in the road
- 12 complaints – regarding vibration/noise

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 4th Quarter 2024

### Complaints – Blast Related

- 12 complaints – corresponding to actual blast events
- 0 complaints – not corresponding to specific blast events
- 6 complaints – complainant requested location not be identified
  - 6 identified with general location of Marquette Avenue area (east)
  - 0 identified with general location of Root River Heights (south)
- 6 complaints – complainant location identified

### Complaints (non-anonymous or general location given; confirmed blast related) - Locations

- 6 complaints – east of 51<sup>st</sup> Street
- 6 complaints – south of Drexel Avenue
- 0 complaints – west of Root River

### Summary of Complaint Comments – Blast Related

- October 11, 2024 (highest readings at the SE of Quarry monitor – 0.050 in/sec PPV, 114 dB AO) – one complaint to the south – blast in southern pit.
  - *“Blasting shook the whole house.”*
- October 14, 2024 – 11:52am (highest readings at the 7301 S 51<sup>st</sup> St monitor – 0.098 in/sec PPV and 7526 S. 51<sup>st</sup> St - 112 dB AO) – one confidential complaint identified as a home in the Marquette Avenue area – blast in northern pit.
  - *“A blast from the quarry shook the entire house and rattled the windows. The blast was very loud and shook the floor.”*
- October 14, 2024 – 12:12 pm (highest readings at the 5800 Allwood monitor – 0.105 in/sec PPV and 112 dB AO) – two complaints to the south (one formal, one informal) – blast in southern pit.
  - *“Huge blast.”*
  - *No comments listed for the informal complaint.*
- October 16, 2024 – (highest readings at the 5800 Allwood monitor – 0.120 in/sec PPV and SE of Quarry monitor - 109 dB AO) – one complaint to the south – blast in southern pit.
  - *“Rolling shake of the house.”*
- October 18, 2024 – (highest readings at the 7301 S 51<sup>st</sup> St monitor – 0.125 in/sec PPV and 7526 S 51<sup>st</sup> St monitor - 111 dB AO) – one confidential complaint identified as a home in the Marquette Avenue area – blast in northern pit.
  - *“A blast shook the entire house, floors, and tables. The windows rattled loudly.”*
- October 25, 2024 – (highest readings at the 7301 S 51<sup>st</sup> St monitor – 0.138 in/sec PPV and 7526 S 51<sup>st</sup> St monitor - 116 dB AO) – one confidential complaint identified as a home in the Marquette Avenue area – blast in northern pit.
  - *“A blast from the quarry shook the entire house and rattled the walls and windows.”*

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 4th Quarter 2024

- October 28, 2024 – (highest readings at the 7301 S 51<sup>st</sup> St monitor – 0.143 in/sec PPV and 7526 S 51<sup>st</sup> St monitor - 110 dB AO) – one confidential complaint identified as a home in the Marquette Avenue area – blast in central pit.
  - *“A blast from the quarry shook the entire floor and shook the house and windows.”*
- November 25, 2024 – (highest readings at the 5800 Allwood monitor – 0.110 in/sec PPV and SE of the Quarry monitor - 115 dB AO) – one confidential complaint identified as a home in the Marquette Avenue area – blast in southern pit.
  - *“A blast moved my pictures that are on the wall.”*
- December 2, 2024 (highest readings at the highest readings at the 5800 Allwood monitor – 0.148 in/sec PPV and 110 dB AO) – one complaint to the south – blast in southern pit.
  - *“Holy crap that blast shook the house and rattled things in the basement (heard that).”*
- December 6, 2024 (highest readings at the highest readings at the SE of quarry monitor – 0.138 in/sec PPV and the 5800 Allwood monitor - 113 dB AO) – one complaint to the south – blast in southern pit.
  - *“Very big blast – way above the normal – shaking our house violently meaning everything shook like windows and doors and cabinets and floors, etc.”*
- December 10, 2024 – (highest readings at the 7301 S 51<sup>st</sup> St monitor – 0.258 in/sec PPV and 107 dB AO) – one confidential complaint identified as a home in the Marquette Avenue area – blast in northern pit.
  - *“A blast shook the entire house.”*

#### Summary of Complaint Comments – Non-Blast Related

- The City of Franklin received an online complaint form on September 20, 2024, regarding asphalt pieces near the intersection of Rawson Avenue and South 31<sup>th</sup> Street.
  - *“If the quarry sells recycled asphalt and it is trucked by dump trucks, one of them dumped and spread (of) asphalt pieces in the east bound traffic lanes at the intersection above. I thought by now this issue would have been addresses as now it is bonded to the concrete and needs to be scraped off.”*

#### Blast Events

- 32 blast events - during monitoring period 3Q2024 (shot numbers 56 through 87)
- 11 blast events - corresponding to complaints
  - 0 weather: rain or light rain
  - 10 weather: haze, partly to mostly cloudy, or cloudy
  - 1 weather: clear, fair, or scattered clouds
  - 7 time: prior to 12:00 pm (noon)
  - 4 time: after 12:00 pm
- 10 blast events with one complaint
- 1 blast event with two complaints

