NEDERVELD

November 16, 2016

Mr. Phillip A. Settles
Brott, Settles & Brott, P.C.
5168 US 31 North, P.O. Box 300
Acme, MI 49610
psettles@bsb.tc

RE: The 81 on East Bay
Nederveld File# 16801862
Relocating Fire Apparatus Access Road

Dear Mr. Settles,

Per your request, I have reviewed the "Findings of Fact" documents from Peninsula Township regarding the above referenced project and I offer the following opinions:

The proposal to eliminate the secondary fire apparatus access road that connects 81 Avenue and Smokey Hollow Road, and relocate it to connect the end of 81 Avenue with Boursaw Road, would place the proposed project in violation of the Peninsula Township Fire Prevention Ordinance (IFC). The following code sections were addressed in my Fire Code Compliance Report dated August 15, 2016, and approved by Chief Rittenhouse in a letter to Ms. Michelle Reardon, Director of Planning & Zoning, on August 16, 2016. Fire apparatus access road requirements include the following:

D104.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to, not less than, one-half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

The proposed residential project exceeds 30 dwelling units and, therefore, requires a second approved fire apparatus access road. The submitted plans indicate a second fire apparatus access road at the north end of the project that connects to Smoky Hollow Road. The primary reason for multiple access roads is to ensure that if one access road is blocked or otherwise unavailable, another will allow access to the fire department, law enforcement, and EMS. When more than one access road is required, they need to be separated by enough distance to avoid a situation where both would be blocked or unavailable simply because they are too close to one another.

The

Gordon Hayward

From: james komendera <jameskomendera@msn.com>
Sent: Wednesday, November 16, 2016 8:59 AM
To: planner@peninsulatownship.com
Subject: Public Hearing for The 81 on East Bay
Attachments: Soil Results Table 2 (1).docx

Gordon Hayward,
Director of Planning and Zoning, Peninsula Township

Dear Mr. Hayward,

Attached is a 2013 soil test for a property off of Westwind Rd. on the peninsula. This property was a former farmland similar to the Boursaw farm which is now under application for a PUD known as The 81 on East Bay. Please note the high levels of lead, arsenic and mercury in this study compared to state background levels (highlighted). Although this is not the 81 property, it had similar farming practices of the 81 in the 60's and 70's. If these levels do exist on the 81 and the severe topographical changes and excavating as proposed takes place, would this not be an environmental threat to the neighboring property and East Bay itself? We are asking that you strongly recommend a Baseline Environmental Assessment for any type of development on this property due to its potential soil contamination. Could you please include this test in the packet for the public hearing tomorrow.

Thank You,

James Komendera,
President, Preserve Old Mission
4168 Rocky Shore Trail
Traverse City, Michigan 49686

CLIENT:

SITE: Westwind Road

PROJECT NO: 2014544.01

SOIL GENERIC RESIDENTIAL CLEANUP CRITERIA (GRCC) COMPARISON TABLE

Hazardous Substance	Chemical Abstract Service Number	Sample I.D.		Statewide Default Background Level	Residential Drinking Water Protection Criteria	Particulate Soil Inhalation Criteria	Direct Contact Criteria
		SS #1	SS #2				
Arsenic	7440382	27,000	17,000	5,800	4,600	7.20E+05	7,600
Barium (B)	7440393	36,000	47,000	75,000	1.30E+06	3.30E+08	3.70E+07
Cadmium (B)	7440439	ND<710	ND<760	1,200	6,000	1.70E+06	5.50E+05
Chromium (VI) (total)	18540299	4,400	6,000	NA	30,000	2.60E+05	2.50E+06
Copper (B)	7440508	11,000	7,400	32,000	5.80E+06	1.30E+08	2.00E+07
Lead (B)	7439921	220,000	48,000	21,000	7.00E+05	1.00E+08	4.00E+05
Mercury (Total) (B,Z)	Varies	300	48	130	1,700	2.00E+07	1.60E+05
Selenium (B)	7782492	460	590	410	4,000	1.30E+08	2.60E+06
Silver (B)	7440224	ND<1,800	ND<1,900	1,000	4,500	6.70E+06	2.50E+06
Zinc (B)	7440666	27,000	17,000	47,000	2.40E+06	ID	1.70E+08

NOTES:

Units are expresed in micrograms per kilogram (ug/kg). Criteria with six or more digits are expressed in scientific notation. A footnote is designated by a letter in parentheses and is explained in the footnote pages that follow the criteria tables.

Shaded criteria are exceeded by one or more samples. Only relevant criteria are listed.

Prepared by Gosling Czubak Engineering, adapted from the Natural Resources and Environmental Protection Act (NREPA), Part 201, R.299.5746, Attachment 1, Table 3, Soil: Residential Part 201 Generic Cleanup Criteria and Screening Levels. Document release Date: December 30, 2013.

Gordon Hayward

From: Scott Howard <Scott@envlaw.com>
Sent: Wednesday, November 16, 2016 12:10 PM
To: planner@peninsulatownship.com
Cc: Karla Gerds
Subject: FW: The 81 on East Bay - Supp PLanner's Report Grobbel 11_15_16
Attachments: The 81 Supplemental Planner's Report - Grobbel 11_15_16.pdf

Attached is a supplemental report from Chris Grobbel on the 81 matter. Please add this to the exhibits. Thanks.

Scott

Scott W. Howard
Olson, Bzdok & Howard, P.C.
www.envlaw.com
scott@envlaw.com
(231) 946-0044

Traverse City Office
420 E. Front St.
Traverse City, MI 49686

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427 Main Street
P.O. Box 1782
Frankfort, MI 49635

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Grobbel Environmental & Planning Associates
P.O. Box 58 Lake Leelanau Michigan 49653

November 15, 2016

Mr. Rob Manigold, Supervisor
Peninsula Township Board
Peninsula Township
13235 Center Road
Traverse City, Michigan 49685

RE: Supplemental Planner's Report – The 81 on East Bay - Planned Unit Condominium Project, Boursaw Road, Section 21, Peninsula Township, T29N R8W, Grand Traverse County, Michigan.

Dear Peninsula Township Board of Trustees,

This letter is intended to supplement professional planner's reports submitted by myself on July 13, 2015 and August 22, 2016 relative to The 81 on East Bay project. I have reviewed the draft Findings of Fact/Decision and Order for SUP #123, the 81 on East Bay (Planned Unit Development Condominium Subdivision), November 17, 2016 prepared by counsel for the Peninsula Township Board of Trustees. Based on project application materials available as of November 15, 2016, the project should be denied as proposed for the failure to adequately comply with the following requirements of the Peninsula Township Zoning Ordinance.[1]

Grading Plan/Soil Erosion. A review of amended site plans and a "Slope Stability Reconnaisance" report by Otwell Mawby, Geotechnical P.C. dated October 26, 2016, indicates that slope stability and the volume of proposed site grading/balancing proposed at this location remain inadequately evaluated and addressed. Specifically, an engineering geotechnical soil assessment and report was provided, while fundamental and detailed plans to minimize soil disturbance through innovative home siting, working with existing topography and natural features, and to adequately detail of slope stabilization remain inadequately addressed. Section 7.4.3 of the Peninsula Township Zoning Ordinance states that "(t)he following rules shall apply to any filling, grading or other earth movement within 200 feet of the normal high water mark[2] to prevent harmful erosion and related sedimentation…

1) The smallest amount of bare ground shall be exposed for as short a time as feasible.

[1]Peninsula Township Zoning Ordinance, effective June 5, 1972 and as amended through August 31, 2009.
[2] The Peninsula Township Zoning Ordinance defines the "normal high water mark" as the MDEQ OHWM of 580.5 feet above mean sea level (msl) (IGLD85) and 581.0 feet above msl (USGS Survey Datum).

2) Temporary ground cover such as mulch must be used as soon as possible and permanent cover such as sod be planted.

3) Diversions, silting basins, terraces and other methods must be used to trap any sediment.

4) Fill must be stabilized according to accepted engineering practices.

5) The Zoning Administrator may issue a land use permit for a seawall without regard to the minimum yard setback from the ordinary high water mark otherwise required in Section 6.8.1 when a sea wall is necessary to protect or prevent structures on the premises from erosion damage caused by high water."

Site plans as submitted fail to provide sufficient detail as to the timing of and species selected to be planted as temporary or permanent ground cover/site stabilization to prevent soil erosion and loss, and fail to provide any detail regarding contingency plans should significant precipitation events occur during site grading/balancing and soil erosion and sedimentation control (SESC) methods fail in whole or in part. Based on my experience as the planner of record for Acme Township, Grand Traverse County during the construction of the Meijer Superstore/Village at Grand Traverse and as a professional planner that reviewed the Leelanau Moorings project, such complete grading, site stabilization/re-vegetation and detailed SESC plans are absolutely required by the Peninsula Township Zoning Ordinance prior to PUD approval or approval with conditions. Therefore, the 81 plans as submitted are incomplete and should be denied as presented.

The 81 application proposes the removal of about one-half of the existing forest cover existing at the parent parcels,[3] and as proposed focuses development upon the most sensitive land areas, i.e., "extremely steep" slopes up to 45 percent.[4] Such steep slopes at this location are comprised of highly erodible Kalkaska loamy sand and Leelanau-Kalkaska loamy sands. Such "steep" to "extremely steep" sandy slopes represent the most challenging development areas in our region, especially once existing vegetative cover and associated root mass are removed, and due to the project's close proximity to East Grand Traverse Bay. Moreover, forest cover is not uniformly spread across the project site, but was wisely retained by on "steep" to "extremely steep" slopes at this location to retain soils, prevent gully erosion, downslope sedimentation, and mass bank slumping. Mass slumping and soil erosion have been observed recently at four (4) locations on similar slopes (i.e., percent slope and soil textures) - two such locations exist along Lake Michigan north of Harbor Springs and followed the removal existing tree cover for residential development. As a general rule, the selective thinning of forest cover up to 30% for filtered views is required by communities following good planning principles, clear cutting is strictly prohibited, root systems should be left in place, and filtered view trimming is only undertake after home construction. Such good planning and development principles should be advanced in this matter, primarily to work with rather than extensively re-engineering site topography, and to direct filtered view tree limb thinning only to create desired home lake views.

Likelihood of Environmental Degradation from the Plan as Proposed. I remain very concerned about the potential for soil erosion/deposition, resulting wildlife habit loss and fragmentation, and aesthetic impacts as observed from public navigation areas of East Grand Traverse Bay from the extensive earthwork proposed for this development. Alternatively, home sites should be worked into the existing topography. Public view sheds and wildlife habitats and migration corridors should also be understood and preserved within required open space. This proposed project's proximity to East Grand

[3] See above referenced site plan and SUP application for The 81 on East Bay, p. 23.
[4] See the above referenced SUP application, p. 11.

Traverse Bay necessitates far more careful and ecologically-informed planning and development to comply with the Peninsula Township Master Plan and the Peninsula Township Zoning Ordinance.

Given the planned density of residential development within the most environmentally sensitive portions of the site (i.e., the prevalence of "steep" to "extremely steep" loamy sand soils); proximity to East Grand Traverse Bay; and typical residential development patterns within shoreline developments in northwestern Michigan (i.e., the significant clearing of trees for a homes/drives/parking footprints; additional tree removal for water views; and future lawn irrigation and fertilization, etc.), I believe that significant water quality degradation and aesthetic impact from public ways are likely adjacent to and directly resulting from this development as proposed. Specifically, given soil types, the extensive planned clearing of mature forests on steep to extremely steep slopes and extensive earthwork/re-contouring as planned for home development, I believe that there is a likelihood of water quality degradation within the nearshore environment of East Grand Traverse Bay from this development.

Thank you for the opportunity to provide these comments. Please contact me if you've any questions at 231-499-7165 or cgrobbel@grobbelenvironmental.com.

Sincerely,
Grobbel Environmental & Planning Associates

Christopher P. Grobbel, Ph.D.
Sr. Project Manager/Planner

cc Scott Howard, OBH

Gordon Hayward

From: Brian Boals <brianb@gfa.tc>
Sent: Friday, November 11, 2016 8:30 AM
To: Gordon Hayward
Subject: RE: Notes on our meeting November 10-2016

Hello Gordon,

I agree, with the exception of the last sentence regarding the storm sewer. I believe it may be feasible to construct a connecting road to Boursaw, but I am not sure the 12" storm drain could/should be removed. The site grading constraints are significant and that would depend on whether the Applicant's engineer can come up with an acceptable alternative drainage design. Let me know if you would like to further discuss.

Thanks,

Brian

From: Gordon Hayward [mailto:planner@peninsulatownship.com]
Sent: Thursday, November 10, 2016 2:53 PM
To: Brian Boals <brianb@gfa.tc>
Subject: Notes on our meeting November 10-2016

Brian M Boals, PE

These are to confirm my notes of our meeting on November 11, 2016 at your office regarding 81 on EB.

You had reviewed the documents that were submitted to you by the developer and that you felt they had addressed any concerns that you has. You referred to three letters that you sent to the Township Planner Michelle L. Reardon /(letters dated March 8, 2016; March 15, 2016 and August 15, 2016 which are in the Township files)

We discussed optional locations for placing an Emergency Access Road on 81 Property. You mentioned that there had been a drawing showing a fire lane connecting the water storage tank to the cul-de-sac at the end of Eightyone Ave that achieved a 12% grade. I mentioned that the Township Private Road Ordinance allows a 12% grade if paved to 20 ft. width plus shoulders and had been used in other developments as an approved drain for handling storm water.

You said that you thought it would be feasible to connect an emergency access road from the cul-de-sac to Boursaw Road that would be paved to meet the Township Road Standards (being Section 7-10 of the Township Zoning Ordinance).

In further discussions regarding the Emergency Access Road you noted that by connecting it to Boursaw the cul-de-sac would not be needed and by using the road to pick up storm water and direct it to the basin, the 12" storm drain could also be removed making the access road cost effective.

If you feel that I have miss-characterized anything, Please let me know so I can make corrections

Gordon Hayward
Peninsula Township Director of Planning & Zoning
13235 Center Road
Traverse City MI 49686
phone - 231-223-7314
fax - 231-223-7117
planner@peninsulatownship.com

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81 on East Bay Project

These are issues the township should address before any approvals are given for this project.

