Essential Skills: Reading and Interpreting Maps and Plans

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BME ASSOCIATES
Stages of Plan Review

- Concept / Sketch Plan
- Preliminary Plan
- Final Plan
Concept Plan

- First Stage of Plan Development
- Shows a Landowner’s Intent for Proposed Use of the Property
- Provides Very Basic Information
  - Parcel boundary and acreage
  - Adjoining streets and properties
  - Proposed use / development
- Comparison to Zoning Ordinance
  - Lots meet zoning criteria
  - Optimum or Maximum allowed density (site yield)
  - Calculation worksheet
Sample of Concept Plan
Concept Plan

- Identify Any Unique Natural Features
  - Wetlands
  - Steep slopes
  - Woodlots
  - Drainage ways

- Prepared for Discussion Purposes with Community and Municipality
  - Identify any site specific concerns

- Get to know the property and its development constraints
Concept Plan Checklist (See Appendix)

The information listed below is required by the Town of Victor Planning Board prior to an application being deemed “complete.”

A completed application must be received by the Secretary to the Planning Board FIVE (5) WEEKS prior to a scheduled Planning Board meeting. This checklist is provided for informational purposes only, and is not to be “used” or “removed” and all items listed must be on the plan at the time of submittal.

1. Twelve (12) copies & One 11x17 (unless additional are requested) copy of plan.

2. Plan not more than 34”x 44”.

3. Name or title of proposed project. 4. Scale not less than 1” = 100’.

5. Name and address of subdivider or developer.

6. Name, address, seal and signature of Professional Engineer or Licensed Surveyor who prepared the plan.

7. Names of owners of adjacent lands and names of adjacent subdivisions.

8. Written and clear statement of subdivider’s intent.

9. North arrow. 10. Location map.


13. Date plan was prepared. 14. Existing buildings.

15. Lots mentioned.

16. Aerial photograph with proposed subdivision outlined (Scale 1” = 1,000’ or larger).

17. Ground contours for the parcel and parcels adjacent to the tract to be subdivided, at intervals not more than ten (10) feet of elevation.

18. Pertinent topographic features within the site and on adjoining tracts including existing buildings, water bodies, water courses, wooded areas, swamps, and recreational or open space. Features to be retained and to be removed shall also be indicated. U.S. Geological Survey Map may be used IF ENLARGED.

19. If the subdivider intends to develop the tract in stages, the entire tract shall be shown, with anticipated stages and time scheduled indicated. All other lands contiguous to the proposal owned by the subdivider shall be shown on the map with approximate area.

20. Zoning district within the tract and any other legal restrictions of use.

21. Method of sewage disposal. Public Septic System

22. Schematic plan of sanitary sewer system.
Preliminary Design Plans

- Preliminary Design Plans
  - Preliminary plan clearly defines the intent of the owner
  - An extension of concept plan, which normally includes input from concept plan hearing
  - Contains basic design information such as:
    - lot sizes and basic dimensions (widths, setbacks)
    - utility layout (water, sanitary, storm)
    - existing and proposed topography
    - stormwater management plan
    - limits of disturbance / features to be preserved

(Cont.)
Preliminary Design Plans

- Preliminary Design Plans (cont.)
  - Contains all information necessary to indicate conformance with the zoning ordinance
  - Indicates proposed phasing (if necessary)
  - Includes utility layout and grading information
  - Accompanied by design reports:
    - stormwater management plan (SWPPP)
    - traffic analysis
    - any other studies identified during concept plan review or EAF review (geotechnical, wetlands delineation, cultural resource survey)
Preliminary Design Plans

- Preliminary Design Plans (cont.)
  - Identify if any special districts required (drainage, sewer, water, etc.)
  - Identify any open space including ownership, use, and/or restrictions
  - Indicates if any variances are required
Preliminary Plan
Preliminary Plan
Preliminary Plan Checklist

(See Appendix)

INFORMATION REQUIRED FOR PRELIMINARY SUBDIVISION PLAN REVIEW

The information listed below is required by the Town of Victor Planning Board prior to an application being deemed “complete” and prior to a public hearing being scheduled.

A complete application must be received by the Secretary to the Planning Board **FIVE (5) WEEKS** prior to a scheduled Planning Board meeting. This checklist is provided for informational purposes only, and is not to be “used” or “removed” and all items listed must be on the plan at the time of submittal.

Preliminary subdivision plan must show the following information:

1. ___ Twelve (12) copies of plan; Plan not more than 34" x 44".

2. ___ Scale not less than 1" = 100'.

3. ___ If more than one sheet is required to show entire project, an index map should be provided.

4. ___ Date.  

5. ___ North Arrow.  

6. ___ Location Map (3" x 3")

7. ___ The approximate lines of proposed lots, the acreage contained in each lot and lot numbering.

8. ___ Owners of adjacent lands.  

9. ___ Field survey of boundary lines of proposed lots.

10. ___ The approximate lines and purposes of proposed easements.

11. ___ The approximate location and dimensions of areas proposed for parks, playgrounds, or other pertinent open space.

12. ___ Subdivision name.  

