CITY OF FRANKLIN PLAN COMMISSION MEETING* FRANKLIN CITY HALL COUNCIL CHAMBERS 9229 W. LOOMIS ROAD, FRANKLIN, WISCONSIN AGENDA THURSDAY, MAY 21, 2020, 7:00 P.M.

The Facebook page for the Economic Development Commission <u>https://www.facebook.com/forwardfranklin/</u> will be live streaming the Plan Commission meeting so that the public will be able to watch and listen to the meeting.

A. Call to Order and Roll Call

B. Approval of Minutes

- 1. Approval of regular meeting of May 7, 2020.
- C. **Public Hearing Business Matters** (action may be taken on all matters following the respective Public Hearing thereon)

1. **ENTERPRISE RENT-A-CAR AUTOMOBILE RENTAL BUSINESS INSIDE OF EWALD TRUCK CENTER.** Special Use and Site Plan applications by Enterprise Rent-A-Car Company of Wisconsin, LLC (CBDT 6321 Real Estate, LLC, property owner), to allow for an 832 square foot area of office space inside of the Ewald Truck Center (the space was previously occupied by Mayfair Rent-A-Car, which Enterprise Holdings acquired in 2018) for automobile rentals to customers of collision centers, dealerships and business travelers to local retail customers having their vehicles serviced in the area (1-25 vehicles on site at a time), with hours of operation Monday through Friday from 7:30 a.m. to 5:00 p.m. and Saturdays from 9:00 a.m. to 12:00 noon; the Site Plan includes updating the interior office space with a demising wall to separate the Truck Center and the Enterprise Rent-A-Car office space, and addition of a manager's office, property located at 6321 South 108th Street, zoned M-1 Limited Industrial District and C-1 Conservancy District; Tax Key No. 704-9973-000. A PUBLIC HEARING IS SCHEDULED FOR THIS MEETING UPON THE SPECIAL **USE APPLICATION OF THIS MATTER.**

- D. **Business Matters** (no Public Hearing is required upon the following matters; action may be taken on all matters)
 - ZACHARY D. PAWLOWSKI AND LAUREN M. PAWLOWSKI LAND COMBINATION. Land Combination application by Zachary D. Pawlowski and Lauren M. Pawlowski for combining a parcel of land located at 6932 South Tumblecreek Drive (Lot 37 of the Tumblecreek Subdivision) with Outlot 30 of Plat of Outlots 1 through 5 of Tumblecreek Subdivision, for construction of a shed that will be located within 5 feet of Outlot 30, property zoned Planned Development District No. 2 (Tumblecreek/Hidden

Lakes Development); Tax Key Nos. 739-0120-000 and 739-0037-000 (Outlot 30).

2. PAYNE AND DOLAN, INC. QUARRY BIANNUAL REPORT TO THE PLAN COMMISSION

E. Adjournment

*Supporting documentation and details of these agenda items are available in the Plan Commission Meeting Packet on the City of Franklin website www.franklinwi.gov.

**Notice is given that a majority of the Common Council may attend this meeting to gather information about an agenda item over which they have 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.

[Note: Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information, contact the City Clerk's office at (414) 425-7500.]

REMINDERS: Next Regular Plan Commission Meeting: June 4, 2020

unapproved

City of Franklin Plan Commission Meeting May 7, 2020 Minutes

A. Call to Order and Roll Call

Mayor Steve Olson called the May 7, 2020 regular Plan Commission meeting to order at 7:00 p.m. in the Council Chambers at Franklin City Hall, 9229 West Loomis Road, Franklin, Wisconsin.

Present were Mayor Steve Olson, Commissioners Patrick Leon, Adam Burckhardt and Kevin Haley, Alderman Mark Dandrea and City Engineer Glen Morrow. Excused was Commissioner Patricia Hogan. Also present were Associate Planner Régulo Martínez, Assistant Planner Marion Ecks, City Development Director Calli Berg and City Attorney Jesse Wesolowski.

B. Approval of Minutes

1. Regular Meeting of April 23, 2020.

C. Public Hearing Business Matters

1. MILLS HOTEL WYOMING, LLC MIXED-USE

DEVELOPMENT. Rezoning application by Mills Hotel Wyoming, LLC, to rezone Lot No. 84 (24.05 acres) of the Ryan Meadows Subdivision development from M-1 Limited Industrial District to M-2 General Industrial District, property generally located on the east side of Monarch Drive, south of Chicory Street, area commonly known as Area G; part of Tax Key No. 891-9010-002 [this *Rezoning application is being submitted* in conjunction with a Site Plan application for Copart, Inc., which is a global online vehicle auction company]. **A PUBLIC HEARING IS SCHEDULED FOR THIS MEETING UPON THIS MATTER. SUBJECT MATTER AND PUBLIC** HEARING CONTINUED FROM THE APRIL 9, 2020 MEETING.]

Alderman Dandrea moved and Commissioner Leon seconded approval of the April 23, 2020 regular meeting minutes. On voice vote, all voted 'aye'. Motion carried (5-0-1).

Associate Planner Régulo Martínez presented the request by Mills Hotel Wyoming, LLC, to rezone Lot No. 84 (24.05 acres) of the Ryan Meadows Subdivision development from M-1 Limited Industrial District to M-2 General Industrial District, property generally located on the east side of Monarch Drive, south of Chicory Street, area commonly known as Area G; part of Tax Key No. 891-9010-002.

The Official Notice of Public hearing was read in to the record by Associate Planner Régulo Martínez and the Public Hearing was opened at 7:04 p.m. and closed at 7:22 p.m.

<u>Rezone (continued from April 9, 2020 Plan</u> <u>**Commission meeting)**</u>

Alderman Dandrea moved and City Engineer Morrow seconded a motion to recommend approval of an Ordinance to amend the Unified Development Ordinance (zoning map) to rezone lot 84 of the approved final plat for "Ryan Meadows" subdivision from M-1 Limited Industrial District to M-2 General Industrial District (generally located on the east side of Monarch Drive, south of Chicory Street, area commonly known as Area G) (approximately 24.0541

2. MILLS HOTEL WYOMING, LLC MIXED-USE

DEVELOPMENT. Natural **Resource Features Special Exception** application by Mills Hotel Wyoming, LLC, (Daniel L. Mathson and Virginia K. Mathson, property owners) for the purpose of grading and development of approximately 9,969 square feet of wetland, 19,268 square feet of wetland buffer and 34,002 square feet of wetland setback (which includes the buffer area as well), identified as W-2 in the Ryan Creek watershed, resulting from a Certified Survey Map land division to develop the property generally located at West Loomis Road and West Ryan Road, such property being zoned M-2 General Industrial District; Tax Key No. 939-9994-000. A PUBLIC HEARING IS SCHEDULED FOR THIS MEETING UPON THIS MATTER. [THE PUBLIC HEARING FOR THIS APPLICATION WAS PREVIOUSLY NOTICED FOR THE PLAN COMMISSION MEETING ON APRIL 9, 2020 AND THE PLAN COMMISSION THEN DECIDED TO CONTINUE AND PUT THE MATTER TO THE MAY 7, 2020 PLAN COMMISSION MEETING.]

D. Business Matters

1. ASKREN WRESTLING ACADEMY: CONVERSION OF AN EXISTING CUSTOM AUTO BODY AND PAINT SHOP TO A WRESTLING ACADEMY

GYMNASIUM. Special Use and Site Plan applications by Benjamin M. Askren, Askren Wrestling Academy, LLC (Askren Properties, LLC, property owner) to allow for a wrestling gymnasium and instruction use (in an existing custom auto body and paint shop building which will be converted into an Askren Wrestling Academy gymnasium), property located at 9760 South 60th Street, and a Site Plan to acres). On voice vote, all voted 'aye'. Motion carried (5-0-1).

Assistant Planner Marion Ecks presented the request by Mills Hotel Wyoming, LLC, (Daniel L. Mathson and Virginia K. Mathson, property owners) for the purpose of grading and development of approximately 9,969 square feet of wetland, 19,268 square feet of wetland buffer and 34,002 square feet of wetland setback (which includes the buffer area as well), identified as W-2 in the Ryan Creek watershed, resulting from a Certified Survey Map land division to develop the property generally located at West Loomis Road and West Ryan Road, such property being zoned M-2 General Industrial District; Tax Key No. 939-9994-000.

The Official Notice of Public hearing was read in to the record by Assistant Planner Marion Ecks and the Public Hearing was opened at 7:52 p.m. and closed at 7:59 p.m.

Natural Resource Special Exception (continued from April 9, 2020 Plan Commission meeting)

Alderman Dandrea moved and City Engineer Morrow seconded a motion to recommend approval of the Mills Hotel Wyoming, LLC Natural Resource Features Special Exception pursuant to the Standards, Findings and Decision recommended by the Plan Commission and Common Council consideration of the staff recommendations as presented at this meeting; and to review the Environmental Commission recommendations. On roll call vote, three (3) members voted 'aye' and two (2) voted 'nay'. The Mayor broke the tie. Motion carried (4-2-1).

Assistant Planner Marion Ecks presented the request by Benjamin M. Askren, Askren Wrestling Academy, LLC (Askren Properties, LLC, property owner) to allow for a wrestling gymnasium and instruction use (in an existing custom auto body and paint shop building which will be converted into an Askren Wrestling Academy gymnasium), property located at 9760 South 60th Street, and a Site Plan to allow for interior building alterations to the space, including adding two Americans with Disabilities Act restrooms, a small office and finish improvements, and minor exterior site modifications, including parking lot restriping (to include 16 parking spaces, including one Americans with Disabilities Act accessible space) and addition of wheel stops, property zoned M-1 Limited Industrial District; Tax Key No. 899-9993-004. [THE MATTER WAS OPENED AND CLOSED AT THE

allow for interior building alterations to the space, including adding two Americans with Disabilities Act restrooms, a small office and finish improvements, and minor exterior site modifications, including parking lot restriping (to include 16 parking spaces, including one Americans with Disabilities Act accessible space) and addition of wheel stops, property zoned M-1 Limited Industrial District; Tax Key No. 899-9993-004. [THE MATTER WAS OPENED AND CLOSED AT THE APRIL 9, 2020 MEETING AND THE SUBJECT MATTER WAS PUT OVER TO THE MAY 7, 2020 PLAN COMMISSION MEETING.1

2. MILLS HOTEL WYOMING, LLC MIXED-USE

DEVELOPMENT. Certified Survey Map application by Mills Hotel Wyoming, LLC, to subdivide Lot 84 (24.05 acres) of the Ryan Meadows Subdivision into two lots (Lot 1 has an area of 13.46 acres and Lot 2 has an area of 10.59 acres) [the proposed division will accommodate the proposed Copart, Inc. (a global online vehicle auction company) Site Plan, which will utilize Lot 2 for the storage of vehicles and an emergency ingress/egress], property is generally located on the east side of Monarch Drive, south of Chicory Street, area commonly known as Area G, zoned M-2 General Industrial District (pending Common Council approval of a rezone application for this area); part of Tax Key No. 891-9010-002.

3. COPART, INC. GLOBAL ONLINE VEHICLE AUCTION COMPANY BUILDING AND VEHICLE STORAGE YARD CONSTRUCTION. Site Plan

application by Copart of Connecticut, Inc. to allow for construction of a 7,200

APRIL 9, 2020 MEETING AND THE SUBJECT MATTER WAS PUT OVER TO THE MAY 7, 2020 PLAN COMMISSION MEETING.]

Special Use and Site Plan (continued from April 9, 2020 Plan Commission meeting)

City Engineer Morrow moved and Commissioner Leon seconded a motion to refer the Special Use and Site Plan to the Economic Development Commission for review and recommendation. On voice vote, all voted 'aye'. Motion carried (5-0-1).

Associate Planner Régulo Martínez presented the request by Mills Hotel Wyoming, LLC, to subdivide Lot 84 (24.05 acres) of the Ryan Meadows Subdivision into two lots (Lot 1 has an area of 13.46 acres and Lot 2 has an area of 10.59 acres) [the proposed division will accommodate the proposed Copart, Inc. (*a global online vehicle auction company*) Site Plan, which will utilize Lot 2 for the storage of vehicles and an emergency ingress/egress], property is generally located on the east side of Monarch Drive, south of Chicory Street, area commonly known as Area G, zoned M-2 General Industrial District (pending Common Council approval of a rezone application for this area); part of Tax Key No. 891-9010-002.

City Engineer Morrow moved and Commissioner Leon seconded a motion to recommend approval of a Resolution conditionally approving a 2 lot Certified Survey Map, being all of lot 84 in Ryan Meadows, located in the Southwest 1/4 and Northwest 1/4 of the Northeast 1/4 and the Northeast 1/4 of the Southwest 1/4 and the Northeast 1/4 and the Southeast 1/4 of the Northwest 1/4 all in Section 30, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin (generally on the east side of Monarch Drive, south of Chicory Street, area commonly known as Area G). On voice vote, all voted 'aye'. Motion carried (5-0-1).