Reference: City of Franklin, WI - Franklin Aggregates Quarry Monitoring Summary, Period: 4th Quarter 2024

Quarry Blast Locations Producing Complaints

- 6 southern area of quarry
- 1 central area of quarry
- 4 northern area of quarry

Upon review of these results outlined above, on Figure 1, and in Attachment C, the following observations are made:

- One address has submitted a total of nine complaints this year (once in the first quarter, three times in the second quarter, once third quarter, and four time this quarter); one other address had two informal complaints in the first quarter.
- Five complaints were identified in the Marquette Avenue area to the east of South 51st Street. It is not known if these complaints came from the same address.
- No complaints came from west of the Root River.

Please feel free to contact Mike Roznowski or Kristen Gunderson-Inden if you have any questions.

Sincerely,

**STANTEC CONSULTING SERVICES INC.**



**Kristen Gunderson-Inden**  
Senior Environmental Scientist  
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**Mike Roznowski, CHMM**  
Senior Principal  
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mike.roznowski@stantec.com

Attachments: A - Franklin Quarry Seismic Monitoring Description of Services  
B - Franklin Quarry Seismic Monitoring Project Background  
C - Summary of Seismic Data – 4th Quarter 2024  
Figure 1 - Seismic Monitoring, Blasting, and Complaint Locations, 4th Quarter 2024



**Attachment A** Franklin Quarry Seismic Monitoring  
Description of Services

## **DESCRIPTION OF SERVICES**

### **Direct Observation (Visual) Monitoring**

During 2024, Stantec will conduct a total of sixteen (16) qualitative site visits at the quarry to observe and document whether the site was compliant with operational parameters defined in the existing Planned Development District (PDD) agreements, and to evaluate whether the quarry's general operations are consistent with best management practices employed by other similar quarries. Site visits are a combination of announced and unannounced, but all are conducted during normal business hours. The days of the week and times of the day for the visits vary. The observations are planned to be completed between April and October, when quarry operations are occurring, and airborne dust is more likely. Qualitative data to be collected includes the following:

- Visual observation of all aspects of the mining operation, including but not limited to:
  - Trucking operations, in particular pertaining to dust issues along Rawson Avenue
  - Operational issues that may affect local citizens in some form of adverse off-site impact
- Direct air quality observations, including:
  - General site and surrounding visual air quality, including opacity, in particular along Rawson Avenue
  - Dust control measures and issues on-site that may affect off-site receptors
  - Dust control issues directly adjacent off-site
  - Any other dust issues that may affect local citizens
- Quarry operations review (for announced visits), including:
  - Review of quarry records pertaining to dust control measures and recordkeeping, ensuring that the operator is following standard protocol to minimize off-site impacts, and evaluating how well and how quickly they respond to potential of actual off-site impact situations
  - Comparison of records to stated performance objectives and respective PDD compliance, only as they pertain to dust in general, and along Rawson Avenue in particular

The findings of each visit will be documented on a standard form previously approved by the City. The form will be filled out by hand during each site visit, and then scanned/posted to a project SharePoint site for review by City representatives. Stantec also will obtain photos to document site or directly adjacent off-site conditions, and short-duration video clips (e.g., showing dust impacts). These photos and videos are also uploaded to the project SharePoint site.

In addition to the observations and record review, Stantec also will obtain and document on the inspection forms local meteorological conditions that were relevant to the observations (e.g., temperature, wind speed, wind direction, humidity, and precipitation).

Stantec also will notify the City Planning Manager of any condition (pertaining to air or dust monitoring, or other PDD condition) that we become aware of that exceeds the allowances outlined in the PDD. This communication will be completed prior to noon the business day following the day we become aware of any such event.

### **Seismic Monitoring**

Stantec provides remote vibration monitoring by using Nomis Seismographs. Sauls Seismic is subcontracted to operate two separate seismographs, each co-located with two existing Payne & Dolan (Vibra-Tech) monitors located at: 7301 S. 51st Street, and 5800 W. Allwood Drive. Each monitor was pole-mounted and provided with a weatherproof enclosure. Power is provided via an internal battery and an external battery connected to a solar panel. This type of configuration provides continuous (24/7) remote monitoring, allowing Stantec to have access to data anytime via the Internet.

Stantec also will notify the City Planning Manager of any condition (pertaining to blasting, noise or other PDD condition) that we become aware of that exceeded the allowances outlined in the PDD. This communication will be completed prior to noon the business day following the day we become aware of any such event.

