



ACME TOWNSHIP PLANNING COMMISSION MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
January 8th, 2018 7:00 p.m.

CALL TO ORDER WITH PLEDGE OF ALLEGIANCE

ROLL CALL:

- A. LIMITED PUBLIC COMMENT:** Members of the public may address the Commission regarding any subject of community interest during public comment periods by filling out a Public Comment Card and submitting it to the Secretary. Public comments are limited to three minutes per individual. Comments during other portions of the agenda may or may not be entertained at the moderator's discretion
- B. APPROVAL OF AGENDA:**
- C. INQUIRY AS TO CONFLICTS OF INTEREST:**
- D. SPECIAL PRESENTATIONS:**
1. None
- E. CONSENT CALENDAR:** The purpose of the consent calendar is to expedite business by grouping non-controversial items together for one Commission motion without discussion. A request to remove any item for discussion later in the agenda from any member of the Commission, staff or public shall be granted.
1. **RECEIVE AND FILE**
 - a. Township Board Meeting Draft Minutes 12/05/17
 2. **ACTION:**
 - a. Adopt Planning Commission Minutes 12/11/17
- F. ITEMS REMOVED FROM THE CONSENT CALENDAR**
1. _____
 2. _____
- G. CORRESPONDENCE:**
1. Post-Construction Acme Creek Monitoring, GTTC, Acme, Michigan
- H. PUBLIC HEARINGS:**
1. Zoning Ordinance 046 – Solar Energy Farms
 2. Zoning Ordinance Amendment 047 – Hoxsie Rezone Request
 3. Zoning Ordinance Amendment 048 – Short-Term Rentals
 4. Planned Development 2016-01 – IDF, Dan Kelly
- I. NEW BUSINESS:**
1. None
- J. OLD BUSINESS:**
1. Zoning Ordinance 046 – Solar Energy Farms
 2. Zoning Ordinance Amendment 047 – Hoxsie Rezone Request
 3. Zoning Ordinance Amendment 048 – Short-Term Rentals
 4. Planned Development 2016-01 – IDF, Dan Kelly
 5. Capital Improvements Plan
- K. PUBLIC COMMENT & OTHER PC BUSINESS**
1. Zoning Administrator Report – Shawn Winter

2. Planning Consultant Report – John Iacoangeli
3. Township Board Report – Doug White
4. Parks & Trails Committee Report – Marcie Timmins

ADJOURN:



Approved 02/12/18

**ACME TOWNSHIP PLANNING COMMISSION MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
January 8th, 2018 7:00 p.m.**

CALL TO ORDER WITH PLEDGE OF ALLEGIANCE: 7:02 p.m.

ROLL CALL: Members present: K. Wentzloff (Chair), S. Feringa (Vice Chair), B. Balentine, D. Rosa, M. Timmins (Secretary), D. VanHouten, D. White (arrived 7:09)

Members excused: none

Staff present: S. Winter, Planning & Zoning Administrator, J. Jocks (Counsel), V. Donn, Recording Secretary

A. LIMITED PUBLIC COMMENT: None

B. APPROVAL OF AGENDA:

Motion by Timmins to approve the agenda adding under Consent Calendar E. 1-b. Parks and Trails Committee Meeting Draft Minutes 12/15/17, 1-c. CIP Committee Meeting Draft Minutes 12/15/17, under Correspondence G.-2. Watershed Center letter regard Kelly Project and 3. MDOT email regarding Kelly Project. Supported by Feringa. Motion carried unanimously.

C. INQUIRY AS TO CONFLICTS OF INTEREST: None

D. SPECIAL PRESENTATIONS:

1. None

E. CONSENT CALENDAR:

1. RECEIVE AND FILE

- a. Township Board Meeting Draft Minutes 12/05/17**
- b. Park and Trails Committee Meeting Draft Minutes 12/15/17**
- c. CIP Committee Meeting Draft Minutes 12/15/17**

2. ACTION:

- a. Adopt Planning Commission Minutes 12/11/17**

F. ITEMS REMOVED FROM THE CONSENT CALENDAR:

1. Remove Planning Commission Minutes 12/11/17

Timmins requested to remove the Planning Commission Minutes 12/11/17 from the Consent Calendar.

Motion by Balentine for approval of Consent Calendar with addition of Parks and Trails Committee Meeting Draft Minutes 12/15/17, CIP Committee Meeting Draft Minutes 12/15/17 and removal of Planning Commission Minutes 12/11/17. Supported by Timmins. Motion carried unanimously.

Motion by Feringa to modify the Planning Commission Minutes 12/11/17 with the correction in Roll Call to remove Secretary from Balentine and add to Timmins, and add to Items Removed From The Consent Calendar, Item F. Feringa as abstained from approval of the 11/13/17 agenda. Supported by Balentine. Motion carried unanimously.

G. CORRESPONDENCE:

- 1. Post-Construction Acme Creek Monitoring, GTTC, Acme, Michigan**
- 2. The Watershed Center Letter regarding Dan Kelly Project**
- 3. MDOT email regarding Dan Kelly Project**

H. PUBLIC HEARINGS:

1. Zoning Ordinance 046 – Solar Energy Farms: None
2. Zoning Ordinance Amendment 047 – Hoxsie Rezone Request: None
3. Zoning Ordinance Amendment 048 – Short-Term Rentals: None
4. Planned Development 2016-01 – IDF, Dan Kelly: None

I. NEW BUSINESS:

1. None

J. OLD BUSINESS:

1. Zoning Ordinance 046 – Solar Energy Farms

It was determined additional information needs to be obtained on the types and regulations of solar energy before presenting to the board. Topic will remain on the agenda for further discussion at the February Planning Commission meeting.

2. Zoning Ordinance Amendment 047 – Hoxsie Rezone Request

Required survey was submitted for the application to rezone a parcel owned by Dennis and Judy Hoxsie.

Motion by Timmins to send the proposed zoning ordinance amendment 047 to rezone surveyed 9.91 acres of the parcel owned by Dennis and Judy Hoxsie along S. Bates Rd from A-1 Agricultural to B-4 Material Processing and Warehousing as indicated in the submitted application to the Grand Traverse County Planning Commission for review and recommend approval to the Township Board. Supported by Balentine. Motion carried unanimously.

3. Zoning Ordinance Amendment 048 – Short-Term Rentals

Motion by Timmins to send the proposed Zoning Ordinance Amendment 048 addressing short-term rentals to the Grand Traverse County Planning Commission for review, and to recommend approval to the Township Board. Supported by VanHouten. Motion carried unanimously.

4. Planned Development 2016-01 – IDF, Dan Kelly

Dan Kelly and Nathan Elkins of Influence Design Forum in Traverse City were available for questions. Elkins asked to have some flexibility in the agreement for any changes that may occur as the project develops. Correspondence from MDOT on the traffic related concerns and the letter from Traverse Bay Watershed Center on watershed issues were discussed. Winter recommended the Planned Development Agreement needs to include language pertaining to these issues and any other conditions of concerns. Winters and Jocks will work on a draft version to review at the February commission meeting before moving the Kelly PD agreement on to the Board.

5. Capital Improvements Plan

Winter reported the CIP committee finished revising a list of projects. He asked the Planning Commissioners to go through the list and rank each project with a 1-5 score with 5 having the highest level of priority. The rankings need to be submitted to him this week to have for the next CIP meeting to review before sending to the Acme Township Board.

K. PUBLIC COMMENT & OTHER PC BUSINESS

1. Zoning Administrator Report – Shawn Winter: No report
2. Planning Consultant Report – John Iacoangeli: No Report
3. Township Board Report – Doug White: No Report
4. Parks & Trails Committee Report – Marcie Timmins: No Report

ADJOURN: Motion to adjourn by Timmins, supported by Balentine. Meeting adjourned at 8:25



MEMORANDUM

Planning and Zoning

6042 Acme Road | Williamsburg, MI | 49690

Phone: (231) 938-1350 Fax: (231) 938-1510 Web: www.acmetownship.org

To: Acme Township Planning Commission
 From: Shawn Winter, Planning & Zoning Administrator
 CC: Jeff Jocks, Counsel; John Iacoangeli, Planning Consultant
 Date: January 3, 2018
 Re: January 8, 2018 Planning Commission Packet Summary

A. LIMITED PUBLIC COMMENT

Open: _____ Close: _____

B. APPROVAL OF AGENDA

Motion to approve: _____ Support: _____

C. INQUIRY AS TO CONFLICTS OF INTEREST

Name: _____ Item: _____
 Name: _____ Item: _____

D. SPECIAL PRESENTATION

1. None

E. CONSENT CALENDAR:

1. **RECEIVE AND FILE:**
 - a. Township Board Meeting Draft Minutes 12/05/17
2. **ACTION:**
 - a. Approve Draft Planning Commission Minutes 12/12/17

Motion to adopt: _____ Support: _____

F. ITEMS TO BE REMOVED FROM THE CONSENT CALENDAR

1. _____
2. _____

G. CORRESPONDENCE:

1. Post-Construction Acme Creek Monitoring, GTTC, Acme, Michigan

H. PUBLIC HEARINGS:

1. **Zoning Ordinance 046 – Solar Energy Farms**
 See item J(1) below for details
2. **Zoning Ordinance Amendment 047 – Hoxsie Rezone Request**
 See item J(2) below for details
3. **Zoning Ordinance Amendment 048 – Short-Term Rentals**
 See item J(3) below for details
4. **Planned Development 2016-01 – IDF, Dan Kelly**
 See item J(4) below for details

I. NEW BUSINESS:

1. Planned Development 2016-01 Dan Kelly

J. OLD BUSINESS:

1. Zoning Ordinance 046 – Solar Energy Farms

The PC was presented with a draft zoning ordinance amendment to allow for and regulate solar energy farms for commercial use in the township. That draft has been attached as originally presented since no changes were proposed at December's meeting. Upon holding of the public hearing and reviewing the amendment, if no further changes are recommended then action is requested as follows:

Suggested Motion for Consideration:

Motion to send the proposed zoning ordinance amendment 046 that would allow and regulate commercial solar energy farms to the Grand Traverse County Planning Commission for review and to recommend approval to the Township Board.

2. Zoning Ordinance Amendment 047 – Hoxsie Rezone Request

An application to rezone approximately ten (10) acres of land on a parcel owned by Dennis and Judy Hoxsie from A-1 Agricultural to B-4 Material Processing and Warehousing. The application was reviewed at the December meeting with a public hearing set to be held this month. That application and staff report have been included again this packet for reference. As of the date of this memo the Applicant still needs to submit an official survey of the portion of the property to be rezoned. The application indicates the portion to be approximately 680 feet (north to south) by 640 feet (east to west) along S. Bates Rd. Upon review of this application I see no objection to the request. Pending the public hearing and any necessary changes, the following action is requested:

Suggested Motion for Consideration:

Motion to send the proposed zoning ordinance amendment 047 to rezone approximately 10 acres of the parcel owned by Dennis and Judy Hoxsie along S. Bates Rd from A-1 Agricultural to B-4 Material Processing and Warehousing as indicated in the submitted application to the Grand Traverse County Planning Commission for review, and to recommend approval to the Township Board contingent on the submission of a survey of the portion of the property where the rezone request has been made, consistent with the extent provided in the application.

3. Zoning Ordinance Amendment 048 – Short-Term Rentals

Included in this packet is version two of the short-term rental zoning ordinance amendment (048) based on changes that were agreed upon at the December meeting. This amendment makes the necessary changes to the Zoning Ordinance to accommodate the Short-Term Rental Ordinance adopted by the Board in November. Pending the public hearing and any necessary changes, the following action is requested:

Suggested Motion for Consideration:

Motion to send the proposed Zoning Ordinance Amendment 048 addressing short-term rentals to the Grand Traverse County Planning Commission for review, and to recommend approval to the Township Board.

4. Planned Development 2016-01 – IDF, Dan Kelly

Last month the PC received a presentation by Nate Elkins of Influence Design Forum for proposed planned development of the property owned by Dan Kelly. A public hearing was set at that meeting for this month's PC meeting. John Iacoangeli's review has been included again in this packet, however, all other documents and drawings have not in order to

conserve paper. The documents will be available for review electronically on the website with this month's packet. I would encourage you to bring your print copies to the meeting.

The next step after the public hearing, should the PC wish to recommend approval to the Board, is to draft the Planned Development Agreement. This document memorializes specific conditions of development agreed upon negotiations between the developer and township during the review process. The provisions and conditions along with the drawings attached to the Planned Development Agreement will be used in review process for each phase of development proposed under the Planned Development. Karly, Jeff, John and I met prior to the holidays to discuss how this document needs to be constructed and what items should be captured. A working draft has been included in this packet. The structure consists of the following:

- Recitals
- General Provisions
- Signatures from the Parties
- Exhibit A – Legal Description
- Exhibit B – Plan Drawings
- Exhibit C – Specific Conditions

The specific conditions are the ones that uniquely pertain to this property should ensure that that which has been presented in the application gets implemented. The working draft contains some elements that were brought up in the aforementioned meeting. Red text indicates points to consider as a Commission to which a solution should be established.

It is my recommendation that the PC not recommend approval to the Board, if that is there intent, until they are comfortable with the Planned Development Agreement language, and until the outstanding issues in John Iacoangeli's report are satisfied, including:

- a) a grading plan that illustrates areas within the property that will be disturbed (graded) and that will not be disturbed. Approximate amounts of disturbed material should be included in the plan narrative.
- b) Submission of discussions and recommendations from MDOT on traffic related concerns.

5. **Capital Improvements Plan**

The CIP Committee has finished revising a list of projects for PC review. These projects come from the community master plan, specifically the goals and objectives and action plan. Projects in the community master plan that have been completed since the plan was adopted have been removed.

The PC is now asked to prioritize each of the projects by ranking them 1 – 5. A score of 5 would indicate the project demonstrates the highest level of priority in advancing the township towards implementing the master plan as determined by each Planning Commissioner individually. A score of 1 would indicate the lowest level or priority in implementing the master plan. The request is to complete this priority scoring exercise prior to this month's meeting. During the meeting, I will be compiling the numbers for a combined score that will be sent to the Board for ranking purposes. Please feel free to reference the community master plan for further clarification on the projects or contact me directly.

K. **PUBLIC COMMENT & OTHER PC BUSINESS:**

1. **Public Comment:**
Open:

Close:

2. **Zoning Administrator Report:** Shawn Winter
 - **Permits** (since December 11, 2017)
 - Land Use Permits – 0
 - Sign Permits – 0
3. **Planning Consultant Report:** John Iacoangeli
4. **Township Board Report:** Doug White
5. **Parks & Trails Committee Report:** Marcie Timmins

L. ADJOURN:

Motion to adjourn:

Support:



**ACME TOWNSHIP REGULAR BOARD MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
Tuesday, December 5, 2017, 7:00 p.m.**

CALL TO ORDER WITH PLEDGE OF ALLEGIANCE at 7:01 p.m.

Members present: J. Aukerman, C. Dye, A. Jenema, D. Nelson, P. Scott, J. Zollinger.

Members excused: D. White

Staff present: S. Winter, Planning & Zoning Administrator, V. Donn, Recording Secretary

A. LIMITED PUBLIC COMMENT: No public comment

B. APPROVAL OF AGENDA:

Motion by Aukerman to approve agenda as presented, seconded by Nelson. Motion carried unanimously

C. APPROVAL OF BOARD MINUTES: 11/14/17

Motion by Dye to approve Board minutes of 11/14/17, seconded by Nelson. Motion carried unanimously

D. INQUIRY AS TO CONFLICTS OF INTEREST: None

E. REPORTS

- a. Clerk – Dye:** Reported township cemeteries closed December 1 with 15 burials and one disinterment. An annual Financial report was given the board.
- b. Parks:** No report
- c. Legal Counsel – J. Jocks:** No report
- d. Sheriff – Brian Potter:** Provided a Policing Statics Township Report. Reiterated from the last meeting not to park on the county roads to keep clear for snowplowing. Anyone who does will be ticketed. Gave awareness of a rash of vehicle break-ins around East Bay Township and recommended to keep car doors locked.
- e. County -Carol Crawford:** Reported on opioid litigation and contracting Attorneys to get with drug companies for financial compensation on the damage it has caused in the county. Both the annual budget and Brownfield project were approved at the last meeting.
- f. Roads –Jason Gillman:** No report
- g. Farmland Update-Laura Regan:** Received back appraisals, an advisory committee will be convening to review them and then get back to the landowners.
- h. GTMESA report:** No report

F. SPECIAL PRESENTATIONS: None

G. CONSENT CALENDAR

1. RECEIVE AND FILE:

- a. Treasurer's Report**
- b. Clerk's Revenue/Expenditure Report and Balance sheet**
- c. North Flight October report**
- d. Draft Unapproved meeting minutes**
 - 1. Planning Commission 11/13/17**

2. CIP Committee meeting 11/17/17

2. APPROVAL:

- 1. Accounts Payable Prepaid of \$57,099.81 and Current to be approved of \$5,354.85
(Recommend approval: Clerk, C. Dye)**

Motion by Scott to approve Consent Calendar, seconded by Jenema. Roll Call motion carried unanimously

H. ITEMS REMOVED FROM THE CONSENT CALENDAR: None

I. CORRESPONDENCE: None

J. PUBLIC HEARING:

- 1. Ordinance change adoption 2015 Edition Fire Prevention code and enforcement**
Brian Belcher from GT Metro gave a review of the Acme Township Fire Prevention Ordinance No. 2017-03.

Motion by Nelson to approve the 2015 Edition Fire Prevention code and enforcement Ordinance No 2017-03, seconded by Scott. Motion carried unanimously.

K. NEW BUSINESS:

- 1. Approval of 2018 Board meetings schedule**

Motion by Scott to approve 2018 Board meeting schedule as presented, seconded by Nelson. Motion carried unanimously

- 2. Fees schedule amendment**

Winter reviewed the proposed fee schedule and six new ordinance adoptions. Applications can't be submitted until the fees have been approved. Changes to the per diem schedule also needs to be adopted.

Motion by Jenema to approve the revised Acme Township Fee Schedule as presented, second by Nelson.

Roll call motion carried by 5 in favor (Aukerman, Dye, Jenema, Nelson and Zollinger) opposed by one (Scott).

- 3. Farmland PDR program-Jesse Wolff GTRLC**

Jesse Wolff discuss the possibility of having a partnership with the township for creating a loan fund used to leverage the conservatory program. He will put together a proposal for the next board meeting to include models from other townships who have used this concept.

L. OLD BUSINESS:

- 1. Metro Fire Lease Agreement/resolution Addendum 1 for station 8 lease**

Motion by Scott to approve Resolution #38 on Metro Fire Lease Agreement, seconded by Jenema. Motion carried unanimously.

PUBLIC COMMENT & OTHER BUSINESS THAT MAY COME BEFORE THE BOARD:

Jenema gave an update on the Capital Improvement Plan progress. A list has already been formed on page #79 in the master plan.

ADJOURN at 8:01 pm. Motion by Scott, seconded by Jenema.



ACME TOWNSHIP PLANNING COMMISSION MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
December 11th, 2017 7:00 p.m.

CALL TO ORDER WITH PLEDGE OF ALLEGIANCE: 7:01 p.m.

ROLL CALL: Members present: K. Wentzloff (Chair), S. Feringa (Vice Chair), B. Balentine (Secretary), D. Rosa, M. Timmins, D. White, D. VanHouten

Members excused: none

Staff present: S. Winter, Planning & Zoning Administrator, J. Iacoangeli, Planning Consultant (by conference call), V. Donn, Recording Secretary

A. LIMITED PUBLIC COMMENT: None

B. APPROVAL OF AGENDA:

Winter requested the Adopt 2018 Regular Planning Commission and Site Plan Review Committee Meeting Schedules I-5 under New Business, be moved to I-1 since there will be items on the agenda that will have public hearings scheduled.

Motion by Timmins to approve the agenda with a change in New Business to move item I-5 to I-1, supported by Balentine. Motion carried unanimously.

C. INQUIRY AS TO CONFLICTS OF INTEREST: None

D. SPECIAL PRESENTATIONS:

1. None

E. CONSENT CALENDAR:

1. **RECEIVE AND FILE**

a. Township Board Meeting Draft Minutes 11/14/17

b. Parks and Trails Committee Meeting Draft Minutes 11/17/17

2. **ACTION:**

a. Adopt Planning Commission Minutes 11/13/17

Motion by Timmins to approve the consent calendar items 1. a & b with the removal of Action 2-a. Adopt Planning Commission Minutes 11/13/17, supported by Feringa. Motion carried unanimously.

F. ITEMS REMOVED FROM THE CONSENT CALENDAR

1. a. Planning Commission Minutes 11/13/17

The word Agenda needs to be added under B. motion for Approval of Agenda.

Motion by Rosa to modify the motion for approval of the agenda under B. Planning Commission Minutes 11/13/17, supported by Balentine. Motion carried unanimously.

G. CORRESPONDENCE:

1. None

H. PUBLIC HEARINGS:

1. None

I. NEW BUSINESS:

1. **Adopt 2018 Regular Planning Commission and Site Plan Review Committee Meeting Schedules**

Motion by Rosa to adopt the 2018 Regular Planning Commission and Site Plan Review Committee Schedule, supported by Balentine. Motion carried unanimously.

2. Planned Development 2016-01 – Dan Kelly

Nathan Elkins of Influence Design Forum in Traverse City presented a planned Development application on behalf of Dan Kelly for the property along M-72. Since the last PC meeting additional property has been purchased changing the original plan as previously presented. The development would consist of commercial businesses, multi and single-family homes. An overview was given of the various dimensions of housing, parking, roads, walk ways, bike trail access, water features, landscaping, storm water usage and the infiltration system. The project will be completed in phases depending on the market as the housing is sold. Dan Kelly stated the housing will be built as sold and the project will be done in phases. Each phase will not begin until the last one is near completion.

John Iacoangeli stated if the proposed planned is approved, the applicant would come before the Planning Commission for site plan review for each phase of construction. He recommended the next step would be to go to public hearing at the next PC meeting.

Motion by Timmins to set a Public Hearing for January 8, 2018 PC Meeting to discuss PD 2016-01, Support by Balentine. Motion carried unanimously.

3. Zoning Ordinance Amendment 046 – Solar Energy Farm

Winter informed he has been contacted by five different Solar Companies regarding Solar Energy Farms in the township. A draft of a zoning ordinance amendment was presented for consideration by the Planning Commission.

Tim Jones with Atwell, LLC a company in Southfield, MI that works with solar energy, was in attendance and offered information on questions from the board.

Motion by Rosa, to set a public hearing at the January 8, 2018 PC meeting to consider Zoning Ordinance Amendment 046 to allow and regulate ground-mounted solar energy farms through a special use permit in selected zoning districts, supported by Timmins. Motion carried unanimously.

4. Zoning Ordinance Amendment 047 – Hoxsie Rezone Request

An application has been submitted by Dennis and Judy Hoxsie, 6620 E. M-72, to rezone approximately ten acres of one of their parcels from A-1 Agricultural District to B-4, Material Processing and Warehousing District. The parcel to be rezoned is located along S. Bates Rd, south of the Hoxsie's current residence.

Motion by Balentine to set a public hearing at the January 8, 2018 PC meeting to consider Zoning Ordinance Amendment 047 for the application request to rezone approximately ten acres of land from A-1 to B-4 along S. Bates Rd. on the parcel owned by Dennis and Judy Hoxsie, supported by White. Motion carried unanimously.

5. Zoning Ordinance Amendment 048 – Short-Term Rentals

Winter reported the Board adopted the Short-Term Rentals Ordinance at the November meeting with revisions. He pointed out some questions regarding the changes that need to be considered. The Corridor Shoreline as commercial, vacation homes as uses by right in the C, CF, CS, B-3 districts in single-family homes, and the definition for Industrial Zoning District to account for the B-4 district that was part of the Business Zoning Districts. It was suggested to have a public hearing at the next PC meeting on these changes.

Motion by Timmins to set a public hearing at the January 8, 2018 Planning Commission meeting to consider Zoning Ordinance Amendment 048 to make the necessary changes to account for short-term rentals as presented in the Acme Township Short-Term Rental Ordinance, supported by VanHouten. Motion carried unanimously.

J. OLD BUSINESS:

1. Capital Improvements Plan: Winter and Feringa gave a brief update on the process. They will have a document for the January Planning Commission meeting.

K. PUBLIC COMMENT & OTHER PC BUSINESS Open at 9:20 pm

Samuel Rosinski, 6100 Lincoln Rd. asked about the Marihuana Ordinance if it was possible to modify or amendment the ordinance to change the amount of plants that can be grown on a parcel or the number of grow licenses an existing operation could stack at one location.

Wentzloff stated any changes to the amendment need to be taken to the board for approval.

Public Comment closed at 9:35 pm

1. Zoning Administrator Report – Shawn Winter: The Board adopted the license fees for short-term and Marihuana applicants. The Fire station is having the annual Santa event this Friday at 7:00 pm
2. Planning Consultant Report – John Iacoangeli: None
3. Township Board Report – Doug White: None
4. Parks & Trails Committee Report – Marcie Timmins: Hoping to get out bids for the parks. Trees will be planted in the Spring.

ADJOURN: Motion to adjourn by Timmins, supported by Balentine. Meeting adjourned at 9:38

December 20, 2017

VIA E-MAIL

Mr. John Iacoangeli, Principal
Beckett & Raeder, Inc.
535 West William, Suite 101
Ann Arbor, MI 48013

**RE: NOVEMBERF 2017 RESULTS
POST-CONSTRUCTION ACME CREEK MONITORING
GRAND TRAVERSE TOWN CENTER, ACME, MICHIGAN**

Dear Mr. Iacoangeli:

The purpose of this letter is to transmit the results of post-construction surface water monitoring of Acme Creek completed by Barr Engineering (Barr) in November 2017 on behalf of the Village at Grand Traverse, LLC (VGT) at the Grand Traverse Town Center (GTTC) site in Acme Township, Grand Traverse County, Michigan. As you are aware, post-construction monitoring activities were initiated in September 2015. This report presents the results of the first quarter of the third year post-construction monitoring event (Year 3/Quarter 1).

Post-construction stream sampling recommendations were outlined in the site development plan for the GTTC (Site Plan Approval for Phase I of the SUP)¹ and later incorporated into a site inspection, monitoring, and maintenance plan submitted to the Township in September 2015 (Monitoring Plan).² The goal of the post-construction monitoring program is to evaluate water quality in Acme Creek over time. To facilitate the monitoring program, two fixed testing locations--one at the upstream point where Acme Creek enters the property and one at the downstream point where Acme Creek leaves the site--have been established (see Figure 1). Baseline (pre-construction) water quality samples were collected from both locations on July 26, 2011.

The Monitoring Plan calls for the receiving water for the GTTC site (Acme Creek) to be monitored for dissolved oxygen concentration, water temperature, specific conductivity, pH, volatile organic compounds (VOCs), total organic carbon (TOC), e. Coli, total dissolved solids (TDS), total suspended solids (TSS), water velocity and elevation. The monitoring was performed on a monthly basis for a period of one year following the completion of construction. Monitoring is scheduled to be performed on a quarterly basis during post-

¹ The Village at Grand Traverse Phase 1, Stormwater Management Recommendations, King & MacGregor Environmental, Inc., December 22, 2011

² Inspection, Monitoring and Maintenance Plan for the Storm Water Management System, Horizon Environmental Corporation, September 2015

construction years 2 through 4 and on a semi-annual basis for post-construction years 5 and beyond. This quarterly (Year 3, Quarter 1) post-construction monitoring event was completed on November 13, 2017. The results of this sampling event along with the results of the pre-construction (baseline) and prior post-construction sampling events are provided on Table 1.

DATA SUMMARY/EVALUATION

Dissolved oxygen, water temperature, specific conductivity and pH were measured at both of the stream gauges using an YSI 556 multi-parameter water quality meter. The data collected at each stream gauge were compared to available water quality standards in the Part 4 Water Quality Standards of Part 31, Water Resources Protection (MCL 324.3101) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 4). The following provides a summary of these results:

- The dissolved oxygen concentrations at both the upstream (11.8 mg/L) and downstream (11.7 mg/L) stream gauges were higher than the minimum standard of 7.0 mg/L specified under Part 4.
- The water temperature at both the upstream (43.5°F) and downstream (44.2°F) stream gauges were nearly identical. Both readings are below the maximum temperature in November specified under Part 4 for streams supporting cold water fish (48°F).
- The pH readings at both the upstream (7.92 S.U.) and downstream (7.27 S.U.) stream gauges were both within the pH range of 6.5 to 9.0 S.U specified under Part 4.

Stream samples were also collected for laboratory analyses of VOCs, TOC, TDS, TSS and e. Coli at both the upstream and downstream stream gauges. Laboratory data sheets are provided in Attachment I. A summary of the results compared to available water quality standards under Part 4 is provided as follows:

- VOCs were below laboratory detection limits at both the upstream and downstream gauges.
- The TDS concentrations at both the upstream (250 mg/L) and downstream (240 mg/L) stream gauges were significantly lower than the maximum TDS standard of 500 mg/L specified under Part 4.
- The upstream e. Coli concentration (41 colonies/100ml) and downstream e. Coli concentrations (73 colonies/100ml) were lower than maximum (300 colonies/100 ml) e.Coli concentration for total body contact.
- There was no significant difference in the TOC, TSS, and turbidity levels observed at the upstream and downstream locations.

Additional stream data, including water velocity and water elevation, were collected as part of this monitoring event. Field analyses for turbidity were completed using a Hach 2100P portable turbidimeter. Stream velocities were measured using a Flo-Mate Model 2000 flowmeter. The results of the additional data collected are summarized on Table 1.

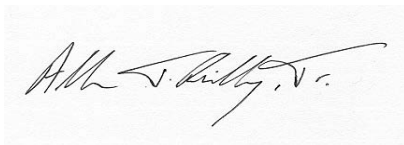
CONCLUSIONS

The results of this quarterly post-construction monitoring event (Year 3/Quarter 1) indicate that water quality in Acme Creek adjacent to the GTTC site meets or exceeds the Part 4 Water Quality Standards prescribed under Part 31 of the Water Resources Protection Section of NREPA (MCL 324.3101).

If you have questions or require additional information regarding this sampling event, please contact me at 616.554.3210.

Sincerely,

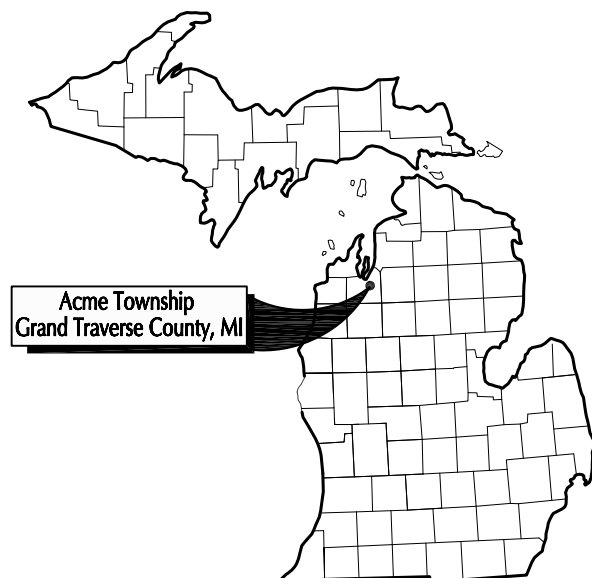
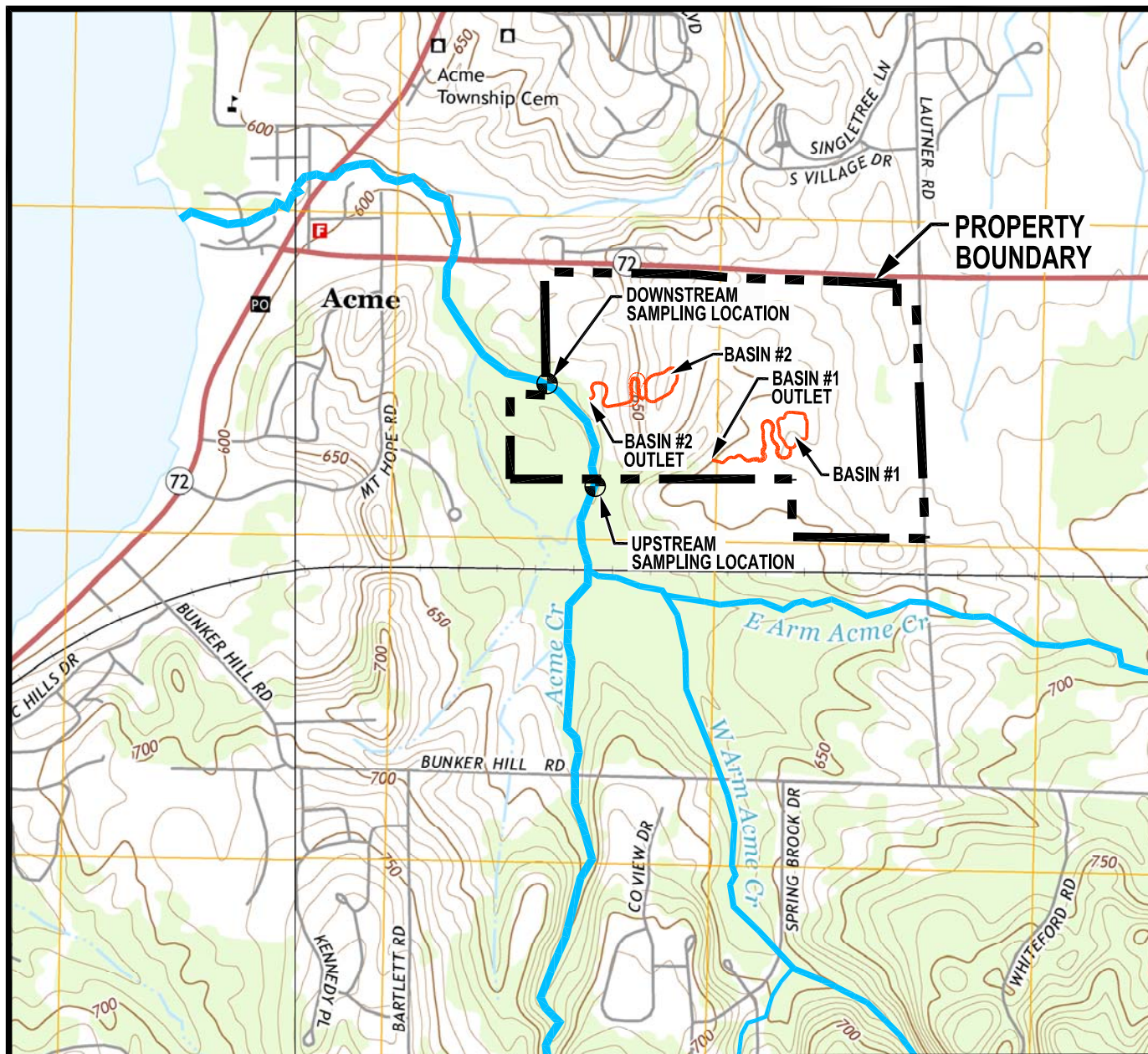
BARR ENGINEERING

A handwritten signature in black ink, appearing to read "Allen J. Reilly, Jr.", is written over a light gray rectangular background.

Allen J. Reilly, Jr.
Project Manager

cc: J. Zollinger, Acme Township
S. Schooler, VGT

enclosures



LEGEND:

 - CREEK SAMPLING LOCATION

TAKEN FROM 7.5 MINUTE SERIES TOPOGRAPHIC MAP
TRAVERSE CITY SE AND WILLIAMSBURG 2014 QUADRANGLES
NORTH AMERICAN VERTICAL DATUM OF 1988
SCALE APPROX. 1" = 1600'

Figure 1

SITE LOCATION MAP

Village at Grand Traverse
Acme Township, Grand
Traverse County, Michigan



4771 50th Street SE
Grand Rapids, MI 49512

TABLE 1
ACME CREEK MONITORING RESULTS
GRAND TRAVERSE TOWN CENTER SITE
ACME TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN

	Part 4 Water	July 26, 2011 Baseline Pre-Construction		September 18, 2015 Post-Construction (Year 1/Month 1)		October 13, 2015 Post-Construction (Year 1/Month 2)		November 16, 2015 Post-Construction (Year 1/Month 3)		December 4, 2015 Post-Construction (Year 1/Month 4)		January 29, 2016 Post-Construction (Year 1/Month 5)		February 18, 2016 Post-Construction (Year 1/Month 6)	
Study Parameter	Quality Standards	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream
Macroinvertebrates	NA	-5													
e Coli (colonies/100 ml)	(1)	100	72	55	81	129	53	29	17	22	27	20	36	33	31
Dissolved Oxygen (mg/L)	7 (minimum)	11.4 ⁽²⁾	11.6 ⁽²⁾	12.4	12.4	11.0	11.2	10.9	11.3	11.5	11.5	13.8	13.7	13.4	14.3
Water Temperature (°F)	(3)	56.1	55.6	49.1	49.0	50.2	50.9	46.3	46.0	42.9	42.8	39.0	39.0	36.1	35.8
Specific Conductivity (µs/cm)	NA	334	334	294	293	343	432	345	358	339	341	346	346	338	330
pH (S.U.)	6.5 to 9.0	8.36	8.39	7.70	6.95	8.24	8.23	8.81	8.82	8.21	8.05	8.03	8.08	8.05	7.33
Volatile Organic Compounds	Various	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Total Organic Carbon (mg/L)	NA	1.3	1	<1.0	1.0	1.6	1.5	1.6	1.4	1.4	1.4	1.4	1.4	<1.0	<1.0
Total Dissolved Solids (mg/L)	500	204	180	250	260	240	230	240	240	240	240	210	240	240	230
Total Suspended Solids (mg/L)	Visual Standard	11.2	4.4	<5.0	<5.0	8	7	4	5	5	6	5	4	6	9
Turbidity (NTU)	Visual Standard			1.99	1.48	3.06	3.10	2.3	1.7	3.0	2.4	0.93	0.98	1.52	1.61
Water Velocity (ft/sec)	NA	1.3	1.2	0.9	1.6	1.4	3.2	3.1	2.8	1.9	2.0	1.7	1.8	1.8	1.6
Water Elevation (NAVD 88)	NA	609.97	606.04	610.01	606.11	610.12	606.17	610.09	606.22	610.10	606.23	610.08	606.23	610.04	606.13

Notes:
1) Parial body contact maximum value 1,000 colonies per 100 ml (November 1 through April 30) and total body contact maximum value 300 colonies per 100 ml (May 1 through October 31)
2) Baseline sample reported as percent saturation. Value converted to mg/L utilizing reported temperature, specific conductivity and standard barometric pressure
3) Temperature varies seasonally
4) EPA 8260 scan. All compounds below laboratory detection limits

TABLE 1
ACME CREEK MONITORING RESULTS
GRAND TRAVERSE TOWN CENTER SITE
ACME TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN

	Part 4 Water	July 26, 2011 Baseline Pre-Construction		March 16, 2016 Post-Construction (Year 1/Month 7)		April 21, 2016 Post-Construction (Year 1/Month 8)		May 26, 2016 Post-Construction (Year 1/Month 9)		June 22, 2016 Post-Construction (Year 1/Month 10)		July 20, 2016 Post-Construction (Year 1/Month 11)		August 24, 2016 Post-Construction (Year 1/Month 12)	
Study Parameter	Quality Standards	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream
Macroinvertebrates	NA	-5													
e Coli (colonies/100 ml)	(1)	100	72	86	126	43	21	16	243	19	30 ⁽⁵⁾	57	60 ⁽⁵⁾	66	75 ⁽⁵⁾
Dissolved Oxygen (mg/L)	7 (minimum)	11.4 ⁽²⁾	11.6 ⁽²⁾	11.4	11.7	11.3	11.3	11.8	12.1	10.9	10.8	10.1	9.7	11.2	11.3
Water Temperature (°F)	(3)	56.1	55.6	44.2	44.0	47.6	47.5	54	53.6	56.5	55.5	57.8	59.4	56.8	57.9
Specific Conductivity (µs/cm)	NA	334	334	482	534	345	324	234	326	422	433	219	220	284	287
pH (S.U.)	6.5 to 9.0	8.36	8.39	7.69	7.69	7.64	7.89	8.55	8.42	8.42	8.15	8.18	8.01	8.48	8.37
Volatile Organic Compounds	Various	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Total Organic Carbon (mg/L)	NA	1.3	1	3.5	3.6	1.2	1.3	0.8	0.7	1.0	1.6	1.3	1.2	0.9	1.0
Total Dissolved Solids (mg/L)	500	204	180	220	220	240	240	240	240	240	230	250	250	260	260
Total Suspended Solids (mg/L)	Visual Standard	11.2	4.4	20	33	7	4	2	4	4	6	4	5	9	8
Turbidity (NTU)	Visual Standard			10.4	12.9	2.0	2.9	1.0	3.0	2.8	2.6	2.6	2.2	2.2	2.0
Water Velocity (ft/sec)	NA	1.3	1.2	3.67	3.04	3.3	3.1	2.4	2.0	2.5	2.2	2.5	2.1	2.2	2.3
Water Elevation (NAVD 88)	NA	609.97	606.04	610.30	606.44	610.09	606.17	610.05	606.11	610.01	605.65	610	605.67	610.01	605.69

Notes:
1) Parial body contact maximum value 1,000 colonies per 100 ml (November 1 through April 30) and total body contact maximum value 300 colonies per 100 ml (May 1 through October 31)
2) Baseline sample reported as percent saturation. Value converted to mg/L utilizing reported temperature, specific conductivity and standard barometric pressure
3) Temperature varies seasonally
4) EPA 8260 scan. All compounds below laboratory detection limits
5) E coli. value reports the geometric mean of three samples collected at the downstream location (left, center, and right)

TABLE 1
ACME CREEK MONITORING RESULTS
GRAND TRAVERSE TOWN CENTER SITE
ACME TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN

	Part 4 Water	July 26, 2011 Baseline Pre-Construction		November 1, 2016 Post-Construction (Year 2/Quarter 1)		February 23, 2017 Post-Construction (Year 2/Quarter 2)		May 31, 2017 Post-Construction (Year 2/Quarter 3)		August 30, 2017 Post-Construction (Year 2/Quarter 4)		November 13, 2017 Post-Construction (Year 3/Quarter 1)			
Study Parameter	Quality Standards	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream	Upstream	Downstream
Macroinvertebrates	NA	-5													
e Coli (colonies/100 ml)	(1)	100	72	39	18 ⁽⁵⁾	23	31	45	53	31	38	41	73		
Dissolved Oxygen (mg/L)	7 (minimum)	11.4 ⁽²⁾	11.6 ⁽²⁾	10.5	10.5	9.9	9.7	9.4	10.1	9.6	9.7	11.8	11.7		
Water Temperature (°F)	48 ⁽³⁾	56.1	55.6	51.4	50.5	43.8	44.0	50.2	50.0	53.8	54.1	43.5	44.2		
Specific Conductivity (µs/cm)	NA	334	334	740	740	330	353	474	497	209	208	306	359		
pH (S.U.)	6.5 to 9.0	8.36	8.39	8.10	8.13	8.79	8.58	7.98	7.96	8.47	8.46	7.92	7.27		
Volatile Organic Compounds	Various	(4)	(4)	Toluene 2 ⁽⁴⁾	Toulene 3 ⁽⁴⁾	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)		
Total Organic Carbon (mg/L)	NA	1.3	1	1.4	1.5	1.8	1.8	1.6	1.7	0.6	0.5	0.9	1.3		
Total Dissolved Solids (mg/L)	500	204	180	240	240	240	250	240	250	240	240	250	240		
Total Suspended Solids (mg/L)	Visual Standard	11.2	4.4	5	5	6	4	4	7	4	4	8	7		
Turbidity (NTU)	Visual Standard			0.3	1.2	2.0	2.0	1.7	1.8	2.6	3.0	3.3	3.2		
Water Velocity (ft/sec)	NA	1.3	1.2	2.11	1.91	2.31	2.01	1.78	2.28	2.4	2.3	0.87	0.5		
Water Elevation (NAVD 88)	NA	609.97	606.04	610.11	605.81	610.08	605.77	610.00	605.69	609.96	605.65	610.08	606.24		

Notes:
1) Parial body contact maximum value 1,000 colonies per 100 ml (November 1 through April 30) and total body contact maximum value 300 colonies per 100 ml (May 1 through October 31)
2) Baseline sample reported as percent saturation. Value converted to mg/L utilizing reported temperature, specific conductivity and standard barometric pressure
3) Temperature varies seasonally (November Value Shown)
4) EPA 8260 scan. All compounds below laboratory detection limits except as noted.
5) E coli. value reports the geometric mean of three samples collected at the downstream location (left, center, and right)

