#### CITY OF FRANKLIN QUARRY MONITORING COMMITTEE\* MEETING AGENDA

Franklin City Hall, **Council Chambers** 9229 West Loomis Road, Franklin, Wisconsin 53132 Tuesday, July 26, 2022, <u>6:00 p.m.</u>

- I. Call to Order, Roll Call and Pledge of Allegiance
- II. Approval of Minutes
  - a. Regular meeting of May 24, 2022.
- 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 2022 (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. 2020-2021 Biannual Report by Payne & Dolan.
  - d. Discussion regarding quarry tour.
  - e. Informational session about Planned Development Districts #23 and #24 and other quarry policies.
- VI. Meeting scheduling discussion
- VII. Adjournment

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.

<sup>\*</sup> 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.

# City of Franklin Quarry Monitoring Committee Meeting Council Chambers, Franklin City Hall 6:00 PM May 24, 2022 Minutes

#### I. CALL TO ORDER

The May 24, 2022, Quarry Monitoring Committee meeting was called to order by Alderwoman Kristen Wilhelm at 6:00 p.m. in the Council Chambers at City Hall.

Alderwoman Kristen Wilhelm, members Jon TenHaken, Bryan Maersch and Edward Pings and Dina Swanson (non-voting) were present. Alderman Barber joined the meeting at 6:25 p.m.. Also present were Principal Planner Régulo Martínez-Montilva, Kristen Gunderson-Inden of Stantec Consulting Services and Bryanna Bucholtz of Payne & Dolan.

#### II. APPROVAL OF THE MINUTES

a. Regular meeting of March 29, 2022.

Member TenHaken moved and member Pings 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 6:01 p.m. and closed at 6:03 p.m. Comments from Bryanna Bucholtz of Payne & Dolan.

#### IV. HEARINGS

None.

#### V. BUSINESS

Moment of silence for former member Fred Knueppel.

a. Welcome new members Bryan Maersch and Edward Pings.

Member Maersch introduced himself followed by member Pings.

b. Quarterly presentation by Stantec Consulting Services, Inc., 1st quarter of calendar year 2022 (January, February and March).

Kristen Gunderson-Inden of Stantec Consulting Services presented the quarterly report.

c. 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 2 complaints were received on April 19, and other 2 complaints on May 5, with recorded ground vibration and air over-pressure levels being in compliance with the PDD.

d. Selection of Chair and Vice-Chair.

Member Maersch nominated Alderman Barber for Chair. On voice vote, all present voted 'aye'; the vote was 5-0-0, the Committee selected Alderman Barber as Chair for a 1-year term.

Alderwoman Wilhelm nominated member Swanson for Vice-Chair. On voice vote, all present voted 'aye'; the vote was 5-0-0, the Committee selected member Swanson as Vice-Chair for a 1-year term.

#### VI. SCHEDULE NEXT MEETING

Next meeting scheduled for July 26, 2022, based on quorum.

#### VII. ADJOURNMENT

Member TenHaken moved and member Pings seconded to adjourn the May 24, 2022, Quarry Monitoring Committee meeting at 6:38 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

July 12, 2022

Regulo Martínez-Montilva
Principal 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 2022 Stantec Project: 193707487

Dear Mr. Martínez-Montilva:

The enclosed information summarizes monitoring activities completed during the first quarter of 2022 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 Teams 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; three were unannounced inspections (April 19, May 19, and June 20) and were limited to the perimeter of the quarry. One was an announced inspection that included observations inside the quarry (June 29). During all four visits, a small amount of dust was observed on Rawson Avenue from trucks that were departing the site. Significant amounts of dirt or stone was not observed in Rawson Avenue. The street sweeper was observed operating on Rawson Avenue on all 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 quarter, and are presented in Attachment C. Figure 1 illustrates the locations of the blasts in the quarter.

Highlights of the seismic data include the following:

- Between April 1 and June 30, 2022, a total of 18 blasting events occurred. 17 of 18 (94%) 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



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Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2Q2022

to report any ground vibration levels to the Wisconsin Department of Natural Resources 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; thus 100% of the quarry's blasts 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; thus 100% of the quarry's blasts this quarter were below this level. This is in conformance with the PDD.
  - There have been 39 blasts through the second quarter of 2022. One blast in first quarter had an AO over 123dB. For 2022 year to date, 97% of the blasts have been under 123dB, which 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. The Sauls Seismic monitors were recalibrated on October 21, 2021; 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 April 1 through June 30, 2022, is provided as Attachment C. Although not applicable for this quarter, 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

- 5 complaints (formally submitted) total
- 1 complaint (informally submitted, e.g., phone call)
- 0 complaints regarding noise
- 0 complaints regarding dust
- 0 complaints miscellaneous
- 6 complaints regarding vibration