### **Blast Complaint Evaluation**

Periodically the City forwards to Stantec specific information pertaining to quarry complaints received. Stantec evaluates each one on a quarterly basis to determine the following corresponding collaborative conditions:

- Off-site dust complaints: weather conditions (wind direction and speed) the day of the complaint
- Off-site seismic complaints: seismic data from both Stantec (if monitoring at the time) and Payne & Dolan placed monitors
- On occasion, the City may request an exceptional blast complaint evaluation if a blast event receives an unusually high number of complaints. A letter report will be issued by Stantec within approximately one week of the request that describes:
  - seismic data from both Stantec and Payne & Dolan placed monitors
  - weather conditions (wind direction and speed) the day of the complaint
  - a figure showing location of blast and complaints

**Attachment B** Franklin Quarry Seismic Monitoring Project  
Background

## **Background Summary**

Seismic monitoring was completed to document whether the site was compliant with operational parameters defined in the existing Planned Development District (PDD) agreements. Prior to 2018, Stantec completed a variety of 2, 4, and 8-week seismic monitoring periods. During 2018, Stantec completed one 4-week period and one 16-week period of monitoring. Monitoring consisted of placing a city owned and maintained Instantel MiniMate Plus fixed seismograph equipped with an external geophone at one of two city-established blast monitoring sites or vaults for each period. Seismic data was downloaded once every two weeks. Due to equipment limitations the data could not be downloaded remotely as it occurs (i.e., real time).

In 2019, Stantec provided remote vibration monitoring by using Nomis Seismographs. Sauls Seismic was subcontracted to install two separate seismographs, each co-located with two existing Payne & Dolan (Vibra-Tech) monitors located at: 7301 S. 51st Street, and 5800 W. Allwood Drive. Each monitor was pole-mounted and provided with a weatherproof enclosure. Power was provided via an internal battery and an external battery connected to a solar panel. This type of configuration provided continuous (24/7) remote monitoring, allowing Stantec to have access to data anytime via the Internet.

As contracted by the City for 2024, Stantec is providing remote vibration monitoring using two seismographs co-located with two existing Payne & Dolan (Vibra-Tech) monitors at 7301 S. 51st Street and 5800 W. Allwood Drive. The monitors provided continuous (24/7) remote monitoring. Quarterly summaries of blasting data, comparing the Payne & Dolan (Vibra-Tech) unit recordings, to the Stantec (Sauls Seismic) unit recordings, will be prepared for the calendar year.

Per the PDD #23 and #24 Ordinances, 85% of the quarry's blasts within any calendar year must be below the maximum permissible vibration (also referred to as particle or ground velocity) of 0.30 inches per second (in/sec), measured at the closest residence or inhabited structure not owned or controlled by the quarry. This is more stringent than State of Wisconsin regulations (Wisconsin Department of Industry, Labor and Human Relations in ch.ILHR 7, Wis. Adm. Code on any blast [new reference now Wis. Adm. Code, Safety and Professional Services (SPS) Chapter 307]) which require quarry operators to report any ground vibration levels to the Wisconsin Department of Natural Resources that are above 0.75 in/sec.

Per the PDD #23 and #24 Ordinances, airblast resulting from P&D blasting shall not exceed 123 dB on at least 85% of its blasts within any single calendar year, measured at the residence or inhabited structure closest to the site of the blast which is not owned or controlled by the Operator. Notwithstanding any other provision in this subsection, the Operator shall not exceed the airblast limitation imposed by Wis. Adm. Code, SPS Ch. 307.

In addition to obtaining and reviewing the blast data from the city-owned, fixed seismograph, Stantec also received data from Payne & Dolan's Vibra-Tech meters, which provided independently monitored Franklin Aggregate blasting data for the entire calendar year. Four monitors are used by Vibra-Tech, three along South 51<sup>st</sup> Street, and one just south of West Drexel Avenue. This independently monitored data was compared to the Stantec-obtained data.

