

MINUTES OF MEETING OF NOVEMBER 11, 2015

The work meeting of the Frelinghuysen Township Committee was held in the Municipal Building, 210 Main Street, Johnsonburg, New Jersey on Wednesday, November 11, 2015 and was called to order at 7:30 p.m. by Mayor Christopher Kuhn.

SUNSHINE LAW STATEMENT:

Under the provisions of the Open Public Meetings Act, adequate notice of this meeting was provided by posting notice on the Township bulletin board and by e mailing notice to the New Jersey Herald and The Express-Times.

ROLL CALL:

Those present were: Mayor Christopher Kuhn, Deputy Mayor Christopher Stracco, Committeeman Frank Desiderio, Committeeman Alan DeCarolis, Committeeman David Boynton, and Acting Clerk Donna Zilberfarb.

MINUTES:

- Minutes of regular meeting of October 21, 2015 were held until next month.

ORDINANCES:

#2015-16 ORDINANCE AMENDING SECTION 526 OF THE FRELINGHUYSEN TOWNSHIP CODE, ESTABLISHING A CARBONATE AREA DISTRICT WHEREAS, areas of Frelinghuysen Township sit on carbonate bedrock, making them potentially unstable and creating the possibility of surface collapse, groundwater contamination, and other hazards; and WHEREAS, it is in the best interests of the Township and its residents to establish a Carbonate Area District, and to regulate development in that District. NOW THEREFORE, BE IT ORDAINED by the Mayor and Committee of the Township of Frelinghuysen as follows: Section I The Frelinghuysen Township Code is amended by adding thereto a new Section 526, to read as follows:

526 Carbonate Area District. a. Purpose. Areas within the Township of Frelinghuysen are underlain with carbonate bedrock such as limestone and dolomite. The solution of this bedrock causes surface depressions, open drainage passages, and the development of irregular, subsurface rock topography known as karst. These conditions make such areas potentially unstable and susceptible to subsidence and surface collapse. As a result, the alteration of drainage patterns in these areas by the placement of impervious coverage, grade changes, or increased loads from site improvements can lead to land subsidence and sinkholes. Fractures or solution openings and fissures in the limestone rock may lead to public or private water supplies, making those sources especially susceptible to groundwater contamination. Contamination of water sources can occur from solid and liquid wastes, contaminated surface water, septic tank effluent, or other hazardous substances moving through fractures or solution openings and fissures within the rock. Carbonate aquifers are an important source of groundwater in the municipality. The Township of Frelinghuysen relies on a clean supply of subsurface water to foster and promote human health, welfare and economic and social development. Therefore, the purposes of enacting this chapter are to protect, preserve and enhance a sensitive and valuable potable groundwater resource area and to reduce the frequency of structural damage to public

and private improvements by sinkhole collapse or subsidence in areas of carbonate rock geology, thus protecting the public health, safety and welfare and insuring orderly development within the municipality. b. Definitions. For the purposes of this Section, the following definitions shall apply: *Agricultural use* shall mean the production, keeping or maintenance of plants or animals for sale, lease or personal use. *Bedding* shall mean the arrangement of a sedimentary rock in layers of varying thickness and character. *Bedrock* shall mean a general term for the rock that underlies soil or other unconsolidated material. *Carbonate Area District* ("CAD") shall mean and is comprised of the Carbonate Rock District and the Carbonate Drainage Area. *Carbonate Drainage Area* shall mean watershed areas which directly drain into the Carbonate Rock District. *Carbonate rock* shall mean rock consisting chiefly of calcium and magnesium carbonates. *Carbonate Rock District* shall mean those land areas underlain by carbonate rock formations. *Cave* shall mean a natural opening of a size permitting human exploration and extending into a region of sharply reduced or no light. *Closed depression* shall mean a shallow, dish-shaped hollow on the land surface which, in areas of limestone geology, may be indicative of old sinkholes or incipient collapse. *Collapse sinkhole* shall mean a sinkhole caused by the collapse of the roof of a bedrock cavern. *Development* for this section shall be defined as set forth in the Municipal Land Use Law. *Disappearing stream* shall mean a stream that enters the subsurface through a sinkhole or other entrance. *Dissolution* shall mean a space or cavity in or between rocks, formed by the solution of part of the rock material. *Doline*. See Sinkhole. *Dolomite* shall mean a carbonate rock that contains more than fifteen (15%) percent magnesium carbonate. *Drainage* shall mean the process by which water moves from an area by stream or overland sheet flow and/or the removal of excess surface water from soil by downward flow through the soil profile. *Fault* shall mean a surface or zone of rock fracture along which there has been noticeable differential movement. *Fissure* shall mean an extensive crack, break, or fracture in the rock. *Geologic investigation program* shall mean a program which identifies the geologic nature of the bedrock materials underlying the site, and provides solutions directed at preserving the water quality and assuring the safety of any planned facility or improvement built over carbonate rocks. *Joint* shall mean a fracture in rock generally more or less vertical or transverse to bedding, along which no appreciable movement has occurred. *Karst* shall mean a type of topography that is formed over limestone or dolomite by dissolving or solution of the carbonate rocks, characterized by sinkholes, closed depressions, caves, solution channels, internal drainage, and irregular bedrock surfaces. *Limestone* shall mean a carbonate sedimentary rock consisting primarily of calcium carbonate. Limestone is commonly used as a general term for that class of rocks, which consists of at least eighty (80%) percent calcium or magnesium carbonate. In this subsection the term "limestone" shall be used generically to refer to carbonate rocks, limestone formations and Precambrian marble. *Lineation* shall mean any straight line or alignment of natural features seen on an aerial photograph or any geographically referenced source. Although some lineations may be geologically controlled, ground-based geologic investigations are necessary to define their existence and significance. *Marble* shall mean a metamorphic rock consisting primarily of crystallized limestone or dolomite. *Outcrop* shall mean an exposure of bedrock projecting through the ground surface. *Pinnacle* shall mean an irregular rock projection often buried beneath the ground surface. *Shear zone* shall mean a zone in which shearing has occurred on a large scale so that the rock is crushed and brecciated (broken). *Sinkhole (Doline)* shall mean a localized land subsidence, generally a funnel-shaped or steep-sided depression, caused by the dissolution of underlying

