

CITY OF FRANKLIN
QUARRY MONITORING COMMITTEE*
MEETING AGENDA

Franklin City Hall, **Council Chambers**
9229 West Loomis Road, Franklin, Wisconsin 53132
Thursday, August 26, 2021, 6:00 p.m.

- I. Call to Order, Roll Call and Pledge of Allegiance
- II. Approval of Minutes
 - a. Regular meeting of June 24, 2021.
- 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. Hearings
- V. Business (Action may be taken on any item)
 - a. Quarterly presentation by Stantec Consulting Services, Inc., 2nd quarter of calendar year 2021 (April, May and June).
 - b. Review and discussion on matters pertaining to citizen complaints, blasting data from Payne & Dolan and Stantec (the City's consultant).
 - c. Review and discussion on quarry monitoring services scope of work for calendar year 2022 presented by Stantec Consulting Services, Inc.
 - d. Discussion on frequency of regular committee meetings.
- VI. Meeting scheduling discussion
- VII. 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
Council Chambers, Franklin City Hall
6:00 PM
June 24, 2021
Minutes

unapproved

I. CALL TO ORDER

The June 24, 2021, Quarry Monitoring Committee meeting was called to order by Alderman Barber at 6:00 p.m. in the Council Chambers at City Hall.

Alderman Mike Barber, members Jon TenHaken, Fred Knueppel, Dallas Schurg were present. Non-voting member Dina Swanson arrived at 6:01 p.m. Alderwoman Kristen Wilhelm was absent. Also present were Principal Planner Regulo Martínez-Montilva and the representative of the quarry operator Clint Weninger.

II. APPROVAL OF THE MINUTES

a. Regular meeting of April 29, 2021.

Member Knueppel moved and member TenHaken seconded to approve the minutes as presented. On voice vote, all present voted 'aye'; the vote was 4-0-1, motion carried.

III. CITIZEN COMMENT PERIOD

Citizen comment period opened at 6:02 p.m. and closed at 6:04 p.m. Clint Weninger offered quarry tours to interested committee members and neighbors.

IV. HEARINGS

a. None.

No action needed. None taken.

V. BUSINESS

a. Discussion on frequency of regular committee meetings.

No action taken, this item was carried over to the August meeting.

b. Review and discussion on matters pertaining to citizen complaints, blasting data from Payne & Dolan and Stantec (the City's consultant).

Principal Planner Martínez-Montilva informed the Committee that the city received one (1) complaint in May and five (5) complaints in June, and that the recorded blasting levels for these events are in compliance with the maximum limits of the Planned Development District (PDD).

VI. SCHEDULE NEXT MEETING

It was agreed that the next meeting of the Quarry Monitoring Committee would tentatively be on August 26, 2021, based on quorum.

VII. ADJOURNMENT

Member Schurg moved and member TenHaken seconded to adjourn the June 24, 2021, Quarry Monitoring Committee meeting at 6:34 p.m. All present voted 'aye'; motion carried.



Stantec Consulting Services Inc.
1165 Scheuring Road
De Pere, Wisconsin 54115
Tel: (920) 592-8400
Fax: (920) 592-8444

V.a

August 3, 2021

Heath Eddy
Planner - Department of City Development
City of Franklin
9229 W. Loomis Road
Franklin, Wisconsin 53132
HEddy@franklinwi.gov

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary
Period: 2nd Quarter 2021
Stantec Project: 193707487

Dear Mr. Eddy:

The enclosed information summarizes monitoring activities completed during the second quarter of 2021 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 description 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 FTP site for review by City representatives. Copies of individual reports are not provided with this summary report.

Four observation events were completed during the monitoring period; all were unannounced inspections (April 12, May 13, June 4, and June 23) and were limited to the perimeter of the quarry. Three of four visits observed a small amount of dust on Rawson Avenue from trucks that were departing the site and travelling to the east. The street sweeper was observed operating on Rawson Avenue on one of the four inspections. No noticeable dust or debris was observed on other roads surrounding the quarry.

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 for the quarter and are presented in Attachment C. Figure 1 illustrates the locations of the blasts in the first quarter.

Highlights of the seismic data include the following:

- Between April 1 and June 30, 2021, a total of 25 blasting events occurred. A total of 20 (80%) 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 that are above 0.75 in/sec.

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary
Period: 2Q2021

- None of the blasting events measured by Payne & Dolan or Stantec had a vibration greater than 0.30 in/sec; thus 100% of the quarry's blasts were below this level.
- 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; thus 100% of the quarry's blasts 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 monitors. There were some larger differences in the AO 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 PPV readings.
- 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 complaints received by Stantec for the period April 1 through June 30, 2021 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. The locations of all blasts and complaints are shown on Figure 1. The following highlights the results of the complaint evaluation:

Complaints - General

- 9 complaints – total (Note: some complaints were for multiple reasons)
- 1 complaint – regarding noise
- 0 complaints – regarding dust
- 0 complaints – miscellaneous
- 9 complaints – regarding vibration

Complaints – Blast Related

- 9 complaints – corresponding to actual blast events
(two were from the same address for the same blast event)
- 0 complaints – not corresponding to actual blast events
- 9 complaints – complainant location identified
 - 3 households that complained once each
 - 2 households that complained three times each
 - 0 complaints – no name and address provided (requested confidentiality)

Complaints (non-anonymous; confirmed blast related) - Locations

- 1 complaint – east of 51st Street
- 8 complaints – south of Drexel Avenue
- 0 complaints – west of Root River