ATTACHMENT I

LABORATORY DATA SHEETS





Client / Company Name : BARR Engineering
 Site Address : 47 ACM 1
 Project # / WSSN # : 22281003.01 100 100
 Sampling Company : BARR
 Sampler's Name : Mike Potter
 Send Results To : Jamie Edelyn
 Address :
 Phone : 616-512-7007 Fax / E-mail : jedelyn@barr.c
 Invoice To : BARR
 Address :

st ID# 176099

Cooler Temp (°C) 3.8°C Page _____ of _____

	HCL	HNO ₃	H ₂ SO ₄	NaOH	MeOH
E COLI	X	X			
VOC'S	X	X			
TSS	X	X			
TDS	X	X			
TOR	X	X			
RUSH Due : CellTo Schedule					

Sample Identification	Collection Information		# of Containers	Matrix		Comments / Other Analysis
	Date	Time		DW, WW, GW, Soil, Oil, Sludge		
1 UPSTREAM	11/13	1130 AM	5	SW	Grab	
2 DOWNSTREAM	"	1115 AM	5	SW	Comp	
3		PM			Grab	
4		PM			Comp	
5		AM			Grab	
6		PM			Comp	
7		AM			Grab	
8		PM			Comp	
9		AM			Grab	
10		PM			Comp	
11		AM			Grab	
12		PM			Comp	
13		AM			Grab	
14		PM			Comp	
15		AM			Grab	
		PM			Comp	

Relinquished by: 	Date: 	Time: AM PM
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Received by:	Date:	Time:	AM PM
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Relinquished by:	Date:	Time:	AM PM
------------------	-------	-------	----------

Received in lab by: C. Hershaid Date: 11/13/17 Time: 12:05 AM/PM



4125 Cedar Run Rd., Suite B
Traverse City, MI 49684
Phone 231-946-6767
Fax 231-946-8741
www.sosanalytical.com

COMPANY: BARR ENGINEERING

SOS PROJECT NO: 176099

NAME:

SAMPLED BY: MIKE POTTER/BARR
ENGINEERING

PROJECT NO: 22281003.01 100 100

WSSN:

DATE SAMPLED: 11/13/2017

WELL PERMIT:

TIME SAMPLED: 11:30 AM

TAX ID:

SAMPLE MATRIX: SURFACE WATER

LOCATION:

DATE RECEIVED: 11/13/2017

ACME

TIME RECEIVED: 12:05 PM

MI

COUNTY:

TWP:

INORGANICS

No:	Analysis	Concentration	LOD	Units	Analyst	Date Completed	Drinking Water Reg Limit(MCL)
SAMPLE ID: UPSTREAM							
1	E.COLI SM9223-B MPN	41		Colonies/100 mL	KMJ	11/14/2017	
1	RESIDUE, FILTERABLE(TDS)/SM2540C	250	10	mg/L (PPM)	KMJ	11/14/2017	
1	RESIDUE, NON-FILTERABLE(TSS)/SM2540D	8	1	mg/L (PPM)	KMJ	11/16/2017	
1	TOTAL ORGANIC CARBON EPA 415.1	0.9	0.5	mg/L (PPM)	FT	11/21/2017	
SAMPLE ID: DOWNSTREAM							
2	E.COLI SM9223-B MPN	73		Colonies/100 mL	KMJ	11/14/2017	
2	RESIDUE, FILTERABLE(TDS)/SM2540C	240	10	mg/L (PPM)	KMJ	11/14/2017	
2	RESIDUE, NON-FILTERABLE(TSS)/SM2540D	7	1	mg/L (PPM)	KMJ	11/16/2017	
2	TOTAL ORGANIC CARBON EPA 415.1	1.3	0.5	mg/L (PPM)	FT	11/21/2017	

ND = NOT DETECTED

LOD = LIMIT OF DETECTION

SMCL = FEDERAL NON-ENFORCEABLE LIMIT

MCL = MAXIMUM CONTAMINANT LEVEL

s.u. = STANDARD pH UNITS REPORTED AT 25 C

DISS = DISSOLVED

APPROVED BY:

SHANNA SHEA
LAB MANAGER



4125 Cedar Run Rd., Suite B
Traverse City, MI 49684
Phone 231-946-6767
Fax 231-946-8741
www.sosanalytical.com

COMPANY: BARR ENGINEERING
NAME:
PROJECT NO: 22281003.01 100 100
WSSN:
LOCATION:

SOS PROJECT NO: 176099 - 1
DATE SAMPLED: 11/13/2017
TIME SAMPLED: 11:30 AM
SAMPLE MATRIX: SURFACE WATER
SAMPLE ID: UPSTREAM

SAMPLED BY: ACME
MIKE POTTER/BARR ENGINEERING

DATE RECEIVED: 11/13/2017
TIME RECEIVED: 12:05 PM

EPA 8260 VOLATILE ORGANICS

Units= ug/L (PPB) Analyst= MM Date Extracted= Date Completed=11/22/2017 Prep Method= EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	5	cis-1,3-DICHLOROPROPENE	ND	1
BENZENE	ND	1	trans-1,3-DICHLOROPROPENE	ND	1
BROMOBENZENE	ND	1	DIETHYL ETHER	ND	5
BROMOCHLOROMETHANE	ND	1	ETHYLBENZENE	ND	1
BROMODICHLOROMETHANE	ND	1	IODOMETHANE	ND	1
BROMOFORM	ND	1	ISOPROPYLBENZENE	ND	1
BROMOMETHANE	ND	1	ISOPROPYLTOLUENE	ND	1
n-BUTYLBENZENE	ND	1	METHYL ETHYL KETONE	ND	5
s-BUTYLBENZENE	ND	1	METHYL-t-BUTYL ETHER	ND	5
t-BUTYLBENZENE	ND	1	METHYLENE CHLORIDE	ND	5
CARBON DISULFIDE	ND	1	MIBK	ND	5
CARBON TETRACHLORIDE	ND	1	2-METHYLNAPHTHALENE	ND	5
CHLOROBEZENE	ND	1	NAPHTHALENE	ND	5
CHLOROFORM	ND	1	n-PROPYLBENZENE	ND	1
CHLOROETHANE	ND	1	STYRENE	ND	1
CHLOROMETHANE	ND	1	1,1,1,2-TETRACHLOROETHANE	ND	1
DIBROMOCHLOROMETHANE	ND	1	1,1,2,2-TETRACHLOROETHANE	ND	1
DIBROMOMETHANE	ND	1	TETRACHLOROETHENE	ND	1
1,2-DIBROMO3CHLOROPROPANE	ND	5	TOLUENE	ND	1
1,2-DIBROMOETHANE	ND	1	1,2,3-TRICHLOROBEZENE	ND	1
1,2-DICHLOROBEZENE	ND	1	1,2,4-TRICHLOROBEZENE	ND	1
1,3-DICHLOROBEZENE	ND	1	1,1,1-TRICHLOROETHANE	ND	1
1,4-DICHLOROBEZENE	ND	1	1,1,2-TRICHLOROETHANE	ND	1
DICHLORODIFLUOROMETHANE	ND	1	TRICHLOROETHENE	ND	1
1,1-DICHLOROETHANE	ND	1	TRICHLORFLUOROMETHANE	ND	1
1,2-DICHLOROETHANE	ND	1	1,2,3-TRICHLOROPROPANE	ND	1
1,1-DICHLOROETHENE	ND	1	1,2,4-TRIMETHYLBENZENE	ND	1
cis-1,2-DICHLOROETHENE	ND	1	1,3,5-TRIMETHYLBENZENE	ND	1
trans-1,2-DICHLOROETHENE	ND	1	VINYL CHLORIDE	ND	1
1,2-DICHLOROPROPANE	ND	1	XYLENE (TOTAL)	ND	3

ND = NOT DETECTED
LOD = LIMIT OF DETECTION

APPROVED BY:

SHANNA SHEA / LAB MANAGER
R. SIMMERMAN / ANALYTICAL CHEMIST



4125 Cedar Run Rd., Suite B
Traverse City, MI 49684
Phone 231-946-6767
Fax 231-946-8741
www.sosanalytical.com

COMPANY: BARR ENGINEERING
NAME:
PROJECT NO: 22281003.01 100 100
WSSN:
LOCATION:

SOS PROJECT NO: 176099 - 2
DATE SAMPLED: 11/13/2017
TIME SAMPLED: 11:15 AM
SAMPLE MATRIX: SURFACE WATER
SAMPLE ID: DOWNSTREAM

SAMPLED BY: ACME
MIKE POTTER/BARR ENGINEERING

DATE RECEIVED: 11/13/2017
TIME RECEIVED: 12:05 PM

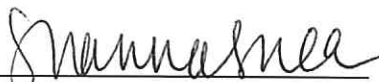
EPA 8260 VOLATILE ORGANICS

Units= ug/L (PPB) Analyst= MM Date Extracted= Date Completed=11/22/2017 Prep Method= EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	5	cis-1,3-DICHLOROPROPENE	ND	1
BENZENE	ND	1	trans-1,3-DICHLOROPROPENE	ND	1
BROMOBENZENE	ND	1	DIETHYL ETHER	ND	5
BROMOCHLOROMETHANE	ND	1	ETHYLBENZENE	ND	1
BROMODICHLOROMETHANE	ND	1	IODOMETHANE	ND	1
BROMOFORM	ND	1	ISOPROPYLBENZENE	ND	1
BROMOMETHANE	ND	1	ISOPROPYLTOLUENE	ND	1
n-BUTYLBENZENE	ND	1	METHYL ETHYL KETONE	ND	5
s-BUTYLBENZENE	ND	1	METHYL-t-BUTYL ETHER	ND	5
t-BUTYLBENZENE	ND	1	METHYLENE CHLORIDE	ND	5
CARBON DISULFIDE	ND	1	MIBK	ND	5
CARBON TETRACHLORIDE	ND	1	2-METHYLNAPHTHALENE	ND	5
CHLOROBENZENE	ND	1	NAPHTHALENE	ND	5
CHLOROFORM	ND	1	n-PROPYLBENZENE	ND	1
CHLOROETHANE	ND	1	STYRENE	ND	1
CHLOROMETHANE	ND	1	1,1,1,2-TETRACHLOROETHANE	ND	1
DIBROMOCHLOROMETHANE	ND	1	1,1,2,2-TETRACHLOROETHANE	ND	1
DIBROMOMETHANE	ND	1	TETRACHLOROETHENE	ND	1
1,2-DIBROMO3CHLOROPROPANE	ND	5	TOLUENE	ND	1
1,2-DIBROMOETHANE	ND	1	1,2,3-TRICHLOROBENZENE	ND	1
1,2-DICHLOROBENZENE	ND	1	1,2,4-TRICHLOROBENZENE	ND	1
1,3-DICHLOROBENZENE	ND	1	1,1,1-TRICHLOROETHANE	ND	1
1,4-DICHLOROBENZENE	ND	1	1,1,2-TRICHLOROETHANE	ND	1
DICHLORODIFLUOROMETHANE	ND	1	TRICHLOROETHENE	ND	1
1,1-DICHLOROETHANE	ND	1	TRICHLORFLUOROMETHANE	ND	1
1,2-DICHLOROETHANE	ND	1	1,2,3-TRICHLOROPROPANE	ND	1
1,1-DICHLOROETHENE	ND	1	1,2,4-TRIMETHYLBENZENE	ND	1
cis-1,2-DICHLOROETHENE	ND	1	1,3,5-TRIMETHYLBENZENE	ND	1
trans-1,2-DICHLOROETHENE	ND	1	VINYL CHLORIDE	ND	1
1,2-DICHLOROPROPANE	ND	1	XYLENE (TOTAL)	ND	3

ND = NOT DETECTED
LOD = LIMIT OF DETECTION

APPROVED BY:


SHANNA SHEA / LAB MANAGER
R. SIMMERMAN / ANALYTICAL CHEMIST

T. C. RECORD-EAGLE, INC.
120 WEST FRONT STREET
TRAVERSE CITY MI 49684
(231)946-2000

ORDER CONFIRMATION

Salesperson: DENISE LINGERFELT Printed at 12/12/17 14:35 by dling

Acct #: 6 Ad #: 482101 Status: N

ACME TOWNSHIP Start: 12/20/2017 Stop: 12/20/2017
CATHY DYE, CLERK Times Ord: 1 Times Run: ***
6042 ACME ROAD STDAD 3.00 X 5.74 Words: 388
WILLIAMSBURG MI 49690 Total STDAD 17.22
Class: 147 LEGALS
Rate: LEGAL Cost: 138.00
Affidavits: 1

Contact: Ad Descrpt: LEGAL NOTICE TOWNSHIP OF
Phone: (231)938-1350 Given by: EMAIL SHAWN WINTER
Fax#: (231)938-1510 Created: dling 12/12/17 14:22
Email: szollinger@acmetownship.org Last Changed: dling 12/12/17 14:35
Agency:

Source: 122000000601 Section: _____ Page: ____
Camera Ready: N Group: _____ AdType: _____
Misc: _____ Color: _____
Proof: _____ Pickup Date: _____ Ad#: _____
Delivery Instr: _____ Gang Ad #: _____
Changes: None ___ Copy ___ Art ___ Size ___ Copy Chg Every Run ___
Coupon: _____
Special Instr: _____

PUB ZONE EDT TP START INS STOP SMTWTFS
RE A 97 W 12/20/17 1 12/20/17 SMTWTFS
IN AIN 97 W 12/20/17 1 12/20/17 SMTWTFS

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Please be sure to check your ad on the first day it appears. Although we are happy to make corrections at any time, the Record-Eagle is only responsible for the first day's incorrect insertions. Also, we reserve the right to edit or reclassify your ad to better serve buyers and sellers.

No refunds or rebates will be issued if you cancel your ad prior to the stop date.

We appreciate your business.

(CONTINUED ON NEXT PAGE)

T. C. RECORD-EAGLE, INC.
120 WEST FRONT STREET
TRAVERSE CITY MI 49684
(231)946-2000

ORDER CONFIRMATION (CONTINUED)

Salesperson: DENISE LINGERFELT

Printed at 12/12/17 14:35 by dling

Acct #: 6

Ad #: 482101

Status: N

**LEGAL NOTICE
TOWNSHIP OF ACME
NOTICE OF HEARING**

PLEASE TAKE NOTICE that the ACME TOWNSHIP PLANNING COMMISSION will hold a public hearing at its regular meeting on Monday, January 8, 2018 at 7:00 p.m. at the Acme Township Hall, 6042 Acme Road, Williamsburg MI 49690, to consider the following amendments to the Acme Township Zoning Ordinance.

Zoning Ordinance Amendment 046 - Solar Energy Farms

The proposed text amendment would allow and regulate the use of solar energy farms through the following changes:

Add the following definition to §3.2:

“Solar Energy Farms: A utility-scale commercial facility that converts sunlight into electricity, whether by photovoltaics, concentrating solar thermal devices or any other various experimental solar technologies for the primary purpose of wholesale or retail sales of generated electricity off-site. Solar Energy Farms do not include small scale solar panels or technologies installed at individual residential or commercial locations (e.g. roof or ground mounted solar panels) that are used exclusively for private purposes and not utilized for any commercial resale of any energy, except for the sale of surplus electrical energy back to the electric grid. These installations are permitted as “Accessory Use” defined under Section 3.2.”

Add Solar Energy Farms as Uses Authorized By Special Use Permit in the following Districts: A-1 Agricultural District, B-3 Planned Shopping Center District, and B-4 Material Processing and Warehousing District.

Add §9.28 Solar Energy Farms with subsequent subsections outlining the Intent and Purpose, Standards, and Additional Special Use Criteria for the conditions necessary for approval.

Copies of the entire proposed Amendment 046 are available for inspection at the Acme Township hall. All interested persons are invited to attend and be heard at public hearings before the Planning Commission. After each public hearing, the Planning Commission may or may not deliberate and take action. The entire Zoning Ordinance is available for inspection at the Acme Township Hall from 7:30 a.m. to 6:00 p.m. Monday through Thursday. Proposed Zoning Ordinance Amendments and the entire Zoning Ordinance are also available for inspection via the Township's website, www.acmetownship.org.

If you are planning to attend and require any special assistance, please notify Cathy Dye, Township Clerk, within 24 hours of the meeting at 938-1350.

Written comments may be directed to:

Shawn Winter, Planning & Zoning Administrator
6042 Acme Road, Williamsburg, MI 49690, (231) 938-1350,
swinter@acmetownship.org

December 20, 2017-1T

482101



Planning and Zoning

6042 Acme Road | Williamsburg, MI | 49690

Phone: (231) 938-1350 Fax: (231) 938-1510 Web: www.acmetownship.org

Acme Township Zoning Ordinance Amendment 046

SOLAR ENERGY FARMS

1. Add the following definition under §3.2 Definitions:

“Solar Energy Farms: A utility-scale commercial facility that converts sunlight into electricity, whether by photovoltaics, concentrating solar thermal devices or any other various experimental solar technologies for the primary purpose of wholesale or retail sales of generated electricity off-site. Solar Energy Farms do not include small scale solar panels or technologies installed at individual residential or commercial locations (e.g. roof or ground mounted solar panels) that are used exclusively for private purposes and not utilized for any commercial resale of any energy, except for the sale of surplus electrical energy back to the electric grid. These installations are permitted as “Accessory Use” defined under Section 3.2.”

2. The use “solar energy farms” shall be added at the following sections:

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.10 B-3 District: Planned Shopping Center,
Subsection 6.10.3 Uses Authorized By Special Use Permit:
x. “Solar Energy Farms”

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.11 B-4 District: Material Processing and Warehousing,
Subsection 6.11.3 Uses Authorized By Special Use Permit:
h. “Solar Energy Farms”

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.12 A-1: Agricultural District,
Subsection 6.12.3 Uses Authorized By Special Use Permit:
aa. “Solar Energy Farms”

3. Article IX shall be amended to add Section 9.28 in its entirety as presented below:

9.28 SOLAR ENERGY FARMS

9.28.1 INTENT AND PURPOSE:

To allow and promote the use of solar energy within the Township as a clean alternative energy source and to provide associated placement, land development, installation and construction regulations for solar energy farm facilities subject to reasonable conditions that will protect the public health, safety and welfare. These regulations establish the minimum requirements for solar energy farm facilities, while promoting a renewable energy source in a safe, effective and efficient manner.

9.28.2 **STANDARDS:**

- a. **Minimum Lot Size:** There is no minimum lot size. Each solar energy farm is permitted as a use authorized by special use permit which review will consider its compatibility with the surrounding area.
- b. **Height Restrictions:** All photovoltaic solar panels and support structures located in a solar energy farm shall be restricted to a maximum height of sixteen (16) feet when orientated at maximum tilt.
- c. **Setbacks:** All photovoltaic solar panels and support structures associated with such facilities (excluding perimeter fencing) shall be setback a minimum of twenty (20) feet from a side or rear property line and a minimum of fifty (50) feet from the front property line along a street right-of-way. If the right-of-way exists as an easement, the fifty (50) foot setback shall be measured from the edge of the easement. Any additional setback requirements in this Ordinance that exceed this requirement shall be adhered to, including but not limited to setbacks from streams, lakes, and wetlands.
- d. **Maximum Lot Coverage:** maximum lot coverage restrictions shall not apply to the photovoltaic solar panels. Any other regulated structures on the parcel are subject to the maximum lot coverage restrictions of the underlying zoning district.
- e. **Safety/Access:** A security fence (height and material to be proposed and reviewed/approved through the special use permit approval process) shall be placed around the perimeter of the solar energy farm and electrical equipment. Knox boxes and keys shall be provided at locked entrances for security personnel access.
- f. **Noise:** No solar energy farm shall exceed sixty (60) dBA as measured at the property line.
- g. **Glare:** Solar energy farm facilities shall be located or placed so that concentrated solar glare shall not be directed toward or onto nearby properties or right-of-ways at any time of the day.
- h. **Landscaping:** The special use permit application for a solar energy farm shall include a proposed landscaping and screening/buffering plan prepared by a licensed landscape architect. This plan will be reviewed through the special use permit approval process to assure that the proposed facility is appropriately landscaped in relation to adjacent land uses and road right-of-ways. The use of berms and evergreen plantings along property lines adjacent to residential land uses and districts is strongly encouraged. Trees shall be a minimum of four (4) feet tall at time of planting, shall remain in good condition for the life of the solar energy farm, and shall adhere to the native plant species requirements of this Ordinance.
- i. **Local, State, and Federal Permits:** Solar energy farms shall be required to obtain all necessary permits and licensing from Acme Township, Grand Traverse County, State of Michigan, and U.S. Government as applicable prior to construction and

shall maintain any necessary approvals as required by the respective jurisdictions or agencies.

- j. **Electrical Interconnections:** All electrical interconnections or distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements. Use of above ground transmission lines shall be prohibited within the site.

9.28.3 ADDITIONAL SPECIAL USE CRITERIA:

In addition to the site plan review criteria in Article VIII and special use permit criteria in Article IX, the applicant shall address the following topics in the application for a solar energy farm facility:

- a. **Project Description and Rationale:** Identify the typed, size, rated power output, performance, safety and noise characteristics of the system including the transmission line/grid connection for the project. Identify the project construction time frame, project life, development phases (and potential future expansions) and likely markets for the generated energy.
- b. **Analysis of On-Site Traffic:** Estimated construction jobs and estimated permanent job associated with the development.
- c. **Visual Impacts:** Graphically demonstrate the visual impact of the project using photos or renditions of the project with consideration given to setbacks and proposed landscaping.
- d. **Environmental Analysis:** Identify impacts on surface and ground water quality and any impacts to established natural or constructed drainage features in the area.
- e. **Waste:** Identify any solid or hazardous waste generated by the project.
- f. **Lighting:** Provide photometric plans showing all lighting within the facility. No light may adversely affect adjacent parcels. All lighting shall conform to the requirements of Section 7.8 and must be shielded from adjoining parcels. Light poles are restricted to a maximum height of eighteen (18) feet.
- g. **Transportation Plan:** Provide a proposed access plan during construction and operational phases. Show proposed project service road ingress and egress locations onto adjacent roadways and the layout of facility service road system. Due to infrequent access following construction, it is not required to pave or curb solar energy farm access drives. It shall be required to pave and curb any driveways and parking lots used for occupied offices that are located on site.
- h. **Public Safety:** Identify emergency and normal shutdown procedures. Identify potential hazards to adjacent properties, public right-of-ways and to the general public that may be created.
- i. **Sound Limitations:** Identify noise levels at the property lines of the project when completed and operational.

j. Telecommunications Interference: Identify any electromagnetic fields and communications interference that may be generated.

k. Life of the Project and Final Reclamation: Describe the decommissioning and final reclamation plan after the anticipated useful life or abandonment/termination of the project. This includes supplying evidence of an agreement with the underlying property owner that ensures proper removal of all equipment and restoration of the site within six (6) months of decommissioning or abandonment of the project. To ensure proper removal of the project upon abandonment/termination, a bond, letter of credit or cash surety shall be:

1. In an amount approved by the Township Board to be no less than the estimated cost of removal and may include a provision for inflationary cost adjustments;
2. Based on an estimate prepared by the engineer for the applicant, subject to approval of the Township Board;
3. Provided to the Township prior to the issuance of a land use permit;
4. Used in the event the owner of the project or the underlying property owner fails to remove or repair any defective, abandoned or terminated project. The Township, in addition to any other remedy under this Ordinance, may pursue legal action to abate the violation by seeking to remove the project and recover any and all costs, including attorney fees.

l. Township Review: Because of the ever-changing technical capabilities of photovoltaic solar panels and of new technology in general, the Township Planning Commission and Board of Trustees shall have the authority to review and consider alternatives in both the dimensional and physical requirements contained in this section as part of the special use permit approval process.

T. C. RECORD-EAGLE, INC.
120 WEST FRONT STREET
TRAVERSE CITY MI 49684
(231)946-2000

ORDER CONFIRMATION

Salesperson: DENISE LINGERFELT Printed at 12/12/17 14:33 by dling

Acct #: 6 Ad #: 482102 Status: N

ACME TOWNSHIP Start: 12/20/2017 Stop: 12/20/2017
CATHY DYE, CLERK Times Ord: 1 Times Run: ***
6042 ACME ROAD STDAD 3.00 X 4.87 Words: 331
WILLIAMSBURG MI 49690 Total STDAD 14.61
Class: 147 LEGALS
Rate: LEGAL Cost: 138.75
Affidavits: 1

Contact: Ad Descrpt: LEGAL NOTICE TOWNSHIP OF
Phone: (231)938-1350 Given by: EMAIL SHAWN WINTER
Fax#: (231)938-1510 Created: dling 12/12/17 14:28
Email: szollinger@acmetownship.org Last Changed: dling 12/12/17 14:33
Agency:

Source: 122000000602 Section: _____ Page: ____
Camera Ready: N Group: _____ AdType: _____
Misc: _____ Color: _____
Proof: _____ Pickup Date: _____ Ad#: _____
Delivery Instr: _____ Gang Ad #: _____
Changes: None ____ Copy ____ Art ____ Size ____ Copy Chg Every Run ____
Coupon: ____
Special Instr: _____

PUB	ZONE	EDT	TP	START	INS	STOP	SMTWTFS
RE	A	97	W	12/20/17	1	12/20/17	SMTWTFS
IN	AIN	97	W	12/20/17	1	12/20/17	SMTWTFS

AUTHORIZATION

Thank you for advertising in the Record-Eagle, our related publications and online properties. If you are advertising with the Record-Eagle classifieds, your ad will begin running on the start date noted above.

Please be sure to check your ad on the first day it appears. Although we are happy to make corrections at any time, the Record-Eagle is only responsible for the first day's incorrect insertions. Also, we reserve the right to edit or reclassify your ad to better serve buyers and sellers.

No refunds or rebates will be issued if you cancel your ad prior to the stop date.

We appreciate your business.

(CONTINUED ON NEXT PAGE)

T. C. RECORD-EAGLE, INC.
120 WEST FRONT STREET
TRAVERSE CITY MI 49684
(231)946-2000

ORDER CONFIRMATION (CONTINUED)

Salesperson: DENISE LINGERFELT

Printed at 12/12/17 14:33 by dling

Acct #: 6

Ad #: 482102

Status: N

**LEGAL NOTICE
TOWNSHIP OF ACME
NOTICE OF HEARING**

PLEASE TAKE NOTICE that the ACME TOWNSHIP PLANNING COMMISSION will hold a public hearing at its regular meeting on Monday, January 8, 2018 at 7:00 p.m. at the Acme Township Hall, 6042 Acme Road, Williamsburg MI 49690, to consider the following amendments to the Acme Township Zoning Ordinance.

Zoning Ordinance Amendment 047 - Hoxsie Farm Property Rezone Request

The proposed map amendment would rezone approximately ten (10) acres of the property located at 6620 E M-72, owned by Denny and Judy Hoxsie, from A-1 Agricultural to B-4 Material Processing and Warehousing. The property is more fully described as:

Parcel No.: 28-01-002-001-20

Legal Description: NW 1/4 OF NE 1/4 EXC W 408.86' OF N 503.82' ALSO EX COM N 1/4 CNR TH E 408.86' TH S 52.99' TO POB TH E 166.51' TH S 15' TH S 659.87' TH W 633.86' TH N 225' TH E 408.86' TH N 450.83' TO POB SEC 6 T27N R9W

The request is to rezone the ten (10) acres along S Bates Rd on the southwest corner of the parcel and would be approximately 680 ft x 640 ft.

Copies of the entire proposed Amendment 047 are available for inspection at the Acme Township hall. All interested persons are invited to attend and be heard at public hearings before the Planning Commission. After each public hearing, the Planning Commission may or may not deliberate and take action. The entire Zoning Ordinance is available for inspection at the Acme Township Hall from 7:30 a.m. to 6:00 p.m. Monday through Thursday. Proposed Zoning Ordinance Amendments and the entire Zoning Ordinance are also available for inspection via the Township's website, www.acmetownship.org.

If you are planning to attend and require any special assistance, please notify Cathy Dye, Township Clerk, within 24 hours of the meeting at 938-1350.

Written comments may be directed to:
Shawn Winter, Planning & Zoning Administrator
6042 Acme Road, Williamsburg, MI 49690, (231) 938-1350,
swinter@acmetownship.org

December 20, 2017-1T

482102

5555 ARNOLD LLC
P O BOX 201
TRAVERSE CITY MI 49685

ORCHARD HILL FARMS LLC
6578 M 72 E
WILLIAMSBURG MI 49690

HOXSIE JUDITH L TRUST
6578 M 72 E
WILLIAMSBURG MI 49690

HAWLEY GARY W
C/O HAWLEY ALLEN & VALERIE
1761 TAYLOR CORNERS CT
BLACKLICK OH 43004

HAGAN KELLY M TRUSTEE
US BANKRUPTCY COURT
PO BOX 6844
TRAVERSE CITY MI 49696

MARSHVIEW PROPERTIES LLC
1630 NORTH HIDDEN FALLS CT
DE PERE WI 54115

AMHURST ASHWAY LLC
4066 WESTRIDGE DR
WILLIAMSBURG MI 49690

STATE OF MICHIGAN
DEPT OF TRANSPORTATION
P O BOX 30050
LANSING MI 48909

NICOLE ROSE PROPERTIES LLC
759 PURDY ST
BIRMINGHAM MI 48009

BARR WILLIAM C & BETTY A TRUST
484 W SILVER LAKE RD N
TRAVERSE CITY MI 49684

BRUNACKEY ANDREA L
6703 E M 72
WILLIAMSBURG MI 49690

STEELE SUZANNE M TRUSTEE
STEELE SUZANNE M REV TRUST
6667 E M 72
WILLIAMSBURG MI 49690

WESTFALL WARREN W & VAUNNIE L
7859 PEACEFUL VALLEY RD
WILLIAMSBURG MI 49690

KORSON MARK R
6599 M 72 E
WILLIAMSBURG MI 49690



Planning and Zoning Staff Report

6042 Acme Road | Williamsburg, MI | 49690

Phone: (231) 938-1350 Fax: (231) 938-1510 Web: www.acmetownship.org

To: Acme Township Planning Commission
From: Shawn Winter, Zoning Administrator
Cc: Jeff Jocks, Counsel
Date: December 4, 2017
Re: Zoning Ordinance Amendment 047 – Hoxsie Farm Rezoning Application

Applicant/Owner: Dennis & Judy Hoxsie (Property Owners under Orchard Hill Farms LLC)
6578 E M-72
Williamsburg, MI 49690

Parcel Address: 6620 E M-72, Williamsburg, MI 49690

Parcel Number: 28-01-002-001-20

Legal Description: NW 1/4 OF NE 1/4 EXC W 408.86' OF N 503.82' ALSO EX COM N 1/4 CNR TH E 408.86' TH S 52.99' TO POB TH E 166.51' TH S 15' TH S 659.87' TH W 633.86' TH N 225' TH E 408.86' TH N 450.83' TO POB SEC 6 T27N R9W

Current Zoning: A-1: Agricultural District

Summary and Recommendation:

The Applicant/Owner is seeking a rezoning of approximately ten (10) acres of the parcel along S Bates Rd from A-1: Agricultural District to B-4: Material Processing and Warehousing in order to allow the operation of a wholesale material landscaping business. It is recommended that the ten (10) acres be rezoned to B-4: Material Processing and Warehousing District.

Subject Property:



- Request to rezone ten (10) acres from A-1 to B-4 (purple)
- Located on the southwest corner of existing parcel
- Approximately 680 ft (north-south) x 640 ft (east-west)

Analysis:

The Applicant is interested in selling his property to a party that wishes to use the area proposed for the rezoning as a wholesale landscaping materials operation. This is not a use allowed under the current A-1: Agricultural District, but would be allowed by-right in the B-4: Material Processing and Warehousing District under §6.11.2(e). The purchasing party intends to continue operating the farm market and orchard until the fruit trees reach maturation in 5-8 years, and as such wishes to maintain the current zoning to prevent creating a non-conformity. Additionally, the purchasing party intends to buy the adjacent Hoxsie property containing the house and agricultural buildings for his personal residence and to support the agricultural operations.

The Future Land Use Map designates this portion of the subject parcel as Rural Residential and Purchase of Development Rights (PDR) Eligible. The Acme Township Community Master Plan defines Rural Residential as:

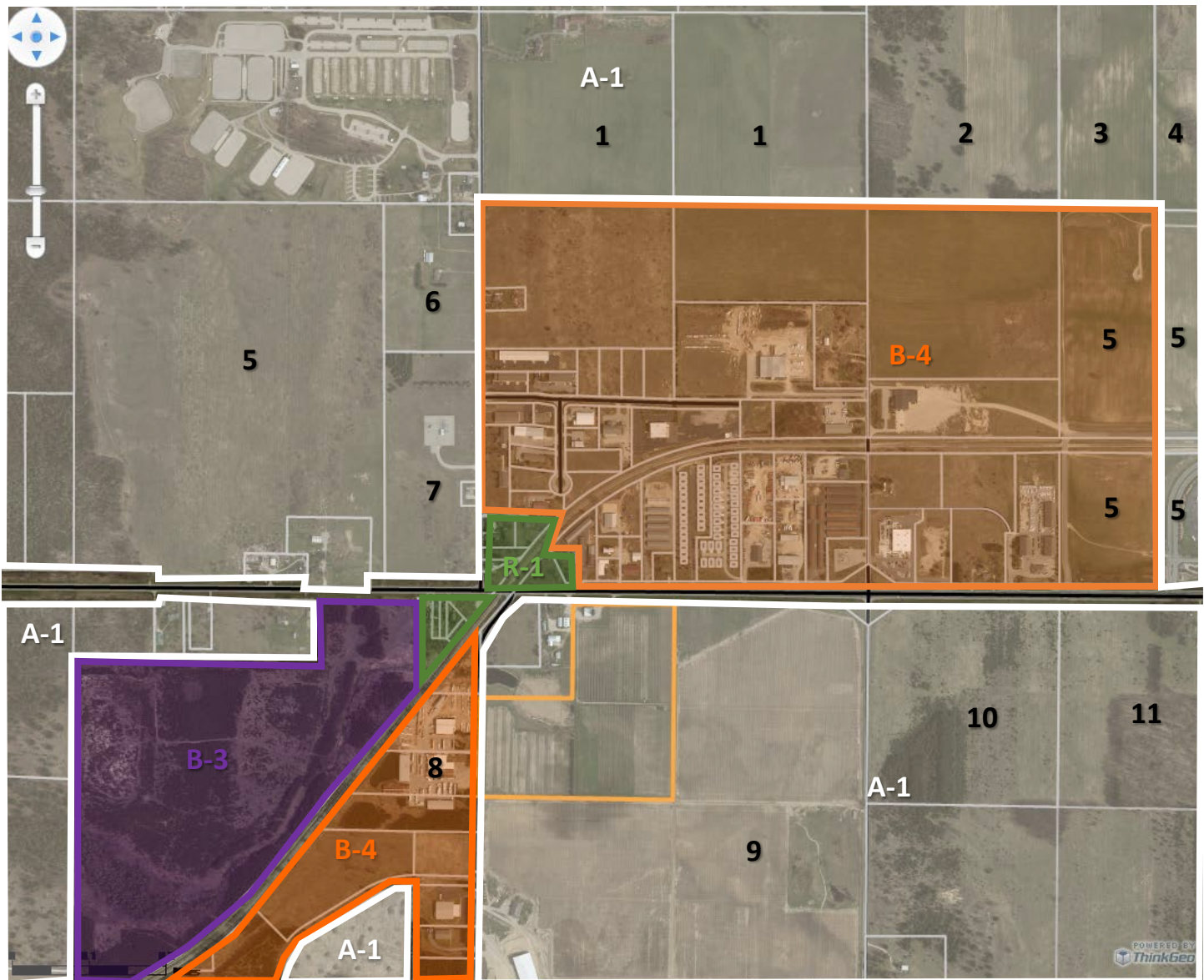
The rural residential category encompasses areas in Acme Township with special natural features that shall be preserved in the environmentally significant areas as identified on the Future Land Use Map. This category also encompasses those areas of rolling hills and open spaces that were formerly agricultural or are in a transitional state from agriculture to residential and complementary uses. The density is generally low to medium, with single-family houses built on large-scale parcels. The land features in this category include level fields, gently rolling hills, steep slopes, thick woodlands, wetlands, creeks, and streams. In all new residential construction, conservation-development designs shall be used to retain the vegetation, natural features, and open space existing on the developed sites. Land uses adjacent to the streams and wetlands of Yuba Creek should use sound environmental stewardship and ecological practices in order to conserve natural resources and protect highly sensitive ecosystems as well as ground- and surfacewater.

The objectives of this category are to provide limited and low density residential development in the rural areas of the Township where sensitive ecosystems and special natural land features such as steep slopes, creeks and streams are prevalent. However, conservation-development designs will be strongly encouraged to prevent sprawling development that undermines the integrity of open space and agricultural uses, and appropriate buffers should be planned to minimize the impact on existing agricultural uses. Another important objective is to encourage responsible stewardship among landowners in the development of the land so that the natural features are preserved to the fullest extent, especially in the areas with highly sensitive ecosystems and where special natural features abound, through the use of cluster housing, open-space development, and planned-unit development.

In the areas with highly sensitive natural features and ecosystems, the Township shall insist on conservation development in order to protect the most sensitive land by clustering housing on the least sensitive land. Land uses in the Rural Residential areas should comport with the policies and actions of the Cornerstones.

Although designated as Rural Residential in the Future Land Use Map, this request merits consideration. Prior discussions have occurred about expanding the B-4 District due to the limited number of undeveloped parcels in the district and the interest expressed by parties wishing to establish businesses of light industrial character, but without available options. This is even before the Board adopted the Acme Township Medical Marihuana Facilities Licensing Ordinance which has placed even greater demand on the district. The options to expand the district for additional light industrial uses are somewhat limited. To the east is Tribal sovereign land, the north is land that is currently in agricultural production, to the west across N Bates Rd is a parcel owned by Consumer's Power used as a substation and due west of that parcel is another parcel that is Tribal sovereign land,

and to the south is land zoned A-1 used primarily by MI Local Hops for their hops production. The land on the southeast corner of the intersection of M-72 and Bates Rd does not seem desirable or suitable for residential use due to its proximity along the busy M-72 right-of-way, industrial zoned land to the north and west, and the high-intensity agricultural operation (MI Local Hops) to the south and east. Staff recommends the Planning Commission consider changing the designation of the southeast corner of M-72 and Bates Rd from Rural Residential to Light Industrial on the Future Land Use Map during the next master plan updated process. Furthermore, the subject property was recently appraised as part of the PDR evaluation process and was determined not to be a viable candidate for the program. The rezoning request would be adjacent to other B-4 designated parcels on the other side of S Bates Rd and would not create a spot-zoning scenario. The map below illustrates the surrounding zoning designations and uses:



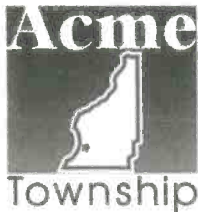
No.	Land Use	No.	Land Use
1	Agriculture	7	Electric Power Substation
2	Agriculture	8	Industrial Lumber Yard
3	Agriculture	9	Agriculture
4	Agriculture	10	Undeveloped
5	Tribal Sovereign Land	11	Undeveloped
6	Horse Show		

Recommendation:

Staff recommends approval of the zoning designation change request to rezone approximately ten (10) acres of land from A-1 to B-4 on the east side of S Bates Rd, pending a public hearing to be set at the regularly scheduled Planning Commission meeting in January.

Suggested Motion for Consideration:

Motion to set a public hearing for the regularly scheduled January 8, 2018 Planning Commission meeting to consider Zoning Ordinance Amendment 047 for the application request to rezone approximately ten (10) acres of land from A-1 to B-4 along S Bates Rd on the parcel owned by Dennis and Judy Hoxsie.



ACME TOWNSHIP
Grand Traverse County, Michigan
Petition for Zoning Change

Owner/Applicant Information: (please type or print clearly)

Name: Dennis & Judy Hoxsie Telephone: 231-620-2962 cell
Mailing Address: 6578 M-72 East, Williamsburg, MI 49690
E-Mail Address: dandj.hoxsie@gmail.com

A. Required Information (attach additional pages as needed):

1. Property Address/Location 6578 M-72 East
South Side of M-72, East of South Bates Road
2. Parcel Number:
28-01-002-001-20
3. Proof of current property ownership. If applicant is not the current property owner, also provide written and signed permission for applicant to act as agent of, and complete contact information for, the current property owner.
4. Sealed survey and legal description for property proposed for rezoning
5. State the current zoning designation, proposed zoning designation and why you are petitioning for and believe that the property should be rezoned
6. Describe the natural features and characteristics of the property
7. Describe the existing land use on the property and on all immediately surrounding properties
8. State whether deed restrictions exist on the property. If so, provide documentation. Discuss how they do or would affect the use of the property

B. Submission Requirements (additional items may be requested depending on circumstances):

1. Signed original copy of this application form
2. Signed original copy of Fee Escrow Policy Acknowledgment
3. Initial fee as required by Acme Township Ordinance #2004-01, Schedule of Fees
4. PDF files for all application materials and attachments
5. CAD and/or GIS shapefiles for area proposed for rezoning
6. If you have prepared any oversized site plans or other documents, provide 17 copies of each

- C. Affidavit:** The undersigned affirms that he/she is the Dennis Hoxsie (owner, agent, lessee, or other interested party) involved in this petition and that the foregoing answers, statements and information are in all respects true and, to the best of his/her knowledge, correct. By making this application, the undersigned grants all officials, staff and consultants of Acme Township access to the subject property as required and appropriate to assess site conditions in support of a determination as to the suitability of the proposed project and/or current or future special use permit and zoning ordinance compliance.

Signed: [Signature]

Date: 11-27-17

Township/Official Use Only

Application No.: Amd 047 Parcel ID #: 28-01-002-001-20 Date Rec'd: 11/27/17

Acme Township

Petition for Zoning Change

Required Information

Additional page

4. Legal Description. 28-01-002-001-20

NW ¼ OF NE ¼ EXC W 408.86' OF N 503.82' ALSO EX COM ¼ CNR TH E 408.86' TH S 52.99' TO POB TH E 166.51' TH S 15' TH S 659.87' TH W 633.86' TH N 225' TH E 408.86' TH N 450.83' TO POB SEC 6 T27N R9W.

5. Current Zoning 28-01-002-001-20. Agricultural. Proposed Zoning B-4 On South West 10 Acres

Our farm is currently for sale and it has become apparent that other uses in addition to agriculture are necessary to make the purchase of the property feasible. We are currently negotiating with a prospective buyer who would like to continue the agricultural operation but add a wholesale landscape material business to the property. A zoning change to B-4 on the South west 10 acres adjacent to South Bates Road would make it possible to operate a wholesale landscape business and still allow agricultural operations to take place on the remaining acreage.