carbonate rocks or the subsidence of the land surface into a subterranean passage, cavity or cave. Sinkholes are formed by the underground removal of soil and rock material. *Soil* shall mean the material found in the surface layer of the earth's crust which may be moved by a spade or shovel. *Solutioned carbonates* shall mean carbonate rocks that have had cavities formed, fractures widened, and passages in the rock created through the dissolution of the rock by the passage of surface water. *Solution channels* shall mean tubular or planar channels formed by solution in carbonate rock terrains, usually along joints and bedding planes. These openings may serve as the water-bearing openings in carbonate rocks. *Solution sinkhole* shall mean a depression formed from the slow dissolution of bedrock. *Spring* shall mean a place where water naturally flows from rock or soil upon the land or body of surface water. *Subsidence sinkholes* shall mean sinkholes formed by the downward settlement of unconsolidated overburden into openings in the underlying, soluble bedrock. *Surface runoff* shall mean the part of the precipitation that passes over the surface of the soil. *Void* shall mean an opening in the soil or rock materials. c. Disclaimer. In limestone areas, the alteration and development of land may be hazardous with respect to the foundation safety of structures, the creation of unstable land as a result of changes in drainage and grading, and the contamination of ground and surface waters. The exact occurrence of sinkholes and/or subsidence is not always predictable; therefore, the administration of these regulations, as contained in the Frelinghuysen Township Carbonate Area District Ordinance herein, shall create no liability on behalf of Frelinghuysen Township, the Land Use Board Engineer, municipal employees, municipal officials, or any municipal agencies or professionals as to damages which may be associated with the formation of sinkholes or subsidence. Compliance with these regulations represents no warranty, finding, guarantee, or assurance that a sinkhole and/or subsidence will not occur on an approved property. Frelinghuysen Township, its Board Engineer, municipal employees, municipal officials, and any municipal agencies and professionals assume no liability for any financial or other damages which may result from sinkhole activity. It is also noted that sinkholes and ground subsidence may occur in areas outside the Carbonate Area District and/or in areas of carbonate geology presently not identified as such. The applicant and/or property owner should always make independent investigations of these matters prior to using land for construction of a building or structure or any activity which alters the soil and bedrock materials. d. Applicability. 1. The provisions of this Section shall be applicable to all development activities in the Carbonate Area District as determined from the Critical Composite Map Set dated October 28, 2012 prepared as part of the Township's Environmental Assessment depicting the Critical Areas Maps of Frelinghuysen Township or as mapped by the USDA Natural Resource Conservation Service for Warren County requiring subdivision approval, site plan approval, or a building permit for new construction in connection with a major subdivision, including single-family detached dwellings to be constructed in connection with an application for a major subdivision, pursuant to this chapter. Nothing in this Section shall be applicable to developments for which preliminary or final site plan or subdivision approval was granted prior to the effective date of this Ordinance. 2. The requirements of this Section are not applicable to the following which are exempt from its application: (a) Applicants seeking minor subdivision approval for the construction of single family residences; (b) Applicants requesting a zoning and/or building permit for new construction on an existing lot of a single-family home in which they will reside, (c) additions to an existing single-family home in which they reside, and/or, (d) any structure within the Carbonate Drainage Area and one thousand (1,000') feet or more

from the boundary with the Carbonate Rock District as determined from the Critical Composite Map Set dated October 28, 2012 prepared as part of the Township's Environmental Assessment depicting the Critical Areas Maps of Frelinghuysen Township or as mapped by the USDA Natural Resource Conservation Service for Warren County. e. District Identification. 1. Carbonate Area District.

The Carbonate Area District is hereby created and shall be any area identified as such within Critical Composite Map Set dated October 28, 2012 prepared as part of the Township's Environmental Assessment depicting the Critical Areas Maps of Frelinghuysen Township or as mapped by the USDA Natural Resource Conservation Service for Warren County. The district shall be constituted as secondary, or as an "overlay," to the zoning districts heretofore established by the Zoning Map and may encompass all or portions of more than one existing zoning district. Regulation of the Carbonate Area District shall be in addition to those requirements governing the existing zoning district. The Carbonate Area District shall contain two areas, which shall be known as the Carbonate Rock District, and the Carbonate Drainage Area.

2. Carbonate Rock District. The Carbonate Rock District is composed of those areas of the municipality underlain by carbonate rocks. The geologic mapping utilized to prepare the Carbonate Rock District overlay boundary is derived from New Jersey Geologic Survey and United States Geological Survey maps. These maps are interpretations developed from available field observations and subsurface data; additional unmapped areas of limestone may exist in the Township of Frelinghuysen. Therefore, the provisions of this Section may be applied to any development which, in the opinion of the Township of Frelinghuysen, is located in an area underlain by carbonate rock. The Carbonate Rock District map shall be updated as information is developed through the application of this Section. 3. Carbonate Drainage Area.

The Carbonate Drainage Area shall consist of all lands, which drain surface water into the Carbonate Rock District. Changes in the quantity, quality and rate of discharge of surface water runoff from land upslope of the Carbonate Rock District can adversely affect the Carbonate Rock District. Therefore, development activities in the Carbonate Drainage Area which may alter the surface drainage patterns or affect the water quality or increase runoff into the Carbonate Rock District shall be subject to the requirements of this Section. f. Performance Standards for Carbonate Rock District. The following performance standards shall be applicable to development activities occurring in the Carbonate Rock District requiring major subdivision approval, site plan approval, or a building permit for new construction in connection with a major subdivision, including single-family detached dwellings to be constructed in connection with an application for a major subdivision: 1. The location of all sinkholes, disappearing streams, or other karst features identified during the geologic investigation program and shown on documents submitted shall be drawn on all final plats. The plats shall also note any site remediation techniques utilized to stabilize any solution channels or subsidence karst features. All final subdivision deeds shall contain the following wording: *"Block XX, Lot XX is underlain by limestone formations. Limestone formations are susceptible to surface collapse (or sinkholes) and subsidence caused by the physical erosion and chemical alteration of the soil and bedrock. In limestone areas the alteration and development of land may be hazardous with respect to the foundation safety of structures, the creation of unstable land as a result of changes in drainage and grading, and the contamination of ground and surface waters. The exact occurrence of sinkholes and/or subsidence is not always predictable; therefore, the administration of the Frelinghuysen Township Carbonate Area District Ordinance shall create no liability on behalf of Frelinghuysen Township, the Board Engineer, municipal employees,*