#### Complaints - Blast Related

- 6 complaints corresponding to actual blast events
- 0 complaints not corresponding to actual blast events
- 5 complaints complainant location identified
  - 1 household that complained once



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Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2Q2022

- o 2 households that complained two times each
- o 1 complaint no name and address provided (requested confidentiality)

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

- 1 complaint east of 51<sup>st</sup> Street
- 4 complaints south of Drexel Avenue
- 0 complaints west of Root River

#### **Blast Events**

- 18 blast events during monitoring period 2Q2022 (shot numbers 22 through 39)
- 4 blast events corresponding to complaints
  - o 0 weather: rain
  - o 4 weather: haze, partly to mostly cloudy, or cloudy
  - o 0 weather: clear, fair, or scattered clouds
  - o 3 time: prior to 12:00 pm (noon)
  - o 1 time: after 12:00 pm
- 2 blast events with one complaint
- 2 blast events with two complaints

#### Quarry Blast Locations Producing Complaints

- 1 southern area of quarry
- 1 central area of quarry
- 2 northeastern 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.
- Most of the complaints (80%) in this guarter originate from residences south of Drexel Avenue.
- One blast in the northern area and one in the central area of the quarry resulted in complaints from 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 number of employees now working from home, residents may have been at home more during the day than in years prior to 2020. However, this is essentially the "new normal".



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Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2Q2022

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

Respectfully,

STANTEC CONSULTING SERVICES INC.

Kristen Gunderson-Inden Senior Environmental Scientist

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 2022

Figure 1 - Seismic Monitoring, Blasting, and Complaint Locations, 2nd Quarter 2022



# **ATTACHMENT A**

FRANKLIN QUARRY SEISMIC MONITORING DESCRIPTION OF SERVICES



#### **DESCRIPTION OF SERVICES**

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

During 2022, Stantec will conduct a total of nine (9) 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:
  - o 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 polemounted 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:
  - o seismic data from both Stantec and Payne & Dolan placed monitors
  - o weather conditions (wind direction and speed) the day of the complaint
  - o 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 polemounted 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 2022, 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. There is a chance one of these monitors may be moved to an alternate location during 2022. The monitor 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 calendar year 2022.

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 2022

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)	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)
4/4/2022	0.5404467	22		5000 ALLWOOD	2.705	NI/D	N/D	NI/D	NI/D			NI -										
	0.5104167	22	north	5800 ALLWOOD	3,795	N/D	N/D	N/D	N/D			No										
	0.5097222	22	north	7301 S 51st Street	977	0.110	107	0.105	106	0.005	1											
	0.5097222	22	north	7526 S. 51st Street	1,457	0.130	114															
	0.5097222	22	north	SE of Quarry	2,344	0.033	111	NI/D	NI/D			NI -										
	0.5763889	23	north	5800 ALLWOOD	3,672	N/D	N/D	N/D	N/D			No										
	0.5743056	23	north	7301 S 51st Street	934	0.183	106	0.195	105	-0.012	1											
	0.5743056	23	north	7526 S. 51st Street	1,219	0.195	112															
	0.5743056	23	north	SE of Quarry	2,119	0.088	99	NI/D	NI/D			N/										
	0.5277778	24		5800 ALLWOOD	3,773	N/D	N/D	N/D	N/D			No										
	0.5222222	24		7301 S 51st Street	1,019	0.155	109	0.168	107	-0.013	2											
	0.5222222	24	north	7526 S. 51st Street	1,481	0.110	114															
	0.5222222	24	north	SE of Quarry	2,351	0.035	111	11/5	A1 /D													
	0.5208333	25	north	5800 ALLWOOD	3,657	N/D	N/D	N/D	N/D			No										
	0.5208333	25	north	7301 S 51st Street	876	0.120	108	0.115	104	0.005	4											
	0.5208333	25	north	7526 S. 51st Street	1,067	0.163	112															
	0.5208333	25	north	SE of Quarry	2,007	0.050	99	11/5	A1 /D													
4/12/2022	0.4513889	26	north	5800 ALLWOOD	3,843	N/D	N/D	N/D	N/D			No										
4/12/2022	0.45	26	north	7301 S 51st Street	959	0.168	101	0.190	101	-0.022	0											
4/12/2022	0.45	26	north	7526 S. 51st Street	1,491	0.095	107															
4/12/2022	0.45	26	north	SE of Quarry	2,391	0.030	98	/ -	/-													
4/18/2022		27	west	5800 ALLWOOD	2,939	N/D	N/D	N/D	N/D			No										
4/18/2022		27	west	7301 S 51st Street	2,279	N/D	N/D	N/D	N/D													
4/18/2022		27	west	7526 S. 51st Street	2,208	N/D	N/D															
	0.4166667	27	west	SE of Quarry	2,478	N/D	N/D							1	I	I _	ı	T				
	0.5069444	28	north	5800 ALLWOOD	3,690	N/D	N/D	N/D	N/D			Yes	2 *	east	WNW	8		29.43	51	mostly	none	42
	0.5090278	28	north	7301 S 51st Street	867	0.175	106	0.173	105	0.003	1									cloudy	1	
	0.5090278	28	north	7526 S. 51st Street	1,129	0.183	117															
	0.5090278	28		SE of Quarry	2,067	0.060	109	h: /=	r: /=				<u> </u>					<u> </u>	<u> </u>			L
	0.4736111	29	north	5800 ALLWOOD	3,546	N/D	N/D	N/D	N/D			No										
	0.4729167	29	north	7301 S 51st Street	974	0.083	96	0.075	102	0.008	-6											
	0.4729167	29	north	7526 S. 51st Street	1,012	0.115	110															
	0.4729167	29	north	SE of Quarry	1,908	0.023	96	1.15	1.15													
	0.5416667	30	central	5800 ALLWOOD	3,210	N/D	N/D	N/D	N/D			No										
	0.5423611	30	central	7301 S 51st Street	1,284	0.170	98	0.160	98	0.010	1											
	0.5423611	30	central	7526 S. 51st Street	896	0.113	106															
	0.5423611	30	central	SE of Quarry	1,604	0.030	93				-		1			I -	ı	1				
	0.4923611	31	south	5800 ALLWOOD	1,625	0.068	114	0.070	105	-0.002	9	Yes	2	south	NNE	6		29.21	66	cloudy	none	47
	0.4895833	31	south	7301 S 51st Street	2,868	N/D	N/D	N/D	N/D													
	0.4923611	31	south	7526 S. 51st Street	1,939	0.125	112															
	0.4923611	31	south	SE of Quarry	1,359	0.145	114															<u> </u>
5/10/2022		32	central	5800 ALLWOOD	3,037	N/D	N/D	N/D	N/D			No										
5/10/2022		32	central	7301 S 51st Street	1,450	0.068	106	0.053	102	0.016	4											
	0.4423611	32	central	7526 S. 51st Street	834	0.158	108															
5/10/2022	0.4423611	32	central	SE of Quarry	1,411	0.035	95															