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary
Period: 2Q2021

Blast Events

- 25 blast events - during monitoring period 2Q2021 (shot numbers 10 through 34)
- 7 blast events - corresponding to complaints
 - 0 weather: rain
 - 4 weather: partly to mostly cloudy, or cloudy
 - 3 weather: fair or scattered clouds
 - 4 time: prior to 12:00 pm (noon)
 - 3 time: after 12:00 pm
- 5 blast events with one complaint
- 2 blast events with two complaints

Quarry Blast Locations Producing Complaints

- 7 southern area of quarry
- 0 northern area of quarry

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

- Very few, if any, quarry operational complaints are made regarding dust or truck traffic. Most complaints focus on quarry blasting and resulting ground vibrations. There was only one noise complaint this quarter.
- Most of the complaints (89%) in this quarter originate from residences south of Drexel Avenue.
- No blast this quarter had more than two complaints.
- No complaints came from west of the Root River.
- Due to increased amount of employees now working from home, residents may have been at home more during the day than in years prior to 2021 and 2020. However, this is essentially the “new normal”.



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Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary
Period: 2Q2021

Please feel free to contact Mike Roznowski at 920-278-3200 or mike.roznowski@stantec.com; or Kristen Gunderson-Inden at 262-665-3447 or kristen.gunderson-inden@stantec.com if you have any questions.

Respectfully,

STANTEC CONSULTING SERVICES INC.

A handwritten signature in blue ink, appearing to read 'Kristen Gunderson-Inden'.

Kristen Gunderson-Inden
Senior Environmental Scientist

A handwritten signature in blue ink, appearing to read 'Michael B. Roznowski'.

Michael B. Roznowski, CHMM
Senior Principal

Attachments A - Franklin Quarry Seismic Monitoring Description of Services
 B - Franklin Quarry Seismic Monitoring Project Background
 C – Summary of Seismic Data – 2nd Quarter 2021
 Figure 1 - Seismic Monitoring, Blasting, and Complaint Locations, 2nd Quarter 2021

ATTACHMENT A

FRANKLIN QUARRY SEISMIC MONITORING DESCRIPTION OF SERVICES

DESCRIPTION OF SERVICES

Direct Observation (Visual) Monitoring

During 2020, Stantec will conduct a total of ten (10) 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 will 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 file transfer protocol (FTP) 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 FTP 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, Stantec provided 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 monitor provided continuous (24/7) remote monitoring. Monthly summaries of blasting data, comparing the Payne & Dolan (Vibra-Tech) unit recordings, to the Stantec (Sauls Seismic) unit recordings, were prepared for the months April through December.

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 51st 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 – 2nd QUARTER 2021

