

# CHARTER TOWNSHIP OF GARFIELD TOWN BOARD MEETING

Tuesday, October 23, 2018 at 6:00pm  
Garfield Township Hall  
3848 Veterans Drive  
Traverse City, MI 49684  
Ph: (231) 941-1620

## A G E N D A

### ORDER OF BUSINESS

**Call meeting to order**

**Pledge of Allegiance**

**Roll call of Board Members**

#### **1. Public Comment**

##### **Public Comment Guidelines:**

Any person shall be permitted to address a meeting of The Township Board, which is required to be open to the public under the provision of the Michigan Open Meetings Act, as amended. (MCLA 15.261, et.seq.) Public Comment shall be carried out in accordance with the following Board Rules and Procedures: a.) any person wishing to address the Board is requested to state his or her name and address. b.) No person shall be allowed to speak more than once on the same matter, excluding time needed to answer Township Board Member's questions. Where constrained by available time the Chairperson may limit the amount of time each person will be allowed to speak to (3) minutes. 1.) The Chairperson may at his or her own discretion, extend the amount of time any person is allowed to speak. 2.) Whenever a Group wishes to address a Committee, the Chairperson may require that the Group designate a spokesperson; the Chairperson shall control the amount of time the spokesperson shall be allowed to speak when constrained by available time.

#### **2. Review and approval of the Agenda - Conflict of Interest**

#### **3. Consent Calendar**

The purpose of the Consent calendar is to expedite business by grouping non-controversial items together to be dealt with in one Board motion without discussion. Any member of the Board, staff or the public may ask that any item on the Consent Calendar be removed there from and placed elsewhere on the Agenda for full discussion. Such requests will be automatically respected. If any item is not removed from the Consent Calendar, the action noted in parentheses on the Agenda is approved by a single Board action adopting the Consent Calendar.

##### **a. Minutes**

October 9, 2018 Regular Session (Recommend Approval)

##### **b. Bills -**

General Fund \$ 310,134.47  
(Recommend Approval)

##### **Gourdie-Fraser**

Developer's Escrow Fund – Storm Water Review	\$ 1,542.50
Developer's Escrow Fund – Utility Plan Review, Oversight & Closeout	3,250.00
<u>Utility Receiving Fund</u>	<u>20,520.00</u>
<b>Total</b>	<b>\$25,312.50</b>

(Recommend Approval)

- c. Application for Progress Payment #3 on the Boardman Valley Nature Preserve Site Improvements to Elmer's Crane and Dozer for \$82,703.75 (Recommend Approval)
- d. Acceptance of Close-out and Turnover documents for Traditions at Ashland Park (Recommend Approval)
- e. Acceptance of Close-out and Turnover documents for Chelsea Park (Final Phase) (Recommend Approval)

**4. Items Removed from the Consent Calendar**

**5. Correspondence**

**6. Reports**

- a. Construction Report
- b. County Commissioner's Report
- c. Northflight Report
- d. Treasurer's Report
- e. Supervisor's Report

**7. Unfinished Business**

**8. New Business**

- a. Consideration of Consumers Utility Easement/Water Main Crossing Request
- b. Consideration of conducting a noise study for car washes
- c. Consideration of going into closed session to discuss attorney's opinion letter and real estate purchase relating to the Tart Trail

**9. Public Comment**

**10. Other Business**

**11. Adjournment**

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Lanie McManus, Clerk

The Garfield Township Board will provide necessary reasonable auxiliary aids and services, such as signers for hearing impaired and audio tapes of printed materials being considered at the meeting to individuals with disabilities upon the provision of reasonable advance notice to the Garfield Township Board. Individuals with disabilities requiring auxiliary aids or services should contact the Garfield Township Board by writing or calling Lanie McManus, Clerk, Ph: (231) 941-1620, or TDD #922-4412.

**CHARTER TOWNSHIP OF GARFIELD  
TOWN BOARD MEETING  
October 9, 2018**

Supervisor Korn called the Town Board Meeting to order on October 9, 2018 at 6:00 p.m. at the Garfield Township Hall, 3848 Veterans Drive, Traverse City, Michigan.

**Pledge of Allegiance**

**Roll Call of Board Members**

Present: Denise Schmuckal, Lanie McManus, Jeane Blood Law, Molly Agostinelli, Steve Duell, Dan Walters and Chuck Korn

Staff Present: Rob Larrea, Erik Perdonik

**1. Public Comment (6:00)**

Matt Cowall, representing the Joint Recreation Authority reminded board members of the public visioning sessions and urged them to attend. He also discussed the contingency resolution in case the Recreation Authority should ever dissolve.

**2. Review and Approval of the Agenda - Conflict of Interest (6:04)**

Duell asked to add Noise Ordinance – Carwashes under Other Business. Schmuckal asked to add Planning Director actions under the Personnel Committee Report.

*Agostinelli moved and Blood Law seconded to approve the agenda as amended with the preceding additions.*

*Yeas: Agostinelli, Blood Law, Duell, Schmuckal, Walters, McManus, Korn  
Nays: None*

**3. Consent Calendar (6:05)**

**a. Minutes**

**September 25, 2018 (Recommend Approval)**

**b. Bills**

General Fund	\$275,763.03
(Recommend Approval)	

**c. MTT Update (Receive and File)**

**d. PD 2018-100 Schostak Brothers & Company Inc./Amerco Real Estate Company - Introduce and schedule for Public Hearing on November 13, 2018**

Consent Calendar Item 3.d was removed to item 4.a.

*Schmuckal moved and Duell seconded to approve the Consent Calendar as amended.*

*Yeas: Schmuckal, Duell, Agostinelli, Blood Law, Walters, McManus, Korn*

*Nays: None*

**4. Items removed from the Consent Calendar (6:05)**

**a. PD 2018-100 Schostak Brothers & Company Inc./Amerco Real Estate Company  
Introduce and schedule for Public Hearing on November 13, 2018**

Larrea explained that this was a Proposal from Shostak Brothers and UHaul for two amendments to the Zoning Ordinance. These amendments would add the use and a new definition to the ordinance. Proper procedure is being followed and now the proposal is in front of the Board to determine if they wish to rule differently on the matter.

*Duell moved and Blood Law seconded THAT application Z-2017-04 BE SCHEDULED for public hearing for the Garfield Township Board meeting to be held on November 13, 2018.*

*Yeas: Duell, Blood Law, Schmuckal, Walters, Agostinelli, McManus, Korn*

*Nays: None*

**5. Correspondence (6:11)**

- a. Grand Traverse Conservation District – September 2018 Report**
- b. Email from Julie Clark – Boardman Lake Loop Update**

**6. Reports**

**a. Sheriff's Report (6:12)**

Lt. Barsheff said that there were 1,398 calls for service in Garfield Township in September which accounted for 41% of all calls in the county. He reported on community events and the sheriff's department's role in many of them. The speed sign will be placed on E. Silver Lake Road. Drug Take Back day is coming up on October 27<sup>th</sup>.

**b. County Commissioner's Report (6:16)**

No commissioner present

**c. Personnel Committee Report (6:16)**

- (i) Consideration of the hiring of Karen Leaver for the position of Office Coordinator  
After interviews, the Personnel Committee recommends hiring Karen Leaver for the Office Coordinator position. She can begin in November.

*Schmuckal moved to hire Karen Leaver for the position of Office Coordinator and Blood Law seconded.*

*Yeas: Schmuckal, Blood Law, Duell, Walters, Agostinelli, McManus, Korn*  
*Nays: None*

(ii) **Planner Position**

Planner Director Rob Larrea has tendered his resignation and ads have been placed. All applications for the vacancy are due on October 26<sup>th</sup>. Board members thanked him for his years of service to the Township. Deputy Planner Erik Perdonik will be the Acting Planning Director and the Personnel Committee recommends that his salary reflect his added duties.

*Schmuckal moved and McManus seconded to upgrade Erik Perdonik's salary to that of the Planning Director's salary while he is the Acting Planning Director.*

*Yeas: Schmuckal, McManus, Duell, Agostinelli, Walters, Blood Law, Korn*  
*Nays: None*

**d. Clerk's Report (6:22)**

McManus said the absentee ballots have been going out and approximately 2500 have been received to date.

**e. Supervisor's Report (6:25)**

Korn said that he has been on vacation. He added that an official opinion was expected shortly in the short term rental matter.

**7. Unfinished Business**

**a. PD 2018-99 – Public Hearing – Minor Revision to Floodplain Management Ordinance – Amendment No. 1 to Ordinance No. 72 and Consideration of Resolution 2018-35-T, a resolution to adopt Amendment One to Garfield Township Ordinance No. 72 (6:27)**

Larrea said that this item is a minor revision to the numbers in the official document. Korn opened the Public Hearing 6:28pm and upon seeing no one wishing to speak, closed the Public Hearing.

*Schmuckal moved THAT Resolution 2018-35-T adopting Amendment One to Charter Township of Garfield Ordinance No. 72, as attached to PD Report 2018-99, BE ADOPTED. Blood Law seconded the motion.*

*Yeas: Schmuckal, Blood Law, Duell, Agostinelli, Walters, McManus, Korn*  
*Nays: None*

**b. Consideration of Resolution 2018-31-T, the 2019 Budget Resolution for Grand Traverse Metro Emergency Services Authority (6:29)**

Board members expressed concerns with the administration of the current budget, the 4-2 votes, and failure to address the Articles of Incorporation and leases, and the 2019 budget as presented.

*Agostinelli moved and Schmuckal seconded to adopt the 2019 Budget Resolution for Grand Traverse Metro Emergency Services Authority.*

*Yeas: Walters*

*Nays: Schmuckal, Duell, Blood Law, Agostinelli, McManus, Korn*

## **8. New Business**

### **a. Matt Cowall - LIAA Contract (6:34)**

Cowall said that this is a Revised Contract for the television services that LIAA provides. Only two changes will be noticeable to the Township. The percentage of shared funds has been lowered and now LIAA will pay for equipment operators.

*Agostinelli moved to adopt the Amended and Restated Contract between the Charter Township of Garfield and LIAA. Schmuckal seconded the motion.*

*Yeas: Agostinelli, Schmuckal, Duell, Walters, Blood Law, McManus, Korn*

*Nays: None*

### **b. Consideration of Amending the Industrial Tax Exemption agreement between the Charter Township of Garfield and RJG, Inc. to add an additional 10 years to the length (6:41)**

Korn said that RJG has done everything asked of them and recommends extending the Tax Exemption until 2028.

*Agostinelli moved and Walters seconded to adopt Resolution 2018-36-T, approving an amendment to and extension of, Industrial Facilities Exemption Certificate 2017-018 for RJG Technologies, Inc.*

*Yeas: Agostinelli, Walters, Duell, McManus, Schmuckal, Blood Law, Korn*

*Nays: None*

### **c. 2018 Appointments – Highlighted list of appointments expiring on 12/31/2018 (6:44)**

A list of appointments was given to board members in the packet and they were reminded that they need to apply for appointments by October 30<sup>th</sup>.

### **d. PD 2018-95 – Direction/Action regarding Silver Lake Recreation Area Improvements (6:49)**

Erik Perdonik said that Park Commissioners recently walked through the park and reviewed what needed to be done. The Park Commission is asking for a motion to spend up to \$5,000 to plant trees for the buffer along Silver Lake Road to shield homes across the street from view.

*Schmuckal moved to allow up to \$5,000 for 6 or more evergreens to be placed in the buffer area alongside E. Silver Lake Road. Blood Law seconded.*

*Yeas: Schmuckal, Blood Law, Agostinelli, Walters, Duell, McManus, Korn*  
*Nays: None*

Park Commissioners also wished to have improvements to the Well House and a sidewalk included in the 2019 budget. Nets at the basketball courts need to be completed.

**9. Public Comment (6:58)**

Engineer Jennifer Hodges said that the tank visit will be held on October 23<sup>rd</sup> at 5pm.

**10. Other Business (7:00)**

Duell talked about the noise ordinance as it pertains to car washes. He would like the Board to determine the justification for the 40 decibel number. Board members discussed and decided to put that item on the Oct 23<sup>rd</sup> agenda.

McManus said there needs to be a study session for the 2019 Budget. She will message everyone to determine a date.

Agostinelli stated that a Building Committee meeting also is needed in the near future.

**11. Adjournment**

*Schmuckal moved to adjourn the meeting at 7:15 p.m.*

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Chuck Korn, Supervisor  
Charter Township of Garfield  
3848 Veterans Drive  
Traverse City, MI 49684

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Lanie McManus, Clerk  
Charter Township of Garfield  
3848 Veterans Drive  
Traverse City, MI 49684

CHECK DISBURSEMENT REPORT FOR TOWNSHIP OF GARFIELD  
 CHECK DATE FROM 10/18 - 10/18/2018  
 Bank

Check Date	Bank	Check #	Payee	Description	GL #	Amount
10/18/2018	GEN	37288	AFLAC	AFLAC	101-000-227.001	637.34
10/18/2018	GEN	37289	AMERICAN WASTE	3394830	308-000-880.001	168.00
		37289		8642317	308-000-880.016	22.00
		37289		3394780	308-000-935.000	115.00
						<u>305.00</u>
10/18/2018	GEN	37290	AMERICAN WASTE	3394790	101-265-935.604	25.00
10/18/2018	GEN	37291	ANNE WENDLING		101-101-805.000	161.00
		37291			101-400-805.000	92.50
						<u>253.50</u>
10/18/2018	GEN	37292	BAIRD, COTTER & BISHOP, P.C.	SEWER AND WATER	101-215-701.303	1,260.00
10/18/2018	GEN	37293	BLUE CROSS BLUE SHIELD OF MICHIGAN	INSURANCE	101-851-873.030	18,021.82
10/18/2018	GEN	37294	BRENDA BURROWS	FRONT DESK	101-101-805.000	637.50
10/18/2018	GEN	37295	CITY OF TRAVERSE CITY	170975-94720	101-000-084.861	182.71
		37295		170975-94720	101-448-920.005	554.41
						<u>737.12</u>
10/18/2018	GEN	37296	CONSUMERS ENERGY	100018131597	101-448-920.005	24.61
10/18/2018	GEN	37297	CONSUMERS ENERGY	100000311801	101-000-084.861	1,462.00
		37297		100000311801	101-448-920.005	6,022.67
						<u>7,484.67</u>
10/18/2018	GEN	37298	DTE ENERGY	910020833133	101-265-920.601	49.54
10/18/2018	GEN	37299	DTE ENERGY	910020833257	101-265-920.601	51.01
10/18/2018	GEN	37300	EAST BAY TOWNSHIP	MCI TICKET BOOKS	101-412-726.000	346.48
10/18/2018	GEN	37301	ENGINEERED PROTECTION SYS.	EPS	101-265-935.606	365.40
10/18/2018	GEN	37302	ESCH LAWN MAINTENANCE, LLC	WOODMERE	101-265-935.602	515.00
10/18/2018	GEN	37303	ESCH LAWN MAINTENANCE, LLC	SILVER LAKE	308-000-935.000	1,380.00
10/18/2018	GEN	37304	ESS	BALLOTS - EXPRESS VOTE	101-191-726.000	75.80
10/18/2018	GEN	37305	GARFIELD CHARTER TOWNSHIP	ELECTION HELP	101-191-701.000	555.00
10/18/2018	GEN	37306	GBS INC	STICKERS	101-191-726.000	138.18
10/18/2018	GEN	37307	GRAND TRAVERSE CONSERVATION DI	4TH QTR SVCS	308-000-880.008	11,500.00
10/18/2018	GEN	37308	GRAND TRAVERSE COUNTY	SHERIFF - COUNTY PATROL OCT-DEC 2018	101-301-830.000	253,990.75

**3. b.**



Check Date	Bank	Check #	Payee	Description	GL #	Amount
10/18/2018	GEN	37309	GRAND TRAVERSE COUNTY	2018 SPRING YARD WASTE	101-747-880.007	686.00
10/18/2018	GEN	37310	GRAND TRAVERSE COUNTY DPW	51058021	101-265-920.602	899.55
10/18/2018	GEN	37311	GRAND TRAVERSE COUNTY DPW	5590511	308-000-935.000	11.50
10/18/2018	GEN	37312	I.T. RIGHT	MONITOR	101-258-935.015	145.00
10/18/2018	GEN	37313	INTEGRITY BUSINESS SOLUTIONS	SUPPLIES	101-101-726.000	39.92
10/18/2018	GEN	37314	LAND INFORMATION ACCESS ASSOC	WEBSITE SUPPORT	101-101-960.000	32.50
10/18/2018	GEN	37315	LANDGREEN LAWCARE	ROUND 5 FERTILIZER	101-265-935.602	1,267.60
10/18/2018	GEN	37316	LAUTNER IRRIGATION INC	SPRING START UP SVC	101-265-935.602	293.35
10/18/2018	GEN	37317	LAUTNER IRRIGATION INC	SPRING START UP SVC	308-000-935.000	728.14
10/18/2018	GEN	37318	MAPLE RIVER DIRECT MAIL	BALLOT MAILING	101-191-726.001	3.03
10/18/2018	GEN	37319	NORTHERN MI JANITORIAL SUP	SUPPLIES	101-265-726.003	206.80
10/18/2018	GEN	37320	OLSON, BZDOK, & HOWARD	FOIA - EMILY	101-101-801.002	435.00
10/18/2018	GEN	37321	PITNEY BOWES INC.	LEASING CHARGES	101-101-726.001	393.63
10/18/2018	GEN	37322	PLANNING & ZONING CENTER	SUBSCRIPTION	101-400-965.000	340.00
10/18/2018	GEN	37323	RUBY CLEANING SERVICE	CONTRACTED SVCS	101-265-935.603	1,150.00
10/18/2018	GEN	37324	RUBY CLEANING SERVICE	CONTRACTED SVCS	308-000-935.000	225.00
10/18/2018	GEN	37325	SONDEE, RACINE, DOREN	CPO SHORT TERM RENTALS	101-400-801.000	148.00
10/18/2018	GEN	37326	STAPLES	SUPPLIES	101-101-726.000	138.13
		37326		SUPPLIES	101-215-726.000	35.96
		37326		SUPPLIES	101-371-726.000	15.09
						<u>189.18</u>
10/18/2018	GEN	37327	STATE OF MICHIGAN (P)	SUM MONTHLY/QUARTERLY	101-000-228.000	2,503.85
10/18/2018	GEN	37328	TRAVERSE CITY RECORD EAGLE	ADVERTISING	101-101-901.000	1,031.75
		37328		ADVERTISING	101-400-901.000	351.00
		37328		ADVERTISING	101-410-901.000	114.00
						<u>1,496.75</u>
10/18/2018	GEN	37329	UNEMPLOYMENT INSURANCE AGENCY	UNEMPLOYMENT	101-851-701.027	362.00
10/18/2018	GEN	37330	VERIZON	PHONES	101-265-850.000	223.95
						<u>310,134.47</u>

TOTAL - ALL FUNDS

TOTAL OF 43 CHECKS

Check Date	Bank	Check #	Payee	Description	GL #	Amount
--- GL TOTALS ---						
101-000-084.861				DUE FROM #861 STREET LIGHTS		1,644.71
101-000-227.001				AFLAC		637.34
101-000-228.000				STATE TAXES PAYABLE		2,503.85
101-101-726.000				SUPPLIES		178.05
101-101-726.001				POSTAGE		393.63
101-101-801.002				LEGAL SERVICES - TOWNBOARD		435.00
101-101-805.000				CONTRACTED AND OTHER SERVICES		798.50
101-101-901.000				ADVERTISING		1,031.75
101-101-960.000				EDUCATION & TRAINING		32.50
101-191-701.000				WAGES		555.00
101-191-726.000				SUPPLIES		213.98
101-191-726.001				POSTAGE		3.03
101-215-701.303				WAGES - ACCOUNTANT		1,260.00
101-258-935.015				SUPPLIES		35.96
101-265-726.003				COMPUTER SUPPORT SYSTEMS		145.00
101-265-850.000				SUPPLIES-MAINTANCE		206.80
101-265-920.601				TELEPHONE		223.95
101-265-920.602				HEATING / GAS		100.55
101-265-935.602				WATER / SEWER		899.55
101-265-935.603				LAWN MAINTENANCE		2,075.95
101-265-935.604				CLEANING SERVICE		1,150.00
101-265-935.606				RUBBISH REMOVAL		25.00
101-301-830.000				ELECTRONIC PROTECTION SYSTEM		365.40
101-371-726.000				POLICE CONTRACT		253,990.75
101-400-801.000				SUPPLIES		15.09
101-400-805.000				LEGAL SERVICES		148.00
101-400-901.000				CONTRACTED AND OTHER SERVICES		92.50
101-400-965.000				ADVERTISING		351.00
101-410-901.000				DUES & PUBLICATIONS		340.00
101-412-726.000				ADVERTISING		114.00
101-448-920.005				SUPPLIES		346.48
101-747-880.007				STREET LIGHTS TOWNSHIP		6,601.69
101-851-701.027				COM. PROM. - COMMUNITY AWAREN		686.00
101-851-873.030				UNEMPLOYMENT		362.00
308-000-880.001				INSURANCE - EMPLOYEE HEALTH		18,021.82
308-000-880.008				COM. PROM. - SILVER LAKE PARK		168.00
308-000-880.016				COM. PROM. - Cont. Serv GTCD		11,500.00
308-000-935.000				COM. PROM. - KIDS CREEK PARK		22.00
				MAINTENANCE - MISC, EQUIP		2,459.64
				TOTAL		310,134.47



September 30, 2018

**SUMMARY OF BILLINGS FOR APPROVAL  
FROM GARFIELD TOWNSHIP**

**I. Developer's Escrow Fund - Storm Water Reviews**

1. Engineering services for private road review. <b>1127 Cass Road, Private Road Review, Escrow #215.840</b>		
Project# 18029C Invoice No. 1829314		330.00
2. Engineering services for storm water review and approval letter. <b>Elmer's Storage &amp; Storage Building, Escrow #215.837</b>		
Project# 18294 Invoice No. 1829401		346.25
3. Engineering services for storm water review and approval letter. <b>John's Marine Services, Indoor Storage, Escrow #215.838</b>		
Project# 18307 Invoice No. 1830701		866.25
	Total	1,542.50

**II. Developer's Escrow Fund - Utility Plan Review, Oversight & Closeout**

1. Engineering services for plan review and construction services. <b>Traditions at Ashland Park</b>		
Project# 17088 Invoice No. 1708806		500.00
2. Engineering consulting services for plan review, permit assistance and construction services. <b>Eaglehurst Estates</b>		
Project# 18258 Invoice No. 1825801		2,750.00
	Total	3,250.00

**III. Utility Receiving Fund**

1. Engineering consulting services. <b>NW Service District Water System Improvements (Water Storage Tank)</b>		
Project# 16037 Invoice No. 1603718		18,450.00
2. Engineering consulting services. <b>Water System Expansion, South of Township along M-37</b>		
Project# 18029C Invoice No. 18029315		910.00
3. Engineering consulting services. <b>Cass Road Drainage District Improvements</b>		
Project# 18029C Invoice No. 18029316		1,160.00
	Total	20,520.00

**GRAND TOTAL** \$25,312.50

**Invoice**



Gourdie-Fraser, Inc.  
123 West Front Street  
Traverse City, MI 49684  
Phone: 231-946-5874, Fax: 231-946-9634  
VISA/MASTERCARD Accepted, Due Upon Receipt  
A/R email: melanie@gfa.tc

MR CHUCK KORN  
CHARTER TWP OF GARFIELD  
3848 VETERANS DR  
TRAVERSE CITY, MI 49684

September 30, 2018  
Project No: 18029C  
Invoice No: 18029314

Re: 1127 Cass Road, Private Road Review, Escrow #215.840

Services Performed: Engineering services for review of plans for compliance with Section 52.1 of the Charter township of Garfield Zoning Ordinance, including communication with applicant and letter of review with corrective measures.