5/13/2022	0.4694444	33	central	5800 ALLWOOD	3,085	N/D	N/D	N/D	N/D			No										
5/13/2022		33	central	7301 S 51st Street	1,403	0.105	106	0.095	101	0.010	5	1										
5/13/2022		33	central	7526 S. 51st Street	770	0.190	103			0.000	-	i										
5/13/2022		33	central	SE of Quarry	1,402	0.035	111					1										
	0.5611111	34	central	5800 ALLWOOD	2,943	0.053	111	0.050	99	0.003	12	No										
5/23/2022	0.5611111	34	central	7301 S 51st Street	1,702	0.078	119	0.085	116	-0.007	3	1										
5/23/2022	0.5611111	34	central	7526 S. 51st Street	1,423	0.143	122															
5/23/2022	0.5611111	34	central	SE of Quarry	1,836	0.078	113															
5/24/2022	0.4513889	35	central	5800 ALLWOOD	3,975	N/D	N/D	N/D	N/D			Yes	1	south	E	8		29.53	64	mostly	none	57
5/24/2022	0.4479167	35	central	7301 S 51st Street	968	0.130	111	0.113	108	0.018	3									cloudy		1
5/24/2022	0.4479167	35	central	7526 S. 51st Street	1,636	0.040	119															1
5/24/2022	0.4513889	35	central	SE of Quarry	2,552	N/D	N/D															<u> </u>
6/7/2022	0.4986111	36	central	5800 ALLWOOD	3,157	0.038	108	0.038	98			No										
6/7/2022	0.4986111	36	central	7301 S 51st Street	1,562	0.068	118	0.053	116	0.016	2											
	0.4986111	36	central	7526 S. 51st Street	1,477	0.103	122															
	0.4986111	36	central	SE of Quarry	2,014	0.058	112															
	0.4256944	37	central	5800 ALLWOOD	2,965	0.065	106	0.068	99	-0.003	7	No										
6/17/2022		37	central	7301 S 51st Street	1,703	0.090	119	0.080	117	0.010	2	]										
	0.4256944	37	central	7526 S. 51st Street	1,456	0.215	119															
	0.4256944	37	central	SE of Quarry	1,878	0.080	111															
6/23/2022	0.475	38	central	5800 ALLWOOD	3,122	0.028	104	N/D	N/D			No										
6/23/2022	0.475	38	central	7301 S 51st Street	1,599	0.053	117	0.053	112	0.001	5	]										
	0.4743056	38	central	7526 S. 51st Street	1,490	0.133	119															
6/23/2022		38	central	SE of Quarry	2,003	0.048	108						•									
6/28/2022		39	central	5800 ALLWOOD	7,493	0.030	102	0.035	94	-0.005	8	Yes	1	south	WSW	14	22	29.40	31	partly	none	85
6/28/2022		39	central	7301 S 51st Street	11180	0.065	116	0.078	114	-0.013	2	]								cloudy		1
	0.4972222	39	central	7526 S. 51st Street	11,184	0.110	118															1
6/28/2022	0.4972222	39	central	SE of Quarry	10,938	0.075	113															<u> </u>
Totals		18	blast events									4	4	events with complaints / total complaints								

