

ARTICLE VIII. SUBDIVISION STANDARDS

Section 8.1 Applicability

A. The Development Review Board (DRB) shall evaluate all subdivision applications under the standards of this article, but may waive those standards that are not relevant to a particular project in accordance with Subsection D.

B. The DRB may require, as necessary to assist in its evaluation and determine project conformance with these standards:

1. Written disclosure of the intended use of land to be subdivided, and general plans for the subsequent development of any land to be retained by the owner or applicant when only a portion of an existing parcel is to be subdivided.

a. **Master Plan.** For major subdivisions that include phased or planned unit development, the applicant shall submit a master plan for the entire parcel which includes, for land to be retained or developed over time:

- i. The general locations of resources to be protected under Section 8.3.
- ii. The general locations of future land subdivision and development, including road rights-of-way, path networks and utility corridors.
- iii. An estimate of the types, density, and timing of future development, including projected total lot coverage and vehicle trip generation rates at build-out.

2. The submission of additional information or studies under one or more standards of review, including an independent technical review prepared by a qualified professional retained by the DRB and paid for by the applicant, in accordance with Section 10.7.

3. The modification of subdivision lot layout and design, the phasing of development, or other reasonable and necessary measures to avoid or mitigate undue adverse impacts resulting from the proposed subdivision and subsequent development of subdivided lots.

C. **Findings of Fact.** An applicant shall submit to the DRB proposed findings of fact for each relevant subdivision standard enumerated in this article as part of the application for final subdivision review, unless waived by the DRB. The Zoning Administrator shall provide a "Findings Checklist" to assist the applicant in this submission.

D. **Modifications & Waivers.** The DRB may waive any standard under this article that it determines does not apply to a particular subdivision.

1. In accordance with the Act [§4418(2)], the DRB also may modify or waive a standard under this article, subject to conditions if it determines that, due to circumstances specific to a particular application:

- 1 a. The standard is not requisite in the interest of the public health, safety and general
2 welfare, or the standard is inappropriate because of the inadequacy or lack of
3 connecting facilities adjacent or in proximity to the subdivision; and
4
- 5 b. The modification or waiver will not nullify the intent and purpose of these
6 regulations, the Underhill Town Plan, or other municipal bylaws and ordinances in
7 effect at the time of application.
8
- 9 2. Requests for modifications or waivers under this section shall be submitted by the
10 applicant in writing with the application for preliminary or final subdivision review. The
11 applicant must provide sufficient information for the DRB to make findings that justify
12 the modification or waiver, with or without conditions.
13
- 14 3. The DRB may require an independent technical review of a proposed modification or
15 waiver, as specified under Subsection B above, that identifies related impacts and
16 mitigation measures that may be incorporated under associated conditions of approval.
17
- 18 4. In granting a modification or waiver, the DRB shall make explicit findings that:
19
 - 20 a. Specify the circumstances that justify granting a modification or waiver.
 - 21 b. State how granting the modification or waiver will not nullify the intent and
22 purpose of these regulations or the Underhill Town Plan, including the plan's stated
23 goals and objectives for the relevant zoning district(s), and other regulations in
24 effect at the time of application.
 - 25 c. State what conditions, if any, shall be required of the applicant in exchange for
26 granting the modification or waiver, as necessary to mitigate adverse impacts.
27

28 Section 8.2 General Standards

- 29
- 30 A. **Development Suitability.** All land to be subdivided shall be suitable for the intended
31 use and proposed density of development. The subdivision shall not result in undue adverse
32 impacts to public health and safety, the natural environment, neighboring properties and
33 uses, or the character of the area in which it is located. Subdivisions shall set aside as open
34 space and exclude from subsequent development land that is characterized by periodic
35 flooding, poor drainage, very steep slopes (>25%) and other known hazards, or that is
36 otherwise not suitable to support structures or infrastructure.
37
- 38 B. **Development Density.** The allowed density of development within a subdivision shall be
39 calculated by dividing the total land area to be subdivided, excluding existing and proposed
40 road rights-of-way, by the minimum lot size and maximum building densities specified for
41 the zoning district(s) in which the subdivision is located (see Tables 2.1 – 2.8), except as
42 modified for planned unit developments under Article IX.
43
- 44 C. **Existing Site Conditions.** To the extent physically feasible, subdivision layout and design
45 shall integrate and conserve existing site features and natural amenities, including:

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- 1 1. natural topography (surface contours, grades) and drainage patterns;
- 2 2. naturally occurring surface waters, wetlands and vernal pools;
- 3 3. mapped flood plains (Special Flood Hazard Areas);
- 4 4. natural vegetative cover (e.g., timber and orchard stands, witness and shade trees,
- 5 copses, hedgerows, and wetland and riparian buffers);
- 6 5. unique topographic or geologic features (e.g., outcrops, ledges, visually prominent
- 7 ridgelines and peaks);
- 8 6. primary agricultural soils, as defined by the U.S. Natural Resource Conservation Service
- 9 and state; and
- 10 7. historic sites and structures.

Note: See Section 8.3 for specific resource management and mitigation measures.

- 11
- 12 D. **Underhill Town Plan & Regulations.** Subdivisions shall conform to clearly stated policies
- 13 and objectives in the Underhill Town Plan as most recently amended, other provisions of
- 14 these regulations, adopted capital or transportation improvement programs, and other
- 15 municipal bylaws, ordinances and regulations in effect at the time of application.
- 16
- 17 E. **District Settlement Patterns.** A subdivision shall be designed and configured to reflect
- 18 the desired settlement pattern for the zoning district(s) in which it is located, as defined
- 19 under Article II and the Underhill Town Plan. To this end, the following standards shall apply
- 20 to subdivisions within respective zoning districts.
- 21
- 22 1. **Underhill Village Center Districts.** Subdivision within the Underhill Flats Village Center
- 23 and Underhill Center Village Districts shall be designed and configured to reinforce a
- 24 compact, pedestrian scale and pattern of development. Lots and building envelopes
- 25 shall be sized and located to maintain a consistent building line and streetscape along
- 26 roads. Subdivisions in this district also shall be designed to incorporate, extend, or
- 27 connect to existing roads, pedestrian paths and utility corridors. Sidewalks and other
- 28 pedestrian facilities shall be provided where physically feasible; new roads in these
- 29 districts shall be designed to maximize pedestrian safety and circulation.
- 30
- 31 2. **Rural Districts.** Subdivisions within the Rural Residential, Water Conservation, and
- 32 Scenic Preservation Districts shall be designed and configured to reinforce the rural
- 33 character and historic working landscape of these districts, characterized by forested
- 34 hillsides and hilltops, open fields, and moderate to low densities of residential
- 35 development interspersed with large contiguous tracts of undeveloped land. Lots shall
- 36 be configured to maintain contiguous tracts of open land between adjoining parcels.
- 37
- 38 3. **Soil and Water Conservation District.** Subdivisions within the Soil and Water
- 39 Conservation Districts shall be designed and configured to avoid undue adverse impacts
- 40 to existing forest resources and environmentally sensitive upland areas, including
- 41 watersheds and significant wildlife habitat and travel corridors, and to maintain
- 42 traditional land uses including forestry and outdoor recreation. To the extent physically
- 43 feasible, fragmentation of productive forest lands and significant wildlife habitat shall be