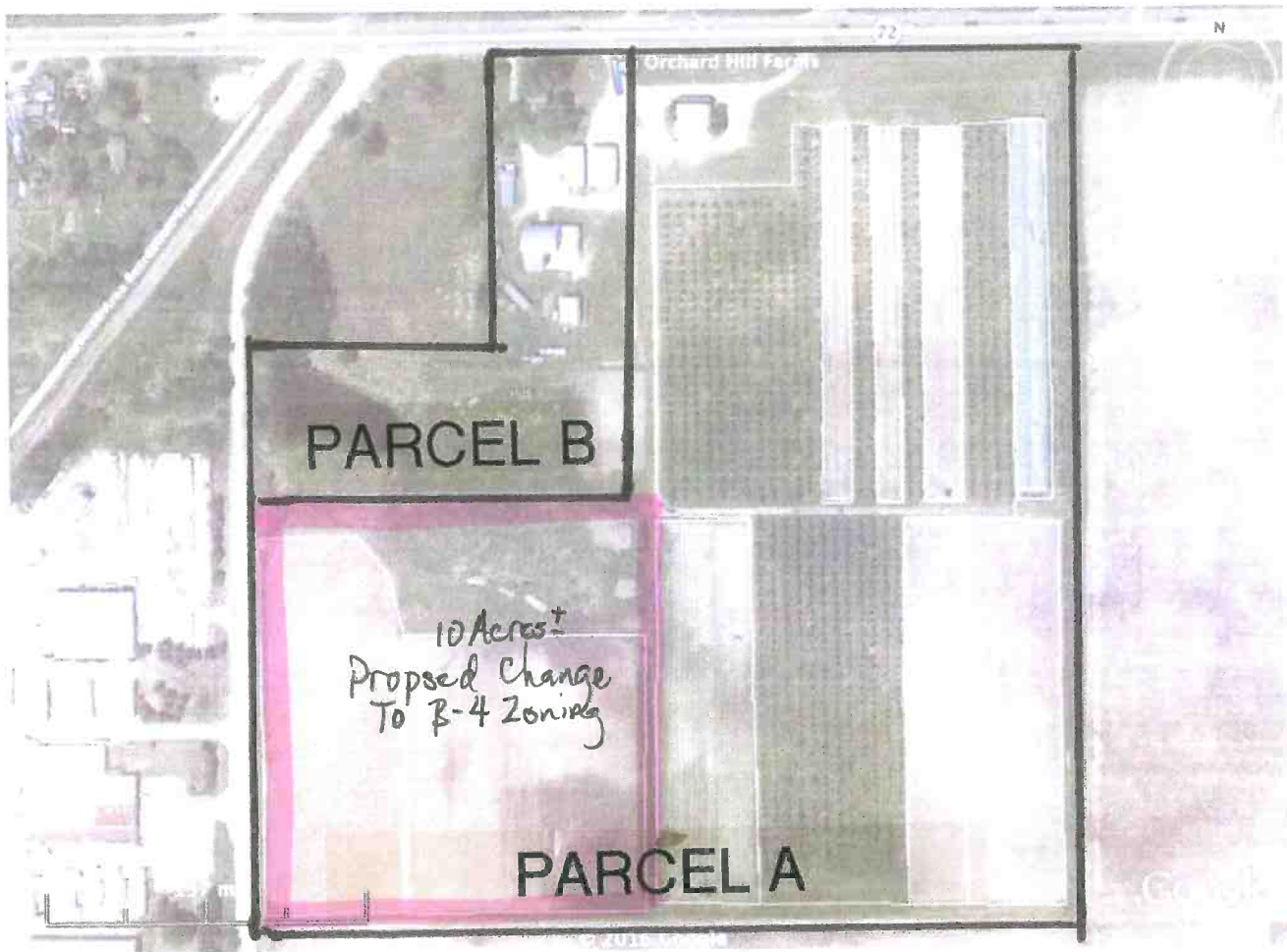
The property proposed for the zoning change is bordered to the West by B-4 zoning. The property to the South and East are zoned agricultural and to the North is Residential

6. The property is flat to gently rolling and is currently being used for pumpkin, squash and gourd production.

7. Surrounding uses. North, Storage/warehousing, East and South, agricultural (MI Local Hops), West, wholesale lumber yard, (Amerhardt)

Farm Location Information

OVERVIEW



CERTIFICATE OF SURVEY

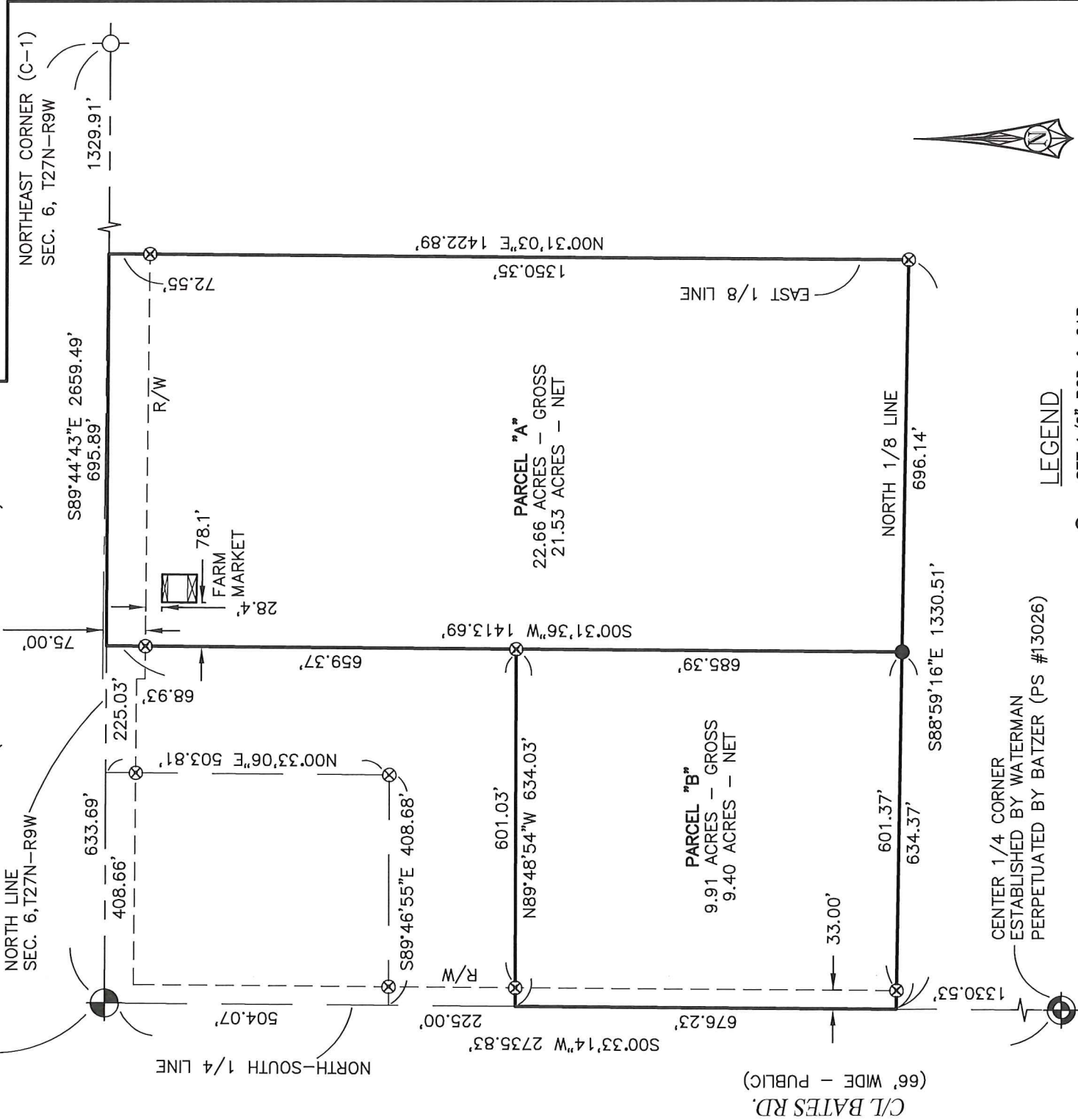
... A CERTIFIED COPY ... SHALL BE RECORDED AT THE TIME
OF RECORDING THE CONVEYANCE OF TITLE ... THE
PART OF (SEC. 1.(2), ACT 132 OF 1970 AS AMENDED.)

NORTH 1/4 CORNER (B-1)
SEC. 6, T27N-R9W
FD. STD. G. T. CO. MON.
AS RECORDED IN LIBER 4, PAGE 141,
GRAND TRAVERSE CO. REGISTER OF
DEEDS

NORTHEAST CORNER (C-1)
SEC. 6, T27N-R9W
FD. STD. G. T. CO. MON.
AS RECORDED IN LIBER 4, PAGE 160,
GRAND TRAVERSE CO. REGISTER OF
DEEDS

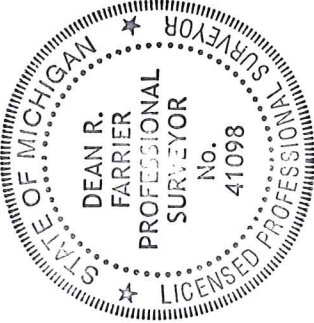
C/L HIGHWAY M-72

(VARIABLE WIDTH - PUBLIC)



LEGEND

- = SET 1/2" ROD & CAP
- = FD. FARRIER IRON
- ⊗ = FD. 1/2" IRON ROD & CAP (PS #13026)



I, DEAN R. FARRIER, A PROFESSIONAL SURVEYOR IN THE STATE OF MICHIGAN,
CERTIFY THAT I HAVE SURVEYED AND MAPPED THE HEREON DESCRIBED PARCEL
OF LAND, AND THAT THE RATIO OF CLOSURE OF THE UNADJUSTED FIELD
OBSERVATIONS WAS WITHIN THE ACCEPTED LIMITS AND THAT I HAVE FULLY
COMPLIED WITH THE SURVEY REQUIREMENTS OF ACT 132 OF 1970 AS
AMENDED.

Dean Farrier PS# 41098 DATE 1-4-18

RATIO OF CLOSURE: 1"/ 5100+

BEARING BASIS: MI STATE PLANE COORD. SYSTEM, CENTRAL ZONE (2112), NAD 83 (2011), GRID NORTH.

DISTANCES: INT'L FEET (GROUND)

FARRIER SURVEYING INC.

P.O. BOX 998
244 S.CEDAR STREET
KALKASKA, MI 49646
TEL(231)258-8162 FAX(231)258-3249
office@farriersurveying.com

CLIENT DENNIS AND JUDITH HOXSIE

DESCRIPTION

PART OF THE NW 1/4 OF THE NE 1/4,
SECTION 6, T27N-R9W, ACME TOWNSHIP,
GRAND TRAVERSE COUNTY, MICHIGAN

DRAWN: WJH

CHECK: DRF

REVISED:

DATE: 1/4/2018

SHEET: 1 of 2

A: \Carlson Projects\2017\23317 HOXSIE\DWGS\23317 HOXSIE.dwg 1/4/2018 3:08:28 PM

DESCRIPTION:

A PARCEL OF LAND SITUATED IN THE TOWNSHIP OF ACME, COUNTY OF GRAND TRAVERSE, STATE OF MICHIGAN, DESCRIBED AS FOLLOWS, TO WIT:

PARENT PARCEL DESCRIPTION

(AS PROVIDED IN THE TAX RECORDS – PARCEL NO.: 01-002-001-20)
THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 6, T27N-R9W; **EXCLUDING**, THE WEST 408.86 FEET OF THE NORTH 503.82 FEET, OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 6, T27N-R9W; **ALSO EXCLUDING**, THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 6, T27N-R9W, DESCRIBED AS, COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION; THENCE EAST, 408.86 FEET; THENCE SOUTH, 52.99 FEET, TO THE **POINT OF BEGINNING**; THENCE EAST 166.51 FEET; THENCE SOUTH 15 FEET; THENCE SOUTH, 659.87 FEET; THENCE WEST, 633.86 FEET; THENCE NORTH, 225 FEET; THENCE EAST, 408.86 FEET; THENCE NORTH, 408.86 FEET, TO THE SAID POINT OF BEGINNING.

(AS SURVEYED)
THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 6, T27N-R9W, DESCRIBED AS, COMMENCING AT THE NORTH 1/4 CORNER OF SECTION 6; THENCE S89°44'43"E, ALONG THE NORTH LINE OF SAID SECTION, 633.69 FEET, TO THE **POINT OF BEGINNING**; THENCE S00°31'36"W, 68.93 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE SOUTHERLY RIGHT-OF-WAY LINE OF STATE HIGHWAY M-72; THENCE CONTINUING S00°31'36"W, 659.37 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026); THENCE N89°48'54"W, 601.03 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE EASTERLY RIGHT-OF-WAY LINE OF BATES ROAD; THENCE CONTINUING N89°48'54"W, 33.00, TO THE NORTH-SOUTH 1/4 LINE OF SAID SECTION; THENCE S00°33'14"W, ALONG SAID NORTH-SOUTH 1/4 LINE, 676.23 FEET, TO THE NORTH 1/8 LINE OF SAID SECTION; THENCE S88°59'16"E, ALONG SAID NORTH1/8 LINE, 33.00 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE EASTERLY RIGHT-OF-WAY OF BATES ROAD; THENCE CONTINUING S88°59'16"E, ALONG SAID NORTH1/8 LINE, 1297.51 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE EAST 1/8 LINE OF SAID SECTION; THENCE N00°31'03"E, ALONG THE EAST 1/8 LINE OF SAID SECTION, 1350.35 TO A FOUND 1/2 INCH IRON ROD AND CAP (PS # 13026) ON THE SOUTHERLY RIGHT-OF-WAY OF STATE HIGHWAY M-72; THENCE CONTINUING N00°31'03"E, ALONG THE EAST 1/8 LINE OF SAID SECTION, 72.55 FEET, TO THE NORTH LINE OF SAID SECTION; THENCE N89°44'43"W, ALONG THE NORTH LINE OF SAID SECTION, 695.89 FEET, TO THE SAID POINT OF BEGINNING. CONTAINING 32.57 ACRES OF LAND, MORE OR LESS. **SUBJECT TO** THE RIGHT-OF-WAY FOR HIGHWAY M-72 AND THE RIGHT-OF-WAY FOR BATES ROAD. **ALSO SUBJECT TO** EASEMENTS AND RESTRICTIONS OF RECORD.

LAND DIVISION PARCELS

PARCEL “A”

THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 6, T27N-R9W, DESCRIBED AS, COMMENCING AT THE NORTH 1/4 CORNER OF SECTION 6; THENCE S89°44'43"E, ALONG THE NORTH LINE OF SAID SECTION, 633.69 FEET, TO THE **POINT OF BEGINNING**; THENCE S00°31'36"W, 68.93 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE SOUTHERLY RIGHT-OF-WAY LINE OF STATE HIGHWAY M-72; THENCE CONTINUING S00°31'36"W, 1344.76 FEET, TO THE NORTH 1/8 LINE OF SAID SECTION; THENCE S88°59'16"E, ALONG SAID NORTH1/8 LINE, 696.14 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE EAST 1/8 LINE OF SAID SECTION; THENCE N00°31'03"E, ALONG THE EAST 1/8 LINE OF SAID SECTION, 1350.35 TO A FOUND 1/2 INCH IRON ROD AND CAP (PS # 13026) ON THE SOUTHERLY RIGHT-OF-WAY OF STATE HIGHWAY M-72; THENCE CONTINUING N00°31'03"E, ALONG THE EAST 1/8 LINE OF SAID SECTION, 72.55 FEET, TO THE NORTH LINE OF SAID SECTION; THENCE N89°44'43"W, ALONG THE NORTH LINE OF SAID SECTION, 695.89 FEET, TO THE SAID POINT OF BEGINNING. CONTAINING 22.66 ACRES OF LAND, MORE OR LESS. **SUBJECT TO** THE RIGHT-OF-WAY FOR HIGHWAY M-72. **ALSO SUBJECT TO** EASEMENTS AND RESTRICTIONS OF RECORD.

PARCEL “B”

THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 6, T27N-R9W, DESCRIBED AS, COMMENCING AT THE NORTH 1/4 CORNER OF SECTION 6; THENCE S89°44'43"E, ALONG THE NORTH LINE OF SAID SECTION, 633.69 FEET; THENCE S00°31'36"W, 68.93 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE SOUTHERLY RIGHT-OF-WAY LINE OF STATE HIGHWAY M-72; THENCE CONTINUING S00°31'36"W, 659.37 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026); AND THE **POINT OF BEGINNING**; THENCE N89°48'54"W, 601.03 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE EASTERLY RIGHT-OF-WAY LINE OF BATES ROAD; THENCE CONTINUING N89°48'54"W, 33.00, TO THE NORTH-SOUTH 1/4 LINE OF SAID SECTION; THENCE S00°33'14"W, ALONG SAID NORTH-SOUTH 1/4 LINE, 676.23 FEET, TO THE NORTH 1/8 LINE OF SAID SECTION; THENCE S88°59'16"E, ALONG SAID NORTH1/8 LINE, 33.00 FEET, TO A FOUND 1/2 INCH IRON ROD AND CAP (PS #13026) ON THE EASTERLY RIGHT-OF-WAY OF BATES ROAD; THENCE S89°59'16"E, 601.37 FEET; THENCE N00°31'16"E, 685.39 FEET, TO THE SAID POINT OF BEGINNING. CONTAINING 9.91 ACRES OF LAND, MORE OR LESS. **SUBJECT TO** THE RIGHT-OF-WAY FOR BATES ROAD. **ALSO SUBJECT TO** EASEMENTS AND RESTRICTIONS OF RECORD.

FARRIER SURVEYING INC. P.O. BOX 998 244 S.CEDAR STREET KALKASKA, MI 49646 TEL(231)258-8162 FAX(231)258-3249 office@farriersurveying.com	CLIENT DENNIS AND JUDITH HOXSIE		DRAWN: WJH	FILE No. 23317
	DESCRIPTION PART OF THE NW 1/4 OF THE NE 1/4, SECTION 6, T27N-R9W, ACME TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN	CHECK: DRF		Fd. Bk. 251, Pg. 50
		REVISED:		DATE: 1/4/2018
				SHEET: 2 of 2
A: \Carlson Projects\2017\23317 HOXSIE\DWGS\23317 HOXSIE.dwg 1/4/2018 3:08:32 PM				

ACME TOWNSHIP

Zoning Districts

Data Source: Acme Township

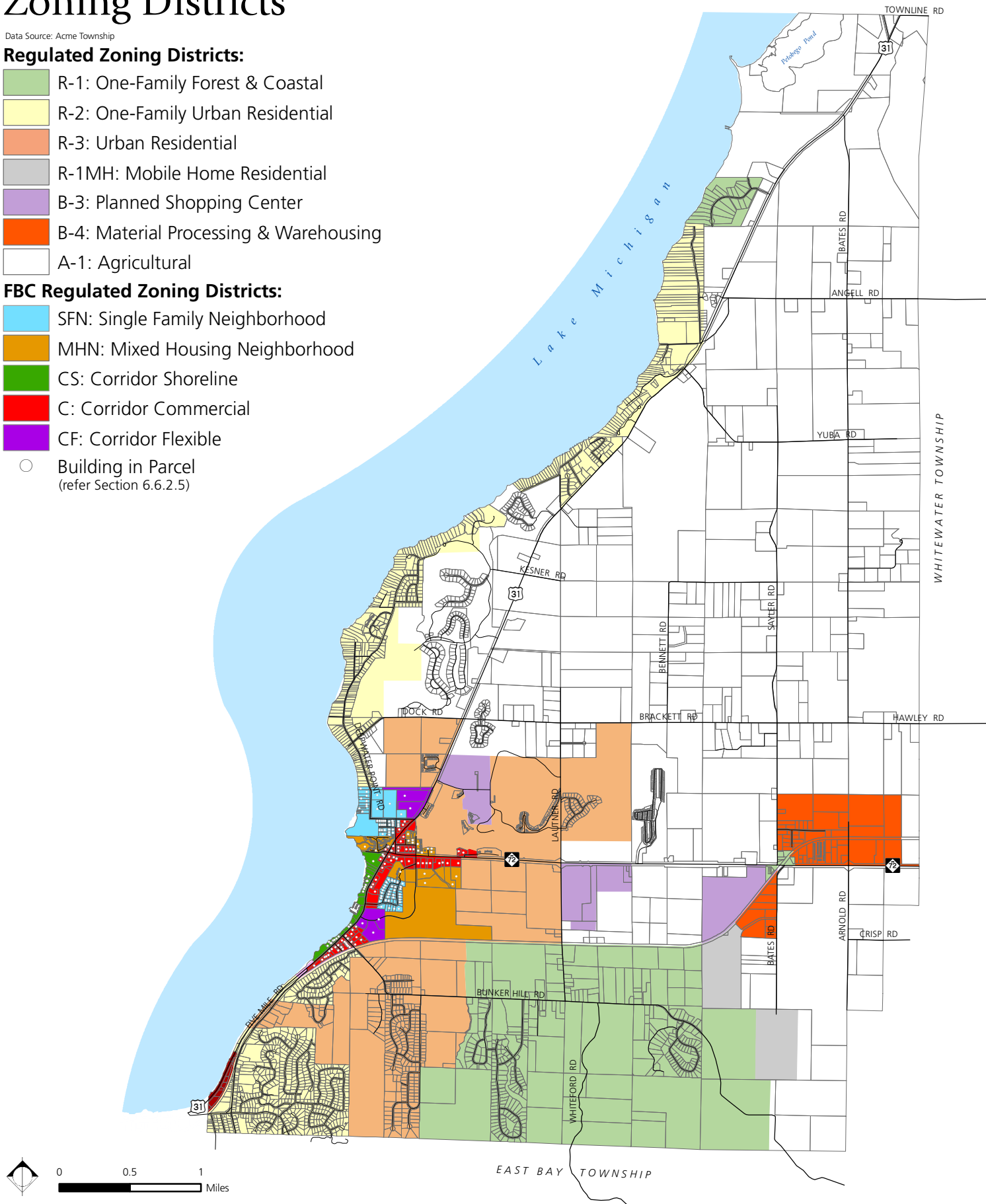
Regulated Zoning Districts:

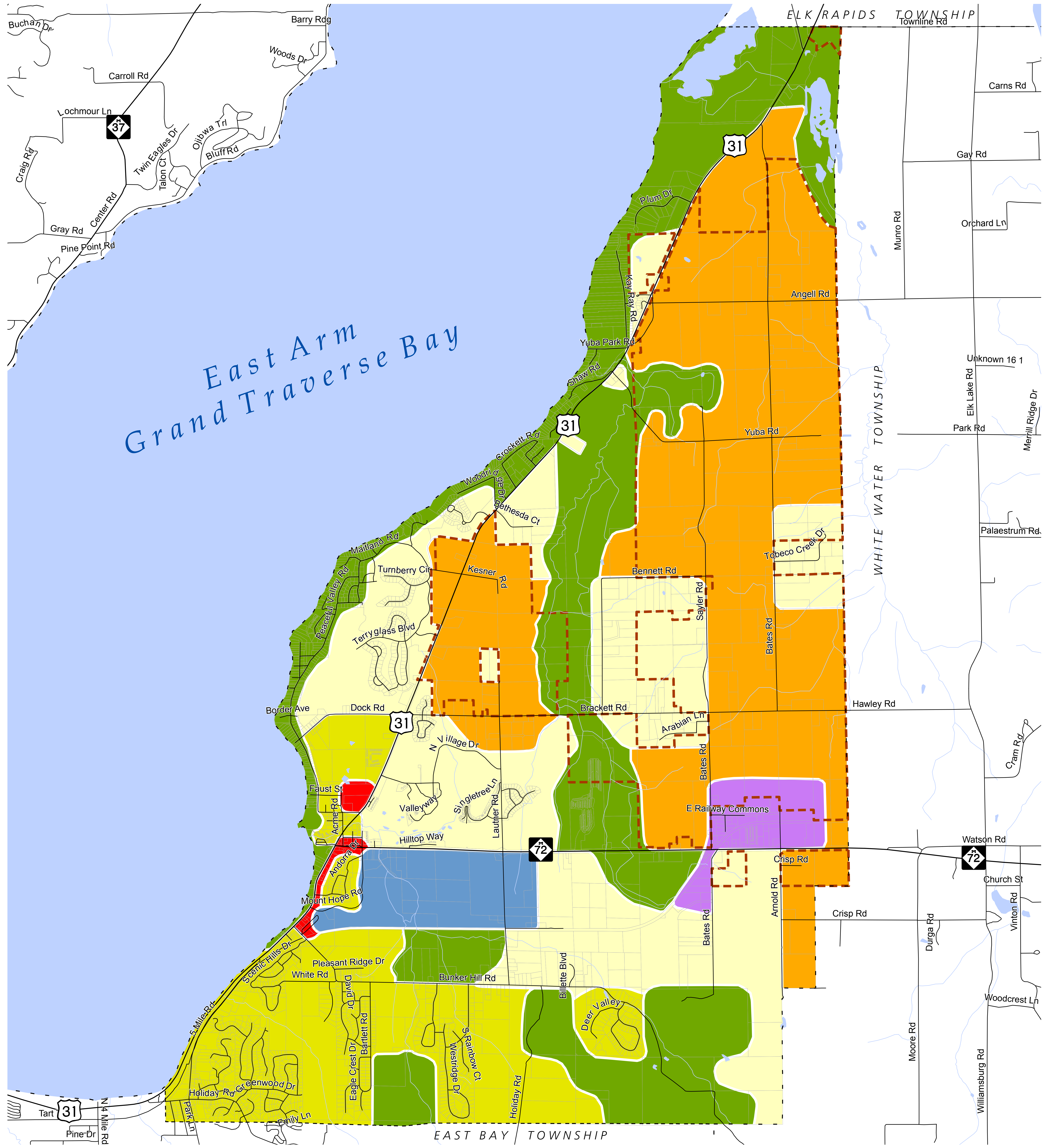
- R-1: One-Family Forest & Coastal
- R-2: One-Family Urban Residential
- R-3: Urban Residential
- R-1MH: Mobile Home Residential
- B-3: Planned Shopping Center
- B-4: Material Processing & Warehousing
- A-1: Agricultural

FBC Regulated Zoning Districts:

- SFN: Single Family Neighborhood
- MHN: Mixed Housing Neighborhood
- CS: Corridor Shoreline
- C: Corridor Commercial
- CF: Corridor Flexible

- Building in Parcel
(refer Section 6.6.2.5)


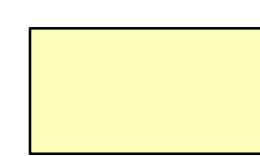
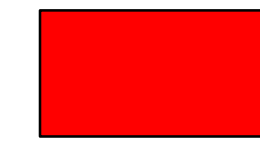
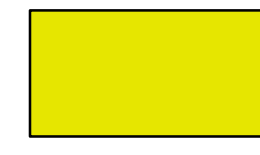

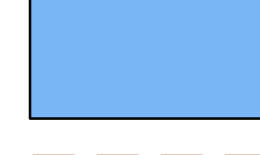






Acme Township

Future Land Use

Data Sources: Michigan Geographic Data Library, Grand Traverse County Equalization

- | | |
|--|---|
|  Agriculture |  Residential - Rural |
|  Commercial / Business |  Residential - Urban |
|  Industrial |  Town Center |
|  Recreation / Conservation |  PDR Eligible Areas |

- Township Boundary
- Road



Updated: 11-25-13

T. C. RECORD-EAGLE, INC.
120 WEST FRONT STREET
TRAVERSE CITY MI 49684
(231)946-2000

ORDER CONFIRMATION

Salesperson: DENISE LINGERFELT Printed at 12/12/17 14:56 by dling

Acct #: 6 Ad #: 482103 Status: N

ACME TOWNSHIP Start: 12/20/2017 Stop: 12/20/2017
CATHY DYE, CLERK Times Ord: 1 Times Run: ***
6042 ACME ROAD STDAD 3.00 X 5.30 Words: 317
WILLIAMSBURG MI 49690 Total STDAD 15.90
Class: 147 LEGALS
Rate: LEGAL Cost: 137.00
Affidavits: 1

Contact: Ad Descrpt: LEGAL NOTICE TOWNSHIP OF
Phone: (231)938-1350 Given by: EMAIL SHAWN WINTER
Fax#: (231)938-1510 Created: dling 12/12/17 14:37
Email: szollinger@acmetownship.org Last Changed: dling 12/12/17 14:56
Agency:

Source: 122000000603 Section: _____ Page: ____
Camera Ready: N Group: _____ AdType: _____
Misc: _____ Color: _____
Proof: _____ Pickup Date: _____ Ad#: _____
Delivery Instr: _____ Gang Ad #: _____
Changes: None ____ Copy ____ Art ____ Size ____ Copy Chg Every Run ____
Coupon: ____
Special Instr: _____

PUB	ZONE	EDT	TP	START	INS	STOP	SMTWTFS
RE	A	97	W	12/20/17	1	12/20/17	SMTWTFS
IN	AIN	97	W	12/20/17	1	12/20/17	SMTWTFS

AUTHORIZATION

Thank you for advertising in the Record-Eagle, our related publications and online properties. If you are advertising with the Record-Eagle classifieds, your ad will begin running on the start date noted above.

Please be sure to check your ad on the first day it appears. Although we are happy to make corrections at any time, the Record-Eagle is only responsible for the first day's incorrect insertions. Also, we reserve the right to edit or reclassify your ad to better serve buyers and sellers.

No refunds or rebates will be issued if you cancel your ad prior to the stop date.

We appreciate your business.

(CONTINUED ON NEXT PAGE)

T. C. RECORD-EAGLE, INC.
120 WEST FRONT STREET
TRAVERSE CITY MI 49684
(231)946-2000

ORDER CONFIRMATION (CONTINUED)

Salesperson: DENISE LINGERFELT

Printed at 12/12/17 14:56 by dling

Acct #: 6

Ad #: 482103

Status: N

**LEGAL NOTICE
TOWNSHIP OF ACME
NOTICE OF HEARING**

PLEASE TAKE NOTICE that the ACME TOWNSHIP PLANNING COMMISSION will hold a public hearing at its regular meeting on Monday, January 8, 2018 at 7:00 p.m. at the Acme Township Hall, 6042 Acme Road, Williamsburg MI 49690, to consider the following amendments to the Acme Township Zoning Ordinance.

Zoning Ordinance Amendment 048 - Short-Term Rentals

The proposed text amendment makes the necessary changes to the Zoning Ordinance in accordance with the Acme Township Short-Term Rental Ordinance (2017-01) adopted by the Township Board on Nov. 14, 2017. The changes include:

Deleting the definitions "Business Zoning Districts" and "Lodging House" from §3.2.

Adding new definitions for "Commercial Zoning Districts", "Industrial Zoning District", "Short-Term Rental", "Tourist Home", and "Vacation Home" to §3.2.

Adding licensed tourist homes as a use allowed by right in all zoning districts.

Adding licensed vacation homes as a use allowed by right in the A-1 Agricultural District (all dwelling types), and the C Corridor Commercial District (single-family homes only).

Deleting "tourist homes" from the parking requirements table in §7.5.3(c)(11).

Copies of the entire proposed Amendment 048 are available for inspection at the Acme Township hall. All interested persons are invited to attend and be heard at public hearings before the Planning Commission. After each public hearing, the Planning Commission may or may not deliberate and take action. The entire Zoning Ordinance is available for inspection at the Acme Township Hall from 7:30 a.m. to 6:00 p.m. Monday through Thursday. Proposed Zoning Ordinance Amendments and the entire Zoning Ordinance are also available for inspection via the Township's website, www.acmetownship.org.

If you are planning to attend and require any special assistance, please notify Cathy Dye, Township Clerk, within 24 hours of the meeting at 938-1350.

Written comments may be directed to:

Shawn Winter, Planning & Zoning Administrator
6042 Acme Road, Williamsburg, MI 49690, (231) 938-1350,
swinter@acmetownship.org

December 20, 2017-1T

482103



Planning and Zoning

6042 Acme Road | Williamsburg, MI | 49690

Phone: (231) 938-1350 Fax: (231) 938-1510 Web: www.acmetownship.org

Acme Township Zoning Ordinance Amendment 048

SHORT-TERM RENTALS

V2 - 12/11/17

1. The following definitions shall be deleted under §3.2 Definitions:

“Business Zoning Districts: Means the B-1S, B-1P, B-2, B-3 and B-4 Zoning Districts, as defined by this Ordinance.”

“Lodging House: A building in which three or more rooms are rented and in which no table board is furnished”

2. The following definitions shall be added under §3.2 Definitions:

“Commercial Zoning Districts: Means the C (Corridor Commercial), CF (Corridor Flex), and B-3 (Planned Shopping Center) Zoning Districts, as defined by this Ordinance.

“Industrial Zoning District: Means the B-4 (Material Processing and Warehousing) Zoning District, as defined by this Ordinance.”

“Short-Term Rental: The commercial use of renting a dwelling unit, or portion thereof, for a period of time less than thirty-one (31) consecutive calendar days. This does not include approved bed and breakfast establishments, hotels/motels, tenant housing, or campgrounds.”

“Tourist Home: A short-term rental operation in which a portion of a dwelling unit is rented out where the owner of the property resides full-time in the dwelling unit and is primarily present at the time of occupation.”

“Vacation Home: A short-term rental operation in which the entire dwelling unit is rented out without the property owner residing at the dwelling unit at the time of occupation.”

3. The use “Tourist Homes” shall be added at the following sections:

Article VI: Zoning Districts, Map and Schedule of Regulations,

Section 6.2 R-1 District: One-Family Forest and Coastal District,

Subsection 6.2.2 Uses Permitted By Right:

q. “Tourist Homes

1. All tourist home operations require a license issued by Acme Township.”

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.5 R-1MH District: Manufactured Home Residential,
Subsection 6.5.2 Uses Permitted By Right:

e. "Tourist Homes

1. All tourist home operations require a permit issued by Acme Township."

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.6 Acme Township US-31/M-72 Business District,
Subsection 6.6.4 Land Use Table,

Sub subsection 6.6.4.1 Regulated Uses

b. "Tourist Homes. By right in the SFN (Single Family Neighborhood), MHN (Mixed Housing Neighborhood), CS (Corridor Shoreline), C (Corridor Commercial), and CF (Corridor Flex) districts

1. All tourist home operations require a license issued by Acme Township."

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.10 B-3 District: Planned Shopping Center,
Subsection 6.10.2 Uses Permitted By Right:

y. "Tourist Homes

1. All tourist home operations require a license issued by Acme Township"

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.11 B-4 District: Material Processing and Warehousing District,
Subsection 6.11.2 Uses Permitted By Right:

j. "Tourist Homes

- i. All tourist home operations require a license issued by Acme Township"

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.12 A-1: Agricultural District,
Subsection 6.12.2 Uses Permitted By Right,

b. Non-Agricultural Uses Listed Below,

13. "Tourist Homes

- a. All tourist home operations require a license issued by Acme Township"

4. The use "Vacation Homes" shall be added at the following sections:

Article VI: Zoning Districts, Map and Schedule of Regulations,
Section 6.6 Acme Township US-31/M-72 Business District,
Subsection 6.6.4 Land Use Table,
Sub subsection 6.6.4.1 Regulated Uses

c. "Vacation Homes. Authorized by right in the C (Corridor Commercial) and CF (Corridor Flex) districts

1. All vacation home operations require a license issued by Acme Township.
2. Vacation homes shall only be operated in single-family dwellings."

Article VI: Zoning Districts, Map and Schedule of Regulations,

Section 6.10 B-3 District: Planned Shopping Center,

Subsection 6.10.2 Uses Permitted By Right:

z. "Vacation Homes

1. All vacation home operations require a license issued by Acme Township
2. Vacation homes shall only be operated in single-family dwellings."

Article VI: Zoning Districts, Map and Schedule of Regulations,

Section 6.12 A-1: Agricultural District,

Subsection 6.12.2 Uses Permitted By Right,

b. Non-Agricultural Uses Listed Below,

14. "Vacation Homes

- a. All vacation home operations require a license issued by Acme Township"

5. The following use shall be deleted from the Parking Space Requirements in Section 7.5.3(c)(11):

"tourist home"

T. C. RECORD-EAGLE, INC.
120 WEST FRONT STREET
TRAVERSE CITY MI 49684
(231)946-2000

ORDER CONFIRMATION

Salesperson: DENISE LINGERFELT Printed at 12/12/17 15:02 by dling

Acct #: 6 Ad #: 482107 Status: N

ACME TOWNSHIP Start: 12/20/2017 Stop: 12/20/2017
CATHY DYE, CLERK Times Ord: 1 Times Run: ***
6042 ACME ROAD STDAD 3.00 X 7.26 Words: 637
WILLIAMSBURG MI 49690 Total STDAD 21.78
Class: 147 LEGALS
Rate: LEGAL Cost: 200.00
Affidavits: 1

Contact: Ad Descrpt: LEGAL NOTICE TOWNSHIP OF
Phone: (231)938-1350 Given by: EMAIL SHAWN WINTER
Fax#: (231)938-1510 Created: dling 12/12/17 14:57
Email: szollinger@acmetownship.org Last Changed: dling 12/12/17 15:02
Agency:

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Camera Ready: N Group: _____ AdType: _____
Misc: _____ Color: _____
Proof: _____ Pickup Date: _____ Ad#: _____
Delivery Instr: _____ Gang Ad #: _____
Changes: None ____ Copy ____ Art ____ Size ____ Copy Chg Every Run ____
Coupon: ____
Special Instr: _____

PUB	ZONE	EDT	TP	START	INS	STOP	SMTWTF
RE	A	97	W	12/20/17	1	12/20/17	SMTWTF
IN	AIN	97	W	12/20/17	1	12/20/17	SMTWTF

AUTHORIZATION

Thank you for advertising in the Record-Eagle, our related publications and online properties. If you are advertising with the Record-Eagle classifieds, your ad will begin running on the start date noted above.

Please be sure to check your ad on the first day it appears. Although we are happy to make corrections at any time, the Record-Eagle is only responsible for the first day's incorrect insertions. Also, we reserve the right to edit or reclassify your ad to better serve buyers and sellers.

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(CONTINUED ON NEXT PAGE)

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120 WEST FRONT STREET
TRAVERSE CITY MI 49684
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ORDER CONFIRMATION (CONTINUED)

Salesperson: DENISE LINGERFELT

Printed at 12/12/17 15:02 by dling

Acct #: 6

Ad #: 482107

Status: N

**LEGAL NOTICE
TOWNSHIP OF ACME
NOTICE OF HEARING**

PLEASE TAKE NOTICE that the ACME TOWNSHIP PLANNING COMMISSION will hold a public hearing at a regular meeting on Monday, January 8, 2018 at 7:00 p.m. in the Acme Township Hall, Acme, Michigan to consider the following application:

An application by Nate Elkins of Influence Design Forum, 120 E Front St, 2nd Floor Loft, Traverse City, MI 49685, on behalf of Dan Kelly, Kelly's Restaurant LLC, 4230 E M-72, Williamsburg, MI 49690, for a Planned Development approval to a retail/residential mixed-use development along M-72 and a series of resort-style neighborhoods to the rear of the properties located at 4160, 4200, and 4230 E M-72, Williamsburg, MI 49690, more fully described as:

Parcel No.: 28-01-102-011-00
PT NW 1/4, SEC 2 T27N R10W COM NW SEC CNR, S 86 DEG 43' E 596.16', S 01 DEG 17' W 145.81' TO SLY HWY R/W & POB, S 88 DEG 42' E 205.81', S 300.34', S 66 DEG 97' W 325.36' TO SLY SHR ACME CREEK, N 13 DEG 23' W 90.08', N 16 DEG 30' E 48.41' TH N 9 DEG 10' W 109.34', N 35 DEG 27' E 56.73', E 72.45', N 150' TO POB.

Parcel No.: 28-01-102-011-25
PART OF NW 1/4 SEC 2 T27N R10W COM NW SEC COR TH S 86 DEG 43' E 596.16 FT TH S145.81 FT TO SLY HWY R/W TH S 88 DEG 42' E 205.81 FT TH S 01 DEG 25' E 300.34 FT TO POB TH S 88 DEG 42' E 100.11 FT TH S 536.60 FT TO SHR ACME CREEK TH ALG SD SHR N 55 DEG 51' W 7.19 FT TH N 87 DEG 11' W 26.10 FT TH N 40 DEG 11' W 92.88 FT TH N 52 DEG 59' W 61.87 FT TH N 38 DEG 33' W 54.80 FT TH N 43 DEG 42' W 94.47 FT TH N 33 DEG 31' W 64.06 FT TH N 43 DEG 42' W 117.95 FT TH N 50 DEG 34' W 68.80 FT TH N 66 DEG 07' E 325.26 FT TO POB

Parcel No.: 28-01-102-014-01
PT NW 1/4 SEC 2 T27N R10W COM AT NW CNR SEC 2 TH S 86 DEG 43' 27" E 895.66' TH S 01 DEG 30' 51" E 430.44' TO POB TH S 88 DEG 42' 59" E 234.60' TH S 01 DEG 25' 35" E 494.39' TH S 86 DEG 43' 27" E 185.62' TH S 01 DEG 25' 35" E 250' TO A PT ON A TRAVERSE LINE ALONG ACME CREEK TH S 59 DEG 48' 00" W 89.73' TH N 73 DEG 15' 02" W 122.46' TH N 28 DEG 44' 26" W 132.64' TH N 55 DEG 32' 38" W 200.73' TH N 01 DEG 30' 51" W 540.18' TO POB SPLIT ON 09/03/1998 FROM 01-102-014-00;

Parcel No.: 28-01-102-010-00
W 214.5' OF NE 1/4 OF NW 1/4 ALSO E 185' OF N 915' OF NW 1/4, NW 1/4, SEC 2 T27N R10W.

All interested persons are invited to attend and be heard at the public hearings before the Planning Commission. After the public hearings the Planning Commission may or may not deliberate and make its recommendation based on the Acme Township Zoning Ordinance to the Township Board, which will subsequently take appropriate action on the application.

Applications may be inspected at the Acme Township Hall between 7:30 a.m. and 6:00 p.m. Monday through Thursday. The application materials will also be available on the Acme Township website www.acmetownship.org as an attachment to the agenda and minutes of the meeting(s) at which they are discussed. If you are planning to attend and require any special assistance, please notify Cathy Dye, Township Clerk, within 24 hours of the meeting at 938-1350. Written comments may be directed to:

Shawn Winter, Planning & Zoning Administrator
6042 Acme Rd, Williamsburg, MI 49690, (231) 938-1350,
swinter@acmetownship.org

December 20, 2017-1T

482107

2801-102-011-00
KELLY RESTAURANTS LLC
4160 E M 72
WILLIAMSBURG MI 49690

2801-102-011-10
PECK ERIC J & KARA L
7677 BATES RD
WILLIAMSBURG MI 49690

2801-102-014-02
M 72 AUTO WASH LLC
3772 KENNEDY PLACE
WILLIAMSBURG MI 49690

2801-102-015-20
MICH BELL TELEPHONE CO
444 MICHIGAN AVE
DETROIT MI 48216

2801-235-020-04
LUCE PARK LLC
3441 AUTUMN LEAP
TRAVERSE CITY MI 49686

2801-235-020-05
SEDGEWICK MARK
4263 E M 72 STE C
WILLIAMSBURG MI 49690

2801-102-010-00
KELLY'S RESTAURANT LLC
4240 M 72 E
WILLIAMSBURG MI 49690

2801-102-016-02
JOHNSON FAMILY LTD PARTNERSHIP
CARL HIEDEMAN
445 W 22ND
HOLLAND MI 49423

2801-235-035-00
CYMAN JESSE
PO BOX 116
ACME MI 49610

2801-102-001-02
GT BAND OF OTTAWA & CHIPPEWA INDIAN
2605 N WEST BAY SHORE DR
SUTTONS BAY MI 49682

2801-102-015-00
LUTHERAN SOCIAL SERVICES OF MI
8131 E JEFFERSON
DETROIT MI 48214

2801-102-015-40
FEAST OF VICTORY LUTHERAN CHUR
P O BOX 298
ACME MI 49610

2801-235-020-03
GRAND TRAVERSE RESORT AND SPA LLC
P O BOX 404
ACME MI 49610



**TOWNSHIP OF ACME
COUNTY OF GRAND TRAVERSE
STATE OF MICHIGAN**

**PLANNED DEVELOPMENT (PD) 2016-01
DAN KELLY RESORT CABINS AND MIXED-USE COMMUNITY**

PLANNED DEVELOPMENT AGREEMENT

This Planned Unit Development Agreement (the “Agreement”) is executed this ____ day of _____, 20____ between ACME TOWNSHIP, a Michigan general law township, with its offices located at 6042 Acme Rd, Williamsburg, MI 49690 (the “Township”), and [Developer], of _____ (the “Developer”).

RECITALS

- A. The Developer owns approximately ____ acres of real property located at _____ in Acme Township, Grand Traverse County, Michigan (the “Property”), more specifically described on the attached Exhibit A.
- B. The Developer applied to the Township for zoning approval to develop the Property as a Planned Development (“PD”). A copy of the approved conceptual PD plan, as required by the Township’s Zoning Ordinance, depicting the scope of the development (the “Project”), dated _____, 20__ and on file with the Township, is attached hereto as Exhibit B.
- C. Following Conceptual Approval of PD Plan, Article XIX of the Acme Township Zoning Ordinance (“Zoning Ordinance”) requires the preparation of a contract setting forth the conditions upon which the approval has been granted, which in turn serves as the basis for site plan approval, and thereafter the development, use, and maintenance of the Project. Township Board approval of the contract is required, **and the contract is to incorporate and attach a final site plan**. In contemplating the Developer’s request to seek Conceptual Approval of a PD Plan, the Township Planning Commission and Township Board adopted certain conditions of approval, which were relied upon by the Planning Commission and Township Board in granting their approval. The conditions, if any, adopted by the Planning Commission and Township Board, are attached as Exhibit C. Additional conditions of approval may also be included within the minutes of relevant meetings of the Planning Commission and/or Township Board. Furthermore, any representations or promises made by the Developer during the zoning review and



approval process for the Development (whether oral or in writing) shall also be additional conditions of approval if deemed appropriate by the Township.

- D. The Developer shall develop the Property only as specified in the final approved Conceptual PD Plan consistent with all conditions and requirements (hereinafter, the development of the Property shall be referred to as the “Project”).
- E. In reliance on their mutual promises and in order to memorialize their understanding, the parties have determined to enter into this Agreement.

