

EXHIBIT K



Grobbel Environmental & Planning Associates
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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 Reconnaissance" 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 mark² to prevent harmful erosion and related sedimentation...

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

¹Peninsula 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 cgrobbei@grobbeenvironmental.com.

Sincerely,
Grobbei Environmental & Planning Associates



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

cc Scott Howard, OBH