1) Has an environmental assessment been done for lead and arsenic on this farmland? All fruit farms throughout the country have used pesticides that included lead and arsenic in the past. An independent firm should be hired by the township- at the developer's expense- to do testing of the soils (refer to Panopoulos/Nichols 80 acre farm on Bluff Rd). Otwell, Mawby, PC did the testing and reports.
   *If this site is contaminated above the DEQ guidelines a baseline environmental audit might be required for each parcel sold. Remediation will be required for the sites affected.
   *Lead and arsenic remain in the soils to a depth up to 2-3 feet and only removal or encapsulation is the remedy.

2) How will the developer address surface storm water runoff to the bay? This many homes close to the bay will have lawn fertilizer from their homes entering the bay. How will they address soil erosion, during construction of the homes, from entering the bay? Trees that are removed along the bay will exacerbate erosion into the bay. How many trees will be removed along the shoreline where the homes will be built? The county Soil Erosion Department is in disarray, as is evidenced by the Acme Meijer Project and CANNOT be relied upon to monitor this project.
   *Water runoff from this many roofs, this close to the bay, would be a problem.

3) Are or were there any underground or above ground storage tanks on the property that could have been used for storage of Agri-Chemicals, used for spraying the previous orchard? Are there any "hot spots" where the mixing of chemicals above ground would have caused excessive levels of contamination from lead and arsenic?

4) Are there or were there any storage tanks that were used for hydrocarbon fuel products or oil tanks, underground or above ground, that could be a cause for contamination? Being this close to Grand Traverse Bay leaking storage tanks would easily reach the bay.

5) Were there any storage barns for Agri-Chemicals on this property? Historically, these storage barns leaked chemicals into the soil. Were there any burn pile areas for Agri-Chemicals which could result in "hot spots?" Are the future common play areas free of contamination?

6) Will the developer drill test wells to determine if the water being used for the drinking water is safe? Nitrates from farming activities are responsible for a number of subdivision's wells to require water purification systems to be installed.

7) If a common well is required will the township be responsible for the common well if it has any problems? The township had to take over the well in the Underwood Project when it started to fail. Underwoods ultimately had to petition for and hook up to city water. That is not possible with this project. If I were a neighbor of this project I would be concerned about the amount of water that will be drawn from the same source that is servicing their wells. In addition to the Underwood development mentioned, growth at the south end of the peninsula forced the residents to hook up to city water because of failing wells.

8) Are soils adequate for the septic systems both community and private in this project? This many homes and the number of people living in them could compromise the system and the effluent ultimately winding up in the bay. Is there sufficient drain field space, and soil quality, to keep this from happening?

9) And Finally- the traffic load on Center Rd from construction trucks will dramatically increase during the construction period- which could last years! This project will add to an existing problem that needs to be addressed.

It is important that whatever takes place on Old Mission Peninsula enhances the quality of life here for everyone and doesn't detract from it. I've got to believe that the developer could come up with a more conservation minded plan that would be far less intrusive on the natural features of Old Mission Peninsula. We are unique from other areas of the country, and that is the reason people are attracted to the Peninsula. Far fewer homes on larger sites away from the water's edge would attract conservation minded buyers to this development and still provide the financial return he is hoping for. This in turn would add to the quality of life in this project and on Old Mission Peninsula. And that is how you get the support of it's residents!

Respectfully,

Mark Nadolski

President of Protect the Peninsula

Gordon Hayward

From: Gordon Hayward <planner@peninsulatownship.com>
Sent: Tuesday, November 15, 2016 5:02 PM
To: 'James G. Young'
Subject: RE: Road Standards and The 81 project and also status of Findings of Fact

Jim,

The connection I have made between the Internal Emergency Access Road and The Township Road Standards, is that the Township Engineer felt that the Internal Emergency Access Road would need to be built to Private Road Standards for paving, for grades greater than 9% in order to prevent erosion.

See the following Section 7.10.9 (3) of the Zoning Ordinance. and (Exhibit 6 and Exhibit 15).

Section 7.10.9 Required improvements and specifications:
(3) GRADES AND PAVING:
Permissible percent grades on any Frontage Road shall be within the following ranges:
Maximum
..... 9%
..... 12% When the conditions below are met.
..... 1% Cul-de-sac
Minimum 0.4%

Frontage roads with grades of up to 9 percent shall have a roadbed width of not less than 18 feet and may be paved or have a gravel surface and shall have 2 foot shoulders on each side. With grades greater than 9 percent, the roadbed width shall be surfaced with bituminous pavement to a width of not less than 20 feet. Integral bituminous raised edge may be used in areas subject to severe erosion, possibly eliminating the need for roadside ditches. Minimum width between beginnings of raised edges shall be the same as for a paved roadbed.

Exhibit 15
Hello Gordon,

I agree, with the exception of the last sentence regarding the storm sewer. I believe it may be feasible to construct a connecting road to Boursaw, but I am not sure the 12" storm drain could/should be removed. The site grading constraints are significant and that would depend on whether the Applicant's engineer can come up with an acceptable alternative drainage design. Let me know if you would like to further discuss.

Thanks,

Brian

From: Gordon Hayward [mailto:planner@peninsulatownship.com]
Sent: Thursday, November 10, 2016 2:53 PM
To: Brian Boals <brianb@gfa.tc>
Subject: Notes on our meeting November 10-2016

Brian M Boals, PE
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You had reviewed the documents that were submitted to you by the developer and that you felt they had addressed any concerns that you has. You referred to three letters that you sent to the Township Planner Michelle L. Reardon /(letters dated March 8, 2016; March 15, 2016 and August 15, 2016 which are in the Township files)
We discussed optional locations for placing an Emergency Access Road on 81 Property. You mentioned that there had been a drawing showing a fire lane connecting the water storage tank to the cul-de-sac at the end of Eightyone Ave that achieved a 12% grade. I mentioned that the Township Private Road Ordinance allows a 12% grade if paved to 20 ft. width plus shoulders and had been used in other developments as an approved drain for handling storm water.
You said that you thought it would be feasible to connect an emergency access road from the cul-de-sac to Boursaw Road that would be paved to meet the Township Road Standards (being Section 7-10 of the Township Zoning Ordinance).
In further discussions regarding the Emergency Access Road you noted that by connecting it to Boursaw the cul-de-sac would not be needed and by using the road to pick up storm water and direct it to the basin, the 12" storm drain could also be removed making the access road cost effective.

If you feel that I have miss-characterized anything, Please let me know so I can make corrections

---

From: James G. Young [mailto:jimyoung@upnorthlaw.com]
Sent: Thursday, November 10, 2016 9:07 PM
To: Hayward Gordon
Cc: Wendling Peter; Manigold Rob
Subject: Road Standards and The 81 project and also status of Findings of Fact

Gordon -

When we met earlier this week, I thought that your condition regarding "no gates" on the fire access was defendable as long as the Fire Chief though that it was justified for emergency purposes, including the evacuation of homes. The Chief had no problem with this condition.

As for a potential condition that requires re-location of the fire access to within the project site for "road continuity purposes", I did not believe that this condition was defendable solely on the basis of Section 7.10.6(4). It is still my opinion that the addition of this condition is highly subject to a legal attack. The addition of this condition could hurt the Township's position regardless of whether the Board finds that the standards in the remanded issue are met or not met.

Remember that the fire access is not a road subject to general public usage….even local usage….such that the "continuous circuit" concept does not logically apply.

However, if you still are inclined to recommend this condition, then I need to review the "road plan" mentioned in Sec. 7.10.6 (1) to see if it helps or hurts such a condition. I want to review all potentially relevant information since such a condition will unquestionably be attacked by the applicant.

I know that you already have the email shown below. However, it relates to this issue.

In summary, if you are still going to make this "internal relocation" recommendation at the public hearing, then please send me either a copy of the "road plan" or a link to it. I could not find it via the Township's website. On the other hand, if you will not make this recommendation, then I do not need to read the road plan.

Lastly, I would like to review the proposed Findings of Fact at the earliest opportunity. If I determine that revisions are needed, then we need time next week to do them.

Thanks again for our meeting earlier this week. It is a pleasure to work with you.

James G. Young
Attorney at Law
of Counsel
Young, Graham, Elsenheimer & Wendling, P.C.
P.O. Box 398
Bellaire, MI. 49615

mobile: 231 288-7700
fax: 231 533-6225

Gordon -

Thank you for sending my the citation to ZO regarding road standard 7.10.6(4). The initial issue to be decided is whether this standard applies to the "fire line" in this project.

I assume that you are referring to the fire line which is shown in the attached drawing. As I understand it, this is the only new "road" related to the project. The issue of the adequacy of the fire lane specially relates to the issues remanded by the Circuit (the Remand Issues) for reconsideration by the Township Board. Only the Remand Issues can be considered at the next hearing. This is why I assume that you are just referring to the fire lane.

Section 7.10.6(4) applies to "roads". Definitional terminology related to "roads" is in Article III of the ZO. The only purpose of the fire line is to provide a second method of access to the project as required by the International Fire Code, which the Township adopted in its Fire Prevention Ordinance.

Based on the clear wording of the ZO, the fire line is a "Road - Marginal Access". The definition from the ZO reads:

Road - Local Access: Local access roads provide access to homes, farms and other low intensity land uses. Traffic desires are local in nature and these roads do not require trip continuity for an extended length. (ADDED BY AMENDMENT 88)

Section 7.10.6(4) requires that the layout of roads provide "as much as possible" for a continuous circuit of travel. Since the purpose of the new fire lane is to provide a second access to the site just for emergency vehicles, there is no need for a "continuous circuit of travel" for the fire lane, itself. The fire lane provides access to the private road within the project, which, in turn, provides access to homes and other uses within the project.

Also, a portion of Article II is relevant to an interpretation of Section 7..10.6(4). Section 2.1 states that one of the purposes of the Ordinance is to "facilitate the development of adequate systems of fire protection". As noted earlier, the sole purpose of the fire lane is to facilitate adequate fire protection.

Thus, reading the ZO as a whole, it is my opinion that the continuous circuit of travel wording of Section 7.10.6(4) simply does not apply to the fire lane.

Please understand that this opinion does not relate to any other roads in the project. Issues relating to road system within the project were decided by the Township Board previously. They are not any of the Remand Issues. Thus, I have not analyzed them.

Please let me know if you concur with this analysis. I would like to get this matter set for a hearing on Nov. 7 or during the following week, if that is possible.

Please confirm receipt of this email. I have been having email problems. Thanks.

RECEIVED
NOV 17 2016
BY: 9214

SPECIAL USE PERMIT

FINDINGS OF FACT

SUP #123, The 81 on East Bay (Planned Unit Development Condominium Subdivision)

November 17, 2016

PENINSULA TOWNSHIP BOARD

DECISION AND ORDER

Applicant: The 81 Development Company, LLC
Kevin O'Grady, Owner
6978 Dixie Hwy, Suite A
Clarkston MI 48346

Hearing Date: May 18, 2015, June 15, 2015, July 14, 2015, August 11, 2015, November 17, 2016

PROPERTY DESCRIPTION

Parcel ID#: 28-11-114-001-00; 28-11-114-002-00

RECONSIDERATION UPON REMAND

Per the decision and order (the Court Decision) of Judge Rodgers of the 13th Circuit Court for Grand Traverse County made on January 15, 2016 in case number 2015-31218-AA with respect to The 81 on East Bay Special Use Permit application and the application for Planned Unit Development (the Development), the Peninsula Township Board held a public hearing at a regular meeting on May 10, 2016 at 7:00 PM and a second public hearing on November 17, 2016 iat the Peninsula Township Hall, 13235 Center Road, Traverse City, MI 49686 to reconsider those issues as specified in the Court Decision.

The Court Decision referred to two conditions set by the Township Board at the Board's August 11, 2015 hearing, which were condition (1) relating to the Development meeting adequate safety standards for fire protection subject to the Peninsula Township Fire Department review and approval including the provision of an additional egress for emergency purposes at either Trevor Rd or within the Development proper and condition (6) relating to the supplying of detailed grading plans for the review and approval of the Township Engineer.

On page 11 of the Decision regarding condition (1),the Court stated, "In this case, the location for the additional egress for emergency purposes was undecided at the time the Board voted to approve the SUP/PUD." Later, in the same paragraph the Court stated, "Similarly, the Board delegated approval of

the grading plan to the Township Engineer." In footnote 46, the Court describes other issues that were improperly decided.

Footnote 46 reads: The Ordinance has required standards relating to soil erosion, grading and storm water. In its findings and conclusions, the Bard indicated that the Developer "shall submit a grading plan with sufficient details to evaluate the plan for protection of steep slopes and vegetation present on site as requested by the SESC and the Township Engineer." Similarly, the Board found that "'storm water control review is currently be contemplated by the engineer and the site shall comply fully with the requirements of Storm Water Control Ordinance." These statements are not legally sufficient findings to support a conclusion that the standards for soil erosion grading and storm water have been met and the Court remands these issues for further consideration by the Board."

At the bottom of page 11, the Court stated, "Here, the Board did not "independently determine" that the proposed SUP/PUD met the ordinance requirements because it delegated authority to the Fire Department and the Township Engineer to provide approval on certain zoning standards. The Court finds that the Board improperly delegated authority to staff and remands this issue for further consideration consistent with this decision and order."

In conclusion, the Court stated, "The issues delegated to the Peninsula Township Fire Department and the Township Engineer for review and approval, including the location and functionality of the emergency access road, and whether the standards for soil erosion, grading and storm water have been met, are remanded to the Board for further proceedings consistent with this decision and order."

Except for the reconsideration of these "Court-remanded" issues, all other portions of the Township Board's Decision and Order of August 11, 2015, including all Findings and Conditions, are unchanged.

A new consideration of these matters involves consideration of the following standards under the Peninsula Township Zoning Ordinance: Section 8.1.3 (1) (c); Section 8.1.3 (3) (d); Section 8.1.3 (3) (h); Section 8.1.3 (3) (i);Section 8.1.3 (3) (j); Section 8.1.3 (3) (k); Section 8.1.3 (3) (n); Section 8.3.3 (7); and Section 7.2.5.

