

1 **LONDONDERRY, NH PLANNING BOARD**
2 **MINUTES OF THE MEETING OF JUNE 10, 2009 AT THE MOOSE HILL**
3 **COUNCIL CHAMBERS**
4

5 7:00 PM: Members Present: Art Rugg; John Farrell; Rick Brideau, CNHA, Ex-
6 Officio; Paul DiMarco, Ex-Officio; Charles Tilgner, P.E., Ex-Officio; Mary Soares;
7 Lynn Wiles; Laura El-Azem; Chris Davies, alternate member
8

9 Also Present: André Garron, AICP; Tim Thompson, AICP; John Trottier, P.E.;
10 Cathy Dirsra, Planning Department Secretary
11

12 A. Rugg called the meeting to order at 7 PM. A. Rugg appointed C. Davies to vote
13 for R. Nichols.
14

15 **Administrative Board Work**
16

17 A. Plans to Sign - Fortier Enterprises Site Plan - Map 10, Lot 136
18

19 J. Trottier said all precedent conditions for approval have been met and the
20 staff recommends signing the plans.
21

22 T. Thompson noted that a compromise was reached between staff and the
23 applicant to phase the project. Phase 1 will allow the driveways on 102 to be
24 striped, Phase 2 will require the narrowing of the driveways when the
25 underground storage tanks are removed from the property.
26

27 **J. Farrell made a motion to authorize the Chair and Secretary to sign**
28 **the plans. R. Brideau seconded the motion. No discussion. Vote on the**
29 **motion: 9-0-0.** A. Rugg said the plans will be signed at the conclusion of the
30 meeting.
31

32 B. Governmental Land Use Request – School Department Radio Tower at North
33 School
34

35 T. Thompson referenced the letter from Chuck Zappala, Director of Buildings
36 & Grounds, School District, with a request under RSA 674:54 for increasing
37 the tower by 65 feet to get better reception in town. He said that staff is
38 asking the Board if they would like a public hearing for this project.
39

40 John Robinson, School Board, said the RF level won't increase. He said that
41 the radiating element will actually be further away from anyone. He said
42 there is no danger to aviation. Chuck Zappala, school board, said that once
43 the new tower is up, the old one will be removed and may have some re-sale
44 value.
45

46 The consensus of the Board was not to require a public hearing and to let the
47 neighborhood (abutters) know what is happening about the tower.
48
49

1 C. Re-affirmation of Approval Request – Nutfield Publishing Site Plan – Map 12,
2 Lot 68

3
4 T. Thompson said the conditional approval expired last week. He stated that
5 the ordinances and regulations have not changed, and the plan is still able to
6 meet all requirements of the ordinances and regulations. He further stated,
7 that if the Board reinstates the plan, the process is not over. He then
8 outlined the requirements for when construction needs to commence, the
9 requirements for active and substantial construction within 12 months, and
10 the need for the building to be inspected and occupancy permits obtained. J.
11 Trottier explained that a pre-construction meeting would need to be held, and
12 that restoration surety needs to be in place prior to construction.

13
14 **J. Farrell made a motion to reinstate the conditional approval and**
15 **that staff will meet with the applicant to clarify expectations.**

16 **R. Brideau seconded the motion.** No discussion. **Vote on the motion: 9-**
17 **0-0.**

18
19 J. Trottier said all precedent conditions for approval have been met and the
20 staff recommends signing the plans.

21
22 **J. Farrell made a motion to authorize the Chair and Secretary to sign**
23 **the plans. R. Brideau seconded the motion.** No discussion. **Vote on the**
24 **motion: 9-0-0.** A. Rugg said the plans will be signed at the conclusion of the
25 meeting.

26
27 D. Signing of Minutes – May 6 & 13

28
29 Minutes for May 6 and 13 have been signed.

30
31 E. Regional Impact Determinations

32
33 T. Thompson stated there are three projects to be considered for regional
34 impact determinations. Sarnia Seacoast, LLC is proposing a 24,684 s.f.
35 warehouse facility addition on 12 North Wentworth Ave, Map 14, Lot 44-25.
36 PSNH is proposing an expansion of the Scobie Pond Substation (4th
37 Autotransformer) on 7 Brewster Rd, Map 13, Lot 111 and a Minor site plan to
38 modify existing public utility communication facility and add a 12'x20'
39 accessory shelter building and emergency generator on 1 Brewster Rd, Map
40 13, Lot 110. He said that staff recommends these projects are not
41 developments of regional impact, as they do not meet any of the regional
42 impact guidelines suggested by Southern NH Planning Commission (SNHPC).

43
44 **J. Farrell made a motion to accept staff recommendations that these**
45 **projects are determined not to be of regional impact under RSA**
46 **36:56. R. Brideau seconded the motion.** No discussion. **Vote on the**
47 **motion: 9-0-0.**

48
49

1 F. Discussions with Town Staff

2
3 A. Garron gave a brief status of the airport, Pettengil Rd, Page Rd projects.
4 T. Thompson said the ARC will be meeting on June 23 and that the first
5 project on the agenda, McDonald's site plan (for a storage addition) has been
6 withdrawn. July 8 staff will discuss workforce housing with the Board.

7
8 A. Rugg said the SNHPC will present a 90-minute film documentary "Liquid
9 Assets" (essential infrastructure systems) on June 23 @ 6pm at the PSNH
10 Energy Park, 780 No. Commercial St in downtown Manchester.

11
12 **Public Hearings**

13
14 A. Falling Water, LLC, Map 17, Lot 5-6 -Public Hearing for an amendment to an
15 approved Site Plan to allow waiver to Section 6.01.e of the Site Plan
16 Regulations.

17
18 Jeff Merritt, Keach Nordstrom Associates, gave an overview of their plans.
19 The owner has been trying to secure funds for this project, and the use of a
20 surety bond will assist in being able to move forward with construction.

21
22 T. Thompson said this plan was originally approved by the Board in 2008.
23 The applicant is requesting a waiver to Section 6.01.e of the regulations to
24 allow a surety bond for the restoration surety instead of the required letter of
25 credit. He stated that completeness is not applicable, as this is an
26 amendment to an approved site plan.

27
28 T. Thompson said that staff recommends granting the waiver, as it is
29 consistent with the proposed regulation language that the Planning Board will
30 likely be adopting later tonight, allowing for surety bonds as an appropriate
31 method of financial guarantee.

32
33 A. Garron said this is consistent with the recommendations will be making to
34 the review process. He said that a surety bond is an appropriate alternative
35 mechanism for the town to use for restoration sureties.

36
37 A. Rugg asked for public input, but there was none.

38
39 **J. Farrell made a motion to grant the waiver based on the applicant's**
40 **letter and staff recommendation. R. Brideau seconded the motion.** No
41 discussion. **Vote on the motion: 9-0-0.** Waiver granted.

42
43 **J. Farrell made a motion to grant amended final approval of this**
44 **application and authorize the chair and secretary to sign the plans,**
45 **with the following amendment (add new condition 1, renumber**
46 **remaining conditions) to the general and subsequent conditions of**
47 **approval:**

48
49
50

1 **GENERAL AND SUBSEQUENT CONDITIONS**

2
3 All of the conditions below are attached to this approval.

- 4
5 1. The applicant shall provide an updated cover sheet, with note 9 updated to
6 reflect the granting of the waiver to Section 6.01.e for Planning Board
7 signature. *This updated cover sheet need not be signed by the Planning*
8 *Board prior to construction in accordance with the plans approved, but shall*
9 *be signed by the Planning Board prior to a certificate of occupancy being*
10 *issued for any buildings on the site.*
11
12 2. **No construction or site work for the amended site plan may be**
13 **undertaken until the pre-construction meeting with Town staff has**
14 **taken place, filing of an NPDES-EPA Permit and the site restoration**
15 **financial guaranty is in place with the Town.** Contact the Department
16 of Public Works to arrange for this meeting.
17
18 3. Orange construction fencing shall be placed along the 50' residential buffer
19 to prevent encroachment and disturbance to the vegetation of the buffer
20 during construction.
21
22 4. The project must be built and executed exactly as specified in the approved
23 application package unless modifications are approved by the Planning
24 Division & Department of Public Works, or if staff deems applicable, the
25 Planning Board.
26
27 5. All of the documentation submitted in the application package by the
28 applicant and any requirements imposed by other agencies are part of this
29 approval unless otherwise updated, revised, clarified in some manner, or
30 superseded in full or in part. In the case of conflicting information between
31 documents, the most recent documentation and this notice herein shall
32 generally be determining.
33
34 6. All site improvements must be completed prior to the issuance of a
35 certificate of occupancy. In accordance with Section 6.01.d of the Site Plan
36 Regulations, in circumstances that prevent landscaping to be completed
37 (due to weather conditions or other unique circumstance), the Building
38 Division may issue a certificate of occupancy prior to the completion of
39 landscaping improvements, if agreed upon by the Planning Division & Public
40 Works Department, when a financial guaranty (see forms available from the
41 Public Works Department) and agreement to complete improvements are
42 placed with the Town. The landscaping shall be completed within 6 months
43 from the issuance of the certificate of occupancy, or the Town shall utilize
44 the financial guaranty to contract out the work to complete the
45 improvements as stipulated in the agreement to complete landscaping
46 improvements. **No other improvements shall be permitted to use a**
47 **financial guaranty for their completion for purposes of receiving a**
48 **certificate of occupancy.**
49

1 7. As built site plans must to be submitted to the Public Works Department
2 prior to the release of the applicant's financial guaranty.

3
4 8. All required Traffic, Police and Fire impact fees must be paid prior to the
5 issuance of a Certificate of Occupancy.

6
7 It is the responsibility of the applicant to obtain all other local, state, and
8 federal permits, licenses, and approvals which may be required as part of this
9 project (that were not received prior to certification of the plans). Contact the
10 Building Division at extension 115 regarding building permits.

11
12 **R. B. Brideau seconded the motion.** No discussion. **Vote on the motion.**
13 **9-0-0.** Site plan amended.

14
15 B. Small Area Master Plan Workshop

16
17 Jack Munn, SNHPC, gave the Board an update on the small area master plan.
18 They have configured the presentation into an 8 ½ x 14 format (see
19 attachment #1).

20
21 A Garron said that the Exit 5 area would be a good candidate for Transit
22 Oriented Development (TOD).

23
24 T. Thompson said that staff is ready to move to a public hearing if the Board
25 agrees.

26
27 The Board agreed to move to a public hearing.

28
29 T. Thompson said the public hearing could possibly be scheduled for July or
30 August. The Board suggested scheduling the public hearing for July 1.

31
32 C. Public Hearing - Subdivision & Site Plan Regulation Amendments - Process
33 Improvements, stonewall reconstruction detail

34
35 T. Thompson gave the Board a presentation on the proposed changes. (see
36 attachment #2)

37
38 P. DiMarco suggested a minor revision to the terminology for electronic
39 submissions.

40
41 A. Rugg asked for public input, but there was none.

42
43 **J. Farrell made a motion to adopt the proposed changes, with the**
44 **minor revisions suggested by P. DiMarco. R. Brideau seconded the**
45 **motion.** No discussion. **Vote on the motion: 9-0-0.**

46
47

1 D. Workshop - Zoning Ordinance Amendments - Small Wind Energy Systems

2
3 T. Thompson gave the Board a presentation of the amendments. (see
4 attachment #3)

5
6 The Board agreed to schedule a public hearing for July 8.

7
8 **Other Business**

9
10 None.

11
12 **Adjournment:**

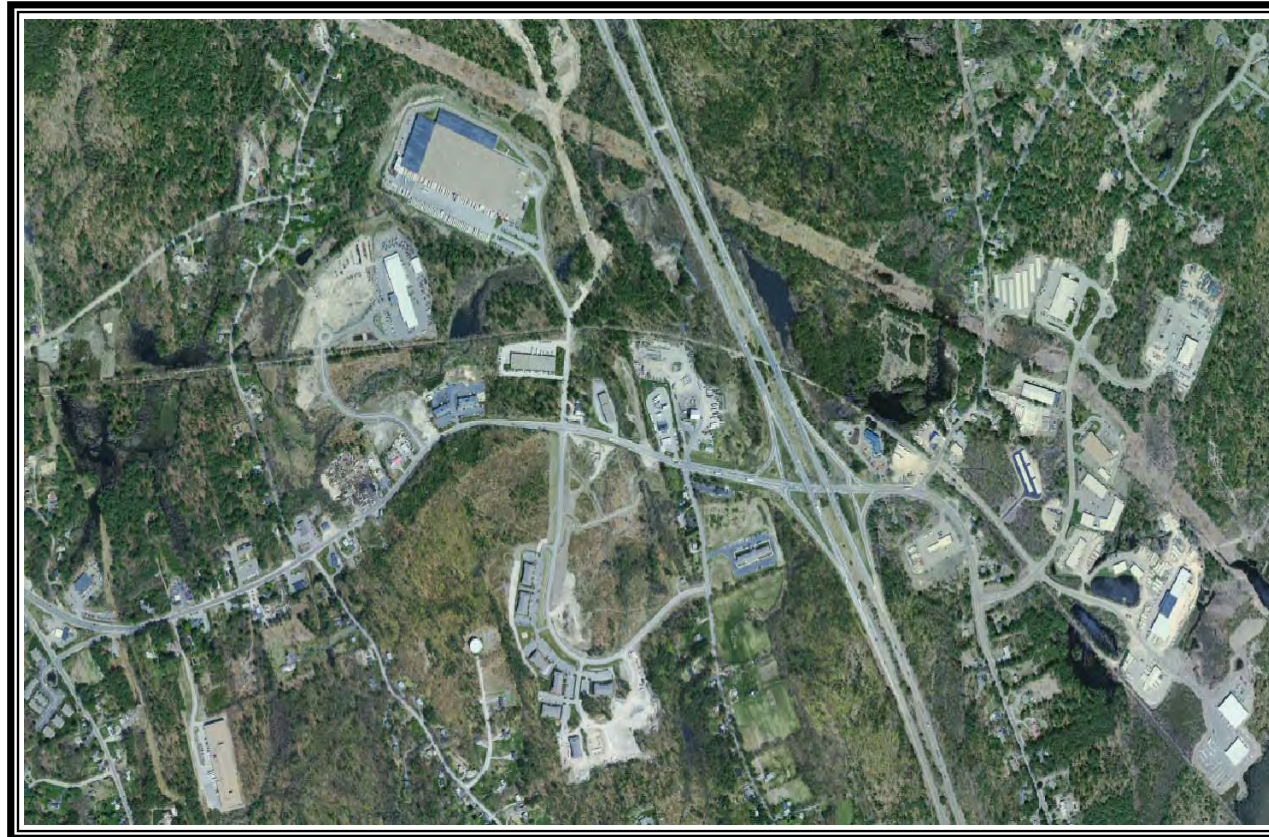
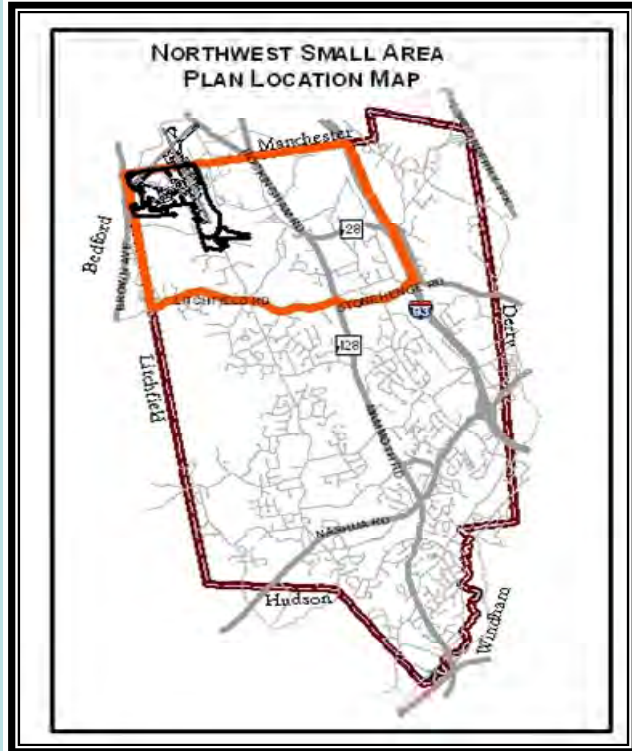
13
14 **J. Farrell made a motion to adjourn the meeting. R. Brideau seconded the**
15 **motion.** No discussion. **Vote on the motion: 9-0-0.** Meeting adjourned at 8:50
16 PM.

17
18
19 These minutes prepared by Cathy Dirsra, Planning Division Secretary.

20
21
22
23 Respectfully Submitted,

24
25
26
27 Mary Wing Soares, Secretary
28

Northwest Small Area Plan



Town of Londonderry, NH
Londonderry Planning Board
Londonderry Community Development Department

Final Report May 2009



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Adoption Signatures

Certification of the 2009 Northwest Small Area Plan Londonderry Planning Board Londonderry, New Hampshire

In accordance with New Hampshire RSA 674:4, Master Plan Adoption and Amendments, and new Hampshire RSA 675:6, Method of Adoption, the Londonderry Planning Board Held duly authorized Public hearing(s) on the 2009 Northwest Small Area Plan on the following date(s): _____. The Planning Board hereby certifies that the 2009 Northwest Small Area Plan was adopted by a majority vote on _____.

Planning Board Members

Arthur Rugg, Chairman

Robery Nichols, Assistant Secretary

Lynn B. Wiles

John Farrell, Vice-Chairman

Melissa Nemon, Alternate

Planning Staff

Richard Brideau, Ex-Officio

Chris Davies, Alternate

Timothy Thompson, AICP, Town Planner

Charles Tilgner, P.E., Ex-Officio

Cole Melendy, P.E., Alternate

Andre Garron, AICP, Community Development Director

Kathy Wagner, Council Ex-Officio

George Herrmann, School Board Liaison

John Trotter, P.E., Asst. Dir. Of Public Works & Engineering

Mary Wing Soares, Secretary

Laura El-Azem

Cathy Dirsra, Planning Division Secretary

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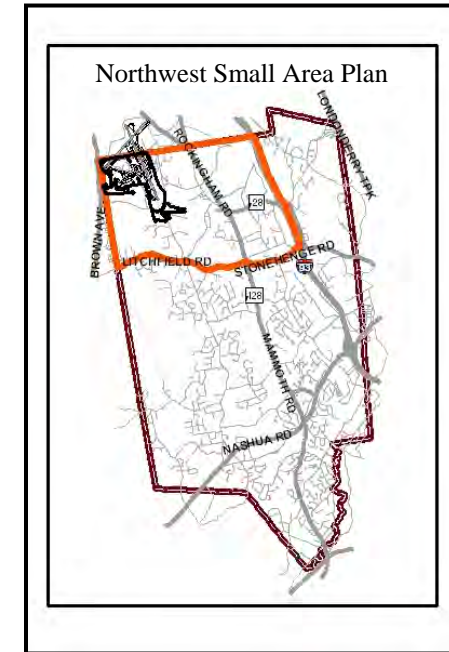
Introduction

This **Small Area Plan** integrates land use, zoning, transportation, housing, economic, development, community design, and other key planning factors into a small area-wide plan for The Northwest Area of the Town of Londonderry. The Northwest Area is bounded by I-93 to the east; Stonehenge and Litchfield Roads to the south; the City of Manchester to the north; and Town of Bedford to the east (see following Location Map).

The purpose of the **Northwest Small Area Plan** is to identify opportunities and propose strategies for guiding the future growth and development of this important part of Londonderry. The plan builds upon current and previous planning initiatives for the area and incorporates the public input received as a result of a community-wide telephone survey and three public workshops.

The plan also provides guidance for improving the Rt. 28 Corridor Performance Overlay District.

It is recommended that this plan be adopted as an element of the 2004 Master Plan of Town of Londonderry.



Source: NH DOT Aerial Data 2005



Background

Telephone Survey

Between June 3 and June 16, 2008, the University of New Hampshire (UNH) Survey Center conducted a detailed telephone survey of four hundred (400) Londonderry residents. The survey was conducted at a sampling error of +/- 4.9 percent and includes questions designed to assess areas of interest and attitudes about the Northwest Area and various planning initiatives for the area.

A copy of the survey questions and the detailed results of the survey are available in the UNH Survey Center's June 2008 Final Report which is on file with the Londonderry Planning Department. The highlights of the survey are as follows:

Overall Growth of Londonderry:

Overall, Londonderry residents feel the Town as a whole is growing at the right pace or too fast, while some would like to see the Northwest Area of Londonderry grow faster.

Northwest Area General Development:

Londonderry residents favor low density residential along with other light commercial and industrial development in the Northwest Area.

Northwest Area Non-Residential Development:

Londonderry residents favor non-residential development that is light and locally-oriented. About 62 percent favor building retail, restaurants and service businesses; 57 percent favor light industrial; 42 percent favor hotels; 40 percent favor convention; 39 percent manufacturing; 38 percent warehouse and distribution facilities; and 20 percent heavy

Satisfaction with Current Development in the Northwest Area:

Londonderry residents are satisfied (57 percent) with Town services (police, fire, recreation) within the Northwest Area, but many residents indicate less satisfaction with the protection of the area's natural resources and drinking water, the provision of necessary infrastructure, and expanding non-residential opportunities and affordable housing.

Londonderry Planning Initiatives:

Overall, a majority of Londonderry residents (61 percent) feel that the Town of Londonderry has been effective in providing a balance of residential, commercial,



US. Army Reserves and FCI Electrical Power
Interconnect Division
Source: SNHPC

Public Workshops



A total of three public workshops were advertised and sponsored by the Londonderry Planning Board to develop this plan.

The first workshop was held on June 25, 2008 at the Londonderry High School. At this workshop, the telephone survey was reviewed and the main issues and opportunities of the Northwest Area were identified.

The second workshop was held on September 24, 2008 at Matthew Thornton School. At this workshop, the effectiveness of the Town's Rt. 28 Performance Overlay District was discussed.

At the third workshop held on November 24, 2008 at Londonderry High School, NH DOT's I-93, Exit 5 and Airport Access Road projects were reviewed as well as the Town of Londonderry's proposals to improve Page Road and Pettengill Road. In addition, the overall future growth of the Northwest Area was discussed.

Copies of the workshop agendas, power point presentations, the workshop results as well as the registration/sign-in sheets are available from the Londonderry Planning Division and are posted on the Town's website. Some of the key issues and opportunities identified at the workshop are as follows:

Key Issues:

- Appropriate Land Use
- Utilizing Existing Zoning
- Traffic and Pedestrian Safety
- Community Appearance

Key Opportunities:

- Economic Growth
- Job Development
- Availability of Developable Land
- Prime Location – Exit 5/Airport
- Mobility – Park & Ride/Bus/Rail
- Zoning Improvements
- Land Use Improvements
- Rt. 28/Mammoth Roads
- Village District



Londonderry Airport Design Charrette
Source: Town of Londonderry



Construction at Exit 5 on I-93
Source: NH DOT

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Breakout Group Questions:

- *What Type and Scale of Commercial Development would you like to see allowed along:*
 - *Rt. 28 corridor;*
 - *Mammoth Road; and*
 - *Rockingham Road*
- *What is your Vision for the Rt. 28 and Mammoth Road corridors and Exit 5?*
- *Would Mammoth and Rockingham Roads benefit from a Performance Overlay District similar to Rt. 28?*
- *Should the 75,000 sq.ft. standard in the Rt. 28 Performance Overlay District be revised and if so, how?*
- *How important is regulating building design within the corridor to you?*
- *Should a new Village District zone be created to provide a sense of place and community identify and if so, where?*
- *Are there areas which might be better suited for future residential, commercial or industrial development?*



View of Mammoth Rd. across from the Seniro Center
Source: SNHPC



Land for Sale off of Enterprise Rd.
Source: SNHPC

Existing land Use

The Northwest Area is home to many residences and businesses as well as important transportation facilities and corridors, Interstate 93, NH Route 128, NH Route 28, and the Manchester-Boston Regional Airport. The area contains a total of 5,904 acres. Roughly 55 percent of the area is developed and 34 percent of the area is currently vacant. Single-family homes (26 percent) and industrial (20 percent) are the largest land uses. Currently only 3 percent of the land area is used for commercial and 2 percent for multifamily use. See table below and Map #1.