Professional Services from September 11, 2018 to September 29, 2018

**Professional Personnel**

	Hours	Rate	Amount	
Project Manager	2.75	120.00	330.00	
Totals	2.75		330.00	
<b>Total Labor</b>				<b>330.00</b>
		<b>Total this Invoice</b>		<b>\$330.00</b>

Invoice



Gourdie-Fraser, Inc.  
123 West Front Street  
Traverse City, MI 49684  
Phone: 231-946-5874, Fax: 231-946-9634  
VISA/MASTERCARD Accepted, Due Upon Receipt  
A/R email: melanie@gfa.tc

MR CHUCK KORN  
CHARTER TWP OF GARFIELD  
3848 VETERANS DR  
TRAVERSE CITY, MI 49684

September 30, 2018  
Project No: 18294  
Invoice No: 1829401

Re Elmer's Storage & Storage Building, Escrow #215 837

Services Performed: Engineering services for storm water review of plans/calculations for compliance with Ordinance #49.  
Communication with applicant and issuance of letter of approval.

Project Location 3711 Elmer's Industrial Drive, Traverse City, Michigan.

Professional Services from August 28, 2018 to September 29, 2018

**Professional Personnel**

	Hours	Rate	Amount	
Project Manager Assistant	.25	65.00	16.25	
Sr. Project Manager	1.00	130.00	130.00	
Project Engineer	2.00	100.00	200.00	
Totals	3.25		346.25	
<b>Total Labor</b>				<b>346.25</b>
		<b>Total this Invoice</b>		<b>\$346.25</b>

Invoice



Gourdie-Fraser, Inc.  
123 West Front Street  
Traverse City, MI 49684  
Phone: 231-946-5874, Fax: 231-946-9634  
VISA/MASTERCARD Accepted, Due Upon Receipt  
A/R email: melanie@gfa.tc

MR CHUCK KORN  
CHARTER TWP OF GARFIELD  
3848 VETERANS DR  
TRAVERSE CITY, MI 49684

September 30, 2018  
Project No: 18307  
Invoice No: 1830701

Re John's Marine Services. Indoor Storage. Escrow #215.838  
Tax ID28-05-060-056-00

Services Performed: Engineering services for storm water review of plans/calculations for compliance with Ordinance #49.  
Communication with applicant and issuance of letter of approval.

Project Location: 824 Mizar Court, Traverse City, Michigan 49685  
Professional Services from August 16, 2018 to September 29, 2018  
Professional Personnel

	Hours	Rate	Amount	
Project Manager Assistant	25	65.00	16.25	
Project Engineer	8.50	100.00	850.00	
Totals	8.75		866.25	
<b>Total Labor</b>				<b>866.25</b>
		<b>Total this Invoice</b>		<b>\$866.25</b>

Invoice



Gourdie-Fraser, Inc.  
123 West Front Street  
Traverse City, MI 49684  
Phone: 231-946-5874, Fax: 231-946-9634  
VISA/MASTERCARD Accepted, Due Upon Receipt  
A/R email: melanie@gfa.tc

MR CHUCK KORN  
CHARTER TWP OF GARFIELD  
3848 VETERANS DR  
TRAVERSE CITY, MI 49684

September 30, 2018  
Project No: 17088  
Invoice No: 1708806

Re: Traditions at Ashland Park (Escrow Account)

Services Performed: Engineering plan review, construction administration, full time on site inspections, and project turnover for the water main and sanitary sewer extension.

Project Location: Rusch and Garfield Road intersection, Traverse City, Garfield Township, Grand Traverse County, Michigan.

Professional Services from August 1, 2018 to September 29, 2018  
Fee

Billing Phase	Fee	Percent Complete	Earned	Previous Fee Billing	Current Fee Billing
Plan Review/Permit Assistance	2,500.00	100.00	2,500.00	2,500.00	0.00
Construction Observation/Inspection	14,000.00	100.00	14,000.00	14,000.00	0.00
Const Observation/Inspection (Additional)	9,500.00	100.00	9,500.00	9,500.00	0.00
Const. Admin/Project Turnover	1,000.00	100.00	1,000.00	1,000.00	0.00
Record Drawings & Reports (Additional)	500.00	100.00	500.00	0.00	500.00
Total Fee	27,500.00		27,500.00	27,000.00	500.00
			<b>Total Fee</b>		<b>500.00</b>
				<b>Total this Invoice</b>	<b>\$500.00</b>

**Invoice**



Gourdie-Fraser, Inc.  
123 West Front Street  
Traverse City, MI 49684  
Phone: 231-946-5874, Fax: 231-946-9634  
VISA/MASTERCARD Accepted, Due Upon Receipt  
A/R email: melanie@gfa.tc

MR CHUCK KORN  
CHARTER TWP OF GARFIELD  
3848 VETERANS DR  
TRAVERSE CITY, MI 49684

September 30, 2018  
Project No: 18258  
Invoice No: 1825801

Re: Eaglehurst Estates - Final Phase Water and Sewer Extension

Services Performed:

1. Engineering services for meeting with development engineer, plan review and Act 399 and Part 41 permit assistance for the water and sewer extension.
2. Project bidding to prepare front end bid documents including measurement and payment. Solicit advertisement of bid and hold a public bid opening and tabulation of bids for presentation to township board to accept.
3. Construction observation and oversight for the water main and sanitary sewer extension.
4. Project turnover for review drawings and easements, review of close out and turnover documents to township.

Project Location: Eaglehurst Estates located off of Herkner Road along Eaglehurst Drive.

Professional Services from August 28, 2018 to September 29, 2018

**Fee**

Billing Phase	Fee	Percent Complete	Earned	Previous Fee Billing	Current Fee Billing
Engineer Review	2,500.00	79.00	1,975.00	0.00	1,975.00
Bidding	2,500.00	31.00	775.00	0.00	775.00
Construction Observation/Oversight	9,000.00	0.00	0.00	0.00	0.00
Project Close Out	750.00	0.00	0.00	0.00	0.00
<b>Total Fee</b>	<b>14,750.00</b>		<b>2,750.00</b>	<b>0.00</b>	<b>2,750.00</b>
<b>Total Fee</b>					<b>2,750.00</b>
<b>Total this Invoice</b>					<b>\$2,750.00</b>



**Invoice**



Gourdie-Fraser, Inc.  
 123 West Front Street  
 Traverse City, MI 49684  
 Phone: 231-946-5874, Fax: 231-946-9634  
 VISA/MASTERCARD Accepted, Due Upon Receipt  
 A/R email: melanie@gfa.tc

MR CHUCK KORN  
 CHARTER TWP OF GARFIELD  
 3848 VETERANS DR  
 TRAVERSE CITY, MI 49684

September 30, 2018  
 Project No: 16037  
 Invoice No: 1603718

Re: NW Service District Water System Improvements

Services Performed: Engineering and construction services for final design, bidding, construction staking, observation and administration, close out and record drawings for water main extension.

Additional Services:

- 01/17/18 Heritage Estates entrance reconstruction.

Project Location: Harris Road and Cedar Run Road, Garfield Township, Grand Traverse County, Michigan.

Professional Services from August 19, 2018 to September 29, 2018  
 Fee

Billing Phase	Fee	Percent Complete	Earned	Previous Fee Billing	Current Fee Billing
WATER STORAGE TANK	0.00	0.00	0.00	0.00	0.00
Research	15,000.00	100.00	15,000.00	15,000.00	0.00
Engineering Design	25,000.00	100.00	25,000.00	25,000.00	0.00
Topographic Survey	5,000.00	100.00	5,000.00	5,000.00	0.00
Bidding	5,000.00	100.00	5,000.00	5,000.00	0.00
Construction Staking	5,000.00	100.00	5,000.00	5,000.00	0.00
Construction Administration	10,000.00	100.00	10,000.00	10,000.00	0.00
Construction Inspection	25,000.00	100.00	25,000.00	25,000.00	0.00
Record Drawings/Close Out	3,500.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00
WATERMAIN EXTENSIONS	0.00	0.00	0.00	0.00	0.00
Prop. Acquisition/Utility Research	10,000.00	100.00	10,000.00	10,000.00	0.00
Final Design/Permitting	50,000.00	100.00	50,000.00	50,000.00	0.00
Topographic Survey	15,000.00	100.00	15,000.00	15,000.00	0.00
Bidding	6,500.00	100.00	6,500.00	6,500.00	0.00
Construction Staking	20,000.00	100.00	20,000.00	20,000.00	0.00
Construction Administration	25,000.00	86.00	21,500.00	16,250.00	5,250.00
Construction Inspection	120,000.00	86.00	103,200.00	90,000.00	13,200.00

Project	16037	GARFIELD/FD,BID,STK,CA,CM/HARRIS-CEDAR R				Invoice	1603718
Record Drawings/Close Out	9,500.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	
INFRASTRUCTURE UPGRADE/BOOSTER STATION	0.00	0.00	0.00	0.00	0.00	0.00	
Research	25,000.00	51.00	12,750.00	12,750.00	0.00	0.00	
Final Design/Permitting	69,100.00	10.00	6,910.00	6,910.00	0.00	0.00	
Topographic Survey	15,000.00	0.00	0.00	0.00	0.00	0.00	
Bidding	6,850.00	6.5693	450.00	450.00	0.00	0.00	
Construction Staking	5,000.00	1.80	90.00	90.00	0.00	0.00	
Construction Administration	30,000.00	0.00	0.00	0.00	0.00	0.00	
Construction Inspection	20,350.00	0.00	0.00	0.00	0.00	0.00	
Record Drawings/Close Out	6,500.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	
HERITAGE EST.ENTRANCE RECONSTRUCTION SAD	0.00	0.00	0.00	0.00	0.00	0.00	
Preliminary Design	500.00	100.00	500.00	500.00	0.00	0.00	
Final Design	500.00	100.00	500.00	500.00	0.00	0.00	
Bidding	250.00	100.00	250.00	250.00	0.00	0.00	
Construction Inspection	3,700.00	14.00	518.00	518.00	0.00	0.00	
Construction Staking	1,800.00	20.00	360.00	360.00	0.00	0.00	
Construction Administration	750.00	69.00	517.50	517.50	0.00	0.00	
Closeout Services	500.00	0.00	0.00	0.00	0.00	0.00	
Total Fee	535,300.00		339,045.50	320,595.50	18,450.00		
			<b>Total Fee</b>			<b>18,450.00</b>	
				<b>Total this Invoice</b>		<b>\$18,450.00</b>	

Invoice



Gourdie-Fraser, Inc.  
123 West Front Street  
Traverse City, MI 49684  
Phone: 231-946-5874, Fax: 231-946-9634  
VISA/MASTERCARD Accepted, Due Upon Receipt  
A/R email: melanie@gfa.tc

MR CHUCK KORN  
CHARTER TWP OF GARFIELD  
3848 VETERANS DR  
TRAVERSE CITY, MI 49684

September 30, 2018  
Project No: 18029C  
Invoice No: 18029315

Re: General Utilities - Water system Expansion, South of Township along M-37

Services Performed: Engineering services for review of the ability to extend water infrastructure to service southern portion of township along M-37, specifically Oleson's and Meadowlane developments and future. Services include detailed cost estimate and illustration map.

Professional Services from August 19, 2018 to September 29, 2018

Professional Personnel

	Hours	Rate	Amount	
Sr. Project Manager	7.00	130.00	910.00	
Totals	7.00		910.00	
<b>Total Labor</b>				<b>910.00</b>
		<b>Total this Invoice</b>		<b>\$910.00</b>

**Invoice**



Gourdie-Fraser, Inc.  
123 West Front Street  
Traverse City, MI 49684  
Phone: 231-946-5874, Fax: 231-946-9634  
VISA/MASTERCARD Accepted, Due Upon Receipt  
A/R email: melanie@gfa.tc

MR CHUCK KORN  
CHARTER TWP OF GARFIELD  
3848 VETERANS DR  
TRAVERSE CITY, MI 49684

September 30, 2018  
Project No: 18029C  
Invoice No: 18029316

Re General Utilities - Cass Road Drainage District

Services Performed: Engineering services for 2nd review of plans for utility impact (sewer/water) and overall project review to assist with issuance of DEQ Part 41 sewer permit, correspondence with drain commissioner and design engineer (Spicer Group). Monthly meeting attendance on project updates.

Professional Services from August 19, 2018 to September 29, 2018

**Professional Personnel**

	Hours	Rate	Amount	
Sr. Project Manager	2.00	130.00	260.00	
Design Engineer	10.00	90.00	900.00	
Totals	12.00		1,160.00	
Total Labor				1,160.00
		Total this Invoice		\$1,160.00

**Contractor's Application for Payment No. 3**


Application Period: 07/01/2018-09/30/2018	Application Date: 10/08/2018
To (Owner): Garfield Charter Township	Via (Engineer): Gourdie Fraser Inc
From (Contractor): Elmer's Crane & Dozer	Engineer: 123 W Front Street Traverse City, MI 49684
Project: Boardman Valley Nature Preserve Site Improvements	Address: Engineer's Project No.: 17277
Owner's Contract No.: 21.60563	Contractor's Project No: 470332

**Application For Payment  
Change Order Summary**

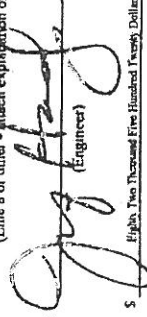
Approved Change Orders Number	Additions	Deductions
1	N/A	N/A
TOTALS		
NET CHANGE BY CHANGE ORDERS		

1. ORIGINAL CONTRACT PRICE..... \$ 5268,465.11
2. Net change by Change Orders..... \$
3. Current Contract Price (Line 1 + 2)..... \$ 5268,465.11
4. TOTAL COMPLETED AND STORED TO DATE  
(Column F total on Progress Estimates)..... \$ 5246,604.71
5. RETAINAGE:
  - a. 10% X \$246,604.71 Work Completed..... \$24,660.47
  - b. X Stored Material..... \$
  - c. Total Retainage (Line 5.a + Line 5.b)..... \$ 24,660.47
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5.c)..... \$ 5221,944.24
7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application)..... \$ 5139,240.69
8. AMOUNT DUE THIS APPLICATION..... \$ 882,703.75
9. BALANCE TO FINISH, PLUS RETAINAGE  
(Column G total on Progress Estimates + Line 5.c above)..... \$ 346,520.87

**Contractor's Certification**  
The undersigned Contractor certifies, to the best of its knowledge, the following:  
(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;  
(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and  
(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective

Contractor Signature:  Date: 10/19/18

Payment of: \$ Eight Two Thousand Five Hundred Twenty Dollars and Eight Seven Cents  
(Line 8 or other - attach explanation of the other amount)

is recommended by:  (Engineer) 10-8-18 (Date)

Payment of: \$ Eight Two Thousand Five Hundred Twenty Dollars and Eight Seven Cents  
(Line 8 or other - attach explanation of the other amount)

is approved by: \_\_\_\_\_ (Owner) \_\_\_\_\_ (Date)

Approved by: \_\_\_\_\_ Funding or Financing Entity (if applicable) \_\_\_\_\_ (Date)

**Progress Estimate - Unit Price Work**

**Contractor's Application**

For (Contract):		3600 Rennie School Rd Traverse City, MI 49685		Application Number:		3					
Application Period		07/01/2018-09/30/2018		Application Date:		10/08/2018					
Bid Item No.	Item Description	Contract Information			C	D	E	F	Balance to Finish (B - F)		
		Item Qty	Units	Unit Price						Total Value of Item (\$)	Qty Instd Prev
1	MOBILIZATION	1	LS	\$13,565.00	\$13,565.00	0.5	\$6,782.50	\$6,782.50	\$13,565.00	100.0%	
2	CLEARING & REMOVALS	1	LS	\$23,690.00	\$23,690.00	1	\$23,690.00	\$23,690.00	\$23,690.00	100.0%	
3	GRADING/SILT FENCE/SESC PERMIT	1	LS	\$19,105.00	\$19,105.00	1	\$19,105.00	\$19,105.00	\$19,105.00	100.0%	
4	PICKLEBALL COURT PAVING	16065	SF	\$3.34	\$53,657.10	16065	\$53,657.10	\$53,657.10	\$53,657.10	100.0%	
5	COURT SURFACE PAINTING & STRIPING	16065	SF	\$0.84	\$13,494.60						\$13,494.60
6	COURT POSTS & NETTING	1	LS	\$8,440.00	\$8,440.00			\$8,440.00	\$8,440.00	100.0%	
7	GALV CHAIN LINK FENCE 6' TALL	512	LF	\$30.71	\$15,723.52			\$15,723.52	\$15,723.52	100.0%	
8	GALV CHAIN LINK FENCE 4' TALL	208	LF	\$20.48	\$4,259.84			\$4,259.84	\$4,259.84	100.0%	
9	2.5" THICK - 21AA GRAVEL MAINT STRIP	315	SF	\$4.67	\$1,471.05	315	\$1,471.05	\$1,471.05	\$1,471.05	100.0%	
10	MDOT 21AA, 8" (PKG AREA) CIP	1060	SY	\$18.70	\$19,822.00	530	\$9,911.00	\$8,415.00	\$18,326.00	92.5%	\$1,496.00
11	MDOT 6AA CRUSHED LIMESTONE, CIP	50	CY	\$48.40	\$2,420.00	50	\$2,420.00	\$2,420.00	\$2,420.00	100.0%	
12	CHIPS & FINES AGGREGATE, 6" (6' PATH)	1250	SF	\$2.32	\$2,900.00			\$2,737.60	\$2,737.60	94.4%	\$162.40
13	12" KAYAK LAUNCH HEADWALL	1	LS	\$11,455.00	\$11,455.00	1	\$11,455.00	\$11,455.00	\$11,455.00	100.0%	
14	4" CONC SIDEWALKS & PADS	4900	SF	\$5.83	\$28,567.00			\$26,934.60	\$26,934.60	94.3%	\$1,632.40
15	PICNIC SHELTER	1	LS	\$18,600.00	\$18,600.00			\$18,600.00	\$18,600.00	100.0%	
16	VAULT TOILET BUILDING	1	LS	\$26,220.00	\$26,220.00	1	\$26,220.00	\$26,220.00	\$26,220.00	100.0%	
17	SIGN KIOSK	1	LS	\$4,335.00	\$4,335.00						\$4,335.00
18	VAN ACCESSIBLE PARKING SIGN	1	LS	\$210.00	\$210.00						\$210.00
19	BARRIER FREE STRIPING	1	LS	\$530.00	\$530.00						\$530.00
<b>Totals</b>							<b>\$154,711.65</b>	<b>\$91,893.06</b>	<b>\$246,604.71</b>	<b>91.9%</b>	<b>\$21,860.40</b>



Engineering  
Surveying  
Testing &  
Operations

123 West Front  
Traverse City, Michigan  
231 946 5  
231 946 3rus 

**3. d.**

October 9, 2018

Charter Township of Garfield  
Attn: Chuck Korn  
2848 Veterans Drive  
Traverse City, MI 49684

RE: Traditions at Ashland Park  
GFA #17088  
Close-out & Turnover

Dear Chuck:

The project for Traditions at Ashland Park has been completed. Enclosed please find copies of the following items submitted by the contractor in compliance with the contract documents:

1. \$80,000 Escrow Deposited with Township (In place of Maintenance Bond)
2. Letter of Guarantee
3. Affidavit of Completion/Consent of Surety
4. Recorded Grant of Easement – Previously completed with Project in 2005 and on file with Township
5. Bill of Sale

The Record Drawings and reports are completed and both paper and CD copies will be delivered to the Grand Traverse County Department of Public Works.

GFA has provided construction oversight for this project and hereby verifies to the best of our knowledge, the contractor has installed the facilities according to the approved plans and specifications. Based on this information, we recommend that the Township accept the facilities.

If you have any questions regarding this matter, please do not hesitate to contact our office.

Sincerely,  
Gourdie-Fraser, Inc.

  
Jennifer Hodges, P.E.  
Project Manager

Enclosures

cc: John Divozzo, Grand Traverse County DPW

**LETTER OF GUARANTEE**

DATE: September 25, 2018

17088  
PROJECT NO.

OWNER: Charter Township of Garfield  
2848 Veterans Drive  
Traverse City, MI 49684

PROJECT: Traditions at Ashland Park  
\_\_\_\_\_

Gentlemen:

As the Contractor for this Project, I hereby guarantee all materials and equipment furnished and all Work performed on this Project including any restoration Work necessary to be repaired or replaced.

With respect to this Project, to our personal knowledge, all payments have been made and there are no Liens on said system

This guarantee will remain in effect for a period of one (1) year from the date of acceptance by the Municipality.