**Attachment C** Summary of Seismic Data – 4th Quarter 2024

Payne & Dolan Blast Monitoring Data									Stantec Blast Monitoring Data			Comparison of P&D and Stantec Monitoring Data			Complaint Information			Weather (for complaints only)							
Date	Time	Activity Number	General Quarry Blast Location	Monitor Location	Distance (feet)	PPV (in/sec)	Freq (Hz)	AO (dB)	PPV (in/sec)	Freq (Hz)	AO (dB)	Difference in PPV Values	Difference in Freq Values	Difference in AO dB Values	Complaints?	#	Primary direction of complaints (from quarry)	Wind Direction	Wind Speed (mph)	Wind Gusts (mph)	Pressure (in)	Humidity (%)	Conditions	Precipitation	Temp. (°F)
10/8/24	11:58 AM	56	central	5800 ALLWOOD	2,529	0.020	33.3	105.0	N/D	N/D	N/D	--	--	--	no										
10/8/24	11:58 AM	56	central	7301 S 51st Street	1,995	0.038	17.2	107.0	N/D	N/D	N/D	--	--	--											
10/8/24	11:58 AM	56	central	7526 S. 51st Street	965	0.235	26.3	113.0																	
10/8/24	11:58 AM	56	central	SE of Quarry	899	0.163	33.3	112.0																	
10/11/24	10:03 AM	57	south	5800 ALLWOOD	1,242	0.045	29.4	107.0	0.0525	12.8	101.9	-0.008	16.6	5.1	yes	1	south	SW	15	23	29.31	43	mostly cloudy	none	72
10/11/24	10:05 AM	57	south	7301 S 51st Street	3,246	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--											
10/11/24	10:03 AM	57	south	7526 S. 51st Street	2,238	0.040	13.9	113.0																	
10/11/24	10:03 AM	57	south	SE of Quarry	1,458	0.050	23.8	114.0																	
10/14/24	11:50 AM	58	north	5800 ALLWOOD	3,843	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	yes	1	east	N	8	17	29.36	51	mostly cloudy	none	55
10/14/24	11:53 AM	58	north	7301 S 51st Street	959	0.098	31.3	108.0	0.098	30.1	101.0	0.000	1.2	7.0											
10/14/24	11:53 AM	58	north	7526 S. 51st Street	1,491	0.080	35.7	112.0																	
10/14/24	11:53 AM	58	north	SE of Quarry	2,391	0.023	14.3	110.0																	
10/14/24	12:00 PM	59	north	5800 ALLWOOD	4,058	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
10/14/24	11:57 AM	59	north	7301 S 51st Street	1,344	0.050	26.3	109.0	0.0475	39.3	95.9	0.003	-13.0	13.1											
10/14/24	11:57 AM	59	north	7526 S. 51st Street	2,038	0.033	35.7	110.0																	
10/14/24	12:00 PM	59	north	SE of Quarry	2,870	N/D	N/D	N/D																	
10/14/24	12:12 PM	60	south	5800 ALLWOOD	1,277	0.105	33.3	112.0	0.1125	28.4	104.9	-0.008	4.9	7.1	yes	2	south	N	8	17	29.36	51	mostly cloudy	none	55
10/14/24	12:13 PM	60	south	7301 S 51st Street	3,213	0.020	7.8	109.0	N/D	N/D	N/D	--	--	--											
10/14/24	12:12 PM	60	south	7526 S. 51st Street	2,185	0.065	10.4	111.0																	
10/14/24	12:12 PM	60	south	SE of Quarry	1,386	0.093	20.8	110.0																	
10/14/24	2:30 PM	61	north	5800 ALLWOOD	3,840	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
10/14/24	2:36 PM	61	north	7301 S 51st Street	941	0.138	26.3	109.0	0.108	25.6	100.0	0.030	0.7	9.0											