Payne & Dolan Blast Monitoring Data							Stantec Blast Monitoring Data		Comparison of P&D and Stantec Monitoring Data		Complaint Information			Weather (for complaints only)							
Date and Time	Activity Number	General Quarry Blast Location	Monitor Location	Distance (feet)	PPV (in/sec)	AO (dB)	PPV (in/sec)	AO (dB)	Difference in PPV 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)
4/1/2021 9:40	10	north	5800 ALLWOOD	3,920	N/D	N/D	N/D	N/D	--	--	no										
4/1/2021 9:40	10	north	7526 S. 51st Street	1,615	N/D	N/D	N/D	N/D	--	--											
4/1/2021 9:40	10	north	SE of Quarry	2513	N/D	N/D															
4/1/2021 9:40	10	north	7301 S 51st Street	1,000	0.028	91															
4/5/2021 9:53	11	north	5800 ALLWOOD	3,887	N/D	N/D	N/D	N/D	--	--	no										
4/5/2021 9:53	11	north	7526 S. 51st Street	1,421	0.048	111	0.09	99	-0.042	12											
4/5/2021 9:53	11	north	SE of Quarry	2,363	N/D	N/D															
4/5/2021 9:53	11	north	7301 S 51st Street	851	0.075	106															
4/7/2021 10:13	12	north	5800 ALLWOOD	3,694	N/D	N/D	N/D	N/D	--	--	no										
4/7/2021 10:13	12	north	7526 S. 51st Street	1,467	0.038	110	0.06	101	-0.022	9											
4/7/2021 10:13	12	north	SE of Quarry	2,302	0.023	107															
4/7/2021 10:13	12	north	7301 S 51st Street	1,085	0.063	107															
4/12/2021 10:58	13	north	5800 ALLWOOD	3,851	N/D	N/D	N/D	N/D	--	--	no										
4/12/2021 10:58	13	north	7526 S. 51st Street	1,442	0.043	116	0.06	102	-0.017	14											
4/12/2021 10:58	13	north	SE of Quarry	2,361	N/D	N/D															
4/12/2021 10:58	13	north	7301 S 51st Street	907	0.088	109															
4/14/2021 11:12	14	north	5800 ALLWOOD	3,573	N/D	N/D	N/D	N/D	--	--	no										
4/14/2021 11:12	14	north	7526 S. 51st Street	1,137	0.078	118	0.17	99	-0.092	19											
4/14/2021 11:12	14	north	SE of Quarry	2,009	0.035	111															
4/14/2021 11:12	14	north	7301 S 51st Street	994	0.19	107															
4/14/2021 12:43	15	north	5800 ALLWOOD	3,567	N/D	N/D	N/D	N/D	--	--	no										
4/14/2021 12:43	15	north	7526 S. 51st Street	1,617	0.025	118	N/D	N/D	--	--											
4/14/2021 12:43	15	north	SE of Quarry	2,344	N/D	N/D															
4/14/2021 12:43	15	north	7301 S 51st Street	1,324	0.035	116															
4/16/2021 9:42	16	south	5800 ALLWOOD	1,542	0.023	114	N/D	N/D	--	--	no										
4/16/2021 9:42	16	south	7526 S. 51st Street	1,933	0.088	110	N/D	N/D	--	--											
4/16/2021 9:42	16	south	SE of Quarry	1,222	0.143	109															
4/16/2021 9:42	16	south	7301 S 51st Street	2,949	N/D	N/D															
4/20/2021 9:59	17	south	5800 ALLWOOD	1,401	0.043	110	0.05	112	-0.007	-2	no										
4/20/2021 9:59	17	south	7526 S. 51st Street	2,058	0.045	106	N/D	N/D	--	--											
4/20/2021 9:59	17	south	SE of Quarry	1,279	0.16	106															
4/20/2021 9:59	17	south	7301 S 51st Street	3,093	N/D	N/D															
4/21/2021 10:55	18	south	5800 ALLWOOD	1,569	0.025	109	N/D	N/D	--	--	no										
4/21/2021 10:55	18	south	7526 S. 51st Street	1,899	0.093	101	N/D	N/D	--	--											
4/21/2021 10:55	18	south	SE of Quarry	1,184	0.143	99															
4/21/2021 10:55	18	south	7301 S 51st Street	2,924	N/D	N/D															
4/28/2021 9:01	19	south	5800 ALLWOOD	1,450	0.033	111	0.1	112	-0.067	-1	yes	1	south	NNE	10	none	29	86	cloudy	0	47
4/28/2021 9:01	19	south	7526 S. 51st Street	2,005	0.048	105	N/D	N/D	--	--											
4/28/2021 9:01	19	south	SE of Quarry	1,230	0.103	107															
4/28/2021 9:01	19	south	7301 S 51st Street	3,047	N/D	N/D															
4/28/2021 12:07	20	south	5800 ALLWOOD	1,155	0.105	105	0.1	106	0.005	-1	yes	1	south	NNE	10	none	29	74	mostly cloudy	0	52
4/28/2021 12:07	20	south	7526 S. 51st Street	2,410	0.028	104	N/D	N/D	--	--											
4/28/2021 12:07	20	south	SE of Quarry	1,683	0.048	101															
4/28/2021 12:07	20	south	7301 S 51st Street	3,355	N/D	N/D															
5/5/2021 11:29	21	north	5800 ALLWOOD	3,588	N/D	N/D	N/D	N/D	--	--	no										
5/5/2021 11:29	21	north	7526 S. 51st Street	1,132	0.103	110	0.09	98	0.013	12											
5/5/2021 11:29	21	north	SE of Quarry	2,013	0.038	106															
5/5/2021 11:29	21	north	7301 S 51st Street	976	0.085	103															
5/5/2021 13:50	22	south	5800 ALLWOOD	1,475	0.035	113	N/D	N/D	--	--	yes	1	south	E	8	none	29	61	fair	0	52
5/5/2021 13:50	22	south	7526 S. 51st Street	1,977	0.033	104	N/D	N/D	--	--											
5/5/2021 13:50	22	south	SE of Quarry	1,199	0.083	109															
5/5/2021 13:50	22	south	7301 S 51st Street	3,026	N/D	N/D															
5/10/2021 11:15	23	north	5800 ALLWOOD	3,616	N/D	N/D	N/D	N/D	--	--	no										
5/10/2021 11:15	23	north	7526 S. 51st Street	1,151	0.073	107	0.09	98	-0.017	9											
5/10/2021 11:15	23	north	SE of Quarry	2,042	0.035	104															
5/10/2021 11:15	23	north	7301 S 51st Street	956	0.095	106															
5/12/2021 12:07	24	north	5800 ALLWOOD	3,928	N/D	N/D	N/D	N/D	--	--	no										
5/12/2021 12:07	24	north	7526 S. 51st Street	1,473	0.033	111	0.08	102	-0.047	9											
5/12/2021 12:07	24	north	SE of Quarry	2,418	N/D	N/D															
5/12/2021 12:07	24	north	7301 S 51st Street	854	0.08	108															
5/19/2021 11:00	25	north	5800 ALLWOOD	3,905	N/D	N/D	N/D	N/D	--	--	no										
5/19/2021 11:00	25	north	7526 S. 51st Street	1,496	0.035	112	0.09	106	-0.055	6											
5/19/2021 11:00	25	north	SE of Quarry	2,423	N/D	N/D															
5/19/2021 11:00	25	north	7301 S 51st Street	900	0.075	112															
5/24/2021 12:43	26	north	5800 ALLWOOD	3,908	N/D	N/D	N/D	N/D	--	--	no										
5/24/2021 12:43	26	north	7526 S. 51st Street	1,519	0.038	112	0.09	103	-0.052	9											
5/24/2021 12:43	26	north	SE of Quarry	2,440	N/D	N/D															
5/24/2021 12:43	26	north	7301 S 51st Street	918	0.065	110															
5/27/2021 10:28	27	north	5800 ALLWOOD	4,010	N/D	N/D	N/D	N/D	--	--	no										
5/27/2021 10:28	27	north	7526 S. 51st Street	2,262	0.05	110	0.12	98	-0.070	12											
5/27/2021 10:28	27	north	SE of Quarry	3,009	0.025	107															
5/27/2021 10:28	27	north	7301 S 51st Street	1,641	0.088	107															
6/8/2021 10:10	28	south	5800 ALLWOOD	1,428	0.053	109	0.06	107	-0.007	2	yes	1	south	E	8	none	29	69	mostly cloudy	0	80
6/8/2021 10:10	28	south	7526 S. 51st Street	2,018	0.035	108	N/D	N/D	--	--											
6/8/2021 10:10	28	south	SE of Quarry	1,216	0.083	108															
6/8/2021 10:10	28	south	7301 S 51st Street	3,075	N/T	N/A															
6/11/2021 10:30	29	south	5800 ALLWOOD	1,420	0.035	115	0.05	110	-0.015	5	yes	2	south and east	variable	5	none	29	55	fair	0	88
6/11/2021 10:30	29	south	7526 S. 51st Street	2,025	0.038	110	N/D	N/D	--	--											
6/11/2021 10:30	29	south	SE of Quarry	1,218	0.07	112															
6/11/2021 10:30	29	south	7301 S 51st Street	3,085	N/T	N/A															
6/14/2021 10:27	30	south	5800 ALLWOOD	1,263	0.035	102	0.05	100	-0.015	2	no										
6/14/2021 10:27	30	south	7526 S. 51st Street	2,341	0.023	103	N/D	N/D	--	--											
6/14/2021 10:27	30	south	SE of Quarry	1,663	0.035	98															
6/14/2021 10:27	30	south	7301 S																		