GENERAL PROVISIONS

- A. The terms of this Agreement represent the product of negotiations between Developer and the Township, and shall be interpreted as a jointly-drafted agreement.
- B. Except as may be modified by this Agreement, the Zoning Ordinance shall apply to the Property. Any substantial violation of the Zoning Ordinance by the Developer with respect to the Property shall be deemed a breach of this Agreement.
- C. The Zoning Board of Appeals (ZBA) shall have no jurisdiction over the Property of the application of this Agreement.
- D. A material breach of this Agreement by Developer shall constitute a nuisance *per se*. In the event of a breach of this Agreement by Developer, its agents, officers, employees, or persons acting in concert with it, the Township may notify Developer of the occurrence of the breach and issue a written notice requiring the breach be cured within thirty (30) days; provided, however, that if the breach, by its nature, cannot be cured within thirty (30) days, Developer shall not be in breach hereunder if Developer commences the cure within the thirty (30) day period and diligently pursues the cure to completion. Failure to comply with such notice shall render Developer liable to the Township in any suit for enforcement for actual costs incurred by the Township including, but not limited to, attorneys’ fees, expert witness fees and the like.
- E. This Agreement contains the entire agreement between the parties. No statements, promises, or endorsements made by either party or agent of either party that are not contained in the Agreement shall be valid or binding (is this inconsistent with Section C under Recitals that states that comments/promises made orally, in writing, or contained in the minutes are binding?). This Agreement may not be amended except in writing signed by the parties and recorded in the same manner as this Agreement. In the event Developer desires to propose an amendment, an application shall be made to the Township Planner and/or Zoning Administrator, who shall process the application in the same manner called for in the PD Ordinance for an original application, with required public hearing(s), with notification of the public to follow then-existing Township



procedures. Minor amendments to the site plan following engineering approvals that do not change the basic scope, extent, or nature of the project, and that do not alter the basis for approval of the project, can be accomplished, at the Planning Commission's discretion, as site plan amendment under the Zoning Ordinance, rather than amendments to the PD Plan or Agreement. **Minor amendments to the site plan as a result of engineering reviews of the site plan (e.g. minor adjustments in road, sidewalk, or utility design or location) can be approved administratively through the Planning and Zoning Department.**

- F. It is understood and agreed by the parties that if any part, term, or provision of this Agreement is finally held by the courts to be illegal or in conflict with any law of the State of Michigan or the United States, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular part, term or provision held to be invalid; provided, however, that if the provision, part of term invalidated is so fundamental to the entire Agreement that its purpose is frustrated, the Agreement is voidable at the option of either party.
- G. This Agreement shall be governed by the laws of the State of Michigan, both as to interpretation and performance. Any and all suits for any and every breach of this Agreement may be instituted and maintained in any court of competent jurisdiction in the County of Grand Traverse, State of Michigan.
- H. No waiver of any breach of this Agreement shall be held to be a waiver of any other or subsequent breach. All remedies afforded in this Agreement shall be taken and construed as cumulative, that is, in addition to every other remedy provided by law.
- I. The signers of this Agreement warrant and represent that they have the authority to sign this Agreement on behalf of their respective principals and the authority to bind each party to this Agreement according to its terms. Further, each of the parties represents that the execution of this Agreement has been duly authorized and is binding on such party.
- J. This Agreement shall run with the land and bind the parties, their heirs, successors, and assigns. This Agreement shall be recorded in the Grand Traverse County Records **by Developer and a recorded copy thereof shall be delivered to the Township forthwith (Or the other way around: recorded by Twp, delivered to Developer?)**. It is understood that the Property is subject to changes in ownership and/or control at any given time, but that successors shall take their interest subject to the terms of this Agreement.
- K. It is understood that the members of the Township Board and/or Township Administration and/or its departments may change, but the Township shall nonetheless remain bound by this Agreement.



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- L. Whenever the consent or approval of either of the parties hereto or their agencies, commissions, departments, representatives or successor is required, such consent or approval shall not be unreasonably delayed, conditioned, or withheld.
- M. Notwithstanding the foregoing, Developer, for itself and its successors and assigns, retains the right at any time prior to the commencement of construction of the improvements contemplated by the PD Plans to terminate the PD.
- N. It is agreed that the final terms, conditions, requirements, and obligations of this Agreement represent the mutual understanding and agreement of the parties, and Developer fully accepts and agrees to the terms, conditions, requirements, and obligations contained herein, and shall not be permitted in the future to claim that their effect results in an unreasonable limitation upon the use of all or any portion of the Property, or to claim that enforcement of the terms and provisions of this Agreement cause an inverse condemnation, due process violation, or taking of all or any portion of the Property. Moreover, it is agreed that the improvements and undertakings described in this Agreement are necessary and roughly proportionate to the burdens created by the Development, and are necessary in order to ensure that public services and facilities necessary for and affected by the Project will be capable of accommodating the Development on the Property and the increased service and facility loads caused by the Project; to protect the natural environment and conserve natural resources; to ensure compatibility with adjacent uses of land; to promote the use of the Property in a socially, environmentally, and economically desirable manner; and to achieve legitimate objectives authorized under the **Michigan Zoning Enabling Act, MCL 125.3101 et seq.**

It is further agreed and acknowledged that all improvement required to be constructed and/or financed by Developer, both on-site and off-site, are clearly and substantially related to the burdens to be created by the Development and/or use of the Property, and all such improvements without exception are clearly and substantially related to the Township's legitimate interest in protecting the public health, safety, and general welfare, are roughly proportionate to such burdens created by the Development. It is further agreed that all fees to be imposed, as contemplated in this Agreement, do not constitute "taxes."

TOWNSHIP OF ACME

Jay B. Zollinger, Supervisor

Cathy L. Dye, Clerk



EXHIBIT A

LEGAL DESCRIPTION(S)

Land in the Township of Acme, Grand Traverse County, Michigan, more fully described as:

Parcel A

Address: 4160 E M-72, Williamsburg, MI 49690
Parcel No.: 28-01-102-011-00
Legal Description: PT NW 1/4, SEC 2 T27N R10W COM NW SEC CNR, S 86 DEG 43' E 596.16', S 01 DEG 17' W 145.81' TO SLY HWY R/W & POB, S 88 DEG 42' E 205.81', S 300.34', S 66 DEG 97' W 325.36' TO SLY SHR ACME CREEK, N 13 DEG 23' W 90.08', N 16 DEG 30' E 48.41' TH N 9 DEG 10' W 109.34', N 35 DEG 27' E 56.73', E 72.45', N 150' TO POB.

Parcel B

Address: Street Number Not Assigned, Williamsburg, MI 49690
Parcel No.: 28-01-102-011-25
Legal Description: PART OF NW 1/4 SEC 2 T27N R10W COM NW SEC COR TH S 86 DEG 43' E 596.16 FT TH S145.81 FT TO SLY HWY R/W TH S 88 DEG 42' E 205.81 FT TH S 01 DEG 25' E 300.34 FT TO POB TH S 88 DEG 42' E 100.11 FT TH S 536.60 FT TO SHR ACME CREEK TH ALG SD SHR N 55 DEG 51' W 7.19 FT TH N 87 DEG 11' W 26.10 FT TH N 40 DEG 11' W 92.88 FT TH N 52 DEG 59' W 61.87 FT TH N 38 DEG 33' W 54.80 FT TH N 43 DEG 42' W 94.47 FT TH N 33 DEG 31' W 64.06 FT TH N 43 DEG 42' W 117.95 FT TH N 50 DEG 34' W 68.80 FT TH N 66 DEG 07' E 325.26 FT TO POB

Parcel C

Address: 4200 E M-72, Williamsburg, MI 49690
Parcel No.: 28-01-102-014-01
Legal Description: PT NW 1/4 SEC 2 T27N R10W COM AT NW CNR SEC 2 TH S 86 DEG 43'27" E 895.66' TH S 01 DEG 30'51" E 430.44' TO POB TH S 88 DEG 42'59" E 234.60' TH S 01 DEG 25'35" E 494.39' TH S 86 DEG 43'27" E 185.62' TH S 01 DEG 25'35" E 250' TO A PT ON A TRAVERSE LINE ALONG ACME CREEK TH S 59 DEG 48'00" W 89.73' TH N 73 DEG 15'02" W 122.46' TH N 28 DEG 44'26" W 132.64' TH N 55 DEG 32'38" W 200.73' TH N 01 DEG 30'51" W 540.18' TO POB SPLIT ON 09/03/1998 FROM 01-102-014-00;

Parcel D

Address: 4230 E M-72, Williamsburg, MI 49690
Parcel No.: 28-01-102-010-00
Legal Description: W 214.5' OF NE 1/4 OF NW 1/4 ALSO E 185' OF N 915' OF NW 1/4, NW 1/4. SEC 2 T27N R10W.



EXHIBIT B

APPROVED CONCEPTUAL PD PLAN DRAWINGS

Attached herein to this Agreement are the approved Conceptual PD Plan drawings.

Working Draft

EXHIBIT C

SPECIFIC CONDITIONS

The following conditions have been adopted by the Township Planning Commission and Township Board:

A. Density:

- 1) The PD Plan proposes seventy six (76) detached single-family dwelling units on the 12.51 acres designated as MHN – Mixed Housing Neighborhood District for a density of 6.08 du/ac. The MHN District allows up to twelve 12 du/ac, and therefore the Project shall not exceed **one hundred fifty (150)** dwelling units in the area designated MHN on the PD Plan.
- 2) The PD Plan proposes fifty (50) multifamily units on the 5.66 acres designated as C – Corridor Commercial District for a density of 8.83 du/ac. The C District allows up to 14 du/ac, and therefore the Project shall not exceed **seventy nine (79)** dwelling units in the area designated C on the PD Plan.

B. Land Use: In addition to the aforementioned allowable dwelling units, the following land uses by type and area shall be allowed in the area designated C on the PD Plan:

- 1) Commercial – 38,300 square feet
- 2) Office – 16,200 square feet

C. Storm Water: The PD Plan that has been presented illustrates a number of LID storm water management techniques. Specific techniques to be implemented, or moreover prohibited may need to be listed.

D. Acme Creek Monitoring: John Iacoangeli's report recommended continuous monitoring of Acme Creek. The creek's baseline conditions should be determined through pre-construction monitoring, continuous monitoring during construction at an interval determined by the Planning Commission and/or Township Board, and at a potentially extended interval for a period of time after construction.

E. Non-motorized Facilities: A requirement that a trail easement be created and filed with the Grand Traverse County Register of Deeds. Sidewalks shall be included along both sides of all street right-of-ways and around the perimeter of each mixed-use buildings. May want to consider sidewalk widths in the specific conditions.

F. Cross Access Management: Cross-access points into the GTTC shall be created as indicated on the site plan.

G. Existing Tree Cover: The plan calls for preserving the existing tree coverage, specifically the mature hardwoods and pines, to the greatest extent possible. Conditions may want to be established to ensure this ends up being the case and that no unnecessary clear cutting takes place.

H. Short-Term Rentals: Short-term rental of the detached single-family homes shall be allowed without a license from Acme Township.



- I. **Architecture and Construction:** Single-family dwelling units shall be built on site and be of a design similar to that which has been presented in the application and accompanying site plan. The single-family homes shall sit on a foundation or slab and shall not be on a chassis. The mixed use buildings presented in the plan shall meet all the architectural requirements of the base zoning district.
- J. **Condominium Home Owner's Association Bylaws:** A copy of the condominium HOA bylaws shall be submitted to the Township

Working Draft

planning review

Date: 12.06.2017

From: John Iacoangeli
To: Karly Wentzloff, Chairperson
ACME TOWNSHIP PLANNING COMMISSION
6042 Acme Road
Traverse City, MI 49690

Project: Kelly's Restaurant LLC
4240 East M-72
PD 2016-01

Request: Preliminary Approval for a Planned Development

Applicant: Kelly's Restaurant LLC
4240 East M-72
Williamsburg, MI 49690

Parcel Address: 4240 East M-72

Parcel Number: 28-01-102-014-01 (4.58 Acres)
28-01-102-010-00 (8.47 Acres)
28-01-102-011-00 (2.34 Acres)

General Description:

The Applicant is resubmitting an application for a Planned Development based on comments received during a preliminary review in November 2016 and March 2017. The proposed concept plan envisions a retail/residential mixed use development with frontage on M-72 consistent with the Corridor Commercial (C) zoning designation and a series of resort-style neighborhoods within the interior of the site on property zoned Mixed Housing Neighborhood (MHN). The overall site is 20.40 acres in size and the CC zoning consists of 7.31 acres and the MHN zoning comprises 13.17 acres.

The property in 2003 was zoned B-2 (Commercial) and currently is zoned C (Corridor Commercial) and MHN (Mixed Housing Neighborhood). The Applicant is proposing to use the Township's Planned Development provision to develop this project.

The subject property has been the recipient of several special use permits, including:

SUP 1-9-84-1	Movie Theater
SUP 6-4-84-1	Minor Amendment to reduce the number of screens from 3 to 2.
SUP 2003-01P	Convert the theater to a banquet facility and add new commercial kitchen.
SUP 2004-4P	Minor Amendment to amend landscaping
SUP 2006-04P	Minor Amendment to allow outdoor events.

If the PD is approved these SUP's will no longer apply to the property.

The proposed development will be served by public sewer and water provided through an agreement from the Grand Traverse Band.

Land Use and Zoning Allocation

The Applicant is proposing through the PD process to reallocate the underlying zoning to slightly increase the C-Corridor Commercial and decrease the MHN -Mixed Neighborhood Housing.

Based on the information provided on the plans the commercial buildings will have a lot coverage of 15% and floor area ratio (FAR) of .87, which indicates that the proposed commercial development is not dense and suburban in character. The proposed housing unit density is well within the limits of the ordinance. The MHN allows up to twelve (12) dwellings per acre and the proposed development ranges from 6.08 units per acre in the MHN district and 8.83 units per acre in the C district. The lower density in the MHN is a result of the Applicant desiring to maintain and work within the existing tree cover.

Land Use	Commercial	Office	Housing
C (Corrdior Commercial)	38,300	16,200	50 (8.83)
MHN (Mixed Housing Neighborhodd			76 (6.08)
Total	38,300	16,200	126

Zoning Category	Existing	Proposed	Total
C (Corridor Commercial)	5.00	5.66	18.17
MHN (Mixed Housing Neighborhodd	13.17	12.51	18.17

Planned Development Process:

The Planned Development (PD) option is intended to allow, with Township approval, private or public development which is substantially in accord with the goals and objectives of the Township Master Plan and Future Land Use Map.

Use of the PD option is to encourage flexibility in the control of land development by encouraging innovative design through an overall development plan that provides a variety of design and layout; to achieve economy and efficiency in the use of land, advance the goals of the community master plan, integrate and preserve natural resources, maximize use of public services and utilities and encourage useful open spaces suited to the needs of the parcel in question.

The PD process is divided into reasonable and manageable parts.

Part 1 is the pre-application process where the Applicant requests the use of the PD provisions and the Planning Commission evaluates if the request is consistent with community goals and objectives as outlined in the zoning ordinance provision.

Part 1 is the gateway to the PD process. The Applicant is required to meet 5 out of 9 community objectives in order for the pre-application to be considered. These objectives tie directly to the Community Master Plan and the Township's goal of protecting and preserving natural resources and open space. The Pre-Application was approved at the March 13, 2017 Planning Commission meeting.

Part 2 commences once the pre-application is approved. This includes the submission of a full application package which includes a detailed narrative and site design. If the Planning Commission finds that the application is consistent with the intent of the ordinance and community master plan it schedules a public hearing.

(After the public hearing, the Planning Commission shall report its findings and recommendation to the Board. The Planning Commission shall review the proposed PD plan and make a determination about the proposal's qualification for the PD option and for adherence to the following objectives and requirements:

1. The proposed PD adheres to the conditions for qualification of the PD option and promotes the land use goals and objectives of the Township.
2. All applicable provisions of the PD ordinance shall be met. If any provision of this ordinance shall be in conflict with the provisions of any other section of this chapter, the provisions of the ordinance shall apply to the lands embraced within a PD area.
3. There will be at the time of development, an acceptable means of disposing of sanitary sewage and of supplying the development with water and the road network, storm water drainage system, and other public infrastructure and services are satisfactory.

Part 3 commences with the approval of application and this allows the Applicant to build the project in one phase or multiple phases, subject to a submission and approval of a site plan(s).

Preliminary Application Evaluation

Criteria	Response
Land use areas represented by the zoning districts listed as A-1, R-1, R-2, R-3, B1S, B-2, B-3, and B-4 of this Ordinance.	The subject properties are zoned C-Commercial Corridor and MHN – Mixed Housing Neighborhood.
Vehicular circulation including major drives and location of vehicular access including cross sections of public streets or private places.	The proposed development maintains the existing two curb cuts on M-72. In addition, the plans indicate two stub streets with the adjacent Grand Traverse Town Center property. Sheet 16 delineates the circulation system classification within the project. Sheets 19 through 22 show the street cross sections within the proposed development. All cross sections show sidewalks.

Transition treatment, including minimum building setbacks to land adjoining the PD and between different land use areas within the PD.	The proposed development is a walkable neighborhood where the different uses are in close proximity to one another. The largest buffer area is along the Acme Creek corridor where the combination of setback from the creek and the wetlands. Setback from the creek is 50 feet and the wetland setback is 25 feet. In some locations the setbacks exceed 100 feet. Sheets 4, 5 and 6 illustrate the various setbacks and boundaries.
The general location of nonresidential buildings and parking areas, estimated floor areas, building coverage and number of stories or height.	Sheet 8 include information on building type, number of floors, and housing density.
The general location of residential unit types and densities and lot sizes by area.	Sheet 8 include information on building type, number of floors, and housing density.
Location of all wetlands, water and watercourses, proposed water detention areas and depth to groundwater.	Sheet 5 notes the location of ecologically sensitive areas including delineated wetland boundaries. Sheet 23 addresses the storm water collection system, location of ponds and utilization of rain gardens. Although not required as part of this phase, the Township Engineer has been asked to perform a general review of the proposed stormwater network. The Applicant has been briefed, and is well aware, of the water quality issues associated with Acme Creek. It has been recommended that prior to implementation and during construction that water quality samples be undertaken periodically in the same fashion as GTTC.
The boundaries of open space areas that are to be preserved or reserved and an indication of the proposed ownership.	Sheet 7 provides a framework where open space within the development will occur. Sheet 24 illustrates the location of park and open space within the development. All open space is within the boundaries of the development.
A schematic landscape treatment plan for open space areas, streets and border/transition areas to adjoining properties.	Sheets 19 through 22 illustrate the landscape treatment along internal streets and Sheet 24 notes the open space provided within the site, much of which is provided through the preservation of the existing tree cover, and setbacks from Acme Creek and delineated wetlands.

<p>A preliminary grading plan, showing the extent of grading and delineating any areas, which are not to be graded or disturbed.</p>	<p>Sheet 23 provides the stormwater plan for the site which shows the proposed topography for the site. However, a grading plan which addresses this specific criteria is not provided.</p>
<p>A public or private water distribution, storm and sanitary sewer plan.</p>	<p>Sheet 25 illustrates the location of water lines and the sanitary sewer collection system.</p>
<p>Elevations of the proposed buildings using durable and traditional building materials shall be used. Materials such as exterior insulation finish system (EIFS), fluted concrete masonry units, concrete panels, panel brick, and scored concrete masonry unit block are not considered durable and traditional building materials.</p>	<p>Sheets 10 through 15 show proposed building elevations. Materials appear to be traditional; wood, metal, brick and stone. Detailed construction plans will be reviewed to ensure that non-traditional materials are not used.</p>
<p>A written statement explaining in detail the full intent of the applicant, showing dwelling units types or uses contemplated and resultant population, floor area, parking and supporting documentation, including the intended schedule of development.</p>	<p>Sheet 27 denotes the phasing plan for the development which is proposed in four stages. Phase 1 would be the housing units along Acme Creek along the southern portion of the property.</p>
<p>A market study, traffic impact study, and /or environmental impact assessment, if requested by the Planning Commission or Board of Trustees.</p>	<p>The proposed development was included in the regional network assessment as part of the GTTC traffic study. Improvements to M-72 and Lautner Road where based on full build-out of GTTC so there should not be a problem with capacity. Based on the EPA Mixed-Use Traffic model the development will result in 6,922 daily trip ends consisting for home-based work trips, home-based other related trips, and non home-based trips. The AM Peak traffic is estimated at 249 trips and the PM Peak has a trip generation of 739. As a result of this assessment a full traffic study doesn't appear to be warranted. However, this is predicated on revised build-out plans for GTTC. If the revised plans for GTTC result in less commercial development than originally approved than there should be added capacity within the traffic network. The housing market has been assessed by Networks Northwest through a regional Target Market Assessment. Based on these</p>

	finding there is demand for both year-round single family and multifamily housing. It should be noted that some of the proposed housing is targeted for seasonal residents.
A pattern book or design guidelines manual if requested by the Planning Commission or Board of Trustees.	This is a decision the Planning Commission can make. However, the elevations presented in the plans provides a reasonable insight to the design intent of the development.

Assessment of the Application

The application and submission materials address the criteria outlined in the ordinance for the "Submittal of the PD Plan and Application Materials."

Findings

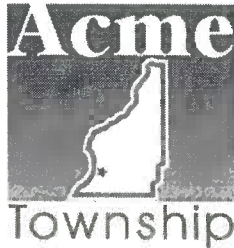
The application is sufficiently complete to schedule a public hearing. The plans provided a comprehensive framework to provide the Planning Commission and the public enough information to evaluate the appropriateness of the project. In advance of the public hearing the following information needs to be submitted:

1. A grading plan that illustrates areas within the property that will be disturbed (graded) and areas that will not be disturbed. Approximate amounts of disturbed material should be included in the plan or plan narrative.
2. A narrative how the Applicant will approach water quality monitoring of Acme Creek.
3. Submission of discussions and recommendations from MDOT on traffic related concerns.
4. Documentation supporting the extension of water from GTB to the property.

Recommendation

It is recommended that the Planning Commission schedule a public hearing on the application.

Application Number: PD 2016-01



PLANNED DEVELOPMENT APPLICATION

Township of Acme, Grand Traverse County, Michigan

6042 Acme Road, Williamsburg, MI 49690

Phone: (231) 938-1350 Fax: (231) 938-1510 Web: www.acmetownship.org

Planning & Zoning Administrator: Shawn Winter Email: swinter@acmetownship.org

OWNER INFORMATION (please type or print clearly)

Name: KELLY RESTAURANTS LLC Phone: 231-938-3663

Mailing Address: 4230 M-72 EAST HIGHWAY

City: WILLIAMSBURG State: MI Zip: 49690

Email Address: info@cateringbykellys.com

APPLICANT INFORMATION (please type or print clearly)

Name: INFLUENCE DESIGN FORUM LLC Phone: 231-944-4114

Mailing Address: 120 E. FRONT ST. 2ND FLR. LOFT PO BOX 1507

City: TRAVERSE CITY State: MI Zip: 49684

Email Address: nate@influencedesignforum.com

PROJECT INFORMATION (please type or print clearly)

Name of Project: PUD Application

Address: 4230 M-72 EAST HIGHWAY

Parcel Number(s): SEE PLANS Current Zoning: SEE PLANS

Existing Site Plan Reviews, Special Use Permits, or Variances: NO

Proposed Use/Change to Property: SEE PLANS

Estimated Start and Completion Dates of Each Phase: SEE PLANS

Planning Commission Criteria of Qualifications Approval Date: _____

APPLICATION SUBMISSION**Format Requirements**

All applications, reports and drawings shall meet the following requirements upon submission:

	One paper copy and one digital copy of complete application materials
	Drawings provided in AutoCad™, Microstation, or similar site civil/architectural drawing format requested by the Planning Commission
	Drawings scaled to not less than one 1 inch equals 100 feet (unless otherwise allowed by Township)
	All other graphics and exhibits, text or tabular information submitted in Adobe Acrobat™ "pdf" Format

Plan Element Requirements

A proposed PD application shall contain the following elements:

Met	Planned Development Plan Elements
	1. Boundary survey of exact acreage prepared by a registered land surveyor or civil engineer
	2. Topographic map of entire project area at a maximum two-foot contour interval. Includes major stands of trees, bodies of water, wetlands, unbuildable areas
	3. A proposed development showing the following, but not limited to:
	a. Land use area zoning districts
	b. Vehicular circulation, major drives, vehicular access, cross sections of public and private streets
	c. Transition treatment, including minimum building setbacks to adjacent land and between land use areas within planned development
	d. General location of nonresidential buildings and parking areas, estimated floor areas, building coverage and number of stories/heights
	e. General location of residential unit types, densities, and lot sizes by area
	f. General location of LID storm water management technologies
	g. Location of all wetlands, water and watercourses, proposed water detention areas and depth to ground water
	h. Boundaries of open space areas that are to be preserved or reserved and an indication of property ownership
	i. Schematic landscape treatment plan for open space, streets, and border/transition areas adjoining properties
	j. Preliminary grading plan, showing extent of grading and delineating any areas which are not to be graded or disturbed
	k. Public or private water distribution, storm, and sanitary sewer plan
	l. Elevations of proposed buildings using durable and traditional materials
	m. Written narrative explaining in detail the full intent of the project, showing dwelling unit types or uses contemplated, resultant population, floor area, parking and supporting documentation, intended schedule of development
	4. Market study, traffic impact study, and/or environmental impact assessment (if requested by the Planning Commission or Township Board)
	5. Pattern book or design guidelines manual (if requested by the Planning Commission or Township Board)

Agency Requirements

Documentation from the following regulatory agencies is required to determine if the proposed PD project appears likely to meet their permit requirements to promote public health, safety, and welfare.

	Grand Traverse County Health Department (well and septic)
	Grand Traverse County Department of Public Works (sewer)
	Grand Traverse Band of Ottawa & Chippewa Indians (water)
	Grand Traverse County Soil Erosion and Sediment Control Department (soil erosion)
	Grand Traverse Metro Fire Department (emergency services)
	Grand Traverse County Sheriff's Department (public safety)
	Grand Traverse County Road Commission (new roads, county road driveways)
	Michigan Department of Transportation (driveways, projects along US-31 and M-72)
	Michigan Department of Environmental Quality (wetlands)

PLANNING COMMISSION REVIEW

Once the application is determined to be complete, the Planning Commission will review the proposed PD project's qualifications for a PD option and adherence to the following objectives and requirements:

1. The proposed PD adheres to the conditions for qualification of the PD option and promotes the land use goals and objectives of the Township.
2. All applicable provisions of the PD Article shall be met. If any provision of the Article shall be in conflict with the provisions of any other section of the Article, the provisions of Section 19.7 Acme Township Zoning Ordinance shall apply to the lands embraced within the PD area.
3. There will be at the time of development, an acceptable means of disposing of sanitary sewage and of supplying the development with water and the road network, storm water drainage system, and other public infrastructure and services are satisfactory.

Following the preliminary review, the Planning Commission will set a public hearing on the proposed PD plan and will give notice as specified in Section 9.1.2(c) Acme Township Zoning Ordinance.

After completion of the review and public hearing, the Planning Commission will report its findings and recommendation to the Township Board for final approval.

TOWNSHIP BOARD APPROVAL

Upon recommendation from the Planning Commission, the Township Board will review all findings and make a final determination as to approve the PD project or not. If approved, then the PD project may proceed forward in accordance with the requirements of Section 19.7.4 and 19.8 of the Acme Township Zoning Ordinance.

FEES AND ESCROW POLICY ACKNOWLEDGEMENT

At the time of application, the applicant will submit the PD application fee according to the Acme Township Schedule of Fees. Additionally, the applicant must sign an Escrow Policy Acknowledgement and submit an initial escrow deposit as determined by the Township.

Application Number: PD 2016-01

AFFIDAVIT

The undersigned affirms that he/she is the OWNER (owner, agent, lessee, or other interested party) involved in this petition and that the foregoing answers, statements and information are in all respects true and, to the best of his/her knowledge, correct. By making this application, the undersigned grants all officials, staff and consultants of Acme Township access to the subject property as required and appropriate to assess site conditions in support of a determination as to the suitability of the proposed project and/or current or future Planned Development and Zoning Ordinance compliance.

Signed: Dan Kelly Date: 11/28/17
Print Name: DAN KELLY

NOTES - FOR TOWNSHIP USE ONLY

Date Received: 11/28/17 Fee Tendered: \$1,000.00
Escrow Amount: \$2,500.00 Project No. (T&A): 080 (for billing)
Date of Preliminary Planning Commission Review: 12/11/17
Date of Public Hearing: _____
Date of Public Hearing Notice: _____
Date of Planning Commission Recommendation: _____
Recommended to Township Board for Approval: **YES** **NO**



Planned Unit Development Site Plan & Application

Kelly Restaurant's LLC 4240 E M-72

influence
design
forum
LLC.

iDF



Studio Profile

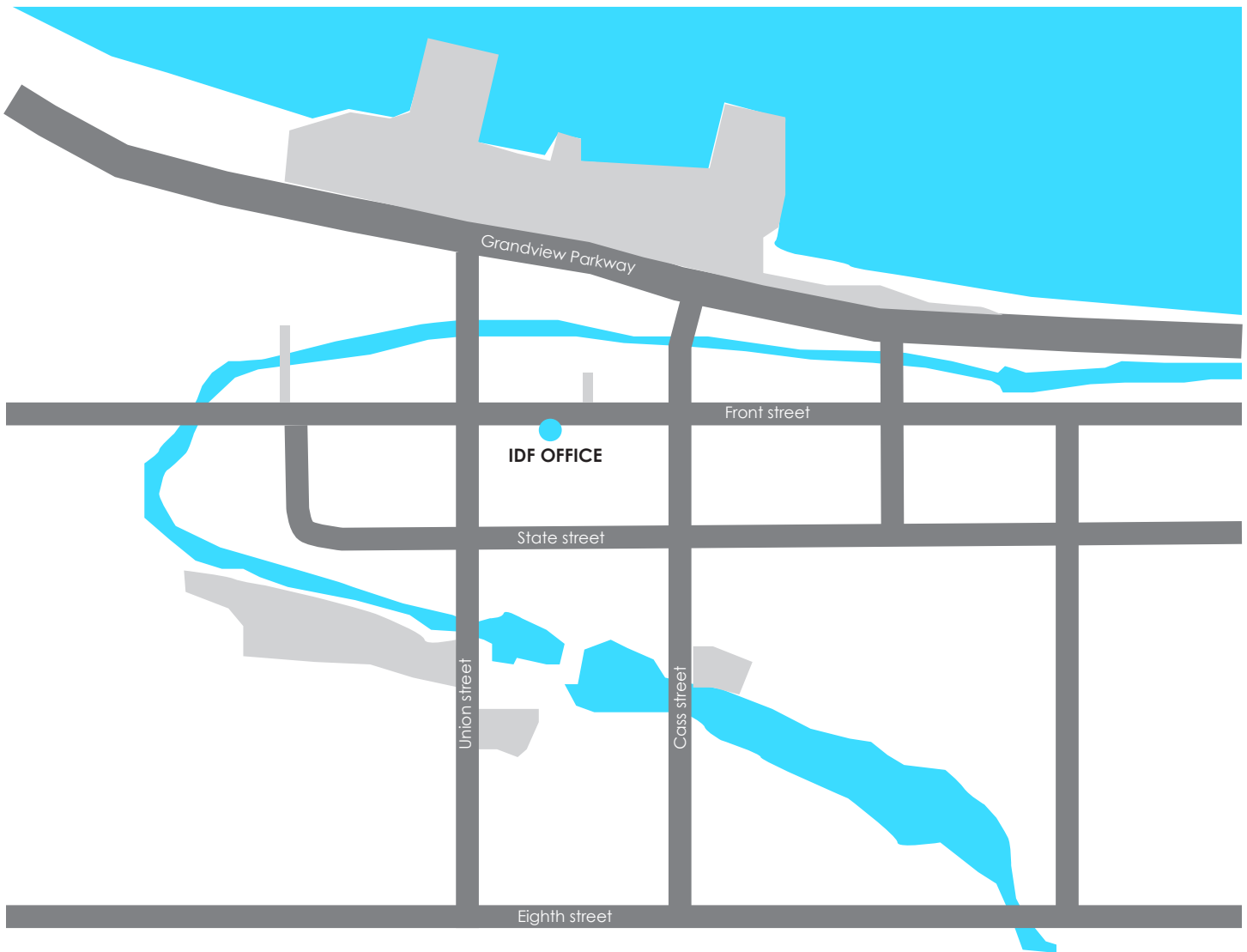
BACKGROUND

Based in Traverse City Michigan and available worldwide – Influence Design Forum (IDF) is a collaboration of professionals exploring the seams that make up the ecological and social context of landscape, art, pop culture, and the built environment.

We work at many different spatial scales - We design public spaces, prepare cities for the future, celebrate rural landscapes, inject art into the landscape, design dwellings and insert creativity to retail and storefronts, explore intimate spaces, and imagine new possibilities by testing design ideas.

Our unconventional project teams bring our clients together with a diverse group of designers, planners, artists, scientists, engineers, and policy makers to problem solve, innovate, and research new ideas for the future. Part think-tank, part creative agency, we like to think of ourselves as visionaries who think systematically how design works - From the importance of building a strong identity to support a brand to understanding social behaviors of public spaces to the workplace and back home again, transportation, rural landscapes, and entire neighborhoods.

Contact



Nathan G. Elkins, ASLA

Influence Design Forum LLC
120 E. Front St., 2nd Flr. Loft
P.O. Box 1507
Traverse City, MI 49685

nate@influencedesignforum.com
(231) 944.4114



www.influencedesignforum.com

studio

120 East Front St.
2nd Floor Loft
PO Box 1507
Traverse City MI 49685
(231) 944.4114

**influence
design
forum**
LLC

November 28, 2017

Acme Township
Shawn Winter, Planning & Zoning Administrator
6042 Acme Rd.
Williamsburg, MI 49690

**RE: Planned Unit Development Site Plan & Application for Kelly Restaurant's LLC, 4240 M-72
East Highway, Williamsburg, MI 49690**

Dear Shawn,

Influence Design Forum (IDF) is pleased to submit a full PUD application on behalf of Dan Kelly and Kelly Restaurant's. Please find attached the application form, site plan, plan elements, studies, and permitting agency reviews.

We are excited and look forward to collaborating with the Township.

Sincerely,
INFLUENCE DESIGN FORUM

A handwritten signature in black ink, appearing to read 'N. Elkins', followed by a horizontal line and a period.

Nathan G. Elkins, ASLA
Studio Director

cc. Dan Kelly
John Iacoangeli, Planning Commission Chair



GT County Public Works

Permitting Agency Review

1. RESPONSE FROM COUNTY DPW
2. SEWER & WATER STUDY



**GRAND TRAVERSE COUNTY
DEPARTMENT OF PUBLIC WORKS**

PUBLIC SERVICE BUILDING
2650 LAFRANIER ROAD
TRAVERSE CITY, MI 49686-8972
(231) 995-6039 • FAX (231) 929-7226

November 30, 2017

Nate Elkins, IDF
120 East Front Street
Traverse City, Michigan 49686

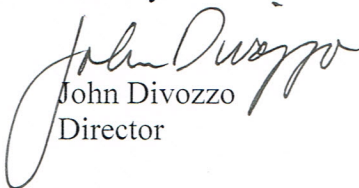
Re: 4230 M-72 Development

Dear Nate:

The DPW has performed a preliminary review of the proposed utility needs for the PUD and mixed-use development plan in Acme Township. Based upon information provided, the DPW is confident that capacity exists in the sewer system to support this development.

Please contact our office if you have any questions, comments, or concerns.

Thank you.


John Divozzo
Director



RECYCLED PAPER



February 20, 2017

RE: Sewer and Water Demand Estimate, Proposed PUD, Acme Township, Michigan

The purpose of this preliminary study is to determine initial water and sewer demand estimates for a new mixed use PUD proposed in Acme Township. The development proposes various commercial, office and residential uses.

The demand basis for this initial water and sewer study is based on the PUD concept prepared by IDF Studios along with a chart indicating the anticipated uses and density of the overall development. These documents include PUD Concept Alternative 2, Dated January 1, 2017 and the development analysis spreadsheet dated January 27, 2017.

The flow estimates are based on utilizing Table 1 of the Acme Township Schedule of Residential Equivalents, dated March, 2016. This approach defines one residential equivalent unit (REU) as approximately 200 gallons per day. This is slightly lower than the typical 300 gallons per day that has historically been the standard, however, this appears to fit this development plan very well due to the large number of smaller single family units and the fact that most fixtures utilized in today's construction generate much lower flows than the historical fixtures that were utilized.

The flow estimates are based on the provided data included in The development analysis spreadsheet prepared by IDF studios. The spreadsheet breaks the anticipated uses down into three categories. These include Commercial, Residential and Office spaces. At this point there are no defined uses in the commercial and office space components of this development so as the project is built out the uses may alter and changes the sewer and water demands based on the specific uses that are proposed for each building.

Based on the size and location of the project, we have removed 6,000 square feet from the overall building area anticipated for the commercial and office uses to include three restaurants. As noted, above, the residential units proposed in this development are 1 and two bedroom units. Utilizing the value of 200 GPD for each of these residential units will help provide for some buffer if more intense uses are proposed in the commercial and office space component of this development. Utilizing, the REU values outlined in the Acme Township Table 1, Schedule of Residential Equivalents we have come up with the following water and sewer estimates for this conceptual mixed use PUD. The table below outlines the estimated daily sewer and water demand for this development based on the three anticipated uses in this project.

Residential Uses

Total Residential Units Proposed = 156, single and two bedroom units.

Estimated daily flow based on 1 REU = 200 GPD = 156 REU * 200 GPD/REU = 31,200 GPD

Commercial and Office Uses

Total anticipated area of commercial and office space = 57,400 sq.ft

Remove 6,000 sq.ft for restaurant space = 51,400 sq.ft.

Estimated daily flow based on Acme Township Table 1 = 1REU + 0.50 REU per 1,000 sq.ft.

Estimated daily flow = (1REU + 0.50*51.4 sq.ft) = 26.7 REU*200 GPD/REU = 5,340 GPD

Restaurant Uses

Total Seats Proposed = 180, 60 each per restaurant

Estimated daily flow based on 0.125 REU per seat

Estimated Daily Flow = 180 seats*0.125 REU/seat = 22.5 REU * 200 GPD/REU = 4,500 GPD

Total estimated daily flows for the Conceptual PUD = 41,040 GPD



GTBOC Indians

Permitting Agency Review

1. TRIBAL COUNCIL ACTION & APPROVAL OF CONNECTION TO WATERMAIN



**The Grand Traverse Band of
Ottawa and Chippewa Indians**

2605 N. West Bay Shore Drive • Peshawbestown, MI 49682-9275 • (231) 534-7750

Certification of Tribal Council Action
Regular Session of September 20, 2017

**I hereby certify as the Tribal Council Secretary that the foregoing
Motion was Approved and Adopted at the Regular Session of the
Grand Traverse Band of Ottawa & Chippewa Indians Tribal Council**

Williamsburg Conference Center Water Service

Motion made by Tribal Council Member Shomin and Supported by Tribal Council Member Wilson to approve the water connection between Tribal Community Water System and Mr. Dan Kelly, located at 4230 M-72 East, to be paid in full by Mr. Dan Kelly.

6-FOR; 0-AGAINST; 0-ABSENT; 0-ABSTAINING
Motion Carries



Jane A. Rohl, GTB Tribal Council Secretary

CC: Ron Anderson; Joe Huhn

The Grand Traverse Band of Ottawa and Chippewa Indians

Agenda Topic/Title: Williamsburg Conference Center Water Service

If required, all signed documents will be returned the above individual who is responsible to complete with the appropriate offices at GTB-OCI.

Date: 9/20/2017 Date: _____ Date: _____

☐ Unfinished Business New Business ☐ Closed Session

☒ Approval by Motion ☐ Information Only
☐ Resolution Approval # _____ ☐ Other (please specify)

Do you have a past motion: ☒ No ☐ Yes, (please attach)

Outcome Requested: Motion to Approve a water connection between the Tribal Community Water System and Dan Kelly located at 4230 M-72 East to be paid in full by Mr. Dan Kelly.

Signatures: Program Director: [Signature] Date: 9-11-17
Supervisor: [Signature] Date: 9-11-17
Division Manager: [Signature] Date: 9/11/17

Tribal Manager: [Signature] Date: 9-11-2017
Signature of TM needed before this Agenda Request can be added to the TC Agenda

rev 9/07 – MP 1/11 – 5/11 TMO 4/12 TMO 5/12 TMO 2/15 TMO
GTB Forms\Tribal Council\ Tribal Council Agenda Request Form

GRAND TRAVERSE BAND LEGAL DEPARTMENT REVIEW APPROVAL FORM

Date: 8/18/2017
Presented By: Joe Huhn
Department: Public Works

Resolution Number(s):

Document Title(s)/Subject Matter:
Dan Kelly Water main extension
4240 M-72 East Acme Michigan

☒ The above document(s) have been reviewed by the GTB Legal Dept. and are approved for signature &/or further action.

☐ The above document(s) have been reviewed by the GTB Legal Dept. and are NOT approved. Reason:

Reviewed by: John Pelsky

John Pelsky Sept. 11, 2017
Signature Date

Please note: Approval of Documents Does NOT Guarantee Approval by Tribal Council

Rev: 12-04

Do Not Separate Form

GRAND TRAVERSE BAND CFO GRANT REVIEW APPROVAL FORM (MATCH GRANTS)

Date: 8/18/2017
Presented By: Joe Huhn
Department: Public Works

Grant Number(s):

Grant Title(s)/Subject Matter:
Dan Kelly water main extension Acme, MI

☒ The above document(s) have been reviewed by the CFO and are approved for signature &/or further action.

Dollar Amount Requested: 0

☐ The above document(s) have been reviewed by the CFO and are NOT approved. Reason:

Reviewed by: Rebecca L. Woods

Rebecca L. Woods 9/14/17
Signature Date

Please note: Approval of Documents Does NOT Guarantee Approval by Tribal Council

Rev: 12-04

* will Dan Kelly be in competition with our development.

Memorandum

To: Tribal Manager, Tribal Council, Ron Anderson
From: Joseph R. Huhn
Date: 8/18/2017
Re: Water service for Williamsburg Banquet and Conference Center

In 2014 Dan Kelly of the Williamsburg Banquet and Conference Center located at 4230 M-72 East in Acme, MI. had requested water service to his property. At that time, Mr. Kelly had intended on allowing a new Oryana grocery store to locate at this location. Plans had apparently changed and Oryana did not move to this site.

On March 23rd, 2017, I received another call from Mr. Kelly regarding water service for his property in Acme. Mr. Kelly is currently proposing the construction of 120 residential units and up to 30 commercial buildings. The estimated water usage for his proposed development is 41,000 gallons per day. On March 31st, 2017, Mr. Kelly emailed me an official request to service his property with the Tribal community water system (email attached).

To service this development an extension will need to be installed from its existing location going west approximately 1,600 feet. This extension includes the 1,600 feet of 12" water main, two valves and three fire hydrants. The estimated cost to install this infrastructure is \$90,000. Mr. Kelly would be responsible for the full cost of construction, engineering and inspections.

On May 23rd, 2017 Ron Anderson and I had a working session with Tribal Council which Dan Kelly also attended. During the meeting Dan had explained his plans to Council for the development. There was some discussion about the possibility of him receiving credit for the cost of the water main extension. On May 24th, 2017 I met with Dan Kelly again and informed him that there would be no credit for connections from the extension of the water main to his property.

An Income analysis from this project is listed below:

Connections fees: 150 units X \$1,700/unit = \$255,000

Base Rate Income: \$18.15/month base rate x 12 months x 150 units = \$32,670/year

Usage Rate Income: \$2.00/1,000 gallons x 41,000 gallons/day x 365 days = \$29,930/year

Yearly Expenses: Electricity \$2,800 + Chlorine \$326 + Labor \$800 + Depreciation \$3,600 = \$7,526

Total Income minus Expenses: \$62,600 - \$7,526 = \$55,074 + Connection fees of \$255,000

August 18, 2017

Based on the well capacity of our existing system and the current usage, the Tribal Community Water System is capable of supplying the requested flow to this proposed development. It is my recommendation that we allow Mr. Kelly to connect to our system thru the extending of a water main to his property.

If you have any further questions or concerns regarding this issue please call or email me at the number below.

Thanks

Joe Huhn
joe.huhn@gtbindians.com 231-499-4235

Huhn, Joe

From: Catering by Kelly <info@cateringbykellys.com>
Sent: Friday, March 31, 2017 11:30 AM
To: Huhn, Joe
Subject: Water Hook Up
Attachments: Water Demand Estimate.pdf; presentation_pre-app_pc.pdf

Kelly Restaurants, L.L.C

4240 M 72 East
Williamsburg, MI 49690

Phone (231) 938-3663
Cell Phone (231) 342-4550

March 31, 2017

Grand Traverse Band of Ottawa & Chippewa Indians
Mr. Joe Huhn
Joe.huhn@gtbindians.com

Dear Joe,

This is a formal request for your consideration of hooking up to the tribal water supply. As discussed, attached is our preliminary Planned Development Submittal which was approved by the Acme Planning Commission on March 13, 2017. Also attached is an Engineered Water Demand Estimate.