Existing Land Use Northwest Area

Land Use Category	Acres	Percent
Single Family	1,548	26%
Multifamily	130	2%
Commercial	177	3%
Industrial	1,194	20%
Government	213	4%
Agricultural	6	0%
Conservation	638	11%
Vacant Land	1,998	34%
Total Area	5,904	100%

Source: SNHPC, NH DOT Arial Photography (2007)

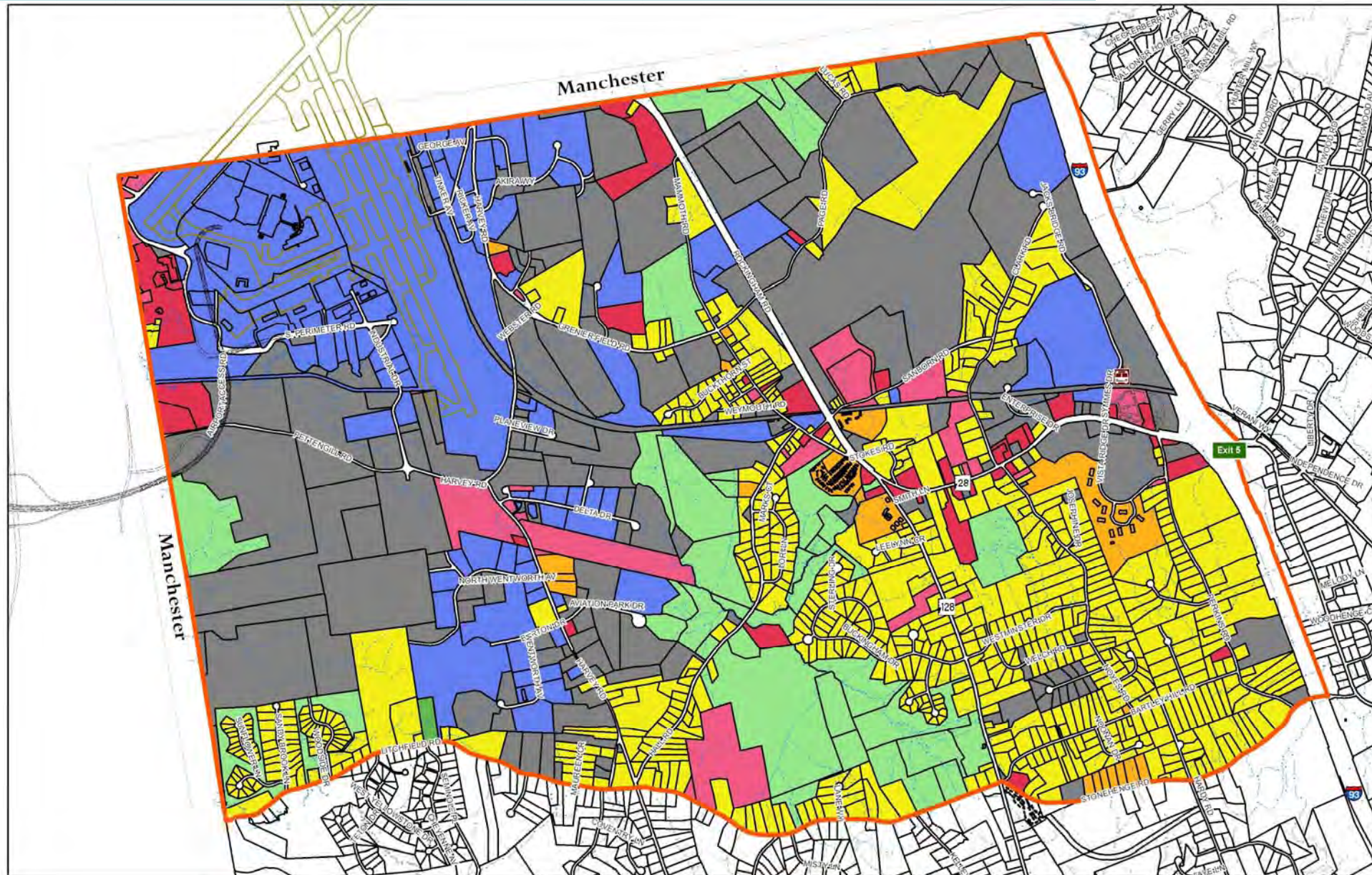


View of Noyes Road Neighborhood
 Source: SNHPC



Old Transfer Station located along Rt. 28
 Source: SNHPC

Northwest Small Area Plan



Map # 1

NORTHWEST SMALL AREA PLAN

EXISTING LAND USE

LONDONDERRY, NH

Land Use	Total Acres	%
Single Residential	1,548	26
Multi-Family Residential	130	2
Commercial	177	3
Industrial	1,194	20
Government	213	4
Agricultural	6	0
Conservation	638	11
Vacant	1,998	34
Totals	5,904	100

Legend:

- Northwest Area (Orange outline)
- Rivers or Streams (Blue wavy lines)
- Exit 5 Park and Ride (Red square)
- Bus Terminal (Red square with bus icon)
- Airport Access Road (Dashed line)
- Road Type:
 - Bridge (Black line)
 - Road-Paved (Grey line)
 - Road-Unpaved (Light Grey line)

Data Sources:
 Town of Londonderry
 GIS and use developed in 2007 from aerial photography. Base features were imported by Varga LLC from aerial photography captured in Spring, 2002. Subsequent updates are performed regularly as new projects are approved. Parcel lines are current as of April 1, 2007 and were mapped using aerial photo interpretation. AutoCAD engineering files or geocoded points for reference.

Scale:
 0 0.2 Miles
 0 800 1,600 3,200 Feet

The Town of Londonderry and the SNHPC make no representations or warranties to the accuracy of the features and dimensions of this map.

Map Produced by:
 GIS Service Staff, 2007
 Contact: gis@snhpc.org
 PH: (603) 499-4884

This map is one of a series of maps and more produced as part of a Town's Master Plan update and are for planning purposes only. It is not to be used for legal, regulatory, administrative or other legislative purposes.

Town of Londonderry, NH
 Londonderry Planning Board
 Londonderry Community Development Department

Existing Land Use Rt. 28

The Route 28 Corridor is a highly visible gateway to Londonderry and contains a variety of businesses. Within the Town of Londonderry's Rt. 28 Performance Overlay District (shown as the black lines on the adjoining Map #2); commercial is the largest use of land at 39 acres or 20 percent of the corridor. Residential (mostly multi-family) is the next largest use at 34 acres or 17 percent of the corridor. Industrial consists of 9 acres or 5 percent at the corridor and Transportation/Utilities at 2 acres makes up 1 percent of the balance of the land.

Existing Land Use Rt. 28

Land Use Category	Acres	Percent
Single Family/Duplex	17	9%
Multifamily	5	3%
Mobile Home Parks	12	6%
Commercial	39	20%
Industrial	9	5%
Institutional	1	0.5%
Transportation	2	0.5%
Conservation	22	11%
Vacant Land	89	45%
Total Area	197	100%
Total Developed Land	85	43%

Source: SNHPC, NH DOT Arial Photography (2007)

Town of Londonderry, NH
 Londonderry Planning Board
 Londonderry Community Development Department



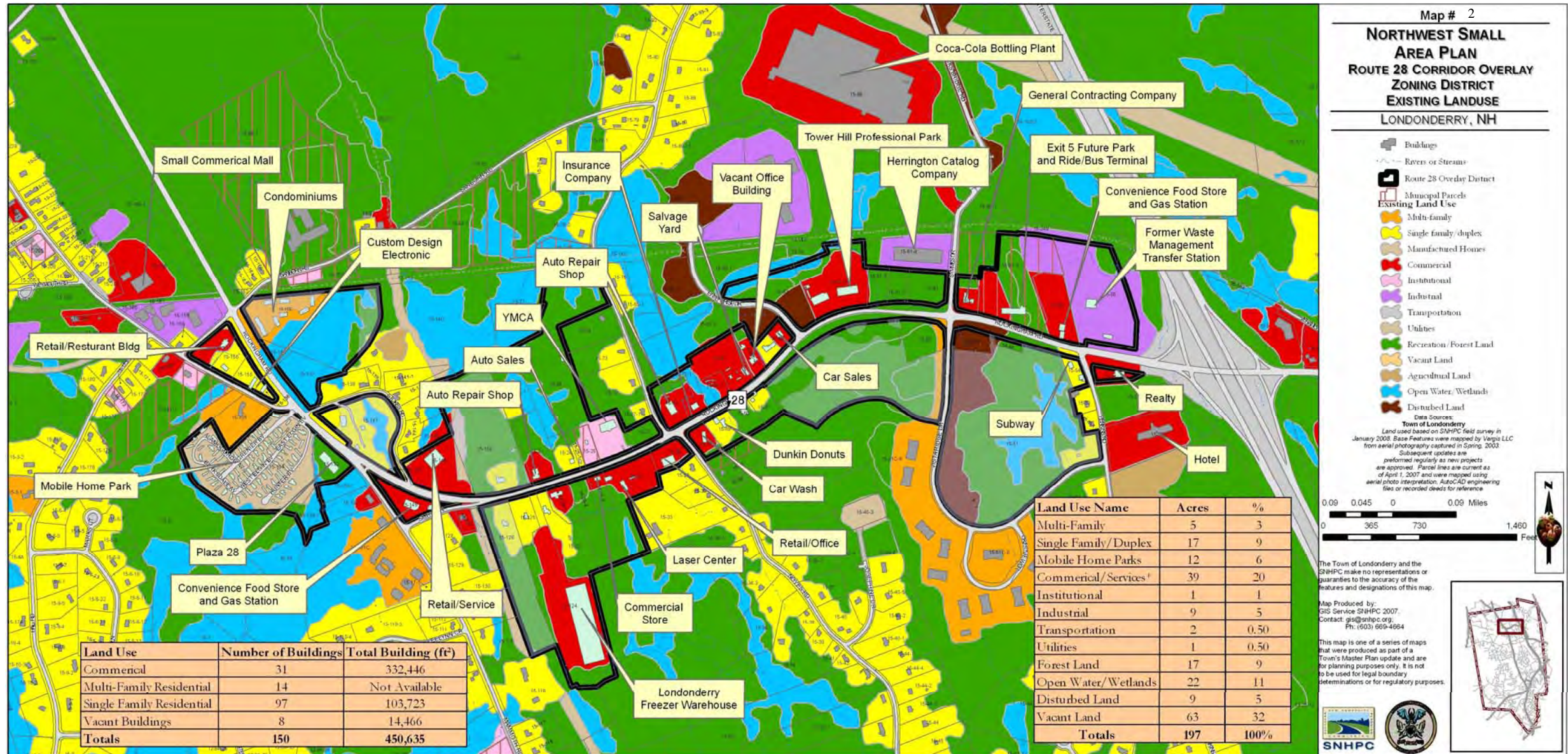
Harvey Industries
 Source: Town of Londonderry



YMCA
 Source: SNHPC

Links for additional information:
 Londonderry Zoning Ordinance
 Londonderry Master Plan, 2004

Northwest Small Area Plan



Town of Londonderry, NH
Londonderry Planning Board
Londonderry Community Development Department

Existing Land Use Mammoth Road Area



The Mammoth Road Area is an important gateway to Londonderry and the area includes a wide variety and mix of commercial and industrial uses. Most of the industrial uses are located along both sides of Rockingham Road south of the City of Manchester and north of Rt. 28. North Londonderry Elementary School is located on Sanborne Road to the east of Rockingham Road. A mixture of residential and commercial uses are found along Mammoth Road and within the small historic village/neighborhood located north of the former railroad line. This village area also contains the Town of Londonderry's Northwest Fire Station, a senior center, and the New England Velodrome and Cycling Park. Roughly 27 percent of the area is currently developed, however 67 percent of the land area is vacant which presents future growth opportunities and challenges for the area. See Table below and Map #3.

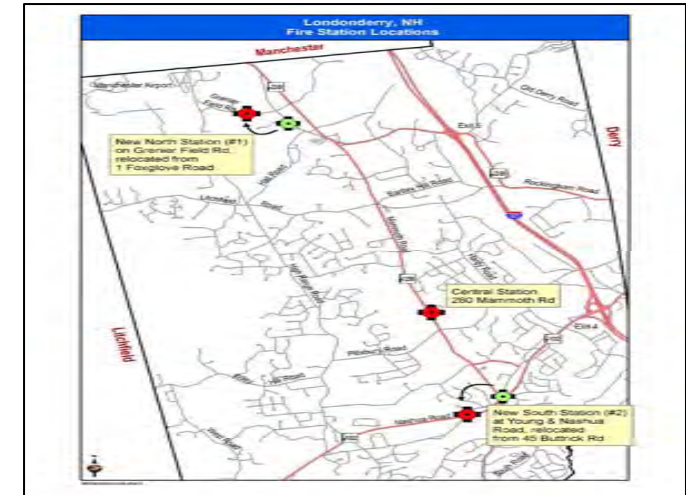
In anticipation of future growth and to address poor existing building conditions, the Town of Londonderry is proposing to upgrade and build a new Northwest Fire Station at the location shown on the adjoining map.

Existing Land Use Mammoth Rd.

Land Use	Acres	Percent
Single Family/Duplex	58	9%
Multifamily	2	0%
Commercial	62	9%
Industrial	28	4%
Government	2	0%
Agricultural	24	4%
Recreation	8	1%
Conservation	41	6%
Vacant Land	450	67%
Total Area	675	100%
Total Developed Land*	184	27%

Source: SNHPC, NH DOT Aerial Photography (2007)

Town of Londonderry, NH
 Londonderry Planning Board
 Londonderry Community Development Department



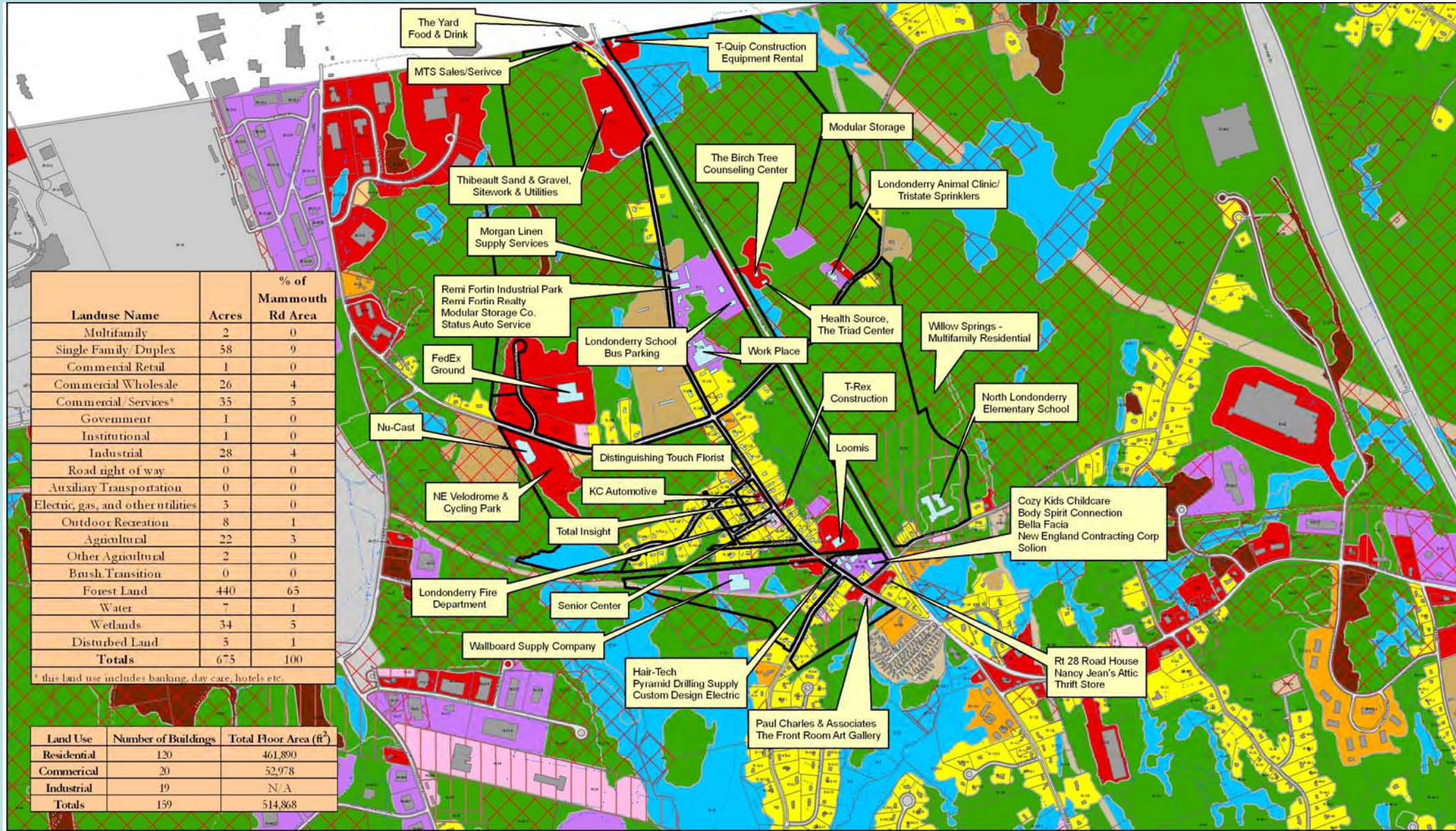
Source: Town of Londonderry



View along Mammoth Road
 Source: SNHPC

Links for additional information:
 Londonderry Zoning Ordinance
 Londonderry Master Plan, 2004

Northwest Small Area Plan



Map # 3
NORTHWEST SMALL AREA PLAN
MAMMOUTH ROAD
LONDONDERRY, NH

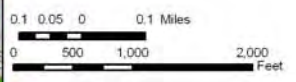
- Existing Land Use**
- Multi-family
 - Single family/duplex
 - Manufactured Homes
 - Commercial
 - Institutional
 - Industrial
 - Transportation
 - Utilities
 - Recreation/Forest Land
 - Vacant Land
 - Agricultural Land
 - Open Water/Wetlands
 - Disturbed Land
- Mammouth Road Area
 Municipal Parcel
 Vacant Parcels

Landuse Name	Acres	% of Mammouth Rd Area
Multifamily	2	0
Single Family/ Duplex	58	9
Commercial Retail	1	0
Commercial Wholesale	26	4
Commercial Services*	35	5
Government	1	0
Institutional	1	0
Industrial	28	4
Road right of way	0	0
Auxiliary Transportation	0	0
Electric, gas, and other utilities	3	0
Outdoor Recreation	8	1
Agricultural	22	3
Other Agricultural	2	0
Brush Transition	0	0
Forest Land	440	65
Water	7	1
Wetlands	34	5
Disturbed Land	5	1
Totals	675	100

* this land use includes banking, day care, hotels, etc.

Land Use	Number of Buildings	Total Floor Area (ft ²)
Residential	120	461,890
Commercial	20	52,978
Industrial	19	N/A
Totals	159	514,868

Data Sources:
Town of Londonderry
 Land used based on SNHPC field survey in January 2008. Base Features were mapped by Vargis LLC from aerial photography captured in Spring, 2003. Subsequent updates are performed regularly as new projects are approved. Parcel lines are current as of April 1, 2007 and were mapped using aerial photo interpretation, AutoCAD engineering files or recorded deeds for reference.



The Town of Londonderry and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

Map Produced by:
 GIS Service SNHPC 2007.
 Contact: gis@snhpc.org
 Ph: (603) 669-4664

This map is one of a series of maps that were produced as part of a Town's Master Plan update and are for planning purposes only. It is not to be used for legal boundary determinations or for regulatory purposes.



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 Londonderry Planning Board
 Londonderry Community Development Department



Existing Zoning

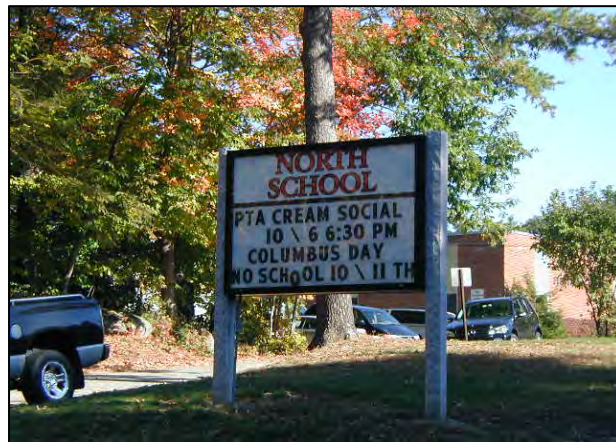
The Northwest Area consists of 8 basic zoning districts and 5 overlays districts. These zones are shown on the adjacent maps. The largest zone is **Agricultural-Residential (AR-1)** containing 2,550 acres or 43 percent of the total zoned land. There is also 2,088 acres of **Industrial IND-1** zoned land or 36 percent of the area. The next largest zones are **C-III** at 10 percent; **C-1** at 6 percent; **IND-1** at 3 percent, and **Multifamily R-III** at 2 percent. See adjoining Table and Map #4.

The 5 overlay districts include: the **Airport District** which provides for uses associated with the airport, including associated utilities and facilities, parking, motor vehicle rental, professional office, airport terminals, warehouse/wholesale establishments and other related businesses; the **Conservation Overlay District** designed to protect wetlands, ponds and streams and applies to areas within 100 feet of named wetlands and within 50 feet of unnamed wetlands; the **Floodplain Development Overlay District** which includes all lands designated as special flood hazard areas by the Federal Emergency Management Agency (FEMA); the **Rt. 28 Performance Overlay District**; and the **Airport Approach – Height and Noise District** to ensure aircraft safety and operation on the flight approaches to the airport.

Existing Zoning Northwest Area

Zoning District	Acres	Percent
Agricultural-Residential R-1	2,550	43%
Multi-family Residential (R-111)	107	2%
Commercial (C-1)	342	6%
Commercial (C-II)	1	<1%
Commercial (C-III)	599	10%
Industrial (IND-1)	2,088	36%
Industrial (IND-II)	188	3%
Total Zoned Land	5,875	100%
Airport District	627	11%
Conservation Overlay District	1,015	17%
Performance Overlay - Rt. 28	195	3%
Floodplain Overlay District	495	8%
Airport Approach Overlay	427	7%

Source: SNHPC, NH DOT Arial Photography (2007)

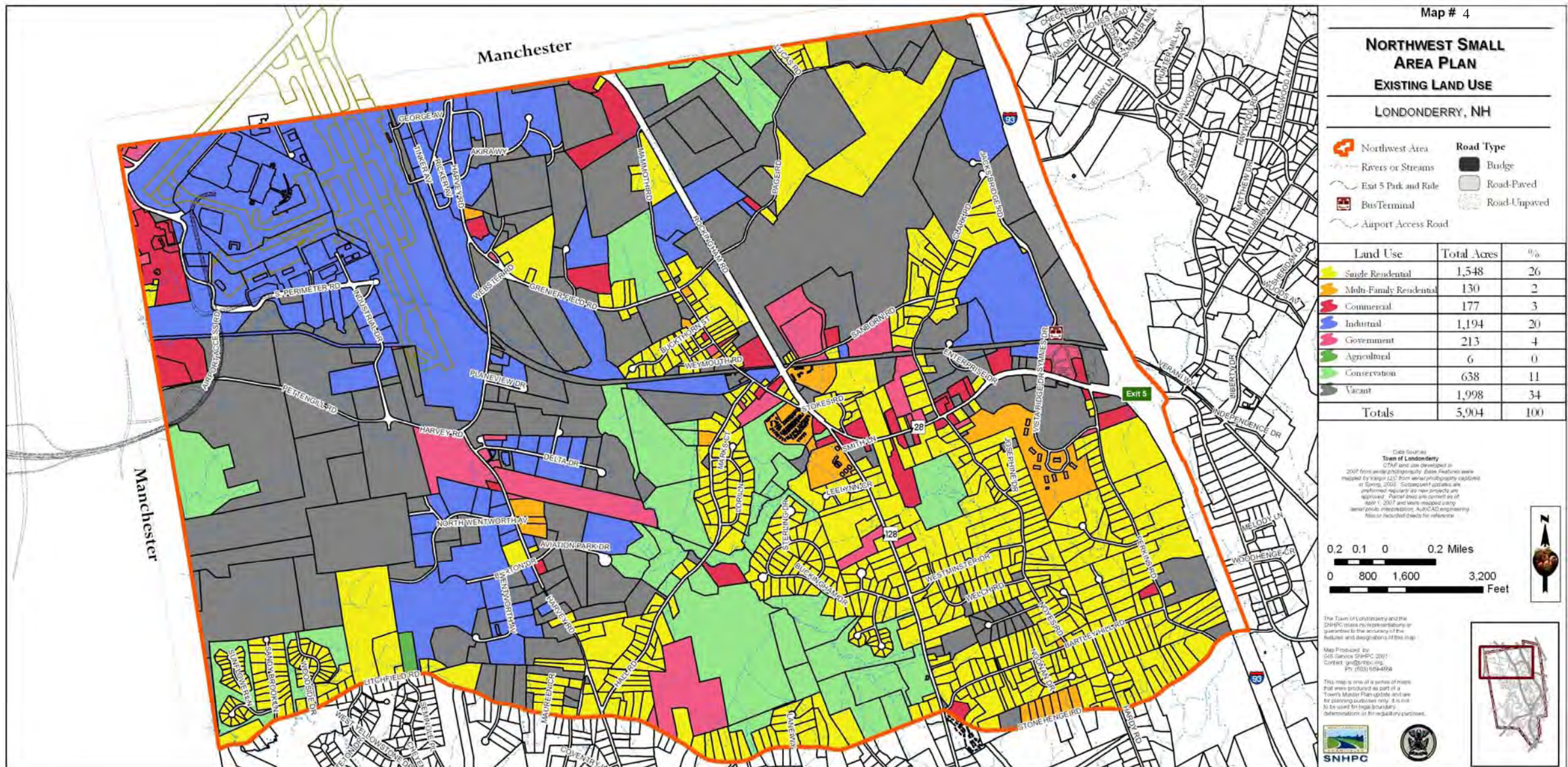


North Londonderry Elementary School
Source: SNHPC



Commercial Shopping Center Sign
Source: SNHPC

Northwest Small Area Plan



Map # 4

NORTHWEST SMALL AREA PLAN
EXISTING LAND USE
LONDONDERRY, NH

Land Use	Total Acres	%
Single Residential	1,548	26
Multi-Family Residential	130	2
Commercial	177	3
Industrial	1,194	20
Government	213	4
Agricultural	6	0
Conservation	638	11
Vacant	1,998	34
Totals	5,904	100

