

RULES AND REGULATIONS
GOVERNING THE SUBDIVISION OF LAND
IN THE
TOWN OF PALMER, MASSACHUSETTS

Approved by the Planning Board
of the Town of Palmer

on
March 29, 1993

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(Adopted under the Subdivision Control Law Sections 81-K to 81-GG inclusive, Chapter 41, G.L.)

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SECTION 1.00

TITLE, PURPOSE AND AUTHORITY

1.01 Title

These rules and regulations of the Palmer Planning Board shall be known and may be cited as the “Rules and Regulations Governing the Subdivision of Land, Town of Palmer,

Massachusetts”, which herein are called “These Rules and Regulations”.

1.02 Purpose

The Rules and Regulations governing the subdivision of land, Town of Palmer, Massachusetts, have been enacted for the purpose of protecting the safety, convenience and welfare of the inhabitants of Palmer by regulating the laying out and construction of ways in subdivisions providing access to the several lots therein, but which have not become public ways, and ensuring sanitary conditions in subdivisions, and in proper cases, parks and open areas. The powers of the Planning Board and the Board of Appeals under these Rules and Regulations shall be exercised with due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in the adjacent public ways; for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic, and other emergencies; for ensuring compliance with the Palmer Zoning By-Law(s); for securing adequate provision for water, sewerage, drainage, underground utility services, fire, police, street lighting and other similar municipal equipment, and other requirements where necessary in a subdivision; and for coordinating the ways in a subdivision with each other and with the public ways in the Town and with the ways in neighboring subdivisions. It is the intent of these Rules and Regulations that any subdivision plan filed with the Planning Board shall receive the approval of such Board if said plan conforms to the recommendation of the Board of Health and to these Rules and Regulations: provided, however that the Planning Board may, when appropriate, waive, as provided for in Section 3.02, such portions of these Rules and Regulations as is deemed advisable.

1.03 Authority

Under the authority vested in the Planning Board of the Town of Palmer by Section 81-Q of Chapter 41 of the General Laws of Massachusetts, said Board hereby adopts these Rules and Regulations governing the subdivision of land in the Town of Palmer.

SECTION 2.00

DEFINITIONS

In construing these Rules and Regulations, the definitions in Section 81-L of Chapter 41 of the General Laws shall apply (unless a contrary intention clearly appears). In addition, the following words shall have the following meanings:

2.01 Applicant, Developer, Subdivider

The person who applies for the approval of a Plan of a proposed subdivision. The applicant or applicants must be the owner or owners of all the land included in the proposed subdivision. An agent, representative or his/her assigns may act for an owner, provided a properly executed power of attorney (or other written evidence acceptable to the Board) is submitted. In the case of a general or limited partnership, all general partners must join in the application and must submit documentation of the legal existence of the partnership and/or

real estate trust and its authority to do business in Massachusetts. An attorney acting on behalf of an applicant shall be licensed to practice law in Massachusetts and shall submit a written statement of representation.

2.02 Board or Planning Board

The Planning Board of the Town of Palmer, Massachusetts.

2.03 Building

A dwelling, shed, garage, or other structure, not to be interpreted as a sewer, water or other utility line.

2.04 Certified by (or Endorsed by) a Planning Board

As applied to a plan or other instrument required or authorized by the Subdivision Control Law to be recorded shall mean bearing a certification or endorsement, following approval at a legal Board meeting, signed by a majority of the members of the Planning Board or any other person authorized by the Board to certify or endorse its approval or other action and amend in a written statement to the Register of Deeds and Recorder of the Land Court.

2.05 Collector Street

Street which receives and distributes traffic from and to various sub-areas within a given region, and receives traffic from a given residential neighborhood or industrial area and carries it to an arterial highway. These roads run through developed areas or connect concentrations of development and carry significant volumes of traffic.

2.06 Consultants or Consulting Services

Includes, but is not limited to, architects, biologists and other environmental experts, chemists, engineers, geologists, landscape architects, planners, lawyers, sanitarians, and surveyors.

2.07 Definitive Plan

A map of a proposed subdivision, three acetate overlays, a Development Impact Statement, together with all other forms, documents, drawings, information filing fees, and reimbursement payments required by these Rules and Regulations, submitted to the Planning Board for its approval.

2.08 Development Impact Statement (DIS)

A documented, written analysis of a proposed subdivision which contains all information provided by Section 8.00 of these Rules and Regulations, and which provides the Planning Board and its agents or consultants with information necessary for plan review. The DIS is prepared by the applicant.

2.09 Engineer

Any person who is registered or otherwise legally authorized by the State of Massachusetts to perform professional civil engineering services.

2.10 Local Street

Street which primarily provides access to adjacent land uses.

2.11 Owner

The owner of record as shown by the records in the Hampden County Registry of Deeds or Land Court.

2.12 Preliminary Plan

A plan of a subdivision submitted by the applicant showing sufficient information to form a clear basis for discussion and clarification of its general contents and for the preparation of a definitive plan.

2.13 Streets

1. Major Street - a street which, in the opinion of the Board, is likely to carry substantial volumes of through traffic.
2. Secondary Street - a street other than a major street which, in the opinion of the Board, is likely to carry traffic other than just to or from lots on that street.
3. Minor Street - a street which, in the opinion of the Board, is likely to be used only by vehicles traveling to or from lots on that street.
4. Dead End Street/Cul-de Sac - a public or private vehicular right of way which affords the principal means of access to abutting property and which joins another thoroughfare at only one end. Any such thoroughfare, which joins or intersects a dead end street/cul-de-sac, shall have adequate access at both ends from a Town, County, or State public way adjacent to the subdivision.

2.14 State Construction Standards, Massachusetts DPW Construction Standards

These specifications are published by the Massachusetts Department of Public Works. They are entitled Standard Specifications for Highways and Bridges, and include all supplements, updates, revisions or future editions covering substantially the same subject matter. All matters left open or undetermined by these specifications shall be specified by the Board on a case-by-case basis.

2.15 Subdivision

“Subdivision” shall mean the division of a tract of land into two or more lots and shall include re-subdivision, and when appropriate to the context, shall relate to the process of subdivision of the land or territory subdivided.

The division of a tract of land into two or more lots shall not be deemed to constitute a subdivision within the meaning of the Subdivision Control Law under any of the following conditions:

1. At the time the subdivision is made, every lot within the tract so divided has frontage on:
 - a. a public way or a way which the Clerk of the Town of Palmer certifies is maintained and used as a public way; or
 - b. a way shown on a plan previously approved and endorsed in accordance with the Subdivision Control Law; or
 - c. a way in existence when the Subdivision Control Law became effective, in the Town of Palmer having, in the opinion of the Planning Board, sufficient width, suitable grades and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon. Such frontage shall be of at least such distance as is then required by the Zoning Ordinances of the Town of Palmer for erection of a building on such lot, and if no distance is so required, such frontage shall be of at least fifty (50) feet.
2. Conveyances or other instrument adding to, taking away from, or changing the size and shape of, lots in such a manner as not to leave any lot so affected without the frontage above set forth.
3. The division of a tract of land on which two or more buildings were standing when the Subdivision Control Law went into effect in the Town of Palmer in which land lies, into separate lots on each of which one of such buildings remains standing.

2.16 Subdivision, Type I.

A subdivision for residential purposes other than apartments or condominium developments.

2.17 Subdivision, Type II.

A subdivision for apartments, condominiums, business or industrial purposes.

2.18 Subdivision Control Law

Refer's to Sections 81-K to 81-GG, inclusive of Chapter 41, of the General Laws of the Commonwealth of Massachusetts entitled "Subdivision Control", as last amended.

2.19 Surveyor

Any person who is registered or otherwise legally authorized by the Commonwealth of Massachusetts to perform land-surveying services.

2.20 Way

A right of way or means of access to a lot. A public way is a way which has been accepted by, and the land owned by, the Town of Palmer or by other means created as a public street. Any other way (private way) is a way over land which is owned by a private party, but which is set forth by deed covenant, deed description, or other means as a private way.

SECTION 3.00

GENERAL

3.01 Limitation of One-Dwelling on Any Lot

Not more than one building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision, or elsewhere in the Town of Palmer without the consent of the Board. Such consent may be conditional upon the providing of adequate ways of furnishing access to each site for

3.02 Waiver of Compliance

The Planning Board may, in special and appropriate cases, waive strict compliance with such portions of these Rules and Regulations, as provided for in Section 81-R, Chapter 41, of the General Laws, where such section is in the public interest and not inconsistent with the purpose and intent of the Subdivision Control Law.

A request, with justification, for a waiver of a requirement, rule, or regulation shall be made in writing by the applicant at the time of first submission.

If the Planning Board approves the request for a waiver, it shall endorse conditions of such waiver (if any) on the plan or set them forth in a separate instrument attached conditions.

3.03 Amendments

These Rules and Regulations or any portion thereof may be amended from time to time in accordance with Section 81-Q of the Subdivision Control Law.

3.04 Validity

The invalidity of any section, paragraph, clause or provision of these Rules and Regulations shall not invalidate any other section, paragraph, clause or provision therein.

3.05 Coordination with Municipal Departments and Other Agencies

In the Town of Palmer certain services are provided to subdivisions under the jurisdiction of various Town departments and other quasi-public agencies. Compliance with the applicable regulations and requirements of these agencies and departments shall be required before a Definitive Plan is approved by the Planning Board, at a regularly scheduled meeting, and

certification and installation of respective utilities shall be required before the performance guarantee can be reduced or released.

3.06 Forming a Subdivision

No person shall make a subdivision within the meaning of the Subdivision Control Law of any land within the Town, or proceed with the improvement or sale of lots in a subdivision, or the construction of ways, or the installation of municipal services therein, unless and until a Definitive Plan of such subdivision has been submitted to, approved and endorsed by, the Board as hereinafter provided, and recorded at the Hampden County Registry of Deeds.

3.07 Effect of Prior Recording of Subdivision of Land

The recording of a plan of land within the Town in the Registry of Deeds of Hampden County prior to the effective date of the Subdivision Control Law in the Town of Palmer, showing the division thereof into existing or proposed lots, sites or other divisions and ways furnishing access thereto, shall not exempt such land from the application and operation of these Rules and Regulations, except as specifically exempt by Section 81-FF of the Subdivision Control Law.

3.08 Compliance with Zoning Ordinance

No plan of a subdivision shall be approved unless all of the building lots shown on the plan comply with the Zoning By-Laws of the Town of Palmer, Massachusetts.

3.09 Requirements for More Stringent Standards

The Planning Board may, in special and appropriate cases, require the developer to follow more stringent standards than the ones mentioned in these Rules and Regulations. In doing so, the Board shall notify the developer in writing of said standards and the reason they are required.

3.10 Engineering

The Preliminary and Definitive Plans shall be prepared by a Registered Land Surveyor and construction details shall be designed by a Registered Professional Engineer.

SECTION 4.00

PROCEDURE FOR SUBMISSION AND ENDORSEMENT OF NON-SUBDIVISION PLANS (PLANS BELIEVED NOT TO REQUIRE APPROVAL)

4.01 General

Any person who wishes to cause to be recorded in the Registry of Deeds or to be filed with the Land Court a plan of land in the Town of Palmer, who believes that his plan does not require approval under the Subdivision Control Law, may submit his plan as hereinafter provided, to the Planning Board for such determination.

4.02 Submission

The applicant shall submit to the Planning Board the original drawing and four (4) prints of the plans accompanied by four (4) copies of a completed application Form A (see Appendix A, Forms), together with any necessary evidence to show that the plan does not require approval, and required filing fee (see Appendix B).

Said plan shall also include a location plan, at the scale of the Palmer Assessor's Maps, of the parcels shown on said plan, accurately showing their relation to one or more existing town streets.

The applicant, may submit a non-subdivision plan to the Planning Board, or by registered mail, postage paid, with the Town Clerk, stating the date of submission for such determination.

In addition, the applicant shall provide written notice to the Town Clerk by personal delivery in hand or by registered mail, of submission to the Planning Board of the items specified above. If the notice is given by delivery, the Clerk shall, if requested, give a written receipt therefore to the person who delivered such notice.

Receipt by the Planning Board, or date of mailing of such notice, plans and necessary documentation as may be required in these Rules and Regulations shall constitute the effective date of submission.

4.03 Approval/Disapproval

If the Board determines that the plan does not require approval, it shall within twenty-one (21) days and without public hearing endorse on the plan the words "Planning Board Approval under the Subdivision Control Law Not Required". Said endorsement shall be signed by a majority of the Planning Board. If the Board determines that the plan does require approval under the Subdivision Control Law, it shall within twenty-one (21) days of submission of said plan so inform the applicant and return the reproducible original of the plan. The Board shall give written notice of its determination to the Town Clerk.

Before the Board makes its determination, it shall review or have a consultant review the correctness of all street information and compliance with the Palmer Zoning By-Laws. If, in the judgment of the Board, consulting services are necessary or appropriate, the applicant

shall reimburse the Town for the full cost of such services prior to the endorsement of the plan. Where the physical condition or width of a public way, from which the lots shown on the plan have their access, is considered by the Board to be inadequate either to provide for emergency services or to carry the traffic which is expected, in the opinion of the Board, to be generated by such lots, the Board shall determine that the plan does require approval under the Subdivision Control Law.

If the Board fails to act upon a plan submitted under this section or fails to notify the Town Clerk and the applicant of its action within twenty-one (21) days after its submission, it shall be deemed to have determined that approval under the Subdivision Control Law is not required.

SECTION 5.00

PROCEDURES FOR THE SUBMISSION OF PRELIMINARY PLANS

5.01 General

A Preliminary Plan of a subdivision may be submitted by the applicant to the Planning Board for discussion and approval by the Board. The submission of such a Preliminary Plan will enable the subdivider, the board, and other municipal agencies to discuss and clarify the problems of such subdivision before a Definitive Plan is prepared. The degree of review and effectiveness of the Board's comments shall be in direct proportion to the accuracy and amount of information provided by the applicant on the Preliminary Plan.

Prior to submission of the Preliminary Plan to the Planning Board for approval, the subdivider should discuss the Plan with the Board of Health, Board of Selectmen, Conservation Commission, School Committee, Fire Department, Police Department, and Highway Department to obtain their recommendations. These recommendations should be transmitted to the Board by the respective agencies. These recommendations may be incorporated in the Preliminary Plan with any changes and additions suggested by the Board.

The centerline of proposed roadway and all property lot lines shall be adequately and accurately staked or flagged on the site sufficient for identification by the Board members and Town officials, when site visits are made.

5.02 Submission

The plan shall be submitted by delivery at a regular or special meeting of the Board, or by delivery by registered mail to the Board in care of the Town Clerk. If so mailed, the date of mailing (postmark) shall be the date of submission of the plan. In addition, written notice (see Appendix A, Form B) shall be filed by delivery or registered mail with the Town Clerk stating the date of submission of the plan. The Town Clerk shall give a written receipt, if requested, to the person who delivered such notice. The applicant shall submit ten (10) prints (dark line on white background) of the Preliminary Plan and a Form B to the Board, together with all other information and documentation, as required in these Rules and Regulations. The Board shall file one (1) print with the Board of Health, one (1) print with the Chief of the Fire Department, one (1) print with the Conservation Commission, one (1) print with the Water

Supply Protection Committee, one (1) print with the Police Chief, and one (1) print with the Highway Department. The Board may decide to forward said plans to other Town agencies and/or departments for their review, thus additional prints may be requested from the applicant. At least three (3) of these copies shall have the significant features illustrated according to the following color scheme:

Roads - dark gray;
Streams and waterbodies - blue;
Wetlands - solid red;
Wetlands 100' buffer zone - dotted red;
One hundred year flood plains - orange;
Open space and recreation areas - green;
Pedestrian and bicycle paths - brown;
Subdivision boundaries - black;

The applicant shall also file:

- a. ten (10) copies of a draft Development Impact Statement (see Section 6.04, number 6, and Appendix A, Form L); and
- b. the required filing fee (see Appendix B)
- c. the required Review Fee (see Appendix B)

Said fee shall be used by the Town to pay for any additional consultants which it finds necessary to hire in order to carry out an effective review of the proposed subdivision.

