

AGENDA
CASCADE CHARTER TOWNSHIP
REGULAR BOARD MEETING

Wednesday, May 10, 2017

7:00 P.M.

Cascade Branch of the Kent District Library, Wisner Center
2870 Jacksmith, S.E.

Expected Meeting Procedures

1. During public comments you may speak on any item not noted on the agenda for a public hearing.
2. Please limit comments to 3 minutes per person and the Board may or may not choose to respond.
3. Please limit your comments to a specific issue.
4. Please turn OFF cellular phones.

- Article 1. Call to Order, Roll Call**
- Article 2. Pledge of Allegiance to the Flag**
- Article 3. Approval of Agenda**
- Article 4. Presentations/Public Comments (limit comments to 3 minutes)**
- Article 5. Approval of Consent Agenda**
- a. Receive and File Various Meeting Minutes
 1. Regular/Township Board Minutes for 4/26/17.
 - b. Receive and File Reports
 1. Building Department Monthly Report for April, 2017.
 2. Kent County Sheriff Office – East Precinct 2017 Quarterly Report.
 - c. Education Request
 1. Roger McCarty/Jennifer Genter – Michigan Assessor Association Conference – July 30 – August 2, 2017 – Kalamazoo, MI.
 - d. Receive and File Communications
 1. State of Michigan – Public Service Commission – Case No U-17771.
 2. Charter Communications – Channel Lineup
- Article 6. Financial Actions**
- a. **Consider Pay Draw #2 for the Thornapple River Dr. Utility Extension Project.**
- Article 7. Unfinished Business**
- Article 8. New Business**
- 022-2017 Consider Approval of a Resolution of Support for Redevelopment Liquor License. (roll call)**
- 023-2017 Discussion/Consideration of Redevelopment Ready Communities (RRC) Program.**
- 024-2017 Consider Approval of Township Hall/Station #1/Station #2/ Rehabilitation – Preliminary Engineering and Integrated Services Agreement.**

- 025-2017** **Consider Approval of 2017 Local Road Improvements.**
- 026-2017** **Consider Approval of Speed Limit Digital Display Signs.**
- 027-2017** **Consider Approval or Road Closure Request from the Hidden Hills Neighborhood Association.**

Article 9. **Public Comments on any other matters. (limit comments to 3 minutes)**

Article 10. **Manager Comments**

Article 11. **Board Member Comments**

Article 12. **Adjournment**

**MINUTES OF THE
CASCADE CHARTER TOWNSHIP
REGULAR BOARD MEETING**

Wednesday, April 26, 2017
7:00 P.M.

- Article 1.** Supervisor Beahan called the meeting to order.
Present: Supervisor Beahan, Treasurer Peirce, Clerk Slater, Trustee Koessel,
Lewis, Shipley and McDonald.
Absent: None
Also Present: Manager Swayze, Interim Fire Chief Rowland, DDA/ED Director
Korhorn and those listed in Supplement #1.
- Article 2.** Supervisor Beahan led the Pledge of Allegiance to the Flag.
- Article 3.** Motion was made by Trustee McDonald and supported by Trustee Koessel to
approve the Agenda as presented. Discussion followed regarding the public
comment sections of the Agenda. Motion carried unanimously.
- Article 4. Presentations/Public Comments (limit comments to 3 minutes)**
- Article 5. Approval of Consent Agenda**
- a. Receive and File Various Meeting Minutes
 - 1. Regular/Township Board Minutes for 4/12/17.
 - 2. Regular Planning Commission Minutes for 3/20/2017.
 - 3. Zoning Board of Appeals Minutes for 3/14/17 and 4/11/17.
 - b. Receive and File Reports
 - 1. Building Department Monthly Report for March, 2017.
Motion was made by Trustee Koessel and supported by Trustee
McDonald to approve the Consent Agenda as presented. Motion carried
unanimously.
- Article 6. Financial Actions**
- a. **Consider Approval of March, 2017 General/Special Funds.**
Motion was made by Trustee Shipley and supported by Treasurer Peirce
to approve the March, 2017 General/Special Funds. Motion carried
unanimously.
- Article 7. Unfinished Business**
- Article 8. New Business**
- 019-2017 a. Public Comments – Cascade Community Gathering Space
Plan.**
DDA/ED Director Korhorn reviewed the Gathering Space Plan.
DDA/ED Director Korhorn also provided feedback from other
communities. Discussion followed within the Board.
Public Comments included the following:
Ron McGowan, 1400 Dewberry Place, also owns property on
Thornapple River Dr., had concerns with skate park in front of
NOTO's and the Library. Also had concerns regarding parking.
Amphitheatre is too small.
Diane Cutler, Branch Manager-Kent District Library, would like
to endorse this project as being a very sound and solid project.

b. Consider Approval of the Cascade Community Gathering Space.

Discussion among the Board Members included the following:

Trustee Lewis:

- Thanked DDA and the people that volunteered.
- Could justify the “want” but was still struggling with the “need”. Still felt there was an incredible “need” for a new Township Administration Building.
- I am going to vote against it...I am for the thoughts and the concepts, but I am more for the idea the Township needs more growth.

Trustee Koessel:

- It’s a nice project...tend to agree with resident regarding the locality of the skate park. They tend to be more within a “park” area.
- I think tonight sets the tone for what we want to see that property used for in the future.
- I am concerned about the DDA’s prioritization of things.
- Need to focus on all the vacancies within the Township before we focus on building a park.
- Not 100% convinced that is where a park ought to go.
- At this point I am not in favor of this project at this time, it may be something in the future.

Trustee McDonald:

- I am totally in favor of it. I think it is a great idea. It is not a park...it is intended to be a gathering space, a community asset.

Supervisor Beahan:

- I think it will be an economic driver.

Clerk Slater:

- I feel the community is not ready to talk about the Township Hall again...I do believe it’s needed, but I feel it has left a “bad taste in their mouth.”
- If we did something for the community like this gathering space, people would come to it and they would enjoy it. They would have a good attitude about it and maybe later would be more receptive to building a Township Hall.

Treasurer Peirce:

- It’s a community development...not an economic development necessarily.
- I see the DDA as doing economic development not community development. I do not see this as a proper project for the DDA.
- I don’t see the revenues and expenditures in the fund balance of the DDA being able to support this project.
- I think it would take the Township to have to guarantee it.

Trustee Shipley:

- I am in favor of having something for our young people. This Township for years has been prejudiced against young people (in my opinion). I think that they sorely need some place like a skate park.
- I like the idea to have phased costs.

- I think the Township needs to go forward with some plan for a gathering place. Maybe not right here. Maybe develop other small projects...like a skate park, or an amphitheater.
- Perhaps many of these comments are “wrong time, wrong” place today.

Motion was made by Trustee McDonald and supported by Clerk Slater to approve the Community Gathering Space Plan as proposed. Motion failed.

Ayes - 3 Nays – 4 (Shiple, Koessel, Peirce and Lewis)

020-2017 Consider Approval of the Cascade Charter Township Agreement for Business Community Research with Cobalt Community Research.

Manager Swayze reviewed the tasks of an ad-hoc committee that had been put together to look at evaluating and making recommendations regarding the 3-Year pilot program for linehaul bus service along the 28th street corridor.

Motion was made by Clerk Slater and supported by Treasurer Peirce to approve the Cascade Charter Township Agreement for Business Community Research with Cobalt Community Research in the amount of \$7,124.00 with ½ coming from DDA and ½ funds coming from the General Fund. Discussion followed. Motion carried.

Ayes – 6 Nays – 1 (Shiple)

021-2017 Consider Approval for an Air Pack Fill Station Project.

Manager Swayze reviewed the need for the air pack fill station at Station #2. Interim Chief Rowland addressed the Board in regards to the need for the filling station. Discussion followed. Motion was made by Trustee Koessel and supported by Trustee McDonald to approve the Air Pack Fill Station Project at a cost of \$42,700. Motion carried unanimously.

Article 9. Public Comments on any other matters. (limit comments to 3 minutes)

Representative Thomas Albert was present to introduce himself to the Board and update the Board with a Legislative Update on what is going on in Lansing.

Lori Wisner, 1017 Skyevale was present to address the Board regarding an issue within the Cemetery. Supervisor Beahan advised Mrs. Wisner to contact Manager Swayze to set up a meeting to discuss her issues.

Diane Cutler, Library Branch Manager wanted to remind the Board regarding the last in the series Give Peace a Challenge...the last presentation is tomorrow night at 6:30 p.m.

Ryan Roe, Community Policing Officer was present to update the Board on issues going on in Cascade Township.

Article 10. Manager Comments

Manager Swayze offered the following comments:

- Reminder we have a 5k going on this weekend. It’s coming from the YMCA down Burton St. That road will be closed for approx. an hour and a half starting around 8:00 a.m.
- We are starting to push public information about our cleanup day. Clean up day area has been moved this year. It has been moved from what was

formerly the Road Commission Building in Ada to the Forest Hills Central High School.

- Thornapple River Dr. extension project is going well. We are currently 1.5 to 2 days behind right now (approx.). Still anticipating that the project will be done well within the 10 week time frame.

Article 11. Board Member Comments

Trustee Shipley offered the following comments:

- Thanked everyone for attending.

Trustee Koessel offered the following comments:

- Is the newsletter all set to go for June? (Manager Swayze stated the deadline is May 10) He wondered if we were going to publicize in the newsletter the roads we have selected for resurfacing.
- Have we gotten any feedback from the Kent County Road Commission regarding the letter we had sent to them regarding the intersection at Thornapple River Dr. and Cascade? Manager Swayze responded that we had not.

Trustee Lewis offered the following comments:

- Just wanted to “tip the hat” to the old Planning Commission member who took a lot of “guff” while they were going thru some of the meetings requiring developers to provide landscaping with their developments. Cascade is a beautiful place to live in today because of it.

Supervisor Beahan offered the following comments:

- Went to a graduation ceremony at Station #2 at the Fire Dept. It was for the South Kent Fire Academy. One of our firefighters, Jim Walker, in conjunction with the Byron Center Fire Dept. helped run the program. He congratulated the Fire Dept. on hosting this Academy and is looking forward to more collaborate efforts like that in the future.
- Thank you to Diane Cutler for getting the World Affairs Council here in Cascade.

Manager Swayze asked for Chief Rowland to approach the Board and fill them in on a call that they ran last night.

- Last night the guys got to deliver a baby. (Firefighter Walker and Firefighter Bolt) It was a baby girl.

Article 12. Adjournment

Motion was made by Treasurer Peirce and supported by Trustee Lewis to adjourn. Motion carried unanimously.

Meeting adjourned at 8:37 p.m.

Respectfully submitted,

Denise M. Biegalle
Deputy Clerk

Approved by:

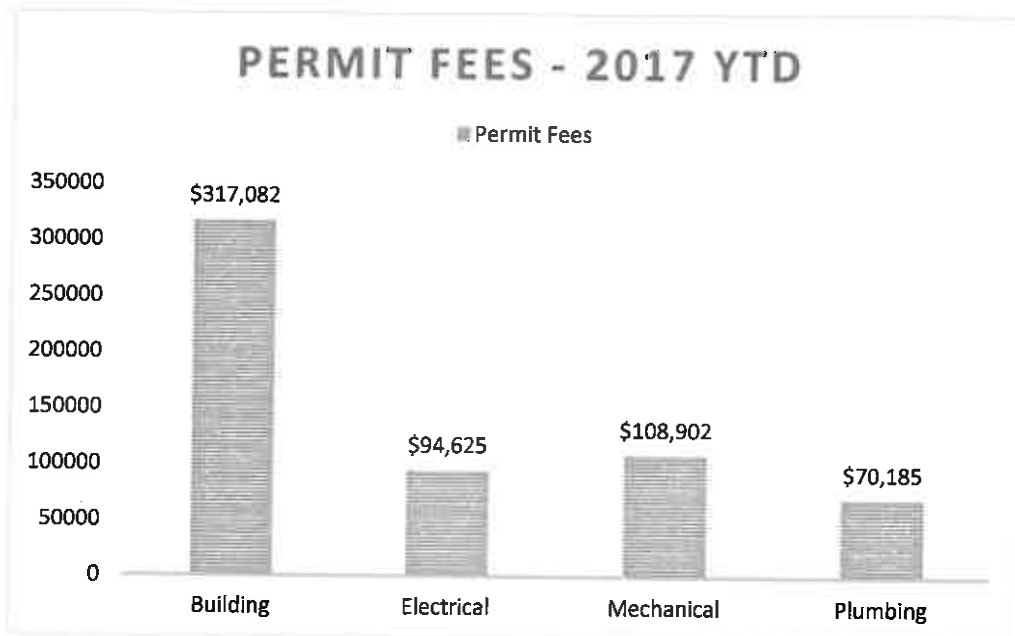
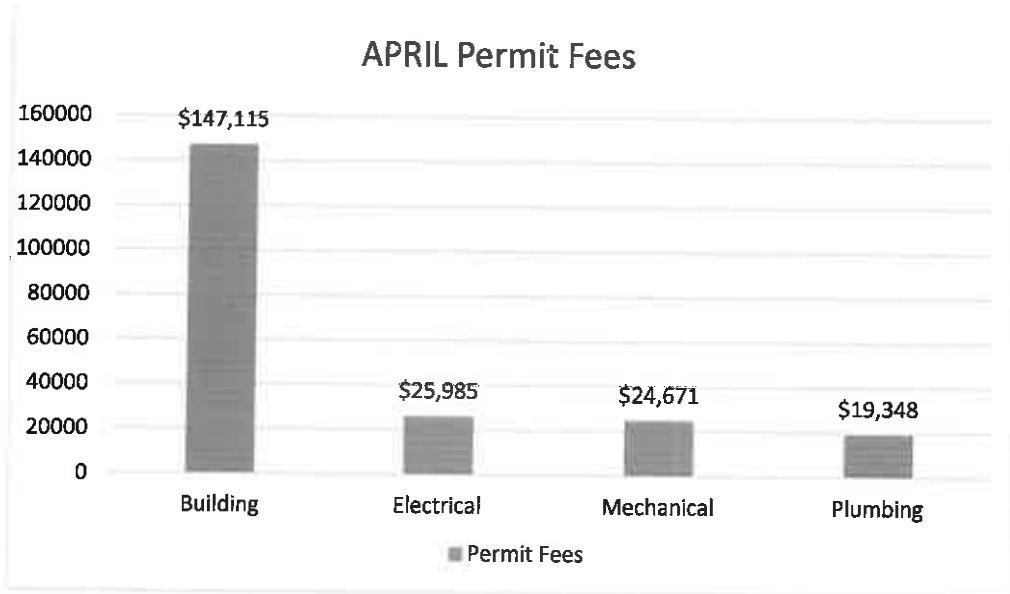
Susan B. Slater, Clerk

Robert S. Beahan, Supervisor

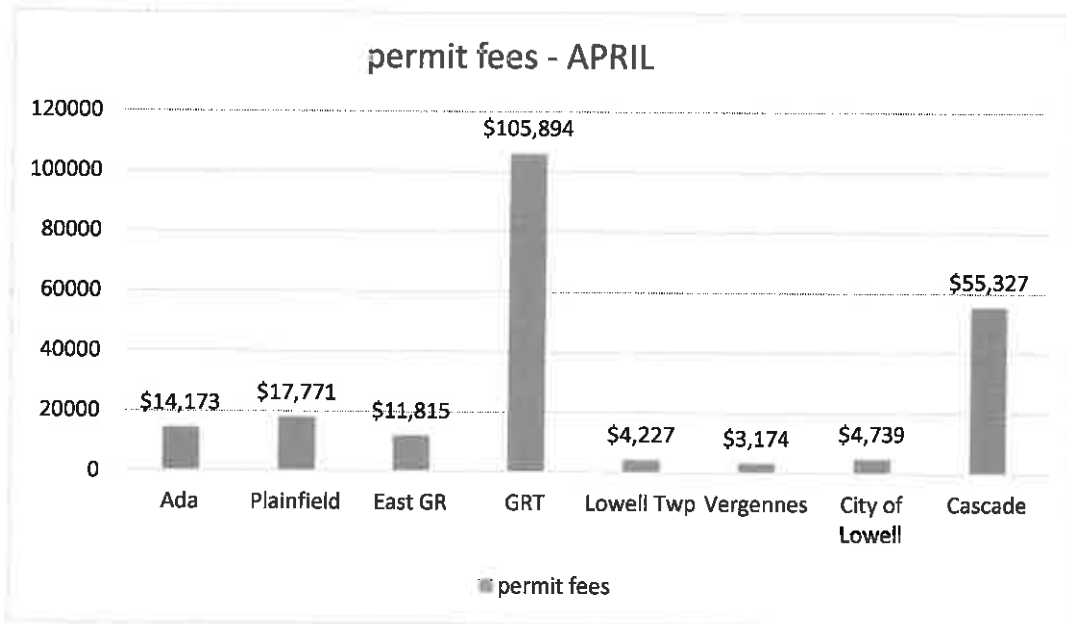
Cascade Inspection Services

APRIL 2017

Permit Fees by Type



Permit Fees by Municipality



Township	#of Per Building	#of Per Electrical	# of Per Mechanical	# of Per Plumbing	Total Permits	Total Fees				
PREV YTD TOTAL	325	\$169,967.00	429	\$68,640.00	676	\$84,230.50	356	\$50,837.00	1786	\$373,674.50
APRIL										
Cascade	60	\$36,253.00	39	\$6,416.00	72	\$8,040.00	30	\$4,618.00	201	\$55,327.00
Lowell Twp	10	\$2,244.00	3	\$724.00	6	\$670.00	5	\$589.00	24	\$4,227.00
Ada	34	\$5,658.00	18	\$2,929.00	31	\$3,405.00	14	\$2,181.00	97	\$14,173.00
Vergennes			7	\$1,216.00	6	\$900.00	4	\$1,058.00	17	\$3,174.00
GR Twp	47	\$96,516.00	25	\$3,725.00	24	\$2,373.50	18	\$3,279.00	114	\$105,893.50
EGR	27	\$4,589.00	22	\$3,065.00	22	\$2,275.00	18	\$1,886.00	89	\$11,815.00
Plainfield			40	\$5,884.00	60	\$6,150.00	34	\$5,737.00	134	\$17,771.00
City of Lowell	5	\$1,855.00	6	\$2,026.00	4	\$857.50			15	\$4,738.50
MONTH TOTAL	183	\$ 147,115.00	160	\$ 25,985.00	225	\$ 24,671.00	123	\$ 19,348.00	691	\$217,119.00

YTD 2017	508	\$ 317,082.00	589	\$ 94,625.00	901	\$ 108,901.50	479	\$ 70,185.00	2477	\$ 590,793.50
TOTAL-2016	1475	\$529,552.24	1992	\$310,463.00	3217	\$383,718.00	1404	\$190,762.00	8088	\$1,414,495.24
TOTAL-2015	1510	\$ 665,025.51	1948	\$327,865.00	3070	\$ 385,822.30	1361	\$ 216,089.00	7889	\$ 1,594,801.81
TOTAL-2014	1354	\$ 615,191.80	1780	\$297,971.00	2860	\$ 359,989.90	1257	\$ 196,553.00	7251	\$ 1,469,705.70
TOTAL-2013	1241	\$644,712.00	1667	\$288,442.06	2583	\$334,045.70	969	\$142,474.00	6460	\$1,409,673.76
TOTAL-2012	1,122	\$511,272.00	1,349	\$188,766.99	2,134	\$247,625.30	835	\$118,335.00	5,440	\$1,065,999.29
TOTAL-2011	949	\$410,550.75	990	\$148,549.50	1585	\$189,180.10	753	\$111,023.00	4277	\$859,303.35
TOTAL-2010	850	\$309,779.00	1330	\$162,994.00	1644	\$188,927.25	625	\$94,790.00	4449	\$756,490.25
TOTAL-2009	712	\$222,039.00	875	\$125,848.00	1313	\$149,101.75	554	\$74,397.00	3463	\$571,382.75
TOTAL-2008	848	\$582,100.75	1043	\$147,674.00	1348	\$164,271.30	697	\$91,695.00	3933	\$951,266.55
TOTAL-2007	1032	\$336,749.55	1069	\$137,857.00	1447	\$151,002.60	778	\$98,270.00	4326	\$723,879.15
TOTAL-2006	1181	\$481,673.30	1547	\$215,121.00	2147	\$243,076.90	1243	\$162,020.00	5173	\$940,523.41
TOTAL-2005	1032	\$419,355.30	1369	\$191,694.00	1874	\$211,234.15	1111	\$144,926.00	5386	\$967,209.45

CASCADE CONSOLIDATED FEES

YEAR 2017

MONTH	YEAR 2017				TOTAL	
	Building Comm.	Building Residential	Electrical	Mechanical		Plumbing
JANUARY	\$20,215.00	\$7,445.00	\$5,437.00	\$5,210.00	\$2,160.00	\$40,467.00
FEBRUARY	\$27,256.00	\$5,206.00	\$4,738.00	\$4,965.00	\$2,559.00	\$44,724.00
MARCH	\$24,077.00	\$7,913.00	\$6,126.00	\$8,929.75	\$5,132.00	\$52,177.75
APRIL	\$23,693.00	\$12,560.00	\$6,416.00	\$8,040.00	\$4,618.00	\$55,327.00
MAY						
JUNE						
JULY						
AUGUST						
SEPTEMBER						
OCTOBER						
NOVEMBER						
DECEMBER						
YEAR END TOTAL	\$95,241.00	\$33,124.00	\$22,717.00	\$27,144.75	\$14,469.00	\$192,695.75
PERMIT # FOR MONTH	12	48	39	72	30	201
PREV PERMIT TOTAL	23	73	101	152	64	413
PERMIT TOTAL FOR YR	35	121	140	224	94	614
YEAR TO DATE	2017	\$192,695.75				
YEAR TO DATE	2016	\$161,714.25				
OVER	\$30,981.50					

CASCADE SINGLE FAMILY HOMES

Number of Permits	APRIL	YTD 2017	2016	2015	2014	2013
New Residential Homes	5	19	56	62	154	74
VALUE - RESIDENTIAL	\$ 6,706,500.00	\$ 12,592,028.00	\$ 24,019,640.00	\$ 26,706,215.00	\$ 39,466,458.00	\$ 30,714,184.00

Cascade Twp -Permit Report by Category/ Fee

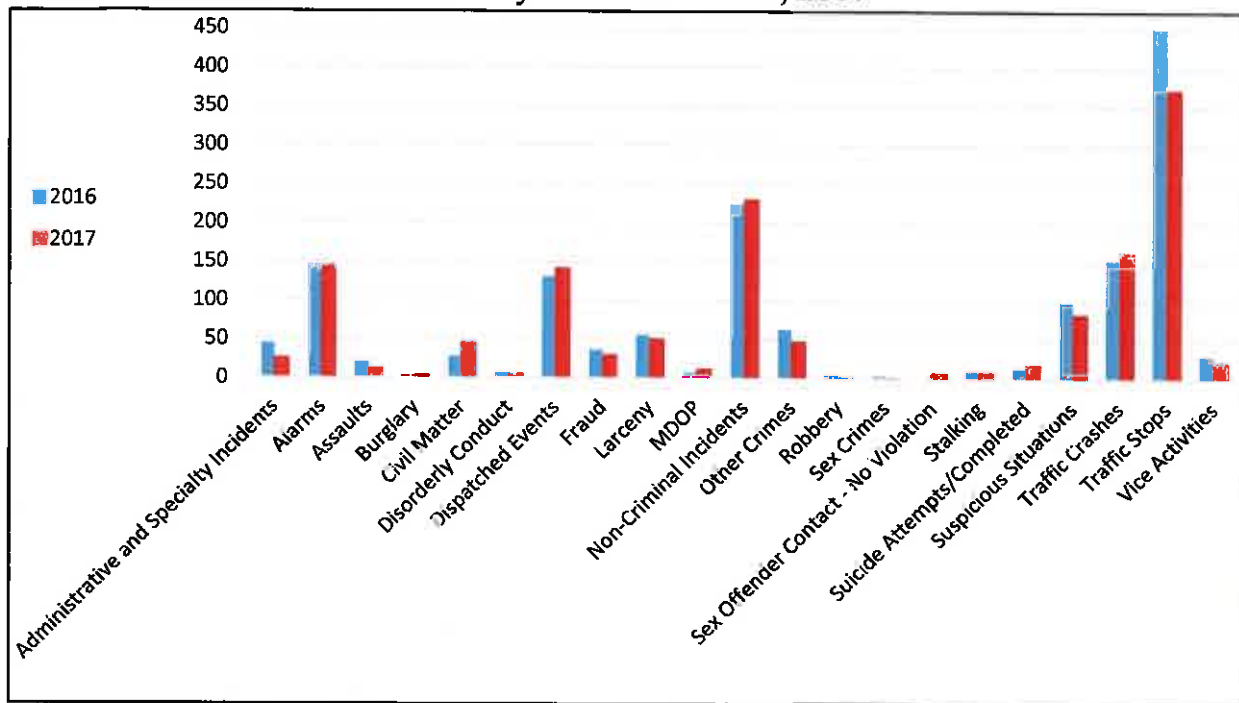
4/1/2017 12:00:0 to 4/30/2017 12:00:

Permit	Applicant	Address	Issue Date	Project Value	Permit Fee	Work Description
Res. Single Family						
PB17000375	ENGELSMA HOMES L	8070 ASHWOOD DR SE	04/07/2017	500,000	893.00	RESIDENCE
PB17000285	ENGELSMA HOMES L	8117 ASHWOOD DR SE	04/07/2017	1,500,000	2,422.00	RESIDENCE W/FINISHED BASEMI
PB17000411	JOHNSON HOMES INC	6853 THORNVIEW DR SE	04/18/2017	363,500	693.00	RESIDENCE W/FINISHED BASEMI
PB17000399	INSIGNIA HOMES	1396 BRIARCLIFF DR SE	04/19/2017	3,500,000	1,660.00	RESIDENCE W/FINISHED BASEMI
PB17000480	INFINITI CUSTOM HO	2928 BURWOOD HILL CT SE	04/24/2017	843,000	1,185.00	RESIDENCE W/FINISHED BASEMI
				6,706,500	6,853.00	
5 Permits				Value Total	6,706,500	Fee Total

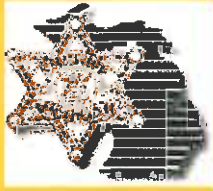


KENT COUNTY SHERIFF OFFICE
EAST PRECINCT
Serving Cascade Township
"A Partnership for Effective Policing"
2017 Quarterly Report

1st Quarter Report
 January 1st - March 31st, 2017

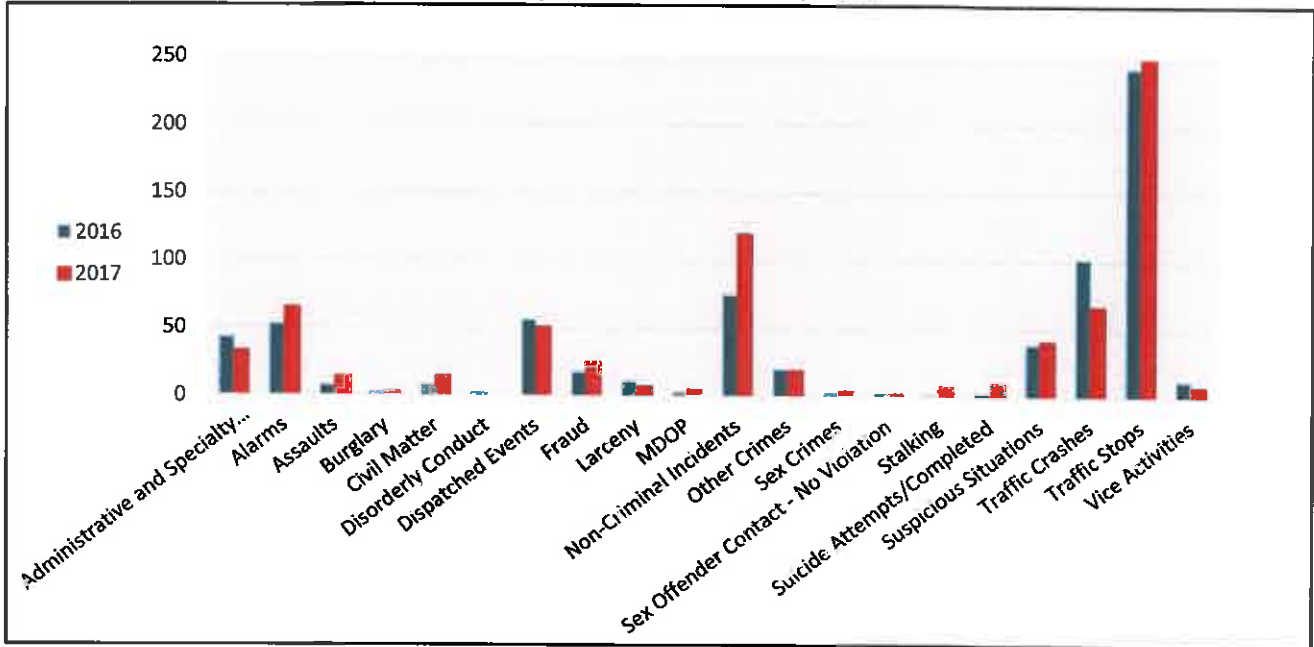


	2016	2017
Administrative and Specialty Incidents	44	25
Alarms	145	144
Assaults	20	12
Burglary	3	3
Civil Matter	27	44
Disorderly Conduct	6	5
Dispatched Events	131	141
Fraud	36	30
Larceny	55	50
MDOP	7	11
Non-Criminal Incidents	224	230
Other Crimes	63	47
Robbery	4	1
Sex Crimes	3	1
Sex Offender Contact - No Violation	0	7
Stalking	9	9
Suicide Attempts/Completed	13	19
Suspicious Situations	98	83
Traffic Crashes	152	162
Traffic Stops	450	372
Vice Activities	30	22
TOTAL	1520	1418



KENT COUNTY SHERIFF OFFICE
EAST PRECINCT
 Serving Ada Township
"A Partnership for Effective Policing"
2017 Quarterly Report

1st Quarter Report
 January 1st - March 31st, 2017

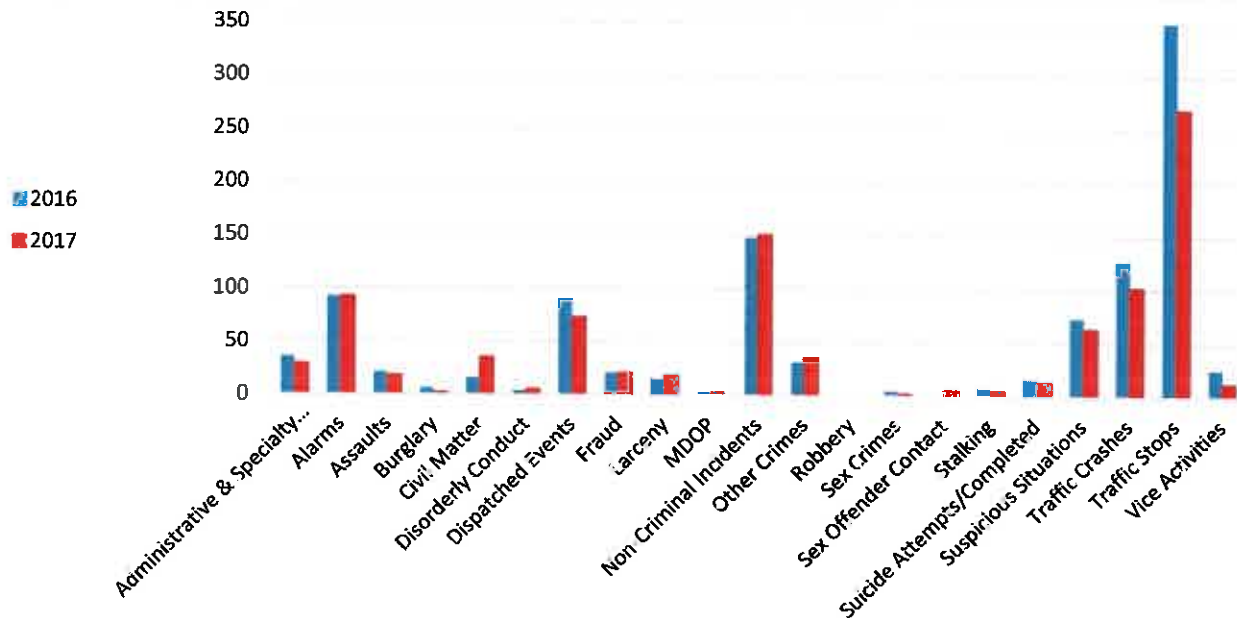


	2016	2017
Administrative and Specialty	43	33
Alarms	53	65
Assaults	8	14
Burglary	2	3
Civil Matter	8	15
Disorderly Conduct	2	0
Dispatched Events	56	51
Fraud	18	25
Larceny	11	7
MDOP	3	5
Non-Criminal Incidents	75	120
Other Crimes	20	19
Sex Crimes	2	4
Sex Offender Contact - No Violation	3	2
Stalking	1	7
Suicide Attempts/Completed	3	10
Suspicious Situations	39	41
Traffic Crashes	102	67
Traffic Stops	243	291
Vice Activities	12	8
TOTAL	704	787



KENT COUNTY SHERIFF OFFICE
EAST PRECINCT
 Serving Grand Rapids Township
"A Partnership for Effective Policing"
2017 Quarterly Report

1st Quarter Report
 January 1st - March 31st, 2017



	2016	2017
Administrative & Specialty Incidents	35	29
Alarms	92	92
Assaults	21	18
Burglary	6	2
Civil Matter	16	35
Disorderly Conduct	4	5
Dispatched Events	90	73
Fraud	21	21
Larceny	15	18
MDOP	3	3
Non-Criminal Incidents	148	151
Other Crimes	31	36
Robbery	1	0
Sex Crimes	4	2
Sex Offender Contact	0	5
Stalking	7	5
Suicide Attempts/Completed	15	13
Suspicious Situations	73	63
Traffic Crashes	126	102
Traffic Stops	355	269
Vice Activities	25	12
TOTAL	1088	954

Memo

To: Cascade Township Board
From: Roger Mc Carty, Assessor
CC:
Date: 4/26/2017
Re: Request for approval for Roger Mc Carty and Jennifer Genter to attend Michigan Assessor Association Conference

Attached is an education request for Roger Mc Carty and Jennifer Genter to attend the Michigan Assessor Association Conference. The conference is July 30 -August 2, 2017 in Kalamazoo, MI.

There are several excellent education classes. The education classes to be taken are listed on the application with class detail on the following page. As always, the conference is an excellent networking opportunity as well as a chance to interact with vendors.

Michigan Assessors Association

45th Annual Summer Conference

July 30 - August 2, 2017

"Soaring to New Heights"



Conference Registration Form

To register on-line, go to www.maa-usa.org

Please type or print clearly. (Please complete all fields and print clearly).

First Name: Roger Last Name: McCARTY

Title: ASSESSOR

Mailing address: 2865 THORNHILL SE

City, State, Zip: GRAND RAPIDS, MI 49546

Business Phone: 616 949 6176 Home Phone/Cell: 616 570 2416

Email Address: RMcCARTY@CASCADETWP.COM Is this your 1st MAA Conference?: Yes No

Guest Name:* _____

*(Guest/Companion Registration: (Please provide only if you are registering another person and include payment)

EDUCATION SESSIONS (Please indicate which education programs you plan to attend)

All educational sessions have been approved for continuing education credit by the State Tax Commission (up to a full 14 hours of credit).

- | | | |
|---|-----------------------------------|------------------|
| <input type="checkbox"/> Mon - "Assessing Administration of Agricultural Properties" | Shila Kiander | - 4 Hours Credit |
| <input checked="" type="checkbox"/> Mon - "Deconstruction of Commercial Construction" | Michael Racklyeft | - 6 Hours Credit |
| <input type="checkbox"/> Mon - "New, Loss, Additions, Losses & Adjustment" | Matthew Raftary | - 6 Hours Credit |
| <input checked="" type="checkbox"/> Tue - "Valuing Lakefront Properties" | Laurie Spencer | - 8 Hours Credit |
| <input type="checkbox"/> Tue - Agricultural Valuation Issues & Topics | Doug Hodge | - 6 Hours Credit |
| <input type="checkbox"/> Tue - "Assessing.net Commercial/ Industrial" | David Kirwin | - 6 Hours Credit |
| <input type="checkbox"/> Wed - "To Exempt or Not to Exempt" | Donna VanderVries & Shila Kiander | - 4 Hours Credit |
| <input checked="" type="checkbox"/> Wed - "Current Assessment Topics" | Timothy Schnelle | - 4 Hours Credit |

Registration Fees	Early Registration (BEFORE July 14, 2017)	Regular Registration (ON or AFTER July 14, 2017)	Amount
MAA Member	<input checked="" type="checkbox"/> \$250.00	<input type="checkbox"/> \$300.00	\$ <u>250</u>
Non-member	<input type="checkbox"/> \$300.00	<input type="checkbox"/> \$350.00	\$ _____
Spouse/Companion*	<input type="checkbox"/> \$200.00	<input type="checkbox"/> \$250.00	\$ _____
* A "companion" is defined as family member or individual not employed in assessment administration or related field.			
Conference Exhibitor*	<input type="checkbox"/> \$500.00	<input type="checkbox"/> \$500.00	\$ _____
* Includes one conference registration, skirted table, electrical and Wi-Fi.			
Conference Contribution Type:	_____		\$ _____
(Education, Coffee Break/\$350, Hospitality, Reception/Entertainment, Pres. Reception/\$350, Golf Hole/\$125/Hole, Misc.)			

Total Amount Enclosed: \$ 250

† A 2.5% convenience fee will be added to all online registrations at time of final payment.

Please make check payable to: **Michigan Assessors Association**
P.O. BOX 638, Grand Ledge, MI 48837

Memberships will be verified. New memberships must be received prior to or with the Conference Registration to qualify for the regular member rate. Faxed registrations will not be processed. Payment must accompany all conference registrations. If payment is received after July 14, 2017, a \$50 fee will be charged. Cancellation Policy: A full refund can be processed if the request is received prior to July 14th. Direct questions to Conference Chairman, Stacey Bassi at: 810-237-2401 or stacey@yohos.com



**Cascade Charter Township
Seminar/Conference Attendance Request Form**

This form must be filled out if the employee is requesting Township payment or reimbursement for the employee's attendance to a seminar or conference.