Road Type

- Northwest Area
- Rivers or Streams
- East 5 Park and Ride
- Bus Terminal
- Airport Access Road
- Bridge
- Road-Paved
- Road-Unpaved

Scale:
0.2 0.1 0 0.2 Miles
0 800 1,600 3,200 Feet

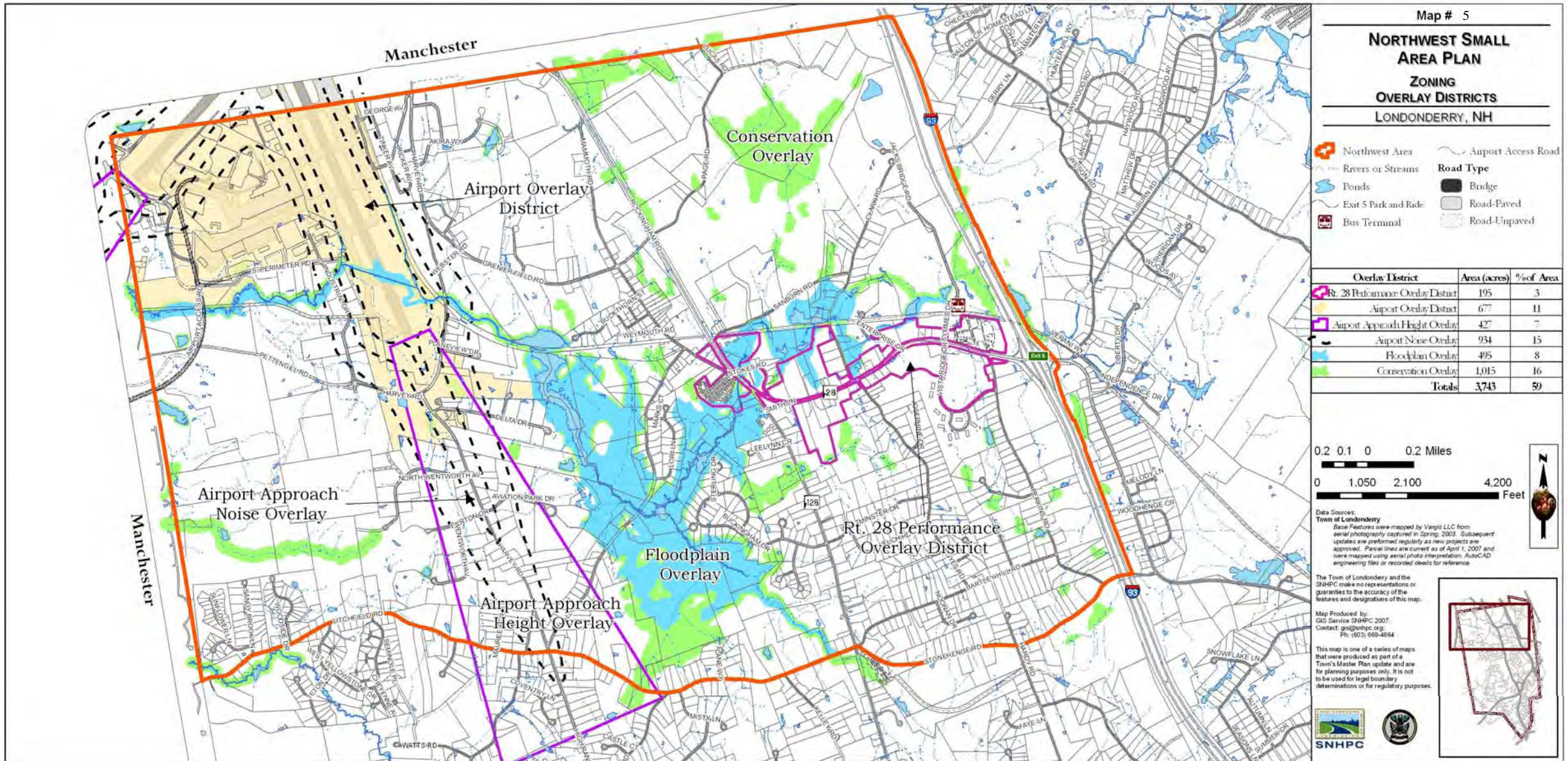
Map Produced by:
GIS Service SNHPC 2007
Context: gnd@snhpc.org
Date: 10/26/2006

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Northwest Small Area Plan



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Built Out Potential

The Town of Londonderry conducted a build out analysis of the community in 2006 which also included examining vacant land parcels with development potential located within the Northwest Area. These vacant parcels of land are shown in subareas 1, 2, 3, 5, 6 and 7 on the adjoining map.

The build out results for potential future residential, commercial and industrial development based upon the town's existing zoning regulations – minimum lot size and building density - are summarized in the table below.

The analysis indicates that the Northwest Area could experience full build out with the addition of **170** new residential dwelling units (a 19 percent increase); 13 new commercial units or **170,000** of new commercial square footage (a 20 and 21 percent increase); and 76 new industrial units or 5,486,000 industrial square footage (a 71 and 221 percent increase).

New industrial development represents the largest potential area of growth within the Northwest area.

Build Out	Existing Units	New Units	% Increase	New Sq. Ft.	% Increase
Residential	902	170	19%	NA	NA
Commercial	66	13	20%	170,000	21%
Industrial	107	76	71%	5,486,000	221%

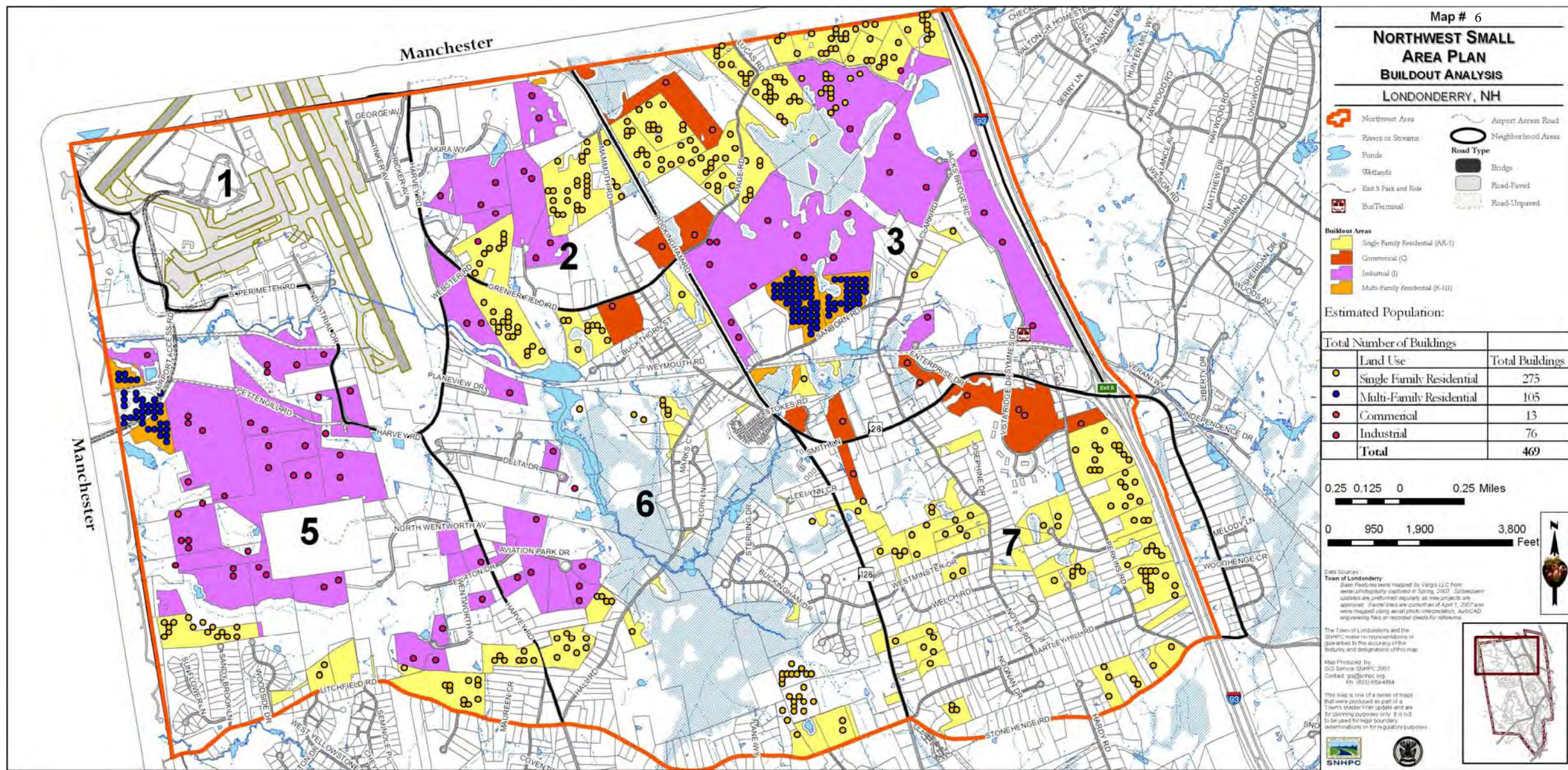


Source: Google Earth



Developable land on Enterprise Drive
 Source: SNHPC

Northwest Small Area Plan



Town of Londonderry, NH
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Transportation

There are significant transportation improvements currently under construction and proposed within the Northwest Area.

State of New Hampshire Department of Transportation improvements include:

- **Widening I-93** (Salem to Manchester) scheduled to be completed by 2011;
- **Exit 5 Area**, reconstruct interchange and off-ramps scheduled to be completed by 2011;
- **443 space Park & Ride @ Exit 5**, completed in 2007;
- **Commuter Bus Terminal** (completed in 2007 and now open) and Bus Maintenance Facility; currently under construction, scheduled to be completed in 2009;
- **I-93 Transit Investment Study** to begin phased implementation of Manchester-Boston bus on shoulder (BOS) strategy and preserve right-of-way for future transit/regional rail system, completed in 2008;
- **Airport Access Road** (Bedford, Manchester, Londonderry and Merrimack), currently under construction, scheduled to be completed in 2012.

Town of Londonderry proposed transportation projects include:

- **Pettengill Road Connection** – a new proposed 4 lane boulevard connecting Harvey Road to Airport Access Road; and
- **Page/Rockingham Road** Intersection improvements.

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Exit 5 Park and Ride and Bus Station
Source: NNH DOT



Source: NH DOT Proposed Exit 5 Improvements

Links for additional information:

RebuildingI93.com

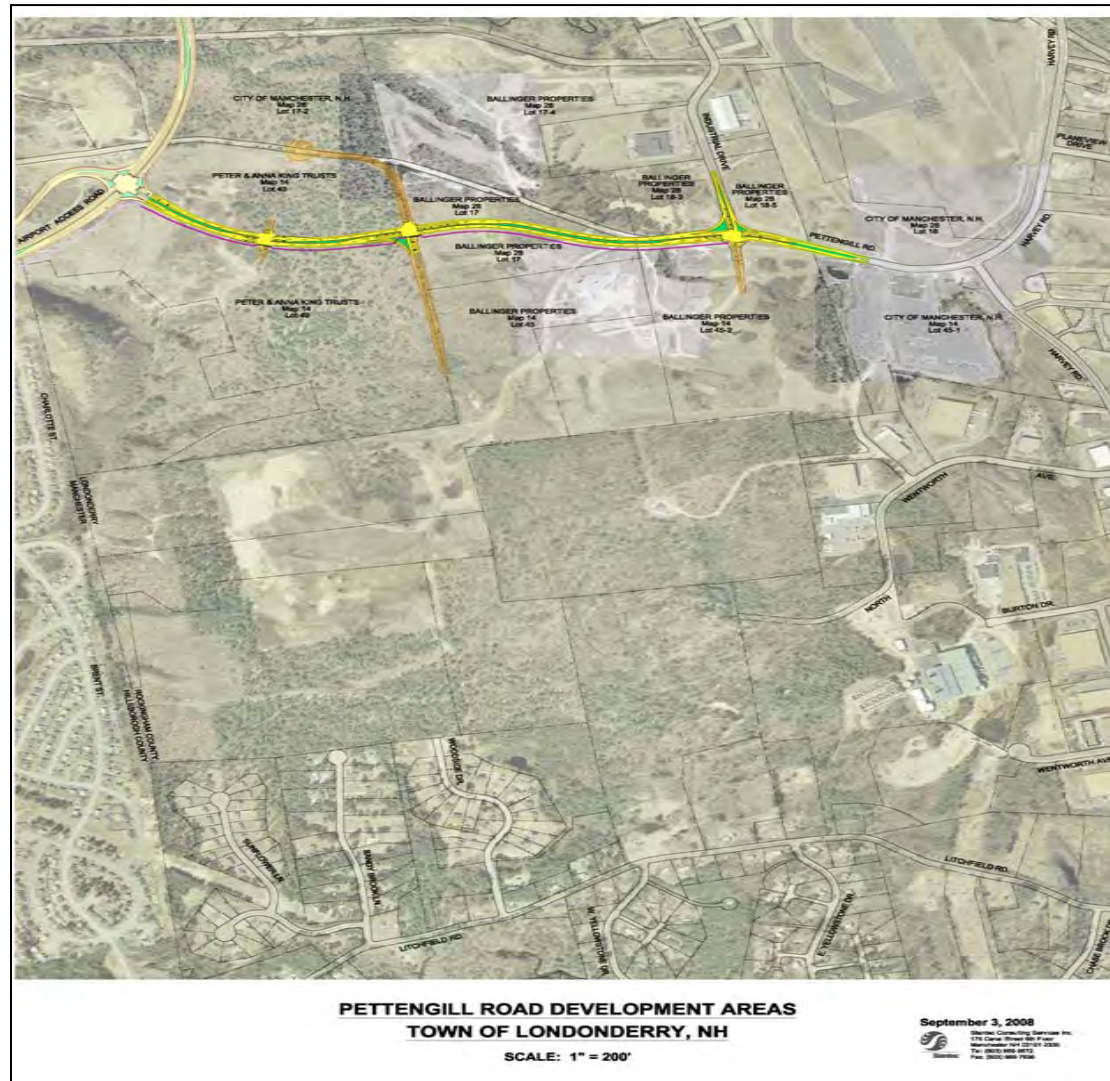
www.rideshare.nh.gov

I93 Transit Study, Final Report December 2008 Southern NH Region Transportation Plan

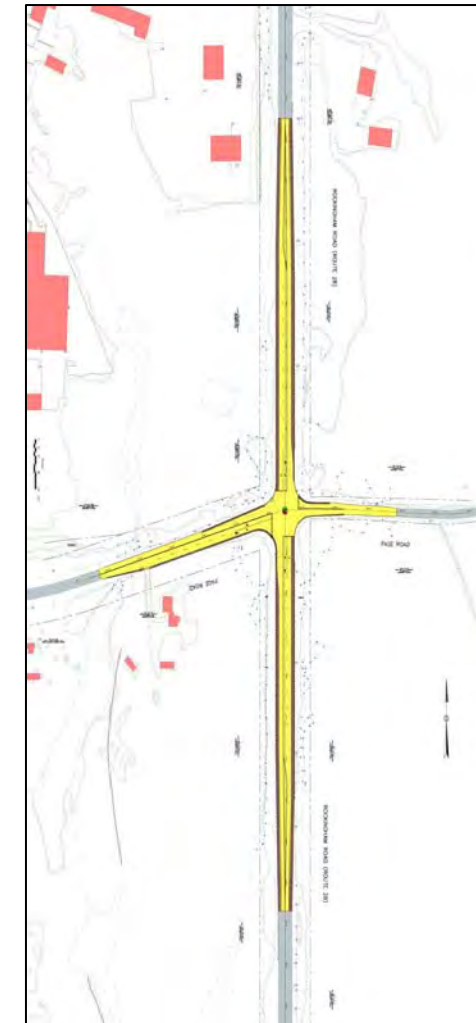
www.bostonexpressbus.com

Londonderry Mater Plan, 2004

Northwest Small Area Plan



Source: Town of Londonderry



Proposed Paige/Rockingham Road Intersection

Town of Londonderry, NH
Londonderry Planning Board
Londonderry Community Development Department

Community Appearance

Vision for Rt. 28 and Exit 5

Resulting from Public Workshops:

• *Traffic and Pedestrian Safety:*

- Monitor and control traffic;
- Require joint parking with shared access and mobility between lots;
- Improve pedestrian access along corridor, at Park & Ride and through Exit 5;
- Prevent traffic impacts on Perkins Road and to adjoining neighborhood; and
- Improve Rt. 28 as a boulevard with landscaped median and sidewalks (see adjacent example).

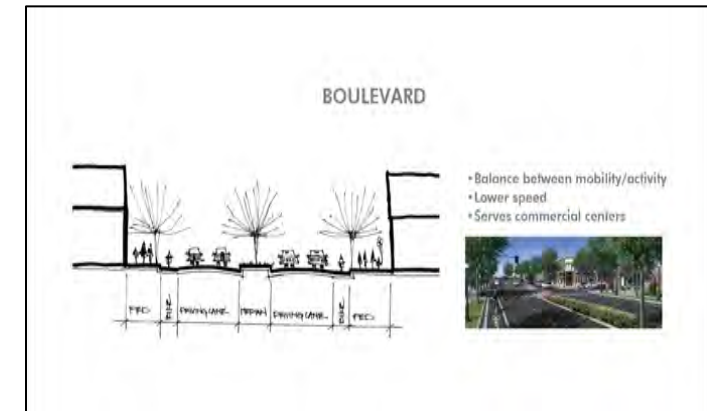
• *Community Appearance:*

- Seek a balance between mandatory and volunteer design standards;
- Encourage building styles that blend with traditional New England architecture; and
- Consider implementing Mixed-Use and Transit-Oriented Development (TOD) at Exit 5

• *Transit-Oriented Development (TOD) :*

TOD includes moderate to higher density development, located within an easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the automobile. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use.

A typical TOD has a rail or bus station at its center, surrounded by relatively moderate to high-density development, with progressively lower-density spreading outwards one-quarter to one half mile, which represents pedestrian scale distances.



Example Cross Section



View of Rt. 28 Going West towards Mammoth Road

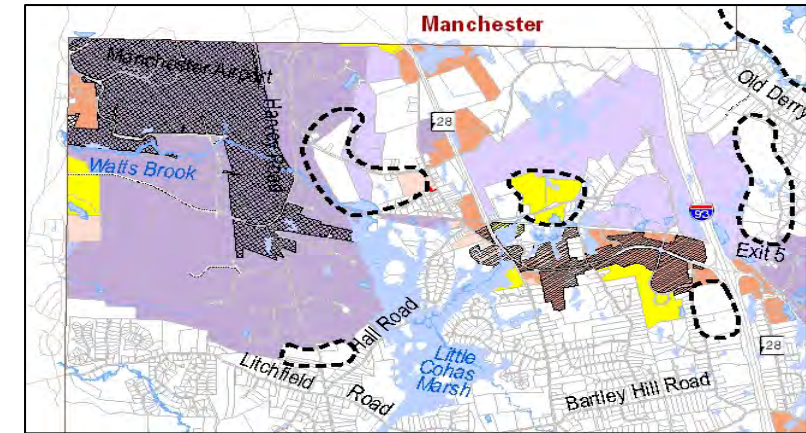
Housing

The Londonderry Housing Task Force (HTF) was established by the Town Council on November 1, 2006 to study the issue of housing affordability and diversity. The Report of the Londonderry, NH Housing Task Force was prepared in April 2008. This report identifies the possible locations for an Affordable Housing Zoning District on the adjoining map. Two locations are proposed within the Northwest Area: Mammoth and Rockingham Roads north of Rt. 28 and the south end of Harvey Road north of Litchfield and Hall Roads.

These areas were selected due to availability of lots greater than 10 acres in size; close proximity to water and/or sewer lines; and reasonable extension possible for frontage on a Class V or better road. These areas were suggested primarily as an exercise to better understanding of the potential for affordable housing in locations that might support it.

Some of the key findings:

- There exists a substantial, untapped demand for affordable housing
- Project selection follows the path of least resistance;
- Development fees and costs are passed on to end users in the purchase price of the home;
- Current zoning ordinances tend to reflect historic priorities;
- Local zoning has typically been designed to encourage single-family, detached housing;
- Density is critical attaining affordability.



Proposed Affordable Housing Zoning Districts
Source: Town of Londonderry



View of Bockmon Mobile Home Park
Source: SNHPC

Economic Development Opportunities

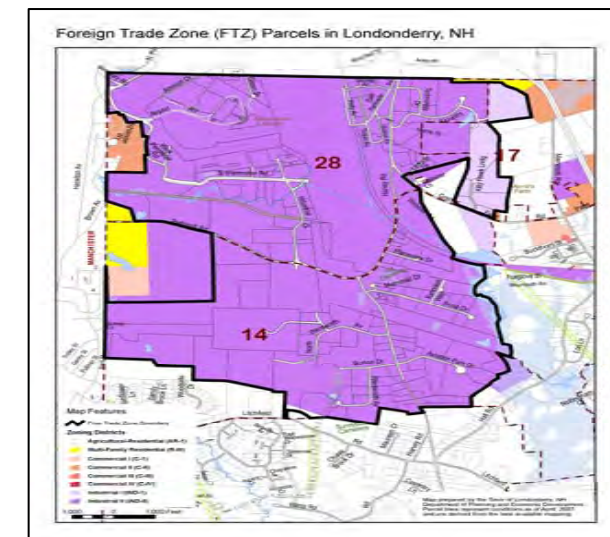


The Northwest Area presents significant economic development opportunities for the Town of Londonderry. Four sub-areas and generalized concept plans previously prepared for those areas to date are shown on the adjacent map and include:

- 1# Airport Sub-Area: currently relatively undeveloped due to lack of infrastructure and access. However, with establishment of the Airport Access Road and construction of the proposed Pettingill Road connection, this area has 800 acres of existing industrial zoning which could be available for future growth. During the Londonderry Business Park Design Charrette held in May 2003, a concept plan for a future business park was prepared which could generate 3.6 million square feet of space and 6,000 new jobs. The Airport Sub-Area also contains the Town of Londonderry's Foreign Trade Zone (see FTZ parcel map below). The Londonderry Planning Board is currently working on a new Flexible Industrial District (FI) to promote a campus atmosphere to the future development of the area.
- 2# Exit 5 Mixed Use Commercial Area: currently identified in the Londonderry Master Plan as a major commercial center. The transportation improvements to and around Exit 5 and the citizen input received indicate that this area is suitable for mixed use and higher density development (including transit oriented development) provided safeguards are maintained in the town's zoning to protect the adjoining residential neighborhood along Perkins Road.
- 3# Jack's Bridge Road Sub-Area: located north-west of Rt. 28, directly north of Exit 5 and west of I-93. This area is similar to the airport sub-area as it is largely zoned industrial and contains a number of established distribution and warehouse businesses (see adjacent map showing conceptual plan and improvements to Page Road).
- 4# Page Road: During the public workshops, residents recommended that the Town of Londonderry encourage industrial zoning on the east side of Rockingham Road and commercial zoning on the west side.

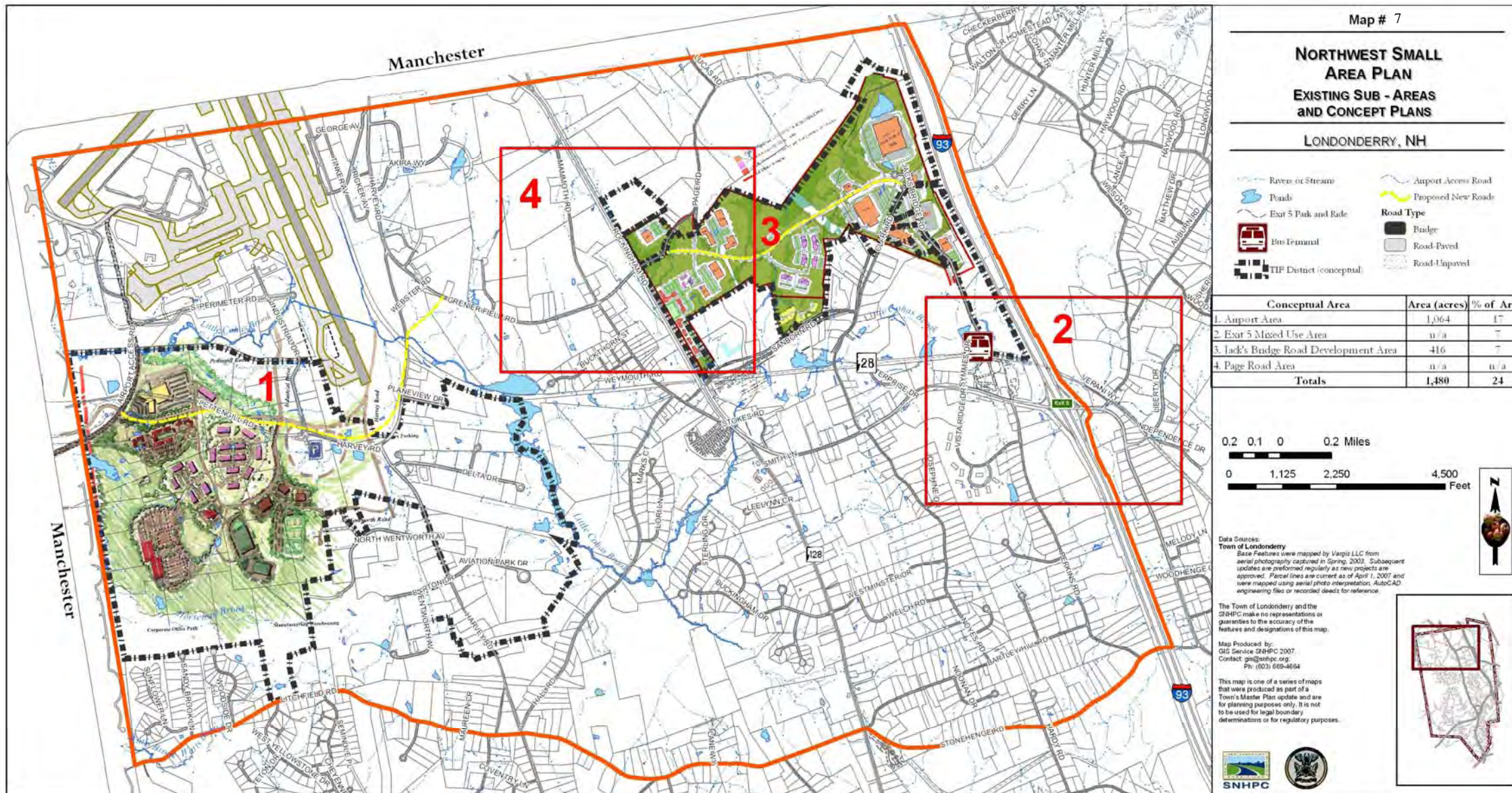


Source: Town of Londonderry



Source: Town of Londonderry

Northwest Small Area Plan



Planning and Zoning Opportunities



Planning Themes/Goals/Strategies Resulting from Public Workshops:

- **Aesthetics:** Improve future building styles/architecture design along Rt. 28 and make it an attractive destination.
- **Zoning/Land Use:** Fix zoning now and for the future; consider best use of land based on energy, smart growth and economic reasons; seek attractive and necessary services at Exit 5; behind Perkins Road encourage workforce housing development.
- **Transportation:** Improve overall traffic flow and safety on Rt. 28 and at Exit 5; make area more accessible to all users, cars and people; mass transit/park and ride/rail are all good for the town; expand trail system in areas and in/around Exit 5.
- **Economic:** Continue to utilize prime location to promote jobs and attract desirable companies to increase tax base and lower property taxes.