5.03 Contents

The Preliminary Plan submission shall include at least three (3) alternative concepts for developing the parcel.

The Preliminary Plan shall be drawn at a scale of 1" = 100' on 24" by 36" sheets. Said plan shall show sufficient information about the subdivision to form a clear basis for discussion of its problems and for the preparation of the Definitive Plan. In addition, the plan shall show at least the following information:

1. The subdivision name, boundaries, true north arrow, date of submission, scale, legend and title "Preliminary Plan".
2. The names and addresses of the owners of record, the applicant and the registered Civil Engineer and Land Surveyor.
3. The names of all abutters and those owners of land separated from the subdivision only by a street, as determined from the most recent tax list.
4. Existing and proposed lines of street, proposed names of the latter, right-of-way, easements, and any public or common areas within the subdivision. Purpose of easements shall be indicated.
5. Location, names and present widths of streets bounding, approaching, or within reasonable proximity of the subdivision.
6. Location of natural waterways and waterbodies within and adjacent to the subdivision.
7. Boundary lines of all proposed lots with approximate dimensions and lot areas in square feet.
8. The existing and proposed topography at a five (5) foot contour interval or better.

- Datum must be U.S.G.S. Mean Sea Level. Major site features, such as existing stone walls, fences, buildings, large trees (12" or greater in diameter), rock ridges and out-croppings, swamps, historic features and wooded areas.
9. Whenever applicable and in a general manner, the proposed and existing storm drainage, sanitary sewer and water systems.
 10. A sketch of the applicant's contiguous un-subdivided land, showing possible or contemplated development and street layout, if applicable.
 11. When multiple sheets are necessary, match lines shall be used and referenced. An index plan graphically indicating the arrangement of said standard (24" x 36") sheets at a suitable scale shall be provided.
 12. During discussion of the Preliminary Plan, the complete information required by the Definitive Plan, Section 6.00 may be developed.
 13. A locus or location plan at U.S.G.S. scale showing the subdivision location to the surrounding roadways and physical features.
 14. The applicant shall request, in writing to the Planning Board, any proposed waivers, with justification, of a requirement, rule, or regulation he/she/they may require.

5.04 Action by the Board

After submission, the Preliminary Plan will be reviewed by the Planning Board, Board of Health, Chief of Police, Chief of the Fire Department, Conservation Commission, Highway Department, Tree Warden, and other municipal agencies and departments to determine whether it is in compliance with the design standards as set forth in these Rules and Regulations and with any additional requirements of the above-mentioned Boards, municipal agencies and departments.

Within thirty (30) days after the date of submission, the Board of Health, the Chief of Police, the Chief of the Fire Department, Conservation Commission, Department of Public Works, the Town Engineering Consultant, and other municipal agencies shall notify the Planning Board of their respective approval or disapproval of the Preliminary Plan, and if disapproved, shall list their reasons in writing.

Within forty-five (45) days after submission of the Preliminary Plan, the Planning Board shall approve, or approve with modifications, or disapprove said Preliminary Plan, and in the case of disapproval, the Board shall state in detail the reasons for its disapproval.

The Planning Board shall file its decision with the Town Clerk, and shall send a copy of said decision by registered mail to the applicant. Failure of the Planning Board to file its decision upon a Preliminary Plan within forty-five (45) days after submission shall be deemed to constitute approval of such a plan.

Approval of the Preliminary Plan by the Planning Board does not constitute approval of a subdivision, but does facilitate the procedure in securing approval of the Definitive Plan. In addition, such approval does not in any way authorize the owner to proceed with construction of roadways and/or other work in the subdivision.

SECTION 6.00

PROCEDURES FOR THE SUBMISSION OF DEFINITIVE PLANS

6.01 General

A Definitive Plan, hereinafter referred to as the Plan, of a subdivision must be submitted to the Planning Board. Said 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 the zoning in effect 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 centerline of proposed roadway and all property lot lines shall be adequately and accurately staked or flagged on the site sufficient for identification by the board members and Town officials, when site visits are made.

6.02 Submission

The plan shall be submitted by delivery at a regular or special meeting of the Board, or by delivery or registered mail to the Board in care of the Town Clerk. If so mailed, the date of mailing (postmark) shall be the date of submission of the plan. In addition, written notice (a copy of Form C in Appendix A) shall be filed by delivery or registered mail with the Town Clerk stating the date of submission of the plan. The Town Clerk shall give a written receipt, if requested, to the person who delivers such notice.

The full submission shall consist of:

1. A properly executed application (see Appendix A., Form C).
2. Ten (10) prints (dark line on white background) of the Definitive Plan (including all plans, maps and cross sections, and documents required in Sections 6.03 and 6.04), together with all other information and documentation, as required in these Rules and Regulations. The Board shall file one (1) print with the Board of Health, one (1) print with the Chief of the Fire Department, one (1) print with the Conservation Commission, one (1) print with the Water Supply Protection Committee, one (1) print with the Highway Department, and one (1) print to the Police Chief. At least three (3) of these prints shall have the significant features illustrated according to the following color scheme:

Roads - dark gray;

Streams and waterbodies - blue

Wetlands - solid red;

Wetlands 100' buffer zone - dotted red;

One hundred year flood plains - orange;

Open space and recreation areas - green;

Pedestrian and bicycle paths - brown;

Subdivision boundaries - black;

The Board may request additional copies of the above to be forwarded to other Town agencies and departments for their review and comments.

3. a. The required Filing Fee (see Fee Schedule, Appendix B).
- b. The required Review Fee (see Fee Schedule, Appendix B).

Said fee shall be used by the Town to pay for any additional consultants which it finds necessary to hire in order to carry out an effective review of the proposed subdivision.

4. List of abutters (see Appendix A, Form D). Name and mailing address of all abutters as they appear in the most recent tax list, including owners of land separated from subdivision only by a street. The applicant shall obtain a certificate of the Board of Assessors, which must be attached to this application, that all abutters are listed.
5. A sketch plan showing a possible or prospective street layout for any adjacent unsubdivided 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 Board.
6. One set of three overlays shall be prepared on acetate at the same scale as the Definitive Plan Map; these overlays shall illustrate the following features of the undeveloped site:

Overlay #1 - One hundred year flood plains, wetlands, aquifer recharge areas;

Overlay #2 - Soils (including all soil types), and slopes greater than 25%;

Overlay #3 - Vegetation types;

7. Ten (10) copies of all additional information required in Section 6.04.

6.03 Contents

The Definitive Plan shall bear the seal of a Massachusetts Land Surveyor and a Registered Professional Engineer. The plan shall be at a scale of one (1) inch equal to forty (40) feet, unless otherwise specified by the Planning Board, and of a sheet size 24 inches by 36 inches outside dimensions. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision.

All surveys must tie to the Massachusetts State Plane Coordinate System (1927 datum) (MSPCS). At least two bench marks must be placed on site and shown on the plans prior to construction. Said bench marks shall be tied to, and employ, U.S.G.S. 1988 Vertical Datum recommended, and the M.S.P.C.S. Every plan sheet should have at least four points tied into the M.S.P.C.S. using the following, or equivalent:

- a. the Global Positioning System (GPS); or
- b. the United State Geological Survey (U.S.G.S.) Horizontal Datum.

Whenever possible, a 3.5" or 5.25" DOS compatible computer disk containing the property boundary lines should be provided using Drawing Interchange Files (AutoCAD Compatible DXF files), in either ASCII or binary format.

The Definitive Plan shall contain the following information:

1. A location plan of the subdivision at a scale of 1" = 200', showing the proposed lot lines, the right-of-way lines of all proposed streets in the subdivision and their location in relation to one or more existing streets of portions thereof, shown and readily identifiable as to locus on the Town Assessors' and Topographic Maps and to such accuracy that the latter may be placed over the location plan for purposes of actual transfer to said maps. Whenever applicable, if the development falls within the limits of existing 1" = 500' scale Assessor's Maps, an additional location plan at 1" = 100' scale with all the above information shall be provided. An inset at a scale of 1" = 1,200' shall be included on the location plan showing the location of the subdivision within the Town.
2. The subdivision name, boundaries, the coordinate north arrow, date, scale, legend and title, Definitive Plan".
3. The names of owners of record, the applicant and the Registered Land Surveyor and Registered Professional Engineer, and official seals. Certification by the Surveyor that all surveying conforms to the technical standards for property surveyors of the American Congress on Surveying and Mapping shall appear on the plan.
4. Names and plan location of all abutters indicating limits of contiguous boundaries of the parcel/lots (within 200 feet of the boundary of the subdivision) and those owners of land separated from the subdivision only by a street. This must agree with Form D (Appendix A).
5. Existing and proposed lines of streets, lots, right-of-way, easements, and any public or common areas within the subdivision. (The proposed name of proposed streets shall be shown in pencil until they have been approved by the Board). Purpose of easement shall be indicated.
6. Location, name and present widths of streets bounding, approaching, or within 200 feet of the limits of the subdivision.
7. Location of natural waterways and water bodies within and adjacent to the subdivision.

8. Major site features, such as existing stone walls, fences, buildings, large trees (12" or greater in diameter), rock ridges and out-croppings, swamps, wetlands, flood plains, historic features, and wooded areas. The plan shall identify which of the above shall remain undisturbed.
9. Sufficient data, including lengths, bearings, radii, tangent distances, and central angles to determine the exact location, direction and length of every street and way line, lot line, and boundary line, and to establish these lines on the ground.
10. Location of all permanent monuments and bench marks identified as to whether existing or proposed, and whenever possible, identified according to the Town of Palmer survey control system. Bounds are required at all intersections of street lines, angle points and changes of curvature of street lines. All benchmarks shall be tied to and employ U.S.G.S. (United States Geological Survey) datum system or the Town control datum.
11. Boundary lines, areas in square feet, and dimensions of all proposed lots, with all lots designated numerically and in sequence.
12. Suitable space to record the action of the Board and the signatures of the members of the Planning Board on each sheet of the Definitive Plan. Where the applicant elects to secure completion of required improvements by covenant (rather than bonds or surety), there shall be a notation above such space as follows:

Approved _____, subject to covenant conditions set forth in a covenant _____ executed by _____, dated _____, and recorded in the Hampden County Registry of Deeds, Book No. _____, Page No. _____, or Document No. _____.

The remaining items shall be submitted on separate sheets.

13. Existing and proposed topography (sufficiently differentiated) with two (2) foot contour intervals for the entire parcel, unless the Board agrees that the natural surface of the ground may be adequately represented by contours with larger intervals or by figures of elevation.

Datum to be U.S.G.S. Mean Sea Level.

14. Where storm drainage line discharges into a brook, stream, or drainage area, to determine condition, and proposed method of stabilization.
15. A street layout plan on a separate 24" x 36" sheet, horizontal scale 1" = 40', for each street in the subdivision showing exterior lines, roadway lines, partial lot lines, curb lines, intersection angles, points of tangency, and radii of curves. Also included on the street layout plan shall be location, size, and type of construction, elevations and invert, whenever applicable, of all pipes and conduits of the:
 - a. Water Supply System, including pumps, valves, stubs, gates, hydrants, and similar equipment;

- b. Storm Drainage System, including manholes, pipes, culverts, catch basins and appurtenant structures;
 - c. Sanitary Sewerage System, including piping, manholes, pumps, community septic tanks, and appurtenant equipment;
 - d. Natural Gas Supply System, including pipes, pumps, valves, gates, and similar equipment;
 - e. Electrical, Telephone and Cable TV Supply System, including piping, handholes, transformer padmounts, and similar equipment, all transmission lines to shown as underground installation;
 - f. Lighting System, including location of street light poles.
16. 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"= 4'. All elevations shall refer to U.S.G.S. Mean Sea Level datum. Profiles shall show existing and proposed street grades, rate of gradient on percentages, ground and proposed elevations at center line of each fifty (50) foot station, and grades of intersecting streets and ways shall be clearly indicated.
 17. The Profile Plan shall show location of existing and proposed water drainage and sanitary sewer lines, invert, rim elevations and station of each manhole or catch basin.
 18. A typical cross section for the full width of the proposed right-of-way shall be shown in accordance with the "Typical Cross Section" illustrated in Appendix C showing foundation material, wearing surface, crown and width of traveled way, curbing, grass strips, sidewalks, utility locations, etc. For a non-typical cross section, see Section 7.01(6).
 19. Construction details for catch basins, manholes, endwalls, headwalls, rip-rap, energy dissipators, etc.
 20. Proposed layout and design of any and all parks, pools, or similarly community improvements, including all water, drainage, and electrical layouts, if any, designed to service such community improvements.
 21. 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 (see Section 6.04.1)
 22. Subsurface conditions on the tract, location and results of tests made to ascertain subsurface soil, rock and ground water conditions, depth to ground water, and on a separate sheet, location and results of soil percolation tests if individual sewage disposal systems are proposed. These percolation tests shall be: (a) made on each lot within the subdivision; (b) made by and at the expense of the applicant; and (c) shall be in accordance with the Board of Health regulations and the State Sanitary Codes as Applicable.

23. Size and location of existing and proposed water supply facilities.
24. Size and location of all fire hydrants, pump, water lines between hydrants and pump, and source(s) of water for fire fighting.
25. Legend denoting any signs and symbols used on the plan and not otherwise explained.
26. Any other pertinent information which the Planning Board may request.

6.04 Additional Requirements

1. Borings

The purpose of borings is to assist the developer and the project's engineer in designing, and the Board in evaluating, 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 subdrains along the edge of the road, etc.). In case of a development located within the limits of the aquifer recharging the Town's wells, borings should provide enough information to facilitate the Town's determining the development's impact on subsurface water quality. 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. Borings must be taken at the proposed roadway centerline at each 50' station unless otherwise specified by the Board.

2. Easements

All easements to be granted by the developer to the Town of Palmer shall be shown on the subdivision plans with bearings and distances, and their purpose clearly stated. In addition, the applicant shall submit, as part of his application, easement documents, suitable for recording, deeding said easements to the Town. The easements shall be submitted by the Board to the Highway Department and the Town Counsel, and their response shall be given in writing within thirty (30) days of the date of submittal.

3. Restrictive Covenants

The applicant shall submit, whenever applicable, as part of his/her/their application any and all documents, such as, but not limited to, master deeds, restrictive covenants, deed restrictions, home owner's association rules and regulations of any commonly owned/shared land, detention pond, open space, recreation area, etc. Said documents shall be submitted by the Board to the Highway Department and the Town Counsel, and their response shall be given in writing within thirty (30) days of the date of submittal.

4. Construction Quantities

The applicant shall submit a detailed estimate for all construction within the proposed roadway layout and/or public utility easements, certified by the project's Registered Professional Engineer. Said estimate shall be based on the "Standard Specifications for Highways and Bridges", 1973 Edition, as amended, of the Commonwealth of Massachusetts, and shall include:

- a. quantity, unit price, and total amount for each construction item; and
- b. total amount for cost of completion of project, including prevailing wage rates.

