



**ACME TOWNSHIP PLANNING COMMISSION MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
7:00 p.m. Monday, October 24, 2005**

Meeting called to Order at 7:06 p.m.

Members present: O. Sherberneau (Chair), B. Carstens, C. David, R. Hardin, D. Krause, J. Pulcifer, E. Takayama, M. Vermetten

Members excused: D. Morgan

Staff present: J. Hull, Zoning Administrator
S. Corpe, Township Manager/Recording Secretary
K. Zopf, Township Counsel

1. **Consent Calendar:**
Motion by Vermetten, support by Carstens to approve the Consent Calendar as presented, including:

Receive and File:

- a) Draft unapproved minutes:
1. 10/04/05 Regular Board of Trustees Meeting
2. 10/13/05 Special Board of Trustees Meeting
b) Resolution #R-2005-20 adopted 10/13/05

Action:

- c) Approve minutes of the 09/26/05 regular and meeting
d) Review and approve agenda, inquiry as to conflicts of interest: Pulcifer excused himself from discussion regarding the proposed Agricultural & Rural Preservation Section Master Plan Amendments because he is a local farmer.

Motion carried unanimously.

2. **Limited Public Comment:** None.

3. **Preliminary Hearings:** None

4. **Public Hearings**

- a) Application #2004-10P by Stone World, LLC / Ed Tobey, 2773 Harris Road, Kalkaska for SUP/Site Plan Approval to construct a natural stone masonry warehouse and wholesale building with limited retail sales on vacant property located in the Bates area approximately 500' east of the M-72, C&O Railway intersection and current zoned B-4, Material Processing and Warehousing: There was a legal notice publication error, and the publication was not made in time to hold the hearing this evening.

Motion by Vermetten, support by Krause to hold the Public Hearing regarding Application #2004-10P on Tuesday, November 1, 2005 at 6:00 p.m. Motion carried unanimously.

- b) Proposed Amendment to Acme Township Master Plan Agricultural & Rural Preservation Section: (Continuation from August and September meetings) Brian Bourdages, Farmland Preservation Specialist with the Grand Traverse Regional Land Conservancy, presented the proposed revised Agricultural Preserve Zone Map for possible inclusion in the Master Plan. He indicated that he has prepared the map

after talking to Farmland Preservation Advisory Chair Bob Garvey and Peninsula Township Planner Gordon Hayward, who is very experienced with farmland preservation and state and federal grant funding programs.

Mr. Bourdages read aloud proposed language to appear on the face of the map stating that: the map is being appended to the plan for the purpose of making the township eligible for grant funding to enhance the local millage proceeds; that most of the land defined in the map is classified as prime or unique farmland by the USDA; that the Red Tart Cherry Site Inventory classifies much of the subject land as being favorable for fruit growing; that the map should not be used for zoning purposes; that most of the land within the boundaries is zoned agricultural and/or in active agricultural use and/or may already be under permanent conservation easement; and that participation in the township PDR program is strictly voluntary. He displayed a map that was not included in the Commission packets that displays properties within the township currently under conservation easement in one form or another.

Acme differs from Peninsula Township and their PDR program in that Peninsula's Agriculture Preserve Zone Map was prepared concurrently with and is specifically referenced by their Farmland Preservation Ordinance. Most of Peninsula Township's entire land area is within their preservation zone. No properties were specifically excluded from their preservation zone, and in some cases land has been added to the preserve zone that was previously external and adjacent to their zone. Peninsula Township is currently in their third development rights purchase cycle; Acme is preparing for its first application cycle.

Vermetten noted that the two key roads serving Peninsula Township travel through the preservation zone and the land potentially to be preserved is more readily visible; whereas in Acme Township the proposed preservation zone has two key traffic arteries for its boundaries. Mr. Bourdages also observed that Acme Township's PDR program was set up exclusively to preserve agricultural use lands, whereas Peninsula's program specifically included both agricultural land and key scenic viewsheds.

In the past, the state grant program required that applications be geared towards preservation of specific parcels of land. Currently, the grant program is geared towards a community application absent a guarantee that any specific property will be preserved and leaves the prioritization for use of any funds gained up to the community.

