

as existing stone walls, fences, buildings, large trees, rock ridges and ledge, swamps, historic features and wooded areas.

- k. Whenever applicable and in a general manner, the proposed and existing storm drainage (curbs, gutters, and pipes or sheet flow), sanitary disposal (septic systems, decentralized systems or package plants) and water (springs, individual wells or community) systems.
  - l. A sketch of the applicant's and other parcels of contiguous un-subdivided land, showing possible or contemplated development and street layout, if applicable.
  - m. When multiple sheets are necessary, match lines showing where two sheets come together shall be used and referenced and an index plan graphically indicating the arrangement of said multiple sheets shall be provided.
  - n. A locus or location plan(s) at 1"=500' or greater showing the subdivision on an orthophoto base and its location to the surrounding roadways and physical features and drainage boundaries for watersheds and streams. The plan shall show the ownership and house number of all surrounding parcels of land.
- 4. The applicant shall request, in writing to the Planning Board, any proposed waivers of subdivision requirements.
  - 5. Six copies of a completed Preliminary Plan Application and such other supporting information as is necessary to review the application.
  - 6. The appropriate fee (see Administration and Fees)

The Planning Board may give such Preliminary Plan its approval, with or without modification and conditions. Such approval does not constitute approval of a subdivision.

## **Section 6. Definitive Plan Submission**

**Overview:** A Definitive Plan shall be governed by the Subdivision Regulations in effect at the time of submission of such plan, or in effect at the time of submission of a Preliminary Plan, provided that a Definitive Plan evolved therefrom shall have been submitted to the Planning Board within seven (7) months from the date of submission of the Preliminary Plan. A Definitive Plan shall also be governed by and be consistent with the zoning in effect at the time of submission of such plan or at the time of submission of a Preliminary Plan from which a Definitive Plan is evolved, in accordance with the appropriate provisions of Chapter 40A of the General Laws, as amended.

The applicant shall submit a Definitive Plan application to the Planning Board by filing at a Planning Board meeting or, by delivery or certified mail with the Town Clerk.

Said Definitive Plan submittal shall include:

- 1. Documentation that the applicant filed two copies of the complete application with the Tyringham Board of Health, the Tyringham Conservation Commission, the Board of Selectmen, and the Road Superintendent.
- 2. Receipts showing that the applicant mailed, by certified mail, a notice of the proposed subdivision containing a locus map of the project to every abutter within 300 feet of the proposed subdivision.

3. All master deeds, restrictive covenants, deed restrictions, deeds for shared land, detention pond, open space, and recreation areas, and homeowners association documents and all easements. A homeowners association must be established to maintain streets and infrastructure until and unless the streets are accepted by the municipality.
4. Six copies of the Definitive Plan on 24" by 36" paper at a scale of 1"= 40' or greater and every sheet shall bear the seal of a Massachusetts Registered Land Surveyor and/or a Registered Professional Engineer as appropriate. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision, and all plans, layouts, profiles, cross sections and application shall be deemed to constitute the Definitive Plan. The Definitive Plan shall contain the information below. Sufficient sheets shall be used to ensure that the plans are all easily readable. At least one of these prints shall have the significant features **illustrated in color** to clearly show roads, streams and water-bodies, wetlands, one hundred year floodplains, dedicated open space and recreation, pedestrian and bicycle paths, and subdivision boundaries.
  - a. The plans shall include the property owner, and project applicant, the coordinate north arrow, date, scale, legend, the title block, "Definitive Plan, Town of Tyringham, {Subdivision Name}", and certification by the Surveyor that all surveying conforms to the technical standards for property surveyors.
  - b. Names, addresses and plan location of all subdivision property owners, applicants, immediate abutters, abutters within 200 feet of any portion of the subdivision, and abutters separated from the subdivision only by a street.
  - c. Existing and proposed lines of streets, lots, rights-of-way, easements, and any public or common areas within the subdivision
  - d. Location, names and present widths of streets bounding, approaching, or within reasonable proximity of the subdivision.
  - e. Location of wetlands, perennial and intermittent streams, certified vernal pools, potential vernal pools (as identified on maps prepared by MassGIS), certified and potential vernal pool upland habitat areas, waterways and water bodies within 300 feet of the subdivision. The plans shall note whether the streams shown are perennial or intermittent, how that determination was made, and whether the Conservation Commission has approved the determination.
  - f. Location of all storm drainage lines and drainage discharges within 200 feet of a brook, stream, or drainage area, a profile will be shown of the brook, stream, or drainage area to determine condition, and proposed method of stabilization.
  - g. An erosion and sedimentation control plan designed to ensure, mitigate and prevent erosion/sedimentation of disturbed areas during and after construction activities. The plan shall show, in detail, what and when such measures will be implemented, on both a temporary and permanent basis, including land disturbances for house construction.
  - h. Major site features, such as existing stone walls, fences, buildings, large trees, rock ridges and ledge, swamps, flood plains as identified on the Federal Insurance Rate Maps and other flood plains identified by a professional engineer, historic features, and wooded areas on and within 100 feet of the proposed subdivision. The plan shall identify which of the above shall remain undisturbed.