10/14/24	2:36 PM	61	north	7526 S. 51st Street	1,468	0.140	31.3	112.0																	
10/14/24	2:36 PM	61	north	SE of Quarry	2,374	0.025	26.3	109.0																	
10/16/24	9:58 AM	62	south	5800 ALLWOOD	1,277	0.120	41.7	108.0	0.1225	39.3	102.8	-0.003	2.4	5.2	yes	1	south	NNW	7	none	29.67	59	mostly cloudy	none	49
10/16/24	10:00 AM	62	south	7301 S 51st Street	3,213	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--											
10/16/24	9:58 AM	62	south	7526 S. 51st Street	2,185	0.045	33.3	108.0																	
10/16/24	9:58 AM	62	south	SE of Quarry	1,386	0.073	29.4	109.0																	
10/16/24	1:30 PM	63	north	5800 ALLWOOD	3,993	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
10/16/24	1:27 PM	63	north	7301 S 51st Street	1,376	0.038	29.4	103.0	N/D	N/D	N/D	--	--	--											
10/16/24	1:30 PM	63	north	7526 S. 51st Street	2,021	N/D	N/D	N/D																	
10/16/24	1:30 PM	63	north	SE of Quarry	2,830	N/D	N/D	N/D																	
10/17/24	11:30 AM	64	north	5800 ALLWOOD	3,983	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
10/17/24	11:26 AM	64	north	7301 S 51st Street	1,216	0.105	31.3	106.0	0.0925	13.1	98.8	0.013	18.2	7.2											
10/17/24	11:26 AM	64	north	7526 S. 51st Street	1,871	0.045	26.3	112.0																	
10/17/24	11:30 AM	64	north	SE of Quarry	2,720	N/D	N/D	N/D																	
10/18/24	10:30 AM	65	north	5800 ALLWOOD	3,812	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	yes	1	east	SW	14	none	29.65	44	fair	none	63
10/18/24	10:41 AM	65	north	7301 S 51st Street	878	0.125	38.5	108.0	0.100	11.6	98.8	0.025	26.9	9.2											
10/18/24	10:41 AM	65	north	7526 S. 51st Street	1,357	0.105	29.4	111.0																	
10/18/24	10:41 AM	65	north	SE of Quarry	2,284	0.035	17.9	106.0																	
10/21/24	11:15 AM	66	north	5800 ALLWOOD	4,072	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
10/21/24	11:21 AM	66	north	7301 S 51st Street	1,214	0.105	35.7	104.0	0.0925	32.0	97.5	0.013	3.7	6.5											
10/21/24	11:21 AM	66	north	7526 S. 51st Street	1,936	0.048	31.3	108.0																	
10/21/24	11:15 AM	66	north	SE of Quarry	2,804	N/D	N/D	N/D																	
10/23/24	10:30 AM	67	north	5800 ALLWOOD	4,232	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
10/23/24	10:27 AM	67	north	7301 S 51st Street	985	0.170	27.8	111.0	0.1275	36.5	101.0	0.043	-8.7	10.0											
10/23/24	10:27 AM	67	north	7526 S. 51st Street	1,862	0.135	33.3	113.0																	
10/23/24	10:27 AM	67	north	SE of Quarry	2,818	0.023	27.8	112.0																	
10/25/24	12:45 PM	68	north	5800 ALLWOOD	3,883	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	yes	1	east	NW	16	24	29.32	60	mostly cloudy	none	59
10/25/24	12:39 PM	68	north	7301 S 51st Street	913	0.138	15.2	113.0	0.0925	64.0	104.2	0.045	-48.8	8.8											