**Notes:** Shaded cells do not have a meter in that location

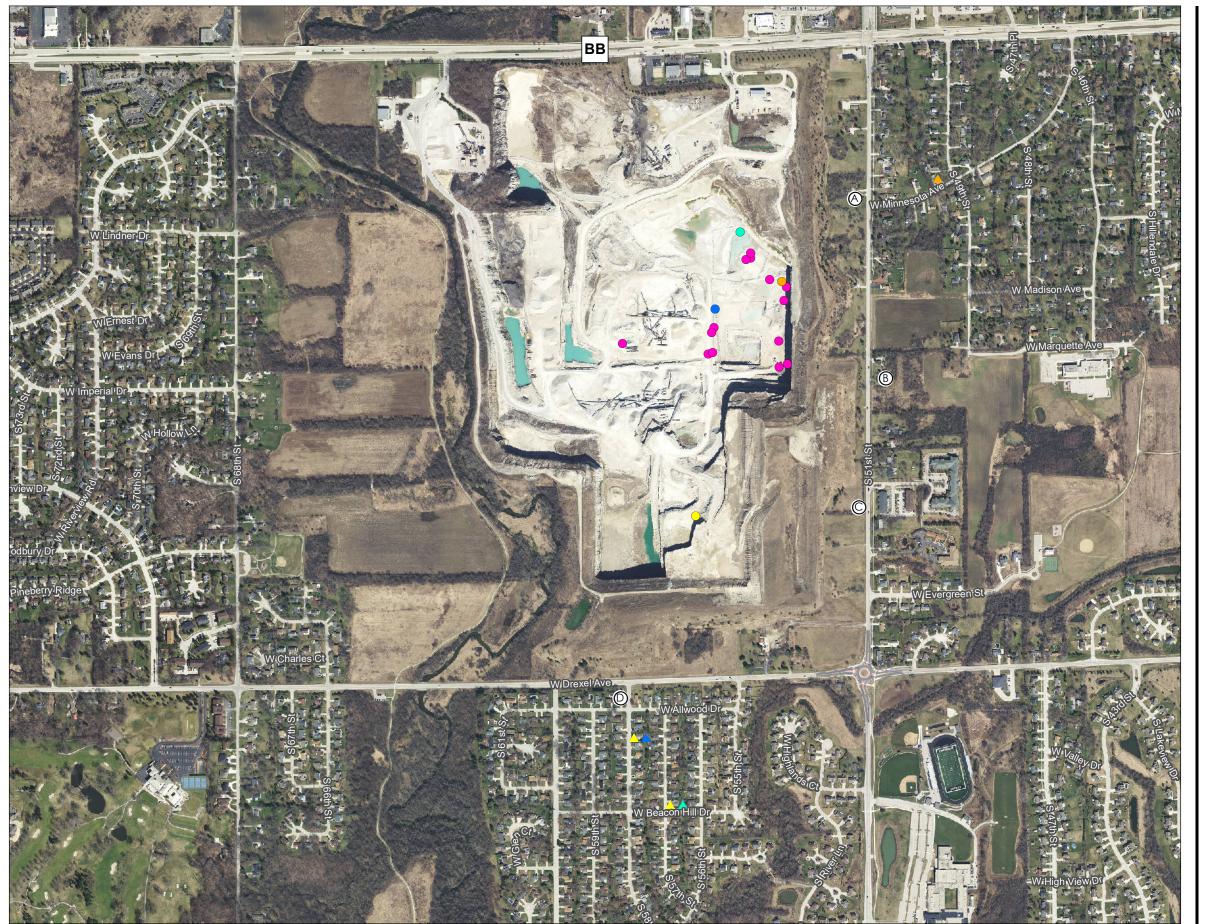
N/D = not detected, meter did not detect blast

<sup>\*</sup> One of these complaints was an informal complaint and one was a confidential complaint



# FIGURE 1

SEISMIC MONITORING, BLASTING, AND COMPLAINT LOCATIONS, 2nd QUARTER 2022



Seismic Monitoring, Blasting, and Complaint Locations - 2nd Quarter 2022

Client/Project
City of Franklin

Vicinity of Payne and Dolan Quarry

Project Location
C. of Franklin, Milwaukee Co., WI

Prepared by AJS on 2022-07-07 TR by ML on 2022-07-07 IR by KGI on 2022-07-07

Blast Complaint ▲ Blast #28

Blast #31

▲ Blast #35

▲ Blast #39



(At original document size of 11x17) 1:9,600

Seismic Monitoring Location

Vibra-Tech(VT1) and Stantec(S1)