1 avoided, and lots shall be configured to maintain contiguous tracts of open land
2 between adjoining parcels. Lots created for the purpose of constructing dwellings or
3 other structures in this district shall not result in the development of environmentally
4 sensitive areas identified in the town plan or through site investigation, as specified in
5 Section 8.3.

6
7 F. **Lot Layout.** Lots and lot layouts shall be configured to:

- 8
9 1. be suitable for their intended use, for subsequent development (building lots) or for
10 resource or open space protection (conserved lots);
11
12 2. conform to desired district settlement patterns, as required under Subsection E;
13
14 3. meet minimum lot size and density requirements under Article II, except as modified for
15 planned residential or planned unit developments under Article IX;
16
17 4. conform to lot and yard requirements under Section 3.7; and to
18
19 5. avoid irregularly shaped lots (e.g., with curves, jogs, dog-legs, etc.), unless warranted
20 due to topographic or other physical site constraints, or to minimize the fragmentation
21 of natural, scenic or cultural resources under Section 8.3
22

23 G. **Building Envelopes.** The designation of building envelopes to limit the location of
24 structures, parking areas, and associated site improvements to one or more portions of a lot
25 shall be required for all subdivided lots, as shown on the subdivision plat. The location, size
26 and shape of each building envelope shall be established in accordance with these
27 regulations, including zoning district requirements under Article II and Subsection E, and
28 resource protection standards under Section 8.3. The DRB also may require the identification
29 of specific building locations (footprints) if, in its judgment, such information is needed to
30 determine conformance with these regulations.
31

32 H. **Survey Monuments.** The locations of all proposed permanent surveying monuments
33 and corner markers, as required under the Rules of the Board of Land Surveyors, shall be
34 identified on the final subdivision plat. The DRB may also require that the corner points of
35 designated building envelopes be marked on the ground with iron pins and identified on the
36 final subdivision plat.
37

38 I. **Landscaping & Screening.** Landscaping and screening, using native and salt-tolerant
39 species (see Appendix C and Appendix D), shall be provided as necessary to:

- 40
41 1. Preserve existing trees, tree lines, wooded areas of particular natural or aesthetic value
42 to the site, and significant wildlife habitat areas.
43

2. Provide an undisturbed vegetated buffer between developed and undeveloped portions of the subdivision, as necessary to minimize adverse impacts to surface waters and wetlands (see Section 3.19), or other natural or scenic resources under Section 8.3.
3. Provide physical separation and visual screening as necessary to provide privacy, reduce noise or glare, or to establish a buffer between potentially incompatible land uses.
4. Establish a tree canopy along roads or pedestrian walkways, particularly where proposed road construction and related site improvements will result in the loss of existing tree cover.

For major subdivisions, the DRB may require the submission of a landscaping plan, to be prepared by a certified landscape architect, as required to determine conformance with these regulations.

J. Energy Conservation. Subdivision design and layout, to the extent physically feasible, shall incorporate energy efficient design by:

1. Locating and orienting sites (e.g., building lots, envelopes) to maximize southern exposures where available, and solar access for solar energy and heating systems.
2. Clustering development (e.g., building lots, envelopes) to minimize road and utility line extensions and to allow for group net-metering.
3. Incorporating existing topography, natural vegetation and landscaping to provide wind breaks, seasonal shade and solar access, and to reduce building heating and cooling needs.
4. Designating lots or areas within major subdivisions that are suitable for net-metered solar collectors, wind turbines, managed wood lots and other renewable energy facilities and resources for the individual or collective use of subdivision residents.

Section 8.3 Natural & Cultural Resources

A. Resource Identification & Protection. All applications for subdivision review shall identify and conserve Underhill's significant cultural and natural features in accordance with these regulations. The following resources under this section may be identified from the Underhill Town Plan, related inventories, studies and maps on file at the Underhill Town Office, and through site investigation, and shall be shown on subdivision plans.

1. The applicant and DRB may consult with the Underhill Conservation Commission, state officials, and/or other qualified professionals to determine the likely impact of a subdivision on one or more of these resources, and appropriate mitigation measures.

1 B. **Surface Waters, Wetlands & Floodplains.** Subdivision boundaries, lot lines and building
2 envelopes shall be located and configured to avoid adverse impacts to surface waters,
3 wetlands, special flood hazard areas (SFHAs) and designated Source Protection Areas (SPAs).
4 Methods to avoid or mitigate undue adverse impacts include but are not limited to the
5 following:

- 6
- 7 1. Setback and buffer areas of sufficient width to protect surface waters and wetlands
8 from accelerated surface runoff, soil erosion and sedimentation shall be designated and
9 indicated on the subdivision plan and plat in accordance with Section 3.19. The DRB may
10 require larger setbacks or buffers, and/or buffer management plans as necessary to
11 minimize impacts resulting from site-specific slope and soil conditions.
12
- 13 2. Lot lines shall be configured to minimize the subdivision and fragmentation of surface
14 waters, wetlands and associated setback and buffer areas.
15
- 16 3. Building envelopes shall be located and sized, to the extent physically feasible, to
17 exclude surface waters, wetlands and associated buffer areas.
18
- 19 4. Roads, driveways and utility corridors shall be located, to the extent physically feasible,
20 to minimize the number and extent of surface water and wetland crossings and
21 associated areas of site disturbance, in accordance with Section 3.19.
22
- 23 5. Surface waters, wetlands and associated buffers shall be included as designated open
24 space areas in accordance with Section 8.4.
25
- 26 6. Building envelopes shall be located and configured to avoid development that is
27 prohibited within designated Source Protection Areas under Section 3.17.
28
- 29 7. Subdivisions and associated infrastructure within Special Flood Hazard Areas shall meet
30 the requirements for subdivision and development within flood hazard areas under
31 Article VI.
32

33 C. **Rock Outcrops, Steep Slopes, Hillside & Ridgelines.** Subdivision boundaries, lot lines,
34 and building envelopes shall be located and configured to the extent physically feasible to
35 minimize the adverse impacts of development on steep slopes (15% or more); to avoid site
36 disturbance on very steep slopes (>25%); and to avoid the placement of structures on
37 exposed rock outcrops and ledges and visually prominent hilltops and ridgelines. Methods
38 to avoid or mitigate adverse impacts include but are not limited to the following:

- 39
- 40 1. Building envelopes, to the extent physically feasible, shall be located to exclude these
41 areas.
42
- 43 2. Building envelopes located in the vicinity of visually prominent ridgelines and hilltops
44 shall be located to minimize the visibility of subsequent development as viewed from
45 public roads or properties.

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1 a. Building envelopes shall be located down-slope of (below) prominent ridgelines and
2 hilltops, and configured so that the height of any structure placed within the
3 envelope will not visually exceed the height of the adjacent tree canopy serving as
4 the visual backdrop to the structure, or the height of land on an exposed ridgeline
5 or hilltop, as viewed from public vantage points.
6

7 b. Existing forest cover outside the envelope shall be maintained to provide a forested
8 backdrop to structures, and/or to lessen the visual impact of new development as
9 viewed from public roads and properties. A tree cutting, landscaping and/or forest
10 management plan may be required as necessary to ensure that ridges and hilltops
11 remain wooded. The DRB also may require additional plantings at specific locations
12 within the subdivision or on individual lots to provide screening.
13

14 3. Building envelopes shall be sized and configured to minimize the extent of clearing, site
15 disturbance and development in areas of steep slope (15% or more). The applicant shall
16 submit an erosion control plan for building envelopes or subdivision improvements,
17 including roads and other infrastructure improvements in these areas in accordance
18 with Sections 3.18 and 8.5.
19

20 4. Driveways, access roads (including logging roads to be converted to private roads or
21 driveways) and utility corridors, to the greatest extent feasible shall share access and
22 rights-of-way, follow existing contours to achieve angled ascents, and be located and
23 designed to minimize surface runoff and erosion, especially in areas of steep slope (15%
24 or more) in conformance with Sections 3.2 and 3.18.
25

26 5. Building envelopes, roads, driveways and utility corridors shall be sited, to the greatest
27 extent physically feasible, to avoid site disturbance and development on very steep
28 slopes (over 25%), in accordance with Section 3.18.
29

30 6. Land characterized as having very steep slopes (>25%), large rock outcrops or ledge
31 areas (>200 square feet), and visually prominent hilltops and ridgelines shall be included
32 as designated open space in accordance with Section 8.4.
33

34 **D. Natural Areas & Wildlife Habitat.** Subdivision boundaries, lot lines, and building
35 envelopes shall be located and configured to avoid the subdivision and fragmentation of,
36 and to prevent adverse impacts on natural areas and significant wildlife habitat identified in
37 the town plan and associated maps and inventories, by the Vermont Department of Fish &
38 Wildlife, or through site investigation. Methods to avoid or mitigate adverse impacts include
39 but are not limited to the following:
40

41 1. Lot lines shall be located and configured, to the extent physically feasible, to minimize
42 the subdivision and fragmentation of significant wildlife habitat, including identified
43 wildlife travel corridors, and to incorporate these areas as within designated open space
44 areas.
45

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1 2. Building envelopes shall be located to exclude significant wildlife habitat areas and
2 natural communities, including but not limited to core habitat areas, travel corridors
3 and rare, threatened or endangered plant and animal communities.
4

5 3. A buffer area of adequate size, as determined in consultation with the Conservation
6 Commission, state wildlife officials, or qualified professionals, shall be established as
7 needed to protect significant wildlife habitat areas and natural communities.
8

9 4. Roads, driveways and utility corridors shall be located to minimize the fragmentation of
10 significant wildlife habitat areas and natural communities.
11

12 5. The DRB may require the submission of a management plan prepared by a wildlife
13 biologist, ecologist or other qualified professional as necessary to identify the function
14 and relative value of impacted wildlife habitat, and associated mitigation and
15 management strategies.
16

17 6. Significant wildlife habitat areas, natural communities and associated buffers shall be
18 included as designated open space, in accordance with Section 8.4.
19

20 E. **Historic & Cultural Resources.** Subdivision boundaries, lot lines, and building envelopes
21 shall be located and configured to minimize adverse impacts to historic and archaeological
22 sites and resources identified in the town plan, by the Vermont Division for Historic
23 Preservation (on state or national registers), or through site investigation. Methods to avoid
24 or minimize adverse impacts include but are not limited to the following:
25

26 1. Historic features, including historic structures, stone walls and cellar holes, to the extent
27 physically feasible, shall be preserved and integrated into subdivision design (e.g.,
28 driveways following stone walls). Wherever feasible, existing property boundary (lot)
29 lines defined by historic stone walls shall be incorporated in subdivision layout and
30 design to retain their historic context.
31

32 2. Building envelopes shall be sited to avoid known archaeological sites. Prior to
33 development on sites that have been identified as being archaeologically sensitive in the
34 town plan or through site investigation, the DRB may require an initial site assessment
35 conducted by a qualified professional, to be paid for by the applicant, as necessary to
36 identify the presence and relative value of archaeological resources on the site, to
37 document archaeological resources and/or recommend strategies for their protection.
38