Conditions:

1. Cascade Charter Township will reimburse employees for approved registration for work related seminars and conferences. Individual seminars and conferences must be related to the employee's current job duties or a foreseeable-future position in the organization in order to be eligible for educational assistance.
2. Some seminars/conferences that an employee may attend may be unrelated to their particular job or government in general, and are therefore not covered by this assistance policy.
3. Any request that requires an overnight stay or expenditure over \$200 requires Township Board approval before the seminar/conference is attended.
4. Under extenuating circumstances, the Township Manager may approve an overnight stay or expenditure over \$200 for a conference or seminar prior to Township Board approval. The request must be made before attendance to a seminar/conference. The Township Board will be informed of request at their next scheduled meeting.

This form must be completed by the employee and approved by the Township Manager and/or Township Board before the seminar/conference is attended.

Name: ROGER MCCARTY

Application Date: 4/26/17

Location of Seminar/Conference KALAMAZOO

Name of Proposed Seminar/Conference: MAA CONF

Description of Seminar/Conference: (may also be attached) ANNUAL CONFERENCE

SEE ATTACHED EDUCATION PROGRAM

(over)

How will the Seminar/Conference benefit the employee and the township? _____

UPDATES FROM STC, SESSION ON VALUING LAKE FRONT PROPERTY AND
WE ARE UPDATING RIVER LAND VALUES THIS YEAR

Cost of the Seminar/Conference: (Registration) \$ 250

(Lodging) \$ 473 (Travel) \$ 53

Account #: 101-257-724

Your Signature: Roy McCar

Approvals:

Department Head: Roy McCar Date: 4/20/17

Township Manager: _____ Date: _____

Clerk's Signature: _____ Date: _____

(Showing Township Board approval)

Original to personnel file

1 copy to applicant

1 copy to Accounting



**Cascade Charter Township
Seminar/Conference Attendance Request Form**

This form must be filled out if the employee is requesting Township payment or reimbursement for the employee's attendance to a seminar or conference.

Conditions:

1. Cascade Charter Township will reimburse employees for approved registration for work related seminars and conferences. Individual seminars and conferences must be related to the employee's current job duties or a foreseeable-future position in the organization in order to be eligible for educational assistance.
2. Some seminars/conferences that an employee may attend may be unrelated to their particular job or government in general, and are therefore not covered by this assistance policy.
3. Any request that requires an overnight stay or expenditure over \$200 requires Township Board approval before the seminar/conference is attended.
4. Under extenuating circumstances, the Township Manager may approve an overnight stay or expenditure over \$200 for a conference or seminar prior to Township Board approval. The request must be made before attendance to a seminar/conference. The Township Board will be informed of request at their next scheduled meeting.

This form must be completed by the employee and approved by the Township Manager and/or Township Board before the seminar/conference is attended.

Name: Jennifer Genter

Application Date: 4/26/17

Location of Seminar/Conference Kalamazoo

Name of Proposed Seminar/Conference: Michigan Assessors Association

Description of Seminar/Conference: (may also be attached) See Attached

(over)

How will the Seminar/Conference benefit the employee and the township? education - gained knowledge from seasoned professionals in the field. Network and collaborate with other professionals/ assessors around the State of Michigan.

Cost of the Seminar/Conference: (Registration) \$ 250⁰⁰

(Lodging) \$ 473.00 (Travel) \$ 53⁰⁰

Account #: 101257724

Your Signature: Jennifer Jeter

Approvals:

Department Head: Ron [Signature] Date: 4/26/17

Township Manager: _____ Date: _____

Clerk's Signature: _____ Date: _____

(Showing Township Board approval)

Original to personnel file

1 copy to applicant

1 copy to Accounting

Michigan Assessors Association

45th Annual Summer Conference

July 30 - August 2, 2017

"Soaring to New Heights"

Conference Registration Form

To register on-line, go to www.maa-usa.org

Please type or print clearly. (Please complete all fields and print clearly).

First Name: Jennifer Last Name: Genter

Title: Deputy Assessor

Mailing address: 2865 Thornhills Ave SE

City, State, Zip: Grand Rapids, MI 49546

Business Phone: 616-949-6176 Home Phone/Cell: 616-915-2444

Email Address: jgenter@cascadetwp.com Is this your 1st MAA Conference?: Yes No

Guest Name: * _____

*(Guest/Companion Registration: (Please provide only if you are registering another person and include payment)

EDUCATION SESSIONS (Please Indicate which education programs you plan to attend)

All educational sessions have been approved for continuing education credit by the State Tax Commission (up to a full 14 hours of credit).

- | | | |
|---|-----------------------------------|------------------|
| <input type="checkbox"/> Mon - "Assessing Administration of Agricultural Properties" | Shila Klander | - 4 Hours Credit |
| <input checked="" type="checkbox"/> Mon - "Deconstruction of Commercial Construction" | Michael Racklyeft | - 6 Hours Credit |
| <input type="checkbox"/> Mon - "New, Loss, Additions, Losses & Adjustment" | Matthew Raftary | - 6 Hours Credit |
| <input checked="" type="checkbox"/> Tue - "Valuing Lakefront Properties" | Laurie Spencer | - 8 Hours Credit |
| <input type="checkbox"/> Tue - Agricultural Valuation Issues & Topics | Doug Hodge | - 6 Hours Credit |
| <input type="checkbox"/> Tue - "Assessing.net Commercial/ Industrial" | David Kirwin | - 6 Hours Credit |
| <input type="checkbox"/> Wed - "To Exempt or Not to Exempt" | Donna VanderVries & Shila Klander | - 4 Hours Credit |
| <input checked="" type="checkbox"/> Wed - "Current Assessment Topics" | Timothy Schnelle | - 4 Hours Credit |

Registration Fees	Early Registration (BEFORE July 14, 2017)	Regular Registration (ON or AFTER July 14, 2017)	Amount
MAA Member	<input checked="" type="checkbox"/> \$250.00	<input type="checkbox"/> \$300.00	\$ <u>250.00</u>
Non-member	<input type="checkbox"/> \$300.00	<input type="checkbox"/> \$350.00	\$ <u>0</u>
Spouse/Companion*	<input type="checkbox"/> \$200.00	<input type="checkbox"/> \$250.00	\$ <u>0</u>
Conference Exhibitor*	<input type="checkbox"/> \$500.00	<input type="checkbox"/> \$500.00	\$ <u>0</u>
Conference Contribution Type:			\$ <u>0</u>

(Education, Coffee Break/\$350, Hospitality, Reception/Entertainment, Pres. Reception/\$350, Golf Hole/\$125/Hole, Misc.)

Total Amount Enclosed: \$ 250.00

* A 2.5% convenience fee will be added to all online registrations at time of final payment.

Please make check payable to: **Michigan Assessors Association**
P.O. BOX 638, Grand Ledge, MI 49837

Memberships will be verified. New memberships must be received prior to or with the Conference Registration to qualify for the regular member rate. Faxed registrations will not be processed. Payment must accompany all conference registrations. If payment is received after July 14, 2017, a \$50 fee will be charged. Cancellation Policy: A full refund can be processed if the request is received prior to July 14th. Direct questions to Conference Chairman, Stacey Bassi at: 810-237-2401 or sbassi@yahco.com.

Michigan Assessors Association

45th Annual Summer Conference

July 30 - August 2, 2017

"Soaring to New Heights"



Radisson Plaza Hotel ~ Kalamazoo, Michigan

This year's conference will provide excellent educational content along with ample social time to provide conference attendees an outstanding environment to learn techniques and practices in assessment administration. This is an exceptional opportunity to meet with colleagues from around the state thus enhancing the opportunity to build professional networks which are vital for continued professional success.

To register on-line, go to www.maa-usa.org

Conference at a Glance

Concurrent Education Sessions

Experience four days of educational content that will expand your professional skills and understanding of emerging concepts. Attendees can obtain up to a total of 18 hours of required annual continuing education credits.

Monday

Assessing Administration of Agricultural Properties
(4 Hours Credit)

Deconstruction of Commercial Construction
(6 Hours Credit)

New, Loss, Additions, Losses & Adjustment
(6 Hours Credit)

Tuesday

Valuing Lakefront Properties (8 Hours Credit)

Agricultural Valuation Issues & Topics (6 Hour Credit)

Assessing.net Commercial/ Industrial
(6 Hours of Credit)

Wednesday

To Exempt or Not to Exempt (4 Hours Credit)

Current Assessment Topics (4 Hours Credit)

Accommodations

Radisson Plaza Hotel at Kalamazoo Center

100 West Michigan Avenue

Kalamazoo MI 49007

Tel: (844) 532-0830

Standard Room: \$142.00* (single/double occupancy)
*plus 6% sales tax and 5% occupancy tax

MAA Hotel-Promotion Code: **MIAA17**

Reservation Deadline: July 14, 2017

Schedule of Events

~ Sunday ~

Annual Golf Outing

Opening Reception ~ AirZoo

~ Monday ~

Awards Breakfast

Concurrent Educational Sessions

~ Tuesday ~

MAA Annual Business Meeting

Concurrent Educational Sessions

Annual Banquet

~ Wednesday ~

Concurrent Educational Sessions

Michigan Assessors Association

45th Annual Summer Conference

July 30 - August 2, 2017

“Soaring to New Heights”



To register on-line, go to www.maa-usa.org

This year's conference offers attendees an outstanding opportunity to meet, share and learn best practices the performance of assessment-related work and the ability to obtain up to 18 hours of the State Tax Commission's required continuing education credit.

~ Monday Educational Sessions ~

Assessing Administration of Agricultural Properties

Do you want to be outstanding in your field? You won't want to miss this new class created for our conference. This course will cover many aspects of assessing agricultural property. It is designed to provide students with an understanding and working knowledge of the state requirements for classification, exemption and valuation of Agricultural property. Resources including STC Bulletins, FAQs and Guidelines, will be utilized as a basis for this course

Presented by:

Shila Kiander, MAAO/3

Deconstruction of Commercial Construction

This session will provide fundamental information on preparing a business valuation when real and personal property is present. The primary objective will be to understand how to allocate value between intangible, real and personal property while ensuring not to double count or omit value for any type of asset. Several case studies involving frequently traded types of business will be discussed.

Presented by:

Michael Racklyeft, MMAO/4

New, Loss, Additions, Losses & Adjustment

This refresher course is an abbreviated version of the MAA 3 day course. Students will learn to determine new, loss, adjustment, additions and losses and the difference between Headlee and capped value additions and losses as they apply to the capped value formula. The instructors will guide students through study problems involving splits and combinations, exemptions, new construction, Board of Review actions, etc., and calculate assessed, capped and taxable values based upon various scenarios. A silent, portable calculator is required.

Presented by:

Matthew Raftary, MAAO/3

~ Tuesday Educational Sessions ~

Valuing Lakefront Properties

This class includes basic development of land value determinations including land value development methods but with the primary focus being waterfront properties. The class is geared towards concepts that explain why waterfront is so difficult to value and covers six common waterfront valuation errors. Waterfront land appraisal differs from other land appraisal types. Waterfront land often carries a much higher value than land even a few blocks away from

water. Identification of lakeshore characteristics, waterfront rights, setbacks, zoning and waterfront problem solving techniques will be covered. The class also covers some lake speak terms. Included is how our Department took many Board of Review appeals down to almost none on Spider Lake by mapping lake characteristics and incorporating them into our CAMA database and working with an Environmental Assessment firm.

Presented by:

Laurie Spencer, MMAO/4

Agricultural Valuation Issues & Topics

Provide an overview of agricultural valuation methodology, techniques, and issues through the use of lecture, sample problems and discussion between the seminar participants.

Presented by:

Doug Hodge, MAI, ARA, CCIM, MRICS

Assessing.net Commercial/ Industrial

This class covers the details of inputting Commercial/ Industrial structures into Assessing .NET. Examples of Calculator, Segregated, Unit-in-Place and Income Capitalization are used.

Presented by:

David Kirwin, MCAO

~ Wednesday Educational Sessions ~

To Exempt or Not to Exempt

State tax law provides that everything is assessable unless it is expressly exempted by statute, however, it isn't always easy to determine the exempt status of property. This course is designed to give an overview of Property Tax Exemptions in Michigan. Exemptions that are applied for and approved by the STC and/or the Local Assessor/unit of government will briefly be referenced. However, the course is primarily designed to cover the property tax exemptions found in statute that do not have a standard statutory application and approval process.

Presented by:

Donna VanderVries, MMAO/4

Shila Kiander, MAAO/3

Current Assessing Topics

This session discusses the many changes in property tax administration legislation and requirements during the past year as well as upcoming changes on the horizon.

Presented by:

Timothy Schnelle, MMAO/4

**STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

**NOTICE OF HEARING
FOR THE ELECTRIC AND NATURAL GAS CUSTOMERS OF
CONSUMERS ENERGY COMPANY
CASE NO. U-17771**

- Consumers Energy Company requests that the Michigan Public Service Commission, on the Commission's own motion, evaluate the regulatory review, revisions, determinations, and/or approvals necessary for Consumers Energy Company to fully comply with Public Act 295 of 2008 and Public Act 342 of 2016 (2016-2017 Energy Optimization Plan)
- The information below describes how a person may participate in this case.
- You may call or write Consumers Energy Company, One Energy Plaza, Jackson, Michigan 49201, (800) 477-5050 for a free copy of its application. Any person may review the documents at the offices of Consumers Energy Company.
- A public hearing will be held:

DATE/TIME: **Thursday, May 11, 2017 at 9:00 a.m.**
This hearing will be a prehearing conference to set future hearing dates and decide other procedural matters.

BEFORE: Administrative Law Judge **Mark D. Eyster**

LOCATION: Michigan Public Service Commission
7109 West Saginaw Highway
Lansing, Michigan

PARTICIPATION: Any interested person may attend and participate. The hearing site is accessible, including handicapped parking. Persons needing any accommodation to participate should contact the Commission's Executive Secretary at (517) 284-8090 in advance to request mobility, visual, hearing or other assistance.

The Michigan Public Service Commission (Commission) will hold a public hearing to consider Consumers Energy Company's (Consumers Energy) March 13, 2017 amended application, which seeks Commission's approval to: 1) determine that the Company's amended 2017 Energy Waste Reduction Plan is reasonable and prudent, and that it meets all applicable requirements of 2016 Public Act 342; 2) approve the requested Amended 2017 Energy Waste Reduction Plan natural gas and electric surcharges; 3) approve the requested accounting authority and approve the authority to roll-forward any unspent funds in 2017 into future approved Energy Waste Reduction plans; 4) approve the issuance of the tariff sheets; and 5) other relief.

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: michigan.gov/mpscedockets. Requirements and instructions for filing can be found in the User Manual on the E-Dockets help page. Documents may also be submitted, in Word or PDF format, as an attachment to an email sent to: mpscedockets@michigan.gov. If you require assistance prior to e-filing, contact Commission staff at (517) 284-8090 or by email at: mpscedockets@michigan.gov.

Any person wishing to intervene and become a party to the case shall electronically file a petition to intervene with this Commission by May 4, 2017. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon Consumers Energy's Legal Department - Regulatory Group, One Energy Plaza, Jackson, Michigan 49201.

Any person wishing to appear at the hearing to make a statement of position without becoming a party to the case may participate by filing an appearance. To file an appearance, the individual must attend the hearing and advise the presiding administrative law judge of his or her wish to make a statement of position. All information submitted to the Commission in this matter becomes public information, thus available on the Michigan Public Service Commission's website, and subject to disclosure. Please do not include information you wish to remain private.

Requests for adjournment must be made pursuant to the Michigan Administrative Hearing System's Administrative Hearing Rules R 792.10422 and R 792.10432. Requests for further information on adjournment should be directed to (517) 284-8130.

A copy of Consumers Energy's application may be reviewed on the Commission's website at: michigan.gov/mpscedockets, and at the office of Consumers Energy Company. For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 284-8090.

Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1909 PA 300, as amended, MCL 462.2 et seq.; 1919 PA 419, as amended, MCL 460.54 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Michigan Administrative Hearing System's Administrative Hearing Rules, 2015 AC, R 792.10401 et seq.

**[THE MICHIGAN PUBLIC SERVICE COMMISSION MAY APPROVE,
REJECT, OR AMEND PROPOSALS MADE BY CONSUMERS ENERGY.]**



May 1, 2017



T4 P1 567 *****AUTO**ALL FOR AADC 493
Cascade Township
2865 Thornhills Ave. SE
Grand Rapids, MI 49546-7195

Dear Franchise Official:

Charter Communications ("Charter") is making changes to our channel lineup for customers in Cascade Township.

Effective on or after May 31, 2017 Spectrum German View, that includes the following channels, will no longer be available:

- ONE World Sports on channels 398 and 846 (HD)
- RTL International on channels 420 and 895 (HD)

As always, please feel free to contact me by phone at (616) 607-2377 should you have any questions on this matter.

Sincerely,

Marilyn Passmore
Director, State Government Affairs, Michigan
Charter Communications



April 24, 2017

Cascade Township
2865 Thornhills Ave. SE
Grand Rapids, MI 49546

Dear Franchise Official:

This letter is to inform you that the following channels found on Spectrum TV Silver/Digi Tier 1 will be available on Spectrum Select service effective on or after May 15, 2017:

- SEC Network on channels 233 and 705 (HD)
- SEC Network Extra on channels 234 and 706 (HD)

Moving these channels to Spectrum Select will provide customers with network availability without the need to subscribe to the Spectrum Silver/Digi Tier 1 service level going forward. The channel numbers will remain the same.

Charter Communications customers in your community are already receiving information regarding this new addition.

If you have any questions related to this change, please do not hesitate to contact me (616) 607-2377.

Sincerely,

Marilyn Passmore

Marilyn Passmore
Director, State Government Affairs, Michigan
Charter Communications

TOWNSHIP BOARD MEMORANDUM

To: Cascade Charter Township Board
From: Sandra Korhorn, DDA/Economic Development Director *SKK*
Subject: Consider Pay Draw #2 for the Thornapple River Dr. Utility
Extension Project
Meeting Date: May 10, 2017

Attached is the contractor's application for payment #2 for the Thornapple River Dr. utility extension project. The pay application, pay estimate report and account balance are attached.

The amount due is \$203,264.14. The pay draw is for construction of the sanitary sewer. The work completed and recommended for payment in this pay request has been reviewed and approved by FTCH.

Staff recommends approval of Pay Draw #2 in the amount of \$203,264.14 for the Thornapple River Dr. utility extension project.

Attachments: FTCH letter
Pay Draw #2



TRANSMITTAL

Ms. Sandra Korhorn
Cascade Charter Township
2865 Thornhills Avenue, SE
Grand Rapids, MI 49546-7192

May 2, 2017

Re: Cascade Charter Township
Thornapple River Drive Utility Extension

Project No. G150788CD

- FOR REVIEW
- FOR YOUR USE
- AS REQUESTED

Sent By: Michael L. Berrevoets, PE/jc2

COPIES	DATE	DESCRIPTION
1	5/2/2017	Application and Recommendation Payment No. 2

COMMENTS

We have reviewed the contractor's Application and Recommendation for Payment No. 2 for the period ending April 28, 2017, and find it in compliance with the work completed to date.

An executed copy of Application and Recommendation for Payment No. 2 is attached.

Please forward a copy, with payment, to the contractor, and keep a copy for your files.

By email

cc: Mr. Jeff Talsma - Kamminga & Roodvoets, Inc.

APPLICATION AND RECOMMENDATION FOR PAYMENT
 PAGE 1 OF 3

TO: Cascade Charter Township
 In Care of: Fishbeck, Thompson, Carr & Huber, Inc. (FTCH)
 1515 Arboretum Drive, SE
 Grand Rapids, MI 49546

FROM (Contractor): Kamminga & Roodvoets, Inc.
 3435 Broadmoor Avenue, S.E.
 Grand Rapids, MI 49512

Application No: 2
 Period From: April 1, 2017
 To: April 28, 2017

Project: Thornapple River Drive Utility Extension
 FTCH Project Number: G150788CD

APPLICATION FOR PAYMENT:

Application for Payment is made, as indicated below, in connection with the Contract. Schedule of Values sheet is attached as page 3 of 3.

1.	Original Contract Price		\$623,476.50
2.	Net change by Change Orders		\$0.00
3.	Current Contract Price (1 plus 2)		\$623,476.50
4.	Gross Amount Due (From Unit Price Schedule		\$255,764.04
5.	Retainage (Per Agreement)	10% of Work Completed:	\$25,576.40
		Total Retainage	\$25,576.40
6.	Amount Eligible to Date (4 minus 5)		\$230,187.64
7.	Less Previous Payments		\$26,923.50
8.	Amount Due This Application (6 minus 7)		<u>\$203,264.14</u>

CHANGE ORDER SUMMARY:

Change Orders Approved by Owner	ADDITIONS	DEDUCTIONS
Change Order No. 1		
Net Change by Change Orders		

APPLICATION AND RECOMMENDATION FOR PAYMENT
PAGE 2 OF 2

CONTRACTOR'S CERTIFICATION:

The undersigned Contractor certifies that to the best of its knowledge (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 Work covered by prior Applications for Payment; (2) title of 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 Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Dated 5-2-17, 2017

Kamminga & Roodvoets, Inc.
Contractor

By 
(Signature)

Kurt D. Pock, PRESIDENT
Name and Title of Signatory

ENGINEER'S RECOMMENDATION:

To: Cascade Charter Township

In accordance with the Contract, the undersigned recommends payment to Contractor.

AMOUNT RECOMMENDED: \$203,264.14
(Attach explanation if amount recommended differs from the amount applied for.)

ENGINEER: Fishbeck, Thompson, Carr & Huber, Inc.

Dated MAY 2, 2017

By 
(Signature)

Michael L. Berrevoets, PE
Name and Title of Signatory

This Recommendation is not negotiable. The AMOUNT RECOMMENDED is payable only to Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of Owner or Contractor under this Contract.

This recommendation for payment is based on a review of the Work performed as compared to the amount of the application. This recommendation does not imply that Engineer is reviewing construction lien documents nor does it imply that Engineer is acting as a guarantor of the property. Any review of construction lien documents by Engineer is for information purposes only.



Construction Pay Estimate Amount Balance Report

Estimate: 2

5/2/2017 10:16 AM

Fishbeck, Thompson, Carr & Huber, Inc.

FieldManager 5.3a

Contract: _G150788CD, Thornapple River Dr Utility Extension

Item Description	Item Code	Prop. Line	Project	Category	Authorized Quantity	Quantity This Estimate	Qty. Paid To Date	Total Qty. Placed	% Cpt	Unit Price	Dollar Amt. Paid To Date
1" water service	_362202	0029	G150788CD	0001	475.000		0.000			33.00000	
10" Sanitary Sewer D-2680	_362203	0033	G150788CD	0001	1,050.000	1,046.000	1,046.000	1,046.000	99%	80.00000	\$83,680.00
12" 11.25 Degree Bend	_362202	0024	G150788CD	0001	3.000	2.000	2.000	2.000	67%	825.00000	\$1,650.00
12" Plug	_362202	0028	G150788CD	0001	1.000		0.000			600.00000	
12" Sleeve	_362202	0026	G150788CD	0001	1.000		0.000			2,000.00000	
12" Valve and Box	_362201	0015	G150788CD	0001	2.000	1.000	1.000	1.000	50%	2,400.00000	\$2,400.00
12" Water Main (DI CL53)	_362201	0012	G150788CD	0001	1,025.000	619.000	619.000	619.000	60%	89.00000	\$55,091.00
12"x12"x6" Tee	_362202	0020	G150788CD	0001	3.000	1.000	1.000	1.000	33%	1,100.00000	\$1,100.00
4' Dia. Sanitary manhole, per Detail S-1	_362203	0034	G150788CD	0001	7.000	7.000	7.000	7.000	100%	3,100.00000	\$21,700.00
5" Hydrant	_362201	0016	G150788CD	0001	4.000	1.000	1.000	1.000	25%	2,500.00000	\$2,500.00
6" 90 Degree Bend	_362202	10021	G150788CD	0001	1.000		0.000			450.00000	
6" Sanitary Sewer Lateral (PVC SDR 23.5)	_362203	0035	G150788CD	0001	480.000	302.400	302.400	302.400	63%	38.00000	\$11,491.20
6" tee/wye on 10" Sanitary Sewer	_362203	0036	G150788CD	0001	13.000	13.000	13.000	13.000	100%	400.00000	\$5,200.00
6" Valve and Box	_362201	0013	G150788CD	0001	4.000	1.000	1.000	1.000	25%	1,250.00000	\$1,250.00
6" Water Main (DI CL53)	_362201	0010	G150788CD	0001	45.000	10.000	10.000	10.000	22%	65.00000	\$650.00
8" 22.5 Degree Bend	_362202	0022	G150788CD	0001	2.000		0.000			575.00000	
8" 45 Degree Bend	_362202	0023	G150788CD	0001	2.000		0.000			600.00000	
8" Plug	_362202	0027	G150788CD	0001	2.000		0.000			425.00000	
8" Sleeve	_362202	0025	G150788CD	0001	2.000		0.000			1,250.00000	
8" Valve and Box	_362201	0014	G150788CD	0001	4.000		0.000			1,500.00000	
8" Water Main (DI CL53)	_362201	0011	G150788CD	0001	435.000		0.000			80.00000	
8"x8"x6" Tee	_362201	0018	G150788CD	0001	1.000		0.000			750.00000	
8"x8"x8" Tee	_362201	0019	G150788CD	0001	2.000		0.000			800.00000	
Aggregate Base, 6-inch	_362204	0046	G150788CD	0001	4,325.000		0.000			8.00000	
Asphalt Driveway Approach, 3-inch	_362205	10051	G150788CD	0001	150.000		0.000			85.00000	



Construction Pay Estimate Amount Balance Report

Estimate: 2

5/2/2017 10:16 AM

Fishbeck, Thompson, Carr & Huber, Inc.

FieldManager 5.3a

Item Description	Item Code	Prop. Line	Project	Category	Authorized Quantity	Quantity This Estimate	Qty. Paid To Date	Total Qty. Placed	% Cpt	Unit Price	Dollar Amt. Paid To Date
Bituminous Pavement, 3C (2.0")	_3622047	0047	G150788CD	0001	440.000		0.000			65.00000	
Bituminous Pavement, 5E1 (1.5")	_3622048	0048	G150788CD	0001	330.000		0.000			68.00000	
Cash Allowances - Testing	_3622002	0002	G150788CD	0001	15,000.000	1,263.080	1,263.080	1,263.080	8%	1.00000	\$1,263.08
Catch Basin, 2-foot Diameter	_3622040	0040	G150788CD	0001	1.000		0.000			1,750.00000	
Concrete Driveway Approach, 6-inch	_3622050	0050	G150788CD	0001	1,350.000		0.000			3.75000	
Core and Boot 10" Sewer into Manhole or Sewer	_3622037	0037	G150788CD	0001	1.000	1.000	1.000	1.000	100%	1,100.00000	\$1,100.00
Curb Stop and box on 1" water service	_3622031	0031	G150788CD	0001	14.000		0.000			450.00000	
Flared End Section, 12-inch	_3622041	0041	G150788CD	0001	11.000		0.000			600.00000	
Hydrant Extension	_3622017	0017	G150788CD	0001	3.000		0.000			550.00000	
Maintaining Traffic	_3622003	0003	G150788CD	0001	1.000	0.300	0.500	0.500	50%	12,900.00000	\$6,450.00
Miscellaneous Work Allowance	_3622055	0055	G150788CD	0001	15,000.000		0.000			1.00000	
Mobilization (5% Maximum of Total Bid)	_3622001	0001	G150788CD	0001	1.000	0.800	1.000	1.000	100%	31,100.00000	\$31,100.00
Pavement Markings	_3622052	0052	G150788CD	0001	3,600.000		0.000			0.39000	
Remove Concrete Drive Approach	_3622006	0006	G150788CD	0001	140.000	47.680	47.680	47.680	34%	7.00000	\$333.76
Remove Pavement	_3622005	0005	G150788CD	0001	3,800.000	3,170.000	3,170.000	3,170.000	83%	2.00000	\$6,340.00
Remove Tree, 19-inch to 36-inch Diameter	_3622008	0008	G150788CD	0001	14.000		12.000	12.000	86%	550.00000	\$6,600.00
Remove Tree, 6-inch to 18-inch Diameter	_3622007	0007	G150788CD	0001	40.000		47.000	47.000	118%	295.00000	\$13,865.00
Remove, Salvage and Place Street Sign	_3622009	0009	G150788CD	0001	3.000		0.000			65.00000	
Roadway Grading	_3622044	0044	G150788CD	0001	11.000		0.000			2,075.00000	
Soil Erosion and Sedimentation Control	_3622004	0004	G150788CD	0001	1.000	0.300	0.500	0.500	50%	3,250.00000	\$1,625.00
Storm Sewer, 12-inch	_3622039	0039	G150788CD	0001	175.000		0.000			40.00000	
Storm Sewer, 8-inch	_3622038	0038	G150788CD	0001	80.000		0.000			50.00000	

Contract: _G150788CD

Estimate: 2

Page 2 of 3



Construction Pay Estimate Amount Balance Report

Estimate: 2

5/2/2017 10:16 AM

Fishbeck, Thompson, Carr & Huber, Inc.

FieldManager 5.3a

Item Description	Item Code	Prop. Line	Project	Category	Authorized Quantity	Quantity This Estimate	Qty. Paid To Date	Total Qty. Placed	% Cpt	Unit Price	Dollar Amt. Paid To Date
Structure Casting, Adjust	_3622042	0042	G150788CD	0001	2.000		0.000			500.00000	
Subbase	_3622045	0045	G150788CD	0001	1,380.000		0.000			8.00000	
Subbase Underdrain, 6-inch	_3622043	0043	G150788CD	0001	2,160.000		0.000			4.00000	
Subgrade Undercutting	_3622049	0049	G150788CD	0001	500.000		0.000			9.00000	
Tap for 1" water service, including corporation stop	_3622030	0030	G150788CD	0001	14.000		0.000			300.00000	
Temporary Gravel	_3622056	0056	G150788CD	0001	1.000	0.500	0.500	0.500	50%	750.00000	\$375.00
Turf Establishment	_3622053	0053	G150788CD	0001	5,600.000		0.000			1.50000	
Turf Reinforcement Mat	_3622054	0054	G150788CD	0001	2,200.000		0.000			3.00000	
Valve Box	_3622032	0032	G150788CD	0001	1.000		0.000			300.00000	

Percentage of Contract Completed(curr): 41%
 (total paid to date / total of all authorized work)

Total Amount Paid This Estimate: \$225,849.04
Total Amount Paid To Date: \$255,764.04



Construction Pay Estimate Report

Fishbeck, Thompson, Carr & Huber, Inc.

5/2/2017 10:16 AM

FieldManager 5.3a

Contract: _G150788CD, Thornapple River Dr Utility Extension

Estimate Date	Estimate No.	Entered By	Estimate Type	Electronic File Created	All Contract Work Completed	Construction Started Date
05/01/2017	2	Rhiannon M Finkler	Semi-Monthly	No		3/6/2017
Prime Contractor Kammaing & Roodvoets, Inc.				Managing Office Fishbeck, Thompson, Carr & Huber, Inc.		

Item Usage Summary

Item Description	Item Code	Prop. Line	Project	Category	Project Line No.	Item Type	Mod. No.	Quantity	Dollar Amount
10" Sanitary Sewer D-2680	_3622033	0033	G150788CD	0001	0165	00	000	1,046.000	\$83,680.00
12" 11.25 Degree Bend	_3622024	0024	G150788CD	0001	0120	00	000	2.000	\$1,650.00
12" Valve and Box	_3622015	0015	G150788CD	0001	0075	00	000	1.000	\$2,400.00
12" Water Main (DI CL53)	_3622012	0012	G150788CD	0001	0060	00	000	619.000	\$55,091.00
12"x12"x6" Tee	_3622020	0020	G150788CD	0001	0100	00	000	1.000	\$1,100.00
4' Dia. Sanitary manhole, per Detail S-1	_3622034	0034	G150788CD	0001	0170	00	000	7.000	\$21,700.00
5" Hydrant	_3622016	0016	G150788CD	0001	0080	00	000	1.000	\$2,500.00
6" Sanitary Sewer Lateral (PVC SDR 23.5)	_3622035	0035	G150788CD	0001	0175	00	000	302.400	\$11,491.20
6" tee/wye on 10" Sanitary Sewer	_3622036	0036	G150788CD	0001	0180	00	000	13.000	\$5,200.00
6" Valve and Box	_3622013	0013	G150788CD	0001	0065	00	000	1.000	\$1,250.00
6" Water Main (DI CL53)	_3622010	0010	G150788CD	0001	0050	00	000	10.000	\$650.00
Cash Allowances - Testing	_3622002	0002	G150788CD	0001	0010	00	000	1,263.080	\$1,263.08
Core and Boot 10" Sewer into Manhole or Sewer	_3622037	0037	G150788CD	0001	0185	00	000	1.000	\$1,100.00
Maintaining Traffic	_3622003	0003	G150788CD	0001	0015	00	000	0.300	\$3,870.00
Mobilization (5% Maximum of Total Bid)	_3622001	0001	G150788CD	0001	0005	00	000	0.800	\$24,880.00
Remove Concrete Drive Approach	_3622006	0006	G150788CD	0001	0030	00	000	47.680	\$333.76
Remove Pavement	_3622005	0005	G150788CD	0001	0025	00	000	3,170.000	\$6,340.00
Soil Erosion and Sedimentation Control	_3622004	0004	G150788CD	0001	0020	00	000	0.300	\$975.00
Temporary Gravel	_3622056	0056	G150788CD	0001	0280	00	000	0.500	\$375.00

Total Estimated Item Payment: \$225,849.04



Construction Pay Estimate Report

Fishbeck, Thompson, Carr & Huber, Inc.

5/2/2017 10:16 AM

FieldManager 5.3a

Time Charges

Site	Site Description	Site Method	Days Charged	Liq. Damages
00	Overall Contract Site	Completion Date		\$0
Total Liquidated Damages:				\$0

Pre-Voucher Summary

Project	Voucher No.	Item Payment	Stockpile Adjustment	Dollar Amount
G150788CD, Thornapple River Dr Utility Extension	0002	\$225,849.04	\$0.00	\$225,849.04
Voucher Total:				\$225,849.04

Summary

Current Voucher Total:	\$225,849.04	Earnings to date:	\$255,764.04
-Current Retainage:	\$22,584.90	- Retainage to date:	\$25,576.40
-Current Liquidated Damages:	\$0.00	- Liquidated Damages to date:	\$0.00
-Current Adjustments:	\$0.00	- Adjustments to date:	\$0.00
Total Estimated Payment:	\$203,264.14	Net Earnings to date:	\$230,187.64
		- Payments to date:	\$26,923.50
		Net Earnings this period:	\$203,264.14

Estimate Certification

Kevin Kietzman, PE (Project Engineer)

(Date)

(Construction Engineer)

(Date)

TOWNSHIP BOARD MEMORANDUM

To: Cascade Charter Township Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Consider Resolution of Support for Redevelopment Liquor License

Meeting Date: May 10, 2017

Township staff has been working with Scott Minke, who would like to open X-Golf Grand Rapids at 5761 28 St. in the Esplanade Center. X-Golf is an indoor virtual golf and entertainment venue (<http://www.xgolfnovi.com>).

Scott has been working to obtain a liquor license; however, nothing has become available to him. He then began the process to obtain a redevelopment liquor license, which are available to businesses that are located within a redevelopment district or DDA district.

Redevelopment liquor licenses are fairly new to Townships but have been available to cities for a number of years. A couple years ago the law was amended to allow Townships to distribute redevelopment liquor licenses. There are specific requirements to be met before a redevelopment license can be secured and these licenses are not transferrable.

The applicant is required to obtain a resolution of support from the Township for the license. The following factors will be considered when deciding to support the resolution:

- a. A conviction of three or more liquor violations or a felony in any court or before the Michigan Liquor Control Commission, within a period of five years preceding the receipt of the application
 - i. **No known liquor violations or felonies.**
- b. A license which, under this chapter, has been revoked for cause.
 - i. **No known revoked licenses.**
- c. Whether all of the members of such copartnership shall qualify to obtain a license.
 - i. **To be determined by the LCC.**
- d. With respect to a corporation, whether any officer, manager or director thereof, or a stock owner or stockholders owning in the aggregate more than 5% of the

stock of such corporation, is not eligible to receive a license hereunder for any reason.

- i. To be determined by the LCC**
- e. Whether the business is conducted by a manager or agent unless such manager or agent possesses the same qualifications required of the licensee.
 - i. The applicant will be the co-owner of the business/license.**
- f. A conviction of any federal or state law concerning the manufacture, possession or sale of alcoholic liquor or a controlled substance.
 - i. No known convictions**
- g. Whether the applicant owns the premises for which a license is sought or does not have lease therefor for the full period for which the license is issued, or a person, corporation or copartnership that does not have sufficient financial assets to carry on or maintain the business.
 - i. Premises is leased by the applicant**
- h. Whether the applicant is a law enforcement public official or a member of the Township Board, and whether such official is interested in any way, either directly or indirectly, in the manufacture, sale or distribution of alcoholic liquor.
 - i. Not applicable**
- i. Whether there exists a violation of the applicable building, electrical, mechanical, plumbing or fire codes, applicable zoning regulations, applicable public health regulations, or any other applicable Township ordinance.
 - i. No current violations, See attached signature sheet**
- j. Whether, for any new license or for the transfer of any existing license, the sale of beer, wine or spirits is shown to be an accessory use to other permitted business uses upon the site, such as but not limited to food sales, motel operations, or recreational activities.
 - i. The primary use is an indoor virtual golf and entertainment venue**
- k. Whether the premises does not or will not soon after commencement of operations have adequate off-street parking, lighting, refuse disposal facilities, screening, noise, or nuisance control or where a nuisance does or will exist.
 - i. Meets requirements and not anticipated to cause a nuisance.**
- l. With respect to a person whose license is in escrow, whether owners of the escrowed license are in violation of any provision of this chapter, state law, other local ordinance or rule of the Michigan Liquor Control Commission, or if the license is held in escrow for more than one year.
 - i. Not applicable**

Based on the factors above, staff recommends approval of the resolution to support the redevelopment liquor license for X-Golf Grand Rapids, 5761 28th St. SE.