5. Lighting System

The applicant shall include a complete street lighting system for the proposed street in the Definitive Plans. Said system shall be compatible with existing systems in town and be in conformance with current utility standards, as supplied by the local electric company. In addition, the applicant shall petition the Board of Selectman to accept said system. A copy of the petition shall be included in the Definitive submission.

6. Development Impact Statement

A Development Impact Statement (DIS) is a documented, written analysis of a proposed development which provides the Planning Board and Town officials with information necessary for plan review.

It is a developer's responsibility to submit a DIS, that is prepared by a qualified professional acceptable to the Board, documented in sufficient detail to permit an adequate evaluation by the Planning Board; however, additional data may be requested in writing by the Board. This is one reason why it is to the advantage of the developer to prepare and submit to the board a Preliminary Plan including a draft DIS. It is necessary to respond to all sections of the DIS form, except when a written exemption is granted by the Planning Board. (see Appendix A, Form L)

7. Review by the Board of Health as to Suitability of the Land

The Board of Health shall within forty-five (45) days after the filing of the Plan, report to the Planning Board in writing its approval or disapproval of said Plan. A copy of such report shall be sent to the applicant. If the Board of Health disapproves said Plan, it 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 reasons therefore in such report, and, where possible, shall make recommendations for the adjustment thereof. Failure of the Board of Health to report shall be deemed approval by the Board of Health. Any approval of the Plan by the Planning Board shall then only be given on condition that the designated lots or land shall not be built upon or served with any utilities (including cesspools, septic tanks, and drainage) without prior consent of the Board of Health. The Planning Board shall endorse on the Plan which condition, specifying the lots or land to which such condition applies.

8. Wetlands Protection

In accordance with Chapter 131, Section 40, of the Massachusetts General Laws, no person shall remove, fill, dredge, or alter any bank, beach, dune, flat, marsh, or swamp bordering on any existing creek, river, stream, pond, lake, or any land under said waters or subject to flooding without receiving a negative determination of applicability or an order of conditions from the local Conservation Commission and/or Department of Environmental Quality Engineering.

9. Water Supply Protection District

Any portion of a proposed subdivision which lies within the limits of the Town's Water Supply Protection District shall conform to the requirements of said District as stated in the appropriate sections of the Palmer Zoning By-Laws.

10. Hydrology Study and Drainage Calculations

The applicant shall submit, as part of his/her/their application, calculations showing (a) that

Any proposed drainage system has been designed according to the standards set forth in Section 8.16; and (b) any impact said drainage system would have on existing drainage systems downstream from the former's point of discharge.

11. Sanitary Sewer Study

The applicant shall submit, as part of his/her/their application, calculations showing (a) that any proposed sanitary sewer system has been designed according to the standards set forth in Section 8.23; and (b) any impact said sanitary sewer system would have on existing sanitary sewer systems downflow from the former's point of discharge.

12. On-Lot Sewage Disposal System

Where sewage disposal is to be by individual on-lot sewage disposal system, the Definitive Plan shall be accompanied by a report, prepared by a Registered Civil Engineer, which includes the following:

- a. the results of percolation and deep hole soil tests performed on each lot, in accordance with Title 5 of the State Environmental Code.
- b. a map which locates the soil test sites on each lot,
- c. other data, including topographic conditions, natural drainage patterns, soil characteristics, maximum ground water elevations,
- d. when on-site water supplies are to be used, the location of those supplies must be shown on a map along with proposed or existing on-site sewage disposal systems on or within 100 feet of any property line.
- e. a statement by a Registered Civil Engineer as to the suitability of the area for the installation of subsurface sewage disposal systems of the general type and size as indicated in the Massachusetts Environmental Code 314 CMR Title 5, Department of Environmental Protection.

13. Water Study

The applicant shall submit, as part of his/her/their application, a study, certified by the District's current water consultant, showing that the proposed water system will provide

the development with adequate fire flows, as determined by the Fire District. The study shall also show the impact of the development on the water pressures in the surrounding area.

14. Erosion/Sedimentation Control Plan

In order to ensure, mitigate and prevent erosion/siltation of disturbed areas during and after construction activities, the developer shall submit a plan showing, in detail, what and when such measures will be implemented, on both a temporary and permanent basis.

6.05 Action on a Definitive Plan

1. Public Hearing

Before approval, modification and approval, approval with conditions, or disapproval of a Definitive Plan is given, a public hearing shall be held by the Planning Board. Notice of the time and place of the hearing, and of the subject matter, sufficient for identification, shall be given by the Board at the expense of the applicant by advertisement in a newspaper of general circulation in the Town of Palmer once in each of two successive weeks, the first publication being not less than fourteen (14) days before the day of such hearing. A copy of said notice shall be mailed by registered mail to the applicant and to all owners of land abutting upon the subdivision or separated from such land only by a street (see Appendix A, Form D). The applicant or his/her/their representative should be present at the hearing.

2. Approval, Modification, or Disapproval

After the required hearing, but within the period specified in the Subdivision Control Law for the submission of the Definitive Plan, the Board shall take action thereon. It may approve, modify and approve, approve with conditions, or disapprove said Plan, as provided by statute. Any approval of the Plan by the Planning board shall only be given on condition that the designated lots or land shall not be built upon or served with any utilities, such as septic tanks or cesspools, and drainage without prior consent of the Board of Health.

The Planning Board shall endorse on the Plan such conditions as set forth by the Board of Health and the lots and land affected by such conditions. The action of the Board with respect to such Plan shall be certified and filed with the Town Clerk and sent by registered mail, postage prepaid, to the applicant at his address as stated on the application (see Appendix A, Form F). Favorable action shall require a majority vote of the full Board in rendering its decision, the Board shall take into consideration:

- a. Completeness and technical adequacy of all submissions;
- b. Determination that development at this location, as proposed in the Definitive Plan, does not entail unwarranted hazard to the health, safety, or welfare of future residents of the subdivision or to others because of possible natural disasters, traffic hazard, or environmental degradation;
- c. Conformity with the Design Standards included in or cited by these Regulations;

If the Board modifies and disapproves such Plan, it shall state with its vote the reasons for its action. Final approval, if granted, shall be endorsed on the reproducible drawing of the Definitive

Plan by the signatures of the majority of the full Board, but not until the statutory twenty (20) day appeal period has elapsed following the filing of the certificate of the action of the Board with the Town Clerk and said Clerk has notified the Board that no appeal has been filed, or if appeal has been taken, not until the entry of a final decree of the court sustaining the approval of such Plan.

Final approval of the Definitive Plan does not constitute the laying out or acceptance by the Town of streets within a subdivision. Such laying out or acceptance shall be by action of the Town Meeting upon recommendation of the Planning Board and the Highway Department.

In the event of disapproval, the Planning Board shall state in detail wherein the plan does not conform to these Rules and Regulations of the Planning Board or the recommendations of the Health Board or officer and shall revoke its disapproval and approve of a plan which, as amended, conforms to these Rules and Regulations or recommendations. Any amended plans which are re-submitted for approval shall follow the same procedures as the original submission (Filing Fee, Public Hearing, etc.). Any amended plans submitted later than nine (9) months following the date of the expiration of the appeal period or appeal(s) on the disapproval of the originally submitted plan must conform to the Subdivision Rules and Regulations and procedures (Filing Fee, Public Hearing, etc.) that are in effect at the time of the amended plan's filing.

3. Endorsement

A Plan that has been approved, approved with modifications, or approved with conditions, shall not be endorsed until after the mandatory twenty (20) day appeal period has elapsed and not until the applicant has:

- a. Posted the necessary performance guarantee. The monetary value of said guarantee, when using any method other than a covenant, shall be based on a revised construction quantity estimate (see Section 6.04(4)) if conditional approval of the subdivision was given and if said approval changed the original quantities. In addition, the monetary value of the performance guarantee shall reflect projected construction costs of completing the project at the end of the expiration of said guarantee.
- b. Made the necessary corrections, whenever applicable, on the Plan, easements, master deeds, restrictive covenants, etc., if conditional approval was given to the satisfaction of the Board.
- c. Presented to the Board, and the Board has subsequently approved, any additional information requested as part of a conditional approval.
- d. Paid the necessary 1) inspection fee; 2) and registration fee (Registry of Deeds, Land Court); and 3) restoration guarantee.
- e. Delivered to the Board two (2) sets of reproducible (Mylar) drawings of the Definitive Plan with the necessary corrections. After endorsement by the Board, the applicant shall deliver to the Board, twelve (12) sets of copies of the endorsed Definitive Plan.

Failure of the applicant to meet the above requirements shall be full and sufficient reason to withhold endorsement.

If the applicant fails to submit the required Performance Guarantees, easements, and other documentations and the endorsement of the Plan by the Planning Board is delayed more than six

(6) months after the expiration of the twenty (20) day appeal period, the Planning Board, on its own motion, shall exercise its power to modify, amend, or rescind its approval of the subdivision plan or to require a change in the Plan as a condition of said Plan retaining the status of an approved Plan.

4. Performance Guarantee

In accepting the Board's approval of a Definitive Plan of a subdivision, the applicant agrees to complete the required improvements specified in Section 7.00 and 8.00 for all lots in the subdivision, such construction and installation to be secured in accordance with Section 81U of the Subdivision Control Law by one, or in part by the other, of the following methods which may from time to time be varied by the applicant:

- a. Approval with Bonds or Surety. The applicant shall either file a surety company performance bond or provide a deposit of money or negotiable securities in an amount determined by the Board, which may consult with the appropriate Town departments, to be sufficient to cover the cost of all or any part of the improvements specified in Sections 7.00 and 8.00 not covered by a covenant under "b" below. Such bond, deposit of money or negotiable securities, shall be approved as to form and manner of execution by the Board.
- b. Approval with Covenant. Instead of filing a bond or depositing money, the applicant may fulfill a covenant executed and duly recorded by the owner of record, running with the land, that no lot in the subdivision shall be sold and no building erected thereon until such ways, services, and, whenever applicable, temporary turnarounds are constructed and installed, in accordance with these Rules and Regulations so as to adequately serve the lots.

Such covenant shall be inscribed on the Definitive Plan or on a separate document referred to on the Plan and delivered to the Planning Board. The Planning Board shall turn over the covenant agreement to the Town Counsel, who shall review its contents and forward his comments in writing to the Board. Upon approval of the covenant by the Board, the applicant shall note the Board's action on the Definitive Plan and the Board shall record the covenant, endorsed Definitive Plan, and other appropriate documents at the Hampden County Registry of Deeds.

5. Completion Time Schedule

The Performance Guarantee, whether by bond, deposit of money, or covenant, as previously described herein, shall be contingent upon the completion of such improvements as required in these Rules and Regulations within a period of two (2) years of the date of such bond, deposit of money, or covenant. There shall be at least a nine (9) month period between completion date of all improvements and the expiration date of any bond or deposit of money. Said nine (9) month period shall give the Town the opportunity to complete necessary improvements in case

- a) the developer is unable to do so; and/or
- b) the Board denies any requests for an extension of time.

Upon written request from the applicant, the Planning Board may at its discretion, grant an extension of time, and such agreement shall be executed and affixed to the bond or covenant.

In the case of a surety company bond, such an agreement for an extension shall not be effective until the surety delivers to the Board a written statement that the surety agrees to the proposed alteration of the completion schedule and that such alteration shall not relieve or affect the liability of the surety company.

Failure to complete all improvements as required by these Rules and Regulations within the time allotted shall cause the Board

- a) to draw upon the performance guarantee (surety bond or deposit of money) in order to complete said improvements; and/or
- b) schedule a public hearing in order to rescind approval of the subdivision in accordance with appropriate sections of Chapter 41, Section 81 of Massachusetts General Law.

6. Recording of Plan

The Board, within ten (10) days after the Definitive Plan has been endorsed, shall record said Plan, Form F and, whenever applicable, the Board's order of conditions, public easements (plans and documents), restrictive covenants, master deeds, etc., at the Hampden County Registry of Deeds, and in the case of registered land, with the recorder of the Land Court. The cost of said recording shall be borne by the developer. Subsequent to said recording, the Board shall file within seven (7) calendar days one (1) print of the Definitive Plan with the Building Inspector. Unless the Building Inspector has received such print, he shall issue no permit for a building on any lot within the subdivision. Further, in accordance with the statute, where approval with covenant is noted thereon, he shall issue no permit for the construction of a building on any lot within the subdivision, except upon receipt from the Board of a copy of the Certificate of Performance releasing the lot in question.

6.06 Release of Performance Guarantee

1. Procedures for Partial Release

The subdivider may, upon partial completion and installation of required improvements in a subdivision, as specified in Sections 7.00 and 8.00 of these Rules and Regulations, the security for the performance of which was given by bond, deposit of money, or covenant, make formal application, in writing, to the Planning Board for partial release of his Performance Guarantee, in accordance with the procedures set forth herein:

- a. Bond or Deposit of Money. The penal sum of any such bond, or the amount of any deposit held may, from time to time, be reduced by the Planning Board, upon formal application in the manner prescribed herein, and the obligations of the parties thereto released by said Board in part. The applicant shall present to the board a list of all construction items performed and/or completed, said list to be based on Section 6.04(4), as well as a list of all construction items still to be performed, and the estimated costs of completing such items. The amount to be reduced by the Board, after consultation with the Highway Department, shall be

based upon prevailing construction costs for the work remaining to be completed at the time of application for reduction is made. In addition, the Board shall withhold a 10% retainage on any reduction it approves, said retainage to be released under Section 6.06(2).

- b. Covenant. The subdivider may request a Release of Conditions for designated lots where the required improvements have been completed for that section of roadway beginning at any intersection with a Town road and abutting lots up through the last lot to be released. Lots may only be released if they abut the completed portion of the road. No partial release from the covenants will be approved if the total length of roadway, including a temporary turnaround, abutting said designated lots, exceeds the Town's maximum allowable length for dead-end streets, as mentioned in Section 7.01(5), unless the Board has already approved within the limits of the development a dead-end street exceeding said limits.

2. Procedures for Full Release

The subdivider may make formal application, in writing (see Appendix A, Form G), to the Planning Board for full release of his/her/their performance guarantee upon completion and installation of required improvements in a subdivision, as specified in Sections 7.00 and 8.00 of these Rules and Regulations, when the performance guarantee was given by bond, deposit of money, or covenant. Before the Planning Board releases the full interest of the Town in said performance guarantee, the Planning Board shall:

- a. Obtain in writing from the Town engineering consultant or from a registered professional engineer chosen by the Board, a certificate or statement that all work required by these Rules and Regulations has been constructed in conformance with the approved construction plans. In cases where roadways will remain under private ownership, the above-mentioned certificate or statement shall be supplied by the project's registered professional engineer.
- b. Obtain from the applicant a set of record construction plans. Said plans shall include, but not be limited to, all the information requested in Appendix G, Record Plans. Approval of said plans by the Board shall take place after review of the former by the Town Engineer.
- c. Receive from the applicant street acceptance Plan or Plans and necessary documents, as stated in Appendix H, Acceptance Plans. Said plans and documents after approval by the Board and the Town Engineer, shall be presented by the Planning Board to the Town Meeting for a formal street acceptance.
- d. The applicant may be required to execute an instrument, in a form approved by the Board, transferring to the Town or to an approved public utility company, without cost, valid unencumbered title to all sanitary sewers, water mains, and appurtenances thereto, and other utilities constructed and installed in the subdivision or approved portion thereof, and conveying to the Town or to an approved public utility company without cost and free of all liens and encumbrances, perpetual rights and easements to construct, inspect, repair, renew, replace, operate, and forever maintain such sanitary

sewers, water mains and other utilities, with any manholes, conduits, and other appurtenances, and to do all acts incidental thereto, in, through, and under the whole of all streets in the subdivision or approved portion thereof, and if any such sewers or water mains have been constructed and installed in land not within such streets, then in, through, and under a strip of land extending fifteen (15) feet in width on each side of the center line where it deems necessary.

