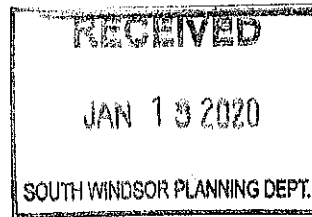


**TOWN OF SOUTH WINDSOR
PLANNING & ZONING COMMISSION
APPLICATION FORM**

Application Number: 20-04P
Official Receipt Date: 1-14-20
Munis Application #: 201902997



APPLICANT: Horseshoe Lane Associates, LLC

PROJECT NAME: Chestnut Ridge

COMPLETE LOCATION OF PROPERTY: 534 Barber Hill Road, South Windsor, CT 06074

OWNER OF RECORD ON LAND RECORDS: Theresa Gedrim

OWNER ADDRESS: 655 Nevers Rd, South Windsor, CT

GIS PIN # 07800534

ZONE RR

NAME, ADDRESS, TELEPHONE & EMAIL ADDRESS OF PERSON TO WHOM INQUIRIES SHOULD BE DIRECTED:

Benjamin Wheeler, Design Professionals, Inc.
21 Jeffrey Drive, South Windsor CT 06074 bwheeler@dpinc.co
(860) 291-8755

Estimated presentation time: 15min.

THIS APPLICATION IS FOR: (Check all that apply):

- ☐ Zone Change to _____ (Public Hearing and Certificate of Mailing Required)
- ☒ Open Space Subdivision/Resubdivision (Public Hearing and Certificate of Mailing Required)
- ☐ Subdivision ☐ Minor ☐ Major
- ☐ Resubdivision (Public Hearing Required) ☐ Minor ☐ Major
- ☐ Conditional Subdivision
- ☒ Special Exception to Table _____ (Public Hearing and Certificate of Mailing Required)
- ☐ Site Plan of Development ☐ New ☐ Modification Building(s) Sq Ft _____
- ☐ General Plan of Development
- ☐ Earth Filling (Sec. 7.6) and/or Earth Removal (Sec. 7.16) (Public Hearing and Certificate of Mailing Required)
- ☐ Regulation Amendment ☐ Zoning ☐ Subdivision - Attach proposed amendment (Public Hearing Required)
- ☐ Temporary and Conditional Permit (Public Hearing Required) for _____
- ☐ Temporary and Conditional Permit Renewal for _____
- ☐ Detached In Law Apartment or ☐ Accessory Apartment (Public Hearing and Certificate of Mailing Required)
- ☐ Major Home Occupation (Certificate of Mailing Required) for _____
- ☐ Other (explain in detail) _____

PLEASE NOTE: An Application Pending Sign is required to be posted on the property for all applications ten (10) days prior to being heard by the Commission.

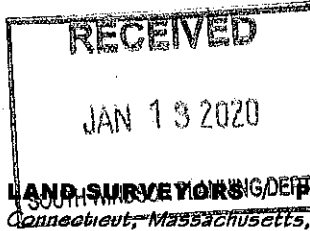
Robert Urso
Signature of Applicant
Robert Urso (Horseshoe Lane Associates, LLC)

Print Name of Applicant

Robert Urso
Signature of Property Owner
Robert Urso, Agent for Owner

Print Name of Property Owner

Revised 1/9/2017



LETTER OF TRANSMITTAL

To: Town of South Windsor
Planning Department
1540 Sullivan Avenue
South Windsor CT 06074

Date: 01/13/2020

DPI Project No. 1704.U

Re: Chestnut Ridge Open Space Subdivision
534 Barber Hill Road
P&Z Application

WE ARE SENDING YOU: ☒ Attached ☐ Under separate cover via _____ the following items:
☐ Shop Drawings ☒ Prints ☐ Renderings ☐ Specifications
☐ Copy of Letter ☐ Change Order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1	1/10/2020		Planning & Zoning Application + 1 copy of Owner Authorization Letter
2	1/10/2020		Site Plan Checklist
2	1/10/2020		Subdivision Checklist
1	1/13/2020		List of direct abutters (South Windsor and East Windsor)
1	1/13/2020		Sample abutter letter (to be mailed and certified within 7 days of receipt)
1	1/13/2020		Site Legal Description
13 ea.	1/13/2020		Special Exception/Open Space Narrative and Traffic Statement (Two docs.)
1	1/10/2020		Fee payment of \$2,320 (Horseshoe Lane Assoc. #1092)
3	1/10/2020		24"x36" Special Exception Site Plan Set

