

TOWNSHIP OF BERNARDS  
LAND DEVELOPMENT ORDINANCE  
(06/18/09)

**§ 21-54.6. Support Documentation.**

Each application not classified as a minor subdivision or minor subdivision/flag lot shall be accompanied by a project report. This report shall include the various items listed hereafter and shall be accompanied by the necessary maps, exhibits, etc. Where maps or exhibits have been submitted to fulfill the requirements of Subsection 21-54.4 above, they may be referenced in the project report.

- a. Project Description and Statistics Report. A written statement describing the application, the intended use, the total area of land involved, any transfers of development rights, the total floor area proposed, a schedule comparing the minimum requirements for parking and coverage set forth in this chapter with the proposed development, and including, as well:
  1. A report describing the number of residential units by type to be constructed.
  2. The anticipated sales price of each unit type.
  3. The acreage of open space.
  4. The square footage of nonresidential construction and its value.
  5. The anticipated age characteristics of the population in the following categories:
    - (a) Preschool: 0 to 6 years.
    - (b) Elementary school children: 6 to 12 years.
    - (c) Secondary school children: 13 to 18 years.
    - (d) Young adults: 19 to 35 years.
    - (e) Primary adults: 36 to 54 years.
    - (f) Mature adults: 55 plus years.
  6. The relationship of the proposed development to the township's Master Plan and the location of any parks, playgrounds, school sites, open space or other public areas which are so designated on the Master Plan or Official Map of the township and which lie within the area proposed to be developed.
- b. Land classification map and report containing the following:
  1. Environmentally restricted lands as defined in Article II of this chapter.
  2. Restricted lands as defined in Article II of this chapter.
  3. Unrestricted lands as defined in Article II of this chapter.
  4. A slope map of the site with minimum contour intervals of five (5) feet, showing the following gradients:
    - (a) 25% or greater
    - (b) 15% to 25%
    - (c) 10% to 15%
    - (d) 0% to 10%
  5. A soils map based on soil conservation data and/or developed from detailed on-site testings. If the latter method is utilized, a detailed description with supporting documentation shall be submitted.

6. A vegetation and special features map showing all woodlands, individual trees in excess of six (6) inches DBH, significant tree masses, existing buildings, roads and trails, and flowing streams, drainageways and ponds.
- c. A Natural Features Report. This report shall include:
  1. A report summarizing the natural features and constraints of the site as related to the proposed land development.
  2. The number of acres and the percent of the total site each classification enumerated represents.
  3. A determination of how the site planning for the site has integrated the natural features in order to minimize adverse impacts on the natural systems, and how areas for common open space were selected to minimize such impacts.
  4. An identification of unavoidable adverse impacts (if any) and the steps to be taken to minimize those impacts.
  5. Data on landscaping, including a vegetation map showing tree and ground cover existing on the site as compared with that proposed.
- d. Open Space Plan and Report. This submission shall include the following:
  1. An Open Space Plan. This shall consist of a map showing all areas of the site to be designated as open space and the designations of each area according to its potential use: active recreation, passive recreation or environmental protection. The map shall also show the size of each of the designated areas in acres and its percentage relationship to the site as a whole. It shall show all proposed buildings, facilities or other forms of development in such open space.
  2. An Open Space Report. This report shall include:
    - (a) An evaluation of the open space plan and how it relates to the township's standards for open space and how the plan is integrated into the overall development plan as well as its relationship to both the pedestrian and vehicular circulation plan and how it integrates those identified sensitive areas in the natural resources inventory.
    - (b) A statement relating the open space plan to any existing or proposed township open space and/or recreational facilities.
    - (c) A description of the form of organization proposed to own and maintain the common open space; a substantive representation of the master deed, where applicable; summaries of the substance of covenants relating to the open space itself and to the maintenance organization; and an estimated schedule of fees to be charged.
- e. Land Coverage and Drainage Plan Report. This submission shall include the following:
  1. All parts of the site which will be covered by paving, building roofs or other impervious cover. Each category shall be denoted on the map legend as to the number of acres involved and the percent of the total site it represents.
  2. All parts of the site in which tree cover shall be altered and, in the map legend, the acres to be altered and a notation as to the percentage this represents of the total treed area of the site.
  3. The subdrainage areas of the site and the points at which storm drainage leaves the site. This shall be performed for the site prior to as well as after improvement. The acreage of each area shall be noted in the map legend.
  4. All drainage improvements, including retention/detention ponds and basins, dams, major drainage swales, culverts and stormwater pipes in excess of six (6) inches in diameter.