FIGURE 1

SEISMIC MONITORING, BLASTING, AND COMPLAINT LOCATIONS, 2nd QUARTER 2021

V:\1937\Active\193707487\03_data\lgc_cad\lgc\mxd\2021_2nd_Quarter_Report\fig1_Seismic_Complaints_193707487.mxd Revised: 2021-08-03 By: jselbel

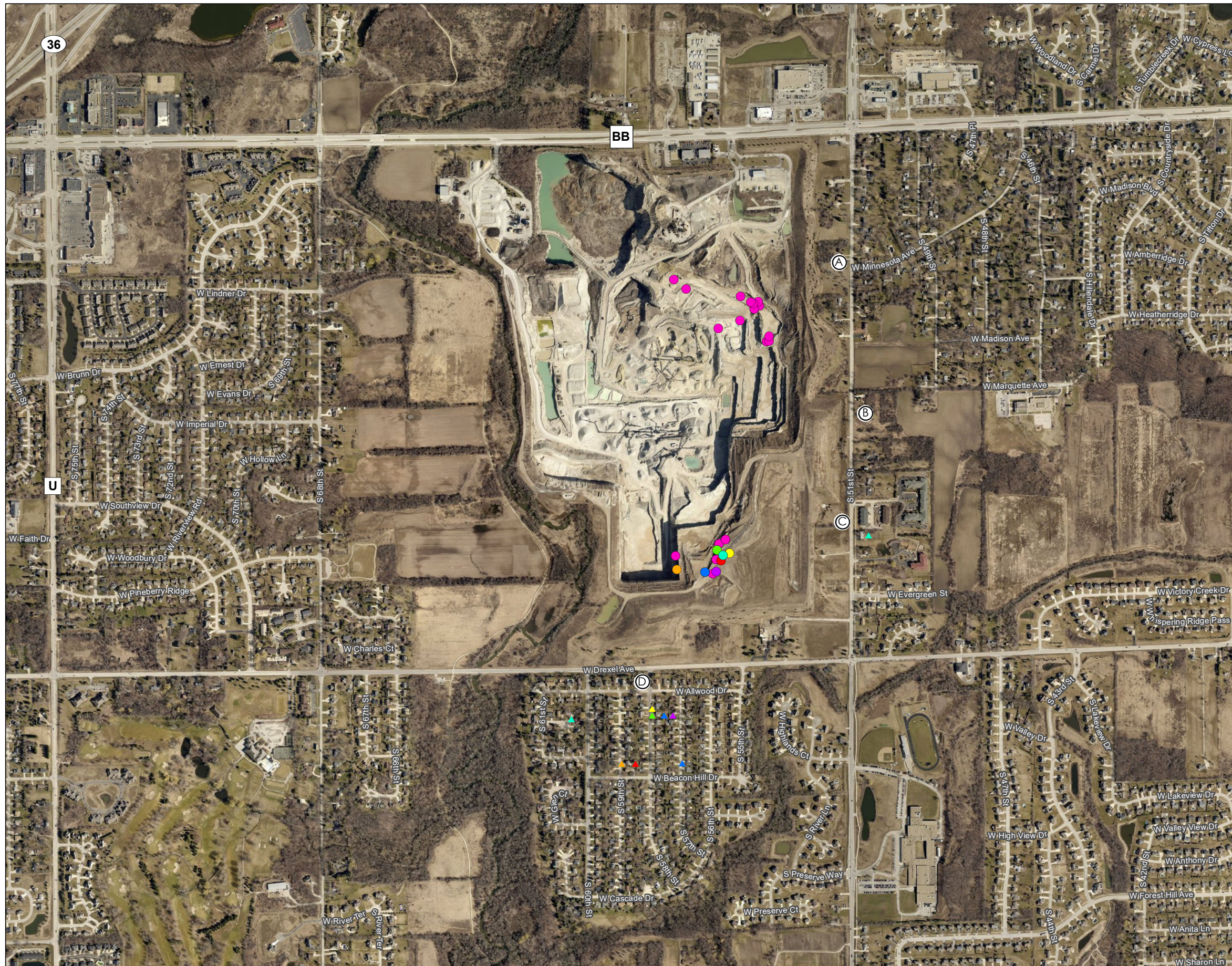
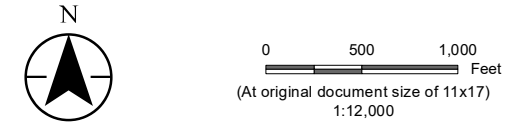