Associate Planner Régulo Martínez presented the request by Copart of Connecticut, Inc. to allow for construction of a 7,200 square foot building and vehicle storage yard for Copart, Inc. (on approximately 44-acres (approximately .5 acres are located within the City of Muskego)), a global online vehicle auction company specializing in asset square foot building and vehicle storage yard for Copart, Inc. (on approximately 44-acres (approximately .5 acres are located within the City of Muskego)), a global online vehicle auction company specializing in asset liquidation services (including short-term storage and sales of assets, and ancillary receiving, shipping, lien sale and administrative activities-all assets liquidated intact) to institutional, commercial and private owners of used undamaged vehicles, trailers, watercraft, and powersports, industrial and construction equipment [Copart, Inc. is classified under Standard Industrial Classification No. 5012 Automobiles and Other Motor Vehicles, which is a Permitted Use in the M-2 General Industrial District (the applicant has concurrently submitted a Rezoning Application, requesting to rezone the property from M-1 Limited Industrial District to M-2 General Industrial District)], the development consisting of a building containing an office and shop space, as well as associated parking, landscaping, lighting, fencing, storm water management facilities, and a drop lot for receiving vehicles (a significant amount of space is dedicated for vehicle storage), with hours of operation Monday through Friday, from 8:00 a.m. to 5:00 p.m., upon property located at 10082 South 124th Street (approximately 72.636 acres of vacant land), zoned R-2 Estate/Single-Family Residence District, C-1 Conservancy District and R-8 Multiple-Family Residence District; Tax Key No. 939-9995-000 and a portion of Tax Key Nos. 939-9994-000 and 891-9010-002. **[SUBJECT MATTER CONTINUED** FROM THE APRIL 9, 2020 MEETING]

E. Adjournment

liquidation services (including short-term storage and sales of assets, and ancillary receiving, shipping, lien sale and administrative activities-all assets liquidated intact) to institutional, commercial and private owners of used undamaged vehicles, trailers, watercraft, and powersports, industrial and construction equipment [Copart, Inc. is classified under Standard Industrial Classification No. 5012 Automobiles and Other Motor Vehicles, which is a Permitted Use in the M-2 General Industrial District (the applicant has concurrently submitted a Rezoning Application, requesting to rezone the property from M-1 Limited Industrial District to M-2 General Industrial District)], the development consisting of a building containing an office and shop space, as well as associated parking, landscaping, lighting, fencing, storm water management facilities, and a drop lot for receiving vehicles (a significant amount of space is dedicated for vehicle storage), with hours of operation Monday through Friday, from 8:00 a.m. to 5:00 p.m., upon property located at 10082 South 124th Street (approximately 72.636 acres of vacant land), zoned R-2 Estate/Single-Family Residence District, C-1 Conservancy District and R-8 Multiple-Family Residence District; Tax Key No. 939-9995-000 and a portion of Tax Key Nos. 939-9994-000 and 891-9010-002. **SUBJECT MATTER CONTINUED FROM THE APRIL** 9, 2020 MEETING]

Site Plan (continued from April 9, 2020 Plan Commission meeting)

City Engineer Morrow moved and Alderman Dandrea seconded a motion to approve a resolution approving a Site Plan for construction of a 7,200 square foot building and vehicle storage yard, along with associated parking, landscaping, lighting, fencing, stormwater management facilities and a drop lot for receiving vehicles, for a global online vehicle auction company specializing in asset liquidation services (10082 South 124th Street) subject to Common Council approval of the concurrent rezoning application and conditions as follows: compaction of soils shall be reviewed and approved by staff prior to the placement of gravel, masonry fencing shall be required along the west property line, permanent irrigation is not required as long as the applicant provides a 2-year landscape planting guarantee. On roll call vote, three (3) members voted 'aye' and two (2) voted 'nay'. The Mayor broke the tie. Motion carried (4-2-1).

Commissioner Haley moved and Commissioner Leon seconded a motion to adjourn the Plan Commission meeting of May 7, 2020 at 9:22 p.m.. On voice vote, all voted 'aye'; motion carried. (5-0-1).

Item C.1

MEMORANDUM

Date:May 21, 2020To:Plan CommissionFrom:Department of City DevelopmentRE:Request to hold over Special Use and Site Plan for 6321 S 108th St, for Enterprise Rent-A-Car. to a future meeting.

The applicant, Enterprise Rent-A-Car, has applied for a special use amendment permit for the property at 6321 108th Street with Standard Industrial Classification Title No 7514, "Passenger car rental." The applicant occupies 832 square feet of space located inside the Ewald Truck Center, with 1-25 vehicles parked on site at a time. The property is currently zoned as M-1 Limited Industrial, with a small area zoned C-1 Conservancy at the rear of the property.

The applicant was not able to provide a revised site plan in time for staff review prior to the Plan Commission meeting for May 21, 2020.

The applicant has requested that the Commission review the matter at a future meeting in June, 2020.

Marion Ecks Assistant Planner - Department of City Development

🇊 CITY OF FRANKLIN 🗊

REPORT TO THE PLAN COMMISSION

Meeting of May 21, 2020

Land Combination

RECOMMENDATION: City Development Staff recommends approval of a land combination for lot 37 and outlot 30 of the Tumblecreek subdivision.

Project Name:	Pawlowski Land Combination
Project Address:	6932 S Tumblecreek Drive
Property Owner:	Zachary and Lauren Pawlowski
Applicant:	Zachary and Lauren Pawlowski
Zoning:	PDD No. 2 Tumblecreek – Hidden Lakes Development
Use of Surrounding Properties:	Residential – single family
Comprehensive Plan:	Residential
Applicant Action Requested:	Approval of application for land combination

Introduction:

On April 7, 2020, Zach and Lauren Pawlowski submitted a land combination application for two properties: Lot 37 and Outlot 30 of the Tumblecreek subdivision, both properties are under common ownership. The area of Lot 37 is 0.26 acres, and Outlot 30 is 0.04 acres, the resulting property would be 0.30 acres in area. The current use of Lot 37 is single-family residential and Outlot 30 is vacant.

The purpose of this land combination request is to eliminate the common lot line between the two properties and the setback restriction associated with such line. With the two properties combined, the owner would increase the buildable area for a shed or other accessory structure.

Pursuant to §15-9.0312.B, of the Unified Development Ordinance, the application for the Land Combination Permit shall be considered "relative to City staff recommendations, the lot area and other dimensional requirements of the zoning district(s) within which the parcels are located, the City of Franklin Comprehensive Master Plan and the planned land use for each of the parcels, present use of the parcels and proposed use of the parcels for the purpose to ensure that upon combination, such properties shall comply with the purposes and provisions of this Ordinance."

Analysis:

The two subject properties are located in the area "A" of Planned Development District (PDD) No. 2 Tumblecreek – Hidden Lakes Development. This PDD was created in 1976 and amended in 1987, 1991, 1993, 1995 and 1996, the current development standards for area "A" are set forth in Ordinance 1995-1362. The resulting lot would comply with the dimensional standards of this Ordinance, such as lot area and setbacks. Per City Development Department files, the combination of a lot with an outlot has a precedent in the Tumblecreek subdivision as noted below:

- 6935 S Tumblecreek. Resolution 88-3095 (attached): lot 20 and outlot 17.
- 6908 S Tumblecreek. Resolution 94-4167 (attached): lot 35 and outlot 28.

It is noted that the rear yard setback in PDD No. 2 is 25 feet and the depth of outlot 30 is 17 feet, therefore structures would not be allowed in the current area of this outlot.

STAFF RECOMMENDATION:

City Development staff recommends approval of a land combination for lot 37 and outlot 30 of the Tumblecreek subdivision, subject to the conditions noted in the attached draft resolution.

CITY OF FRANKLIN

RESOLUTION NO. 2020-

A RESOLUTION CONDITIONALLY APPROVING A LAND COMBINATION FOR TAX KEY NOS. 739-0120-000 AND 739-0037-000 (6932 SOUTH TUMBLECREEK DRIVE AND OUTLOT 30 OF PLAT OF OUTLOTS 1 THROUGH 5 OF TUMBLECREEK) (ZACHARY D. PAWLOWSKI AND LAUREN M. PAWLOWSKI, APPLICANTS)

WHEREAS, the City of Franklin, Wisconsin, having received an application for approval of a proposed land combination for Zachary D. Pawlowski and Lauren M. Pawlowski to accommodate construction of a shed within 5 feet of Outlot 30 of Plat of Outlots 1 through 5 of Tumblecreek, adjoining the Pawlowski residential property at 6932 South Tumblecreek Drive (Lot 37); bearing Tax Key Nos. 739-0120-000 and 739-0037-000 (Outlot 30), more particularly described as follows:

Property Description for 6932 South Tumblecreek Drive:

Lot Thirty-Seven (37), in Tumblecreek, being a Subdivision of a part of the Southwest One-Quarter (1/4) of the Southwest One-Quarter (1/4) of Section One (1), Township Five (5) North, Range Twenty-One (21) East, in the City of Franklin, County of Milwaukee, State of Wisconsin.

Property Description for Outlot 30:

Outlot Thirty (30) of Plat of Outlots One (1) Thru Five (5) of Tumblecreek, being a Subdivision of Outlots One (1) Thru Five (5) of Tumblecreek, being a part of the Southwest One-Quarter (1/4) of the Southwest One-Quarter (1/4) of Section One (1), Township Five (5) North, Range Twenty-One (21) East, in the City of Franklin, County of Milwaukee, State of Wisconsin.

WHEREAS, the Plan Commission having reviewed such application and recommended approval thereof and the Common Council having reviewed such application and Plan Commission recommendation and the Common Council having determined that such proposed land combination is appropriate for approval pursuant to law upon certain conditions, all pursuant to §15-9.0312 of the Unified Development Ordinance, Land Combination Permits.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the proposed land combination for Zachary D. Pawlowski and Lauren M. Pawlowski, as submitted by Zachary D. Pawlowski, as described above, be and the same is hereby approved, subject to the following conditions:

ZACHARY D. PAWLOWSKI AND LAUREN M. PAWLOWSKI – LAND COMBINATION RESOLUTION NO. 2020-____ Page 2

- Zachary D. Pawlowski and Lauren M. Pawlowski, successors and assigns shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the Zachary D. Pawlowski and Lauren M. Pawlowski land combination project, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19. of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
- 2. The approval granted hereunder is conditional upon Zachary D. Pawlowski and Lauren M. Pawlowski and the land combination project for the property located at 6932 South Tumblecreek Drive and Outlot 30 of Plat of Outlots 1 through 5 of Tumblecreek: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.

Introduced at a regular meeting of the Common Council of the City of Franklin this _____ day of ______, 2020.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this ______ day of ______, 2020.

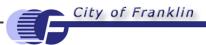
APPROVED:

Stephen R. Olson, Mayor

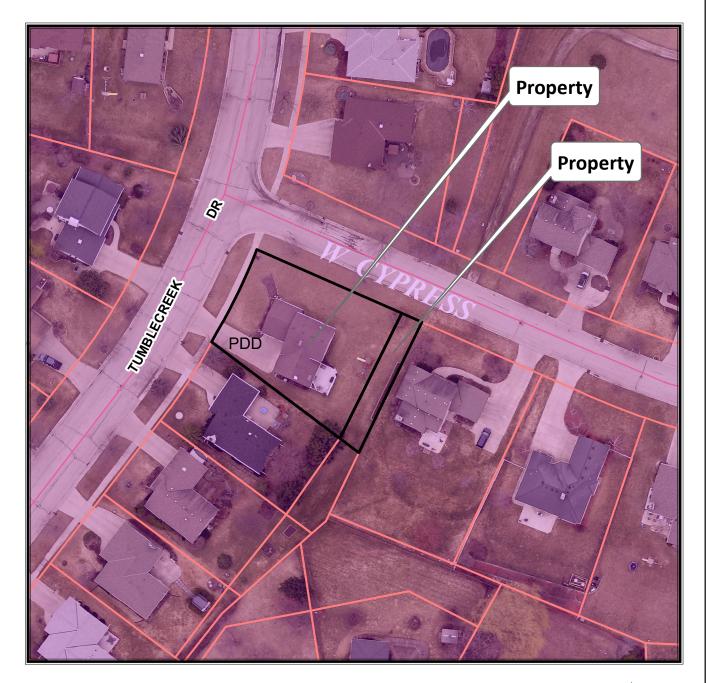
ATTEST:

Sandra L. Wesolowski, City Clerk

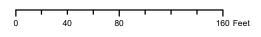
AYES NOES ABSENT



6932 S. Tumblecreek Dr. TKN: 739 0037 000 & 739 0120 000

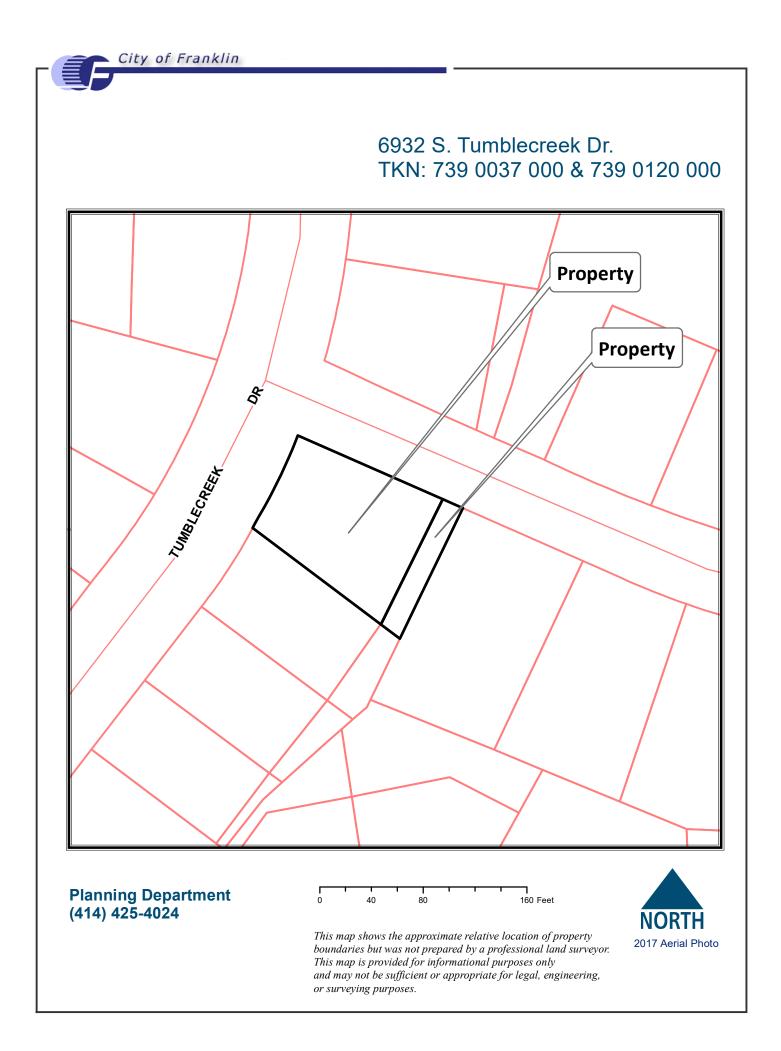


Planning Department (414) 425-4024





This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.