municipal officials, or any municipal agencies or professionals as to damages which may be associated with the formation of sinkholes or subsidence. Compliance with these regulations represents no warranty, finding, guarantee, or assurance that a sinkhole and/or subsidence will not occur on an approved property. Frelinghuysen Township, the Board Engineer, municipal employees, municipal officials, municipal agencies or and professionals assume no liability for any financial or other damages which may result from sinkhole activity. It is also noted that sinkholes and ground subsidence may occur in areas outside the Carbonate Area District and/or in areas of carbonate geology presently not identified as such. The applicant and/or property owner should always make independent investigations of these matters prior to using this land for construction of a building or structure or any activity which alters the soil and bedrock materials."

2. The design and construction of the improvements listed in Table 1, annexed to this Ordinance, shall be accomplished so as to minimize, to the greatest extent practical, the development of future sinkholes or other karst hazards and the pollution of surface and groundwater resources. Carbonate formations present complex design and engineering challenges. As a result, the provisions of Table 1 were developed to provide an outline of geologic procedures, and minimum standards that might be useful to those using this Section. None of the items is intended to preclude the application of judgment, innovation and experience. Table 1 represents the best technical judgment available at this time. As Frelinghuysen Township gains experience with this Ordinance and the local geologic conditions, both the level of review and the scope of Table 1 may be evaluated. A number of "testing" procedures are presented in Table 1. These include direct methods, such as site reconnaissance, test pits, test probes and test borings. These direct methods are essentially those procedures that allow the investigator to physically see or sample some of the geologic parameters of the site. Direct methods can provide an accurate picture of known site locations. It is then necessary to extrapolate these known data points to the entire site. Indirect methods include the use of such items as aerial photography, satellite imagery and geophysical procedures. With geophysical procedures, one records some earth properties and attempts to correlate each property with more specific site characteristics, such as rock properties or depths. Indirect methods must be used with great care because of the complex nature of karst sites. Indirect methods may not detect small variations in the carbonate bedrock features, which may be of great significance to the project design. For purposes of better understanding Table 1, a number of specific items are discussed herein.

3. Direct Methods. (A) Site Reconnaissance. An on-site reconnaissance, by a person with knowledge of local geology, is important to develop an understanding of the site constraints. Prior to conducting reconnaissance on-site, field personnel should review aerial photography to look for the presence of such features as photo lineaments, vegetation changes and depression areas. Black and white aerial photographs, when viewed in a stereo image, can reveal such features as sinkholes, closed surface depressions, lineaments and bedrock pinnacles. Older aerial photographs are a valuable resource to document changes in the landforms or karst features, which have occurred on the site over time.

(B) Test Pits. Test pits are a simple, inexpensive way to view the overburden materials and the condition and variability of the carbonate rock surface. Test pits are backhoe excavations generally to the depth of the bedrock or limitation of backhoe.

(C) Test Probes. These generally consist of advancing a steel bit into the ground by an air-percussion machine. Essentially a large, mobile "jack-hammer" is used. Depth of normal penetration is usually less than fifty (50') feet. The "cuttings" are blown out of the hole and examined. Although quite disturbed, these cuttings yield a sample of the

materials penetrated. The amount of air injected and return of cuttings at the surface can indicate the presence of fractures and cavities. The rate of speed of the advance of the probe provides a qualitative estimate of the competency of the material encountered. Backfilling with a fluid cement grout and recording the volume of materials placed in the drill hole (of known dimension) can also yield a measure of the size of openings encountered in the subsurface during the downward progress of the probe.

(D) Test Borings. As discussed in Phase II, test borings can yield virtually complete and relatively undisturbed soil and rock samples. These borings provide visual evidence of fractures, weathering, fracture fillings and even the vertical dimensions of cavities. A measure of the drilling fluid losses can also indicate the volume and nature of any soil or rock cavities encountered. Backfilling with a fluid cement grout and recording the volume of materials placed in the drill hole (of known dimension) can also yield a measure of the size of openings encountered in the subsurface during the downward progress of the probe.

4. Indirect Methods. (A) Aerial Photography. This is the simplest indirect technique, particularly when photos taken over a long time period are analyzed. Open depressions, bedrock exposures, vegetation and moisture changes over time can be detected on either black and white or color photographs. Piles of rock or small groups of brush or trees in otherwise open fields can indicate active sinkholes or rock pinnacles breaking the ground surface. Images defined at wavelengths other than visible light can be as useful as, or even more useful than, conventional aerial photographs. These images are generally available from satellite mapping work.

(B) Geophysical Procedures. Various geophysical investigation techniques can be used in karst terrains including: ground penetrating radar, electrical conductivity, electrical resistivity, electromagnetic conductivity, very low frequency (VLF) measurement, gravity field recording and seismic velocity measurements. In general, none of these methods has the ability to discriminate all fractures and small cavities. The data provides information on the variation in underground conditions, which should be interpreted by a person trained in geophysics. These procedures are used to identify zones of variation across a site. Areas showing variation are then targeted for additional direct testing procedures. Geophysical procedures should not be used as the only method of verifying underground conditions. Information gathered with geophysical procedures is useful when extrapolating directly measured data. The variability in physical properties and the solutioned nature of most carbonate rocks require an increase in the number of locations analyzed and the use of several investigation methods to provide a reliable interpretation of the subsurface conditions.

g. Procedures and Submission Requirements for the Carbonate Area District.

1. General Requirements. (A) All applicants for subdivision approval, site plan approval, or building permit for new construction, including single family detached dwellings in connection with major subdivision approval, shall undertake a geologic investigation program. Projects located in the Carbonate Drainage Area shall comply with this Chapter and shall be based on the recommendation of the Board Engineer as per subsection (F), below. (B) A professional engineer or geologist with experience in karst terrains shall prepare the geologic investigation program. The Board Engineer shall be similarly qualified to review all project submittals. (C) The Geologic Investigation Program shall identify the nature of materials underlying the site.