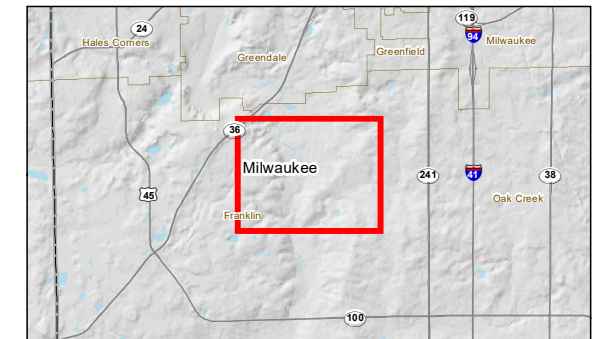
Figure No. **1**
 Title **Seismic Monitoring, Blasting, and Complaint Locations - 2nd Quarter 2021**

Client/Project **City of Franklin** 193707487
 Vicinity of Payne and Dolan Quarry

Project Location **C. of Franklin, Milwaukee Co., WI** Prepared by JDS on 2021-08-03
 TR by MZ on 2021-07-21
 IR by KGI on 2021-08-03



- Legend**
- | | |
|-------------------------------------|------------------------|
| Seismic Monitoring Location | Blast Complaint |
| (A) Vibra-Tech(VT1) and Stantec(S1) | ▲ Blast #19 |
| (B) Vibra-Tech(VT2) | ▲ Blast #20 |
| (C) Vibra-Tech(VT3) | ▲ Blast #22 |
| (D) Vibra-Tech(VT4) and Stantec(S2) | ▲ Blast #28 |
| | ▲ Blast #29 |
| | ▲ Blast #31 |
| | ▲ Blast #33 |
- Blast Location**
- Non-complaint Blast Location
 - Blast #19
 - Blast #20
 - Blast #22
 - Blast #28
 - Blast #29
 - Blast #31
 - Blast #33



Notes
 1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 2. Data Sources: Stantec, SCO, WDNR, WisDOT
 3. Orthophotography: ESRI Clarity Imagery





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Show entries

Search:

Date	Time	Shot #	Seismo Loc	PPV	AO
8/06/2021	10:05 am	47	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
8/06/2021	10:05 am	47	Franklin Quarry (7526 S. 51st Street)	N/T	N/T
8/06/2021	10:05 am	47	Franklin Quarry (7301 S 51st Street)	N/T	N/T
8/06/2021	10:02 am	47	Franklin Quarry (SE of Quarry)	0.068	106
8/04/2021	2:00 pm	46	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
8/04/2021	1:52 pm	46	Franklin Quarry (SE of Quarry)	0.030	106
8/04/2021	1:52 pm	46	Franklin Quarry (7526 S. 51st Street)	0.105	103
8/04/2021	1:52 pm	46	Franklin Quarry (7301 S 51st Street)	0.068	116
8/04/2021	10:23 am	45	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
8/04/2021	10:23 am	45	Franklin Quarry (SE of Quarry)	N/T	N/T
8/04/2021	10:23 am	45	Franklin Quarry (7526 S. 51st Street)	0.038	112
8/04/2021	10:23 am	45	Franklin Quarry (7301 S 51st Street)	0.083	106
7/30/2021	9:15 am	43	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/30/2021	9:15 am	43	Franklin Quarry (SE of Quarry)	N/T	N/T
7/30/2021	9:14 am	43	Franklin Quarry (7526 S. 51st Street)	0.065	125
7/30/2021	9:14 am	43		0.123	110

Date	Time	Shot #	Seismo Loc	PPV	AO
			Franklin Quarry (7301 S 51st Street)		
7/30/2021	11:30 am	44	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/30/2021	11:30 am	44	Franklin Quarry (7301 S 51st Street)	N/T	N/T
7/30/2021	11:36 am	44	Franklin Quarry (7526 S. 51st Street)	0.053	101
7/30/2021	11:36 am	44	Franklin Quarry (SE of Quarry)	0.098	106
7/27/2021	10:45 am	42	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/27/2021	10:45 am	42	Franklin Quarry (SE of Quarry)	N/T	N/T
7/27/2021	10:42 am	42	Franklin Quarry (7526 S. 51st Street)	0.050	114
7/27/2021	10:42 am	42	Franklin Quarry (7301 S 51st Street)	0.088	107
7/23/2021	10:51 am	41	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/23/2021	10:51 am	41	Franklin Quarry (SE of Quarry)	0.025	106
7/23/2021	10:51 am	41	Franklin Quarry (7526 S. 51st Street)	0.078	109
7/23/2021	10:51 am	41	Franklin Quarry (7301 S 51st Street)	0.088	109
7/21/2021	11:10 am	40	Franklin Quarry (7301 S 51st Street)	N/T	N/T
7/21/2021	11:11 am	40	Franklin Quarry (5800 ALLWOOD)	0.028	112
7/21/2021	11:11 am	40	Franklin Quarry (7526 S. 51st Street)	0.048	101
7/21/2021	11:11 am	40	Franklin Quarry (SE of Quarry)	0.125	106
7/19/2021	9:00 am	39	Franklin Quarry (7301 S 51st Street)	N/T	N/T
7/19/2021	9:00 am	39	Franklin Quarry (SE of Quarry)	0.100	108
7/19/2021	9:00 am	39	Franklin Quarry (5800 ALLWOOD)	0.040	112
7/19/2021	9:00 am	39	Franklin Quarry (7526 S. 51st Street)	0.050	103
7/15/2021	9:04 am	38		N/T	N/T