Cascade Charter Township
Application for Liquor License Support Resolution

Cascade Township does not issue liquor licenses. This application is for a resolution of support from the Township, which may be required by the State of Michigan Liquor Control Commission before a liquor license is issued.

APPLICANT INFORMATION

Name: Scott Minke DOB: 3.15.82
Street Address: 815 Glen Meadows Drive
City: South Lyon State: MI Zip: 48178
Phone: 248.431.8277 Mobile: 248.431.8277 Email: scott@xgolfnovi.com

BUSINESS INFORMATION

Name of Business: X-Golf Grand Rapids
Street Address: 5761 E 28th Street
City: Cascade Township State: MI Zip: 49546

Business Partners (all individuals with greater than 5% interest in the business):

Name	Address	DOB
SCOTT MINKE	815 GLEN MEADOWS DR. SOUTH LYON, MI 48178	3.15.82
JASON PERRAS	57680 DEERE CT. SOUTH LYON, MI 48178	10.29.82
BRENDAN WADLEY	3498 RICHARDS CROSSING FORT MILL, SC 29708	9.23.81

LICENSE INFORMATION:

Please list the Michigan Liquor License Commission license that is being applied for. If you are applying for transfer of an escrowed license, please list the license number and current owner.

Class C - New On Premise Liquor License

Business Description: Indoor golf simulator business
to include full bar and limited food options

Have you or any of the business partners been convicted of a felony in any court?

Yes No **If yes, explain:** _____

Have you or any of the business partners been convicted on any state or federal law concerning the manufacture, possession or sale of alcoholic liquor or a controlled substance: Yes No **If yes, explain:** _____

Have you ever had a liquor license revoked for cause, or been convicted of a liquor license violation by the Michigan Liquor Control Commission? Yes No

If yes, explain: _____

Is the sale or manufacturing of beer, wine or liquor an accessory use to other permitted uses upon the site? Yes No


If yes, explain: _____





Please attach to this application a building and site plan showing the entire structure and premises and, in particular, the specific area where the license is to be utilized. Where applicable, the plans shall demonstrate adequate off-street parking, lighting, refuse disposal facilities, screening and noise control measures.

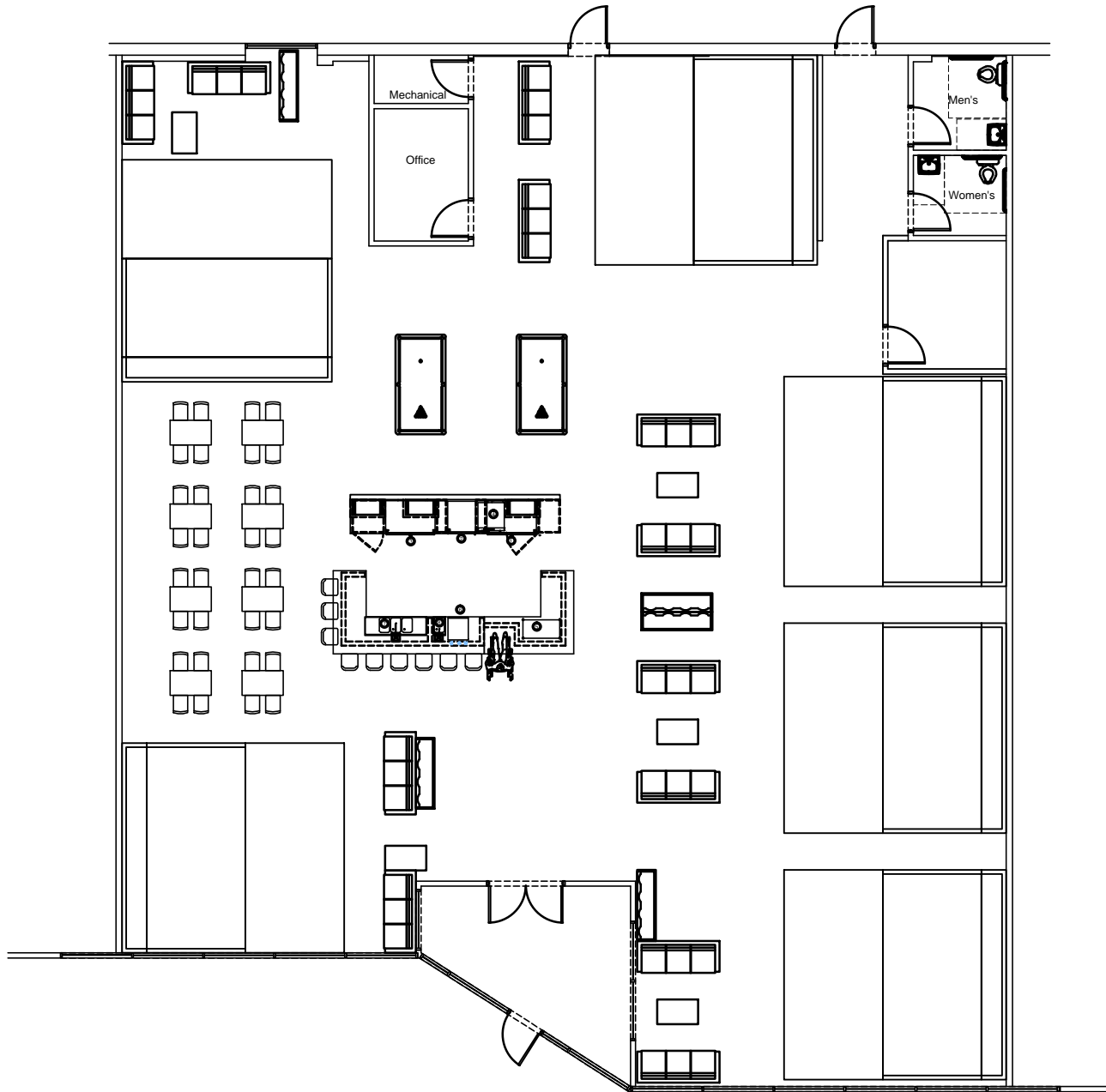
Please initial the following statements:

SM I (the applicant) have never been convicted of a felony and am not disqualified to receive a license by any matter contained in the Cascade Charter Township Liquor Licenses Ordinance or the laws of the State of Michigan.

SM I (the applicant) have read and understood the Cascade Charter Township Liquor License ordinance and will not violate any of the laws of the State of Michigan or of the United States or any ordinances of Cascade Charter Township in the conduct of business related to the license being applied for.

Signature:  Date: 4.5.17

<i>For Official Use Only</i>	
Fire Department Approval Notes: _____	Signature: <u></u> Date: <u>4/26/17</u>
Building Department Approval Notes: _____	Signature: <u></u> Date: <u>4/24/17</u>
Clerk Department Approval Notes: _____	Signature: <u></u> Date: <u>4/21/17</u>
Treasurer Department Approval Notes: _____	Signature: <u></u> Date: <u>4/26/17</u>
Zoning Department Approval Notes: _____	Signature: <u></u> Date: <u>4/27/17</u>
Township Board Approval Notes: _____ Resolution Number _____	Signature: _____ Date: _____





Local Government Approval
(Authorized by MCL 436.1501)

Instructions for Applicants:

- You must obtain a recommendation from the local legislative body for a new on-premises license application, certain types of license classification transfers, and/or a new banquet facility permit.

Instructions for Local Legislative Body:

- Complete this resolution or provide a resolution, along with certification from the clerk or adopted minutes from the meeting at which this request was considered.

At a Regular meeting of the Cascade Charter Township council/board
(regular or special) (township, city, village)
called to order by Supervisor Beahan on May 10, 2017 at 7:00 p.m.
the following resolution was offered: (date) (time)

Moved by _____ and supported by _____

that the application from Scott Minke, X-Golf Grand Rapids
(name of applicant)

for the following license(s): New Class C license issued under MCL436.1521a(1)(b)
(list specific licenses requested)

to be located at: 5761 28th St. SE, Grand Rapids, MI 49546

and the following permit, if applied for:

Banquet Facility Permit Address of Banquet Facility: _____

It is the consensus of this body that it _____ this application be considered for
(recommends/does not recommend)
approval by the Michigan Liquor Control Commission.

If disapproved, the reasons for disapproval are _____

Vote

Yeas: _____

Nays: _____

Absent: _____

I hereby certify that the foregoing is true and is a complete copy of the resolution offered and adopted by the Cascade Township
council/board at a regular meeting held on May 10, 2017 (township, city, village)
(regular or special) (date)

Susan B. Slater

Print Name of Clerk

Signature of Clerk

Date

Under Article IV, Section 40, of the Constitution of Michigan (1963), the Commission shall exercise complete control of the alcoholic beverage traffic within this state, including the retail sales thereof, subject to statutory limitations. Further, the Commission shall have the sole right, power, and duty to control the alcoholic beverage traffic and traffic in other alcoholic liquor within this state, including the licensure of businesses and individuals.

Please return this completed form along with any corresponding documents to:

Michigan Liquor Control Commission

Mailing address: P.O. Box 30005, Lansing, MI 48909

Hand deliveries or overnight packages: Constitution Hall - 525 W. Allegan, Lansing, MI 48933

Fax to: 517-763-0059

TOWNSHIP BOARD MEMORANDUM

To: Cascade Charter Township Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Introduce Redevelopment Ready Communities (RRC) Program

Meeting Date: May 10, 2017

The Michigan Economic Development Corporation (MEDC) offers a state-wide certification program that allows communities to become Redevelopment Ready. Redevelopment Ready Communities (RRC) is a voluntary, no cost certification program promoting effective redevelopment strategies through a set of best practices. The program measures and then certifies communities that integrate transparency, predictability and efficiency into their daily development practices. The RRC certification is a formal recognition that a community has a vision for the future and the fundamental practices in place to get there.

The RRC program enhances opportunities for municipalities to encourage business attraction and retention, offer superior customer service, and have a streamlined development approval process. The foundation of the program is the RRC Best Practices. Each best practice must be evaluated and then the community must explain how it is being met or how it will be met to achieve certification. The best practices are as follows:

- Community Plans and Public Outreach
- Zoning Regulations
- Development Review Process
- Recruitment and Education
- Redevelopment Ready Sites
- Community Prosperity

There are currently ten municipalities that have been certified as Redevelopment Ready Communities. Receiving certification can be a lengthy process and involves the various boards and commissions as well as the public to be involved.

Ryan Kilpatrick, a MEDC CATeam Specialist, will provide more information and a short presentation at the meeting.

This program has been introduced to both the DDA and Planning Commission. Both boards felt this would be a positive step for Cascade. Township staff would like to begin going through the best practices and submit for certification.

MICHIGAN REDEVELOPMENT READY COMMUNITIES PROGRAM

The Redevelopment Ready Communities® (RRC) Program is a state-wide certification program that supports communities to become development ready and competitive in today's economy. It encourages communities to adopt innovative redevelopment strategies and efficient processes which build confidence among businesses and developers. Through the RRC program, local municipalities receive assistance in establishing a solid foundation for development to occur in their communities – making them more attractive for investments that create places where people want to live, work and play.

Once engaged in the program, communities commit to improving their redevelopment readiness by undergoing a rigorous assessment, and then work to achieve a set of criteria laid out in the RRC Best Practices. Each best practice addresses key elements of community and economic development, setting the standard for evaluation and the requirements to attain certification. The program measures and then certifies communities that actively tap the vision of local residents and business owners to shape a plan for their future while also having the fundamental practices in place to be able to achieve that vision. The six RRC best practices include:

- Community Plans and Public Outreach
- Zoning Regulations
- Development Review Process
- Recruitment and Education
- Redevelopment Ready Sites®
- Community Prosperity

Through the RRC best practices, communities build deliberate, fair and consistent development processes from the inside out. RRC provides the framework and benchmarks for communities to strategically and tactically ask “What can we do differently?” By shifting the way municipalities approach development, they're reinventing the way they do business – making them

more attractive for investments that create places where talent wants to live, work and visit.

The RRC program also has an advisory council consisting of public and private sector experts to assist in guiding the development of the best practices, provide feedback and recommendations on community assessments, and consider new opportunities to enhance the program. In addition to Michigan Economic Development Corporation (MEDC) assistance, communities receive comments from multiple perspectives from experts working in the field, tapping into a broader pool of talent.

RRC certification formally recognizes communities for being proactive and business friendly. Certified communities clearly signal they have effective development practices such as well-defined development procedures, a community-supported vision, an open and predictable review process and compelling sites for developers to locate their latest projects. Through the program, MEDC provides evaluation support, expertise and consultation, training opportunities, and assist certified communities market their top redevelopment sites. These packaged sites are primed for new investment because they are located within a community that has effective policies, efficient processes and broad community support.

For more information email RRC@michigan.org or contact the MEDC at 517.373.9808.



redevelopment ready
communities®

BEST PRACTICES



redevelopment ready
communities®
BEST PRACTICES

Program overview 3

Best Practice One: Community Plans and Public Outreach

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Best Practice Two: Zoning Regulations

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Best Practice Three: Development Review Process

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Best Practice Four: Recruitment and Education

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Best Practice Five: Redevelopment Ready Sites®

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Best Practice Six: Community Prosperity

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 6.2—Marketing and promotion 19

Conclusion 20





If your community plans for future investment, invites public input, and offers superior customer service, then Redevelopment Ready Communities certification® is for you!

The Michigan Economic Development Corporation's Redevelopment Ready Communities® (RRC) program works with Michigan communities seeking to streamline the development approval process by integrating transparency, predictability and efficiency into their daily development practices. RRC is a statewide program that certifies communities who actively engage stakeholders and plan for the future. RRC empowers communities to shape their future by assisting in the creation of a solid planning, zoning and development foundation to retain and attract businesses, investment and talent.

Through RRC, communities commit to improving redevelopment readiness by agreeing to undergo a rigorous assessment, and work to achieve a set of criteria as described in this document. Developed by public and private sector experts, the RRC best practices are the standard for evaluation. Each best practice addresses key elements of community and economic development. Evaluations are conducted by the RRC team through interviews, observation and data analysis. After the evaluation, a community is presented

with a report of findings that highlights successes and outlines recommended actions for implementation of missing best practice criteria. The expectations listed with each evaluation criteria are what a community is measured against to determine if that criteria is being accomplished. A community must demonstrate how the expectations are being achieved, and when applicable, may propose alternative approaches. To be awarded certification, a community must meet all RRC best practice criteria.

Redevelopment Ready Communities certification signals that a community has clear development policies and procedures, a community-supported vision, a predictable review process and compelling sites for developers to locate their latest projects. Once certified, the MEDC will assist in the promotion and marketing of up to three Redevelopment Ready Sites®. These packaged sites are primed for new investment because they are located within a community that has effective policies, efficient processes and the broad community support needed to get shovels in the ground.

In this document, parts of the best practices will have further explanation. If a word is in **orange**, hover your mouse over it and a yellow box will appear with more information. If a word is orange and **underlined**, it contains a hyperlink. Contact the RRC team at RRC@michigan.org with questions.

Best Practice One: Community plans and public outreach

1.1—THE PLANS

Best Practice 1.1 evaluates community planning and how a community's redevelopment vision is embedded in the master plan, capital improvements plan, downtown plan and corridor plan. Comprehensive planning documents are a community's guiding framework for growth and investment. Information and strategies outlined in the plans are intended to serve as policy guidelines for local decisions about the physical, social, economic and environmental development of the community.

The master plan is updated, at a minimum, every five years to provide a community with a current and relevant decision making tool. The plan sets expectations

for those involved in development, giving the public some degree of certainty about their vision for the future, while assisting the community to achieve its stated goals. An updated master plan is essential to articulating the types of development the community desires and the specific areas where the community will concentrate resources. Coordination between the master plan, capital improvements plan, downtown plan and corridor plan is essential. It is important that planning documents incorporate recommendations for implementation, including goals, actions, timelines and responsible parties.

EVALUATION CRITERIA 1

The governing body has adopted a master plan in the past five years.

EXPECTATIONS

- The master plan reflects the community's desired direction for the future.
- The master plan identifies strategies for priority redevelopment areas.
- The master plan addresses land use and infrastructure, including complete streets elements.
- The master plan includes a zoning plan.
- The master plan incorporates recommendations for implementation, including goals, actions, timelines and responsible parties.
- Progress on the master plan is annually reported to the governing body.
- The master plan is accessible online.

EVALUATION CRITERIA 2

The governing body has adopted a downtown plan.

EXPECTATIONS

- The downtown plan identifies development area boundaries.
- The downtown plan identifies projects, and includes estimated project costs and a timeline for completion.
- The downtown plan includes mixed-use and pedestrian oriented development elements.
- The downtown plan addresses transit oriented development, if applicable.
- The downtown plan coordinates with the master plan and capital improvements plan.
- The downtown plan is accessible online.

Best Practice One: Community plans and public outreach

1.1—THE PLANS *continued*

EVALUATION CRITERIA 3

The governing body has adopted a **corridor plan**.

EXPECTATIONS

- The **corridor plan** identifies development area boundaries.
- The corridor plan identifies projects, and includes estimated project costs and a timeline for completion.
- The **corridor plan** includes mixed-use and pedestrian oriented development elements.
- The corridor plan addresses transit oriented development, if applicable.
- The corridor plan coordinates with the master plan and capital improvements plan.
- The corridor plan is accessible online.

EVALUATION CRITERIA 4

The governing body has adopted a capital improvements plan.

EXPECTATIONS

- The **capital improvements plan** details a minimum of six years of public structures and improvements and is reviewed annually.
- The capital improvements plan coordinates projects to minimize construction costs.
- The capital improvements plan coordinates with the master plan and budget.
- The capital improvements plan is accessible online.

Best Practice One: Community plans and public outreach

1.2—PUBLIC PARTICIPATION

Best Practice 1.2 assesses how well a community identifies its stakeholders and engages them, not only during the master planning process, but on a continual basis. A public participation strategy is essential to formalize those efforts and outline how the public will be engaged throughout planning and development processes.

Public participation is the process by which a community consults with interested or affected stakeholders before making a decision. It is two-way communication and collaborative problem solving with the objective of being intentionally inclusive, and the goal

of achieving better and more acceptable decisions. Public participation aims to prevent or minimize disputes by creating a process for resolving issues before they become an obstacle.

The best plans and proposals have the support of many stakeholders from businesses, residents, community groups and elected and appointed community officials. Public engagement should be more frequent and interactive than only soliciting input during the master plan update and public hearings.

EVALUATION CRITERIA 1

The community has a **public participation strategy** for engaging a diverse set of community stakeholders.

EXPECTATIONS

- The strategy identifies **key stakeholders**, including those not normally at the visioning table.
- The strategy describes public participation methods and the appropriate venue to use each method.
- If a third party is consulted, they adhere to the public participation strategy.

EVALUATION CRITERIA 2

The community demonstrates that public participation efforts go beyond the basic methods.

EXPECTATIONS

- Basic practices:**
 - **Open Meetings Act**
 - Website posting
 - Postcard mailings
 - Local cable notification
 - Newspaper posting
 - Flier posting on community hall door
 - Attachments to water bills
 - Announcements at governing body meetings
- Proactive practices:**
 - Individual mailings
 - Community workshops
 - Social networking
 - One-on-one interviews
 - Charrettes
 - Canvassing
 - Focus groups
 - **Crowd-sourcing**

EVALUATION CRITERIA 3

The community shares outcomes of public participation processes.

EXPECTATIONS

- The community tracks success of various outreach methods.
- The community participation results are communicated in a consistent and transparent manner.

Best Practice Two: Zoning regulations

2.1—ZONING REGULATIONS

Best Practice 2.1 evaluates a community’s zoning ordinance and how well it regulates for the goals of the master plan.

Zoning is a key tool for plan implementation. Inflexible or obsolete zoning regulations can discourage development and investment. Outdated regulations can

force developers to pursue rezoning or variance requests, extending project timelines, increasing costs and creating uncertainty. Communities should look to streamline ordinances and regulate for the kind of development that is truly desired. In addition, zoning is an essential tool for shaping inviting, walkable, vibrant communities.

EVALUATION CRITERIA 1

The governing body has adopted a zoning ordinance that aligns with the goals of the master plan.

EXPECTATIONS

- The community has evaluated the master plan’s recommendations to determine if changes to the zoning map or ordinance are needed.

EVALUATION CRITERIA 2

The zoning ordinance provides for areas of concentrated development in appropriate locations and encourages the type and form of development desired.

EXPECTATIONS

- The ordinance allows mixed-use by right in designated areas of concentrated development.
- The community has reviewed the ordinance to consider how **form-based zoning** could help achieve community goals.
- The ordinance requires one or more of the following **elements** in areas of concentrated development:
 - Build-to lines
 - Open store fronts
 - Outdoor dining
 - Minimum ground floor transparency
 - Streetscape elements (trees, seating, pedestrian-scale lighting and signage)
- The ordinance allows for preservation of sensitive historic and environmental features.

EVALUATION CRITERIA 3

The zoning ordinance includes flexible tools to encourage development and redevelopment.

EXPECTATIONS

- Special land use and conditional zoning approval procedures and requirements are clearly defined.
- Commercial and industrial districts allow for related compatible uses that serve **new economy-type** businesses.

Best Practice Two: Zoning regulations

2.1—ZONING REGULATIONS *continued*

EVALUATION CRITERIA 4

The zoning ordinance allows for a variety of housing options.

EXPECTATIONS

- The ordinance allows for two or more of the following **non-traditional housing types**:
 - Accessory dwelling units
 - Attached single-family units
 - Stacked flats
 - Live/work
 - Residential units above non-residential uses
 - Co-housing
 - Corporate temporary housing
 - Cluster housing
 - Micro units

EVALUATION CRITERIA 5

The zoning ordinance includes standards to improve non-motorized transportation.

EXPECTATIONS

- The community understands the benefits of walkable and transit oriented development and has standards for the following elements where appropriate:
 - Bicycle parking
 - Traffic calming
 - Pedestrian-scale lighting
 - Public realm standards
- The community understands the benefits of **connectivity** and has **ordinance requirements** that accommodate pedestrian activity within and around development.

EVALUATION CRITERIA 6

The zoning ordinance includes flexible parking standards.

EXPECTATIONS

- The ordinance includes regulations for two or more of the following:
 - Reduction or elimination of required parking when on-street and public parking is available
 - Connections between parking lots
 - Shared parking agreements
 - Parking maximums
 - Parking waivers
 - Electric vehicle charging stations
 - Bicycle parking
 - Payment in lieu of parking
 - Reduction of required parking for complementary mixed-uses

Best Practice Two: Zoning regulations

2.1—ZONING REGULATIONS *continued*

EVALUATION CRITERIA 7

The zoning ordinance includes standards for green infrastructure.

EXPECTATIONS

- The ordinance includes regulations for one or more of the following:
 - Rain gardens, bioswales and other low impact development techniques
 - Green roofs
 - Pervious pavement
 - Landscaping that encourages or requires use of native, non-invasive species
 - Preservation of existing trees
- The community recognizes the benefits of street trees and parking lot landscaping to mitigate the impacts of heat island effects.

EVALUATION CRITERIA 8

The zoning ordinance is user-friendly.

EXPECTATIONS

- The ordinance portrays clear definitions and requirements.
- The ordinance is available in an electronic format at no cost. Hard copies are available for review at convenient locations.
- The ordinance is accessible online.

Best Practice Three: Development review process

3.1—DEVELOPMENT REVIEW PROCEDURES

Best practice 3.1 evaluates the community’s development review policies and procedures, project tracking and internal/external communication.

The purpose of the development review process is to assure plans for specific types of development comply with local ordinances and are consistent with the master plan. Streamlined, well-documented development policies and procedures ensure a smooth and predictable experience when working with a community. It is essential for a community’s development review team to also coordinate with permitting and inspections staff.

Unnecessary steps or unclear instructions increase time

and expenses associated with development. Community leaders should look to simplify and clarify policies, operate in a transparent manner and increase efficiency to create an inviting development climate that is vital to attracting investment. To do this, sound internal procedures need to be in place and followed. Tracking projects internally across multiple departments can alleviate potential delays. Offering conceptual site plan review meetings is one more step a community can take to show investors they are working to remove development barriers and cut down on unexpected time delays.

EVALUATION CRITERIA 1

The zoning ordinance articulates a thorough site plan review process.

EXPECTATIONS

- The responsibilities of the governing body, planning commission, zoning board of appeals, other reviewing bodies, and staff are clearly documented.

EVALUATION CRITERIA 2

The community has a qualified intake professional.

EXPECTATIONS

- The community identifies a project point person and trains staff to perform intake responsibilities including:
 - Receiving and processing applications and site plans
 - Documenting contact with the applicant
 - Explaining procedures and submittal requirements
 - Facilitating meetings
 - Processing applications after approval
 - Excellent customer service

EVALUATION CRITERIA 3

The community defines and offers **conceptual site plan review** meetings for applicants.

EXPECTATIONS

- The community has clearly defined expectations posted online and a checklist to be reviewed at conceptual meetings.

Best Practice Three: Development review process

3.1—DEVELOPMENT REVIEW PROCEDURES *continued*

EVALUATION CRITERIA 4

The community encourages a developer to seek input from neighboring residents and businesses at the onset of the application process.

EXPECTATIONS

- The community **assists the developer** in soliciting input on a proposal early in the site plan approval process as detailed in the public participation strategy.

EVALUATION CRITERIA 5

The appropriate departments engage in **joint site plan reviews**.

EXPECTATIONS

- The joint site plan review team consists of the following representatives, as appropriate:
 - Planning department
 - Public works department
 - Building department
 - Transportation department
 - Fire
 - Police
 - Assessor
 - Community manager or supervisor
 - Economic development
 - Historic District Commission
 - Consultant
 - Attorney
 - County soil erosion and sedimentation
 - County drain commissioner
 - County health department
 - County road commission
 - Outside agencies

EVALUATION CRITERIA 6

The community has a clearly documented internal staff review policy.

EXPECTATIONS

- The internal review process articulates clear roles, responsibilities and timelines.
- Development review standards are clearly defined.

EVALUATION CRITERIA 7

The community promptly acts on **development requests**.

EXPECTATIONS

- Site plans for permitted uses are approved administratively or by the planning commission.
- The community follows its documented procedures and timelines.
- The community has easy to follow flowcharts of development processes that include timelines.
- Community development staff coordinates with permitting and inspections staff to ensure a smooth and timely approval process.

Best Practice Three: Development review process

3.1—DEVELOPMENT REVIEW PROCEDURES *continued*

EVALUATION CRITERIA 8

The community has a method to track development projects.

EXPECTATIONS

- The community uses a **tracking mechanism** for projects during the development process.
- The community uses a tracking mechanism for projects during the permitting and inspections process.

EVALUATION CRITERIA 9

The community annually reviews successes and challenges with the development review process.

EXPECTATIONS

- The community **obtains customer feedback** on the site plan approval and permitting and inspections process and integrates changes where applicable.
- The joint site plan review team, including permitting and inspections staff, meets to capture lessons learned and amends the process accordingly.

Best Practice Three: Development review process

3.2—GUIDE TO DEVELOPMENT

Best Practice 3.2 evaluates the accessibility of a community’s planning and development information.

Development information and applications must be assembled to help citizens, developers and public officials gain a better understanding of how the development

process in the community works. Documents should be updated regularly and provide a general overview of development processes, steps necessary to obtain approvals and be readily available online.

EVALUATION CRITERIA 1

The community maintains a [guide to development](#) that explains policies, procedures and steps to obtain approvals.

EXPECTATIONS

- The guide includes:
 - Relevant [contact information](#)
 - Relevant meeting schedules
 - Easy-to-follow step-by-step [flowcharts](#) of development processes, including [timelines](#)
 - [Conceptual meeting](#) procedures
 - Relevant ordinances to review prior to site plan submission
 - Site plan review [requirements and application](#)
 - Clear explanation for site plans that can be approved administratively
 - [Rezoning request](#) process and application
 - [Variance request](#) process and application
 - [Special land use](#) request process and application
 - Fee schedule
 - Special meeting procedures
 - Financial assistance [tools](#)
 - Design guidelines and related processes
 - Building permit requirements and applications
- The guide to development is accessible online.

EVALUATION CRITERIA 2

The community annually reviews the fee schedule.

EXPECTATIONS

- The fee schedule is updated to cover the community’s true cost to provide services.
- The community accepts credit card payment for fees.

Best Practice Four: Recruitment and education

4.1—RECRUITMENT AND ORIENTATION

Best practice 4.1 evaluates how a community conducts recruitment and orientation for newly appointed or elected officials and board members.

Diversity on boards and commissions can ensure a wide range of perspectives are considered when making

decisions on development and financial incentives.

Communities should seek applicants with desired skill sets and establish expectations prior to new officials and board members becoming active.

EVALUATION CRITERIA 1

The community sets expectations for board and commission positions.

EXPECTATIONS

- The community outlines expectations and **desired skill sets** for open seats.
- Board and commission applications are available online.

EVALUATION CRITERIA 2

The community provides orientation packets to all appointed and elected members of development related boards and commissions.

EXPECTATIONS

- The **orientation packet** includes all relevant planning, zoning and development information.

Best Practice Four: Recruitment and education

4.2—EDUCATION AND TRAINING

Best practice 4.2 assesses how a community encourages ongoing education and training and tracks training needs for appointed or elected officials, board members and staff.

Planning commissioners, zoning board of appeals members, the governing body and staff make more informed development decisions when they receive

adequate training on land use and development issues. Turnover in officials and staff can create gaps in knowledge, which makes ongoing training essential to the efficient functioning of a community's development processes.

EVALUATION CRITERIA 1

The community has a dedicated source of funding for training.

EXPECTATIONS

- The community has a training budget allocated for elected and appointed officials and staff.

EVALUATION CRITERIA 2

The community identifies training needs and tracks attendance for elected and appointed officials and staff.

EXPECTATIONS

- The community manages a simple tracking mechanism for logging individual training needs and attendance.
- The community identifies trainings that assist in accomplishing their stated goals and objectives.

EVALUATION CRITERIA 3

The community encourages elected and appointed officials and staff to attend trainings.

EXPECTATIONS

- The community consistently notifies its elected and appointed officials and staff about training opportunities.

EVALUATION CRITERIA 4

The community shares information between elected and appointed officials and staff.

EXPECTATIONS

- The community holds collaborative work sessions, including joint trainings on development topics.
- Training participants share information with those not in attendance.
- The planning commission prepares an annual report for the governing body.

Best Practice Five: Redevelopment Ready Sites®

5.1 — REDEVELOPMENT READY SITES®

Best practice 5.1 assesses how a community identifies, visions for and markets priority redevelopment sites. A redevelopment ready site is a site targeted by the community and ready for investment.

Identifying and marketing priority sites can assist a community to stimulate the real estate market for obsolete, vacant and underutilized property.

Communities that have engaged the public and determined desired outcomes for priority sites create a predictable environment for development projects. A community which takes steps to reduce the risk of

rejected development proposals will entice hesitant developers to spend their time and financial resources pursuing a project in their community. If a development proposal on a priority site is deemed controversial, additional public participation opportunities should be held to ensure community support. To encourage development, it is essential that communities actively package and market sites prioritized for redevelopment. Developers look to invest in places that have an overall vision for the community and priority sites.

EVALUATION CRITERIA 1

The community identifies and prioritizes redevelopment sites.

EXPECTATIONS

- The community maintains an updated list of priority sites to be redeveloped.

EVALUATION CRITERIA 2

The community gathers basic information for prioritized redevelopment sites.

EXPECTATIONS

- Required information to include:
 - Photo of the site and/or rendering
 - Desired development outcomes for the site
 - Owner contact information
 - Community contact information
 - Zoning
 - Lot size
 - Building size
 - State equalized value
 - Utilities on site: Water, sewer, electricity, natural gas
 - Wired broadband infrastructure: DSL, cable, fiber

EVALUATION CRITERIA 3

The community has developed a vision for the priority redevelopment sites.

EXPECTATIONS

- The vision includes desired development outcomes.
- Community champions for redevelopment of the site are identified.
- High controversy redevelopment sites may require additional public engagement.

Best Practice Five: Redevelopment Ready Sites®

5.1 — REDEVELOPMENT READY SITES® *continued*

EVALUATION CRITERIA 4

The community identifies **potential resources and incentives** for prioritized redevelopment sites.

EXPECTATIONS

- The community identifies negotiable development tools, financial incentives and/or in-kind support, based on the project meeting the community's vision and desired development outcomes.

EVALUATION CRITERIA 5

Property information packages for prioritized sites are assembled.

EXPECTATIONS

- The property information package includes basic information and the following as applicable:
 - Available financial incentives
 - Deed restrictions
 - Property tax assessment information
 - Property survey
 - Previous uses
 - Existing conditions report
 - Known environmental and/or contamination conditions
 - Soil conditions
 - Demographic data
 - Surrounding amenities
 - Planned infrastructure improvements as identified in CIP
 - GIS information including site location and street maps
 - Natural features map
 - Traffic studies
 - Target market analysis or feasibility study results
 - Market studies

EVALUATION CRITERIA 6

Prioritized redevelopment sites are actively marketed.

EXPECTATIONS

- The property information packages are accessible online.

Best Practice Six: Community prosperity

6.1—ECONOMIC DEVELOPMENT STRATEGY

Best practice 6.1 assesses what goals and actions a community has identified to assist in strengthening its overall economic health.

Today, economic development means more than business attraction and retention. While business development is a core value, a community needs to include community development and talent in the

overall equation for economic success. The goal of the economic development strategy is to provide initiatives and methods that will encourage diversity of the region’s economic base, tap into opportunities for economic expansion and help to create a sustainable, vibrant community.

EVALUATION CRITERIA 1

The community has an approved **economic development strategy**.

EXPECTATIONS

- The economic development strategy is part of the master plan, annual budget or a separate document.
- The economic development strategy connects to the master plan and capital improvements plan.
- The economic development strategy identifies the economic opportunities and challenges of the community.
- The economic development strategy incorporates **recommendations for implementation**, including goals, actions, timelines and responsible parties.
- The economic development strategy coordinates with a regional economic development strategy.
- The economic development strategy is accessible online.

EVALUATION CRITERIA 2

The community annually reviews the economic development strategy.

EXPECTATIONS

- Progress on the economic development strategy is reported annually to the governing body.

Best Practice Six: Community prosperity

6.2—MARKETING AND PROMOTION

Best practice 6.2 assesses how a community promotes and markets itself to create community pride and increase investor confidence. It also evaluates the ease of locating pertinent planning, zoning and economic development documents on the community’s website.

Community marketing and promotion can take many forms. Communities must develop a positive, promotional strategy through marketing campaigns,

advertising and special events to encourage investment. Marketing campaigns can assist with sharing the established community vision, values and goals.

Developing a brand to promote a consistent identity can position a community for future success. A community’s website is an important marketing tool and must be well-designed to provide information to the public and build a positive image.

EVALUATION CRITERIA 1

The community has developed a [marketing strategy](#).

EXPECTATIONS

- The marketing strategy identifies opportunities and outlines specific steps to attract businesses, consumers and real estate development to the community.
- The marketing strategy strives to create or strengthen an image for the community.
- The marketing strategy identifies approaches to market priority development sites.
- The community coordinates marketing efforts with local, regional and state partners.

EVALUATION CRITERIA 2

The community has an updated, user-friendly municipal website.

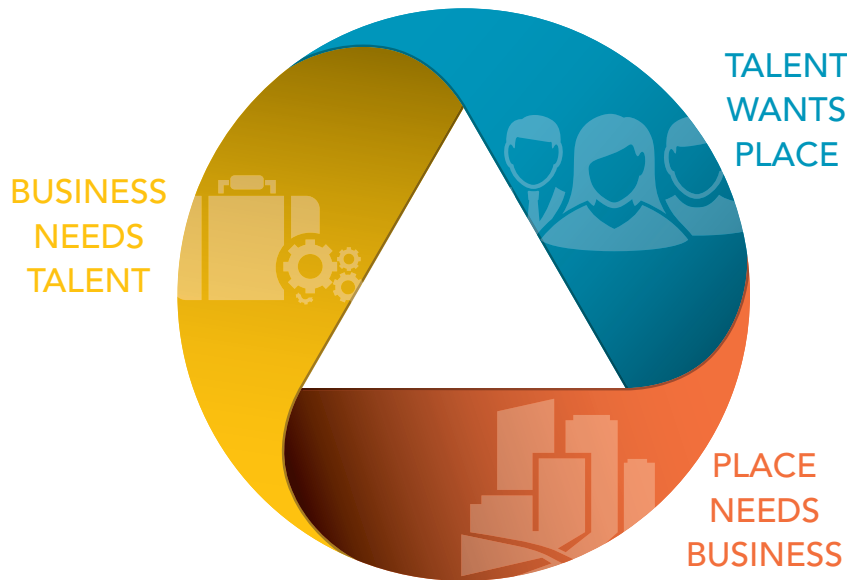
EXPECTATIONS

- The community’s website is easy to navigate.
- The community’s planning, zoning and development information is grouped together with links to the following:
 - Master plan and amendments
 - Downtown plan
 - Corridor plan
 - Capital improvements plan
 - Zoning ordinance
 - Guide to development
 - Online payment option
 - Partner organizations
 - Board and commission applications
 - Property information packages
 - Economic development strategy

Conclusion

The Redevelopment Ready Communities® program looks to foster communities that creatively reuse space, embrace economic innovation and proactively plan for the future, making them more attractive for investments that create places where talent wants to

live, work and play. RRC certification signals to business owners, developers and investors that the community has removed barriers by building deliberate, fair and consistent processes.



Communities not formally engaged in the RRC program, but wanting to work toward certification are encouraged to compare their current policies and procedures to the best practice standards by completing RRC self-evaluations. The self-evaluations are available to assist any community interested in being more redevelopment ready. Completion of the self-evaluation documents does not replace the formal evaluation process conducted by the RRC team. In addition to the self-evaluations, guides have been developed to act as resources for communities working on RRC best practice components. Each guide is a tool describing recommended processes and sample language. Every community has different needs and capacities, so the process and document can be tailored to fit individual community requirements.