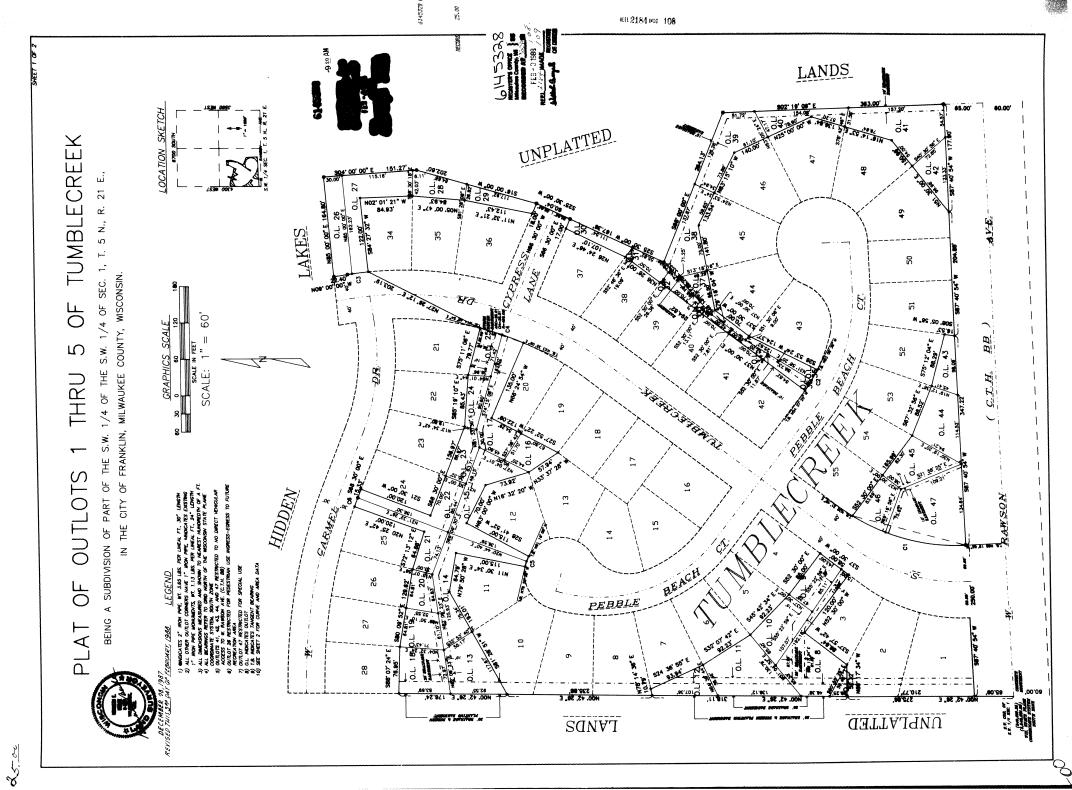


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6935 J. Temblecreek Dr Scanned

STATE OF WISCONSIN : CITY OF FRANKLIN : MILWAUKEE COUNTY

RESOLUTION NO. 88-3095

A RESOLUTION APPROVING A COMBINATION OF LAND OF A PART OF THE SOUTHWEST % OF SECTION 1, TOWN 5 NORTH, RANGE 2I EAST IN THE CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

BE IT RESOLVED, that the combination of land being a part of the Southwest 1/4 of Section 1, Town 5 North, Range 21 East and described as Lot 20, Tumble Creek and Outlot 17, Tumble Creek (Plat of Outlots 1-5) in the City of Franklin, Milwaukee County, Wisconsin, Rick L. and Gail A. Johnson, owner(s), or successor or assigns, having been approved by the City Plan Commission of the City of Franklin, be and the same is hereby approved.

Introduced this <u>lst</u> day of <u>March</u>, 1988, by Alderman <u>Franken</u> as recommended by the City Plan Commission.

Passed and approved at a regular meeting of the Common Council of the City of Franklin held this <u>lst</u> day of <u>March</u>, 1988.

APPROVED:

ATTEST:

James C. Payne

City Busines' ADministrator/Clerk

AYES<u>6</u> NOES<u>0</u> ABSENT<u>0</u> STATE OF WISCONSIN : CITY OF FRANKLIN : MILWAUKEE COUNTY

RESOLUTION NO. 94-4167

A RESOLUTION APPROVING A COMBINATION OF LAND OF A PART OF THE SOUTHWEST 1/4 OF SECTION 1 BRIAN & LINDA LECUS

BE IT RESOLVED, that the combination of land being a part of the Southwest 1/4 of Section 1, Town 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin and described as follows:

Parcel No. 1 - Tax Key No. 739-0035, Tumblecreek, SW 1 5 21, Lot 35.

Parcel No. 2 - Tax Key No. 739-0118, Plat of Outlots 1 thru 5 of Tumblecreek Outlot 28.

for Brian & Linda Lecus owner(s) or successor or assigns, having been approved by the City Plan Commission of the City of Franklin, be and the same is hereby approved subject to the following conditions:

None

Introduced this <u>12th</u> day of <u>September</u>, 1994 by Alderman <u>Thomas</u> as recommended by the City Plan Commission.

Passed and approved at a regular meeting of the Common Council of the City of Franklin held this <u>12th</u> day of <u>September</u>, 1994.

APPROVED:

Frederick F. Klimetz,

ATTEST:

the la

James C. Payne, Business Administrator

AYES 6 NOES 0 ABSENT 0



Date of Application: 4/4/20

LAND COMBINATION APPLICATION

Complete, accurate and specific information must be entered. <u>Please Print.</u>

Property Owner(s) Name(s): Zachary Pawlowski	(Full Legal Name[s]):	Applicant is Represented by (contact person) Name: Zachary Pawlowski	(Full Legal Name[s]):
Larren Paulowsk- (Chmielewsk;)		Company:	
Mailing Address: 6932 S. Tumblecreek Dr		Mailing Address: 6932 S. Tumblecreek Dr	
City / State: Franklin	Zip: 53132	City / State: Franklin	Zip: 53132
Phone: 815 603 1558		Phone: 815 603 1558	
Email Address: Zachary.pawlowski@gmail.co	m	Email Address: Zachary.pawlowski@gmail.co	om
Project Property #1 Information: Property Address: 6932 S. Tumblecreek Dr. Tax Key No: 739-0037-000 Existing Zoning: PPD-2 (planned development district) Existing Use: Residential Proposed Use: Residential Future Land Use Identification: Residential *The 2025 Comprehensive Master Plan Future Land Use Map is available		Project Property #2 Information: Property Address: 6932 S. Tumblecreek Dr. (O Tax Key No: 739-0120-000 Existing Zoning: PPD-2 (planned development Existing Use: Residential Proposed Use: Residential Future Land Use Identification: Residential ble at: http://www.franklinwi.gov/Home/ResourcesDoc	nt district)
	with original signature(s). Fuklin: 4400 WORD.doc or compatible for parcels to be combined gra	acsimiles and copies will not be accepted.	
•Upon receipt of a complete submittal, s •Review and consideration of Land Coml •Requests require Plan Commission revie •Final document will be recorded by the	pination approvals shall be in w and Common Council app	accordance with Section 15-9.0312(B) of the Unified Devroval.	velopment Ordinance.
of applicant's and property owner(s)' knowledge; (2) the applicant and property	ther information submitted as part of this application ar y owner(s) has/have read and understand all informatic entations made by them in this Application and its sub	on in this application; and (3)

or applicant's and property owner(s) knowledge; (2) the applicant and property owner(s) has/have read and understand all information in this application; and (3) the applicant and property owner(s) agree that any approvals based on representations made by them in this Application and its submittal, and any subsequently issued building permits or other type of permits, may be revoked without notice if there is a breach of such representation(s) or any condition(s) of approval. By execution of this application, the property owner(s) authorize the City of Franklin and/or its agents to enter upon the subject property(ies) between the hours of 7:00 a.m. and 7:00 p.m. daily for the purpose of inspection while the application is under review. The property owner(s) grant this authorization even if the property has been posted against trespassing pursuant to Wis. Stat. §943.13.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the owners of the property must sign this Application).

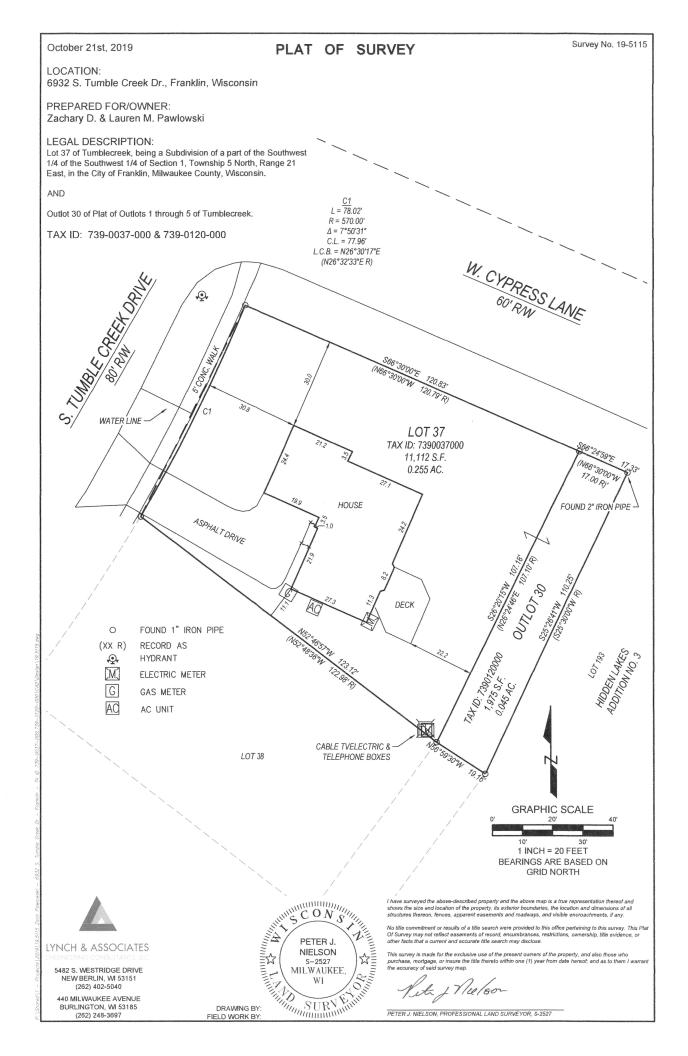
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	Date: 1/ 1/	20

WWW ture - Applicant Pawlowsky, ac han Name & Title (PRINT) Date: 4/4/20

Signature - Applicant's Representative

Name & Title (PRINT)

Date:



Legal Description: Looking to combine the following.

Lot 37 of Tumblecreek, being a Subdivision of a part of the Southwest 1/4 of the Southwest 1/4 of Section1, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, WI.

AND

Outlot 30 of Plat of Outlouts 1 through 5 of Tumblecreek.

TAX ID: 739-0037-0000 & 739-0120-000

MEMORANDUM

Date:	May 5, 2020
To:	Zachary and Lauren Pawlowski
From:	Department of City Development
RE:	Land Combination for 6932 S Tumblecreek Drive.

Please be advised that City Staff have reviewed the above application. Department comments are as follows for the Land Combination application submitted on April 7, 2020.

City Development Department comments

1. The Department of City Development has no issues with this request.

Engineering Department comments

2. This is okay- I don't see any easement. If easement exist in this area they still need to follow the restriction of the easement. Also, the lots that they are combining must be the same owner.

Fire Department Comments

3. The fire department has no comments.

Police Department Comments

4. The Police Department has no objection to this request.

Item D.2.

MEMORANDUM

Date: May 13, 2020

To: Plan Commission

From: Department of City Development

RE: 2018-2019 Franklin Aggregates Quarry Bi-annual reporting.

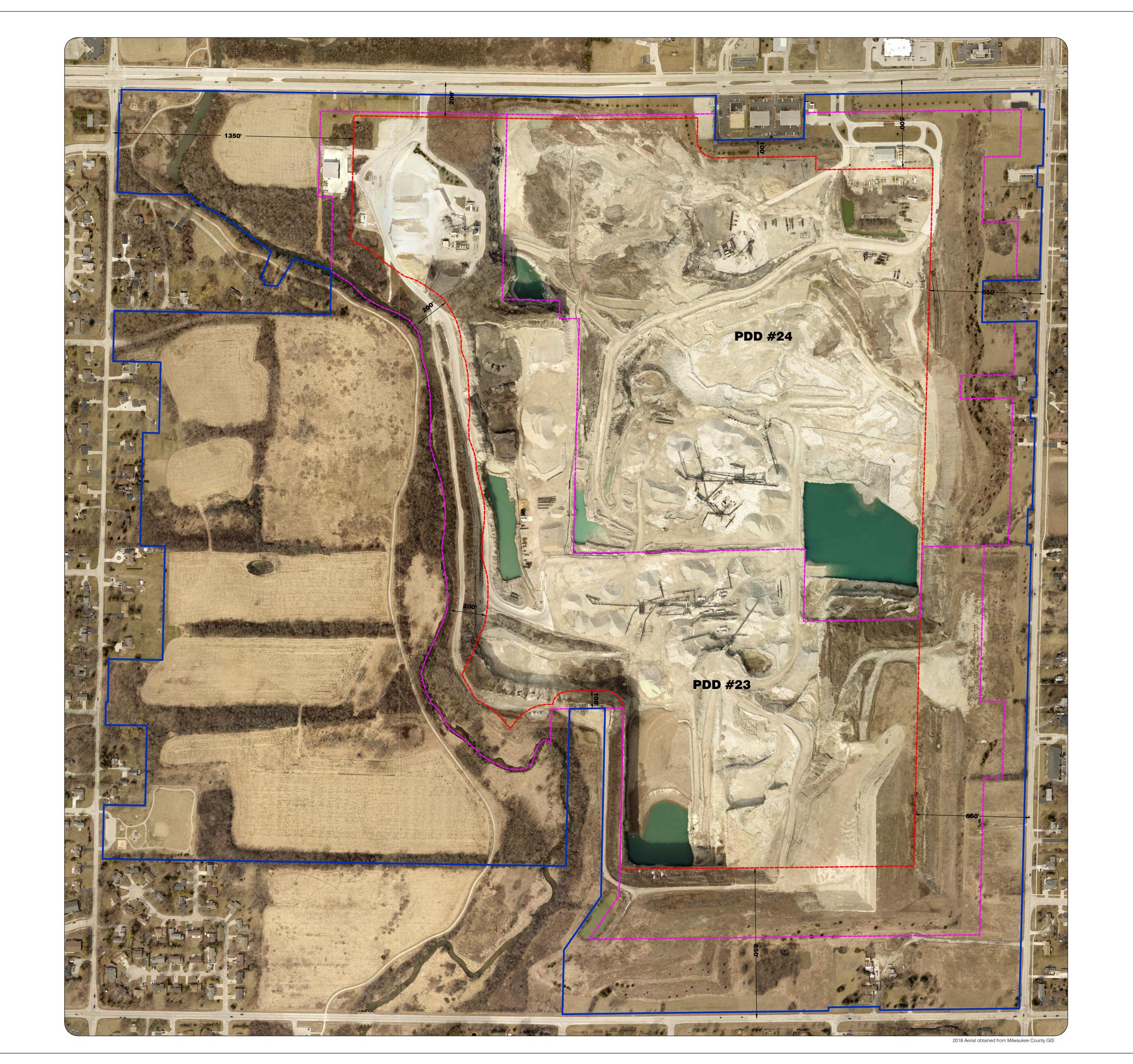
Per Ordinances 97-1456 and 97-1457 of Planned Development Districts (PDD) 23 and 24, the operator (Payne & Dolan) shall report to the Plan Commission approximately every two (2) years. According to the operator's report (page 1), blasting operations complies with PDD blast limits (0.30 and 0.65 in/sec).