Date	Time	Shot #	Seismo Loc	PPV	AO
			Franklin Quarry (7301 S 51st Street)		
7/15/2021	9:04 am	38	Franklin Quarry (5800 ALLWOOD)	0.075	114
7/15/2021	9:04 am	38	Franklin Quarry (SE of Quarry)	0.118	110
7/15/2021	9:04 am	38	Franklin Quarry (7526 S. 51st Street)	0.038	111
7/13/2021	9:15 am	37	Franklin Quarry (7301 S 51st Street)	N/T	N/T
7/13/2021	9:11 am	37	Franklin Quarry (7526 S. 51st Street)	0.028	105
7/13/2021	9:11 am	37	Franklin Quarry (5800 ALLWOOD)	0.030	112
7/13/2021	9:11 am	37	Franklin Quarry (SE of Quarry)	0.073	108
7/08/2021	10:25 am	36	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/08/2021	10:25 am	36	Franklin Quarry (SE of Quarry)	N/T	N/T
7/08/2021	10:22 am	36	Franklin Quarry (7526 S. 51st Street)	0.045	117
7/08/2021	10:22 am	36	Franklin Quarry (7301 S 51st Street)	0.130	109
7/02/2021	9:15 am	35	Franklin Quarry (7301 S 51st Street)	N/T	N/T
7/02/2021	9:15 am	35	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/02/2021	9:15 am	35	Franklin Quarry (SE of Quarry)	N/T	N/T
7/02/2021	9:15 am	35	Franklin Quarry (7526 S. 51st Street)	N/T	N/T
6/30/2021	10:15 am	34	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
6/30/2021	10:14 am	34	Franklin Quarry (7526 S. 51st Street)	0.060	110
6/30/2021	10:14 am	34	Franklin Quarry (7301 S 51st Street)	0.095	110
6/30/2021	10:14 am	34	Franklin Quarry (SE of Quarry)	0.023	106
6/28/2021	9:30 am	33	Franklin Quarry (7301 S 51st Street)	N/T	N/T
6/28/2021	9:24 am	33		0.050	105

Date	Time	Shot #	Seismo Loc	PPV	AO
			Franklin Quarry (7526 S. 51st Street)		
6/28/2021	9:24 am	33	Franklin Quarry (5800 ALLWOOD)	0.053	113
6/28/2021	9:24 am	33	Franklin Quarry (SE of Quarry)	0.130	107
6/22/2021	12:20 pm	32	Franklin Quarry (7301 S 51st Street)	N/T	N/T
6/22/2021	12:18 pm	32	Franklin Quarry (5800 ALLWOOD)	0.048	110
6/22/2021	12:18 pm	32	Franklin Quarry (SE of Quarry)	0.135	109
6/22/2021	12:18 pm	32	Franklin Quarry (7526 S. 51st Street)	0.055	112
6/16/2021	1:15 pm	31	Franklin Quarry (7301 S 51st Street)	N/T	N/T
6/16/2021	1:12 pm	31	Franklin Quarry (7526 S. 51st Street)	0.030	110
6/16/2021	1:12 pm	31	Franklin Quarry (5800 ALLWOOD)	0.050	106
6/16/2021	1:12 pm	31	Franklin Quarry (SE of Quarry)	0.068	109
6/14/2021	10:25 am	30	Franklin Quarry (7301 S 51st Street)	N/T	N/T
6/14/2021	10:27 am	30	Franklin Quarry (7526 S. 51st Street)	0.023	103
6/14/2021	10:27 am	30	Franklin Quarry (SE of Quarry)	0.035	98
6/14/2021	10:27 am	30	Franklin Quarry (5800 ALLWOOD)	0.035	102
6/11/2021	10:30 am	29	Franklin Quarry (7301 S 51st Street)	N/T	N/T
6/11/2021	10:30 am	29	Franklin Quarry (7526 S. 51st Street)	0.038	110
6/11/2021	10:30 am	29	Franklin Quarry (5800 ALLWOOD)	0.035	115
6/11/2021	10:30 am	29	Franklin Quarry (SE of Quarry)	0.070	112
6/08/2021	10:10 am	28	Franklin Quarry (7301 S 51st Street)	N/T	N/T
6/08/2021	10:10 am	28	Franklin Quarry (7526 S. 51st Street)	0.035	108
6/08/2021	10:10 am	28		0.053	109