5. A drainage impact evaluation defining the current stormwater discharge on the unimproved site by drainage area and for the total site for a one-hundred-(100) year storm of twenty-four-(24) hour duration, using Somerset County procedures; the acres in cover types (i.e., trees, lawn, impervious) after improvement; the stormwater discharge after improvements; the total increase in stormwater drainage for the total site, as well as for each of its subdrainage areas; and a description of all improvements proposed to control the additional stormwater discharge to meet the township's standards such that improvement of the land shall not increase peak runoff over that which presently exists. If alternate standards, methods and factors are utilized, they must be in addition to those required and shall include a clear, concise explanation in the report submitted.
- f. Erosion and Sedimentation Control Plan and Report. This submission shall include the following:
  1. Calculations of the estimated soil loss from the site in an unimproved state, and calculations of the estimated soil loss during construction based upon Soil Conservation Service data or alternate data acceptable to the board.
  2. A plan showing the general location of any structure or device that is intended to minimize soil erosion and control sedimentation.
  3. An Erosion and Sedimentation Control Report. This report shall include:
    - (a) A clear, concise explanation of structures, devices and techniques to be utilized during and after construction to minimize soil erosion and control sedimentation.
    - (b) An evaluation of the effectiveness of the proposals.
- g. Sewer and Water Plan and Report. This submission shall include the following:
  1. A Sewer and Water Plan. This shall consist of a map showing the proposed location of major collection and distribution lines serving the proposed development, how and where these lines will tie into existing sewer and water systems, or, the location of an on-site sewage disposal facility or water processing facility (if applicable).
  2. A Sewer and Water Report. This shall include:
    - (a) An explanation of plans to tie into existing sewer or water facilities and information on the status of efforts to have such tie-ins approved by the appropriate authorities; a description of any proposed sewage treatment and water processing facilities to be built on the site. Where a federal, state, county, or regional agency must approve any such facility before it can be built, a copy of the application to each such agency should also be submitted along with an outline of all approvals by nontownship agencies which are required for the erection and operation of such a plant.
    - (b) Calculations of water demands and sewage generation resulting from the proposed development.
    - (c) A statement of existing sewer and/or water systems to determine their capacity, documented by a letter from appropriate agency. This evaluation shall state the capacities, if any, of existing systems and relate these capacities to projected demands and generations to determine what, if any, adverse impacts are to be expected.
    - (d) If the projected sewage generation and/or water demand will exceed the identified capacities of the available systems, then a detailed report describing what improvements shall be implemented to provide the necessary sewerage and/or water for the project.
    - (e) If an independent, on-site, interim sewage treatment facility is proposed, then a description and analysis of the projected quality of the water discharged from the

system and an analysis of the impact of that discharge on any stream or underground aquifer likely to be affected by it, together with a description of how the applicable requirements of Article IV will be complied with.