Sherberneau asked if landowners outside of the proposed preservation area who wanted to join the area would have to be contiguous to existing boundaries. Mr. Bourdages replied that this would be up to the community. He noted that in his comments accompanying the revised map he expressed concern about excluding parcels from the preservation area as was requested by some property owners. Carstens recalled that at the last meeting it was discussed that just because a property is outside of the proposed preservation zone would not preclude its owner from applying to have the development rights purchased. Mr. Bourdages stated that this map has been designed to indicate all properties that might be eligible according to state grant program guidelines based on aerial photographs. Mr. Hayward believes this is a good approach to map preservation, as does Mr. Bourdages. He noted that there are some active farmlands, most notably the Hoxsie farm on the south side of M-72 near Bates, that are not included in the proposed preservation zone that would qualify but due to surrounding land uses and transportation corridors may be unlikely to be preserved on a long-term basis.

David stated that he believes the true intent of the grant program is to preserve active agricultural lands that are threatened by development pressures. If this is the case, the proposed map may not address this specific question. Mr. Bourdages noted that much of the existing farmland may be threatened by rural sprawl and the conflict of even lower-density residential uses and working farms (trespassing by residential neighbors on farmlands, agricultural noises and smells, etc.) David noted that the map was not intended to be all inclusive, but not to be exclusive either.

Vermetten had concerns with some portions of the previous versions of the map that included LochenHeath or the land owned by The Village at Grand Traverse, LLC. that were clearly unrealistic. He would not favor further reducing the size of the proposed preserve zone by carving out individual properties. Takayama stated that his feeling about the previous map was similar to Vermetten's, but he has a lingering concern over lands such as the Hoxsie parcel that seems to be a large and agriculturally viable property that someone motivated might be able and willing to farm well into the future. He fears that by excluding the Hoxsie parcel the township might be, in effect, abandoning it to strip development along M-72.

Hardin expressed the thought that the map has undergone revision because the original map was presented with an orientation completely towards producing a map that would make the township eligible for grant funding. Mr. Bourdages may have been surprised to enter into a meeting where there was significant public concern that the proposed map might be applied to zoning decisions. Hardin hopes that this concern will be alleviated through the completion of the future land use map visioning process currently underway. He recognizes that land within the proposed preserve zone will score higher in the PDR selection system. He believes that the current version of the map represents a vision more in keeping with public expectations. Mr. Bourdages favors as inclusive a map as possible, and perhaps labeling the map as an eligibility map to eliminate any potential argument about whether or not it is also a zoning-related map. He stated that neither he nor Matt McDonough from the Conservancy wanted to get caught up in overall land planning issues for the township.

David asked about the definition of "protected" land; Mr. Bourdages stated that it is land on which a permanent conservation easement has been placed. Krause asked for a concise description of the purpose of the map; Mr. Bourdages suggested that it is a map of the area in which township preservation resources will be focused. Land outside of the defined area might and could also be preserved and/or added to the map. Krause stated that all the map needs to do is define the land that can be eligible for preservation funding. Through general discussion, the Commission and Mr. Bourdages clarified that the map is necessary to qualify to apply to the grant program(s) but is not particularly necessary for each additional grant application. Mr. Bourdages believes that the most important component to the new map is the wording that has been added to explain its genesis and define and limit expectations for its scope and use and remind the public that participation in the PDR program is strictly voluntary.

Sherberneau asked what the process would be to move forward with adoption. Corpe replied that although state law permits the Board to assume final responsibility for Master Plan adoption, the Acme Board of Trustees has not done so. The Planning Commission may adopt the proposed language and map amendments at its pleasure.

Carstens stated a belief that there is growing concern in the general public with where food comes from and how it is produced. He thinks about this while he is shopping, and about the idea that in Detroit it has become harder to find local produce because

agricultural landowners have been taxed out of the ability to afford to grow food. This has been a driving principle for him in his support of the PDR program, along with wanting to help individuals who simply enjoy and want to continue farming. Carstens also heard Mr. Bourdages say that Peninsula's program includes scenic viewsheds, whereas Acme's currently does not.