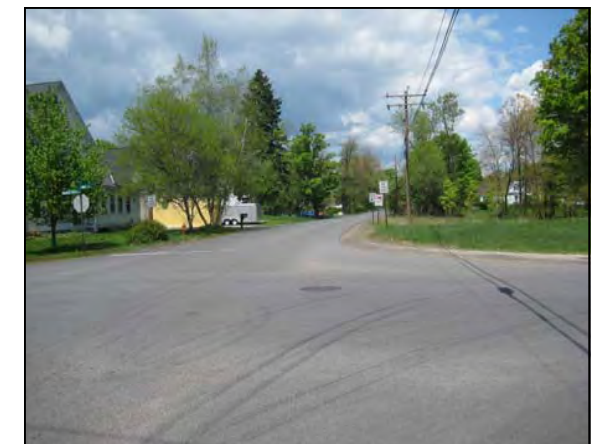
Village District:

- Establish a Village District zone within the Mammoth Road area to safeguard existing historic character and encourage continued residential and small scale commercial revitalization of the village/neighborhood;
- Ideally this Village District could be located north of Hall Road and the former railroad line and include the Page Road intersection;

Mammoth and Rockingham Roads:

- Protect overall appearance of Rockingham Road as an important gateway to Londonderry;
- Maintain existing commercial zoning as currently established, but include architectural standards;
- Establish industrial zoning – east side of Rockingham Road and commercial zoning on west side.

Town of Londonderry, NH
Londonderry Planning Board
Londonderry Community Development Department



View of Memorial/Page Intersection
Source: SNHPC

Links for additional information:
Londonderry Zoning Ordinance
snhpc.org



Rt. 28 and Exit 5:

- Protect overall appearance of Rt. 28 as an important gateway to Londonderry;
- Consider removing existing Rt. 28 Performance Overlay District at Exit 5;
- Allow higher density/clustering and mix of land use at Exit 5 through appropriate zoning/transit-oriented development options (see Exit 5 Zoning Options – next slide);
- Maintain existing building size and scale along Rt. 28 corridor west of Exit 5 consistent with Rt. 28 Performance Overlay District standards, including 75,000 sq.ft. cap;
- Provide incentives to increase 75,000 sq.ft. cap in the Overlay District with increased building setbacks, landscaping and parking at rear/behind buildings;
- Establish a standard landscape buffer along the corridor;
- Require smaller building signage with one entrance sign per shopping/business center;
- Prevent strip commercial development and commercial creep; and
- Encourage banks, restaurants, grocery, medical and personal services, and a healthy balance of mix of retail, professional and residential development to locate along the corridor.

Airport/Jack's Bridge and Page Road Sub-Areas:

- Establish proposed Flexible Industrial Zoning District (FI); and
- Consider establishing where feasible TIFDs and Economic Revitalization Zone Tax Credits (RSA 162-N).



Parking Located at rear of Exit 5 Park and Ride Buss Terminal
Source: NH DOT



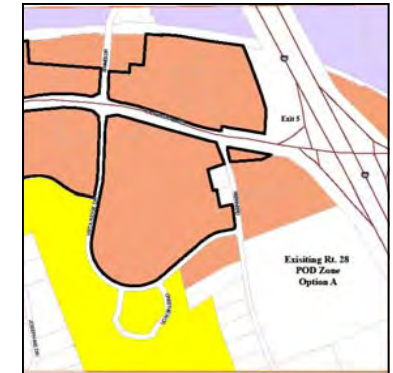
Rt. 28 between Exit 5 and Symmes Drive
Source: SNHPC

Exit 5 Zoning Strategies



Option A: Leave Existing Zone and Rt. 28 Performance Overlay District as is at Exit 5 (see attached example)

- Local zoning is designed primarily to encourage small scale business and commercial use; and
- Transportation improvements at Exit 5 are secondary to current zoning goals.



Option B: Remove Rt. 28 Performance Overlay District at Exit 5 from Vista Ridge and Simes Drive east to I-93 (see attached example)

- Underlying commercial zoning is adequate to address small scale business and commercial use;
- Rt. 28 POD (75,000 sq.ft. building cap) has discouraged growth at Exit 5; and
- Development of Exit 5 is critical in improving overall community appearance/economic growth/tax base.



Option C: Replace Rt. 28 Performance Overlay District with a new Transit-Oriented Development Overlay District at Exit 5 (see attached example)

- Significant transportation improvements/opportunities - commuter bus/park and ride/rail exist at Exit 5 making it conducive for well-planned TOD; and
- Substantial, untapped supply of vacant land and former commercial uses exist at Exit 5 for higher density/mixed use development opportunities.





Appendix:

Transit-Oriented Development Overlay District Model Bylaw

Town of Londonderry, NH
Londonderry Planning Board
Londonderry Community Development Department

Links for additional information:
http://www.mass.gov/envir/smart_growth_toolkit/bylaws/TOD-Bylaw.pdf

Transit-Oriented Development Overlay District

Model Bylaw

This model Transit-Oriented Development bylaw provides a foundation for developing a municipal TOD bylaw for your community. No single “model” bylaw or ordinance can be adopted by a municipality without some tailoring to the unique characteristics and needs of that individual municipality. Therefore, readers are encouraged to revise and adapt the text to reflect your community’s character, and to be compatible with your existing zoning bylaws/ordinances

Cities and towns are not required to adopt the exact procedures and regulations identified in this document since the development review process may vary considerably among municipalities across the state. Rather, municipalities must examine their development review processes to determine how the model bylaw can be adapted to fit into the existing procedures and regulations.

The annotations provided below will not be part of your bylaw/ordinance. These annotations are intended to provide background and context to explain the provisions of the model bylaw.

Several zoning bylaws (including draft bylaws, adopted bylaws, and model bylaws) from communities around the country were used to develop this bylaw. In some instances, language was taken verbatim from these bylaws. The Cities and Towns whose bylaws were consulted for this model include Abington, MA; Needham, MA; Somerville, MA; Concord, MA; Canton, MA; Ashland, MA; Woburn, MA; Lower Merion, PA; Hartford, CT; Columbus, OH; Minneapolis, MN; Seattle, WA; Salt Lake City, UT; Atlanta, GA; Sacramento, CA; Tempe, AZ; and Phoenix, AZ.

Section 1.0 Background and Authority

The Town finds that Transit Oriented Development benefits the general health and welfare of the inhabitants of the town by fulfilling existing housing, transportation and employment needs. Therefore, The Town implements this bylaw and designates certain zoning districts as Transit Oriented Development Districts (“TOD” Districts) to encourage furtherance of transit oriented development.

Section 2.0 Purpose

The purposes of the Transit Oriented Development (TOD) Overlay District are to:

1. Encourage a mix of moderate and high density development within walking distance of transit stations to increase transit ridership;
2. Create a pedestrian-friendly environment to encourage walking, bicycling and transit use;
3. Provide an alternative to traditional development by emphasizing mixed use, pedestrian oriented development;
4. Create a neighborhood identity that promotes pedestrian activity, human interactions, safety and livability;

5. Encourage building reuse and infill to create higher densities;
6. Reduce auto dependency and roadway congestion by locating multiple destinations and trip purposes within walking distance of one another;
7. Provide a range of housing options for people of different income levels and at different stages of life.

Section 3.0 Authority

This Bylaw is adopted pursuant to M.G.L.c. 40A and the Home Rule Amendment to the Massachusetts Constitution.

Section 4.0 Applicability

The TOD Overlay District consists of those areas shown on [INSERT TITLE OF MAP] on file with the Town/City Clerk and dated [INSERT DATE MAP IS ADOPTED BY THE CITY/TOWN].

Typically these areas are within ¼ to ½ mile of a transit station, measured from the center point of the passenger platform or passenger loading area.

Section 5.0 Definitions

Commercial Parking Facilities. Parking facilities created for the purpose of generating income from paid parking, but not including commuter parking lots owned by the transit operator.

Development. The construction of new buildings or structures and modification of, additions to, and expansion of existing buildings or structures.

Drive-Through Facility: Facilities that allow for transactions of goods or services without leaving a motor vehicle.

Fast Food Establishment. A food service business that offers relatively immediate service of semi-prepared or prepared foods for take-out or in-house consumption in disposable containers and serving walk-in and/or drive-through customers.

Mixed-Use. Development contained on a single parcel or adjoining parcels that includes different, complimentary uses (both residential and non-residential) and which provide for a variety of activities throughout the day.

Overlay Zoning District. A zoning district that encompasses one or more underlying zoning districts, and imposes additional or alternative requirements or provisions than required by the underlying zoning.

Park and Ride Lot. A parking structure or surface lot intended for use by persons riding transit or carpooling.

Pedestrian-Friendly Design. The design of communities, neighborhoods, streetscapes, buildings and other uses that promotes pedestrian comfort, safety, access and visual interest.

Public Seating Area. Any outside seating area designated for use by the public, including outdoor seating owned and operated by eating and drinking establishments.

Service-Oriented Office – Office uses with walk-in business and/or whose clientele is the general public.

Shared Parking. Parking that is utilized by two or more different uses that generate different peak period parking demand.

Strip Commercial Development. Commercial development characterized by a low density (one story) linear development pattern (usually one lot in depth), separate curb cuts for each use, no defined pedestrian system, and high traffic volumes. Parking lots are generally located between the street and the front entrance to the businesses.

Townhouse. A single family residence typically of two to three stories attached to a similar residence by a common sidewall.

Transit-Oriented Development. A development pattern created around a transit facility or station that is characterized by higher density, mixed uses, a safe and attractive pedestrian environment, reduced parking, and a direct and convenient access to the transit facility.

Transit Station. The area including the platform which supports transit usage and that is owned and/or operated by the transit agency.

Section 6.0 Procedural Requirements

Certain specified uses are allowed by right in the TOD District. Other uses may be allowed by Special Permit. The Planning Board shall be the Special Permit Granting Authority for any Special Permit granted in a TOD District. Procedural Requirements, including application requirements, abutter notification and public hearing shall be in accordance with the Special Permit Procedures as found elsewhere in the Town's Zoning Bylaw [REFERENCE SECTION OF BYLAW/ORDINANCE]. The Planning Board, acting as the Special Permit Granting Authority, may grant a Special Permit in a TOD District if it finds that the use will: 1) promote the purpose of the Overlay District as described in Section 2.0; and 2) include active ground floor uses, subordinate parking, and have upper floor residential units.

Section 7.0 Use Regulations

Section 7.1 Allowed Uses:

The uses listed below in Table 1 are allowed in the TOD Overlay District

Table 1. Uses Allowed By Right in the TOD Overlay District

Apartments <above ground floor in active business districts>
Townhouses
Service-oriented office uses
Non-service oriented office uses on upper floors only
Mixed uses with ground floor retail, personal services and/or service-oriented offices
Banks
Retail under 10,000 square feet
Government buildings
Hospitals
Hotels
Transit stations
Restaurants (except fast food establishments which may only be authorized by Special Permit)
Civic, cultural and community facilities
Theaters, except drive-ins
Dry cleaners stores with cleaning facilities outside the TOD Overlay District
Buildings and uses accessory to the above, such as parking garages, gift shops, cafeterias and day care facilities

A TOD overlay district should include a mix of uses to encourage activity throughout daytime and evening hours, and to encourage pedestrian travel for different trip purposes.

Section 7.2 Prohibited Uses

The uses listed below in Table 2 are prohibited in the TOD Overlay District

Table 2. Prohibited Uses in the TOD Overlay District

Auto sales, auto service and repair, auto storage and auto rental uses
Gasoline sales
Heavy equipment sales and service
Manufactured home sales
Salvage yards
Industrial uses
Towing services and vehicle storage yards
RV mobile home sales yards and storage
Car wash
Strip Commercial Development
Mini-storage and self-storage facilities
Commercial laundries with dry-cleaning operation on site
Warehousing and distribution facilities
Low density housing (less than 7 units per acre)
Golf Courses
Cemeteries
Boat sales and storage yards
Freight terminals

Amusement parks
Building contractors
Retail uses, except grocery stores, larger than 10,000 square feet, unless part of a mixed-use development
Drive-in theaters
Drive-through facilities
Commercial parking facilities

Section 7.3 Special Permit Uses

The following uses (Table 3) may be allowed by Special Permit. The Planning Board, acting as the Special Permit Granting Authority, may grant a Special Permit in a TOD District if it finds that the use will: 1) promote the purpose of the Overlay District as described in Section 2.0; and 2) include active ground floor uses, subordinate parking, and have upper floor residential units.

Table 3. Uses that May Be Allowed by Special Permit

Single family homes
Commercial surface parking lots
Laboratories
Fast Food Establishments
Research facilities
Stadiums and sports facilities with over 10,000 seats
Grocery stores over 10,000 square feet

The types of uses permitted, prohibited, or allowed with a Special Permit may differ based on the character of the area in which the TOD is located. The goal of a TOD is to encourage pedestrian oriented uses and discourage auto-dependent or auto-oriented uses. Further, TODs should encourage uses that can be easily served by transit, that have high levels of visitor activity, and/or that have high employment to floor area ratios. Thus, office, retail and entertainment establishments are encouraged, while industrial and warehouse uses (which generally have fewer visitors and two or less employees per 1,000 square feet) are prohibited. For example, TODs in small suburban centers may wish to prohibit fast food establishments outright, while planners may wish to integrate fast food establishments into stations located in dense urban settings. Communities may also wish to craft their bylaw to distinguish between types of fast food establishments. Other uses that might be permitted in some TOD districts and not in others include commercial parking facilities and single family homes. Commercial surface lots should only be allowed for commuter parking or for short term parking (1-2 hours) to serve retail or service uses. Such lots are generally not conducive to a pedestrian-friendly environment, and should be located to the rear of buildings, and not along major pedestrian ways.

Research has found that housing densities of at least 7-10 units per acre are required to support transit.¹ Thus, to accommodate single family homes, zoning must allow for 6,000 square foot or smaller lots, and should include a provision for a maximum lot size. Single family homes could be allowed on the periphery of a TOD adjacent to an existing single family neighborhood.

Section 8.0 Parking Requirements

Parking requirements within the TOD Overlay District are as follows:

1. A maximum of 1 parking space per multi-family unit, plus 1 guest space per 15 units, is permitted.
2. Parking for non-residential uses shall be provided at not more than 3 per 1,000 square feet (gross) and not less than less than 1 per 500 square feet (gross) for uses covering less than 1,000 square feet.
3. Further reduction in the number of required parking spaces may be permitted by a Special Permit granted by the Planning Board after a finding by the Board that the development will be adequately served by users of public transportation.
4. Shared parking is strongly encouraged. On lots serving more than one use, the total number of spaces required may be reduced, provided that the applicant submits credible evidence to the satisfaction of the City/Town Planning Board that the peak parking demand of the uses do not coincide, and that the accumulated parking demand at any one time shall not exceed the total capacity of the facility. Such evidence must take into account the parking demand of residents, employees, customers, visitors, and any other users of the lot. It must also take into account parking demand on both weekends and weekdays, and both during the daytime and overnight.
5. Where feasible, ingress and egress from parking shall be from side streets or alleys.
6. Surface parking lots must be to the rear of buildings, and shall not exceed one acre in size. Surface lots are prohibited in front of businesses.
7. Surface parking lots with more than thirty spaces shall be divided into separate areas by landscaped areas of at least 10 feet in width. A minimum of 15 percent of all surface lots shall be landscaped. No row of parking shall be more than 10 spaces wide without being interrupted by a landscaped area. Each landscaped area shall have at least one tree. Landscaped areas should be planted with low-maintenance, salt tolerant plants capable of withstanding extreme weather conditions.
8. Surface lots shall be screened along all sidewalks by a landscaped buffer of not less than six feet, or three foot walls or fencing compatible with the adjacent architecture.
9. Surface parking lots shall provide pedestrian walkways and connections to the sidewalk system.
10. On-street parking is permitted and encouraged.
11. Parking structures shall have well-designed and marked pedestrian walkways and connections to the sidewalk system.
12. Parking structures must include ground level retail along all streets and sidewalks.
13. Parking structures shall be designed to be compatible with adjacent buildings and architecture.
14. Bicycle racks shall be provided on site at a ratio of 1 space for every 15 automobile parking spaces or portion thereof.

The Massachusetts Office of Commonwealth Development is developing Bicycle Parking Facility Requirements for its Transit Oriented Development Bond Program. Municipalities adopting a TOD overlay district are encouraged to review these requirements and incorporate some of the bicycle parking design and materials requirements into their bylaws to ensure that quality bicycle parking is provided.

15. All parking lots and structures must provide pedestrian access ways to streets that meet the Dimensional Requirements detailed in section 9.0, below.
16. Signage that shows the location and best means of access to the transit station must be provided at all parking facilities.

The density and location of the TOD district will dictate whether or not structured parking should be encouraged or allowed. In more suburban town centers, structured parking is less desirable than in more dense urban areas.

Section 9.0 Dimensional Requirements

The development standards in a TOD overlay district bylaw are intended to create densities that will support transit as well as to provide a pedestrian friendly environment.

1. Building Setbacks

- a. A building shall have a minimum front yard setback of 0 feet and a maximum setback of five feet from the front property line. A setback may be increased to 25 feet from the front property line if a courtyard, plaza or seating area is incorporated into the development adjacent to the public street.

Limited setbacks help to create a pedestrian-friendly environment. Buildings with windows located close to the sidewalk provide a visually stimulating environment for pedestrians. Conversely, buildings set back too far from the pedestrian walkway result in a less pedestrian-inviting environment.

- b. The minimum setback for a side yard shall be zero feet. Where deemed appropriate by the Planning Board, alleys between buildings may be encouraged for the provision of beneficial public connections between buildings, open spaces and streets. The maximum side setback shall be determined by the Planning Board, and shall not exceed 25 feet.

In smaller town centers or rural locations, it may be more appropriate to have side yard setbacks of up to 15 feet. In town centers or urban areas with substantial vehicle traffic, side setbacks may need to be up to 30 feet to accommodate two-way traffic to rear parking and loading areas.

- c. The minimum setback for a back yard shall be 15 feet.
- d. The setback provisions in section 1.a-c may be waived with a Special Permit issued by the Planning Board where such waiver would further the purposes of this Bylaw as listed in Section 2.0.

2. Bulk and Lot Coverage

- a. Minimum lot coverage is 60 percent of the net lot area. This minimum may be reduced if a minimum of 40 percent of the lot is developed as improved public open space or if ingress, egress or other building code requirements would otherwise make the development infeasible. The Planning Board shall have final discretion in deciding if land constitutes improved open space for the purposes of this provision.
- b. Maximum lot coverage is limited to 85 percent. This lot coverage may be increased to 100 percent for mixed use buildings, or for renovated historic structures.

The 100 percent lot coverage is not appropriate for small town centers and rural settings.

- c. The maximum by-right floor-to-area ratio (FAR) is 1.5. The maximum FAR shall be 2.5, upon the discretion of the Planning Board. The Planning Board may issue a Special Permit to grant additional FAR beyond 1.5 up to 2.5 for affordable housing or for mixed use developments if it finds that such an increase furthers the purposes of this bylaw.

The floor-area ratio is the ratio of the gross square footage of structures on a site to the gross square footage of the site. For example, an FAR of 1.0 on a 10,000 square foot site could be achieved with a one-story building of 10,000 square feet, a two story building in which each floor measures 5,000 square feet, a four story building in which each floor measures 2,500 square feet, etc. The FAR controls the density of the site. A high FAR will allow higher densities than a low FAR. FAR allows flexibility in design while controlling for overall building size. The FAR is used in conjunction with height limits, setbacks, and lot coverage to arrive at acceptable densities and design of a development.

Each Planning Board must adopt an FAR that is suitable for the character of the neighborhood in which the TOD is located. In rural areas, a 2.5 FAR will be too high, and even the 1.5 FAR may need to be reduced to conform to the surrounding built environment. In urban areas, the acceptable FAR may be significantly higher than 2.5. The primary goal of TOD is to concentrate development in the area around the train station, and to create a pedestrian-friendly environment. Higher density allowed by a higher FAR helps to achieve these goals.

It is important to ensure that the provisions for minimum lot coverage coupled with minimum height are within the by-right FAR when implemented.

3. Building Height Requirements

- a. The minimum allowable building height is 28 feet above grade.

The minimum height is meant to encourage density and create an aesthetic appeal throughout the TOD area. When determining minimum height, local officials must require a height that allows for at least two stories. Urban practitioners may want to consider requiring a height that allows for at least three stories.

- b. The maximum building height is 78 feet above grade.

In more rural areas or smaller town centers, it may be appropriate to reduce this maximum height to 45 feet or three stories. In more urban areas, the height can be much higher and should reflect the character of the neighborhood in which the overlay district is located.

- c. Notwithstanding the building height provisions noted above, no building shall exceed by more than two stories or thirty feet, whichever is less, the height of the tallest building or buildings that front on the same street and are located within 150 feet of such building.

This standard can be relaxed in dense urban areas. The allowed building heights should reflect the context in which the TOD is located. In areas with buildings exceeding 78 feet, the maximum height should be set to reflect the height of surrounding buildings.

- d. No portion of a building locate within 50 feet of an existing one or two family dwelling in a residential zoning district shall be permitted to exceed three stories or 45 feet, whichever is less.

4. Driveways

- a. The creation of new sidewalk curb cuts shall be avoided whenever an alternative point of access is available or can be created. Shared access agreements are encouraged.
- b. The minimum width for one-way traffic is 12 feet, and the maximum 18 feet.
- c. The minimum width for two-way traffic is 18 feet and the maximum is 22 feet.

5. Sidewalks

- a. A minimum unobstructed sidewalk width of five feet is required. Sidewalk width can be up to 20 feet, and is dependent on expected level of activity.

Smaller towns may want to decrease the allowable sidewalk width.

- b. Sidewalks shall be constructed along the frontage of all public streets.

- c. Pedestrian scale lighting fixtures no greater than 15 feet in height shall be provided along all sidewalks and walkways to provide ample lighting during nighttime hours.

Lighting height may be lower in smaller town centers and rural areas, and up to 20 feet in more urban areas.

- d. All sidewalks and walkways shall meet ADA requirements.e.

Section 10.0 Design Standards

The design standards included in a TOD overlay district bylaw are intended to create a pedestrian friendly environment. Landscaping should both provide shade and create an aesthetically pleasing setting. The pedestrian environment is further enhanced by locating building facades close to the sidewalk, and by ensuring the facades are architecturally interesting. Street level windows add to the interest of a pedestrian way. Street furniture will provide opportunities for pedestrians to rest and relax, and trash receptacles will help keep the pedestrian ways clean. Lighting will help increase the safety of the area in the evening.

When evaluating the design components of plans, the Planning Board should consider who will be using the area around the transit station and when the station area will be used. Will the area have a lot of daytime or nighttime activity? Will the area be a destination for work or entertainment? What types of activities does the community want to encourage in the station area? For example, if a TOD is located in a primarily residential area, the Planning Board may require fewer benches than would be required in an area with heavy daytime pedestrian traffic. Further, the Planning Board should consider how projects in the station area tie into the surrounding neighborhoods and existing built environment. Buildings should be designed and materials chosen to fit into the existing built environment, or to create a new sense of place. (This goal will differ based on the existing characteristics of an area. For example, in a location with important historic character, the Planning Board may wish to encourage design that will blend with the surroundings. Conversely, in an area characterized by strip mall development, the Planning Board may wish to encourage design elements that will create a new identity for the area.)