- e. If the Planning Board determines that all improvements as shown on the endorsed Definitive Plan have been completed satisfactorily, it shall release the interest of the Town in such performance guarantee and return the bond or deposit, including the 10% retainage to the person who furnished the same, or release the covenant, by appropriate instrument, duly acknowledged, which may be recorded.
- f. If the Planning Board determines after inspection that said construction or installation has not been completed, or wherein said construction or installation fails to comply with these Rules and Regulations, the Planning Board shall send by registered mail to the applicant and deliver to the Town Clerk the details wherein said construction or installation fails to comply with its rules.
- g. The applicant shall have thirty (30) days after receipt of such notice to correct all problems mentioned in the above. Failure of the applicant to finish all the necessary work within said thirty (30) days shall cause the Board to draw upon the bond or deposit of money as mentioned below.
- h. Any such bond may be enforced and any such deposit may be applied by the Planning Board for the benefit of the Town of Palmer, as provided in Chapter 41, Section 81 of the Massachusetts General Law upon failure of the performance for which any bond or deposit was given to the extent of the reasonable cost to the Town of completing such construction and installation.

3. Release of Lots from Covenant in Exchange for Bond or Deposit of Money

The subdivider may request a Release of Lots from Covenant in exchange for a bond or deposit of money provided that:

- a. The lots run consecutively and are released on both sides of the road simultaneously, beginning with the lots nearest any intersection of the subdivision road and a Town road; lots across the road from each other must be released together.
- b. The amount of the surety of bond shall be determined by the Planning Board, based on regulations as set in Sections 6.04(4) and 6.05(3a). The amount of the surety of bond shall be determined on a request basis, and each request shall be judged on its own merits.

6.07 *Deviation from Approved Plan*

1. After approval of any Definitive Plan, the location and width of ways shown thereon, or any street or way subject to the Subdivision Control Law, shall not be changed unless the Plan is amended in accordance with the provisions set

forth in Section 81W, Chapter 41, as amended, of the General Laws, and approved by the Planning Board.

2. In the event the applicant desires to alter or change the grade of a street or the size, location, or layout of a storm sanitary or water line or appurtenant structure, he shall:
 - a. Provide the Planning Board with a written statement requesting such alteration or change.
 - b. Provide the Board with three (3) prints of the original Definitive Plan with the proposed changes drawn on said prints in red.
 - c. No change or alteration shall be permitted unless such change or alteration has been approved by the Planning Board.
 - d. After approval of a change or alteration, the applicant shall cause such approved changes to be shown on the record plans.
 - e. Deviations from material and construction specifications shall not be allowed, except as specifically authorized by the Planning Board, upon consultation with the Town's engineering consultant.
 - f. The Board shall have forty-five (45) days to respond to the applicant's request for said change or alteration.

6.08 *Submission of Revised Plans, Additional Materials, etc.*

Any revised plans and other additional materials submitted by the applicant after the original submission, must be accompanied by a FORM K and the required \$500 Filing Fee.

The Planning Board may elect not to consider such revised plans or other additional materials if such plans/materials are not filed with the Planning Board at least fourteen (14) calendar days prior to the date of the Public Hearing or meeting at which the developer wishes them to be considered. This is to ensure that the town departments, consultants and the public have adequate time to review and comment on said materials.

SECTION 7.00

DESIGN STANDARDS

The subdivider shall observe all design standards for land division as hereinafter provided. These standards shall be considered minimum standards and shall be varied from or waived only as provided in Section 3.02. State Construction Standards shall be followed, and all matters left open or undefined in those Standards shall be specified by the Board on a case-by-case basis. Specification of matters not covered by the State Construction Standards shall be made by the Board or its engineering consultant on a case by case basis, based wherever possible on the publications of the American Association of State Highway and Transportation Officials (AASHTO) or other publications cited in Appendix J to these regulations.

7.01 *Streets and Ways*

Streets and ways shown on the subdivision plan, or on a plan for more than one dwelling building per lot when in conformance with Zoning, must comply with the following requirements:

1. Location
 - a. All streets and ways shall be designed so that in the opinion of the Planning Board, they will provide safe vehicular travel. Due consideration shall also be given by the subdivider to the attractiveness and design of the street layout in order to obtain the maximum livability and amenity of the subdivision. As far as practicable, streets should also follow natural contours.
 - b. The proposed streets shall conform, so far as practicable, to any Master Plan, as adopted in whole or in part by the Planning Board.
 - c. Streets and ways shall be continuous and in alignment with existing streets, as far as practicable, to insure free and safe movement of vehicular traffic.
 - d. Temporary dead-end or cul-de-sac streets shall conform to the provisions of alignment, width, and grade that would be applicable to such streets if extended.
 - e. The developer shall make every effort to avoid the creation of dead-end streets.

2. Alignment

Horizontal and vertical alignment shall be in accordance with the standards as shown in Appendix E.

3. Grade

Grades shall be in accordance with the standards as shown in Appendix E.

4. Intersections

Streets and ways shall be laid out so as to intersect in accordance with the standards as

shown in Appendix E and the following:

- a. Street and way lines at all intersections, between proposed streets or between, whenever applicable, a proposed and/or existing street, shall be rounded with a curve at each corner that has a property line radius of not less than forty (40) feet.
- b. The center line of all intersecting streets or ways shall be a straight line from the point of intersection of said center line for a distance of no less than one hundred (100) feet.
- c. On any street where the grade exceeds two (2) percent on the approach of the intersection, a leveling area, with a maximum slope of two (2) percent shall be provided for a distance of not less than thirty (30) feet measured from the nearest gutter line of the intersecting street.
- d. Streets entering opposite sides of another street shall be laid out either directly opposite each other or with a minimum offset of three hundred (300) feet between their centerlines. This minimum offset shall be observed whenever one or more streets entering opposite sides of another street are existing, whether located within or outside the boundary of the proposed subdivision.
- e. Streets entering the same side of another street shall be laid out with a minimum offset of three hundred (300) feet between their centerlines. This minimum offset shall be observed whenever one or more streets entering the same side of another street are existing, whether located within or outside the boundary of the proposed subdivision.

5. Cul-de-Sac or Dead-End Street

- a. No street in the proposed subdivision shall be laid out in such a manner that an obstruction at point on this street or any street with which it intersects (proposed or existing) would isolate without another point of exit to an existing public street more than a cumulative total of five hundred (500) feet of roadway as measured along the centerline of construction of the road(s).
- b. Permanent cul-de-sac streets shall be provided with a turn around at the end of the street having a minimum outside roadway radius of seventy (70) feet and a property line radius of at least eighty (80) feet (see Appendix D). The center of the cul-de-sac shall be on the center-line of construction.
- c. A permanent cul-de-sac turnaround (island) shall be constructed in lieu of paving the entire area of the cul-de-sac (see Appendix D). The roadway pavement shall have the same width beginning at the exterior radius of the turnaround, with the inner circle graded, seeded and/or appropriately planted with acceptable trees or shrubs, or left with natural tree growth. The maintenance of said inner circle shall be the responsibility of the developer, his

successors and assigns (excluding the Town of Palmer), or a homeowner's association. The inside radius of the cul-de-sac pavement shall be constructed with granite edging type SA (see Section 8.06).

- d. A temporary cul-de-sac shall be allowed only where it is part of a street or way that eventually will be extended into adjoining property. The design of a temporary

turnaround shall be satisfactory to the Planning Board, and clearly shown on the Plan as temporary in nature, and such property lines shall be those which would normally have been required or used without the turnaround.

Regardless of the above, no temporary cul-de-sac shall be allowed if the street length exceeds the limit set in these Rules and Regulations.

Layout of the turnaround beyond the normal street right-of-way lines shall be in the form of an easement to the Town of Palmer covering said premises included in the turnaround. When the street is extended into adjoining property, the easement shall become null and void.

6. Cross Sections

- a. Cross sections shall be in accordance with the standards as shown in Appendix C.
- b. Only one typical cross section need be shown on the Definitive Plan if the former conforms to the standard shown in Appendix C. Any variation from the typical standard should be shown on the construction plans at fifty (50) foot intervals.

7. Right-of-Way Width

The right-of-way shall be in accordance with the standards as shown in Appendix C.

8. Paved Roadway Width

The roadway width shall be based on the following criteria:

- a. Projected traffic volume generated by the development, based on ten (10) average daily trips (ADT) per dwelling unit. (i.e., a two-family house will generate 20 ADT)
- b. The maximum number of vehicles, based on the above-mentioned ADT per dwelling unit, whether generated within the development (as in the case of a dead-end street) or outside of said development (as in the case of a through street) and passing any section of a roadway will determine the width of the entire length of said roadway, based on standards as shown in Appendix F.
- c. In establishing the proposed road width, the developer shall also consider the future growth of the surrounding area.
- d. The center-line of the roadway shall coincide with the center line of the right-of-way, unless otherwise approved by the Board.
- e. Greater widths may be required by the Planning Board when deemed necessary for present and future vehicular traffic. This may include widening and upgrading existing streets, the expense of which shall be borne by the applicant.

7.02 Easements

For municipal utilities, easements shall be thirty (30) feet in width, except that wider easements may be required by the Board where necessary. Utilities shall be located as close as possible to the center line of the easement.

7.03 Open Space

1. Before approval of a Plan, the Board shall also require the plan to show a park or parks suitably located for playground or recreation purposes. The park or parks shall be of reasonable size, but not less than five (5) percent of the area of the land to be subdivided. The Board shall, by appropriate endorsement on the Plan, require that no building may be erected on such park or parks without its approval for a period of not more than three (3) years after the approval of the Definitive Plan. If this land is not conveyed to the Town of Palmer by sale or gift within three (3) years after the approval of the Definitive Plan, then such land may be incorporated into a subsequent subdivision.
2. Land designated for open space or park purposes shall not include wetlands, ledge, or other land unsuitable for playground or recreation use.
3. Any open space, park or playground shall be provided with a minimum of one hundred feet (100') continuous frontage on a street. Pedestrian ways will be required to provide access from each of the surrounding streets, if any, on which the open space, park or playground has no frontage. Further, maintenance provided for by covenants and agreements acceptable to the Board, until such time (if any) as public acquisition may be accomplished by the community, but in no case longer than three (3) years.

7.04 Fencing

Fencing and/or screening shall be required in subdivisions abutting limited or controlled access highways or expressways, other limited or controlled access roads, or any other collector streets. Fencing may be required in other areas where the physical features require such safety.

7.05 Protection of Natural Features

All natural features such as trees over sixteen (16) inch diameter, water courses, one hundred year flood plains, wetlands, ponds and other water bodies, marshes, stone walls, scenic points, and historic sites shall be preserved.

7.06 Guard Rails

Guard rails shall be provided at points of hazard along the roadway, such as fixed objects along the pavement edge, high fills, fills on sharp curvature, along water courses, steep cliffs, along deep ditches in cuts and similar locations as required by the Planning Board. Type and installation of guard rails shall be approved by the Town's engineering consultant.

7.07 Sidewalks and Bicycle Paths

Unless the Board determines that pedestrian movement is otherwise provided for, sidewalks having a width of not less than five (5) feet shall be constructed between the roadway and the

right-of-way line, as close to said line as practicable, and generally parallel with the roadway. All streets shall be provided with sidewalks on both sides. Pedestrian access other than by routes parallel with roadways may be permitted, provided easements are established.

The Planning Board may require bicycle paths from four (4) to eight (8) feet in width within a subdivision. In certain cases, at the discretion of the Planning Board, all or part of the sidewalk requirement may be waived where bicycle paths are provided.

7.08 *Wheelchair Ramps*

All sidewalks shall be accessible to the handicapped from the roadway at all intersections. Wheelchair ramps to accomplish the above shall be designed and constructed according to the Commonwealth of Massachusetts Department of Public Works, "Construction Standards", 1977 Edition, as amended.

7.09 *Relationship to Town Plans*

The design and layout of a proposed subdivision should be guided by the goals and objectives of any existing master plans, strategic plans, village plans, or statements of goals and objectives for the Town of Palmer.

7.10 *Access Through Another Municipality*

In case access to a subdivision crosses land in another municipality, the Board may require certification, from appropriate authorities, that such access is in accordance with the Master Plan and subdivision requirements of such municipality and that a legally adequate performance bond has been duly posted or that such access is adequately improved to handle prospective traffic.

7.11 *Conservation Restrictions*

1. Water courses, drainage ways, channels, or streams shall be located within easements conforming substantially with the lines of their courses, whose width shall not be less than twenty (20) feet and whose boundaries shall not be closer than seven (7) feet horizontally from the one hundred year flood plain. Wetlands shall be located within easements whose boundaries shall not be closer than one hundred (100) feet from the boundaries of the wetlands. No building shall be constructed and no paving or other activity shall be permitted within such easement except as permitted under the Zoning By-Laws and under the Massachusetts Wetlands Protection Act (Sections 40 and 40A of Chapter 131 of the General Laws), and the Town of Palmer General Wetlands Bylaw.
2. In any subdivision, the developer may grant to the Town a conservation restriction over any portion of the subdivision providing the area subject to the restriction has the approval of the Conservation Commission and the Board of Selectmen.

7.12 *Adequate Access from Public Way*

1. Where the street system within a subdivision does not connect with or have, in the opinion of the Board, adequate access from a Town, County, or State public

way, the board may require, as a condition of approval of a plan, that such adequate access be provided by the subdivider, and/or that the subdivider make physical improvement of access to and within such a way, in boundary of the subdivision to a Town, County or State public way, or along such public way for a distance which, in the opinion of the Board, is sufficient to provide adequate access to the subdivision.

2. Where the physical condition or width of a public way from which a subdivision has its access is considered by the Board to be inadequate to either provide for emergency services or carry the traffic which is expected, in the opinion of the Board, to be generated by such subdivision, and to make physical improvements to and within such public way to the same standards required within the subdivision. Any such dedication of land for the purpose of way and any such work performed within such public way shall be made only with permission of the governmental agency having jurisdiction over such way, and all costs of any such widening or construction shall be born by the subdivider.

7.13 Septic Disposal Systems

No lot shall be built upon without the provision of on-lot sewage disposal facilities specifically approved by the Board of Health.

7.14 Water Wells

No lot shall be built upon without the provision of on-lot water facilities specifically approved by the Board of Health.