Signature:   
\_\_\_\_\_

(Contractor)

Title: President  
(Please Print or Type)

Company Name:

Whitewater Restoration and Building  
(Please Print or Type)

Address:

PO Box 76  
Williamsburg, MI 49690



**AFFIDAVIT OF COMPLETION/CONSENT OF SURETY**

Steve ZAKRAJSEK  
Name of Contractor

P.O. Box 76 Williamsburg MI 49690  
Address of Contractor

being duly sworn, deposes and says that they entered into a Contract with Steve on the 1st day of April, 2008 for the Traditions Project.

Contractor further says that the said Contract has been completed and all indebtedness incurred by him to Subcontractors, Suppliers, and laborers in their employ has been paid in full. Contractor further says that there are no outstanding or pending Claims, Liens or actions in Law involving this Contract. Contractor further says this affidavit is furnished as an inducement to the Owner to make final payment on said Contract.

**WITNESSES:**

Sabrina K Dusseau  
Print

SIGNED: [Signature]  
Print Steve ZAKRAJSEK

Subscribed and sworn to before me this 1st day of September, 2008.  
SABRINA K. DUSSEAU

NOTARY PUBLIC - STATE OF MICHIGAN  
COUNTY OF GRAND TRAVERSE  
My Commission Expires 08-26-2014  
Acting in the County of Grand Traverse  
SEAL

Sabrina K Dusseau  
Print Name  
[Signature]  
Notary Public Sign

My commission expires: 8-26-2014

**CONSENT OF SURETY**

We, as Surety on the above-described Contract, hereby give our consent to the payment to the Contractor as indicated.

NAME OF SURETY COMPANY: \_\_\_\_\_

PERFORMANCE AND PAYMENT BOND NO.: \_\_\_\_\_

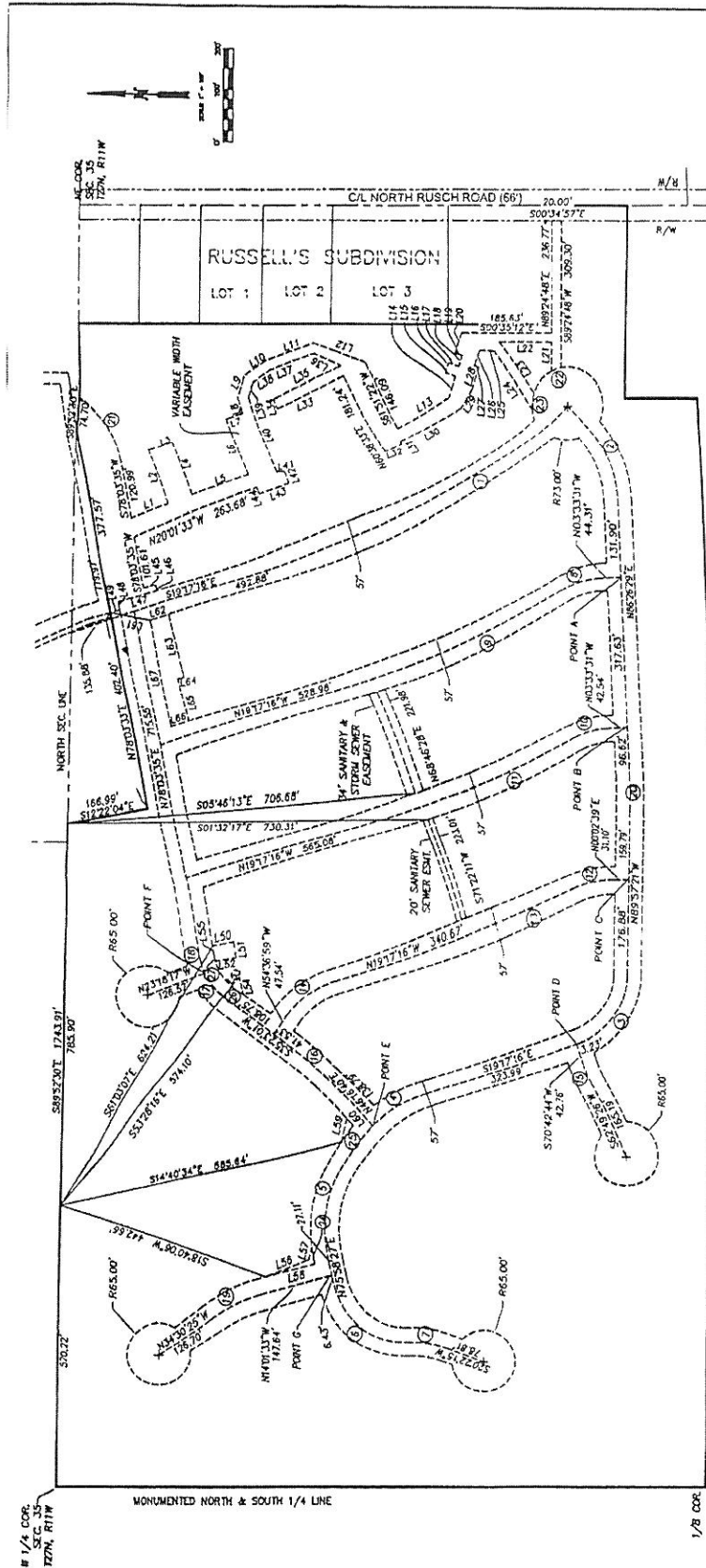
Date: \_\_\_\_\_

Signed: \_\_\_\_\_

Name: \_\_\_\_\_







LINE	BEARING	DISTANCE	L25	L26	L27	L28	L29	L30	L31	L32	L33	L34	L35	L36	L37	L38	L39	L40	L41	L42	L43	L44	L45	L46	L47	L48	L49		
L1	S19°01'24"E	78.74		29.58																									
L2	N69°18'58"E	121.06		32.58																									
L3	S69°23'39"E	21.17		10.00																									
L4	S69°23'39"E	21.17		10.00																									
L5	S20°01'33"E	120.17		40.36																									
L6	N69°18'58"E	140.09		14.76																									
L7	S21°31'44"E	38.40		36.19																									
L8	N69°23'24"E	32.26		146.03																									
L9	S72°39'24"E	41.83		20.00																									
L10	S72°39'24"E	52.10		149.44																									
L11	S20°01'33"E	141.96		59.57																									
L12	S32°22'22"E	120.27		42.75																									
L13	S32°22'22"E	120.27		179.60																									
L14	S71°11'12"E	40.76		15.80																									
L15	N18°55'23"E	22.00		25.60																									
L16	S71°11'12"E	22.00		63.18																									
L17	N17°13'36"E	23.35		14.70																									
L18	N17°13'36"E	45.37		14.70																									
L19	N72°48'22"E	45.41		83.55																									
L20	N72°48'22"E	108.21		18.08																									
L21	N69°03'25"W	108.21		18.08																									
L22	N69°03'25"W	124.18		20.43																									
L23	S52°51'11"E	136.91																											
L24	S52°51'11"E	136.91																											

*Steven P. Bye*  
 STEVEN P. BYE  
 PROFESSIONAL SURVEYOR NO. 35981

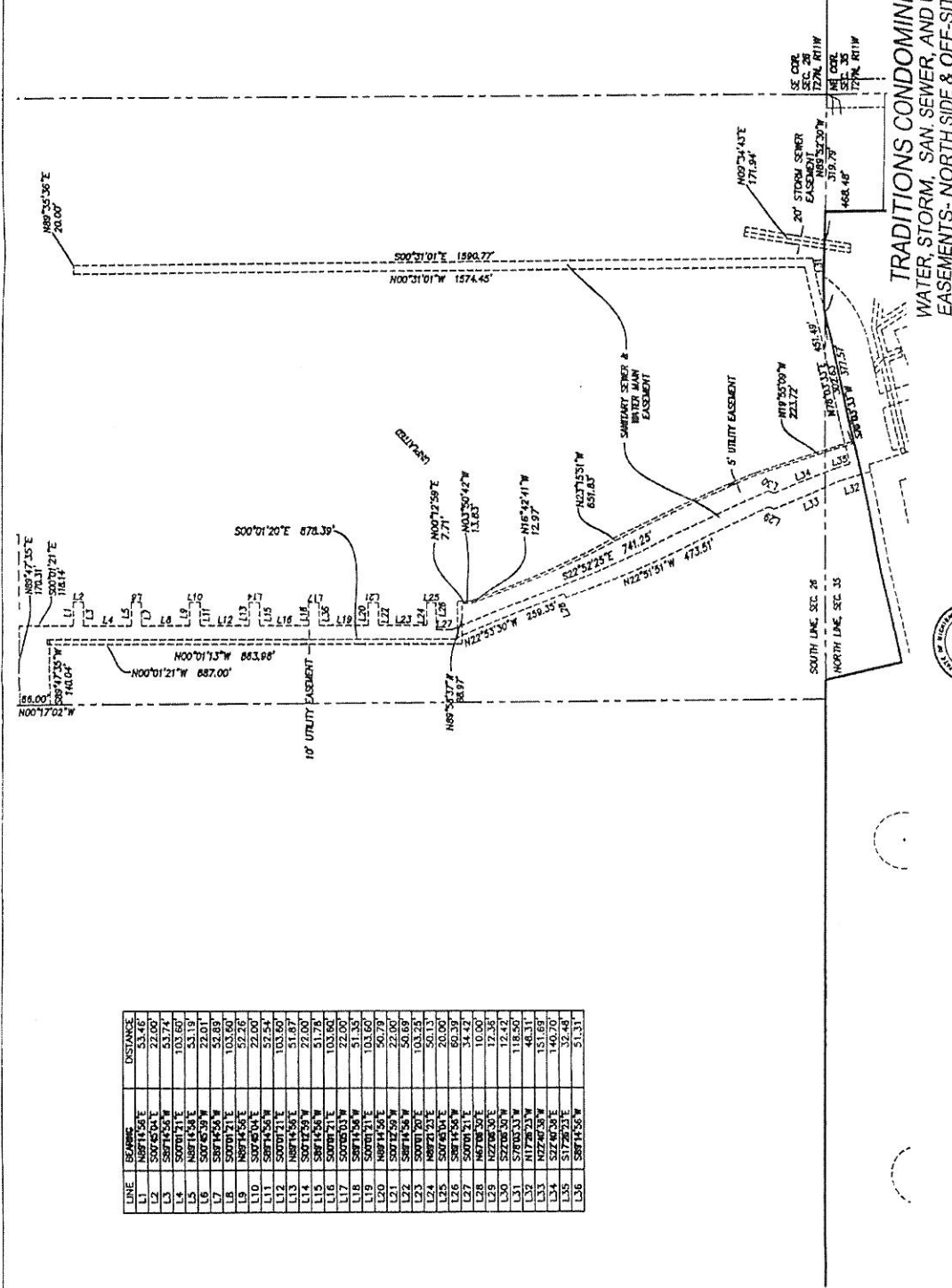
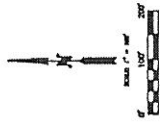


**TRADITIONS CONDOMINIUM**  
 EASEMENTS - WATER, STORM, & SANITARY SEWER

3606 RONNE SCHOOL ROAD  
 TRAVERS CITY, MO. 64656  
 TEL: (313) 943-3434  
 FAX: (313) 943-3599

**Elmers**  
 CONSTRUCTION ENGINEERS, INC.  
 ENGINEERING — SURVEYING — INSPECTION — TESTING

PROPOSED  
 9-21-05  
 FILE 20049  
 EOLAD0001494  
 SHEET 21



LINE	BEARING	DISTANCE
L1	N87°14'56"E	53.46
L2	S00°52'04"E	22.00
L3	S87°14'56"W	53.74
L4	S00°01'21"E	103.60
L5	N87°14'56"E	53.19
L6	S87°14'56"W	52.89
L7	S00°01'21"E	103.60
L8	N87°14'56"E	52.76
L9	S00°01'21"E	22.00
L10	S00°01'21"E	103.60
L11	S87°14'56"W	52.54
L12	S00°01'21"E	103.60
L13	N87°14'56"E	51.67
L14	S00°01'21"E	22.00
L15	S87°14'56"W	51.14
L16	S00°01'21"E	103.60
L17	S00°01'21"E	22.00
L18	S87°14'56"W	51.35
L19	S00°01'21"E	103.60
L20	N87°14'56"E	50.79
L21	S00°01'21"E	22.00
L22	S87°14'56"W	50.69
L23	S00°01'21"E	103.60
L24	S00°01'21"E	20.00
L25	S87°14'56"W	60.39
L26	S00°01'21"E	34.42
L27	N87°14'56"E	10.00
L28	N22°52'25"E	12.36
L29	N22°52'25"E	17.26
L30	S22°52'25"E	17.26
L31	N22°52'25"E	16.56
L32	N17°55'09"W	48.31
L33	N22°52'25"E	151.69
L34	S22°52'25"E	140.70
L35	S17°29'23"E	32.48
L36	S87°14'56"W	51.31

TRADITIONS CONDOMINIUM  
 WATER, STORM, SAN, SEWER, AND UTILITY  
 EASEMENTS- NORTH SIDE & OFF-SITE

PROPOSED  
 9-21-05  
 FILE: 2004AS  
 EXH A SURVPLAN  
 SHEET 24

3400 DENNIS SCHOOL ROAD  
 THUNDERBOLT, MO 64088-1105  
 TEL: 203AS  
 FAX: (313) 242-5078



STEVEN P. BTE  
 PROFESSIONAL SURVEYOR NO. 35991

**Elmer's**  
 CONSTRUCTION ENGINEERS, INC.  
 ENGINEERING - SURVEYING - INSPECTION - TESTING

**BILL OF SALE**

TNR Investment Corporation, whose address is P.O. Box 76, Williamsburg, MI 49690, (herein referred to as "Seller") for and in consideration of One (\$1.00) Dollar and other good and valuable consideration, does hereby grant, dedicate, transfer, and deliver to The charter Township of Garfield, whose address is 3848 Veterans Drive Traverse City, MI 49684, (herein referred to as the "Township"), 8" watermain and appurtenances and 8" sewer main and appurtenances (hereinafter referred to as the "Improvement").

DESCRIPTION OF WATER MAIN

Approximately 1,510 linear feet of 8" D.I water main water main along with hydrants, valves and appurtenances the location of which is as follows:

Approximately 420 linear feet of 8" D.I water main beginning at a point intersection of Traditions Dr and Ashland Drive and continuing east to blow off and gate valve. And commencing at existing 8" D.I water main in south Cottages approximately 214 linear feet easterly along Cupola Drive to Umber Drive. Thence northerly approximately 271 linear feet along Umber Drive. Thence westerly approximately 193 linear feet along Basil Drive. Thence northerly approximately 289 linear feet to connect with 8" D.I water main. And easterly approximately 123 linear feet along Olive Place to Hydrant 901.

DESCRIPTION OF SEWER MAIN

Approximately 2,326 linear feet of 8" SDR-35 sanitary sewer with manholes to service said sewer the location of which is as follows:

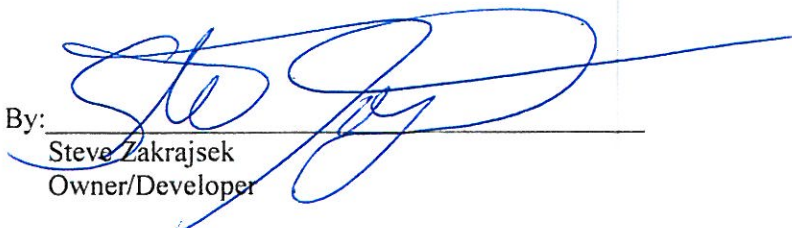
Approximately 188 linear feet of 8" SDR-35 sanitary sewer beginning at manhole #1408; then approximately 190 linear feet south to manhole #1447; then approximately 132 linear feet east to manhole #1448. AND approximately 175 linear feet east connecting at manhole #1452 to manhole #1453; then approximately 150 linear feet north to manhole #1454. AND connecting at existing manhole # 1414 and continuing northerly approximately 148 linear feet to manhole #1422, then northerly approximately 283 linear feet to manhole #1426 in Sepia Street. AND at manhole #1426, southerly along Sepia Street approximately 369 linear feet to manhole #1427. And at manhole #1427 easterly along Umber Drive, approximately 312 linear feet to manhole #1429, then easterly along Umber Drive approximately 125 linear feet. And at manhole #1427, westerly along Umber Drive approximately 254 linear feet to manhole #1438 and point of ending.

Seller hereby warrants and certifies to the Township that the Improvement has been acquired, constructed and completed in accordance with the Plans and Specifications of Jowiak Consulting for the Improvement previously approved by the Township, and that no claim, action, or liability exists with respect to the Improvement and its construction and installation.

Seller further warrants and represents to the Township that it is the lawful owner of the Improvement, and that the Improvement is free of all liens and encumbrances of any kind. Seller further represents that is has the authority to transfer the Improvement. All warranties and guarantees pertaining to the Improvement are hereby assigned and transferred to the Township.

Dated: 10/17/18

Witnessed By: 

By:   
Steve Zakrajsek  
Owner/Developer



Engineering  
Surveying  
Testing &  
Operations

123 West Front : **3. e.**  
Traverse City, Michigan  
231 946 58  
231 946 37

October 16, 2018

Charter Township of Garfield  
Attn: Chuck Korn  
2848 Veterans Drive  
Traverse City, MI 49684

RE: Chelsea Park (Final Phase) – Sewer/Water  
GFA #17221  
Close-out & Turnover

Dear Chuck:

The project for Chelsea Park Sewer/Water (Final Phase) has been completed. Enclosed please find copies of the following items submitted by the contractor in compliance with the contract documents:

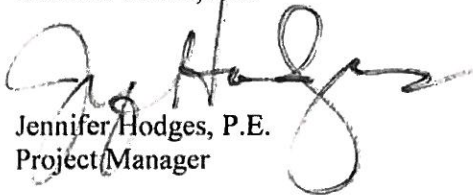
1. One-Year Maintenance Bond
2. Letter of Guarantee
3. Affidavit of Completion/Consent of Surety
4. Recorded Grant of Easement
5. Bill of Sale

The Record Drawings and reports are completed and both paper and CD copies will be delivered to the Grand Traverse County Department of Public Works.

GFA has provided construction oversight (Otwell Mawby provided full time inspection) for this project and hereby verifies to the best of our knowledge, the contractor has installed the facilities according to the approved plans and specifications. Based on this information, we recommend that the Township accept the facilities.

If you have any questions regarding this matter, please do not hesitate to contact our office.

Sincerely,  
Gourdie-Fraser, Inc.



Jennifer Hodges, P.E.  
Project Manager

Enclosures

cc: John Divozzo, Grand Traverse County DPW

**MAINTENANCE BOND**

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

**CONTRACTOR (Name and Address):**

Elmer's Crane and Dozer, Inc  
3600 Rennie School Road  
Traverse City, MI 49685

**SURETY (Name and Address of Principal Place of Business):**

The Cincinnati Insurance Company  
6200 S Gilmore Road  
Fairfield, OH 45014

**OWNER (Name and Address):**

Charter Township of Garfield  
3848 Veterans Drive  
Traverse City, MI 49684

**CONTRACT**

Date: May 31, 2018  
Amount: \$75,000.00

Project Description (Name and Location): Chelsea Park Condominiums Water and Sewer Main

**BOND**

Date (1 year from date of Acceptance by the Municipality):  
Amount: \$75,000.00  
Bond Number: B3238802

Surety and Contractor, intending to be legally bound hereby, subject to the following terms, to each cause this Maintenance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

**KNOW ALL MEN BY THESE PRESENTS,**

That we, Elmer's Crane and Dozer, Inc

as Principal, (hereinafter called Principal), and  
as Surety (hereinafter called  
**Surety), are held and firmly bound into** \_\_\_\_\_  
Charter Township of Garfield

**as Obligee (hereinafter called Obligee), in the**  
**penal sum of** Seventy Five Thousand and no/100--  
**Dollars \$** 75,000.00 **for the**  
**payment whereof Principal and Surety bind**  
**themselves, their heirs, executors,**  
**administrators, successors, and assigns, jointly**  
**and severally, firmly by these presents**

**WHEREAS, said Principal has by written**  
**Agreement, dated** May 31, 2018

entered into a Contract with said Obligee for       
Chelsea Park Condominiums Water & Sewer

Main  
in accordance with the General Conditions, the  
Drawings and Specifications, which Contract is  
by reference incorporated herein, and made a  
part hereof, and is referred to as the Contract..

NOW, THEREFORE, the condition of this  
obligation is such that, if said Principal shall  
maintain and remedy any defects due to faulty  
materials or workmanship, and pay for any  
damage to other Work resulting therefrom, and  
additional expense which shall appear within a  
period of one year(s) from the date of  
acceptance by the municipality of the Work  
provided for in the Contract, then this obligation

The Cincinnati Insurance Company



to be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that said Obligee shall give Principal and Surety notice of observed defects with reasonable promptness.

Signed and sealed this 7th day of June, 2018

CONTRACTOR AS PRINCIPAL  
Company: (Corp. Seal)  
Elmer's Crane and Dozer, Inc

SURETY  
Company: (Corp. Seal)  
The Cincinnati Insurance Company

Signature: [Handwritten Signature]  
Name and Title: Nick Broad

Signature: [Handwritten Signature]  
Name and Title: Marisa J Miller, attorney-in-fact  
(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required).

CONTRACTOR AS PRINCIPAL  
Company: (Corp. Seal)

SURETY  
Company: (Corp. Seal)

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_  
Name and Title: \_\_\_\_\_ Name and Title: \_\_\_\_\_

NOTE: Date of Bond must not be prior to date of Substantial Completion. If Contractor is a Partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located.

Fairfield, Ohio

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That THE CINCINNATI INSURANCE COMPANY, a corporation organized under the laws of the State of Ohio, and having its principal office in the City of Fairfield, Ohio, does hereby constitute and appoint

David G. Chapman; Robert G. Chapman; Nathan G. Chapman; Marcia J. Miller and/or Cloyd W. Barnes

of Lansing, Michigan its true and lawful Attorney(s)-in-Fact to sign, execute, seal and deliver on its behalf as Surety, and as its act and deed, any and all bonds, policies, undertakings, or other like instruments, as follows:

Any such obligations in the United States, up to Twenty Five Million and No/100 Dollars (\$25,000,000.00)

This appointment is made under and by authority of the following resolution passed by the Board of Directors of said Company at a meeting held in the principal office of the Company, a quorum being present and voting, on the 6th day of December, 1958, which resolution is still in effect:

"RESOLVED, that the President or any Vice President be hereby authorized, and empowered to appoint Attorneys-in-Fact of the Company to execute any and all bonds, policies, undertakings, or other like instruments on behalf of the Corporation, and may authorize any officer or any such Attorney-in-Fact to affix the corporate seal; and may with or without cause modify or revoke any such appointment or authority. Any such writings so executed by such Attorneys-in-Fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company."