B Vibra-Tech(VT2)

Vibra-Tech(VT3)

Vibra-Tech(VT4) and Stantec(S2)

#### Blast Location

Non-complaint Blast Location

Blast #28\*

Blast #31

Blast #35 Blast #39

#### \*One Confidential complaint (No address location)



Notes
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet 2. Data Sources: Stantec, SCO, WDNR, WisDOT 3. Orthophotography: 2020 Milwaukee Co. WROC



Page 1 of 1

Franklin Aggregates
Recorded Ground Vibration and Airblast Levels for PDDs #23 & 24
April 2022

Time	Activity	Location	Distance	PPV	Freq	AO
4/28/2022 13:01	30	5800 ALLWOOD	3,210	N/T	N/T	N/A
4/28/2022 13:01	30	7526 S. 51st Street	896	0.113	33.3	106
4/28/2022 13:01	30	SE of Quarry	1,604	0.03	33.3	93
4/28/2022 13:01	30	7301 S 51st Street	1,284	0.17	38.5	98
4/21/2022 11:21	29	5800 ALLWOOD	3,546	N/T	N/T	N/A
4/21/2022 11:21	29	7526 S. 51st Street	1,012	0.115	41.7	110
4/21/2022 11:21	29	SE of Quarry	1,908	0.023	20	96
4/21/2022 11:21	29	7301 S 51st Street	974	0.083	41.7	96
4/19/2022 12:13	28	5800 ALLWOOD	3,690	N/T	N/T	N/A
4/19/2022 12:13	28	7526 S. 51st Street	1,129	0.183	21.7	117
4/19/2022 12:13	28	SE of Quarry	2,067	0.06	16.1	109
4/19/2022 12:13	28	7301 S 51st Street	867	0.175	45.5	106
4/18/2022 10:00	27	5800 ALLWOOD	2,939	N/T	N/T	N/A
4/18/2022 10:00	27	7526 S. 51st Street	2,208	N/T	N/T	N/A
4/18/2022 10:00	27	SE of Quarry	2,478	N/T	N/T	N/A
4/18/2022 10:00	27	7301 S 51st Street	2,279	N/T	N/T	N/A
4/12/2022 10:48	26	5800 ALLWOOD	3,843	N/T	N/T	N/A
4/12/2022 10:48	26	7526 S. 51st Street	1,491	0.095	29.4	107
4/12/2022 10:48	26	SE of Quarry	2,391	0.03	18.5	98
4/12/2022 10:48	26	7301 S 51st Street	959	0.168	35.7	101
4/11/2022 12:30	25	5800 ALLWOOD	3,657	N/T	N/T	N/A
4/11/2022 12:30	25	7526 S. 51st Street	1,067	0.163	21.7	112
4/11/2022 12:30	25	SE of Quarry	2,007	0.05	20.8	99
4/11/2022 12:30	25	7301 S 51st Street	876	0.12	55.6	108
4/7/2022 12:32	24	5800 ALLWOOD	3,773	N/T	N/T	N/A
4/7/2022 12:32	24	7526 S. 51st Street	1,481	0.11	27.8	114
4/7/2022 12:32	24	SE of Quarry	2,351	0.035	25	111
4/7/2022 12:32	24	7301 S 51st Street	1,019	0.155	33.3	109
4/4/2022 13:47	23	5800 ALLWOOD	3,672	N/T	N/T	N/A
4/4/2022 13:47	23	7526 S. 51st Street	1,219	0.195	25	112
4/4/2022 13:47	23	SE of Quarry	2,119	0.088	25	99
4/4/2022 13:47	23	7301 S 51st Street	934	0.183	38.5	106
4/1/2022 12:14	22	5800 ALLWOOD	3,795	N/T	N/T	N/A
4/1/2022 12:14	22	7526 S. 51st Street	1,457	0.13	29.4	114
4/1/2022 12:14	22	SE of Quarry	2,344	0.033	20.8	111
4/1/2022 12:14	22	7301 S 51st Street	977	0.11	23.8	107

PDD Vibration Limit - Per the PDD #23 and #24 Ordinances, ground vibration resulting from P&D blasting shall not exceed 0.30 inches per second on at least 85% of its blasts within any single calendar year. The Operator shall not exceed the ground vibration limitation imposed by the Wisconsin Department of Industry, Labor and Human Relations in Figure 7.64 of ch. ILHR 7, Wis. Adm. Code (new reference now Wis. Adm. Code, Safety and Professional Services Chapter 307), or 0.65 inches per second, whichever is more restrictive, on any blast.

PDD Airblast Limit - 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. The Operator shall not exceed the airblast limitation imposed by the 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).