After giving notice as required by law, the Township Board (the Board) has held on November 17, 2016 to reconsider the Court-remand issues. The Board has considered the statements of the Applicant and agents and documents submitted by them, the statements of the public and documents submitted by them and all Exhibits, which are part of the record in this matter. Accordingly, the Board has reached a decision on this matter and states as follows:

Findings of Fact

8.3.1(1) General Standards: The Town Board shall review each application for the purpose of determining that each proposed use meets the following standards, and in addition, shall find adequate evidence that each use on the proposed location will:

(c) Be served adequately by essential facilities and services, such as highways, streets, police, fire protection, drainage structures, refuse disposal, water and sewage facilities, or schools.

i. The Board finds that revisions to the proposed development plans include a new emergency access location and also a widening of the 81 East Road from 20' to 26'. These items have been added to the development plans in order to address this standard, and add a minimum of at least 4,230 square feet of paved area to the project.

ii. The Board finds that, in order to meet essential services on the site plan, additional impervious surface that does not qualify as "open space" has been added to the site plans and requires a review of the open space provided within the development.

iii. The Township Board finds that a total of 65% of the property is required to remain as open space as defined by the Zoning Ordinance.

iv. The Board finds that, in order to arrive at its open space calculation, the developer took the entire property, removed the area to be occupied by the roads and building envelopes for the homes, then counted everything else as "open space." The Board finds that the Township engineer has undertaken the same mathematical analysis.

v. The Board finds that this calculation improperly includes the storm sewer detention basin (+/- 125,231 SF), the community septic system (+/- 54,000 SF), a 16.5 foot gap between the gravel road edge and buildable envelope (+/-65,142 SF) - (each units private driveway crosses this 16.5 foot open space gap), centers of cul-de-sacs (+/- 5,460 SF), and parking for carts at beach (+/- 1,860 SF).

vi. The Board finds that, in order for the development to have essential services and facilities, the development proposal includes a widened road in the project, a new emergency access road, a storm sewer detention basin and community septic system that cannot be counted as "open space" for purposes of the PUD development. These items, when removed from the calculation for preserved open space presented by the Developer, reduce the amount of preserved open space well below the required 65% for an open space PUD. (Exhibit B to May 10, 2016 correspondence from S. Howard).

This standard HAS NOT been met.

8.3.1(3) Specific Requirements: In reviewing an impact assessment and site plan, the Town Board and the Planning Commission shall consider the following standards:

8.3.1(3)(d) That the plan meets the requirements of Peninsula Township for fire and police protection, water supply, sewage disposal or treatment, storm drainage and other public facilities and services.

i. The Board finds that revisions to the proposed development plans include a new emergency access location and also a widening of the 81 East Road from 20' to 26'. These items have been added to the development plans in order to address this standard, and add a minimum of at least 4,230 square feet of paved area to the project.

ii. The Board finds that, in order to meet essential services on the site plan, additional impervious surface that does not qualify as "open space" has been added to the site plans and requires a review of the open space provided within the development.

iii. The Township Board finds that a total of 65% of the property is required to remain as open space as defined by the Zoning Ordinance.

iv. The Board finds that, in order to arrive at its open space calculation, the developer took the entire property, removed the area to be occupied by the roads and building envelopes for the homes, then counted everything else as "open space." The Board finds that the Township engineer has undertaken the same mathematical analysis.

v. The Board finds that this calculation improperly includes the storm sewer detention basin (+/- 125,231 SF), the community septic system (+/- 54,000 SF), a 16.5 foot gap between the gravel road edge and buildable envelope (+/-65,142 SF) - (each units private driveway crosses this 16.5 foot open space gap), centers of cul-de-sacs (+/- 5,460 SF), and parking for carts at beach (+/- 1,860 SF).

vi. The Board finds that, in order for the development to have essential services and facilities, the development proposal includes a widened road in the project, a new emergency access road, a storm sewer detention basin and community septic system that cannot be counted as "open space" for purposes of the PUD development. These items, when removed from the calculation for preserved open space presented by the Developer, reduce the amount of preserved open space well below the required 65% for an open space PUD. (Exhibit B to May 10, 2016 correspondence from S. Howard).

This standard HAS NOT been met.

8.3.1(3)(e) That the plan meets the standards of other governmental agencies where applicable, and that the approval of these agencies has been obtained or is assured.

i. The Board finds that the Developer has not procured a Part 41 permit for the proposed community septic system. The Board finds that the information is incomplete and lacks evidence in support due to the lack of State approval of the wastewater treatment plans for the development. (Township Exhibit 2).

ii. The Board finds that County Soil Erosion Control's review is contingent on grading and stabilization plans for the bluff and topographical features that have not been submitted to the County. The Board further finds that the County identifies the potential for storm water to be directed onto neighboring properties as a result of grading activities on the site. No Part 91 permit has been procured by the Developer. (Township Exhibits 7 and 8.)

This standard HAS NOT been met.

8.3.1(3)(h) That the soil conditions are suitable for excavation and site preparation, and that organic, wet or other soils which are not suitable for development will either be undisturbed or modified in an acceptable manner.

i. The Board finds that the soils map indicates that the majority of the property to be developed is classified LKE2 (Leelanau-Kalkaska loamy sands, 12 to 18 percent slopes, moderately eroded) and LKF2 (Leelanau-Kalkaska loamy sands, 25 to 45 percent slopes, moderately eroded). The plan focuses development on sandy steep slopes and unique topographical features on the property.

ii. The Board finds that the development plan calls for the removal of "approximately half of the tree cover" on the property "to accommodate grading and earthwork for the project." (Application at 23). The Application itself points out the importance of these trees for soil and slope stability (Application at 10). According to Dr. Christopher Grobbel, this will likely cause substantial erosion on the property due to a loss of stabilizing trees on steep slopes. (Grobbel Report and supplemental reports dated July 13, 2015, August 22, 2016 and November 15, 2016)

iii. The Board finds that the plan calls for regrading of steep slopes and topographical features on the property cutting some 15 vertical feet of the bluff and filling equivalent areas (see Application at 24). Some 27 acres of the property, or 33% of the land, will be denuded and re-contoured with heavy equipment.

iv. The Board finds that County Soil Erosion Control's review is contingent on grading and stabilization plans for the bluff and topographical features that have not been submitted. The Board further finds that the County identifies the potential for storm water to be directed onto neighboring properties as a result of grading activities on the site. No Part 91 permit has been procured by the Developer. (Township Exhibits 7, 8.)

v. The Board finds that evidence has been presented at the public hearing of historic use of pesticides on the property containing compounds like lead and arsenic. These compounds stay in the soil and could there is a high likelihood that they exceed acceptable state criteria. The developer has not provided any information on the environmental condition of the soils on the property, including any Phase I, Phase II or BEA studies done in conjunction with the property. The developer has not provided an approved or proposed "due care plan" for the property. Therefore, it is unclear whether the project will disturb contaminated soils and increase exposure risk to those contaminated soils. (See Part 201, MCL 324.20101, et. seq.)

This standard HAS NOT been met.

8.3.1(3)(i) That the proposed development will not cause soil erosion or sedimentation problems.

i. The Board finds that the soils map indicates that the majority of the property to be developed is classified LKE2 (Leelanau-Kalkaska loamy sands, 12 to 18 percent slopes,

moderately eroded) and LKF2 (Leelanau-Kalkaska loamy sands, 25 to 45 percent slopes, moderately eroded). The plan focuses development on sandy steep slopes and unique topographical features on the property.

ii. The Board finds that the development plan calls for the removal of "approximately half of the tree cover" on the property "to accommodate grading and earthwork for the project." (Application at 23). The Application itself points out the importance of these trees for soil and slope stability (Application at 10). According to Dr. Christopher Grobbel, this will likely cause substantial erosion on the property due to a loss of stabilizing trees on steep slopes. (Grobbel Report and supplemental reports dated July 13, 2015, August 22, 2016 and November 15, 2016)

iii. The Board finds that the plan calls for regrading of steep slopes and topographical features on the property cutting some 15 vertical feet of the bluff and filling equivalent areas (see Application at 24). Some 27 acres of the property, or 33% of the land, will be denuded and re-contoured with heavy equipment.

iv. The Board finds that County Soil Erosion Control's review is contingent on grading and stabilization plans for the bluff and topographical features that have not been submitted. The Board further finds that the County identifies the potential for storm water to be directed onto neighboring properties as a result of grading activities on the site. No Part 91 permit has been procured by the Developer. (Township Exhibits 7, 8.)

This standard HAS NOT been met.

8.3.1(3)(j) That the drainage plan for the proposed development is adequate to handle anticipated stormwater runoff, and will not cause undue runoff onto neighboring property or overloading of water courses in the area.

i. The Board finds that the development plan calls for development next to a very steep bluff down to East Bay. The plan also calls for regrading portions of the top of this bluff for home sites and the removal of "approximately half of the tree cover" on the property "to accommodate grading and earthwork for the project." (Application at 23). The Application itself points out the importance of these trees for soil and slope stability (Application at 10). According to Dr. Christoper Grobbel, this will likely cause substantial erosion and runoff due to a loss of stabilizing trees on steep slopes. (Grobbel Report and supplemental reports dated July 13, 2015, August 22, 2016 and November 15, 2016). In particular Dr. Grobbel concludes that "significant water quality degradation and aesthetic impact from public ways are likely adjacent to and directly resulting from this development as proposed. Specifically, given soil types, the extensive planned clearing of mature forests on steep to extremely steep slopes and extensive earthwork/recontouring as planned for home development, I believe that there is a likelihood of water quality degradation within the nearshore environment of East Grand Traverse Bay from this development. (Grobbel Supplemental Report November 15, 2016).

ii. The Board finds that the plan calls for regrading of steep slopes and topographical features on the property cutting some 15 vertical feet of the bluff and filling of equivilent areas (see Application at 24). Some 27 acres of the property, or 33% of the land, will be denuded and re-contoured with heavy equipment.

iii. The Board finds that County Soil Erosion Control's review is contingent on grading and stabilization plans for the bluff and topographical features that have not been submitted to the County. The Board further finds that the County identifies the potential for storm water to be directed onto neighboring properties as a result of grading activities on the site. No Part 91 permit has been procured by the Developer. (Township Exhibits 7, 8.)

iv. The Board finds that evidence has been presented at the public hearing of historic use of pesticides on the property containing compounds like lead and arsenic. These compounds stay in the soil and could there is a high likelihood that they exceed acceptable state criteria. The developer has not provided any information on the environmental condition of the soils on the property, including any Phase I, Phase II or BEA studies done in conjunction with the property. The developer has not provided an approved or proposed "due care plan" for the property to ensure there is no runoff of contaminated substances. (See Part 201, MCL 324.20101, et. seq.)

This standard HAS NOT been met.

8.3.1(3)(k) That grading or filling will not destroy the character of the property or the surrounding area, and will not adversely affect the adjacent or neighboring properties.

i. The Board finds that the soils map indicates that the majority of the property to be developed is classified LKE2 (Leelanau-Kalkaska loamy sands, 12 to 18 percent slopes, moderately eroded) and LKF2 (Leelanau-Kalkaska loamy sands, 25 to 45 percent slopes, moderately eroded). The plan focuses development on sandy steep slopes and unique topographical features on the property.

ii. The Board finds that the development plan calls for the removal of "approximately half of the tree cover" on the property "to accommodate grading and earthwork for the project." (Application at 23). The Application itself points out the importance of these trees for soil and slope stability (Application at 10). According to Dr. Christopher Grobbel, this will likely cause substantial erosion due to a loss of stabilizing trees on steep slopes. (Grobbel Report and supplemental reports dated July 13, 2015, August 22, 2016 and November 15, 2016)

iii. The Board finds that, based on testimony at the various public hearings, the high ridge on the east side of the property is a feature that is shared with neighboring property owners. Not only will this degrade the viewscapes for surrounding properties, but it will also impact the lateral support for adjacent lands. The presence of roads and homes on this ridge will also impact neighbors and surrounding properties with stormwater runoff and erosion.

This standard HAS NOT been met.

8.3.1(3)(n) That the plan provides for the proper expansion of existing facilities such as public streets, drainage systems and water sewage facilities.

i. The Board finds that the Developer has not provided evidence that it procured a Part 41 permit for the proposed community septic system. The Board finds that the information is incomplete and lacks evidence in support due to the lack of State approval of the wastewater treatment plans for the development. (Township Exhibit 2)

ii. The Board finds that, in order for the development to have essential services and facilities, the development proposal includes a new emergency access road, a storm sewer detention basin and community septic system that cannot be counted as "open space" for purposes of the PUD development. These items, when removed from the calculation for preserved open space presented by the Developer, reduce the amount of preserved open space well below the required 65% for an open space PUD. (Exhibit B to May 10, 2016 correspondence)

This standard HAS NOT been met.

8.3.3(7) The proposed planned unit development shall meet all of the standards and requirements outlined in this Section 8.3 and also Section 8.1 and Article VII.

i. The Board finds that, for the reasons stated above, the requirements of Sections 8.3 and 8.1 have not been met.

ii. The Board further finds that the development plan calls for the removal of "approximately half of the tree cover" on the property "to accommodate grading and earthwork for the project." (Application at 23). The plan also calls for regrading of steep slopes and topographical features on the property cutting some 15 vertical feet of the bluff and filling equivalent areas (see Application at 24). Some 27 acres of the property, or 33% of the land, will be denuded and re-contoured with heavy equipment.The large scale removal of trees and regarding of topographical features called for by the project is inconsistent with Section 8.3.2, to preserve "the natural character of open fields, stand of trees, steep slopes, brooks, ponds, lake shore, hills, and similar natural assets" and Section 8.3.1(3), to preserve natural resources "to a maximum feasible extent."

iii. The Board finds that the project focuses development on the unique topographical features on the property – steep slopes and ridgelines – rather than the "by-passing of natural obstacles" as required by Section 8.3.2 (4).

iv. The Board finds that the proposed development is contrary to the objectives of the Township as expressed in the Township's Master Plan, contrary to 8.3.1(s). In particular, the development is inconsistent with the provisions of the Master Plan requiring preservation of environmentally sensitive areas "while improving the relationship between the natural and the developed environment" (Master Plan at 3); calling for "careful land management practices to sustain residential uses while preserving rural

character, providing wildlife habitat, controlling erosion and protecting water quality" (MP at 6); designing overlay areas "[t]o protect and preserve shorelines, historic sites, environmentally sensitive areas, and the character of certain sub-areas as requested by its residents" (MP at 20); support of preservation efforts "focused on natural shorelines, historic buildings, township character and discouraging development upon wetlands or steep slopes" (MP at 21); and new overlay districts focusing on "the following characteristics: wetlands, shorelines, steep slopes, ridgelines, historical areas, archeological sites, and wildlife habitats." (MP at 21.)

v. The Board finds that the development proposal includes a widened road in the project, a new emergency access road, a storm sewer detention basin and community septic system that cannot be counted as "open space" for purposes of the PUD development under Section 8.3.4. These items, when removed from the calculation for preserved open space presented by the Developer, reduce the amount of preserved open space well below the required 65% for an open space PUD in contravention of Section 8.3.6. (Exhibit B to May 10, 2016 correspondence from S. Howard).