- i. Sign-off from the Massachusetts Historical Commission and the Tyringham Historical Commission that there are no known archaeological sites on the property. For sites within 200 feet of a river or perennial stream and for sites without the above sign-off, a study by a qualified archaeologist to determine if any mitigation is required to avoid damaging such sites.
- j. Using metes and bounds and standard surveying, including lengths, bearings, and curve data to determine the exact location, direction and length of every street and way line, easement, lot line and boundary line, and to establish these lines on the ground. All surveys must tie to the Massachusetts State Plane coordinate System (NAD 1983 Datum), using said published control points or the global positioning system. Boundary lines, areas in square feet, and dimensions of all proposed lots, with all lots designated numerically and in sequence.
- k. All easements must be clearly shown on the subdivision plans and their purpose shall be clearly stated. All water and sewer utilities easements shall be a minimum of thirty (30) feet in width. Utilities shall be located as close as possible to the center line of the easement.
- l. Location of all permanent monuments and control points identified as to whether existing or proposed, and identified according to the Massachusetts State Plane coordinate system (NAD 1983 Datum). At least two permanent concrete or granite monuments must be placed on site and shown in the plans prior to construction. Bounds are required at all intersections of street lines, angle points and changes of curvature of street lines. All control points shall be tied to and employ NAVD 1988 AND the Massachusetts State Plane Coordinate System (NAD 1983 Horizontal Datum), with horizontal control using said published control points or the global positioning system (with horizontal coordinates provided in metric). Vertical benchmarks separate from horizontal control points may be provided, provided these points are also tied to permanent concrete or granite monuments.
- m. Proposed names of roads or ways as well as all information described under the definition of the Definitive Plan. Street names may not be similar to any other streets within Tyringham.
- n. Construction level details of all roads and associated utilities and improvements.
- o. The names and addresses of the owners of record, the applicant and the names, addresses and professional seals of the registered Professional Engineer and Land Surveyor.
- p. Location of all structures on and within 100 feet of the proposed subdivision.
- q. The existing and proposed topography (sufficiently differentiated) with two (2) foot contour intervals for the entire parcel, unless the Planning Board agrees that the natural surface of the ground may be adequately represented by contours with larger intervals or by figures of elevation. (The existing and proposed topographical information presented shall be sufficient to define the grading of each proposed lot and street.) Datum to be NAVD 1988 or later.