1. Streetscapes

- a. Street trees shall be planted by the developer along all public rights-of-way. Street trees shall be planted at intervals of no more than 40 feet. Tree species shall be selected that require minimal maintenance and are of native origin.

In more dense urban areas, communities may wish to allow non-native species that are more tolerant of pollution and other harsh conditions found in congested, built-up areas.

- b. Pedestrian amenities such as benches, public art, planters, trash receptacles, etc. are encouraged and shall be located along sidewalks, and in landscaped areas, open spaces and plazas.
- c. All new utilities shall be placed underground

2. Building Facades.

- a. All buildings must provide a main entrance on the façade of the building facing the transit station or streets leading to the transit station.
- b. The main entrance of any building shall face the street. The main entrance shall not be set back more than five feet from the front property line, unless a public seating area or plaza is provided in front of the building.
- c. Facades over fifty feet in length shall be divided into shorter segments by means of façade modulation, repeating window patterns, changes in materials, canopies or awnings, varying roof lines and/or other architectural treatments.
- d. The ground floor of a front commercial façade shall contain a minimum of 50 percent glass.

The purpose of specifying glass is to allow for views into the interior of the building, providing interest for pedestrians. Clear glass that permits a clear view into a building is preferable to tinted or reflective glass that prohibits views into a building

- e. Architectural style and materials shall be compatible with the surrounding area, and facades must provide a visually interesting environment.
- f. All buildings shall articulate the line between the ground and upper levels with a cornice, canopy, balcony, arcade, or other visual device.
- g. All structured parking must be designed so that the only openings at street level are those to accommodate vehicle ingress and egress, and pedestrian access to the building. All openings must be designed so that vehicles are not visible from the sidewalk. The remainder of the street frontage must be available for retail or commercial usage.

3. Signage

- a. Height. No signs shall extend higher than the height of the ground story.
- b. Size. No façade sign shall exceed 25 percent of the ground floor wall area. No other sign shall exceed 25 square feet in size. Signs may be double sided.
- c. Design. All signs within a given district shall be complimentary in their use of color, shape, and material.

Section 11.0 Exemptions and Exclusions

This bylaw shall apply to all new construction in the TOD District. It shall apply to reconstruction or redevelopment when the redevelopment will result in an increase of property value of 50% or greater of the assessed values of the existing property. The provisions of this bylaw shall apply to reconstruction of existing property where the reconstruction will result in less than 50% increase in property value over the assessed value of the existing property to the maximum extent feasible.

Section 12.0 Severability

If any provision of this bylaw is found to be invalid by a court of competent jurisdiction, the remainder of the bylaw shall not be affected but shall remain in full force. The invalidity of any section of this bylaw shall not affect the validity of the remainder of the Town's/City's Zoning Bylaw/Ordinance.

(Footnotes)

¹See, for example, Newman, P. and J. Kenworthy, *Cities and Automobile Dependence*, Gower Publishing Company Limited, Hants, England, 1989, and Parsons Brinkerhoff & Quade and Douglas, Inc., *Report 16: Transit and Urban Form, Volume 1*, Transportation Research Board, National academy Press, Washington, D.C., 1996.

What is Transit Oriented Development (TOD)?

TOD is characterized by high **density** mixed-use development within $\frac{1}{4}$ - $\frac{1}{2}$ mile of a **transit** hub that allows for easy **pedestrian** access to transit stops.



Benefits of TOD



- **Mobility Choices** - Allows for pedestrian, bicycle, and mass transit options for people who do not own cars or prefer not to drive
- **Public Safety** - Neighborhoods can be active for large portions of the day, thus allowing many sets of eyes to watch the streets
- **Transit Ridership** - Ease of accessibility can increase use of mass transit 20-40%
- **Disposable Income** - Alternative transit options can lower household transportation costs and free up money to be used elsewhere

Additional Benefits

- Energy Consumption and Air Pollution – Allows for walkable communities and can reduce congested roadways
- Land Conservation – Dense development allows for more land to be used for parks, open space and farming
- Economic Development – TOD has been shown to revitalize downtowns by creating more desirable neighborhoods and shopping districts
- Infrastructure Cost – high density development can reduce the need for extended water and sewage systems as well as lower road maintenance costs

What Is Smart Growth?

Smart Growth typically refers to a set of urban planning principles that seek to minimize the impacts of suburban sprawl and create a higher quality of life. Although the term is modern, the concept stems from early organic settlements with easy access to goods and services as well as a strong sense of community.

The 10 Principles of Smart Growth

- Create a range of housing opportunities and **choices**
- Create **walkable** neighborhoods
- Encourage community and stakeholder **collaboration**
- Make development decisions predictable, **fair**, and cost effective
- **Mix** land uses
- Preserve open space, farmland, natural beauty and critical environmental areas
- Take advantage of compact building design
- Strengthen and direct development toward existing communities
- Provide a variety of transportation choices
- Foster distinctive, attractive communities with strong sense of place

Case Study Examples

The following slides provide a few examples of transit oriented developments and smart growth communities. As you will find, the two concepts tend to be mutually supportive.

Birkdale Village - Huntersville, NC

- 52 acre mixed-use development 15 miles outside of Charlotte
- Town of Huntersville is one of the fastest growing communities in North Carolina; population of 1,300 in 1980 grew to 25,000 in 2000
- Many residents make the daily commute to Charlotte
- New zoning code implemented in 1996 over concern of rapid development and loss of rural charm
- Birkdale was the first development in Huntersville under the new zoning codes



- Majority of buildings are 2-4 stories with 81% of residential units placed above retail



- The Village Green in the center of Birkdale acts as community gathering spot for concerts & holidays



- Architecture was inspired by New England coastal towns



- Neighborhood features included rear alleyway entry to the garage and front porches to promote interaction amongst neighbors



- Emphasis is on public space, street and building design and connectivity for pedestrians



Orenco Station – Hillsboro, OR

- 190 acre Portland suburb in Hillsboro, Oregon
- Boasted an electric railway in the early 1900s with a small, quaint downtown area but became a sprawling suburb with the discontinuation of rail service and emphasis on the automobile
- Originally zoned for commercial and industrial use but changed to mixed-use with the addition of the light rail
- State government sought new, dense developments along the light rail line to provide a greater density of users in the new corridor
- Issued free light rail passes for first year new-comers as an incentive to use transit
- Target housing market has been for young professional couples, singles and empty nesters.



- Majority of residents only have a 5 or 10 minute walk to shops, businesses, light rail stop and Central Park



- Lofts above main street retail as well as live/work units built to a pedestrian-friendly design and scale



- Features cottages, condominiums and rowhomes in a broad range of sizes and prices as well as rental units at a density of up to 25 units per acre



- Development team implemented a sequence of open spaces to make the pedestrian experience more enjoyable through views, scenery and visual markers

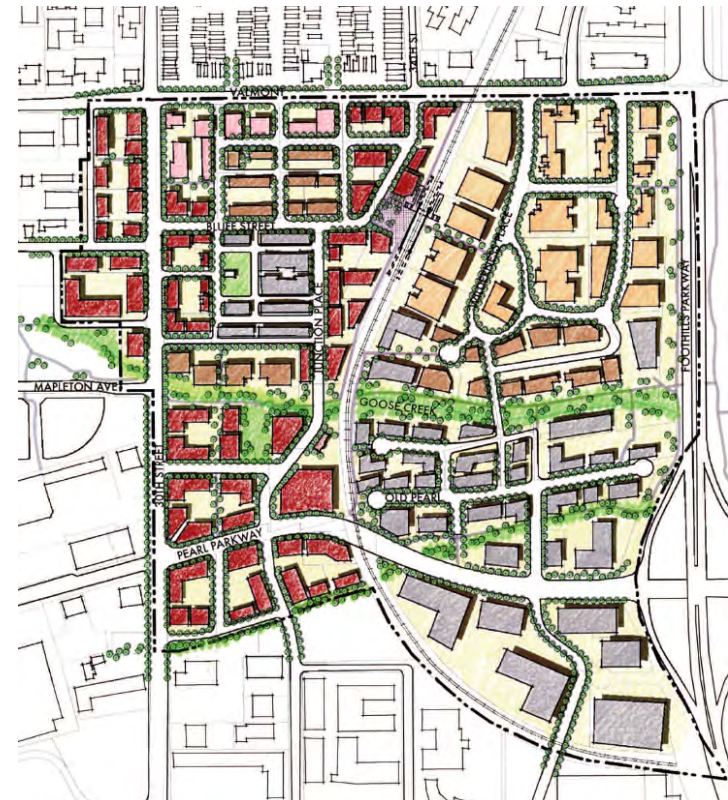


- New ordinances allows for a number for narrow streets, close maximum street setbacks, granny flat accessory dwellings, and alley-loaded garages



Transit Village - Boulder, CO

- Anticipating growth over the next 25 years including a new light rail station and rapid bus transit to Denver
- City of Boulder is widely recognized as having the most progressive town planning
- Provides a vibrant mixed-use community where people can work, live, and play with the option of automobile - free living
- Integrates pedestrian, bicycle, and automobile traffic so that one does not have priority over the other
- Includes zoning that will ensure the industrial and commercial services that are currently located on the site will play a role in the future community as well



The Crossings, Mountain View, CA

- 18 acre infill development to replace failing 1960's auto-oriented shopping center
- 30 miles south of San Francisco
- Residents have less than a 5 minute walk to stores and rail stations and a 2 minute walk to parks
- High density development with an average of 30 residential units per acre
- Won 2002 American Planning Association's Planning Award for Implementation



Addition Images of Smart Growth Principles



Create Walkable Neighborhoods



Create a Strong Sense of Place



Mix Land Uses



Preserve Open Space



Provide a Variety of Transportation Options

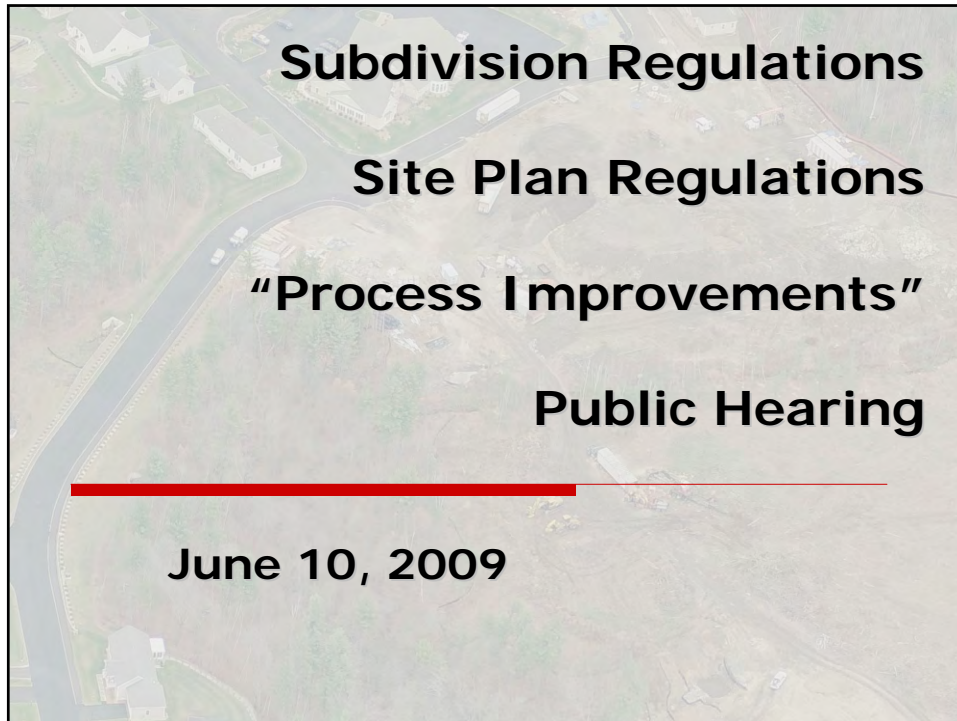


Use Compact Building Design



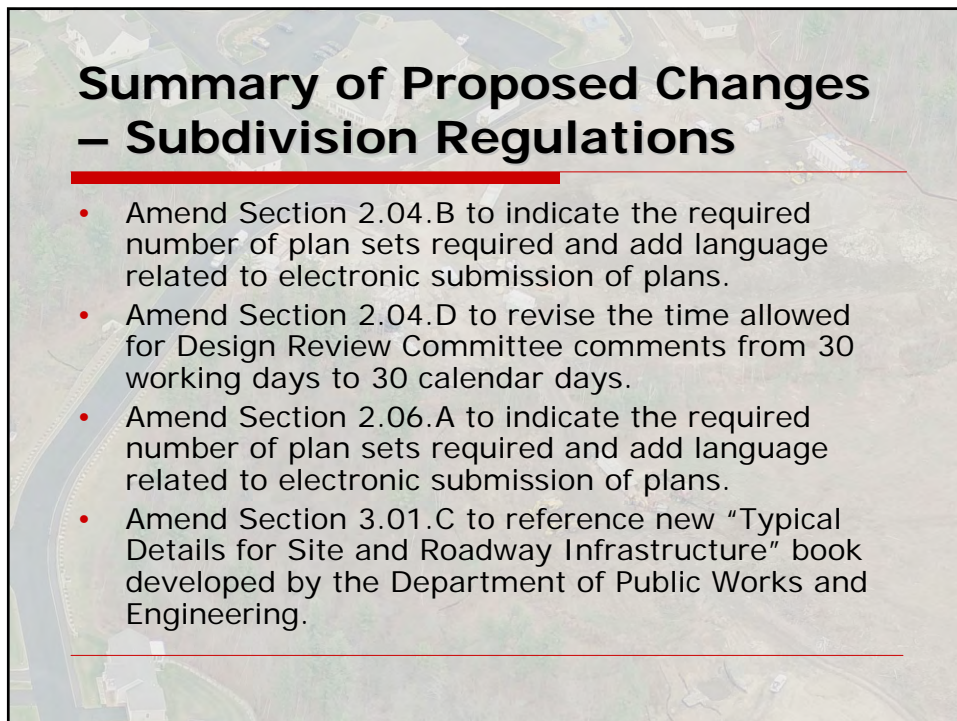
Range of Housing Opportunities





Subdivision Regulations
Site Plan Regulations
“Process Improvements”
Public Hearing

June 10, 2009



Summary of Proposed Changes
– Subdivision Regulations

- Amend Section 2.04.B to indicate the required number of plan sets required and add language related to electronic submission of plans.
- Amend Section 2.04.D to revise the time allowed for Design Review Committee comments from 30 working days to 30 calendar days.
- Amend Section 2.06.A to indicate the required number of plan sets required and add language related to electronic submission of plans.
- Amend Section 3.01.C to reference new “Typical Details for Site and Roadway Infrastructure” book developed by the Department of Public Works and Engineering.



Summary of Proposed Changes – Subdivision Regs (Cont'd)

- Amend Section 3.09.A.1 to include a new detail for reconstruction of stonewalls disturbed by construction.
 - Amend Section 4.14 to revise the requirements for outside permits as they relate to Planning Board acceptance of applications.
 - Amend Section 5.01.A to allow for surety bonds as an acceptable method of guaranteeing completion of improvements.
 - Amend Exhibits 2, 3, 5, 5-A, and 5-B to reflect the above changes, and add requirement for e-mail addresses for applicants and their representatives.
-



Summary of Proposed Changes – Site Plan Regulations

- Amend Section 2.04.b to indicate the required number of plan sets required and add language related to electronic submission of plans.
 - Amend Section 2.04.d to revise the time allowed for Design Review Committee comments from 30 working days to 30 calendar days.
 - Amend Section 2.05.a to indicate the required number of plan sets required and add language related to electronic submission of plans.
 - Amend Section 3.01.c to reference new "Typical Details for Site and Roadway Infrastructure" book developed by the Department of Public Works and Engineering.
-



Summary of Proposed Changes – Site Plan Regs (Cont'd)

- Amend Section 3.09.c.11 to include a new detail for reconstruction of stonewalls disturbed by construction.
 - Amend Section 4.13 to revise the requirements for outside permits as they relate to Planning Board acceptance of applications.
 - Amend Section 6.01.e to allow for surety bonds as an acceptable method of guaranteeing completion of improvements.
 - Amend Exhibit 4 to reflect the above changes, and add requirement for e-mail addresses for applicants and their representatives.
-



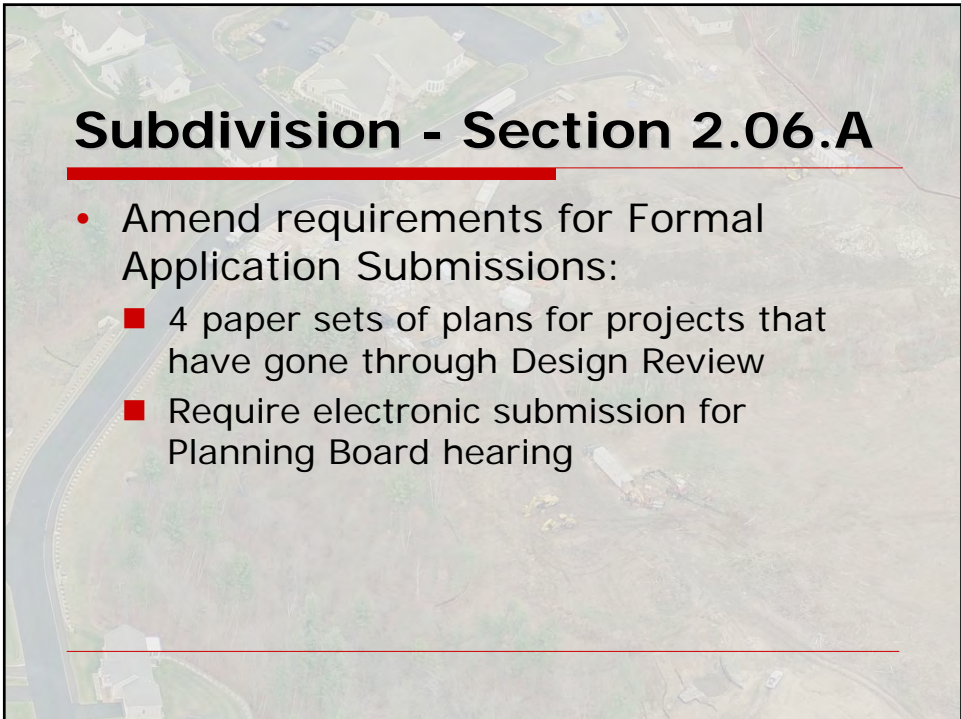
Subdivision - Section 2.04.B

- Amend to allow for electronic submission of plans for Design Review as an alternative to 12 sets of paper plans.
-



Subdivision - Section 2.04.D

- Amend section to change time period for review of Design Review applications from 30 working days to 30 calendar days, and clarify what constitutes a complete Design Review application.



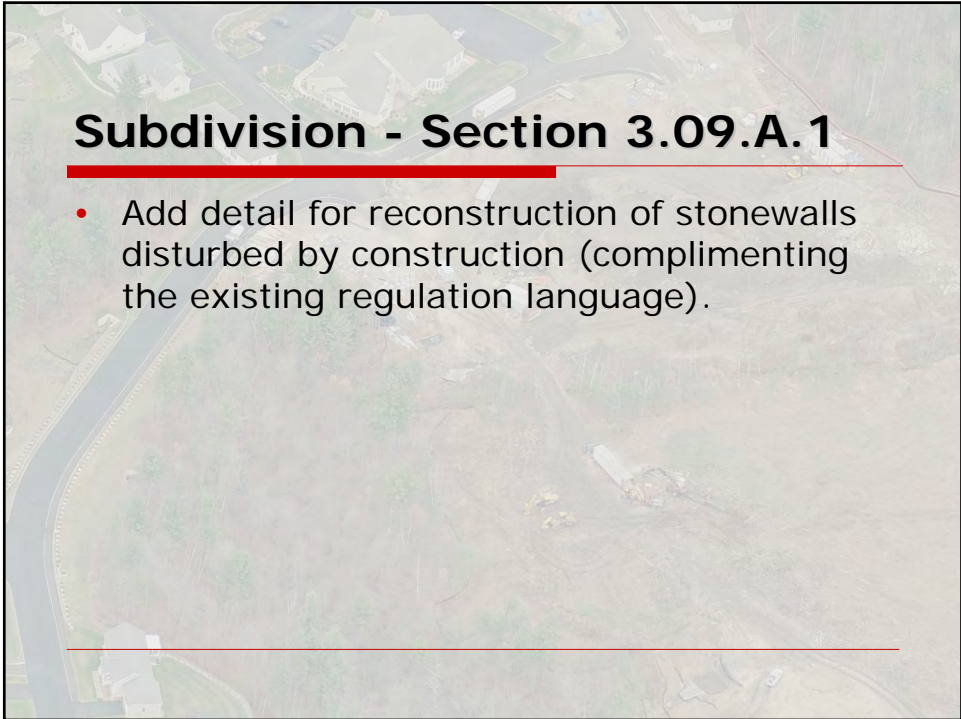
Subdivision - Section 2.06.A

- Amend requirements for Formal Application Submissions:
 - 4 paper sets of plans for projects that have gone through Design Review
 - Require electronic submission for Planning Board hearing



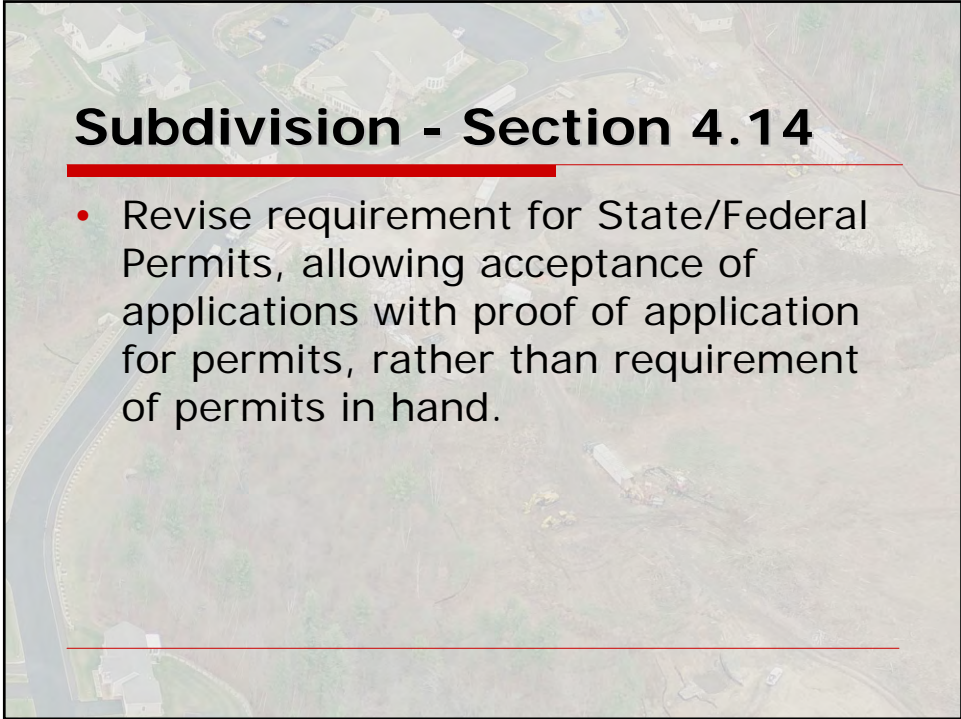
Subdivision - Section 3.01.C

- Add reference to new “Typical Details” handbook developed by Department of Public Works & Engineering
 - Renumber remainder of section
-



Subdivision - Section 3.09.A.1

- Add detail for reconstruction of stonewalls disturbed by construction (complimenting the existing regulation language).
-



Subdivision - Section 4.14

- Revise requirement for State/Federal Permits, allowing acceptance of applications with proof of application for permits, rather than requirement of permits in hand.



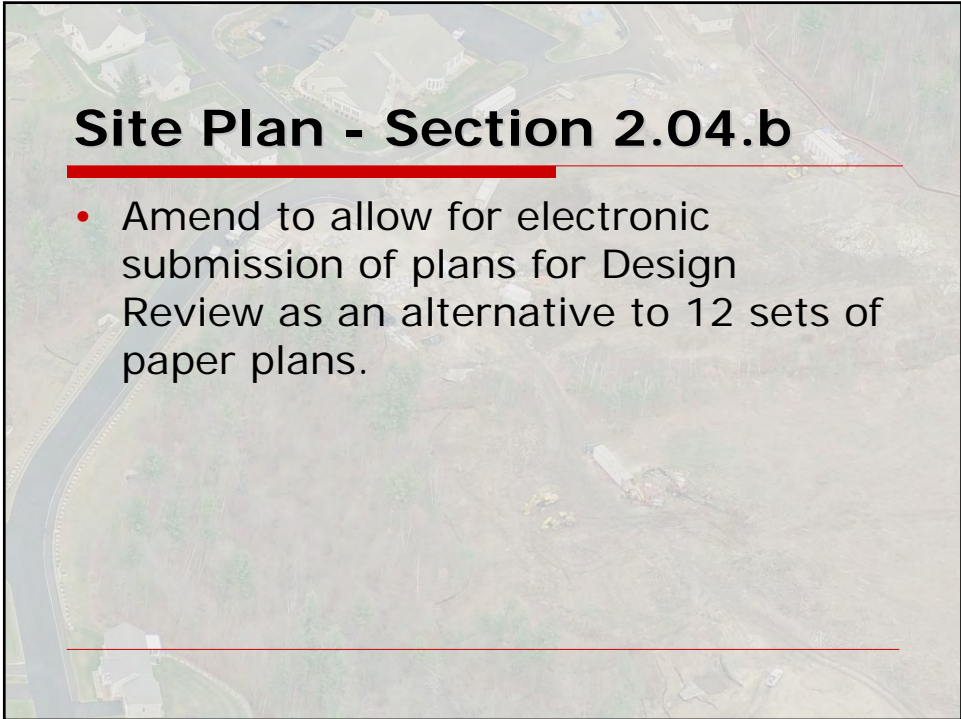
Subdivision - Section 5.01.A

- Revise requirements for performance sureties, allowing for surety bonds in addition to cash or letter of credit.