To be vibrant and competitive, Michigan communities must be ready for development. This involves planning for new investment, identifying assets and opportunities and focusing limited resources. Communities must create the types of places where talent and businesses want to locate, invest and expand.

Certified Redevelopment Ready Communities® signal that locating a new business or growing an existing one is straightforward. Certified communities have removed barriers to development including eliminating uncertainties surrounding project timelines and approvals by implementing and executing the RRC best practices.

Contact the RRC team at rrc@michigan.org or your CATeam specialist with questions.



CASCADE CHARTER TOWNSHIP

2865 Thornhills SE Grand Rapids, Michigan 49546-7140

Date: May 10th, 2017
To: Supervisor Beahan & Cascade Township Board
From: Benjamin Swayze, Township Manager
Subject: Township Hall / Station #1 / Station #2 Rehabilitation – Preliminary Engineering and Integrated Services Agreement

FACTS:

At the conclusion of the FY2015/FY2016 Township Hall feasibility study, direction was given to prepare to complete the necessary rehabilitation projects at the current Township Hall and Fire Station #1 to continue operations in those facilities for the short-to-moderate term. Township Administrative staff has identified the following projects that need to be undertaken in the Township Hall and Station #1 in order to continue operations in those facilities:

- **Roof Replacement** – The flat portions of the roof over the Township Hall and Fire Station #1 have reached the end of their useful life. Over the past two years we have had a maintenance come in several times to provide “spot” repairs to the roof. Most recently we had significant roof leaks in the Building Department during the snow thaw event that took place the last week of December 2016.
- **HVAC Replacement** – The Township HVAC system has reached the end of its useful life. The Township Hall and Fire Station have significant climate control issues, and the boiler requires constant maintenance and repair. The system is also not energy efficient, and the utility bills for the Township are significantly higher than they could be.
- **Building Generator** – Township Hall and Station #1 serve as an Emergency Action Center during emergency situation occurring in and around the Township. The Township currently has no back-up generator system in place, which could significantly hamper response during a township emergency situation that involves a loss of power. The Township Hall also serves as the IT hub for the entire organization, and maintaining information access is critical, no matter where the Emergency Action Center may be set up.
- **Parking Lot** – Township Hall parking lot is deteriorated and showing signs of need rehabilitation beyond typical preventative maintenance activities.

In addition to these identified projects, the Township Administrative staff has also identified the following project needed at Fire Station #2:

- **Parking Lot** – Station #2 parking lot is deteriorated and showing signs of need rehabilitation beyond typical preventative maintenance activities. Parking lot has not been rehabilitated since the facility was built.

In the FY2017 Budget the Township Board appropriated approximately \$600,000 for these activities. That number was based on preliminary budgetary estimates with no engineering activities behind it. In February the Township Board approved a contract with the Township

engineering firm Fishbeck, Thompson, Carr and Huber to conduct a preliminary engineering study, which has been completed and is attached for your review. The engineers from Fishbeck will be in attendance at the meeting to present the findings to the Township Board.

Attached for your review are:

- Cascade Township Hall Renovation Study, including project recommendations and proposed costs.
- Proposed Integrated Services Agreement and General Conditions with Fishbeck for the potential Township Hall Renovation Project.

ANALYSIS & CONCLUSIONS:

Fishbeck came to the April Infrastructure Committee meeting to review the findings of the report with the committee. The findings included:

- **Site Paving** – Recommended a combination of full-depth mill-and-fill and overlays at both Township Hall/Station #1 and Station #2. Also included recommended concrete work at Township Hall/Station #1.
- **Architectural Components** – Recommended replacement of the flat roof portions and minor improvements to the west-end mezzanine and Building Department vestibule.
- **Heating, Ventilation and Air Conditioning** – Recommendations include a full replacement of the HVAC system with some upgrades and significant electrical work. Vent and distribution work is also recommended.
- **Generator** – Options given for both full building and essential systems generator. Generator location can significantly influence costs.
- **Snowmelt System** – Proposed for sidewalk replacements at the recommendation of the Infrastructure Committee.

The subtotal for all construction work (found on page 13 of the report) is \$951,100 and the total project cost estimate is \$1,203,200 in consideration of contingencies, architectural/engineering fees and construction management fees. Reductions in the project estimate could be realized if an optimal space for the generator can be utilized.

The Infrastructure Committee held in-depth discussions about a recommendation for the next step of the project. One significant option they considered was reducing the scope of the project by reducing or eliminating the generator portion of the project. Ultimately they decided that a full-building generator is essential to the operations of the Township given the services that are housed in the facility (emergency response, IT infrastructure). The committee has recommended the following:

- The Township Board move to the next step of the project, which would be to engage Fishbeck in a contract for architectural and engineering services through bidding for the project.
- The project be considered in a manner that the Township anticipates utilizing the building long-term and may be repurposed at some point.
- The township staff begin the planning process for a facilities needs study for the entire Township organization (Admin, Fire, B&G, Building, etc...) that includes significant public input.

FINANCIAL CONSIDERATIONS:

The proposed cost of the Integrated Services Agreement and General Conditions from Fishbeck is \$163,500. This includes \$88,200 through the bidding process and \$75,300 for Construction Administration. The proposal indicates that there could be a reduction in fee if the Total Construction cost is reduced, but reductions may not be directly proportional.

The Township Board has budgeted \$600,000 for this project. With an estimate of \$1,203,200 for the project, significant budget amendments will be needed in the three effected funds (General Fund, Fire Fund, Building Fund) to facilitate the project. Current fund balances for the three effected funds:

- General Fund - \$9,080,192
- Fire Fund - \$2,655,709
- Building Fund - \$2,430,081

RECOMMENDED ACTION:

The Infrastructure Committee has recommended the Township Board approve the Integrated Services Agreement and General Conditions with Fishbeck, Thompson, Carr and Huber and authorize work through Bidding for the project, contingent on approval from the Township Attorney

Cascade Township Hall
2865 Thornhills Avenue, SE
Grand Rapids, Michigan

Cascade Township Hall Renovation

Prepared for:
Integrated Services Agreement
And General Conditions

Project No. G170341



Fishbeck, Thompson, Carr & Huber, Inc.
engineers | scientists | architects | constructors

ftc&h

ConsensusDocs® 410

INTEGRATED SERVICES AGREEMENT AND GENERAL CONDITIONS BETWEEN OWNER AND FISHBECK, THOMPSON, CARR & HUBER, INC. (FTCH) (Cost of the Work Plus a Fee)



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AMENDMENT 1

ARTICLE 1 AGREEMENT

Project Number: _____



ConsensusDocs® 410 –Integrated Services Agreement and General Conditions Between Owner and FTCH (Cost of Work Plus Fee) - Copyright© 2011. THIS DOCUMENT MAY HAVE BEEN MODIFIED. Consultation with legal and insurance counsel are strongly encouraged. You may only make copies of finalized documents for distribution to parties in direct connection with this contract. Any other uses are strictly prohibited.

This Agreement is made this _____ day of _____ in the year 2017, by

and between the OWNER

Cascade Charter Township
2865 Thornhills Avenue, SE
Grand Rapids, Michigan 49546-7192

and INTEGRATED SERVICES PROVIDER

Fishbeck, Thompson, Carr & Huber, Inc. (FTCH)
1515 Arboretum Drive, SE
Grand Rapids, Michigan 49546

Tax identification number (TIN) 38-184-1857

for services in connection with the following

PROJECT: Design and construction of Township Hall renovations at 2865 Thornhills Avenue, SE, Grand Rapids, Michigan.

Notice to the Parties shall be given at the above addresses.

ARTICLE 2 GENERAL PROVISIONS

2.1 TEAM RELATIONSHIP The Parties each agree to proceed with the Project on the basis of trust, good faith and fair dealing and shall take all actions reasonably necessary to perform this Agreement in an economical and timely manner, including consideration of design modifications and alternative materials or equipment that will permit the Work to be constructed within the budget and by the Dates of Substantial Completion and Final Completion if they are established by Amendment 1. FTCH agrees to furnish, as permitted by the Law, the design phase services and construction phase services as set forth below.

2.1.1 FTCH represents that it is an independent contractor and that it is familiar with the type of work it is undertaking.

2.1.2 Neither FTCH nor any of its agents or employees shall act on behalf of or in the name of the Owner unless authorized in writing by the Owner's Representative.

2.1.3 The Parties shall perform their obligations with integrity, ensuring at a minimum that each: (a) avoid conflicts of interest and discloses promptly any to the other Party, and (b) warrant that it has not and shall not pay or receive any contingent fees or gratuities to or from the other Party, including its agents, officers and employees, Subcontractors or others for whom they may be liable, to secure preferential treatment.

2.2 DESIGN-PROFESSIONAL Architectural and engineering services shall be furnished by licensed employees of FTCH.

2.3 DEFINITIONS

2.3.1 "Agreement" means this ConsensusDocs 410 Standard Integrated Services Agreement and General Conditions Between Owner and FTCH (Cost of the Work Plus a Fee), as modified, amendments, exhibits, addenda, and attachments made part of this agreement upon its execution.

2.3.2 The following exhibits are a part of this Agreement:

Exhibit A: Cascade Township Hall Renovation Study dated April 19, 2017.



Exhibit B: Professional Services letter dated April 28, 2017.
Exhibit C: Certificate of Insurance.
Exhibit D: FTCH Standard Billing Rates dated July 2, 2016.

2.3.3 "Business Day" means all Days, except weekends and official federal or state holidays where the Project is located.

2.3.4 A "Change Order" is a written order signed by the Owner and FTCH after execution of this Agreement, indicating changes in the scope of the Work, Cost of the Work or Contract Time, including substitutions proposed by FTCH and accepted by the Owner.

2.3.5 The "Contract Documents" consist of those documents identified in section 15.1, change orders and written amendments to this Agreement including exhibits and appendices, signed by both the Owner and FTCH.

2.3.6 The "Contract Time" is the period between the Date of Commencement and Final Completion.

2.3.7 "Cost of the Work" means the costs and discounts specified in ARTICLE 8.

2.3.8 "Day" means calendar day.

2.3.9 "Date of Commencement" is as provided for in section 6.1

2.3.10 "Construction Management's Fee" means the compensation paid to FTCH for salaries and other mandatory or customary compensation of FTCH's employees while engaged in Construction Management Services at its principal and branch offices except employees listed in subsection 8.2.2, general and administrative expenses of FTCH's principal and branch offices other than the field office, and FTCH's capital expenses, including interest on FTCH's capital employed for the Work, and profit.

2.3.11 "Defective Work" is any portion of the Work not in conformance to the requirements of the Contract Documents.

2.3.12 "Final Completion" occurs on the date when FTCH's obligations under this Agreement are complete and accepted by the Owner and final payment becomes due and payable.

2.3.13 "Laws" mean federal, state and local laws, ordinances, codes, rules, and regulations applicable to the Work with which FTCH must comply that are enacted as of the Agreement date.

2.3.14 "Material Supplier" is a person or entity retained by FTCH to provide material and equipment for the Work.

2.3.15 "Others" means other contractors and all persons at the Worksite who are not employed by FTCH, its Subcontractors or Material Suppliers.

2.3.16 "Overhead" shall mean (a) payroll costs and other compensation of FTCH's employees in FTCH's principal and branch offices; (b) general and administrative expenses of FTCH's principal and branch offices including deductibles paid on any insurance policy, charges against FTCH for delinquent payments, and costs related to the correction of defective work; and (c) FTCH's capital expenses, including interest on capital used for the Work.

2.3.17 The "Owner" is the person or entity identified in ARTICLE 1, and includes the Owner's Representative.



2.3.18 The "Owner's Program" is an initial description of the Owner's objectives that may include budget and time criteria, space requirements and relationships, flexibility and expandability requirements, special equipment and systems, and site requirements.

2.3.19 The "Parties" are collectively the Owner and FTCH.

2.3.20 The "Project," as identified in ARTICLE 1, is the building, facility or other improvements for which FTCH is to perform the Work under this Agreement. It may also include improvements to be undertaken by the Owner or Others.

2.3.21 A "Subcontractor" is a person or entity retained by FTCH as an independent contractor to provide the labor, materials, equipment or services necessary to complete a specific portion of the Work. The term Subcontractor does not include the Design-Professional or any separate contractor employed by the Owner or any separate contractor's subcontractors.

2.3.22 "Substantial Completion" of the Work, or of a designated portion, occurs on the date when FTCH's obligations are sufficiently complete in accordance with the Contract Documents so that the Owner may occupy or utilize the Project, or a designated portion, for the use for which it is intended, in accordance with section 10.4. The issuance of a certificate of occupancy is not a prerequisite for Substantial Completion if the certificate of occupancy cannot be obtained due to factors beyond FTCH's control. This date shall be confirmed by a certificate of Substantial Completion signed by the Owner and FTCH. The certificate shall state the respective responsibilities of the Owner and FTCH for security, maintenance, heat, utilities, or damage to the Work, and insurance. The certificate shall also list the items to be completed or corrected, and establish the time for their completion and correction, within the timeframe, if any, established in Amendment 1 for the date of Final Completion.

2.3.23 "Sub-subcontractor" is a party or entity who has an agreement with a Subcontractor to perform any portion of the Subcontractor's work.

2.3.24 "Terrorism" means a violent act, or an act that is dangerous to human life, property or infrastructure, that is committed by an individual or individuals and that appears to be part of an effort to coerce a civilian population or to influence the policy or affect the conduct of any government by coercion. Terrorism includes, but is not limited to, any act certified by the United States Secretary of Treasury as an act of terrorism pursuant to the Terrorism Risk Insurance Act, as amended.

2.3.25 The "Work" is the Design Phase services furnished in accordance with section 3.1, the Construction Phase services provided in accordance with section 3.3, Additional services that may be provided in section 3.9, and other services which are necessary to complete the Project in accordance with and reasonably inferable from the Contract Documents.

2.3.26 "Worksite" means the geographical area of the Project location mentioned in ARTICLE 1 where the Work is to be performed.

2.3.27 FTCH will provide Integrated Services as the architect, engineer, and construction manager.

ARTICLE 3 FTCH'S RESPONSIBILITIES

FTCH shall be responsible for procuring or furnishing the design and for the construction of the Work consistent with the Owner's Program, as such Program may be modified by the Owner during the course of the Work and outlined in Exhibit A. FTCH shall exercise reasonable skill and judgment in the performance of its services consistent with the team relationship described in section 2.1, but does not warrant nor guarantee schedules.



FTCH and the Owner may establish a fast-track approach to the design and construction services necessary to complete the Project. The Schedule of the Work shall be included as an exhibit to this Agreement. In the absence of such agreement, the Parties shall proceed in accordance with sections 3.1 and 3.3 below.

3.1 DESIGN PHASE SERVICES

3.1.1 PRELIMINARY EVALUATION The Cascade Township Hall Renovation Study dated April 19, 2017 shall serve as the preliminary evaluation for scope and feasibility of the Project.

3.1.2 PRELIMINARY SCHEDULE FTCH shall prepare a preliminary schedule of the Work. The Owner shall provide written approval of milestone dates established in the preliminary schedule of the Work. The schedule shall show the activities of the Owner and FTCH's Design and Construction Management team necessary to meet the Owner's completion requirements. The schedule shall be updated periodically with the level of detail for each schedule update reflecting the information then available. If an update indicates that a previously approved schedule will not be met, FTCH shall recommend corrective action to the Owner in writing.

3.1.3 PRELIMINARY ESTIMATE The Cascade Township Hall Renovation Study dated April 19, 2017, shall serve as the initial preliminary estimate for the Project. The estimate shall be updated periodically with the level of detail for each estimate update reflecting the information then available. If the preliminary estimate or any update exceeds the Owner's budget, FTCH shall make recommendations to the Owner.

3.1.4 SCHEMATIC DESIGN DOCUMENTS (Not Used)

3.1.5 PLANNING PERMITS FTCH shall obtain and the Owner shall pay for all planning permits necessary for the construction of the Project.

3.1.6 DESIGN DEVELOPMENT DOCUMENTS FTCH shall submit for the Owner's written approval Design Development Documents based on the Cascade Township Hall Renovation Study (see Exhibit A). The Design Development Documents shall define the Project including drawings and outline specifications fixing and describing the Project size and character as to site utilization, and other appropriate elements incorporating the structural, architectural, mechanical and electrical systems. One set of these documents shall be furnished to the Owner. When FTCH submits the Design Development Documents, FTCH shall identify in writing all material changes and deviations that have taken place from the Schematic Design Documents. FTCH shall update the schedule and estimate based on the Design Development Documents.

3.1.7 CONSTRUCTION DOCUMENTS FTCH shall submit for the Owner's written approval Construction Documents based on the approved Design Development Documents. The Construction Documents shall set forth in detail the requirements for construction of the Work, and shall consist of drawings and specifications based upon Laws enacted at the time of their preparation. When FTCH submits the Construction Documents, FTCH shall identify in writing all material changes and deviations that have taken place from the Design Development Documents. Construction shall be in accordance with these approved Construction Documents. One set of these documents shall be furnished to the Owner prior to commencement of construction.

3.1.8 OWNERSHIP OF DOCUMENTS

3.1.8.1 OWNERSHIP OF TANGIBLE DOCUMENTS The Owner shall receive ownership of the property rights, except for copyrights, of all documents, drawings, specifications, electronic data and information (hereinafter "Documents") prepared, provided or procured



by FTCH, its Design-Professional, Subcontractors or consultants and distributed to the Owner for this Project, upon the making of final payment to FTCH or, in the event of termination under ARTICLE 12, upon payment for all sums due to FTCH pursuant to ARTICLE 12.

3.1.8.2 COPYRIGHT The Parties agree that the Owner shall not obtain ownership of the copyright of all Documents. The Owner's acquisition of the copyright for all Documents shall be subject to the making of payments as required by the subsection above and the payment of the fee reflecting the agreed value of the copyright set forth below:

If the Parties have not made a selection to transfer copyright interests in the Documents, the copyright shall remain with FTCH.

3.1.8.3 USE OF DOCUMENTS IN EVENT OF TERMINATION In the event of a termination of this Agreement pursuant to ARTICLE 12, the Owner shall have the right to use, to reproduce, and to make derivative works of the Documents to complete the Project, regardless of whether there has been a transfer of copyright under this section, provided payment has been made pursuant to subsection 3.1.8.1.

3.1.8.4 OWNER'S USE OF DOCUMENTS AFTER COMPLETION OF PROJECT After completion of the Project, the Owner may reuse, reproduce or make derivative works from the Documents solely for the purposes of maintaining, renovating, remodeling or expanding the Project at the Worksite. The Owner's use of the Documents without FTCH's involvement or on other projects is at the Owner's sole risk, except for Construction Management's indemnification obligations, and the Owner shall indemnify and hold harmless FTCH, its Design-Professional, Subcontractors and consultants, and the agents, officers, directors and employees of each of them, from and against any and all claims, damages, losses, costs and expenses, including reasonable attorneys' fees and costs, arising out of or resulting from such any prohibited use.

3.1.8.5 DESIGN-PROFESSIONAL'S USE OF DOCUMENTS Where FTCH has transferred its copyright interest in the Documents under subsection 3.1.8.1, FTCH may reuse Documents prepared by it pursuant to this Agreement in its practice, but only in their separate constituent parts and not as a whole.

3.1.8.6 FTCH shall obtain from its Design-Professional, Subcontractors and consultants rights and rights of use that correspond to the rights given by FTCH to the Owner in this Agreement, and FTCH shall provide evidence that such rights have been secured.

3.2 NOT USED

3.3 CONSTRUCTION PHASE SERVICES

3.3.1 The Construction Phase will commence upon the issuance by the Owner of a written notice to proceed with construction. If construction commences prior to execution of Amendment No. 1, FTCH shall prepare for the Owner's written approval a list of the documents that are applicable to the part of the Work which the Owner has authorized, which list shall be included in the Owner's written notice to proceed.

3.3.2 In order to complete the Work, FTCH shall provide all necessary construction supervision, inspection, construction equipment, labor, materials, tools, and subcontracted items.

3.3.3 FTCH shall give all notices and comply with all laws and ordinances legally enacted at the date of execution of the Agreement which govern the proper performance of the Work.



3.3.4 FTCH shall obtain and the Owner shall pay for the building permits necessary for the construction of the Project.

3.3.5 FTCH shall keep such full and detailed accounts as are necessary for proper financial management under this Agreement. The Owner shall be afforded access to all FTCH records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda and similar data relating to this Agreement. FTCH shall preserve all such records for a period of three years after the final payment or longer where required by law.

3.3.6 FTCH shall provide periodic written reports to the Owner on the progress of the Work in such detail as is required by the Owner and as agreed to by the Owner and FTCH.

3.3.7 FTCH shall develop a system of cost reporting for the Work, including regular monitoring of actual costs for activities in progress and estimates for uncompleted tasks and proposed changes in the Work. The reports shall be presented to the Owner at mutually agreeable intervals.

3.3.8 FTCH shall regularly remove debris and waste materials at the Worksite resulting from the Work. Prior to discontinuing Work in an area, FTCH shall clean the area and remove all rubbish and its construction equipment, tools, machinery, waste and surplus materials. FTCH shall minimize and confine dust and debris resulting from construction activities. At the completion of the Work, FTCH shall remove from the Worksite all construction equipment, tools, surplus materials, waste materials and debris.

3.3.9 FTCH shall prepare and submit to the Owner either:

- final marked-up as-built drawings, or
- updated electronic data

that generally document how the various elements of the Work including changes were actually constructed or installed, or as defined by the Parties by attachment to this Agreement.

3.4 SCHEDULE OF THE WORK FTCH shall prepare and submit a schedule of work for the Owner's acceptance and written approval as to milestone dates. This schedule shall indicate the commencement and completion dates of the various stages of the Work, including the dates when information and approvals are required from the Owner. The schedule shall be revised as required by the conditions of the Work.

3.5 SAFETY OF PERSONS AND PROPERTY

3.5.1 SAFETY PRECAUTIONS AND PROGRAMS FTCH shall have overall responsibility for safety precautions and programs in the performance of the Work. However, such obligation does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with the provisions of Laws.

3.5.2 FTCH shall seek to avoid injury, loss or damage to persons or property by taking reasonable steps to protect:

3.5.2.1 its employees and other persons at the Worksite;

3.5.2.2 materials, supplies and equipment stored at the Worksite for use in performance of the Work; and



3.5.2.3 the Project and all property located at the Worksite and adjacent to work areas, whether or not said property or structures are part of the Project or involved in the Work.

3.5.3 FTCH'S SAFETY REPRESENTATIVE FTCH shall designate an individual at the Worksite in the employ of FTCH who shall act as FTCH's designated safety representative with a duty to prevent accidents. Unless otherwise identified by FTCH in writing to the Owner, the designated safety representative shall be FTCH's project superintendent. FTCH will report promptly in writing all recordable accidents and injuries occurring at the Worksite to the Owner. When FTCH is required to file an accident report with a public authority, FTCH shall furnish a copy of the report to the Owner.

3.5.4 FTCH shall provide the Owner with copies of all notices required of FTCH by Law. FTCH's safety program shall comply with the requirements of governmental and quasi-governmental authorities having jurisdiction over the Work.

3.5.5 Damage or loss not insured under property insurance that arises from the performance of the Work, to the extent of the negligence attributed to such acts or omissions of FTCH, or anyone for whose acts FTCH may be liable, shall be promptly remedied by FTCH. Damage or loss attributable to the acts or omissions of the Owner or Others and not to FTCH shall be promptly remedied by the Owner.

3.5.6 If the Owner deems any part of the Work or Worksite unsafe, the Owner, without assuming responsibility for FTCH's safety program, may require FTCH to stop performance of the Work or take corrective measures satisfactory to the Owner, or both. If FTCH does not adopt corrective measures, the Owner may perform them and reduce by the costs of the corrective measures the amount of the estimated Cost of the Work as provided in ARTICLE 8. FTCH agrees to make no claim for damages, compensation for Design Phase services, Construction Management's Fee or the Date of Substantial Completion or the Date of Final Completion based on FTCH's compliance with the Owner's reasonable request.

3.6 EMERGENCIES In any emergency affecting the safety of persons or property, FTCH shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in the estimated Cost of the Work, Construction Management's Fee, the Date of Substantial Completion or the Date of Final Completion, and if appropriate the compensation for Design Phase services, on account of emergency work shall be determined as provided for in ARTICLE 9.

3.7 HAZARDOUS MATERIALS

3.7.1 A Hazardous Material is any substance or material identified now or in the future as hazardous under any Laws or any other substance or material which may be considered hazardous or otherwise subject to statutory or regulatory requirements governing handling, disposal or clean-up. FTCH shall not be obligated to commence or continue work until any Hazardous Material discovered at the Worksite has been removed, rendered or determined to be harmless by the Owner as certified by an independent testing laboratory and approved by the appropriate governmental agency.

3.7.2 After commencing the Work, if Hazardous Material is discovered at the Project, FTCH shall be entitled to immediately stop Work in the affected area. FTCH shall promptly report the condition to the Owner and, if required, the governmental agency with jurisdiction.

3.7.3 FTCH shall not be required to perform any Work relating to or in the area of Hazardous Material without written mutual agreement.

3.7.4 The Owner shall be responsible for retaining an independent testing laboratory to determine the nature of the material encountered and whether it is a Hazardous Material requiring corrective



measures or remedial action. Such measures shall be the sole responsibility of the Owner, and shall be performed in a manner minimizing any adverse effect upon the Work of FTCH. FTCH shall resume Work in the area affected by any Hazardous Material only upon written agreement between the Parties after the Hazardous Material has been removed or rendered harmless and only after approval, if necessary, of the governmental agency or agencies with jurisdiction.

3.7.5 If FTCH incurs additional costs or is delayed due to the presence or remediation of Hazardous Material, FTCH shall be entitled to an equitable adjustment in the compensation for Design Phase services, Construction Management's Fee or the Date of Substantial Completion or the Date of Final Completion.

3.7.6 To the extent permitted and to the extent not caused by the negligent acts or omissions of FTCH, its Subcontractors, Material Suppliers and Sub-subcontractors, and the agents, officers, directors and employees of each of them, the Owner shall defend, indemnify and hold harmless FTCH, its Subcontractors and Sub-subcontractors, and the agents, officers, directors and employees of each of them, from and against all claims, damages, losses, costs and expenses, including but not limited to reasonable attorneys' fees, costs and expenses incurred in connection with any dispute resolution, arising out of or relating to the performance of the Work in any area affected by Hazardous Material.

3.7.7 Safety Data Sheets (SDS) as required by law and pertaining to materials or substances used or consumed in the performance of the Work, whether obtained by FTCH, Subcontractors, the Owner or Others, shall be maintained at the Project by FTCH and made available to the Owner and Subcontractors.

3.7.8 During FTCH's performance of the Work, FTCH shall be responsible for the proper handling of all materials brought to the Worksite by FTCH. Upon the issuance of the Certificate of Substantial Completion, the Owner shall be responsible under this section for materials and substances brought to the site by FTCH if such materials or substances are required by the Contract Documents.

3.7.9 Section 3.7 shall survive the completion of the Work under this Agreement or any termination of this Agreement.

3.8 WARRANTY AND COMPLETION

3.8.1 FTCH warrants that all materials and equipment furnished under the Construction Phase of this Agreement will be new unless otherwise specified, of good quality, in conformance with the Contract Documents, and free from defective workmanship and materials. Warranties shall commence on the Date of Substantial Completion of the Work or of a designated portion. FTCH agrees to correct all construction performed under this Agreement which is defective in workmanship or materials within a period of one year from the Date of Substantial Completion or for such longer periods of time as may be set forth with respect to specific warranties required by the Contract Documents.

3.8.2 To the extent products, equipment, systems or materials incorporated in the Work are specified and purchased by the Owner, they shall be covered exclusively by the warranty of the manufacturer. There are no warranties which extend beyond the description on the face of any such warranty. To the extent products, equipment, systems or materials incorporated in the Work are specified by the Owner but purchased by FTCH and are inconsistent with selection criteria that otherwise would have been followed by FTCH, FTCH shall assist the Owner in pursuing warranty claims. ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.



3.8.3 FTCH shall secure required certificates of inspection, testing or approval and deliver them to the Owner.

3.8.4 FTCH shall collect all written warranties and equipment manuals and deliver them to the Owner in a format directed by the Owner.

3.8.5 With the assistance of the Owner's maintenance personnel, FTCH shall direct the checkout of utilities and start-up operations, and adjusting and balancing of systems and equipment for readiness.

3.9 CORRECTION OF WORK WITHIN ONE YEAR

3.9.1 If, prior to Substantial Completion and within one year after the date of Substantial Completion of the Work or for such longer periods of time as may be set forth with respect to specific warranties required by the Contract Documents, any Defective Work is found, the Owner shall promptly notify FTCH in writing. Unless the Owner provides written acceptance of the condition, FTCH shall promptly correct the Defective Work at its own cost and time and bear the expense of additional services required for correction of any Defective Work for which it is responsible. If within the one-year correction period the Owner discovers and does not promptly notify FTCH or give FTCH an opportunity to test or correct Defective Work as reasonably requested by FTCH, the Owner waives FTCH's obligation to correct that Defective Work as well as the Owner's right to claim a breach of the warranty with respect to that Defective Work.

3.9.2 With respect to any portion of Work first performed after Substantial Completion, the one-year correction period shall be extended by the period of time between Substantial Completion and the actual performance of the later Work. Correction periods shall not be extended by corrective work performed by FTCH.

3.9.3 If FTCH fails to correct Defective Work within a reasonable time after receipt of written notice from the Owner prior to final payment, the Owner may correct it in accordance with the Owner's right to carry out the Work. In such case, an appropriate Change Order shall be issued deducting the cost of correcting the Defective Work from payments then or thereafter due FTCH. If payments then or thereafter due FTCH are not sufficient to cover such amounts, FTCH shall pay the difference to the Owner.

3.9.4 FTCH's obligations and liability, if any, with respect to any Defective Work discovered after the one-year correction period shall be determined by the Law. If, after the one-year correction period but before the applicable limitation period has expired, the Owner discovers any Work which the Owner considers Defective Work, the Owner shall, unless the Defective Work requires emergency correction, promptly notify FTCH and allow FTCH an opportunity to correct the Work if FTCH elects to do so. If FTCH elects to correct the Work, it shall provide written notice of such intent within fourteen (14) Days of its receipt of notice from the Owner and shall complete the correction of Work within a mutually agreed timeframe. If FTCH does not elect to correct the Work, the Owner may have the Work corrected by itself or others, and, if the Owner intends to seek recovery of those costs from FTCH, the Owner shall promptly provide FTCH with an accounting of correction costs it incurs.

3.9.5 If FTCH's correction or removal of Defective Work causes damage to or destroys other completed or partially completed Work or existing buildings, FTCH shall be responsible for the cost of correcting the destroyed or damaged property.

3.9.6 The one-year period for correction of Defective Work does not constitute a limitation period with respect to the enforcement of FTCH's other obligations under the Contract Documents.



3.9.7 Prior to final payment, at the Owner's option and with FTCH's agreement, the Owner may elect to accept Defective Work rather than require its removal and correction. In such case the Contract Price shall be equitably adjusted for any diminution in the value of the Project caused by such Defective Work.

3.10 CONFIDENTIALITY FTCH shall treat as confidential and not disclose to third-persons, except Subcontractors, Sub-subcontractors and the Design-Professional as is necessary for the performance of the Work, or use for its own benefit any of the Owner's developments, confidential information, know-how, discoveries, production methods and the like that may be disclosed to FTCH or which FTCH may acquire in connection with the Work. The Owner shall treat as confidential information all of FTCH's estimating systems and historical and parameter cost data that may be disclosed to the Owner in connection with the performance of this Agreement. The Owner and FTCH shall each specify those items to be treated as confidential and shall mark them as "Confidential."

3.11 ADDITIONAL SERVICES FTCH shall provide or procure the following Additional services upon the request of the Owner. A written agreement between the Owner and FTCH shall define the extent of such Additional services before they are performed by FTCH.

3.11.1 Development of the Owner's Program, establishing the Project budget, investigating sources of financing, general business planning and other information and documentation as may be required to establish the feasibility of the Project.

3.11.2 Consultations, negotiations, and documentation supporting the procurement of Project financing.

3.11.3 legal descriptions and aerial photographs.

3.11.4 Appraisals of existing equipment, existing properties, new equipment and developed properties.

3.11.5 environmental studies, reports and investigations.

3.11.6 Consultations and representations before governmental authorities or others having jurisdiction over the Project other than normal assistance in securing building permits.

3.11.7 . Not Used

3.11.8 , models and mockups of the Project or any part of the Project or the Work.

3.11.9 Inventories of existing furniture, fixtures, furnishings and equipment which might be under consideration for incorporation into the Work.

3.11.10 Interior design and related services, including procurement and placement of furniture, furnishings, artwork and decorations.

3.11.11 Making revisions to the Schematic Design, Design Development, or Construction Documents after they have been approved by the Owner, and which are due to causes beyond the control of FTCH. Causes beyond the control of FTCH do not include acts or omissions on the part of Subcontractors, Material Suppliers, Sub-subcontractors or the Design-Professional.

3.11.12 Design, coordination, management, expediting and other services supporting the procurement of materials to be obtained, or work to be performed, by the Owner, including but not limited to telephone systems, computer wiring networks, sound systems, alarms, security systems and other specialty systems which are not a part of the Work.



3.11.13 Estimates, proposals, appraisals, consultations, negotiations and services in connection with the repair or replacement of an insured loss, provided such repair or replacement did not result from the negligence of FTCH.

3.11.14 The premium portion of overtime work ordered by the Owner, including productivity impact costs, other than that required by FTCH to maintain the Schedule of Work.

3.11.15 Out-of-town travel by the Design-Professional in connection with the Work, except between the Design-Professional's office, FTCH's office, the Owner's office and the Worksite.

3.11.16 Obtaining service contractors and training maintenance personnel, assisting and consulting in the use of systems and equipment after the initial start-up.

3.11.17 Services for tenant or rental spaces not a part of this Agreement.

3.11.18 Services requested by the Owner or required by the Work which are not specified in the Contract Documents and which are not normally part of generally accepted design and construction practice.

3.11.19 Serving or preparing to serve as an expert witness in connection with any proceeding, legal or otherwise, regarding the Project.

3.11.20 Document reproduction exceeding the limits provided for in this Agreement.

3.11.21 Providing services relating to Hazardous Material discovered at the Worksite.

3.11.22 Other services as agreed to by the Parties and identified in an attached exhibit.

3.12 FTCH'S REPRESENTATIVE FTCH shall designate a person who shall be FTCH's representative. FTCH's Representative is Kent D. Moeggenborg.

ARTICLE 4 OWNER'S RESPONSIBILITIES

4.1 INFORMATION AND SERVICES PROVIDED BY OWNER

4.1.1 Owner shall provide full information in a timely manner regarding requirements for the Project, including the Owner's Program and other relevant information.

4.1.2 The Owner shall provide:

4.1.2.1 all available information describing the physical characteristics of the site, including surveys, site evaluations, legal descriptions, existing conditions, subsurface and environmental studies, reports and investigations;

4.1.2.2 unless otherwise provided in the Contract Documents, necessary approvals, site plan review, rezoning, easements and assessments, fees and charges required for the construction, use, occupancy or renovation of permanent structures, including legal and other required services.

4.2 FINANCIAL INFORMATION Prior to commencement of the Work and thereafter at the written request of FTCH, the Owner shall provide FTCH evidence of Project financing. Evidence of such financing shall be a condition precedent to FTCH's commencing or continuing the Work. FTCH shall be notified prior to any material change in Project financing.



4.3 WORKSITE INFORMATION To the extent the Owner has obtained, or is required elsewhere in the Contract Documents to obtain, the following Worksite information, the Owner shall provide at the Owner's expense and with reasonable promptness:

4.3.1 information describing the physical characteristics of the site, including surveys, Worksite evaluations, legal descriptions, data or drawings depicting existing conditions, subsurface conditions and environmental studies, reports and investigations; Legal descriptions shall include easements, title restrictions, boundaries, and zoning restrictions. Worksite descriptions shall include existing buildings and other construction and all other pertinent site conditions. Adjacent property descriptions shall include structures, streets, sidewalks, alleys, and other features relevant to the Work. Utility details shall include available services, lines at the Worksite and adjacent thereto and connection points. The information shall include public and private information, subsurface information, grades, contours, and elevations, drainage data, exact locations and dimensions, and benchmarks that can be used by FTCH in laying out the Work.

4.3.2 tests, inspections and other reports dealing with environmental matters, Hazardous Material and other existing conditions, including structural, mechanical and chemical tests, required by the Contract Documents or by Law; and

4.3.3 any other information or services requested in writing by FTCH which are required for FTCH's performance of the Work and under the Owner's control.

4.4 MECHANICS AND CONSTRUCTION LIEN INFORMATION Within seven (7) Days after receiving FTCH's written request, the Owner shall provide FTCH with the information necessary to give notice of or enforce mechanics lien rights and, where applicable, stop notices. This information shall include the Owner's interest in the real property interests of the Worksite and the record legal title.

4.5 RESPONSIBILITIES DURING DESIGN PHASE

4.5.1 The Owner shall provide the Owner's Program at the inception of the Design Phase and shall review and timely approve in writing schedules, estimates, Preliminary Estimate, Schematic Design Documents, Design Development Documents and Construction Documents furnished during the Design Phase

4.6 RESPONSIBILITIES DURING CONSTRUCTION PHASE

4.6.1 The Owner shall review the Schedule of the Work as and timely approve the milestone dates set forth.

4.6.2 If the Owner becomes aware of any error, omission or failure to meet the requirements of the Contract Documents or any fault or defect in the Work, the Owner shall give prompt written notice to FTCH. The failure of the Owner to give such notice shall not relieve FTCH of its obligations to fulfill the requirements of the Contract Documents.

4.6.3 The Owner shall communicate with FTCH Subcontractors, Material Suppliers and the Design Professional only through or in the presence of FTCH. The Owner shall have no contractual obligations to Subcontractors, suppliers, or the Design-Professional.