- (f) Data and methods for calculating sewage generation and water demand for the capacity/demand evaluation.
- h. Circulation Plan and Traffic Report. This submission shall include the following:
  - 1. A Circulation Plan. This shall consist of a map showing streets, roads, parking areas and pedestrian/bicycle pathways. The cartway and right-of-way width for all streets, roads and pathways shall be shown on the map. The dimension and capacities of parking areas shall also be shown on the map. The map shall also show landscaped areas in or immediately adjacent to any part of the proposed circulation system.
  - 2. A Circulation and Traffic Report. This report shall include:
    - (a) An evaluation of the internal circulation plan and how it relates to the anticipated traffic volumes, how layout relates to the terrain, and any proposed deviation from the standards of this chapter.
    - (b) An evaluation of the external circulation systems and the impacts of the traffic to be generated by the proposed development.
    - (c) A designation as to what intersection(s) the generated traffic will affect. If traffic is projected to flow to more than one intersection, then a traffic study performed by a professional engineer, indicating the flows of the anticipated traffic to the multiple intersections shall be undertaken. This study shall clearly and concisely define the standards and methods utilized to document this analysis.
    - (d) Calculations of the number of motor vehicle trips expected to enter and leave the site for the peak hour (PHT) and on a daily basis (ADT), and the number of trucks.
    - (e) Calculation and analysis of the impact of the traffic to be generated by the development on the identified intersections.
    - (f) Data, methods and factors for calculating traffic generation for the capacity/demand evaluation.
    - (g) A description of the adverse impacts, and steps to be taken to minimize these impacts.
- i. Utilities Plan and Report. This submission shall include the following:
  - 1. A map showing any and all easements and lands subject to covenants for the purpose of providing natural gas, electricity, oil, telephone or CATV.
    - (a) A portion of the submission may be shown as a separate map or may be included as part of the sewer and water plan submission (paragraph g).
    - (b) A typical cross-section of the common utility easement and trench, if applicable, shall be shown on the utilities plan.
  - 2. A Utilities Report. This report shall include:
    - (a) Arrangements and written statements from each utility company or distribution service serving the area stating its ability to provide the service or commodity in the quantity necessary to adequately service the development.
    - (b) A written statement from all utilities willing to share a common easement.
- j. Development Schedule Plan. If project construction is extended over more than one year, a map showing the location of the first phase of the development and the anticipated location of each successive phase shall be submitted and shall include:
  - 1. The number by type of dwelling units and, where applicable, other uses, indicating gross leasable areas for each type of use in each phase.

2. The amount and location of open space.
  3. The location and type of community structures and facilities.
  4. The location of all public improvements or other improvements necessary to completely define the development plan.
- k. Variances and Exceptions. This report shall describe any exceptions requested from the regulations of Article V and any variances applied for from the requirements of Article IV of this chapter. For each exception or variance request, detailed substantiation shall be submitted.
- l. Easements and Covenants. This report shall contain the substance of any easements or covenants to be imposed upon the use of the land, structures or other improvements within the development which are not presented elsewhere in the application.
- m. Township Environmental Impact Assessment. The reports described in Paragraphs a through l may be submitted separately or as part of the township environmental impact assessment. The applicant is encouraged to submit each report as a separate chapter in the environmental impact assessment and, as a final chapter, present the information described in Subparagraphs 3 and 4 below. If this procedure is used, repetitious information described below may be deleted if no loss in clarity or continuity occurs.
1. The Board shall require for all development plans (other than a minor subdivision) that an environmental impact assessment be submitted as set forth in this article. This requirement shall also apply to all public or quasi-public projects unless such are exempt from the requirements of local law by supervening county, state or federal law. The Board may, at the request of the applicant, waive the foregoing requirement if sufficient evidence is submitted to support a conclusion that the proposed application will have a slight or negligible environmental impact. Portions of the foregoing requirement may also be waived upon a finding that a complete report need not be prepared in order to evaluate adequately the environmental impact of a particular application.
  2. Filing Requirements. The environmental impact assessment requirements of this chapter cover the most complex cases and the entire contents may not be applicable to less complex projects. Therefore, an outline with discussion shall be submitted to the Board prior to the preparation of an environmental impact assessment. The outline will address briefly the items described in subparagraphs 3 and 4 below and discuss which of these items are environmentally significant with regard to the proposed project. The discussion shall describe the depth of study for these items and how their environmental impacts will be evaluated. Additionally, those items upon which the proposed project will have insignificant or no environmental impact shall also be discussed with the request that such items need not be addressed in the environmental impact assessment.