The annual reports prepared by the City's consultant (Stantec) for 2018 and 2019, noted that the quarry appears to be operating within the limits of the PDD (conclusions and recommendations section).

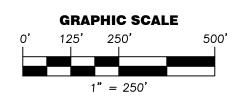
Staff is pleased to present the following updates to the Plan Commission:

- On April 29, 2020, the Department of City Development received the survey of the quarry extraction limits prepared by Lynch & Associates.
- On March 17, 2020, the Common Council adopted Ordinance 2020-2425 to amend the Municipal Code §10-19 "Quarry Monitoring Committee", as it pertains to committee membership to add a non-voting member.
- On March 10, 2020, Department of City Development staff transmitted the 2019 Nonmetallic mining annual report to the Department of Natural Resources (DNR).
- On February 5, 2020, the City renewed the professional services agreement with Stantec Consulting Services, Inc.

Régulo Martínez-Montilva, AICP Associate Planner - Department of City Development

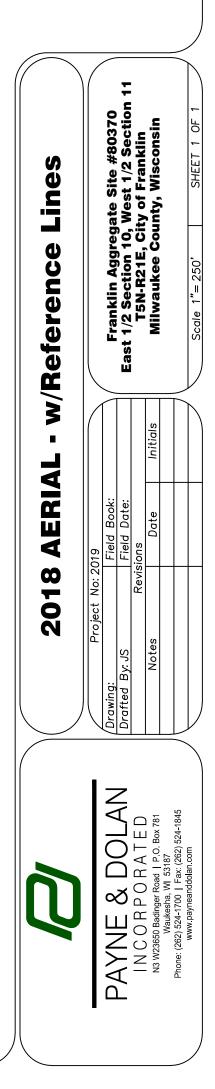


DISCLAIMER: Some of the information shown on this maps has been obtained and compiled from various state, county, municipal and private sources that are maintained by their sources for a wide variety of purposes and are of varying age, reliability and resolution. Therefore, the contents are supplied for reference purposes only and Payne & Dolan cannot guarantee the quality, content, accuracy, completeness or currency of the information obtained from these sources and provided herein. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering or surveying purposes.



Legend	
Property Boundary Planned Development District Extraction Setback	

Purpose of this drawing is to provide a visual reference for the property owned by Payne & Dolan, the extents of PDD #23 and PDD #24, and the extraction setback outlined in PDDs #23 & #24





January 24, 2020

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.

9. Ulenin

Clint Weninger, P.G. Land Resources Manager

Franklin JAN 27 2020 City Development

An Equal Opportunity Employer • www.payneanddolan.com

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 apprx. early March and to mid-December. However, due to the high demand in the local area, crushing did not shut down for the winter of 2018 - 19 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.

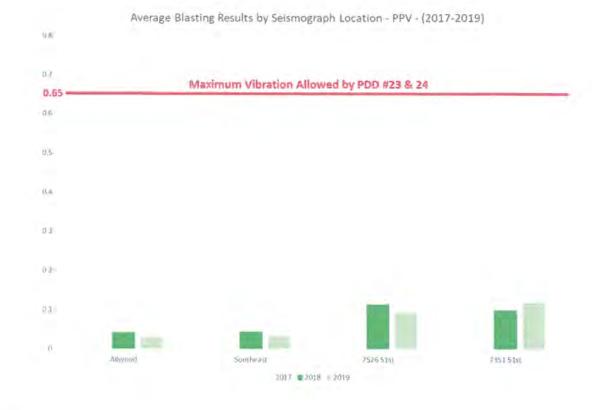
IV. Blasting Operations

- 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.

T

Bi-Annual Report 2019

- 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.



V. 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.
- Numerous quarry tours and site visits were conducted with neighbors and members of the community including 90 people (children and parents) of Cub Scout Pack 538 from Pleasant View Elementary School and over 750 people during the Franklin Civic Celebrations in 2017 and 2019.
- At the request of neighbors, Payne & Dolan has started 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 39 people on the notification list.

 Arranged for an industry expert in vibration monitoring and analysis to make a presentation at the February Quarry Monitoring Committee meeting for committee members and neighbors. Mike Spors with Vibra-Tech discussed what the vibrations are from blasting, how vibrations are measured, how and why the State blasting limits are set where they are (Z-curve), how conservative the blasting limits within the PDDs are to the State blasting limits, and why there is no potential impact on nearby residences and structures when blasting at these conservative levels. Mr. Spors also answered questions from neighbors and committee members.

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





Figure 2. Current Aerial Photo - (September 2019)



Figure 3. Limestone Extraction Areas (2017 – 2019 and 2020 – 2021) *2020-2021 is a Projection only – subject to change and may vary at discretion of P&D



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

November 30, 2018

Joel E. Dietl, AICP Planning Manager City of Franklin Planning Department 9229 W. Loomis Road Franklin, Wisconsin 53132 Via email: <u>jdietl@franklinwi.gov</u>

REFERENCE: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2018 Stantec Project: 193703639

Dear Mr. Dietl:

The enclosed information summarizes monitoring activities completed during 2018 by Stantec Consulting Services Inc. (Stantec) pertaining to the Franklin Aggregates, Inc. quarry (owned by Payne & Dolan, Inc.) located at 6211 W Rawson Ave, 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. This letter summarizes these efforts.

DESCRIPTION OF SERVICES

Direct Observation (Visual) Monitoring

Stantec conducted a total of twenty (20) 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 were a combination of announced and unannounced but were all conducted during normal business hours. The days and times of the visits varied. Most of the observations were completed during the warmer months (June through October) when quarry operations were occurring, and airborne dust was more likely. Qualitative data collected included 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
 - o Dust control measures and issues on-site that may affect off-site receptors
 - o Dust control issues directly adjacent off-site
 - Any other dust issues that may affect local citizens
- Quarry operations review, 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



November 30, 2018 Page 2 of 5

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2018

The findings of each visit were documented on a standard form developed prior to the first visit previously approved by the City. The form was 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 obtained photos to document site or directly adjacent off-site conditions, and shortduration video clips (e.g., showing dust impacts). These photos and videos were also uploaded to the project FTP site.

In addition to the observations and record review, Stantec also obtained and documented 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 notified the City Planning Manager of any condition (pertaining to air or dust monitoring, or other PDD condition) that we become aware of that exceeded the allowances outlined in the PDD. This communication was completed prior to noon the business day following the day we become aware of any such event.

Seismic Monitoring

Seismic monitoring was completed to document whether the site was compliant with operation parameters defined in the existing PDD agreements. All monitoring events were unannounced to Franklin Aggregates. Prior to 2018, Stantec completed a variety of 2, 4, and 8-week seismic monitoring periods. During 2018, Stantec planned to complete one 4-week period and one 16-week period of monitoring. To accomplish this, the equipment was set-up to include an external power source. This enabled the seismograph to begin monitoring and run continuously, and thereby reduced the number of mobilizations for equipment set-up and removal. With continuous power being available, the memory capacity of the seismograph becomes the limiting factor affecting the frequency of our visits. Based on this limit, we reported to the monitoring site every two weeks to download the data. The planned periods of monitoring in 2018 consisted of the following:

- June 5 July 3 (4-week)
- July 25 November 14 (16-week)

These periods were chosen since this is the time when blasting activities are predominantly occurring at the quarry. Stantec retained a local professional engineering firm (Giles Engineering Associates, Inc.) with experience in seismic monitoring to assist with this portion of the work.

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. The city locations are (1) at the southeast corner of 58th and Drexel, and (2) at the South 51st Street lift station. Since the predominance of quarry seismic activity was occurring along the northeast quarry perimeter, all monitoring performed by Stantec was completed at the adjacent South 51st Street lift station. Once the monitor is placed for a two-week period it cannot be moved. In addition, we do not know the quarry blasting schedule or planned blasting locations. Stantec ensured that the seismograph and external power source were maintained to ensure power for the full period. At the end of each period and/or every two weeks, the seismic data was downloaded and evaluated against the PDD limits. Due to equipment limitations the data cannot be downloaded remotely as it occurs (i.e., real time).

Reports providing a summary of the fixed-location blast monitoring and evaluation of the results relative to the requirements of the PDD were prepared every two weeks and posted to the project FTP site for review by City representatives.



November 30, 2018 Page 3 of 5

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2018

Stantec also notified 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 was completed prior to noon the business day following the day we become aware of any such event.

Blast Complaint Evaluation

Periodically through the year the City forwarded to Stantec specific information pertaining to quarry complaints received during 2018. Stantec evaluated each one 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

SUMMARY OF RESULTS

As previously indicated copies of completed observation forms and reports providing a summary of the fixed-location blast monitoring were prepared and posted to the project FTP site for review by City representatives. Thus, this end-of-year summary letter is not intended to describe specific details from each previously posted document. Copies of individual reports are not provided with this summary report.

Direct Observation (Visual) Monitoring

Stantec conducted a total of twenty (20) qualitative observation site visits at the quarry. A summary of these visits is provided as Attachment A. Note the following:

- 15 of the 20 visits (75%) were unannounced to representatives of Franklin Aggregates.
- During the announced visits, Stantec was allowed guided access to the property; otherwise all observations were completed from the quarry perimeter.
- A street sweeper was observed during 9 of the 20 visits (45%). We also periodically observed operating an on-site water truck and sprinkler systems.
 - From 2015 through 2017 the percentage of visits the street sweeper was observed operating was 50%, 57%, and 42%, respectively.
- Noticeable debris (e.g., aggregate; sand) on the adjacent roadways was observed during 5 of the 20 visits (25%).
 - From 2015 through 2017 the percentage of visits with noticeable debris was observed was 26%, 33%, and 63%, respectively.
- Noticeable opacity impacts (e.g., airborne dust) was observed during 1 of the 20 visits (5%). The dust was noticed primarily at the entrance along Rawson Avenue. Upon observation Stantec communicated with the quarry and they dispatched a street sweeper to the area.
 - From 2015 through 2017 the percentage of visits noticeable airborne dust was 26%, 0%, and 0%, respectively.
- On-site review of quarry records pertaining to dust control measures and recordkeeping appeared to be maintained by site representatives. This is consistent with previous years.
- The quarry operator appears to be following standard protocol (e.g., street sweeper; sprinklers) to minimize off-site impacts. Truck traffic used the west entrance only; thus, no trucks were observed transporting material using the east entrance, therefore the wheel wash was not used. Only site level traffic was observed at the east entrance with no customer products leaving through this entrance.



November 30, 2018 Page 4 of 5

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2018

It is important to note that Attachment A provides merely a small snapshot in time compared to the overall quarry operations during 2018.

Seismic Monitoring

As selected by the City, Stantec planned to complete one 4-week period and one 16-week period of monitoring. The monitoring data was intended to be downloaded and summarized in a report to the City every two weeks. Unfortunately, during the August 22 – September 5, 2018 monitoring period, it was determined that the external geophone had malfunctioned. The seismograph unit itself appeared to be in good working condition. In an effort to still obtain usable comparable data, the next two recording periods were completed with the ground spikes, which are normally attached to the geophone, affixed in different configurations to the seismograph unit. An evaluation of the seismographs continued effectiveness was completed during these periods, and it was determined not to be accurately recording the blast events, thus monitoring was discontinued. Upon verification with the City, the unit was sent in for diagnosis and repair. It should be ready for use in 2019.

While the seismic monitoring unit was effective, when the predominance of quarry seismic activity was occurring along the northeast quarry perimeter, all monitoring performed by Stantec was completed at the adjacent South 51st Street lift station.

Per the PDD, 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 Administrative Code, Safety and Professional Services 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.

In addition to obtaining and reviewing the blast data from the city-owned, fixed seismograph, Stantec also retrieved blasting data from the Vibra-Tech web site which provides 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. One of the locations on South 51st Street was moved in early 2018. This independently monitored data was then compared to the Stantec-obtained data.

A summary of the seismic data is provided as Attachment B. Note the following:

- A total of 50 blasting events occurred during the two monitoring periods.
- When the city-owned monitor was accurately monitoring, Stantec confirmed 17 of the 18 blasting events. Thus, the unit did not identify one blasting event.
- None of the 17 confirmed blasting events measured by Stantec, and none of the 50 actual blasting events during the same period measured by Vibra-Tech, had a vibration greater than 0.30 in/sec; thus 100% of the quarry's blasts were below the maximum permissible vibration level according to the city-owned monitor. This is in conformance with the PDD.
- Stantec identified an additional 7 events that appeared to be potential blasting events; however, they were not. This could be for many reasons. The location of the city blasting vault used during this monitoring is directly adjacent to the South 51st Street lift station. Erroneous events may be caused by vibrations originating from the lift station equipment and operations.