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company at a meeting duly called and held on the 7th day of December, 1973.

"RESOLVED, that the signature of the President or a Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary or Assistant Secretary and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power of certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company."

IN WITNESS WHEREOF, THE CINCINNATI INSURANCE COMPANY has caused these presents to be sealed with its corporate seal, duly attested by its Vice President this 10th day of May, 2012.



THE CINCINNATI INSURANCE COMPANY

Signature of Stephen A. Justice

Vice President

STATE OF OHIO ) ss:
COUNTY OF BUTLER )

On this 10th day of May, 2012, before me came the above-named Vice President of THE CINCINNATI INSURANCE COMPANY, to me personally known to be the officer described herein, and acknowledged that the seal affixed to the preceding instrument is the corporate seal of said Company and the corporate seal and the signature of the officer were duly affixed and subscribed to said instrument by the authority and direction of said corporation.



Signature of Mark J. Huller

MARK J. HULLER, Attorney at Law
NOTARY PUBLIC - STATE OF OHIO
My commission has no expiration date. Section 147.03 O.R.C.

I, the undersigned Secretary or Assistant Secretary of THE CINCINNATI INSURANCE COMPANY, hereby certify that the above is a true and correct copy of the Original Power of Attorney issued by said Company, and do hereby further certify that the said Power of Attorney is still in full force and effect.

GIVEN under my hand and seal of said Company at Fairfield, Ohio.
this 7th day of June, 2018



Signature of Scott R. Bolan

Assistant Secretary

**LETTER OF GUARANTEE**

DATE: May 1, 2018

102216  
PROJECT NO.

OWNER: Broad Condominium  
700 Broad Road  
Traverse City, MI 49684

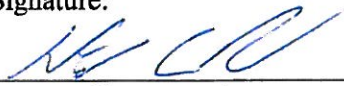
PROJECT: Chelsea Park Condominium  
Garfield Township, Grand Traverse County

Gentlemen:

As the Contractor for this Project, I hereby guarantee all materials and equipment furnished and all Work performed on this Project including any restoration Work necessary to be repaired or replaced.

With respect to this Project, to our personal knowledge, all payments have been made and there are no Liens on said system

This guarantee will remain in effect for a period of one (1) year from the date of acceptance by the Municipality.

Signature:   
\_\_\_\_\_  
(Contractor)

Title: Nick Broad, Project Manager  
(Please Print or Type)

Company Name:  
Elmer's Crane & Dozer, Inc.  
\_\_\_\_\_  
(Please Print or Type)

Address:  
3600 Rennie School Road  
Traverse City, MI 49685

**AFFIDAVIT OF COMPLETION/CONSENT OF SURETY**

Elmer's Crane & Dozer, Inc.

Name of Contractor

3600 Rennie School Road, Traverse city, MI 49685

Address of Contractor

being duly sworn, deposes and says that they entered into a Contract with Broad Condominium on June 13, 2017 for the Chelsea Park Condominium Project.

Contractor further says that the said Contract has been completed and all indebtedness incurred by him to Subcontractors, Suppliers, and laborers in their employ has been paid in full. Contractor further says that there are no outstanding or pending Claims, Liens or actions in Law involving this Contract. Contractor further says this affidavit is furnished as an inducement to the Owner to make final payment on said Contract.

WITNESSES:

SIGNED:

Kirsten L Bott

Nick Broad

Kirsten L Bott

Print

Nick Broad

Print

Subscribed and sworn to before me this 31st day of May, 2018.

Marynell Ripmaster

Print Name

[Signature]

Notary Public Sign

SEAL

My commission expires: 02/04/2023

**CONSENT OF SURETY**

We, as Surety on the above-described Contract, hereby give our consent to the payment to the Contractor as indicated.

NAME OF SURETY COMPANY: n/a

PERFORMANCE AND PAYMENT BOND NO.: \_\_\_\_\_

Date: \_\_\_\_\_

Signed: \_\_\_\_\_

Name: \_\_\_\_\_



**GRANT OF EASEMENT**

KNOW ALL MEN BY THESE PRESENTS: that Broad Condominium, LLC, (Grantor), whose address is 526 W Fourteenth St, Traverse City, MI 49684 for and in consideration of One Dollar and 00/100 cents (\$1.00) grants and conveys to the Charter Township of Garfield, a Michigan municipal corporation, (Grantee), whose address is 3848 Veterans Drive Traverse City, MI 49684, and the successors and assigns of Grantee, a non-exclusive easement for the purposes of laying constructing, maintaining, operating, repairing, substituting, removing, enlarging, inspecting and replacing public and private utilities, through, along and across the following described property:

Situated in the Township of Garfield , County of Grand Traverse, State of Michigan, to wit:

That part of the East 1/2 of the South 1/2 of the Southeast 1/4 lying north of an unnamed creek and that part of the West 1/2 of the South 1/2 of the Southeast 1/4 lying north and east of Hartman Road in Section 21, Town 27 North, Range 11 West, Garfield Township, Grand Traverse County, Michigan.

Together with the right of ingress and egress to, from and over said lands, and subject to other easements or restrictions, if any.

Grantors warrant tat Grantors have the legal right to convey this easement over the land of Grantors which is described as follow:

Situated in the Township of Garfield, County of Grand Traverse, State of Michigan, to wit:

Watermain Easement: Subject to and together with a 20 foot wide water main easement in part of the South half of the Southeast 1/4 of Section 21, Town 27 North, Range 11 West, Garfield Township, Grand Traverse County, Michigan, the centerline of which is more fully described as follows:

Commencing at the Southeast corner of said Section 21; thence N 01°00'01" E, 1288.72 feet, along the east line of said Section 21; thence N 88°39'50" W, 275.93 feet; thence S 45°00'00" W, 166.37 feet; thence S 82°09'33" W, 77.95 feet; thence N 88°30'00" W, 9.35 feet to the POINT OF BEGINNING; thence N 68°31'34" W, 72.42 feet; thence N 87°20'24" W, 298.40 feet; thence S 89°33'14" W, 149.31 feet; thence S 00°21'46" W, 103.41 feet; thence S 03°04'24" W, 85.15 feet, to a point at the end of a previously recorded water main easement; thence N 03°04'24" E, 85.15 feet; thence N 00°21'46" E, 103.41 feet; thence S 89°33'14" W, 2.84 feet; thence S 72°26'16" W, 329.43 feet to the POINT OF ENDING OF

said centerline. The sidelines of said easement to extend or shorten to meet at angle points and begin at the sidelines of a previously recorded water main easement.

Sewermain Easement: Subject to and together with a 20 foot wide sanitary sewer easement in part of the South half of the Southeast 1/4 of Section 21, Town 27 North, Range 11 West, Garfield Township, Grand Traverse County, Michigan, the centerline of which is more fully described as follows:

Commencing at the Southeast corner of said Section 21; thence N 01°00'01" E, 1300.72 feet, along the east line of said Section 21 to the POINT OF BEGINNING; thence N 88°39'50" W, 281.00 feet; thence S 45°00'00" W, 152.11 feet; thence S 79°56'27" W, 89.74 feet, to a point previously referred to as Reference Point "A" and the POINT OF BEGINNING; thence N 77°05'32" W, 125.13 feet; thence N 88°43'55" W, 399.81 feet; thence S 72°11'34" W, 348.67 feet to the POINT OF ENDING of said centerline. The sidelines of said easement to extend or shorten to meet at angle points and begin at the sidelines of the previously recorded sanitary sewer easement.

The Grantee shall replace and restore the property to the condition in which it is found whenever any construction or maintenance occurs within the easement area. Grantors agree that no buildings or other structures will be placed within the boundaries of said easement.

This easement and associated rights and restriction are granted in perpetuity.

Grantor and Grantee, as used herein, shall be deemed to be plural, when required to be so, and shall include the heirs, successors and assigns of the parties hereto.

The word "easement", as used herein, shall be deemed to be plural when required to be so.

The rights, obligations and restrictions under this Grant of Easement shall run with the land of Grantors and shall be binding on the successors and assigns of Grantors.

Dated this 26 day of June, 2018

Broad Condominium LLC

Russell L. Broad

By: Russell L Broad

Its: Sole Member

STATE OF MICHIGAN  
COUNTY OF GRAND TRAVERSE

Acknowledged before me in on 26 day of June, 2018  
the by Russell L Broad, Sole member  
Broad Condominium LLC

Jerril Kindlinger

Notary Public:

\_\_\_\_\_, Michigan

My Commission Expires: \_\_\_\_\_



\* Prepared By:  
William Crain  
Crain Engineering LLC  
7622 Bott Rd  
Buckley MI 49620  
231-632-4707

## BILL OF SALE

Chelsea Park, Broad Condominium, LLC, whose address is 700 Broad Road, Traverse City, MI 49684, (herein referred to as "Seller") for and in consideration of One (\$1.00) Dollar and other good and valuable consideration, does hereby grant, dedicate, transfer, and deliver to The charter Township of Garfield, whose address is 3848 Veterans Drive Traverse City, MI 49684, (herein referred to as the "Township"), 8" water-main and appurtenances and 8" sewer-main and appurtenances along Chelsea Lane (hereinafter referred to as the "Improvement").

846 lineal feet of 8-inch C-900 watermain commencing at existing 8-inch gate valve #1127 at northeast corner of Chelsea Lane extending approximately 846 lineal feet wetward along Chelsea Lane with a loop connection to the main along Avon Drive. 403 lineal feet of 8-inch C-900 watermain at existing deadend of along Avon Drive to the intersection of Avon and Chelsea Lane. All fitting, hydrants and valves included.

Install 852' of 8" SDR-35 sewermain along Chelsea Lane along with four(4) manholes and services to service 4 quadplexes and 7 duplexes.

Seller hereby warrants and certifies to the Township that the Improvement has been acquired, constructed, and completed in accordance with the Plans and Specifications of Crain Engineering, LLC. for the Improvement previously approved by the Township, and that no claim, action, or liability exists with respect to the Improvement and its construction and installation.

Seller further warrants and represents to the Township that it is the lawful owner of the Improvement, and that the Improvement is free of all liens and encumbrances of any kind. Seller further represents that it has the authority to transfer the Improvement. All warranties and guarantees pertaining to the Improvement are hereby assigned and transferred to the Township.

Dated: 6/6/18

Witnessed By:

  
\_\_\_\_\_

By:   
Russell "Butch" Broad

Title: Owner



## Fractile Emergency Response Times

Company IS NORTH FLIGHT INC; AND Trip Date IS BETWEEN 07/01/2018 AND 09/30/2018; AND Call Types IS Prehospital; AND I  
 Priorities IS P - 1, Lights and Sirens; AND Response Zones IS GARFIELD TWSP-28

6. c.

Response Time Minutes	Call Count	Cumulative Call Count	Percentage of Total Calls	Cumulative Percentage
<i>five Times</i>	14	14	4.00%	4%
<i>00:00 - 00:59</i>	4	18	1.00%	5%
<i>01:00 - 01:59</i>	12	30	3.00%	8%
<i>02:00 - 02:59</i>	22	52	6.00%	13%
<i>03:00 - 03:59</i>	40	92	10.00%	24%
<i>04:00 - 04:59</i>	44	136	11.00%	35%
<i>05:00 - 05:59</i>	66	202	17.00%	52%
<i>06:00 - 06:59</i>	68	270	18.00%	70%
<i>07:00 - 07:59</i>	46	316	12.00%	82%
<i>08:00 - 08:59</i>	29	345	7.00%	89%
<i>09:00 - 09:59</i>	12	357	3.00%	92%
<i>10:00 - 10:59</i>	11	368	3.00%	95%
<i>11:00 - 11:59</i>	6	374	2.00%	97%
<i>12:00 - 12:59</i>	5	379	1.00%	98%
<i>13:00 - 13:59</i>	1	380	0.00%	98%
<i>14:00 - 14:59</i>	2	382	1.00%	99%
<i>15:00 - 15:59</i>	1	383	0.00%	99%
<i>17:00 - 17:59</i>	3	386	1.00%	100%
<i>20:00 - 20:59</i>	1	387	0.00%	100%
<b>Total Calls:</b>	<b>387</b>			



**Charter Township Of Garfield  
Treasurers Report  
Ending June 30, 2018**

Acct.	Unrestricted Funds	General Fund	03/31/18	06/30/18	Difference	Maturity Date	Rate
7118	General Fund	Checking	3,032,855	2,041,906	(990,949)	N/A	
5605	General Chase High Yield	Savings	168,890	168,966	76	N/A	
4670	<i>General Fund Managed</i>	<i>Invest</i>	2,267,730	3,267,665	999,934	N/A	
25	Chemical	CD	192,311	192,311	-	6/4/20	1.20%
740	Huntington	CD	82,052	82,052	0	10/30/20	0.61%
72	First Merit - Citizens	CD	252,287	252,287	0	2/22/19	0.90%
604	Mbank CD -	CD	95,413	95,413	-	9/24/20	1.74%
605	Mbank CD -	CD	95,413	95,413	-	9/24/20	1.74%
606	Mbank CD -	CD	60,261	60,261	-	9/24/20	1.74%
S101	4-Front Credit Union	CD	209,313	210,000	687	7/8/20	1.30%
300	NW Consumers CU	CD	167,580	167,908	328	2/23/20	0.80%
302	NW Consumers CU	CD	59,838	59,969	131	9/28/18	0.60%
662	Traverse City State Bank	CD	268,055	269,063	1,008	3/12/21	1.49%
55	1st Community Bank	CD	212,615	212,615	(0)	8/2/18	0.45%
15	First National Bank of America	CD	260,636	261,529	893	7/4/21	2.36%
1	Team 1 Credit Union	CD	250,365	251,458	1,093	3/2/21	1.76%
982	Credit Union One	CD	250,261	251,082	821	2/25/21	1.30%
119	Honor Bank	CD	262,807	262,807	-	11/28/19	2.02%
40	Lake Michigan Credit Union	CD	250,856	252,143	1,286	1/17/23	2.03%
<b>Total Unrestricted Funds - Available for Spending</b>			<b>8,439,540</b>	<b>8,454,847</b>	<b>15,307</b>		
<b>Restricted Funds</b>			<b>03/31/18</b>	<b>03/31/18</b>	<b>Difference</b>	<b>Date</b>	
7118	Park Fund	Checking	560,021	533,118	(26,903)	N/A	
7118	Roads	Checking	550,903	220,330	(330,573)	N/A	
8728	Fire Fund	Checking	166,646	170,281	3,635	N/A	
4654	Fire Fund Managed	Invest	779,639	778,000	(1,639)	N/A	
7134	Receiving Fund	Checking	5,811,434	5,278,079	(533,355)	N/A	
6025	Chemical Receiving Fund CD	M/M	1,014,522	2,085,718	1,071,196	6/22/20	1.30%
4662	Receiving Fund Managed	Invest	7,629,153	7,639,104	9,951	N/A	
7940	DPW Fund Managed	Invest	108,187	108,761	575	N/A	
7126	Tax Fund	Checking	32,418	25,898	(6,519)	N/A	
4750	General Employee Flex	Checking	5,076	5,076	-	N/A	
3734	Retirement Rec Fund	Checking	85,298	84,880	(418)	N/A	
2343	Insurance Funding	Checking	371,146	369,757	(1,389)	N/A	
8681	Trust & Agency	Checking	120,433	133,807	13,374	N/A	
1111	Special Lights	Checking	48,187	6,278	(41,909)	N/A	
3801	Special Milfoil/Water/Sewer/Roads	Checking	62,756	33,388	(29,369)	N/A	
<b>Total Restricted Funds - Restricted Use</b>			<b>17,345,819</b>	<b>17,472,476</b>	<b>126,657</b>	<i>Increase/Decrease</i>	
<b>TOTAL</b>			<b>\$ 25,785,359</b>	<b>\$ 25,927,323</b>	<b>\$ 141,964</b>	<b>*</b>	
<b>* SEE ABOVE NOTES</b>							

\* Transferred 1 Million to 5/3 Managed General Account 5/17/18

\* Transferred 1 Million from Gen Cking to 5/3 Managed General Account 5/17/18

\* Expences to Oak Terrance

\* Transferred \$1 Million to from Rec fund checking to Rec fund managed 5/17/18

\* Transferred \$1 Million to from Rec fund checking to managed 5/17/18

\* Cleared out year end balances caused reduction

\* Cleared out year end balances caused reduction

Respectfully Submitted:

*Jane Blood Law*

10/1/18

Jeanne Blood Law, Treasurer

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## MEMO

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**To:** Garfield Township Board of Trustees

**Re:** Consumers Utility Easement / Water Main Crossing Request

**From:** Jennifer Hodges, GFA

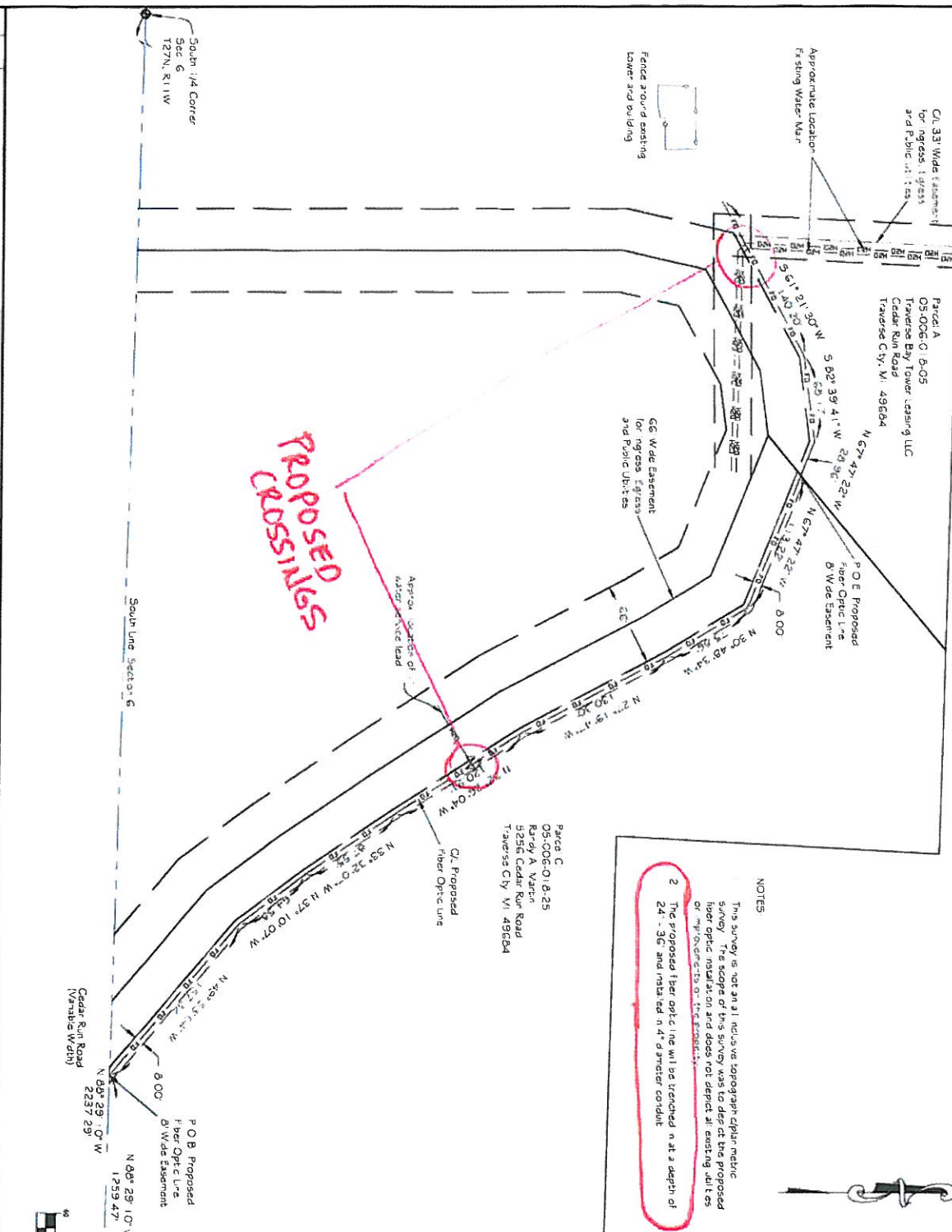
**Date:** October 16, 2018

Consumers Energy contacted GFA and Garfield Township to inquire on permission to utilize our easement located off Cedar Run Road to facilitate the installation of a fiber optic line. The easement was obtained from the property owners on 5256 Cedar Run Road (Terry and June Martin) and encompass the newly installed 16" and 12" high and low pressure water mains that are used for filling and distributing water to the customers on the Northwest Service District. Consumer Energy is formally requesting permission from Garfield Township to cross the newly installed watermain and utilize a portion of this easement. Attached is the illustration identifying the crossings for reference.

GFA has reviewed the proposed scope of work and requested to have fiber installed by method of open cut and at depth not to exceed 3' to ensure protection of Townships' main which is installed at depth of 6', which is noted on the drawing. Subject to the following items noted, it is our recommendation that Garfield Township approve the request:

- It is requested and required under Miss Dig that Consumers Energy provide staking of all existing utilities onsite which would include the Township water main prior to beginning construction.
- It is requested Consumers Energy coordinate with Garfield Township regarding construction schedule to provide them opportunity to witness installation (specifically crossing Township water main)
- Record drawing location and depth of fiber optic shall be provided to Township upon completion of installation.
- Restoration of site conditions to existing or better conditions shall be provided by Consumers Energy upon completion of installation (as weather permits).