7.15 Solar Energy

The purpose of the Section 7.15 is advisory and is intended to encourage the use of solar energy systems and to protect to the extent feasible the access to direct sunlight of solar energy systems. The applicant should utilize passive solar energy techniques that maximize solar heat gain, minimize heat loss during the heating season, and minimize heat gain and provide for natural ventilation during the cooling season. These passive solar techniques could include, but are not limited to, the following:

1. The street and layout plan should, as far as practicable, provide for east-west street orientations to facilitate the development of this regulation an east-west street refers to any street with its axis within thirty (30) degrees of true east.
2. In so far as practicable, side lot lines should be perpendicular to the street line unless that purpose of the lot line orientation is to provide greater solar access protection.
3. The proposed principal building should be located and oriented so that the longest side of the building faces within thirty (30) degrees of true south.
4. Proposed buildings should be located to avoid shadows cast by other buildings, vegetation and natural and man-made topographical features whenever practicable.
5. Provided soil and topographic conditions permit, primary and reserve leaching fields should be planned and located to the south of a proposed house location whenever such location enhances solar access to the south wall due to and regarding tree removal associated with the installation of the sewage disposal system.
6. At the discretion of the Board, taking into consideration the need for solar access

protection, the applicant shall be required to include solar easements or restrictive covenants with the deeds of each lot.

7.16 Driveways

In particular instances, including but not limited to slopes and site distances, the Planning Board may require that the developer show curb-cuts and driveways on the Definitive Subdivision Plan, and construct said curb-cuts and driveways in conjunction with the construction of the subdivision road.

SECTION 8.00

CONSTRUCTION STANDARDS

Basic Requirements

The subdivider shall provide all of the improvements required herein and installed at his/her own expense. All work done under this section shall be done under the direction of the Board, including registered engineer(s) and any other consultants appointed by the Board.

No performance guarantee under Section 6.05(4) shall be released in its entirety until:

1. all streets and all other improvements, except the topcoat, shall have been in place over at least one (1) winter (December 1, through April 15);
2. said topcoat has been laid after over-wintering of the base and other improvements;
3. full approval in writing of all work done under this section as received from the Board's engineering consultant, or other consultants; and

All construction shall follow the Commonwealth of Massachusetts, Department of Public Works'

1. "Standard Specification for Highways, Bridges and Waterways", 1973 edition, as amended (to be referred hereto as the "Standard Specification's),
2. "Construction Standards", 1977, as amended (to be referred hereto as the "Construction Standards") and the following:

8.01 Borings

The work shall consist of making soil-test borings, obtaining and preserving acceptable samples, preparing a report of the results obtained and delivery of the report and samples in conformance with appropriate provisions of the Standard Specifications and these Rules and Regulations.

8.02 Construction (Stakes) Staking

The developer shall employ, at his own expense, a professional engineer or a registered land surveyor to set all lines and grades in a manner satisfactory to the Town's engineering consultant and in accordance with the appropriate provisions of the Standard Specifications.

8.03 *Site and Earthwork*

1. All materials and construction methods used for roadway excavation and embankments shall conform to appropriate provisions of the Standard Specifications.
2. All natural features, such as large trees, water courses, scenic points, historic plots, and similar community assets shall be preserved. It is the opinion of the Board that this protection and preservation will add to the attractiveness and value of the subdivision.
3. The entire area within the right-of-way liens, except for trees and other vegetation intended to be preserved, shall be cleared and grubbed of all stumps, brush, roots, and like material. All rock or masonry with a maximum dimension over three inches and within six inches of the top of subgrade shall be removed. Trees intended to be preserved shall be protected by suitable boxes, fenders, or wells as appropriate.
4. In a cut area all material shall be removed to subgrade. All unsuitable material, such as peat, highly organic silt or clay, or any other material that, in the opinion of the Town's engineering consultant, is considered to be detrimental to the subgrade, shall be removed and shall be replaced by bank-run gravel, and be brought to proper compaction with a ten-ton roller.
5. Topsoil, defined as fertile, friable, natural material which has demonstrated vegetative growth, and found on the site, can be used within the right of way, provided it conforms with the relative provisions of the Standard Specifications.
6. In fill areas the embankment shall be ordinary borrow specified and placed, as in the relevant provisions of the Standard Specifications.
7. Before the ground base course is spread, the subgrade shall be shaped to a true surface conforming to the proposed cross section of the road. Where fill is required, it shall be placed in layers not deeper than twelve (12) inches loose, except the last layer which shall not exceed four (4) inches in depth. The fill shall be ordinary borrow specified and placed as in the relevant provisions of the Standard Specifications. A tolerance of one-half (1/2) inch above or below finished subgrade will be permitted, provided this difference is not maintained over fifty (50) feet and the required cross section is maintained.
8. The subgrade shall be classified as follows:
 - a. Poor - Subgrade soils which become quite soft and plastic when wet. Included in these are soils having an appreciable amount of clay, silt, and fine sand.
 - b. Medium - Subgrade soils which retain a moderate degree of firmness when saturated. Included in these are such soils as fine sands, silty sands, and sandy gravels with some silts and clays.
 - c. Good to Excellent - Subgrade soils which retain a substantial amount of their load-supporting capacity when saturated shall be classified as good. Included are clean sands and gravels free of detrimental amounts of plastic silts and clays. Subgrade soils unaffected by moisture shall be classified as excellent. Included are clean and sharp sands and

gravels, particularly those that are well graded.

9. Inspections shall be required upon completion of the subgrade by the Town's engineering consultant or similarly appointed agent.

8.04 Pavement Structure

1. The Pavement structure shall be constructed in accordance with applicable provisions of the Standard Specifications and the following:
 - a. Sub-Base - The sub-base shall be gravel borrow meeting M1.03.0 Type a specifications, except that the top four (4) inches shall be gravel borrow meeting M1.03.01 specifications. A tolerance of one-half (1/2) inch above or below finished sub-grade will be permitted, provided this difference is not maintained over fifty (50) feet and the required cross section is maintained. The gravel borrow shall be laid to a depth indicated in Appendix D.
 - b. Binder Course - The binder course shall be asphalt concrete, in accordance with Section 420, Class I Bituminous Concrete Pavement Type I-1 (Binder Course Mix). It shall be laid to a depth indicated in Appendix E.
 - c. Surface Course - The surface course shall be asphalt concrete, in accordance with Section 460, Class I Bituminous Concrete Pavement Type I-1 (Top Course Mix). It shall be laid to a depth indicated in Appendix E.
2. Inspections shall be required by the Town's engineering consultant upon completion of each layer of sub-base and the binder and surface courses.

8.05 Shoulders

Shoulders shall not be allowed in place of sidewalks, curbs and grass strips, as shown in the typical cross section (Appendix C) unless permission is specifically granted by the Planning Board.

8.06 Curbs

1. For all non-residential subdivision, all curbing shall be granite Type VB. Granite curb corners Type A shall be installed at all driveways.
2. In all residential subdivision, curbing shall be bituminous concrete curb Type 2 (6" reveal), except that all street intersections radii and the outside radius of cul-de-sacs shall be constructed with granite curb type VB. The outside radius of the island in all cul-de-sacs shall be constructed with granite edging Type SB having a minimum thickness of four (4) inches.
3. Granite curb corners, wherever required, shall be Type A (see Section 8.07).
4. Granite curb inlets (Type VB) shall be built against all catch basin frames and shall be installed true to the horizontal and vertical alignment as shown on the plans.
5. All bituminous berms shall be placed on the bituminous binder.

6. The type and method of installation of bituminous berm, granite curb, granite edging and granite curb corners shall conform to the relevant provisions of the Standard Specifications.
7. Under special conditions, specially constructed berms or gutters may be required by the Planning Board.

8.07 Driveway Approach Areas and Aprons

1. Driveway approach areas from the edge of the public roadway to the edge of the public right-of-way shall be constructed in accordance with standards and permits set by the Town's Department of Public Works.
2. The nearest line of any driveway shall not be closer than fifty (50) feet from the intersection of any two (2) or more streets.
3. The Planning Board may require the developer to construct certain driveway approach areas during the construction of the subdivision, in order to insure that certain physical characteristics, such as swales, steep side slopes, etc., do not get disturbed after the end of construction.

In addition, the developer shall make provisions for driveway openings in all cases where granite curb had been used, (e.g. around all cul-de-sacs). Granite curb corners Type A shall be used at all driveway openings. The developer shall follow the regulations as stated in #1 and #2 above in constructing said driveways.

4. Driveways of Type II subdivisions shall be shown on the Definitive Plans.

8.08 Grass Strips

1. Grass strips shall be provided on each side of the roadway, between the curb and the sidewalk, where sidewalks are required.
2. The finished grade of such grass strips shall have a slope of one-half (1/2) inch per foot toward the roadway. Where unusual physical land characteristics or topographic conditions exist, and where no sidewalk is to be constructed, the Board may approve the construction of a grass strip of a greater slope with the finished slope not projecting above a plane sloped four (4) horizontal to one (1) (vertical) from the back of the curb.
3. No trees or other obstruction shall be placed or retained within the grass strip, except those approved by the Planning Board.
4. See Section 8.15(G) for planting instructions.
5. The minimum width of any grass strip shall be ten (10) feet.
6. The applicant, his successors or assigns, shall mow and maintain the grass.

8.09 Side Slopes

1. The area in back of the required strip, or behind the sidewalk when one is required, shall be graded to a point where it coincides with the finished grade of abutting lots in such a manner that no portion thereof within the right-of-way lines of the street will project above a plane sloped four (4) horizontal to one (1) vertical.
2. See section 8.15(G) for planting instructions.
3. The applicant, his successors, or assigns, shall mow and maintain the grass.

8.10 Street Name Signs

Street name signs shall be provided to the applicant by the Highway Department. The applicant shall pay a fee per sign to the Department of Public Works (see Appendix B, Fee Schedule). The applicant shall provide the posts and erect them at each intersection near the inside curb edge, at locations to be approved by the Town's engineering consultant. The installation shall be done in accordance with the sketch shown in Appendix I.

8.11 Monuments and Markers

1. Granite or reinforced concrete monuments six (6) feet in length, dressed to six (6) inches at the top with a three-eighths (3/8) inch drill hole in the center, and not less than six (6) inches square at the bottom shall be set to finish grade as shown on plans.
2. No permanent monuments shall be installed until all construction which could destroy or disturb the monuments is completed.
3. Monuments shall be installed at all street intersections, at all points of change in direction, or curvature of streets, and at other points as shown in the Definitive Plan and where in the opinion of the Board, permanent monuments are necessary. All monuments shall be installed under the direction of a Massachusetts registered land surveyor.
4. All monuments shall be installed prior to any release of the performance guarantee and will be inspected by the Town's engineering consultant.
5. All monuments shall be set flush with the ground.

8.12 Bridges

Bridges shall be designed in accordance with the Standards of the Massachusetts Department of Public Works.

8.13 Fire Alarms

Fire alarm boxes must be provided, whenever applicable, on light standard or separate poles, placed, installed, and wired under the direct supervision of the Chief of the Fire Department, at the expense of the applicant who must make all necessary arrangements with the Fire Department for this installation.

8.14 Plantings

1. Existing Trees

Trees on the site, especially those over twelve (12) inches in diameter should be preserved. Following is a list of recommended measures for the protection of trees:

- a. There should be no operation of heavy equipment or storage of any materials under said tree within its natural drip line.
- b. Wherever possible no grading or filling should be done within the drip line.
- c. Supplemental irrigation should be provided to all trees as needed during the summer months to insure healthy maintenance.

- d. No black top paving or vehicle parking should be located under evergreen trees. No more than twenty (20) percent of the area under any deciduous tree's natural dip line may be so paved.
- e. All drainage from paved areas should be directed away from root zones.

2. Additional Trees

- a. The subdivider is required to plant suitable broad leaved deciduous shade trees along roads or ways unless specifically exempted by the Board. All trees shall be well-rooted nursery-grown stock free of injury, harmful insects, and diseases. They shall be well-branched, and the branching structure should be sound.
- b. Acceptable types of street trees may be selected from those recommended by the Associated Landscape Contractors of Massachusetts and approved by the Town of Palmer, which includes large-growing, medium-growing, and small-growing deciduous trees.
- c. Large growing trees shall be spaced at intervals of forty-five (45) to fifty-five (55) feet, medium growing trees at intervals of thirty (30) to forty (40) feet, and small growing trees at intervals of twenty (20) to thirty (30) feet. Trees on one side of the street may be set either opposite or diagonally to trees on the opposite side. If overhead wires are present, large or medium growing trees to be planted along the same side as such wires should be planted within the front yard set-back area in all cases.
- d. Minimum acceptable sizes of trees to be planted shall be as follows:

Large-Growing - 2 1/2" trunk diameter caliper at 1' above the ground.

Medium-Growing - 2 1/2" trunk diameter, caliper at 1' above the ground.

Small-Growing - 9' crown height, 5' spread.

- e. Planting operations shall be as specified in the appropriate sections of the Recommended Standard Specifications for Planting Trees, Shrubs, and Vines—Associated Landscape Contractors of Massachusetts.
- f. Requirements for support stakes, guy wire and cable, ground anchors, hose, and wrapping material shall be those contained in Section 6 of the Recommended Standard Specifications for Planting Trees, Shrubs, and Vines, compiled and issued by the Associated Landscape Contractors of Massachusetts, Inc.
- g. The applicant, his successor or assigns shall be responsible for maintenance of planted trees and replacement of those which have died or become diseased from the time of planting through one full growing season.

3. Bank Plantings

- a. All cut or fill bankings that tend to wash or erode shall be planted with suitable, well-rotted, and low-growing plantings. All plants shall be nursery grown stock in good health, free from injury, harmful

insects, and diseases.

- b. Acceptable planting types may be selected from those recommended by the Associated Landscape Contractors of Massachusetts and approved by the Town of Palmer which includes very low-growing (4" - 12"), low-growing (12" - 30"), and herbaceous plantings. Perennial grass turf installed as sod is an acceptable alternative for the planting banks.
- c. If bank plantings are of a type which are properly spaced at close intervals, 8" to 12" of loam shall be spread over the entire bank. If the plantings are to be widely spaced they may be planted in loam pits.
- d. Landscape fabric shall be laid and mulch (wood chips or equal) shall be spread heavily among plantings for weed and erosion control.
- e. The applicant, his successors or assigns, shall be responsible for maintenance of bank planting and replacement of those which have died or become diseased from the time of planting through one (1) full growing season.

4. Corner Plantings

Requirements for plantings adjacent to street intersections shall be the same as those for Bank Plantings with the following exceptions:

- a. Turf may be provided by seeding as well as by planting sod.
- b. Bushy shrubs and herbaceous plantings that would tend to obscure visibility are not permitted within one hundred (100) feet of the point of intersection of the curbs adjacent to the corner lot.

No small trees, shrubs or herbaceous plants that tend to obstruct visibility at street intersections shall be permitted in the right-of-way within fifty (50) feet of the point of intersection of the edge of the pavement along both sides of the corner lot.

5. Cul-de-Sac Plantings

The central portion of a permanent dead-end street should be landscaped with low-maintenance/no - maintenance plantings of the following options:

- a. Planting with ground cover recommended by the Associated Landscape Contractors of Massachusetts and approved by the Town of Palmer using an 8" to 12" base of loam, and spreading mulch between plants for weed control.
- b. Planting perennial grass by either sod or seed.
- c. Planting ornamental shrubs of a type acceptable to the Board.
- d. Retaining existing vegetation, with the approval of the Board.
- e. Standards and Specifications.

8.15 Trenches

1. Sheeting shall be used, whenever necessary, upon the direction of the Town's engineering consultant and in conformance with relevant provisions of the Standard Specifications.
2. Pipe and conduits shall be surrounded by six (6) inches of compacted screened

gravel if set in earth, and twelve (12) inches if set in rock. In rock, clay, or peat excavation, trenches shall be excavated to a depth of twelve (12) inches or more below the bottom of any water pipe, storm drain, or sewer and filled with bank-run or select gravel, whichever is approved by the Town's engineering consultant.