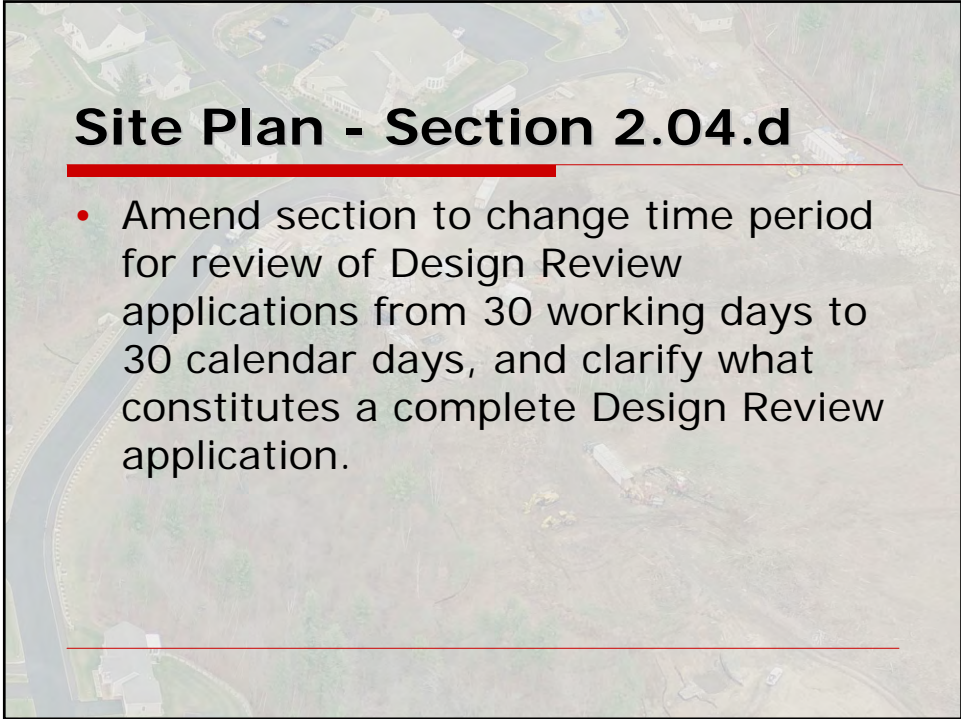
Subdivision - Exhibits 2, 3, 5, 5-A, and 5-B

- Revise applications and checklists to reflect the previous amended sections, and also add requirement for e-mail addresses for applicants.
 - Eliminate supplemental checklist for “Planned Residential Developments,” which were replaced by “Conservation Subdivisions” in the Zoning Ordinance, and are covered by the existing checklists.
-



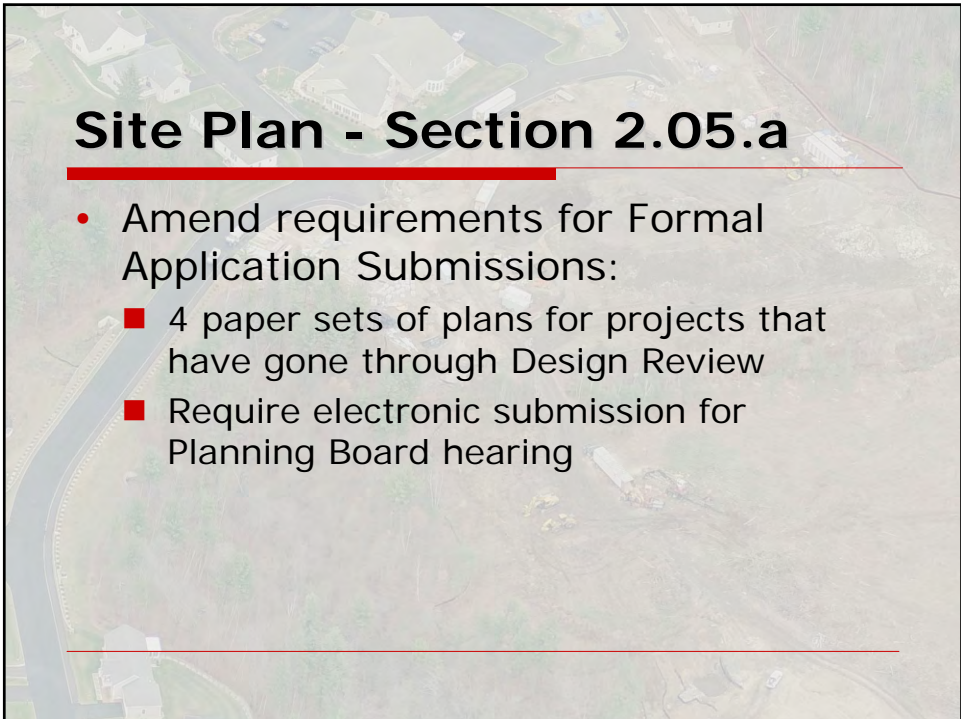
Site Plan - Section 2.04.b

- Amend to allow for electronic submission of plans for Design Review as an alternative to 12 sets of paper plans.
-

An aerial photograph of a residential or commercial development site, showing buildings, roads, and green spaces. The image is semi-transparent, serving as a background for the text.

Site Plan - Section 2.04.d

- Amend section to change time period for review of Design Review applications from 30 working days to 30 calendar days, and clarify what constitutes a complete Design Review application.

An aerial photograph of a residential or commercial development site, showing buildings, roads, and green spaces. The image is semi-transparent, serving as a background for the text.

Site Plan - Section 2.05.a

- Amend requirements for Formal Application Submissions:
 - 4 paper sets of plans for projects that have gone through Design Review
 - Require electronic submission for Planning Board hearing

An aerial photograph of a site plan, showing a winding road on the left, a large open area in the center, and some buildings and trees in the background. The image is semi-transparent, allowing text to be overlaid.

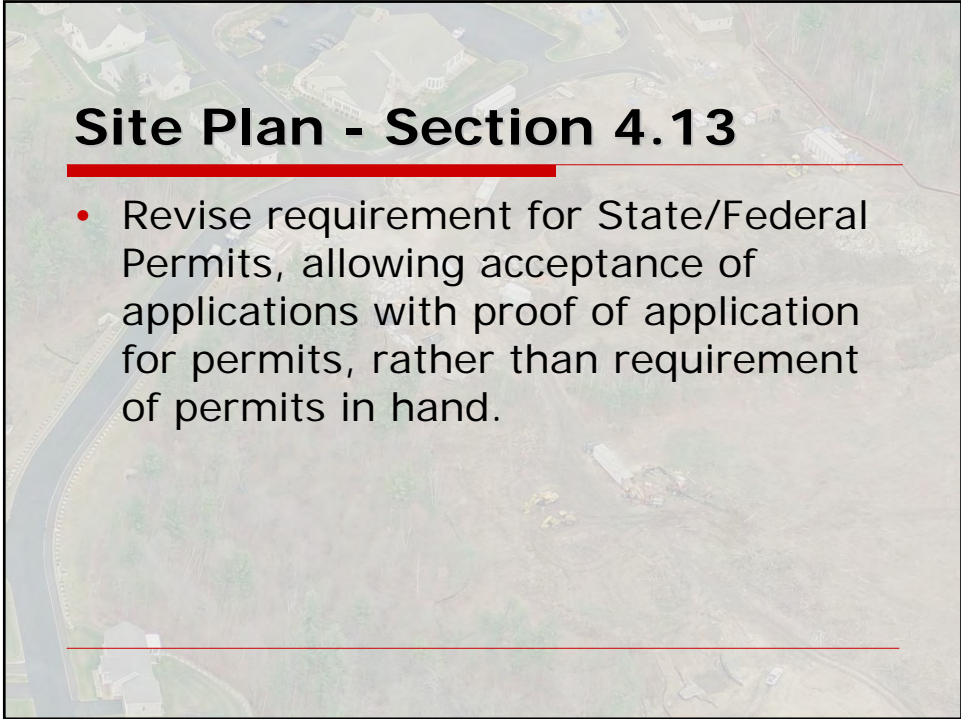
Site Plan - Section 3.01.c

- Add reference to new “Typical Details” handbook developed by Department of Public Works & Engineering
 - Renumber remainder of section
-

An aerial photograph of a site plan, showing a winding road on the left, a large open area in the center, and some buildings and trees in the background. The image is semi-transparent, allowing text to be overlaid.

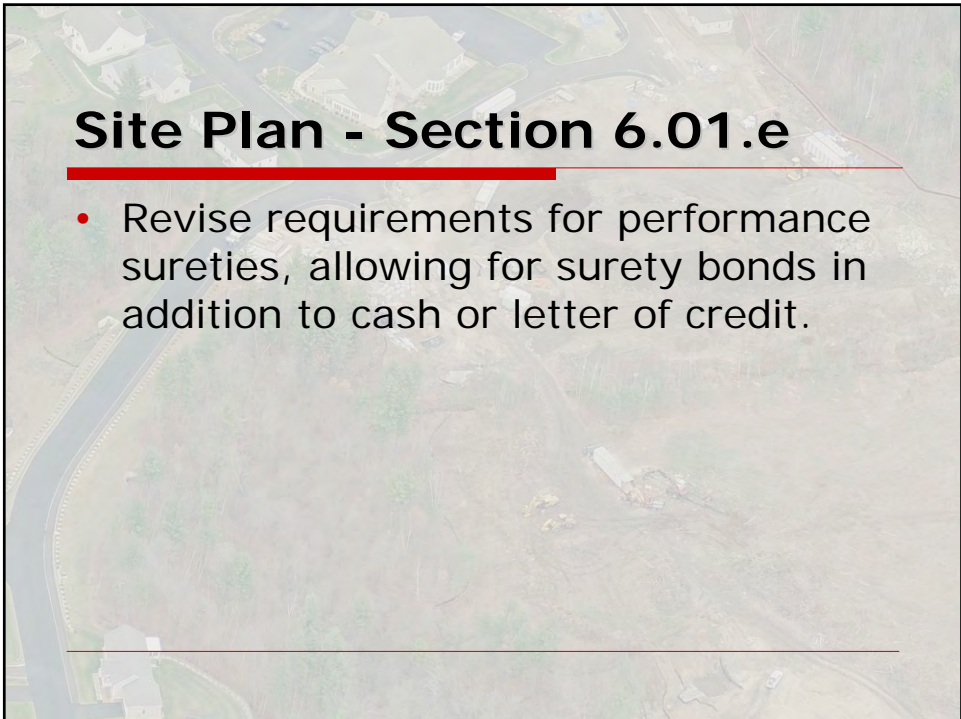
Site Plan - Section 3.09.c.11

- Add detail for reconstruction of stonewalls disturbed by construction (complimenting the existing regulation language).
-

An aerial photograph of a site plan, showing a road on the left, a large open area in the center, and some buildings in the upper left. The image is semi-transparent, serving as a background for the text.

Site Plan - Section 4.13

- Revise requirement for State/Federal Permits, allowing acceptance of applications with proof of application for permits, rather than requirement of permits in hand.

An aerial photograph of a site plan, showing a road on the left, a large open area in the center, and some buildings in the upper left. The image is semi-transparent, serving as a background for the text.

Site Plan - Section 6.01.e

- Revise requirements for performance sureties, allowing for surety bonds in addition to cash or letter of credit.

An aerial photograph of a site plan, showing a road on the left, a building complex at the top, and a large cleared area in the center. A red horizontal line is drawn across the middle of the image, passing behind the text.

Site Plan – Exhibit 4

- Revise applications and checklists to reflect the previous amended sections, and also add requirement for e-mail addresses for applicants.

Town of Londonderry, New Hampshire

LEGAL NOTICE OF PUBLIC HEARING ON SUBDIVISION REGULATION AND SITE PLAN REGULATION AMENDMENTS

A public hearing will be held at the Moose Hill Council Chambers, 268B Mammoth Road on the 10th day of June, 2009, at 7:00 PM on proposed amendments to the Londonderry Subdivision and Site Plan Regulations.

The proposed amendments were prepared by the Planning Division of the Community Development Department, the Department of Public Works & Engineering, and Planning Board to facilitate Planning Board review process improvements in the regulations, and to add a detail for stonewall reconstruction to the regulations.

The proposed changes are summarized as follows:

- Subdivision Regulations

- Amend Section 2.04.B to indicate the required number of plan sets required and add language related to electronic submission of plans.
- Amend Section 2.04.D to revise the time allowed for Design Review Committee comments from 30 working days to 30 calendar days.
- Amend Section 2.06.A to indicate the required number of plan sets required and add language related to electronic submission of plans.
- Amend Section 3.01.C to reference new "Typical Details for Site and Roadway Infrastructure" book developed by the Department of Public Works and Engineering.
- Amend Section 3.09.A.1 to include a new detail for reconstruction of stonewalls disturbed by construction.
- Amend Section 4.14 to revise the requirements for outside permits as they relate to Planning Board acceptance of applications.
- Amend Section 5.01.A to allow for surety bonds as an acceptable method of guaranteeing completion of improvements.
- Amend Exhibits 2, 3, 5, 5-A, and 5-B to reflect the above changes, and add requirement for e-mail addresses for applicants and their representatives.

- Site Plan Regulations

- Amend Section 2.04.b to indicate the required number of plan sets required and add language related to electronic submission of plans.
- Amend Section 2.04.d to revise the time allowed for Design Review Committee comments from 30 working days to 30 calendar days.
- Amend Section 2.05.a to indicate the required number of plan sets required and add language related to electronic submission of plans.
- Amend Section 3.01.c to reference new "Typical Details for Site and Roadway Infrastructure" book developed by the Department of Public Works and Engineering.
- Amend Section 3.09.c.11 to include a new detail for reconstruction of stonewalls disturbed by construction.
- Amend Section 4.13 to revise the requirements for outside permits as they relate to Planning Board acceptance of applications.
- Amend Section 6.01.e to allow for surety bonds as an acceptable method of guaranteeing completion of improvements.
- Amend Exhibit 4 to reflect the above changes, and add requirement for e-mail addresses for applicants and their representatives.

Copies of the full text of the proposed amendments are available at the Planning Division, Second Floor of the Town Hall & on the Town Website www.londonderrynh.org (Click on Boards & Commissions, then Planning Board)



Timothy J. Thompson, AICP
Town Planner

2.04 PRE-APPLICATION SUBMISSIONS - DESIGN REVIEW (OPTIONAL):

- A. Design Review:** The design review submission is a tool to assist the Applicant in providing complete information for the project. The Applicant shall submit complete drawings and supporting information to address the requirements of the regulations. A complete checklist shall be provided to assist design review. The submittal package shall be checked for completeness. If all the required items are not submitted, the submittal will be returned to the Applicant.
- B. Submission items:** The Applicant shall file a completed design review request form and checklist for design review. A complete application is one which shall:
1. Include a design review request form available at the Planning Department (Exhibit 3);
 2. Include a completed subdivision application checklist marked design review available at the Planning Department (Exhibit 5);
 3. Be accompanied by an application fee (Exhibit 1);
 4. The application form shall be signed by the property owner or the owner's agent. If an agent signs the application, an affidavit authorizing the agent to act on the owners behalf shall be submitted as well
 5. Include a list of names and addresses of all abutters provided in RSA 676:4, I(b);
 6. Include four (4) sets of plans and an electronic submission of the plans in Adobe Acrobat "PDF" format on a CD ROM, as required per Section 4 and in accordance with the requirements for design standards and improvements as outlined in Section 3. Alternatively, for those applicants that cannot provide an electronic submission, twelve (12) sets of plans (six full sets and six sets of only the sheets the Planning Board would sign);
 7. Include escrow for review cost in sufficient amount estimated by the Planning Department. Escrow account shall be periodically reviewed to ensure that sufficient funds are available to cover all review costs and additional escrow provided as needed..
- C. Notification of Design Review:** Abutters and the general public shall be promptly notified in accordance with Section 2.02.B that the Town of Londonderry is conducting DESIGN REVIEW of the project and plans for the project are available for review by the general public at the Planning Department.
- D. Schedule:** The DRC shall review the submitted plans within thirty (30) calendar days of the submittal date of the complete Design Review Application, including all items specified in Section 2.04.B.

Deleted: as required per Section 4 and in accordance with the requirements for design standards and improvements as outlined in Section 3.

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2.06 FORMAL APPLICATION SUBMISSIONS AND PROCEDURES:

A. Submission Items: The Applicant shall file a completed Formal Application for consideration. A complete application is one which shall:

1. If pre-application design review was pursued, include a letter from the Applicant stating whether or not the Formal Application incorporates all changes called for by design review comments. If not, the letter shall explain fully;
2. Be made on application form available at the Planning Department (Exhibit 2);
3. Include a completed checklist available at the Planning Department (Exhibit 5);
4. The application form shall be signed by the property owner or the owner's agent. If an agent signs the application, an affidavit authorizing the agent to act on the owners behalf shall be submitted as well.
5. Be accompanied by the correct application fee (Exhibit 1), if not already paid under pre-application design review submittal;
6. Include a list of the names and addresses of all abutters, as provided in RSA 676:4, I(b);
7. Include twelve (12) sets of plans (six full sets and six sets of only the sheets the Planning Board would sign) as required per Section 4 and in accordance with the requirements for design standards and improvements as outlined in Section 3. Projects that have undergone pre-application Design Review shall need only provide four (4) sets of plans;
8. Include an electronic submission of the complete plan set in Adobe Acrobat "PDF" format for use by the Planning Board at the public hearing;
9. Include applicable documents listed in Section 4.18;
10. Include a materials quantity list on Town of Londonderry Department of Public Works forms and a summary total for bond estimate for the project; and
11. Include escrow for review cost in sufficient amount estimated by the Planning Department, if not already provided under pre-application design review submittal. Escrow account shall be periodically reviewed to assure that sufficient funds are available to cover all review costs and additional escrow provided as needed.

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SECTION 3 DESIGN STANDARDS AND REQUIREMENTS FOR IMPROVEMENTS

3.01 GENERAL

- A. **Approval of Improvements:** All improvements shall be designed and constructed in accordance with the Town of Londonderry regulations and standards, and shall be subject to the approval of the Board.

- B. **Installation and Maintenance:** The Applicant is responsible for the satisfactory installation of all required improvements and maintenance of these improvements in a satisfactory condition without cost to the Town of Londonderry until their acceptance by the Town of Londonderry.

- C. **Standards and Specifications:** The following standards and specifications shall include but not be limited to the following in the design and construction of all improvements:
 - 1. ZONING ORDINANCE - Town of Londonderry, current edition;
 - 2. TYPICAL DETAILS FOR SITE AND ROADWAY INFRASTRUCTURE – Town of Londonderry, current edition;
 - 3. MANUAL ON DRAINAGE DESIGN FOR HIGHWAYS - State of New Hampshire, Department of Public Works and Highways, current edition;
 - 4. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - U.S. Department of Transportation, Federal Highway Administration, current edition;
 - 5. STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - State of New Hampshire, Department of Transportation, current edition;
 - 6. HIGHWAY DESIGN MANUAL - State of New Hampshire, Highway Design Division, current edition;
 - 7. HIGH INTENSITY SOILS MAPS FOR New Hampshire STANDARDS AND ORIGINS - Society of Soil Scientists of Northern New England, Special Publication No. 1 - current edition;
 - 8. A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS - AASHTO – current edition;
 - 9. STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE - current edition, prepared by Rockingham County Conservation District (Green Book);
 - 10. STATE OF NEW HAMPSHIRE STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWERAGE AND WASTEWATER TREATMENT FACILITIES - New Hampshire Department of Environmental Services, Code of Administrative Rules, Env-ws 700, September 1997 (or latest revision);
 - 11. SUBDIVISION AND INDIVIDUAL SEWAGE DISPOSAL SYSTEM DESIGN RULES - New Hampshire Department of Environmental Services, Code of Administrative Rules, Env-ws 1000, August 1999 (or latest revision); and
 - 12. STATE OF NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, DESIGN STANDARDS FOR SMALL PUBLIC DRINKING WATER SYSTEMS, Env-ws 372, June 1997 (or latest revision).
 - 13. Other standards and specifications as approved by the Town of Londonderry.

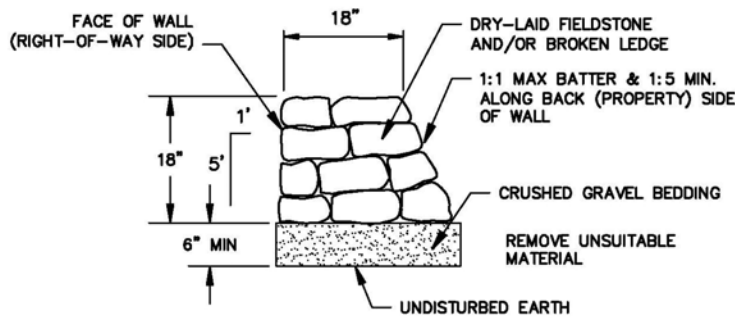
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3.09 STREETS

A. **General:** All subdivisions shall have adequate provision for a safe and suitable access to a Class V or better road or shall make provisions for the construction and dedication of a Class V or better road in order to obtain safe and suitable access to the subdivision. Where an adjacent existing street from which access is gained is deemed to be substandard, the upgrading of said street shall be provided for, as may be required by the Town of Londonderry Department of Public Works. Where traffic from a proposed subdivision will adversely impact a nearby street or intersection, provisions shall be made for the mitigation of said impacts. Proposed streets, whether to be dedicated as public streets or retained as private streets, shall be of suitable location, width, grade, and improvement to accommodate prospective traffic and afford satisfactory access to police, fire fighting, emergency equipment, snow removal, sanitation, and road maintenance equipment. The arrangement and character of all streets in a subdivision shall conform to the Master Plan, and shall compose a safe and convenient system in relation to other existing and planned streets, to topographical conditions, and to the proposed uses of land to be served by street. Existing stone walls shall be retained where possible or relocated and restored as required by the Board.

1. No person shall deface, alter the location, of, or remove any stonewall which was made for the purpose of marking the boundary of, or borders, any road in the Town of Londonderry, except upon written consent of the Planning Board with written comments from the Heritage Commission.
 - i. The Heritage Commission will use the following guidelines for making recommendations to the Planning Board for the reconstruction of stone walls disturbed by construction activity:
 - a. Reconstruction should be done in a fieldstone farm-style wall.
 - b. Use of existing boulders and fieldstone already in place is strongly recommended.
 - c. Walls should be drystacked with a rustic level topline.
 - d. The center of the wall should be filled with smaller native stone.
 - e. Stone should be used from the property and mixed as needed with native New England fieldstone.
 - f. Walls should be no higher than 3 feet in height, and approximately 3-6 feet deep.
 - g. The Heritage Commission recommends applicants refer to Chapter 8 of "The Granite Kiss", by Kevin Gardner, Susan Allport, and Guillermo Nunez (ISBN# 0881505463, © 2003, Countryman Press)

h. The detail, below should be used as a general guideline for reconstruction of stone walls:



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- ii. The Applicant shall take photographs of existing stone walls that are proposed to be disturbed by development. These photographs will be made part of the project file, and can be utilized by the Heritage Commission as they make recommendations on stonewall disturbances.

4.14 PERMITS: The Applicant is responsible for obtaining the approval and necessary permits of governmental or municipal agencies. A copy of each permit shall be submitted to the Town of Londonderry and the permit number shall be shown on the plan. In order for the Planning Board to consider an application complete, as stipulated by Section 2.06 and RSA 676:4, proof of application for any state, federal, or local permits must be provided to the Planning Board.

Deleted: Project permits may be pending during design review application only

SECTION 5 ASSURANCES FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

5.01 GENERAL:

- A. Prior to commencing any construction on a project, all the conditions of approval shall be met, the plan has been signed by the Planning Board, a preconstruction meeting has taken place with the Public Works Department, and the applicant has posted a performance surety to guarantee the completion of improvements. The performance surety shall be in the form of the "Hampton Method Letter of Credit" (copy on file with the DPW), surety bond, or a cash bond on deposit with the Town in an interest bearing account. All Letters of Credit or surety bonds required by these regulations must be posted by a Town approved bank or a surety company listed on the current United States Department of Treasury "Department of the Treasury's listing of approved Sureties (Department Circular 570)" as authorized to do business in the State of New Hampshire.