THESE ARE TRANSMITTED AS CHECKED BELOW:

☒ For Approval ☐ For review and comment ☐ No exceptions taken
☐ For your use ☐ For bids due ☐ Make corrections
☐ As requested ☐ Prints returned after loan to us ☐ Make corrections

REMARKS:

SIGNED: **CC:**
Rachel Meier



P.O. BOX 1167
21 JEFFREY DRIVE
SOUTH WINDSOR, CT 06074
PHONE: 860.291.8755
FAX: 860.291.8757
www.designprofessionalsinc.com

CIVIL & TRAFFIC ENGINEERS / LAND SURVEYORS / PLANNERS / LANDSCAPE ARCHITECTS
Serving Connecticut, Massachusetts, & Rhode Island

January 13, 2020

Ms. Michele Lipe
Director of Planning
Town of South Windsor
1540 Sullivan Avenue
South Windsor, CT 06074

Re: Chestnut Ridge Open Space Subdivision
534 Barber Hill Road
Special Exception / Open Space Narrative

Dear Ms. Lipe:

On behalf of our client, Horseshoe Lane Associates, LLC, we are submitting this brief project narrative demonstrating compliance with the special exception and open space criteria for the above referenced proposed development.

On September 10, 2019, we presented concepts to the Planning & Zoning Commission on the subject parcel showing 26 lots for both a conventional and open space subdivision layout. The general preference of the Commission was for the open space layout with all of the lots fronting on a new street off of Barber Hill Road. This application follows that direction, proposing only 19 lots on the new street.

Special Exception Criteria

Per the South Windsor Zoning Regulations, an open space subdivision is subject to the Special Exception Review Criteria outlined in Section 8.4 B of the Zoning Regulations. We believe the proposed outdoor storage meets the review criteria, namely:

1. *The proposal is consistent with the goals and objectives of the Plan of Conservation and Development.* The POCD outlines this area of South Windsor where the PZC should "consider requiring open space subdivisions."
2. *The application has met the requirements of the zoning regulations.* The application meets the requirements of the regulations for an open space subdivision.
3. *The land is physically suited to the proposed use.* The land is physically suited for a single-family residential subdivision on public water and on-site septic systems.
4. *Minimal, if any, adverse environmental impacts are created.* This development will have minimal environmental impact as demonstrated by the submitted plans and reports.
5. *No traffic or other hazards will be created.* The traffic statement indicates there will be minimal traffic generated from this development to the surrounding roadway network that has low existing traffic volumes.
6. *The impacts on the capacity of the present and proposed utilities, street, drainage systems, sidewalks, and other elements of the infrastructure will be minimal.* The subdivision will

utilize public water and natural gas systems available along the property frontage in Barber Hill Road. Drainage systems will collect and treat stormwater runoff and discharge at or below peak volumes for the evaluated storm events.

7. *There will be minimal or no adverse effects on existing uses in the area.* The site is surrounded by other residential uses, farms, and permanent open space.
8. *Surrounding property values will be conserved.* Existing property values will not be adversely impacted given the compatible use.
9. *The character of the neighborhood will be maintained or minimally disrupted.* A 25' hedgerow easement is proposed along Barber Hill Road, as requested by the Commission, to preserve the hedgerow and the rural character along the road. A majority of the existing woods and the existing tree rows on the north and south property lines will be preserved.
10. *The general welfare of the community will be served.* The general welfare of the community will be served through the development while preserving over half of the property in permanent open space.
11. *There is a balance between neighborhood acceptance and community needs.* There is currently only one house on Barber Hill Road opposite the proposed development, and the closest house on the same side of the road is over 300' away from the edge of the property to the north (located in East Windsor). The property to the south is permanent open space owned by the State of Connecticut. There are currently very few single-family residential building lots available in South Windsor. Therefore, the neighborhood acceptance is balanced with the community needs.
12. *Historic factors are adequately protected; or due consideration to preservation of historic factors has been demonstrated.* There are no known historic factors that will be impacted on the site.
13. *The overall physical appearance of the proposed development is compatible with surrounding development and the Commission's goals for the neighborhood/corridor.* The character of the homes built in this subdivision will match those built in recent subdivisions along Barber Hill Road.
14. *The architectural design is aesthetically pleasing and blends well into the surrounding area.* The character of the homes built in this subdivision will match those built in recent subdivisions along Barber Hill Road.