3. Backfill shall be compacted to ninety (90) percent of the maximum dry density of the material as determined by the American Association of State Highway Officials, Designation T-180D.
4. The water and sanitary sewer systems shall be tested and approved prior to installation of base course(s) and pavement.
5. All lot connections shall be installed to the right- of-way line, and marked or surveyed so as to be easily located in the future.

8.16 Drainage

1. The construction of the drainage system, including methods of construction and quality of materials used, shall be in conformity with the Definitive Plan and appropriate sections of the Standard Specifications.
2. The design capacity of the drains shall be determined by the "rational method", unless the engineer exhibits satisfactory evidence that another approach is more appropriate for the specific case. The engineer shall design the drainage system in accordance with natural drainage boundaries of the total contributing drainage area, using a minimum of a ten (10) year design frequency storm. Where, in the opinion of the Board, flooding would produce property damage or a safety hazard, the design frequency storm shall be increased to twenty-five (25) years. A one hundred (100) year design frequency storm shall be used for all bridge openings, major culverts, and detention areas. Drainage calculation shall be submitted with the Definitive Plan.
3. Pipe drains, where used, shall have a minimum diameter of twelve (12) inches, and shall be laid in true line. All drainage pipe shall be reinforced concrete pipe, ACCM pipe (14 gauge), or other approved pipe of equal strength. Rubber gaskets ("O" rings), or other suitable seals shall be used for all pipe joints of the pipe mentioned above. The rubber gaskets ("O" rings), or other suitable seals shall be of approved composition, size, and shape to provide for a proper joint.
4. Where feasible, stormwater should be directed toward the nearest open stream channel. Stormwater shall not be permitted to cross any roadway upon the surface but must be piped underground. Stormwater runoff shall not be permitted to flow upon the road surface for a longer distance than three hundred (300) feet before it enters the underground system. Catch basins shall be located on both sides of the roadway on continuous grades at intervals of not more than three hundred (300) feet, at all sags in the roadway, and near the corners of the roadway at intersecting streets.
5. Proper connections shall be made with any existing public drainage system within four hundred (400) feet of the subdivision, if that system has the capacity to absorb the flows from the project area. Where no public drain is available within four hundred (400) feet, adequate provisions shall be made for the detention of surface drainage within the boundaries of the subdivision and

for its proper dispersal onto adjacent property. The rate of run-off from the completed subdivision shall not exceed the rate that existed prior to development.

6. No open water body or pond shall be filled in and no wet or swampy area shall be filled in unless it can be shown to the board that provision has been made in the lower drainage system to account for the removal of the storage area represented by the former wet or swampy area. In addition, permits and approval must be secured from the appropriate Town, State and/or Federal authorities.
7. Where open stream channels exist within a subdivision, adequate provision shall be made for properly maintaining them or for properly enclosing them, if absolutely necessary. It is the Town's intent to preserve and maintain the natural features of such streams and any development should be planned accordingly.
8. Manholes and catch basins shall be pre-cast, cast in place or block, and a typical detail of such, noting materials, dimensions, and construction details, shall be part of the Definitive Plan.
9. Iron castings for manhole frames and covers and catch basin frames and grates shall be in accordance with Massachusetts Department of Public Works Standards.
 - a. Manhole covers shall have three (3) inch lettering to read, "DRAIN". In addition, manhole covers shall be 26" in diameter.
 - b. Catch basin grates shall be square, type F, as manufactured by LeBaron Foundry Company, Box 746, Brockton, MA 02403, or other approved equal.
10. Drain manholes shall be located at every change in grade, or direction of the drainage line, at catch basin connections, and shall not exceed three hundred (300) feet apart in a continuous system.
11. All catch basins shall connect directly to drain manholes.
12. All catch basins shall have two and one-half (2 ½) foot sumps.
13. If roadway sub-drainage is required, rigid perforated PVC or ACCM pipe of appropriate size shall be used. Installation and materials shall conform to the appropriate provisions of the Standard Specifications and the sketch shown in Appendix C.
14. The maximum allowable slope on a drainage system for reinforced concrete pipe shall be seven (7) percent. The maximum allowable difference in elevation between inlet and outlet pipes in a drain manhole shall be one (1) foot. If greater slopes than seven (7) percent are necessary, ACCM pipe of appropriate size shall be used.
15. The maximum depth of any portion of the storm system shall be ten (10) feet.
16. The responsibility for adequate drainage shall rest with the developer. This shall include the risk involved in connecting with the existing drainage facilities (if any) provided by the Town.

Where property adjacent to the subdivision, but within the same watershed, is not subdivided, provision shall be made for proper projection of the drainage systems by continuing appropriate drains and easements to the exterior boundaries of the subdivision at such size and grade as will allow for such projection. Drainage rights which are

appropriate, sufficient, and necessary to handle drainage from the subdivision and adjacent areas shall be secured for the Town.

8.17 Unforeseen Groundwater Conditions

As construction progresses, unforeseen groundwater conditions may be encountered which require additional subdrains or curtain drains. These conditions include potential problems if construction is in progress at a time of low water table or other dry conditions. The Board reserves the right to require appropriate systems to accommodate the problem.

8.18 Sewage Disposal

A Definitive Plan may be approved without provision of sanitary sewers, provided that no lot shall be built upon without the provision of on-lot sewage disposal facilities specifically approved by the Board of Health in conformity with the regulations of said Board as promulgated and amended from time to time.

8.19 Water for Other than Fire Fighting Purposes

A Definitive Plan may be approved without provision of water lines (except required lines to fire hydrants) provided that no lot shall be built upon without the provision of on-lot facilities specifically approved by the Board of Health in conformity with the regulations of said Board as promulgated and amended from time to time.

Any public water lines must meet the specification and the approval of the water district within which it falls.

8.20 Other Utilities

Materials and construction methods shall be in accordance with the requirements of the involved utility company after said requirements have been approved by the Town's engineering consultant and other appropriate Town Boards.

a. Fire Hydrants

1. Maximum distance between hydrants shall be eight hundred (800) feet measured along the access route, provided however, that at least one (1) hydrant shall be located on each street.
2. Minimum size of hydrant branch is six (6) inches ID (inside diameter), or as required by the water district.
3. Hydrants shall be supplied with water by a well or other water source (such as a pond within the subdivision with an all-weather way for access) provided by the subdivider, with pipes between hydrants and a pump capable of supplying to the hydrants one thousand six hundred (1600) gallons per minute for a period of at least twenty-four (24) hours. The pump and associated equipment shall be housed in a pump house with insulation and heating sufficient to protect the pump from freezing at temperatures down to -25 degrees Fahrenheit (-31.6 degrees Celsius). One (1) hydrant shall be located at the pump house.
4. Maximum distance from any structure to a hydrant shall be five hundred

(500) feet measured along the street.

8.21 Retaining Walls

Retaining walls shall not be permitted in the right-of-way. Retaining walls shall be and remain the responsibility of the private property owner. Retaining walls shall be designed and constructed in accordance with the Commonwealth of Massachusetts Department of Public Works Bridge Manual, including all amendments, and shall conform to the applicable sections of the Standard Specifications. All deeds to said lots shall include wording that it is the property owner's responsibility to maintain said retaining walls.

8.22 Cleaning Up

Upon completion of the work, the subdivider shall remove from the highway and adjoining property all temporary structures, surplus material, and rubbish which may have accumulated during the execution of the work, and shall leave the subdivision area in a neat and orderly condition. Burning or burying of the rubbish and waste material is prohibited.

The entire area must be cleaned up within thirty (30) days of completed construction so as to leave a neat and orderly appearance free from debris and other objectionable materials. All catch basins shall be properly cleaned out.

Existing streets, and sections of the subdivision streets upon which dwellings exist, shall be cleaned up at the end of each working day.

8.23 Sanitary Sewer

1. The construction of the sanitary system, including methods of construction and quality of materials used, shall be in conformity with the Definitive Plan, Section 230 of the Standard Specifications and the specifications of the Department of Public Works.
2. If a public sewerage system is located within four hundred (400) feet of the subdivision, the applicant shall connect all lots to the public sewerage system.
3. If a planned public sewerage system has not yet been installed to within four hundred (400) feet of the proposed subdivision, the applicant shall install private on-lot sewerage systems. The latter shall be installed in conformity with applicable codes, rules and regulations of the Commonwealth of Massachusetts and the town's Board of Health.
4. Sanitary sewer mains shall have a minimum diameter of eight (8) inches and shall be PVC, bedded in 3/4" stone to spring line of pipe, or other approved equal.
5. Sanitary sewer services shall be six (6) inch PVC, bedded in 3/4" stone to spring line of pipe, or other approved equal, and shall be extended to the edge of the right-of-way.
6. The minimum slope for sanitary sewer pipes shall be such that a minimum flow velocity of two and one-half (2 1/2) feet per second is achieved.
7. The maximum slope for sanitary sewer pipes shall be seven (7) percent. Drop sanitary sewer manholes shall be allowed only with outside "chimneys".
8. Manhole cover shall have three (3) inch lettering to read "SEWER". In addition, manhole covers shall be 26" in diameter.

9. The following requirements shall be met for the design and construction of sewerage systems in relation to water systems:
 - a. Horizontal Separation: Whenever possible, sewers shall be constructed in the center of the street. A lateral separation of ten (10) feet between the sewer and water mains shall be maintained and the elevation of the top (crown) of the sewer shall be at least eighteen (18) inches below the bottom (invert) of the water main.
 - b. Vertical Separation: Whenever sewers must cross under water mains, the sewer shall be laid at such an elevation that the top of the sewer is at least eighteen (18) inches below the bottom of the water main. When the elevation of the sewer cannot be varied to meet the above requirement, the water main shall be relocated to provide this separation or reconstructed with mechanical-joint pipe for a distance of ten (10) feet on each side of the sewer. One full length of water main should be centered over the sewer so that both joints will be as far from the sewer as possible.
 - c. When it is impossible to obtain proper horizontal or vertical separation as stipulated above, both the water main and sewer shall be constructed of mechanical-joint cast-iron pipe and shall be pressure tested to assure water-tightness.

10. Leakage Test

- a. The sewer shall be made as nearly watertight as practicable and leakage measurements shall be made as directed and under the supervision of the town's authorized representative.
- b. Whenever possible, the leakage tests shall be made at a time when the ground water is at least one (1) foot above the top of the pipe of the highest section of work being tested.
- c. Leakage into the sewer shall not exceed five hundred (500) gallons per inch diameter in twenty-four (24) hours per mile of sewer.
- d. Where the ground water level is less than one (1) foot above the top of the pipe, the sewer shall be subjected to an internal pressure by plugging the pipe at the lower end and then filling the sewers and the higher manhole with clean water to a height of two (2) feet above the top of the pipe. The leakage out of the sewer will be measured by the volume of water necessary to maintain the water level in the higher manhole. Leakage out of the sewer shall not exceed five hundred (500) gallons per inch diameter per twenty-four (24) hours per mile of pipeline.
- e. Should the sections under test fail to meet the requirements, the contractor shall do all the work of locating and repairing leaks and retesting as the town's authorized representative may require.
- f. The contractor shall furnish suitable test plugs, water, pumps, and any appurtenances, and all labor required to conduct the tests properly on the sewer.
- g. Maximum depth of any portion of the sanitary system shall be ten (10) feet.

SECTION 9.00

REQUIRED IMPROVEMENTS FOR AN APPROVED SUBDIVISION

All streets, underground utilities, shoulders, curbing, sidewalks, planting strips, side slopes, street name signs, monuments and markers, drainage systems, water systems, sewage systems, and easements shall be obtained and installed by the subdivider. The obtaining and installing of these improvements shall be in accordance with Section 8.00 of these Regulations.

SECTION 10.00

ADMINISTRATION

10.01 Inspection and Control

1. Inspection shall be made and the project shall be certified in writing to the Planning Board by the project developer's registered professional engineer at each of the phases outlined in Section 10.01(4). The Town's Highway Superintendent and/or any other authorized representative of the Planning Board shall also make inspections and issue a written report to the Planning Board periodically and at each of the above referred to phases.
2. CONSTRUCTION SHALL NOT COMMENCE ON ANY PORTION OF THE SUBDIVISION UNTIL ALL OF THE FOLLOWING HAVE BEEN COMPLETED:
 - a. the Board's decision of Approval has been filed with the Town Clerk,
 - b. all of the necessary approved/endorsed plans and documents have been recorded at the Hampden County Registry of Deeds (by the Planning Board),
 - c. the developer, the project's engineer/surveyor, the project's designated contractor, the Town's Highway Superintendent and Engineering Consultant have attended a pre-construction conference to be arranged by the Planning Board.
3. The developer shall notify, in writing, the Highway Department, Planning Board and the Board's authorized representative three (3) days (excluding
4. At the phases hereinafter indicated, the construction of required streets and other improvements shall be inspected (see Section 10.01(1)):
 - a. The installation of underground utilities and services shall be inspected before the backfilling of trenches or other covering of structures.
 - b. The roadway shall be inspected upon the completion of each of the following: (1) subgrade; (2) gravel base source; (3) binder; and (4) surface course prior to each required construction step.
 - c. The curbing shall be inspected upon the completion of each of the following: (1) subgrade; (2) gravel base course; (3) binder; and (4) surface course prior to each construction step.
 - d. Following the completion of all the improvements required by Sections 7.00 and 8.00, the subdivision shall be inspected by the developer's project engineer who shall submit a certified statement that all work and improvements have been completed in conformance with the approved plans.

5. Unless each phase of the work, including the materials used on the project, have been approved by the Town's Highway Superintendent and/or any other authorized representative of the Planning Board, no further work shall be done on any other phase of construction.
6. Inspections shall be requested by the applicant three (3) working days in advance in written notice to the Town's Highway Superintendent, Planning Board and the Board's authorized representative.
7. The cost of inspections shall be paid by the applicant according to the fee schedule shown in Appendix B, Fees.
8. If the Town personnel cannot perform the inspections due to the size or complexity of the project or the unavailability of personnel, the Town may retain the services of a private engineer or consultant to perform such inspection service. The total cost of such services, plus ten (10) percent to pay the Town's administrative costs, shall be paid by the applicant.
9. Inspections by the Town's Highway Superintendent and/or any other authorized representative of the Planning Board will in no way relieve the developer, contractor or project engineer of responsibility in insuring that all materials and all construction meet all standards as stated in these Rules and Regulations.

10.02 Interpretation

Whenever these Rules and Regulations made under the authority hereof differ from those prescribed by any local Ordinance or other local regulations, the provision which imposes the greater restriction or the higher standard shall govern.

10.03 Enforcement by Denial of Building Permits

1. The Building Inspector of the Town of Palmer shall issue no building permits for any of the lots of any subdivision unless notified in writing by the Chair of the Planning Board that the approved subdivision plans and documents have been recorded at the Hampden County Registry of Deeds. Said notice shall be sent to the Building Inspector within seven (7) calendar days after the date of said recording.
2. The Building Inspector of the Town of Palmer shall issue no occupancy permits for any of the lots of any subdivision unless notified, in writing, by the Chair of the Planning Board that the following have been installed/constructed by the developer and approved by the Town's Superintendent of the Department of Public Works and/or other authorized representative of the Planning Board:
 - a. all utilities to said lot (including payment of all necessary "entry" fees);
 - b. a driveway meeting Department of Public Works Standards; and

c. at least the binder course on the proposed roadway from an existing Town roadway, up to at least the driveway mentioned above.