The approval of the outline does not relieve the applicant from the responsibility for evaluating additional areas of potential environmental impact which may be revealed during the review of the environmental impact assessment, nor does it prevent the Board from requesting the inclusion of additional items as necessary at a later date.

An environmental impact assessment shall be submitted prior to the issuance of soil removal permits and prior to preliminary approval of all development plans but shall not be required for a minor subdivision.

3. Contents. The environmental impact assessment shall include the following:
  - (a) Plan and Description of the Development Plan. A description, complete with site plans, which shall specify the purpose of the proposed project, including products and services, if any, being provided, the regional, municipal and neighborhood setting, including buildings, roads, grading and regrading, adjacent natural streams and utility lines.
  - (b) Inventory of Existing Natural Resources. An inventory of existing natural resources at the site and in the affected region which shall describe air quality, water quality, geological character, soil characteristics, land form, hydrological features, wildlife, aquatic organisms, noise characteristics and levels, land use, history and archaeology. The inventory shall be referenced to applicable subject matter in the township Natural Resources Inventory. Air and water quality shall be described with reference to standards promulgated by the Department of Environmental Protection of the State of New Jersey and soils shall be described with reference to the Somerset County Soil Survey and the criteria contained in the Somerset-Union Soil Conservation District Standards and Specifications.
  - (c) Assessment of Environmental Impact. An assessment supported by environmental data of the environmental impact of the project upon the factors described in Subparagraph 3(b) above. It shall also include an evaluation of: water use and depletion; the effects of projected liquid and solid wastes on quality and quantity of surface and ground water; air quality; traffic; and aquatic and terrestrial wildlife. The assessment shall also include an evaluation of the loss of open space and the social and economic effects on the community, including schools, parks, roads, police, fire, etc.
  - (d) Unavoidable Adverse Environmental Impacts. A discussion of any adverse environmental impacts and damages to natural resources which cannot be avoided with particular emphasis upon: air or water pollution; damage to plants, trees or wildlife systems; displacement of existing farms; and increase in sedimentation and siltation.
  - (e) Steps to Minimize Environmental Damage. A description of steps to be taken to minimize adverse environmental impacts during construction, operation and completion both at the project site and in the affected region. Such description is to be accompanied by necessary maps, schedules and other explanatory data as may be needed to clarify and explain the actions to be taken.
  - (f) Alternatives. A discussion of alternatives to the proposed project which might avoid some or all of the adverse environmental effects. The discussion should include the reasons for the acceptability or nonacceptability of each alternative.
4. Details and Matters to Be Evaluated.
  - (a) Sewerage Facilities. A description of the sewerage facilities that will be utilized including the following:
    - (1) If disposal is to be on-site: data on underlying geology, water table, depth to bedrock, soils analysis and soil stratification for every sewage disposal site; topography, location and depth of aquifers and depth, capacity, type of construction and location of all wells which have been recorded or can be obtained from interviews with adjacent property owners within 500 feet of the

site; soil logs and percolation tests for each disposal site as witnessed by the Health Officer; and any other pertinent data.