39 3. The subdivision of land shall be designed to maintain the historic context of the site, as
40 defined by historic structures located on and in the immediate vicinity of the property,
41 and to minimize the impact of new development on the historic and architectural
42 integrity of historic resources.
43

44 F. **Farmland.** Subdivision boundaries, lot lines and building envelopes, to the extent
45 physically feasible, shall be located and configured to avoid the fragmentation of and

1 adverse impacts to primary (“prime” and “statewide”) agricultural soils and open fields,
2 orchards, and maple sugar stands in existence at the time of application. Methods for
3 avoiding or mitigating adverse impacts include but are not limited to the following:
4

- 5 1. The subdivision of farmland, to extent physically feasible, shall be configured to allow
6 for continued access to and ongoing management of productive farmland for
7 agricultural use. Lot lines shall be located and configured to minimize farmland
8 fragmentation and, where feasible, to incorporate farmland within separately conserved
9 agricultural lots to be held in common or individual ownership.
- 10
11 2. Building envelopes shall be located at field or orchard edges or, in the event that no
12 other land is practical for development, on the least fertile soils in order to minimize the
13 conversion of productive agricultural land, impacts to existing farm operations, and
14 disruption to the scenic qualities of the site.
- 15
16 3. Vegetated buffer areas may be required by the DRB as necessary to physically separate
17 and visually screen building lots or envelopes from agricultural operations as necessary
18 to minimize land use conflicts.
- 19
20 4. Access roads, driveways and utility corridors, to the extent physically feasible, shall be
21 shared and located along field edges or to follow existing linear features such as roads,
22 tree lines, stone walls, and fence lines, to minimize the fragmentation of open
23 agricultural land and associated visual impacts.
- 24
25 5. Retained farm parcels or open land shall be included as designated open space in
26 accordance with Section 8.4. Conservation easements, limitations on further
27 subdivision, or comparable site protection mechanisms may be required as necessary to
28 ensure their long-term protection and management. Easements may allow for the
29 construction of farm structures that support active farming operations on conserved
30 farmland.

31
32 **G. Forestland.** Subdivision boundaries, lot lines and building envelopes shall be located
33 and configured to the extent physically feasible to avoid the fragmentation or development
34 of productive forestland, including large (50+ acre) tracts of forestland, forestland that is
35 contiguous to other large, undeveloped tracts that have either been protected through
36 public or private land conservation initiatives or are subject to use value appraisal contracts,
37 and forestland that includes distinctive timber standards or possesses unique or fragile
38 features, including natural areas, significant wildlife habitat and travel corridors, and/or
39 exceptional outdoor recreational resources. Methods for avoiding or mitigating adverse
40 impacts include but may not be limited to the following:
41

- 42 1. Subdivisions that include forestland, to the extent physically feasible, shall be configured
43 to allow for continued access to and ongoing management of forest resources. Lot lines
44 shall be located to minimize forest fragmentation, and to incorporate forested areas

1 within separately conserved lots to be held in common or individual ownership and
2 management.

- 3
- 4 2. Building envelopes, driveways, and road and utility corridors, to the extent physically
5 feasible, shall be laid out to minimize forest fragmentation, and to maintain access to
6 forestland for long-term management.
- 7
- 8 3. Building envelopes, to the extent physically feasible, shall be located and sized to
9 minimize the extent of forest clearing required for development. Where applicable, the
10 DRB may require that building envelopes be set back and buffered from adjacent forest
11 parcels as needed to protect public recreation areas, conserved open space, and
12 significant wildlife habitat, and to avoid conflicts between new development and
13 existing forest management activities on land that is protected or enrolled in municipal
14 or state tax stabilization (current use) programs. Setbacks and buffer areas shall be
15 included as designated open space, in accordance with Section 8.4.
- 16
- 17 4. Lots specifically intended for long-term forest management should, to the extent
18 physically feasible, be of sufficient size to qualify for enrollment in state and/or
19 municipal tax stabilization programs, and shall be included as designated open space in
20 accordance with Section 8.4. Easements may allow for the construction of accessory
21 structures (e.g., equipment sheds) that support active forestry operations on conserved
22 forestland.
- 23

24 **Section 8.4 Open Space & Common Land**

25

26 A. **Open Space.** The location, size and shape of lands set aside to be preserved for open
27 space shall be approved by the Development Review Board, in accordance with the
28 following:

29

- 30 1. Open space areas shall include significant natural and cultural features identified and
31 designated for protection in accordance with Section 8.3.
- 32
- 33 2. Open space areas shall be configured to be contiguous with existing and potential open
34 space lands on adjacent parcels.
- 35
- 36 3. Designated open space may include a portion of a single lot, or extend over several
37 contiguous lots; however to the extent physically feasible, lot configurations shall
38 minimize the subdivision and fragmentation of contiguous open space areas.
- 39
- 40 4. The location, shape, size and character of open space areas shall be suitable for their
41 intended purpose and use.
- 42
- 43 5. Provisions shall be made to allow open space designated for agriculture and forestry
44 (silviculture) to be used for these purposes. Management plans for forests, wildlife

1 habitat, and farmland may be required by the Development Review Board as necessary
2 to ensure their long-term management.

- 3
4 6. Sewage disposal areas, utility and road rights-of-way or easements, and access and
5 parking areas shall not be included within designated open space areas, unless the
6 applicant can demonstrate to the satisfaction of the DRB that they will in no way disrupt
7 or detract from the purposes or values for which the open space is to be protected.

8
9 B. **Common Land.** Land held in common for the preservation and maintenance of open
10 space or the management and maintenance of shared facilities (e.g., community wastewater
11 systems, community water supplies, recreation or community facilities, road and trail rights-
12 of-way) may be held under separate ownership from contiguous parcels and shall be subject
13 to the legal requirements set forth below.