- r. When multiple sheets are necessary, match lines showing where two sheets come together shall be used and referenced and an index plan graphically indicating the arrangement of said multiple sheets shall be provided.
  - s. A locus or location plan(s) at 1"=500' or greater showing the subdivision on an orthophoto base and its location to the surrounding roadways and physical features and drainage boundaries for watersheds and streams. The plan shall show the ownership and house number of all surrounding parcels of land.
  - t. A sketch plan showing a possible prospective street layout for any adjacent un-subdivided land owned or controlled by the owner or applicant of the subdivision and also showing topography, unless such a plan has already been submitted to the Planning Board.
- 5. The applicant shall request, in writing to the Planning Board, any proposed waivers of subdivision requirements.
- 6. Six copies of a completed Definitive Plan Application and such other supporting information as is necessary to review the application.
- 7. The appropriate fee (see Administration and Fees)
- 8. A plan and a report providing details of sewage disposal and treatment systems, including the results of all percolation and soil tests for individual lots and/or for any community or shared system, and any water supplies and wells within 200' of the property line. The report shall include all information required under the Department of Environmental Protection's Title 5 regulations and local health and septic regulations, if any. A registered Professional Engineer or sanitarian must stamp the plans and the results.
- 9. Suitable space to record the action of the Planning Board and the signatures of the members of the Planning Board on each sheet of the Definitive Plan and reference to separate certificate by municipal clerk.
- 10. A separate plan showing street layout, horizontal scale 1" = 40', for each street in the subdivision showing exterior lines, roadway lines, partial lot lines, curb lines, intersection angles (the angles formed by the intersection of two roads, and the centerline), points of tangency, and radii of curves. Also included on the street layout plan shall be location, size, type of construction, elevations and invert (elevation of the entry to a pipe), whenever applicable, of all pipes and conduits of the following utilities if applicable:
  - a. Water Supply System, if a community water system is used, including pumps, valves, stubs (which extend water service beyond the edge of the asphalt), gates, hydrants, and similar equipment;
  - b. Storm Drainage System, including manholes, pipes, culverts, catch basins, detention ponds (stormwater storage ponds), and appurtenant structures;
  - c. Sanitary Sewerage System, if a community system is used, including piping, manholes, pumps, community septic tanks, and appurtenant equipment;
- 11. A Profile Plan on the same sheet located directly below and coordinated with the street layout plan, indicating existing profiles on the exterior and center lines (using light weight lines) and proposed profile on the center line (using heavy weight lines) of each proposed street, at a horizontal scale of 1" = 40' and a vertical scale of 1" =4'. All elevations shall refer to NAVD 1988 datum. Profiles shall show existing and proposed street grades, rates of gradient on percentages, ground and proposed elevations at center line of each fifty (50) foot station, and grades of intersection streets and ways shall be clearly indicated. The Profile Plan shall show location of existing and proposed water, drainage and sanitary sewer lines,

- slopes and types (material and class) of all storm and sanitary sewer lines, invert, manhole rim elevations and station of each manhole or catch basin.
12. A typical cross section for the full width of the proposed right-of-way shall be shown in accordance with the standards of these Rules and Regulations showing foundation material, wearing surface, crown (or high point) and width of traveled way, curbing, grass strips, sidewalks, utility locations, etc.
  13. Construction details for catch basins, manholes, end-walls, head-walls, rip-rap, and energy dissipaters, detention ponds, gabion structures, level lip spreaders, etc.
  14. Every plan shall have at least four points on each sheet accurate within a centimeter, as certified by a surveyor, tied into the Massachusetts State Plane Coordinate System (NAD 1983 datum), using said published control points or the global positioning system. The plan must note the coordinates, in metric, of the four tie-in points, the datum, and the source and location of monuments used for data.
  15. A table listing lot numbers with the corresponding lot size and street frontage for every lot.
  16. Locations of borings shall be shown on the plan with a numbering system corresponding to boring logs which will be submitted as part of the application. The purpose of borings is to assist the developer and the project's engineer in designing an appropriate roadway and related utilities based on existing water table and subsurface soil conditions (i.e., a clay subsurface might necessitate extra excavation and extra depth for gravel base; a water table near ground surface might necessitate the installation of sub-drains (to drain the groundwater) along the edge of the road, etc.). The actual location at which each boring is made shall be shown on the plans. The borings shall be certified by a Massachusetts Professional Engineer. Boring or test pits used for the purpose of design detention facilities must include estimates of high groundwater based on mottles and hydromorphic features, which generally requires test pits witnessed by a qualified soil scientist. Test pits may be used instead of borings except when borings are required for any geotechnical (structural) reasons.
  17. Hydrology Study and Drainage Calculation. The applicant shall submit drainage calculations, including rational method and TR-55 or TR-20, showing (a) that any proposed drainage system has been designed according to the standards set forth in these rules; and (b) any impact said drainage system would have on existing drainage systems downstream from the proposed point of discharge.
  18. Sanitary Sewer Study, if a community system is used. The applicant shall submit calculations showing (a) that any proposed sanitary sewer system or community disposal system has been designed according to the standards set forth in these rules; and (b) any impact said sanitary system would have on existing sanitary systems downstream from the proposed point of discharge.
  19. Water Study, if a community system is used. The applicant shall submit a study certified by a professional engineer with demonstrated qualifications as a water consultant, showing that the proposed water system would provide the development with adequate potable water to meet building code requirements.
  20. Fire Water Availability. The applicant shall demonstrate that sufficient water exists to address fire needs. Any subdivision where the homes are sprinkled with a minimum of a sixty gallon basement cistern feeding the sprinklers will be assumed to meet this standard. In the alternative, a project may demonstrate that there will be adequate fire ponds or access to natural water bodies in a manner acceptable to the fire chief and meeting national standards.