Open Space Requirements

Section 7.14.7 A. of the Zoning Regulations requires the open space shall serve at least one of eight listed purposes. The proposed subdivision serves six of those eight purposes, namely:

- The preservation of land areas outlined within the Master Plans;
- The protection of natural streams, ponds, or water supply;
- The protection of natural drainage systems or assurance of safety from flooding;
- The preservation of existing natural buffers;
- The conservation of forests, wildlife, agricultural and other natural resources; and
- The networking of trails and corridors.

By meeting six of the eight purposes, we believe the proposed open space meets the goals and purposes of an open space subdivision.

Open Space Ownership

Section 7.14.7 F. of the Zoning Regulations outlines six criteria for determining the ownership of the open space:

1. *The ownership of any existing open space on adjacent properties or the proximity to non-adjacent open space that might reasonably interconnect with the proposed open space in the future;* The proposed open space is adjacent to permanent open space owned by the State of Connecticut along the southern boundary of the property.
2. *The proposed use of open space for active or passive uses and the extent of maintenance, supervision, or management required;* The South Windsor Walk & Wheel Ways group is working to create a Greenway along the Eversource power lines that runs through South Windsor from the East Windsor line all the way to Manchester. Those power lines run through the proposed open space providing a potential location for the Greenway and a possible small parking lot off of Neiderwerfer Road, which would be located at the northern end of the Greenway.
3. *The potential benefits that the open space might provide to residents of the Town or the State, if it were accessible to them;* The Greenway described above would provide a great benefit to the residents of South Windsor and the surrounding communities.
4. *The size, shape, topography and character of the open space;* The open space would preserve a mature, hardwood woodland in a size and shape that is beneficial.
5. *The recommendations of the South Windsor Plan of Conservation and Development; the open space Master Plan; the Agricultural Land Preservation Master Plan; and the Park and Recreation Commission Master Plan.;* The property is listed as a Target Property on the Town of South Windsor Open Space Master Plan.
6. *The reports or recommendations of other State or Town agencies, including, but not limited to, the Capitol Regional Council of Governments and the Connecticut Department of Environmental Protection.* No reports from other State or Town agencies regarding this property are known at this time.

As such, we believe the open space subdivision proposal is appropriate for this property and will be beneficial to the Town of South Windsor and its residents.

We look forward to reviewing this application with Town Staff and the Commission, and are available should you have any questions or comments.

Sincerely,
DESIGN PROFESSIONALS, INC.



Benjamin P. Wheeler, PLA
Director of Operations

May 10, 2019

Town of South Windsor
1540 Sullivan Avenue
South Windsor CT 06074

Re: 534 Barber Hill Road
L006 Barber Hill Road
South Windsor CT 06074

I, Vincent Bifulck, the executor for the Estate of Theresa Gedrim, the owner of record for the above-reference parcels of land. I hereby authorize Robert A. Urso to execute, on the owner's behalf, any land use and related applications associated with the development of these properties known as 534 Barber Hill Road and L006 Barber Hill Road in South Windsor, Connecticut.

Sincerely,

A handwritten signature in cursive script, appearing to read "Vincent Bifulck".

Vincent Bifulck
29 George Drive
Vernon CT 06066

**TOWN OF SOUTH WINDSOR CHECKLIST
REQUIRED INFORMATION SITE PLANS**

APPLICANT Horseshoe Lane Associates, LLC

PROJECT NAME Chestnut Ridge

This checklist must be signed by plan preparer (P.E./L.S.) declaring that all required information is provided. Items 1-7 are required for all applications; items 8-11 required where appropriate.

Check mark for each item supplied.