REV	DATE	DESCRIPTION	BY	APP



**NOTES**

- This survey is not an all-inclusive topographic/planimetric survey. The scope of this survey was to locate the proposed fiber optic installation and does not depict all existing utilities or encumbrances on the property.
- The proposed fiber optic line will be trenching in at a depth of 24" - 36" and installed in 4" diameter conduit.



LOCATION MAP  
NOT TO SCALE

Sec 5  
Garfield Township

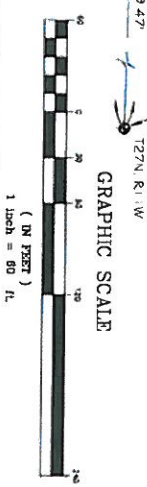
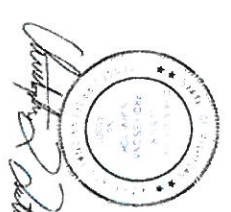
T27N. R. 11W  
Grand Traverse County

**BASIS OF BEARING**

Vernon State Plane Coordinate System  
Central Zone - NAD83 2011 International Feet  
Referenced to the Michigan Spatial Reference Network  
Station W1TC  
Avg Computed Scale Factor = 0.99917797716  
Grid-to-Distance are shown

**LEGEND**

- 10 — 10 — Proposed Fiber Optic
- 100 — 100 — Existing Utility Water
- 100 — 100 — Fence - Chain Link
- 100 — 100 — Water Valve



**Consumers Energy**

**Go Gourdie-Fraser**  
National | Development | Electrical

Traverse City 800 MHz Tower  
Fiber Optic Installation  
Sec 6  
Garfield Township  
T27N. R. 11W  
Grand Traverse County

DRAWING NO: SE-2379C  
SHEET: 1

DATE: 09-20-2016  
BY: DR. J. TRAVIS  
APP: JDD  
DATE: 09-17-2016  
BY: M. J. WATTS  
APP: GMD  
DATE: 09-21-2016  
BY: GMD  
APP: GMD

		<b>Charter Township of Garfield</b>	
		<b>Planning Department Report No. 2018-105</b>	
Prepared:	October 17, 2018	Pages:	Page 1 of 3
Meeting:	October 23, 2018 Township Board	Attachments:	<input checked="" type="checkbox"/>
Subject:	Car Wash Decibel Levels-Discussion		

**BACKGROUND AND PURPOSE OF REPORT:**

At the October 9, 2018 Township Board meeting, the Board had a brief discussion about whether the Township's current noise regulation for noise generated from car washes is appropriate. The possibility of a Township-wide noise study was suggested. The Board asked that Staff put together a report prior to having a more detailed discussion on the appropriateness of the noise regulation and possible study. Therefore, the purpose of this report is to provide some context for that discussion.

**STAFF COMMENT:***Existing Regulation and Possible Origin:*

Section 712.A(4) of the Garfield Township Zoning Ordinance states the following regarding noise generated by car washes (called "automobile laundries" in the Ordinance): "**Noise generated on site from any source shall not exceed 40 decibels measured at any property line.**" A brief search revealed that the 2012 through 2016 East Bay Township Zoning Ordinances contain exactly the same regulation, word for word. According to the Center for Hearing and Communication, 40 decibels is the decibel level of a quiet residential area or quiet office or library.

It appears that car washes are the only use in the Garfield Township Zoning Ordinance that has a specific decibel limit attached to it. Garfield Township's Township-wide noise ordinance (Ordinance No. 47) takes a more subjective approach and does not include any hard decibel level ranges or limits for any uses or activities.

*Other Local Governments and Levels of Government:*

- Staff averaged the maximum decibel levels allowed for car washes for 18 communities and the resulting *average* is 53 decibels. Both the *median* and *mode* levels among the 18 communities are 50 decibels.
- Staff reviewed the information mentioned at the October 9<sup>th</sup> Board meeting by Township Engineer, Jennifer Hodges. The Australian Environmental Protection Agency has different decibel limits for car washes depending on the time of day and uses in the area. On the low end, 39-43 decibels maximum are allowed at night in a "mainly residential area" and; on the high end, 63-68 decibels maximum are allowed during the day in a "predominately industrial area." By contrast, it appears that the United States Environmental Protection Agency leaves such regulations to the state and local governments, and that the State of Michigan defers to local regulations as well.

*Serra Automotive's Noise Study:*

The Planning Commission approved a modified Conditional Rezoning Agreement for Serra Toyota at 940 Boon Street which allowed for the installation of a "wash bay" at the location, without noise generating mechanicals. The Planning Commission expressed concern that the noise of the blowers from an automated car wash might be a disturbance to the neighboring residential properties. However, the following two provisions are included in the agreement:

Any modification to the wash bay to include noise generating mechanicals shall first be reviewed and approved, following a public hearing, by the Planning Commission (Paragraph 2.f.i).

A noise study shall be performed prior to approval and following installation of the mechanicals, if approved, demonstrating that noise will not be detrimental to the surrounding neighborhoods (Paragraph 2.f.ii).

Basically, these provisions leave the door open for the applicant to add mechanicals to the wash bay provided that it can be demonstrated not to be a disturbance to the neighboring residences. In an attempt to get the addition of mechanicals approved by the Planning Commission, the applicant had their consultant conduct a noise study (*attached*) for the proposed car wash which found, in short, that:

- The noise levels produced by a mechanized car wash are in line with the ambient sound level currently experienced by adjacent neighborhoods.
- At the Garfield Township property line, the sound level will be 56-58 dBA, whereas steady traffic is at 55-65 dBA. Individual events, such a noise generated by airport operations, often exceed this level.
- In light of the above findings, it is the consultant's opinion that "there will be no detrimental acoustical impact to the adjacent residential neighborhoods of either Garfield Township or Traverse City from the operation of the proposed car wash, as the blowers will only be operated with the exit door closed."

With 56-58 decibels at the Garfield Township property line, the proposed car wash would violate the current 40 decibel limit in the Ordinance, even with the exit doors closed. Therefore, the relevant question is whether the Ordinance should be amended to allow a higher decibel level than 40 decibels?

Of course, the applicant suggests that the Township look into such an amendment. Staff had initially suggested that the applicant put funds in escrow for the Township to hire a consultant to verify their noise study, but they declined. The Planning Commission is empowered to initiate a Text Amendment to the Zoning Ordinance at any time but is under no legal obligation to initiate one at an applicant's suggestion. The Board would have to approve funding for any noise study.

*Considerations:*

There are obviously many variables to consider in regulating noise generated by car washes, including:

- The design of the building housing the car wash, particularly the length of the building beyond the noise generating mechanicals;
- The design of the equipment used within the car wash as well as its placement;
- Mitigating factors such as weather, obstacles, and other noise sources in the area;
- The distance between the car wash and other features; and
- Whether the car wash uses some form of sound deadening measures.

With a myriad of variables in play, it is very difficult to draw broad conclusions about car washes across an entire community, which is precisely why communities typically hire a noise consultant to study particular situations and to determine appropriate levels.

In addition, there are many approaches to setting decibel limits, such as requiring different limits at different times of day, or different limits depending upon the adjoining zoning district, for example.

*Enforcement:*

At this point, the Township simply does not have the equipment or resources necessary to enforce a hard decibel level limit, let alone conduct an in-house noise study.

**CONCLUSIONS AND RECOMMENDATIONS:**

- Preliminary evidence suggests that the Township's decibel limit for car washes is quite low relative to other communities, with the average being 53 decibels and the median 50.
- Serra Automotive's proposed car wash would not only violate the current 40 decibel requirement, but would also generate noise in excess of the community average and median of 53 and 50 respectively, with 56-58 decibels at the residential Garfield Township property line projected by their own consultant.
- Although Serra Automotive's consultant suggested that there are many louder sounds occurring in the area at various times (the property adjoins an airport after all), the sound of the blower will add to the cumulative amount of noise in the area regardless. In other words, just because the area is already noisy, does not mean that making it noisier should be taken lightly.
- Discuss the practicality of requiring a hard decibel limit that currently cannot be enforced by Township Staff.
- Discuss, at the Planning Commission level, whether the car wash noise limits should be amended and obtain a formal recommendation from Commissioners prior to discussing funding a noise study at the Board level, which could aid in determining what those new limits might be. However, whether this should be a priority this year while the Planning Department is short-staffed is something to consider.
- Consider these circumstances from a cost-benefit standpoint. Is the cost of Staff time and noise consulting warranted for one particular proposed car wash? Consider that all other car washes in the Township predate the 2015 Zoning Ordinance and therefore have nonconforming status. In other words, Staff could not issue violations to existing car washes that do not meet the current 40 decibel requirement now.

**Attachments:**

1. Packet provided by Serra Automotive dated June 28, 2018 containing full noise study findings

**STAFF COPY**

THE NOISE CONSULTANCY, LLC  
309 VAN NESTE ROAD  
FLEMINGTON, NEW JERSEY 08822

RECEIVED  
JUN 28 2018  
THE NOISE CONSULTANCY  
PLANNING

(908)237-0298 ✉ noiseconsultancy@aol.com ✉ www.noiseconsultancy.com

SENT VIA EMAIL

June 28, 2018

Karrie A. Zeits  
Sondee, Racine & Doren, PLC  
310 W. Front Street, Suite 300  
Traverse City, Michigan 49684

Re: Acoustical Study and Impact Analysis  
Proposed Car Wash  
Serra Automotive – Toyota Project  
940 Boon Street  
Charter Township of Garfield, MI

Dear Ms. Zeits:

#### Background

Serra Works of Traverse City, LLC, is proposing to construct an automotive car wash as part of Serra Toyota Traverse City in Garfield Township, Grand Traverse County, Michigan. The car wash will serve only those vehicles being sold and serviced by the Toyota dealership. The Noise Consultancy, LLC (see resume, Appendix F) has been engaged in this matter, and I have conducted an extensive acoustical study and impact analysis on-site in Garfield Township and Traverse City from Thursday May 31 through Saturday June 2.

#### Executive Summary

Source sound level measurements were conducted of a car wash equipped with the same blowers and rollup door as will be installed at the proposed facility. Those measurements were conducted both in close proximity to the car wash as well at the same distance and orientation to the car wash as are the nearest residences in Garfield Township and Traverse City. As a result of this analysis, a modification has been made to the proposed operations/configuration of the proposed car wash, which will allow the blower cycle to complete prior to opening the exit door. Operated with the exit door closed, the sound level of the car wash will be 56-58 dBA (decibels, measured on the A-scale) at the closest residential property line in Garfield Township, and 45-46 dBA at the closest residential property line in Traverse City.



Ambient sound level measurements were conducted Thursday May 31 through Saturday June 2 in both Garfield Township and Traverse City on either side of Boon Street, at locations that represent the closest residences in both jurisdictions to the proposed car wash. These ambient sound level measurements demonstrated that Boon Street and Garfield Avenues are very active roads, and Traverse City's Cherry Capital Airport is the source of intermittent but intense (loud) noise events.

At the Garfield Township property line there are between 10-25 noise events every 10 minutes that range from 55-65 + dBA. At the Traverse City property line there are 10-25 noise events every 10 minutes that range from 65-75 + dBA, as that property line is closer to Boon Street, where vehicles pass often and fast. Other noise sources in the environment such as aircraft and sirens range from 70-90 dBA.

### **Executive Conclusion**

Serra Toyota is proposing to construct a relatively quiet car wash in a relatively noisy location, adjacent to two busy roads and an airport. The noise levels of the car wash with the proposed modification are well within the ambient sound level currently experienced by the surrounding neighborhoods.

At the Garfield Township property line, the sound level of the car wash will be 56-58 dBA, while steady traffic is in the range of 55-65 dBA, with individual events well above that level. At the Traverse City property line the sound level of the car wash will be 45-46 dBA, while steady traffic is in the range of 65-75 dBA.

It is my opinion that there will be no detrimental acoustical impact to the adjacent residential neighborhoods of either Garfield Township or Traverse City from the operation of the proposed car wash, as the blowers will only be operated with the exit door closed.

### **Applicable Standards**

In Garfield Township, the Conditional Rezoning Agreement (CRA) establishes the standard by which the noise emissions from the proposed automobile laundry's "wash bay" is to be evaluated. The CRA provides in relevant part as follows:

\*\*\* 2.f.

- i. Any modification to the "wash bay" to include noise generating mechanicals shall first be reviewed and approved, following a public hearing, by the Planning Commission.

- ii. A noise study shall be performed prior to approval and following installation of the mechanicals, if approved, **demonstrating that noise will not be detrimental to the surrounding neighborhoods.**
- iii. The automobile laundry shall not be open to the public. (Emphasis supplied).

It should be noted that Garfield Township Article 7 Supplemental Use Regulations establishes standards for certain uses. Section 712 Automobile Laundries states that “Noise generated on site from any source [associated with the car laundry] shall not exceed 40 decibels measured at any property line.” This limit is significantly over-restrictive, and without proper regulatory basis and background. It is well below the limit established by most jurisdictions for nighttime noise, much less daytime noise.

In fact, just across Boon Street, in Traverse City, the permissible limits in a residential area are 65 dBA from 7:00 AM to 10:00 PM and 60 dBA from 10:00 PM to 7:00 AM. (§652.04(h)). Garfield Township’s limit on Automobile Laundries is also unique, as in the entirety of Garfield Township’s Zoning Ordinance the only other potential sound source for which decibel limits are established are wind turbines (and the limit is 60 dBA (Section 780)), and they operate at night, when the car wash will not.

This study also demonstrates that the standard set forth in Section 712 is well below the pre-existing ambient sound level in the surrounding neighborhood.

### **Study Goals**

The goal of this acoustical study and impact analysis was to determine the current ambient sound levels across a range of weekday and weekend hours and evaluate whether the sound emissions of the proposed car wash would have detrimental impact on the surrounding residential neighborhoods. If it were determined that there would be impact, to develop and test mitigation measures that would remediate the acoustical impact.

### **Receptor Locations**

The closest residence in Garfield Township is directly to the west of the proposed car wash on Boon Street (see Measurement Location Map and Photos, Appendix B). The property line is approximately 129 feet from the exit of the car wash as detailed on the site plan dated 6/08/2017.

The closest residences in Traverse City are to the north and northwest of the proposed car wash across Boon Street. The property line is approximately 138 feet (to the “split rail fence”) from the exit of the car wash as detailed on the site plan dated 6/08/2017.

### Measurement Quality Control

#### Larson Davis Precision Acoustics Analyzer

Sound Level Meter - Model 831 (ANSI Type I)	Serial# 0002504
Preamplifier - Model PRM831	Serial# 019078
Microphone - Model 377B02	Serial# 115996
Laboratory Certified: PCB Piezotronics, March 12, 2018 (see Calibration Certificates, Appendix E)	

#### Casella CEL-120/2 Acoustic Calibrator

Laboratory Certified: Casella CEL, October 25, 2017	Serial# 2661883
-----------------------------------------------------	-----------------

#### Kestrel 3000 Wind Meter

Serial# 2180869

#### Field Calibration Checks:

May 31, 2018	6:12 PM, 7:10
June 1, 2018	7:44 AM, 8:34, 10:35, 11:15, 1:20 PM, 2:32, 3:54, 4:25
June 2, 2018	8:10 AM, 8:56, 9:51, 10:18

#### Weather:

May 31 6:12 PM	3.2 -7.4 MPH, 75.7°F, 69.8% RH
June 1 8:33 AM	1.2 - 3.9 MPH, 56.2°F, 78.4% RH
June 1 10:53 AM	0.0 - 3.3 MPH, 59.2°F, 72.7% RH
June 1 1:20 PM	2.9 - 6.3 MPH, 62.6°F, 58.7% RH
June 1 2:32 PM	4.8 – 8.5 MPH, 62.2°F, 57.4% RH
June 2 8:57 AM	0.0 – 1.8 MPH, 59.4°F, 58.8% RH
June 2 10:18 AM	1.6 - 3.9 MPH, 66.6°F, 41.2% RH

### Ambient Sound Level Measurement Locations

The primary sources of ambient sound for the residences adjacent to the proposed car wash are: Boon Street, Garfield Avenue and the operations of Traverse City’s Cherry Capital Airport. While flight operations from the airport are the source of the most intense sound events in the environment, those operations are significantly less frequent than the traffic on Boon Street, which is a busy street and cars pass the houses frequently, going fast. Thus, distance from Boon Street was a primary consideration in choosing ambient sampling locations. Vehicles on Garfield Avenue can occasionally be as loud as those on Boon Street, as can be General Aviation aircraft in and out of the airport which were very numerous on Saturday morning.

Ambient sound level measurements in Garfield Township (see Appendix B - Garfield Township Ambient Sound Level Time History Graphs) were conducted at a measured distance of 60.5 feet from the edge of the pavement of Boon Street, which was visually estimated in the field to be the approximate distance from the pavement to the front wall of the adjacent residence in Garfield Township. The goal was to conduct ambient sound level measurements at a location that accurately represents the sound level of vehicles on Boon Street and Garfield Avenue as received at that residence. Further analysis via Google Earth demonstrates that the adjacent house actually sits 50 feet from the pavement on Boon Street (see attached photos and satellite image). Thus, the reported ambient sound levels that were measured at 60.5 feet from Boon Street slightly understate the actual exposure levels for the residence that sits at 50 feet from the road. In other words, the noise experienced at the residence is actually louder than was measured.

Ambient sound level measurements in Traverse City (see Appendix C – Traverse City Ambient Sound Level Time History Graphs) were conducted across Boon Street at a split rail fence approximately 19 feet from the edge of the pavement. This location accurately represents the sound levels at the rear property lines (backyards) of the Traverse City properties at the end of the Arbutus Court cul-de-sac. The southern corner of the residences are approximately another 10 feet to the north. This location is closer to Boon Street than is the Garfield Township measurement location so the sound levels measured at that location are higher, as traffic on Boon Street is the predominant source of ambient sound for these residences.

It should be noted that the Traverse City ambient sound levels, as reported, also represent the ambient sound levels for the middle of the front yard of the Garfield Township residence, 19 feet from Boon Street.

### **Comparable Source Sound Level Measurements**

Extensive sound level measurements were conducted of an existing car wash that utilizes the same equipment as will the proposed car wash (see Appendix D – Source Sound Level Measurements).

Garfield Township receptor - sound level measurements were conducted directly on the axis of the exit of the car wash at 0° (zero degrees) at a distance of 129 feet.

Traverse City receptor - sound level measurements were conducted at an angle 80° (eighty degrees) to the axis of the exit of the car wash at a distance of 138 feet.

## Results

### Ambient Sound Levels of the Surrounding Neighborhood

In Appendix B is presented a series of time history graphs of the ambient sound levels measured in the Garfield Township residential neighborhood adjacent to the proposed car wash. A review of those graphs demonstrates that there are between 10-25 separate noise events during each 10-minute sampling period that are between 55-65 dBA. In addition, there are a number of noise events above those levels such as on 6/1, vehicles at 69 dBA 8:11 AM and 73 dBA at 8:14 AM, and a helicopter at 85 dBA.

For ease of comparison in one place, those time history graphs are also labeled with the sound levels of the car wash at the nearest Garfield Township property line (56-58 dBA, see below).

In Appendix C are time history graphs of the ambient sound levels in the adjacent Traverse City residential neighborhood. A review of those graphs demonstrates a similar number of noise events, but there the maximum levels range between 65-75 dBA because of the closer proximity of the property line to Boon Street. There was an ambulance at 90 dBA at 8:42 AM Saturday morning.

Again, for ease of comparison in one place, those time history graphs are also labeled with the sound levels of the car wash (45-46 dBA in the case of the Traverse City neighborhood, see below).

### Source Sound Levels

The most intense sound sources in the car wash are the blowers at the exit. Sound emissions from the entrance are much less intense. The primary source on the entrance side is the garage door opening, and it is 17 dBA less than the blowers at a comparable distance (67 dBA @ 25 ft v 84 dBA @ 25 ft).

### Garfield Township Receptor

Blower sound levels, **exit door open** - when measured at a distance of 129 feet, directly on axis to the exit at 0° (zero degrees) the maximum sound levels ranged from **71-73 dBA** (see Appendix D).

Blower sound levels, **exit door closed** - when measured at a distance of 129 feet, directly on axis to the exit at 0° (zero degrees) the maximum sound levels ranged from **56-58 dBA**. This is the sound level for the closest residential property line in Garfield

Township. Those levels will drop with additional distance into the surrounding neighborhood.

Closing the exit door provides an attenuation of 15 dBA. This was also confirmed by paired readings at 25 feet (84 dBA open v 69 dBA closed).

As stated above, for ease of comparison in one place, the sound level of the car wash (56-58 dBA, Garfield receptor) was also labeled onto the ambient sound level time history graphs in Appendix B.

### **Traverse City Receptor**

Blower sound levels, **exit door open** - when measured at a distance of 138 feet, at an angle 80° (eighty degrees) to the axis of the exit of the car wash the maximum sound levels ranged from **60-61 dBA**.

With the **exit door closed**, the level will drop to **45-46 dBA** at that location. The closed-door study was not conducted as the ambient sound level was 50-52 dBA at the time of the testing. You can't measure a sound which is below the ambient sound level.

The sound level of 45-46 dBA is at the closest residential property line in Traverse City. Those levels will drop with additional distance into the surrounding neighborhood.

As stated above, for ease of comparison in one place, the sound level of the car wash (45-46 dBA, Traverse City receptor) was also labeled onto the ambient sound level time history graphs in Appendix C.

### **Discussion**

#### **Garfield Township Receptor**

Sound level measurements conducted at a comparable car wash at a distance and orientation representing the closest residential property line in Garfield Township revealed that operation of the proposed car wash with an open exit door would result in an unacceptable impact of sound levels ranging from 71-73 dBA.

It was thereupon agreed that the blowers would not be operated with the exit door open. Upon retesting the car wash with the exit door closed and blowers operating, the sound level ranged from 56-58 dBA, measured at the same location (see Appendix D).

The car wash will likely be extended so that vehicles can complete the blower cycle prior to the exit doors opening. In this study, the testing was conducted with the blowers

immediately inside the exit doors. In the newly proposed configuration, the blowers will be approximately 14 feet inside the exit door, further reducing the sound levels exiting the building while the blowers are in operation.