(in responsible charge)

Signature: _____

H. Name of Certified Soil Scientist: _____

I. Name of Certified Wetland Scientist: _____

J. Date of Submittal to Planning Department: _____

- Application Fee Attached:
- Escrow for Review Cost Attached:
- Subdivision Plans Attached:
- Abutters List Attached:
- Subdivision Application Checklist Attached:
- Required Documents Attached
(As outlined in Subdivision Application Checklist)

For Planning Department Use Only (Date Received Stamp)

(in responsible charge)

Signature: _____

H. Name of Certified Soil Scientist: _____

I. Name of Certified Wetland Scientist: _____

J. Date of Submittal to Planning Department: _____

- Application Fee Attached:
- Escrow for Review Cost Attached:
- Subdivision Plans Attached:
- Abutters List Attached:
- Subdivision Application Checklist Attached:
- Required Documents Attached
(As outlined in Subdivision Application Checklist)

For Planning Department Use Only (Date Received Stamp)

E. Design Firm:
 Name: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

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F. Name of Licensed Land Surveyor: _____
 (in responsible charge) Signature: _____
 G. Name of Licensed Professional Engineer: _____
 (in responsible charge) Signature: _____
 H. Name of Certified Soil Scientist: _____
 I. Name of Certified Wetland Scientist: _____
 J. Date of Submittal to Planning Department: _____

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 ¶

II. General Requirements (All Applications):

		Provided	N/A
1.	Executed Subdivision Formal Application Request Form (Exhibit 2)	<input type="checkbox"/>	<input type="checkbox"/>
2.	Executed Subdivision Design Review Request Form (Exhibit 3)	<input type="checkbox"/>	<input type="checkbox"/>
3.	Complete abutters list	<input type="checkbox"/>	<input type="checkbox"/>
4.	All Required Fees	<input type="checkbox"/>	<input type="checkbox"/>
5.	<u>Four (4) sets of plans and electronic "PDF" plans (12 sets if electronic plans not possible) submitted with all required information in accordance with the site plan regulations and this checklist.</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.	Copies of any proposed easement deeds, protective Covenants or other legal documents	<input type="checkbox"/>	<input type="checkbox"/>
7.	Any waiver request(s) submitted with justification in writing	<input type="checkbox"/>	<input type="checkbox"/>
8.	Technical reports and supporting documents (see Sections X & XI of this checklist)	<input type="checkbox"/>	<input type="checkbox"/>
9.	Completed Site Plan Application Checklist	<input type="checkbox"/>	<input type="checkbox"/>
10.	Letter explaining how DRC comments have been addressed and two (2) sets of highlighted, revised drawings (applicable if pre-application design review process was followed).	<input type="checkbox"/>	<input type="checkbox"/>

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 Deleted: and this checklist ¶

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E. Design Firm:
 Name: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

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F. Name of Licensed Land Surveyor: _____
 (in responsible charge) Signature: _____
 G. Name of Licensed Professional Engineer: _____
 (in responsible charge) Signature: _____
 H. Name of Certified Soil Scientist: _____
 I. Name of Certified Wetland Scientist: _____
 J. Date of Submittal to Planning Department: _____

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 ¶

II. General Requirements (All Applications):

	Provided	N/A
1. Executed Subdivision Formal Application Request Form (Exhibit 2)	<input type="checkbox"/>	<input type="checkbox"/>
2. Executed Subdivision Design Review Request Form (Exhibit 3)	<input type="checkbox"/>	<input type="checkbox"/>
3. Complete abutters list	<input type="checkbox"/>	<input type="checkbox"/>
4. All required fees	<input type="checkbox"/>	<input type="checkbox"/>
5. <u>Four (4) sets of plans and electronic "PDF" plans (12 sets if electronic plans not possible) submitted with all required information in accordance with the site plan regulations and this checklist.</u>	<input type="checkbox"/>	<input type="checkbox"/>
6. Copies of any proposed easement deeds, protective covenants or other legal documents	<input type="checkbox"/>	<input type="checkbox"/>
7. Technical reports and supporting documents	<input type="checkbox"/>	<input type="checkbox"/>
8. Any waiver request(s) submitted with justification in writing	<input type="checkbox"/>	<input type="checkbox"/>
9. Completed Condo Conversion Application Checklist	<input type="checkbox"/>	<input type="checkbox"/>
10. Letter explaining how DRC comments have been addressed and two (2) sets of highlighted, revised drawings (applicable if pre-application design review process was followed).	<input type="checkbox"/>	<input type="checkbox"/>

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Deleted: Twelve (12) sets of plans submitted with all required ¶ information in accordance with the subdivision regulations ¶ and this checklist □ . □

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IV. Required Project Permits (as applicable to applications):

		Provided	N/A	App Submitted
1.	HDES subdivision approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Londonderry ZBA variance(s)/special exception(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Other federal, state or local permits (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 * Note Project permits may be pending during design review application only.¶

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 N/A Pending*¶
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V. Acknowledgment and Signature:

The undersigned acknowledges he/she has read and understands all of the Town's current zoning, subdivision, site plan, and health regulations and requirements for obtaining all required local, state, and federal permits.

 (Signature of person preparing plans)

 (Name)

 (Title)

 (Date)

E. Design Firm:
 Name: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-Mail: _____

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F. Name of Licensed Land Surveyor: _____
 (in responsible charge) Signature: _____
 G. Name of Licensed Professional Engineer: _____
 (in responsible charge) Signature: _____
 H. Name of Certified Soil Scientist: _____
 I. Name of Certified Wetland Scientist: _____
 J. Date of Submittal to Planning Department: _____

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 ¶

II. General Requirements (All Applications):

	Provided	N/A
1. Executed Subdivision Formal Application Request Form (Exhibit 2)	<input type="checkbox"/>	<input type="checkbox"/>
2. Executed Subdivision Design Review Request Form (Exhibit 3)	<input type="checkbox"/>	<input type="checkbox"/>
3. Complete abutters list	<input type="checkbox"/>	<input type="checkbox"/>
4. All required fees	<input type="checkbox"/>	<input type="checkbox"/>
5. <u>Four (4) sets of plans and electronic "PDF" plans (12 sets if electronic plans not possible) submitted with all required information in accordance with the site plan regulations and this checklist.</u>	<input type="checkbox"/>	<input type="checkbox"/>
6. Copies of any proposed easement deeds, protective covenants or other legal documents	<input type="checkbox"/>	<input type="checkbox"/>
7. Technical reports and supporting documents	<input type="checkbox"/>	<input type="checkbox"/>
8. Any waiver request(s) submitted with justification in writing	<input type="checkbox"/>	<input type="checkbox"/>
9. Completed Lot Line Adjustment Application Checklist	<input type="checkbox"/>	<input type="checkbox"/>
10. Letter explaining how DRC comments have been addressed and two (2) sets of highlighted, revised drawings (applicable if pre-application design review process was followed).	<input type="checkbox"/>	<input type="checkbox"/>

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Deleted: Twelve (12) sets of plans submitted with all required information in accordance with the subdivision regulations and this checklist.

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24.	HISS requirements:	Provided	N/A
a.	Criteria for HISS delineation	<input type="checkbox"/>	<input type="checkbox"/>
b.	Soil scientist certification on plan (if HISS required)	<input type="checkbox"/>	<input type="checkbox"/>
c.	HISS mapping shown over all subject parcels (where no municipal sewer exists)	<input type="checkbox"/>	<input type="checkbox"/>
25.	4K Areas with test pits on all proposed lots (meeting NHDES & Town setback requirements)	<input type="checkbox"/>	<input type="checkbox"/>
26.	Location of all water wells with protective radii as required by the NHDES (meeting Town and NHDES setback requirements)	<input type="checkbox"/>	<input type="checkbox"/>
27.	Owner(s) signature(s)	<input type="checkbox"/>	<input type="checkbox"/>
28.	All required setbacks (including any applicable buffers)	<input type="checkbox"/>	<input type="checkbox"/>
29.	Physical features (Existing features)		
a.	Buildings	<input type="checkbox"/>	<input type="checkbox"/>
b.	Wells	<input type="checkbox"/>	<input type="checkbox"/>
c.	Septic systems	<input type="checkbox"/>	<input type="checkbox"/>
d.	Stone walls	<input type="checkbox"/>	<input type="checkbox"/>
e.	Paved drives	<input type="checkbox"/>	<input type="checkbox"/>
f.	Gravel drives	<input type="checkbox"/>	<input type="checkbox"/>
30.	Location & name (if any) of any streams or waterbodies	<input type="checkbox"/>	<input type="checkbox"/>
31.	Location of existing overhead utility lines, poles, towers, etc.	<input type="checkbox"/>	<input type="checkbox"/>
32.	Plan and deed references	<input type="checkbox"/>	<input type="checkbox"/>
33.	Zoning District boundary lines (if any)	<input type="checkbox"/>	<input type="checkbox"/>
34.	Driveway sight distance plans/profiles	<input type="checkbox"/>	<input type="checkbox"/>

IV. Required Project Permits (as applicable to applications):

		Provided	N/A	App Submitted
1.	N HDES subdivision approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	NHDOT driveway permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Londonderry ZBA variance(s)/special exception(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Other federal, state or local permits (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Deleted: * Note Project permits may be pending during design review application only.¶

¶

Provided N/A

Pending**¶

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V. Acknowledgment and Signature:

The undersigned acknowledges he/she has read and understands all of the Town's current zoning, subdivision, site plan, and health regulations and requirements for obtaining all required local, state, and federal permits.

(Signature of person preparing plans)

(Name)

(Title)

(Date)

2.04 **PRE-APPLICATION SUBMISSIONS - DESIGN REVIEW (OPTIONAL):**

- a. **Design Review:** The design review submission is a tool to assist the Applicant in providing complete information for the project. The Applicant shall submit complete drawings and supporting information to address the requirements of the regulations. A complete checklist shall be provided to assist design review. The submittal package shall be checked for completeness. If all the required items are not submitted, the submittal will be returned to the Applicant.
- b. **Submission items:** The Applicant shall file a completed design review request form and checklist for design review. A complete application is one which shall:
 - 1. Include a design review request form available at the Planning Department (Exhibit 4);
 - 2. Include a completed site plan application checklist marked design review available at the Planning Department (Exhibit 4);
 - 3. The application form shall be signed by the property owner or the owner's agent. If an agent signs the application, an affidavit authorizing the agent to act on the owners behalf shall be submitted as well.
 - 4. Be accompanied by an application fee (Exhibit 3);
 - 5. Include a list of names and addresses of all abutters provided in RSA 676:4, I(b);
 - 6. Include four (4) sets of plans and an electronic submission of the plans in Adobe Acrobat "PDF" format on a CD ROM, as described in Section 4.01d; as required by Section 4 and in accordance with the requirements for design standards and improvements as outlined in Section 3 (and Section 5 if applicable). Alternatively, for those applicants that cannot provide an electronic submission, twelve (12) sets of plans (six full sets and six sets of only the sheets the Planning Board would sign);
 - 7. Include escrow for review cost in sufficient amount determined by the Planning Department. Escrow account shall be periodically reviewed to ensure that sufficient funds are available to cover all review costs and additional escrow shall be provided as needed.
- c. **Notification of Design Review:** Abutters and the general public shall be promptly notified in accordance with Section 2.02b that the Town of Londonderry is conducting DESIGN REVIEW of the project and plans for the project are available for review by the general public at the Planning Department.
- d. **Schedule:** Once it is determined that all required checklist items are provided, the plans will be reviewed by the DRC. The DRC shall review the submitted plans within thirty (30) ~~calendar~~ days of the submittal date of the complete Design Review Application, including all items specified in Section 2.04.b.

Deleted: as described in Section 4.01d; as required by Section 4 and in accordance with the requirements for design standards and improvements as outlined in Section 3 (and Section 5 if applicable)

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2.05 **FORMAL APPLICATION SUBMISSIONS AND PROCEDURES:**

- a. **Submission Items:** The Applicant shall file a completed Formal Application for consideration. A complete application is one which shall:
1. If pre-application design review was pursued, include a letter from the Applicant's engineer stating whether or not the Formal Application incorporates all changes called for by design review comments. If not, the letter shall explain fully;
 2. Be made on application form available at the Planning Department (Exhibit 4);
 3. Include a completed checklist available at the Planning Department (Exhibit 4);
 4. The application form shall be signed by the property owner or the owner's agent. If an agent signs the application, an affidavit authorizing the agent to act on the owners behalf shall be submitted as well.
 5. Be accompanied by the correct application fee (Exhibit 3), if not already paid under pre-application design review submittal;
 6. Include a list of the names and addresses of all abutters, as provided in RSA § 676:4, I(b);
 7. Include twelve (12) sets of plans (six full sets and six sets of only the sheets the Planning Board would sign) as described in Section 4.01d; as required by Section 4 and in accordance with the requirements for design standards and improvements as outlined in Section 3 (and Section 5 if applicable). Projects that have undergone pre-application Design Review shall need only provide four (4) sets of plans;
 8. Include an electronic submission of the complete plan set in Adobe Acrobat "PDF" format for use by the Planning Board at the public hearing;
 9. Include applicable documents listed in Section 4.19.
 10. Include a materials quantity list for all improvements excluding buildings, on Town of Londonderry Department of Public Works forms and a summary total for bond estimate for the project; and
 11. Include escrow for review cost in sufficient amount determined by the Planning Department. Escrow account shall be periodically reviewed to ensure that sufficient funds are available to cover all review costs and additional escrow shall be provided as needed.

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SECTION 3 DESIGN STANDARDS AND REQUIREMENTS FOR IMPROVEMENTS

3.01 GENERAL

- a. Approval of Improvements: All improvements shall be designed and constructed in accordance with the Town of Londonderry regulations and standards, and shall be subject to the approval of the Board.
- b. Installation and Maintenance: The applicant is responsible for the satisfactory installation of all required improvements and maintenance of these improvements in a satisfactory condition without cost to the Town.
- c. Standards and Specifications: The following standards and specifications shall be used in the design and construction of all improvements unless stated otherwise in these regulations:
 - 1. ZONING ORDINANCE - Town of Londonderry, current edition;
 - 2. TYPICAL DETAILS FOR SITE AND ROADWAY INFRASTRUCTURE – Town of Londonderry, current edition;
 - 3. MANUAL ON DRAINAGE DESIGN FOR HIGHWAYS - State of N.H., Department of Public Works and Highways, current edition;
 - 4. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - U.S. Department of Transportation, Federal Highway Administration, current edition;
 - 5. STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - State of N.H. Department of Transportation, 1997 or latest revision;
 - 6. HIGHWAY DESIGN MANUAL - State of N.H., Highway Design Division, current edition;
 - 7. A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS - AASHTO - 1990;
 - 8. STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE - August 1992, prepared by Rockingham County Conservation District (Green Book);
 - 9. STATE OF NEW HAMPSHIRE STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWERAGE AND WASTEWATER TREATMENT FACILITIES - New Hampshire Department of Environmental Services, Code of Administrative Rules, Env-ws 700, September 1997 (or latest revision);
 - 10. SUBDIVISION AND INDIVIDUAL SEWAGE DISPOSAL SYSTEM DESIGN RULES - New Hampshire Department of Environmental Services, Code of Administrative Rules, Env-ws 1000, August 1999 (or latest revision);
 - 11. STATE OF NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, DESIGN STANDARDS FOR SMALL PUBLIC DRINKING WATER SYSTEMS, Env-ws 372, June 1997 (or latest revision);
 - 12. TRIP GENERATION, Institute of Transportation Engineers, current edition;
 - 13. Other standards and specifications as approved by the Town of Londonderry.

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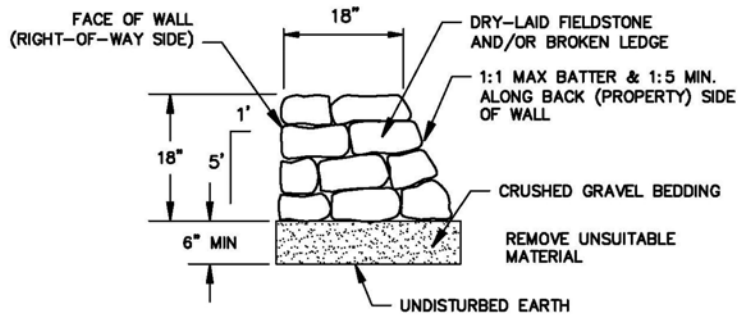
3.09 LANDSCAPING DESIGN STANDARDS

- a. The existing landscape of Londonderry is diverse, containing natural wooded environments, orchards and open fields, as well as wetlands and streams. New development should be respectful and sensitive to the dominant landscape character of Londonderry as a whole.
- b. The purpose of landscaping design standards in Londonderry are to:
 1. Preserve and enhance the character of Londonderry's landscape
 2. Enhance the goals of the Master Plan, the Zoning Ordinance, and the Orchard and Open Space Preservation Plan, and provide attractive settings for new development.
 3. Preserve and enhance local and regional open space resources such as, but not limited to, the apple orchards and the Musquash Conservation Area.
 4. Preserve the integrity of valuable historic resources, particularly stonewalls and dwellings and structures listed in the Heritage Commission's Cultural Resource Survey.
 5. Support and encourage the use of sustainable design principles and operating practices that preserve and enhance wildlife habitats, water quality, and overall health of the natural environment.
 6. Encourage the use of indigenous plant material to provide natural habitat and food sources and to maintain ecological diversity.
 7. Maintain a quality image of the public spaces within Londonderry and high property values for present and future development
- c. General Requirements:
 1. All required landscaping shall be located entirely within the lot, unless agreements have been made with the Town for landscaping in the road right-of-way.
 2. Native plants shall be used in appropriate locations, such that individual plants are selected for their ability to thrive in or adapt to the particular soil and light conditions they are placed in. (For a list of recommended native plants, see Appendix LS1: Notes on Native Trees and Shrubs and Their Use in Landscaping)
 3. Under no circumstances shall any plants be used that are recognized by the horticultural or agricultural industries as invasive, whether they are native or exotic (non-native). (For a list of known invasive plants, see Appendix LS2: Notes on Native Trees and Shrubs and Their Use in Landscaping)
 4. All plant material shall have a minimum winter hardiness for Zone 5B as determined by the American Standards for Nursery Stock.
 5. Minimum sizes for plant material, unless indicated elsewhere in these regulations or the Zoning Ordinance, shall be as follows:
 - i. Deciduous shade trees: three inch caliper,
 - ii. Deciduous ornamental trees: two inch caliper, and
 - iii. Evergreen trees: six foot height.
 6. Landscaping shall be laid out in informal drifts rather than formal rows and shall undulate with site topography. Individual clusters of trees or islands of shrub beds are acceptable as long as the tree clusters and/or shrub islands overlap. Linear solutions shall be avoided wherever possible, unless existing landscaping is so arranged.
 7. The applicant may request that the Planning Board determine that existing vegetation is suitably located, sufficiently visually impervious, and vigorous enough to be substituted for landscaping material required by these regulations.
 8. Plant material located within 20 feet of any road or other paved area shall consist of species recognized by the nursery, horticultural and botanical industries as being tolerant of roadway deicing salts.
 9. Landscaping requirements for parking lots are located in Section 3.11f.
 10. Landscaping shall be maintained in good condition, and any dead vegetation shall be replaced within one year.
 11. No person shall deface, alter the location, of, or remove any stonewall which was made for the purpose of marking the boundary of, or borders, any road in the Town of Londonderry, except upon written consent of the Planning Board with written comments from the Heritage

Commission.

- i. The Heritage Commission will use the following guidelines for making recommendations to the Planning Board for the reconstruction of stonewalls disturbed by construction activity:
 - a. Reconstruction should be done in a fieldstone farm-style wall.
 - b. Use of existing boulders and fieldstone already in place is strongly recommended.
 - c. Walls should be drystacked with a rustic level topline.
 - d. The center of the wall should be filled with smaller native stone.
 - e. Stone should be used from the property and mixed as needed with native New England fieldstone.
 - f. Walls should be no higher than 3 feet in height, and approximately 3-6 feet deep
 - g. The Heritage Commission recommends applicants refer to Chapter 8 of "The Granite Kiss", by Kevin Gardner, Susan Allport, and Guillermo Nunez (ISBN# 0881505463, © 2003, Countryman Press)

h. The detail, below should be used as a general guideline for reconstruction of stonewalls:



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- ii. The Applicant shall take photographs of existing stonewalls that are proposed to be disturbed by development. These photographs will be made part of the project file, and can be utilized by the Heritage Commission as they make recommendations on stonewall disturbances.

12. Landscaping shall be designed so that it does not interfere with sight distances at driveways.

4.13 PERMITS: The applicant shall be responsible for obtaining the approvals and necessary permits from governmental or municipal agencies. A copy of each permit shall be submitted to the Town of Londonderry and the permit number shall be shown on the plan. In order for the Planning Board to consider an application complete, as stipulated by Section 2.05 and RSA 676:4, proof of application for any state, federal, or local permits must be provided to the Planning Board.

Deleted: Project permits may be pending during DESIGN REVIEW application only

SECTION 6 ASSURANCES FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

6.01 GENERAL:

- a. Under no circumstances shall any site work commence or any building permits be issued until all the conditions of approval have been met, the plan is signed by the Planning Board, a preconstruction meeting has taken place with the Public Works Department, and until all required performance sureties have been posted.
- b. OFF-SITE IMPROVEMENTS: Off-Site Improvements: Prior to the Planning Board signing the site plan and prior commencement of any work, the applicant shall post a performance surety to guarantee the completion of off-site improvements.
- c. ON-SITE IMPROVEMENTS: All site plans shall be required to submit an erosion control and site restoration bond, in an amount and form determined by the Department of Public Works, prior to commencing construction on the site. Also, in accordance with NH RSA § 676:13, no certificate of occupancy shall be issued by the Building Department until all on-site improvements specified on the approved site-plan are completed and inspected in accordance with section 6.02.
- d. In circumstances that prevent landscaping to be completed (due to weather conditions or other unique circumstance), the Building Department may issue a certificate of occupancy prior to the completion of landscaping improvements, if agreed upon by the Planning & Public Works Departments, when a bond (see forms available from the Public Works Department) and agreement to complete improvements are placed with the Town. The landscaping shall be completed within 6 months from the issuance of the certificate of occupancy, or the Town shall utilize the bond to contract out the work to complete the improvements as stipulated in the agreement to complete landscaping improvements. No other improvements shall be permitted to bond for their completion for purposes of receiving a certificate of occupancy.
- e. All performance sureties shall be in the form of the "Hampton Method Letter of Credit" (a copy of which is on file with the DPW), surety bond, or a cash bond on deposit with the town in an interest bearing account. All Letters of Credit or surety bonds required by these regulations must be posted by a Town approved bank or a surety company listed on the current United States Department of Treasury "Department of the Treasury's listing of approved Sureties (Department Circular 570)" as authorized to do business in the State of New Hampshire.
- f. CO District & No Cut Zones: All Conservation Overlay District Boundaries and other no cut zones indicated on the plans shall be clearly delineated in the field using flagging tape or similar approved methods prior to construction and shall be maintained throughout construction of the project.

E. Design Firm:
Name: _____
Address: _____
Phone: _____
Fax: _____
E-Mail: _____

F. Name of Licensed Land Surveyor: _____
(in responsible charge) Signature: _____
G. Name of Licensed Professional Engineer: _____
(in responsible charge) Signature: _____
H. Name of Certified Soil Scientist: _____
I. Name of Certified Wetland Scientist: _____
J. Date of Submittal to Planning Department: _____

For Planning Department Use Only (Date Received Stamp)

II. General Requirements (All Applications):

		Provided	N/A
1.	Executed Site Plan Application Form	<input type="checkbox"/>	<input type="checkbox"/>
2.	Complete abutters list	<input type="checkbox"/>	<input type="checkbox"/>
3.	All Required Fees	<input type="checkbox"/>	<input type="checkbox"/>
4.	<u>Four (4) sets of plans and electronic "PDF" plans (12 sets if electronic plans not possible) submitted with all required information in accordance with the site plan regulations and this checklist</u>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Copies of any proposed easement deeds, protective Covenants or other legal documents	<input type="checkbox"/>	<input type="checkbox"/>
6.	Any waiver request(s) submitted with justification in writing	<input type="checkbox"/>	<input type="checkbox"/>
7.	Technical reports and supporting documents (Drainage report, Traffic Study, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
8.	Completed Site Plan Application Checklist	<input type="checkbox"/>	<input type="checkbox"/>

Deleted: Twelve (12) sets of plans submitted with all required information in accordance with the site plan regulations and this checklist

III. General Plan Information (All Plans):

1.	Size and presentation of sheet(s) per requirements of the site plan regulations	<input type="checkbox"/>	<input type="checkbox"/>
2.	Title block information:		
a.	Drawing title	<input type="checkbox"/>	<input type="checkbox"/>
b.	Name of site plan	<input type="checkbox"/>	<input type="checkbox"/>
c.	Location of site plan	<input type="checkbox"/>	<input type="checkbox"/>
d.	Tax map & lot #s of subject parcel(s)	<input type="checkbox"/>	<input type="checkbox"/>
e.	Name & address of owner(s)	<input type="checkbox"/>	<input type="checkbox"/>
f.	Date of plan	<input type="checkbox"/>	<input type="checkbox"/>
g.	Scale of plan	<input type="checkbox"/>	<input type="checkbox"/>
h.	Sheet number	<input type="checkbox"/>	<input type="checkbox"/>
i.	Name, address, & telephone number of design firm	<input type="checkbox"/>	<input type="checkbox"/>
j.	Name and address of Applicant	<input type="checkbox"/>	<input type="checkbox"/>
3.	Revision block	<input type="checkbox"/>	<input type="checkbox"/>
4.	Planning Board approval block provided on appropriate sheets (Cover sheet, site plan, landscape plan only)	<input type="checkbox"/>	<input type="checkbox"/>
5. C or	ertification block (for engineer, surveyor, soil scientist, wetland scientist)	<input type="checkbox"/>	<input type="checkbox"/>
6.	Match lines (if any)	<input type="checkbox"/>	<input type="checkbox"/>

<SNIPPED>

XII. Required Project Permits (as applicable to applications):

	Provided	N/A	App Submitted	
1. NHDES site-specific approval	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
2. NHDES wetlands permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: Pending
3. NHDES sewer discharge permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
4. NHDES water supply permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
5. NHDES dam permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
6. NHDOT driveway permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
7. Londonderry ZBA variance(s)/special exception(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
8. Londonderry sewer discharge permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
9. Army Corps of Engineers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
10. Federal Aviation Administration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .
11. Other federal, state or local permits (if applicable) for project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Deleted: .