I am asking the tribe to run a water main down M-72 to the Stained Glass Company property, approximately 1600 feet.

We anticipate 120 residential and 30-40 commercial hook-ups. Using \$1700 as a hook-up fee, the calculation more than pays for the extension.

Please consider this request and let me know if the Tribal Council would like to have me formally present my development ideas.

Much Appreciated,
Dan Kelly
Owner, Kelly Restaurants, L.L.C



February 20, 2017

RE: Sewer and Water Demand Estimate, Proposed PUD, Acme Township, Michigan

The purpose of this preliminary study is to determine initial water and sewer demand estimates for a new mixed use PUD proposed in Acme Township. The development proposes various commercial, office and residential uses.

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Restaurant Uses

Total Seats Proposed = 180, 60 each per restaurant

Estimated daily flow based on 0.125 REU per seat

Estimated Daily Flow = $180 \text{ seats} * 0.125 \text{ REU/seat} = 22.5 \text{ REU} * 200 \text{ GPD/REU} = 4,500 \text{ GPD}$

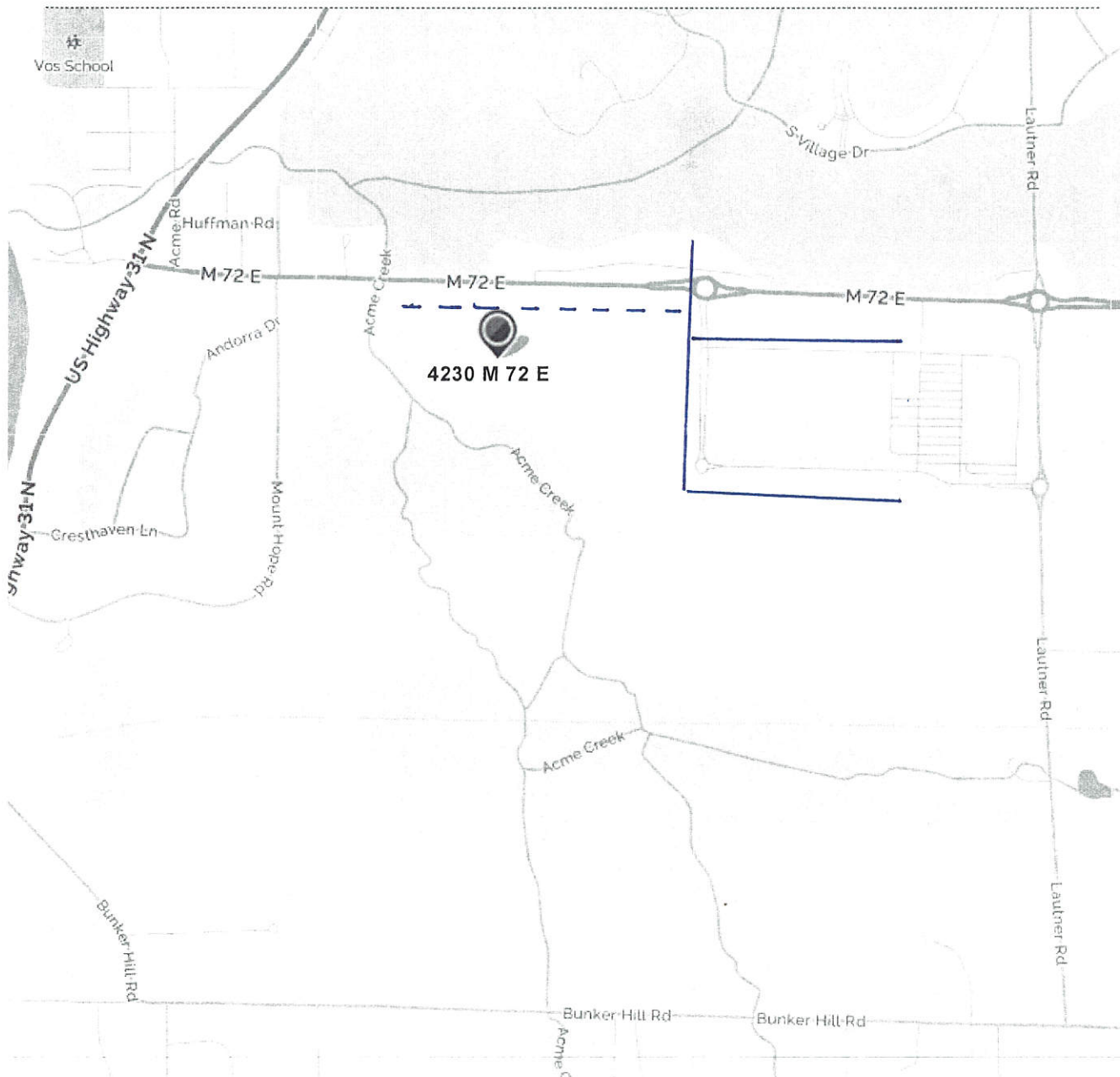
Total estimated daily flows for the Conceptual PUD = 41,040 GPD

Search Results for "4230 M 72 E, Williamsburg, MI 49690-9309"

mapquest

page 1 of 1

1. 4230 M 72 E
4230 M 72 E,
Williamsburg, MI 49690-9309





GT County SESC

Permitting Agency Review

1. PRELIMINARY SITE PLAN REVIEW
2. RESPONSE FROM SESC OFFICE
3. PRELIMINARY STORMWATER RUNOFF CALCULATIONS

SEDIMENTATION CONTROL PROGRAM
400 BOARDMAN AVE.
TRAVERSE CITY, MICHIGAN 49684
PHONE: (231) 995-6042 FAX: (231) 922-4636

PRELIMINARY REVIEW

PERMIT APPLICATION

PART 91, SOIL EROSION & SEDIMENTATION CONTROL, OF ACT 451 OF 1994,
AS AMENDED GTC SOIL EROSION

ALL APPLICATION ITEMS MUST BE COMPLETED

Permit #:
Date Applied:
Expiration:
Receipt #:

APPLICANT: Owner ☐ Developer ☐ Contractor ☐ Engineer ☐ Other ☒

Name:	INFLUENCE DESIGN FORUM LLC			Email:	nate@influencedesignforum.com
Address:	120 E FRONT ST 2ND FLR LOFT			Phone:	231-944-4114
City:	TRAVERSE CITY	State:	MI	Zip:	49684
Address: <input type="text"/>					

SITE LOCATION INFORMATION: NOTE - TWO COMPLETE SET OF PLANS MUST BE ATTACHED

Township:	ACME	Section:		Town:		Range:		Subdivision:		Lot #:	
Address:	4230 M-72 EAST HIGHWAY						City:	WILLIAMSBURG			
State:	MI	Zip:	49690	Property Tax #:							

PROPOSED EARTH CHANGE:

Type of Change:	Size of Earth Change:
MDEQ Permit # (If Applicable):	Permit Fee: \$
Excavation Start Date:	Date to be Completed:

***Make Checks Payable to GTC**

REASON FOR PERMIT:

SOM PA 451, PART 91 REQUIREMENTS

GTC SESC REQUIREMENTS

<input checked="" type="checkbox"/> Within 500' of Lake or Stream *Estimated Distance to lake or Stream: _____ Name of Water Body: <u>ACME CREEK</u>	<input checked="" type="checkbox"/> Commercial Site
<input checked="" type="checkbox"/> Acreage (Soil Disturbance of 1 Acre or More) *Must be completed	<input checked="" type="checkbox"/> Within 100' of Protected Wetlands
	<input type="checkbox"/> Slopes of 10% or Greater
	<input type="checkbox"/> Heavy Clay Soils
	<input checked="" type="checkbox"/> Township Required / Development Required
	<input type="checkbox"/> Drain Easement on Site / Within a Drainage District

PARTIES RESPONSIBLE FOR EARTH CHANGE

PROPERTY OWNER of Record (Include Warranty Deed for properties purchased less than 3 months ago)

Name :	KELLY RESTAURANTS LLC	Email:	info@cateringbykellys.com
Mailing Address:	4230 M-72 EAST HIGHWAY		Phone: 231-938-3663
City:	WILLIAMSBURG	State:	MI
		Zip:	49690
		Cell Phone:	

Person "On-Site" Responsible for Earth Change:	Email:
Company Name:	Phone:
Mailing Address:	
City:	State:
Zip:	Cell Phone:

I (we) affirm that the above information is accurate and that I (we) will conduct the above described earth change in accordance with Part 91, Soil Erosion & Sedimentation Control, of the Natural Resource and Environmental Protection Act, Act 451 of the Public Acts of 1994, and/or the 2003 Grand Traverse County Soil Erosion Ordinance, its corresponding rules, applicable local ordinances and the agreements accompanying this application, and that I (we) have been notified and understand that the aforementioned ordinances are more restrictive than Part 91 of the N.R.E.P.A..

Owner's Signature:	Print Name: DAN KELLY	Date: 11/29/17
Designated Agent's Signature:	Print Name: NATE ELKINS	Date: 11/29/17

*** The Landowner is responsible for the maintenance of all permanent SESC measures.** **Designated Agent must have a written statement from landowner authorizing him/her to secure a permit in the landowner's name.

COMMENCEMENT OF WORK PRIOR TO RECEIVING THE APPROVED PERMIT is a municipal or state civil infraction that may subject you to a fine of not more than \$2,500.00. Knowingly violating the Soil Erosion and Sedimentation Control Act, of 1994 PA 451, as amended or knowingly making a false statement on the permit application or a soil erosion or sedimentation control plan may subject you to a civil fine of not more than \$10,000.00 for each day of the violation. In addition, knowingly violating section 9112 or 9117, relating to a determination that the work undertaken does not conform to a permit or plan or adversely affects adjacent land or waters, may be responsible for a civil fine of not less than \$2,500.00 nor more than \$25,000.00 for each day of the violation.

PERMIT PROCEDURES

In accordance with Part 91 of Act 451 of 1994, as amended, and/or the GTC Ordinance #25 of 2003 and their corresponding General Rules, the undersigned herewith makes application for a permit to undertake a proposed earth change. Permit requirements will be as follows:

1. A person proposing to undertake an earth change shall submit an application for a state prescribed permit to the appropriate enforcing agency. In land development, the application shall be submitted by the landowner or their designated agent (a person who has written authorization from the landowner to sign the application and secure a permit in the landowner's name), whoever is responsible for the earth change.
2. The application shall be accompanied by a soil erosion and sedimentation control plan and any other document with the appropriate enforcing agency may require.
3. The soil erosion and sedimentation control plan shall be reviewed and approved by a person designated by the county or local enforcing agency who is trained and experienced in soil erosion and sedimentation control techniques.
4. The appropriate enforcing agency shall approve, disapprove or require modification of an application for an earth change permit within 30 calendar days following receipt of the application. Notification of disapproval shall be made by certified mail with the reasons for disapproval and conditions required for approval.
5. A state prescribed application form shall be provided to the applicant by the county or local enforcing agency.
6. A state prescribed permit shall be used by each county for local enforcing agency and shall include any additional provisions that may be required by the county or local enforcing agency. The permit shall be available on the site of the earth change for inspection.
7. Upon a determination that an applicant has met all the requirements of Part 91 and the promulgated rules, and the local ordinance, if applicable, the appropriate enforcing agency shall issue a permit for the proposed earth change.
8. An "authorized public agency" is exempt from obtaining a permit from a county or local enforcing agency, but shall notify the county or local enforcing agency of each proposed earth change.
9. When an earth change is under the jurisdiction of 2 or more local or county enforcing agencies, the person must obtain coverage in each jurisdiction, unless there is an interlocal agreement.

Checklist for Permit Applications

- ☐ Fill in all blanks including emails and phone numbers
 - A name must be in “Person Responsible for Earth Change”
 - “Same as Above” is not acceptable
 - ☐ Type of Change must be specific and include all aspects of the project
 - For example: New House must also include deck, garage, septic, pool
 - ☐ Size of Earth Change must include all disturbed areas, not just the footprint of the project
 - ☐ Excavation Start Date and Date to be Completed must be the same as the starting and ending dates on the construction schedule
 - ☐ Stamp construction schedule on the site plan – all blanks must be filled, N/A can be used for items that are not applicable
 - ☐ Property Tax Number must be listed.
 - ☐ Reason for Permit:
 - Distance to water must be indicated. If it is not within 500 ft of a body of water, do not check the box. Write in the body of water and the distance.
- Check all applicable boxes
- ☐ Property Owner must be filled out completely. If property was purchased within past – months, a warranty deed is needed as proof of ownership.
 - ☐ Owner’s signature is required. If there is a designated agent, a designated agent’s letter, signed by the owner is required. It can be sent by email if the applicant does not have it, but the permit will not be issued without it.
 - ☐ Commercial sites need to have a Maintenance Agreement. It can be filled out later, but the permit will not be issued without it.
 - ☐ Two (2) copies of the site plan are required.
 - ☐ Additional fees may be charged after the Inspector reviews the site plan:
 - Surety may be required which is refunded when the site is stabilized
 - ☐ The permit fee covers three (3) inspections. Any additional inspections due to compliance, sensitivity or requests from the applicant/owner will be charged \$55.00



November 10th, 2017

IDF
Mr. Nate Elkins
Traverse City, MI

RE: Preliminary Storm Water Runoff Estimates, Acme PUD, Acme Township, Michigan

Dear Mr. Elkins,

Per your request M2E has taken an initial stab at developing preliminary storm water retention volumes for the proposed PUD in Acme Township, Grand Traverse County, Michigan. Enclosed please find preliminary storm water runoff calculations for the various districts that you have broken out for the PUD. In general, the districts that you have created make sense and will help develop a reasonable preliminary basis of design for the estimated storm water retention requirements on this site. When final calculations are developed, a few of the areas that you have broken out separately will likely end up being combined through a storm sewer network based on the existing topography of the site and current drainage patterns.

Based on the size of each district that you have broken out, we have utilized the Rational Method to determine the preliminary storm water volume requirements for each district. With the exception of district MU01 the storm water volume calculations are based on providing storage for the 25-year developed condition storm event less the pre-existing 2-year rainfall event for each district. This method is generally accepted for new construction based on the current county storm water runoff control ordinance and state guidelines. This approach assumes that each of these districts will have an available overflow route to a natural drainage course which in this case is Acme creek. The overflow would only take place during large rain events and the discharge rate would mimic the pre-existing site conditions within each drainage district. This assumption is typically allowable for a site with a natural overflow route to a creek or lake but will require approval from both the county and MDEQ. This will also require that the design be based on Best Management Practices to help control any additional sediment discharge off this site and only discharge pre-treated storm water through a combination of bio-swales and storm water controls that the MDEQ and local storm water authority will approve.

Due to the topography and existing conditions, the storm water volume requirements that have been developed for District MU01 are based on providing storage for the 100 year rain event with no outlet. The soils in this area of the site are also noted to be more loamy and do not appear to be well drained. It may be possible to create an outlet for this district, which is highly recommended however, the volume required for this district will not change due to the fact that this area is currently land locked and does not appear to have a direct discharge point. As the project moves forward, further site reconnaissance is recommended to verify certain assumptions in this evaluation and possibly uncover additional information that is not shown in the existing survey or is not evident until becoming more familiar with the drainage patterns on the property.

Along with these preliminary calculations, I have reviewed available soils information for this property published by the USDA and NRCS. Note, this information is general and is not always completely accurate. Unlike the very heavy soils to the east of this site, in general, the soils based on the available mapping data are loamy sands with a reasonable infiltration capacity. For the majority of the site, the USDA mapping information also indicates that although the upper soil horizons are well drained loamy sands as you get further below grade the soils begin to get heavier and become more poorly drained. This lends itself well to your proposed shallow storm water retention concept however, this approach will require a great deal of storm water conveyance design, BMP's and innovative storm water controls to incorporate this type of this system into the project. The USDA mapping indicates that the existing developed area on the northeast corner of the site has much heavier soils than the remaining areas of the property.

Currently, the storm water calculations developed for all of the proposed districts do not include any credit or reduction in volume due to the infiltration capacity of the soils. I believe that if we can prove the infiltration capacity of the existing soils, this can help reduce the overall sizing of the storm water retention facilities. Soil borings will need to be completed on this site to verify the soils if we plan to utilize infiltration as a means to reduce the total storm water volume required on this site. Along with soil borings, percolation or infiltration testing would also need to be completed.

Many areas of this site are already developed. It appears that there are currently two release points that allow for overflows to Acme Creek from past development that has taken place on these properties. Before moving forward with final storm water design calculations, research on the past construction documents for these developed areas should be done to determine what existing release rates have been historically allowed from these areas. Even if there is not a direct pipe overflow, due to the topography most of the areas on this site have an existing release that is directed towards Acme Creek.

Your goal to maintain Low profile storm retention basins in the areas shown may be achievable but this will require a great deal of engineering analysis of flow through the storm water treatment train. Innovative storm water techniques and BMP's will become important and will require progressive and innovative storm water design calculations to ensure a quality design. In your initial master plan you are proposing this technology which I believe will be a good thing to help create a productive storm water control plan that will meet both local and state standards and requirements.

The following pages indicate the preliminary estimates for storm water volume requirements for each of the districts that have been evaluated. Also included are pages from the USDA NRCS soil survey that are pertinent to this property.

Please review the enclosed information and give me a call or write back to discuss any questions.

Sincerely,

M2E, LLC

A handwritten signature in blue ink that reads "Ryan A. Cox". The signature is fluid and cursive, with the first name "Ryan" being more prominent than the last name "Cox".

Ryan A. Cox, PE
Civil Engineer

INFILTRATION BASIN DESIGN

Drainage District MU01

Modified Rational Method, 100-year Developed

Project: Kelly - Acme

Project #: 2017-165

100-year Developed Condition

Sub-District	"C" Factor	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Pavement	0.95	99,370	2.281	2.167	
Building(s) roof	0.95	32,300	0.742	0.704	
Concrete	0.95	31,791	0.730	0.693	
Other impervious	0.90	0	0.000	0.000	
Open	0.20	29,945	0.687	0.137	
Total		193,406	4.440	3.702	0.83

Infiltration Parameters					
Measured/Assumed Infiltration Rate of Soil	=	0.00	in/hr		
Calculated Infiltration Rate (0.50 safety factor)	=	0.00	in/hr		
Area of Basin Provided (measured at 1/2 Depth)	=	0.00	s.f.		

100-year storm IDF table with "CA" and Infiltration applied					
Duration (min.)	Intensity (in/hr)	Weighted Area (acres)	Peak Runoff (cfs)	Infiltration Rate (cfs)	Required Storage (c.f.)
10	6.29	3.702	23.29	0.00	13,973
15	5.48	3.702	20.29	0.00	18,260
20	4.67	3.702	17.29	0.00	20,748
30	3.76	3.702	13.92	0.00	25,058
40	3.06	3.702	11.33	0.00	27,190
45	2.85	3.702	10.55	0.00	28,490
50	2.67	3.702	9.89	0.00	29,656
60	2.39	3.702	8.85	0.00	31,856
75	2.02	3.702	7.48	0.00	33,655
90	1.78	3.702	6.59	0.00	35,588
105	1.61	3.702	5.96	0.00	37,554
120	1.48	3.702	5.48	0.00	39,453
180	1.08	3.702	4.00	0.00	43,185
240	0.86	3.702	3.18	0.00	45,851
300	0.72	3.702	2.67	0.00	47,983
360	0.64	3.702	2.37	0.00	51,182
420	0.56	3.702	2.07	0.00	52,248
480	0.51	3.702	1.89	0.00	54,381
540	0.46	3.702	1.70	0.00	55,181
600	0.43	3.702	1.59	0.00	57,313
720	0.37	3.702	1.37	0.00	59,179
1080	0.27	3.702	1.00	0.00	64,777
1440	0.21	3.702	0.78	0.00	67,688

◀ PEAK

Required Volume

Volume Required = peak storage volume = **67688.336 c.f.**

Note: There is approximately 50,000 c.f. of storage in existing basin.

INFILTRATION BASIN DESIGN

Drainage District MU02

Modified Rational Method, 25-year Developed vs. 2-year Undeveloped

Project: Kelly - Acme, Michigan

Project #: 2017-165

25-year Developed Condition

Sub-District	"C" Factor	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Pavement	0.95	10,897	0.250	0.238	
Building(s) roof	0.95	12,000	0.275	0.262	
Concrete	0.95	6,530	0.150	0.142	
Other impervious	0.90	768	0.018	0.016	
Open	0.15	30,353	0.697	0.105	
Total		60,548	1.390	0.762	0.55

Infiltration Parameters			
Measured/Assumed Infiltration Rate of Soil	=	0.00	in/hr
Calculated Infiltration Rate (0.50 safety factor)	=	0.00	in/hr
Area of Basin Provided (measured at 1/2 Depth)	=	0.00	s.f.

25-year storm IDF table with "CA" and Infiltration applied					
Duration (min.)	Intensity (in/hr)	Weighted Area (acres)	Peak Runoff (cfs)	Infiltration Rate (cfs)	Required Storage (c.f.)
10	4.82	0.762	3.67	0.00	2,204
15	4.20	0.762	3.20	0.00	2,881
20	3.58	0.762	2.73	0.00	3,274
30	2.88	0.762	2.20	0.00	3,951
40	2.34	0.762	1.78	0.00	4,280
45	2.18	0.762	1.66	0.00	4,486
50	2.05	0.762	1.56	0.00	4,687
60	1.83	0.762	1.39	0.00	5,021
75	1.55	0.762	1.18	0.00	5,316
90	1.36	0.762	1.04	0.00	5,597
105	1.23	0.762	0.94	0.00	5,906
120	1.13	0.762	0.86	0.00	6,201
180	0.83	0.762	0.63	0.00	6,832
240	0.66	0.762	0.50	0.00	7,244
300	0.56	0.762	0.43	0.00	7,683
360	0.49	0.762	0.37	0.00	8,067
420	0.43	0.762	0.33	0.00	8,259
480	0.39	0.762	0.30	0.00	8,561
540	0.35	0.762	0.27	0.00	8,643
600	0.33	0.762	0.25	0.00	9,054
720	0.28	0.762	0.21	0.00	9,219
1080	0.20	0.762	0.15	0.00	9,878
1440	0.16	0.762	0.12	0.00	10,668
Max. Storage Volume (w/ infiltration)				10,668	c.f.

◀ PEAK

2-year Undeveloped Condition

Sub-District	C	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Open	0.15	60,548	1.390	0.209	
Existing Impervious	0.95	0	0.000	0.000	
Total		60,548	1.390	0.209	0.15

Duration = 15 min. (matches duration at peak volume of 25-yr dev.)
 Intensity = 2.24 in/hr (2-year storm for above duration)
 Volume = 420 c.f. (Q = CIA)

Required Volume

Vol. Required = 25-yr developed minus the 2-yr undeveloped =

10,248 c.f.

INFILTRATION BASIN DESIGN

Drainage District R01

Modified Rational Method, 25-year Developed vs. 2-year Undeveloped

Project: Kelly - Acme, Michigan

Project #: 2017-165

25-year Developed Condition

Sub-District	"C" Factor	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Pavement	0.95	11,281	0.259	0.246	
Building(s) roof	0.95	7,168	0.165	0.156	
Concrete	0.95	5,429	0.125	0.118	
Other impervious	0.90	0	0.000	0.000	
Open	0.15	28,394	0.652	0.098	
Total		52,272	1.200	0.619	0.52

Infiltration Parameters			
Measured/Assumed Infiltration Rate of Soil	=	0.00	in/hr
Calculated Infiltration Rate (0.50 safety factor)	=	0.00	in/hr
Area of Basin Provided (measured at 1/2 Depth)	=	0.00	s.f.

25-year storm IDF table with "CA" and Infiltration applied					
Duration (min.)	Intensity (in/hr)	Weighted Area (acres)	Peak Runoff (cfs)	Infiltration Rate (cfs)	Required Storage (c.f.)
10	4.82	0.619	2.98	0.00	1,789
15	4.20	0.619	2.60	0.00	2,338
20	3.58	0.619	2.21	0.00	2,657
30	2.88	0.619	1.78	0.00	3,206
40	2.34	0.619	1.45	0.00	3,474
45	2.18	0.619	1.35	0.00	3,641
50	2.05	0.619	1.27	0.00	3,804
60	1.83	0.619	1.13	0.00	4,075
75	1.55	0.619	0.96	0.00	4,314
90	1.36	0.619	0.84	0.00	4,542
105	1.23	0.619	0.76	0.00	4,793
120	1.13	0.619	0.70	0.00	5,032
180	0.83	0.619	0.51	0.00	5,545
240	0.66	0.619	0.41	0.00	5,879
300	0.56	0.619	0.35	0.00	6,235
360	0.49	0.619	0.30	0.00	6,547
420	0.43	0.619	0.27	0.00	6,702
480	0.39	0.619	0.24	0.00	6,947
540	0.35	0.619	0.22	0.00	7,014
600	0.33	0.619	0.20	0.00	7,348
720	0.28	0.619	0.17	0.00	7,482
1080	0.20	0.619	0.12	0.00	8,016
1440	0.16	0.619	0.10	0.00	8,657
Max. Storage Volume (w/ infiltration)				8,657	◀ PEAK c.f.

2-year Undeveloped Condition

Sub-District	C	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Open	0.15	52,272	1.200	0.180	
Existing Impervious	0.95	0	0.000	0.000	
Total		52,272	1.200	0.180	0.15

Duration = 15 min. (matches duration at peak volume of 25-yr dev.)
 Intensity = 2.24 in/hr (2-year storm for above duration)
 Volume = 363 c.f. (Q = CIA)

Required Volume

Vol. Required = 25-yr developed minus the 2-yr undeveloped =

8,295 c.f.

INFILTRATION BASIN DESIGN

Drainage District R02

Modified Rational Method, 25-year Developed vs. 2-year Undeveloped

Project: Kelly - Acme, Michigan

Project #: 2017-165

25-year Developed Condition

Sub-District	"C" Factor	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Pavement	0.95	3,740	0.086	0.082	
Building(s) roof	0.95	21,896	0.503	0.478	
Concrete	0.95	17,091	0.392	0.373	
Other impervious	0.90	8,602	0.197	0.178	
Open	0.15	83,707	1.922	0.288	
Total		135,036	3.100	1.398	0.45

Infiltration Parameters			
Measured/Assumed Infiltration Rate of Soil	=	0.00	in/hr
Calculated Infiltration Rate (0.50 safety factor)	=	0.00	in/hr
Area of Basin Provided (measured at 1/2 Depth)	=	0.00	s.f.

25-year storm IDF table with "CA" and Infiltration applied					
Duration (min.)	Intensity (in/hr)	Weighted Area (acres)	Peak Runoff (cfs)	Infiltration Rate (cfs)	Required Storage (c.f.)
10	4.82	1.398	6.74	0.00	4,042
15	4.20	1.398	5.87	0.00	5,284
20	3.58	1.398	5.00	0.00	6,005
30	2.88	1.398	4.03	0.00	7,246
40	2.34	1.398	3.27	0.00	7,850
45	2.18	1.398	3.05	0.00	8,227
50	2.05	1.398	2.87	0.00	8,597
60	1.83	1.398	2.56	0.00	9,209
75	1.55	1.398	2.17	0.00	9,750
90	1.36	1.398	1.90	0.00	10,265
105	1.23	1.398	1.72	0.00	10,832
120	1.13	1.398	1.58	0.00	11,373
180	0.83	1.398	1.16	0.00	12,530
240	0.66	1.398	0.92	0.00	13,285
300	0.56	1.398	0.78	0.00	14,090
360	0.49	1.398	0.68	0.00	14,794
420	0.43	1.398	0.60	0.00	15,147
480	0.39	1.398	0.55	0.00	15,700
540	0.35	1.398	0.49	0.00	15,851
600	0.33	1.398	0.46	0.00	16,606
720	0.28	1.398	0.39	0.00	16,908
1080	0.20	1.398	0.28	0.00	18,116
1440	0.16	1.398	0.23	0.00	19,565
Max. Storage Volume (w/ infiltration)				19,565	◀ PEAK c.f.

2-year Undeveloped Condition

Sub-District	C	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Open	0.15	135,036	3.100	0.465	
Existing Impervious	0.95	0	0.000	0.000	
Total		135,036	3.100	0.465	0.15

Duration = 15 min. (matches duration at peak volume of 25-yr dev.)
 Intensity = 2.24 in/hr (2-year storm for above duration)
 Volume = 937 c.f. (Q = CIA)

Required Volume

Vol. Required = 25-yr developed minus the 2-yr undeveloped =

18,627 c.f.

INFILTRATION BASIN DESIGN

Drainage District R03

Modified Rational Method, 25-year Developed vs. 2-year Undeveloped

Project: Kelly - Acme, Michigan

Project #: 2017-165

25-year Developed Condition

Sub-District	"C" Factor	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Pavement	0.95	3,864	0.089	0.084	
Building(s) roof	0.95	12,240	0.281	0.267	
Concrete	0.95	7,381	0.169	0.161	
Other impervious	0.90	3,162	0.073	0.065	
Open	0.15	44,356	1.018	0.153	
Total		71,003	1.630	0.730	0.45

Infiltration Parameters			
Measured/Assumed Infiltration Rate of Soil	=	0.00	in/hr
Calculated Infiltration Rate (0.50 safety factor)	=	0.00	in/hr
Area of Basin Provided (measured at 1/2 Depth)	=	0.00	s.f.

25-year storm IDF table with "CA" and Infiltration applied					
Duration (min.)	Intensity (in/hr)	Weighted Area (acres)	Peak Runoff (cfs)	Infiltration Rate (cfs)	Required Storage (c.f.)
10	4.82	0.730	3.52	0.00	2,112
15	4.20	0.730	3.07	0.00	2,760
20	3.58	0.730	2.61	0.00	3,137
30	2.88	0.730	2.10	0.00	3,786
40	2.34	0.730	1.71	0.00	4,101
45	2.18	0.730	1.59	0.00	4,298
50	2.05	0.730	1.50	0.00	4,491
60	1.83	0.730	1.34	0.00	4,811
75	1.55	0.730	1.13	0.00	5,094
90	1.36	0.730	0.99	0.00	5,363
105	1.23	0.730	0.90	0.00	5,659
120	1.13	0.730	0.83	0.00	5,941
180	0.83	0.730	0.61	0.00	6,546
240	0.66	0.730	0.48	0.00	6,940
300	0.56	0.730	0.41	0.00	7,361
360	0.49	0.730	0.36	0.00	7,729
420	0.43	0.730	0.31	0.00	7,913
480	0.39	0.730	0.28	0.00	8,202
540	0.35	0.730	0.26	0.00	8,281
600	0.33	0.730	0.24	0.00	8,675
720	0.28	0.730	0.20	0.00	8,833
1080	0.20	0.730	0.15	0.00	9,464
1440	0.16	0.730	0.12	0.00	10,221
Max. Storage Volume (w/ infiltration)					10,221 c.f.

◀ PEAK
c.f.

2-year Undeveloped Condition

Sub-District	C	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Open	0.15	71,003	1.630	0.245	
Existing Impervious	0.95	0	0.000	0.000	
Total		71,003	1.630	0.245	0.15

Duration = 15 min. (matches duration at peak volume of 25-yr dev.)
 Intensity = 2.24 in/hr (2-year storm for above duration)
 Volume = 493 c.f. (Q = CIA)

Required Volume

Vol. Required = 25-yr developed minus the 2-yr undeveloped =

9,728 c.f.

INFILTRATION BASIN DESIGN

Drainage District R04

Modified Rational Method, 25-year Developed vs. 2-year Undeveloped

Project: Kelly - Acme, Michigan

Project #: 2017-165

25-year Developed Condition

Sub-District	"C"	Area		Weighted	Weighted
	Factor	(s.f.)	(acres)	Area (CxA)	"C"
Pavement	0.95	16,821	0.386	0.367	
Building(s) roof	0.95	8,400	0.193	0.183	
Concrete	0.95	6,050	0.139	0.132	
Other impervious	0.90	8,730	0.200	0.180	
Open	0.15	117,686	2.702	0.405	
Total		157,687	3.620	1.268	0.35

Infiltration Parameters			
Measured/Assumed Infiltration Rate of Soil	=	0.00	in/hr
Calculated Infiltration Rate (0.50 safety factor)	=	0.00	in/hr
Area of Basin Provided (measured at 1/2 Depth)	=	0.00	s.f.

25-year storm IDF table with "CA" and Infiltration applied					
Duration (min.)	Intensity (in/hr)	Weighted Area (acres)	Peak Runoff (cfs)	Infiltration Rate (cfs)	Required Storage (c.f.)
10	4.82	1.268	6.11	0.00	3,666
15	4.20	1.268	5.32	0.00	4,792
20	3.58	1.268	4.54	0.00	5,446
30	2.88	1.268	3.65	0.00	6,571
40	2.34	1.268	2.97	0.00	7,119
45	2.18	1.268	2.76	0.00	7,461
50	2.05	1.268	2.60	0.00	7,796
60	1.83	1.268	2.32	0.00	8,351
75	1.55	1.268	1.96	0.00	8,842
90	1.36	1.268	1.72	0.00	9,309
105	1.23	1.268	1.56	0.00	9,823
120	1.13	1.268	1.43	0.00	10,313
180	0.83	1.268	1.05	0.00	11,363
240	0.66	1.268	0.84	0.00	12,047
300	0.56	1.268	0.71	0.00	12,778
360	0.49	1.268	0.62	0.00	13,416
420	0.43	1.268	0.55	0.00	13,736
480	0.39	1.268	0.49	0.00	14,238
540	0.35	1.268	0.44	0.00	14,375
600	0.33	1.268	0.42	0.00	15,059
720	0.28	1.268	0.35	0.00	15,333
1080	0.20	1.268	0.25	0.00	16,428
1440	0.16	1.268	0.21	0.00	17,743
Max. Storage Volume (w/ infiltration)					17,743 c.f.

◀ PEAK

c.f.

2-year Undeveloped Condition

Sub-District	C	Area		Weighted	Weighted
		(s.f.)	(acres)	Area (CxA)	"C"
Open	0.15	157,687	3.620	0.543	
Existing Impervious	0.95	0	0.000	0.000	
Total		157,687	3.620	0.543	0.15

Duration = 15 min. (matches duration at peak volume of 25-yr dev.)
 Intensity = 2.24 in/hr (2-year storm for above duration)
 Volume = 1095 c.f. (Q = CIA)

Required Volume

Vol. Required = 25-yr developed minus the 2-yr undeveloped =

16,648 c.f.

INFILTRATION BASIN DESIGN

Drainage District R05

Modified Rational Method, 25-year Developed vs. 2-year Undeveloped

Project: Kelly - Acme, Michigan

Project #: 2017-165

25-year Developed Condition

Sub-District	"C" Factor	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Pavement	0.95	14,215	0.326	0.310	
Building(s) roof	0.95	7,200	0.165	0.157	
Concrete	0.95	6,652	0.153	0.145	
Other impervious	0.90	11,156	0.256	0.230	
Open	0.15	86,665	1.990	0.298	
Total		125,888	2.890	1.141	0.39

Infiltration Parameters			
Measured/Assumed Infiltration Rate of Soil	=	0.00	in/hr
Calculated Infiltration Rate (0.50 safety factor)	=	0.00	in/hr
Area of Basin Provided (measured at 1/2 Depth)	=	0.00	s.f.

25-year storm IDF table with "CA" and Infiltration applied					
Duration (min.)	Intensity (in/hr)	Weighted Area (acres)	Peak Runoff (cfs)	Infiltration Rate (cfs)	Required Storage (c.f.)
10	4.82	1.141	5.50	0.00	3,300
15	4.20	1.141	4.79	0.00	4,313
20	3.58	1.141	4.08	0.00	4,902
30	2.88	1.141	3.29	0.00	5,915
40	2.34	1.141	2.67	0.00	6,408
45	2.18	1.141	2.49	0.00	6,716
50	2.05	1.141	2.34	0.00	7,017
60	1.83	1.141	2.09	0.00	7,517
75	1.55	1.141	1.77	0.00	7,959
90	1.36	1.141	1.55	0.00	8,380
105	1.23	1.141	1.40	0.00	8,842
120	1.13	1.141	1.29	0.00	9,284
180	0.83	1.141	0.95	0.00	10,228
240	0.66	1.141	0.75	0.00	10,844
300	0.56	1.141	0.64	0.00	11,502
360	0.49	1.141	0.56	0.00	12,077
420	0.43	1.141	0.49	0.00	12,364
480	0.39	1.141	0.45	0.00	12,816
540	0.35	1.141	0.40	0.00	12,939
600	0.33	1.141	0.38	0.00	13,556
720	0.28	1.141	0.32	0.00	13,802
1080	0.20	1.141	0.23	0.00	14,788
1440	0.16	1.141	0.18	0.00	15,971

Max. Storage Volume (w/ infiltration) 15,971 c.f.

2-year Undeveloped Condition

Sub-District	C	Area (s.f.)	Area (acres)	Weighted Area (CxA)	Weighted "C"
Open	0.15	125,888	2.890	0.434	
Existing Impervious	0.95	0	0.000	0.000	
Total		125,888	2.890	0.434	0.15

Duration = 15 min. (matches duration at peak volume of 25-yr dev.)
 Intensity = 2.24 in/hr (2-year storm for above duration)
 Volume = 874 c.f. (Q = CIA)

Required Volume

Vol. Required = 25-yr developed minus the 2-yr undeveloped =

15,097 c.f.



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Grand Traverse County, Michigan**



November 9, 2017

Custom Soil Resource Report Soil Map



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AsA	Au Gres-Saugatuck sands, 0 to 2 percent slopes	0.5	0.7%
EyB	Emmet sandy loam, 2 to 6 percent slopes	3.4	5.4%
EyC	Emmet sandy loam, 6 to 12 percent slopes	6.1	9.6%
EyC2	Emmet sandy loam, 6 to 12 percent slopes, moderately eroded	0.8	1.3%
EyD	Emmet sandy loam, 12 to 18 percent slopes	1.9	3.0%
EyE2	Emmet sandy loam, 18 to 25 percent slopes, moderately eroded	0.3	0.4%
EyF	Emmet sandy loam, 25 to 45 percent slopes	0.2	0.4%
GxA	Guelph-Nester loams, 0 to 2 percent slopes	14.0	22.0%
GxB2	Guelph-Nester loams, 2 to 6 percent slopes, moderately eroded	0.8	1.2%
IsA	Iosco-Ogemaw loamy sands, 0 to 2 percent slopes	0.4	0.6%
KaA	Kalkaska loamy sand, 0 to 2 percent slopes	10.3	16.1%
KaA2	Kalkaska loamy sand, 0 to 2 percent slopes, moderately eroded	3.1	4.9%
KaC	Kalkaska loamy sand, 6 to 12 percent slopes	2.3	3.6%
KaD	Kalkaska loamy sand, 12 to 18 percent slopes	4.9	7.6%
KsB	Karlin sandy loams, 2 to 6 percent slopes	3.6	5.6%
Lu	Carlisle muck, 0 to 2 percent slopes, cool	5.7	9.0%
Ru	Roscommon mucky loamy sand	1.2	1.9%
Tp	Tonkey-Hettinger-Pickford loams, overwash	1.9	3.0%
WdC	Wind eroded land, sloping	2.3	3.7%
Totals for Area of Interest		63.7	100.0%

Custom Soil Resource Report

Across-slope shape: Linear

Parent material: Sandy glaciofluvial deposits cemented with ortstein

Typical profile

H1 - 0 to 2 inches: sand

H2 - 2 to 12 inches: sand

H3 - 12 to 26 inches: sand

H4 - 26 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: About 12 inches to ortstein

Natural drainage class: Somewhat poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Very low (about 0.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: B/D

Hydric soil rating: No

Minor Components

Roscommon

Percent of map unit: 5 percent

Landform: Depressions on lake plains, depressions on outwash plains

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

EyB—Emmet sandy loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 6c3f

Elevation: 600 to 1,400 feet

Mean annual precipitation: 27 to 32 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 140 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Emmet and similar soils: 90 percent

Minor components: 10 percent

Custom Soil Resource Report

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Emmet

Setting

Landform: Moraines, till plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: 24 to 50 inches of loamy material over calcareous loamy till

Typical profile

H1 - 0 to 8 inches: sandy loam

H2 - 8 to 30 inches: sandy loam

H3 - 30 to 38 inches: sandy clay loam

H4 - 38 to 60 inches: sandy loam

Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Leelanau

Percent of map unit: 10 percent

Landform: Moraines

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

EyC—Emmet sandy loam, 6 to 12 percent slopes

Map Unit Setting

National map unit symbol: 6c3h

Elevation: 600 to 1,400 feet

Custom Soil Resource Report

Mean annual precipitation: 27 to 32 inches
Mean annual air temperature: 41 to 45 degrees F
Frost-free period: 90 to 140 days
Farmland classification: Farmland of local importance

Map Unit Composition

Emmet and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Emmet

Setting

Landform: Moraines, till plains
Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest
Down-slope shape: Linear
Across-slope shape: Linear, convex
Parent material: 24 to 50 inches of loamy material over calcareous loamy till

Typical profile

H1 - 0 to 8 inches: sandy loam
H2 - 8 to 30 inches: sandy loam
H3 - 30 to 38 inches: sandy clay loam
H4 - 38 to 60 inches: sandy loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Leelanau

Percent of map unit: 10 percent
Landform: Moraines
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope, summit
Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest
Down-slope shape: Linear

Across-slope shape: Linear, convex

Hydric soil rating: No

EyC2—Emmet sandy loam, 6 to 12 percent slopes, moderately eroded

Map Unit Setting

National map unit symbol: 6c3j

Elevation: 600 to 1,400 feet

Mean annual precipitation: 27 to 32 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 90 to 140 days

Farmland classification: Farmland of local importance

Map Unit Composition

Emmet, moderately eroded, and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Emmet, Moderately Eroded

Setting

Landform: Moraines, till plains

Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope

Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest

Down-slope shape: Linear

Across-slope shape: Linear, convex

Parent material: 24 to 50 inches of loamy material over calcareous loamy till

Typical profile

H1 - 0 to 8 inches: sandy loam

H2 - 8 to 30 inches: sandy loam

H3 - 30 to 38 inches: sandy clay loam

H4 - 38 to 60 inches: sandy loam

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Properties and qualities

Slope: 12 to 18 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 30 percent
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Leelanau

Percent of map unit: 5 percent
Landform: Moraines
Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest
Down-slope shape: Convex, linear
Across-slope shape: Concave, convex
Hydric soil rating: No

East lake

Percent of map unit: 5 percent
Landform: Beach ridges, lake terraces, outwash plains, moraines
Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest
Down-slope shape: Convex, linear
Across-slope shape: Concave, convex
Hydric soil rating: No

EyE2—Emmet sandy loam, 18 to 25 percent slopes, moderately eroded

Map Unit Setting

National map unit symbol: 6c3n
Elevation: 600 to 1,400 feet
Mean annual precipitation: 27 to 32 inches
Mean annual air temperature: 41 to 45 degrees F

Custom Soil Resource Report

Frost-free period: 90 to 150 days

Farmland classification: Not prime farmland

Map Unit Composition

Emmet, moderately eroded, and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Emmet, Moderately Eroded

Setting

Landform: Moraines, till plains

Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope

Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest

Down-slope shape: Convex, linear

Across-slope shape: Concave, convex

Parent material: 24 to 50 inches of loamy material over calcareous loamy till

Typical profile

H1 - 0 to 8 inches: sandy loam

H2 - 8 to 30 inches: sandy loam

H3 - 30 to 38 inches: sandy clay loam

H4 - 38 to 60 inches: sandy loam

Properties and qualities

Slope: 18 to 25 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Leelanau

Percent of map unit: 5 percent

Landform: Moraines

Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope

Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest

Down-slope shape: Convex, linear

Across-slope shape: Concave, convex

Hydric soil rating: No

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Leelanau

Percent of map unit: 5 percent

Landform: Moraines

Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope

Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest

Down-slope shape: Convex, linear

Across-slope shape: Concave, convex

Hydric soil rating: No

East lake

Percent of map unit: 5 percent

Landform: Beach ridges, lake terraces, outwash plains, moraines

Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope

Landform position (three-dimensional): Interfluvium, head slope, nose slope, side slope, base slope, crest

Down-slope shape: Convex, linear

Across-slope shape: Concave, convex

Hydric soil rating: No

GxA—Guelph-Nester loams, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 6c43

Elevation: 600 to 1,400 feet

Mean annual precipitation: 27 to 32 inches

Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 100 to 140 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Guelph and similar soils: 60 percent

Custom Soil Resource Report

Nester and similar soils: 40 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Guelph

Setting

Landform: Moraines, till plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy till

Typical profile

H1 - 0 to 6 inches: loam

H2 - 6 to 21 inches: clay loam

H3 - 21 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Available water storage in profile: High (about 9.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: C

Hydric soil rating: No

Description of Nester

Setting

Landform: Moraines

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: 20 to 36 inches of loamy and clayey material over calcareous loamy and clayey till

Typical profile

H1 - 0 to 8 inches: loam

H2 - 8 to 14 inches: silty clay loam

H3 - 14 to 28 inches: clay loam

H4 - 28 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: High

Custom Soil Resource Report

H3 - 20 to 26 inches: loamy sand

H4 - 26 to 60 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: About 10 inches to ortstein

Natural drainage class: Somewhat poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 20 percent

Available water storage in profile: Very low (about 1.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B/D

Hydric soil rating: No

KaA—Kalkaska loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 6c4n

Elevation: 600 to 1,900 feet

Mean annual precipitation: 27 to 34 inches

Mean annual air temperature: 39 to 46 degrees F

Frost-free period: 70 to 150 days

Farmland classification: Not prime farmland

Map Unit Composition

Kalkaska and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kalkaska

Setting

Landform: Outwash plains, moraines

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy glaciofluvial deposits

Typical profile

H1 - 0 to 6 inches: loamy sand

H2 - 6 to 8 inches: sand

H3 - 8 to 36 inches: sand

H4 - 36 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

East lake

Percent of map unit: 5 percent
Landform: Beach ridges, lake terraces, outwash plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

KaA2—Kalkaska loamy sand, 0 to 2 percent slopes, moderately eroded

Map Unit Setting

National map unit symbol: 6c4p
Elevation: 600 to 1,900 feet
Mean annual precipitation: 27 to 34 inches
Mean annual air temperature: 39 to 46 degrees F
Frost-free period: 70 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Kalkaska, moderately eroded, and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kalkaska, Moderately Eroded

Setting

Landform: Outwash plains, moraines
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear

Custom Soil Resource Report

Parent material: Sandy glaciofluvial deposits

Typical profile

H1 - 0 to 6 inches: loamy sand

H2 - 6 to 8 inches: sand

H3 - 8 to 36 inches: sand

H4 - 36 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat excessively drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

East lake

Percent of map unit: 5 percent

Landform: Beach ridges, lake terraces, outwash plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

KaC—Kalkaska loamy sand, 6 to 12 percent slopes

Map Unit Setting

National map unit symbol: 6c4s

Elevation: 600 to 1,900 feet

Mean annual precipitation: 27 to 34 inches

Mean annual air temperature: 39 to 46 degrees F

Frost-free period: 70 to 150 days

Farmland classification: Not prime farmland

Map Unit Composition

Kalkaska and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kalkaska

Setting

Landform: Outwash plains, moraines

Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope

Landform position (three-dimensional): Interfluve, head slope, nose slope, side slope, base slope, crest

Down-slope shape: Linear

Across-slope shape: Linear, convex

Parent material: Sandy glaciofluvial deposits

Typical profile

H1 - 0 to 6 inches: loamy sand

H2 - 6 to 8 inches: sand

H3 - 8 to 36 inches: sand

H4 - 36 to 60 inches: sand

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat excessively drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

East lake

Percent of map unit: 5 percent

Landform: Beach ridges, lake terraces, outwash plains

Landform position (two-dimensional): Summit, shoulder, backslope, footslope, toeslope

Landform position (three-dimensional): Interfluve, head slope, nose slope, side slope, base slope, crest

Down-slope shape: Linear

Across-slope shape: Linear, convex

Hydric soil rating: No

Hydric soil rating: Yes

Ru—Roscommon mucky loamy sand

Map Unit Setting

National map unit symbol: 6c7w

Elevation: 600 to 1,500 feet

Mean annual precipitation: 22 to 35 inches

Mean annual air temperature: 39 to 46 degrees F

Frost-free period: 70 to 140 days

Farmland classification: Farmland of local importance

Map Unit Composition

Roscommon and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Roscommon

Setting

Landform: Depressions on lake plains, depressions on outwash plains

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy glaciofluvial deposits

Typical profile

H1 - 0 to 3 inches: mucky loamy sand

H2 - 3 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum in profile: 10 percent

Available water storage in profile: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6w

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Custom Soil Resource Report

H3 - 20 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum in profile: 30 percent

Available water storage in profile: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: D

Hydric soil rating: Yes

WdC—Wind eroded land, sloping

Map Unit Composition

Wind eroded land: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.