Extensive ambient sound level measurements conducted over the course of three days demonstrates that traffic and other noise sources in the environment routinely result in between 10-25 events during each 10 minute period which range between 55-65+ dBA at the Garfield residence (see Appendix B). Some are much higher, such as flight operations from the Traverse City Airport, with the end of the main runway at a distance of approximately 2,000 feet, oriented essentially parallel to Boon Street.

In addition, the ambient sound level measurements representing the Garfield Township residence were conducted at a distance of 60 feet from Boon Street, while the distance to the residence is actually 50 feet. Thus, the ambient sound levels in this report understate the sound levels of the Boon Street traffic at the residence.

The noise levels of the car wash with the proposed modification are well within the ambient sound level currently experienced by the Garfield Township Residence.

### **Traverse City Receptor**

Sound level measurements conducted at a comparable car wash at a distance and orientation representing the closest residential property line in Traverse City revealed that operation of the proposed car wash with an open exit door would result in sound levels of approximately 60-61 dBA. The acoustical remediation measures undertaken to address the Garfield Township receptor will reduce the sound levels for the Traverse City receptors to 45-46 dBA. The permissible limit for such sound under Traverse City's Noise Code is 65 dBA.

Extensive ambient sound level measurements conducted over the course of three days demonstrates that traffic and other noise sources in the environment routinely result in between 10-25 events during each 10 minute period which range between 65-75 dBA at the Traverse City residential property lines (See Appendix C). Some are much higher, such as flight operations from the Traverse City Airport, and an ambulance siren.

Again, the noise levels of the car wash with the proposed modification are well within the ambient sound level currently experienced by the Traverse City residences.

### **Conclusions**

Serra Toyota is proposing to build a relatively quiet car wash in a relatively noisy environment, adjacent to two busy roads and an airport. They have agreed to an extensive

Serra Toyota - Proposed Car Wash  
Traverse City, MI  
June 28, 2018

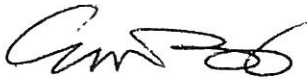
modification of the proposed facility for the sole purpose of reducing sound emissions from their property. The use of the car wash is intermittent and the blowers only operate in the final stage of the washing cycle.

Most of the time sound from the car wash will be masked by the sound from traffic on the two immediately adjacent busy roads, noise from which is both much more frequent and also more intense (louder) than from the car wash. In addition, the proximity to the Airport results in intermittent noise sources that are much louder than the car wash, and in the case of Saturday morning, the buzz of general aviation aircraft was pervasive.

There may be times when the car wash is audible, if someone is listening carefully when there is no masking sound occurring at the same time, however, it will be well below other sound levels common and frequent in the environment and thus will neither be unusual nor intrusive. It will also be at levels approximately 20 decibels below the applicable regulatory standard, across Boon Street in Traverse City.

Therefore, it is my conclusion that there will be no detrimental acoustical impact to the adjacent residential neighborhoods of either Garfield Township or Traverse City from the operation of the proposed car wash, as reconfigured, and as a result will not be disturbing to those neighborhoods.

Sincerely,



Eric M. Zwerling, M.S., INCE, ASA  
President



**Appendix A**  
**Measurement**  
**Locations**  
**and**  
**Photos**

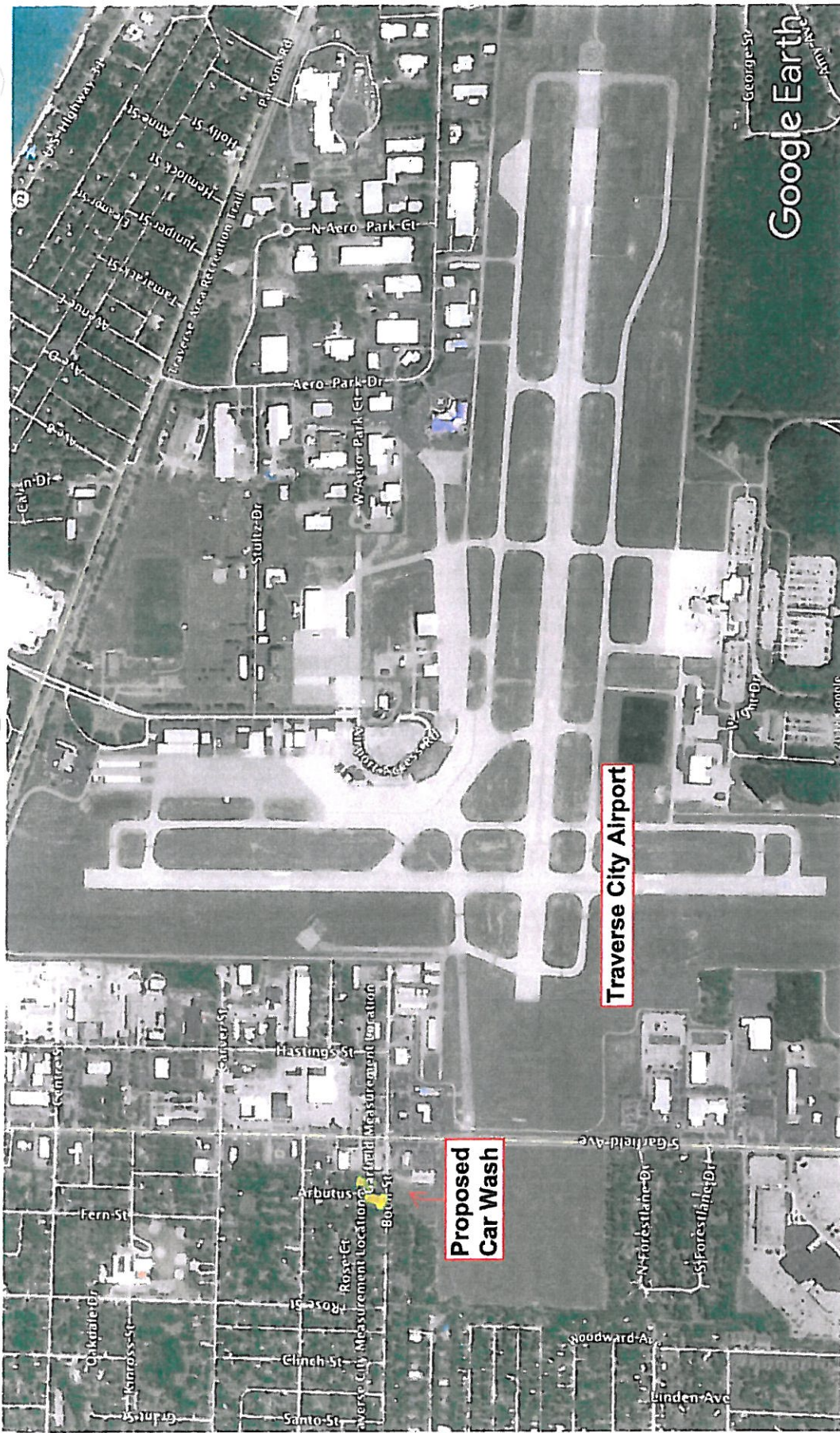


Google Earth

feet  
meters  
100  
400



\* Location and dimensions approximate.  
For illustration purposes only.  
Refer to site plan.



Google Earth

miles 1 km 2

Google Earth

North Arrow

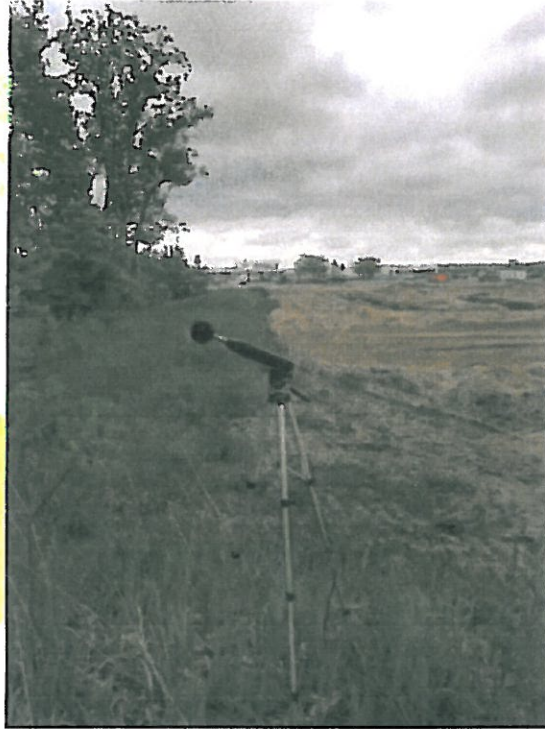
## AMBIENT SOUND LEVEL MEASUREMENT LOCATIONS



View of the meter at the Garfield Township location - looking west, towards the residence.  
It was estimated that this location was approximately in the plane of the front wall of the residence.  
It was measured to be 60.5 feet from the pavement of Boon Street.  
Further analysis showed that the house is actually 50 feet from the pavement.



View of meter looking North towards Boon Street



View of meter looking east towards Garfield Ave.

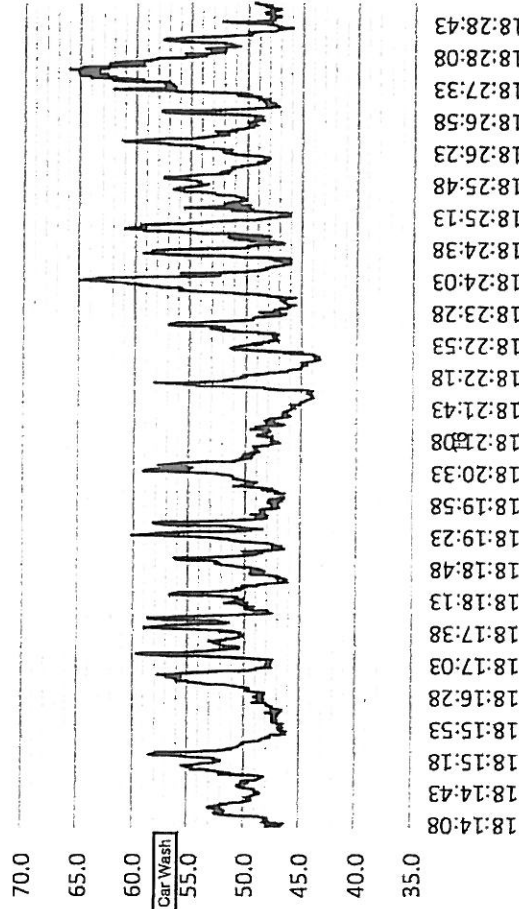


View of the meter at the Traverse City location - split rail fence.

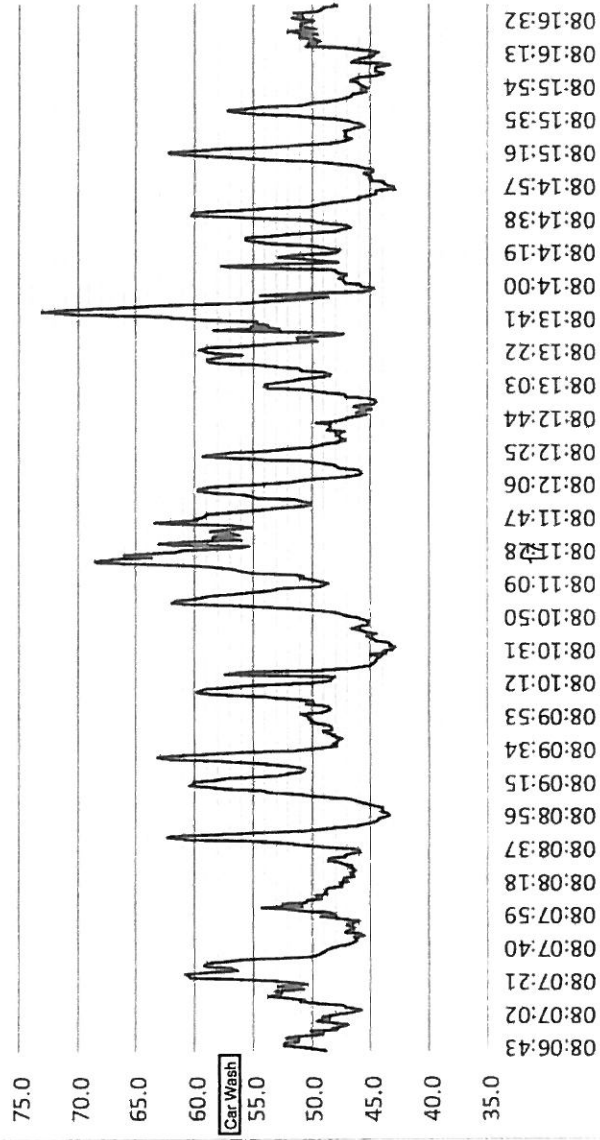
**Appendix B**

**Ambient  
Sound Level Measurements  
Garfield Township**

Ambient Sound Levels (dBA)  
Garfield Township  
Thursday May 31, 2018

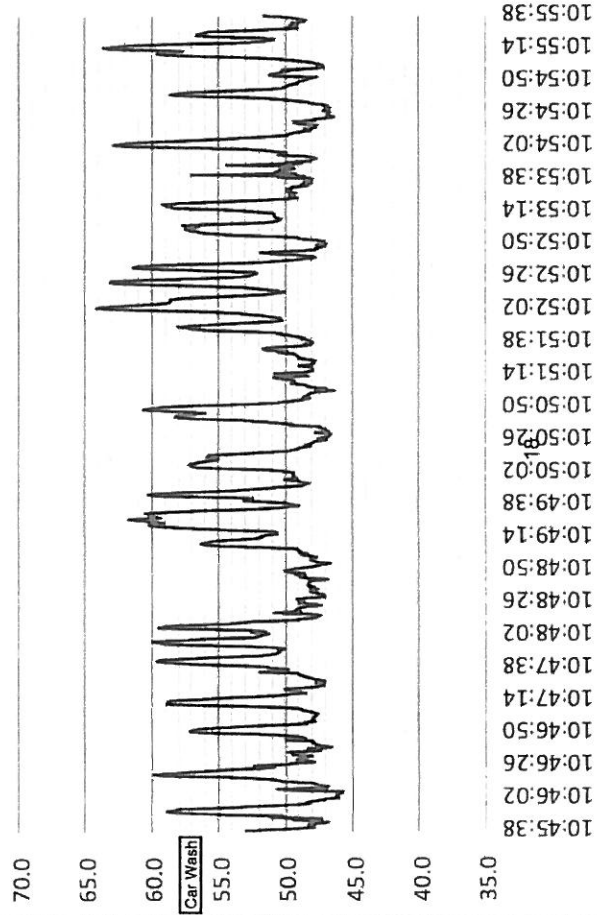


Ambient Sound Levels (dBA)  
Garfield Township  
Friday June 1, 2018

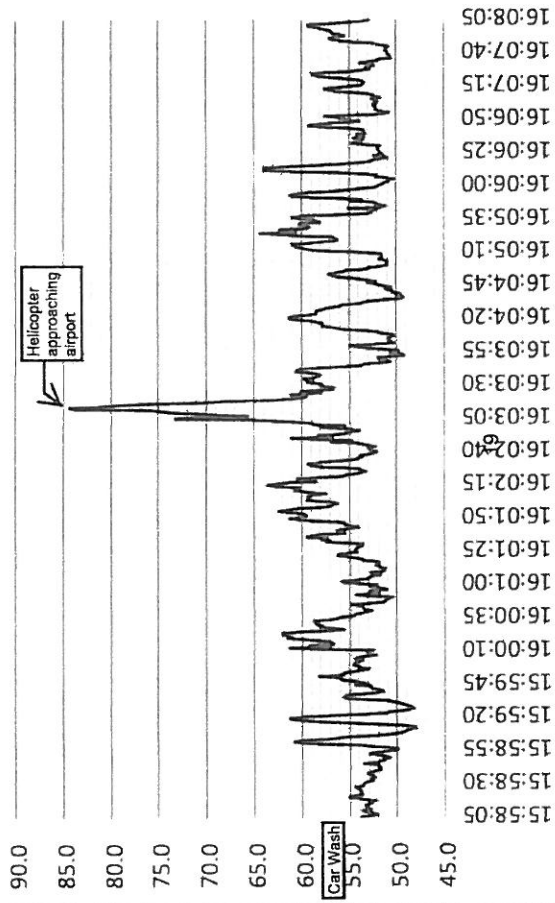




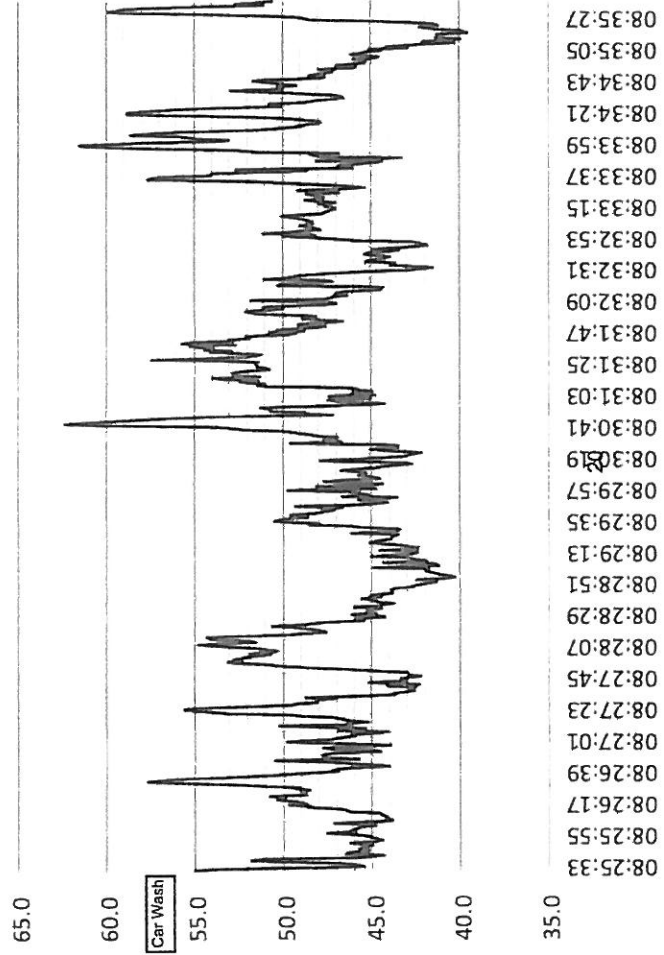
Ambient Sound Levels (dBA)  
Garfield Township  
Friday June 1, 2018