10.04 Material Testing

The developer shall test, upon the request of the Town's Highway Superintendent and/or other authorized representative of the Planning Board, at his own expense, all materials to be used in the construction of the public ways. The tests shall be conducted by qualified firms/individuals which have to be approved by the Town's Highway Superintendent and/or other authorized representative of the Planning Board.

SECTION 11.00

EFFECTIVE DATE AND REPEALER

11.01 Effective Date

These Rules and Regulations shall be effective on and after April 8, 1993.

A copy of these Rules and Regulations as adopted by the Planning Board and certified by the Town Clerk shall be recorded with both the Registrar of Deeds of Hampden County and the Recorder of the Land Court.

APPENDIX A

FORMS

Date

***APPLICATION FOR ENDORSEMENT
OF PLAN BELIEVED NOT TO REQUIRE APPROVAL***

File one completed form with the Planning Board
and one copy with the Town Clerk in accordance with
the requirements of Section 4.02.

To the Planning Board:

The undersigned, believing that the accompanying plan of his/her property in the Town of Palmer does not constitute division within the meaning of the Subdivision Control Law, herewith submits said plan for a determination and endorsement that Planning Board approval under the Subdivision Control Law is not required.

1. Applicant _____
Print or type name Signature

Address Phone

2. Owner _____
Print or type name Signature

Address Phone

3. Surveyor _____
Print or type name Signature

Address Phone

4. Deed or property recorded in _____

Registry, Book _____ Page _____

5. Location and Description of Property:

Date of Submission: _____

Town Clerk: _____
Signature

_____ Date

***APPLICATION FOR APPROVAL
OF DEFINITIVE PLAN***

File one completed form with the Planning Board
and one copy with the Town Clerk in accordance with
the requirements of Section 6.00.

To the Planning Board:

The undersigned herewith submits the accompanying Definitive Plan of Property located in the Town of Palmer for approval as a subdivision under the requirements of the Subdivision Control Law and the Rules and Regulations are included with this submission.

1. Applicant _____
Print or type name Signature

_____ Address Phone

2. Owner _____
Print or type name Signature

_____ Address Phone

3. Engineer _____
Print or type name Signature

_____ Address Phone

4. Surveyor _____
Print or type name Signature

_____ Address Phone

5. Deed or property recorded in _____

Registry, Book _____ Page _____.

6. Location and Description of Property:

Date

The following are all the mortgages and other liens or encumbrances on the whole or any part of the above described property:

The undersigned hereby covenants and agrees with the Town of Palmer upon approval of the Definitive Plan:

1. To construct the ways and install the municipal services as finally approved by the Planning Board.
2. To design and construct the ways and design and install the municipal services in accordance with the Rules and Regulations Governing the Subdivision of Land, Town of Palmer, Massachusetts, with the rules appropriate department heads, and with the Definitive Plan and its accompanying material as finally approved by the Planning Board.
3. At the laying out and acceptance of said ways all municipal services within the ways will become the property of the Town of Palmer at no cost to said Town, unless otherwise agreed upon.

This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Owner of Record _____
Print or Type Name Signature

Address Phone

Before me appeared _____, Owner of Record, and made oath that the above statements are true.

Notary Public
Comm. Expires: _____

Note: Complete Form D and attach.
Date of Submission _____

Town Clerk _____
Signature

_____ Date

CERTIFIED LIST OF ABUTTERS

The applicant must fill in this space with a rough sketch of land described in this petition; write against boundary lines the name and mailing address of adjoining owners in their relative positions (include owners of land separated from the subdivision only by a street); obtain the Assessor's verification prior to submittal of a definitive plan.

Planning Board
Palmer, Massachusetts

This is to certify that at the time of the last assessment for taxation made by the Town of Palmer, the names and addresses of the parties assessed as adjoining owners to the parcel of land shown above were as above written, except as follows:

Date of Verification: _____

Assessor: _____
Authorized Signature

_____ Date

DEPARTMENTAL REVIEW OF SUBDIVISION PLAN

To: Board of Health Building Inspector
 Highway Department Conservation Commission
 Board of Selectmen Town Counsel
 Fire Department Police Department
 Town Engineering Consultant

From: Planning Board

Subject: _____
(description of plan, date, etc.)

1. The subject named plan herewith attached has been submitted to the Planning Board for approval as a subdivision.

For the guidance of the Planning Board will you please note any appropriate comment or approval on the blank below and/or on the plan itself and return to the Planning Board as soon as possible.

2. Under the requirements of Section 81-U of Chapter 41 of the General Laws the Board of Health must notify the Planning Board within thirty (30) days for Preliminary Plans and within forty- five (45) days for Definitive Plans (all other thirty (30) days) of the date of this notice if the Board of Health is in doubt as to whether any of the land in the subdivision can be used as building sites without injury to the public health.

------(do not detach)-----

To: Planning Board
Date: _____
Subject: _____
(description of plan, date, etc.)

1. The undersigned APPROVES/DISAPPROVES (cross out one) of the subject named subdivision plan insofar as its requirements are affected.
2. The following comments are offered for the guidance of the Planning Board:
3. Bond requirements: \$ _____

Department: _____

Signed: _____

_____ Date

NOTICE OF PRELIMINARY SUBDIVISION APPROVAL OR DISAPPROVAL

To: Town Clerk

The Planning Board on _____ by _____
vote DISAPPROVE/APPROVED (cross out one) the following preliminary subdivision plan:

Name or description of plan: _____

Date of plan: _____

New street names: _____

Submitted by: _____

Address: _____

On: _____
(Date)

Signed: _____
Chairman, Palmer Planning Board

This vote of the Planning Board is duly recorded in the minutes of
their _____ meeting.
(date)

- | | |
|-------------------------------------|-------------------------|
| c.c. Applicant (by registered mail) | Board of Assessors |
| Police Department | Registrar of Voters |
| Building Inspector | File |
| Highway Department | Conservation Commission |
| Fire Department | Board of Health |

_____ Date

NOTICE OF DEFINITIVE SUBDIVISION APPROVAL OR DISAPPROVAL

To: Town Clerk

The Planning Board on _____ by _____
vote DISAPPROVED/APPROVED (cross out one) the following subdivision plan:

Name or description of plan: _____

Date of plan: _____

New street names: _____

Submitted by: _____

Address: _____

On: _____
(Date)

pending termination of the statutory twenty day appeal period.

Signed: _____
Chairman, Palmer Planning Board

This vote of the Planning Board is duly recorded in the minutes of their
_____ meeting.
(date)

c.c. Applicant (by registered mail)	Board of Assessors
Police Department	Registrar of Voters
Building Inspector	File
Highway Department	Conservation Commission
Fire Department	Board of Health

If approved, after twenty (20) days without notice of appeal, endorsed blueprints, if approved, will be transmitted to:

1 Mylar to: Applicant

and 1 print to: Assessors	Registrar of Voters
Building Inspector	Police Department
File	Fire Department
Highway Department	Building Inspector

Date

REQUEST FOR RELEASE OF BONDS, SURETY OR CONDITIONS

To: Highway Department

From: Palmer Planning Board

Subject: _____
(description and name, if any)

Submitted by: _____

Address: _____

The improvements specified in Section 6.00 of the Planning Board Rules and Regulations are believed to have been completed on the above described subdivision. Please indicate your approval or disapproval of release of bonds, surety, or conditions insofar as the requirements of your department only are concerned. If release of conditions is indicated, specify for which lot(s) you approve release.

Signed: _____
Chairman Palmer Planning Board

(do not detach)

To: Planning Board

Date: _____

Subject: _____
(description and name, if any)

Insofar as the requirements of this department are concerned, the release of bonds, surety or conditions for the above described subdivision is: APPROVED/DISAPPROVED (cross out one)

If disapproved, state reason: _____

Department: _____

Signed: _____

Date

NOTICE OF RELEASE OF BONDS OR SURETY

To: Town Treasurer

From: Planning Board

Subject: _____
(description and name, if any)

Submitted by: _____

Address: _____

The improvements required by Planning Board Rules and Regulations have been completed on the above described subdivision. You are requested to release any bonds or surety filed for said subdivision.

Signed: _____
Chairman, Palmer Planning Board

c.c. File

_____ Date

COVENANT

The undersigned _____ of
Print or type name(s)

_____, _____,
No. and street City/Town

_____ hereinafter called the "Covenanter" having submitted State
to the Palmer Planning Board the Definitive Plan of a subdivision,

Name of Subdivision Dated

does hereby covenant and agree with said Planning Board and the successors in office of said Board, pursuant to General Laws (Tercentenary Edition), Chapter 41, Section 81 U, as amended, that:

1. The Covenanter is the owner of record of the premise shown on said plan;
2. This covenant shall run with the land _____
(list specific lots)
and be binding upon the executors, administrators, heirs, assigns of the covenanter, and their successors in title to the premises shown on said plan.
3. The construction of ways and the installation of municipal services shall be provided to serve such lot.
4. Nothing herein shall be deemed to prohibit a conveyance subject to this covenant by a single deed of the entire parcel of land shown on the subdivision plan or of all lots not previously released by _____ the Planning Board without first providing such ways and services;
5. This covenant shall take effect upon approval of said plan;
6. Reference to this covenant shall be entered upon said plan and this covenant shall be entered when said plan is recorded.

_____Date

The undersigned _____ (wife, husband) of the covenanter hereby agrees that such interest as (I, We) may have in said premises shall be subject to the provisions of this covenant and insofar as is necessary release all rights of tenancy by the courtesy, dower, homestead, and other interest therein:

EXECUTED as a sealed instrument this _____ day of _____ 20_____.

Witness Signature

Witness Signature

Witness Signature

COMMONWEALTH OF MASSACHUSETTS

-----, ss. _____ 20____

Then personally appeared _____ and acknowledged the foregoing instrument to be _____ free act and deed, (his, her, their) before me.

Notary Public

Commission Expires: _____

_____ Date

***RELEASE OF CONDITIONS
or
CERTIFICATE OF PERFORMANCE***

Certification is herewith given that _____
has complied with the conditions imposed by the Planning Board of the Town of Palmer under
the Rules and Regulations Governing the Subdivision of Land on Lot No. _____,
or Lots No. _____,
as shown on the plan entitled _____

and recorded in Hampden County Registry of Deeds Plan Book _____
_____, Page _____.

By: _____
Chairman Palmer Planning Board

Palmer, MASSACHUSETTS _____
Date

Before me appeared _____, Chairman, Palmer
Planning Board, and made oath that the above statement subscribed to by him/her is true.

Notary Public

Commission Expires: _____

c.c. File

_____ Date

***APPLICATION FOR SUBMISSION/RESUBMISSION
OF ADDITIONAL PLAN, MATERIALS,
INFORMATION, ETC.
AND
FOR EXTENSION OF TIME PERIOD***

File one completed form with the Planning Board (with fee) and a copy with the Town Clerk in accordance with the requirements of Section 6.00.

To the Planning Board:

The undersigned herewith submits/resubmits the accompanying additional plan, materials, information, etc., relative to the previously filed Definitive Subdivision Plan entitled _____ and originally filed on _____, for approval under the requirements of the Subdivision Control Law and the Rules and Regulations Governing the Subdivision of Land of the Planning Board in the Town of Palmer.

Submitted/Resubmitted Plans:

_____	_____	_____	_____
(Title)	(Sheet(s))	(Dated)	
_____	_____	_____	_____
(Title)	(Sheet(s))	(Dated)	
_____	_____	_____	_____
(Title)	(Sheet(s))	(Dated)	

Other Submitted/Resubmitted Materials, Information, Etc.:

_____	_____
(Document)	(Dated)
_____	_____
(Document)	(Dated)
_____	_____
(Document)	(Dated)

_____ Date

With this Submission/Resubmission of the above listed additional plans, materials, information, etc. I am also hereby requesting a sixty (60) day extension, from the date of this filing, to the Planning Board's Decision Deadline Date for the Approval or Disapproval of this Definitive Subdivision Plan.

Applicant _____
(Print or Type Name) (Signature)

Before me appeared _____, the Applicant, and made oath that the above subscribed to be him/her are true.

Notary Public

Commission Expires: _____

Date of Submission: _____

Town Clerk _____
(Signature)

FORM L
DEVELOPMENT IMPACT STATEMENT

DEVELOPMENT IMPACT STATEMENT (DIS)

Name of Project:	Acreage:
Type of Project:	Owner(s):
Location:	Planner:
Parcel Number(s):	Engineer:
Zoning District(s):	Architect:

I. PROJECT DESCRIPTION

A. Number of Units:

Total _____ Low Income _____ Single Family _____

Two Family _____ Other _____

B. Type of Ownership (list number of units for each):

Condominium _____ Rental _____ Private _____

C. Approximate Price per Lot/Unit:

Private _____ Condominium _____ Rental _____

II. CIRCULATION SYSTEMS

- A. Street Design - Explain reasons for location of streets, stubs, and intersections.
- B. Street Classification - Classify the streets and stubs within the development according to the street classification set forth in Section 2.13 of these Regulations. Project the number of motor vehicles to enter or depart the site per average day and peak hour. Also state the number of motor vehicles actually to pass by streets adjacent to the proposed subdivision per average day or peak hour. Such data shall be sufficient to enable the Board to evaluate (1) existing traffic on streets adjacent to the proposed project, (2) traffic generated or resulting from the proposed project, and (3) the impact of such additional traffic on all ways within and adjacent to the proposed project.
- C. Parking and Bus Stops - Describe the number, opportunities for multiple use, and screening of parking spaces. With respect to bus stops (if any), explain the location, shelter design, and orientation to path systems.
- D. Pedestrian and Bicycle Circulation - Describe the orientation of the pedestrian and bicycle system to activity centers, location of bike racks (if any) and any bike path plans.

III. SUPPORT SYSTEMS

- A. Water Distribution - Describe the types of wells proposed for the project, means for providing fire supply, and any special problems which might arise.
- B. On-Lot Sewage Disposal System - Where sewage disposal is to be by individual on-lot sewage disposal system, the Definitive Plan shall be accompanied by a report, prepared by a Registered Civil Engineer, which includes the following:
 - 1. The results of percolation and deep hole soil tests performed on each lot, in accordance with Title 5 of the State Environmental Code.
 - 2. A map which locates the soil test sites on each lot.
 - 3. Other data, including topographic conditions, natural drainage patterns, soil characteristics, maximum ground water elevations.
 - 4. When on-site water supplies are to be used, the location of those supplies must be shown on a map along with proposed on-site sewage disposal systems within 100 feet of the property line.
 - 5. A statement by a Registered Civil Engineer as to the suitability of the area for the installation of subsurface sewage disposal systems of the general type and size as indicated in the Massachusetts Environmental Code 314CMR Title 5 - Department of Environmental Quality Engineering.
- C. Storm Drainage - Describe the storm drainage system including the projected flow from a 50 year storm, name of the receptor stream, and flow constrictions between the site and the receptor stream.
- D. Refuse Disposal - Describe the location and type of facilities, hazardous materials requiring special precautions, and screening.
- E. Lighting - Describe the location and size of lights, and methods used to screen adjoining properties from glare.
- F. Fire Precaution - Describe the type and capacity of fuel storage facilities, location of storage areas for hazardous substances, special requirements, and distance to the fire station.
- G. Recreation - Indicate the distance to, and type of, any public facilities. Describe the type of private recreation facilities to be provided with the development.
- H. Schools - Project the student population for the nursery, Elementary School, Junior High School and Senior High School levels and indicate the distance, capacity and present enrollment of the nearest elementary and secondary schools. Describe the basis or methodology for all projections of student population.