Payne & Dolan Blast Monitoring Data									Stantec Blast Monitoring Data			Comparison of P&D and Stantec Monitoring Data			Complaint Information			Weather (for complaints only)							
Date	Time	Activity Number	General Quarry Blast Location	Monitor Location	Distance (feet)	PPV (in/sec)	Freq (Hz)	AO (dB)	PPV (in/sec)	Freq (Hz)	AO (dB)	Difference in PPV Values	Difference in Freq Values	Difference in AO dB Values	Com-plaints?	#	Primary direction of complaints (from quarry)	Wind Direc-tion	Wind Speed (mph)	Wind Gusts (mph)	Press-ure (in)	Humi-dity (%)	Condi-tions	Precip-itation	Temp. (°F)
10/25/24	12:39 PM	68	north	7526 S. 51st Street	1,487	0.073	26.3	116.0																	
10/25/24	12:39 PM	68	north	SE of Quarry	2,407	0.035	22.7	111.0																	
10/28/24	12:15 PM	69	central	5800 ALLWOOD	3,694	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	yes	1	east	SSE	13	none	29.31	44	mostly cloudy	none	62
10/28/24	12:06 PM	69	central	7301 S 51st Street	916	0.143	15.2	109.0	0.125	15.0	101.0	0.018	0.2	8.0											
10/28/24	12:06 PM	69	central	7526 S. 51st Street	1,227	0.125	26.3	110.0																	
10/28/24	12:06 PM	69	central	SE of Quarry	2,135	0.043	27.8	104.0																	
11/1/24	11:16 AM	70	central	5800 ALLWOOD	3,702	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
11/1/24	11:15 AM	70	central	7301 S 51st Street	855	0.133	62.5	107.0	0.105	36.5	97.5	0.028	26.0	9.5											
11/1/24	11:15 AM	70	central	7526 S. 51st Street	1,131	0.085	26.3	112.0																	
11/1/24	11:15 AM	70	central	SE of Quarry	2,074	0.023	10.6	107.0																	
11/8/24	11:30 AM	71	north	5800 ALLWOOD	4,051	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
11/8/24	11:24 AM	71	north	7301 S 51st Street	1,079	0.083	35.7	105.0	0.090	11.3	94.0	-0.007	24.4	11.0											
11/8/24	11:24 AM	71	north	7526 S. 51st Street	1,803	0.055	27.8	106.0																	
11/8/24	11:30 AM	71	north	SE of Quarry	2,702	N/D	N/D	N/D																	
11/13/24	2:00 PM	72	central	5800 ALLWOOD	3,903	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
11/13/24	1:21 PM	72	central	7301 S 51st Street	722	0.158	50.0	107.0	0.188	64.0	95.9	-0.030	-14.0	11.1											
11/13/24	1:21 PM	72	central	7526 S. 51st Street	1,284	0.068	33.3	107.0																	
11/13/24	2:00 PM	72	central	SE of Quarry	2,277	N/D	N/D	N/D																	
11/15/24	11:25 AM	73	north	5800 ALLWOOD	4,090	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
11/15/24	11:26 AM	73	north	7301 S 51st Street	608	0.143	12.5	107.0	0.160	34.1	95.9	-0.018	-21.6	11.1											
11/15/24	11:26 AM	73	north	7526 S. 51st Street	1,406	0.090	35.7	111.0																	
11/15/24	11:25 AM	73	north	SE of Quarry	2,443	N/D	N/D	N/D																	
11/18/24	1:00 PM	74	south	5800 ALLWOOD	1,215	0.070	41.7	106.0	0.0975	39.3	100.0	-0.028	2.4	6.0	no										
11/18/24	1:00 PM	74	south	7301 S 51st Street	3,275	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--											
11/18/24	1:00 PM	74	south	7526 S. 51st Street	2,247	0.030	20.8	109.0																	
11/18/24	1:00 PM	74	south	SE of Quarry	1,435	0.058	26.3	110.0																	
11/20/24	10:10 AM	75	south	5800 ALLWOOD	1,156	0.100	33.3	107.0	0.093	34.1	97.5	0.008	-0.8	9.5	no										
11/20/24	10:10 AM	75	south	7301 S 51st Street	3,333	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--											
11/20/24	10:10 AM	75	south	7526 S. 51st Street	2,341	0.033	13.2	114.0																	
11/20/24	10:10 AM	75	south	SE of Quarry	1,561	0.035	50.0	115.0																	
11/20/24	11:00 AM	76	north	5800 ALLWOOD	3,939	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
11/20/24	11:00 AM	76	north	7301 S 51st Street	1,629	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--											
11/20/24	11:00 AM	76	north	7526 S. 51st Street	2,208	N/D	N/D	N/D																	
11/20/24	11:00 AM	76	north	SE of Quarry	2,940	N/D	N/D	N/D																	
11/25/24	9:55 AM	77	south	5800 ALLWOOD	1,126	0.110	35.7	110.0	0.090	34.1	100.0	0.020	1.6	10.0	yes	1	east	NW	8	none	29.09	83	cloudy	none	49
11/25/24	10:00 AM	77	south	7301 S 51st Street	3,362	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--											
11/25/24	9:55 AM	77	south	7526 S. 51st Street	2,343	0.040	9.6	113.0																	
11/25/24	9:55 AM	77	south	SE of Quarry	1,525	0.055	14.7	115.0																	
11/26/24	11:44 AM	78	central	5800 ALLWOOD	2,629	0.020	33.3	101.0	N/D	N/D	N/D	--	--	--	no										
11/26/24	11:44 AM	78	central	7301 S 51st Street	1,883	0.038	50.0	105.0	N/D	N/D	N/D	--	--	--											
11/26/24	11:44 AM	78	central	7526 S. 51st Street	905	0.153	31.3	109.0																	
11/26/24	11:44 AM	78	central	SE of Quarry	990	0.115	41.7	107.0																	
11/26/24	1:56 PM	79	north	5800 ALLWOOD	4,053	N/D	N/D	N/D	N/D	N/D	N/D	--	--	--	no										
11/26/24	1:46 PM	79	north	7301 S 51st Street	860	0.223	35.7	110.0	0.173	42.6	95.9	0.050	-6.9	14.1											
11/26/24	1:46 PM	79	north	7526 S. 51st Street	1,608	0.088	29.4	114.0																	
11/26/24	1:46 PM	79	north	SE of Quarry	2,567	0.023	21.7	108.0																	
12/2/24	10:59 AM	80	south	5800 ALLWOOD	1,200	0.148	35.7	110.0	0.118	34.1	98.8	0.030	1.6	11.2	yes	1	south	WNW	9	none	29.59	68	cloudy	none	23
12/2/24	10:52 AM	80	south	7301 S 51st Street	3,288	N/T	N/T	N/A	N/D	N/D	N/D	--	--	--											
12/2/24	10:59 AM	80	south	7526 S. 51st Street	2,268	0.030	18.5	109.0																	
12/2/24	10:59 AM	80	south	SE of Quarry	1,464	0.070	17.2	109.0																	