David does not believe that anything other than agricultural use can make Acme properties eligible for protection at this time, and that viewshed protection may be outside of the intent of the current state law.

Takayama is concerned about having a map labeled "eligibility" when some eligible areas are excluded from the current version.

Public Hearing opened at 8:00 p.m.

Kim Challender stated that if the Commission were to revert to the earlier version of the map, would recent changes including the wording as to the purpose and intent be retained, as well as exclusion of the Challender property? Sherberneau indicated that this could easily be accomplished.

Ken Engle, 6754 Yuba Road, expressed concerns about the proposed map. He originally felt that the advisory committee would evaluate whether individual lands were truly eligible or not. Looking at this map he believes that some landowners within the proposed boundaries will be concerned that the map will be used as a proposed preserve zone rather than an eligibility map despite any appended wording. The Tart Cherry Site Inventory Map was labeled to say that it should not be used for planning and zoning considerations, yet over the years it has frequently been used for those purposes. It is also not entirely reliable when it comes to determining the suitability of different pieces of land for fruit growing. On the Peninsula when a neighbor preserves their land, nearby property development values increase. These issues are complex and Mr. Engle hopes that the Commission will not make a hasty decision, even though frustration over the number of meetings at which this has been discussed exists.

Lewis Griffith, 5181 Lautner Road, stated the old map included land that has not been farmed for anywhere from 10 – 50 years. He cited the Kennedy farm on Bunker Hill Road and some of the land surrounding his airport. The new map seems to him to be a better representation of where farming is actually occurring in the township.

Margy Goss, 4105 Bay Valley drive spoke to Mr. Engle's comments about the economic viability of agriculture. For how long will farming be economically viable here? What kind of farming? Will it change over time? One thing that will be enduring is the waterfront, and she believes that funding for shoreline preservation and waterfront recreation should be addressed. She suspects that the taxpayers will be asked to foot the bill. Last year the public was engaged in a discussion and some consensus-building regarding waterfront recreation, but nothing has been done with this information. When the vote for the preservation millage occurred, she thought that some of the funding would go towards these other purposes. She enjoys scenic views in agricultural areas and agrees that it enhances land values, but what about preserving and enhancing waterfront areas.

Public Hearing closed at 8:10 p.m.

Vermetten expressed concerns that as things currently stand the proposed map and proposed Master Plan text amendments do not match up, particularly the statutory

definition in the text and the shape of the new map. The former version of the map seemed, for the most part, to meet the statutory definition. Whether to strictly follow the statute, which would require inclusion of properties such as LochenHeath that clearly are not suitable for preservation, or to change the definition and ensure the map meets the new definition, may not be a decision the group is ready to make this evening. Mr. Bourdages suggested that if the Commission can provide some succinct consensus it would be helpful: 1) is the map intended to be a map of lands that meet the Township PDR program's requirement; 2) if there are parcels that could be left in or excluded, should the statutory requirements be the determining factor or not? Vermetten suggested that the Advisory prepare two alternative maps: one that meets the state statute and one that meets a more localized definition. The Commission can evaluate the two options side-by-side and make a final determination. Carstens asked if one alternative or the other would "dilute" the township's ability to successfully attract grant funds, and if so why and how? He would like a clear understanding of the consequences of either scenario. Mr. Bourdages stated that no matter what, township properties will be ranked via a County-wide application scoring system. This system has yet to be prepared, so it is impossible to determine at this time how either alternative would mesh with it. His personal preference would be to use the original map minus all properties that are clearly not current candidates for preservation. He disfavors excluding any parcel that might be viable for preservation at some point in time, but the realities of the situation are that there is generally more demand from landowners to purchase their development rights than there is cash to purchase it all, and somebody will have to rank Acme lands and choose some over others. Vermetten concurred with this approach.

Hardin noted that the statutory language that is only the middle third of the portion of language causes concern. The latter third seems to indicate that land outside of any ultimate preserve zone will be ranked lower by the scoring system. Both this language and the language on the map seem to indicate that land outside of the preserve zone is effectively excluded from program eligibility at this time.