- | | |
|------------|--|
| <u>X</u> | 1. On each sheet for plans or maps, title block with the following information: |
| <u>X</u> | a. Name, address and telephone of applicant. |
| <u>X</u> | b. Name, address and telephone number of Land Surveyor or Professional Engineer. |
| <u>X</u> | c. Name of Development. |
| <u>X</u> | d. Date when drawings were made. |
| <u>X</u> | 2. Key Map: An overall map drawn to a scale of 1 inch equals either 100 feet or 200 feet. This map will show the overall design of the Development and surrounding property within 500 feet. |
| <u>X</u> | a. Data block which gives needed zoning information such as percentage of lot coverage, acreage of tract, number of apartment units, parking requirements, etc. |
| <u>X</u> | b. Outline of buildings. |
| <u>X</u> | c. Layout of streets. |
| <u>X</u> | d. Surrounding property boundaries-within 500 feet. |
| <u>X</u> | e. Names of abutting property owners. |
| <u>X</u> | f. Proposed open spaces and recreation areas. |
| <u>X</u> | g. Driveway cuts on abutting properties and any properties across from proposed site. |
| <u>X</u> | h. Distance to and name of nearest intersection street. |
| <u>N/A</u> | 3. Architectural Elevations: See attached checklist for Architecture and Design Review. |

X

4. Plot Plan: A layout map of the proposed site drawn to a scale of 1 inch equals 40 feet on either of the following size sheets: (1) 24" x 36" with a 3/4" ruled margin; (2) 18" x 24" with a 1/2" ruled margin, containing the following data:

X

- a. Distance and bearings of all boundary lines and acreage of site. Iron pins required at all property angle points and shown on map.

X

- b. Proposed streets and street lines with center line station, curve data, and parking spaces.

X

- c. Building lines in accordance with zoning regulations.

X

- d. Proposed buildings and other structures, including signs, outside lighting, and dumpsters (on concrete pad and screened).

X

- e. Easements, noting grantors, grantees, and purpose must be shown in table format, e.g. below

Grantor	Grantee	Type of Easement	Date Filed	Vol/Pg

X

- f. Names of abutting property owners.

X

- g. Monuments will be indicated at corners and angles of all streets and at all points of curvature and tangency. The monumented points within proposed site shall be coordinated. These coordinates shall appear in tabular form on the plot plan. The accessibility of these CGS points shall be determined by the Town Engineer.

X

- h. All open space or other common or public land uses shall be indicated.

X

- i. A-2 certification; P.E./L.S. Seal.

X

5. Topographic Map: A map drawn to a scale of 1 inch to 40 feet on sheets not exceeding 24 inches by 36 inches, including ruled margins shall in addition to the requirements of the plot plans show the following:

X

- a. All existing and proposed buildings.

X

- b. Curb Lines and pavement width, sidewalks.

X

- c. Existing and proposed sanitary sewers.

X

- d. Existing and proposed water and-all existing utilities.

- X e. Present wooded area indicated by foliage lines. Any trees to be saved should be shown.
- X f. Existing and proposed contours shall be shown in not less than two-foot intervals, but in cases of relatively level land, the contours shall be one-foot intervals and spot elevations.
- X
_____ g. Regulated wetlands and 100-year floodplain or note that none are present.
- X
_____ h. Proposed storm drainage system, showing all catch basins, endwalls, manholes, lengths and sizes of pipes and elevations of structures. (Maximum distance between catch basins shall be 300 feet and minimum size of storm drain lines shall be 15 inches, within Town ROW.) If plan/profile sheet is provided all of this does not need to be shown. Only top of frame elevations and inverts of open discharge pipe shall be shown on this plan.
- N/A
_____ i. Connections of all springs into proposed storm drainage system as needed.
- N/A
_____ j. Location and indications of existing brook channels, and 100-year flood limits.
- X
_____ k. A-2 & T-2 Certification; P.E & L.S. Seals.
- X
_____ 6. Landscaping plan
- X
_____ 7. Drainage calculations: - Zero Runoff Increase per attached guidelines.
- X
_____ 8. Traffic Report
- N/A
_____ 9. Site Lighting Plan
- X
_____ 10. Plans and Profiles: A plan and profile of the proposed streets drawn on plan/profile paper of scales 1 inch to 40 feet horizontally, and 1 inch to 4 feet vertically on sheets not exceeding 24 inches by 36 inches, including ruled margins and containing the following:
- X
_____ a. Layout of streets in sections coordinated by stations with the profile.
- X
_____ b. Street plan showing roadways, drainage, sanitary sewer (including house sewer), foundation drains, lot lines, buildings including all utilities with elevations (top frame and inverts), size, type, length, slopes of pipes.
- X
_____ c. Sight line at driveway & street intersections.