13. ___ Engineer’s seal and signature.

14. ___ Owner’s name, address and signature.

15. ___ Name, address and signature of designer.  

16. ___ Deed descriptions.

17. ___ Property boundaries including bearings and distances.

18. ___ Location of property lines.  

19. ___ Existing buildings.

20. ___ Existing site features including bodies of water, water courses, swamps, creeks, springs, and woods.
Final Design Plan

- Advances the Preliminary Plan to Preparation for Construction
- Contains all Construction and Design Details
- Addresses any Conditions or Concerns of Preliminary Plan Review
- Implements Findings of Design Studies and Municipal SEQRA Review
- Contains all Technical Information Necessary for the Property to be Developed to Municipal Standards and Maps to be Recorded / Filed
Final Plan Checklist

INFORMATION REQUIRED FOR FINAL SUBDIVISION PLAN REVIEW

The information listed below is required by the Town of Victor Planning Board prior to an application being deemed "complete."

A complete application must be received by the Secretary to the Planning Board FIVE (5) WEEKS prior to a scheduled Planning Board meeting. This checklist is provided for informational purposes only, and is not to be "used" or "removed" and all items listed must be on the plan at the time of submittal.

Submission requirements for Final Plans for Major Subdivisions:

The final subdivision plans shall include the following separate sheets:

1. Subdivision plat record plan.
2. Grading and Drainage Plan.
5. Street Lighting Plan.

In addition to the requirements for Sketch Plan and the Preliminary Plan, the following information shall be provided on the Final Plans:

6. GENERAL

________ Twelve (12) sets of full size plans not more than 34" x 44" and One (1) 11x17 (unless additional are requested)

________ If more than one sheet, provide an index map.

________ Date and North Arrow. ___________ Subdivision name.

________ Name, address and signature of owner of record.

________ Owners of adjacent lands.

________ Name, address and signature of Engineer or Surveyor.

________ Engineer's seal and signature.

________ Field survey of boundary lines of proposed lots.

________ Covenants, easements, or deed restrictions affecting the proposed subdivision.
Subdivision Plan
Final Subdivision Plan

- Plan is Considered a Legal Instrument
- Parcel Divisions with Dimensional Information
  - Distances and lengths
  - Compass (angular) directions of lines
- Street Right-of-Ways and Easements
- Zoning Information, including Bulk Area Requirements and Setbacks
- Lot Numbers and Lot Areas
- Any Special Conditions of Subdivision to be Filed with the Plan
- Subdivision Notes (lot area requirements, conditions of approval) See Appendix
Typical Subdivision Notes  (See Appendix)

1. SECTION 4 AREA IS 19.64 ACRES CONTAINING 16 LOTS AND 11.08 ACRES OF CONSERVATION EASEMENT
   AND HOMEOWNERS ASSOCIATION (HOA) LANDS.

2. EXISTING ZONING: R-2
   THIS PROPOSAL IS TO BE DEVELOPED UNDER SECTION 278 OF TOWN LAW AND SECTION 184 (SUBDIVISION OF
   LAND), ARTICLE V, OF THE TOWN OF VICTOR CODE.

3. PROPOSED USE: RESIDENTIAL SINGLE FAMILY DWELLING

4. TOTAL HOA/CONSERVATION EASEMENT AREA PROVIDED IN SECTION 4 IS 11.08 ACRES.

5. LOT STANDARDS:

<table>
<thead>
<tr>
<th>REQUIRED</th>
<th>PROVIDED</th>
</tr>
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<tbody>
<tr>
<td>R-2</td>
<td></td>
</tr>
<tr>
<td>MINIMUM LOT SIZE</td>
<td>25,000 SF</td>
</tr>
<tr>
<td>MINIMUM LOT WIDTH (@ SETBACK)</td>
<td>100'</td>
</tr>
<tr>
<td>MINIMUM LOT WIDTH ON CUL-DE-SAC</td>
<td>50'</td>
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<tr>
<td>MINIMUM LOT DEPTH SETBACKS:</td>
<td>175'</td>
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<tr>
<td>FRONT</td>
<td>40'</td>
</tr>
<tr>
<td>SIDE</td>
<td>15'</td>
</tr>
<tr>
<td>REAR</td>
<td>40'</td>
</tr>
<tr>
<td>DRIVEWAY SIDE SETBACK</td>
<td>10'</td>
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* THE ABOVE LOT STANDARDS ARE PROPOSED UNDER SECTION 278 OF TOWN LAW AND THE CLUSTERING
   PROVISIONS (ARTICLE V) OF THE TOWN OF VICTOR CODE.

6. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST RECENT STANDARDS AND SPECIFICATIONS
   OF THE TOWN OF VICTOR AND THE APPROPRIATE WATER/SEWER AGENCIES, UNLESS OTHERWISE NOTED.

7. REVIEW OF FEMA MAPS DOES NOT INDICATE THIS PROPERTY TO BE WITHIN A RECOGNIZED 100-YEAR
   FLOODPLAIN.

8. ALL STREET AND TRAFFIC CONTROL SIGNS REQUIRED BY THE TOWN OF VICTOR DESIGN AND CONSTRUCTION
   STANDARDS WILL BE INSTALLED PRIOR TO STREET DEDICATION.