Franklin Aggregates
Recorded Ground Vibration and Airblast Levels for PDDs #23 & 24
May 2022

Time	Activity	Location	Distance	PPV	Freq	AO
5/24/2022 10:45	35	5800 ALLWOOD	3,975	N/T	N/T	N/A
5/24/2022 10:45	35	7526 S. 51st Street	1,636	0.04	27.8	119
5/24/2022 10:45	35	SE of Quarry	2,552	N/T	N/T	N/A
5/24/2022 10:45	35	7301 S 51st Street	968	0.13	71.4	111
5/23/2022 13:28	34	5800 ALLWOOD	2,943	0.053	7.6	111
5/23/2022 13:28	34	7526 S. 51st Street	1,423	0.143	23.8	122
5/23/2022 13:28	34	SE of Quarry	1,836	0.078	13.5	113
5/23/2022 13:28	34	7301 S 51st Street	1,702	0.078	8.5	119
5/13/2022 11:16	33	5800 ALLWOOD	3,085	N/T	N/T	N/A
5/13/2022 11:16	33	7526 S. 51st Street	770	0.19	33.3	103
5/13/2022 11:16	33	SE of Quarry	1,402	0.035	31.3	111
5/13/2022 11:16	33	7301 S 51st Street	1,403	0.105	38.5	106
5/10/2022 10:37	32	5800 ALLWOOD	3,037	N/T	N/T	N/A
5/10/2022 10:37	32	7526 S. 51st Street	834	0.158	38.5	108
5/10/2022 10:37	32	SE of Quarry	1,411	0.035	33.3	95
5/10/2022 10:37	32	7301 S 51st Street	1,450	0.068	38.5	106
5/5/2022 11:49	31	5800 ALLWOOD	1,625	0.068	13.5	114
5/5/2022 11:49	31	7526 S. 51st Street	1,939	0.125	16.7	112
5/5/2022 11:49	31	SE of Quarry	1,359	0.145	22.7	114
5/5/2022 11:49	31	7301 S 51st Street	2,868	N/T	N/T	N/A

PDD Vibration Limit - Per the PDD #23 and #24 Ordinances, ground vibration resulting from P&D blasting shall not exceed 0.30 inches per second on at least 85% of its blasts within any single calendar year. The Operator shall not exceed the ground vibration limitation imposed by the Wisconsin Department of Industry, Labor and Human Relations in Figure 7.64 of ch. ILHR 7, Wis. Adm. Code (new reference now Wis. Adm. Code, Safety and Professional Services Chapter 307), or 0.65 inches per second, whichever is more restrictive, on any blast.

PDD Airblast Limit - 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. The Operator shall not exceed the airblast limitation imposed by the 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).

# Franklin Aggregates Recorded Ground Vibration and Airblast Levels for PDDs #23 & 24 June 2022

Time	Activity	Location	Distance	PPV	Freq	AO
6/23/2022 11:23	38	5800 ALLWOOD	3,122	0.028	21.7	104
6/23/2022 11:23	38	7526 S. 51st Street	1,490	0.133	21.7	119
6/23/2022 11:23	38	SE of Quarry	2,003	0.048	29.4	108
6/23/2022 11:23	38	7301 S 51st Street	1,599	0.053	11.4	117
6/17/2022 10:13	37	5800 ALLWOOD	2,965	0.065	22.7	106
6/17/2022 10:13	37	7526 S. 51st Street	1,456	0.215	21.7	119
6/17/2022 10:13	37	SE of Quarry	1,878	0.08	25	111
6/17/2022 10:13	37	7301 S 51st Street	1,703	0.09	14.3	119
6/7/2022 11:58	36	5800 ALLWOOD	3,157	0.038	11.4	108
6/7/2022 11:58	36	7526 S. 51st Street	1,477	0.103	27.8	122
6/7/2022 11:58	36	SE of Quarry	2,014	0.058	20.8	112
6/7/2022 11:58	36	7301 S 51st Street	1,562	0.068	18.5	118

PDD Vibration Limit - Per the PDD #23 and #24 Ordinances, ground vibration resulting from P&D blasting shall not exceed 0.30 inches per second on at least 85% of its blasts within any single calendar year. The Operator shall not exceed the ground vibration limitation imposed by the Wisconsin Department of Industry, Labor and Human Relations in Figure 7.64 of ch. ILHR 7, Wis. Adm. Code (new reference now Wis. Adm. Code, Safety and Professional Services Chapter 307), or 0.65 inches per second, whichever is more restrictive, on any blast.

PDD Airblast Limit - 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. The Operator shall not exceed the airblast limitation imposed by the 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).