MOTION TO APPROVE/DENY

Motion made by _____, supported by _____

that based upon the specific findings of fact with respect to Section 8.1.3 (1) (c); Section 8.1.3 (3) (d); Section 8.1.3 (3) (h); Section 8.1.3 (3) (i);Section 8.1.3 (3) (j); Section 8.1.3 (3) (k); Section 8.1.3 (3) (n); Section 8.3.3 (7); and Section 7.2.5, the applicable standards have not been met and the applicant's request for Special Use Permit to a Planned Unit Development is hereby denied.

Ayes: _____ Nays:_____

DECISION

Upon Motion, seconded and passed the Board RULED that the Applicant's request be DENIED.

TIME PERIOD FOR JUDICIAL REVIEW

MCL 125.3606 provides that any party aggrieved by a decision of the Township Board may appeal that decision to the Circuit Court within thirty (30) days after the Township Board issues its decision in writing signed by the chairperson, if there is a chairperson, or signed by the members of the Township Board, if there is no chairperson, or within twenty-one (21) days after the Township Board approves the minutes at which the decision was made.

DATE DECISION AND ORDER ADOPTED

_____

Date Chairperson

_____

Date Vice Chairperson

_____

Date Secretary

THE TOWNSHIP OF PENINSULA

ORDINANCE NO. 32

FIRE PREVENTION ORDINANCE
INTERNATIONAL FIRE CODE

An Ordinance of the Township of Peninsula adopting the International Fire Code 2003 Edition, regulating the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices and from conditions hazardous to life or property in the occupancy of buildings and premises in the Township of Peninsula; and providing for the issuance of permits and the collection of fees.

THE TOWNSHIP OF PENINSULA, GRAND TRAVERSE COUNTY, MICHIGAN ORDAINS:

SECTION 1. Adoption of International Fire Code 2003 Edition. The International Fire Code 2003 Edition, including Appendix Chapters A through G, as published by the International Code Council, two (2) copies of which are on file at the office of the Township of Peninsula, is adopted as the Township of Peninsula Fire Prevention Ordinance for regulating the safeguarding of life and property from the fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings or premises in the Township and providing for the issuance of permits and the collection of fees. All of the regulations, provisions, penalties, conditions and terms of the International Fire Code 2003 Edition, and any future amendments to that Code, published by the International Fire Code Council, on file in the office of the Township of Peninsula Clerk are adopted and made a part of this Ordinance as if fully set forth in this Ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this Ordinance.

SECTION 2. International Fire Code 2003 Edition Changes. The following sections of the International Fire Code 2003 edition, adopted in Section 1, are added, deleted, or changed as follows:

101. Title. These regulations shall be known as the Township Fire Prevention Ordinance of the Township of Peninsula, referred to below as "this Code".

103 General. The Department of Fire Prevention is established within the jurisdiction under the direction of the Peninsula Township Board. The Peninsula Township Fire Chief (and/or his or her designate(s)) shall be named the Fire Code Official. The function of the Fire Code Official shall be the implementation, administration and enforcement of the provisions of this Code. The Fire Code Official shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.

105.7.13 New Construction. Any owner or authorized agent who intends to construct, enlarge,

alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any fire alarm and detection system and related equipment, fire suppression system and related equipment including fire pump, standpipe systems and water supply piping and hydrants, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the fire code official and obtain the required permit.

Exceptions:

1. One and two family residential (Residential Group R-3).
2. Utility and Miscellaneous Group U structures.

109.3 Penalties.

A. A person who violates any provision of this code is responsible for a civil infraction, punishable by a maximum fine of $500.00 plus court costs. Each day that a violation continues after due notice has been served in accordance with this ordinance shall be deemed a separate offense.

B. A person who knowingly or willfully violates any provision of this code, or a person who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, or who refuses to correct a violation of the code after receiving due notice, interferes with the code official's enforcement of the code, or retaliates against another who has made complaint of a violation of this code, is guilty of a misdemeanor, punishable by imprisonment not exceeding 90 days and/or a fine of not more than $500.00 plus court costs. Each day that a violation continues after due notice has been served in accordance with this code shall be deemed a separate offense.

111.4 Failure to Comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than $500.00. Each day that a violation of the stop work order continues after due notice has been served shall be deemed a separate offense.

307 Open Burning: This Section has been intentionally deleted in its entirety.

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be approved by the Fire Chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Automatic security gates shall comply with the applicable provisions set forth in Appendix H of this code. Manual security gates shall comply with the applicable provisions set forth in Appendix I of this code.

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the Fire Code Official is authorized to require a key box to be installed in an approved

location. Such lock boxes shall be installed on all structures of Use Group A-1, A-2, A-3, A-4, B, E, F-1, F-2, H-1, H-2, H-3, H-4, I-1, I-2, I-3, I-4, M, R-1, R-2, R-4, S-1, S-2, or any Mixed Use Group, where the structure is equipped with a fire protection system. Approved lock box containers shall be installed in the location that is designated by the Fire Department. The key box shall be of an approved type and shall contain keys to gain access as required.

903.4.2 Alarms. Approved visual devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. The visual device shall be a white strobe light. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

SECTION 3 International Fire Code Additional Changes. The limits or restrictions referred to in certain sections of the International Fire Code are hereby established as follows:

Section 3204.3.1.1 Locations (Outdoor Storage) Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by the Zoning Ordinance of the local governmental unit wherein the storage occurs or is proposed.

3308.2.2.1 Proximate Audience Displays - Where Allowed. Proximate audience displays are allowed only in Group A-1 occupancies that are equipped with a theatrical legitimate stage. Such occupancy shall be equipped throughout with an automatic fire sprinkler system designed and installed in accordance with Section 903.3.1.1 of this Code.

3404.2.9.5.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by Zoning Ordinance of the local governmental unit wherein the storage occurs or is proposed.

3406.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited within the limits established by the Zoning Ordinance of the local governmental unit wherein the storage occurs or is proposed.

3804.2 Maximum capacity within established limits. Within the limits established by Zoning Ordinance of the local governmental unit wherein the storage occurs or is proposed restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L).

SECTION 4. Deletion and Substitution, Appeal Board: Appendix A regarding the Appeal Board is deleted and the following shall be substituted: The Board of Appeals for this International Fire Code shall be the state authorized Construction Code Board of Appeals for the County of Grand Traverse created under the State Construction Code or it's successors and one additional person appointed by the Board of Trustees in the same manner as other members of the Construction Code Board of Appeals and who has experience in design, installation and

operation of fire suppression systems.

SECTION 5. Deletion and Substitution, Electrical Code: That any reference to the International Electrical Code appearing in the International Fire Code is deleted and such references therein shall be substituted with the State of Michigan Electrical Code.

SECTION 6. Fee Schedule: The Peninsula Township Board shall, at each new code cycle, review, establish and approve a fee schedule for the implementation and enforcement of this Ordinance. The fee schedule to implement this Ordinance shall be published at the time of publication of this Ordinance.

SECTION 7. Code update: This Ordinance shall remain in effect and be in full force until repealed by the Township Board of the Township of Peninsula. The adopted edition of the International Fire Code shall automatically be updated to be the same edition as the State of Michigan Building Code. This update shall occur at the time the State of Michigan updates and places the State Building Code in force.

SECTION 8. Prior Ordinances: All other ordinances or parts of ordinances in conflict with or superseded by this Ordinance are repealed except to the extent that any project, condition, violation or prosecution that was subject to the prior Ordinance shall continue.

SECTION 9. Severability: If any section, subsection, sentence, clause or phrase of this Ordinance is, for any reason, held to be unconstitutional, unlawful or unenforceable by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

SECTION 10. Publication: The Clerk of the Township of Peninsula shall publish this Ordinance once (1) in a newspaper of general circulation in the Township of Peninsula, which publication shall be after the adoption by the Township Board.

SECTION 11. Effective Date: This Ordinance and any rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect 30 days after the date of publication of this Ordinance as provided in Section 10 and signing by the Supervisor and Clerk of the Township Board of the Township of Peninsula.

PENINSULA TOWNSHIP FIRE PREVENTION ORDINANCE PERMIT/PLAN REVIEW FEE SCHEDULE

1. **Construction Plan Review Fees: Review/Permit**

0-2000 ft².....$ 95.00
2001ft²- 5000ft².....$115.00
5001ft²- 10000ft².....$135.00
Over 10000ft².....$155.00

2. **Fire Suppression System Plan Fees:**

A. Sprinkler system fees:
1-100 heads:.....$225.00
101-200 heads.....$250.00
201-300 heads.....$275.00
301-400 heads.....$300.00
401-500 heads.....$350.00
501-750 heads.....$375.00
Over 750 heads.....$375.00 plus $0.20 per sprinkler over 750.
For hydraulically designed systems, multiply the fee by two (2).

B. **Alternative Agents (dry chemical, wet chemical, clean-agent, etc.) Fees.**
Pre-engineered systems $125.00
Engineered and Total Flooding systems.....$250.00

C. **Fire Alarm/Smoke Detection fees.** Same as construction plan review/permit fees stated above.

Fees include plan review, permit and two (2) inspections. Additional inspections will be charged at $95.00 per hour- Minimum one (1) hour charge.

ROBERT K. MANIGOLD, Supervisor
MONICA A. HOFFMAN, CLERK
Peninsula Township Board
Passed by the Town Board on:
April 10, 2007
Prepared in the offices of:
Running, Wise & Ford, P.L.C.
By: Richard W. Ford
Township Attorneys
326 E. State Street, P.O. Box 686
Traverse City, MI 49685-0686

* * *

TO THE RECORD EAGLE:

Please publish on:	April 19, 2007
Please send affidavit to:	Richard W. Ford
Please send bill to:	Monica A. Hoffman, Clerk Peninsula Township 13235 Center Road Traverse City, MI 49684

* * *

E-MAILED TO THE RECORD EAGLE ON APRIL 11, 2007

Gordon Hayward

From: Dusty Christensen <dusty@maaeps.com>
Sent: Wednesday, November 16, 2016 3:41 PM
To: Gordon Hayward
Cc: supervisor@peninsulatownship.com; 'Philip Settles'; Doug Mansfield; 'Kevin O'Grady'; Petra Kuehnis; Jim Hirschenberger
Subject: The 81 - Responses to 11/17/16 Findings of Fact
Attachments: Responses to the November 17 Findings.pdf; 11-16-16_Fire_Lane_Plans_The81.pdf; 16-11-16 Inventory of Dead End Roads.pdf; 14016 dead end road exhibit 16-11-16.pdf

Good afternoon Gordon,

I have attached responses to some of the proposed November 17th Findings of Fact for SUP #123, The 81 on East Bay. Also attached are revised fire lane drawings that show the removal of the gate across the proposed fire access road, and an inventory of Township dead-end roads in list and map format. These revised drawings and exhibits are referenced in the responses to the findings.

Thank you,
Dusty

Dustin M. Christensen, LLA
Mansfield Land Use Consultants
830 Cottageview Drive, Suite 201
Traverse City, MI 49685
office: (231) 946-9310 ext. 1008
cell: (231) 360-7021

RECEIVED
NOV 16 2016
BY: SLM 3:41 pm

Mansfield
Land Use Consultants

November 16, 2016

Responses to the November 17, 2016 Findings of Fact for SUP #123, The 81 on East Bay (Planned Unit Development Condominium Subdivision)

The following are responses to specific findings from the November 17, 2016 Findings of Fact for SUP #123, The 81 on East Bay (Planned Unit Development Condominium Subdivision). Responses to specific findings from pages 3 and 4 of the findings, proposed conditions from page 6 of the findings, and Exhibit 14 "Planner memo to Township Board Gates" are included below.

Responses to findings related to Section 8.1.3 (1) (c)

Language from the Findings of Fact is shown as regular text. Responses are shown as **bold text**.

i. The Board finds that in order to protect the safety and security of the citizens of the Township an unobstructed road is necessary and available to provide emergency response units with quick access to all units.
The gate has been removed from the fire access road, as shown in the revised fire lane plans provided.

ii. The Board finds that the presence of the two locked gates increases the emergency response time. (Exhibit 4)
Only one gate was shown on plans for the fire access road between Smokey Hollow Road and 81 Avenue. The gate has been removed from the fire access road, as shown in the revised fire lane plans provided.

iii. The Board finds that home owners cannot use the Emergency Access Road as a means of escape in case of fire or other emergency because the gates are locked at both the 81 property line and at Smokey Hollow and a key is required to open them. (Exhibit 4)
The gate has been removed from the fire access road, as shown in the revised fire lane plans provided.

iv. The Board finds that there are eleven lots between the Emergency Access intersection and the cul-de-sac on Eightyone Ave. (Exhibit 4)
Section D107.1 of the International Fire Code requires that developments with more than 30 dwelling units be provided by two separate fire apparatus access roads. Proposed plans show two separate fire apparatus access roads, one accessing Boursaw Road and the other accessing Smokey Hollow Road. The proposed cul-de-sac and dead-end access road on 81 Avenue can be approved by the fire code official according to Section D103.4 and Table D103.4 of the International Fire Code. Peninsula Township Fire Chief Rittenhouse's previous letter approved the proposed length of this dead-end fire apparatus access road. Many dead-end roads serving greater numbers of lots and of longer lengths exist in

830 Cottageview Drive -Suite 201
P.O. Box 4015 Traverse City, MI 49685

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f 231.946.8926

Peninsula Township. An exhibit identifying these existing dead-end roads in list and map form has been provided.

v. The Board finds that there is no fire exit available for the eleven residents between the Emergency Access intersection and the cul-de-sac on Eightyone Ave. if a fire is between the intersection of Eightyone Ave and the Emergency Access Road to Smokey Hollow Rd. (exhibit 4)

Section D107.1 of the International Fire Code requires that developments with more than 30 dwelling units be provided by two separate fire apparatus access roads. Proposed plans show two separate fire apparatus access roads, one accessing Boursaw Road and the other accessing Smokey Hollow Road. The proposed cul-de-sac and dead-end access road on 81 Avenue can be approved by the fire code official according to Section D103.4 and Table D103.4 of the International Fire Code. Peninsula Township Fire Chief Rittenhouse's previous letter approved the proposed length and design of this dead-end fire apparatus access road. Many dead-end roads serving greater numbers of lots and of longer lengths exist in Peninsula Township. An exhibit identifying these existing dead-end roads in list and map form has been provided.

vi. The Board finds that there are open fields to the north of the Emergency Access so the road will be subject to blowing and drifting snow on occasion.