Motion by Vermetten, support by Carstens to send the map and text back to the Farmland Preservation advisory for further analysis of the old and new maps with an eye towards inclusion of land rather than exclusion, with the different options available for analysis to be presented at the next regular Planning Commission meeting. Motion carried unanimously.

A recess was declared from 8:30 p.m. – 8:42 p.m.

5. Special Presentation:

- a) **Presentation** by John Hull, Zoning Administrator, and Jerry Dobek, Grand Traverse County Planning Commissioner and nationally-recognized dark-sky lighting expert, regarding the science behind dark-sky lighting standards: Hull noted that Mr. Dobek holds a Ph.D in astrophysics before presenting the handout in the Commission packets to the audience. He noted that when he first heard about dark sky lighting requirements he was inclined to disregard it as nonsense. After unsuccessfully attempting to work through the math himself he worked with Mr. Dobek to gain a better understanding of dark sky lighting principles and came to appreciate it as being a scientifically meaningful standard.

Hull created diagrams for the audience to depict how an illuminated area increases as light pole height increases. He also depicted how the intensity of light at ground level is greater directly under the light source and decreases at the far edges of the circle of light. He discussed the fact that whereas a 20' tall light might require a 450 watt bulb to shed a certain amount of light at the perimeter of the circle, a 30' tall light would

require a 1,000 watt bulb – more than double the strength – to cast the same amount of light at the perimeter of its circle. He discussed the inverse square law, putting it into commonly understandable terms by explaining how it works in the human body. The body generates heat based on cubic volume of innards but releases heat through the 2 dimensional skin. The larger a person gets, the more innards are generating heat through an area of skin that does not increase at the same rate, which explains why larger people are more prone to overheating. Applying this back to lighting, pole height increases in one dimension – verticality – while the area of the light shed grows in more than one dimension, which is why a pole that increases in height by 50% requires a 120% increase in the bulb wattage to create the same amount of light on the ground at the perimeter of the lighted area generated by each fixture. Shorter poles generate light that covers less ground, so more poles are initially required. However, taller poles require much brighter lights, which means that more energy is required to operate them on an ongoing basis.

Why does this matter to anyone but the person paying the energy bill/owning the property? Why does this matter off premises to surrounding landowners and the general public's health, safety and welfare? Taller poles lead to glare outside of the property on which they are located. The typical shoebox fixture with a 75 degree cutoff has a curved reflective surface surrounding the bulb. A driver on the road may still see the bulb and reflective surface from the roadway, creating glare. Further, light waves are not only linear – they bend and curve. The light bulb is bent and refracted by the reflector shield that surrounds it. Given the same shape of lighting fixture, the light from a lower-intensity bulb bends differently than that from a higher-intensity bulb. In the case of the latter, the light can actually bend upward around the edges of the fixture, even if it is designed as a “90 degree cutoff.”

Mr. Dobek assumed leadership in the presentation at this point and continued the discussion about glare. Recent lighting advances have been trying to address glare reduction first through changes in the fixtures themselves. He discussed the typical mercury vapor yard lights people install themselves at rural homes and farms. Up to 35% of the light from these fixtures escapes upwards and never reaches the ground. Newer fixtures of the “full cutoff” variety are designed to project light at a maximum of 75 degrees from vertical, which is believed to be optimal for spreading light evenly throughout an area and minimizing “hotspots” of overly intense light directly under the light. Mr. Dobek stated that the strategic location of light poles is also critical to ensure the most even distribution of light and lack of dark spaces.

Takayama asked if Mr. Dobek is familiar with the lights at Turtle Creek Casino. Mr. Dobek stated that those are 30' – 40' lights, full- or semi-cutoff, with metal halide bulbs. Some recessed light fixtures utilize lenses that project below the bottom horizontal plane of the fixture and increase glare. He stated that this parking lot is highly visible from the Observatory, which is over 22 miles away. Mr. Griffith noted that the Observatory is at a higher elevation than the casino, which adds to this situation. He also asserted that any bulb will project light in a 360 degree circle; it is the configuration of the fixture that channels and directs the light.