Payne & Dolan Blast Monitoring Data									Stantec Blast Monitoring Data			Comparison of P&D and Stantec Monitoring Data			Complaint Information			Weather (for complaints only)							
Date	Time	Activity Number	General Quarry Blast Location	Monitor Location	Distance (feet)	PPV (in/sec)	Freq (Hz)	AO (dB)	PPV (in/sec)	Freq (Hz)	AO (dB)	Difference in PPV Values	Difference in Freq Values	Difference in AO dB Values	Complaints?	#	Primary direction of complaints (from quarry)	Wind Direction	Wind Speed (mph)	Wind Gusts (mph)	Pressure (in)	Humidity (%)	Conditions	Precipitation	Temp. (°F)
12/2/24	1:00 PM	81	north	5800 ALLWOOD	4,165	N/T	N/T	N/A	N/D	N/D	N/D	--	--	--	no										
12/2/24	12:49 PM	81	north	7301 S 51st Street	1,003	0.108	11.9	105.0	0.100	28.4	94.0	0.007	-16.5	11.0											
12/2/24	12:49 PM	81	north	7526 S. 51st Street	1,827	0.040	27.8	108.0																	
12/2/24	1:00 PM	81	north	SE of Quarry	2,767	N/T	N/T	N/A																	
12/6/24	11:11 AM	82	south	5800 ALLWOOD	1,477	0.055	31.3	113.0	0.050	26.9	104.9	0.005	4.4	8.1	yes	1	south	WSW	12	none	29.46	49	mostly cloudy	none	26
12/6/24	11:15 AM	82	south	7301 S 51st Street	3,011	N/T	N/T	N/A	N/D	N/D	N/D	--	--	--											
12/6/24	11:11 AM	82	south	7526 S. 51st Street	2,039	0.040	11.6	111.0																	
12/6/24	11:11 AM	82	south	SE of Quarry	1,362	0.138	21.7	111.0																	
12/9/24	9:57 AM	83	central	5800 ALLWOOD	2,711	0.028	27.8	110.0	N/D	N/D	N/D	--	--	--											
12/9/24	9:57 AM	83	central	7301 S 51st Street	1,782	0.033	25.0	105.0	N/D	N/D	N/D	--	--	--											
12/9/24	9:57 AM	83	central	7526 S. 51st Street	917	0.165	33.3	109.0																	
12/9/24	9:57 AM	83	central	SE of Quarry	1,138	0.130	38.5	110.0																	
12/10/24	12:00 PM	84	north	5800 ALLWOOD	4,032	N/T	N/T	N/A	N/D	N/D	N/D	--	--	--	yes	1	east	WNW	9	none	29.13	61	cloudy	none	35
12/10/24	12:06 PM	84	north	7301 S 51st Street	895	0.258	35.7	107.0	0.225	42.6	95.9	0.033	-6.9	11.1											
12/10/24	12:06 PM	84	north	7526 S. 51st Street	1,621	0.065	31.3	105.0																	
12/10/24	12:00 PM	84	north	SE of Quarry	2,567	N/T	N/T	N/A																	
12/13/24	12:14 PM	85	north	5800 ALLWOOD	4,094	N/T	N/T	N/A	N/D	N/D	N/D	--	--	--	no										
12/13/24	12:12 PM	85	north	7301 S 51st Street	909	0.160	29.4	106.0	0.160	32.0	94.0	0.000	-2.6	12.0											
12/13/24	12:12 PM	85	north	7526 S. 51st Street	1,689	0.053	29.4	104.0																	
12/13/24	12:14 PM	85	north	SE of Quarry	2,641	N/T	N/T	N/A																	
12/17/24	10:05 AM	86	north	5800 ALLWOOD	4,051	N/T	N/T	N/A	N/D	N/D	N/D	--	--	--	no										
12/17/24	10:06 AM	86	north	7301 S 51st Street	1,079	0.098	23.8	110.0	0.073	13.8	97.5	0.025	10.0	12.5											
12/17/24	10:07 AM	86	north	7526 S. 51st Street	1,803	0.040	27.8	111.0																	
12/17/24	10:05 AM	86	north	SE of Quarry	2,702	N/T	N/T	N/A																	
12/18/24	1:57 PM	87	central	5800 ALLWOOD	2,739	N/T	N/T	N/A	N/D	N/D	N/D	--	--	--	no										
12/18/24	12:22 PM	87	central	7301 S 51st Street	1,779	0.028	9.8	100.0	N/D	N/D	N/D	--	--	--											
12/18/24	12:22 PM	87	central	7526 S. 51st Street	803	0.105	16.7	110.0																	
12/18/24	12:22 PM	87	central	SE of Quarry	1,018	0.063	15.6	99.0																	
<b>Totals</b>		<b>32</b>														<b>11</b>	<b>12</b>								