X

d. Profile of roadway showing existing and finished grades. Roadway profile will show all tangent grade and all vertical curve information.

X

e. Profile will show all catch basins and all drainage lines between catch basins with all invert and top of frame elevations, sizes, lengths and slopes of pipes.

X

f. Where any storm drainage line discharges into an existing brook sufficient profile of this brook will be shown to determine conditions.

X

g. CGS datum shall be used on all sites accessible to these controls. The Town Engineer shall, based on standard engineering practices, determine the accessibility of these controls.

N/A

h. Profiles shall show all sanitary sewer lines and manholes, including elevations, (inverts, top of frame) sizes, lengths, and slopes of pipes. Top of foundation elevations for building shall be shown.

N/A

11. Open Space Site Improvement Plans: For sites which require or include a provision for open spaces, a plan which contains data for site improvement may be required. This map shall be drawn to a scale of 1 inch equals 40 feet.

X

12. Sanitary Report: Where individual sanitary sewage disposal systems are proposed, the final plans shall include a Sanitary Report certified by a Professional Engineer. The report shall demonstrate the feasibility of the proposed individual systems.

Daniel H. Jameson, P.E.



PLAN PREPARER (P.E./L.S.)

January 10, 2020

DATE

TOWN OF SOUTH WINDSOR

CHECKLIST OF REQUIRED SUBMISSION DOCUMENTS
SUBDIVISIONS/RESUBDIVISIONSAPPLICANT Horseshoe Lane Associates, LLCPROJECT NAME Chestnut Ridge

This checklist must be signed by plan preparer (P.E./L.S) declaring that all required information is provided. Place a check mark for each item supplied.

Subdivision
Minor Regular

I. PROJECT-PLOT INFORMATION

A. General Information

- | | | | |
|-------------|--|---|---|
| <u>✓</u> 1. | Appl. & owner name, address | x | x |
| <u>✓</u> 2. | Engineer & land surveyor name, address, license no. & seal | x | x |
| <u>✓</u> 3. | Key map at 1" = 100' scale showing location of tract with reference to surrounding properties, streets, municipal boundaries, etc., within 500'. Key map must include: | x | x |
| <u>✓</u> a. | Outline of buildings. | | |
| <u>✓</u> b. | Layout of streets and lots. | | |
| <u>✓</u> c. | Surrounding property boundaries-within 500 feet. | | |
| <u>✓</u> d. | Names of abutting property owners. | | |
| <u>✓</u> e. | Proposed open spaces and recreation areas. | | |
| <u>✓</u> f. | Driveway cuts on abutting properties and any properties across from proposed site | | |

Subdivision
Minor Regular

✓ g. Distance to and name of nearest intersection street.

✓ 4. A schedule of required and provided zoning district requirements including lot area, lot frontage, lot depth, yard setbacks, open space, variances granted, etc.

x x

✓ 5. North arrow and scale.

x x

✓ 6. Appropriate certification block.

x x

✓ 7. Date of original drawing and all revisions.

x x

✓ 8. Name of development.

x x

B. Plot plan at 1" = 40' scale on standard 18" x 24" or 24" x 36" sheets with a 1/2" ruled margin containing the following data. Developments which require more than two 24" x 36" sheets may submit the plot plan at 1" = 100' scale.

x x

✓ 1. Metes and bounds description showing dimensions, bearings, curve data, length of tangents, radii, arcs, chords, and central angles for all centerlines and rights-of-way, and centerline curves on streets. Monuments are required at corners and angles of all new streets and new street lines, at all points of curvature and tangency, and at critical corners and angles of all new Town open space. Coordinates for monuments shall be in tabular form.

x x

✓ 2. CGS datum shall be used on all subdivisions accessible to controls. The Town Engineer shall determine the accessibility of these controls.