6. Continued Discussion/Deliberation:

a) Application #2004-3P by Meijer, Inc., 2929 Walker NW, Grand Rapids MI 49544 for SUP/Site Plan Approval for development of a 232,360 sq. ft. grocery/general merchandise store, 2,400 sq. ft. convenience store with 10 gas pumps, and 100,041 sq. ft. of additional commercial space on property located at 5896 Lautner Road (the southeast corner of M-72 East and Lautner Road) and currently zoned B-3, Planned Shopping Center: (Discussion planned to center around lighting plan for the proposed development): Vermetten stated that Meijer

has expressed a primary concern for customer and employee safety in terms of lighting, and asked if this specific project has been evaluated by Mr. Dobek, who stated that he has been working directly with Meijer representatives in this situation. He believes that this project has an opportunity to become a model for the community. Due to the topography of the site he recommends use of 20' light poles closer to the buildings, with some 30' light poles in the middle of the parking lot. Additional canopy lighting could be used at the building in conjunction with the shorter light poles as needed. Vermetten asked if Mr. Dobek had performed his own photometric study of the project; he has not but he has reviewed the Meijer proposal and feels it could be improved through a combination of light pole height changes and light pole relocation to even out the lighting. He stated that lighting plans should not be "cookie cutter" but should be designed to specifically suit each individual site. He has offered assistance to Meijer in preparing such a plan for this site.

Krause believes that the ICSC recommends/requires 1 foot-candle minimum light at the parking lot throughout. Mr. John Eberly III, Senior Electrical Engineer with Fishbeck, Thompson, Carr & Huber, Inc stated unfamiliarity with this standard, and stated that Meijer standards are for ½ foot-candle minimums. He agreed that uniformity of light is key rather than having hotspots and dark spots. Chris DeGood stated that all parties seemed to agree that the Meijer site plan had some generally good elements to it but that there were some things that could be done to even out the light, reduce glare and fine-tune the plan in a manner that would be beneficial to store owner, customers, employees and passersby. Mr. Eberly also stated that Meijer tends to turn off lights at the perimeter of their parking lots in the wee hours of the night to save energy during periods when there are fewer customers who park very close to the store. He also stated that Meijer has a metal halide lighting standard, but in this circumstance is willing to consider alternatives such as a mix of metal halide and high pressure sodium lights. Mr. DeGood stated that a variance request in this regard is pending before the ZBA.

Sherberneau asked for an explanation of the differences between metal halide and high-pressure sodium lighting. Mr. Eberly explained that the metal halide tends to be a bluer light that provides for truer color perception; high-pressure sodium light tends to be yellowier and provides for less accurate color perception. In either case bulbs are measured in wattages and the light produced is measured in foot-candles at ground level. Low-pressure sodium is a very yellow light that is monochromatic. Mr. Nowakowski, Meijer, Inc. stated that a Grand Rapids area store once employed low-pressure sodium but discarded it because people couldn't tell their cars apart by color. Mr. Dobek stated that this problem is not as drastic as it is made out to be – one has only to open a car door or have even a small amount of a polychromatic light that enables perception of a broader spectrum of light.

Mr. Stoepker expressed a need for clarification. Pursuant to a recommendation from John Iacoangeli, the township's planning consultant, a variance request has been submitted to the ZBA. If the Planning Commission desires a change to the lighting plan it should be made now so that revised submissions to the ZBA can be made. Vermetten expressed understanding that Messrs. Dobek, DeGood and Mr. Eberly are working cooperatively on alternatives that will be mutually beneficial. Mr. Dobek is recommending high-pressure sodium lighting in general, with the exception of possibly some metal halide lighting under canopies and perhaps in the garden center area. The Planning Commission has input regarding pole height, which is not specifically dictated by the Zoning Ordinance. Because the Ordinance specifically requires high-pressure sodium lights, any variance from this requirement must be evaluated by the ZBA. Mr. Stoepker believes that an understanding on which type of light might be where on what height poles is critical before the ZBA hearing, and is

pushing for a final recommendation from the Planning Commission to the Board at the November meeting. Hull requested that information be submitted as soon as possible but that timing of the submission will not be critical to the ZBA.