# Welcome City of Franklin Logout

#### • Home/View

Show 20 v entries
Search:

Date	Time	Shot #	Seismo Loc	PPV	AO
7/18/2022	1:23 pm	43	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/18/2022	1:23 pm	43	Franklin Quarry (SE of Quarry)	0.023	110
7/18/2022	1:23 pm	43	Franklin Quarry (7301 S 51st Street)	0.050	116
7/18/2022	1:23 pm	43	Franklin Quarry (7526 S. 51st Street)	0.035	117
7/14/2022	12:00 pm	42	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/14/2022	12:02 pm	42	Franklin Quarry (SE of Quarry)	0.025	107
7/14/2022	12:02 pm	42	Franklin Quarry (7301 S 51st Street)	0.040	110
7/14/2022	12:02 pm	42	Franklin Quarry (7526 S. 51st Street)	0.040	112
7/12/2022	10:30 am	41	Franklin Quarry (7301 S 51st Street)	0.103	110
7/12/2022	10:30 am	41	Franklin Quarry (SE of Quarry)	0.028	115
7/12/2022	10:30 am	41	Franklin Quarry (7526 S. 51st Street)	0.070	116
7/12/2022	10:30 am	41	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/07/2022	11:45 am	40	Franklin Quarry (5800 ALLWOOD)	N/T	N/T
7/07/2022	11:43 am	40	Franklin Quarry (7301 S 51st Street)	0.058	117
7/07/2022	11:43 am	40	Franklin Quarry (SE of Quarry)	0.033	108
7/07/2022	11:43 am	40	Franklin Quarry (7526 S. 51st Street)	0.083	118
6/28/2022	11:56 am	39	Franklin Quarry (5800 ALLWOOD)	0.030	102
6/28/2022	11:56 am	39	Franklin Quarry (7301 S 51st Street)	0.065	116
6/28/2022	11:56 am	39	Franklin Quarry (SE of Quarry)	0.075	113
6/28/2022	11:56 am	39	Franklin Quarry (7526 S. 51st Street)	0.110	118
01 1 1 00 0040					

Showing 1 to 20 of 340 entries FirstPrevious12345...17NextLast Franklin Quarry

 $<sup>\ {\</sup>mathbb C}$  2006-2022 Geosonics/Vibra-Tech Engineers Inc v20120709



An Equal Opportunity Employer

N3 W23650 Badinger Road | Waukesha, WI 53188 262.524.1700 | walbecgroup.com

May 12<sup>th</sup>, 2022

Mr. Regulo Martinez-Montilva Department of City Development 9229 W. Loomis Road Franklin, WI 53132

Subject:

**Biannual Report** 

Dear Mr. Martinez-Montilva:

As required by PDD #97-1456 & PDD #97-1457 (or PDD #23 and PDD #24), I have enclosed the Biannual Report to the Plan Commission for the Franklin Aggregates quarry located on Rawson Avenue.

Please do not hesitate to contact me in the office at (262) 524-1258, if you have any additional questions and/or would like some additional information.

Sincerely,

Payne & Dolan, Inc.

Franklin

MAY 17 2022

City Development

Clint Weninger, P.G. Land Resources Manager

#### I. Site History

- Franklin Aggregate has been in operation since the mid 1940's.
- Payne & Dolan has owned and operated the Franklin Aggregate location since 1983.
- The quarry was operated by Payne & Dolan and Vulcan Materials until June of 2013, when the Vulcan Franklin quarry was purchased by Payne & Dolan. Payne & Dolan is now the sole operator.
- Payne & Dolan operates the quarry in accordance with two (2) Planned Development Districts (PDD), PDD #23 (#97-1456) and PDD #24 (#97-1457), approved by the City Common Council in 1997.

#### II. Quarry Operations

- Quarry operations include stripping, blasting, crushing, washing and load out of material.
- Limestone was extracted in two areas of the quarry as shown in Figure 3 below.
- Crushing continues to utilize both the crushing plants and typically occurs from approx. early March to mid-December. However, due to the high demand in the local area, one of the crushing plants did not shut down for the winters of 2019 – 2020 and 2020 – 2021 and continued thru the end of the year.
- Quarry operations may be conducted from 6:30 AM 7:00 PM Monday thru Friday, 7:00 AM 4:00 PM on Saturdays and no operations on Sundays or various holidays as specified in the PDDs. Hours of operation for blasting and the asphalt plants are different and listed later in other sections.
- Majority of the load out of materials utilized the west entrance along Rawson Avenue, with limited use of the east entrance. Load out occurs throughout the year with reduced hours in the construction off-season.
- Quarry operations will continue to utilize both crushing plants and most of the load out will be through the west entrance.