(D) The geologic investigation report shall evaluate site information gathered during the geologic investigation, and provide recommendations for the planning, engineering design, and construction techniques to be utilized. All design recommendations shall minimize, to the greatest extent practical, impacts upon water quality and structural hazards associated with limestone formations. (E) In the case of applications for site

plans or subdivisions, the geologic investigation program may be completed and filed prior to a formal application for preliminary approval. (F) After the submission of the information required in the Phase I and reviewing the Board Engineer's report, the Land Use Board may grant a waiver from the requirement of part or all of the geologic investigation and report requirements under subsections 4 and 5, below.

2. Geologic Investigation Program Process. For all properties located in the CAD, the applicant shall conduct a comprehensive geologic investigation program. The purpose of this program is to provide the Land Use Board with sufficient data to define the nature of all existing geologic conditions that may affect construction and land use activities on the site. Specifically, the investigations shall yield information, which shall demonstrate that the proposed development will identify any existing geologic conditions for which appropriate site design and/or engineering solutions may be necessary to minimize any adverse environmental impacts caused by the project. A geologic investigation program involves the following:

(A) Phase I – submission of the application with appropriate mapping and indication as to whether the application impacts Carbonate Rock Areas in accordance with this chapter, and a review and report of the application by the Board Engineer. (B) Phase II – completion of the proposed Geologic Investigation Program by applicant, review by the Board Engineer and action on completeness by the Land Use Board; issuance of permit to undertake on-site testing. (C) Applicant undertakes on-site geologic investigation program, with observation by the Board Engineer. (D) Submission of a Geologic Investigation Report and site recommendation by applicant. (E) Board Engineer's review, report and final recommendation forwarded to Land Use Board. (F) Land Use Board acts on the geologic aspects of the proposed project.

3. Geological Investigation Program Time Limits. (A) Completing the Phase I process shall commence an investigation program. A report from the Board Engineer shall be rendered to the Land Use Board within thirty (30) days of the submission by the applicant of the application. The Land Use Board shall rule on the completeness of the Phase I submission within thirty (30) days of the receipt of the Board Engineer's completeness report. The Board Engineer's report shall either recommend that Phase II shall be commenced, or in the alternative, that portions or all of the requirements of the Phase II be waived. (B) If Phase II is required, the application shall be submitted to the Land Use Board and reviewed by the Board Engineer for completeness upon completion of the Phase II study. A completeness report shall be made to the Land Use Board within thirty (30) days of the submission by applicant of the Phase II study. The Land Use Board shall rule on the completeness of the application within thirty (30) days of the receipt of the Board Engineer's completeness report. The Board Engineer's completeness report shall also advise the applicant as to whether any proposed testing methodology is prohibited because of the potential danger the methodology may pose to the integrity of the site or the health, safety and welfare of the community. If the Board Engineer recommends the disapproval of the testing program, the recommendation shall include suggestions on alternate methodology, which would provide the requisite data. The Board Engineer may also recommend waiver of some or all of the required investigations in appropriate cases. (C) At the applicant's option, it may comply with Phase I and/or Phase II simultaneously, in which case the Township Geologist shall submit a completeness report to the Land Use Board within thirty (30) days of submission of the appropriate studies by the applicant. The Land Use Board shall act on the completeness report within thirty (30) days of submission of the Board Engineer's report. (D) After the Phase I and Phase II submissions have been made, and the application has been deemed complete by the Land Use Board and the Board Engineer has advised that the

testing methodology poses no danger to the integrity of the site or to the health, safety and welfare of the community, a permit shall be issued to the applicant authorizing the commencement of the testing.

4. On-Site Investigation Protocol. (A) Any on-site investigations and tests undertaken pursuant to this Section shall not begin until the applicant has received a permit pursuant to subsection 3, above. The applicant shall also be responsible for providing, at least fifteen (15) days prior to commencement of any testing procedures, written notice of same to the Land Use Board Secretary for investigations related to subdivision and site plan applications, or to the Zoning Officer for investigations related to building permit applications, which notice shall be transmitted by certified mail, return receipt requested or served personally. All site investigations shall be properly closed in accordance with N.J.A.C. 7:9-9.1 et seq.

(B) The proposed development site shall be subject to inspection by the Board Engineer or designated municipal inspectors at any time. All testing data and results shall be made available to municipal officials and inspectors on demand.

(C) All samples taken shall be properly preserved and shall be available for examination by the Township upon request until the Land Use Board takes final action on the application.

5. Geological Investigation Report Requirements. (A) At the completion of the field investigation, a formal site investigation report shall be submitted to the Township and include any of the following required information gathered during the testing protocol: logs of all borings, test pits, and probes including evidence of cavities, loss of drilling fluid circulation during drilling, voids encountered and similar cavities, type of drilling or excavation technique employed, drawings of monitoring or observation wells as installed, time and dates of explorations and tests, reports of chemical analyses of on-site surface and groundwater, names of individuals conducting tests if other than the professional engineer or geologist referred to in the application or studies submitted by the applicant, analytical methods used on soils, water samples, and rock samples; a 1" = 100' scale topographic map of the site (at a contour interval of two (2') feet) locating all test pits, borings, wells, seismic or electromagnetic conductivity or other geophysical surveys and analysis of the groundwater including any potentiometric maps constructed from site data or aquifer tests with rate and direction of flow; a geologic interpretation of the observed subsurface conditions, including soil and rock type; jointing (size and spacing), faulting, voids, fracturing, grain size, and sinkhole formation.

(B) The report shall define the extent of geological findings at the site in relation to the planned development or land use. The recommendations proposed to minimize environmental and structural impacts for the useful life of the project, as well as during construction, must be clearly detailed.