It is important to note that Attachment B provides measurement comparisons from a portion of time of the overall quarry operations during 2018.



November 30, 2018 Page 5 of 5

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2018

Blast Complaint Evaluation

A compilation of all complaints received by Stantec for the period March 12 through October 16, 2018 is provided as Attachment C. This was the first year that the City provided to Stantec the detailed complaint data. 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 following highlights the results of the complaint evaluation:

Complaints - General

- 41 complaints total
- 40 complaints corresponding to actual blast events (98%)
- 1 complaint regarding blast that did not occur on date/time specified

Complaints (confirmed blast related) - Identity

- 28 complaints complainant location identified (70%)
 - o 13 households that complained once each
 - o 2 households that complained two (2) times each
 - o 1 household that complained eleven (11) times
- 12 complaints anonymous (43%)

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

- 3 complaints east of 51st Street
- 25 complaints south of Drexel Avenue (89%)

Blast Events

- 55 blast events during period 03/12/18 to 10/16/18 (shot numbers 8 through 62)
 - 19 blast events corresponding to complaints (35%)
 - o 16 weather: partly to mostly cloudy, or cloudy
 - o 3 weather: fair or scattered clouds
 - o 18 time: prior to 12:30 pm
 - o 1 time: after 12:30 pm (actual 3:28 pm)
- blast events with one (1) complaint
- 6 blast events with two (2) complaints
- 1 blast events with sixteen (16) complaints (October 1, 2018)

Quarry Blast Locations Producing Complaints

- 10 northeast corner of quarry
- 6 east side of quarry
- 3 southeast corner of quarry



November 30, 2018 Page 6 of 5

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2018

Monitor Locations (Vibra-Tech) with highest recorded blast readings

Monitor ID	Blast Numbers	Comments
VT1	14, 17, 30, 31, 32, 34, 37, 38, 42	Corresponds with all blasts in far northeast corner of quarry
VT2	8	Corresponds with single blasts on east border of quarry
VT3	33, 39, 40, 45, 61, 62	Corresponds with all blasts in east-central portion of quarry
VT4	15, 55, 59	Corresponds with all blasts in southern end of quarry
VT5		

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

- 1. Very few, if any, quarry operational complaints are made regarding noise, dust, or truck traffic. Most complaints focus on quarry blasting and resulting ground vibrations.
- 2. Aside from blast number 55 which occurred on October 1, 2018, most complaints were generated from blasts completed in the northeast and eastern sections of the quarry.
- 3. A percentage (30%) of complaints choose to remain anonymous.
- 4. A large percentage (89%) of complaints (non-anonymous; confirmed blast related) originate from residences south of Drexel Avenue. Most of these were related to blast number 55 which occurred on October 1.
- 5. The largest blast readings at each Payne & Dolan sponsored Vibra-Tech monitors appear to correlate with the proximity of the nearest adjacent blast location.
- 6. None of the blasting events measured by Vibra-Tech had a vibration greater than 0.30 in/sec; the maximum permissible vibration level as outlined in the PDD.
- 7. The corresponding blast data measured by Stantec with the city-owned monitor, closely aligned with the readings at each Payne & Dolan sponsored Vibra-Tech monitors.
- 8. Only one blast later than 12:30 pm resulted in a complaint, the one on October 1 at 3:28 pm.
- 9. An increased number of complaints were made on days with cloudy weather.

CONCLUSIONS AND RECOMMENDATIONS

Based on historical results the quarry appears to be operating within the limits of the PDD. This conclusion is not based on 365/7/24 monitoring, but rather on periodic assessments during small windows of random time periods. Increasing or decreasing the degree or extent of monitoring will likely produce the same results. Thus, it's our opinion that future monitoring should not viewed as a means to find or verify fault with the quarry's compliance with the PDD, but rather to simply confirm the operations remain consistent with the PDD limits. With this in mind, direct observation (visual) monitoring and seismic monitoring adjacent the Franklin quarry should continue to be considered as a tool to gauge the operators on-going compliance with the PDD limits.



November 30, 2018 Page 7 of 5

Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2018

Particulate debris impacts appear minimal around the perimeter of the quarry. Periodic debris sometimes appears adjacent the western quarry property entrance along Rawson Avenue. Continued use of the street sweeper is highly recommended. In addition, use of tarps by all trucks departing the property is highly encouraged.

Seismic monitoring should continue to focus along the southern and eastern side of the quarry due to current operations. The city should consider creating a separate vault location away from the South 51st Street lift station since erroneous blasting events and/or irregularities may be caused by vibrations originating from the lift station equipment and operations. Another option to consider would be to install the monitor in the city-owned vault at the southeast corner of 58th and Drexel Avenue, since the predominance of seismic complaints appear to be originating from residences in this area. However, similar to the Vibra-Tech monitor in this location, prior monitoring in previous years from this vault did not produce higher readings than the monitors installed on the east side of the quarry.

Please feel free to contact Mike Roznowski at 920.278.3200 or <u>mike.roznowski@stantec.com</u> if you have any questions or concerns.

Respectfully,

STANTEC CONSULTING SERVICES INC.

Megan Matheus Environmental Scientist

David Boyd, PE Senior Engineer

Michael B. Roznowski, CHMM Principal

Attachments A - Franklin Quarry Observation Summary – 2018 B - Franklin Quarry Seismic Monitoring Summary – 2018 C - Franklin Quarry Complaint Summary - 2018



ATTACHMENT A

FRANKLIN QUARRY OBSERVATION SUMMARY - 2018

FRANKLIN QUARRY OBSERVATION SUMMARY

Period: 2018

Prepared by: Stantec Consulting Services Inc.

Month	Day		ounced or ounced		Truck ating		weeper ating		Debris on way(s)	Obvious	Airborne Prope	Dust from Quarry erty
Month	Day	Ann.	Unann.	No	Yes	No	Yes	No	Yes	No	Yes	If Yes, Wind Direction (speed - mph)
June	7		1	1			1	1		1		
	12		1	1		1		1		1		
	21	1			1		1	1		1		
	25		1	1			1	1		1		
July	3		1	1			1	1		1		
	11		1	1		1		1		1		
	17	1			1		1	1		1		
	23		1		1		1	1		1		
	30		1	1		1		1		1		
August	7		1	1		1			1		1	NW (light)
	13		1	1		1		1		1		
	23		1	1			1	1		1		
	27		1	1		1			1	1		
Sept	4	1			1		1	1		1		
	11		1	1		1			1	1		
	17		1	1		1		1		1		
	28	1			1	1		1		1		
Oct	3		1	1		1		1		1		
	12		1	1		1			1	1		
	19	1			1		1		1	1		
-	-	5	15	14	6	11	9	15	5	19	1	
		25%	75%	70%	30%	55%	45%	75%	25%	95%	5%	



ATTACHMENT B

FRANKLIN QUARRY SEISMIC MONITORING SUMMARY - 2018

	lents							t the two									
	Stantec Comments							There was a blast the day before and two days after.									
	S Other Location							da, da, da,									
Blast Data antec) ^{2, 3}	S. 51st St. lift c station Lo (S1)								0.115	0.115	0.08				0.11	0.125	0.255
Corresponding Blast Data (Measured by Stantec) ^{2,3}	SE Corner - 58th St. / Drexel (S2)																
Corr (Mea	Time St Measured D	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	9:39 AM	9:39 AM	11:36	Note 5	Note 5	Note 5	11:20 AM	11:09 AM	11:33 AM
(Measured	7351 S. 51st St. (VT2)	0.158													<i>t</i> —		
(Me	7301 S. 51st St. (VT1)		0.145	0.145	0.033	0.033	0.231		0.128	0.128	0.078	0.075	0.06	0.095	0.0	0.1	0.14
	7526 S. 51st. St. (VT3)	0.123	0.11	0.11	0.095	0.095	0.09		0.105	0.105	0.058	0.053	0.105	0.05	0.07	0.045	0.258
by Vibra-Tech) ^{2,3}	SE of Quarry (VT4)	0.033	0.023	0.023	0.168	0.168	0.028		0.028	0.028	N/T	0.028	0.033	N/T	0.025	n/T	0.068
by Vibra	5800 Allwood (VT5)	0.023	N/T	N/T	0.115	0.115	N/T		N/T	N/T	L/Ν	1/N	N/T	N/T	N/T	N/T	N/T
g Blast Data	Location	blast at east side of quarry pit	blast at east side of quarry pit	blast at east side of quarry pit	blast at south end of quarry pit	blast at south end of quarry pit	blast at east side of quarry pit		blast at east side of quarry pit	blast at east side of quarry pit	blast at east side of quarry pit	blast at east central side of quarry pit	blast on SE side of quarry pit	blast at east side of quarry pit	blast at east side of quarry pit	blast at east side of quarry pit	blast at east side of quarry pit
Corresponding Blast Data	Time Measured	12:33 PM si	9:32 AM si	9:32 AM si	12:12 PM e	12:12 PM @	9:54 AM si		9:39 AM si	9:39 AM si	b 11:36 AM si p	11:33 AM C	10:13 AM si	d 1:10 PM si	11:25 AM 8i	11:13 AM ^{si}	11:39 AM si
it Time of ent	Location of Blast on Figure ⁵	ω	14	14	15	15	17		30	30	31	32	33	34	37	38	39
Corresponding Blast at Time of Complaint/Incident	Maybe																
Correspond Com	No Yes	×	×	×	×	×	×		×	×	×	×	×	×	×	×	×
	Temp. (^{°F)} N	42	47	47	81	81	62	66 x	81	81	82	86	76	77	75	76	77
	Precipi- tation	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
ner ¹	Conditions	scattered clouds	partly cloudy	partly cloudy	mostly cloudy	mostly cloudy	mostly cloudy	light rain	partly cloudy	partly cloudy	mostly cloudy	mostly cloudy	mostly cloudy	mostly cloudy	mostly cloudy	mostly cloudy	partly cloudy
Weather ¹	Wind Gusts (mph)	23	90 30	90 30	31	31	21	22	ŭ 0	ŭ O	0	0	0	0	0	0	ů 0
	Wind Speed (mph)	15	19	19	23	23	12	17	ы	Q	ω	12	7	9	ω	വ	ω
	Wind Direction	MNN	NNE	NNE	WSW	WSW	NNN	SE	ŴN	MN	ш	MNM	ENE	ENE	NE	SW	ENE
Complaint: Description	Description	Complainant noted she/he had received complaints from a number of people about a large blast that afternoon, and she/he had felt it too. It was bad enough that she/he thought their living room window would break- but did not.	Complainant indicated it shook her/his house.	Complainant noted (on July 5th) she had received complaints from 4 of her neighbors about the blast.	Complainant noted she/he had received complaints from six of her/his neighbors about the blast.	Complainant noted that this was the strongest blast in 18 years, other large blasts just shake the windows, this one shook her/his entire house.	Complainant filed an official complaint, noted that she heard the big blast while outside, the her dogs in the house were panicked.	Complainant noted (on July 5th) that she had received complaints from 6 of her neighbors about a blast this day.	Anonymous complaint to Alderperson Wilhelm about a particularly large blast this day.	Complainant noted she had received complaints from 4 of her neighbors about the blast.	Complainant noted (on July 5th) she had received complaints from 8 of her neighbors about the blast.	Complainant noted she had received complaints from 5 of her neighbors about the blast.	Official complaint. The blast shook the entire house. They did not request any call back or response. They also noticed another blast, that same day, at 1:11pm.	Official, but anonymous, complaint. The blast rattled the windows and was felt both inside and outside the house.	Official complaint. The blast was clearly felt. No other information was provided in the complaint. The complainant did not request a call back.	Official complaint. The blast was clearly felt. No other information was provided in the complaint. The complainant did not request a call back.	Official complaint. The blast was clearly felt, and shook the house. The complainant did not request a call back.
Complaint: Type of Event	Noise Dust Vibra- Truck Other	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
te/Time	Location of Complainant on Figure ⁴	nnknown	14	unknown	unknown	15	17	unknown	unknown	unknown	unknown	unknown	33	unknown	37	38	39
Complaint: Date/Time	Time	12:30 PM	9:30 AM	9:30 AM	noon	noon	9:56 AM	10:15 AM	9:40 AM	9:30 AM	11:35	11:30 AM	10:13 AM	1:11 PM	11:25 AM	11:14 AM	11:40 AM
Co	Date	12-Mar	25-Apr	25-Apr	1-May	1-May	10-May 9	26-Jun 1	28-Jun	28-Jun 9	28-Jun	5-Jul 1	11-Jul 1-	11-Jul	31-Jul 1	2-Aug 1	10-Aug 1

FRANKLIN QUARRY COMPLAINT SUMMARY Period: 2018 Prepared by: Stantec Consulting Services Inc.