These conditions exist along many roads within the Township and are far from unique. The proposed fire access road will be plowed along with the proposed private roads within the development.

vii. The Board finds that there is no turnaround provided at the locked gates for equipment or vehicles that may inadvertently be at the gate because they do not have a key or there is snow blocking the gate. (Exhibit 4)

The gate has been removed from the fire access road, as shown in the revised fire lane plans provided.

viii. The Board finds that there was an event in Peninsula Township, where the Township Ambulance was on an emergency run to a resident that was not breathing. The ambulance was unable to use the emergency access road between Underwood Farms and Peninsula Hills Drive because of snow blockage at the locked gate. The ambulance had to turn around and take a longer route to get to the resident. The fire chief, Richard VanderMey told the Township Planner, Gordon Hayward, that the department was hesitant to use the emergency road in the winter because they could not be assured that the gate would be usable. (Exhibit 5)

The gate has been removed from the fire access road, as shown in the revised fire lane plans provided.

ix. The Board finds that existing roads with approved locked gates connect one development to another development and when the gate is open provides for a continuous circuit of travel between the developments. (Exhibit 14)).

The gate has been removed from the fire access road, as shown in the revised fire lane plans provided.

x. The Board finds that the Fire Department will incur additional costs for employees monitoring the snow removal by the plow driver and ambulance driver on each day that snow accumulates. (contemporaneous notes from meeting with Planner, Fire chief and Attorney Young) (Exhibit 5)
The proposed development will also generate an increase in tax base, and fire service funding, for the Township.

xi. The Board finds that the budget for the Fire Department includes the following 2015-16 Activities thru 03/31/2016. "Permanent Employees $237,275.00" and "Vehicle Maintenance $42,592.00" (Exhibit 12)
See above.

xii. The Board finds that it is feasible to place a Fire Access Road on 81 property to connect the cul-de-sac at the end of Eightyone Ave to Boursaw road. (Exhibit 15) • (NOTE: this is one of the available options included in the Circuit Court remand order.)
Connecting the cul-de-sac at the end of 81 Avenue to Boursaw Road with an additional fire apparatus access road would not meet the standards of Section D104.3 of the International Fire Code, as the access points for the two fire apparatus access roads would be too close together. Relocating the fire apparatus access road to the location above would reduce the distance between access roads to less than half of the length of the maximum overall diagonal dimension of the area to be served, measured in a straight line between accesses, violating Section D104.3.

Responses to specific proposed conditions from page 6 of the Findings of Fact

Language from the Findings of Fact is shown as regular text. Responses are shown as **bold text**.

CONDITION 1c - An Emergency Access Road shall connect the cul-de-sac at the end of Eightyone Ave to Boursaw Rd. The developer shall prepare plans and designs for this Emergency Access Road and shall submit same to the Township Fire Department, Township Engineer and Township Planner for review and make recommendations to the Township Board for consideration.

Connecting the cul-de-sac at the end of 81 Avenue to Boursaw Road with an additional fire apparatus access road would not meet the standards of Section D104.3 of the International Fire Code, as the access points for the two fire apparatus access roads would be too close together. Relocating the fire apparatus access road to the location above would reduce the distance between access roads to less than half of the length of the maximum overall diagonal dimension of the area to be served, measured in a straight line between accesses, violating Section D104.3.

CONDITION 2c - There shall be no gates on the emergency access road.

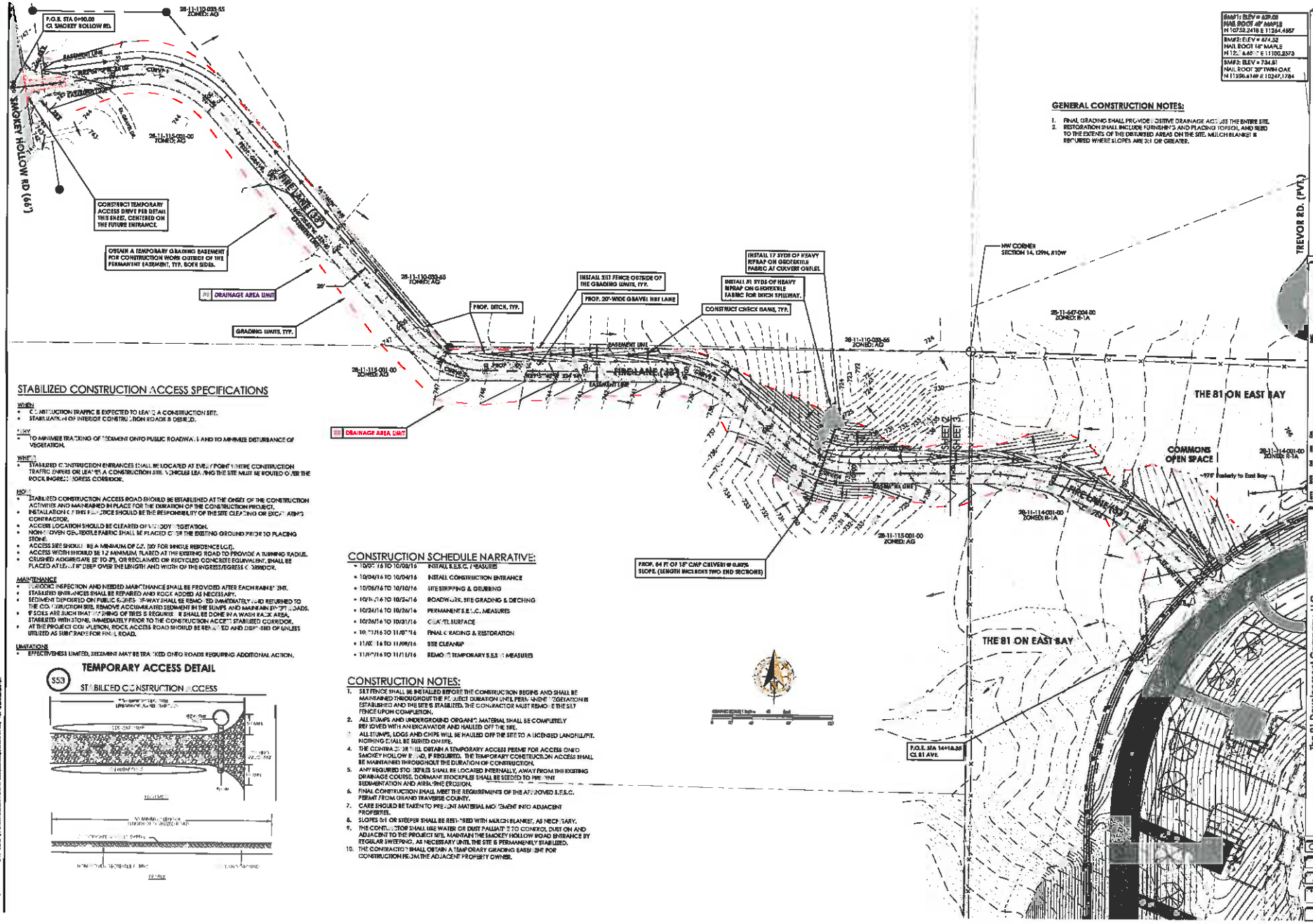
The gate has been removed from the fire access road, as shown in the revised fire lane plans provided.

Responses to Exhibit 14 "Planner memo to Township Board Gates" from of the Findings of Fact

Language from the memo is shown as regular text. Responses are shown as **bold text.**

I have reviewed the locked gates on emergency access roads in Peninsula Township. When a project was approved, it was required to extend its roads to its property lines to provide adjacent undeveloped properties with future road connections consistent with Section 10.7 of the Zoning Ordinance. When the adjacent projects were developed, the Township required that project to connect the roads to the existing roads on adjacent parcels and approved locked gates so that when the gate is open it allows for a continuous circuit of travel between the developments. All of the allowed locked gates in the Township connect one development to another development.

It is agreed that the proposed access to Smokey Hollow Road is a fire apparatus access road that doesn't connect to an adjacent development, which is a situation where locked gates were previously allowed. Thus, the gate has been removed from the fire access road, as shown in the revised fire lane plans provided.



STABILIZED CONSTRUCTION ACCESS SPECIFICATIONS

WHEN

- CONSTRUCTION TRAFFIC IS EXPECTED TO LEAVE A CONSTRUCTION SITE.
- STABILIZATION OF INTERIOR CONSTRUCTION ROADS IS DESIRED.

WHY

- TO MINIMIZE TRACKING OF SEDIMENT ONTO PUBLIC ROADWAYS AND TO MINIMIZE DISTURBANCE OF VEGETATION.

WHERE

- STABILIZED CONSTRUCTION ENTRANCES SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST BE ROUTED OVER THE ROCK INGRESS/EGRESS CORRIDOR.

HOW

- STABILIZED CONSTRUCTION ACCESS ROAD SHOULD BE ESTABLISHED AT THE ONSET OF THE CONSTRUCTION ACTIVITIES AND MAINTAINED IN PLACE FOR THE DURATION OF THE CONSTRUCTION PROJECT.
- INSTALLATION OF THIS PRACTICE SHOULD BE THE RESPONSIBILITY OF THE SITE CLEARING OR EXCAVATING CONTRACTOR.
- ACCESS LOCATION SHOULD BE CLEARED OF VEGETATION.
- NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE.
- ACCESS SIZE SHOULD BE A MINIMUM OF 12' (20' FOR SINGLE RESIDENCE LOT).
- ACCESS WIDTH SHOULD BE 12' MINIMUM, FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- CRUSHED AGGREGATE (2" TO 3"), OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT, SHALL BE PLACED AT LEAST 8" DEEP OVER THE LENGTH AND WIDTH OF THE INGRESS/EGRESS CORRIDOR.

MAINTENANCE

- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL EVENT.
- STABILIZED ENTRANCES SHALL BE REPAIRED AND ROCK ADDED AS NECESSARY.
- SEDIMENT DEPOSITED ON PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY AND RETURNED TO THE CONSTRUCTION SITE. REMOVE ACCUMULATED SEDIMENT IN THE SUMPS AND MAINTAIN SUMP LOADS.
- IF SOILS ARE SUCH THAT TIRE WASHING OF TIRES IS REQUIRED, IT SHALL BE DONE IN A WASH RACK AREA, STABILIZED WITH STONE, IMMEDIATELY PRIOR TO THE CONSTRUCTION ACCESS STABILIZED CORRIDOR.
- AT THE PROJECT COMPLETION, ROCK ACCESS ROAD SHOULD BE REMOVED AND DISPOSED OF UNLESS UTILIZED AS SUBGRADE FOR FINAL ROAD.

LIMITATIONS

- EFFECTIVENESS LIMITED, SEDIMENT MAY BE TRANSFERRED ONTO ROADS REQUIRING ADDITIONAL ACTION.

TEMPORARY ACCESS DETAIL

S53 STABILIZED CONSTRUCTION ACCESS

CONSTRUCTION SCHEDULE NARRATIVE:

- 10/07/16 TO 10/08/16 — INSTALL S.E.S.C. MEASURES
- 10/24/16 TO 10/24/16 — INSTALL CONSTRUCTION ENTRANCE
- 10/06/16 TO 10/10/16 — SITE STRIPPING & GRUBBING
- 10/11/16 TO 10/24/16 — ROADWORK, SITE GRADING & DITCHING
- 10/24/16 TO 10/26/16 — PERMANENT S.E.S.C. MEASURES
- 10/26/16 TO 10/31/16 — GRAVEL SURFACE
- 10/17/16 TO 11/07/16 — FINAL GRADING & RESTORATION
- 11/08/16 TO 11/09/16 — SITE CLEANUP
- 11/09/16 TO 11/11/16 — REMOVE TEMPORARY S.E.S.C. MEASURES

CONSTRUCTION NOTES:

1. SILT FENCE SHALL BE INSTALLED BEFORE THE CONSTRUCTION BEGINS AND SHALL BE MAINTAINED THROUGHOUT THE PROJECT DURATION UNTIL PERMANENT VEGETATION IS ESTABLISHED AND THE SITE IS STABILIZED. THE CONTRACTOR MUST REMOVE THE SILT FENCE UPON COMPLETION.
2. ALL STUMPS AND UNDERGROUND ORGANIC MATERIAL SHALL BE COMPLETELY REMOVED WITH AN EXCAVATOR AND HAULED OFF THE SITE.
   ALL STUMPS, LOGS AND CHIPS WILL BE HAULED OFF THE SITE TO A LICENSED LANDFILL/PIT. NOTHING SHALL BE BURIED ON SITE.
4. THE CONTRACTOR WILL OBTAIN A TEMPORARY ACCESS PERMIT FOR ACCESS ONTO SMOKEY HOLLOW ROAD, IF REQUIRED. THE TEMPORARY CONSTRUCTION ACCESS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
5. ANY REQUIRED STOCKPILES SHALL BE LOCATED INTERNALLY, AWAY FROM THE EXISTING DRAINAGE COURSE. DORMANT STOCKPILES SHALL BE SEEDED TO PREVENT SEDIMENTATION AND AIRBORNE EROSION.
6. FINAL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE APPROVED S.E.S.C. PERMIT FROM GRAND TRAVERSE COUNTY.
7. CARE SHOULD BE TAKEN TO PREVENT MATERIAL MOVEMENT INTO ADJACENT PROPERTIES.
8. SLOPES 3:1 OR STEEPER SHALL BE RESTABILIZED WITH MULCH BLANKET, AS NECESSARY.
9. THE CONTRACTOR SHALL USE WATER OR DUST PALLIATIVES TO CONTROL DUST ON AND ADJACENT TO THE PROJECT SITE. MAINTAIN THE SMOKEY HOLLOW ROAD ENTRANCE BY REGULAR SWEEPING, AS NECESSARY UNTIL THE SITE IS PERMANENTLY STABILIZED.
10. THE CONTRACTOR SHALL OBTAIN A TEMPORARY GRADING EASEMENT FOR CONSTRUCTION FROM THE ADJACENT PROPERTY OWNER.

GENERAL CONSTRUCTION NOTES:

1. FINAL GRADING SHALL PROVIDE POSITIVE DRAINAGE ACCESS THE ENTIRE SITE.
2. RESTORATION SHALL INCLUDE FURNISHING AND PLACING TOPSOIL AND SEED TO THE EXTENTS OF THE DISTURBED AREAS ON THE SITE. MULCH BLANKET IS REQUIRED WHERE SLOPES ARE 3:1 OR GREATER.