6. Township Review of Geologic Investigation Report. (A) Within forty-five (45) days of submission of the Geological Investigation Report by the applicant, the Board Engineer shall review and prepare a completeness report for submission to the Land Use Board. During the Board Engineer's review of the Geological Investigation Report for proposed development in the Carbonate Rock District, the Board Engineer shall consider the data, formal maps, drawings and related submission materials and shall advise the Land Use Board whether or not the applicant has provided the Township with: (i) Sufficient design, construction and operational information to insure that the proposed development of the property will not adversely impact on the health, safety and welfare of the community; (ii) Proof that the proposed method of development of the property will minimize any adverse effects on the quality of surface or subsurface water, and will not alter the character of surface and/or subsurface water flow in a manner detrimental to known on-site or off-site conditions; (iii) Specific details insuring that design concepts and construction and operational procedures intended to protect surface and subsurface waters will be

properly implemented; (iv) Specific details on inspection procedures to be followed during construction and after project completion. (B) The Land Use Board shall, within forty-five (45) days of the receipt of the report from the Board Engineer, approve or disapprove the proposed geologic aspects of the development plan and associated construction techniques. In the event the Land Use Board denies the proposed development plan and associated construction procedures the Land Use Board shall state in the resolution its reasons for disapproval. h. Reevaluation. 1. In certain situations, a specific geologic hazard may not be identified while the geologic investigation program is underway and may be discovered during or after construction. In such cases the applicant shall: (A) Report the occurrence of the hazard to the Township Clerk within twenty-four (24) hours of discovery; (B) Halt construction activities which would impact the geologic hazard; (C) Prepare a report on the geologic hazard which analyzes the impact of the hazard and details a remediation plan for review and approval by the Board Engineer; (D) After obtaining approval from the Township, perform necessary remediation of the hazard to prevent or minimize damage to buildings, structures, utilities, driveways, parking areas, roadways, and other site improvements, and to minimize pollution of the groundwater; (E) Repair any damage to improvements and restore ground cover and landscaping; (F) In those cases where the hazard cannot be repaired without adversely affecting the site plan or subdivision, file an amended application for a site plan or subdivision approval in compliance with the provisions of this Section. i. Compliance and Enforcement. 1. Compliance with this Section is required prior to the granting of Township subdivision or site plan approval, the granting of building permits, except as exempted in subsection d herein, or the Township endorsement of State permits and treatment works approvals, unless the applicant is exempted from the provisions of this Section or the requirements in this Section have been waived. The enforcement officials for any application requiring the approval of the Land Use Board shall be the Board Engineer. The enforcement official for building permit applications that are subject to this Section shall be the Zoning Officer or Construction Code Official. For well and septic system installation, the Board Engineer shall serve as the enforcement officer. The Board Engineer shall serve as the enforcement official for wastewater systems requiring NJDEP permits or Treatment Works Approvals. 2. Failure to comply with any of the conditions in this may result in the issuance of a stop-work order, revocation of building permits, or denial of certificates of occupancy. Remedial and corrective measures may be mandated if the appropriate construction and site planning techniques as outlined in the applicant's approved geologic report, are not followed and result in actions which adversely impact karst features. j. Carbonate Area District Data Distribution. On-site geologic information collected through the provisions of this Section represents important resource data. Copies of the final geologic investigation report and all maps and accompanying data shall be submitted to the Township Clerk, Warren County Board of Health, and a copy filed with the Land Use Board Secretary. The Township shall develop a catalogue system of all available municipally-generated geologic reports. This file shall be accessible to the public during normal working hours. k. Application and Escrow Fees. The applicant shall submit the application fees and escrow deposits specified in the Township Code for any project in the Carbonate Area District requiring a submission. l. Investigation Required. 1. All applications for subdivision approval, site plan approval, or building permit for new construction, including single family detached dwellings and located within the Carbonate Area District shall be accompanied by completed submissions as an initial step of the geologic investigation required herein. 2. Procedure for Submission of Documents.

(A) The applicant shall submit the completed Phase I submission to the Township of Frelinghuysen Land Use Board for distribution to the Board Engineer. Applicants shall also submit the required application fee and escrow as per the Township's posted escrow and fee requirements. (B) Phase I and II submissions may be completed and filed prior to the completion of other required submissions at the applicant's option. (C) The applicant and the municipal Land Use Board will be advised within thirty (30) days of submission of the Phase I submission whether a waiver of completion of the Phase II study is being recommended by the Board Engineer. The Board Engineer may recommend a waiver of some or all of the required investigations as provided herein. The Land Use Board will act on the Board Engineer's completion report within thirty (30) days of receipt. Notice of the Township's action will be forwarded to the applicant in writing. 3. The Phase I submission is intended to ensure that the information to be submitted by the applicant demonstrates that the applicant has sufficient information available on geologic issues to enable the applicant to prepare a plan for investigation of the proposed development site. 4. Any applicant with questions regarding whether applicant is entitled to a waiver of some or all segments of the geologic investigation is encouraged to contact the Board Engineer prior to the commencement of the preparation of the geotechnical investigation program. Section II 1. All ordinances or parts of ordinances inconsistent herewith are repealed to the extent of such inconsistency. 2. If any word, phrase, clause, section or provision of this ordinance shall be found by any Court of competent jurisdiction to be unenforceable, illegal or unconstitutional, such word, phrase, clause, section, or provision shall be severable from the balance of the ordinance and the remainder of the ordinance shall remain in full force and effect. 3. This ordinance shall take effect immediately upon final passage and publication as required by law. Motion for introduction for first reading November 11, 2015 by Desiderio, seconded by Boynton. All were in favor. Boynton-Yes; Desiderio-Yes; DeCarolis-Yes; Kuhn-Yes; Stracco-Yes. Public hearing and adoption set for December 16, 2015.