ATTACHMENT C

FRANKLIN QUARRY COMPLAINT SUMMARY - 2018

	Complaint: D	Date/Time			Complaint: pe of Event	Complaint: Description			We	ather ¹			Corresponding Blast Complaint/Inci		Correspond	ding Blast Data	by Vibra	a-Tech) ^{2, 3}		۸)	<i>l</i> easured		Corresponding Measured by S			
Date	Time	Location of Complainant on Figure ⁴	Noise	Dust	Vibra- Truck tion Traffic	Description	Wind Direction	Wind Speed (mph)	Gusts	Conditions	Precipi- tation	Temp. (°F)	No Yes Maybe	Location of Blast on Figure ⁵	Time Measured	Location	5800 Allwood (VT5)	SE of Quarry (VT4)	7526 S. 51st. St. (VT3)	7301 S. 51st St. (VT1)	7351 S. 51st St. (VT2)	Time Measured	SE Corner - 58th St. / Drexel (S2)	S. 51st St. lift station (S1)	Other Location	Stantec Comments
14-Aug	10:00 AM	40			х	Official complaint. The blast was clearly felt. No other information was provided. The complainant did not request a call back.	w	8	0	fair	0	82	x	40	10:07 AM	blast at east side of quarry pit	0.023	0.083	0.295	0.115		10:01 AM		0.255		
14-Aug	10:00 AM	40			x	Unofficial complaint. The blast was clearly felt. The ground shaking was the worst he's felt in the 10 years he's been the School Principal.	W	8	0	fair	0	82	x	40	10:07 AM	blast at east side of quarry pit	0.023	0.083	0.295	0.115		10:01 AM		0.255		
22-Aug	10:30 AM	42	x		x	Official complaint. It caused noise and rattling.	variable	6	0	fair	0	73	x	42	10:36 AM	blast at northeast side of quarry pit	N/T	0.03	0.093	0.24		10:29 AM		0.215		
4-Sep	12:28 PM	45	х		х	Official complaint. No additional information provided.	SW	15	26	partly cloudy	0	88	х	45	12:27 PM	blast at east side of quarry pit	0.03	0.065	0.143	0.078		Note 6				
1-Oct	3:28 PM	unknown			x	Unofficial complaint. He called, said it was the worst blast he has experienced. Although he noted that only recently has he been home during the day. Joel informed him of the official complaint process.	SE	10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	unknown			x	Unofficial complaint. She called, said it was a large blast, has already received calls from 5 of her neighbors. Joel reminded her of the official complaint process.	a SE	10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	unknown			x	Unofficial complaint. He called, said it was the worst blast he has experienced. There should not be any more blasts this bad. Joel informed him of the official complaint process.	SE	10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			х	Unofficial complaint. She called, said it was a large blast, shook the entire house, and she was very upset.	SE	10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			х	Unofficial complaint. He called, said it was the worst blast ever.	SE	10	0	cloudy	0	58	х	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			x	Unofficial complaint and official complaint. He sent an email to Mayor Olson. Said it was the largest blast in 18 years, thinks they have been getting worse, shock the house and rattled things in his house. Thinks such a blast could cause damage to his house foundation that will get worse with repeated quarry blasts. Did not want a call back.	SE	10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			x	Unofficial complaint. Worst quarry blast in 20 years, it shook the house. She had already called the quarry. Wants the quarry monitored.	SE	10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			x	Unofficial complaint. Shook the whole house There are cracks in his basement, he will have them looked at.		10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			x	Unofficial complaint. Blast shook the whole house and she is very concerned. This blast was posted on Facebook. People in her neighborhood have had their basements redone.	SE	10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			x	Official complaint. The blast shook the house felt it on the second floor. Did not want a cal back.		10	0	cloudy	0	58	x	55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				

	Complaint: D	Date/Time			Complai pe of Ev		Complaint: Description			We	eather ¹			Co		ding Blast blaint/Inci	at Time of dent	Correspond	ding Blast Data	by Vibra	a-Tech) ^{2, 3}		۸)	leasured		Corresponding Measured by			
Date	Time	Location of Complainant on Figure ⁴	Noise	Dust	Vibra- tion	Truck Traffic Other	Description	Wind Direction	Wind Speed (mph)	Wind Gusts (mph)	Conditions	Precipi- tation	Temp. (°F)	No	Yes	Maybe	Location of Blast on Figure ⁵	Time Measured	Location	5800 Allwood (VT5)	SE of Quarry (VT4)	7526 S. 51st. St. (VT3)	7301 S. 51st St. (VT1)	7351 S. 51st St. (VT2)	Time Measured	SE Corner - 58th St. / Drexel (S2)	S. 51st St. lift station (S1)	Other Location	Stantec Comments
1-Oct	3:28 PM	55			x		Official complaint. There was a huge bang and the house shook. This was the loudest and most powerful blast she has ever felt. Did not want a call back.	SE	10	0	cloudy	0	58		х		55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			х		Official complaint. The blast was huge, it shook the whole house, felt like an earthquake. She called the quarry, but did not get a call back.	SE	10	0	cloudy	0	58		х		55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			х		Official complaint. This was a louder blast, and he felt the house shaking much more than usual. He is not sure what this is doing to his foundation.	SE	10	0	cloudy	0	58		х		55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			х		Official complaint. It was a large blast, it shook his house noticeably, dishes rattled. Did not request a call back.	SE	10	0	cloudy	0	58		х		55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			x		Unofficial complaint. Strong blast that he could hear and feel. It has been a while since a blast was this big. He also has been smelling asphalt, even on the weekends. He did not request a call back.	SE	10	0	cloudy	0	58		х		55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
1-Oct	3:28 PM	55			x		Official complaint. The blast was extremely loud and powerful. It shook the entire house and caused parrots in two separate cages to fall. This is probably causing structural damage to her home and must stop.	SE	10	0	cloudy	0	58		х		55	15:28	SE portion of quarry	0.1100	0.1680	0.1050	0.0300		Note 6				
11-Oct	12:26 PM	59			x		Unofficial complaint. The complainant called, indicated that the blast shook her house, and that it was bad, but not as bad as the blast on October 1st. She has had enough with this blasting and wants it to stop.	WNW	17	29	mostly cloudy	0	31		х		59	12:16	SE portion of quarry	0.0730	0.1500	0.0950	N/T		Note 6				
11-Oct	12:26 PM	unknown			x		Unofficial complaint. The complainant called, indicated this was the second complaint they have ever filed. That this was not as bad as the blast on October 1st, but it shook his house.	WNW	17	29	mostly cloudy	0	31		x		59	12:16	SE portion of quarry	0.0730	0.1500	0.0950	N/T		Note 6				
16-Oct	11:45 PM	61			x		Official complaint. The complainant indicated there were 3 blasts within 10 to 12 minutes, clearly felt.	SW	24	32	mostly cloudy / windy	0	49			x	61	10:46 AM	blast at east side of quarry pit	N/T	0.0500	0.1400	0.1100		Note 6				Shot blast number was the same for two adjacent blasts.
16-Oct	11:45 PM	61			x		Official complaint. The complainant indicated there were 3 blasts within 10 to 12 minutes, clearly felt.	SW	24	32	mostly cloudy / windy	0	49			x	61	10:50 AM	blast at east side of quarry pit	N/T	0.0430	0.1230	0.1030		Note 6				Shot blast number was the same for two adjacent blasts.
16-Oct	11:45 PM	62			x		Official complaint. The complainant indicated there were 3 blasts within 10 to 12 minutes, clearly felt.	SW	24	32	mostly cloudy / windy	0	49			x	62	10:55 AM	blast at east side of quarry pit	0.0300	0.0600	0.1780	0.0530		Note 6				

Note 1

From weather history.

https://www.wunderground.com/history/

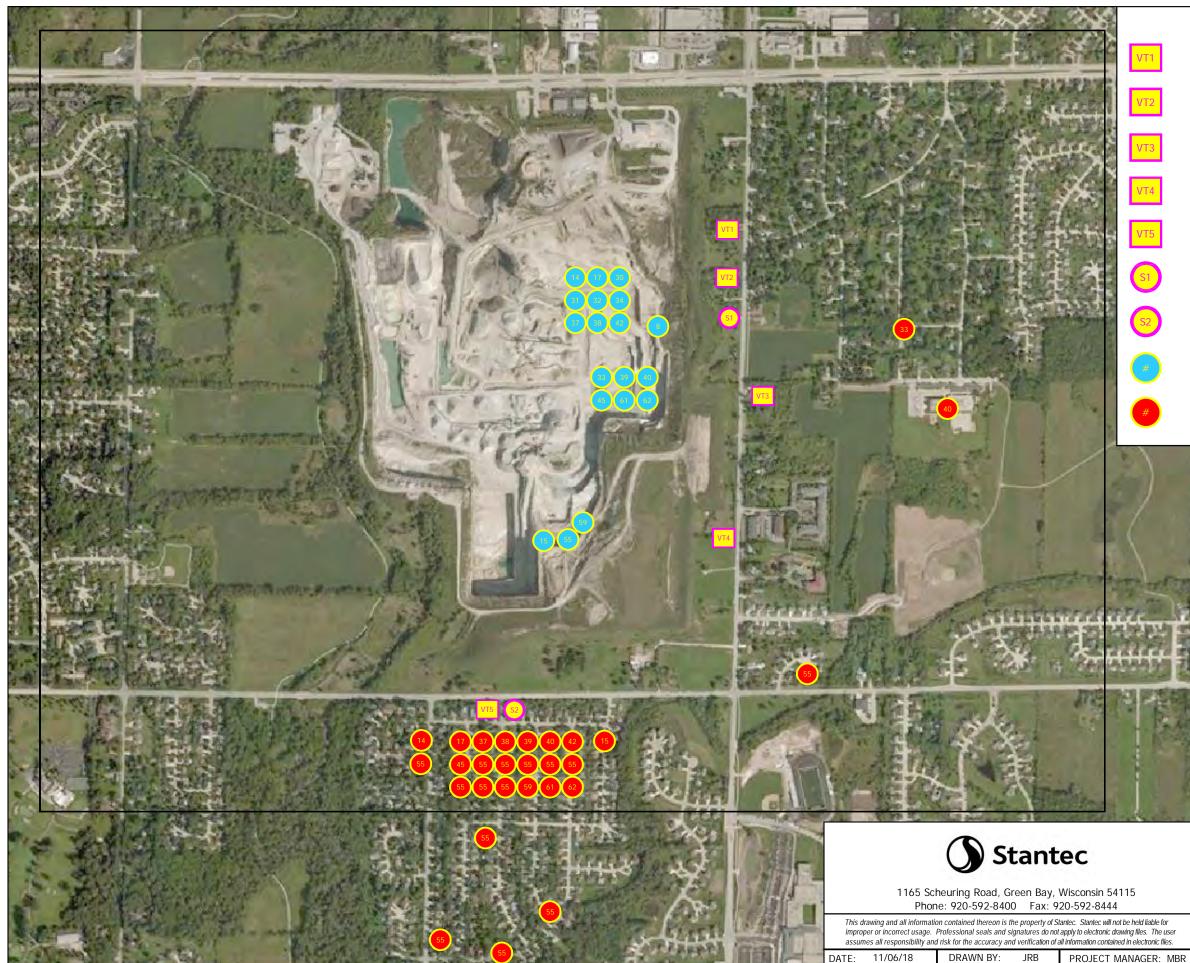
Note 2

Note 3

Note 4 Corresponds to Payne & Dolan actual blast shot number.

Note 5 Stantec was not monitoring at the time of this blast event.

Note 6 Stantec was monitoring at the time of this blast event, however the city-owned monitor used by Stantec was inoperable.



PROJECT NUMBER:

VICINITY OF PAYNE & DOLAN QUARRY CITY OF FRANKLIN, WISCONSIN

193703639

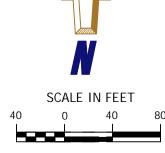
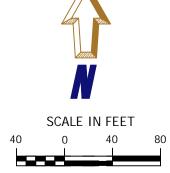


FIGURE 1

SEISMIC COMPLAINTS TRACKING FIGURE





COMPLAINT LOCATIONS # CORRESPONDS TO PAYNE & DOLAN BLAST NUMBER

BLAST LOCATIONS # CORRESPONDS TO PAYNE & DOLAN BLAST NUMBER

(SOUTHEAST CORNER OF 58TH AND DREXEL)

STANTEC MONITOR

STANTEC MONITOR (SOUTH 51ST STREET LIFT STATION)

(7351 SOUTH 51ST STREET) VIBRA-TECH MONITOR

(7526 SOUTH 51ST STREET)

(SOUTH EAST OF QUARRY)

VIBRA-TECH MONITOR

VIBRA-TECH MONITOR

(5800 ALLWOOD)

VIBRA-TECH MONITOR

VIBRA-TECH MONITOR (7301 SOUTH 51ST STREET)

<u>KEY:</u>



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

January 24, 2020

Joel E. Dietl, AICP Planning Manager City of Franklin Planning Department 9229 W. Loomis Road Franklin, Wisconsin 53132 Via email: jdietl@franklinwi.gov

REFERENCE: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2019 Stantec Project: 193703639

Dear Mr. Dietl:

The enclosed information summarizes monitoring activities completed during 2019 by Stantec Consulting Services Inc. (Stantec) pertaining to the Franklin Aggregates, Inc. quarry (owned by Payne & Dolan, Inc.) located at 6211 W Rawson Ave, 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. This letter summarizes these efforts.

DESCRIPTION OF SERVICES

Direct Observation (Visual) Monitoring

Stantec conducted 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 were a combination of announced and unannounced but were all conducted during normal business hours. The days of the week and times of the day for the visits varied. The observations were completed between April and October, when quarry operations were occurring, and airborne dust was more likely. Qualitative data collected included 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
 - o 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
 - o 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, 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



Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2019

The findings of each visit were documented on a standard form that was approved by the City. The form was 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 obtained photos to document site or directly adjacent off-site conditions, and short-duration video clips (e.g., showing dust impacts). These photos and videos were also uploaded to the project FTP site.

In addition to the observations and record review, Stantec also obtained and documented 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 notified the City Planning Manager of any condition (pertaining to air or dust monitoring, or other PDD condition) that we become aware of that exceeded the allowances outlined in the PDD. This communication was completed prior to noon the business day following the day we become aware of any such event.

Seismic Monitoring

Seismic monitoring was completed to document whether the site was compliant with operational parameters defined in the existing 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.

Stantec prepared monthly summaries of blasting data, comparing the Payne & Dolan (Vibra-Tech) unit recordings, to the Stantec (Sauls Seismic) unit recordings. This allowed the City to better evaluate the validity of the current seismic monitoring and the actual blasts being conducted by Payne & Dolan. These monthly reports were posted to the project FTP site for review by City representatives.

Stantec also notified 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 was completed prior to noon the business day following the day we become aware of any such event.

Blast Complaint Evaluation

Periodically through the year the City forwarded to Stantec specific information pertaining to quarry complaints received during the year. Stantec evaluated each one 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



Reference:

City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2019

SUMMARY OF RESULTS

As previously indicated copies of completed observation forms and reports providing a summary of the fixed-location blast monitoring were prepared and posted to the project FTP site for review by City representatives. Thus, this end-of-year summary letter is not intended to describe specific details from each previously posted document. Copies of individual reports are not provided with this summary report.