14
15 C. **Legal Requirements.** At a minimum, unless waived by the Development Review Board:

- 16
17 1. Designated open space areas and common land shall be indicated on the final
18 subdivision plat.
19
20 2. Land held in common shall be subject to deed restrictions and owner agreements that
21 stipulate the permitted and restricted use of such land, and establish the person(s) or
22 entity responsible for its maintenance and long term stewardship.
23
24 3. Designated open space and common land areas shall be subject to management
25 agreements that include terms for administration, maintenance, and cost sharing. A
26 draft management agreement shall be submitted with the application for final
27 subdivision approval.
28
29 4. Nothing in these regulations shall be construed as indicating that the public has a right
30 to recreate on private property without permission of the landowner.
31

32 **Section 8.5 Stormwater Management & Erosion Control**

33
34 A. Temporary and permanent stormwater management and erosion control measures
35 shall be used during all phases of subdivision development as necessary to limit surface
36 runoff and erosion, protect water quality and to avoid damage to downstream properties in
37 conformance with the following:

- 38
39 1. Building envelopes, driveways, road and utility corridors shall be located to minimize
40 site disturbance on steep slopes (15%, or more) and, to the greatest extent feasible,
41 avoid site disturbance on very steep slopes (>25%) in accordance with Sections 3.18 and
42 8.3.
43
44 2. Stormwater management and erosion control measures serving the subdivision shall be
45 designed, installed and maintained in accordance with best management practices

1 accepted by the state, based on the upstream drainage area, size of storm events, slope
2 and soil conditions, and the proposed type and density of development, including total
3 lot coverage at build-out.

4
5 3. Stormwater management systems shall be designed to accommodate existing and
6 anticipated runoff, including anticipated flows from storm events, and total runoff
7 generated at build-out and, to the extent physically feasible, to:

- 8
9 a. Maximize onsite infiltration and treatment and minimize surface runoff through the
10 use of "Low Impact Development" (LID) strategies (see Appendix E).
11 b. Integrate natural drainage systems in stormwater system design.
12 c. Minimize the need for expensive system maintenance.
13 d. Integrate stormwater storage and treatment areas (e.g., retention ponds) in
14 subdivision design.
15 e. Avoid flooding or damage to adjoining properties and downstream drainage
16 facilities.

17
18 4. The applicant shall demonstrate that existing downstream drainage facilities will be able
19 to accommodate any additional runoff from the subdivision at build-out. If the increase
20 in runoff exceeds the capacity of downstream drainage facilities, the DRB may require
21 one or more of the following mitigation measures, to be installed or paid for by the
22 applicant:

- 23
24 a. Additional on-site stormwater infiltration, retention and treatment facilities.
25 b. Off-site improvements to downstream drainage facilities and infrastructure as
26 necessary to accommodate increased runoff from the subdivision.

27
28 B. For major subdivisions, the DRB may require the submission of a stormwater
29 management and erosion control plan for all phases of subdivision development, prepared
30 or certified by a licensed professional engineer, as necessary to determine conformance with
31 these regulations. The plan shall incorporate best management practices recommended by
32 the state in the most recent editions of the "Vermont Stormwater Management Manual"
33 and the Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites" or
34 similar state-issued publications.

35
36 C. The DRB may also require, as conditions of preliminary or final subdivision approval:

- 37
38 1. Project phasing as necessary to minimize the extent of soil disturbance and erosion
39 during each phase of development, in accordance with Section 3.18.
40
41 2. Increased surface water and wetland setback distances and buffer areas (under Section
42 3.19), and/or the submission and implementation of buffer management plans to
43 protect surface waters and wetlands from stormwater runoff and erosion.
44

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- 1 3. Drainage easements and/or or municipal approvals as necessary to accommodate
2 drainage directed onto adjoining properties or public rights-of-way.
3
- 4 4. Documentation that state stormwater and construction permits have been obtained,
5 which may also serve as documentation of compliance with applicable requirements of
6 these regulations.
7

8 **Section 8.6 Transportation Facilities**

9
10 A. **Access & Driveways.** Access to the subdivision and to individual lots within the
11 subdivision shall at minimum meet the requirements of these Regulations, the Road
12 Ordinance, Section 3.2 (Access Management) and the following:
13

- 14 1. Access to individual lots legally in existence as of the effective date of these regulations
15 that do not have frontage on a public road may be approved by the Development
16 Review Board in accordance with Section 3.72 concurrently with subdivision approval.
17
- 18 2. All lots created after the effective date of these regulations that are intended for
19 development must meet minimum applicable frontage requirements along public and
20 private road rights-of-way for the district(s) in which they are located unless modified or
21 waived by the DRB for planned unit development under Article IX. The DRB may also
22 reduce or waive district lot frontage requirements for:
23
 - 24 a. minor (up to three lot) subdivisions accessed by a shared driveway,
 - 25 b. lots that will be maintained in perpetuity as undeveloped open land to be used only
26 for passive outdoor recreation or resource conservation,
 - 27 c. lots located on a cul-de-sac or at the end of an existing dead-end road, or
 - 28 d. to allow for rear lot (flag lot) infill development within the Underhill Flats Village
29 Center and Underhill Center Village zoning districts.
30
- 31 3. A highway access (curb cut) permit from the Underhill Selectboard (or designee) is
32 required for subdivision access onto town highways, and from the Vermont Agency of
33 Transportation for subdivision access onto state highways, as required under by these
34 Regulations and Section 3.2 the Town's Road Ordinance. Applicants are encouraged to
35 meet with local and state highway officials prior to submitting an application for
36 preliminary subdivision review. As required under the Town's Road Ordinance,
37 preliminary Aaccess permits are required prior to filing an application for final
38 preliminary subdivision review, and access permits are required after obtaining final
39 subdivision approval.
40
 - 41 a. Municipal or state access management requirements in effect at the time of
42 application shall be incorporated in subdivision layout and design. These include,
43 but may not be limited to Underhill town highway ordinance standards, and
44 Vermont Access Management Program Guidelines.
45

1 4. Access to a subdivision shall conform to adopted state or municipal access management
2 plans and capital or transportation improvement plans. Planned highway and access
3 improvements, including proposed rights-of-way, shall be incorporated in subdivision
4 design. Right-of-way reservations may be required as necessary to accommodate
5 planned improvements.