#2015-17 BOND ORDINANCE AMENDING BOND ORDINANCE NUMBER 2015-12 (PROVIDING FOR VARIOUS 2015 CAPITAL IMPROVEMENTS) HERETOFORE FINALLY ADOPTED BY THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF FRELINGHUYSEN, IN THE COUNTY OF WARREN, STATE OF NEW JERSEY (THE "TOWNSHIP"), ON APRIL 15, 2015, AS PREVIOUSLY AMENDED AND RESTATED BY BOND ORDINANCE NUMBER 2015-13 HERETOFORE FINALLY ADOPTED BY THE TOWNSHIP ON JULY 15, 2015, TO AMEND THE DESCRIPTION THEREOF

WHEREAS, the Township Committee of the Township of Frelinghuysen, in the County of Warren, State of New Jersey (the "Township"), heretofore finally adopted Bond Ordinance Number 2015-12 on April 15, 2015 providing for various 2015 capital improvements (the "2015-12 Ordinance"); and **WHEREAS**, the Township Committee of the Township heretofore finally adopted Bond Ordinance Number 2015-13 on July 15, 2015, which amended and restated the 2015-12 Ordinance to (i) increase the amounts of the appropriation (including increasing the amount of the New Jersey Department of Transportation Grants), the authorization of bonds or notes and the down payment thereunder, and (ii) amend the description of the improvements and purposes authorized thereby (the "2015-13 Ordinance", and together with the 2015-12 Ordinance, the "Existing Ordinance"); and **WHEREAS**, the Township's 2015 Capital Improvement Program includes the acquisition of turnout gear for use by the Green Township Fire Department; and **WHEREAS**, the Township has determined that the improvements and purposes of Section 3(a) of the Existing Ordinance should be amended to include the acquisition of turnout gear

for use by the Green Township Fire Department. **NOW, THEREFORE, BE IT ORDAINED AND ENACTED BY THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF FRELINGHUYSEN, IN THE COUNTY OF WARREN, STATE OF NEW JERSEY** (not less than two-thirds of all the members thereof affirmatively concurring), **AS FOLLOWS:**

SECTION 1. Section 3(a) of the Existing Ordinance is hereby amended and restated in its entirety to read as follows: **“SECTION 3(a).** The improvements hereby authorized and purposes for the financing of which said bonds or notes are to be issued is the 2015 Capital Improvement Program (the “Program”), which includes, but is not limited to, the acquisition of hardware and software for a geographical information engineering system to be used for capital planning and road maintenance, the acquisition of turnout gear for use by the Green Township Fire Department, State Park road improvements (a \$150,000 portion of such improvements being funded by the State Park Grant), the design phase of an engineering project in connection with improvements to Kerrs Corner Road, the resurfacing of Kerrs Corner Road (a \$130,000 portion of the costs of such resurfacing being funded by the Kerrs Corner Road Grant), and road overlay, tarring, chipping and micropaving of various roads within the Township, including, as applicable, all work, materials, equipment, labor and appurtenances necessary therefor or incidental thereto, all in accordance with the plans therefor on file in the office of the Township Clerk and available for public inspection and hereby approved.” **SECTION 2.** Except as expressly amended, supplemented and restated hereby, the Existing Ordinance shall remain in full force and effect. **SECTION 3.** This bond ordinance shall take effect twenty (20) days after the first publication thereof after final adoption, as provided by the Local Bond Law. **ADOPTED ON FIRST READING**

DATED: November 11, 2015 TOWNSHIP COMMITTEE OF THE TOWNSHIP OF FRELINGHUYSEN PUBLIC NOTICE NOTICE OF PENDING ORDINANCE AND SUMMARY

The bond ordinance, the summary terms of which are included herein, was introduced and passed upon first reading at a meeting of the governing body of the Township of Frelinghuysen, in the County of Warren, State of New Jersey, held on November 11, 2015. It will be further considered for final passage, after public hearing thereon, at a meeting of the governing body to be held at the Township Municipal Building, in said County, on December 16, 2015 at ____ p.m. During the week prior to and up to and including the date of such meeting, copies of the full ordinance will be available at no cost and during regular business hours, at the Township Clerk’s office for the members of the general public who shall request the same. The summary of the terms of such bond ordinance follows:

Title: BOND ORDINANCE AMENDING BOND ORDINANCE NUMBER 2015-12 (PROVIDING FOR VARIOUS 2015 CAPITAL IMPROVEMENTS) HERETOFORE FINALLY ADOPTED BY THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF FRELINGHUYSEN, IN THE COUNTY OF WARREN, STATE OF NEW JERSEY (THE “TOWNSHIP”), ON APRIL 15, 2015, AS PREVIOUSLY AMENDED AND RESTATED BY BOND ORDINANCE NUMBER 2015-13 HERETOFORE FINALLY ADOPTED BY THE TOWNSHIP ON JULY 15, 2015, TO AMEND THE DESCRIPTION THEREOF

Purpose(s): The acquisition of hardware and software for a geographical information engineering system to be used for capital planning and road maintenance, the acquisition of turnout gear for use by the Green Township Fire Department, State Park road improvements (a \$150,000 portion of such improvements being funded by the State Park Grant), the design phase of an engineering project in connection with improvements to Kerrs Corner Road, the resurfacing of Kerrs Corner Road (a \$130,000 portion of the costs of such resurfacing being funded by the Kerrs Corner Road Grant), and road overlay, tarring, chipping and micropaving of various roads within the Township

Appropriation:	\$695,000 (Unchanged)
Bonds/Notes Authorized:	\$394,250 (Unchanged)
Grants Appropriated:	Two Grants expected to be received from the New Jersey Department of Transportation, one in the amount of \$150,000 and one in the amount of \$130,000 (Unchanged)
Section 20 Costs:	\$20,000 (Unchanged)
Average Useful Life:	9.41 years (Unchanged)

TOWNSHIP COMMITTEE OF THE TOWNSHIP OF FRELINGHUYSEN PUBLIC NOTICE

BOND ORDINANCE STATEMENT AND SUMMARY The bond ordinance, the summary terms of which are included herein, has been finally adopted by the Township Committee of the Township of Frelinghuysen, in the County of Warren, State of New Jersey on December 16, 2015, and the twenty (20) day period of limitation within which a suit, action or proceeding questioning the validity of such ordinance can be commenced, as provided in the Local Bond Law (N.J.S.A. 40A:2-1 et seq.), has begun to run from the date of the first publication of this statement. Copies of the full ordinance are available at no cost and during regular business hours at the Township Clerk’s Office for members of the general public who request the same. The summary of the terms of such bond ordinance follows:

Title: BOND ORDINANCE AMENDING BOND ORDINANCE NUMBER 2015-12 (PROVIDING FOR VARIOUS 2015 CAPITAL IMPROVEMENTS) HERETOFORE FINALLY ADOPTED BY THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF FRELINGHUYSEN, IN THE COUNTY OF WARREN, STATE OF NEW JERSEY (THE “TOWNSHIP”), ON APRIL 15, 2015, AS PREVIOUSLY AMENDED AND RESTATED BY BOND ORDINANCE NUMBER 2015-13 HERETOFORE FINALLY ADOPTED BY THE TOWNSHIP ON JULY 15, 2015, TO AMEND THE DESCRIPTION THEREOF

Purpose(s): The acquisition of hardware and software for a geographical information engineering system to be used for capital planning and road maintenance, the acquisition of turnout gear for use by the Green Township Fire Department, State Park road improvements (a \$150,000 portion of such improvements being funded by the State Park Grant), the design phase of an engineering project in connection with improvements to Kerrs Corner Road, the resurfacing of Kerrs Corner Road (a \$130,000 portion of the costs of such resurfacing being funded by the Kerrs Corner Road Grant), and road overlay, tarring, chipping and micropaving of various roads within the Township

Appropriation:	\$695,000 (Unchanged)
Bonds/Notes Authorized:	\$394,250 (Unchanged)
Grants Appropriated:	Two Grants expected to be received from the New Jersey Department of Transportation, one in the amount of \$150,000 and one in the amount of \$130,000 (Unchanged)
Section 20 Costs:	\$20,000 (Unchanged)
Average Useful Life:	9.41 years (Unchanged)

Motion for introduction for first reading November 11, 2015 by Desiderio, seconded by Boynton. Roll call vote: Boynton-Yes; Desiderio-Yes; DeCarolis-Yes; Kuhn-Yes; Stracco-Yes. Public hearing and adoption set for December 16, 2015.

RESOLUTIONS:

#2015-108 SETTING EXECUTIVE SESSION WHEREAS, it is necessary to discuss items dealing with the discussion of possible litigation in private or executive session; and WHEREAS, under the Open Public Meetings Act (number 7 of the permitted exceptions to the requirements that a public body hold its meetings in public) it is permissible that such matters be discussed in executive or private session. NOW, THEREFORE BE IT RESOLVED, on November 11, 2015 that the Township Committee of the Township of Frelinghuysen will adjourn to private or executive session to discuss the above mentioned and results or portions of that discussion will be made known in reasonable length of time. Motion made by Desiderio, seconded by DeCarolis – all were in favor.

#2015-109 RESOLUTION APPROVING PAYMENT OF BILLS FOR THE MONTH OF NOVEMBER 2015 WHEREAS, the Finance Committee of the Township of Frelinghuysen have reviewed the bills submitted by the Municipal Clerk to the Frelinghuysen Township Committee for the month of NOVEMBER 2015; and WHEREAS, the Finance Committee find the bills to be in order and recommend to the Township Committee that they be paid by the Chief Finance Officer. NOW, THEREFORE BE IT RESOLVED, by the Frelinghuysen Township Committee that all bills submitted for the above named month are reasonable and proper and are to be paid from their appropriate account. Motion made by Boynton, seconded by DeCarolis – all were in favor.

EXECUTIVE SESSION:

Motion was made by Mr. Desiderio to enter executive session regarding pending litigation, seconded by Mr. DeCarolis. All were in favor.

Motion was made by Mr. Desiderio to exit executive session, seconded by Mr. Boynton. All were in favor.

Mr. Wacks stated that the discussion that was held in the executive session dealt with the property regarding rock removal. His colleague, Mr. Robert Correlle will represent Frelinghuysen Township with prosecuting summons which have been issued to the property owner, Janene Morgan and to the onsite operator, John Juresci. The court date is scheduled for December 9th in the Knowlton Court. The closed session was to determine how the Township wanted to handle the matter and what it was seeking as the ultimate decision in this case. Reason it was handled in Executive Session was because that kind of information could impact the way the matter could be handled in the court. Otherwise there was nothing else discussed in Executive Session.

OLD BUSINESS:

- Salt Shed - Mr. DeCarolis explained that Mr. Sterbenz had the salt shed in the wrong location. Mr. DeCarolis, Mr. Sterbenz and Mr. Boynton all walked the entire site. Mr. Boynton reminded the Committee that Mr. Barbour was here when the salt shed was being discussed for the new location and that he was ok with it backing up to his barn. Mr. DeCarolis stated it would be 15 feet from the boundary. Mr. Kohuth asked about the drain pipe and how it would handle the heavy trucks driving over it all the time. Mr. Boynton explained the pipe is behind the proposed salt shed building.
- Kerr Road Project - There is some aggregate material that needs to be removed, as well as, some rocks. There is a need for some minor grading in certain areas. Mr. Kuhn will forward a list to Ms. Zilberfarb to give to Mr. Crone.

Mr. Boynton asked the residents on Kerr Road for their permission to use their driveway for the trucks to turn around in. Both residents gave their permission. Mr. Wacks will write a letter to both residents asking them for use of their driveways for turning around. Mr. Boynton stated that Kerr Road looks the best that it ever has and Mr. Stracco agreed.

- Mr. Kuhn told the Committee that the dpw has been patching Bear Creek Road, Mott Road, Greendale Road, Old Stage Coach Road and will be getting to Heller Road before the weather turns colder.
- Swift 911 Contract – Mr. Kuhn asked if we have gotten any response from Green Township regarding their portion of the outstanding invoice. Ms. Zilberfarb stated she has not but did receive a few emails before the meeting and didn't get to read fully. Mr. Kuhn stated as soon as the contract gets signed by Green Township then the bill can be paid. After discussion, the Township is waiting for the signed contract from Green Township to be able to move forward with the invoice.
- Employee Handbook – Mr. Wacks has a rough draft but in his note's it says that we would be holding until the November 11, 2015 meeting to discuss. Mr. Kuhn explained that one of the changes that needs to be made is regarding sick time buyout and sick time accumulation. He read an email from Ms. Dyer that explained the difference between the two. The handbook needs to clarify sick time buyout so that we are in compliance with best practices. Removing sick time buyout eliminates a payout at retirement for any accumulated sick time. Mr. Wacks suggested making a motion to allow him to make this change.