- (2) If sewage disposal will utilize an interim on-site treatment facility: documentation as to methodology, quality of effluent and status of approvals in addition to the data.
  - (3) If disposal is to be off-site: projected sewage discharges stated in average daily flows (gallons per day) for the initial phase of development and five-year projections of same for each of the following land use categories: residential discharges and industrial/commercial discharges. Industrial/commercial discharges shall be described as follows: type of process; projected daily flows; physical characteristics, including temperature; biological characteristics; and chemical characteristics, including description of toxic components.
  - (4) If treatment is to be by public facility: name of public facility, point of connection and description of interconnecting facilities.
  - (5) If project is to include treatment facilities discharging into a stream or watercourse in the township: location of treatment facilities; receiving stream and data on stream classification; water quality; seven day low flow at ten-year frequency; description of treatment facilities and proposed effluent quality; and evaluation of initial and future deleterious effects on use of stream for water supply, recreation and aquatic and terrestrial wildlife. Evaluation shall include projected effects of nutrients on downstream ponds and lakes.
  - (6) Compliance with all state and local health requirements.
- (b) Water Supply. A description of the water supply that will be utilized, including the following:
- (1) If supply is from on-site sources: location of water supply source(s); description of water supply facilities, including type, depth and pumping rates; location and depth of all private and public water supplies and septic systems within 500 feet of the proposed water sources; and geologic evaluation of subsurface conditions, including statements on the following:

Long-term evaluation of the adequacy of the supply to serve the project (in terms of both quantity and quality);

Evaluation of possible interference with existing private and public water supplies within the same aquifer, and

Evaluation of water table conditions and aquifer recharge capability.

- (2) If supply is from public facilities off-site: name of public facility; point(s) of interconnection and description of interconnecting facilities; pressure requirements; and projected water usage stated in average daily usage (gallons per day), peak daily usage (gallons per day) and peak hourly usage (gallons per hour). Water usage shall also be projected for the initial phase of development and for five- and ten-year periods for each of the following:

Residential usage (excluding lawn sprinkling);

Lawn sprinkling irrigation;

Industrial/commercial usage (to include discharge to treatment facilities, discharge to streams without treatment and other uses); and

Fire protection requirements.

- (3) Compliance with all state (including Department of Environmental Protection, Division of Water Resources) requirements and local health regulations.
- (c) Stormwater. The following data and documentation:
  - (1) Peak rates and volumes of stormwater runoff from the undeveloped site and projected to be generated by the site after the proposed development including rates for ten- , fifteen- , twenty-five- , fifty- and one-hundred-year storm frequencies using Somerset County procedures.
  - (2) Changes in peak rates and volumes of stormwater runoff and runoff coefficients expected to be caused by changes in land use and whether or not there will be any increased incidence of flooding caused by increased stormwater runoff due to the proposed project.
  - (3) Submission of plans showing the disposition of stormwater and attempts to delay the time of concentration by the use of detention basins or other acceptable methods.
  - (4) Submission of an erosion and sediment control plan in accordance with the requirements of Article IV.
- (d) Stream Encroachments. Evidence that a stream encroachment permit from the New Jersey Department of Environmental Protection, Division of Water Resources, for fill or diversion of a water channel, alteration of a stream, repair or construction of a bridge, culvert, reservoir, dam, wall, pipeline or cable crossing has been applied for and/or obtained, if applicable.
- (e) Floodplains. Description of potential flood damage, including a summary of flood stages from the Flood Maps (see Subsection 21-14.3.).
- (f) Solid Waste Disposal. A plan for disposal by means of a facility operating in compliance with federal, state, regional, county and local requirements.
- (g) Air Pollution. A description of any changes in air quality to be produced by the proposed development, including the amounts or degree of smoke, heat, odor or substances to be created and added to the atmosphere by heating, incineration and processing operations.
- (h) Traffic. A determination of the present traffic volumes and capacities of the road(s) serving the project and the nearest major intersections, and the projected impacts of the completed project on them. Also, a determination of any additional air pollution and noise to be caused by traffic from the completed project.
- (i) Social/Economic. Analysis is of the factors affecting the finances of the township, including the estimated changes in tax receipts and fiscal outlay for municipal services; the estimated number and types of jobs to be provided; the number of school-age children to be produced; and any addition to existing municipal services which will be required by the project.



- (j) Aesthetics. A discussion of how the natural or present character of the area will be changed as a result of the proposed action.
- (k) Licenses, permits, etc. A list of all licenses, permits and other approvals required by municipal, county or state law and the status of each.
- (l) A copy of the development plan and application form.