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info@mansfieldplanning.com

REV	DATE	BY	DESCRIPTION
1	10-14-16	SRH	PRELIMINARY SITE PLAN REVIEW
2	10-17-16	SRH	ADDED TEMPORARY ACCESS DETAIL
3	10-19-16	SRH	ADDED TEMPORARY ACCESS DETAIL
4	10-24-16	SRH	ADDED TEMPORARY ACCESS DETAIL
5	10-26-16	SRH	ADDED TEMPORARY ACCESS DETAIL
6	10-31-16	SRH	ADDED TEMPORARY ACCESS DETAIL
7	11-07-16	SRH	ADDED TEMPORARY ACCESS DETAIL
8	11-09-16	SRH	ADDED TEMPORARY ACCESS DETAIL
9	11-11-16	SRH	ADDED TEMPORARY ACCESS DETAIL

The 81 Development Company, LLC
The 81 on East Bay - PUD

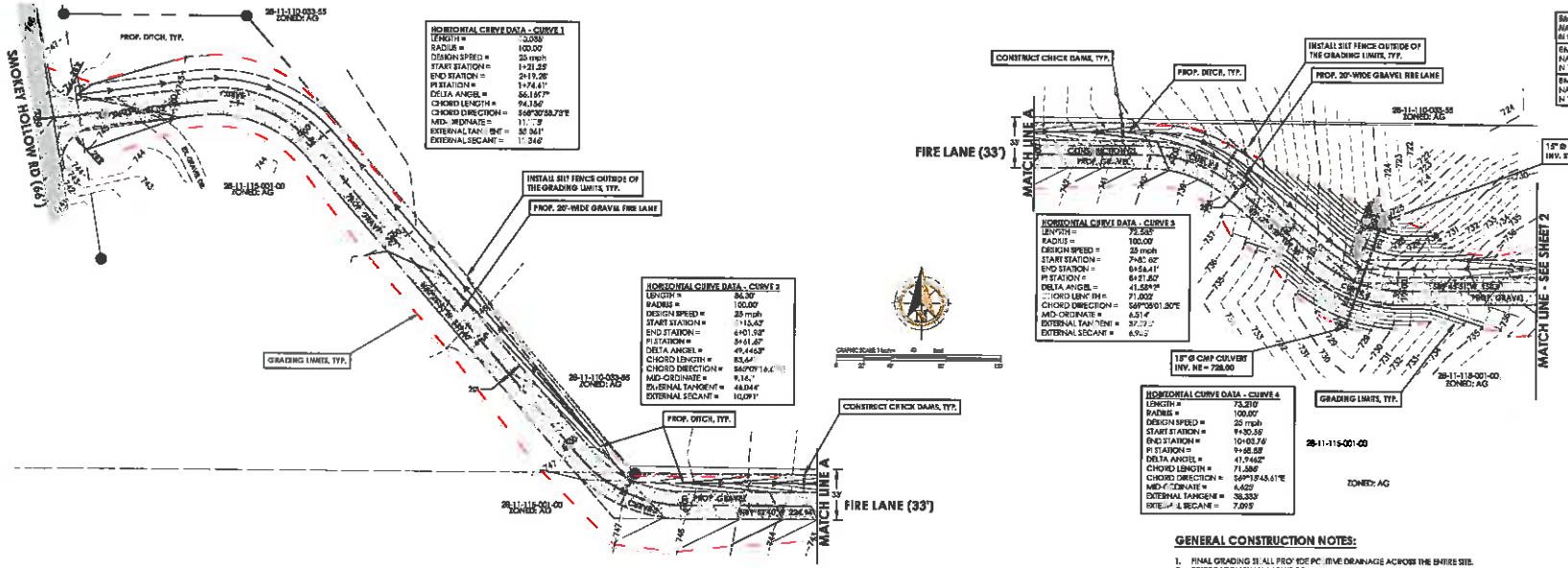
FIRE LANE: OVERALL SITE, S.E.S.C. & DRAINAGE PLANS

Section 14, Town 29 North, Range 10 West
Peninsula Twp., Grand Traverse County, Michigan

CONSTRUCTION

14016

1 of 3



HORIZONTAL CURVE DATA - CURVE 1

LENGTH =	130.03'
RADIUS =	100.00'
DESIGN SPEED =	25 mph
START STATION =	1+21.25
END STATION =	2+19.28'
PI STATION =	1+74.41'
DELTA ANGLE =	56.167°
CHORD LENGTH =	94.156'
CHORD DIRECTION =	S68°30'58.72"E
MID-ORDINATE =	11.[illegible]
EXTERNAL TANGENT =	69.961'
EXTERNAL SECANT =	1[illegible].946'

HORIZONTAL CURVE DATA - CURVE 2

LENGTH =	86.30'
RADIUS =	100.00'
DESIGN SPEED =	25 mph
START STATION =	6+15.63'
END STATION =	6+01.93'
PI STATION =	5+61.48'
DELTA ANGLE =	49.443°
CHORD LENGTH =	83.64'
CHORD DIRECTION =	S60°01'16.[illegible]
MID-ORDINATE =	9.16'
EXTERNAL TANGENT =	46.04'
EXTERNAL SECANT =	10.09'

HORIZONTAL CURVE DATA - CURVE 3

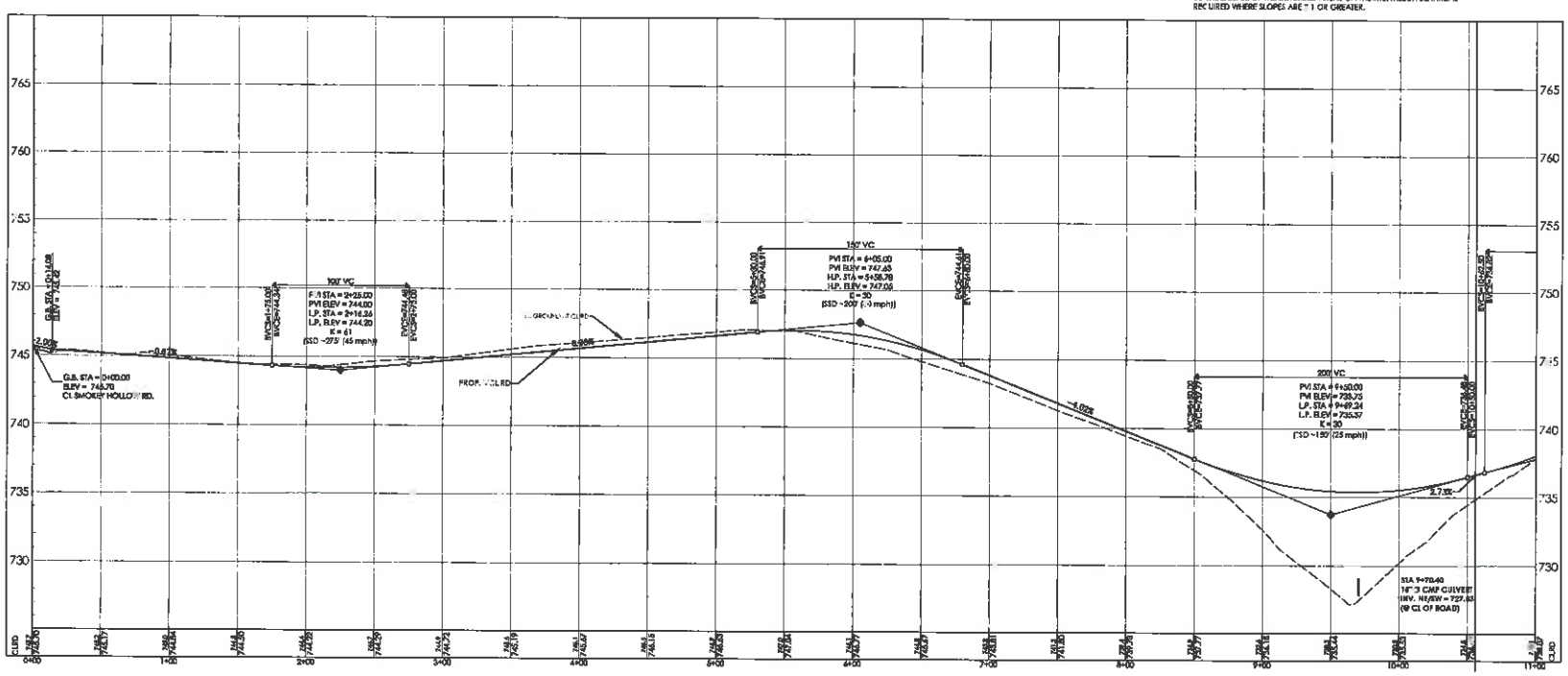
LENGTH =	75.50'
RADIUS =	100.00'
DESIGN SPEED =	25 mph
START STATION =	7+42.60'
END STATION =	8+58.41'
PI STATION =	8+21.50'
DELTA ANGLE =	41.58°2"
CHORD LENGTH =	71.002'
CHORD DIRECTION =	S69°05'01.30"E
MID-ORDINATE =	6.31'
EXTERNAL TANGENT =	37.[illegible]'
EXTERNAL SECANT =	6.9[illegible]

HORIZONTAL CURVE DATA - CURVE 4

LENGTH =	73.210'
RADIUS =	100.00'
DESIGN SPEED =	25 mph
START STATION =	9+30.59'
END STATION =	10+03.79'
PI STATION =	9+68.59'
DELTA ANGLE =	41.946°
CHORD LENGTH =	71.586'
CHORD DIRECTION =	S69°15'45.61"E
MID-ORDINATE =	6.625'
EXTERNAL TANGENT =	38.335'
EXTERNAL SECANT =	7.005'

GENERAL CONSTRUCTION NOTES:

1. FINAL GRADING SHALL PROVIDE POSITIVE DRAINAGE ACROSS THE ENTIRE SITE.
2. RESTORATION SHALL INCLUDE FURNISHING AND PLACING TOPSOIL AND SEED TO THE EXTENTS OF THE DISTURBED AREAS ON THE SITE. MULCH BLANKET IS REQUIRED WHERE SLOPES ARE 3:1 OR GREATER.



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Phone: 231-946-2288
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info@mansfieldlanduse.com

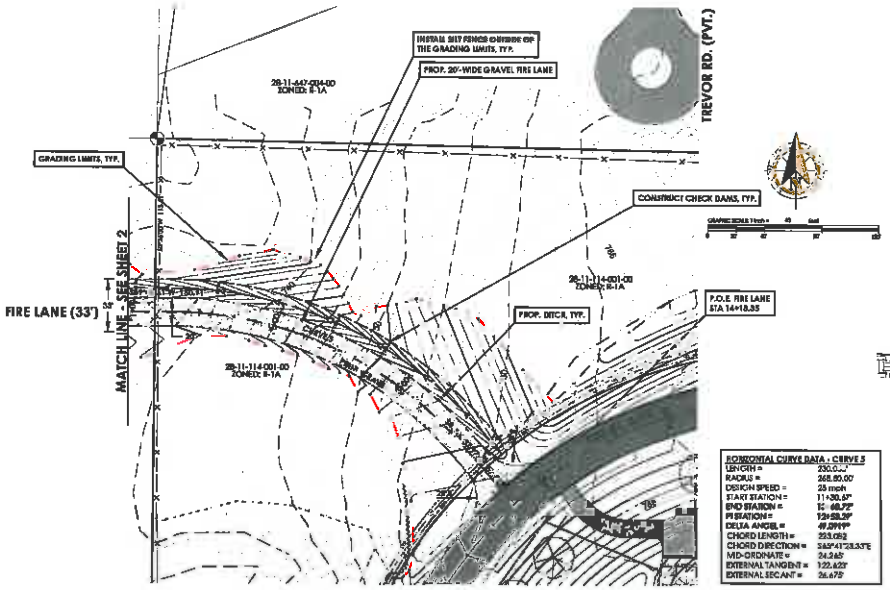
DATE	BY	DESCRIPTION
[illegible]	[illegible]	[illegible]

The 81 Development Company, LLC
The 81 on East Bay - PUD
FIRE LANE - PLAN & PROFILE: P.O.B. TO STA 11+00
Section 14, T.[illegible] 29 North, Range 10 West
Peninsula Twp., Grand Traverse County, Michigan

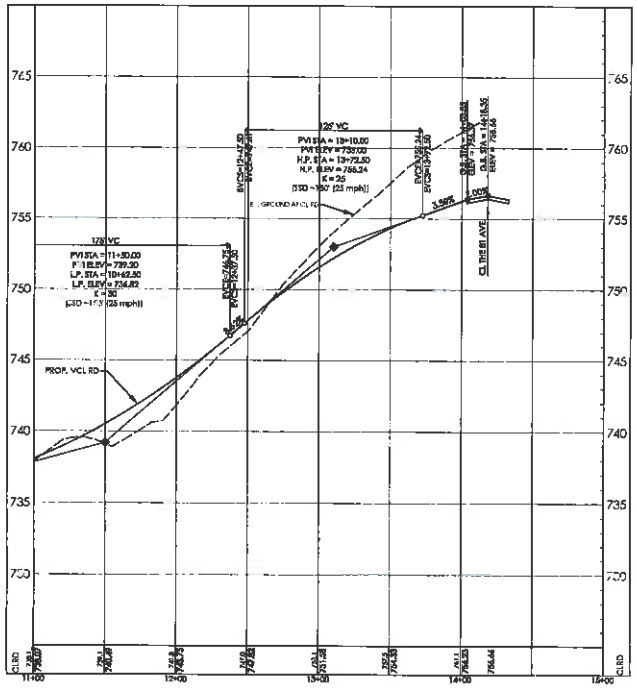
CONSTRUCTION

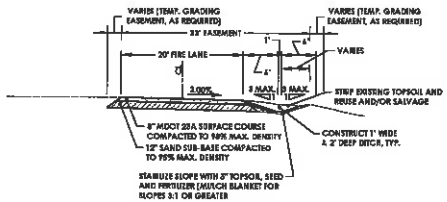
14016

2 of 3

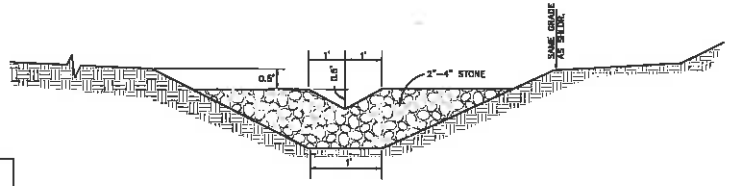


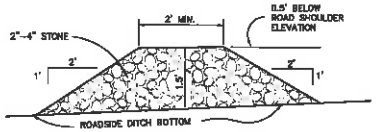
HORIZONTAL CURVE DATA - CURVE 5	
LENGTH =	230.0[illegible]
RADIUS =	268.00.00'
DESIGN SPEED =	25 mph
START STATION =	11+30.67'
END STATION =	13+[illegible]
PI STATION =	12+[illegible]
DELTA ANGLE =	49.[illegible]°
CHORD LENGTH =	223.08[illegible]
CHORD DIRECTION =	S65°41'23.33"E
MID-ORDINATE =	24.365'
EXTERNAL TANGENT =	122.62'
EXTERNAL SECANT =	26.67'





FIRE ACCESS SECTION
NO SCALE





STONE CHECK DAM
NO SCALE

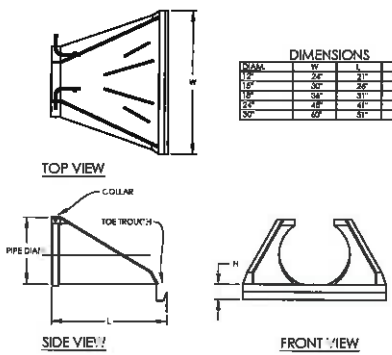
GENERAL CONSTRUCTION NOTES:

1. FINAL GRADING SHALL PROVIDE POSITIVE DRAINAGE ACROSS THE ENTIRE SITE.
2. RESTORATION SHALL INCLUDE FURNISHING AND PLACING TOPSOIL AND SEED TO THE EXTENTS OF THE DISTURBED AREAS ON THE SITE. MULCH BLANKET IS REQUIRED WHERE SLOPES ARE 3:1 OR GREATER.