GT Metro Fire Department

Permitting Agency Review

1. FIRE & EMERGENCY SERVICES SITE PLAN REVIEW
2. PLAN REVIEW FROM FIRE DEPARTMENT



GRAND TRAVERSE METRO FIRE DEPARTMENT

FIRE PREVENTION BUREAU

897 Parsons Road ~ Traverse City, MI 49686
Phone: (231) 947-3000 Fax: (231) 947-8728 ~ Website: www.gtmetrofire.org Email: Info@gtmetrofire.org

SITE PLAN REVIEW APPLICATION

DATE: 11/14/17 (FOR OFFICE USE ONLY) ID# _____

APPLICANT/ COMPANY NAME: INFLUENCE DESIGN FORUM LLC

CONTACT PERSON: NATE ELKINS

ADDRESS: 120 E. FRONT ST. 2ND FLR LOFT

CITY: TRAVERSE CITY STATE: MI ZIP: 49684

PHONE NUMBERS: BUSINESS _____ CELL 231-944-4114

EMAIL: NATE@INFLUENCEDESIGNFORUM.COM

DEVELOPMENT/ BUSINESS NAME: KELLY RESTAURANTS

SITE ADDRESS: 4230 M-72 EAST TOWNSHIP: ACME

CITY: WILLIAMSBURG STATE: MI ZIP: 49690

SPECIFIC USE OF BUILDING: MIXED-USE DEVELOPMENT

BUILDING SIZE (LxWxH): SEE PLANS NUMBER of STORIES: SEE PLANS

CONSTRUCTION TYPE TBD SITE SERVICED BY GTB MUNICIPAL WATER YES NO

Complete civil engineering drawings shall be submitted with this application including the following:

Plans drawn to scale showing property boundaries, building locations, topography, water supply main sizes and hydrant locations, all roads/designated fire lanes/ property access/egress points with dimensions and turning radius, building construction type, use group and presence of automatic fire protection systems.

Site Plan Review -available in district only (Acme, East Bay & Garfield Twps.)

\$75.00 Includes 2 reviews

Additional reviews charged at \$75.00 per hour, minimum charge 1 hour

**** All fees shall be paid before permit can be issued, requests for inspections, or approvals for occupancy.**

APPLICANT SIGNATURE: 



GRAND TRAVERSE METRO FIRE DEPARTMENT

FIRE PREVENTION BUREAU

897 Parsons Road ~ Traverse City, MI 49686
Phone: (231) 922-2077 Fax: (231) 922-4918 ~ Website: www.gtfire.org Email: info@gtfire.org

SITE PLAN REVIEW RECORD

ID # P-1192-5865-M6338

DATE: 11/30/17

PROJECT NAME: Kelly Mixed-Use Development

PROJECT ADDRESS: 4230 M-72 East

TOWNSHIP: Acme

APPLICANT NAME: Nate Elkins

APPLICANT COMPANY: Influence Design Forum LLC

APPLICANT ADDRESS: 120 E. Front St. 2nd Floor Loft

APPLICANT CITY: Traverse City STATE: MI ZIP: 49684

APPLICANT PHONE # 231-944-4114 FAX #

REVIEW FEE: **\$75.00**

Reviewed By: Brian Belcher Assistant Chief/ Fire Marshal

This review is based solely on the materials submitted for review and does not encompass any outstanding information. Compliance with all applicable code provisions is required and is the responsibility of the permit holder. Items not listed on the review do not negate any requirements of the code nor the compliance with same. Inspection requests must be made a minimum of 48 hours prior to needed inspection. This plan review is based on the 2012 International Fire Code, as adopted.



GRAND TRAVERSE METRO FIRE DEPARTMENT

FIRE PREVENTION BUREAU

897 Parsons Road ~ Traverse City, MI 49686
Phone: (231) 922-2077 Fax: (231) 922-4918 ~ Website: www.gtfire.org Email: info@gtfire.org

SITE PLAN REVIEW

ID # P-1192-5865-M6338

DATE: 11/30/17

1. 503.2.1 Dimensions.

Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

2. 503.2.2 Authority.

The fire code official shall have the authority to require or permit modifications to the required access widths where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

-Provide a minimum of 15 feet width at the East and West entrances to the complex where the parallel parking begins. Plans indicate a width of only 12 feet.

3. 503.2.3 Surface.

Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

-Plans indicate grass pavers on the fire apparatus access roads and the fire lanes that access the housing units. Grass pavers are not a maintainable surface and therefore are not allowed fire apparatus access roads and fire lanes.

4. 503.2.5 Dead ends.

Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus.

-Provide a turnaround or a connector fire department access road for the center housing units.

5. 503.1.1 Buildings and facilities.

Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

-Plans indicate homes that have access that exceeds the 150 foot requirement. Provide access that meets the above requirement.



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6. D105.1 Where required.

Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

7. D105.2 Width.

Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

8. D105.3 Proximity to building.

At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official.

9. D105.4 Obstructions.

Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building. Other obstructions shall be permitted to be placed with the approval of the fire code official.

-Aerial access may be required for any building exceeding 30 feet. Provide building heights. Plans indicate what may be aerial access, locations and dimensions are not clear.

10. 507.5.1 Where required.

Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

-Additional fire hydrants may be required for commercial buildings in parking lot areas and also on the two way street for the East housing area.

11. 507.5.4 Obstruction.

Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.



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12. 507.5.5 Clear space around hydrants.

A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or approved.

13. 507.5.6 Physical protection.

Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall comply with Section 312.

- Fire hydrants cannot be obstructed by parking and bicycle racks as indicated on the plans. Install hydrants according to the criteria in 507.5.4, 507.5.5, and 507.5.6.

14. 505.1 Address identification.

New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

- Provide the address for each building on the street side of the building according to the above criteria.

15. 505.2 Street or road signs.

Streets and roads shall be identified with approved signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an approved size, weather resistant and be maintained until replaced by permanent signs.

16. 507.3 Fire flow.

Fire flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method.

-The very minimum fire flow required is 1500 gallons per minute. This amount could be greater based on building size and construction type.

17. 3312.1 When required.

An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on the site.



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18. 3310.1 Required access.

Approved vehicle access for fire fighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30 480 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

Resubmit updated drawings.



MDOT

Permitting Agency Review

1. RESPONSE FROM MDOT

From: Wiest, Jeremy (MDOT) WiestJ@michigan.gov 
Subject: RE: KELLY_acme twp pud submittal_sewer demand
Date: November 7, 2017 at 3:37 PM
To: IDF (Nate Elkins) nate@influencedesignforum.com
Cc: Burzynski, Steve (MDOT) BurzynskiS@michigan.gov, Liptak, Rick (MDOT) LiptakR@michigan.gov

WJ

Nathan,

I appreciate the opportunity to review the development concepts prior to them getting too far along in the process.

To start MDOT does not have any plans to do any sort of work in this area, not even in our 5-year plan. I do know that the Tribe has talked about doing work to the Acme Creek culvert that crosses under M-72. And with that they may continue the 5 lane section from the intersection east to the roundabout, but don't quote me on any of that as I'm speaking for the Tribe. The only thing that I'm sure about is that MDOT doesn't have any planned work in this location.

Looking at the provided sight plan I do have some concerns with the spacing between the existing driveways (M-72 Auto Wash and Northern Michigan Veterinary Hospital) and the proposed development driveways. We would like to see more interconnection with the properties that are not part of this development to reduce the number of driveways out onto M-72.

If you have any questions please let me know.

Thanks!

Jeremy

Jeremy R Wiest, P.E.

Permit Engineer

Michigan Department of Transportation

Traverse City Transportation Service Center

2084 US-31 South, Suite B

Traverse City, MI 49685

Phone: 231-941-1986

From: IDF (Nate Elkins) [<mailto:nate@influencedesignforum.com>]

Sent: Tuesday, November 7, 2017 12:29 PM

To: Wiest, Jeremy (MDOT) <WiestJ@michigan.gov>

Subject: KELLY_acme twp pud submittal_sewer demand

Dear Mr. Wiest,

We are preparing a PUD / mixed-use development plan submittal for our client Dan Kelly in Acme Township. The project is located at 4230 M-72 East (property currently has the Williamsburg Events Center, Catering By Kelly's commercial kitchen, a private home, and 2 other commercial buildings).

I understand its early on in the planning process and Mr. Kelly has not even been approved for the PUD by the Township, but I would like to begin the conversation prior to submittal so we can be better prepared to address the Acme Township Planning Commission. We currently show one concept that would require drivers to exit right-only and use the new round-a-bouts to return westbound. We also show (2) possible street connections to the VGT property to the east to improve future access management.

It is also my understanding that MDOT has current plans to make changes to the road (widening and new sidewalks) adjacent to the property so it will be important to coordinate those proposed improvements.

The submittal for the PUD will be going in the week of Thanksgiving and it would be much appreciated if we could arrange a time to discuss Mr. Kelly's project prior to then.

Please call or email me directly with any questions - All the Best,

Nathan Elkins, ASLA / Studio Director / IDF / Research, Planning & Design / 120 East Front Street, 2nd Floor Loft / Downtown Traverse City, Michigan / www.influencedesignforum.com / (231) 944-4114

Influence Design Forum (IDF) Studio is a multidisciplinary collective of professionals exploring the seams that make up the outdoor spaces we inhabit everyday - through an ecological and social context exploring the landscape, art, culture and the built environment. Our Studio brings together a diverse group of designers, planners, artists, scientists, engineers and policy makers to problem solve, innovate and research new ideas for the future.

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From: Wiest, Jeremy (MDOT) WiestJ@michigan.gov
Subject: RE: KELLY_acme twp pud submittal_sewer demand
Date: November 8, 2017 at 11:46 AM
To: IDF (Nate Elkins) nate@influencedesignforum.com
Cc: Burzynski, Steve (MDOT) BurzynskiS@michigan.gov, Liptak, Rick (MDOT) LiptakR@michigan.gov

WJ

Nate,

As I mentioned during our phone conversation it would be in the developers best interest to have a Traffic Impact Study completed. By having this completed it would tell if there is a need for any improvement to the M-72 roadway. As I mentioned there are concerns with the number of driveways and the spacing between them. Along with the lefts into the sight given the number of driveways in a short stretch. Something else that we didn't discuss is the impact of having access to and from the VGT property.

If you have any other questions/concerns please let me know.

Thanks!

Jeremy

Jeremy R Wiest, P.E.
Permit Engineer
Michigan Department of Transportation
Traverse City Transportation Service Center
2084 US-31 South, Suite B
Traverse City, MI 49685
Phone: 231-941-1986

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To: 'IDF (Nate Elkins)' <nate@influencedesignforum.com>
Cc: Burzynski, Steve (MDOT) <BurzynskiS@michigan.gov>; Liptak, Rick (MDOT) <LiptakR@michigan.gov>
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Nathan Elkins, ASLA / Studio Director / IDF / Research, Planning & Design / 120 East Front Street, 2nd Floor Loft / Downtown Traverse City, Michigan / www.influencedesignforum.com / (231) 944-4114

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MDEQ

Permitting Agency Review

1. PRE-APPLICATION REVIEW
2. RESPONSE FROM MDEQ
3. COPIES OF (2) SOIL SAMPLING LOCATIONS & REPORTS FROM GFA

Pre-Application Meeting Request Part 301 (Inland Lakes and Streams), Part 303 (Wetlands Protection)

version 1.5

(Submission #: HN9-QDAA-SF38S, revision 1)

Thank you for your submission!

Your submission has successfully been submitted. A confirmation message has been issued to you at nate@influencedesignforum.com. We recommend that you retain a copy of your receipt for this transaction by using the [Print Receipt](#) function.

RECEIPT

Submission #	HN9-QDAA-SF38S
Submitted on	11/29/2017 4:06 PM
Fee	\$100.00
Amount Paid	\$0.00
<hr/>	
Amount Due	\$100.00
⚠ Your submission will not be processed until paid in full.	



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
CADILLAC



C. HEIDI GRETHUR
DIRECTOR

December 6, 2017

Dan Kelly
4240 M-72 East Highway
Williamsburg, MI 49690

Dear Dan Kelly:

SUBJECT: Preapplication Meeting
Michigan Department of Environmental Quality (MDEQ)
Submission Number HN9-QDAA-SF38S

This letter is a follow-up to our November 30th, preapplication meeting regarding the proposed project in Williamsburg, Grand Traverse County. The purpose of a preapplication meeting is to provide you with information that will clarify the permit process, answer preliminary questions about your specific project in order to avoid delays at a later date, and to determine, if possible, the need for wetland or inland lakes and streams permits.

During this meeting we reviewed the need to obtain a permit under Part 301, Inland Lakes and Streams; Part 303, Wetlands Protection, and Part 31 Water Resources, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The review was based on discussion of the proposed project and/or draft permit application, the proposed site, and potential modifications to the project discussed during our meeting.

Based on the information provided with the draft project plans reviewed on site and in our office, including your delineation of wetlands on the proposed project site, the MDEQ's Water Resources Division (WRD) has determined that a permit is required under Part 301, Part 303 and Part 31, of the NREPA. Please reference the submission number at the top of this letter when submitting a permit application for this project.

This determination is based on the project plan prepared by Nate Elkins of IDF, along with other information discussed at the time of this meeting only. Provided that the proposed project and location are not altered, this determination is binding on the MDEQ for a period of two years from the date of this meeting.

During the review of the project site, the MDEQ's Water Resources Division (WRD) made the following findings regarding the need for a permit under Part 301, Part 303, and Part 31 of the NREPA:

- ☒ A permit is required for the project as proposed.
- ☐ A permit is not required for the project as proposed.
- ☐ It cannot be determined whether a permit is required given the information presented at this time.

During the review of the proposed project, the WRD noted activities that, as currently designed, would require authorization under:

Floodplain Regulatory Authority found in Part 31, Water Resources Protection, of the NREPA.

Section 404 of the federal Clean Water Act and/or the federal Rivers and Harbors Act from the United States Army Corps of Engineers.

During the meeting, we also discussed a number of issues related to the project, including the following:

- Information on completing an application form.
- Possible alternative design options to minimize project effects on aquatic resources, *specifically* the placement and orientation of storm water management structures and the conversion of retention structures that are currently in place.
- Potential adverse effects to aquatic resources on the site that may result from the proposed project, *specifically* the conversion of the storm water retention pond near M-72.
- Potential floodplain effects. We recommend that you discuss this issue further with the WRD District Floodplain Engineer, Susan Conradson.

Please note that this is not a permit. The WRD cannot indicate during a preapplication meeting whether or not a permit will be issued. The WRD cannot make a decision regarding a permit until it has considered all of the information provided in the final permit application, and, in some instances, has also considered comments received in response to a public notice of the project. Therefore, the WRD cannot legally tell you whether the project will be permitted in advance of a permit application being submitted and reviewed.

The MDEQ submission number assigned to this project is HN9-QDAA-SF38S. Please keep a record of this submission number and use it when submitting a final application or otherwise corresponding with our office on this project.

We appreciate the opportunity to meet with you or your representative to address these concerns. We have established a submission for this project, and the information submitted to date will be used to facilitate processing of the final application. If you should have follow-up questions before then, please contact me at 231-429-5244; SchockN@michigan.gov; or MDEQ, WRD, Cadillac District Office, 120 West Chapin Street, Cadillac, MI, 49601-2158.

Sincerely,

Neil Schock

Neil Schock
Water Resources Division



VEGETATION - Use scientific names of plants

Sampling Point: 1

Tree Stratum					Plot Size (30')		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Fraxinus nigra</i>					40	Y	FACW	
2	<i>Populus balsamifera</i>					20	Y	FACW	
3	<i>Populus balsamifera</i>					10	N	FACW	
4	<i>Quercus alba</i>					5	N	FACU	
5									
6									
7									
8									
9									
10									
						75	= Total Cover		

Sapling/Shrub Stratum					Plot Size (10')		Absolute % Cover	Dominant Species	Indicator Status
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
						0	= Total Cover		

Herb Stratum					Plot Size (5')		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Carex vulpinoidea</i>					40	Y	OBL	
2	<i>Onoclea sensibilis</i>					20	Y	FACW	
3	<i>Equisetum fluviatile</i>					10	N	OBL	
4	<i>Toxicodendron radicans</i>					10	N	FAC	
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
						80	= Total Cover		

Woody Vine Stratum					Plot Size (10')		Absolute % Cover	Dominant Species	Indicator Status
1									
2									
3									
4									
5									
						0	= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum	15	38
Sapling/Shrub Stratum	0	0
Herb Stratum	16	40
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	50	x 1 =	50
FACW species	90	x 2 =	180
FAC species	10	x 3 =	30
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column totals	155 (A)		280 (B)

Prevalence Index = B/A = 1.81

Hydrophytic Vegetation Indicators:

 Rapid test for hydrophytic vegetation

☒ Dominance test is >50%

☒ Prevalence index is ≤3.0*

 Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

 Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)



VEGETATION - Use scientific names of plants

Sampling Point: 2

Tree Stratum					50/20 Thresholds		
Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status		20%	50%	
1 <i>Malus</i>	40	Y	FACU	Tree Stratum	20	50	
2 <i>Acer rubrum</i>	20	Y	FACU	Sapling/Shrub Stratum	2	5	
3 <i>Fraxinus nigra</i>	20	Y	FACW	Herb Stratum	8	20	
4 <i>Pinus strobus</i>	20	Y	FACU	Woody Vine Stratum	0	0	
5				Dominance Test Worksheet			
6				Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A)			
7				Total Number of Dominant Species Across all Strata: <u>8</u> (B)			
8				Percent of Dominant Species that are OBL, FACW, or FAC: <u>37.50%</u> (A/B)			
9				Prevalence Index Worksheet			
10				Total % Cover of:			
	100 = Total Cover			OBL species <u>0</u> x 1 = <u>0</u>			
				FACW species <u>30</u> x 2 = <u>60</u>			
				FAC species <u>20</u> x 3 = <u>60</u>			
				FACU species <u>100</u> x 4 = <u>400</u>			
				UPL species <u>0</u> x 5 = <u>0</u>			
				Column totals <u>150</u> (A) <u>520</u> (B)			
				Prevalence Index = B/A = <u>3.47</u>			
				Hydrophytic Vegetation Indicators:			
				<input type="checkbox"/> Rapid test for hydrophytic vegetation			
				<input type="checkbox"/> Dominance test is >50%			
				<input type="checkbox"/> Prevalence index is ≤3.0*			
				<input type="checkbox"/> Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)			
				<input type="checkbox"/> Problematic hydrophytic vegetation* (explain)			
				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			
				Definitions of Vegetation Strata:			
				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.			
				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
				Woody vines - All woody vines greater than 3.28 ft in height.			
				Hydrophytic vegetation present? <u>N</u>			
Remarks: (Include photo numbers here or on a separate sheet)							



SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-14"	10YR 4/4	100					SANDY LOAM	
14-27"	10YR 5/3	100					LOAMY SAND	
27-39"	10YR 5/3	90	5YR 5/8	10			LOAMY SAND	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histisol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) (LRR K, L) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils:

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? N

Remarks:



SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-11"	2.5YR 2.5 1	100					LOAMY CLAY	HIGH ORGANIC
11-24"	2.5Y 4 2	100					LOAMY SAND	
24-27"	7.5YR 2.5 1	100					SANDY PEAT	HIGH ORGANIC
27-30"	2.5Y 4 2	100					LOAMY SAND	
30-38"	7.5YR 2.5 1	100					SANDY PEAT	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histisol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> (LRR K, L) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils:

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? ☒ Y

Remarks:



CORRESPONDENCE FROM TOWNSHIP

1. PARKING CALCULATIONS
2. LETTER, DATED OCTOBER 2, 2017 REGARDING SHORT-TERM RENTALS

Use	Units / ft ²	Required	Use Total
Detached Flats	76	2 / unit	152
Commercial	46,300	4/1000 ft ²	185
Office	17,900	3/1000 ft ²	54
Multifamily	46	1.5 / unit	69
Total			460

SCENARIO 1

Use	Area; #	Base	Spaces	Total
Office	17,900	1,000	3	54
Flats ("lodging")	76	per unit	2	152
Total				206
Shared Parking Function				1.7
Shared Total				121
Use	Area; #	Base	Spaces	Total
Commercial	46,300	1,000	4	185
Multifamily	46	per unit	1.5	69
Total				254
Shared Parking Function				1.2
Shared Total				212
Total				333

SCENARIO 2

Use	Area; #	Base	Spaces	Total
Commercial	46,300	1,000	4	185
Flats ("lodging")	76	per unit	2	152
Total				337
Shared Parking Function				1.3
Shared Total				259
Use	Area; #	Base	Spaces	Total
Office	17,900	1,000	3	54
Multifamily	46	per unit	1.5	69
Total				123
Shared Parking Function				1.4
Shared Total				88
Total				347

SCENARIO 3

Use	Area; #	Base	Spaces	Total
Commercial	46,300	1,000	4	185
Office	17,900	1,000	3	54
Total				239
Shared Parking Function				1.2
Shared Total				199
Use	Area; #	Base	Spaces	Total

Flats ("lodging")	76	per unit	2	152
Multifamily	46	per unit	1.5	69
Total				221
Shared Parking Function				0
Shared Total				221
Total				420



Planning and Zoning

6042 Acme Road | Williamsburg, MI | 49690

Phone: (231) 938-1350 Fax: (231) 938-1510 Web: www.acmetownship.org

October 2, 2017

Dan Kelly
4240 E M-72
Williamsburg, MI 49690

RE: short-term rentals

Mr. Kelly,

I have spoken with our township counsel who agreed with me that your proposed development at the property where your catering facility exists and adjacent parcels will not be jeopardized by any ruling the Township Board takes on short-term rentals. The zoning of your property and the Planned Development approval you are seeking will allow your proposal to operate as a mixed-use development where individual, detached units may be condominiumized for residential or short-term rental use. These short-term rentals will not require a permit if allowed under the Planned Development approval.

Please note that this opinion does not guarantee final approval of the project by the Planning Commission or Township Board.

Shawn Winter

Planning & Zoning Administrator – Acme Township

swinter@acmetownship.org

set number

influence
design
forum
LLC

studio

120 E. Front St.
2nd Floor Loft
P.O. Box 1507
Traverse City, MI 49685
(231) 944.4114

www.influencedesignforum.com

PLANNED UNIT DEVELOPMENT SITE PLAN & APPLICATION

KELLY RESTAURANTS LLC

OWNER

KELLY RESTAURANTS
4230 M-72 EAST HIGHWAY
WILLIAMSBURG, MI 49690

(231) 938-3663
(231) 342-4550

PLANNER

INFLUENCE DESIGN FORUM, LLC
PO BOX 1507
120 EAST FRONT ST. 2ND FLR. LOFT
TRAVERSE CITY, MI 49685

(231) 944-4114
www.influencedesignforum.com

CIVIL ENGINEER

M2E, LLC
1230 PENINSULA CT.
TRAVERSE CITY, MI 49686

(231) 218-0590

PUBLIC AGENCIES & UTILITIES

UTILITY AGENCIES

CONSUMERS ENERGY
Telephone: 231.929.6242

CHARTER COMMUNICATIONS
Telephone: 231.929.7012

DTE ENERGY
Telephone: 231.592.3244

AT&T MICHIGAN
Telephone: 231.941.2707

PUBLIC AGENCIES

ACME TOWNSHIP
ZONING ADMINISTRATOR
Telephone: 231.938.1350

GRAND TRAVERSE COUNTY SOIL
EROSION
Telephone: 231.995.6042

GRAND TRAVERSE COUNTY
CONSTRUCTION CODE
Telephone: 231.995.6049

EMERGENCY SERVICES

EMERGENCY CALLS
911

FIRE DEPARTMENTS
Emergency Service: **911**

EMERGENCY AMBULANCE SERVICE
911

Grand Traverse Metro Fire Department
Telephone: 231.947.3000

POLICE AGENCIES
Emergency Service: **911**

MISS DIG 811
Emergency Service
Telephone: 1.800.482.7171

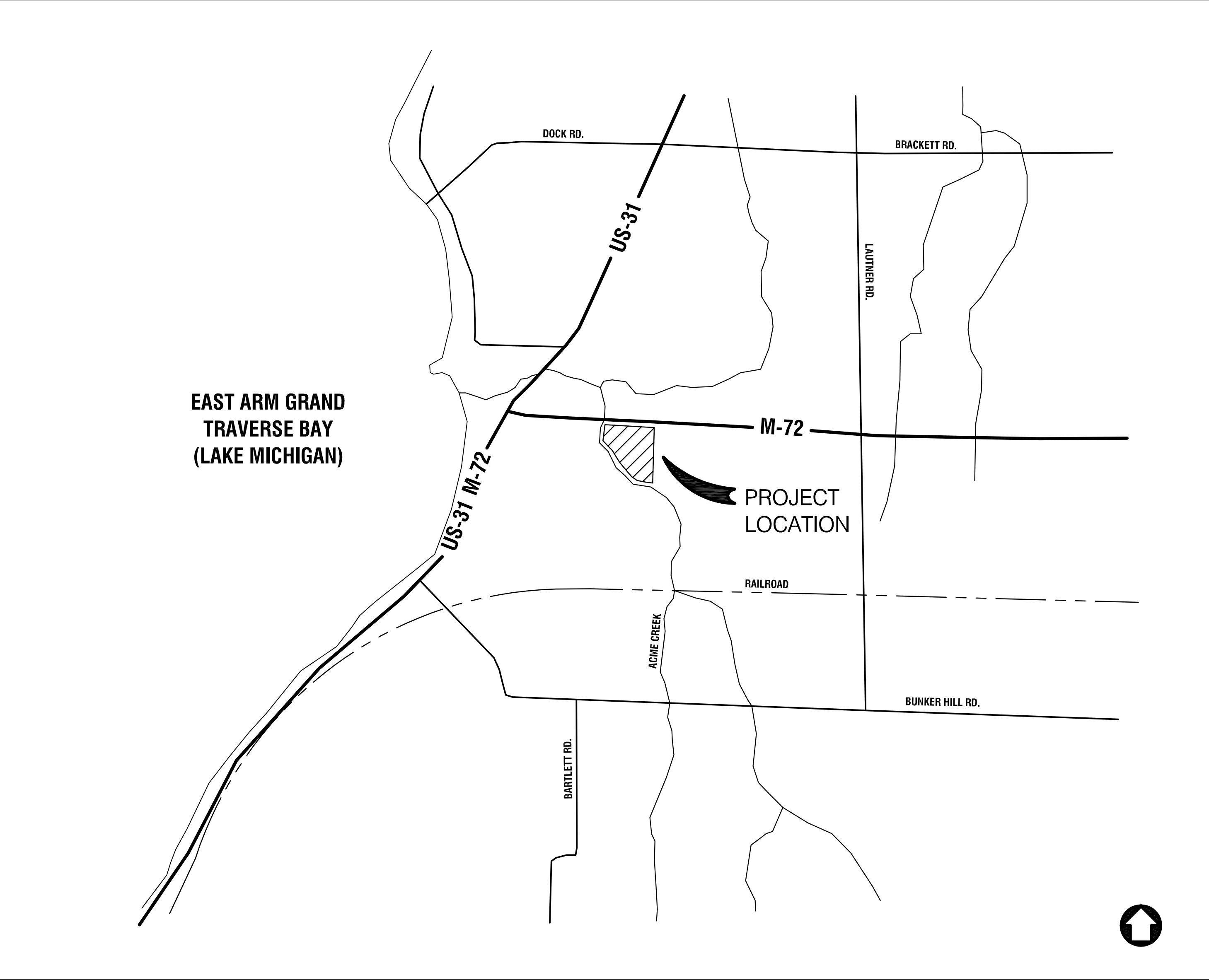
Grand Traverse County Sheriff:
Telephone: 231.995.5000

Michigan State Police: Telephone:
231.946.4646

INFLUENCE DESIGN FORUM COMMISSION / JOB NO. 2017101.01

LOCATION MAP

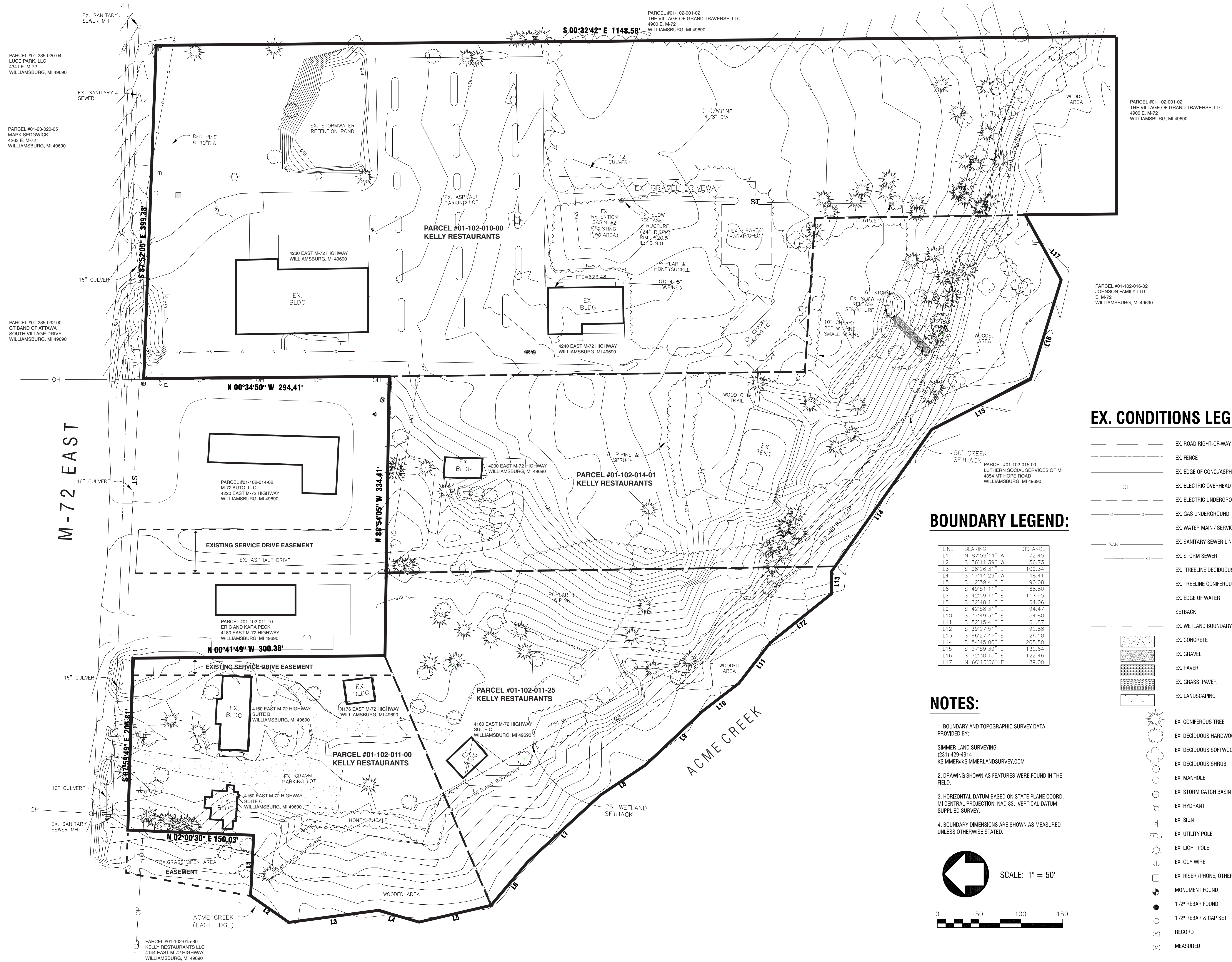
ACME TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN



ISSUE DATE	DESCRIPTION
11-28-17	PUD APPLICATION

SHEET INDEX

DRAWING NO.	SHEET DESCRIPTION
C	COVER
S1	EXISTING CONDITIONS PLAN
S2	EXISTING CONDITIONS: ZONING DISTRICT OVERLAY
S3	EXISTING CONDITIONS: PROPOSED CHANGE IN LAND USE
S4	EXISTING CONDITIONS: LOCATION OF BUSINESSES
S5	EXISTING CONDITIONS: ECOLOGICALLY SENSITIVE AREAS
S6	EXISTING CONDITIONS: FOREST COVER TYPES
S7	OVERALL SITE PLAN
S8	NEIGHBORHOOD PLAN
S9	MODELING STUDY: CAMERA LOCATION ID MAP
S10	MODELING STUDY: CAMERA 1
S11	MODELING STUDY: CAMERA 2
S12	MODELING STUDY: CAMERA 3
S13	MODELING STUDY: CAMERA 4
S14	MODELING STUDY: CAMERA 5
S15	MODELING STUDY: CAMERA 6
S16	CIRCULATION PLAN
S17	PARKING MANAGEMENT PLAN
S18	CROSS-SECTION STUDY: SECTION ID MAP
S19	CROSS-SECTION STUDY: SECTION A - MAIN STREET
S20	CROSS-SECTION STUDY: SECTION B - SECONDARY OR COLLECTOR STREET
S21	CROSS-SECTION STUDY: SECTION C - TERTIARY OR LOCAL STREET
S22	CROSS-SECTION STUDY: SECTION D - TERTIARY OR LOCAL ONE-WAY STREET
S23	STORMWATER MANAGEMENT PLAN
S24	PARK AND OPEN SPACE PLAN
S25	PRELIMINARY UTILITY PLAN
S26	FIRE & EMERGENCY ACCESS PLAN
S27	PHASING PLAN
C-S7	FIRE & EMERGENCY SERVICES SITE PLAN REVIEW PLAN SET



EX. CONDITIONS LEGEND:

- EX. ROAD RIGHT-OF-WAY
- EX. FENCE
- EX. EDGE OF CONC./ASPHALT
- EX. ELECTRIC OVERHEAD
- EX. ELECTRIC UNDERGROUND
- EX. GAS UNDERGROUND
- EX. WATER MAIN / SERVICE LINE
- EX. SANITARY SEWER LINE
- EX. STORM SEWER
- EX. TREELINE DECIDUOUS
- EX. TREELINE CONIFEROUS
- EX. EDGE OF WATER
- SETBACK
- EX. WETLAND BOUNDARY

- EX. CONCRETE
- EX. GRAVEL
- EX. PAVER
- EX. GRASS PAVER
- EX. LANDSCAPING

- EX. CONIFEROUS TREE
- EX. DECIDUOUS HARDWOOD TREE
- EX. DECIDUOUS SOFTWOOD TREE
- EX. DECIDUOUS SHRUB
- EX. MANHOLE
- EX. STORM CATCH BASIN
- EX. HYDRANT
- EX. SIGN
- EX. UTILITY POLE
- EX. LIGHT POLE
- EX. GUY WIRE
- EX. RISER (PHONE, OTHER)
- MONUMENT FOUND
- 1/2" REBAR FOUND
- 1/2" REBAR & CAP SET
- RECORD
- MEASURED

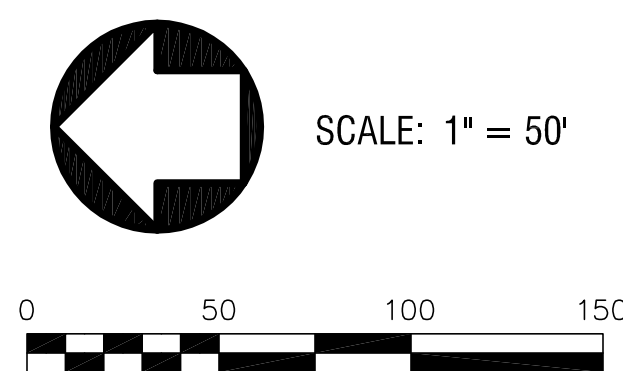
BOUNDARY LEGEND:

LINE	BEARING	DISTANCE
L1	N 87°59'11" W	72.45'
L2	S 38°11'39" W	56.73'
L3	S 08°26'31" E	109.34'
L4	S 17°14'29" W	48.41'
L5	S 12°39'41" E	90.08'
L6	S 49°51'11" E	68.80'
L7	S 42°59'11" E	117.95'
L8	S 32°48'11" E	64.06'
L9	S 42°58'31" E	94.47'
L10	S 37°49'31" E	54.80'
L11	S 52°15'41" E	61.87'
L12	S 39°27'51" E	92.88'
L13	S 86°27'46" E	26.10'
L14	S 54°45'00" E	208.80'
L15	S 27°59'39" E	132.64'
L16	S 72°30'15" E	122.46'
L17	N 60°16'36" E	89.00'

NOTES:

- BOUNDARY AND TOPOGRAPHIC SURVEY DATA PROVIDED BY:

SIMMER LAND SURVEYING
(231) 429-4914
KSIMMER@SIMMERLANDSURVEY.COM
- DRAWING SHOWN AS FEATURES WERE FOUND IN THE FIELD.
- HORIZONTAL DATUM BASED ON STATE PLANE COORD. MI CENTRAL PROJECTION, NAD 83. VERTICAL DATUM SUPPLIED SURVEY.
- BOUNDARY DIMENSIONS ARE SHOWN AS MEASURED UNLESS OTHERWISE STATED.



set number

influence design forum LLC

studio

120 E. Front St.
2nd Floor Loft
P.O. Box 1507
Traverse City, MI 49685
(231) 944.4114

www.influencedesignforum.com

CIVIL ENGINEER CONSULTANT

REGISTRATION SEAL

ISSUE DATE
11-28-17

DESCRIPTION
PUD APPLICATION

PROJECT

PLANNED UNIT DEVELOPMENT

CLIENT

KELLY RESTAURANTS
4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

PRINCIPAL:

PROJECT MGR.:

DESIGNED BY:

DRAWN BY:

CHECKED BY:

COMMISSION / JOB NO.:

170101.01

DRAWING TITLE

EXISTING CONDITIONS PLAN

S.1

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Traverse City, MI 49685
(231) 944.4114

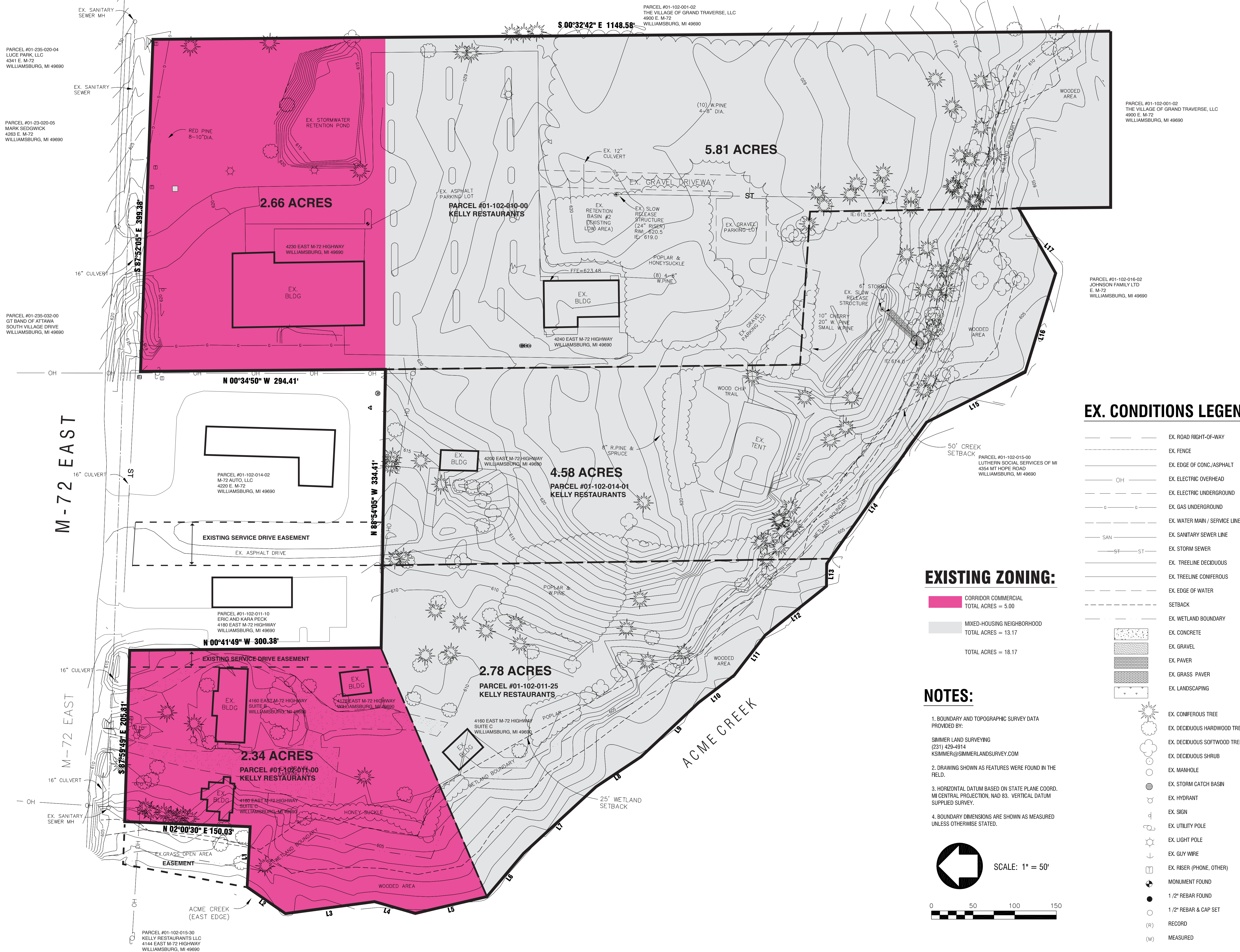
CIVIL ENGINEER
CONSULTANT

ISSUE DATE	DESCRIPTION
11-28-17	PUD APPLICATION

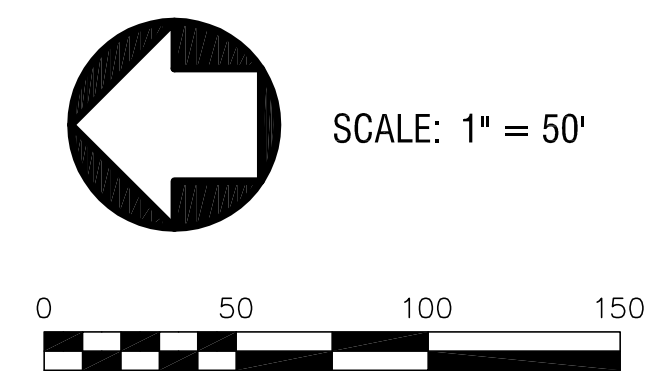
PLANNED UNIT DEVELOPMENT

PRINCIPAL:	NGE
PROJECT MGR.:	
DESIGNED BY:	NGE
DRAWN BY:	
CHECKED BY:	
COMMISSION / JOB NO.:	2017101.01

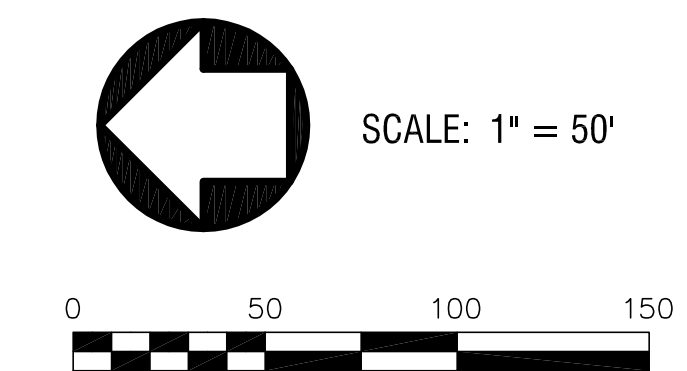
S.2



S.3



S.4



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PLANNED UNIT DEVELOPMENT







KELLY RESTAURANTS
4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

DRAWING TITLE

S.5



ECOLOGICALLY SENSITIVE AREAS:

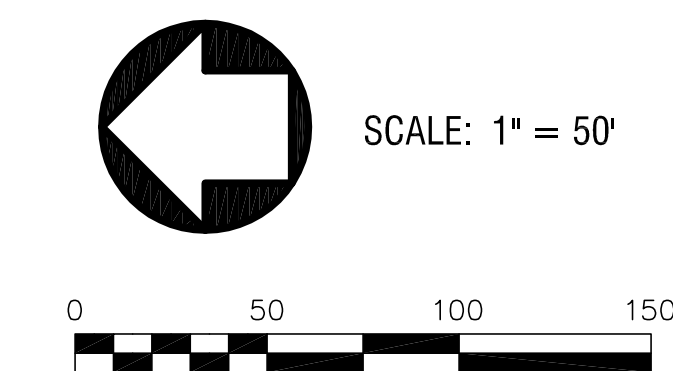
-  ACME CREEK
 DELINEATED WETLAND
 PROPERTY BOUNDARY
 WETLAND BOUNDARY
 50' CREEK SETBACK
 25' WETLAND SETBACK



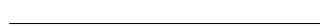






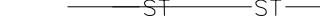



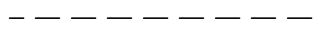


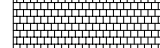

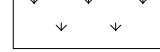















100-YEAR FLOOD PLAIN APPROX. 5' ABOVE ORDINARY HIGH WATER MARK PER MDEQ

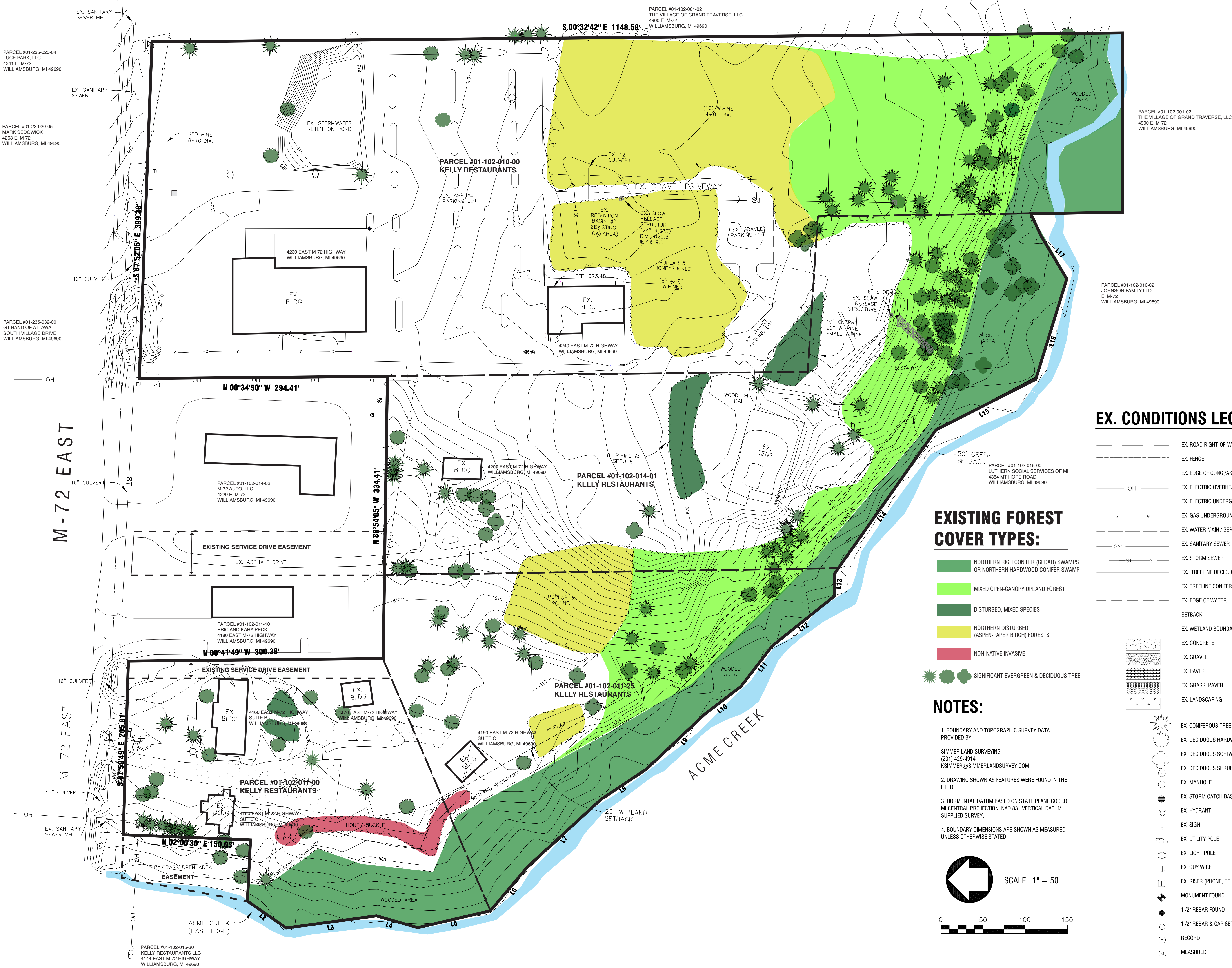
NOTES:

1. BOUNDARY AND TOPOGRAPHIC SURVEY DATA PROVIDED BY:

SIMMER LAND SURVEYING
(231) 429-4914
KSIMMER@SIMMERLANDSURVEY.COM
2. DRAWING SHOWN AS FEATURES WERE FOUND IN THE FIELD.
3. HORIZONTAL DATUM BASED ON STATE PLANE COORD. MI CENTRAL PROJECTION, NAD 83. VERTICAL DATUM SUPPLIED SURVEY.
4. BOUNDARY DIMENSIONS ARE SHOWN AS MEASURED UNLESS OTHERWISE STATED.



- | | |
|---|-------------------------------|
|  | EX. ROAD RIGHT-OF-WAY |
|  | EX. FENCE |
|  | EX. EDGE OF CONC./ASPHALT |
|  | EX. ELECTRIC OVERHEAD |
|  | EX. ELECTRIC UNDERGROUND |
|  | EX. GAS UNDERGROUND |
|  | EX. WATER MAIN / SERVICE LINE |
|  | EX. SANITARY SEWER LINE |
|  | EX. STORM SEWER |
|  | EX. TREELINE DECIDUOUS |
|  | EX. TREELINE CONIFEROUS |
|  | EX. EDGE OF WATER |
|  | SETBACK |
|  | EX. WETLAND BOUNDARY |
|  | EX. CONCRETE |
|  | EX. GRAVEL |
|  | EX. PAVER |
|  | EX. GRASS PAVER |
|  | EX. LANDSCAPING |
|  | EX. CONIFEROUS TREE |
|  | EX. DECIDUOUS HARDWOOD TREE |
|  | EX. DECIDUOUS SOFTWOOD TREE |
|  | EX. DECIDUOUS SHRUB |
|  | EX. MANHOLE |
|  | EX. STORM CATCH BASIN |
|  | EX. HYDRANT |
|  | EX. SIGN |
|  | EX. UTILITY POLE |
|  | EX. LIGHT POLE |
|  | EX. GUY WIRE |
|  | EX. RISER (PHONE, OTHER) |
|  | MONUMENT FOUND |
|  | 1/2" REBAR FOUND |
|  | 1/2" REBAR & CAP SET |
| (R) | RECORD |
| (M) | MEASURED |



EX. CONDITIONS LEGEND:

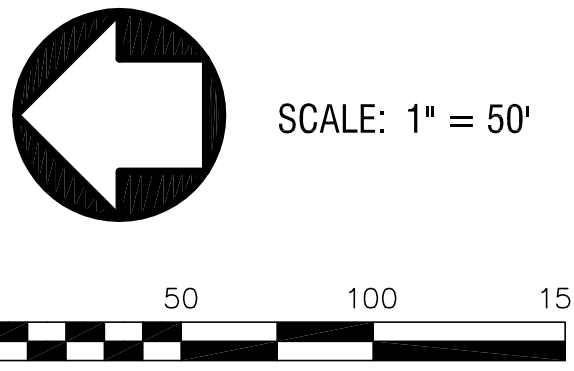
- EX. ROAD RIGHT-OF-WAY
- EX. FENCE
- EX. EDGE OF CONC./ASPHALT
- EX. ELECTRIC OVERHEAD
- EX. ELECTRIC UNDERGROUND
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- EX. TREELINE CONIFEROUS
- EX. EDGE OF WATER
- SETBACK
- EX. WETLAND BOUNDARY
- EX. CONCRETE
- EX. GRAVEL
- EX. PAVER
- EX. GRASS PAVER
- EX. LANDSCAPING

EXISTING FOREST COVER TYPES:

- NORTHERN RICH CONIFER (CEDAR) SWAMPS OR NORTHERN HARDWOOD CONIFER SWAMP
- MIXED OPEN-CANOPY UPLAND FOREST
- DISTURBED, MIXED SPECIES
- NORTHERN DISTURBED (ASPEN-PAPER BIRCH) FORESTS
- NON-NATIVE INVASIVE
- SIGNIFICANT EVERGREEN & DECIDUOUS TREE

NOTES:

- BOUNDARY AND TOPOGRAPHIC SURVEY DATA PROVIDED BY:
SIMMER LAND SURVEYING
(231) 429-4914
KSIMMER@SIMMERLANDSURVEY.COM
- DRAWING SHOWN AS FEATURES WERE FOUND IN THE FIELD.
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set number

influence design forum LLC

studio

120 E. Front St.
2nd Floor Loft
P.O. Box 1507
Traverse City, MI 49685
(231) 944.4114

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CIVIL ENGINEER
CONSULTANT

REGISTRATION SEAL

ISSUE DATE	DESCRIPTION
11-28-17	PUD APPLICATION

PROJECT

PLANNED UNIT DEVELOPMENT

CLIENT

KELLY RESTAURANTS
4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

PRINCIPAL:	NGE
PROJECT MGR:	
DESIGNED BY:	NGE
DRAWN BY:	
CHECKED BY:	
COMMISSION / JOB NO.:	2017101.01

DRAWING TITLE

EXISTING CONDITIONS PLAN
Forest Cover Types

S.6

120 E. Front St.
2nd Floor Loft
P.O. Box 1507
Traverse City, MI 49685
(231) 944.4114

**CIVIL ENGINEER
CONSULTANT**

ISSUE DATE	DESCRIPTION
11-28-17	PUD APPLICATION

PLANNED UNIT DEVELOPMENT

KELLY RESTAURANTS
4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

PRINCIPAL:	NGE
PROJECT MGR.:	
DESIGNED BY:	NGE
DRAWN BY:	
CHECKED BY:	
COMMISSION / JOB NO.:	2017101.0

SITE PLAN

S.7





MIXED-USE BUILDING TYPES:

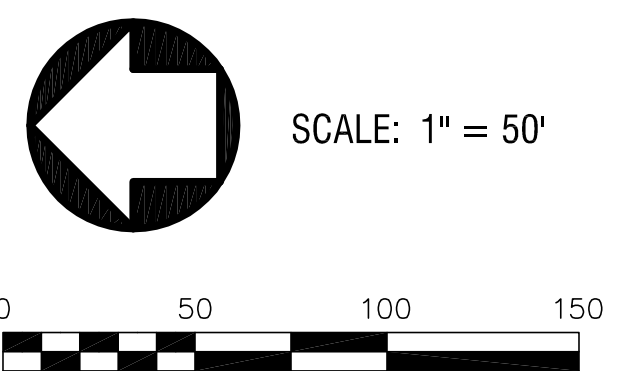
1	MIXED-USE BUILDING 3-Story Mixed-Use 21600 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Commercial		7200 SFT	
2nd Flr. Office		7200 SFT	
3rd Flr. Apartments		7200 SFT	8
2	MIXED-USE BUILDING 3-Story Mixed-Use 21600 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Commercial		7200 SFT	
2nd Flr. Office		7200 SFT	
3rd Flr. Apartments		7200 SFT	8
3	MIXED-USE BUILDING 3-Story Mixed-Use 8400 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Commercial		4200 SFT	
2nd Flr. Apartments		4200 SFT	4
4	MIXED-USE BUILDING 3-Story Mixed-Use 8400 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Commercial		4200 SFT	
2nd Flr. Apartments		4200 SFT	4
5	MIXED-USE BUILDING 3-Story Mixed-Use 8400 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Commercial		4200 SFT	
2nd Flr. Apartments		4200 SFT	4
6	MIXED-USE BUILDING 2-Story Mixed-Use 3600 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Commercial		1800 SFT	
2nd Flr. Office		1800 SFT	
7	MIXED-USE BUILDING 3-Story Mixed-Use 10500 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Commercial		3500 SFT	
2nd Flr. Condominium		3500 SFT	2
3rd Flr. Condominium		3500 SFT	2
8	MIXED-USE BUILDING 2-Story Mixed-Use 12000 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Commercial		6000 SFT	
2nd Flr. Apartment		6000 SFT	8
9	MULTI-FAMILY BUILDING 3-Story Mixed-Use 12000 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Condominium Walkout		4000 SFT	> 4
2nd Flr. Condominium		4000 SFT	
3rd Flr. Condominium		4000 SFT	2
10	MULTI-FAMILY BUILDING 3-Story Mixed-Use 6000 Square Feet (SFT)		
USE BY FLOOR		SFT	# OF RES. UNITS
1st Flr. Condominium Walkout		2000 SFT	> 2
2nd Flr. Condominium		2000 SFT	
3rd Flr. Condominium		2000 SFT	2
TOTAL RES. UNITS			50

PROPOSED DENSITY:

CORRIDOR COMMERCIAL			
TOTAL ACRES = 5.66	50 UNITS	8.83 UNITS/ACRE	
MIXED-HOUSING NEIGHBORHOOD			
TOTAL ACRES = 12.51	76 UNITS	6.08 UNITS/ACRE	
TOTAL ACRES = 18.17			

DETACHED SINGLE FAMILY DWELLING TYPES:

TYPE	DESCRIPTION	# OF UNITS	
A	2-Story 1600 Square Feet	23	
B	1-Story 800 Square Feet	18	
C1	1-Story 600 Square Feet	17	
C2	1-Story 1000 Square Feet	11	
D	2-Story w/detached garage 1200 Square Feet	7	
TOTAL UNITS		76	



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REGISTRATION SEAL

ISSUE DATE
11-28-17

DESCRIPTION
PUD APPLICATION

PROJECT

PLANNED UNIT DEVELOPMENT

CLIENT
KELLY RESTAURANTS
4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

PRINCIPAL: _____ NGE

PROJECT MGR: _____

DESIGNED BY: _____ NGE

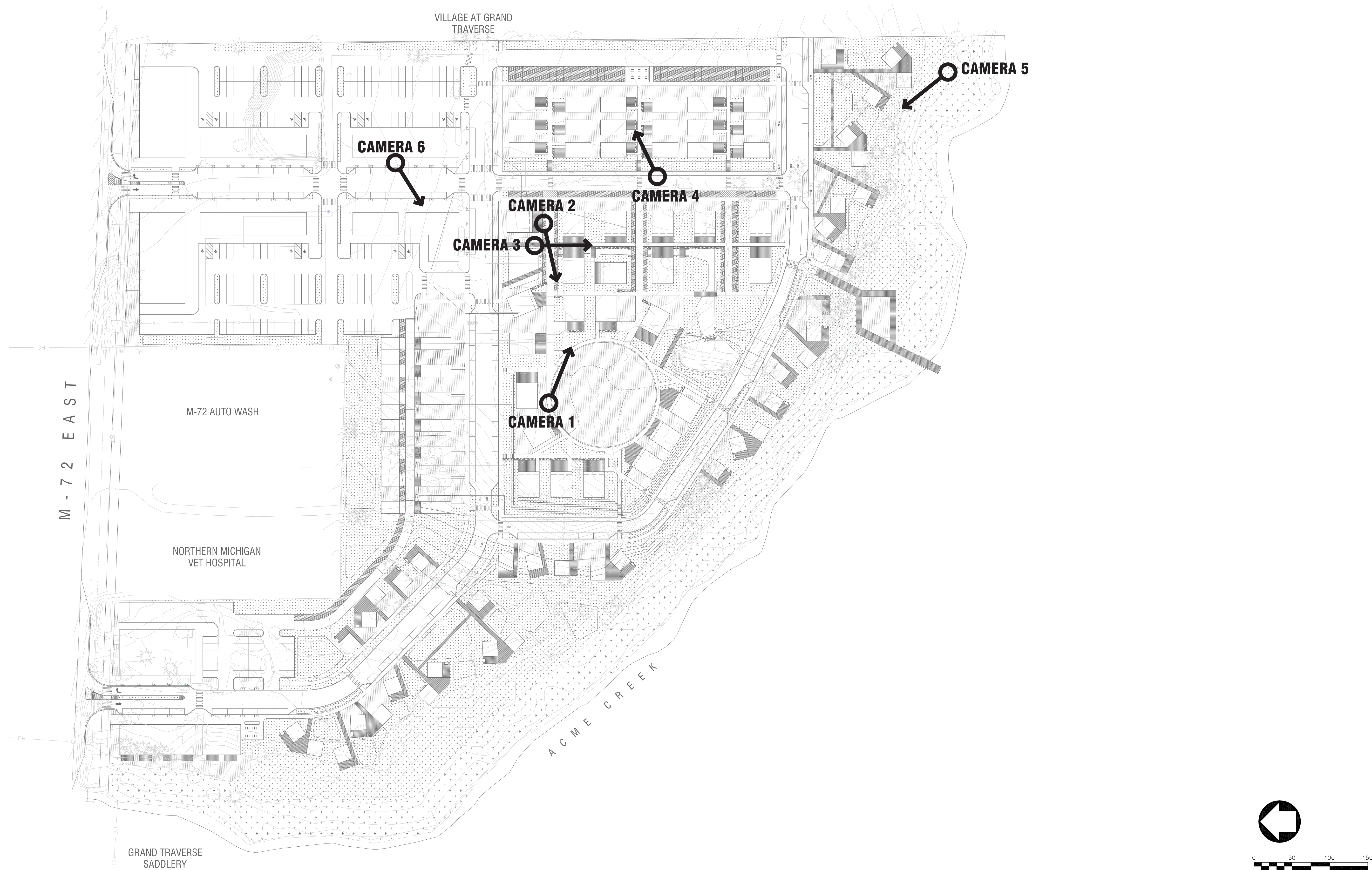
DRAWN BY: _____

CHECKED BY: _____

COMMISSION / JOB NO.: _____ 2017101.01

DRAWING TITLE
NEIGHBORHOOD PLAN

S.8



PRINCIPAL	NGE
PROJECT MANAGER	
DESIGNED BY	NGE
DRAWN BY	
CHECKED BY	
COMMISSION / JOB NO.	2017101.01

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PROJECT

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CLIENT
KELLY RESTAURANTS

4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

PRINCIPAL:	NGE
PROJECT MOD:	

DESIGNED BY: NGE

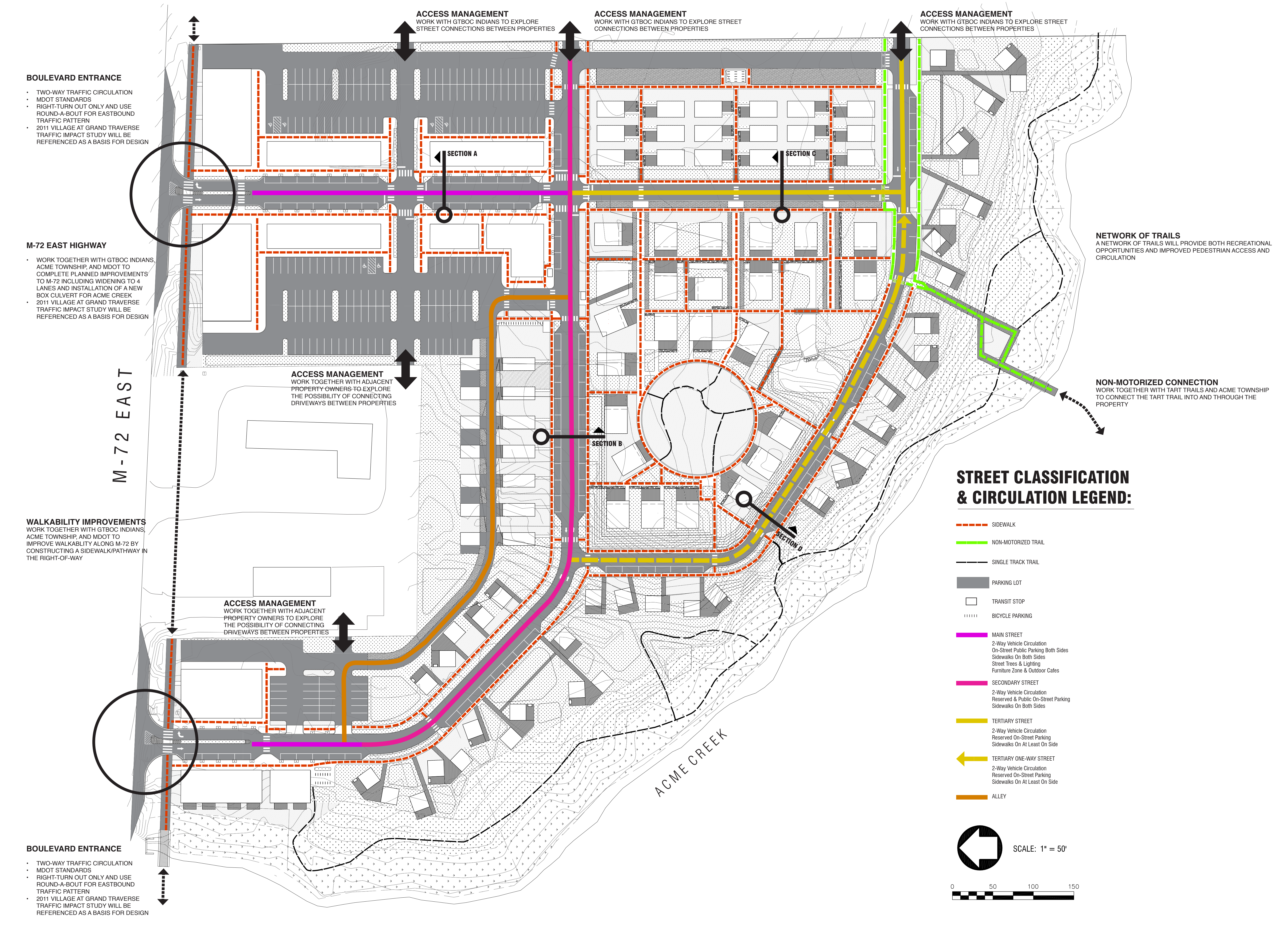
DRAWN BY: _____
CHECKED BY: _____

COMMISSION / JOB NO.: 201710101

DRAWING TITLE

CIRCULATION PLAN

S.16



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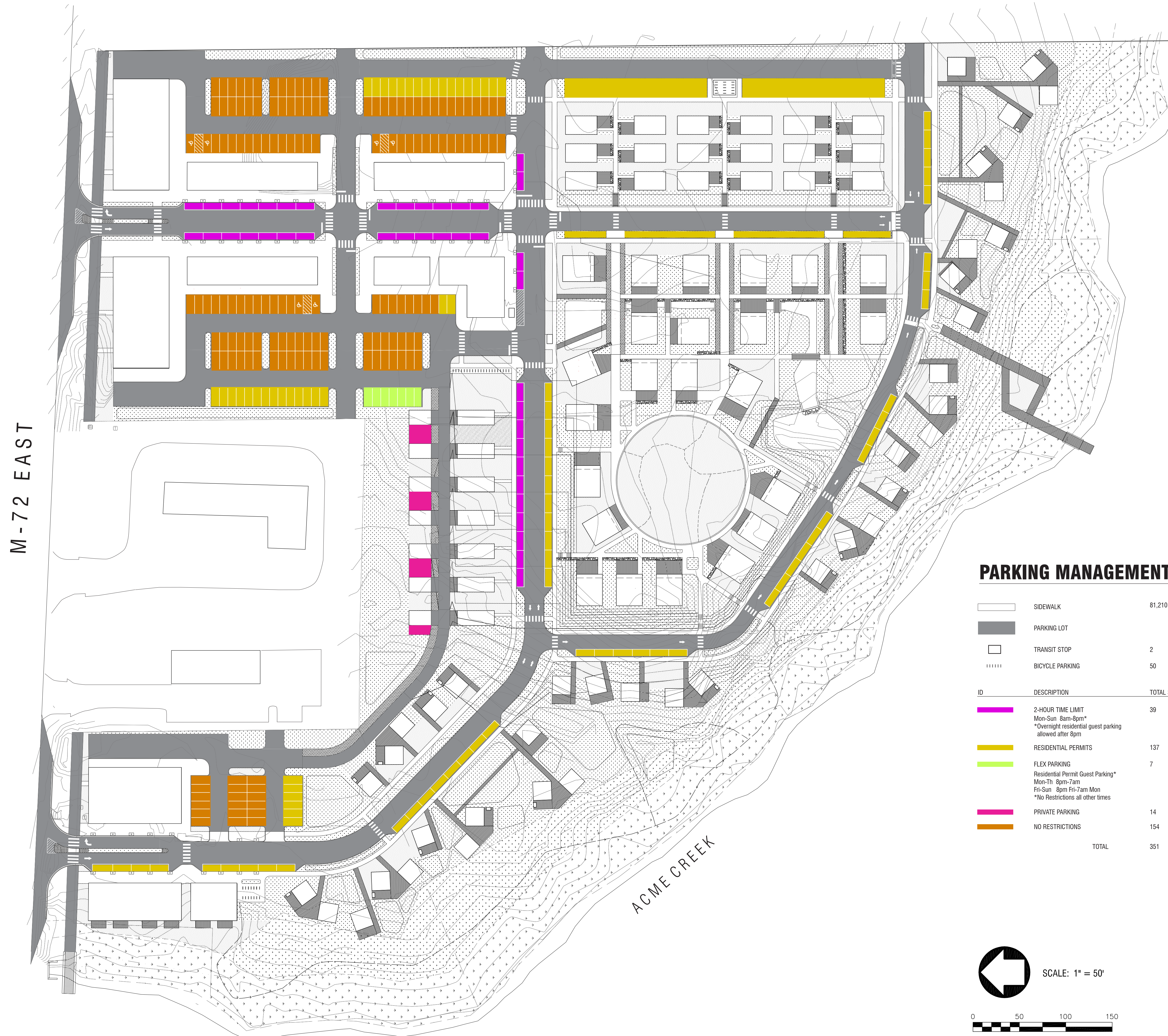
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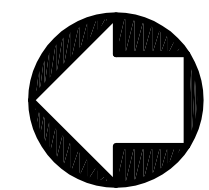
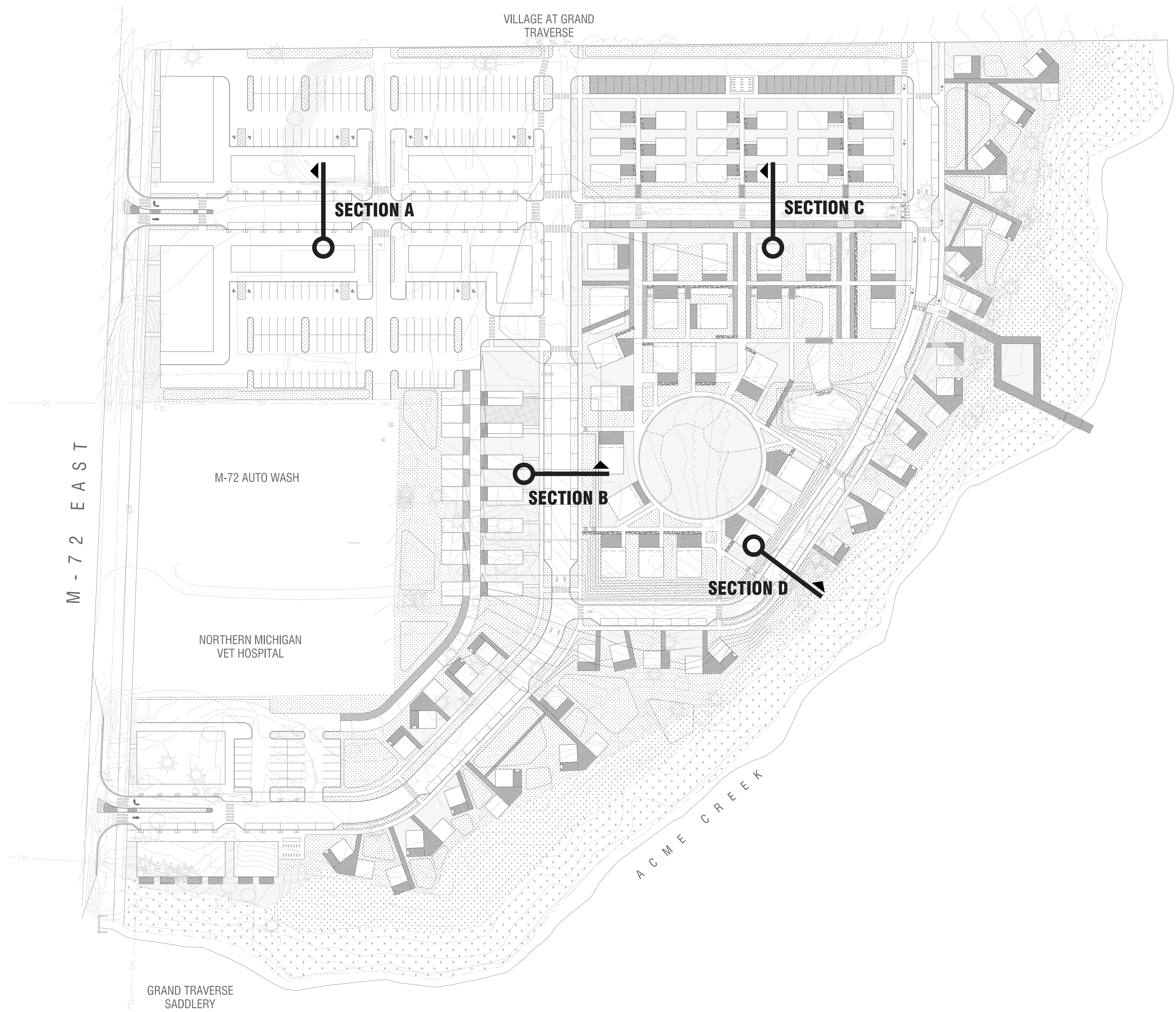
PLANNED UNIT DEVELOPMENT

KELLY RESTAURANTS
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PRINCIPAL:	NGE
PROJECT MGR.:	
DESIGNED BY:	NGE
DRAWN BY:	
CHECKED BY:	
COMMISSION / JOB NO.:	2017101.0

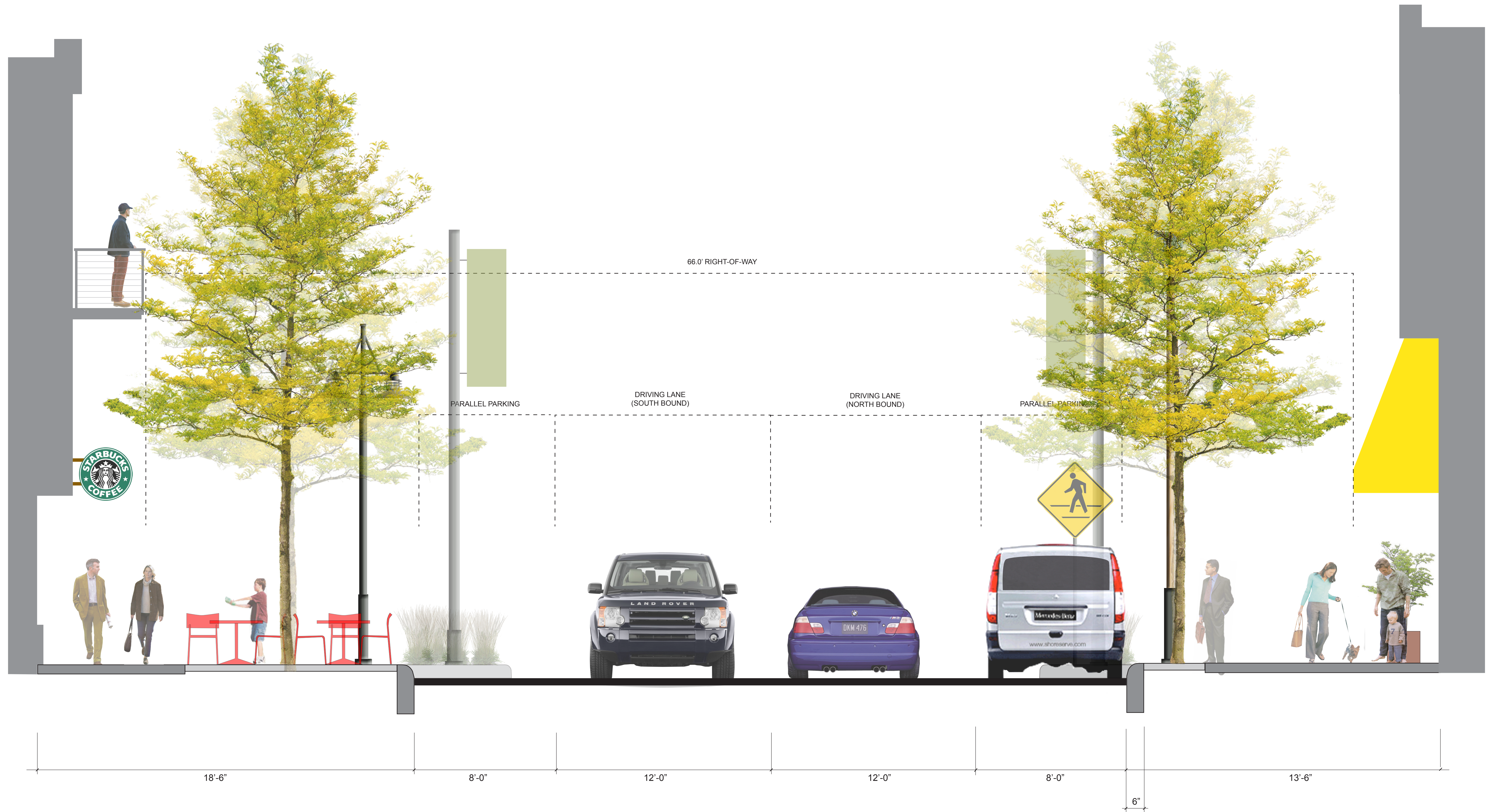
PARKING MANAGEMENT PLAN

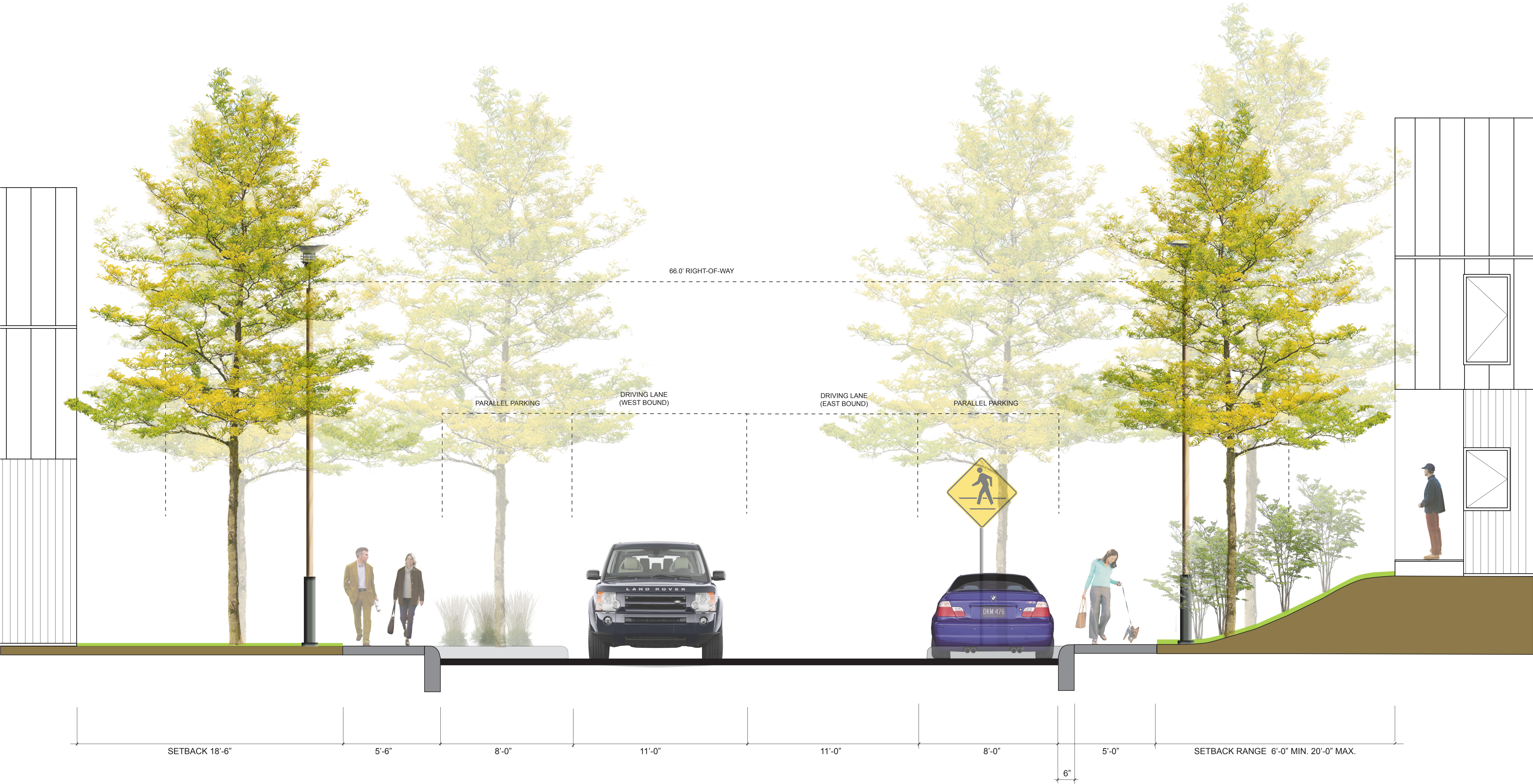


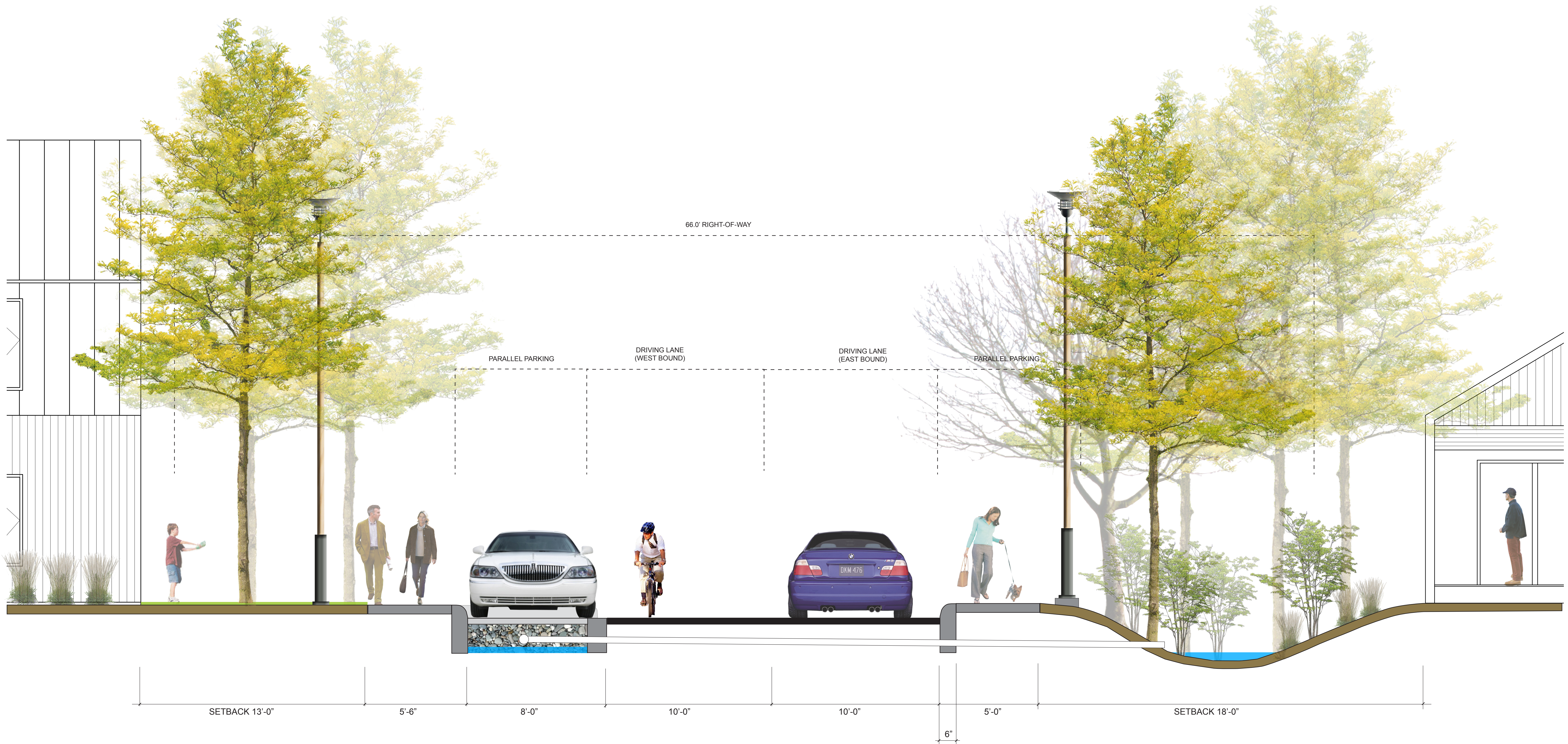


PRINCIPAL	NGE
PROJECT MANAGER	
DESIGNED BY	NGE
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COMMISSION / JOB NO.	2017101.01