Direct Observation (Visual) Monitoring

Stantec conducted a total of nine (9) qualitative observation site visits at the quarry. A summary of these visits is provided as Attachment A. Note the following:

- 6 of the 9 visits (67%) were unannounced to representatives of Franklin Aggregates.
- During the announced visits, Stantec was allowed guided access to the property; otherwise all observations were completed from the quarry perimeter.
- A street sweeper was observed during 5 of the 9 visits (53%). We also periodically observed operations of an on-site water truck and sprinkler systems.
 - From 2015 through 2018 the percentage of visits the street sweeper was observed operating was 50%, 57%, 42% and 45%, respectively.
- Noticeable debris (e.g., aggregate; sand) on the adjacent roadways was observed during 6 of the 9 visits (67%).
 - From 2015 through 2017 the percentage of visits with noticeable debris was observed was 26%, 33%, 63% and 25%, respectively.
- Noticeable opacity impacts (e.g., airborne dust) was observed during 5 of the 9 visits (56%). The dust was noticed primarily at the entrance along Rawson Avenue. Upon observation Stantec communicated with the quarry and they dispatched a street sweeper to the area.
 - From 2015 through 2017 the percentage of visits noticeable airborne dust was 26%, 0%, 0% and 5%, respectively.
 - The observations of noticeable airborne opacity coincided with the periods which had the highest wind speed, which at the time ranged from 12 to 17 mph.
- On-site review of quarry records pertaining to dust control measures and recordkeeping appeared to be maintained by site representatives. This is consistent with previous years.
- The quarry operator appears to be following standard protocol (e.g., street sweeper; sprinklers) to minimize off-site impacts. Truck traffic used the west entrance only; thus, no trucks were observed transporting material using the east entrance, therefore the wheel wash was not used. Only site level traffic was observed at the east entrance with no customer products leaving through this entrance.

It is important to note that Attachment A provides merely a small snapshot in time compared to the overall quarry operations during 2019. In addition, a different Stantec employee was assigned to conduct monitoring compared to prior years; this too could have produced additional variability in the results.

Seismic Monitoring

As contracted by the City, Stantec provided remote vibration monitoring using two seismographs colocated 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, 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 Administrative Code, Safety and*



Reference:

City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2019

Professional Services 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.

- In addition to obtaining and reviewing the blast data from the city-owned, fixed seismograph, Stantec also retrieved blasting data from the Vibra-Tech web site, which provides 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 then compared to the Stantec-obtained data.
- Summaries of the seismic data is provided in Attachment B. The previously submitted monthly letter reports provides additional details. Highlights include the following:
 - Between April 1 and December 31, 2019, a total of 140 blasting events occurred. A total of 118 (84%) of these blasts were confirmed by the Stantec monitors.
 - Very few blasts were confirmed by the Payne & Dolan (7, 5%) or Stantec (1, 0.7%) monitors located at 5800 W/ Allwood Drive. Almost all blasts were confirmed by the Payne & Dolan (137, 98%) or Stantec (117, 84%) monitors located at 7301 S. 51st Street. This is because the predominance of blasts occurred along the eastern portion of the quarry, and not the southern portion.
 - The highest PPV readings were consistently measured by the Payne & Dolan monitor compared to the Stantec monitor, indicating the Payne & Dolan monitors may be providing a slightly more conservative PPV measurement. 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.
 - 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.

Blast Complaint Evaluation

A compilation of all complaints received by Stantec for the period January 1 through December 31, 2019 is provided as Attachment C. This was the second year that the City provided to Stantec the detailed complaint data. 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 following highlights the results of the complaint evaluation:

Complaints - General

•	38	complaints – total (Note: several complaints were for multiple reasons and /or blast events)
•	5	complaints – regarding noise
•	4	complaints – regarding dust
٠	1	complaint – miscellaneous
٠	38	complaints – regarding blast events

Complaints - Blast Related

- 35 complaints corresponding to actual blast events
- 2 complaints corresponding to possible blast events
- 1 complaint not corresponding to actual blast events
- 27 complaints complainant location identified



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Reference:			f Franklin, WI – Franklin Aggregates Quarry Monitoring Summary J: 2019
	0	10	households that complained once each

- household that complained two (2) times
- household that complained three (3) times
- 1 household that complained four (4) times
- 1 household that complained eight (8) times
- 8 complaints no name and address provided

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

- 0 complaints east of 51st Street
- 25 complaints south of Drexel Avenue
- 2 complaints west of Root River

Blast Events

- 162 blast events during monitoring period 2019 (shot numbers 1 through 162)
- 23 blast events corresponding to complaints
 - o 2 weather: rain
 - o 12 weather: partly to mostly cloudy, or cloudy
 - o 9 weather: fair or scattered clouds
 - o 12 time: prior to 12:00 pm (noon)
 - o 9 time: after 12:00 pm
- 18 blast events with one (1) complaint
- 2 blast events with two (2) complaints
- 2 blast events with two (2) complaints
- 1 blast events with nine (9) complaints (September 23, 2019)

Quarry Blast Locations Producing Complaints

- 16 eastern area of quarry
- 6 slightly northwest of eastern area of quarry
- 3 southern area of quarry

Monitor Locations (Vibra-Tech) with highest recorded blast readings

Monitor ID	Blast Numbers	Comments
VT1	4; 6; 23; 28; 29; 32; 33; 34; 42; 111; 117; 123; 132; 153	Corresponds with a variety of the blasts in the eastern area of the quarry, along with all of those slightly northwest of this area.
VT2	20; 26; 41; 48; 65; 105; 130; 159	Corresponds with a variety of the blasts in the eastern area of the quarry.
VT3	127	Blast in southern area of quarry.
VT4	None	



Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2019

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

- 1. Very few, if any, quarry operational complaints are made regarding noise, dust, or truck traffic. Most complaints focus on quarry blasting and resulting ground vibrations.
- 2. Aside from blast number 127 which occurred on September 23 in the southern area of the quarry, most complaints were generated from blasts completed in the eastern area of the quarry.
- 3. A fair number of complainants chose to remain anonymous.
- 4. A large percentage of complaints (non-anonymous; confirmed blast related) originate from residences south of Drexel Avenue. Most of these were related to blast number 127 which occurred on September 23. This was the only blast identified in the southern portion of the quarry during the monitoring period.
- 5. No complaints came from households directly east of the quarry, adjacent the majority of blast events.
- 6. Two complaints came from west of the Root River, one of which was well removed into the adjacent neighborhood.
- 7. Blasts along the eastern area of the quarry correspond to the highest readings on monitors in that vicinity; however, no complaints are directly adjacent this area, the complaints are all south of Drexel Avenue.
- 8. In general, the largest blast readings at each Payne & Dolan sponsored Vibra-Tech monitors appear to correlate with the proximity of the nearest adjacent blast location.
- 9. None of the blasting events measured by Vibra-Tech had a vibration greater than 0.30 in/sec.
- 10. The corresponding blast data measured by Stantec with the Sauls Seismic monitors, closely aligned with the readings at each Payne & Dolan sponsored Vibra-Tech monitors.
- 11. Complaints were made on days with varying types of weather. Most, however, were on rainy or cloudy days.

CONCLUSIONS AND RECOMMENDATIONS

Based on historical results, the quarry appears to be operating within the limits of the PDD. This conclusion is based on both 365/7/24 monitoring during the period April-December for seismic monitoring, and also periodic visual assessments during small windows of random time periods. Increasing or decreasing the degree or extent of monitoring will likely produce the same results. Thus, it's our opinion that future monitoring should not be viewed as a means to find or verify fault with the quarry's compliance with the PDD, but rather to simply confirm the operations remain consistent with the PDD limits. With this in mind, direct observation (visual) monitoring and seismic monitoring adjacent the Franklin quarry should continue to be considered as a tool to gauge the operator's on-going compliance with the PDD limits.

Particulate debris impacts continue to appear minimal around the perimeter of the quarry. Periodic debris sometimes appears adjacent the western quarry property entrance along Rawson Avenue. Continued use of the street sweeper is highly recommended. In addition, use of tarps by all trucks departing the property is highly encouraged.

Seismic monitoring should continue to focus along the southern and eastern side of the quarry due to current operations. It is noted as unusual that although blasts along the eastern area of the quarry correspond to the highest readings on monitors in that vicinity, the corresponding complaints do not come



Reference: City of Franklin, WI – Franklin Aggregates Quarry Monitoring Summary Period: 2019

from the adjacent area but instead south of Drexel Avenue. Any blasts in the southern portion of the quarry, which is closer to the residences south of Drexel Avenue, should be closely controlled to minimize blast effects.

Please feel free to contact Mike Roznowski at 920.278.3200 or <u>mike.roznowski@stantec.com</u> if you have any questions or concerns.

Respectfully, **STANTEC CONSULTING SERVICES INC.**

Kristen Gunderson-Inden Environmental Scientist

David Boyd, PE Senior Engineer

Michael B. Roznowski, CHMM Principal

Attachments

- A Franklin Quarry Observation Summary 2019
- B Franklin Quarry Seismic Monitoring Summary 2019
- C Franklin Quarry Complaint Summary 2019



ATTACHMENT A

FRANKLIN QUARRY OBSERVATION SUMMARY - 2019

FRANKLIN QUARRY OBSERVATION SUMMARY

Period: 2019

Prepared by: Stantec Consulting Services Inc.

Month	Day		ounced or ounced		weeper rating		Debris on way(s)	Proper		Dust from Quarry from Traffic on Roadway
Wohan	Day	Ann.	Unann.	No	Yes	No	Yes	No	Yes	Wind Direction (speed - mph)
April	3		1	1			1		1	WSW / 17
	19		1	1			1	1		NW / 0
Мау	7		1	1			1		1	NNW / 14
	13	1			1		1		1	NE / 12
June	14		1		1		1		1	W / 12
July	11		1	1			1	1		NE / 9
August	7	1			1	1		1	1	SW / 3
September	6		1		1	1			1	WSW / 14
October	10	1			1	1		1		ESE / 11
		3	6	4	5	3	6	4	5	
		33%	67%	44%	56%	33%	67%	44%	56%	



ATTACHMENT B

FRANKLIN QUARRY SEISMIC MONITORING SUMMARY - 2019

FRANKLIN QUARRY BLAST MONITORING SUMMARY

Period: 2019

Prepared by: Stantec Consulting Services Inc.

Month	Bla	ists		nfirmed at Allwood		nfirmed at 51st St.		sts PPV dings	exceed	adings ling 0.30 sec		Value at 51st St.	Highest	PPV record	led by P&E) Monitor
		Confirmed by Stantec	P&D	Stantec	P&D	Stantec	P&D	Stantec	P&D	Stantec	P&D	Stantec	7301 S. 51st st.	5800 W. Allwood Dr.	7526 S. 51st St.	SE of Quarry
April	17	16	1	0	17	16	16	1	0	0	0.128	0.098	17	0	0	0
Мау	18	13	1	0	16	13	17	1	0	0	0.130	0.095	9	0	8	0
June	17	16	3	0	17	16	17	0	0	0	0.131	0.104	12	0	5	0
July	21	19	0	0	20	19	17	3	0	0	0.138	0.103	16	0	4	0
August	20	18	0	0	20	18	15	5	0	0	0.105	0.099	15	0	5	0
September	16	14	2	1	16	13	11	4	0	0	0.137	0.118	13	0	2	1
October	18	13	0	0	18	13	17	1	0	0	0.109	0.082	12	0	6	0
November	9	7	0	0	9	7	6	3	0	0	0.090	0.083	6	0	3	0
December	4	2	0	0	4	2	4	0	0	0	0.112	0.115	2	0	2	0
	140	118	7	1	137	117	120	18	0	0			102	0	35	1
	100%	84%	5%	0.7%	98%	84%	87%	13%					74%	0%	25%	0.7%



ATTACHMENT C

FRANKLIN QUARRY COMPLAINT SUMMARY - 2019

FRANKLIN QUARRY COMPLAINT EVALUATION

Period: 2019

Prepared by: Stantec Consulting Services Inc.

	City Compla	of Frank aint: Date				Compla ype of I			Complaint: Description			We	eather ¹					Blast at Tir pmplaint/In	me of Blast or ncident			esponding I ured by Vib		3		Corres (Meas	sponding Blast ured by Stante	Data c) ^{2, 3}	
Date	Tim	ie Co	Location of omplaintant on Figure ⁴	Noise	Dust	Vibra	- Truck Traffie		Description	Wind Direction	Wind Speed (mph)	Wind Gusts (mph)	Conditions	Precipi- tation	Temp. (°F)	No	Yes	Maybe	Location of Blast on Figure ⁵	Time Measured	Location	5800 Allwood (VT4)	SE of Quarry (VT3)	7526 S. 51st. St. (VT2)	7301 S. 51st St. (VT1)	Time Measured	5800 W. Allwood Dr. (S2)	7301 S. 51st St. (S1)	Stantec Comments
10-Jan	12:38	PM	4			1			Official complaint. It was strongly felt and rattled the windows and shook the house. Did not request a call back.	Calm	0	0	partly cloudy	0	23		1		4	12:38 PM	eastern portion of quarry	N/T	0.0280	0.0630	0.1450	Note 5			
15-Jan	10:56	АМ	6			1			Unofficial complaint to Ald. Barber. No details provided, other than a comment that it was a very noticeable blast.	WSW	16	28	cloudy	0	30		1		6	10:56 AM	eastern portion of quarry	N/T	0.0250	0.0680	0.1200	Note 5			
25-Jan	6:56 /	AM	NA					1	Unofficial complaint (email to Ald. Barber) complaint about the City's complaint process. Taken to the 1-31-19 QMC meeting.											NA	NA	NA	NA	NA	NA				
21-Mar	11:56	АМ	NA			1			Official complaint, but the complainant wished to remain confidential.	W	14	0	Fair	0	48		1		20	11:57 AM	eastern portion of quarry	N/T	0.0630	0.2200	0.1450	Note 5			
21-Mar	11:56	AM	20			1			Unofficial complaint. Complaintant did not request a call back.	W	14	0	Fair	0	48		1		20	11:57 AM	eastern portion of quarry	N/T	0.0630	0.2200	0.1450	Note 5			
21-Mar	11:56	АМ	20			1			Unofficial complaint. Complaintant did not request a call back.	W	14	0	Fair	0	48		1		20	11:57 AM	eastern portion of quarry	N/T	0.0630	0.2200	0.1450	Note 5			
2-Apr	9:53 /	АМ	23			1			Official complaint. Complaintant indicated that there were two blasts at 9:53 and two blasts at 9:55. However, P&D records indicate only one blast at 9:53 and one blast at 9:55. Complaintant indicated they did not want the City to contact them.	NW	6	0	Light Rain	0	41		1		23	9:53 AM	eastern portion of quarry	N/T	0.0380	0.0900	0.1250	9:53 AM		0.08	
5-Apr	10:45	AM	26			1			Official complaint. Complaintant indicated that the blast shook the house. That it was a cloudy day and that they said they avoid blasting on cloudy days. And that it is a public nuisance. Joel called, left a message.	E	12	0	Partly Cloudy	0	49		1		26	10:45 AM	eastern portion of quarry	0.0200	0.0580	0.1530	0.0930	10:45 AM		0.05	
8-Apr	10:24	AM	28			1			Official complaint. Complaintant indicated that the blast shook the house and rattled the windows, but was barely felt outside. Did not	SW	9	0	Fair	0	71			1	28	12:21 PM	eastern portion of quarry	N/T	0.0380	0.1050	0.1330	12:22 PM		0.11	Atantec assumes the "time" of the complaint may have been incorrectly logged.
			29			1			request a call back.	SW	9	0	Fair	0	71			1	29	12:24 PM	eastern portion of quarry	N/T	0.0430	0.0850	0.1180	12:24 PM		0.1	
15 Aug	11.45		32			1			Official complaint. Complaintant indicated that there were two blasts, the first blast was strong, but the second blast was very strong,	SSW	13	0	Fair	0	50		1		32	11:45 AM	eastern portion of quarry	N/T	0.0250	0.1300	0.1580	11:45 AM		0.18	
15-Apr	11:45	AIVI	33			1			rattled the windows and the house did shake. Joel called resident and confirmed it was the second blast that was the worst.	SSW	13	0	Fair	0	50		1		33	11:47 AM	east-northeast portion of quarry	N/T	N/T	0.0380	0.0580	Note 6			
15-Apr	11:45	AM	NA			1			Confidential complaint. Complaintant did not want any information about them released. Did indicate that both blasts shook the house	SSW	13	0	Fair	0	50		1		32	11:45 AM	eastern portion of quarry	N/T	0.0250	0.1300	0.1580	11:45 AM		0.18	
19-2401			NA			1			and a picture fell off the wall. Did not want a call back.	SSW	13	0	Fair	0	50		1		33	11:47 AM	east-northeast portion of quarry	N/T	N/T	0.0380	0.0580	Note 6			