BM#1: ELEV = 629.05
NAIL S 26" 48" MAPLE
N 1[illegible] E 11[illegible]

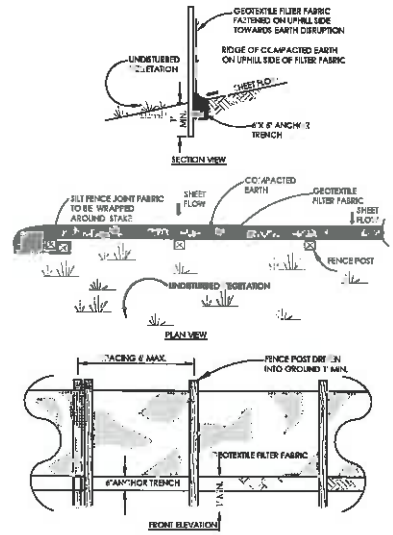
BM#2: ELEV = [illegible]
N [illegible] 75.0' 18" MAPLE
N 1227[illegible].6579 E 11100.35[illegible]

BM#3: ELEV = 734.81
NAIL ROOT 20" TWIN OAK
N 11258.6169 E 10247.1784



DIMENSIONS			
NAM.	W	L	H
12"	24"	31"	5"
18"	30"	36"	6"
18"	34"	31"	6"
24"	48"	41"	6"
30"	60"	51"	8"

CMP FLARED END SECTION DETAIL
NO SCALE



SILT FENCE DETAILS
NO SCALE

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info@mansfield-llc.com

REVISIONS							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

The 81 Development Company, LLC
The 81 on East Bay - PUD
FIRE LANE - PLAN/PROFILE: STA 11+00 TO P.O.E.
Section 14, Town 29 North, Range 10 West
Peninsula Township, Grand Traverse County, Michigan

CONSTRUCTION

14016

Peninsula Township -Dead End Road Inventory

Mansfield
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Traverse City, MI 49684
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f 231.946.8926
i www.mmcpc.com

5/18/2015
11/14/2016 update
11/16/16 update

Road Name	Number of Units/Lots	Approximate Length in Feet	
Neahtawanta (west of S. Kroupa Rd.)	130	18,691	no provision for future connectivity, no cul-de-sac or turn around
Center Road / M-37 (out to light house)	48	10,300	no provision for future connectivity
Shipman Drive & Beautiful Shores	26	5,085	no cul-de-sac or turn around (one end)
Meier and Dunn Drives	33	4,900	
Shorewood Drive	40	4,900	no provision for furure connectivity
Eastern Road / Ridgewood Road	27	4,600	no provision for future connectivity
Forest Avenue	40	4,600	no provision for future connectivity
Cedarmere	41	4,327	no provision for future connectivity
Whispering Trail (s of old mission rd.)	16	4,200	no
Warren & Marion Dr.	33	3,900	
Trevor Road / Rocky Shore Trail	15	3,700	no provision for future connectivity
Mapleton Lane	10	3,600	no provision for future connectivity
Nelson Road	6	3,500	no provision for future connectivity, no cul-de-sac or turn around
Craig Road	17	3,400	no provision for future connectivity, no cul-de-sac or turn around
Lin Dale Drive	40	2,800	
Mallard Drive North	27	2,800	
Whispering Trail (n of swaney)	23	2,700	no provision for future connectivity, no cul-de-sac or turn around
Quaker Valley Drive	39	2,500	
Ojibwa Trail	61	2,475	no provision for future connectivity
Underwood Ridge	27	2,400	
Peninsula Knoll Lane	37	2,330	no provision for future connectivity
Centennial Lane	6	2,200	no provision for future connectivity
Franklin Woods	44	2,145	no provision for future connectivity
Council Oak	26	2,117	no provision for future connectivity
Birch Drive	22	2,100	
Chimney Ridge Drive	28	2,000	
Phelps Road	7	1,900	no cul-de-sac or turn around
Snowfield Court	18	1,900	no provision for future connectivity
Blueheights Drive	9	1,800	no cul-de-sac or turn around
Timber Crest Drive	14	1,750	no provision for future connectivity
Eastbeach Trail	11	1,600	no provision for future connectivity
Truesdale Lane	9	1,500	no provision for future connectivity
Arbor Trail	9	1,400	no cul-de-sac or turn around
Bluff Ridge Road	4	1,400	no cul-de-sac or turn around
Woods Drive	13	1,400	
Henderson Dr.	14	1,303	no provision for future connectivity
Walnut Ridge	11	1,240	no provision for future connectivity
Eightyone Avenue	11	1,150	emergency access onto Smokey Hollow
Summit Court	36	1,150	no provision for future connectivity
Smokey Ridge Road	19	1,130	
Dougherty Lane	24	1,100	no propvision for future connectivity
Wrightwood Terrace Drive	21	1,000	no provision for future connectivity
Harbor Reach Drive	11	945	no provision for future connectivity
Hilltop Avenue	20	935	no provision for future connectivity

Peninsula Township – Dead End Road Inventory

Mansfield Land Use Consultants
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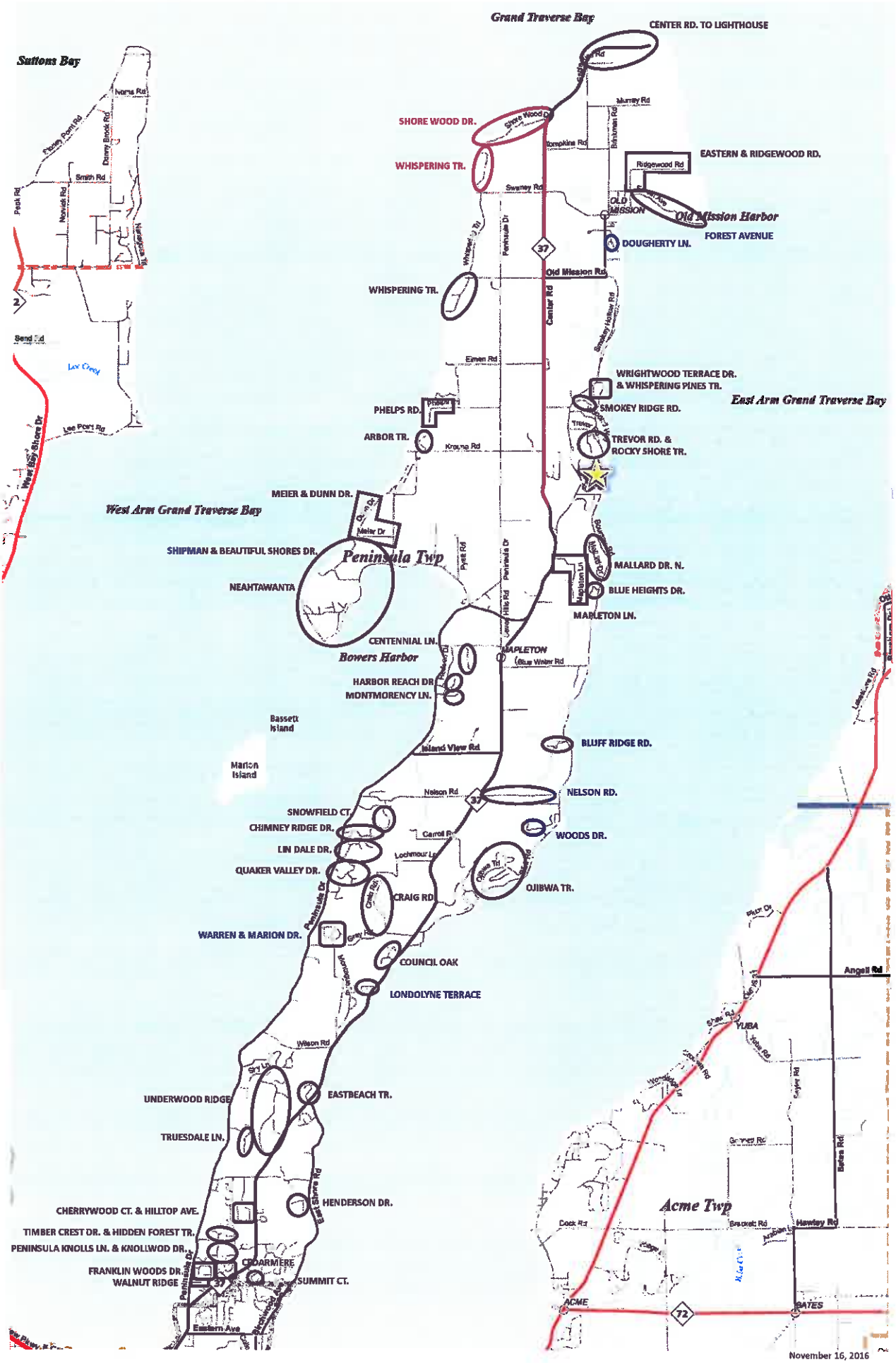
t www.mlucy.com



November 16, 2016

Peninsula Township Planning & Zoning Department
13235 Center Road
Traverse City, MI 49686

SPECIAL USE PERMIT
FINDINGS OF FACT
SUP #123, The 81 on East Bay (Planned Unit Development Condominium Subdivision)
November 17, 2016

PENINSULA TOWNSHIP BOARD

DECISION AND ORDER

Applicant: The 81 Development Company, LLC
Kevin O'Grady, Owner
6978 Dixie Hwy, Suite A
Clarkston MI 48346

Hearing Date: May 18, 2015, June 15, 2015, July 14, 2015, August 11, 2015 and November 17, 2016

PROPERTY DESCRIPTION

Parcel ID#: 28-11-114-001-00 and 28-11-114-002-00

SUPPLEMENTAL CONSIDERATION UPON REMAND

Background

Per the decision and order of Judge Rodgers of the 13th Circuit Court for Grand Traverse County, made on January 15, 2016 in case No. 2015-31218-AA (the Court Decision) with respect to The 81 on East Bay Special Use Permit application and the application for Planned Unit Development (the Development), the Peninsula Township Board held a public hearing at a special meeting on November 17, 2016 at 7:00 PM at the St. Joseph Catholic Church, 13235 Center Road, Traverse City, MI 49686 to consider those issues as specified in the Court Decision.

The issues to be considered are specified in the Court Decision pertaining to two conditions implemented by the Township Board at the August 11, 2015 hearing. The conditions specified by the Court are as follows:

> (1) [That] The Development shall meet adequate safety standards for fire protection subject to the Peninsula Township Fire Department review and approval including the provision of an additional egress for emergency purposes at either Trevor Rd or within The 81 proper. If provided within The 81 proper staff shall be allowed to permit a reduction in lot size as warranted and based upon the mathematical calculation for open space under the ordinance. The second egress should it be provided with [sic] The 81 proper shall be gravel or paved per review of Peninsula Township Fire Chief , and
>
> (6) [That] Detailed grading plans shall be supplied to the Township Engineer for the Township Engineer's review and approval prior to SUP/SUP issuance.
>
> *- 8/11/15 Board Minutes Page 32*

In this regard the Court found that although the Board lawfully exercised its discretion under the Ordinance when it determined that the PUD met the objectives of the Ordinance, preserving natural resources to the maximum feasible extent and fulfilling the open space requirements; the Board improperly delegated authority to the Fire Department and Township Engineer by the conditions stated above which require the Boards independent determination.

The Issues

The Court therefore remanded the following issues for further consideration:

1) the location and functionality of an emergency access road after reviewing the findings of the Fire Department - *Court Decision @ p11*

2) the grading plan in sufficient detail to evaluate the plan for protection of steep slopes and vegetation on the site as [sic] requested by the SESC and the Township Engineer and shall fully comply with the Storm Water Control Ordinance , - *Court Decision, footnote 46 @ pp11-12*

Standards Considered

A consideration of these issues involves consideration of the following standards under the Peninsula Township Zoning Ordinance as it applies to these issues: Section 8.1.3 (1) (c), Section 8.1.3 (3) (d), Section 8.1.3 (3) (h), Section 8.1.3 (3) (i); Section 8.1.3 (3) (j), Section 8.1.3 (3) (k), and Section 8.1.3 (3) (n), Section 8.3.3(7) and Section 7.2.5.