Ambient Sound Levels (dBA)  
Garfield Township  
Friday June 1, 2018

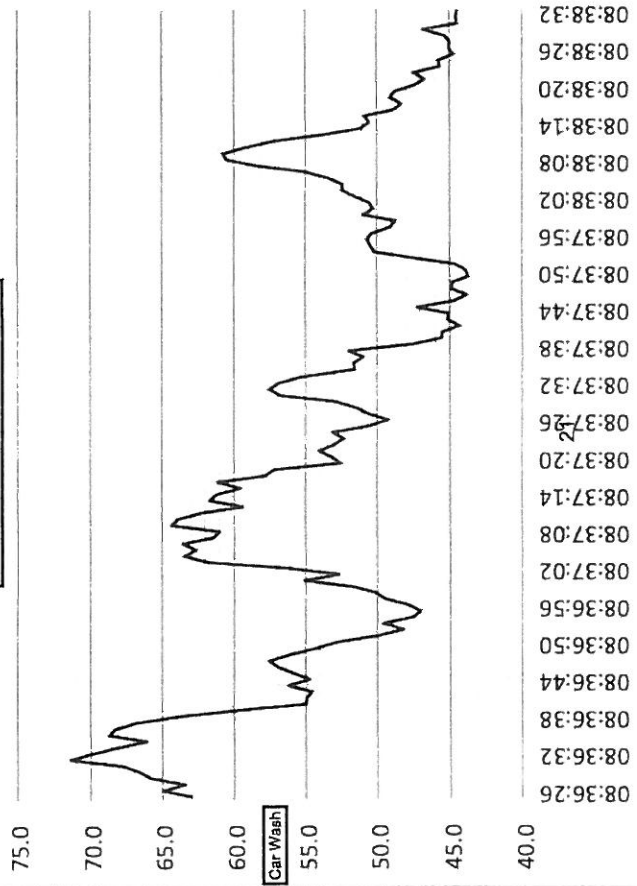


Ambient Sound Levels (dBA)  
Garfield Township  
Saturday June 2, 2018

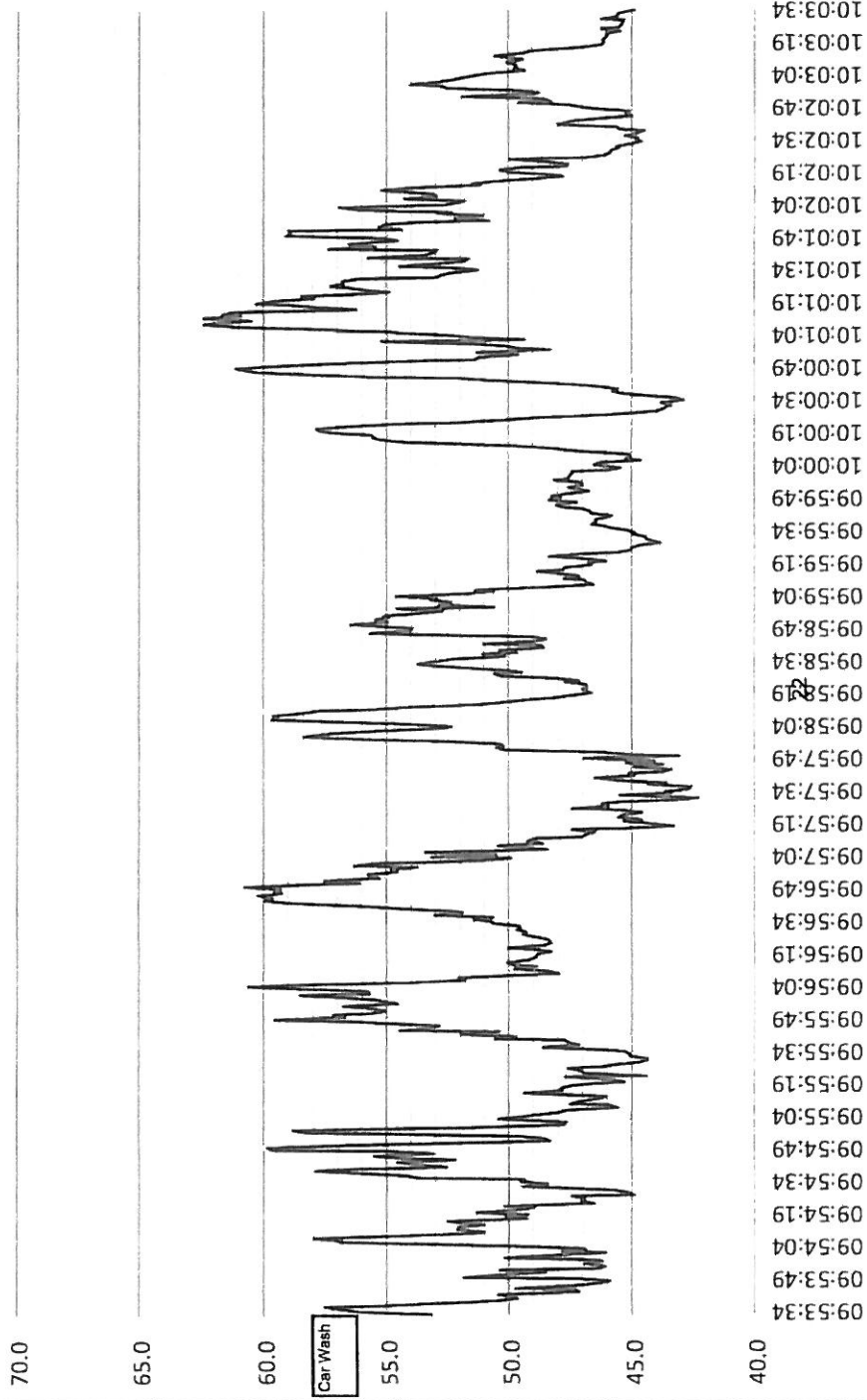


**Ambient Sound Levels (dBA)**  
**Garfield Township**  
**Saturday June 2, 2018**

**Low Level Airport Operations**

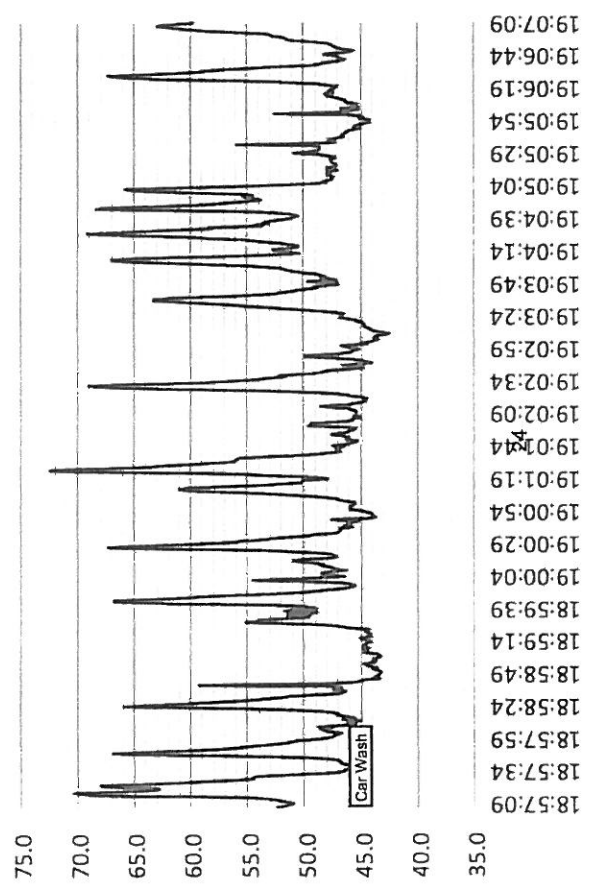


Ambient Sound Levels (dBA)  
Garfield Township  
Saturday June 2, 2018

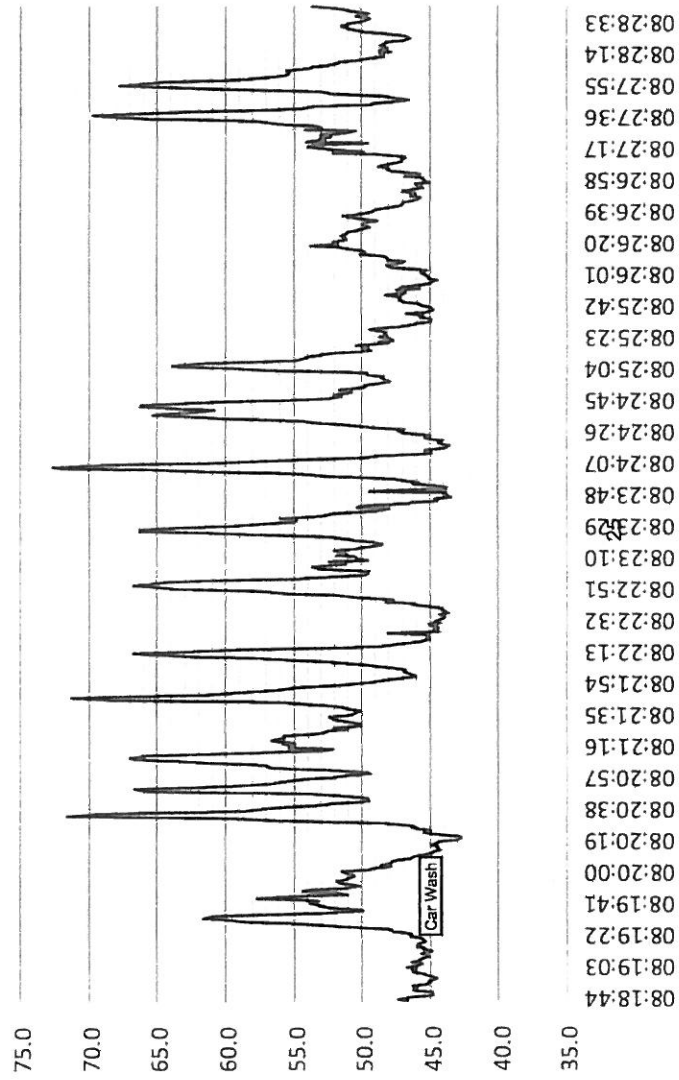


**Appendix B**  
**Ambient**  
**Sound Level Measurements**  
**Traverse City**

Ambient Sound Levels (dBA)  
Traverse City  
Thursday May 31, 2018

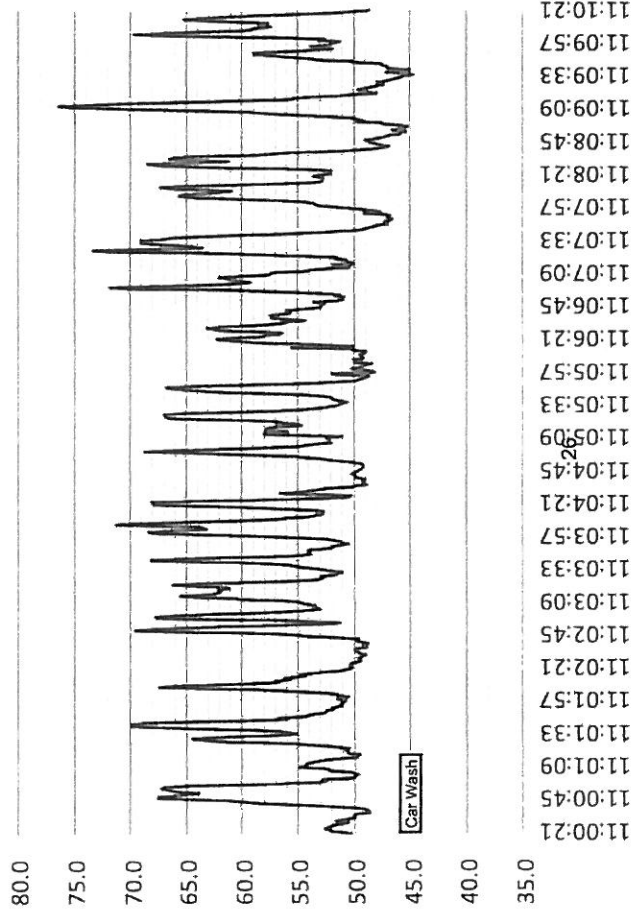


Ambient Sound Levels (dBA)  
Traverse City  
Friday June 1, 2018

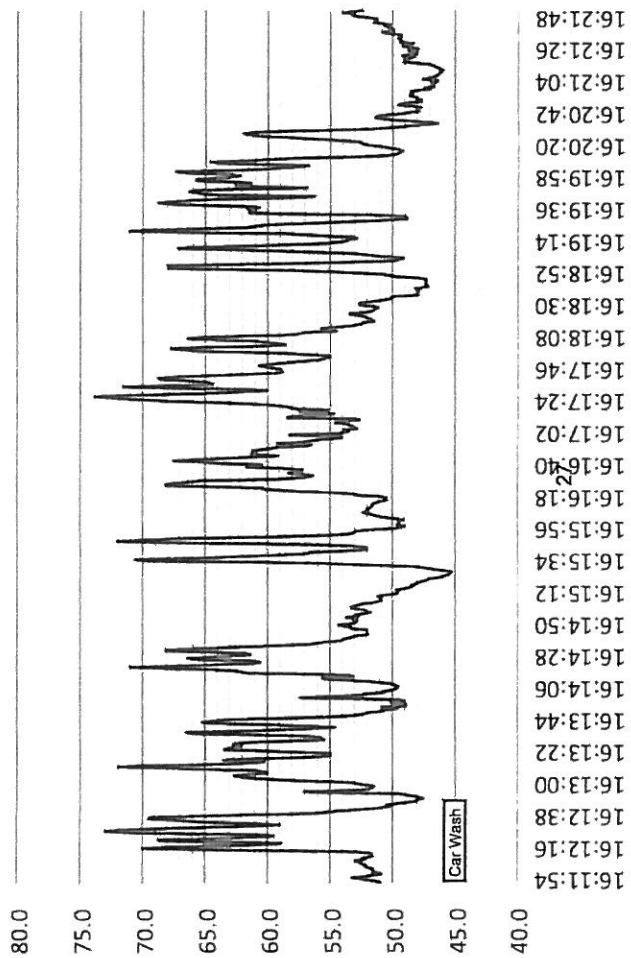




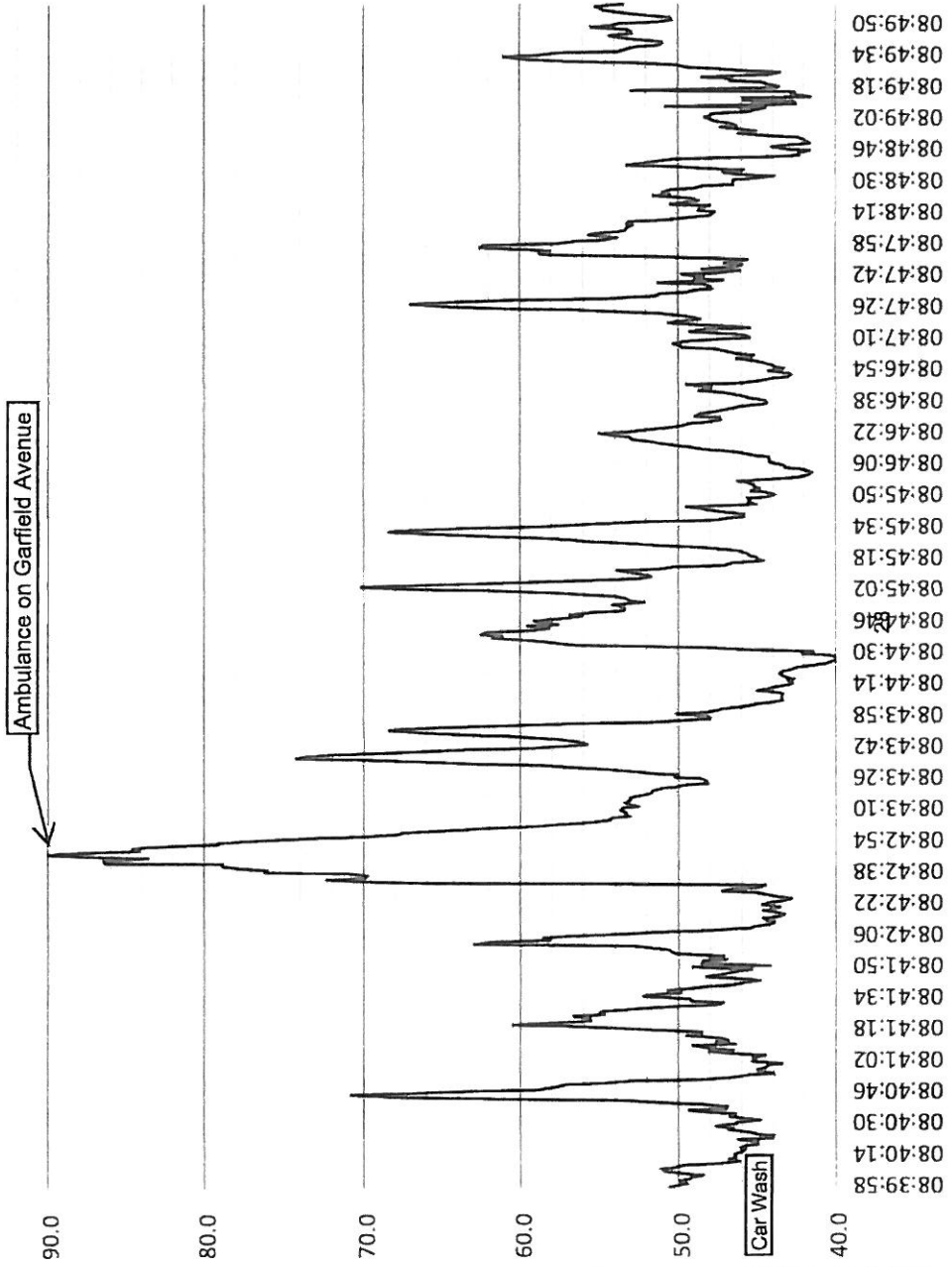
Ambient Sound Levels (dBA)  
Traverse City  
Friday June 1, 2018



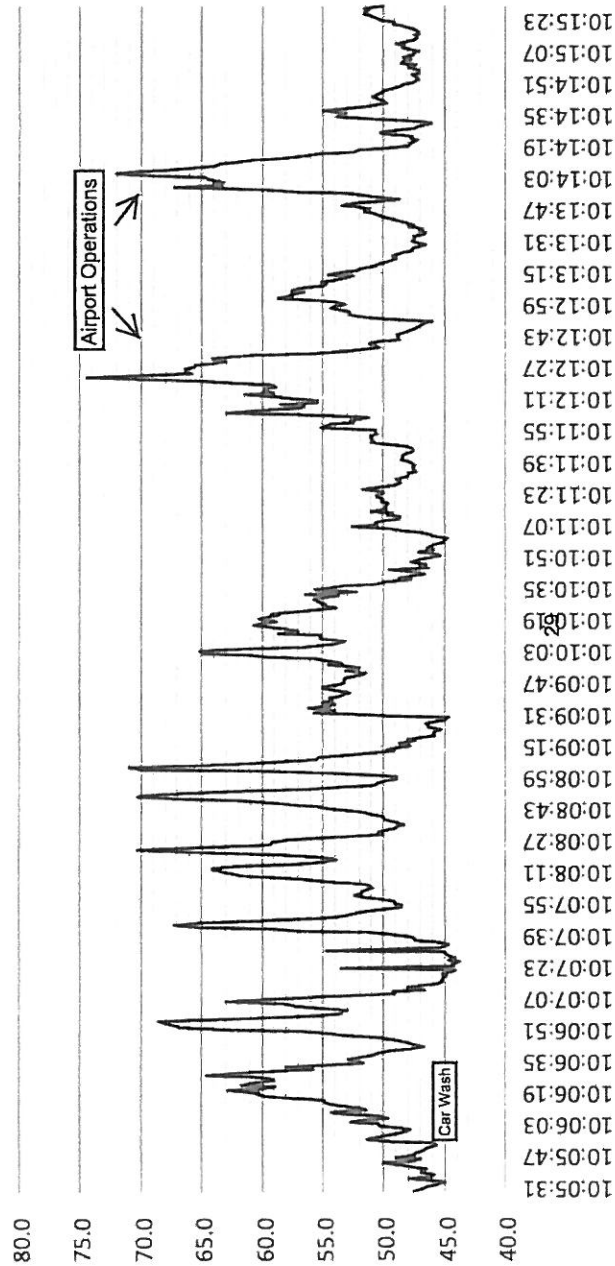
**Ambient Sound Levels (dBA)**  
**Traverse City**  
**Friday June 1, 2018**



Ambient Sound Levels (dBA)  
Traverse City  
Saturday June 2, 2018



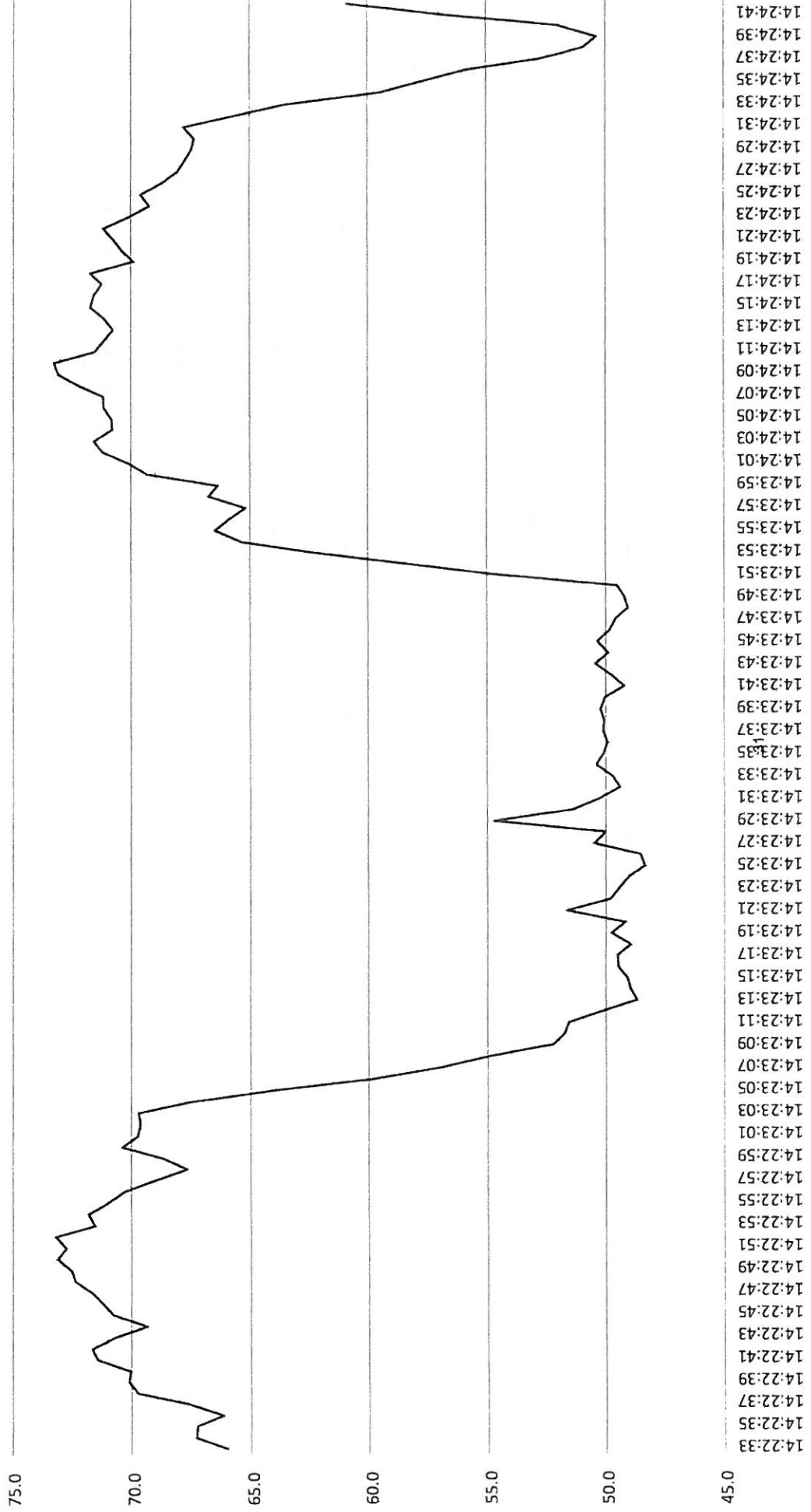
Ambient Sound Levels (dBA)  
Traverse City  
Saturday June 2, 2018