						Official complaint. Complaintant said the																		
19-Apr	9:30 AM	34			1	blast rattled the house and windows, and that ongoing blasts will damage the window seals. Requested a call back, but did not submit official complaint until 5-29-19.	N	22	36	Partly Cloudy / Windy	0	45	1	34	9:38 AM	east-northeast portion of quarry	N/T	N/T	0.0650	0.2080	9:38 AM		0.12	
		41			1	Unofficial complaint. Two very large blasts	NNE	15	25	Mostly Cloudy	0	44	1	41	1:04 PM	eastern portion of quarry	N/T	0.0300	0.2250	0.1380	1:04 PM		0.08	
7-May	1:00 PM	42			1	 within a few minutes of one another. Complaintnant did not request a call back. 	NNE	15	25	Mostly Cloudy	0	44	1	42	1:07 PM	eastern portion of quarry	N/T	0.0400	0.0900	0.1200	1:07 PM		0.09	
20-May	2:35 PM	48			1	Official complaint. Complaintant felt the blast, and there was another at 2:44pm. Did not want a call back.	E	3	0	Cloudy	0	47	1	48	2:34 PM	eastern portion of quarry	0.0200	0.0480	0.1150	0.0700	2:44 PM		0.085	
14-Jun	10:08 AM	NA			1	Confidential complaint. Complaintant did not want any information about them released. Did indicate that the blast shook the house and spilled their coffee cup. Did not want a call back.	SW	20	37	Mostly Cloudy	0	79	1	65	10:07 AM	eastern portion of quarry	0.0280	0.0500	0.1230	0.1100	10:07 AM		0.065	
15-Aug	11:38 AM	105			1	Official complaint. Blast was felt both inside and outside the house, it was very loud and shook the house. Did not want a call back.	NNE	14	0	Partly Cloudy	0	74	1	105	11:37 AM	eastern portion of quarry	N/T	0.090	0.190	0.113	11:37 AM		0.10	
15-Aug	11:38 AM	105			1	Official complaint. Very large blast that shook the house and the floor. Staff called on 10/9/19 (1:51pm), complainant said that limits should be lowered.	NNE	14	0	Partly Cloudy	0	74	1	105	11:37 AM	eastern portion of quarry	N/T	0.090	0.190	0.113	11:37 AM		0.10	
15-Aug	11:38 AM	105			1	Official complaint. Bigger blast, rattled doors and windows. Staff left a voice message on 10/9/19 (1:58pm).	NNE	14	0	Partly Cloudy	0	74	1	105	11:37 AM	eastern portion of quarry	N/T	0.090	0.190	0.113	11:37 AM		0.10	
23-Aug	11:06 AM	111			1	Official complaint. Blast shook the home, doors, and windows. Did not want a call back.	ENE	14	0	Mostly Cloudy	0	72	1	111	11:05 AM	east-northeast portion of quarry	N/T	0.025	0.050	0.080	11:06 AM		0.07	
28-Aug	4:00 PM	NA		1		Unofficial complaint about gravel on Rawson Avenue, most from the quarry, possibly some from other construction sites.	WSW	20	29	Partly Cloudy	0	75		NA	NA	NA	NA	NA	NA	NA	NA		NA	
5-Sep	12:25 PM	117	1	1	1	Official complaint. Blast rattled the windows and knocked a rack off the wall. WANTS A CALL BACK. Staff left a voice message on 10/9/19 (2:00pm).	ESE	9	0	Fair	0	69	1	117	12:25 PM	eastern portion of quarry	N/T	N/T	0.090	0.215	Note 6			
16-Sep	unknown	123			1	Unofficial complaint noted she had received three complaints about a blast this day, and that there were complaints on Facebook also.	W	16	24	Mostly Cloudy	0	83	1	123	11:10 AM	east-northeast portion of quarry	N/T	N/T	0.053	0.128	11:10 AM		0.09	
23-Sep	11:02 AM	127			1	Official complaint. Staff called on 10/9/19 (2:10pm), complainant said that this blast activated her security alarm.	WNW	18	26	Fair	0	71	1	127	11:01 AM	southern portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09		
23-Sep	11:02 AM	127	1		1	Official complaint. This blast made waves in the pool, extremely loud.	WNW	18	26	Fair	0	71	1	127	11:01 AM	southern portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09		
23-Sep	11:02 AM	NA			1	Official complaint. Confidential	WNW	18	26	Fair	0	71	1	127	11:01 AM	southern portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09		
23-Sep	11:02 AM	127	1		1	Official complaint. No visible damage but foundation damage would be unknown.	WNW	18	26	Fair	0	71	1	127	11:01 AM	southern portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09		

23-Sep	11:02 AM	127			1	Official complaint. Terrible shake of our house, worse than we have previously experience during our 45 years living at same residence.	WNW	18	26	Fair	0	71		1	127	southern 11:01 AM portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09	
23-Sep	11:02 AM	127			1	Official complaint.	WNW	18	26	Fair	0	71		1	127	southern 11:01 AM portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09	
23-Sep	11:02 AM	127			1	Official complaint. Bigger blast, rattled doors and windows. Staff left a voice message on 10/9/19 (1:58pm).	WNW	18	26	Fair	0	71		1	127	southern 11:01 AM portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09	
23-Sep	11:02 AM	127			1	Official complaint. Staff called on 10/9/19 (2:22pm), blast within PDD limits.	WNW	18	26	Fair	0	71		1	127	southern 11:01 AM portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09	
23-Sep	11:02 AM	127			1	Official complaint. Called back and provided copy of Stantec Report.	WNW	18	26	Fair	0	71		1	127	southern 11:01 AM portion of quarry	0.090	0.138	0.083	0.030	11:04 AM	0.09	
26-Sep	1:07pm	130			1	Official complaint. Long vibration, it sounded different.	W	15	26	Fair	0	70		1	130	eastern 1:05 PM portion of quarry	0.025	0.083	0.243	0.153	1:06 PM	0.11	
27-Sep	1:05pm	NA			1	Official complaint. Blast was extremely tiny compared to 9/23 blast.	S	10	0	cloudy	0	66	1		NA	NA NA	NA	NA	NA	NA	Note 7	NA	
23-Sep	1:45pm	NA		1		Official complaint. No cover on dump trucks.	WNW	22	35	Fair / Cloudy	0	74			NA	NA NA	NA	NA	NA	NA	NA	NA	
1-Oct	10:47am	NA	1		1	Unofficial complaint.	W	8	0	Light Rain	0	75		1	132	east-northeast 10:47 AM portion of quarry	N/T	N/T	0.043	0.055	10:47 AM	0.06	
12-Nov	11:10am	153			1	Complainant did not request a call back.	NW	12	0	fair	0	16		1	153	10:38 AM portion of quarry	NA	0.025	0.050	0.058	10:38 AM	0.06	
20-Nov	9:41am	NA		1		Huge build-up on Rawson Ave, it may be gravel (not confirmed). Quarry took clean up action, which was verified by DPW.	S	5	0	Haze	0	42			NA	NA NA	NA	NA	NA	NA	NA	NA	
2-Dec	12:12pm	159	1		1	Official complaint. Rattled windows and scared dogs.	NW	9	0	cloudy	0	33		1	159	eastern 12:11 PM portion of quarry	N/T	0.048	0.125	0.058	Note 6		

From weather history. <u>https://www.wunderground.com/history/</u>

Note 2 Blast data is the highest Peak Particle Velocity (PPV) value (in/sec) recorded (longitudinal, transverse, or vertical) at monitor location. (N/T = monitor verification of blast was "not triggered")

Note 3 Monitor with highest PPV measurement is in red bold font.

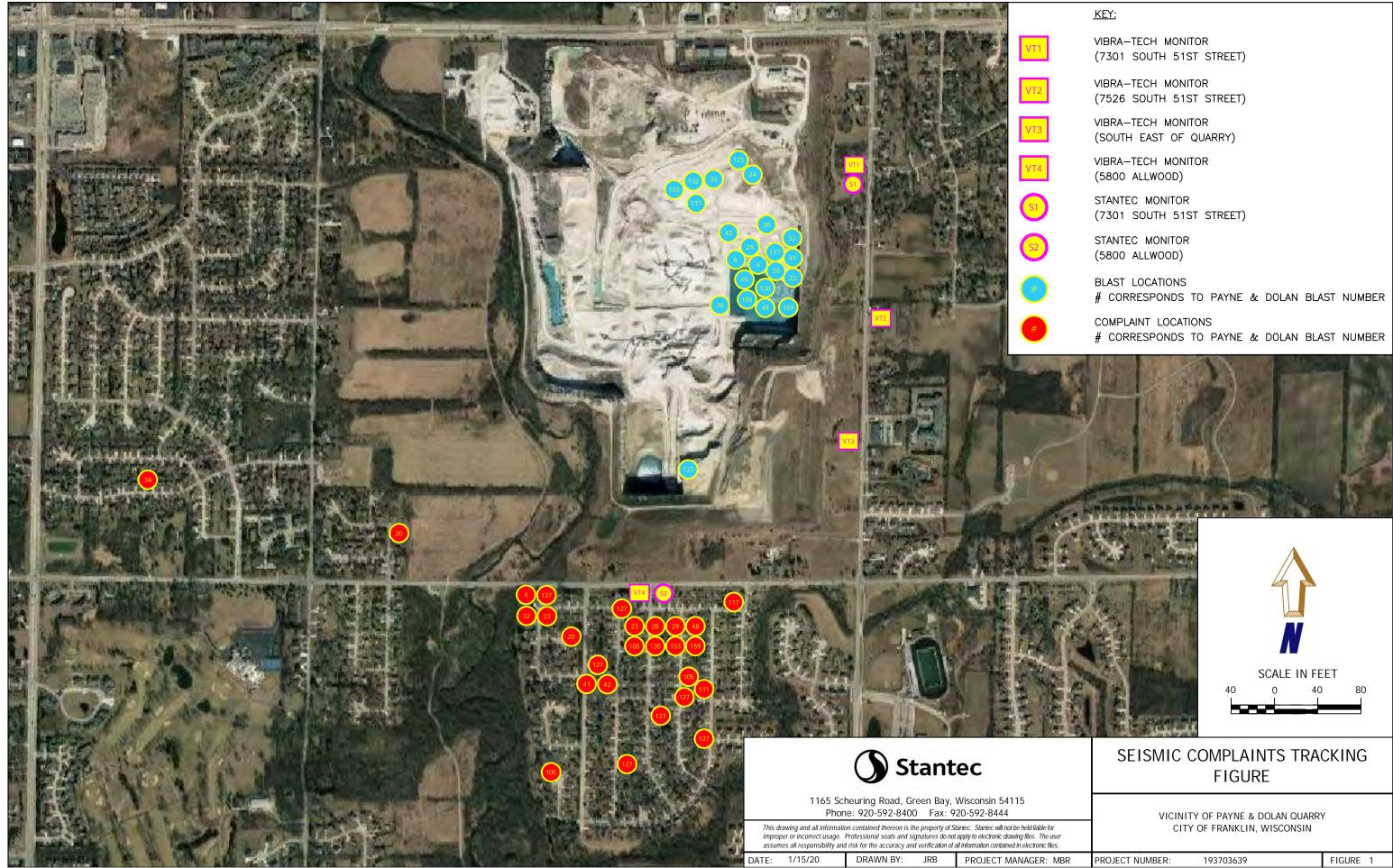
Note 4 Corresponds to Payne & Dolan actual blast shot number.

Note 5 Stantec was not monitoring at the time of this blast event.

Blast complaint. Actual blast did occur. Stantec monitors were operating but did not detect blast event. Note 6

Note 7 Blast complaint. Actual blast did NOT occur. Stantec monitors were operating but did not detect blast event.

Note 1



1	<u> /</u>	L