21. Any supplemental materials submitted by the developer after the original submission must provide the number of copies and the format required for the original submittal. The Planning Board may elect not to consider such revised plans or other additional materials if such plans/materials are not filed at least fourteen days prior to the date of the Public Hearing or meeting at which the developer wishes them to be considered. This is to ensure adequate time for review.
22. Lighting System, if used: Outdoor lighting is not required. If used, any lighting system should comply with the recommendations of the International Dark-Sky Association, whose goal is "To preserve and protect the nighttime environment and our heritage of dark skies through quality outdoor lighting." All street lights must be 50-watt high pressure sodium or more energy efficient models. All street lights must contain full cutoffs (hoods covering the sides of the lamps) to avoid any direct lighting off of streets and sidewalks. Maximum foot candles of any light shall be 1 foot candle.

### Impact Statement

Any land subdivision plan consisting of ten (10) or more lots must be accompanied by an impact statement which details the probable effects of the proposed subdivision on the following aspects of concern to the Town:

1. Public Works costs: Additional costs for future plowing, sanding, and sweeping per lane mile (using current costs per lane mile) plus catch basin cleaning (using current costs per catch basin).
2. Municipal service costs: Estimates of costs base on existing average cost per resident for police, fire, libraries, recreation, and schools.
3. Environmental impacts: Impacts on wetlands, floodplains, open space, archeological features, wildlife, water quality, and water supplies.
4. Schools enrollment projections: For future planning for school enrollment, assume 0.7 school-age-children per housing unit.
5. Analysis of traffic on all subdivision streets and surrounding streets: Assume 10 average daily trips per single family home, other than age restricted dwellings.

### **Section 7. Definitive Plan Approval and Recording**

**Plan Approval by Board of Health:** The Board of Health shall report to the Planning Board in writing approval or disapproval of said plan, and in the event of disapproval shall make specific findings as to which, if any of the lots shown on such plan cannot be used for building sites without injury to the public health and include such specific findings and the reasons therefore in such report, and where possible, shall make recommendations for the adjustment thereof. If a municipal sewerage system will serve the proposed subdivision, then failure of the Board of Health to make such a report within forty-five days after the plan is filed with their office shall be deemed approval by such board. A copy of the report, if any, shall be sent by such board to the applicant.

1. Every lot not serviced by a municipal water supply and sewage disposal systems shall be provided with water supply and sewage disposal installations in compliance with the provisions of the State Environmental Code and Board of Health Regulations.
2. The Board of Health may approve the plan on condition that prior to the issuance of a building permit for a dwelling on any lot, soil and percolation tests be made in accordance