6
7 ~~5. A subdivision shall be served by no more than one direct access onto a public highway,
8 unless additional access is deemed necessary by the DRB to:~~

- 9
10 ~~a. improve traffic circulation or reduce traffic congestion,~~
11 ~~b. facilitate emergency vehicle access, as determined by the Jericho Underhill Fire~~
12 ~~Department,~~
13 ~~c. allow connections between adjacent parcels of land, each of which has direct access~~
14 ~~to a public highway, or to~~
15 ~~d. address physical site constraints, such as the presence of steep slopes, surface~~
16 ~~waters, wetlands, resource or hazard areas, or other physical site conditions that~~
17 ~~warrant additional access.~~

18
19 6.5. Access to newly created parcels, and to existing contiguous parcels under common
20 ownership or control, shall be provided internally from a shared driveway or
21 development road that intersects the public highway, unless otherwise approved by the
22 DRB under Subsection A.5. Additional indirect access via an adjacent parcel to serve
23 part or all of the subdivision is allowed.

24
25 ~~a. No additional access rights to a public highway shall automatically result from the~~
26 ~~subdivision or re-subdivision parcels established after the effective date of these~~
27 ~~regulations [March 2, 2011], nor for the development or redevelopment of~~
28 ~~contiguous parcels under common ownership and control as of the effective date of~~
29 ~~these regulations.~~

30
31 ~~7. Access to a subdivision from a Class IV town highway must meet minimum requirements~~
32 ~~for the upgrade and use of Class IV roads under Section 3.2 and the Underhill Highway~~
33 ~~Ordinance:~~

- 34
35 ~~a. A Class IV road serving a minor subdivision (three or fewer lots) must be upgraded~~
36 ~~to meet minimum driveway (B-71) standards under these regulations and the town~~
37 ~~highway ordinance.~~
38
39 ~~b. A Class IV road serving four or more lots must meet minimum road standards (A-76)~~
40 ~~under these regulations and the town highway ordinance.~~
41
42 ~~c. The applicant is responsible for the cost of Class IV road upgrades and road~~
43 ~~maintenance under a maintenance agreement approved by the Selectboard.~~
44

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1 ~~8.—~~To improve traffic flow and safety, avoid congestion, and preserve the capacity of public
2 highways the DRB, in consultation with local or state highway officials, may also:

- 3 ~~9.—~~
4 ~~further limit access onto public highways by requiring the elimination or relocation of~~
5 ~~existing accesses;~~
6 ~~require shared accesses, driveways, or roads to serve multiple lots within a subdivision;~~
7 ~~require access from a secondary (less traveled) road, if the proposed subdivision has~~
8 ~~frontage on both primary (arterial or collector) and secondary (local) roads, and access to~~
9 ~~the secondary road is sufficient and reasonable;~~
10 ~~require that road rights-of-way extend to property line(s) to allow future access or~~
11 ~~connections to adjoining parcels; or~~

12 ~~10.6.~~ prohibit the creation of reserved strips of land adjacent to a proposed road which
13 would deny access to adjacent properties.

14
15 ~~11.7.~~ **Driveways.** Driveways serving minor subdivisions of three or fewer lots shall meet
16 the requirements of Section 3.2 and the Underhill Highway Ordinance in effect at the
17 time of application. For the purposes of these regulations, driveways serving four or
18 more lots shall be considered development roads subject to the requirements of
19 Subsection B.

20
21 **B. Development Roads.** ~~Development roads and rights-of-ways serving major subdivisions~~
22 ~~of four or more lots shall meet the requirements of Section 3.2 and the Town Road~~
23 ~~Ordinance in effect at the time of application. The following road standards shall apply to all~~
24 ~~rights-of-way serving major subdivisions or accessing four or more lots.~~ In the event that
25 there is a conflict between the requirements of these regulations and the highway
26 ordinance, the more restrictive shall apply.

27
28 ~~1.—~~ **System Capacity.** ~~The volume and type of traffic to be generated by the proposed~~
29 ~~subdivision at build-out shall not result in undue traffic congestion or delay on public~~
30 ~~highways, or exceed the functional or structural capacity of travel lanes, intersections,~~
31 ~~bridges, culverts and other highway infrastructure in the vicinity of the proposed~~
32 ~~subdivision. The Development Review Board may require a traffic impact analysis~~
33 ~~prepared by a qualified transportation engineer or planner for any subdivision that~~
34 ~~generates 75 or more peak hour trips, or as otherwise deemed necessary by the DRB to~~
35 ~~determine whether infrastructure improvements are needed to mitigate traffic impacts~~
36 ~~from a proposed subdivision. Traffic studies shall reference the Institute of~~
37 ~~Transportation Engineers' Trip Generation Manual (current edition), or trip generation~~
38 ~~rates derived from local transportation studies.~~

39
40 ~~2.—~~ **Layout.** To promote safety, to facilitate traffic flow and emergency vehicle access, and
41 to protect significant resources, roads shall, to the extent physically feasible, be laid out
42 to:

43 ~~3.—~~

44 ~~4.1.~~ Provide access to lots within the subdivision that are intended for subsequent
45 development.

- ~~a. Follow existing linear features where physically feasible (e.g., farm and logging roads, field edges, utility corridors, tree and fence lines, stone walls), and meet other requirements for the protection of identified resource and hazard areas under Subsection 8.3.~~
- ~~b. Minimize the number and extent of stream and wetland crossings and disturbed areas within associated buffers in accordance with Sections 3.19 and 8.3.~~
- ~~c. Logically relate to topography, following contour elevations, to minimize the amount of cut and fill required and to maintain reasonable finished grades and safe intersections.~~
- ~~d. Extend or connect to existing or planned roads adjoining the subdivision, under joint agreement or in common or public ownership.~~
- ~~e. Provide for road extensions to serve future subdivisions as shown on the subdivision plat.~~

~~5. **Design & Construction.** All roads serving the proposed subdivision shall be designed to meet dimensional and geometric design standards contained in the Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads, and Streets (Vermont State Standards) as most recently amended; and constructed in accordance with current state "Standards for Town and Development Roads" (Standard Drawing A-76) and the Underhill Highway Ordinance as it applies to new or upgraded roads. Minimum design standards include, but may not be limited to the following:~~

- ~~a. **Rights of way.** A road right of way must be at least 50 feet wide unless otherwise approved or required by the Underhill Selectboard under the town highway ordinance.~~
- ~~b. **Grades.** The average finished grade of a road shall not exceed 12% over any 50-foot section, unless otherwise approved by the DRB in consultation with the Selectboard and the Underhill Jericho Fire Department. In no case shall the maximum finished grade exceed 15%.~~

~~**Drainage.** Drainage from development roads and driveways shall not adversely affect public highway infrastructure or neighboring properties, and shall be designed, installed and maintained in accordance with best management practices accepted by the state, and as required under the town highway ordinance.~~

- ~~i. Road drainage shall be designed, installed and maintained in accordance with best management practices accepted by the state, and as required under the town highway ordinance.~~
- ~~ii. Selectboard approval is required for any road drainage into a town highway right of way.~~
- ~~iii. Drainage easements and off-site improvements are required for road drainage directed onto adjoining properties.~~

~~Travel Lanes.~~ The width of travel lanes and shoulders shall be based on average daily traffic (ADT) and design (existing or planned) posted speeds, in accordance with current "Vermont State Standards for Design and Construction" in effect at the time of application and the town highway ordinance. Design standards for rural development roads are included in Table 8.1.