Hardin stated that there will be trees in the parking lot, and one of the arguments made by the applicant in favor of tall poles is so that light does not get lost in the tree foliage. On the other hand, he felt that light poles that were too high would only light the tops of trees. Mr. Dobek stated an expectation that the trees may ultimately reach a 20' – 35' height. On another project he is recommending 10' – 12' poles because they will be shorter than the trees and eliminate the conflict. Additionally, the reflection/refraction of the light off sidewalks will direct light to dark areas at the base of trees. In response to this point, Mr. Stoepker stated that a landscaping plan was submitted last month to the Commission; he asserted that the applicant has received no staff feedback about this plan. He wrote a letter to Jim Christopherson expressing these concerns today, and is concerned about modifying the lighting plan and perhaps having to do it again to accommodate revisions to the landscaping plan if it is changed later. Mr. Stoepker also stated that they have yet to receive staff feedback regarding traffic issues, and characterized the process as “piecemealing.” He is hopeful that all issues will be resolved on November 28 and a recommendation made to the Board of Trustees at that time. Takayama had an impression after the last meeting that Krause would meet with Meijer after the last meeting; Mr. Stoepker stated that this meeting occurred before the last meeting and Takayama said again that he had expected further collaboration after the last meeting. Mr. Stoepker stated that he is inclined to treat Iacoangeli’s lack of comment as assent to the plans as presented. Krause suggested that by the end of this week Iacoangeli should be able to provide written feedback to the applicant and asked Corpe if this was a reasonable expectation; she stated that she could not say without speaking to him first. Carstens and Takayama both recalled consensus at the last meeting that a generic type of downtown landscaping plan sample presented by Iacoangeli at the last meeting would be pursued, as would the locations of sidewalks and the potential narrowing of Lautner Road. Mr. Stoepker stated that he believes the Road Commission’s review of the situation with MDOT is complete and it would be counterproductive to revisit the situation after the fact. Sherberneau stated that he would make inquiries tomorrow.

Vermetten asked Mr. Dobek if there are “ideally lit” parking lots in the area. Mr. Dobek suggested the car dealerships on Garfield Road are using metal halide lights, whereas the existing Meijer is using high-pressure sodium. He says that the Grand Traverse Mall is an example of a very good lighting plan and utilizes high-pressure sodium, but that the Grand Traverse Crossings is a poor example, having many hotspots. He stated that high-pressure sodium lighting is not monochromatic like low-pressure sodium. Mr. Dobek drew a picture showing the very narrow band of light in the yellow range given by low-pressure sodium; the wider band of light throughout the spectrum from high-pressure sodium, and the band of light skewed towards the blue end of the spectrum generated by metal halide light. He noted that the Mercedes dealership next door is using high-pressure sodium lighting. Mr. Dobek also asked people to think about normal car headlights and the xenon headlights that are much bluer and difficult to look at as a good comparison between high-pressure sodium and metal halide type lamps. David noted that the “metal” in metal halide lamps is mercury. Mr. Dobek suggested that he work with the Meijer team to come up with a new lighting plan that employs a mixture of lighting types that are strategically located. The Commission thanked Mr. Dobek for his assistance with general lighting education and

Mr. Eberly stated that there was a model ordinance put out by the dark sky association that was put out for comment but has been removed from public access

during revision. Mr. Dobek noted that the Commission has been provided with a copy of Whitewater Township's dark sky ordinance adopted in the early 1990's, and which he views as a very good basic ordinance in this region. Mr. Eberly encouraged the Commission to wait until the revisions to the society's proposed model ordinance are available and keep options open.

7. Public Comment/Any other business that may come before the Commission:

Mr. Engle thanked the Commission for opening the farmland issue comment to the public again this evening. He realizes that the Commission may have closed the public comment period a few meetings ago but this is an important issue and much has been occurring, so the additional opportunity was very welcome.

Meeting adjourned at 9:47 p.m.