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DRAWING TITLE
RESIDENTIAL NEIGHBORHOOD - CROSS SECTION STUDY

SECTION C

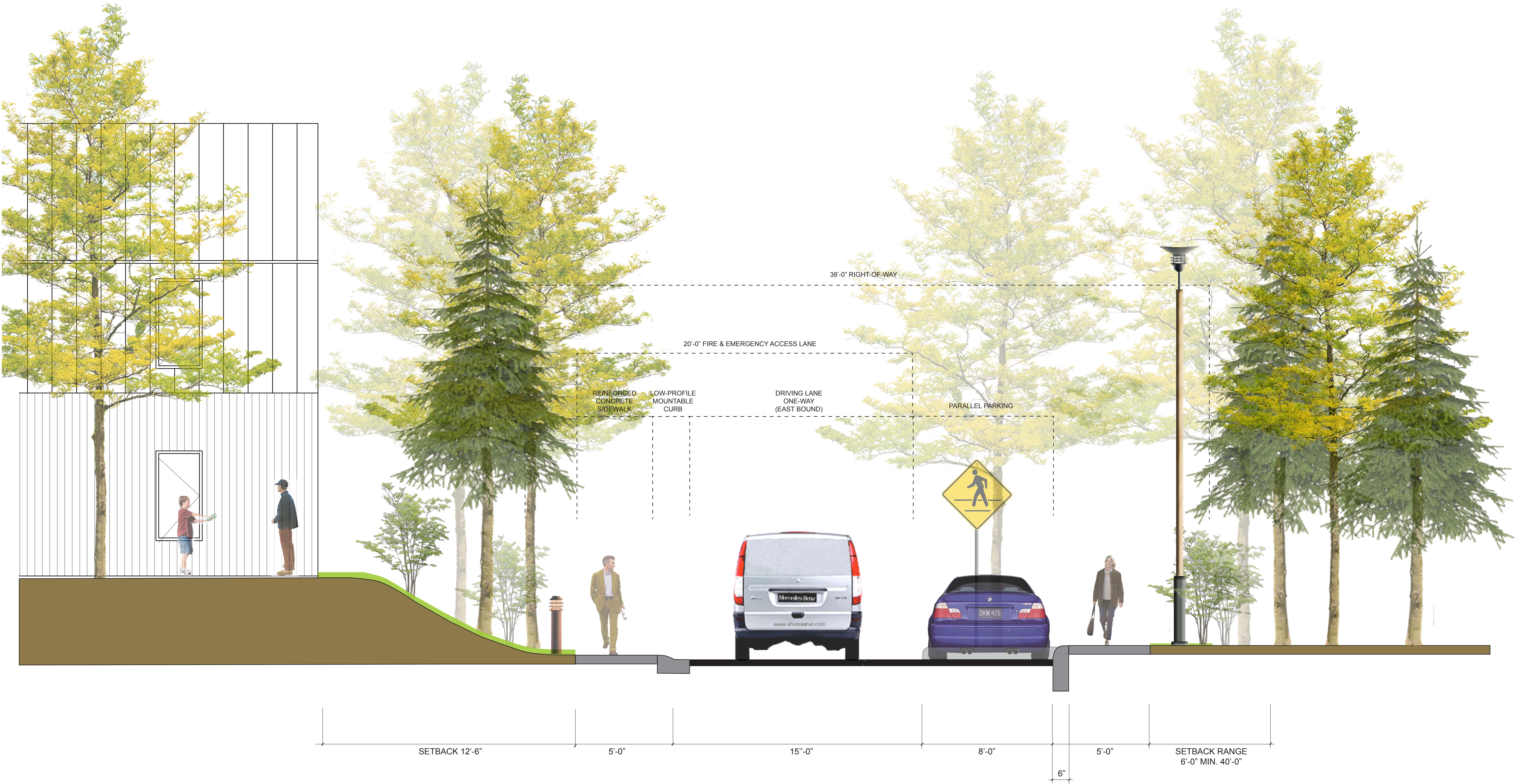
TERTIARY OR LOCAL STREET

PROJECT
**PLANNED UNIT
DEVELOPMENT**

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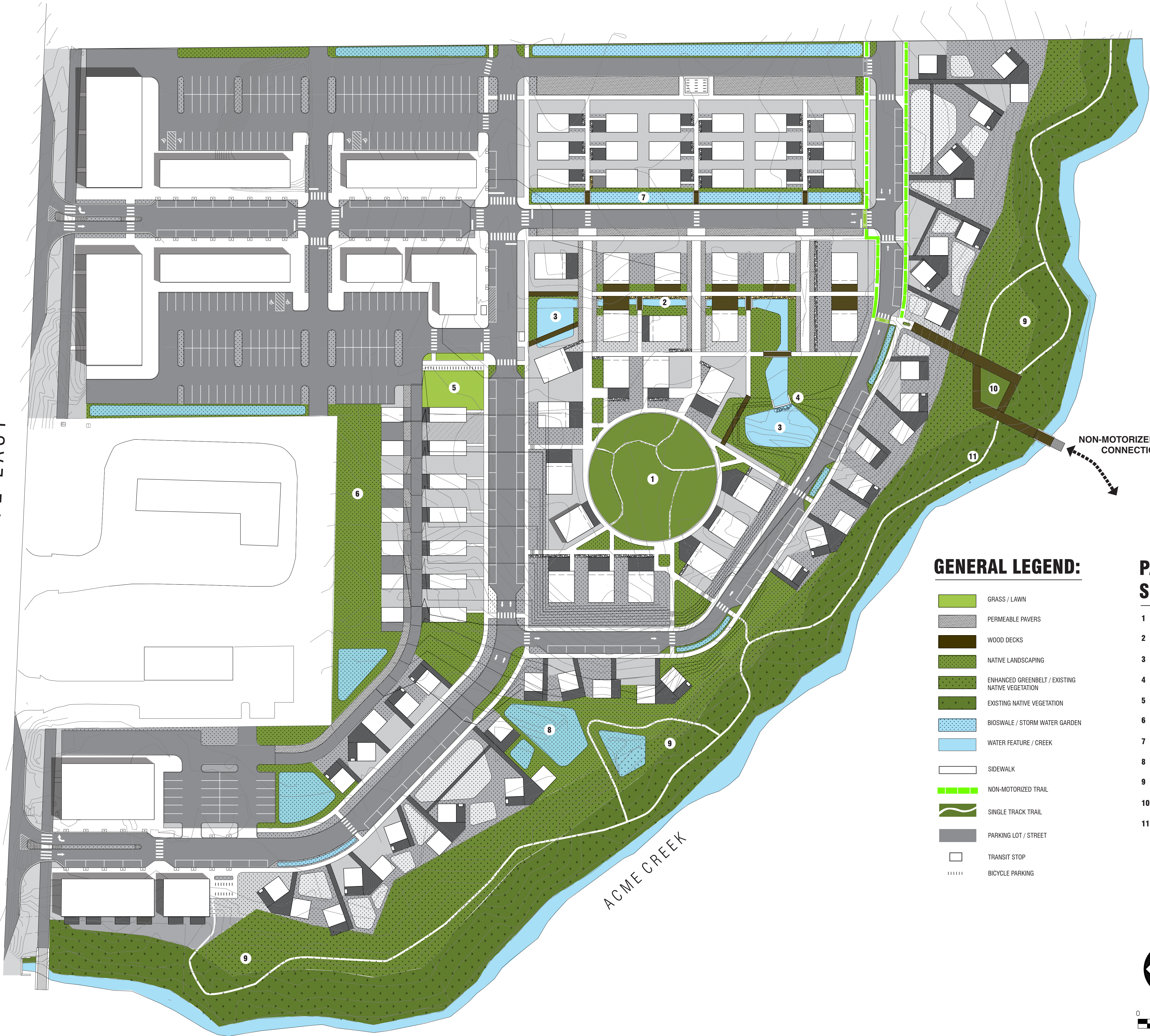
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M-72 EAST

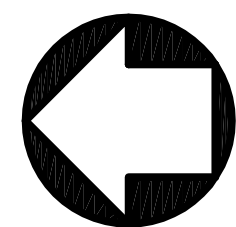


GENERAL LEGEND:

- GRASS / LAWN
- PERMEABLE PAVERS
- WOOD DECKS
- NATIVE LANDSCAPING
- ENHANCED GREENBELT / EXISTING NATIVE VEGETATION
- EXISTING NATIVE VEGETATION
- BIOSWALE / STORM WATER GARDEN
- WATER FEATURE / CREEK
- SIDEWALK
- NON-MOTORIZED TRAIL
- SINGLE TRACK TRAIL
- PARKING LOT / STREET
- TRANSIT STOP
- BICYCLE PARKING

PARK & OPEN SPACE LEGEND:

- 1 WOODED PARK
- 2 MAN-MADE CREEK
- 3 MAN-MADE PONDS
- 4 WATERFALL
- 5 TENT LAWN
- 6 WOODED BUFFER
- 7 BIOSWALE
- 8 STORM WATER GARDEN
- 9 WOODED
- 10 BOARDWALK
- 11 SINGLE-TRACK TRAIL



SCALE: 1" = 50'



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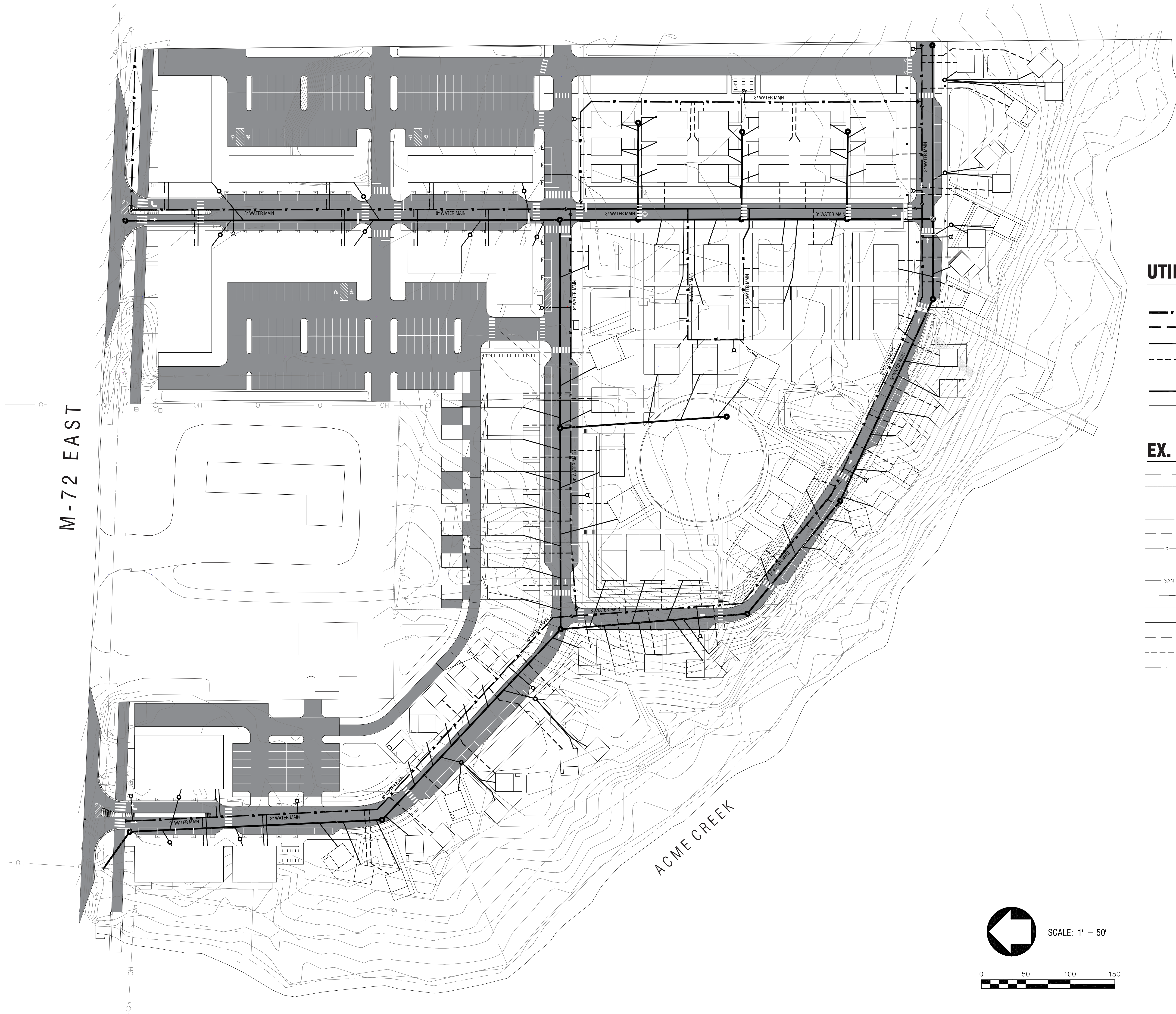
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PARK & OPEN SPACE PLAN

S.24

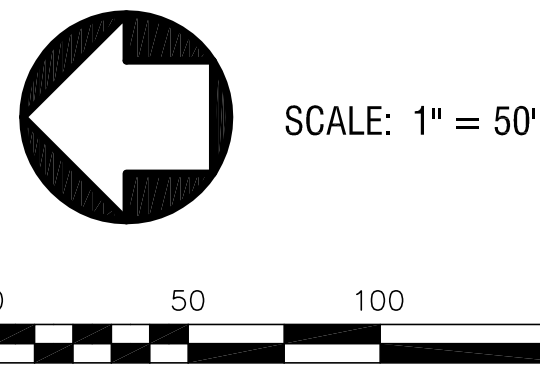


UTILITY PLAN LEGEND:

- HYDRANT
- 8" WATERMAIN
- 2" COMMERCIAL WATER SERVICE
- 4" COMMERCIAL FIRE SERVICE
- 1" DOMESTIC WATER SERVICE
- MANHOLE
- 8" SEWER MAIN
- 6" SEWER LEAD

EX. CONDITIONS LEGEND:

- EX. ROAD RIGHT-OF-WAY
- EX. FENCE
- EX. EDGE OF CONC./ASPHALT
- EX. ELECTRIC OVERHEAD
- EX. ELECTRIC UNDERGROUND
- EX. GAS UNDERGROUND
- EX. WATER MAIN / SERVICE LINE
- EX. SANITARY SEWER LINE
- EX. STORM SEWER
- EX. TREELINE DECIDUOUS
- EX. TREELINE CONIFEROUS
- EX. EDGE OF WATER
- SETBACK
- EX. WETLAND BOUNDARY
- EX. CONCRETE
- EX. GRAVEL
- EX. PAVER
- EX. GRASS PAVER
- EX. LANDSCAPING
- EX. CONIFEROUS TREE
- EX. DECIDUOUS HARDWOOD TREE
- EX. DECIDUOUS SOFTWOOD TREE
- EX. DECIDUOUS SHRUB
- EX. MANHOLE
- EX. STORM CATCH BASIN
- EX. HYDRANT
- EX. SIGN
- EX. UTILITY POLE
- EX. LIGHT POLE
- EX. GUY WIRE
- EX. RISER (PHONE, OTHER)
- MONUMENT FOUND
- 1/2" REBAR FOUND
- 1/2" REBAR & CAP SET
- RECORD
- MEASURED



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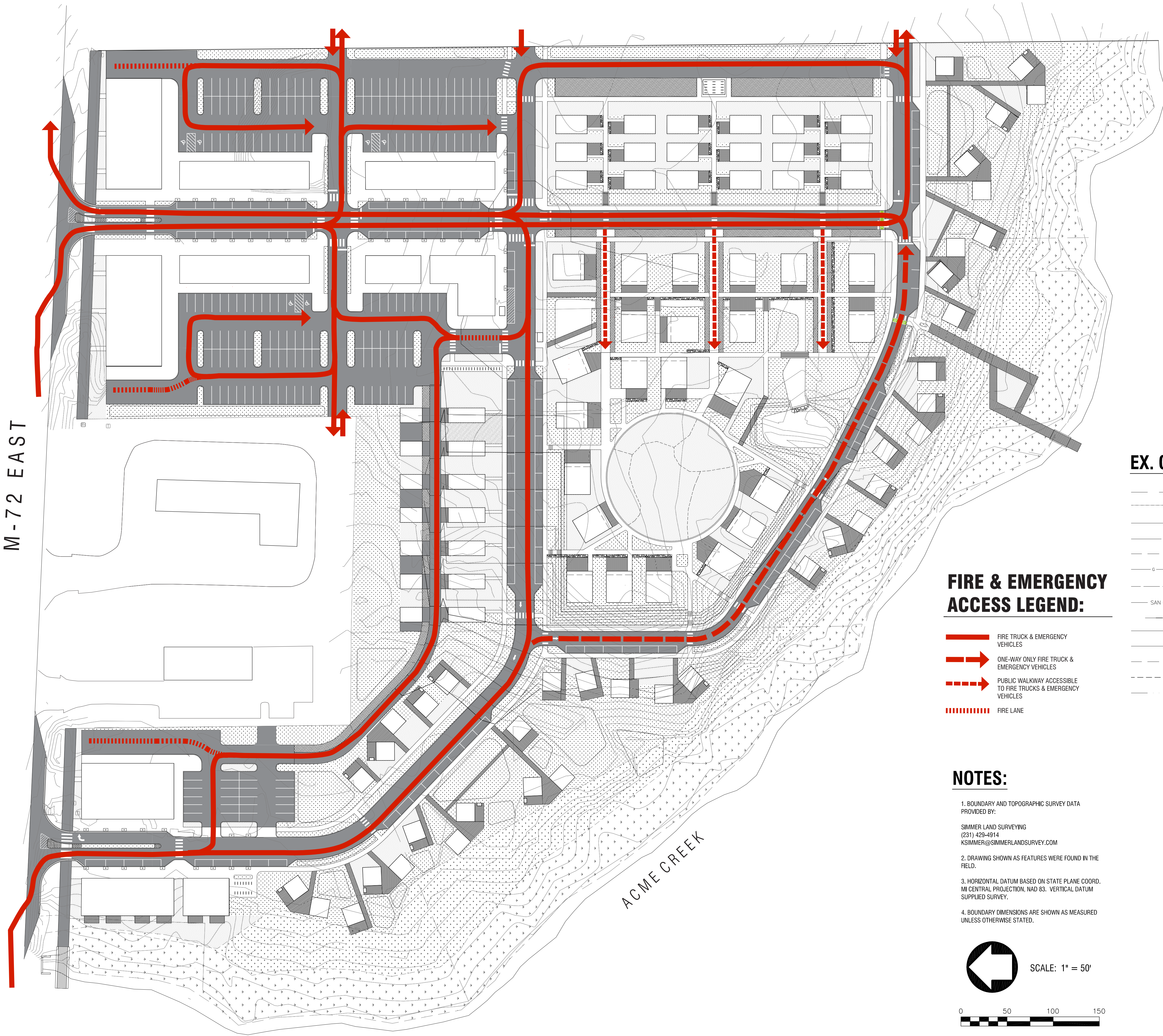
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PRELIMINARY UTILITY PLAN

S.25



EX. CONDITIONS LEGEND:

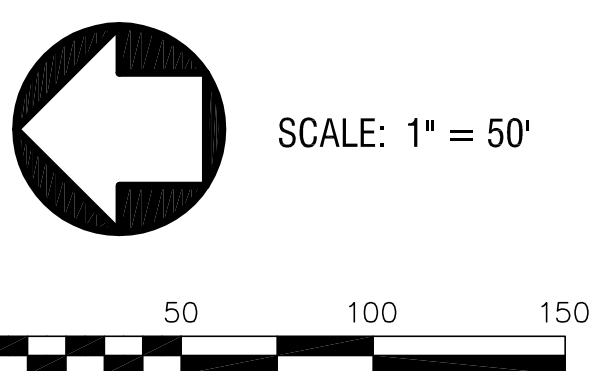
- EX. ROAD RIGHT-OF-WAY
- EX. FENCE
- EX. EDGE OF CONC./ASPHALT
- EX. ELECTRIC OVERHEAD
- EX. ELECTRIC UNDERGROUND
- EX. GAS UNDERGROUND
- EX. WATER MAIN / SERVICE LINE
- EX. SANITARY SEWER LINE
- EX. STORM SEWER
- EX. TREELINE DECIDUOUS
- EX. TREELINE CONIFEROUS
- EX. EDGE OF WATER
- SETBACK
- EX. WETLAND BOUNDARY
- EX. CONCRETE
- EX. GRAVEL
- EX. PAVER
- EX. GRASS PAVER
- EX. LANDSCAPING

FIRE & EMERGENCY ACCESS LEGEND:

- FIRE TRUCK & EMERGENCY VEHICLES
- ONE-WAY ONLY FIRE TRUCK & EMERGENCY VEHICLES
- PUBLIC WALKWAY ACCESSIBLE TO FIRE TRUCKS & EMERGENCY VEHICLES
- FIRE LANE

NOTES:

- BOUNDARY AND TOPOGRAPHIC SURVEY DATA PROVIDED BY:
SIMMER LAND SURVEYING
(231) 429-4914
KSIMMER@SIMMERLANDSURVEY.COM
- DRAWING SHOWN AS FEATURES WERE FOUND IN THE FIELD.
- HORIZONTAL DATUM BASED ON STATE PLANE COORD. MI CENTRAL PROJECTION, NAD 83. VERTICAL DATUM SUPPLIED SURVEY.
- BOUNDARY DIMENSIONS ARE SHOWN AS MEASURED UNLESS OTHERWISE STATED.



- EX. CONIFEROUS TREE
- EX. DECIDUOUS HARDWOOD TREE
- EX. DECIDUOUS SOFTWOOD TREE
- EX. DECIDUOUS SHRUB
- EX. MANHOLE
- EX. STORM CATCH BASIN
- EX. HYDRANT
- EX. SIGN
- EX. UTILITY POLE
- EX. LIGHT POLE
- EX. GUY WIRE
- EX. RISER (PHONE, OTHER)
- MONUMENT FOUND
- 1/2" REBAR FOUND
- 1/2" REBAR & CAP SET
- RECORD
- MEASURED

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DEVELOPMENT

CLIENT

KELLY RESTAURANTS
4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

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PROJECT MGR:	
DESIGNED BY:	NGE
DRAWN BY:	
CHECKED BY:	
COMMISSION / JOB NO.:	2017101.01

DRAWING TITLE

FIRE & EMERGENCY ACCESS PLAN

S.26

1. COMPLETE CONSTRUCTION OF PARKING LOTS
2. COMPLETE CONSTRUCTION OF LIMITED SIDEWALK.
3. BEGIN CONSTRUCTION OF MIXED-USE NEIGHBORHOOD II.
4. COMPLETE RESTORATION AND LIMITED LANDSCAPING.



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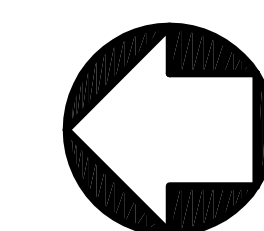
1. COMPLETE CONSTRUCTION OF PARKING LOTS
2. COMPLETE CONSTRUCTION OF LIMITED SIDEWALK.
3. BEGIN CONSTRUCTION OF MIXED-USE NEIGHBORHOOD II.
4. COMPLETE RESTORATION AND LIMITED LANDSCAPING.

KELLY RESTAURANTS
4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

COMMISSION / JOB NO.: 2017101.01

PHASING PLAN

S.27



SCALE: 1" = 50'



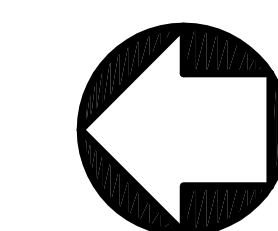
1. COMPLETE CONSTRUCTION OF PARKING LOTS
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3. BEGIN CONSTRUCTION OF MIXED-USE NEIGHBORHOOD II
4. COMPLETE RESTORATION AND LIMITED LANDSCAPING.

PLANNED UNIT DEVELOPMENT

CLIENT
KELLY RESTAURANTS
4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

PRINCIPAL:	NGE
PROJECT MGR.:	
DESIGNED BY:	NGE
DRAWN BY:	
CHECKED BY:	
COMMISSION / JOB NO.:	2017101.0

S.27



SCALE: 1" = 50'





PHASING SEQUENCE

PHASE 1

1. COMPLETE SITE PREPARATION & DEMOLITION FOR ENTIRE DEVELOPMENT.
2. EXISTING BUILDINGS 1,2,3 AND 4 REMAIN.
3. COMPLETE EARTHWORK & ROUGH GRADING FOR ENTIRE DEVELOPMENT.
4. COMPLETE CONSTRUCTION OF STORMWATER GARDENS AND OTHER CONTROLS.
5. COMPLETE ALL UNDERGROUNDING FOR MAIN UTILITY RUNS INCLUDING WATER MAIN, SEWER, GAS, ELECTRIC, AND COMMUNICATIONS.
6. COMPLETE CONSTRUCTION OF STREETS AND LIMITED SIDEWALK.
7. BEGIN CONSTRUCTION OF SINGLE FAMILY DWELLING TYPE C1-C2
8. COMPLETE RESTORATION AND LIMITED LANDSCAPING.

PHASE 2

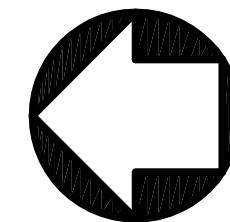
1. COMPLETE DEMOLITION OF BUILDINGS 1 AND 2. EXISTING BUILDINGS 3 AND 4 REMAIN.
2. COMPLETE EARTHWORK & ROUGH GRADING FOR ENTIRE DEVELOPMENT.
3. COMPLETE CONSTRUCTION OF STORMWATER GARDENS AND OTHER CONTROLS.
4. COMPLETE CONSTRUCTION OF LIMITED SIDEWALK.
5. BEGIN CONSTRUCTION OF SINGLE FAMILY DWELLING TYPE A
6. COMPLETE RESTORATION AND LIMITED LANDSCAPING.

PHASE 3

1. COMPLETE CONSTRUCTION OF PARKING LOTS
2. COMPLETE CONSTRUCTION OF LIMITED SIDEWALK.
3. BEGIN CONSTRUCTION OF MIXED-USE NEIGHBORHOOD I
4. BEGIN CONSTRUCTION OF SINGLE FAMILY DWELLING TYPE B
5. BEGIN CONSTRUCTION OF SINGLE FAMILY DWELLING TYPE D
6. COMPLETE RESTORATION AND LIMITED LANDSCAPING.

PHASE 4

1. COMPLETE CONSTRUCTION OF PARKING LOTS
2. COMPLETE CONSTRUCTION OF LIMITED SIDEWALK.
3. BEGIN CONSTRUCTION OF MIXED-USE NEIGHBORHOOD II.
4. COMPLETE RESTORATION AND LIMITED LANDSCAPING.



SCALE: 1" = 50'



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4230 M-72 EAST HWY.
WILLIAMSBURG, MI 49690

PRINCIPAL: NGE

PROJECT MGR: NGE

DESIGNED BY: NGE

DRAWN BY:

CHECKED BY:

COMMISSION / JOB NO.: 2017101.01

DRAWING TITLE

PHASING PLAN

S.27

M-72 EAST



PHASE 4
MIXED-USE
NEIGHBORHOOD II

GENERAL LEGEND:

- EXISTING BUILDINGS
- GRASS / LAWN
- PERMEABLE PAVERS
- WOOD DECKS
- NATIVE LANDSCAPING
- ENHANCED GREENBELT / EXISTING NATIVE VEGETATION
- EXISTING NATIVE VEGETATION
- BIOSWALE / STORM WATER GARDEN
- WATER FEATURE / CREEK
- SIDEWALK
- STONE WALL
- SINGLE TRACK TRAIL
- PARKING LOT / STREET
- TRANSIT STOP
- BICYCLE PARKING

PHASING SEQUENCE

PHASE 1

1. COMPLETE SITE PREPARATION & DEMOLITION FOR ENTIRE DEVELOPMENT.
2. EXISTING BUILDINGS 1,2,3 AND 4 REMAIN.
3. COMPLETE EARTHWORK & ROUGH GRADING FOR ENTIRE DEVELOPMENT.
4. COMPLETE CONSTRUCTION OF STORMWATER GARDENS AND OTHER CONTROLS.
5. COMPLETE ALL UNDERGROUNDING FOR MAIN UTILITY RUNS INCLUDING WATER MAIN, SEWER, GAS, ELECTRIC, AND COMMUNICATIONS.
6. COMPLETE CONSTRUCTION OF STREETS AND LIMITED SIDEWALK.
7. BEGIN CONSTRUCTION OF SINGLE FAMILY DWELLING TYPE C1-C2
8. COMPLETE RESTORATION AND LIMITED LANDSCAPING.

PHASE 2

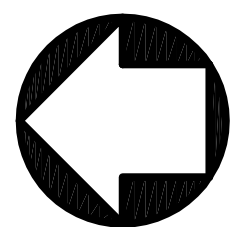
1. COMPLETE DEMOLITION OF BUILDINGS 1 AND 2. EXISTING BUILDINGS 3 AND 4 REMAIN.
2. COMPLETE EARTHWORK & ROUGH GRADING FOR ENTIRE DEVELOPMENT.
3. COMPLETE CONSTRUCTION OF STORMWATER GARDENS AND OTHER CONTROLS.
4. COMPLETE CONSTRUCTION OF LIMITED SIDEWALK.
5. BEGIN CONSTRUCTION OF SINGLE FAMILY DWELLING TYPE A
6. COMPLETE RESTORATION AND LIMITED LANDSCAPING.

PHASE 3

1. COMPLETE CONSTRUCTION OF PARKING LOTS
2. COMPLETE CONSTRUCTION OF LIMITED SIDEWALK.
3. BEGIN CONSTRUCTION OF MIXED-USE NEIGHBORHOOD I
4. BEGIN CONSTRUCTION OF SINGLE FAMILY DWELLING TYPE B
5. BEGIN CONSTRUCTION OF SINGLE FAMILY DWELLING TYPE D
6. COMPLETE RESTORATION AND LIMITED LANDSCAPING.

PHASE 4

1. COMPLETE CONSTRUCTION OF PARKING LOTS
2. COMPLETE CONSTRUCTION OF LIMITED SIDEWALK.
3. BEGIN CONSTRUCTION OF MIXED-USE NEIGHBORHOOD II.
4. COMPLETE RESTORATION AND LIMITED LANDSCAPING.



SCALE: 1" = 50'



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WILLIAMSBURG, MI 49690

PRINCIPAL: NGE

PROJECT MGR: NGE

DESIGNED BY: NGE

DRAWN BY:

CHECKED BY:

COMMISSION / JOB NO.: 2017101.01

DRAWING TITLE

PHASING PLAN

S.27



TECHNICAL MEMORANDUM

Preliminary Storm Water Review–Kelly PUD

To: Shawn Winter, Zoning Administrator Date: December 7, 2017
From: Robert Verschaeve, P.E. *Robert M. Verschaeve* Re: Preliminary Storm Water Review–Kelly PUD
cc: Jay Zollinger, Supervisor

This preliminary review is being provided as requested by Acme Township for the storm water control measure concepts proposed for the Planned Unit Development (PUD) under consideration proposed by Kelly Restaurants. Currently, the storm water control plan included in the plans appear to be conceptual in nature. A narrative of the project includes a discussion of storm water control and runoff estimates by the project's Civil Engineer, Ryan Cox. Should the project progress, each phase of construction will require a detailed storm water review of the storm water plans and calculations. General items for consideration with respect to Acme Township's storm water ordinance (Ordinance No. 2007-01) are noted herein.

The proposed PUD consists of two mixed use neighborhoods which front the development with access from M-72. Several types of single family residential unit neighborhoods are then situated between the mixed-use neighborhoods and Acme Creek. The Stormwater Management Plan included in the PUD set identifies two "Mixed-Use" stormwater districts and five "Residential" stormwater districts ranging in size from 1.31 to 4.35 acres.

The general flow of stormwater identified in the mixed-use districts shows rainfall being conveyed from impervious surfaces to underground infiltration systems. Some green roof systems are noted where plants would take up some of the storm water. There are also outlets proposed from the infiltration systems which direct overflow to bioswales which ultimately discharge to Acme Creek. The residential districts generally appear to have less impervious surfaces. In addition to bioswales, additional stormwater management practices such as permeable pavement, raingardens, stone drains, and enhanced greenbelts are identified in the residential districts. Outlets to Acme Creek area also identified from the residential districts.

The storm water runoff estimates presented in the narrative are calculated based on the Modified Rational Method. This is an appropriate method and recognized in the ordinance. The preliminary volumes are based on the difference between a 25-year storm with developed conditions and a 2-year storm with undeveloped conditions. One of the districts is calculated with a 100-year storm due to a lack of outlet. These calculations generally follow the ordinance however consideration for a back to back 100-year storm may be necessary for the district lacking an outlet.

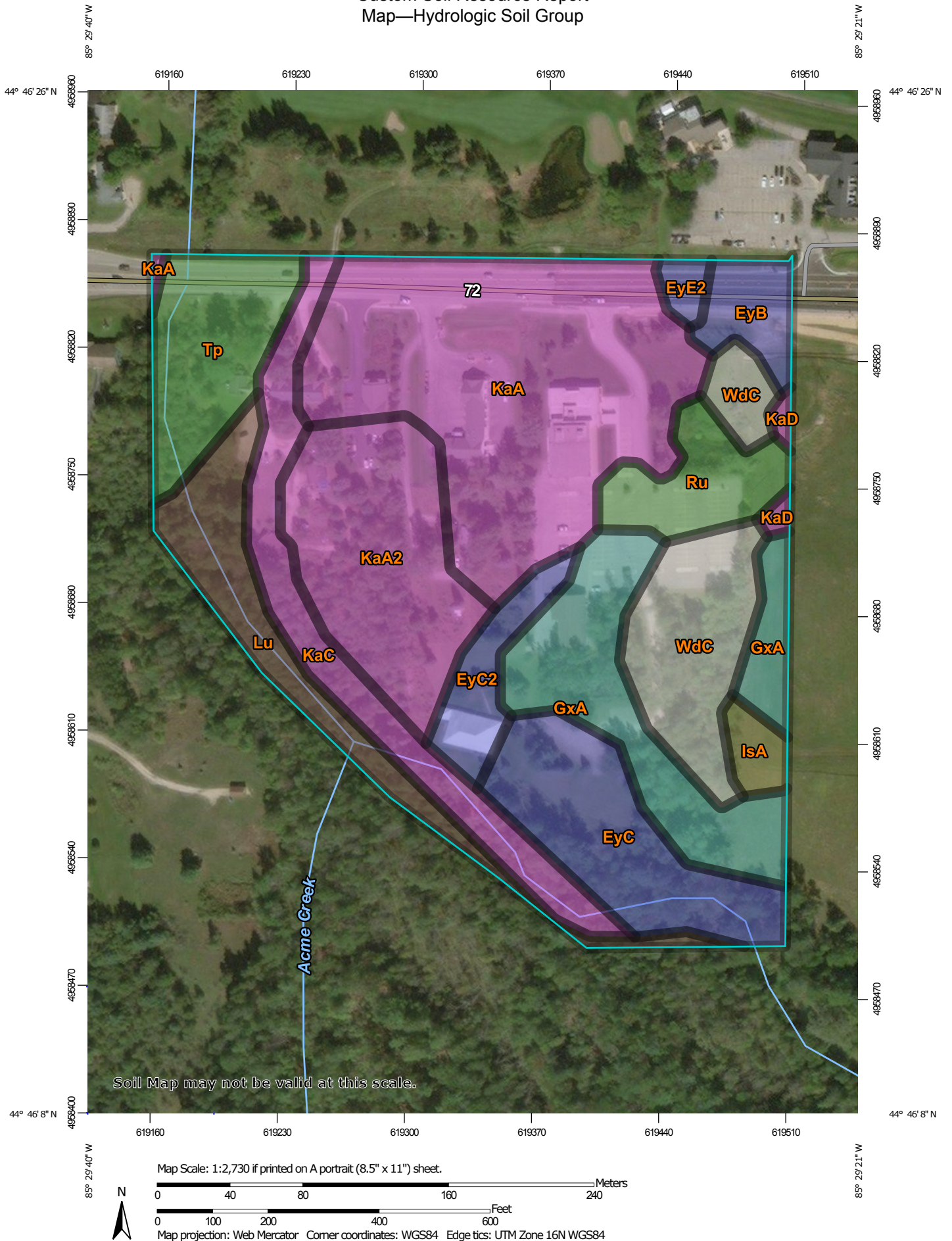
The type of soils present on the site will be a major consideration that will need to be investigated by the developer to ensure the storm water management techniques ultimately proposed are appropriate. The engineer recognizes this and provides a good commentary of it in the narrative. The USDA soil maps for the site were downloaded and are included with this memo for reference. The site has soils from several of the hydrologic soil groups A-D. In general, group A soils are sandy, have low runoff potential when wet, and can infiltrate water well. Group D soils are clayey, have high runoff potential when wet, and have restricted infiltration. Groups B and C are in-between. Providing for infiltration where the soils can accept it and appropriately addressing runoff from other areas of the site will be key to this project, and it appears to be understood by the engineer.

The stormwater ordinance identifies the necessary design criteria for infiltration/retention systems and detention systems. It appears these are the sections most applicable to this development. They should be familiar to the design engineer noted on the plans. Stormwater management practices identified on the plan are all acceptable practices when used where there are physically feasible. Many of them are innovative techniques that will still require thoughtful design and calculations for successful implementation.

Important items that should be expected to be reviewed when construction plans are submitted include: appropriateness of system, runoff calculations, hydraulic calculations, materials, water levels, volumes, release rates, pre-treatment, emergency controls, and maintenance provisions. The narrative regarding the storm water control measures of the project generally indicates the engineer understands the ordinance and what will be required moving forward.


Custom Soil Resource Report

Map—Hydrologic Soil Group









MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines


 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points






 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available


Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Grand Traverse County, Michigan
 Survey Area Data: Version 11, Oct 5, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 19, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EyB	Emmet sandy loam, 2 to 6 percent slopes	B	0.7	2.5%
EyC	Emmet sandy loam, 6 to 12 percent slopes	B	2.4	9.1%
EyC2	Emmet sandy loam, 6 to 12 percent slopes, moderately eroded	B	0.8	3.1%
EyE2	Emmet sandy loam, 18 to 25 percent slopes, moderately eroded	B	0.2	0.8%
GxA	Guelph-Nester loams, 0 to 2 percent slopes	C	3.0	11.1%
IsA	Iosco-Ogemaw loamy sands, 0 to 2 percent slopes	C/D	0.3	1.3%
KaA	Kalkaska loamy sand, 0 to 2 percent slopes	A	6.6	24.7%
KaA2	Kalkaska loamy sand, 0 to 2 percent slopes, moderately eroded	A	3.1	11.6%
KaC	Kalkaska loamy sand, 6 to 12 percent slopes	A	2.3	8.4%
KaD	Kalkaska loamy sand, 12 to 18 percent slopes	A	0.1	0.5%
Lu	Carlisle muck, 0 to 2 percent slopes, cool	B/D	2.0	7.3%
Ru	Roscommon mucky loamy sand	A/D	1.2	4.4%
Tp	Tonkey-Hettinger-Pickford loams, overwash	A/D	1.8	6.7%
WdC	Wind eroded land, sloping		2.3	8.7%
Totals for Area of Interest			26.9	100.0%

Rating Options—Hydrologic Soil Group*Aggregation Method: Dominant Condition**Component Percent Cutoff: None Specified**Tie-break Rule: Higher*



GRAND TRAVERSE COUNTY
SOIL EROSION – SEDIMENTATION CONTROL DEPARTMENT
400 BOARDMAN AVE
TRAVERSE CITY, MICHIGAN 49686
(231) 995-6042 * FAX (231) 995-6048

ACME TOWNSHIP ZONING
6042 ACME RD
WILLIAMSBURG, MI 49690

Preliminary Review #25061 for Planned Unit Development
Kelly Restaurants LLC
4240 E M72 Hwy

Parcel: 28-01-900-301-00, Acme Township

To Whom It May Concern:

This office has reviewed the submitted plans prepared by Influence Design Forum. We also field checked the parcel on December 5, 2017 and compared it to the proposed development plans.

There soil types on the proposed development area have diverse drainage and soil erosion potential.

- Kalkaska loamy sands - somewhat excessively drained and will provide excellent infiltration for storm water. These soils are not highly susceptible to erosion.
- Emmet sandy loam – well drained, but contains a higher percentage of clay and silt than the Kalkaska soil and is therefore slightly more susceptible to erosion.
- Guelph Nester loam – well drained, but can contain more poorly drained areas composed of more clay which are more susceptible to erosion.
- Lupton Muck – Hydric soil. These soils are within the wetland setback
- Roscommon mucky loamy sand – Hydric soil. These soils now contain a storm water basin by the existing dinner theater.

The Northwest half of the site has slopes of less than 2% in mostly sandy soil. There is a ridge of slightly steeper, yet sandy soil that parallels the creek on the south. This band is inland from the proposed wetland buffer. The South central part of the site contains some soils with up to 10% slope on generally more sandy soil. The loams and sandy loams are located on the east part of the site which is partly developed and not as steep.

The preliminary phasing plan for this PUD is the preferred method to develop the entire site. Phase I assures that the most sensitive area, paralleling the stream and wetlands, is completely stabilized before starting any excavation on Phase II. The movement of any sediment produced during construction of Phase II, III and IV will be further contained by the developed and stabilized areas of Phase I. Maintaining an undisturbed green belt is of upmost importance.

When the engineered site plan is submitted for approval, a final grading plan is required, which shows existing and final grades, in addition to soil erosion and sedimentation control measures with detailed Best Management Practices for soil erosion and sedimentation control.

We will also require a Maintenance Agreement and a surety deposit.

Upon preliminary review of the site plan and one initial site inspection, this office grants conceptual approval for a Soil Erosion and Sedimentation Control permit.

If you have any questions or concerns regarding this decision please feel free to contact me at 231-995-6055.

Respectfully,

A handwritten signature in cursive script, appearing to read "Gwendolyn Zagore".

Gwendolyn Zagore

Grand Traverse County Soil Erosion Inspector

Cc: Jean Derenzy, Director Community Development/ Codes
Nathan Elkins, Influence Design Forum

Rank each project 1 -5 for each metric to the right of the project column. Add the scores for the each project and record in the "Total Score" column. 1 = lowest priority; 5 = highest priority

Goal / Objective	Project	Contributes to health, safety, and Welfare	Needed to comply with local state or federal law	Remediates an existing or projected deficiency	Reduces operation and/or maintenance costs for Twp	Implements the Master Plan	Supports the local economy	Delivers level of service desired by the broader community	Total Score
1.5	Improve Stormwater Runoff Bunker Hill-Identify & implementing best management practices, low impact design and improve stormwater run, water quality.								
1.6	Improve Stormwater Runoff - Scenic Hills								
4.2	Bayside Park Improvements (North Phase 3) - Pavilion, parking, South end structure improvements								
4.3	Bayside Park South (to Vet Clinic) -Design, engineering								
4.4	Bayside Park South Implemention								
5.1	Water System - Collaborate with GTB on possibly combining system, Expansion of Water System, Developing/Managing of the DWP								
5.2	Sewer Expansion								
5.3	Township Hall - Location Evaluation/Land Acquisition, Design Engineering, Construction of Facility								
5.4	New Fire Station 8 - Design engineering, construction of facility								
6.1	Non-Motorized trail on US-31 - US-31 Conceptual Design/Engineering, US-31 Right of Way & Acquistion								
6.3	Non-Motorized trial on M-72 - M-72 Conceptual Design/Engineering								
6.5	Sidewalks Connecting Business Districts along US 31 - Conceptual Design on Sidewalks on North-side US 31								
6.6	Acme Connector Trail (ACT) to Business Districts - Design Engineering (GTB \$15,000), Implementaion of the Plan ACT to MT Hope Rd, Implementation from Mt Hope to GTTC								
7.1	Connect Mt Hope Rd W/ GTTC								
7.2	Pave Bunker Hill Rd to Supply Rd - Design Engineering, Implementation								
7.3	Re-Build Bunker Hill rd to Lautner Rd - GTTC or South of RR to Bunker Hill Rd, Design Engineering, Implementation								
7.4	Develop Road Program focused on how residnetial Road Improvements (S of Bunker Hill for Neighborhoods)								
7.5	Facilitate SAD - Wild Juniper 29 Parcels								
7.6	Facilitate SAD - Spring Brook 65 Parcels								
7.4	Facilitate SAD - Scenic Hill 95 Parcels								
7.5	BATA - Coordinate Transfer Stations, Location/Construction of shelters								