4.6.4 The Owner shall provide insurance for the Project as provided in ARTICLE 11.

4.7 OWNER'S REPRESENTATIVE The Owner's Representative is _____. The Owner's representative shall: (a) be fully acquainted with the Project; (b) agree to furnish the information and services required of the Owner in a timely manner; and (c) have the authority to bind the Owner in all



matters requiring the Owner's approval, authorization or written notice. If the Owner changes its representative or the representative's authority as listed above, the Owner shall notify FTCH in writing in advance.

4.8 TAX EXEMPTION If in accordance with the Owner's direction FTCH claims an exemption for taxes, the Owner shall indemnify and hold FTCH harmless for all liability, penalty, interest, fine, tax assessment, attorneys' fees or other expense or cost incurred by FTCH as a result of any action taken by FTCH in accordance with the Owner's direction.

4.9 ELECTRONIC DOCUMENTS If the Owner requires that the Owner and FTCH exchange documents and data in electronic or digital form, prior to any such exchange, the Owner and FTCH shall agree on a written protocol governing all exchanges in ConsensusDocs 200.2 or a separate addenda, which, at a minimum, shall specify: (a) the definition of documents and data to be accepted in electronic or digital form or to be transmitted electronically or digitally; (b) management and coordination responsibilities; (c) necessary equipment, software and services; (d) acceptable formats, transmission methods and verification procedures; (e) methods for maintaining version control, (f) privacy and security requirements; and (g) storage and retrieval requirements. The Parties shall each bear their own costs for the requirements identified in the protocol. In the absence of a written protocol, use of documents and data in electronic or digital form shall be at the sole risk of the recipient.

ARTICLE 5 SUBCONTRACTS

Work not performed by FTCH with its own forces shall be performed by Subcontractors.

5.1 RETAINING SUBCONTRACTORS FTCH shall not retain any Subcontractor to whom the Owner has a reasonable and timely objection, provided that the Owner agrees to compensate FTCH for any additional costs incurred by FTCH as a result of such objection. The Owner may propose subcontractors to be considered by FTCH. FTCH shall not be required to retain any subcontractor to whom FTCH has a reasonable objection.

5.2 MANAGEMENT OF SUBCONTRACTORS FTCH shall be responsible for the management of the Subcontractors in the performance of their work.

5.3 CONTINGENT ASSIGNMENT OF SUBCONTRACT

5.3.1 If this Agreement is terminated, each subcontract agreement shall be assigned by FTCH to the Owner, subject to the prior rights of any surety, provided that:

5.3.1.1 this Agreement is terminated by the Owner pursuant to sections 12.2 or 12.3; and

5.3.1.2 the Owner accepts such assignment, after termination by notifying the Subcontractor and FTCH in writing, and assumes all rights and obligations of FTCH pursuant to each subcontract agreement.

5.3.2 If the Owner accepts such an assignment, and the Work has been suspended for more than thirty (30) consecutive Days, following termination, if appropriate, the Subcontractor's compensation shall be equitably adjusted as a result of the suspension.

5.4 BINDING OF SUBCONTRACTORS AND MATERIAL SUPPLIERS FTCH agrees to bind every Subcontractor and Material Supplier (and require every Subcontractor to so bind its Sub-subcontractors and Material Suppliers) to all the provisions of this Agreement and the Contract Documents as they apply to the Subcontractors' or Material Suppliers' portions of the Work.

ARTICLE 6 TIME



6.1 DATE OF COMMENCEMENT The Date of Commencement is the Agreement date in ARTICLE 1 unless otherwise set forth here: _____

To be determined.

The Work shall proceed in general accordance with the approved schedule of Work as such schedule may be amended from time to time, subject, however, to other provisions of this Agreement.

6.2 SUBSTANTIAL/FINAL COMPLETION Unless the Parties agree otherwise, the Date of Substantial Completion or the Date of Final Completion shall be established in Amendment 1 to this Agreement subject to adjustments as provided for in the Contract Documents. The Owner and FTCH may agree not to establish such dates, or in the alternative, to establish one but not the other of the two dates. If such dates are not established upon the execution of this Agreement is accepted a Date of Substantial Completion or Date of Final Completion of the Work shall be established in Amendment 1.

6.2.1 The deadlines for Substantial and Final Completion are subject to adjustments as provided for in the Contract Documents.

6.2.2 Time is of the essence for this Agreement and the Contract Documents.

6.2.3 Unless instructed by the Owner in writing, FTCH shall not knowingly commence the Work before the effective date of insurance to be provided by FTCH or the Owner.

6.3 DELAYS AND EXTENSIONS OF TIME

6.3.1 If FTCH is delayed at any time in the commencement or progress of the Work by any cause beyond the control of FTCH, FTCH shall be entitled to an equitable extension of the Date of Substantial Completion or the Date of Final Completion. Examples of causes beyond the control of FTCH include, but are not limited to, the following: (a) acts or omissions of the Owner or Others; (b) changes in the Work or the sequencing of the Work ordered by the Owner, or arising from decisions of the Owner that impact the time of performance of the Work; (c) encountering Hazardous Materials unanticipated by FTCH, or concealed or unknown conditions; (d) delay authorized by the Owner pending dispute resolution or suspension by the Owner under section 12.1; (e) transportation delays not reasonably foreseeable; (f) labor disputes not involving FTCH; (g) general labor disputes impacting the Project but not specifically related to the Worksite; (h) fire; (i) Terrorism; (j) epidemics, (k) adverse governmental actions, (l) unavoidable accidents or circumstances; (m) adverse weather conditions not reasonably anticipated. FTCH shall process any requests for equitable extensions of the Date of Substantial Completion or the Date of Final Completion in accordance with the provisions of ARTICLE 9.

6.3.2 In addition, if FTCH incurs additional costs as a result of a delay that is caused by items (a) through (d) immediately above, FTCH shall be entitled to an equitable adjustment in the estimated Cost of the Work.

6.3.3 If delays to the Project are encountered for any reason, the Parties agree to take reasonable steps to mitigate the effect of such delays.

6.4 LIQUIDATED DAMAGES (Not Used)

ARTICLE 7 COMPENSATION

7.1 DESIGN PHASE COMPENSATION



7.1.1 Not Used

7.1.2 The Owner shall compensate FTCH for Professional Design and Construction Phase Engineering services performed as described in Exhibit B.

7.1.3 Not Used

7.1.4 Not Used

7.1.5 Within fifteen (15) Days after receipt of each monthly application for payment, the Owner shall give written notice to FTCH of the Owner's acceptance or rejection, in whole or in part, of such application for payment. Within fifteen (15) Days after accepting such application, the Owner shall pay directly to FTCH the appropriate amount for which application for payment is made, less amounts previously paid by the Owner. If such application is rejected in whole or in part, the Owner shall indicate the reasons for its rejection. If the Owner and FTCH cannot agree on a revised amount then, within fifteen (15) Days after its initial rejection in part of such application, the Owner shall pay directly to FTCH the appropriate amount for those items not rejected by the Owner for which application for payment is made, less amounts previously paid by the Owner. Those items rejected by the Owner shall be due and payable when the reasons for the rejection have been removed.

7.1.6 If the Owner fails to pay FTCH at the time payment of any amount becomes due, then FTCH may, at any time thereafter, upon serving written notice that the Work will be stopped within seven (7) Days after receipt of the notice by the Owner, and after such seven (7) Day period, stop the Work until payment of the amount owing has been received.

7.1.7 Payments due pursuant to subsection 7.1.5, may bear interest from the date payment is due at the prime rate prevailing at the location of Project.

7.2 CONSTRUCTION PHASE COMPENSATION

7.2.1 The Owner shall compensate FTCH for Work performed following the commencement of the Construction Phase on the following basis.

7.2.1.1 the estimated Cost of the Work as allowed in ARTICLE 8; and

7.2.1.2 Construction Management's Fee paid in proportion to the services performed subject to adjustment as provided in Paragraph 7.4.

7.2.2 The compensation to be paid under this section shall be limited to the estimated Cost of Work established in Amendment 1, which may be adjusted under ARTICLE 9.

7.2.3 Payment for Construction Phase services shall be as set forth in ARTICLE 10. If Design Phase services continue to be provided after construction has commenced, FTCH shall continue to be compensated as provided in section 7.1, or as mutually agreed.

7.3 CONSTRUCTION MANAGEMENT'S FEE Construction Management's Fee shall be as follows, subject to adjustment as provided in section 7.4:

Five percent (5%) of total cost of construction.

7.4 ADJUSTMENT IN CONSTRUCTION MANAGEMENT'S FEE Adjustment in Construction Management's Fee shall be made as follows:



7.4.1 for changes in the Work as provided in ARTICLE 9, Construction Management's Fee shall be adjusted as follows:

Five percent (5%) of total cost of the change order.

7.4.2 for delays in the Work not caused by FTCH, except as provided in subsection 6.3.2, there will be an equitable adjustment in Construction Management's Fee to compensate FTCH for increased expenses; and

7.4.3 if FTCH is placed in charge of managing the replacement of an insured or uninsured loss, FTCH shall be paid an additional fee in the same proportion that Construction Management's Fee bears to the estimated Cost of the Work for the replacement.

ARTICLE 8 COST OF THE WORK

The Owner agrees to pay FTCH for the estimated Cost of the Work as defined in this article. This payment shall be in addition to Construction Management's Fee stipulated in section 7.3.

8.1 COST ITEMS FOR DESIGN PHASE SERVICES

8.1.1 Compensation for Design Phase services as provided in section 7.1.

8.2 COST ITEMS FOR CONSTRUCTION PHASE SERVICES

8.2.1 Wages paid for labor in the direct employ of FTCH in the performance of the Work at FTCH Standard Billing Rates.

8.2.2 Cost at Standard Billing Rates of FTCH's employees when stationed at the field office, in whatever capacity employed, employees engaged on the road expediting the production or transportation of material and equipment, and supervisory employees from the principal or branch office performing the functions listed below:

Project Manager	Project Estimator/Scheduler
Project Accountant/Clerk :	Project Site Manager

8.2.3 Cost of all employee benefits and taxes included in FTCH's Standard Billing Rates including but not limited to workers' compensation, unemployment compensation, social security, health, welfare, retirement and other fringe benefits as required by law, labor agreements, or paid under FTCH's standard personnel policy, insofar as such costs are paid to employees of FTCH who are included in the estimated Cost of the Work under subsections 8.2.1 and 8.2.2.

8.2.4 Reasonable transportation, travel, hotel and moving expenses of FTCH's personnel incurred in connection with the Work.

8.2.5 Cost of all materials, supplies and equipment incorporated in the Work, including costs of inspection and testing if not provided by the Owner, transportation, storage and handling.

8.2.6 Payments made by FTCH to Subcontractors for work performed under this Agreement.

8.2.7 Fees and expenses for design services furnished by FTCH and compensated in section 7.1.

8.2.8 Cost, including transportation and maintenance of all materials, supplies, equipment, temporary facilities and hand tools not owned by the workers that are used or consumed in the performance of the Work, less salvage value or residual value; and cost less salvage value on such items used, but not consumed that remain the property of FTCH.



8.2.9 Rental charges of all necessary machinery and equipment, exclusive of hand tools owned by workers, used at the Worksite, whether rented from FTCH or Others, including installation, repair and replacement, dismantling, removal, maintenance, transportation and delivery costs. Rental from unrelated third-parties shall be reimbursed at actual cost. Rentals from FTCH or its affiliates, subsidiaries or related parties shall be reimbursed at the prevailing rates in the locality of the Worksite up to eighty-five percent (85%) of the value of the piece of equipment.

8.2.10 Cost of the premiums for all insurance and surety bonds which FTCH is required to procure or deems necessary, and approved by the Owner, including any additional premium incurred as a result of any increase in the estimated Cost of the Work.

8.2.11 Sales, use, gross receipts or other taxes, tariffs or duties related to the Work for which FTCH is liable.

8.2.12 Permits, fees, licenses, tests, royalties, damages for infringement of patents or copyrights, including costs of defending related suits for which FTCH is not responsible as set forth in Paragraph 3.7, and deposits lost for causes other than FTCH's negligence

8.2.13 Losses, expenses or damages to the extent not compensated by insurance or otherwise, and the cost of corrective work or redesign during the Construction Phase and for a one-year period following the Date of Substantial Completion, provided that such corrective work or redesign did not arise from FTCH's negligence.

8.2.14 All costs associated with establishing, equipping, operating, maintaining and demobilizing the field office.

8.2.15 Reproduction costs, photographs, facsimile transmissions, long-distance telephone calls, data processing services, postage, express delivery charges, data transmission, telephone service, and computer-related costs at the Worksite, to the extent such items are used and consumed in the performance of the Work or are not capable of use after completion of the Work.

8.2.16 All water, power and fuel costs necessary for the Work.

8.2.17 Cost of removal of all non-hazardous substances, debris and waste materials.

8.2.18 Costs incurred due to an emergency affecting the safety of persons or property.

8.2.19 Legal and arbitration fees and costs, other than those arising from disputes between the Owner and FTCH, reasonably and properly resulting from FTCH's performance of the Work.

8.2.20 All costs directly incurred in the performance of the Work or in connection with the Project, and not included in Construction Management's Fee as set forth in ARTICLE 7, which are reasonably inferable from the Contract Documents as necessary to produce the intended results.

8.3 DISCOUNTS All discounts for prompt payment shall accrue to the Owner to the extent such payments are made directly by the Owner. To the extent payments are made with funds of FTCH, all cash discounts shall accrue to FTCH. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment, shall be credited to the estimated Cost of the Work.

ARTICLE 9 CHANGES IN THE WORK

Changes in the Work which are within the general scope of this Agreement may be accomplished, without invalidating this Agreement, by Change Order, Interim Directed Change, or a minor change in the work, subject to the limitations stated in the Contract Documents.



9.1 CHANGE ORDER

9.1.1 FTCH may request or the Owner, without invalidating this Agreement, may order changes in the Work within the general scope of the Contract Documents consisting of additions, deletions or other revisions to the estimated cost of the work, compensation for Design Phase services, Construction Management's Fee or the Date of Substantial Completion or the Date of Final Completion being adjusted accordingly. All such changes in the Work shall be authorized by applicable Change Order, and shall be performed under the applicable conditions of the Contract Documents.

9.1.2 Each adjustment in the estimated Cost of the Work resulting from a Change Order shall clearly separate the amount attributable to compensation for Design Phase services, other Cost of the Work and Construction Management's Fee, with Construction Management's Fee not to exceed Five percent (5%).

9.1.3 The Owner and FTCH shall negotiate an appropriate adjustment to the estimated Cost of the Work, compensation for Design Phase services, Construction Management's Fee or the Date of Substantial Completion or the Date of Final Completion in good faith and conclude negotiations as expeditiously as possible. Acceptance of the Change Order and any adjustment in the estimated Cost of the Work, compensation for Design Phase services, Construction Management's Fee or the Date of Substantial Completion or the Date of Final Completion shall not be unreasonably withheld.

9.2 INTERIM DIRECTED CHANGE

9.2.1 The Owner may issue a written Interim Directed Change directing a change in the Work prior to reaching agreement with FTCH on the adjustment, if any, in the estimated Cost of the Work, Construction Management's Fee, the Date of Substantial Completion or the Date of Final Completion, and if appropriate, the compensation for Design Phase services.

9.2.2 The Owner and FTCH shall negotiate expeditiously and in good faith for appropriate adjustments, as applicable, to the estimated Cost of the Work, Construction Management's Fee, the Date of Substantial Completion or the Date of Final Completion, and if appropriate the compensation for Design Phase services, arising out of Interim Directed Change. As the changed Work is completed, FTCH shall submit its costs for such Work with its application for payment beginning with the next application for payment within thirty (30) Days of the issuance of the of cost to the Owner, amounts not in dispute may be included in applications for payment and shall be paid by Owner.

9.2.3 When the Owner and FTCH agree upon the adjustments in the estimated Cost of the Work, Construction Management's Fee, the Date of Substantial Completion or the Date of Final Completion, and if appropriate the compensation for Design Phase services, for a change in the Work directed by an Interim Directed Change, such agreement shall be the subject of an appropriate Change Order. The Change Order shall include all outstanding Change Directives issued since the last Change Order.

9.3 MINOR CHANGES IN THE WORK

9.3.1 FTCH may make minor changes in the design and construction of the Project consistent with the intent of the Contract Documents which do not involve an adjustment in the estimated Cost of the Work, Construction Management's Fee, the Date of Substantial Completion or the Date of Final Completion, and do not materially and adversely affect the design of the Project, the quality of any of the materials or equipment specified in the Contract Documents, the performance of any



materials, equipment or systems specified in the Contract Documents, or the quality of workmanship required by the Contract Documents.

9.3.2 FTCH shall promptly inform the Owner in writing of any such changes and shall record such changes on the Construction Documents maintained by FTCH.

9.4 CONCEALED OR UNKNOWN SITE CONDITIONS If in the performance of the Work, FTCH finds latent, concealed or subsurface physical conditions which materially differ from the conditions FTCH reasonably anticipated, or if physical conditions are materially different from those normally encountered and generally recognized as inherent in the kind of work provided for in this Agreement, then the estimated Cost of the Work, Construction Management Fee, the Date of Substantial Completion or the Date of Final Completion, and if appropriate the compensation for Design Phase services, shall be equitably adjusted by Change Order within a reasonable time after the conditions are first observed. FTCH shall provide the Owner with written notice within the time period set forth in Paragraph 9.6.

9.5 DETERMINATION OF COST

9.5.1 An increase or decrease in the estimated Cost of the Work resulting from a change in the Work shall be determined by one or more of the following methods:

9.5.1.1 unit prices set forth in this Agreement or as subsequently agreed;

9.5.1.2 a mutually accepted, itemized lump sum;

9.5.1.3 costs determined as defined in section 7.2 and ARTICLE 8 and a mutually acceptable Construction Management's Fee as determined in subsection 7.4.1; or

9.5.2 If an increase or decrease in Contract Price or Contract Time cannot be agreed to as set forth in sections 9.5.1 above, and the Owner issues an Interim Directed Change, the cost of the change in the Work shall be determined by the reasonable actual expense incurred and savings realized in the performance of the Work resulting from the change. If there is a net increase in the estimated Cost of the Work, Construction Management's Fee shall be adjusted as set forth in subsection 7.4.1. In case of a net decrease in the estimated Cost of the Work, Construction Management's Fee shall not be adjusted unless ten percent (10%) or more of the Project is deleted. FTCH shall maintain a documented, itemized accounting evidencing the expenses and savings.

9.5.3 If unit prices are indicated in the Contract Documents or are subsequently agreed to by the Parties, but the character or quantity of such unit items as originally contemplated is so different in a proposed Change Order that the original unit prices will cause substantial inequity to the Owner or FTCH, such unit prices shall be equitably adjusted.

9.5.4 If the Owner and FTCH disagree as to whether work required by the Owner is within the scope of the Work, FTCH shall furnish the Owner with an estimate of the costs to perform the disputed work in accordance with the Owner's interpretations. If the Owner issues a written order for FTCH to proceed, FTCH shall perform the disputed work and the Owner shall pay FTCH fifty percent (50%) of its actual, direct cost to perform the work. In such event, both Parties reserve their rights as to whether the work was within the scope of the Work. The Owner's payment does not prejudice its right to be reimbursed should it be determined that the disputed work was within the scope of Work. FTCH's receipt of payment for the disputed work does not prejudice its right to receive full payment for the disputed work should it be determined that the disputed work is not within the scope of the Work.

9.6 CLAIMS FOR ADDITIONAL COST OR TIME For any claim for an increase in the estimated Cost of the Work, Construction Management's Fee and the Date of Substantial Completion or the Date of Final



Completion, and if appropriate the compensation for Design Phase services, FTCH shall give the Owner written notice of the claim within twenty-one (21) Days after the occurrence giving rise to the claim or within twenty-one (21) Days after FTCH first recognizes the condition giving rise to the claim, whichever is later. Except in an emergency, notice shall be given before proceeding with the Work. Claims for design and estimating costs incurred in connection with possible changes requested by the Owner, but which do not proceed, shall be made within twenty-one (21) Days after the decision is made not to proceed. Thereafter, FTCH shall submit written documentation of its claim, including appropriate supporting documentation, within twenty-one (21) Days after giving notice, unless the Parties mutually agree upon a longer period of time. The Owner shall respond in writing denying or approving FTCH's claim no later than fourteen (14) Days after receipt of FTCH's documentation of claim. Owner's failure to so respond shall be deemed a denial of FTCH's claim. Any change in the estimated Cost of the Work, Construction Management's Fee, the Date of Substantial Completion or the Date of Final Completion, and if appropriate the compensation for Design Phase services, resulting from such claim shall be authorized by Change Order.

9.7 .CHANGES IN LAW In the event any change in laws or regulations affecting the performance of the Work are enacted after the date of this Agreement, the estimated Cost of the Work, Construction Management Fee, the Date of Substantial Completion or the Date of Final Completion, and if appropriate, the compensation for Design Phase services, shall be equitably adjusted by Change Order.

ARTICLE 10 PAYMENT FOR CONSTRUCTION PHASE SERVICES

10.1 PROGRESS PAYMENTS

10.1.1 On the 30th Day of each month after the Construction Phase has commenced, FTCH shall submit to the Owner an application for payment consisting of the estimated Cost of the Work performed up to the 20th Day of the month, along with a proportionate share of Construction Management's Fee. Approval of payment applications for such stored materials shall be conditioned upon submission by FTCH of bills of sale and applicable insurance or such other procedures satisfactory to the Owner to establish the Owner's title to such materials, or otherwise to protect the Owner's interest including transportation to the site. Prior to submission of the next application for payment, FTCH shall furnish to the Owner a statement accounting for the disbursement of funds received under the previous application. The extent of such statement shall be as agreed upon between the Owner and FTCH.

10.1.2 Within seven (7) Days after receipt of each monthly application for payment, the Owner shall give written notice to FTCH of the Owner's acceptance or rejection, in whole or in part, of such application for payment. Within fifteen (15) Days after accepting such application, the Owner shall pay directly to FTCH the appropriate amount for which application for payment is made, less amounts previously paid by the Owner. If such application is rejected in whole or in part, the Owner shall indicate the reasons for its rejection. If the Owner and FTCH cannot agree on a revised amount then, within fifteen (15) Days after its initial rejection in part of such application, the Owner shall pay directly to FTCH the appropriate amount for those items not rejected by the Owner for which application for payment is made, less amounts previously paid by the Owner. Those items rejected by the Owner shall be due and payable when the reasons for the rejection have been removed.

10.1.3 If the Owner fails to pay FTCH at the time payment of any amount becomes due, then FTCH may, at any time thereafter, upon serving written notice that the Work will be stopped within seven (7) Days after receipt of the notice by the Owner, and after such seven (7) Day period, stop the Work until payment of the amount owing has been received.



10.1.4 Payments due but unpaid pursuant to subsection 10.1.2, less any amount retained pursuant to sections 10.2 and 10.3 may bear interest from the date payment is due at the prime rate plus two percent (2%) prevailing at the place of the Project.

10.1.5 FTCH warrants and guarantees that title to all Work, materials and equipment covered by an application for payment, whether incorporated in the Project or not, will pass to the Owner upon receipt of such payment by FTCH, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to as liens.

10.1.6 The Owner's progress payment, occupancy or use of the Project, whether in whole or in part, shall not be deemed an acceptance of any Work not conforming to the requirements of the Contract Documents.

10.1.7 Upon Substantial Completion of the Work, the Owner shall pay FTCH the unpaid balance of the estimated Cost of the Work, compensation for Design Phase services and Construction Management's Fee, less one-hundred-fifty percent (150%) of the cost of completing any unfinished items as agreed to between the Owner and FTCH as to extent and time for completion. The Owner thereafter shall pay FTCH monthly the amount retained for unfinished items as each item is completed.

10.1.8 **STORED MATERIALS AND EQUIPMENT** Unless otherwise provided in the Contract Documents, applications for payment may include materials and equipment not yet incorporated into the Work but delivered to and suitably stored onsite or offsite, including applicable insurance, storage and costs incurred transporting the materials to an offsite storage facility. Approval of payment applications for stored materials and equipment stored offsite shall be conditioned on submission by FTCH of bills of sale and proof of required insurance, or such other procedures satisfactory to the Owner to establish the proper valuation of the stored materials and equipment, the Owner's title to such materials and equipment, and to otherwise protect the Owner's interests therein, including transportation to the worksite

10.2 **RETAINAGE** From each progress payment made prior to the time of Substantial Completion, the Owner may retain Ten percent (10%) of the amount otherwise due after deduction of any amounts as provided in section 10.3, and in no event shall such percentage exceed any applicable statutory requirements. If the Owner chooses to use this retainage provision:

10.2.1 after the Work is Substantially Complete, the Owner shall withhold no additional retainage and shall pay FTCH the full amount due on account of subsequent progress payments;

10.2.2 the Owner may, in its sole discretion, reduce the amount to be retained at any time;

10.2.3 the Owner may release retainage on that portion of the Work a Subcontractor has completed, in whole or in part, and which work the Owner has accepted;

10.2.4 Not Used

10.3 **ADJUSTMENT OF FTCH'S APPLICATION FOR PAYMENT** The Owner may adjust or reject an application for payment or nullify a previously approved FTCH application for payment, in whole or in part, as may reasonably be necessary to protect the Owner from loss or damage based upon the following, to the extent that FTCH is responsible under this Agreement:

10.3.1 FTCH's repeated failure to perform the Work as required by the Contract Documents;

10.3.2 loss or damage arising out of or relating to this Agreement and caused by FTCH to the Owner or Others to whom the Owner may be liable;



10.3.3 FTCH's failure to properly pay the Design-Professional, Subcontractors or Material Suppliers for labor, materials, equipment or supplies furnished in connection with the Work, provided that the Owner is making payments to FTCH in accordance with the terms of this Agreement;

10.3.4 Defective Work not corrected in a timely fashion;

10.3.5 reasonable evidence of delay in performance of the Work such that the Work will not be completed by the Date of Substantial Completion or the Date of Final Completion, and that the unpaid balance of the estimated Cost of the Work is not sufficient to offset any direct damages that may be sustained by the Owner as a result of the anticipated delay caused by FTCH;

10.3.6 reasonable evidence demonstrating that the unpaid balance of the estimated Cost of the Work is insufficient to fund the cost to complete the Work;

10.3.7 third-party claims involving FTCH or reasonable evidence demonstrating that third-party claims are likely to be filed unless and until FTCH furnishes the Owner with adequate security in the form of a surety bond, letter of credit or other collateral or commitment sufficient to discharge such claims if established.

10.3.8 third-party claims involving FTCH or reasonable evidence demonstrating that third-party claims are likely to be filed unless and until FTCH furnishes the Owner with adequate security in the form of a surety bond, letter of credit or other collateral or commitment sufficient to discharge such claims if established.

No later than seven (7) Days after receipt of an application for payment, the Owner shall give written notice to FTCH, at the time of disapproving or nullifying all or part of an application for payment, stating its specific reasons for such disapproval or nullification, and the remedial actions to be taken by FTCH in order to receive payment. When the above reasons for disapproving or nullifying an application for payment are removed, payment will be promptly made for the amount previously withheld.

10.4 OWNER OCCUPANCY OR USE OF COMPLETED OR PARTIALLY COMPLETED WORK

10.4.1 Portions of the Work that are completed or partially completed may be used or occupied by the Owner when (a) the portion of the Work is designated in a Certificate of Substantial Completion, (b) appropriate insurer(s) or sureties consent to the occupancy or use, and (c) appropriate public authorities authorize the occupancy or use. Such partial occupancy or use shall constitute Substantial Completion of that portion of the Work. FTCH shall not unreasonably withhold consent to partial occupancy or use. The Owner shall not unreasonably refuse to accept partial occupancy or use, provided such partial occupancy or use is of value to the Owner.

10.5 FINAL PAYMENT

10.5.1 Final Payment, consisting of the unpaid balance of the estimated Cost of the Work, compensation for Design Phase services and Construction Management's Fee, shall be due and payable when the work is fully completed. Before issuance of final payment, the Owner may request satisfactory evidence that all payrolls, material bills and other indebtedness connected with the Work have been paid or otherwise satisfied.

10.5.2 In making final payment the Owner waives all claims except for:

10.5.2.1 outstanding liens;

10.5.2.2 improper workmanship or defective materials appearing within one year after the Date of Substantial Completion;



10.5.2.3 work not in conformance with the Contract Documents; and

10.5.2.4 terms of any special warranties required by the Contract Documents.

10.5.3 In accepting final payment, FTCH waives all claims except those previously made in writing and which remain unsettled.

ARTICLE 11 INDEMNITY, INSURANCE, AND BONDS

11.1 INDEMNITY

11.1.1 To the fullest extent permitted by law, FTCH shall indemnify and hold harmless the Owner, Owner's officers, directors, members, consultants, agents and employees (the Indemnitees) from all claims for bodily injury and property damage (other than to the Work itself and other property required to be insured under Paragraph 11.5), including reasonable attorneys' fees, costs and expenses, that may arise from the performance of the Work, but only to the extent caused by the negligent acts or omissions of FTCH, Subcontractors or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable. FTCH shall not be required to indemnify or hold harmless the Indemnitees for any negligent acts or omissions of the Indemnitees.

11.1.2 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless FTCH, its officers, directors or members, Subcontractors or anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable from all claims for bodily injury and property damage, other than property insured under Paragraph 11.5, including reasonable attorneys' fees, costs and expenses, that may arise from the performance of work by the Owner or Others, but only to the extent caused by the negligent acts or omissions of the Owner or Others.

11.1.3 NO LIMITATION ON LIABILITY In any and all claims against the Indemnitees by any employee of FTCH, anyone directly or indirectly employed by FTCH or anyone for whose acts FTCH may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for FTCH under workers' compensation acts, disability benefit acts or other employee benefit acts.

11.2 FTCH'S LIABILITY INSURANCE

11.2.1 Before commencing the Work, FTCH shall procure and maintain in force Workers' Compensation Insurance, Employers' Liability Insurance, Business Automobile Liability Insurance, and Commercial General Liability Insurance (CGL). The CGL policy shall include coverage for liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury, contractual liability, and broad form property damage. FTCH shall maintain completed operations liability insurance for one year after Substantial Completion, or as required by the Contract Documents, whichever is longer. FTCH's Employers' Liability, Business Automobile Liability, and CGL policies shall be written with at least the following limits of liability:

11.2.1.1 Employers' Liability Insurance

- (a) \$500,000 bodily injury by accident per accident
- (b) \$500,000 bodily injury by disease policy limit
- (c) \$500,000 bodily injury by disease per employee

11.2.1.2 Business Automobile Liability Insurance per accident \$1,000,000.

11.2.1.3 Commercial General Liability Insurance



- (a) Per occurrence \$1,000,000
- (b) General aggregate \$2,000,000
- (c) Products/completed operations aggregate \$2,000,000
- (d) Personal and advertising injury limit \$1,000,000

11.2.2 Employers' Liability, Business Automobile Liability and CGL coverage required under subsection 11.2.1 may be arranged under a single policy for the full limits required or by a combination of underlying policies with the balance provided by Excess or Umbrella Liability policies.

11.2.3 FTCH shall maintain in effect all insurance coverage required under subsection 11.2.1 with insurance companies lawfully authorized to do business in the jurisdiction in which the Project is located. If FTCH fails to obtain or maintain any insurance coverage required under this Agreement, the Owner may purchase such coverage and charge the expense to FTCH, or terminate this Agreement.

11.2.4 The policies of insurance required under Subparagraph 11.2.1 shall contain a provision that the coverage afforded under the policies shall not be cancelled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the Owner. FTCH shall maintain completed operations liability insurance for one year after acceptance of the Work, Substantial Completion of the Project, or to the time required by the Contract Documents, whichever is longer. Prior to commencement of the Work, FTCH shall furnish the Owner with certificates evidencing the required coverage.

11.3 PROPERTY INSURANCE

11.3.1 Before commencing the Work, the Owner shall obtain and maintain a Builder's Risk Policy upon the entire Project for the full cost of replacement at the time of loss. This insurance shall also name FTCH, Subcontractors, Sub-subcontractors, Material Suppliers and Design-Professional as named insureds. This insurance shall be written as a Builder's Risk Policy or equivalent form to cover all risks of physical loss except those specifically excluded by the policy, and shall insure (a) at least against the perils of fire, lightning, explosion, windstorm, hail, smoke, aircraft (except aircraft, including helicopter, operated by or on behalf of FTCH) and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, debris removal, flood, earthquake, earth movement, water damage, wind damage, testing if applicable, collapse however caused, and (b) damage resulting from defective design, workmanship or material and material or equipment stored offsite, onsite or in transit. The Owner shall be solely responsible for any deductible amounts or coinsurance penalties. This policy shall provide for a waiver of subrogation in favor of FTCH, Subcontractors, Sub-subcontractors, and Material Suppliers. This insurance shall remain in effect until final payment has been made or until no person or entity other than the Owner has an insurable interest in the property to be covered by this insurance, whichever is sooner. Partial occupancy or use of the Work shall not commence until the Owner has secured the consent of the insurance company or companies providing the coverage required in this subsection. Before commencing the Work, the Owner shall provide a copy of the property policy or policies obtained in compliance with this subsection.

11.3.2 If the Owner does not intend to purchase the property insurance required by this Agreement, including all of the coverages and deductibles described herein, the Owner shall give written notice to FTCH before the Work is commenced. FTCH may then provide insurance to protect its interests and the interests of the Subcontractors and Sub-subcontractors, including the coverage of deductibles. The cost of this insurance shall be charged to the Owner in a Change Order. The Owner shall be responsible for all of FTCH's costs reasonably attributed to the Owner's failure or neglect in purchasing or maintaining the coverage described above.



11.3.2.1 If the Owner does not obtain insurance to cover the risk of physical loss resulting from Terrorism, the Owner shall give written notice to FTCH before the Work commences. FTCH may then provide insurance to protect its interests and the interests of the Subcontractors and Sub-subcontractors against such risk of loss, including the coverage of deductibles. The cost of this insurance shall be charged to the Owner in a Change Order.

11.3.3 Owner and FTCH waive all rights against each other and their respective employees, agents, contractors, subcontractors, and sub-subcontractors for damages caused by risks covered by the property insurance except such rights as they may have to the proceeds of the insurance and such rights as FTCH may have for the failure of the Owner to obtain and maintain property insurance in compliance with subsection 11.3.1.

11.3.4 To the extent of the limits of FTCH's CGL specified in subsection 11.2.1, FTCH shall indemnify and hold harmless the Owner against any and all liability, claims, demands, damages, losses and expenses, including attorneys' fees, in connection with or arising out of any damage or alleged damage to any of Owner's existing adjacent property that may arise from the performance of the Work, to the extent of the negligent acts or omissions of FTCH, Subcontractor or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable.

11.3.5 RISK OF LOSS Except to the extent a loss is covered by applicable insurance, risk of loss or damage to the Work shall be upon FTCH until the Date of Substantial Completion, unless otherwise agreed to by the Parties.

11.4 OWNER'S INSURANCE

11.4.1 BUSINESS INCOME INSURANCE The Owner may procure and maintain insurance against loss of use of the Owner's property caused by fire or other casualty loss.

11.4.2 OWNER'S LIABILITY INSURANCE The Owner shall either self-insure or obtain and maintain its own liability insurance for protection against claims arising out of the performance of this Agreement, including without limitation, loss of use and claims, losses and expenses arising out of the Owner's acts or omissions

11.5 ADDITIONAL LIABILITY COVERAGE

11.5.1 The Owner shall be named as an additional insured on FTCH's CGL specified, for operations and completed operations, but only with respect to liability for bodily injury, property damage or personal and advertising injury to the extent caused by the negligent acts or omissions of FTCH, or those acting on FTCH's behalf, in the performance of FTCH's Work for the Owner at the Worksite

Any documented additional cost associated with procuring the additional liability coverage beyond that stated in Subparagraph 11.5.1 shall be paid by the Owner directly or the costs may be reimbursed by Owner to FTCH by increasing the contract price to correspond to the actual cost required to purchase and maintain the coverage. Prior to commencement of the Work, FTCH shall obtain and furnish to the Owner a certificate evidencing that the Owner has been named as an additional insured, as applicable,

11.6 ROYALTIES, PATENTS AND COPYRIGHTS FTCH shall pay all royalties and license fees which may be due on the inclusion of any patented or copyrighted materials, methods or systems selected by FTCH and incorporated in the Work. FTCH shall indemnify and hold the Owner harmless from all suits or claims for infringement of any patent rights or copyrights arising out of such selection. The Owner agrees to indemnify and hold FTCH harmless from any suits or claims of infringement of any patent rights or



copyrights arising out of any patented or copyrighted materials, methods or systems specified by the Owner.

11.7 PROFESSIONAL LIABILITY INSURANCE FTCH shall obtain professional liability insurance for claims arising from the negligent performance of professional services under this Agreement, which shall be:

General Office Coverage

Project Specific Profession Liability Insurance

written for not less than Two Million dollars (\$2,000,000) per claim and in the aggregate with a deductible not to exceed One Hundred Fifty Thousand dollars (\$150,000). The Professional Liability Insurance shall include prior acts coverage sufficient to cover all services rendered by the Design-Professional. This coverage shall be continued in effect for two years after the Date of Substantial Completion.

11.8 BONDING (Not Used)

ARTICLE 12 SUSPENSION AND TERMINATION OF THE AGREEMENT AND OWNER'S RIGHT TO PERFORM FTCH RESPONSIBILITIES

12.1 SUSPENSION BY THE OWNER FOR CONVENIENCE

12.1.1 The Owner may order FTCH in writing to suspend, delay or interrupt all or any part of the Work without cause for such period of time as the Owner may determine to be appropriate for its convenience.

12.1.2 Adjustments caused by suspension, delay or interruption shall be made for increases in the estimated Cost of the Work, compensation for Design Phase services, Construction Management's Fee or the Date of Substantial Completion or the Date of Final Completion. No adjustment shall be made if FTCH is or otherwise would have been responsible for the suspension, delay or interruption of the Work, or if another provision of this Agreement is applied to render an equitable adjustment.