9. THE CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD, AND PRESERVE ALL SURVEY CONTROL MONUMENTS
   AND RIGHT-OF-WAY MONUMENTS IN THE AREAS OF CONSTRUCTION.

10. THIS PROPERTY MAY BORDER A FARM, AS DEFINED IN LOCAL LAW NO. 4-1992. RESIDENTS SHOULD BE AWARE
    THAT FARMERS HAVE THE RIGHT TO UNDERTAKE FARM PRACTICES WHICH MAY GENERATE DUST, ODOR,
    SMOKE, NOISE AND VIBRATION.

11. IN LIEU OF STREET LIGHTING, EACH HOUSE WILL BE PROVIDED A LAMP POST AT THE EDGE OF THE DRIVEWAY
    IN THE FRONT YARD OF EACH LOT. INDIVIDUAL LAMP POSTS SHALL HAVE A UNIFORM LOCATION OF 20 FEET
    FROM THE RIGHT-OF-WAY, USE UNIFORM LIGHT FIXTURES, AND BE LOCATED TO PREVENT INTERFERENCE
    WITH WATER, STORM, AND SANITARY LATERALS.

12. ALL PRIVATE LOTS WILL BE MARKED WITH CAPPED REAR AT ALL LOT CORNERS AFTER HOUSE CONSTRUCTION
    AND PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
Grading Plan

- Existing and Proposed Ground Elevations (Contours)
- Contours: Lines that Connect Points of Equal Elevation
- Contour Intervals (1’, 2’ & 5’
Contour Examples
Contour Examples
Grading Plan

- **Slope**: A measurement of steepness. The vertical rise for 100’ of horizontal distance (% slope). Closer the contour lines, the steeper the slope.

- **Cuts / Fills**: The difference between existing and proposed contour elevations
Grading Plan

- Illustrates Proposed Cuts and Fills of Topography
- Shows Existing and Proposed Vegetation Limits (Clearing Limits)
- Identify Existing and Proposed Drainage Patterns (Stormwater Flows Perpendicular to Contour Lines)
- Identify Locations for Storm Inlets and Other Drainage Features
- Proposed Building Elevations

(Cont.)
Grading Plan

- Proposed Stormwater Management Area Locations
- Grading Notes
  - Topsoil reclamation
  - Compaction requirements
  - Slope stabilization
- Sequence of Construction
- Erosion Control Measures
Construction Erosion Control Plan
Utility Plan

- **Identifies Existing and Proposed Utility Systems to Serve Development**
  - Water supply (watermains)
  - Sanitary and storm sewers
  - Septic systems / wells (if required)
  - Private utility systems (gas, electric, telephone)

- **Contains Design Information for Systems**
  - Pipe size and material
  - Invert or depth below ground
  - Pipe slope (direction of flow)
Utility Plan

- **Location of Appurtenances**
  - Hydrants and water line valves
  - Manholes and inlets

- **Additional Easements for Utility Lines (Outside of Road Right-of-Way)**
  - Minimum 20’ easement width
  - Width equals double the depth

- **Contains Construction and Testing Notes of Regulatory Agencies (Water Authority and Health Department)**
Utility Plan
Profile Sheet

- **Provides Side View of Proposed Roads and Utilities**
  - x. axis = centerline road station
  - y. axis = elevation

- **Plan Illustrates how Roads and Sewers Change in Elevation over their Length**
  - Road slope (0.50% min. / 8.0% maximum)
  - Pipe slope and depth
  - Potential pipe conflicts

- **Very Effective in Identifying Utility Depths and Proposed Change to Existing Topography (Cut or Fill)**
Final Site Plan

**Typical Checklist Items**

- Zoning information
  - Setbacks
  - Lot coverage
  - Parking requirements
  - Building height
- Traffic flow patterns
  - Point of access
  - Ingress / egress
  - Delivery areas
  - Shared access
Final Site Plan

- **Typical Checklist Items** (cont.)
  - Traffic flow patterns
  - Drive-thru circulation and queues
  - Parking spaces (incl. handicap and ramps)
  - Pedestrian access, including crosswalks
  - Dumpster locations / enclosures
  - Snow storage
  - Land bank parking areas
  - Greenspace calculation
  - Location of proposed fencing
Landscape and Lighting Plan

- **Landscaping**
  - Proposed plant materials
  - SWMA plantings
  - Building foundation plantings
  - Seeding plan

- **Lighting**
  - Types of lights
    - MH = metal halide
    - HPS = high pressure sodium
Landscape and Lighting Plan

- **Lighting** (cont.)
  - Pole height
  - # of fixtures
  - Lighting contours / foot candles
  - Building mounted lighting
Landscape Plan

PLANTING SHOVELS

WEED PLANTING

SOIL SINKAGES

Location Map

PLANT MATERIALS LIST

Scale: 1" = 80'
Appendix Materials

- Sample Notes
- Plan Checklists
- Sample Plans
Contact Information

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