Design Volume (ADT)	0-25	25-50	50-100	100-400	400-1500	1500-2000	2000+
Design Speed (mph)	Width of Lane/Shoulder (ft)						
25	7/0	8/0	9/0	9/2	9/2	10/3	11/3
30	7/0	8/0	9/0	9/2	9/2	10/3	11/3
35	7/0	8/0	9/0	9/2	9/2	10/3	11/3
40	7/0	8/0	9/2	9/2	9/2	10/3	11/3
45	---	---	9/2	9/2	9/2	10/3	11/3
50	---	---	9/2	9/2	10/2	10/3	11/3

~~Source: Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation on Freeways, Roads and Streets, October 1997.~~

~~iv. Roads intended for shared use by bicycles or for on-street parking (e.g., within the Underhill Flats Village District) shall incorporate paved shoulder areas that meet minimum recommended width and design standards under Vermont State Standards in effect at the time of application.~~

~~Surfacing.~~ Road surfacing (gravel, paved, other) shall meet applicable requirements of the town road ordinances and polices in effect at the time of application.

~~Dead Ends.~~ Dead end roads shall meet the standards of these regulations and the Town's road ordinance.

6.2. Improvements. The proposed subdivision shall not unduly burden town or state highways, including roads and intersections in the vicinity of the project. Any highway access, drainage, lane, or other infrastructure or traffic control improvements necessitated by the proposed subdivision shall be paid for and installed by the applicant, unless otherwise approved by the DRB, where applicable, in consultation with the Selectboard or state highway officials. The DRB also may require as conditions of approval, as necessary to ensure compliance with these regulations:

- a. Performance bonding or other form of surety acceptable to the Selectboard to ensure that required road, intersection and related infrastructure improvements are installed as approved by the DRB.
- b. The phasing of development in relation to planned state or municipal transportation infrastructure improvements included in adopted capital or transportation improvement programs.

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1 c. A development agreement approved by the Selectboard governing the timing,
2 installation and any agreed upon cost-sharing arrangements between the
3 subdivider and the town or other affected property owners.

4
5 ~~7.— **Acceptance.** A road shall be considered private road unless formally dedicated to the
6 town and accepted by the Underhill Selectboard as a public road in accordance with
7 adopted town road policies, ordinances and state statutes.~~

8
9 ~~8.— **Names, Signs and 911 Locator Numbers.** Road names shall be approved by the
10 Underhill Selectboard as part of the subdivision process. Approved road names and
11 assigned 911 locator numbers for each parcel shall be clearly depicted on the final plat,
12 and identified on signs approved by the Selectboard.~~

13
14 **C. Parking Facilities.** Common or shared parking areas shall be identified on the
15 subdivision plat, and designed in accordance with Section 3.13. Parking areas for individual
16 lots shall be included within designated building envelopes.

17
18 **D. Transit Facilities.** The Development Review Board may require that subdivisions located
19 on existing or planned transit routes, including school bus routes, incorporate a sheltered
20 transit or bus stop in subdivision design.

21
22 **E. Pedestrian Access.** The Development Review Board may require one or more of the
23 following as necessary to facilitate pedestrian access from the subdivision to adjoining
24 parcels and roads, or to nearby public schools, playgrounds, or public lands:

- 25
26 1. Sidewalks and curbing or pedestrian or recreation paths that connect the subdivision to
27 existing facilities on adjoining properties and rights-of-way, or as shown on an adopted
28 sidewalk or recreation path plan and improvement program.
- 29
30 2. Sidewalks and curbing along internal subdivision roads, or an internal network of
31 pedestrian paths that provide access to common lands and facilities within the
32 subdivision.
- 33
34 3. The installation of pedestrian crosswalks at designated road and path intersections.
- 35
36 4. Unobstructed easements at least 10 feet in width for pedestrian or recreation corridors,
37 as indicated on the final subdivision plat.

38
39 **Section 8.7 Public Facilities & Utilities**

40
41 **A. Public Facilities.** The Development Review Board shall find that the proposed
42 subdivision does not create an undue burden on existing and planned public facilities. The
43 applicant and DRB may consult with appropriate municipal and school officials and

1 emergency service providers to determine whether adequate capacity exists to serve the
2 subdivision.

3
4 1. For major subdivisions, the DRB may require, as a condition of preliminary subdivision
5 approval, that the applicant submit documentation from appropriate officials, or a fiscal
6 impact analysis to be paid for by the applicant, that identifies potential impacts of the
7 subdivision on public facilities and services and methods for mitigating such impacts,
8 which may include the phasing of development in accordance with a duly adopted
9 capital budget and program.

10
11 B. **Fire Protection.** The DRB, in consultation with the Underhill–Jericho Fire Department,
12 may require that the applicant provide adequate water storage and distribution facilities for
13 fire protection in accordance with department specifications. The applicant shall install fire
14 hydrants, dry hydrants, or fire ponds as required by the DRB to serve the subdivision, and
15 shall ensure adequate access to developed lots for emergency response vehicles. The Board
16 may also require that fire ponds be designed by a licensed professional engineer in
17 accordance with Section 3.15.