Board Action

The Board having further considered these issues as ordered by the Court at public hearing having been held on November 17, 2016 before the Township Board, after giving due notice as required by law, the Board having heard the statements of the Applicant and agents, the Board after having considered letters submitted by members of the public and comments by members of the public, the Board having considered the Exhibits, and the Board having reached a decision on this matter, finds, orders and decides:

THE BOARDS DECISION AND ORDER OF AUGUST 11, 2015 IS SUPPLEMENTED AS FOLLOWS:

Section 8.1.3 (1) General Standards:

Section 8.1.3 (1) (c): Be served adequately by essential facilities and services, such as highways, streets, police, fire protection, drainage structures, refuse disposal, water and sewage facilities, or schools.

i. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, with respect to the requirements of the Peninsula Township Storm Water Control Ordinance determining that storm water calculations for the project have been found to be acceptable with respect to drainage patterns, storm sewer sizing and storm water retention. (Exhibits 4, 7 & 11)**

ii. **The Board finds that the Peninsula Township Fire Department and an independent consultant on behalf of the applicant have conducted a review of the plan and concur that the site is in compliance with the International Fire Code. (Exhibits 4, 8, 13 & 16)**

iii. **The Board finds that the site shall require emergency access signage as specified in Chief Rittenhouse's letter. (Exhibit 16)**

iv. **The Board finds that the developer shall be required to supply the proper hose connections for the water supply tank as specified by Chief Rittenhouse. (Exhibit 16)**

v. **The Board finds that it is not feasible to eliminate the secondary fire apparatus access road that connects 81 Avenue to Smokey Hollow Road, and relocate it to connect the end of 81 Ave with Boursaw Road because it would not be in compliance with the International Fire Code as adopted by the township by its Fire Prevention Ordinance. (Exhibit 23 and 24)**

vi. **The Board finds that Daniel Thorell M, MS RS Environmental Sanitarian for the Grand Traverse County Health Department, has examined the soils within the project area, including soils in the proposed reserve septic field for the community dispersal field as well as for individual units and has determined that the soils are suitable for waste water dispersal. (Exhibit 19)**

vii. **The Board finds that Daniel Thorell M, MS RS Environmental Coordinator for the Grand Traverse County Health Department, examined a test well on site and determined based on the test sell results approval will be granted for the use of individual wells for the development by the county Health Department (Exhibit 20)**

viii. **The Board finds the County Road Commission has reviewed the addition of the emergency access road and determined that that there will be no increase in traffic and no work within the County Right of Way, and therefore takes no jurisdiction. (Exhibit 3)**

ix. **The Board finds that although the Fire Department may incur additional costs associated with monitoring snow removal and maintenance of the emergency access road, any such additional cost would be offset by the increased tax base, and fire township funding. (Exhibit 24)**

This standard HAS/HAS NOT been met.

Section 8.1.3 (3) Specific Requirements: In reviewing an impact assessment and site plan, the Planning Commission and the Township Board shall consider the following standards:

Section 8.1.3 (3) (d): That the plan meets the requirements of Peninsula Township for fire and police protection, water supply, sewage disposal or treatment, storm drainage and other public facilities and services.

i. **The Board finds that the Peninsula Township Fire Department and an independent consultant on behalf of the applicant have conducted a review of the plan and concur that the site is in compliance with the International Fire Code. (Exhibits 4, 8, 13 & 16)**

ii. **The Board finds that the site shall require emergency access signage as specified in Chief Rittenhouse's letter. (Exhibit 16)**

iii. **The Board finds that the developer shall be required to supply the proper hose connections for the water supply tank as specified by Chief Rittenhouse. (Exhibit 4, 7 & 11)**

iv. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, with respect to the requirements of the Peninsula Township Storm Water Control Ordinance determining that storm water calculations for the project have been found to be acceptable with respect to drainage patterns, storm sewer sizing and storm water retention. (Exhibits 4, 7 & 11)**

v. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, who have been provided with detailed grading plans for the project and have determined that the plans are consistent with the Private Road Ordinance with respect to alignment grading and drainage and the project meets the Township open space requirements. (Exhibits 4, 7 & 11)**

vi. **The Board finds that the Grand Traverse County Soil Erosion and Sedimentation Control Department has reviewed the project and issued its permit with specific and detailed conditions for protection of steep slopes and vegetation. (Exhibits 17)**

vii. **The Board finds that the site plan shall meet all necessary requirements related to the Great Lakes waterfront as mandated by the Michigan Department of Environmental Quality and the Army Corps of Engineers. The applicant has submitted a letter from the Michigan Department of Environmental Quality dated March 5, 2015 showing no permit is required from this agency as it pertains to the dock structure. The applicant has submitted a letter from the Army Corps of Engineers dated July 21, 2015 indicating the project has been reviewed and a permit has been offered. (Exhibits 21 and 22)**

This standard HAS/HAS NOT been met.

Section 8.1.3 (3) (h): That the soil conditions are suitable for excavation and site preparation, and that organic, wet or other soils which are not suitable for development will either be undisturbed or modified in an acceptable manner.

i. **The Board finds that the Grand Traverse County Soil Erosion and Sedimentation Control Department has reviewed the project and issued its permit with specific and detailed conditions for protection of steep slopes and vegetation. (Exhibit 17)**

ii. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, with respect to the requirements of the Peninsula Township Ordinance determining that storm water calculations for the project have been found to be acceptable with respect to drainage patterns, storm sewer sizing and storm water retention. (Exhibits 4, 7 & 11)**

iii. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, who have been provided with detailed grading plans for the project and have determined that the plans are consistent with the Private Road Ordinance with respect to alignment grading and drainage and the project meets the Township open space requirements. (Exhibits 4, 7 & 11)**

iv. **The engineering and design of these roads have been reviewed and approved by the Township Engineer, Brian Boals, of Gourdie Fraser with respect to grading, drainage patterns and pavement cross-sections. (Exhibits 4, 7 & 11)**

v. **The Board finds that the applicant has provided a comprehensive review of the site by a qualified environmental consultant, being GEI Consultants of Michigan, and finds that the reports delineate wetlands which will not be developed and which shall preserved within the development (Exhibit 18)**

vi. **The Board finds that the developer shall be required to supply the proper hose connections for the water supply tank as specified by Chief Rittenhouse. (Exhibit 16)**

This standard HAS/HAS NOT been met.

Section 8.1.3 (3) (i): That the proposed development will not cause soil erosion or sedimentation problems.

i. **The Board finds that the Grand Traverse County Soil Erosion and Sedimentation Control Department has reviewed the project and issued its permit with specific and detailed conditions for protection of steep slopes and vegetation. (Exhibits 17)**

ii. **The Board finds that the Township Engineer, Brian Boals has reviewed and approved the grading plans. (Exhibit 4, 7 & 11)**

iii. **The Board finds that the Township Engineer, Brian Boals, of Gourdie-Fraser, having been provided with detailed grading, plans has reviewed the and approved the proposed grading plans as being consistent with the Township Private Road Ordinance with respect to grading and drainage. (Exhibits 4, 7 & 11)**

vi. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, with respect to the requirements of the Peninsula**

Township Ordinance determining that storm water calculations for the project have been found to be acceptable with respect to drainage patterns, storm sewer sizing and storm water retention. (Exhibits 4, 7 & 11)

v. **The Board finds that the engineering and design of these roads have been reviewed and approved by the Township Engineer, Brian Boals, of Gourdie Fraser with respect to grading, drainage patterns and pavement cross-sections. (Exhibits 4, 7 &11)**

vi. **The Board finds that the applicant has provided a confirmation by a qualified consultant for the wetland delineation shown on the plans (Exhibit 18)**

This standard HAS/HAS NOT been met.

Section 8.1.3 (3) (j): That the drainage plan for the proposed development is adequate to handle anticipated storm-water runoff, and will not cause undue runoff onto neighboring property or overloading of water courses in the area.

i. **The Board finds that the Township Engineer, Brian Boals has reviewed and approved the grading plans. (Exhibit 4, 7 & 11)**

ii. **The engineering and design of these roads have been reviewed and approved by the Township Engineer, Brian Boals, of Gourdie Fraser with respect to grading, drainage patterns and pavement cross-sections. (Exhibits 4, 7 & 11)**

iii. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, with respect to the requirements of the Peninsula Township Storm Water Control Ordinance determining that storm water calculations for the project have been found to be acceptable with respect to drainage patterns, storm sewer sizing and storm water retention. (Exhibits 4, 7 & 11)**

iv. **The Board finds that the Grand Traverse County Soil Erosion and Sedimentation Control Department has reviewed the project and issued its permit with specific and detailed conditions for protection of steep slopes and vegetation. (Exhibits 17)**

This standard HAS/HAS NOT been met.

Section 8.1.3 (k): That grading or filling will not destroy the character of the property or the surrounding area, and will not adversely affect the adjacent or neighboring properties.

i. **The Board finds that the Township Engineer, Brian Boals has reviewed and approved the grading plans. (Exhibit 4, 7 & 11)**

ii. **The board finds that the engineering and design of these roads have been reviewed and approved by the Township Engineer, Brian Boals, of Gourdie Fraser with respect to grading, drainage patterns and pavement cross-sections. (Exhibits 4, 7 & 11)**

iii. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, with respect to the requirements of the Peninsula Township Storm Water Control Ordinance determining that storm water calculations for the project have been found to be acceptable with respect to drainage patterns, storm sewer sizing and storm water retention. (Exhibits 4, 7 & 11)**

vi. **The Board finds that the Grand Traverse County Soil Erosion and Sedimentation Control Department has reviewed the project and issued its permit with specific and detailed conditions for protection of steep slopes and vegetation. (Exhibits 17)**

Section 8.1.3 (3) (n): That the plan provides for the proper expansion of existing facilities such as public streets, drainage systems and water sewage facilities.

i. **The engineering and design of these roads have been reviewed and approved by the Township Engineer, Brian Boals, of Gourdie Fraser with respect to grading, drainage patterns and pavement cross-sections. (Exhibits 4, 7 & 11)**

ii. **The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, with respect to the requirements of the Peninsula Township Storm Water Control Ordinance determining that storm water calculations for the project have been found to be acceptable with respect to drainage patterns, storm sewer sizing and storm water retention. (Exhibits 4, 7 & 11)**

iii. **The Board finds that the Peninsula Township Fire Department and an independent consultant on behalf of the applicant have conducted a review of the plan and concur that the site is in compliance with the International Fire Code (Exhibits 4, 8, 13 & 16)**

vi. **The Board finds that the site shall require emergency access signage as specified in Chief Rittenhouse's letter. (Exhibit 16)**

v. **The Board finds that the developer shall be required to supply the proper hose connections for the water supply tank as specified by Chief Rittenhouse. (Exhibit 16)**

This standard HAS/HAS NOT been met.

Section 8.3.3 (7): The proposed planned unit development shall meet all of the standards and requirements outlined in this Section 8.3 and also Section 8.1 and Article VII.

Section 7.2.5, Stormwater Detention: The Board finds the development has been reviewed by Brian Boals of Gourdie Fraser engineers, being the Township Engineers, with respect to the requirements of the Peninsula Township Storm Water Control Ordinance determining that storm water calculations for the project have been found to be acceptable with respect to drainage patterns, storm sewer sizing and storm water retention. (Exhibits 4, 7 & 11)

This standard HAS/HAS NOT been met.

MOTION TO APPROVE/DENY

Motion made by _____, supported by _____ that based upon the specific findings of fact with respect to Sections 8.1.3(1)(c); 8.1.3(3)(d); 8.1.3(3)(h); 8.1.3(3)(i); 8.1.3(3)(j); 8.1.3(3)(k); and 8.1.3(3)(n) and 7.2.5 that the applicant has met these standards and in conjunction with the Township's previous approval of this project on August 11, 2015 along with these supplemental findings of fact made at the direction of Judge Rodgers in his Order dated January 15, 2016, all standards have been met and the applicant's request for Special Use Permit to a Planned Unit Development is hereby recommended to be approved.

Ayes:

Nays:

DECISION

Upon Motion, seconded and passed the Board RULED that the Applicant's variance request be ALLOWED / DENIED / TABLED.

TIME PERIOD FOR JUDICIAL REVIEW

MCL 125.3606 provides that any party aggrieved by a decision of the Township Board may appeal that decision to the Circuit Court within thirty (30) days after the Township Board issues its decision in writing signed by the chairperson, if there is a chairperson, or signed by the members of the Township Board, if there is no chairperson, or within twenty-one (21) days after the Township Board approves the minutes at which the decision was made.

DATE DECISION AND ORDER ADOPTED

_____ _____

Date Chairperson

_____	_____
Date	Vice Chairperson
_____	_____
Date	Secretary

Peninsula Township Planning & Zoning Department
13235 Center Road
Traverse City, MI 49686

SPECIAL USE PERMIT
EXHIBIT LIST

SUP #123, The 81 on East Bay (Planned Unit Development Condominium Subdivision)

November 17, 2016

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1. Findings of Fact SUP #123, The 81 on East Bay November 17, 2016
2. Supplemental Information Mansfield August 16, 2016
3. Grand Traverse County Road Commission June 10, 2016
4. Plan sets updated to include an Emergency Access Road Revised 7-8-2016 and East 81 Road widened to 26' Revised 9-1-2016
5. Meeting Notes Planner and Fire Chief 10-26-16
6. Notes on Boals and Hayward 11-10-2016
7. Boals letters to former Planner, Michelle Reardon: March 8, 2016; March15, 2016 and August 15, 2016, and September 27, 2016
8. Ron Taylor Fire Code Compliance Reports: July 26, 2016, August 15, 2016 and October 11, 2016 and Curriculum Vitae
9. Grand Traverse County Road Names 10/28/2016
10. Otwell Mawby Slope stability 10/26/2016
11. Boals Letter to Hayward 10/18/16 - East Road design calculations
12. Fire Fund 03/31/2016
13. E-mail from Peninsula Fire Chief, Randy Rittenhouse Fire Code applied to apparatus access roads 11 -1 -2016
14. Planner memo to Township Board regarding Gates on Fire Lane
15. Boals to Hayward letter 11-10-16 Review of a previously proposed Fire Lane
16. Letters from Peninsula Fire Chief Randy Rittenhouse to former Planner, Michelle Reardon, dated August 9, 2016 and August 16, 2016
17. Soil Erosion and Sedimentation Control Permit with Conditions; Issued May 9, 2016; Amended on August 22, 2016 re Fire Road; Amended on September 19, 2016 re widening E 81

18. Wetland Delineation Report by GEI Consultants of Michigan PC June 15, 2015

19. Daniel Thorell 2-18-15 e-mail to former Planner, Michelle Reardon

20 Daniel Thorell 3-10-16 e-mail to former Planner, Michelle Reardon

21 Letter from Robyn L Schmnidt, MDEQ dated 3/5/15

22 Letter from Charles M. Simon, US Department of Army, corps of engineers dated July 21, 2015

23. Ron Taylor Report 11/16/16 pertaining to feasibility of relocation of fire apparatus road

24 Mansfield 11/16/16 Responses to Proposed Findings regarding fire apparatus road