A motion was made by Mr. DeCarolis to approve Ed Wacks to change the employee handbook to reflect the changes to sick time buyout, seconded by Mr. Stracco. All were in favor.

- Snow Plow Contract - Mr. Wacks revised the contract from last year and handed the new contract to Ms. Zilberfarb. She will get Mr. Greco to sign the contracts.

- Innovation in Governance Award - Mr. Kuhn explained that we were a runner up for this award and that the Certificate we received will be hung in the town hall.

NEW BUSINESS:

- Mr. Hardy, address – 729 route 519 – inquired about getting cable for that area. Mr. Kuhn stated that a letter could be written by the Township to Board of Public Utilities (BPU). Mr. Wacks explained that Century Link was contacted and there had to be 50 residents and he then contacted someone at BPU and the woman was very helpful and took care of what needed to be done. After discussion among the Committee, it was determined for Mr. Wacks to write a letter to Service Electric.

A motion was made by Mr. Boynton to have Mr. Wacks write a letter to Service Electric, seconded by DeCarolis. All were in favor.

- Letter from Resident, Janet Schurling - A letter was received by the Mayor from resident, Janet Schurling asking about GPS for the residents on Main Street and what can be done to get it to have more accurate directions. She also discussed the historical areas in the town. Mr. Kuhn will send a letter back to Ms. Schurling. Ms. Zilberfarb will forward a copy of Ms. Schurling's letter to the Land Use Board and the Historical Committee.

OPEN MEETING TO THE PUBLIC:

Motion was made by Mr. Boynton, seconded by Mr. DeCarolis to open meeting to the public. All were in favor. Spoke were:

- Loren Greco spoke regarding an article in the New Jersey Herald and would like to know who the Deputy Clerk is. Mr. Kuhn stated that we do not have a Deputy Clerk. Mr. Boynton stated that he was totally unaware of this article and stated that it should not have been presented that way. The article is referring to the OEM, the Mayor and the Deputy Clerk. Mr. Kuhn will clarify with the newspaper that we do not have a Deputy Clerk.

Motion was made by Mr. Boynton, seconded by Mr. Stracco to close to the public. All were in favor.

DEPARTMENT REPORTS:

- Legal report – Mr. Wacks discussed the personnel policy with respect to vacation time for the new employee that will be hired. Mr. Wacks explained that there still needs to be clarification on this as he has not received any information from the committee. As of now the policy says 1 vacation day per calendar month work for the first year. Mr. DeCarolis would like himself and Mr. Stracco to discuss this and come up with a time for vacation.

Mr. Wacks also mentioned that the probationary period is now 6 months for a new employee and that the Committee was looking to change that to 9 months.

With regards to the new hire, Mr. Desiderio asked what the pay rate would be. Mr. Kuhn stated what the pay rate is currently. Mr. Desiderio questioned paying someone new the same rate as someone that has worked here for almost 26-29 years. Mr. DeCarolis and Mr. Kuhn both stated that our pay is less than other towns and the county.

Mr. Kuhn asked that the Committee have answers for the changes for the next meeting.

- Mr. Wacks had two other matters to discuss, the first being advertised meetings. He explained how the Mayor wanted to attend the Open Space meeting and that would then make 3 Committeemen in attendance. He stated that because Open space is a committee, the meeting dates do not need to be advertised even though they have and are being advertised now. There is not a problem by advertising the meetings but he suggested that we advertise all meetings for committees as joint meetings with the Township Committee for the future.

Mr. Stracco feels that the Land Use Board should not be advertised that way as they have their own legal counsel and if a Township Committee member would like to attend then a special notice would have to be advertised. Mr. Wacks was in agreement with him.

- The second question that Mr. Wacks explained was whether a Committeeman on the Land Use Board could participate in a matter involving an application which the town owns property within 200 feet. After discussion on this matter, Mr. Stracco clarified that members can vote on applications that are not D variances and will not impact municipal property. Mr. Wacks was in agreement.
- Recreation report - Mr. Desiderio stated that the Recreation Committee did a wonderful job with the hayride and everything else for Halloween. There were 5 entries in the house decorating contest. There is a recreation meeting tomorrow night at 7pm. Soccer is finished next weekend and the top dressing will be put on all fields the weekend after soccer is over.
- Mayor report – Mr. Kuhn discussed that the Environmental Commission was happy with the Carbonate Rock Ordinance. Farmland Preservation has a couple of farms going state direct for preservation. The Berry farm should be closing soon. Open Space will be hosting a walk on Saturday at noon at Kids Camp.
- Deputy Mayor Report – Mr. Stracco stated that the Land Use Board unanimously recommended the Carbonate Rock Ordinance.
- Committeeman DeCarolis Report: Mr. DeCarolis spoke about the salt shed and Kerr Road during the meeting. He congratulated the Mayor and Deputy Mayor on their win in the election and thanked Marty Connor for the concrete lids and Ms. Zilberfarb for printing his business cards.

- Committeeman Desiderio Report: Discussed throughout meeting.
- Committeeman Boynton Report: Mr. Boynton stated the heating systems at the Lodge at Kids Camp seem to be running good. Mr. Cook still needs to put batteries and filters in. He needs to install a ¾ pipe plug and ensure the pressure is good.

He also congratulated the Mayor and Deputy Mayor on their election win. He did state that he is somewhat concerned with the fact that a write in candidate would have the response that he had. He believes that this is something that this Committee needs to seriously look into. He believes that perhaps there are a lot of people out there that aren't happy with what is going on with this Committee and publically stated that the Committee should work as a team of 5 members and not 3 & 2 or 3 & 1 & 1. He wants to be a part of this Committee. He does not want to come in to a work session and have major issues introduced to the public rather than done at a regular meeting. He feels that this is not transparent government and would like the Committee to keep everyone informed of what's going on and coming up so there are no surprises, and he asks to get everyone's opinion. Mr. Boynton publically stated he is a member of this Committee and is ready to work with all 5 members.

ADJOURNMENT:

There being no further business, motion was made by Mr. DeCarolis, seconded by Mr. Boynton to adjourn the meeting. All were in favor.

Respectfully Submitted,

Donna Zilberfarb, Acting Township Clerk