12.2 OWNER'S RIGHT TO PERFORM CONSTRUCTION MANAGEMENT OBLIGATIONS AND TERMINATION BY THE OWNER FOR CAUSE

12.2.1 If FTCH persistently fails to perform any of its obligations under this Agreement, the Owner may, after seven (7) Days' written notice, during which period FTCH fails to perform such obligation, undertake to perform such obligations. The Cost of the Work shall be reduced by the cost to the Owner of performing such obligations.

12.2.2 Upon an additional seven (7) Days' written notice to FTCH and FTCH's surety, if any, the Owner may terminate this Agreement for any of the following reasons:

12.2.2.1 if FTCH persistently utilizes improper materials or inadequately qualified workers;

12.2.2.2 if FTCH does not make proper payment to laborers, Material Suppliers or Subcontractors, provided that the Owner is making payments to FTCH in accordance with the terms of this Agreement.

12.2.2.3 if FTCH persistently fails to abide by the orders, regulations, rules, ordinances or laws of governmental authorities having jurisdiction; or

12.2.2.4 if FTCH otherwise materially breaches this Agreement.



If FTCH fails to cure or commence and continue to cure within the seven (7) Days, the Owner, without prejudice to any other right or remedy, may take possession of the Worksite and complete the Work utilizing any reasonable means. In this event, FTCH shall not have a right to further payment until the Work is completed.

12.2.3 If FTCH files a petition under the Bankruptcy Code, this Agreement shall terminate if FTCH or FTCH's trustee rejects the Agreement or, if there has been a default, FTCH is unable to give adequate assurance that FTCH will perform as required by this Agreement or otherwise is unable to comply with the requirements for assuming this Agreement under the applicable provisions of the Bankruptcy Code.

12.2.4 In the event the Owner exercises its rights under subsection 12.21 or 12.2.2, upon the request of FTCH, the Owner shall provide a detailed accounting of the cost incurred by the Owner.
12.2.5

12.3 TERMINATION BY OWNER WITHOUT CAUSE If the Owner terminates this Agreement other than as set forth in section 12.2, the Owner shall pay FTCH for all Work executed and for all proven loss, cost or expense in connection with the Work, plus all demobilization costs. In addition, FTCH shall be paid an amount calculated as set forth below:

12.3.1 If the Owner terminates this Agreement before commencing the Construction Phase, FTCH shall be paid for FTCH's Design Phase services provided to date as set forth in subsections 7.1.2.

12.3.2 If the Owner terminates this Agreement after commencement of the Construction Phase, FTCH shall be paid for the Construction Phase services provided to date pursuant to subsection 7.2.1 and a premium as set forth below:

Plus Twenty-five percent (25%) of the remaining Construction Management Fee.

12.3.3 The Owner shall also pay to FTCH fair compensation, either by purchase or rental at the election of the Owner, for all equipment retained. The Owner shall assume and become liable for obligations, commitments and unsettled claims that FTCH has previously undertaken or incurred in good faith in connection with the Work or as a result of the termination of this Agreement. As a condition of receiving the payments provided under this article, FTCH shall cooperate with the Owner by taking all steps necessary to accomplish the legal assignment of FTCH's rights and benefits to the Owner, including the execution and delivery of required papers.

12.4 TERMINATION BY FTCH

12.4.1 Upon seven (7) Days' written notice to the Owner, FTCH may terminate this Agreement for any of the following reasons:

12.4.1.1 if the Work has been stopped for a thirty (30) Day period

- a. under court order or order of other governmental authorities having jurisdiction; or
- b. as a result of the declaration of a national emergency or other governmental act during which, through no act or fault of FTCH, materials are not available;

12.4.1.2 if the Work is suspended by the Owner for thirty (30) consecutive Days;



12.4.1.3 If the Owner fails to furnish reasonable evidence that sufficient funds are available and committed for the entire cost of the Project in accordance with subsection 4.2 of this Agreement.

12.4.2 If the Owner has for thirty (30) Days failed to pay FTCH pursuant to subsection 10.1.2, FTCH may give written notice of its intent to terminate this Agreement. If FTCH does not receive payment within seven (7) Days of giving written notice to the Owner, then upon seven (7) Days' additional written notice to the Owner, FTCH may terminate this Agreement.

12.4.3 Upon termination by FTCH in accordance with this section, FTCH shall be entitled to recover from the Owner payment for all Work executed and for all proven loss, cost or expense in connection with the Work, plus all demobilization costs and reasonable damages. In addition, FTCH shall be paid an amount calculated as set forth either in subsection 12.3.1 or 12.3.2, depending on when the termination occurs.

ARTICLE 13 DISPUTE MITIGATION AND RESOLUTION

13.1 **WORK CONTINUANCE AND PAYMENT** Unless otherwise agreed in writing, FTCH shall continue the Work and maintain the approved schedules during any dispute mitigation or resolution proceedings. If FTCH continues to perform, the Owner shall continue to make payments in accordance with the Agreement.

13.2 **DIRECT DISCUSSIONS** If the Parties cannot reach resolution on a matter relating to or arising out of this Agreement, the Parties shall endeavor to reach resolution through good faith direct discussions between the Parties' representatives, who shall possess the necessary authority to resolve such matter and who will record the date of first discussions. If the Parties' representatives are not able to resolve such matter within five (5) Business Days from the date of first discussion, the Parties' representatives shall immediately inform senior executives of the Parties in writing that resolution was not affected. Upon receipt of such notice, the senior executives of the Parties shall meet within five (5) Business Days to endeavor to reach resolution. If the dispute remains unresolved after fifteen (15) Days from the date of first discussion, the Parties shall submit such matter to the dispute mitigation and dispute resolution procedures selected herein.

13.3 **MITIGATION** If the Parties select one of the dispute mitigation procedures provided in this section 13.3, disputes remaining unresolved after direct discussions shall be directed to the selected mitigation procedure. The dispute mitigation procedure shall result in a nonbinding finding on the matter, which may be introduced as evidence at a subsequent binding adjudication of the matter, as designated in section 13.5. The Parties agree that the dispute mitigation procedure shall be:

Dispute Review Board.

13.3.1 **MITIGATION PROCEDURES** The Project Neutral/Dispute Review Board (Neutral/Board) shall be mutually selected and appointed by the Parties and shall execute a retainer agreement with the Parties establishing the scope of the Neutral's/Board's responsibilities. The costs and expenses of the Neutral/Board shall be shared equally by the Parties. The Neutral/Board shall be available to either Party, upon request, throughout the course of the Project, and shall make regular visits to the Project so as to maintain an up-to-date understanding of the Project progress and issues and to enable the Neutral/Board to address matters in dispute between the Parties promptly and knowledgeably. The Neutral/Board is to issue nonbinding findings within five (5) Business Days of referral of the matter to the Neutral/Board, unless good cause is shown.

13.3.2 If the matter remains unresolved following the issuance of the nonbinding finding by the mitigation procedure or if the Neutral/Board fails to issue nonbinding findings within five (5)



Business Days of the referral, the Parties shall submit the matter to the binding dispute resolution procedure designated in section 13.5.

13.4 Not Used

13.5 BINDING DISPUTE RESOLUTION If the matter is unresolved after submission of the matter to a mitigation procedure, the Parties shall submit the matter to the binding dispute resolution procedure selected below:

Litigation in either the state or federal court having jurisdiction of the matter in the location of the Project.

13.5.1 COSTS The costs of any binding dispute resolution processes shall be borne by the non-prevailing Party, as determined by the adjudicator of the dispute.

13.5.2 VENUE The venue of any binding dispute resolution procedure shall be the location of the Project, unless the Parties agree on a mutually convenient location.

13.6 MULTIPARTY PROCEEDING (Not Used)

13.7 LIEN RIGHTS. Nothing in this article shall limit any rights or remedies not expressly waived by FTCH which FTCH may have under lien laws.

ARTICLE 14 MISCELLANEOUS

14.1 EXTENT OF AGREEMENT this Agreement is solely for the benefit of the Parties, represents the entire and integrated agreement between the Parties, and supersedes all prior negotiations, representations or agreements, either written or oral. The Owner and FTCH agree to look solely to each other with respect to the performance of the Agreement. This Agreement and each and every provision is for the exclusive benefit of the Owner and FTCH and not for the benefit of any third-party nor any third party beneficiary, except to the extent expressly provided in the Agreement.

14.2 ASSIGNMENT Except as to the assignment of proceeds, neither Party shall assign its interest in this Agreement without the written consent of the other Party. The terms and conditions of this Agreement shall be binding upon both Parties, their partners, successors, assigns and legal representatives. Neither Party shall assign the Agreement as a whole without written consent of the other except that the Owner may assign the Agreement to a wholly-owned subsidiary of the Owner when the Owner has fully indemnified FTCH or to an institutional lender providing construction financing for the Project as long as the assignment is no less favorable to FTCH than this Agreement. In the event of such assignment, FTCH shall execute any consent reasonably required. In such event, the wholly-owned subsidiary or lender shall assume the Owner's rights and obligations under the Contract Documents. If either Party attempts to make such an assignment, that Party shall nevertheless remain legally responsible for all obligations under the Agreement, unless otherwise agreed by the other Party.

14.3 GOVERNING LAW This Agreement shall be governed by the law in effect at the location of the Project.

14.4 SEVERABILITY The partial or complete invalidity of any one or more provisions of this Agreement shall not affect the validity or continuing force and effect of any other provision.

14.5 NO WAIVER OF PERFORMANCE The failure of either Party to insist, in any one or more instances, on the performance of any of the terms, covenants, or conditions of this Agreement, or to exercise any of its rights, shall not be construed as a waiver or relinquishment of such term, covenant, condition or right with respect to further performance.



14.6 TITLES The titles given to the articles and sections are for ease of reference only and shall not be relied upon or cited for any other purpose. The grouping of the articles in this Agreement and of the Owner's specifications under the various headings is solely for the purpose of convenient organization and in no event shall the grouping of provisions, the use of paragraphs or the use of headings be construed to limit or alter the meaning of any provisions.

14.7 JOINT DRAFTING The Parties expressly agree that this Agreement was jointly drafted, and that both had opportunity to negotiate its terms and to obtain the assistance of counsel in reviewing its terms prior to execution. Therefore, this Agreement shall be construed neither against nor in favor of either Party, but shall be construed in a neutral manner.

14.8 RIGHTS AND REMEDIES The Parties' rights, liabilities, responsibilities and remedies with respect to this Agreement, whether in contract, tort, negligence or otherwise, shall be exclusively those expressly set forth in this Agreement.

ARTICLE 15 CONTRACT DOCUMENTS

15.1 CONTRACT DOCUMENTS The specifications and drawings were not available at the time of execution of the Agreement. Therefore, Contract Documents are as follows:

- (a) This Agreement.
- (b) Cost of the Work that will be presented in an amendment after bidding.
- (c) Project Schedule that will be presented in an amendment after bidding.

15.2 ORDER OF PRECEDENCE In case of any inconsistency, conflict or ambiguity among the Contract Documents, the documents shall govern in the following order: (a) Change Orders and written amendments to this Agreement, including Amendment 1; (b) this Agreement; (c) design documents approved by the Owner pursuant to sections 3.1.4 - 3.1.7 in order of the most recently approved; (d) information furnished by the Owner pursuant to 3.7.4 or designated as a contract document in section 15.1; (e) other documents listed in this Agreement. Except as otherwise provided, among categories of documents having the same order of precedence, the term or provision that includes the latest date shall control. Information identified in one Contract Document and not identified in another shall not be considered a conflict or inconsistency

OWNER:
Cascade Charter Township

BY: _____

NAME: _____ TITLE: _____

WITNESS: _____

NAME: _____ TITLE: _____

INTEGRATED SERVICE PROVIDER:
Fishbeck, Thompson, Carr & Huber, Inc. (FTCH)

BY: _____



NAME: _____ TITLE: _____

WITNESS: _____

NAME: _____ TITLE: _____

END OF DOCUMENT.

DRAFT



EXHIBIT A

Cascade Township Hall Renovation Study

Prepared for:
Cascade Charter Township
Grand Rapids, Michigan

FINAL

Project No. G170341
April 19, 2017



Fishbeck, Thompson, Carr & Huber, Inc.
engineers | scientists | architects | constructors

ftc&h



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 C1 Fire Station No. 2 (Buttrick Avenue)

 C2 Township Office (Thornhills Avenue)

 C3 Township Office Snowmelt Walk (Thornhills Avenue)

Appendix 2 Electrical Drawing E-1

List of Abbreviations/Acronyms

A/E	Architectural/Engineering
Township	Cascade Charter Township
CM	Construction Manager
CFH	Cubic Feet per Hour
EPDM	Ethylene Propylene Diene Monomer
FTCH	Fishbeck, Thompson, Carr & Huber, Inc.
HVAC	Heating, Ventilating, and Air Conditioning
kVA	Kilovolt-amp
kW	Kilowatt
MDP	Main Distribution Panel
Psf	Per Square Foot
RTU	Rooftop Unit
Sf	Square Feet



Introduction

This study of Cascade Charter Township (Township) municipal facilities addressed specific concerns of the Township as related to building and site with the intent of extending the useful life of the facilities approximately ten to fifteen years. At the Township offices on Thornhills Avenue the scope included condition of the roofs, Mezzanine windows, the heating, ventilating and air conditioning (HVAC) system, and the parking lot.

An investigation was also done for adding a whole building generator. The condition of the parking lot at Fire Station No. 2 on Buttrick Avenue was also assessed. A cost estimate was also developed for creating heated sidewalks at the main entrance of the Township office building.

Site visits were made to verify current conditions and investigate the feasibility of improvements. Design and materials research was then undertaken to propose solutions. Opinions of probable cost were then developed into project estimates. The expertise of FTCH's Construction Department was utilized for estimating. The construction management services of FTCH that would guide the construction process also contributed to the crafting of this study.

The study is divided into individual sections to address each of the topics covered and then the report concludes with a section on estimated costs.

Site Paving

FTCH visited both sites; Fire Station No. 1/Township Office (Thornhills Avenue) and Fire Station No. 2 (Buttrick Avenue) on March 23 to review the parking lot conditions and assess the need for replacement or resurfacing.

Fire Station No. 2 (Buttrick Avenue)

Original construction drawings for the Fire Station were prepared by Progressive AE and dated 1995. The drawings currently available are bid drawings and not as built record drawings, however they do indicate the proposed pavement cross sections on Plan Sheet C101.

There are two different pavement cross sections shown on the drawings;

1. The large parking area east of the fire station and the smaller parking spaces near the front door have a lighter duty cross section of 2.5" of asphalt over 6" of aggregate base over 12" of sand subbase.
2. The remainder of the asphalt parking lot areas show a heavier duty cross section with 4" of asphalt over 8" of aggregate over 12" of sand subbase.

There is no indication that the asphalt areas were not constructed according to the plans, however the depths cannot be confirmed without coring the pavement.

March 23, 2017 site visit findings:

- Minor crack sealing has been performed.
- Slight settlement at asphalt to concrete interface west of building.
- Block Cracking over approximately 40% of entire surface.
- Long, wide (greater than 1/2") cracks evident on east side of building.
- Small section (3' by 10') of raveling south of building in drive lane.
- A handful of smaller areas (10' by 20') of alligator cracking and small potholes.
- There was no significant evidence of surface deformation, frost heave or rutting.

Overall, the condition of the pavement could be classified as "Fair" given its age of approximately 20 years. The lack of significant surface deformation, frost heave or rutting indicates that the underlying base is in general good condition. There are a few small areas of alligator cracking that should be investigated further with possible full depth spot pavement removal and replacement. The block cracking and the wider long cracks are typical given the age of the surface.

Recommended Repairs shown on Sketch C1:

1. Full depth pavement repairs in areas of Alligator Cracking, predominant block cracking and along wider long cracks. Approximate Areas shown on C1.
2. Cold-mill to 1.5" depth and place 2" overlay around building.
3. Place 2" overlay in parking area behind building and on driveway in from Buttrick Avenue.

Township Office (Thornhills Avenue)

The available Township office plans date back to 1979. Those plans do not have a pavement cross section, therefore, the asphalt, aggregate base and subbase thicknesses are not known at this time. It is possible the parking lot may have been resurfaced approximately 15 to 20 years ago.

March 23, 2017 site visit findings:

- Block Cracking is evident in greater than 60% of the pavement surface.
- Areas of longitudinal alligator cracking in drive lanes.
- Areas of alligator cracking with water staining that indicates slight settlement.
- Raveling in areas just north of the north main entrance.
- Raveling/scour along the south edge of the drive lane south of the building.
- Concrete curb by main entrance has multiple cracks, spalling and a repair area.
- Concrete curb by the bike rack is also cracked and in need of repair.
- Sidewalk north of the building at the east entrance door (by the courtyard) is deteriorating along the joint lines. There is also an area with slight vaulting that could be a potential trip hazard.
- There was no significant evidence of surface deformation, frost heave or rutting.

Overall, the condition of the pavement could be classified as "Fair to Poor". The overall lack of significant surface deformation, frost heave or rutting indicates that the underlying base is in general good condition, however there are isolated areas where some settlement has occurred and there is significant alligator cracking.

The Block Cracking is evident in the majority of the parking lot which means the parking lot has reached the expected life span and requires a structural (2") overlay at a minimum.

Recommended Repairs as shown on Sketch C2:

1. Replace concrete curb north of the entrance in two locations.
2. Full depth pavement repairs for the worse alligator cracking spots. Estimated at 30% of the parking lot.
3. Full depth pavement removal and replacement for drive lanes.
4. Cold-mill to 1.5" depth and place 2" overlay in all parking areas.
5. Replace concrete sidewalk at the easterly main entrance (Barrier Free Ramp location).

Snow Melt System

The area of sidewalk (400 square feet (sf)) to the east of the Main Entrance is being removed and replaced as part of Township Office Paving scope of work. A new boiler is being specified as part of the HVAC work effort.

These two work efforts (priced elsewhere) set the stage for adding a snow melt system to all of the concrete walks both east and west of the Main Entrance. This improvement to the building approaches includes the following:

- The cost to up-size the new boiler to provide the capacity required to heat the sidewalks.
- The cost to remove and replace approximately 850 sf of additional concrete walk extending to the east, which serves the entrance to the Building Department and the barrier free parking spaces.
- The cost to remove and replace approximately 550 sf of concrete walk to the west of the Main Entrance, extending to the Fire Department equipment bays.
- The cost of all plumbing components, piping runs, controls and other accessories required to provide a complete in-slab snow melt system for 1,800 sf including all three areas identified above.

The anticipated limits of the snowmelt system is identified on Sketch C3.

Architectural Components

Assessment of Existing Sloped Metal Roof

The single largest roof on the facility is the existing pitched metal roof on the original steel framed building. It covers approximately 9,800 sf. While there is no significant deterioration of the finish visible on the standing seam panels, the age of the roof would indicate that the material is approaching its average service life. It is impossible to estimate when this roofing metal will lose its finish and/or leaks will begin to develop so it is beneficial to have some ideas in hand for when that day comes. There are a few options available to in effect create a new roof.

The roofing metal could be removed and new metal laid down, but this is not often done. It is labor intensive and weather sensitive. Consequently, this option should receive no further consideration.

One method of roof rejuvenation is to recoat the existing roof metal. The most thorough method is to sand off the degraded existing finish and then paint on a new fluoropolymer coating. An example of a good product is Fluoroner by Tnemec. This process can typically cost over \$20 per square foot (psf).

The most cost effective method for extending the life of a standing seam metal roof is to cover it with an Ethylene Propylene Diene Monomer (EPDM) membrane. Polyiso foam rigid insulation is laid between the flutes of the metal roof; the roof is then covered by a continuous layer of rigid insulation; and a membrane is adhered to the foam. This would be a 60 mil EPDM membrane with a 20 year system warranty.

One concern that goes along with adding insulation at the roof plane is the likelihood of additional snow loading. This concern is especially valid for "pre-engineered" steel buildings that are usually designed with very little extra structural capacity. Less heat rising through the roof means less snow melting off, which means more snow load on the roof. The first investigation to do if considering installation of an EPDM roof needs to be a structural analysis of the roof support system. Since there appears to be no leaking caused by the roof at this time, the recommendation is to regularly inspect and monitor the condition of the roof and make improvements only when needed in the future.

West End Mezzanine Window Improvements

There is a mezzanine level above the Fire Department offices at the west end of the steel framed building. Windows in the west exterior wall look out onto the one story flat roof. The sill of the window opening is only about 4" above the roof surface, and water is infiltrating the wall. The windows are aluminum gliders which are at the end of their useful life.

The windows need to be replaced, and the sill raised. The most economical way to do this is to work below the existing window head. The existing plastic laminate covered sill on the interior should be removed and the wall built up to a satisfactory new height. This would be about 9" above where it is now (raising the sill from 3' to 4' above the mezzanine floor). This would create a 24" tall ribbon of windows, which is adequate for daylight and ventilation. Losing the lower 12" of view is of minor concern since that view was of the roof membrane and mechanical equipment. Since roof membrane changes are an integral part of this project the cost of window replacement is included in the Flat Roof Replacement outlined in another section of this report.

Potential Pitched Roof Overlayment on Flat Roof Areas

From a constructability standpoint, it is possible to create a new sloped roof system above an existing flat roof. However, this is not a recommended solution for this building.

It would require a thorough structural examination of the existing building to explore whether the dead loads of the new roof construction could be supported without providing reinforcement to the existing walls. The cost of both the study and any subsequent structural reinforcement are unknown at this time.

A portion of each of two of the flat roof areas run along the side of the existing sloped metal roof. This presents design challenges for the layout of the new roof slopes of both providing a roof configuration that sheds water to the perimeter and one that looks in harmony with the proportions and scale of the building.

All of the mechanical equipment is located on the flat roofs. It would be cost prohibitive to relocate the equipment to the ground. The most direct solution would be to raise the air handling units straight up, to above the new sloped roof. It would certainly have a negative impact on the aesthetics of the building to have the equipment moved from behind a parapet wall to up above the new pitched roof. Locating the equipment on curbs on sloped roofs also makes access to the units for routine maintenance more difficult.

The overarching determinate working against the viability of overlaying a sloped roof system is cost. This solution would easily cost two to three times as much as replacing the existing EPDM.

Flat Roof Replacement

The existing building housing Township Offices/Fire Station No. 1 consists of a sloped metal roof over the central structure with three flat roof areas on the east, north, and west sides of the building. These flat areas are covered with a membrane roof over rigid insulation. A typical medium quality 45 mil membrane would have an expected life of 20 to 25 years.

The flashing conditions against the taller metal building range from acceptable detailing, to marginal detailing with limited flashing height, to very poor detailing with practically no flashing height. There is a perimeter parapet around the open sides of the roofs that provides a good opportunity for proper roof termination. The roof drains are well located and appear to be working adequately so no reworking of the drains should be required. No soft spots were found in the insulation when walking the roofs and there was no noticeable ponding. This would indicate that the existing rigid insulation has not been compromised by water infiltration and it is assumed that it may be left in place.

A reroofing project would consist of:

- Removal and replacement of the existing wall cap and all of the roofing membrane.
- Inspection and repair of the underlayment insulation.
- Modifying the metal siding on the building sidewalls as required to create a uniform height at the bottom of the siding that allows for a proper roofing termination detail. This option would be weighed against the option of sheathing over the full five foot height of the sidewall (up to the metal roof edge height) and covering the sidewall with white roofing membrane. This situation exists along approximately 140 linear feet of metal building sidewall.



Assessment of Building Department Vestibule

The existing Building Department Vestibule consists of aluminum framed glass walls and doors along with a translucent panel roof. It is approximately 6' wide and 7' deep. It has a tile floor with recessed walk-off mat. The only sign of water penetration is at the northwest corner, at the floor, and it looks like this may be caused by the mulch adjacent to the wall being above floor height. In general, the structure appears to be functioning well for its intended use.

While there are no recommendations to be made for the Vestibule's upkeep or repair, a couple of minor issues could be dealt with.

- The door hardware is old enough that it is worn out and in need of replacement.
- The floor mat does not drain and can hold odors when the wet area is exposed to sunlight. Options for improving upon the current system include: A different material could be placed in the recess that would not collect and/or trap moisture; or the recess could be filled in and tiled.

Heating, Ventilating, and Air Conditioning

Mechanical

Existing HVAC equipment consists of single zone natural gas-fired heating/DX electric cooling packaged rooftop units (RTU) of following ages and capacities:

Tag	Age	Area Served	Existing Tons	Proposed Tons
RTU-1	20	North Conference Room	2	2
RTU-2	11	North Offices	3	3
RTU-3	20	Interior Offices	10	10
RTU-4	20	South Offices	5	5
RTU-5	23	West Fire Dept - Addition	5	8
AC-4	23	Fire Dept - Original Main Level	2	4

A natural gas-fired boiler provides heating water for perimeter baseboard finned tube radiation. Heating water distribution piping consists of a single pipe system which uses diverter tees to connect the finned tube radiation supply and return branch piping to single pipe loop. As each finned tube element releases heat to its respective room, cooler return water is blended with continuing supply water. As a result, heating water supply temperature near the distribution loop end is reduced and rooms furthest from the boiler are not heated adequately. A natural gas-fired upright furnace with DX electric cooling (AC-4) serves the main level of the Fire Department area.

Proposed HVAC system renovations include:

1. Variable capacity rooftop units connected to variable air volume terminal units with supplemental heating coils to match varying building loads and allow similar areas to be zoned together considerably improving occupant comfort.
2. Vertical air handler to serve the main level Fire Department area with DX electric cooling.
3. Boiler sized to handle variable air volume (VAV) supplemental heating coils and existing finned tube radiation along with required combustion air and gas vent modifications.
4. Additional heating water return piping loop to remove single pipe heating loop and allow all finned tube sections to receive the same temperature heating supply water.
5. Air and dirt separator and diaphragm-type pressurized expansion tank.
6. Insulating new and existing uninsulated heating water piping.
7. Variable volume heating water circulating pump that matches system demand.
8. Reusing existing ductwork to extent possible.
9. HVAC control system to schedule HVAC equipment and allow perimeter finned tube radiation system and RTU air systems operation to be coordinated.
10. Natural gas piping modifications required for rooftop units.

Above ceiling work will be executed by removing and replacing existing ceiling tiles. No new finishes and only minimal repair to existing finishes is anticipated to be required for any of the work.



Electrical

It is assumed that the power connections and disconnect switches for the 5 existing RTUs and 2 roof mounted condensing units shall be removed. New conduit and wiring shall be installed from existing power sources up to new HVAC rooftop units and condensing units. If existing conduit is in satisfactory condition, conduit could be reused and new wiring installed. New conduit and wiring shall be required for a new boiler, boiler safety shutdown, and other HVAC equipment. New 120V circuits shall be required to power new RTU control system device(s) and for new 120V ground fault receptacles with while-in-use electrical boxes. These receptacles shall be located within 25' of HVAC roof top unit equipment. These costs are included. Costs to upgrade the existing electrical main distribution panel are included in the Generator section of this study.

Sheet E-1 in the appendix includes an Overall Electrical Plan. This plan indicates approximate locations of existing HVAC roof mounted equipment and includes electrical nameplate information.

Energy Savings

The HVAC system renovation is required because the existing equipment is at the end of its useful life. Energy savings, due to the greater efficiency of the new equipment, will be a welcome dividend of this work and the estimate is that a savings of about 5% will be realized. With an annual gas and electric cost of about \$28,000 the savings will be \$1,500 per year. Since energy savings was not the primary driver behind this work, Return on Investment is not a useful metric for this project.

Emergency Generator

Generator

Based on existing drawings and electrical nameplate information from HVAC roof mounted equipment, existing electrical loads are estimated as follows:

HVAC roof mounted equipment	59 kVA
Lighting	32 kVA
Receptacles	24 kVA
Other	21 kVA
Total	136 kVA

Based on these loads, a 200kW/250kVA natural gas engine generator shall be provided to serve the whole building. A generator of this size would require a gas connection at the generator capable of delivering 2,115 cubic feet per hour (CFH) at 7" to 11" of water column of pressure. It is assumed that the existing DTE gas service for the building would need to be upgraded and a new underground gas line would be extended over to the generator.

A cost estimate was developed with the generator placed due north of the northwest corner of the fire station, on the north side of the parking lot. This location is adjacent to other site utilities and does not impinge upon the appearance of the office building. The generator and associated electrical equipment would likely take up at least three parking spaces. As a minimum, concrete bumper posts would be required to protect new equipment. A fence, panel system or enclosure to conceal this equipment is not included in the cost estimate. The existing gas/electric services currently enter the building near the east building entrance. These services are located within the brick enclosure where the utility transformer is located. The approximate linear distance from this existing brick enclosure to the proposed generator location is 300'. Conduit and wiring for new main generator feeders is estimated to be more than \$120,000. New feeders would extend from the building to the generator and then back to the building

If the generator could be located closer to the main entrance of the building, the gas and electric feeder costs could be reduced.

The first alternate location considered was in the same general area as the existing building transformer. To position the new generator here the brick enclosure would have to be removed and the sidewalk reconfigured to be placed out along the curb line. Unfortunately closer study showed that there were too many challenges to make this a feasible solution. The ground area is too small to accommodate the equipment footprint and clearances, as well as a new screening element. There is also too little space to create a new sidewalk configuration that addresses all barrier free requirements.

A second location was developed that does meet all technical criteria. This sets the generator in a group of parking spaces directly north of the main building entrance. There would be a cost savings for the shorter gas and electrical lines required to reach this location but there is a cost added for a masonry enclosure to screen the generator. This Alternate appears at the bottom of the Cost page and may be substituted for the value shown for the generator in the Construction Activities area of that page.



Sheet E-1 in the Appendix includes a Preliminary Electrical Riser Diagram. This diagram illustrates how new electrical equipment would be connected to existing electrical equipment. New electrical equipment would include a natural gas engine-generator in an outdoor enclosure, an Automatic Transfer Switch (ATS) with maintenance by-pass in an outdoor rated enclosure, and two service entrance rated disconnect switches in outdoor rated enclosures. The existing Main Distribution Panel (MDP) would be replaced with a new MDP one-for-one in the existing shared Mechanical/Electrical Room. The new MDP would be connected to the generator and reconnected to serve existing panels in the Township Hall and Fire Station.

Two existing panels include mechanical interlocks and receptacles for connection to a portable generator, one interlock is located in the Township Hall and one is located in the Fire Station. These interlocks are manual mechanical devices that prevent two different power sources from energizing a common bus at the same time. Either the main circuit breaker or the circuit breaker serving the portable generator receptacle is turned on and connected to the bus, but not both at the same time. These interlocks shall not be considered manual or automatic transfer switches and should be removed after the new generator system is operational.

Cost Estimate

The cost opinions developed on the following page are the result of a collaborative effort of members of the FTCH team. Factors considered include specific project conditions and requirements, industry standards, knowledge of comparable work, bidding climate, and professional experience. The values represent work efforts undertaken in a coordinated manner and to be completed in 2017.

This estimate is structured to include integrated Architectural/Engineering (A/E) and Construction Management (CM) services to be provided by FTCH. Both groups are involved with the entire project from the Owner's decision to begin design to the completion of construction. The A/E will lead the effort to establish final design requirements, develop drawings and specifications, and produce the Construction Documents. The CM will then assume the lead role with services including: Advertise for bids, receive and evaluate bids, make recommendations to the Owner, write and sign contracts with the Owner and sub-contractors, provide a project schedule, provide periodic inspections, work with the Owner to conduct a punch list, follow up on the punch list, and conduct the project close out.



CONSTRUCTION ACTIVITIES

SITE PAVING	
Fire Station #2	\$58,100
Township Hall	\$112,700
TOWNSHIP HALL ROOF	
Reroofing Flat Areas	\$85,800
HVAC	
Replace Rooftop Units & Boiler	\$315,900
SNOW MELT SYSTEM	
At Main Building Entry	\$47,400
EMERGENCY GENERATOR	
Provide Whole-Building Generator at Northwest Corner of Property	\$331,200
<hr/>	
SUBTOTAL FOR CONSTRUCTION	\$951,100
Design & Estimating Contingency (10%)	\$95,100
Construction Management Fee (5%)	\$47,600
<hr/>	
TOTAL CONSTRUCTION COST ESTIMATE	\$1,093,800
Architectural/Engineering Fees (10%)	\$109,400
<hr/>	
TOTAL PROJECT COST ESTIMATE	\$1,203,200

EMERGENCY GENERATOR ALTERNATE

If the new Emergency Generator is located in parking spaces directly north of the main building entrance, then \$270,500 may be substituted for the \$331,200 value listed above.

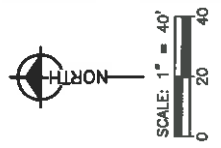
With this generator substitution made,
and soft costs recalculated, the revised


TOTAL PROJECT COST ESTIMATE is: \$1,151,600

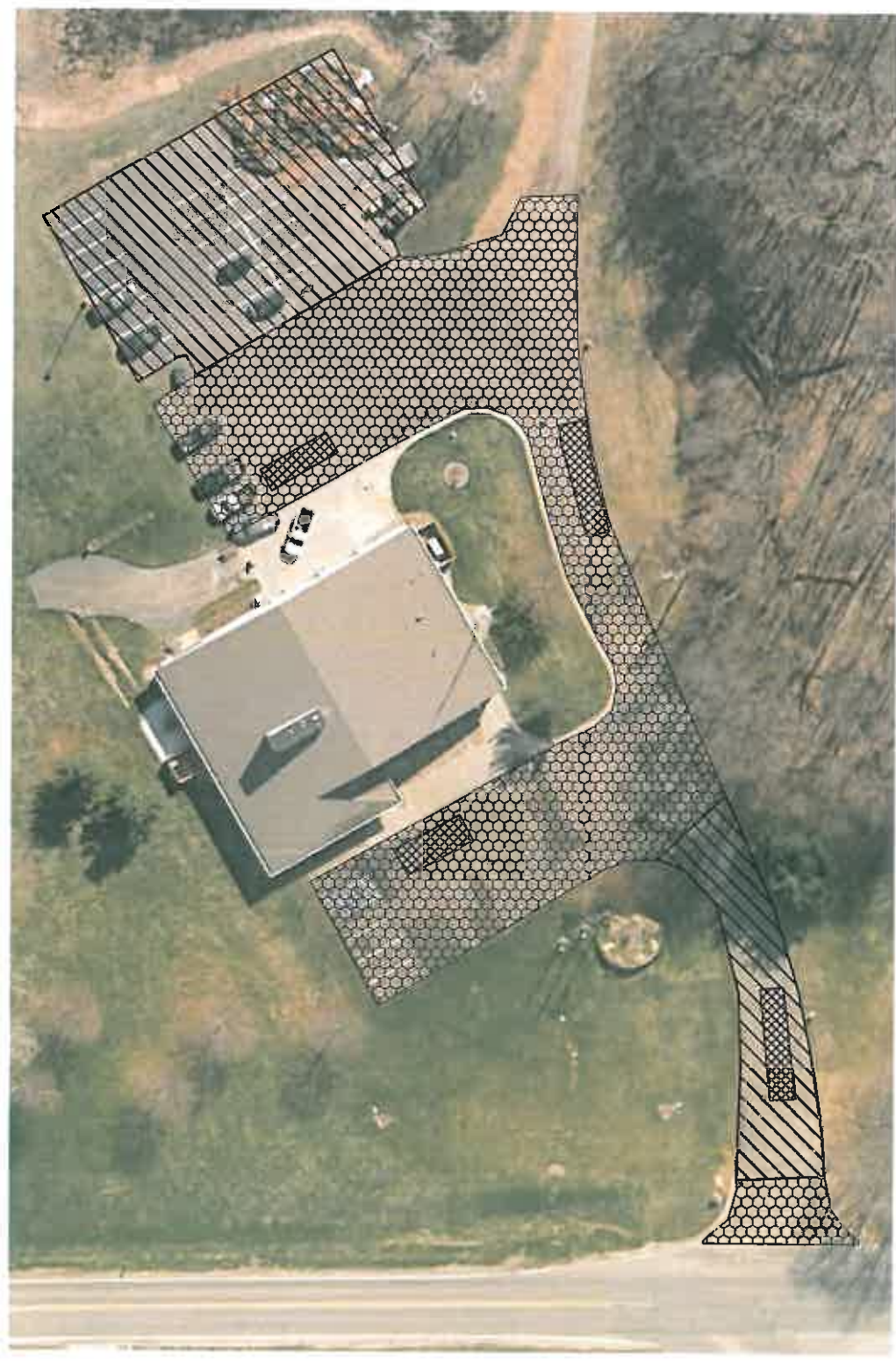
Appendix 1

THIS DOCUMENT IS THE PROPERTY OF FIGH & ASSOCIATES, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED TO BE PREPARED BY FIGH & ASSOCIATES, INC. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF FIGH & ASSOCIATES, INC. THIS DOCUMENT IS NOT BE SUBJECT TO ANY OTHER ACT.