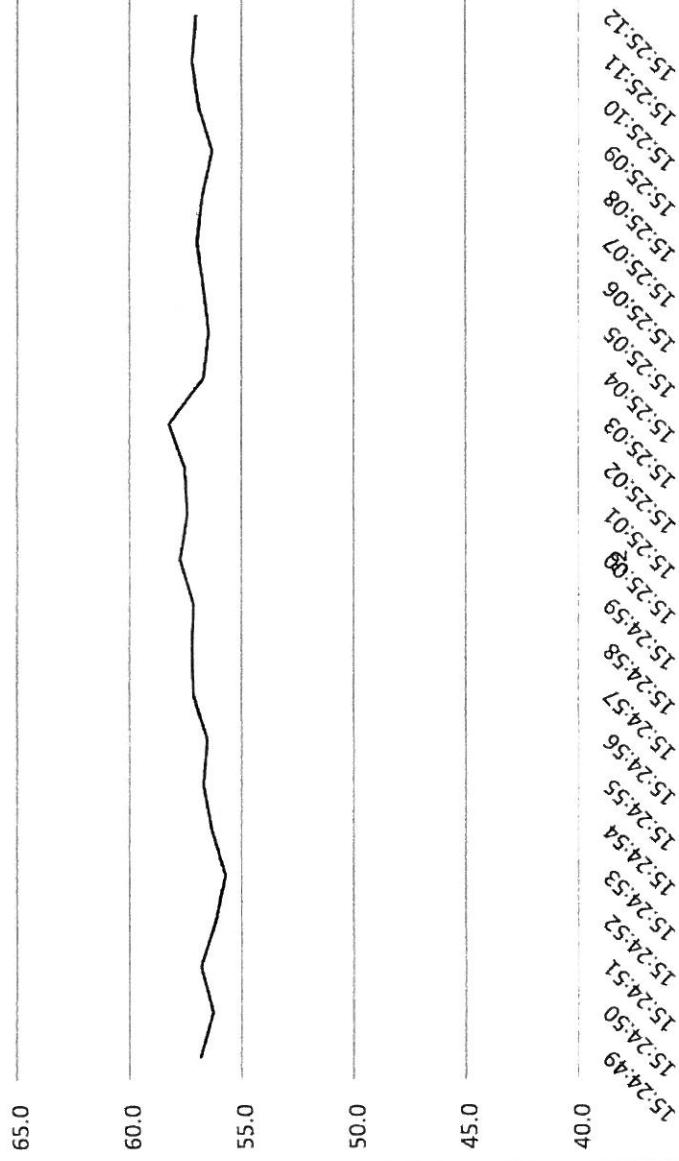
## **Appendix D**

### **Source Sound Level Measurements**

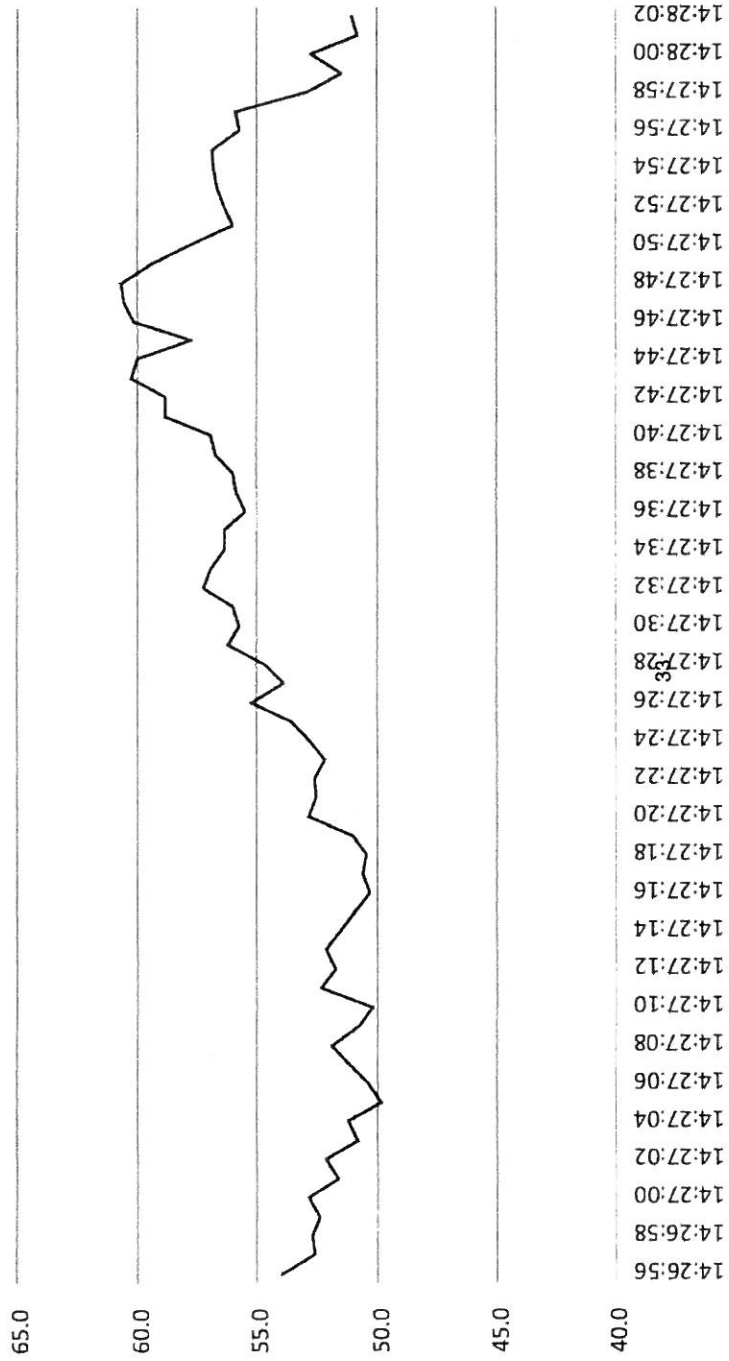
Car Wash  
Door Open, Blowers on  
129 Feet - Zero Degrees- Garfield Township Receptor  
Sound Levels (dBA)



Car Wash  
Door Closed, Blowers on  
129 Feet - Zero Degrees- Garfield Township Receptor  
Sound Levels (dBA)



Car Wash  
Door Open, Blowers on  
138 Feet - Eighty Degrees- Traverse City Receptor  
Sound Levels (dBA)





## Appendix E

### Calibration Certificates

# Calibration Certificate

Certificate Number 2018002601

**Customer:**

The Noise Consultancy LLC  
309 Van Nest Road  
Flemmington, NJ 08822, United States

<b>Model Number</b>	831	<b>Procedure Number</b>	D0001.8384
<b>Serial Number</b>	0002504	<b>Technician</b>	Ron Harris
<b>Test Results</b>	Pass	<b>Calibration Date</b>	12 Mar 2018
<b>Initial Condition</b>	AS RECEIVED same as shipped	<b>Calibration Due</b>	12 Mar 2019
<b>Description</b>	Larson Davis Model 831 Class 1 Sound Level Meter Firmware Revision: 2.314	<b>Temperature</b>	23.53 °C ± 0.25 °C
		<b>Humidity</b>	50.1 %RH ± 2.0 %RH
		<b>Static Pressure</b>	86.74 kPa ± 0.13 kPa

**Evaluation Method**      **Tested with:**      *Data reported in dB re 20 µPa.*

Larson Davis PRM831, S/N 019078  
PCB 377B02, S/N 115996  
Larson Davis CAL200, S/N 9079  
Larson Davis CAL291, S/N 0203

**Compliance Standards**      Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8378:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.11 (R2009) Class 1
IEC 61260:2001 Class 1	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Correction data from Larson Davis Model 831 Sound Level Meter Manual, I831.01 Rev O, 2016-09-19

For 1/4" microphones, the Larson Davis ADP024 1/4" to 1/2" adaptor is used with the calibrators and the Larson Davis ADP043 1/4" to

Larson Davis, a division of PCB Piezotronics, Inc.  
1681 West 820 North  
Provo, UT 84601, United States  
1-684-0001



**LARSON DAVIS**  
A PCB PIEZOTRONICS DIV.

## Certificate of Conformity and Calibration

**Instrument Model:** CEL-12D/2 Acoustic Calibrator  
**Serial Number:** 2651893

**Certificate #:** 69278

### Calibration References:

Casella CEL hereby certifies that the above listed sound measuring instrument has been tested according to the manufacturer's specifications and meets the requirements of the relevant American National Standards Institute (ANSI) Standard for Sound Calibrators S1.40 - 1983 (R1997). This instrument was calibrated against standards which are either traceable to the National Institute of Standards and Technology (NIST) or they have been derived by approved ratio techniques.



### Test Conditions:

22.5 °C  
71.9 %RH  
1006.1 mBar

**Date of issue:-** October 25, 2017  
**Due Date:-** October 25, 2018  
**Service Engineer:-** Ken Umbehr

### Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards. This product is certified as being compliant to the requirements of the CE Directive. Test accuracy ratio (TAR) ≥1.

### Summary:

The data represents the response of the sound level meter calibrator to the reference source corrected for atmospheric conditions at the time of calibration.

	Nominal Value	Tolerance	As Received	As Adjusted
Frequency (Hz)	1000.0	±5.0	1000.0	1000.0
Level (dB)	114.0	±0.3	114.0	114.0

### Standards Used in Calibration:

	Serial Number	Calibration Due Date	Certificate Number
<b>Sound Level Meter:</b> CEL-62D.A1	5130002	1/30/2018	27299-2
<b>Multimeter:</b> Fluke 45	4995184	1/27/2018	1447789

**Casella CEL**  
415 Lawrence Bell Dr  
Unit #4  
Buffalo, NY 14231  
U.S.A.

Toll Free: +1 (800) 356 2966  
Fax: +1 (716) 276 3043  
E-mail: [info@casellatUSA.com](mailto:info@casellatUSA.com)  
Web: [www.casellatUSA.com](http://www.casellatUSA.com)

**Casella CEL (U.K.)**  
Regent House  
Walsley Road  
Kempston  
Bedford  
MK42 7JY

Phone: +44 (0) 1234 844100  
Fax: +44(0) 1234 841890  
E-mail: [info@casellacel.com](mailto:info@casellacel.com)  
Web: [www.casellacel.com](http://www.casellacel.com)

**Casella España S.A.**  
Polígono Europolis  
Calle C, nº48  
28230 Las Rozas - Madrid

Phone: +34 91 640 75 19  
Fax: +34 91 634 01 96  
E-mail: [online@casella-es.com](mailto:online@casella-es.com)  
Web: [www.casella-es.com](http://www.casella-es.com)

**Casella China (中国)**  
地址:  
北京亦庄经济开发区广渠门内大街111号  
邮编: 100078

电话: 0086 10 85183141  
传真: 0086 10 85183143  
电子邮件:  
[info@casellameasurements.cn](mailto:info@casellameasurements.cn)  
网址: [www.casellachina.cn](http://www.casellachina.cn)

**Appendix F**  
**Qualifications**  
**Of**  
**Firm**

## ERIC M. ZWERLING, M.S., INCE, ASA

Rutgers University Noise Technical Assistance Center  
14 College Farm Road  
New Brunswick, NJ 08901

The Noise Consultancy, LLC  
309 Van Neste Rd  
Flemington, NJ 08822

### CURRENT POSITIONS

- 1991-Present *Director* – Rutgers Noise Technical Assistance Center  
Department of Environmental Sciences  
Rutgers - The State University of New Jersey
- 1999-Present *President* - The Noise Consultancy, LLC  
Noise Consultant/ Expert Witness (Since 1992)  
[Expert for the Defendants, City of New York Law Department -  
United States District Court for the Southern District of New York]
- 1993-Present *Noise Enforcement Expert* - New Jersey Department of Environmental  
Protection. Contracted (as Director of the RNTAC) to provide technical expertise  
on noise related issues to the NJDEP and the State of New Jersey
- 1998-Present Committee Member - S12 Working Group 41, Model Community Noise  
Ordinances. Acoustical Society of America
- 2001-Present Committee Member - Technical Study Group on Community Noise  
Institute of Noise Control Engineering
- 1994-Present *Instructor* - "Community Noise" in 'Environment and Public Health Course,'  
Rutgers Continuing Education Program, Cook College Office of Continuing  
Professional Education.
- 1998-2011 *Instructor* - "Noise Hazards" in 'Fundamentals of Industrial Hygiene'.  
University of Medicine and Dentistry of New Jersey, School of Public Health,  
Office of Public Health Practice
- 1992-2005 *Adjunct Professor*- Rutgers University Department of Environmental  
Sciences. Course: 375:336 'Community and Occupational Noise'
- 1998-2000 Commissioner - Franklin Township (NJ) Environmental Commission
- 2010-Present Board of Education, Chair – Green Committee  
Readington Township, New Jersey
- 2017-Present Chair – Subcommittee  
New Jersey State Noise Code NJAC 7:29 - Amendments  
New Jersey Noise Control Council  
New Jersey Department of Environmental Protection

## PROFESSIONAL AFFILIATIONS

Member - Acoustical Society of America  
Member – Institute of Noise Control Engineering

## EDUCATION

ABD Ph.D. Candidate  
Rutgers - the State University of New Jersey  
Department of Environmental Sciences

Occupational Hearing Conservationist  
Council for Accreditation in Occupational Hearing Conservation.

Graduate Certificate in Environmental Ethics -  
Department of Philosophy, University of Georgia.

B.S., M.S. University of Georgia.

## JURISDICTIONAL CERTIFICATIONS

Approved Noise Control Investigator  
New Jersey Department of Environmental Protection  
Pursuant to N.J.A.C. 7:29 -2.11(a)3

Approved Noise Consultant  
New York City Department of Environmental Protection  
Pursuant to N.Y.C.A.C. Section 24-231

Approved Instructor  
State of Michigan  
Department of Licensing and Regulatory Affairs  
Bureau of Construction Codes

## AWARDS

1997 *Advisor of the Year Award*  
Rutgers College Student Activities Advisory Council  
Faculty Advisor - Students for Environmental Awareness

2016 *Sustainable Raritan Award*  
Outstanding Achievement in Public Education  
Sustainable Raritan River Collaborative and Rutgers' Sustainable Raritan River Initiative

## PUBLICATIONS

Zwerling, E.M. 2015. Proposed Noise Standard for Wind Turbine Generators on Farms.  
State Agriculture Development Committee, New Jersey Department of Agriculture.

- Zwerling, E.M., A. Myers, C. Shamoon. 2012. Analysis of the "Plainly Audible" Standard for Noise Ordinances. Proceedings of Inter- Noise 2012. Institute of Noise Control Engineering.
- Zwerling, E.M., C. Shamoon. 2010. Proactive Regulation Engenders Creative Innovation - Quieting the Jackhammer. Proceedings of Noise-Con 2010. Institute of Noise Control Engineering.
- Szulecki, S., E. Zwerling, C. Anderson, B. Turpin. 2010. Modeling with CadnaA to estimate the probability of awakening associated with train horns. Proceedings of Noise-Con 2010. Institute of Noise Control Engineering.
- Zwerling, E.M., C. Anderson, S. Szulecki, F. Maimone, B. Turpin. 2009. Study of Train Noise in Teaneck, NJ. USEPA Agreement Number: X-83245701-0
- Zwerling, E.M. 2005. Regulatory Scheme For Noise Enforcement In New Jersey . *Invited paper*. Journal of the Acoustical Society of America.V.118, No. 3, Pt 2 of 2, Sept. 2005, p. 1849.
- Zwerling, E.M. 2004. Training as a Critical Component of Successful Noise Enforcement Programs. *Invited paper*. Journal of the Acoustical Society of America.V.115, No. 5, Pt 2 of 2, May 2004, p. 2568.
- Zwerling, E.M. 2004. Noise Enforcement in Cities. *Invited paper*. Journal of the Acoustical Society of America.V.115, No. 5, Pt 2 of 2, May 2004, p. 2593.
- Zwerling, E.M. 2002. Characteristics of Successful Local Noise Enforcement Programs. *Invited paper*. Journal of the Acoustical Society of America.V.112, No. 5, Pt 2 of 2, Nov. 2002, p. 2375.
- Zwerling, E.M. 2002. Boom Car and Boom Box Code Drafting. The Quiet Zone. Spring 2002.
- Zwerling, E.M. 2002. Hearing Protection. In *Encyclopedia of Public Health*, ed. Lester Breslow. Macmillan Reference USA.
- Zwerling, E.M. 2001. Vehicle Enforcement. Rutgers Noise Technical Assistance Center. Developed for North Salem, NY
- Zwerling, E.M. 2000. Regulation of Amplified Sound Sources. Proceedings of Noise-Con 2000. Acoustical Society of America / Institute of Noise Control Engineering. Newport Beach , CA. December 3-5, 2000 .
- Zwerling, E.M. 2000. State of Michigan Model Noise Ordinance. Proceedings of Michigan Municipal League Annual Convention/ Michigan Association of Municipal Attorneys Annual Meeting. September 28-30, 2000 , Macinac Island , MI .
- Zwerling, E. M. Contributing Editor. 1991-Present. Community Noise Enforcement. Rutgers Noise Technical Assistance Center.
- Zwerling, E. M. Contributing Editor. 1998. Vehicle Sound Reproduction Enforcement. Rutgers Noise Technical Assistance Center. Developed for the City of Rochester, New York
- Zwerling, E.M. 1997. Community Noise Enforcement: A Mature Technology. Hearing Rehabilitation Quarterly. 22:4, 4-8+.

Zwerling, E.M., D. Pinto, P. Hanna, J. Lepis, B. Turpin. 1997. Local Noise Enforcement Options and Model Noise Ordinance *With Pre-Approved Language for the State of New Jersey*. Rutgers Cooperative Extension Publication #E215.

Zwerling, E.M. 1997. Community Noise Infosheet. Environmental and Occupational Health Sciences Institute. Public Education and Risk Communication Division.

Zwerling, E.M. 1996. Turning Down the Volume: Effective Strategies for Community Noise Enforcement. *The Police Chief*. V. 63, Dec. 53-59.

Zwerling, E. M. & B. J. Turpin. 1996. Community Noise Enforcement: Reviving a Moribund Program or Developing One Anew. Proceedings of Noise-Con 96, The 1996 National Conference on Noise Control Engineering. 955-960.

Zwerling, E.M. 1996. Community Noise Pollution Certification and Assistance. Home page for Rutgers Noise Technical Assistance Center. <http://www.envsci.rutgers.edu/org/rntac/>

#### **RESEARCH PROJECTS** (at Rutgers University, as P.I. or Co-P.I.)

"Assistance Regarding Noise Standards for Wind Turbines on Farms," Granting Agency: New Jersey State Agricultural Development Commission (SADC), 2011 - 2015.

"Assistance Regarding Noise Standards for Photovoltaic Installations on Farms," for New Jersey State Agricultural Development Commission (SADC), 2010.

"Railroad Noise in Teaneck, New Jersey" Granting Agency: United States Environmental Protection Agency, 2005 - 2009.

"Road Noise Educational Outreach Program," Granting Agency: New Jersey Department of Transportation, 2002.

#### **CONFERENCE PRESENTATIONS**

Community Noise Control: Reviving a Moribund Program or Creating One Anew. International Code Council 2013 Conference. Atlantic City, NJ. September 30, 2013.

Emerging Noise Issues: Emergency Generators and Beach Bars. *Invited Presentation*. New Jersey Environmental Health Association Annual Public Health Conference. Atlantic City, NJ March 5, 2013.

Must we regulate civility? Yes, unfortunately. But, is it effective? *Invited lecture*. stillspotting ( ) nyc . Guggenheim Museum. New York City. October 9, 2012.

Analysis of the "Plainly Audible" Standard for Noise Ordinances. Proceedings of Inter- Noise 2012. Institute of Noise Control Engineering. August 22, 2012.

Proactive Regulation Engenders Creative Innovation - Quieting the Jackhammer. *Invited Paper*. Proceedings of Noise-Con 2010. Institute of Noise Control Engineering. Baltimore, MD, April 20, 2010.



Environmental Health and Noise: Issues and Answers. *Invited Presentation*. New Jersey Environmental Health Association Annual Public Health Conference. Atlantic City , NJ March 3, 2008.

Noise Primer For Legal Professionals. *Invited Presentation*. New York State Bar Association Environmental Law Section Fall Meeting. Saratoga Springs , New York . October 13, 2007.

How to Control Noise Pollution in Your Community. *Invited Presentation*. 90th Annual Conference - New Jersey State League of Municipalities. Atlantic City , NJ November 15. 2005.

Regulatory Scheme for Noise Enforcement in New Jersey . *Invited Paper*. 150th Meeting - Acoustical Society of America . Minneapolis , MN October 17-21, 2005.

Noise Enforcement in Cities. *Invited Paper*. 147th Meeting - Acoustical Society of America . New York . New York May 24-28, 2004.

Training as a Critical Component of Successful Noise Enforcement Programs. *Invited Paper*. 147th Meeting - Acoustical Society of America . New York , New York May 24-28, 2004.

Community Noise Impacts. *Invited Presentation*. Topics in Public Health. New Jersey Department of Health and Senior Services. April 16, 2003.

Characteristics of Successful Local Noise Enforcement Programs. *Invited Paper*. First Pan-American/Iberian Meeting on Acoustics. Jointly Sponsored: Acoustical Society of America , the Iberoamerican Federation of Acoustics and the Mexican Institute of Acoustics. Cancun , Mexico .Dec 2-6, 2002.

Community-Based Environmental Noise Management, *Invited Panelist*; The Role of State and Local Governmental Agencies in Noise Abatement and Control, *Invited Panelist*. Inter-Noise 2002, The 2002 International Congress and Exposition on Noise Control Engineering. Dearborn , MI Aug. 19-21, 2002.

Community Noise Regulation and Enforcement: Theory and Practice. American Association of Code Enforcement. 4th Semi-Annual Education Conference. Bowie , MD. May 1-3, 2002.

Regulation of Amplified Sound Sources. Noise-Con 2000. Acoustical Society of America/Institute of Noise Control Engineering. Newport Beach , CA. December 3-5, 2000.

Writing and Enforcing a Noise Ordinance. Michigan Municipal League Annual Convention. Nuts and Bolts of Writing a Noise Ordinance. Michigan Association of Municipal Attorneys Annual Conference. Macinac Island , MI , September 28-30, 2000.

Municipal Noise Regulation - Theory and Practice. International Municipal Lawyers Association, Mid-Year Seminar. Washington , D.C. April 9-11, 2000.

Effective Strategies for Community Noise Enforcement:

Michigan Municipal League 9th Annual Education Conference. Mt. Pleasant, MI.  
March 11, 1998.

The Association of Towns of the State of New York , Annual Meeting,  
Educational Training Courses. New York City , February 16, 1998 .

Township (NJ); City of Lansing (MI); City of Tacoma (WA); City of St. Augustine (FL); Atlantic Development and Management Corp.; CareMatrix Corporation; County of Charleston (SC); DeKalb County (GA); Greenville County (SC); Ethicon, Inc.; City of Yonkers (NY); Walton County (FL); City of Overland Park (KS); City of Newport (RI); City of Ossining (NY); Franklin Township (NJ); Alliance to Save Southern Ulster's Rural Environment; Roche Molecular Systems; Wheelabrator, Inc.; Monroe County (FL); City of Juneau (AK); Township of Branchburg (NJ); City of Eugene (OR); Union County United (PA); City of Fort Lauderdale (FL); City of Panama City Beach (FL); Stop & Shop Supermarket Company; Track Racket (Millville, NJ); Green Lawn Cemetery (Columbus, OH); Nissan Motor Company, Ltd.; City of Union (OH); City of Ithaca (NY); SA Engineering; Upper Deerfield Township (NJ); Serra Toyota (Traverse City, MI); City of Norwalk (CT), Coronet Inc.