XIII. Acknowledgment and Signature:

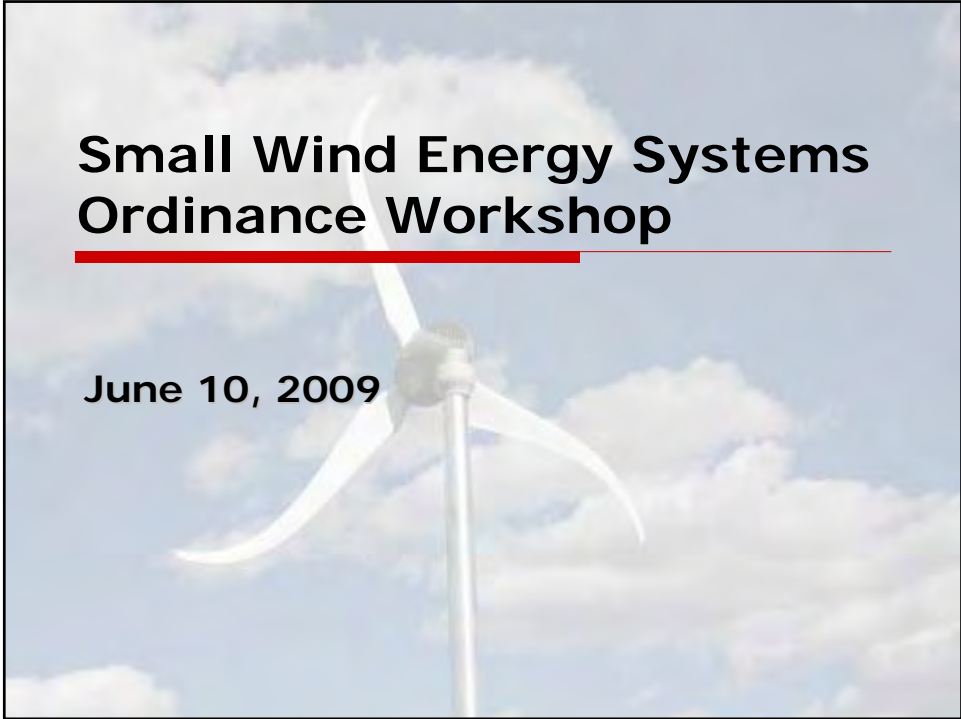
The undersigned acknowledges he/she has read and understands all of the Town's current zoning, subdivision, site plan, and health regulations and requirements for obtaining all required local, state, and federal permits. .

(Signature of person preparing plans)

(Name)

(Title)

(Date)

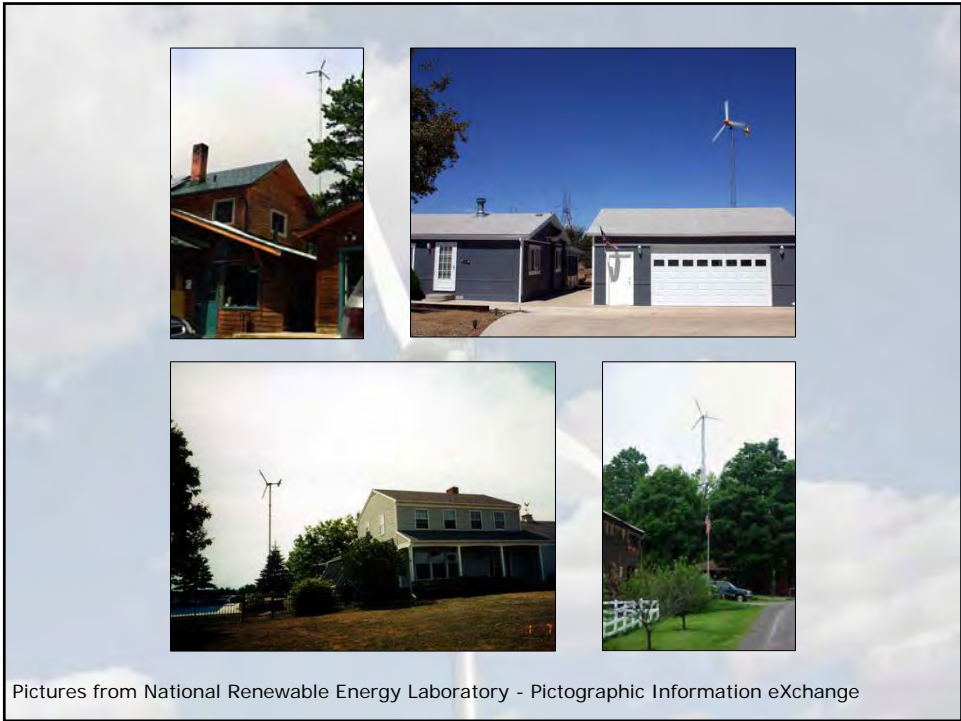


Small Wind Energy Systems Ordinance Workshop

June 10, 2009

What is a Small Wind Energy System?

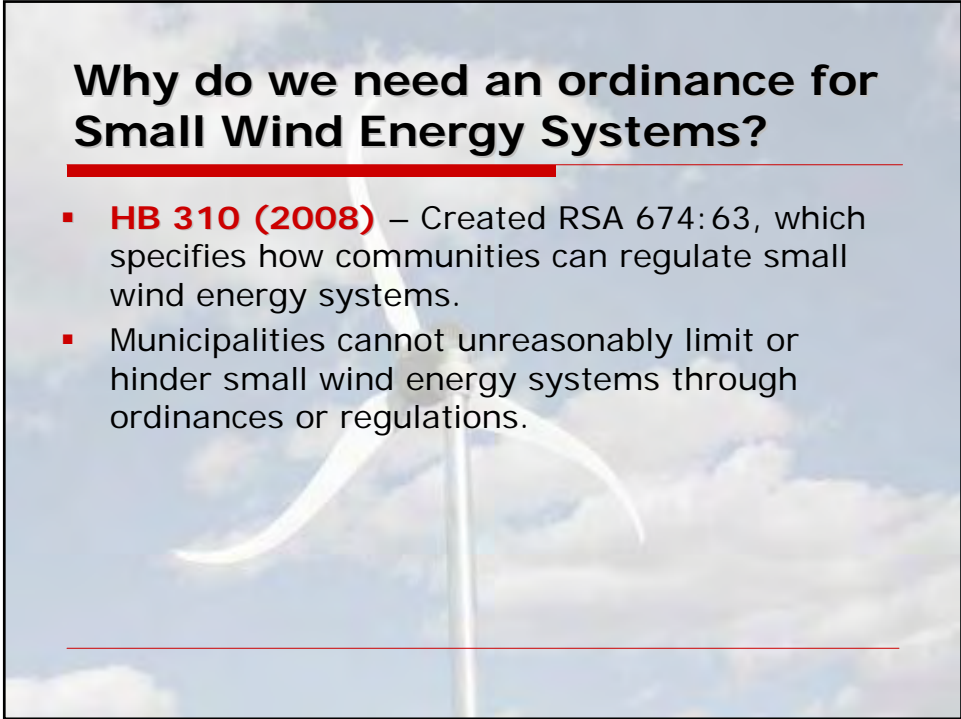
- **Small scale wind systems** have a generating capacity up to 100 kW
 - Proposed to be regulated by the proposed ordinance language
 - **Large scale wind systems** have a generating capacity greater than 100 kW and up to 30 megawatts (MW)
 - Reviewed under normal site plan review process.
 - **Utility scale** electric generation facility 30 MW or more
 - Regulated under the Energy Facility Siting Process before the Site Evaluation Committee (SEC)
-



Pictures from National Renewable Energy Laboratory - Pictographic Information eXchange



Pictures from National Renewable Energy Laboratory - Pictographic Information eXchange



Why do we need an ordinance for Small Wind Energy Systems?

- **HB 310 (2008)** – Created RSA 674:63, which specifies how communities can regulate small wind energy systems.
 - Municipalities cannot unreasonably limit or hinder small wind energy systems through ordinances or regulations.
-



RSA 674:63 - unreasonable limits and hindrances include:

- Outright prohibition of small wind energy systems in all districts.
 - Application of a generic building/structure height restriction to prohibit small wind energy systems.
 - Requirement of setbacks in excess of 150% of the system height.
 - Requirement of setting noise limits lower than 55 decibels or not allowing for limits to exceed noise levels for short-term events (storms, power outages).
 - Requirement of stricter electrical or structural design criteria outside of state, federal or international building/electrical codes or laws.
-

Summary of Proposed Amendments

- Inclusion of Small Wind Energy Systems regulations in the Zoning Ordinance (New Section 3.15), based on model language developed by State of NH
 - Allows and regulates the construction and use of small wind energy systems
 - Defines components of a small wind energy system
 - Provides a system for application, standards, compliance and approval
-

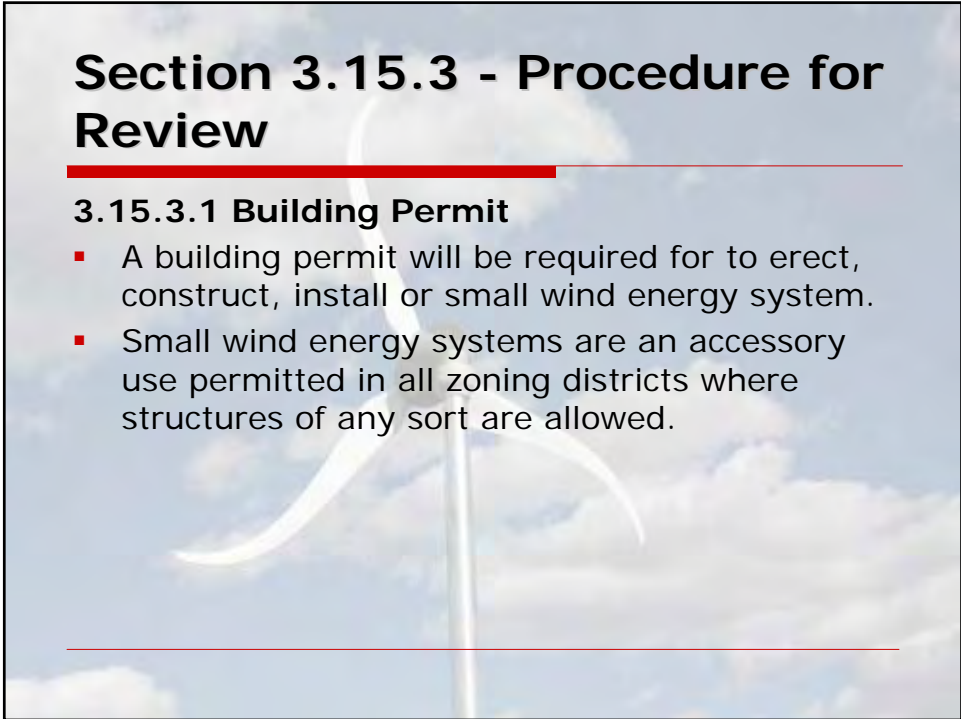
Section 3.15.1 - Purpose

- Enacted in accordance with RSA 674:62-66, and the purposes outlined in RSA 672:1-III-a.
 - Accommodates small wind energy systems in appropriate locations, while protecting the public's health, safety and welfare.
-



Section 3.15.2 - Definitions

- Definitions specific to this new section:
 - Small wind energy system
 - meteorological tower (met tower)
 - Modification
 - Net metering
 - Power grid
 - Shadow flicker
 - System height
 - Tower
 - Tower height
 - Wind generator
-



Section 3.15.3 - Procedure for Review

3.15.3.1 Building Permit

- A building permit will be required for to erect, construct, install or small wind energy system.
 - Small wind energy systems are an accessory use permitted in all zoning districts where structures of any sort are allowed.
-

Section 3.15.3 - Procedure for Review

3.15.3.2 Application

- Applications will be submitted to the Senior Building Official
 - Applications will contain a site plan, with all relevant information (e.g. property lines, tower blueprints, utility lines) as outlined in the Ordinance
-

Section 3.15.3 - Procedure for Review

3.15.3.3 Abutter and Regional Notification

The Senior Building Official will notify all abutters, and they will be given 30 days to submit comments before issuance of the building permit.

Section 3.15.4 - Standards

- Provides standards for construction and placement of small wind energy system pertaining to:
 - Setback
 - Tower Height
 - Sound Level
 - Shadow Flicker
 - Signs
 - Code Compliance
 - Aviation
 - Visual Impacts
 - Approved Wind Generators
 - Utility Connection
 - Access
 - Clearing
-

Section 3.15.5 - Abandonment

- The owner has 90 days to remove the system after notifying the building inspector of a discontinuance of use.
 - If the system is found to be out of service for 12 month, the owner will be notified and have 3 months to remove the system.
-

A background image of a white wind turbine against a blue sky with white clouds. The turbine is centered and slightly to the left. The sky is filled with soft, white clouds.

Section - 3.15.6 Violation

- It is unlawful for any person to construct, install, or operate a small wind energy system that is not in compliance with this ordinance.
 - Systems installed prior to the adoption of this ordinance are exempt, except for modifications.
-

A background image of a white wind turbine against a blue sky with white clouds. The turbine is centered and slightly to the left. The sky is filled with soft, white clouds.

Section - 3.15.7 Penalties

- Any person who fails to comply with any provision of this ordinance or a building permit issued pursuant to this ordinance shall be subject to enforcement and penalties as allowed by NH Revised Statutes Annotated Chapter 676:17.
-

3.15 SMALL WIND ENERGY SYSTEMS

3.15.1 Purpose - This small wind energy systems section is enacted in accordance with RSA 674:62-66, and the purposes outlined in RSA 672:1-III-a. The purpose of this ordinance is to accommodate small wind energy systems in appropriate locations, while protecting the public's health, safety and welfare. In addition, this ordinance provides a permitting process for small wind energy systems to ensure compliance with the requirements and standards established herein.

3.15.2 Definitions Specific to this Section:

3.15.2.1 Meteorological tower (met tower). Includes the tower, base plate, anchors, guy wires and hardware, anemometers (wind speed indicators), wind direction vanes, booms to hold equipment for anemometers and vanes, data loggers, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location. For the purpose of this ordinance, met towers shall refer only to those whose purpose are to analyze the environmental factors needed to assess the potential to install, construct or erect a small wind energy system.

3.15.2.2 Modification. Any change to the small wind energy system that materially alters the size, type or location of the small wind energy system. Like-kind replacements shall not be construed to be a modification.

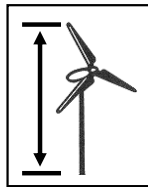
3.15.2.3 Net metering. The difference between the electricity supplied to a customer over the electric distribution system and the electricity generated by the customer's small wind energy system that is fed back into the electric distribution system over a billing period.

3.15.2.4 Power grid. The transmission system, managed by ISO New England, created to balance the supply and demand of electricity for consumers in New England.

3.15.2.5 Shadow flicker. The visible flicker effect when rotating blades of the wind generator cast shadows on the ground and nearby structures causing a repeating pattern of light and shadow.

3.15.2.6 Small wind energy system. A wind energy conversion system consisting of a wind generator, a tower, and associated control or conversion electronics, which has a rated capacity of 100 kilowatts or less and will be used primarily for onsite consumption.

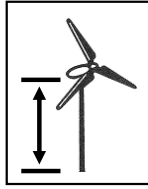
3.15.2.7 System height. The vertical distance from ground level to the tip of the wind generator blade when it is at its highest point (see below).



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3.15.2.8 Tower. The monopole, guyed monopole or lattice structure that supports a wind generator.

3.15.2.9 Tower height. The height above grade of the fixed portion of the tower, excluding the wind generator (see below).



3.15.2.10 Wind generator. The blades and associated mechanical and electrical conversion components mounted on top of the tower whose purpose is to convert kinetic energy of the wind into rotational energy used to generate electricity.

3.15.3 Procedure for Review

3.15.3.1 Building Permit: Small wind energy systems and met towers are an accessory use permitted in all zoning districts where structures of any sort are allowed. No small wind energy system shall be erected, constructed, or installed without first receiving a building permit from the building inspector. A building permit shall be required for any physical modification to an existing small wind energy system. Met towers that receive a building permit shall be permitted on a temporary basis not to exceed 3 years from the date the building permit was issued.

3.15.3.2 Application: Applications submitted to the Senior Building Official shall contain a site plan with the following information:

- 3.15.3.2.1 Property lines and physical dimensions of the applicant's property.
- 3.15.3.2.2 Location, dimensions, and types of existing major structures on the property.
- 3.15.3.2.3 Location of the proposed small wind energy system, foundations, guy anchors and associated equipment.
- 3.15.3.2.4 Tower foundation blueprints or drawings.
- 3.15.3.2.5 Tower blueprints or drawings.
- 3.15.3.2.6 Setback requirements as outlined in this ordinance.
- 3.15.3.2.7 The right-of-way of any public road that is contiguous with the property.
- 3.15.3.2.8 Any overhead utility lines.
- 3.15.3.2.9 Small wind energy system specifications, including manufacturer, model, rotor diameter, tower height, tower type, nameplate generation capacity.
- 3.15.3.2.10 Small wind energy systems that will be connected to the power grid shall include a copy of the application for interconnection with their electric utility provider.
- 3.15.3.2.11 Sound level analysis prepared by the wind generator manufacturer or qualified engineer.
- 3.15.3.2.12 Electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the NH State Building Code.

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3.15.3.2.13 Evidence of compliance or non-applicability with Federal Aviation Administration requirements.

3.15.3.2.14 List of abutters to the applicant's property.

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3.15.3.3 Abutter and Regional Notification: In accordance with RSA 674:66, the Senior Building Official shall notify all abutters and the local governing body by certified mail upon application for a building permit to construct a small wind energy system. The public will be afforded 30 days to submit comments to the building inspector prior to the issuance of the building permit. The Senior Building Official shall review the application for regional impacts per RSA 36:55. If the proposal is determined to have potential regional impacts, the Senior Building Official shall follow the procedures set forth in RSA 36:57, IV.

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3.15.4 Standards

3.15.4.1 The Senior Building Official shall evaluate the application for compliance with the following standards:

3.15.4.1.1 Setbacks: The setback shall be calculated by multiplying the minimum setback requirement number by the system height and measured from the center of the tower base to property line, public roads, or nearest point on the foundation of an occupied building.

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Minimum Setback Requirements			
<u>Occupied Buildings on Participating Landowner Property</u>	<u>Occupied Buildings on Abutting Property</u>	<u>Property Lines of Abutting Property and Utility Lines</u>	<u>Public Roads</u>
0 times system height	1.5 times system height	1.1 times system height	1.5 time system height

3.15.4.1.1.1 Small wind energy systems must meet all setbacks for principal structures for the zoning district in which the system is located.

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3.15.4.1.1.2 Guy wires used to support the tower are exempt from the small wind energy system setback requirements.

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3.15.4.1.2 Tower: The maximum tower height shall be restricted to 35 feet above the tree canopy within 300 feet of the small wind energy system. In no situation shall the tower height exceed 150 feet.

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3.15.4.1.3 Sound Level: The small wind energy system shall not exceed 60 decibels using the A scale (dBA), as measured at the site property line, except during short-term events such as severe wind storms and utility outages.

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3.15.4.1.4 Shadow Flicker: Small wind energy systems shall be sited in a manner that does not result in significant shadow flicker impacts. Significant shadow flicker is defined as more than 30 hours per year on abutting occupied buildings. The applicant has the burden of proving that the shadow flicker will not have significant adverse impact on neighboring or adjacent uses. Potential shadow flicker will be addressed either through siting or mitigation measures.

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- 3.15.4.1.5 Signs: All signs including flags streamers and decorative items, both temporary and permanent, are prohibited on the small wind energy system, except for manufacturer identification or appropriate warning signs. ← Formatted: Bullets and Numbering
- 3.15.4.1.6 Code Compliance: The small wind energy system shall comply with all applicable sections of the New Hampshire State Building Code. ← Formatted: H5
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- 3.15.4.1.7 Aviation: The small wind energy system shall be built to comply with all applicable Federal Aviation Administration regulations including but not limited to 14 C.F.R. part 77, subpart B regarding installations close to airports, and the New Hampshire Aviation regulations, including but not limited to RSA 422-b and RSA 424. ← Formatted: Indent: Left: 0.6"
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- 3.15.4.1.8 Visual Impacts: It is inherent that small wind energy systems may pose some visual impacts due to the tower height needed to access wind resources. The purpose of this section is to reduce the visual impacts, without restricting the owner's access to the optimal wind resources on the property.
- 3.15.4.1.8.1 The applicant shall demonstrate through project site planning and proposed mitigation that the small wind energy system's visual impacts will be minimized for surrounding neighbors and the community. This may include, but not be limited to information regarding site selection, wind generator design or appearance, buffering, and screening of ground mounted electrical and control equipment. All electrical conduits shall be underground, except when the financial costs are prohibitive. ← Formatted: H5
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- 3.15.4.1.8.2 The color of the small wind energy system shall either be the stock color from the manufacturer or painted with a non-reflective, unobtrusive color that blends in with the surrounding environment. Approved colors include but are not limited to white, off-white or gray.
- 3.15.4.1.8.3 A small wind energy system shall not be artificially lit unless such lighting is required by the Federal Aviation Administration (FAA). If lighting is required, the applicant shall provide a copy of the FAA determination to establish the required markings and/or lights for the small wind energy system. ← Formatted: Heading 6
- 3.15.4.1.9 Approved Wind Generators: The manufacturer and model of the wind generator to be used in the proposed small wind energy system must have been approved by the California Energy Commission or the New York State Energy Research and Development Authority, or a similar list approved by the state of New Hampshire, if available. ← Formatted: Heading 5, Indent: Left: 0.6"
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- 3.15.4.1.10 Utility Connection: If the proposed small wind energy system is to be connected to the power grid through net metering, it shall adhere to RSA 362-A:9. ← Formatted: Indent: Left: 0.6"
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- 3.15.4.1.11 Access: The tower shall be designed and installed so as not to provide step bolts or a ladder readily accessible to the public for a minimum height of 8 feet above the ground. All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access. ← Formatted: Indent: Left: 0.6"
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- 3.15.4.1.12 Clearing: Clearing of natural vegetation shall be limited to that which is necessary for the construction, operation and maintenance of the small wind energy system and as otherwise prescribed by applicable laws, regulations, and ordinances. ← Formatted: Indent: Left: 0.6"
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3.15.5 Abandonment

3.15.5.1 At such time that a small wind energy system is scheduled to be abandoned or discontinued, the applicant will notify the building inspector by certified U.S. mail of the proposed date of abandonment or discontinuation of operations.

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3.15.5.2 Upon abandonment or discontinuation of use, the owner shall physically remove the small wind energy system within 90 days from the date of abandonment or discontinuation of use. This period may be extended at the request of the owner and at the discretion of the building inspector. "Physically remove" shall include, but not be limited to:

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3.15.5.2.1 Removal of the wind generator and tower and related above-grade structures.

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3.15.5.2.2 Restoration of the location of the small wind energy system to its natural condition, except that any landscaping, grading or below-grade foundation may remain in its same condition at initiation of abandonment.

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3.15.5.3 In the event that an applicant fails to give such notice, the system shall be considered abandoned or discontinued if the system is out-of-service for a continuous 12-month period. After the 12 months of inoperability, the building inspector may issue a Notice of Abandonment to the owner of the small wind energy system. The owner shall have the right to respond to the Notice of Abandonment within 30 days from Notice receipt date. After review of the information provided by the owner, the building inspector shall determine if the small wind energy system has been abandoned. If it is determined that the small wind energy system has not been abandoned, the building inspector shall withdraw the Notice of Abandonment and notify the owner of the withdrawal.

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3.15.5.4 If the owner fails to respond to the Notice of Abandonment or if, after review by the building inspector, it is determined that the small wind energy system has been abandoned or discontinued, the owner of the small wind energy system shall remove the wind generator and tower at the owner's sole expense within 3 months of receipt of the Notice of Abandonment. If the owner fails to physically remove the small wind energy system after the Notice of Abandonment procedure, the building inspector may pursue legal action to have the small wind energy system removed at the owner's expense.

3.15.6 Violation - It is unlawful for any person to construct, install, or operate a small wind energy system that is not in compliance with this ordinance. Small wind energy systems installed prior to the adoption of this ordinance are exempt from this ordinance except when modifications are proposed to the small wind energy system.

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3.15.7 Penalties - Any person who fails to comply with any provision of this ordinance or a building permit issued pursuant to this ordinance shall be subject to enforcement and penalties as allowed by NH Revised Statutes Annotated Chapter 676:17.

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