Date	Time	Shot #	Seismo Loc	PPV	AO
			Franklin Quarry (5800 ALLWOOD)		
6/08/2021	10:10 am	28	Franklin Quarry (SE of Quarry)	0.083	108
5/27/2021	10:30 am	27	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
5/27/2021	10:28 am	27	Franklin Quarry (SE of Quarry)	0.025	107
5/27/2021	10:28 am	27	Franklin Quarry (7526 S. 51st Street)	0.050	110
5/27/2021	10:28 am	27	Franklin Quarry (7301 S 51st Street)	0.088	107
5/24/2021	12:45 pm	26	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
5/24/2021	12:45 pm	26	Franklin Quarry (SE of Quarry)	N/T	N/T
5/24/2021	12:43 pm	26	Franklin Quarry (7526 S. 51st Street)	0.038	112
5/24/2021	12:43 pm	26	Franklin Quarry (7301 S 51st Street)	0.065	110
5/19/2021	11:00 am	25	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
5/19/2021	11:00 am	25	Franklin Quarry (SE of Quarry)	N/T	N/T
5/19/2021	11:01 am	25	Franklin Quarry (7526 S. 51st Street)	0.035	112
5/19/2021	11:01 am	25	Franklin Quarry (7301 S 51st Street)	0.075	112
5/12/2021	12:10 pm	24	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
5/12/2021	12:10 pm	24	Franklin Quarry (SE of Quarry)	N/T	N/T
5/12/2021	12:07 pm	24	Franklin Quarry (7526 S. 51st Street)	0.033	111
5/12/2021	12:07 pm	24	Franklin Quarry (7301 S 51st Street)	0.080	108
5/10/2021	11:15 am	23	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
5/10/2021	11:16 am	23	Franklin Quarry (7526 S. 51st Street)	0.073	107
5/10/2021	11:15 am	23	Franklin Quarry (SE of Quarry)	0.035	104
5/10/2021	11:15 am	23		0.095	106

Date	Time	Shot #	Seismo Loc	PPV	AO
			Franklin Quarry (7301 S 51st Street)		
5/05/2021	1:50 pm	22	Franklin Quarry (7301 S 51st Street)	N/T	N/T
5/05/2021	1:50 pm	22	Franklin Quarry (7526 S. 51st Street)	0.033	104
5/05/2021	1:50 pm	22	Franklin Quarry (5800 ALLWOOD)	0.035	113
5/05/2021	1:50 pm	22	Franklin Quarry (SE of Quarry)	0.083	109
5/05/2021	11:30 am	21	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
5/05/2021	11:29 am	21	Franklin Quarry (7526 S. 51st Street)	0.103	110
5/05/2021	11:29 am	21	Franklin Quarry (SE of Quarry)	0.038	106
5/05/2021	11:29 am	21	Franklin Quarry (7301 S 51st Street)	0.085	103
4/28/2021	12:10 pm	20	Franklin Quarry (7301 S 51st Street)	N/T	N/T
4/28/2021	12:07 pm	20	Franklin Quarry (7526 S. 51st Street)	0.028	104
4/28/2021	12:07 pm	20	Franklin Quarry (SE of Quarry)	0.048	101
4/28/2021	12:07 pm	20	Franklin Quarry (5800 ALLWOOD)	0.105	105
4/28/2021	9:02 am	19	Franklin Quarry (7301 S 51st Street)	N/T	N/T
4/28/2021	9:01 am	19	Franklin Quarry (7526 S. 51st Street)	0.048	105
4/28/2021	9:01 am	19	Franklin Quarry (5800 ALLWOOD)	0.033	111
4/28/2021	9:01 am	19	Franklin Quarry (SE of Quarry)	0.103	107
4/21/2021	11:00 am	18	Franklin Quarry (7301 S 51st Street)	N/T	N/T
4/21/2021	10:55 am	18	Franklin Quarry (7526 S. 51st Street)	0.093	101
4/21/2021	10:55 am	18	Franklin Quarry (5800 ALLWOOD)	0.025	109
4/21/2021	10:55 am	18	Franklin Quarry (SE of Quarry)	0.143	99
4/20/2021	10:00 am	17		N/T	N/T

Date	Time	Shot #	Seismo Loc	PPV	AO
			Franklin Quarry (7301 S 51st Street)		
4/20/2021	9:59 am	17	Franklin Quarry (5800 ALLWOOD)	0.043	110
4/20/2021	9:59 am	17	Franklin Quarry (SE of Quarry)	0.160	106
4/20/2021	9:59 am	17	Franklin Quarry (7526 S. 51st Street)	0.045	106
4/16/2021	9:40 am	16	Franklin Quarry (7301 S 51st Street)	N/T	N/T
4/16/2021	9:42 am	16	Franklin Quarry (7526 S. 51st Street)	0.088	110
4/16/2021	9:42 am	16	Franklin Quarry (5800 ALLWOOD)	0.023	114
4/16/2021	9:42 am	16	Franklin Quarry (SE of Quarry)	0.143	109
4/14/2021	12:45 pm	15	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
4/14/2021	12:45 pm	15	Franklin Quarry (SE of Quarry)	N/T	N/T
4/14/2021	12:43 pm	15	Franklin Quarry (7526 S. 51st Street)	0.025	118
4/14/2021	12:43 pm	15	Franklin Quarry (7301 S 51st Street)	0.035	116
4/14/2021	11:15 am	14	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
4/14/2021	11:12 am	14	Franklin Quarry (SE of Quarry)	0.035	111
4/14/2021	11:12 am	14	Franklin Quarry (7526 S. 51st Street)	0.078	118
4/14/2021	11:12 am	14	Franklin Quarry (7301 S 51st Street)	0.190	107
4/12/2021	11:00 am	13	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
4/12/2021	11:00 am	13	Franklin Quarry (SE of Quarry)	N/T	N/T
4/12/2021	10:58 am	13	Franklin Quarry (7526 S. 51st Street)	0.043	116
4/12/2021	10:58 am	13	Franklin Quarry (7301 S 51st Street)	0.088	109
4/07/2021	10:15 am	12	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
4/07/2021	10:13 am	12		0.038	110