IV. NATURAL CONDITIONS - Describe the following elements of natural conditions, identifying short-term (those occurring primarily during project construction) and long-term (those remaining after the completion of project construction) impacts on each:

- A. Topography - Indicate datum, source, date, slopes greater than 15%; provide contours at two foot intervals, with graphic drainage analysis showing annual high-water mark; show location of existing structures, including fences and walls.
 - B. Soils - Indicate soils and land types, utilizing all government soil surveys covering the project area, including but not limited to prime agricultural land, depth to bedrock, and extent of land which has been filled.
 - C. Mineral Resources - Indicate extent and economic importance of mineral resources, extent and means of proposed extraction, and rehabilitation measures.
 - D. Surface Geology
 - E. Depth to Water Table - (ground water level) - Show location and provide test results of soil percolation or other subsurface tests for each lot in a proposed subdivision.
 - F. Aquifer Recharge Areas
 - G. Wetlands
 - H. Watercourses
 - I. One Hundred Year Flood Plains
 - J. Wildlife - Describe species present and estimate numbers of each; identify endangered species.
 - K. Vegetative Cover - Provide an analysis of vegetative cover, including identification of general cover type (including but not limited to wooded, open areas, cropland, wetlands, etc.); show location of all tree groupings and identify such grouping by major or dominant species; show location of and describe wildlife habitats; identify endangered species; identify unusual habitats, meaning those not commonly found in the Connecticut River Valley in Franklin County, Massachusetts.
- V. DESIGN FACTORS - Describe briefly the following features. Photographs are helpful.
- A. Present visual quality of the area.
 - B. Location of significant viewpoints.
 - C. Historic structures.
 - D. Architecturally significant structures.
 - E. Type of architecture for development.
- VI. ENVIRONMENTAL IMPACT - This section shall deal separately with both short term and long term impacts. A narrative statement shall be submitted, documenting all mitigative measures taken to:

- A. Prevent surface water contamination, changes in surface water level, or both.
- B. Prevent ground water contamination, changes in ground water level, or both.

Note: As part of items A and B above, estimate phosphate and nitrate loading on ground water and surface water from septic tanks, lawn fertilizer, household gardens, landscaping and other activities within the development.

- C. Maximize ground water recharge.
- D. Prevent air pollution.
- E. Prevent erosion, sedimentation, or other instability in soils or vegetative cover.
- F. Maintain slope stability.
- G. Reduce noise levels.
- H. Preserve significant views.
- I. Preserve wildlife habitats, botanical features, scenic or historic features.
- J. Design project to conserve energy.
- K. Ensure compatibility with surrounding land uses.
- L. Protect wetlands and floodplains, and ensure compliance with the Wetlands Protection Act (Sections 40 and 40A of Chapter 131 of the General Laws) and the Town of Palmer General Wetlands Bylaw.
- M. Promote lot layout and house sitting for potential solar energy capabilities.
- N. Minimize or avoid all short term and long-term impacts identified in Section IV. of the DIS (Natural Conditions) and not otherwise covered in this section.

VII. PLANS - Describe how the project relates to the following:

- A. Village concept and any village plans.
- B. Any conservation, Town master plan or strategic plan.
- C. Any regional plans prepared by county or regional planning agencies.

VIII. PHASING - If the development of the site will take place over more than one year, supply a schedule showing how the development will be phased. A flow chart is helpful. This timetable shall include the following elements:

- A. Stripping or clearing site, or both.
- B. Rough grading and construction.

- C. Construction of grade stabilization and sedimentation control structures.
 - D. Final grading and vegetative establishment.
 - E. Landscaping.
 - F. The construction of any public improvements shall be specified explaining how these improvements are to be integrated with the development.
 - G. The number of housing units and the square footage of nonresidential uses to be constructed each year.
- IX. Attach to this DIS the results of all studies conducted to develop these data, plus a description of the study methodology, and the name, address, telephone number, and qualifications of the person(s) responsible for carrying out the study and qualifications.
- X. ATTESTATION - The DIS must contain the following statement, signed and notarized by the applicant: "I, (applicant's name), hereby attest that the statements and information contained in this Development Impact Statement are true and accurate."

Restoration Guarantee

(Deposit/bond for the restoration/repair of existing public streets, bridges, utilities and systems disturbed or damaged as a result of construction activities, as determined by the Planning Board.)

Street Signs

Including but not limited to street names, speed limits, and other signs required by the Town.

150.00/sign

Subdivision Rules and Regulations

35.00

* to be measured along the center line of the road. For cul-de-sacs, measurement shall follow around full length of cul-de-sac.

** Consultant "Review Fee" shall be used by the Board to pay for the reasonable costs incurred by the Board for the employment of outside professional consultant's (including but not limited to engineers, hydrologists, geologists, planners, lawyers, urban designers, regional planning agencies, etc.) whose expertise, due to the size, scale or complexity of the project, is required by the Board to assist in the review of an application. The Board's selection of any consultants/experts shall be filed with the Office of the Town Clerk, and mailed (certified return receipt) to the applicant, within five (5) business days of the Board's final selection(s).

The Consultant "Review Fee", upon receipt, shall be deposited by the Board with the municipal treasurer who shall establish a special account for this purpose/project.

The "Review Fee" may only be spent for services rendered in connection with the specific project for which they are collected. these services shall include, but not limited to, project reviews, document reviews, and project related inspections. Accrued interest from this fee may also be spent for this purpose.

At the completion of the Board's review of a submitted project, or at a time determined at the submission of the application, any excess amount in that account, including interest, attributable to a specific project, shall be repaid to the applicant or the applicant's successor in interest.

A final report of the status of said account shall be made available to the applicant or the applicant's successor in interest.

An applicant may make an administrative appeal from the selection of an outside professional expert/consultant to the Town Board of Selectmen.

The grounds for such an appeal shall be limited to claims that the consultant selected has a conflict of interest or does not possess the minimum required qualifications, namely:

- a. an educational degree in, or related to the field at issue, from a recognized public or private college or university, or
- b. three or more years of practice in the field at issue or related field.

An applicant aggrieved by a selection of an outside consultant may appeal to the Board of selectmen provided that such appeal is entered within seven (7) days after such selection has been made as recorded in the Office of the Town Clerk. An appeal will not be considered valid unless it is formally filed with the Office of the Town Clerk and, at the same time, a copy given to the Board of Selectmen and the Planning Board.

The Applicant shall notify the Board of it's intention to seek a waiver at the earliest possible time in the review and consultant selection process. If the applicant fails to sign and/or file a formal waiver of appeal, this action will then be viewed as an intention to appeal on the part of the project applicants. Failure to inform the Board of such interest of appeal may result in the delay of start-up of the Town outside review services.

In acting on an administrative appeal, the Board of Selectmen may determine that:

- a. a conflict of interest does exist, and/or the consultant does not meet the minimum qualifications, therefore the Board must select another consultant, or
- b. a conflict of interest does not exist, and/or the consultant does meet the minimum qualifications, therefore the selection made by the Board stands.

The required time limit for action upon an application by the Board shall be extended by the duration of the administrative appeal, beginning from the date of filing of such appeal.

In the event that no decision is made by the Board of Selectmen within thirty (30) days following the filing of the appeal, the selection made by the Board shall stand.

If the outside consultant review begins and expenses are generated prior to the filing of an administrative appeal, all such expenses, up to the time of appeal, shall be paid out of the special account for that particular project.

APPENDIX C

TYPICAL CROSS SECTION

APPENDIX D

CUL-DE-SAC

APPENDIX E

DESIGN CRITERIA

	<i>Collector Streets</i>	<i>Local Streets</i>
<u>Right-of-Way Width</u> (feet)	60	60
<u>Horizontal Alignments</u>		
Minimum radius of center line (feet). See also Section 7.01(4b)	500	270
<u>Vertical Alignment</u>		
Minimum stopping sight distance at three and one-half (3.5) feet above pavement (feet).	275	200
<u>Grade</u>		
Maximum (percent)	5	8
<u>Intersection</u>		
Intersection angles (degrees)	90	90
Minimum sight distances (feet)	550	300
Minimum radius at edge of roadway (feet)	50	25

Required Depth of Pavement Sections

Subgrade Support Classification*

	Poor	Medium	Good - Exec.
Surface Course	2"	2"	2"
Binder Course	2"	2"	2"
Sub-base	18 - 24"	12 - 18"	12"

* See Section 8.03(8)

APPENDIX F

WIDTH OF ROADWAY IN LOCAL STREET

(TYPE I SUBDIVISION)

Maximum Development Traffic Volume Potential (MDTVP): The maximum traffic volume generated from the maximum potential number of dwelling units (1 dwelling unit = 10 ADT) capable of being developed on a proposed roadway (using the minimum lot frontage requirements) as well as other traffic expected to use the proposed roadway generated from intersecting streets.

Pavement Width
(face to face of berm)

Type A: Proposed street with MDTVP of not greater than 200 ADT	24'
Type B: Proposed street with MDTVP of not greater than 500 ADT	26'
Type C Proposed street with MDTVP of not greater than 2,000 ADT	28'
Type D Proposed street with MDTVP exceeding 2,000 ADT	32'

APPENDIX G

RECORD PLANS

The function of the record plan is to facilitate the Town in locating all components of the underground utilities within a street and/or public easements, so that the municipal utilities can be maintained, repaired, and reconstructed in the future

In preparing said plans, the project's professional engineer can make certain assumptions, such as, but not limited to: a sewer main was laid in a straight line between successive manholes, all materials (e.g., size and type of waterpipe) are the same as what was shown on the approved construction plans unless otherwise notified by the Town's engineering consultant, etc.

All surveys must tie to the Massachusetts State Plane Coordinate System (1927 Datum)(MSPCS). At least two bench marks must be placed on site and shown on the plans prior to construction. Said bench marks shall be tied to, and employ, U.S.G.S. 1988 Vertical Datum recommended, and the M.S.P.C.S. Every plan sheet should have at least four points tied into the M.S.P.C.S. using the following, or equivalent:

- a. the Global Positioning System (GPS); or
- b. the United State Geological Survey (U.S.G.S.) Horizontal Datum.

Whenever possible, a 3.5" or 5.25" DOS compatible computer disk containing the property boundary lines should be provided using Drawing Interchange Files (AutoCAD Compatible DXF files), in either ASCII or binary format.

The Developer shall submit one set of originals and two sets of prints of the record plan which shall include the following:

- A. Stamped by project's registered professional engineer.
- B. Same scale and size as originals.
- C. Plans to show:
 1. Edge of road, type of curbing, driveways in existence at date of preparation of plan.
 2. Right-of-way sidelines and lot property lines shown at least 100' from frontage (metes and bounds not necessary).
 3. Sanitary Sewer
 - a. Each component of sanitary sewer system to be clearly identified and marked.
 - b. Stationing of manholes based on center-to-center distances between successive ones with lowest/beginning manholes being 0+00 station.
 - c. Type, size, and class of pipe between each manhole.

d. Location of sanitary sewer ways with distances from the center of downstream manhole.

e. Location of end of sanitary sewer service stubs at property lines. Each location, ties to fixed and easily identifiable objects and elevation of end of pipe (Town datum) to be placed on a 4" x 6" card and submitted with record plans.

f. Type, size and class of sanitary sewer service pipe.

g. Location of pumping stations, siphons, etc.

4. Storm Sewer

a. Each component of storm sewer system to be clearly identified and marked.

b. Stationing of manholes based on center-to-center between successive ones with the lowest/beginning manhole having a 0+00 station.

c. Type, size and class of pipe between each successive manhole and between manholes and catch basins.

d. Location of individual house/lot subdrains, if any, within the proposed road layout. Location of connections of said subdrains to storm system (i.e., distance from center of downstream manhole to connection, etc.). Location, ties to easily identifiable objects and elevation (Town datum) of end of subdrains at property line. Each location ties and elevation to be placed on a 4" x 6" card and submitted with record plans. Type, size and class of subdrains.

e. Location, size, and class of roadway curtain drains, if any, within proposed layout.

5. Water System

a. Each component of water system to be clearly identifiable and marked.

b. Location, ties to fixed and easily identifiable objects, of all water gates, water service boxes, corporations, bends, reducers, T.S. & V., etc. Each location and ties for each of the above to be placed on a 4" x 6" card and submitted with record plans.

c. Location, type and class of water main, hydrant branches, water services, etc.

6. Public Utilities

It shall be the responsibility of the developer to insure that each public utility (gas, electric, telephone, cable TV) provides all the necessary information to the person preparing the record plan. Components of said systems which can be identified on the ground such as gates, manholes, transformers, etc. shall be verified by project's professional engineer.

7. Profile showing centerline of roadway and complete profile of storm and sanitary systems. Elevations to be Town datum.

APPENDIX H

STREET ACCEPTANCE PLANS

The developer shall submit to the Planning Board the following:

A. A petition to the Palmer Board of Selectmen that a particular street be accepted as a "Town Street". Each street shall have its own petition and each petition shall be signed by at least six (6) residents of the Town of Palmer.

B. Plans and documents which shall include the following:

1. Two (2) sets of originals and three (3) sets of prints.
2. Plan(s) to be prepared by a registered land surveyor.
3. Size 24" x 36".
4. Rules of Registry of Deeds to be followed (borders, size lettering, scale, reserved boxes, etc.)

5. Only one proposed street to be shown per sheet.

6. Match lines to be used if a street is to be shown on more than one sheet.

7. Title block to be: THE COMMONWEALTH OF
MASSACHUSETTS STREET
ACCEPTANCE PLAN
OF _____ IN
THE TOWN OF PALMER
HAMPDEN COUNTY

8. Date plan was prepared.

9. Reserved spaces for:

a. Town Clerk's endorsements

_____ accepted by vote of
(Name of Street)

Town of Palmer Selectmen; passed _____,
(Date)

Attest: _____, Town Clerk.

b. Statement that:

_____ is part of the

(Name of Street)

_____ Subdivision approved by the Palmer
(name)

Planning Board, filed with the Town Clerk,
_____ and recorded at the Hampden
(Date)
County Registry of Deeds (book and page no.)

- c. Planning Board's endorsement that "Approval is not Required".
10. Street line to be shown in metes and bounds. Tie courses so that street can be mathematically closed. Chord bearings and distances for all curves to be shown.
 11. Street to be tied to Town control system, if possible.
 12. All street line monumentation to be shown and identified.
 13. At least 100' of lot property lines shown with metes and bounds.
 14. Ownership of lots (including Registry Book and Page) at the time subdivision was approved by Planning Board.
 15. Land court case numbers, whenever appropriate, must appear on plans.
 16. Full legal document (including complete descriptions) suitable for recording at the Registry of Deeds, deeding each proposed street to the Town.
 17. All surveys must tie to the Massachusetts State Plane Coordinate System (1927 Datum)(MSPCS). At least two benchmarks must be placed on site and shown on the plans prior to construction. Said bench marks shall be tied to, and employ, U.S.G.S. 1988 Vertical Datum recommended, and the M.S.P.C.S. Every plan sheet should have at least four points tied into the M.S.P.C.S. using the following, or equivalent:
 - a. the Global Positioning System (GPS); or
 - b. the United State Geological Survey (U.S.G.S.) Horizontal Datum.

Whenever possible, a 3.5" or 5.25" DOS compatible computer disk containing the property boundary lines should be provided using Drawing Interchange Files (AutoCAD Compatible DXF files), in either ASCII or binary format.

APPENDIX J

ADDITIONAL REFERENCES