**Notes:** Shaded cells do not have a meter in that location  
N/D = not detected, meter did not detect blast

**Figure 1** Seismic Monitoring, Blasting, and Complaint Locations, 4th Quarter 2024



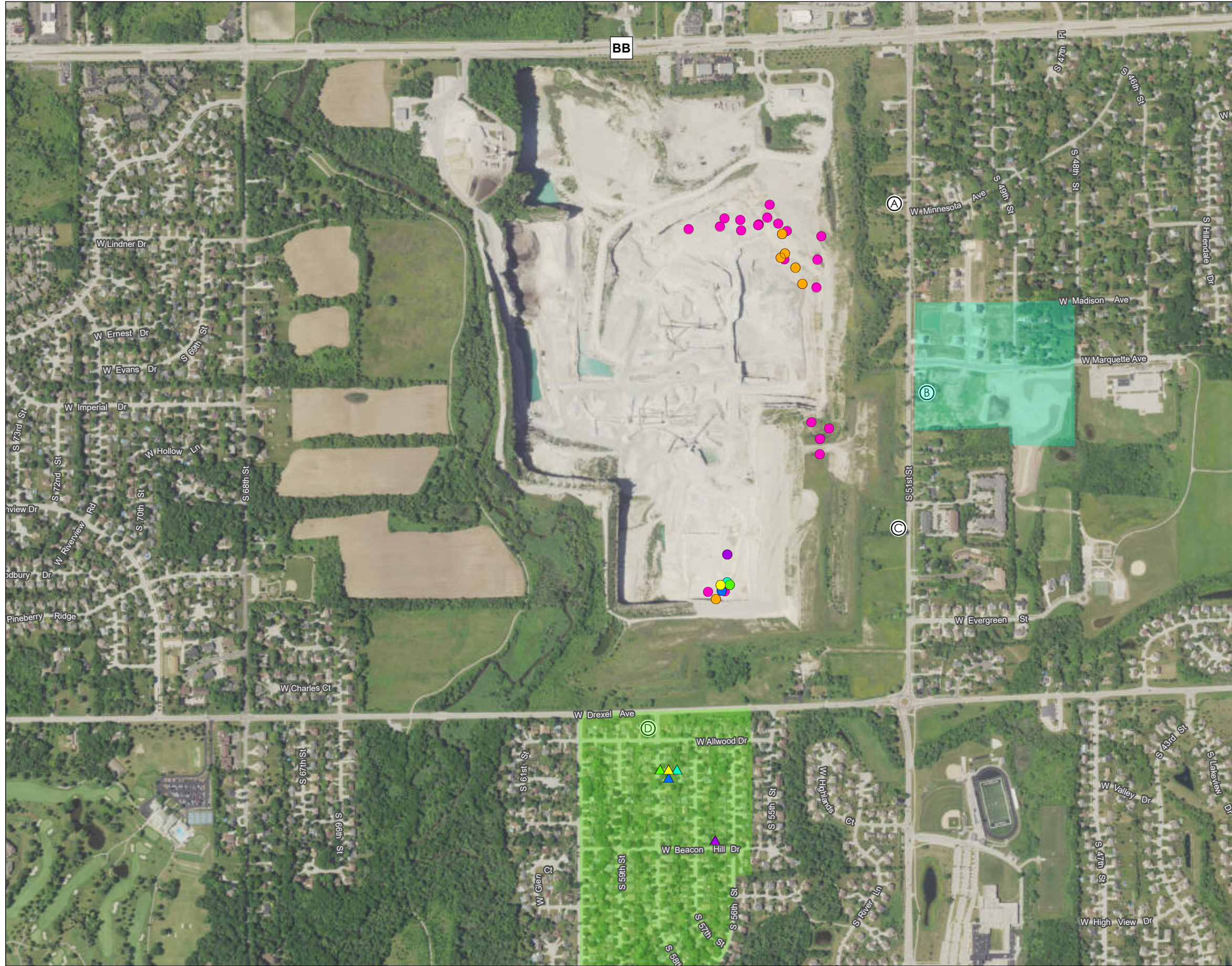
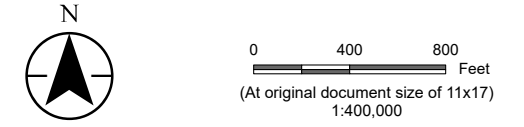
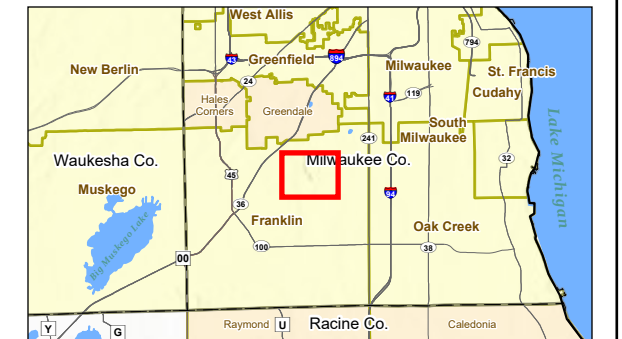


Figure No. **1**  
**Seismic Monitoring, Blasting, and Complaint Locations - 4th Quarter 2024**  
 Client/Project: City of Franklin, Vicinity of Payne and Dolan Quarry  
 Project Location: C. of Franklin, Milwaukee Co., WI  
 Prepared by: AJS on 2025-01-14, TR by DG on 2025-01-14, IR by KGI on 2025-01-14



- Legend**
- Seismic Monitoring Location**
- (A) Vibra-Tech(VT1) and Stantec(S1)
  - (B) Vibra-Tech(VT2)
  - (C) Vibra-Tech(VT3)
  - (D) Vibra-Tech(VT4) and Stantec(S2)
- Complaint Blast Location**
- Marquette Ave Area (#58, #65, #68, #69, #77, #84)
  - Blast #57
  - Blast #60
  - Blast #62
  - Blast #80
  - Blast #82
- Address Specific Blast Complaint**
- ▲ Blast #57
  - ▲ Blast #60
  - ▲ Blast #62
  - ▲ Blast #80
  - ▲ Blast #82
- Complaint Area**
- Marquette Ave Area
  - Root River Heights



**Notes**

1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
2. Data Sources: Stantec, SCO, WDNR, WisDOT
3. Orthophotography: 2022 NAIP



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