PROJECT NO.	170341
FIGURE NO.	C1



-  COLD MILL 1.5-INCH AND PLACE 2.0-INCH OVERLAY
-  FULL DEPTH (4-INCH) ASPHALT REMOVAL AND REPLACEMENT (SPOT REPAIRS)
-  2-INCH ASPHALT OVERLAY



TOWNSHIP FIRE STATION LOT RESURFACING
 PRELIMINARY PLAN

Appendix 2

Cascade Township
State of Michigan
Renovation Study
Cascade Township Hall

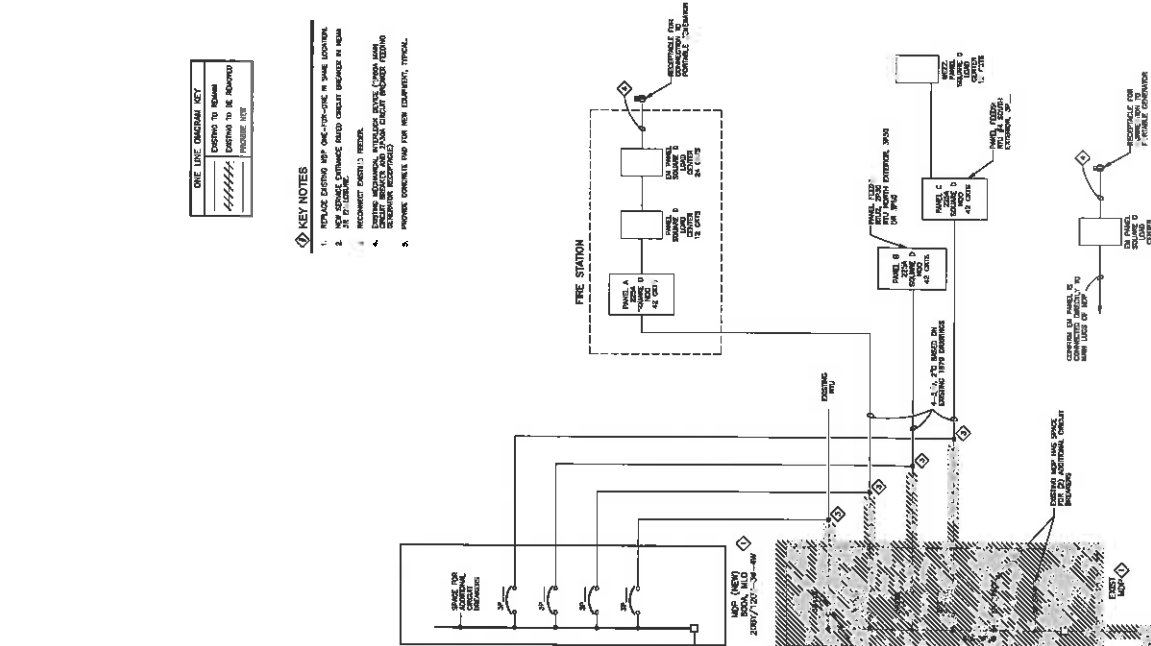
REVISED

DESIGN TEAM
Owner: MTC
Designer: MTC
Reviewer: MTC
Date: 08/14/14

PROJECT NO.
170341
SHEET NO.
E-1

E-1

170341



PRELIMINARY ELECTRICAL RISER DIAGRAM
2007/10/27/2014

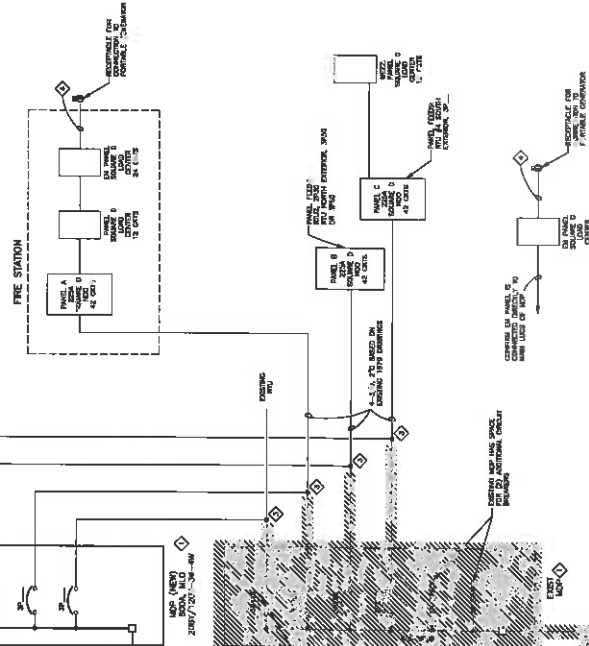


EXHIBIT B



April 28, 2017

Mr. Benjamin Swayze, Township Manager
Cascade Charter Township
2865 Thornhills Drive SE
Grand Rapids, MI 49546

Re: Cascade Township Hall Renovation Professional Services Fees

Dear Ben:

Please find in this letter additional information in support of cost figures established in our Renovation Study dated April 19, 2017. That Study reported on individual work efforts under consideration to help maintain and improve vital Township facilities. The Cost Estimate provided in that Study included architectural/engineering fees as well as the costs associated with FTCH performing construction management services for the various work efforts.

It is those "soft" costs that are expanded upon here. The line item for Architectural/Engineering Fees was calculated as 10% of the Total Construction Cost Estimate. There were also two components of the Construction Management services. The General Conditions which are for pre-construction services up through bidding and the Construction Management Fee calculated as 5% of the Subtotal for Construction. The General Conditions were included in the individual construction activities and so did not show up as a separate line item in the Cost Estimate.

The groupings of project costs below separate out what the A/E and CM fees would be for design and bidding from what the A/E and CM fees will be for the period of construction.

	Thru Bidding	Constr. Admin.	Total
Architectural/Engineering	\$73,200	\$27,700	\$100,900
Construction Management (Including General Conditions)	\$15,000	\$47,600	\$62,600
Total	\$88,200	\$75,300	\$163,500

A comparison of these numbers to the Cost Estimate in the Report shows that they have changed, and in the Townships favor. A closer look at the factors involved in calculating the A/E fee allowed us to trim our estimate of the time required to both design the work as well as be involved in construction administration. This resulted in an overall reduction in fee of \$8,500 (\$109,400 – \$100,900).

There is one qualifying factor that must be kept in mind when considering these numbers. These fees were calculated based on all six of the proposed work efforts going ahead simultaneously. And with the generator being placed at the west end of the site. There certainly would be a reduction in fee if the Total Construction Cost estimate was reduced, but it could not be directly proportional to that reduction in construction cost.

Mr. Benjamin Swayze, Township Manager
Page 2
April 28, 2017



Another factor to be considered when looking at the costs associated with the Report is the implied desire to have the work completed in 2017. The window for being prepared for late summer/fall construction is rapidly closing. To help get the design work underway as quickly as possible we would propose putting together a contract modeled on the one crafted and approved by both parties in 2015. This was when preparation was being made for A/E and CM services for the proposed new Township Hall.

We hope you find this information beneficial for deciding how to proceed, we appreciate the opportunity to provide services for this project, and look forward to working together. Please contact our office if you have questions or require any additional information regarding these fees.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

A handwritten signature in black ink that reads "Gregg Yeomans" with a stylized flourish at the end.

Gregg Yeomans RA

A handwritten signature in black ink that reads "K.D.M." followed by a stylized flourish.

Kent D. Moeggenborg

Cc
D.Durkee

EXHIBIT C



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
5/3/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Professional Underwriters, Inc 39475 13 Mile Road, Suite 106 Novi MI 48377	CONTACT NAME: Stephanie C. Mulligan
	PHONE (A/C, No, Ext): 248-553-8300 FAX (A/C, No): 248-553-8305 E-MAIL: smulligan@profunderwriters.com ADDRESS: smulligan@profunderwriters.com
INSURED FISHB-1 Fishbeck, Thompson, Carr & Huber, Inc. 1515 Arboretum Dr., SE Grand Rapids MI 49546	INSURER(S) AFFORDING COVERAGE NAIC #
	INSURER A: National Fire Ins. of Hartford
	INSURER B: Valley Forge Insurance Co 20508
	INSURER C: Continental Insurance Company
	INSURER D: Continental Casualty Company 20443
	INSURER E: INSURER F:

COVERAGES CERTIFICATE NUMBER: 1522721279 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC			PMT 6043508076	11/1/2016	11/1/2017	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$15,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			BUA 6043508093	11/1/2016	11/1/2017	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			CUE 6043508109	11/1/2016	11/1/2017	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	WC 6045517776	11/1/2016	11/1/2017	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000
D	Arch/Eng Professional Liability			AEH-254038073	10/31/2016	10/31/2017	Per Claim 2,000,000 Aggregate 4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Cascade Township Hall Renovation: Cascade Charter Township is listed as additional insured in respect to the General Liability.

CERTIFICATE HOLDER Cascade Charter Township 2865 Thornhills Avenue, SE Grand Rapids MI 49546-7192	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

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EXHIBIT D



RATE SCHEDULE

July 2, 2016

Principal	\$217
Senior Associate	\$186–\$207
Associate	\$129–\$186
Architect Construction Engineer/Manager/Administrator Engineer Estimator Geologist Hydrogeologist Industrial Hygienist Interior Designer Project Manager Scientist Surveyor	
Senior Level	\$120–\$207
Mid Level	\$104–\$120
Staff Level	\$70–\$104
Architectural Specialist Engineering Specialist Environmental Specialist Health & Safety Specialist Operations Specialist Technical Specialist Project Superintendent Survey Specialist	
Senior Level	\$129–\$186
Mid Level	\$87–\$129
Staff Level	\$79–\$87
Technician	
Senior Level	\$104–\$120
Mid Level	\$87–\$104
Staff Level	\$54–\$87
Production Support	\$70
Photocopies	\$0.10/Copy
Mileage/Passenger Vehicles	\$0.70/Mile
Field and Services Vehicles	\$0.95/Mile (\$37/day min.)
Equipment Schedule	Separate Schedule
Expenses and Outside Services	Cost Plus 10%

Compensation to be at one and one-half times the hourly rate for approved overtime.

Invoices are rendered every four weeks and payment is due upon receipt. A service charge of 1% per four-week period is added to accounts unpaid after 28 days from date of billing.

7/16



CASCADE CHARTER TOWNSHIP

2865 Thornhills SE Grand Rapids, Michigan 49546-7140

Date: May 10th, 2017
To: Supervisor Beahan & Cascade Township Board
From: Benjamin Swayze, Township Manager
Subject: Approval of 2017 Local Road Improvements

FACTS:

Each year, Cascade Township budgets general fund dollars to go towards the improvement of local roads. The process for identifying local roads for improvement typically begins in early spring when a list for potential road improvements is developed by Cascade Township staff, and provided to the KCRC for further investigation. The initial list of roads compiled by the Township is developed utilizing resources such as road PASER ratings supplied by the GVMC and a simpler 1-5 rating system map provided by the KCRC, as well as visual inspections by the Township staff.

The KCRC then takes the possible project list and provides recommendations to the Township on maintenance/repair activities and cost estimates. This list is further reviewed by Township staff to select the highest priority projects, considered within the construct of the budgeted allocation for road repair, and is presented to the Infrastructure Committee and ultimately the Township Board for approval.

Attached for your review are:

- A list of the recommended maintenance/repair activities and cost estimates for those activities as provided by the Kent County Road Commission.
- A narrative of the different types of repair/maintenance activities.
- A map of the Cascade Township local road system

ANALYSIS & CONCLUSIONS:

The initial proposed local road program from the KCRC included several different project areas:

The first project area, resurfacing of the remaining roads in the Bridgewater Plat that weren't addressed in the 2015 work, involves the removal of the asphalt and repaving of 3 ½" of asphalt. The estimated cost of this project is \$467,000 with \$282,500 to come from the Township. This roads are rated 4 or lower on the PASER scale.

The second project area, Denison Dr., involves the removal of the asphalt and repaving of 3 ½" of asphalt. The estimated cost of this project is \$28,000 with \$14,000 to come from the Township. This road is rated 4 on the PASER scale.

The third project area, Wycliffe Dr, also involves the removal of the asphalt and repaving of 3 ½" of asphalt. The estimated cost of this project is \$51,000 with \$25,500 to come from the Township. This road is rated 2 on the PASER scale.

The fourth project area would be minor construction (ditching, tree removal and limestone overlay) on the gravel portion of Bolt Avenue between Buttrick and Grand River Drive. This would be a continuation of regular maintenance on our remaining gravel roads. The cost would be \$50,000 (\$27,500 to the Township.) Gravel roads are not PASER rated, but this section is due for maintenance.

At the April Infrastructure Committee the committee recommended that the Township Board move forward with the work as proposed. The Committee also reviewed a significant mill-and fill project in the Foremost Industrial Park (33rd between Patterson and Kraft and surrounding roads) but chose not to recommend that work at this time, citing costs (\$420,000 in Township funds).

It should be noted that Township Funds are also being spent on road repairs to Thornapple River Drive as part of the utility extension project. The committee is exploring finishing the rehabilitation of the remaining stretch of that section (project limits to Thornhills) but does not have estimates yet.

FINANCIAL CONSIDERATIONS:

The projected cost to the Township for the proposed local road program as recommended by the Infrastructure Committee is \$300,500 and the budget for proposed road work in 2017 is \$380,000.

RECOMMENDED ACTION:

To approve the FY 2017 Cascade Township local road program as recommended by the Infrastructure Committee.

Chip seal

Chip seal is a pavement surface treatment that combines a layer of asphalt with a layer of fine aggregate. Chip seals are constructed by evenly distributing a thin base of hot asphalt onto an existing pavement and then embedding finely graded aggregate into it. The aggregate is evenly distributed over the seal spray, then rolled into a smooth pavement surface. Chip seals are very economical.

Chip seals are used to provide a high friction-wearing course over an old pavement. Chip seals also help seal small cracks and waterproof the old pavement.

Disadvantages: Slightly dusty until swept or rains. Small amount of loose aggregate. High-friction (rough) surface not rollerblade/skateboard friendly.

Micro-surfacing

Micro-Surfacing systems are low-cost preventive maintenance treatments that retard deterioration of the pavement, maintain or improve the functional condition of roadways, and extend the pavement's service life. Micro Surfacing is a polymer modified cold-mix paving system that can remedy a broad range of problems.

Micro-surfacing begins as a mixture of dense-graded aggregate, asphalt emulsion, water, and mineral fillers. It is applied to existing pavements by a specialized machine, which carries all components, mixes them on site, and spreads the mixture onto the road surface.

The surface is initially dark brown in color and changes to the finished black surface as the water is chemically ejected and the surface cures, permitting traffic within one hour in most cases.

Disadvantages: Hard to adjust casting to match new surface.

Cape seal

The "Cape Seal" is a combination of two effective paving techniques. The first paving course is called a "Chip Seal" and the second is known as 'Micro-surfacing.'

The Chip Seal is necessary to seal the aging pavement and provide a stress relieving membrane between the old pavement and the new. This is a highly effective preventive maintenance technique that is utilized to retard reflective cracking. Shortly after the Chip Seal has been applied, the Micro-surfacing is laid. The popularity of the Cape Seal is rapidly increasing due to its cost effective nature and its ability to rehabilitate roadways that are in poor condition

Disadvantages: 2 to 6 weeks between chip seal and micro-surface.

Overlay

A pavement overlay may be required because of inadequate ride quality, excessive pavement distress and inadequate structural capacity. New pavement look and feel.

Disadvantages: New pavement is often higher than existing driveways and yards. Driveway modifications and trapped water can create issues.

Mill and Fill

The use of milling machines to remove worn out asphalt surfaces that have completed their service life allows for a very cost-effective way to restore a roadway surface to a “like new” condition. Milling machines grind out the worn out asphalt then transfer the material to a haul truck for delivery back to the asphalt plant for recycling into new mixes. Much of the grade and slope is restored as part of this process. Multiple layers of new asphalt are put into place.

Disadvantages: Cost – 2 to 3 day project time table.

Cascade Township 2017

Surface Treatments

<u>Full Depth Mill and Fill</u>	<u>Total Estimated Cost</u>	<u>Twp Share</u>
Bridgewater Plat		
Bridgewater Dr (Thornapple River Dr to end)	\$ 161,000.00	\$ 80,500.00
Riverton Ave (End to End)	\$ 109,000.00	\$ 54,500.00
Hillsboro Ave (Bridgewater Dr to end)	\$ 45,000.00	\$ 22,500.00
Middlebrook Ave (Bridgewater Dr to end)	\$ 43,000.00	\$ 21,500.00
Sandy Point Ave (Bridgewater to end)	\$ 35,000.00	\$ 17,500.00
Springline Ct (Bridgewater to end)	\$ 34,000.00	\$ 17,000.00
Donnegal Ct (Tammarron Ave to end)	\$ 40,000.00	\$ 20,000.00
Total	\$ 467,000.00	\$282,500.00
Denison Dr (Thornapple River Dr to end)	\$ 28,000.00	\$ 14,000.00
Wycliffe Dr (Cascade Rd to Cascade Springs Dr)	\$ 51,000.00	\$ 25,500.00
Grand Total	\$ 546,000	\$273,000



Kent County Road Commission

KENT COUNTY ROAD COMMISSION LOCAL ROAD CONSTRUCTION AUTHORIZATION

Date: 4-18-17

Project: Local Road Surface Treatments Work Order Number: _____

Township: Cascade Length: 1.54 Miles

Type of Work: Full Depth Mill and Fill

Location: See attached.

Do Sanitary Sewers exist on project? Yes No System Date: _____

FINANCING

TOTAL BUDGET ESTIMATE: \$ 546,000.00

	K.C.R.C Share	Township Share		
	\$ 273,000.00	\$ 273,000.00		
Expended	\$			
Expended	\$			
Expended	\$			

Note: Estimate Cost Valid Until December 31, 2017

At a meeting of the _____ Township Board held on _____, the above estimate was approved. The Road Commission is authorized to proceed to accomplish the work and to bill the Township for all direct costs charged to the project plus an administrative overhead charge of seven and one half percent (7.5%) of the total direct costs so charged, and the Township hereby agrees to pay same in full. Direct costs include any payments for engineers and other consultants, materials, force account labor and fringes, equipment rental, advertising, and printing. The overhead cost is included in the above estimate.

Remarks: Paving done by contractor, prep work and inspections done by Kent County Road Commission Local Construction and Maintenance Division.

Approved by: _____ Date: _____

Note: For correct processing, please return this work order to the attention of the Maintenance Department of the K.C.R.C. Fax Number 242-6983.

Working to keep Kent County moving



**Kent County
Road Commission**

**KENT COUNTY ROAD COMMISSION
LOCAL ROAD CONSTRUCTION AUTHORIZATION**

Date: 4-18-17

Project: MINOR CONSTRUCTION Work Order Number: 060

Township: Cascade Length: _____

Type of Work: Tree removal, drainage improvements and asphalt milling aggregate surface.

Location: Bolt Dr (Grand River Dr to pavement)

Do Sanitary Sewers exist on project? Yes No System Date: _____

FINANCING

TOTAL BUDGET ESTIMATE: \$ 50,000.00

	K.C.R.C Share	Township Share		
	\$ 22,500.00	\$ 27,500.00		
Expended	\$			
Expended	\$			
Expended	\$			

Note: Estimate Cost Valid Until December 31, 2017

At a meeting of the _____ Township Board held on _____, the above estimate was approved. The Road Commission is authorized to proceed to accomplish the work and to bill the Township for all direct costs charged to the project plus an administrative overhead charge of seven and one half percent (7.5%) of the total direct costs so charged, and the Township hereby agrees to pay same in full. Direct costs include any payments for engineers and other consultants, materials, force account labor and fringes, equipment rental, advertising, and printing. The overhead cost is included in the above estimate.

Remarks: _____

Approved by: _____ Date: _____

Note: For correct processing, please return this work order to the attention of the Maintenance Department of the K.C.R.C. Fax Number 242-6983.

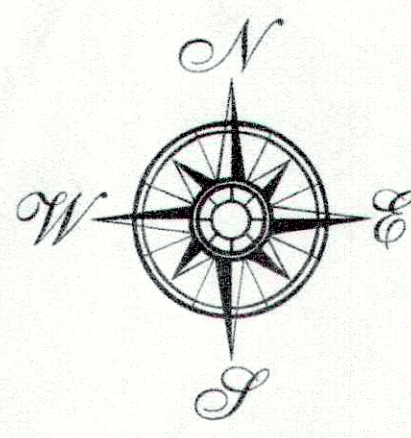
Working to keep Kent County moving

1500 Scribner Avenue NW, Grand Rapids, MI 49504 | (616) 242-6900 | kentcountyroads.net



ROAD CONDITIONS

- POOR (1 OR 2)
- POOR (3)
- POOR (4)
- FAIR (5)
- FAIR (6)
- FAIR (7)
- GOOD (8-10)



CASCADE CHARTER TOWNSHIP
 KENT COUNTY, MICHIGAN
2016 LOCAL PASTER MAP
 With 2016 Chips and
 Crush/Shapes Treatments

Updated: November 30, 2016



CASCADE CHARTER TOWNSHIP

2865 Thornhills SE Grand Rapids, Michigan 49546-7140

Date: May 10th, 2017
To: Supervisor Beahan and Township Board Members
From: Ben Swayze, Township Manager
Subject: Speed Limit Digital Display Signs

FACTS:

The Township is consistently looking for ways to help deter speeding in the Township. Several years ago the Township, in partnership with our East Precinct partners, purchased a speed limit trailer. This trailer can be parked in various areas of the East Precinct and alerts motorists to the speed they are traveling. The trailer takes detailed records and helps us to identify areas for proactive speed patrols.

With changes in technology, Deputy Roe has been investigating other tools that are available to the Township to help address speed issues. One of the items he has been researching is portable speed limit signs with LED displays. These signs, which work similar to the speed board, are smaller and can be permanently or temporarily mounted to existing signage or light poles in the right-of-way. Deputy Roe reviewed signs from three different companies, and his analysis is attached for your review

Deputy Roe has made contact with the Kent County Road Commission regarding utilizing the signs as we have received reluctance from the department to utilizing these signs in the past. After reviewing the project with Tim Haagsma, Traffic Safety Engineer, the KCRC has indicated that they would allow for the signs as long as they are not permanent and are tied to Law Enforcement activities. Should the purchase of the units be approved the Buildings and Grounds Department would work with the Sheriff's Department to move the signs every 2-3 weeks.

Attached for your review are:

- Quotes for portable speed limit signs with LED displays from Elan City, Radar Sign and All Traffic Solution.
- Research and analysis summary from Deputy Roe regarding the 3 signs/companies.

ANALYSIS & CONCLUSIONS:

The Public Safety Advisory Committee had an opportunity to review the quotes and proposal at their April meeting. The committee agreed that the signs could be an effective tool in helping us to deter speeding in the Township. They also agreed that the signs would be more effective being rotated through several locations in the Township rather than being in a fixed location where it may eventually be ignored by daily drivers.

In reviewing the three proposed models, the committee selected the Elan City Evolis Radar Speed Sign for the following reasons:

- **Price** – The Elan sign was the cheapest sign, with an additional discount for purchasing additional units.
- **Screen Display** – The Elan sign incorporates a multi-colored read out with customizable messaging board. The other signs featured a single colored static read out.
- **Batteries** – Additional batteries are included
- **Warranty** – 2 year warranty included
- **Review** – Sign came highly recommended from City of Lowell Police Department who currently uses the sign in their Downtown area.

The Public Safety Advisory Committee has recommended that the Township purchase two units to be utilized in the Township at this time. If the project is successful, the committee may recommend additional purchases in the future.

FINANCIAL CONSIDERATIONS:

The cost of purchasing the two Elan City Evolis Radar Speed Signs is \$4,900. Additional discounts may be added if our East Precinct partners (Ada and Grand Rapids Township) choose to purchase signs for their communities as well. This item is not budgeted for this year, so a budget amendment will be needed to cover the purchase. The Police Fund has a current estimated surplus of \$40,568.

RECOMMENDED ACTION:

Approve the purchase of two Elan City Evolis Radar Speed Signs at a cost of \$4,900.

Portable speed limit signs with LED displays can be very effective when it comes to reducing speed levels. Other communities that have begun implementing these signs have seen great success rates with reducing speeding violations. I believe these signs would be useful in the problem areas of our townships, and I have compiled information highlighting the details of some of our options. The companies which I have compared are Elan City, Radar Sign, and All Traffic Solutions. Please see the following chart for some specific comparisons regarding these three manufacturers.

ELAN CITY EVOLIS RADAR SPEED SIGN https://www.elancity.net/	RADAR SIGN TC-400 http://www.radarsign.com/	All TRAFFIC SOLUTIONS http://www.alltrafficsolutions.com/
Steel with resin weatherproof coating – reinforced frame & screen for protection	Aluminum weatherproof frame - Bulletproof	Aluminum frame with powder coating
Separate mounting brackets included (additional brackets cost \$50 each)	Separate mounting bracket included (additional brackets cost \$50 each)	Separate mounting bracket included (additional brackets cost \$50 each)
4 batteries included (2 batteries to operate device last 7 days)	2 batteries included (2 batteries to operate device last 2 weeks with light traffic)	2 batteries included (2 batteries to operate device last 7 days)
Data collection is similar to our current speed boards	Data collection is similar to our current speed boards	Data collection is similar to our current speed boards
Bluetooth, USB, or smartphone app connectivity	Wi-Fi & smartphone app connectivity	Cloud connectivity – free for 1 year, then \$1,500 annually. USB connectivity if cloud is not purchased
Timer to adjust for school zones	Timer – on & off during certain hours	Timer to adjust for school zones
Visibility over 800 feet	Unknown at this time, but likely slightly smaller than Elan	Great visibility due to flash at high speeds
Stealth mode (screen can appear to be off but still collects data)	Stealth mode (screen can appear to be off but still collects data)	Stealth mode (screen can appear to be off but still collects data)
2 year warranty	2 year warranty	1 year warranty – can be extended as long as \$1,500 fee is paid annually
Multicolor display screen: yellow, red, green – messages are customizable	One color display: yellow	One color display: yellow
Cost: \$3,100 or 2 for \$2,450 Each	Cost: \$3,170	Cost: \$4,700 for 12-inch unit or \$5,100 for 15-inch unit

The three units are comparable in many ways. A distinct difference to note is that the Radar Sign unit is almost indestructible. The unit itself is heavy duty aluminum and is actually bulletproof and graffiti-proof. Kent County has not personally had issues with speed boards being spray-painted or damaged, but it is still be beneficial for most communities.

One major difference between these units is the display. The Elan unit is very visible and the LED lights change from green to yellow to red in order to draw the driver's attention. It also allows a phrase at the bottom of the screen that that is completely customizable. For example it could read "Thank you" for speeds under the posted limit, or "Slow down" for speeding drivers. Radar Sign and Traffic Solutions do not offer this feature and the LED display is yellow.

In comparison with the others, the All Traffic Solutions Shield 12" and 15" both have tamper cameras and alerts. If the sign is tampered with, the camera will snap a picture that will be saved, and it also sends an alert to the sign owner. The All Traffic Solutions units also have built-in GPS in case the device is stolen. Lastly, the device emits a bright flash if a driver's speed is too high. This is effective because it catches the driver's eye.

Another notable difference between all the manufacturers is cost. Radar Sign and Elan are comparable in price, while All Traffic Solutions is more expensive and has additional annual fees to continue the cloud service. All Traffic Solutions is also the only unit that has a camera and GPS to prevent tampering with the device, so I suspect these features are why the cost is higher.

Radar Sign and All Traffic Solutions are both American companies, while Elan is manufactured in Canada. Because of this, Elan's customer service is not as prompt as Radar Sign's or All Traffic Solutions'. Lowell Police Department uses an Elan sign and they are satisfied enough with its quality that they hope to purchase more of them. Upon pulling some numbers from their device, the Lowell PD chief found that the Elan sign has recorded up to 96% of drivers within the speed limit, which was better than was expected. Lowell PD's sign is a fixed unit and is hardwired. When I inquired if there have been any traffic-related issues or crashes as a result of the sign, he stated there has not. The only cons the Lowell police chief has noticed is that the customer service has not been the best and the directions were in French. He also said that data collection has been effective but not as easy to read and has not had as many settings as previous speed boards. Regardless of this, however, he was able to figure things out and is still quite happy with the sign.

I also asked the Lowell chief if he has used the stealth mode to compare speeds when the device is on versus when it appears to be off. He has not, but says he knows from watching traffic and reading the data that the device has effectively slowed traffic overall.

Rockford City Police have All Traffic Solutions' speed signs and are very pleased with them. They currently have two units and will be purchasing more. They have chosen to continually pay the \$1,500 annual fee to keep information on the cloud. They have the Portable Shield 12" unit and don't regularly monitor the data because the sign has already slowed traffic enough that complaints of speed in the area have drastically decreased. Rockford Police especially likes the flashing light feature which alerts drivers when they are driving too fast, as they have witnessed drivers immediately slow down after seeing the flash.

I have also reached out the Kent County Road Commission, and spoke to Tim Haagsma in regard to these specific speed signs. Tim stated he is not a fan, but if the sign is portable, and not a fixed unit he is ok with it. He also mentioned that he would prefer that this item be tied to Law Enforcement and we contact him with locations of where the unit is placed. Tim expressed that private citizens have purchased and placed these signs up through Kent County and that when he sees one he removes it. I agree and completely understand we can't have citizens placing these devices up where they see fit. I advised that the item would be purchased through the townships and we could likely label it Sheriff's department, similar to the speed board. Tim and I also agree a portable unit would be of the most benefit. The main benefit is that the daily drivers on that specific road will eventually ignore the fixed sign. If the sign gets rotated through different locations similar to what we do with the speed board it seems very effective at slowing traffic.

I have recognized a need in the townships for speed reduction, and having worked with the speed board for a few years, I know that it works at slowing speeds. So I contacted these 3 companies and would be happy to negotiate a deal for purchase with any company you choose. When I was thinking of this proposal I was anticipating the township purchasing their own unit, not to be shared like the speed board. The speed board will of course still be used and shared among the 3 townships, but a speed sign that would stay in the township is a great benefit to the residents and more practical than a large speed board.

For further information, I have provided the websites for each company. If you have any additional questions, please do not hesitate to contact me.

All Traffic Solutions

<http://www.alltrafficsolutions.com/>

Radar Sign

<http://www.radarsign.com/>

Elan

<https://www.elancity.net/>

In service,

Ryan



Hi again Mr. Roe,

This is Camille, the account manager at Elan City radar speed signs. We spoke on the phone earlier.

Thank you for contacting us!

The ***Evolis*** radar speed sign is an all-in-one product, the most versatile choice on the market! It simultaneously displays both the driver's speed and entirely programmable messages or graphics, using three rows of LED lights in **AMBER**, **RED** and **GREEN**! It is ideal for both mobile or permanent use, records and analyses traffic data for **BOTH** directions of the road, and everything from the installation to the software is *very* user-friendly!

The perfect solution for any situation!

We are currently running 2 promotional offers on all of our full-option EVOLIS Radar Speed Sign packs.

*Promotional offer price available for the purchase of two or more packs

*Promotional offer price available in exchange for customer testimonial and photos of the radar, once received and installed. I attached the "Customer testimonial + photo request form and specifications" document to this email.

Here is some information about the Evolis Mobile Pack:

*The **EVOLIS AC MOBILE PACK** is intended for frequent mobility (weekly or bi-monthly). The radar is fully battery operated but maintains the possibility for an electrical connection. The pack includes four (12V/22AH) batteries - two within the radar casing and two external, to be switched out as needed, with minimal interruption to the radar's service. The radar has an autonomy of an average of 7 days. All standard pack features included.

Special: \$3,100 OR **TWO FOR ONLY \$2,450each!**

For mobile use of the Solar option or the AC Mobile option: the 1 mounting bar included in each pack can be mounted / un-mounted / re-mounted to different locations. You also have the possibility of ordering additional mounting bars and / or solar brackets (for solar panels) and pre-mounting them at the designated locations. By doing this, radar installation only takes a few minutes!

Additional mounting bar \$49 each

Additional solar panel bracket \$75 each

Standard pack features: (additional information below)

*Traffic data collection for both directions of the road

*Software for traffic data analysis

*Software for radar speed and message programming

- includes **Stealth Mode** and **Timer Mode** (great for school zones!)

*Bluetooth to extract the traffic data and / or to program radar

*Mounting kit

-1 mounting bar - specially designed ABS injected resin (pole straps not included)

*2 year warranty

I have included some practical information below, a booklet of information on the Evolis (in an attachment) and here is a link to our informative video

<https://www.youtube.com/watch?v=AU-hWgDOZXE>.

Please let me know if you have any questions by email at camille.mongeon@elancity.net or by phone at (646)878-6259 and ask for Camille.

The EVOLIS Radar Speed Sign:

Display:

- Tri-color: **AMBER**, **RED** and **GREEN!** Exclusivity on the market
- Simultaneous display of both speed and message / graphic
- Messages / graphics pre-programmed OR entirely programmable:
WRITE WHATEVER YOU WANT!
- Speed thresholds programmed through software or manual dial
- Three rows of LED lights for maximum visibility (over 800ft!)

Traffic data / Software:

- Traffic data collection for **BOTH DIRECTIONS** of the road
- Converts data to charts and graphs in pdf form (easy use for reports)
- Analyses average/fastest speeds and percentiles for chosen time period
- Very user friendly software, intuitive and clear

Evolis power options:

- **AC:** connection to city lighting paired with battery
- **AC MOBILE:** fully battery powered, still possible to connect to city lighting.
- **SOLAR:** solar panel paired with 2 batteries, fully autonomous
- **DUAL SOLAR / AC:** combined street lighting and solar capability.

Product design:

- ABS injected resin casing -incredibly robust yet lightweight
- Waterproof and non-erosive (unlike standard metal casings)
- Aesthetically designed urban furniture
- Curved polycarbonate front-face (prevents damage from projectiles: rocks)
- Over voltage protection- double fuse (exterior and interior)

Simple Installation / Set-up:

- One person, five minutes to set up (user-friendly software & instructions)
- Mounting kit includes 1 specially designed ABS injected resin mounting bar (pole straps not included)
- Easy installation, universal mounting bar adapts to nearly any type of pole
- Excellent customer service / technician help. Fast, friendly and efficient!
- No operational costs

Ideal for both permanent or mobile use:

- Casing weighs 19lbs, 28 X 28in
- Can be transported in the trunk of a car
- Mounting bar adapts to nearly any type of pole

Multi-Lane options available:

- Ideal for highways, fast-traffic, multi-lane roads
- Highly sophisticated antenna system
- Precise traffic collection
- Message actions from each sign

Product reliability:

- 2 year warranty
 - Over **8,000** units installed **worldwide...**
-

Have a wonderful day and hope to hear from you soon!

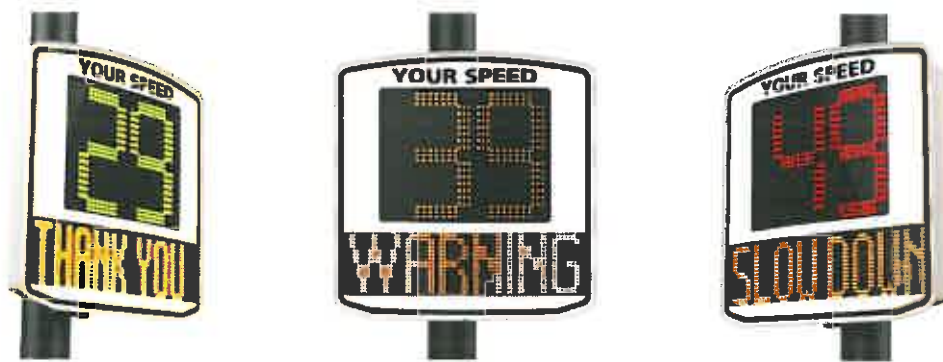
Sincerely,

ElanCity



DETECT • INFORM • SECURE

THE EVOLIS RADAR SPEED SIGN



Elan City Inc.

10-34 44th Avenue – Long Island 11101 NY

646 878 6259 – sales@elancity.net

www.elancity.net

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ABOUT US

WHO WE ARE

- Created June 2005
- Activity: Design and manufacture of electronic display products for local governments
- Representation in + 45 countries
- Customers: more than 5,000 municipalities, DOTs, police departments, universities...
- Speed signs installed: more than 8,000 units

MISSION STATEMENT

- Provide a range of products dedicated to local communities: quality, reliability, ease of use
- Innovative design and user friendly products
- Help you at all stages of your projects
- Offer a reactive and qualitative customer service



REFERENCES

More than 6,000 satisfied customers worldwide:



"Within the first few days of installing the speed signs from Elan City, we noticed vehicles slowing down at our toll plazas. Installation was a breeze, software was trouble-free and the customer support was excellent. This product is definitely living up to our expectations."



Eric Becker -Director of Roadway Operations - Kansas Turnpike Authority



"Evolis provided us a simple and fairly inexpensive solution for both monitoring vehicle speed while at the same time providing visual deterrent to motorist. The sign provides motorist speed in addition to providing a customized message display. In addition this portable speed sign provides us statistical feedback that aides us in furthering our enforcement efforts. The customer service department far exceeded our past experience with other vendors."

Chief Joseph A. Sinagra - Saugerties Police Department

RADAR SPEED SIGNS: A POPULAR AND EFFECTIVE CONCEPT

THOUSANDS OF LOCAL GOVERNMENTS EQUIPPED

In less than 10 years, the number of governments using radar speed signs has dramatically increased, for the following reasons:

- **Efficiency in traffic calming: 15 to 20% average, measured at our customers.**
- **Proven long term efficiency, especially for permanent installations.**
- **Popularity among residents, school areas...**
- **Ability to generate traffic statistics.**

HOW DOES IT WORK?

A radar speed sign is used for traffic calming by confronting motorists with their speed. They are commonly installed at village entries, residential areas, schools zones, roadwork zones...

Speed is detected by a Doppler radar located inside the speed sign casing and displayed on a LED board. Messages can also be displayed according to the detected speed (slow down, danger...)

Speed displays also provide useful traffic information data (average and maximum speed, amount of vehicles...).