18
19 C. **Water Systems.** The applicant shall demonstrate to the satisfaction of the DRB that
20 adequate potable water supplies exist on- or off-site to serve the subdivision. In addition:

21
22 1. Individual or community water supply systems shall be designed in accordance with
23 state regulations as certified by a designer or professional engineer licensed by the state
24 (see also Section 3.23). State permits shall be required where applicable prior to final
25 subdivision approval and the issuance of certificates of compliance under Section 10.4;
26 and may serve as documentation of compliance with relevant standards of this section.

27
28 2. All water sources and required isolation distances shall be identified on the final
29 subdivision plat.

30
31 3. Where applicable, designated source protection areas (SPAs) for municipal and
32 community water supplies also shall be identified on the final subdivision plat; and shall
33 be managed in accordance with a state approved source protection plan and Section
34 3.17.

35
36 4. Potable water supply systems located within designated flood hazard areas (Flood
37 Hazard Overlay District) shall be sited and designed in accordance with applicable
38 requirements of Section 6.6.

39
40 D. **Wastewater Systems.** The applicant shall demonstrate to the satisfaction of the DRB
41 that adequate wastewater system capacities exist on- or off-site to serve the proposed
42 subdivision. In addition:

43
44 1. Sewage disposal systems, which may include individual and/or community systems,
45 shall be designed in accordance with all applicable state regulations, as certified by a

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1 professional designer or engineer licensed by the state (see also Section 3.23). State
2 permits shall be required where applicable prior to final subdivision approval and the
3 issuance of certificates of compliance under Section 10.4; and may serve as
4 documentation of compliance with relevant standards of this section.

5
6 2. Wastewater collection lines and sewage disposal areas including individual on-site septic
7 systems shall be shown on the final engineering drawing, and collection lines and
8 disposal areas shall be shown on the final plat.

9
10 3. Where connection to pre-existing wastewater system is proposed, the applicant shall
11 demonstrate that the system is adequate to serve additional connections, and provide
12 legal documentation that ensures system access and allocates system capacity for each
13 connection.

14
15 4. A proposed subdivision with adequate on-site capacity for clustered systems may be
16 served by a community wastewater system to allow for increased densities of
17 development or reduced lot sizes, or to protect potable water supply sources.

18
19 5. Septic systems located within designated flood hazard areas (Flood Hazard Overlay
20 District) shall be sited and designed in accordance with applicable requirements of
21 Section 6.6.

22
23 E. **Utilities.** The location of all existing and proposed utilities, including but not limited to
24 electric, telephone, and cable television utilities, shall be shown on the final plat. In addition:

25
26 1. All utilities within the subdivision shall be located underground unless the applicant
27 demonstrates to the satisfaction of the Development Review Board that burial is not
28 reasonable given physical site constraints (e.g., ledge or shallow depth to bedrock); or
29 the Development Review Board determines that burial is not necessary to preserve the
30 scenic character of the area.

31
32 2. Utility panels shall be screened from the view of public lands and rights-of-way and
33 adjoining properties.

34
35 3. The applicant shall coordinate subdivision design with utility companies to ensure that
36 suitable areas are available for above ground or underground installation, within and
37 adjacent to the proposed subdivision. Utility easements of sufficient width shall be
38 provided to serve both the proposed subdivision, and future service extensions to
39 adjoining properties. Such easements shall be identified on the final subdivision plat.

40 4. Utility corridors shall be shared with other utility and/or transportation corridors where
41 feasible, and be located to minimize site disturbance, adverse impacts to public health
42 and safety, and to significant natural, cultural and scenic resources, in accordance with
43 Section and 8.3.

44

- 1 5. Areas designated for the installation of solar collectors, wind turbines or other group
2 net-metered renewable energy facilities intended to serve the subdivision, and subject
3 to review and approval by the Vermont Public Service Board shall be shown on the
4 subdivision plat or accompanying subdivision plan, as recorded in the land records of
5 the town.
6
- 7 6. Outdoor lighting shall meet applicable standards under Section 3.11. In the event the
8 applicant proposes parking area or street lighting, lighting fixtures shall be limited to
9 cut-off fixtures and shall be the minimum height necessary to ensure vehicular and
10 pedestrian safety on roads and adjacent sidewalks and paths.
11

12 Section 8.8 Legal Requirements

- 13
- 14 A. Land reserved for the protection of significant natural, cultural, or scenic resources or
15 other open space under Sections 8.4 including conserved lots, shall be classified as
16 designated "open land" and may be held in common ownership or in separate individual
17 ownership from contiguous parcels. At minimum, land designated as protected open space
18 shall be indicated with appropriate notation on the final subdivision plat. In addition, the
19 Development Review Board may consider, as required for long-term protection:
20
- 21 1. A restriction prohibiting the further subdivision of a conserved lot or other protected
22 open space area, as noted on the final plat and in accompanying legal documentation.
23
- 24 2. The dedication of such land, either in fee or through a conservation easement approved
25 by the Development Review Board, to the municipality, an owners' association
26 comprised of all present or future owners of subdivided lots, the applicant, and/or a
27 nonprofit conservation organization with the demonstrated capacity and qualifications
28 to manage conservation easements.
29
- 30 3. Designated open space areas, including conserved lots, may be conveyed to the State of
31 Vermont.
32
- 33 B. The applicant shall provide documentation and assurances that all required
34 improvements, associated rights-of-way and easements, and other common lands or
35 facilities will be adequately maintained in accordance with an approved management plan,
36 either by the applicant, an owners' association, or through other legal means acceptable to
37 the DRB. Draft management plans and documentation must be submitted with the
38 application for final subdivision review, for approval by the DRB. The DRB may forward
39 submitted documentation to the Selectboard and town attorney for review. All legal
40 documents, as approved by the DRB, shall be filed in the land records of the town in
41 association with recording the final subdivision plat.
42
- 43 C. All required improvements shall be constructed to approved specifications in
44 accordance with a construction schedule approved by the DRB. The DRB may require the
45 issuance of a Certificate of Compliance in accordance with Sections 7.6 and 10.4 to ensure

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- 1 that all such improvements are completed prior to the issuance of zoning permits for the
- 2 subsequent development of subdivided lots. A performance bond or comparable surety
- 3 acceptable to the Underhill Selectboard may be required to ensure that all improvements
- 4 are completed to specification in accordance with Sections 7.6 and 10.7.

DRAFT