Date	Time	Shot #	Seismo Loc	PPV	AO
			Franklin Quarry (7526 S. 51st Street)		
4/07/2021	10:13 am	12	Franklin Quarry (SE of Quarry)	0.023	107
4/07/2021	10:13 am	12	Franklin Quarry (7301 S 51st Street)	0.063	107
4/05/2021	10:00 am	11	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
4/05/2021	10:00 am	11	Franklin Quarry (SE of Quarry)	N/T	N/T
4/05/2021	9:53 am	11	Franklin Quarry (7526 S. 51st Street)	0.048	111
4/05/2021	9:53 am	11	Franklin Quarry (7301 S 51st Street)	0.075	106
4/01/2021	9:40 am	10	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
4/01/2021	9:40 am	10	Franklin Quarry (SE of Quarry)	N/T	N/T
4/01/2021	9:40 am	10	Franklin Quarry (7526 S. 51st Street)	N/T	N/T
4/01/2021	9:40 am	10	Franklin Quarry (7301 S 51st Street)	0.028	91
3/31/2021	9:45 am	8	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
3/31/2021	9:45 am	8	Franklin Quarry (SE of Quarry)	N/T	N/T
3/31/2021	9:42 am	8	Franklin Quarry (7526 S. 51st Street)	0.055	114
3/31/2021	9:42 am	8	Franklin Quarry (7301 S 51st Street)	0.070	107
3/31/2021	12:00 pm	9	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
3/31/2021	12:00 pm	9	Franklin Quarry (SE of Quarry)	N/T	N/T
3/31/2021	12:00 pm	9	Franklin Quarry (7526 S. 51st Street)	0.040	116
3/31/2021	12:00 pm	9	Franklin Quarry (7301 S 51st Street)	0.063	108
3/26/2021	10:05 am	6	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
3/26/2021	10:05 am	6	Franklin Quarry (SE of Quarry)	N/T	N/T
3/26/2021	10:06 am	6		0.055	114

ATTACHMENT A - QUARRY MONITORING SERVICES

SCOPE OF WORK AND ASSOCIATED COST

The following scope of work items, each with their own associated professional fee, is offered to the City by Stantec for calendar year 2021.

DESCRIPTION	EVENT PERIOD	COST PER EVENT	# OF EVENTS	SUBTOTAL	NOTES REGARDING SCOPE OF SERVICES
Operations Monitoring	daily	\$700	9	\$6,300	Visual assessments around quarry perimeter, concentrating on Rawson Avenue adjacent to the quarry entrances. Will include weather data as part of observation summary, along with photos and short duration videos during periods of high winds. A percentage of the visits will also include on-site observations and records review.
Blast Monitoring	monthly	\$1,775	12	\$21,300	Stantec will provide remote vibration monitoring by using Nomis Seismographs. We plan to subcontract Sauls Seismic to assist with this scope of work. Two separate seismographs will be installed, each co-located with two existing Payne & Dolan (Vibra-Tech) monitors located at: 7301 S. 51 st Street and 5800 W. Allwood Drive. Each monitor will be provided with an enclosure and will either be pole mounted or located in a short-stack weatherproof enclosure. Power will be provided via an internal battery and an external battery connected to a solar panel. All maintenance/repair and annual calibration of seismographs are included. This type of configuration will provide continuous (24/7) remote monitoring, allowing Stantec to have access to data anytime via the Internet. No written reports or summaries will be provided monthly.
Exceptional Blast Complaint Evaluation	Per City request	\$1,000	3	\$3,000	For unusual blast events (e.g., those resulting in multiple complaints), at the City's request, Stantec will prepare a brief summary report describing: <ul style="list-style-type: none"> • seismic data from both Stantec and Payne & Dolan placed monitors • weather conditions (wind direction and speed) the day of the complaint • a figure showing locations of blast along with location of complaints
Quarterly Reports and Presentation	Quarterly (May, August, November 2020, and February 2021)	\$3,600	4	\$14,400	Stantec will prepare a quarterly report (to be distributed/presented as part of the regularly scheduled Quarry Monitoring Committee meetings) describing: <ul style="list-style-type: none"> • Operations monitoring completed in prior quarter • Blast monitoring completed in prior quarter (summary of blasting data, comparing the Payne & Dolan unit recordings, to the Stantec unit recordings) • Citizen complaints received by the City of Franklin in prior quarter <ul style="list-style-type: none"> ○ For off-site dust complaints <ul style="list-style-type: none"> ▪ weather conditions (wind direction and speed) the day of the complaint ○ For off-site seismic complaints <ul style="list-style-type: none"> ▪ seismic data from both Stantec and Payne & Dolan placed monitors ▪ weather conditions (wind direction and speed; temp.; humidity; precipitation) the day of the complaint ▪ a figure showing locations of blasts along with location of complaints <p>The February 2022 quarterly report and presentation will also summarize the operations and blast monitoring, along with complaint evaluations, completed during calendar year 2021. This annual report is not meant to repeat what has already been provided in the prior quarterly reports; rather, it is intended to be a brief summary.</p>
\$45,000 TOTAL (compared to budget: \$45,000)					

Note: The number of Exceptional Blast Complaint Evaluations is estimated, since the exact number cannot be determined at this time. In addition, based on prior years Stantec is estimating approximately 25 different blasts will result in complaints needing to be evaluated as part of the quarterly reports and presentations. Stantec agrees to be flexible with the City regarding this scope of work as the year progresses as the actual number of events are determined, and agrees not to exceed the approved budget without prior approval.