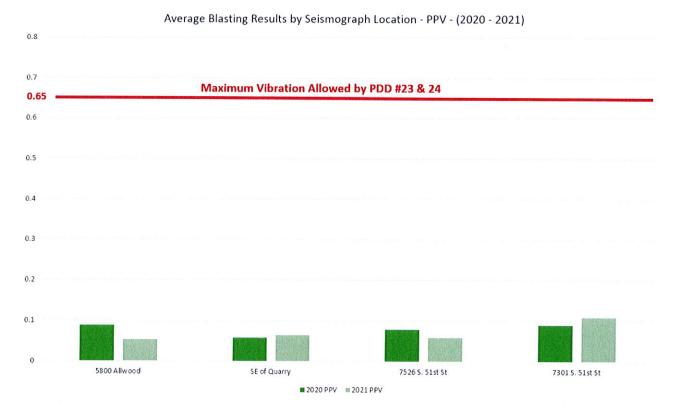
#### III. Asphalt Plant Operations

- There are two asphalt plants on site currently owned and operated by Payne & Dolan. The east asphalt plant was purchased by Payne and Dolan from Black Diamond in 2014.
- The west asphalt plant operates on PDD #23 and utilizes the west entrance. The east asphalt plant operates on PDD #24 and utilizes the east entrance.
- Asphalt plant operations may be conducted from 6:00 AM 7:00 PM Monday thru Friday, 6:00 AM -4:00 PM on Saturdays and no operation on Sundays per their permit use approvals as specified in the PDDs.
- Asphalt plants typically operate from mid-April thru mid-November, but may vary with market conditions.

#### IV. Blasting Operations

- Payne & Dolan supervises, implements, and conducts its drilling and blasting program specifically designed for this site. Blasting events are designed at conservative levels and kept well within the limits established by the PDDs.
- All blasting is conducted by experienced personnel licensed with the State of Wisconsin.
- Hours of blasting are restricted to 8:00 AM to 4:00 PM Monday thru Friday with no blasting taking place on Saturday, Sunday or holidays as listed in the PDDs.

- All blasting events are monitored by four (4) independently calibrated seismographs operated by Vibra-Tech, a third party vendor.
- City of Franklin personnel and quarry monitoring consultant (Stantec) have access to Vibra-Tech's seismograph information via a website.
- Stantec, the City of Franklin's quarry monitoring consultant, has done independent blast monitoring of the quarry and their monitoring results are consistent with Payne & Dolan's results and confirm that all blasting operations are within the PDD limits.



#### ٧. Other

- Stantec continues to conduct quarry monitoring at the discretion of the City of Franklin Quarry Monitoring Committee.
- Payne & Dolan personnel regularly attends the Quarry Monitoring Committee meetings.
- Payne & Dolan personnel continues to provide site visits and tours of its operations to City officials and representatives from Stantec.
- Quarry tours and site visits have been limited due to Covid in 2020 and 2021.
- At the request of neighbors, Payne & Dolan has a preblast notification process to provide advance notice to neighbors of a blast. The notification process entails sending interested parties a message the day of the blast by either test or email, informing them that blasting would be occurring that day. Currently, there are 49 people on the notification list.
- The Quarry Monitoring Committee recommended approval of the Franklin Aggregates Reclamation Plan and the City of Franklin Plan Commission approved the Reclamation Plan in October 2021. The

City of Franklin Common Council subsequently approved the Reclamation Plan in November 2021. Payne & Dolan updated the reclamation financial assurance per the approved plan.



Figure 1. Site Map showing Property Lines, PDD Locations and Extraction Limits

Figure 2. Current Aerial Photo - (October 2021)

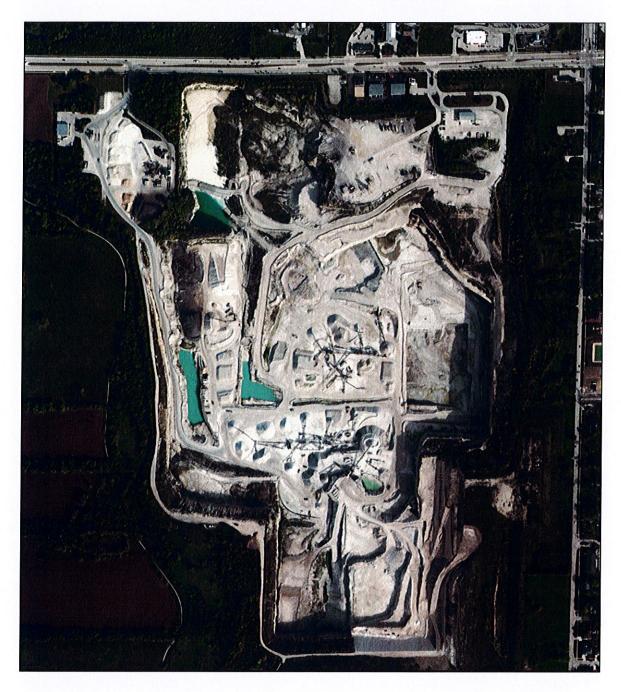


Figure 3. Limestone Extraction Areas (2020 – 2021 and 2022 – 2023) \*2022-2023 is a Projection only – subject to change and may vary at discretion of P&D



Figure 4. Site Map Showing Conceptual Reclamation Plan