KEY BENEFITS

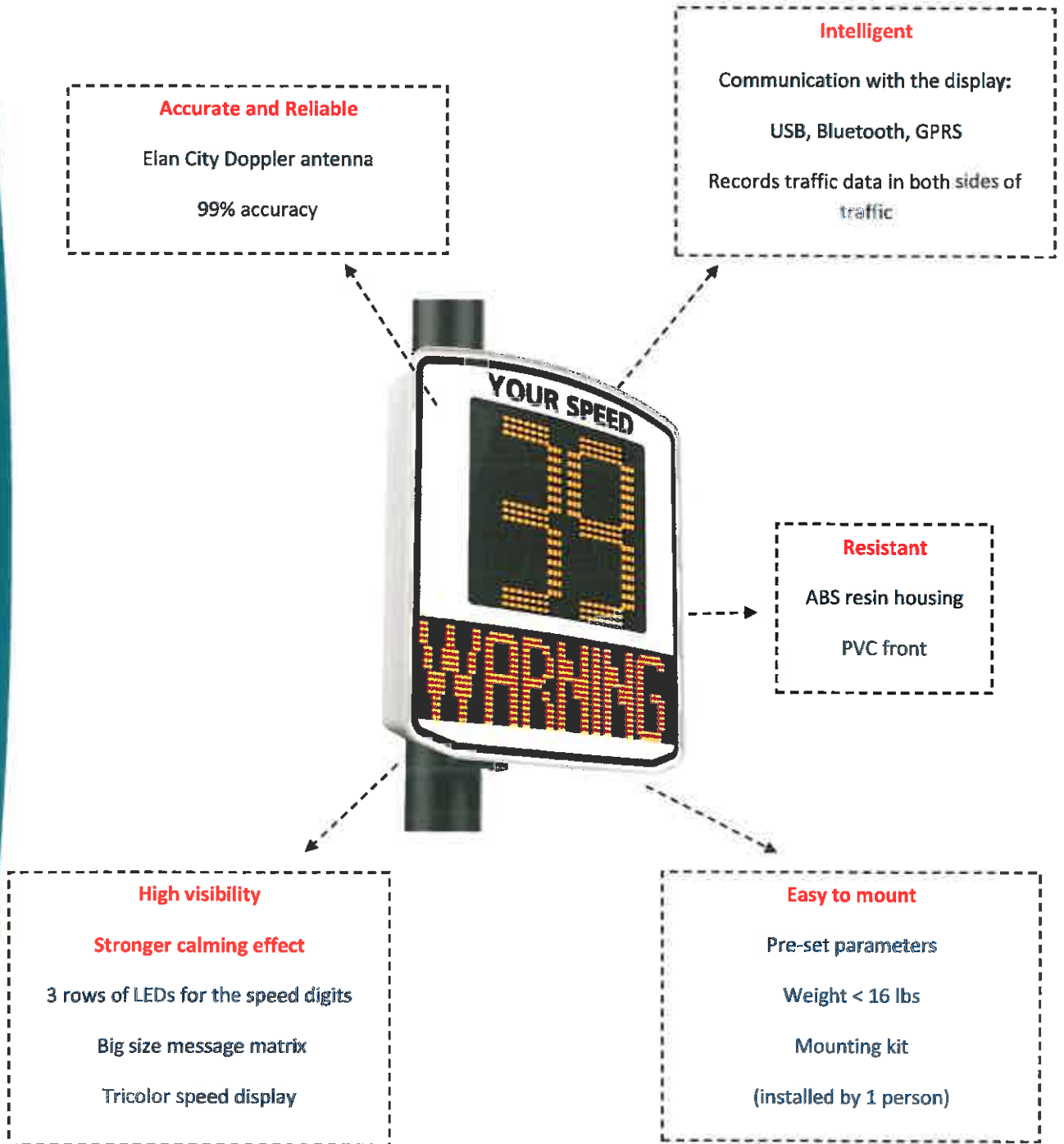
- **EFFICIENT SPEED REDUCTION**
- **EASY TRAFFIC DATA ANALYSIS**
- **POPULAR AND VISIBLE ACTION**



The Minister of Transportation Québec, Mr Robert Poëti, inaugurating the national Road Safety campaign with the first Evolis radar of a massive installment plan.

EVOLIS RADAR SPEED SIGN: THE WORLDWIDE MARKET REFERENCE

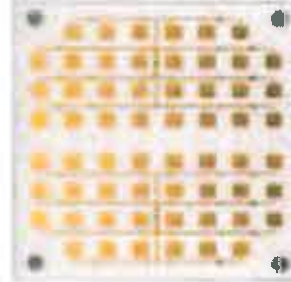
PRESENTATION



ACCURATE DETECTION

The Doppler antenna is the key element of a speed display. It has to provide:

- Most precise speed detection
- Long range



The Evolis Doppler antenna is:

- Located inside the casing
- Accuracy: +/-1%
- Range: up to 1,000 ft (adjustable)
- Detection: both sides of traffic. Only speed of on-coming vehicles is displayed. Data of on-coming and out-going vehicles are collected and saved to generate traffic statistics.
- Angle: 12° Horizontal 25 % Vertical

EYECATCHING DISPLAY OF SPEED

Unlike most products on the market that have only amber LEDs, Evolis can display speed in 3 colors for a much stronger calming effect:




- Display in **GREEN** or **AMBER** for speeds below speed limit.
- **RED** for excess speeds (flashing for critical speeds)



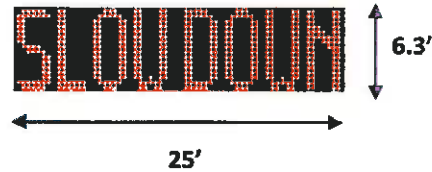
ENHANCED EFFICIENCY IN SPEED REDUCTION THROUGH DISPLAY OF TEXT MESSAGES

The simultaneous display of both messages and speed enhances the traffic calming effect. Drivers are further compelled to reduce their speed with radars that display messages than those who simply display the detected speed. Because of this, it is now mandatory in many countries for all radar speed signs to display messages.




Unlike other products on the market which only display speed, or those who alternate 1 message with the speed, the Evolis radar speed sign displays the SPEED at the same time as (5 programmable) TEXT MESSAGES:

MODEL	Competition	Competition	THE EVOLIS
			
Display	Speed only	Speed or text	SPEED AND TEXT
Calming effect	5-10% drop	10-15% drop	15-20% drop

Depending on the detected speed, up to 5 different messages can be displayed on the "Full-graphic" matrix 64*16 Pixels:



Examples of messages:

Type of message	Line height	Number of characters
1 Line of Text 	6.3'	Up to 8
2 Lines of Text 	3'	Up to 11
Icons 	6.3'	

HIGH BRIGHTNESS LEDS FOR BOTH DISPLAYS (SPEED & TEXT)

- OSRAM SMC high brightness low consumption LEDs
- Lifetime > 100.000 hours
- High visibility process with contrast lenses
- Automatic brightness adjustment control








RESISTANT AND ESTHETIC STRUCTURE



Elements	Specifications	Benefits
Front Face	Antiglare Polycarbonate. Convex shape	Excellent impact resistance. Excellent visibility even by bright sunlight
Casing	Reinforced Polycarbonate ABS resin. No external metal components (except stainless steel locks). Structural performance (charges, deformities, Passive Safety, resistance to shock and vibration) fully meets the requirements of world standards.	Excellent impact resistance. No corrosion
	Integrated Battery box with key-secured access. Dial selector and USB port located in the battery box.	Discreet and secure. Reduces the risk of vandalism.
	Weight below 16lbs. Dimensions 27"x27"x6'	Easy installation and removal. Limits the size of poles and concrete blocks. Reduced mechanical wear and tear.
	Waterproof IP 67 (NEMA 3). Monobloc structure.	Eliminates the risk of failure by oxidation. Any waterproof casing incorporating batteries must provide a solution for depressurization (the Evolis uses of a "Goretex" vent)
	Light color	Light colors attract and generate less heat than dark color. The lifetime of the electronics is increased. (+ 20% on average equal component)
	Color and anti-UV treatment integrated into the ABS resin	No paint, therefore no possible alteration (peeling...). Increases the lifetime of the product.

POWER SUPPLY: LOW CONSUMPTION ENABLE NUMEROUS POWER OPTIONS

DISPLAY	Average current	Average power at 12 Volts
Speed	0,3 Ah	3,6 W
Speed and message	0,8 Ah	9,6 W
Stand by (no display)	0,1 Ah	1,2 W

Battery	Mains	Street light	Solar Panel
			
Recharge with an external charger	Direct power supply. An internal charger supplies 12 Volts.	An internal quick charger (4 Ah) enables battery recharge during street light operation. Battery ensures day operation.	<p>2 Batteries 12 Volts 22 Ah with solar specific technology</p> <p>internal solar charger with intelligent charging management</p> <p>80 Watts solar panel. "Polycrystalline" High Performance.</p> <p>Dimensions: 38'x27'. Compact size prevents from windage. Charging capacity up to 5,3 A.</p> 

SET-UP SOFTWARE SUITE

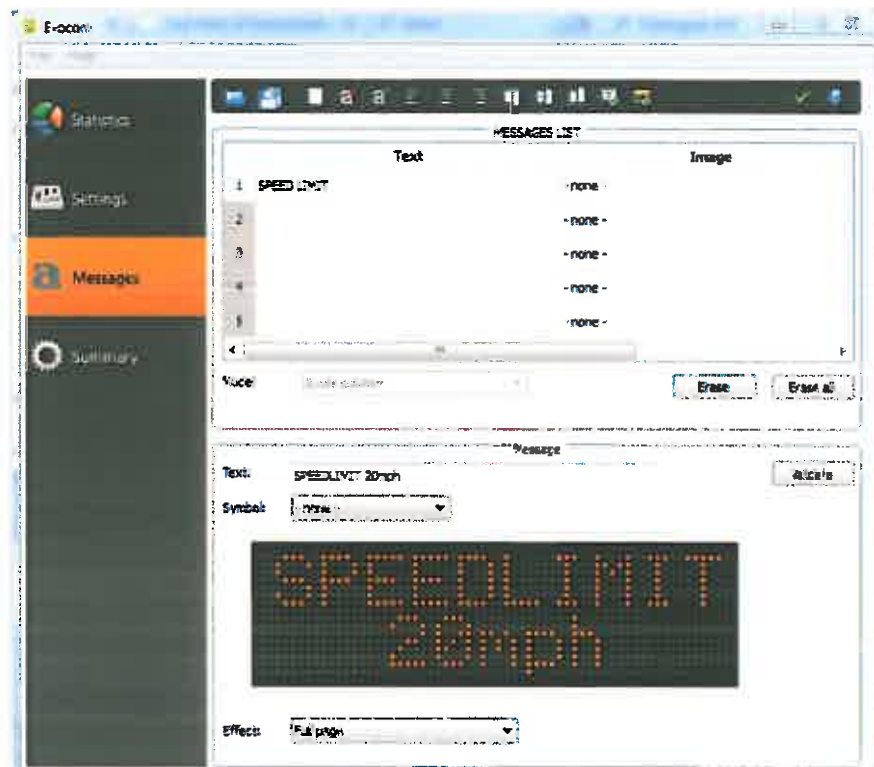
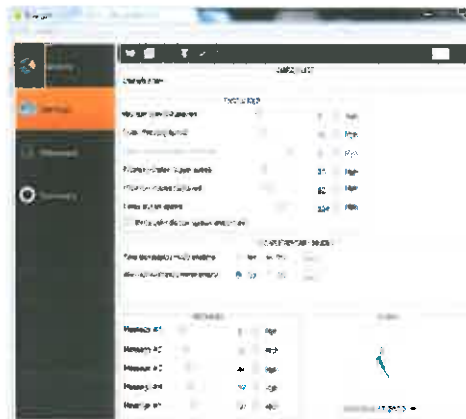
Communication with the speed display

Can be done by :

- USB (key secured access to USB plug)
- Bluetooth (secured by code) with PC, Mini Pc or touchpad (Android or Windows)
- Web. G.P.R.S. (upon request)



Change the parameters with Evocom set-up software:



Unlimited version for Windows. Evocom can be installed as many times as requested.

TRAFFIC DATA: HIGH MEMORY STORAGE & USER-FRIENDLY

- › Internal memory of 8MB (more than 1.000.000 vehicles)
- › Accuracy of speed measurements: +/-1 mph
- › Each detection is precisely recorded and time-stamped

Data are collected using the software Evocom.

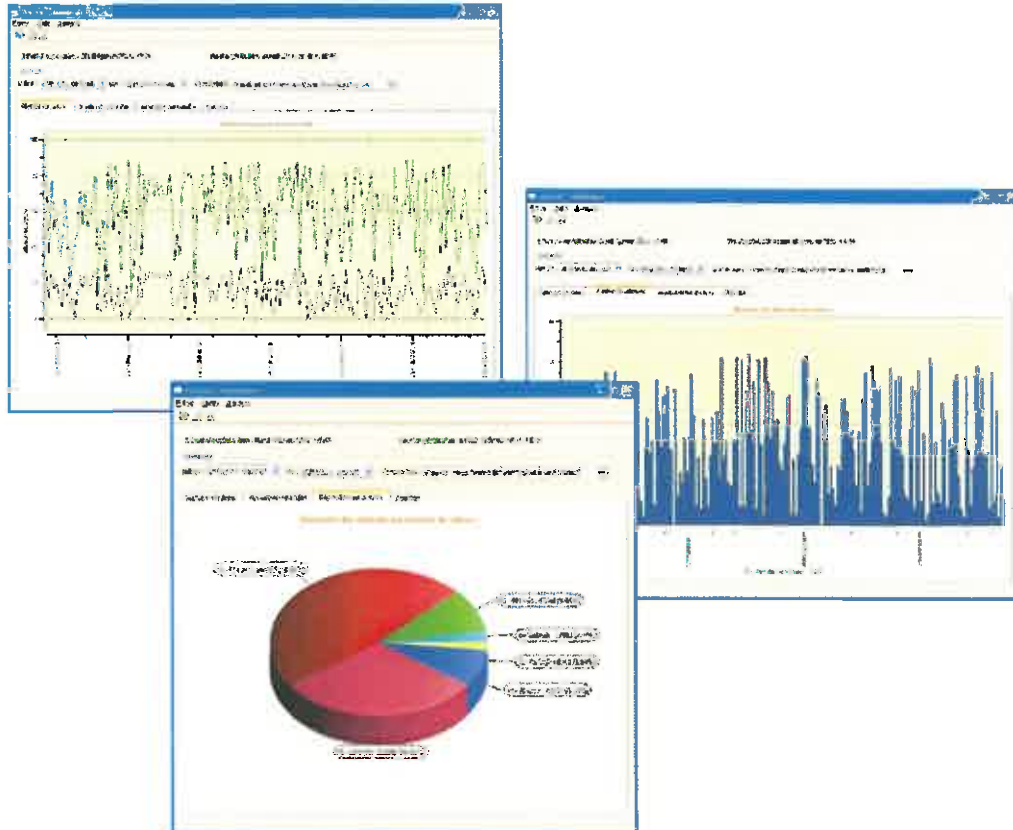
They are then analyzed using our software Evograph (unlimited version).



Several charts can be generated:

- › Distribution of vehicles by speed range
- › Maximum speed
- › Percentiles: V30, V50 and V85
- › Amount of vehicles

Data can be exported to Excel for further analysis or directly in PDF reports for mailing, printing and video presentations.



SAFE & EASY INSTALLATION

Step 1: mount the bar onto the pole



Step 2: secure the radar to the bar and lock it into place (optional) (pad lock not included)



Step 3: Insert the battery



Step 4: select the desired speed zone on the dial selector



THE EVOLIS RADAR SPEED SIGN IS NOW UP & RUNNING!

The Evolis does not require further adjustments.
Simply install the sign perpendicular to the traffic flow.

COMPREHENSIVE AND REACTIVE SERVICE



INSTALLATION

Evolis radar speed sign was designed to be quickly and easily installed by non-technician people. You can save on installation expenses by installing yourself. Alternately, any local service business (electrician, road works...) will do it at limited time and cost.

2-YEAR WARRANTY

Evolis radar speed signs are warranted during 2 years from installation date (except vandalism), on parts and labor.

In case of default device, our service department will proceed to a phone diagnosis. If a manufacturing default is proven, we proceed to factory return within 3 working days, and repair and shipping within 10 working days from receipt of default product.

WARRANTY CONDITIONS AND DEADLINES ONLY APPLY IF ORIGINAL PACKAGING IS KEPT BY CUSTOMER!

REACTIVE HOTLINE

Our service team helps on any question related to the use of our devices.

KEY FEATURES

- ▶ Tested and proven technologies: + 8.000 units installed worldwide
- ▶ Lightweight: easy to install and rotate
- ▶ 3 LEDs digits: increased visibility and traffic calming effect.
- ▶ Large sized matrix for messages
- ▶ No corrosion nor color fading thanks to ABS resin design
- ▶ User friendly software for set-up and traffic data analysis



CUSTOMER

Quotation

Date: 2/22/2017

1095 Windward Ridge Pkwy
Suite 150
Alpharetta, GA 30005

PROPOSED BY:	
Name	Lee Robeson
Phone	678-522-5558
Fax	678-278-1256

SOLD/PROPOSED TO:	SHIP TO:	
Kent County	Kent County	Account
300 Monroe Ave. NW	300 Monroe Ave. NW	Address
Grand Rapids, MI 49503	Grand Rapids, MI 49503	City, ST, Zip
616-632-6435	616-832-6435	Phone
ryan.roe@kentcountymi.gov	ryan.roe@kentcountymi.gov	Email
Ryan Roe	Ryan Roe	Attention

P. O. NUMBER		TERMS		F O B	
				Alpharetta, GA	
LINE #	QTY	PART #	DESCRIPTION	PRICE EACH	TOTALS
1	2	TC-400	Modular Battery Power Radar Sign - 11" Display 11" LED display area - superbright amber with est. 100,000 hour life Two 12V 18 amp hour Ni-MH battery packs, provides up to 14 days operation AC battery charger (24 hours for full charge) 24" w x 21" h YOUR SPEED faceplate with 3" lettering on one line Battery Housing (field accessible to swap batteries), holds 2 battery packs, lock included Universal GoBracket mounting - accepts bolting, banding or strapping to existing poles Bashplate™ (provides the ultimate in vandal protection of sign) Wifi wireless transmitter, communication range up to 300 feet	\$2,895.00	\$5,790.00
			Included		
			Included		
			Included		
			Included		
			Included		
			Included		
			Included		
2	2	RW002	Two year warranty (Includes parts & labor)	Included	
			Turnaround time to repair after receipt, 10 business days		
3	2	SH400	Ground Shipping for TC-400	\$95.00	\$190.00
4	1	-	Trade Show Discount	(\$200.00)	(\$200.00)
* Quote valid for 60 days. Pricing does not include any international applicable taxes, fees, or duties or US Sales Tax.				TOTAL	\$5,780.00

Authorized Signature

Print Name/Title

Date



What our Business/Corporate Customers are saying about us.....

'We have noticed a huge difference in slowing drivers' speed on our production plant site. The Radarsign speed sign is really effective!'

Abe Peterson, Setton Farms – Terra Bella (CA), August 2011

'The Radarsign speed signs are working great and are helping slow cars down on our busy job site.'

Bill Nunley, RJ Corman Real Estate Company – Wheatfield (IN), November 2011

'Prior to installing the signs, trucks were speeding and rolling over. Since we installed the Radarsign speed sign, we haven't had any rolled trucks!'

John Drazin, Clearwater Paper Company, March 2013



'Radarsign's StreetSmart data collection software is very easy to use once it is installed. And the Radarsign speed signs are easy to use, they really are plug and play. The signs have helped considerably in slowing drivers by making them aware of their speed.'

Josh Strength, Deputy Security Operations Coordinator, Chevron – Pascagoula (MS), August 2011

'Radarsign speed signs have made motorists aware of their speed, which helps with the safety of our road crews.'

Don Handley, Far North Supply-Conoco Phillips – Anchorage (AK), April 2012

'We have received positive feedback from employees who notice a big difference in drivers' speed. The Radarsign's speed signs are working great!'

John Templeton, Sim Supply-United Taconite Mining – Forbes (MN), March 2012

INSTALLMENT. THIS IS THE BEST TRAFFIC CALMING TOOL OUT THERE TODAY!"

"Residents of our HOA were complaining about speeding and wanted speed humps. After much research I determined that the best solution was driver speed signs from Radarsign, not speed humps. Almost immediately after installing the signs, complaints about speeding stopped."

Angie Bowman, Milolii Beach Club Association – Hawaii (HI), March 2013



"We love that our Radarsign speed signs are transportable. They help our patrol unit officers, who are extremely busy, deter speeders."

Darrel Carbone, Security Director for Mirasol Community Association- Palm Beach Gardens (FL), December 2011

"Drivers are even stopping at the stop signs more now. We have very few phone calls from homeowners complaining of reckless drivers anymore."

Mario Barjon, Head of Security, St. Ives Country Club – John Creek (GA), February 2014

"The difference is drastic. They are no longer speeding like they used to. Before installation, we were seeing 3-4 tickets per month with average ticketed speeds of over 42.5 MPH. After installation, we've seen only 3 tickets in last 5 months. Now 90% of drivers are driving below 33MPH."

"If the industry experts were all saying Radarsign was the best choice, that was enough for me."

Joseph Karr, Wedgewood HOA – Columbus (OH), October 2013



"The 4 signs are located in the neighborhood and we have noticed they do work to slow the drivers down and the residents are happy with the signs. We have not had any complaints, only positives."

Todd Cooper, Director of Operations, Concord Township (OH), May 2010

"The Radarsign speed signs have received positive feedback from the community. They have a calming effect on drivers who prefer the feedback signs over patrol officers."

Jennifer Stauff, Property Manager for Black Diamond Ranch – Lecanto (FL), January 2012

"We installed our Radarsign driver speed sign in April. Your assistance before and after the sale has been outstanding. Most importantly, it works great. It most definitely has improved the safety of our little village."

Grant Blackwell, Grayton Beach POA (Property Owner's Assoc) – Grayton Beach (FL), July 2010-07

ALL TRAFFIC SOLUTIONS

All Traffic Solutions Inc.
 3100 Research Drive
 State College, PA 16801
 Phone: 814-237-9005
 Fax: 814-237-9006

Tax ID: 25-1887906

A sign of the future.™

QUOTE Q-26377

DATE/TIME: 2/23/2017 10:41:55 AM
 PAGE NO: 1

Questions contact:
MANUFACTURER:
 All Traffic Solutions
 Julie Styskin
 (866) 366-6602

Independent Sales Rep:

BILL TO:
 Kent County Sheriff's Office
 300 Monroe Avenue NW
 Grand Rapids, MI 49503

SHIP TO:
 Kent County Sheriff's Office

Attn: Ryan Roe

PAYMENT TERMS: Net 30
CUSTOMER: 244462
CONTACT: (616) 632-6435

ITEM NO:	DESCRIPTION:	QTY:	EACH:	EXT. PRICE:
4000566	Shield 15 Speed Display; base unit w/ mounting bracket	2.00	\$3,195.00	\$6,390.00
4000647	App, Traffic Suite (12mo); Equip Mgmt, Reporting, Image Mgmt, Alerts, Mapping and PremierCare	2.00	\$1,500.00	\$3,000.00
4000767	Base Model CREDIT, speed display; requires min 1 yr TrafficCloud Traffic Suite	2.00	(\$600.00)	(\$1,200.00)
4000874	All Options Activation: Bluetooth, Traffic Data, Violator Alert, Pictures, (\$3000 Value, requires Traffic or Message Suite)	2.00	\$0.00	\$0.00
4000744	LFP Power kit, 16Ah battery (2), internal power controller, charger w/connector	2.00	\$795.00	\$1,590.00
4000750	App, Mobile User Interface perpetual license (only 1 req'd per account)	1.00	\$0.00	\$0.00
4900063	Carrying Case; Sh15 softcase with storage pockets	2.00	\$175.00	\$350.00
4000641	Shipping	2.00	\$60.00	\$120.00

Special Notes:

Sh15 – 2 LFP batteries with charger – mount plate – “YOUR SPEED” sign – All features activated perpetually (Bluetooth – Data – Strobe and Imaging) – 1 year of web services (SmartApps) to all 6 Apps (Remote Management – Imaging – Data – Alerts, Mapping and Premier Care warranty) – shipping and training. Carrying Case.

SALES AMOUNT: \$10,250.00
SHIPPING:
TOTAL: \$10,250.00

Duration: This quote is good for 60 days from date of issue.

Shipping Notes: Unless shipping charges are specifically indicated, prices are FOB factory. Shipping charges may apply

Taxes: Taxes are not included in quote. Please provide a tax exempt certificate or sales tax will be applied.

Warranty: Unless otherwise indicated, all products have a one year warranty from date of sale. Warranty extensions are a component of some applications that are available at time of purchase. A Finance Charge of 1.5% per month will be applied to overdue balances. GSA GS-07F-6092R

Authorization: By Signing below I indicate that I am authorized to commit my organization to the above.

Print Name, Title

Signature

Date



CASCADE CHARTER TOWNSHIP

2865 Thornhills SE Grand Rapids, Michigan 49546-7140

Date: May 10th, 2017
To: Supervisor Beahan & Cascade Township Board
From: Benjamin Swayze, Township Manager
Subject: Approval of 2017 Local Road Improvements

FACTS:

Each year, Cascade Township budgets general fund dollars to go towards the improvement of local roads. The process for identifying local roads for improvement typically begins in early spring when a list for potential road improvements is developed by Cascade Township staff, and provided to the KCRC for further investigation. The initial list of roads compiled by the Township is developed utilizing resources such as road PASER ratings supplied by the GVMC and a simpler 1-5 rating system map provided by the KCRC, as well as visual inspections by the Township staff.

The KCRC then takes the possible project list and provides recommendations to the Township on maintenance/repair activities and cost estimates. This list is further reviewed by Township staff to select the highest priority projects, considered within the construct of the budgeted allocation for road repair, and is presented to the Infrastructure Committee and ultimately the Township Board for approval.

Attached for your review are:

- A list of the recommended maintenance/repair activities and cost estimates for those activities as provided by the Kent County Road Commission.
- A narrative of the different types of repair/maintenance activities.
- A map of the Cascade Township local road system

ANALYSIS & CONCLUSIONS:

The initial proposed local road program from the KCRC included several different project areas:

The first project area, resurfacing of the remaining roads in the Bridgewater Plat that weren't addressed in the 2015 work, involves the removal of the asphalt and repaving of 3 ½" of asphalt. The estimated cost of this project is \$467,000 with \$282,500 to come from the Township. This roads are rated 4 or lower on the PASER scale.

The second project area, Denison Dr., involves the removal of the asphalt and repaving of 3 ½" of asphalt. The estimated cost of this project is \$28,000 with \$14,000 to come from the Township. This road is rated 4 on the PASER scale.

The third project area, Wycliffe Dr, also involves the removal of the asphalt and repaving of 3 ½" of asphalt. The estimated cost of this project is \$51,000 with \$25,500 to come from the Township. This road is rated 2 on the PASER scale.

The fourth project area would be minor construction (ditching, tree removal and limestone overlay) on the gravel portion of Bolt Avenue between Buttrick and Grand River Drive. This would be a continuation of regular maintenance on our remaining gravel roads. The cost would be \$50,000 (\$27,500 to the Township.) Gravel roads are not PASER rated, but this section is due for maintenance.

At the April Infrastructure Committee the committee recommended that the Township Board move forward with the work as proposed. The Committee also reviewed a significant mill-and fill project in the Foremost Industrial Park (33rd between Patterson and Kraft and surrounding roads) but chose not to recommend that work at this time, citing costs (\$420,000 in Township funds).

It should be noted that Township Funds are also being spent on road repairs to Thornapple River Drive as part of the utility extension project. The committee is exploring finishing the rehabilitation of the remaining stretch of that section (project limits to Thornhills) but does not have estimates yet.

FINANCIAL CONSIDERATIONS:

The projected cost to the Township for the proposed local road program as recommended by the Infrastructure Committee is \$300,500 and the budget for proposed road work in 2017 is \$380,000.

RECOMMENDED ACTION:

To approve the FY 2017 Cascade Township local road program as recommended by the Infrastructure Committee.

Chip seal

Chip seal is a pavement surface treatment that combines a layer of asphalt with a layer of fine aggregate. Chip seals are constructed by evenly distributing a thin base of hot asphalt onto an existing pavement and then embedding finely graded aggregate into it. The aggregate is evenly distributed over the seal spray, then rolled into a smooth pavement surface. Chip seals are very economical.

Chip seals are used to provide a high friction-wearing course over an old pavement. Chip seals also help seal small cracks and waterproof the old pavement.

Disadvantages: Slightly dusty until swept or rains. Small amount of loose aggregate. High-friction (rough) surface not rollerblade/skateboard friendly.

Micro-surfacing

Micro-Surfacing systems are low-cost preventive maintenance treatments that retard deterioration of the pavement, maintain or improve the functional condition of roadways, and extend the pavement's service life. Micro Surfacing is a polymer modified cold-mix paving system that can remedy a broad range of problems.

Micro-surfacing begins as a mixture of dense-graded aggregate, asphalt emulsion, water, and mineral fillers. It is applied to existing pavements by a specialized machine, which carries all components, mixes them on site, and spreads the mixture onto the road surface.

The surface is initially dark brown in color and changes to the finished black surface as the water is chemically ejected and the surface cures, permitting traffic within one hour in most cases.

Disadvantages: Hard to adjust casting to match new surface.

Cape seal

The "Cape Seal" is a combination of two effective paving techniques. The first paving course is called a "Chip Seal" and the second is known as 'Micro-surfacing.'

The Chip Seal is necessary to seal the aging pavement and provide a stress relieving membrane between the old pavement and the new. This is a highly effective preventive maintenance technique that is utilized to retard reflective cracking. Shortly after the Chip Seal has been applied, the Micro-surfacing is laid. The popularity of the Cape Seal is rapidly increasing due to its cost effective nature and its ability to rehabilitate roadways that are in poor condition

Disadvantages: 2 to 6 weeks between chip seal and micro-surface.

Overlay

A pavement overlay may be required because of inadequate ride quality, excessive pavement distress and inadequate structural capacity. New pavement look and feel.

Disadvantages: New pavement is often higher than existing driveways and yards. Driveway modifications and trapped water can create issues.

Mill and Fill

The use of milling machines to remove worn out asphalt surfaces that have completed their service life allows for a very cost-effective way to restore a roadway surface to a “like new” condition. Milling machines grind out the worn out asphalt then transfer the material to a haul truck for delivery back to the asphalt plant for recycling into new mixes. Much of the grade and slope is restored as part of this process. Multiple layers of new asphalt are put into place.

Disadvantages: Cost – 2 to 3 day project time table.

Cascade Township 2017

Surface Treatments

<u>Full Depth Mill and Fill</u>	<u>Total Estimated Cost</u>	<u>Twp Share</u>
Bridgewater Plat		
Bridgewater Dr (Thornapple River Dr to end)	\$ 161,000.00	\$ 80,500.00
Riverton Ave (End to End)	\$ 109,000.00	\$ 54,500.00
Hillsboro Ave (Bridgewater Dr to end)	\$ 45,000.00	\$ 22,500.00
Middlebrook Ave (Bridgewater Dr to end)	\$ 43,000.00	\$ 21,500.00
Sandy Point Ave (Bridgewater to end)	\$ 35,000.00	\$ 17,500.00
Springline Ct (Bridgewater to end)	\$ 34,000.00	\$ 17,000.00
Donnegal Ct (Tammarron Ave to end)	\$ 40,000.00	\$ 20,000.00
Total	\$ 467,000.00	\$282,500.00
Denison Dr (Thornapple River Dr to end)	\$ 28,000.00	\$ 14,000.00
Wycliffe Dr (Cascade Rd to Cascade Springs Dr)	\$ 51,000.00	\$ 25,500.00
Grand Total	\$ 546,000	\$273,000



Kent County Road Commission

KENT COUNTY ROAD COMMISSION LOCAL ROAD CONSTRUCTION AUTHORIZATION

Date: 4-18-17

Project: Local Road Surface Treatments Work Order Number: _____

Township: Cascade Length: 1.54 Miles

Type of Work: Full Depth Mill and Fill

Location: See attached.

Do Sanitary Sewers exist on project? Yes No System Date: _____

FINANCING

TOTAL BUDGET ESTIMATE: \$ 546,000.00

	K.C.R.C Share	Township Share		
	\$ 273,000.00	\$ 273,000.00		
Expended	\$			
Expended	\$			
Expended	\$			

Note: Estimate Cost Valid Until December 31, 2017

At a meeting of the _____ Township Board held on _____, the above estimate was approved. The Road Commission is authorized to proceed to accomplish the work and to bill the Township for all direct costs charged to the project plus an administrative overhead charge of seven and one half percent (7.5%) of the total direct costs so charged, and the Township hereby agrees to pay same in full. Direct costs include any payments for engineers and other consultants, materials, force account labor and fringes, equipment rental, advertising, and printing. The overhead cost is included in the above estimate.

Remarks: Paving done by contractor, prep work and inspections done by Kent County Road Commission Local Construction and Maintenance Division.

Approved by: _____ Date: _____

Note: For correct processing, please return this work order to the attention of the Maintenance Department of the K.C.R.C. Fax Number 242-6983.

Working to keep Kent County moving



Kent County Road Commission

KENT COUNTY ROAD COMMISSION LOCAL ROAD CONSTRUCTION AUTHORIZATION

Date: 4-18-17

Project: MINOR CONSTRUCTION Work Order Number: 060

Township: Cascade Length: _____

Type of Work: Tree removal, drainage improvements and asphalt milling aggregate surface.

Location: Bolt Dr (Grand River Dr to pavement)

Do Sanitary Sewers exist on project? Yes No System Date: _____

FINANCING

TOTAL BUDGET ESTIMATE: \$ 50,000.00

	K.C.R.C Share	Township Share		
	\$ 22,500.00	\$ 27,500.00		
Expended	\$			
Expended	\$			
Expended	\$			

Note: Estimate Cost Valid Until December 31, 2017

At a meeting of the _____ Township Board held on _____, the above estimate was approved. The Road Commission is authorized to proceed to accomplish the work and to bill the Township for all direct costs charged to the project plus an administrative overhead charge of seven and one half percent (7.5%) of the total direct costs so charged, and the Township hereby agrees to pay same in full. Direct costs include any payments for engineers and other consultants, materials, force account labor and fringes, equipment rental, advertising, and printing. The overhead cost is included in the above estimate.

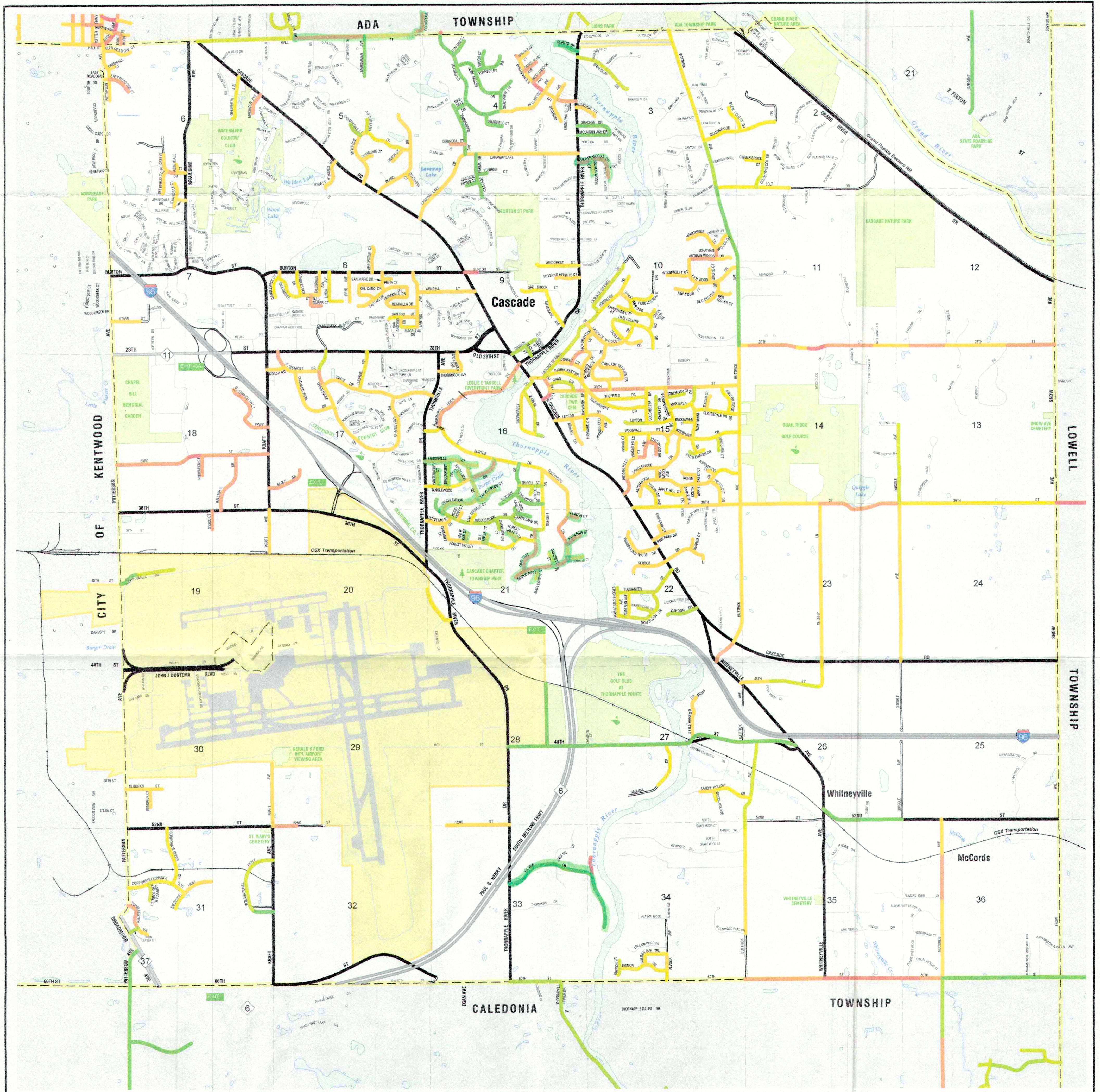
Remarks: _____

Approved by: _____ Date: _____

Note: For correct processing, please return this work order to the attention of the Maintenance Department of the K.C.R.C. Fax Number 242-6983.

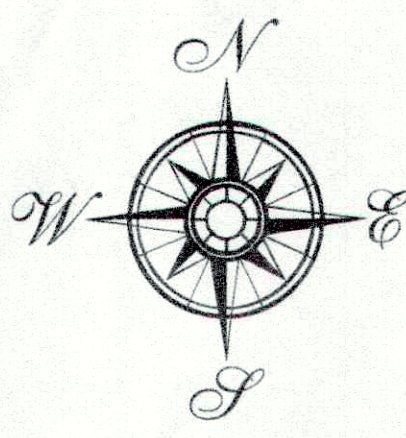
Working to keep Kent County moving

1500 Scribner Avenue NW, Grand Rapids, MI 49504 | (616) 242-6900 | kentcountyroads.net



ROAD CONDITIONS

- POOR (1 OR 2)
- POOR (3)
- POOR (4)
- FAIR (5)
- FAIR (6)
- FAIR (7)
- GOOD (8-10)



REGIS



CASCADE CHARTER TOWNSHIP
 KENT COUNTY, MICHIGAN
2016 LOCAL PASTER MAP
 With 2016 Chips and
 Crush/Shapes Treatments

Updated: November 30, 2016