✓ 3. Lot layout numbers, square footage of all lots, and all lot dimensions. Iron pins are required at all property angle points. No lots shall be divided on 2 sheets.

x x

✓ 4. Yard setbacks dimensioned.

x x

✓ 5. Easements, noting grantors, grantees and purpose. must be shown in table format, e.g. below

x x

Grantor	Grantee	Type of Easement	Date Filed	Vol/Pg

Subdivision
Minor Regular

<u>N/A</u> 6.	Development phasing, if proposed.	x	x
<u>✓</u> 7.	Names of abutting property owners.	x	x
<u>✓</u> 8.	Proposed street names (use approved list of names).	x	x
<u>✓</u> 9.	All open space reserved for common or public uses.	x	x
<u>✓</u> 10.	Appropriate A-2 certification & LS seals.	x	x

II Topographic map at same scale as plot plan containing all data included on the plot plan plus the following:

<u>✓</u> 1.	All existing structures, streets, wetlands and watercourses, or other environmentally sensitive areas, including enough data beyond property boundaries to allow a reasonable evaluation of the property's ecological relationship to surrounding areas, 100 yr. floodplain.	existing structs streets wetlands floodpln *	x
<u>✓</u> 2.	Existing and proposed contours to extend a sufficient amount beyond subject property, to determine the effects on the property as follows (town mapping): up to 3% grade: 1' contour interval 3% grade & over; 2' contour interval	x 100' *	 x
<u>✓</u> 3.	Boundary limits, nature, and extent of wooded areas, specimen trees, and other significant physical features.	x	x
<u>✓</u> 4.	Existing system of drainage of subject site and of any larger tract or basin of which it is a part (can use Town stormwater study).	x	x
<u>✓</u> 5.	Drainage area map.	*	x
<u>✓</u> 6.	Drainage calculations	*	x
<u>✓</u> 7.	Perc test data, preliminary indication of septic system feasibility if individual sanitary sewerage systems provided.	*	x

Subdivision
Minor Regular

<u>✓</u>	8.	Proposed utility infrastructure plans, including sanitary sewer, water, storm water management.	*	x
<u>✓</u>	9.	Spot and finished elevations at all property corners, corners of all structures or dwellings, or proposed first floor elevations	x	x
<u>✓</u>	10.	Construction details (per standard specs.)	*	x
<u>✓</u>	11.	Road and paving cross-sections (per, standard specs).	*	x
<u>✓</u>	12.	Proposed street names.	x	x
<u>✓</u>	13.	Landscape plan and details.	x	x
<u>✓</u>	14.	Site identifications signs, traffic control signs, and directional signs.	*	x
<u>✓</u>	15.	Sight triangles at new road intersections.	*	x
<u>✓</u>	16.	Sight triangles at driveway entrance (where there may be a question)..	x	x
<u>✓</u>	17.	Vehicular and pedestrian circulation patterns (less detail necessary for preapplications, concept plan, and general plan of development.	*	x
III.		Plans and profiles (1" = 40' horizontally and 1" = 4' vertically) showing the following:		x
<u>✓</u>	a.	Layout of streets in sections coordinated by stations with the profile.		x
<u>✓</u>	b.	Street plan showing roadways, drainage, and partial lot lines		x



P.O. BOX 1167
21 JEFFREY DRIVE
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CIVIL & TRAFFIC ENGINEERS / PLANNERS / SURVEYORS / GIS ANALYSTS / LANDSCAPE ARCHITECTS
Serving Connecticut, Massachusetts, & Rhode Island

January 13, 2020

Re: Inland Wetlands & Watercourses / Planning & Zoning Applications
534 Barber Hill Road, South Windsor, CT 06074

Dear Abutting Property Owner:

In accordance with Section 7.3b of the "Town of South Windsor Inland Wetlands, Watercourses, and Conservation Regulations", we are required to notify you that an application has been filed on the property abutting yours and is subject to a hearing by the Inland Wetlands Agency/Conservation Commission. The application and plans are on file with the South Windsor Planning Department.

As an abutting property owner, you are invited to the hearing to ask questions and/or give comments, however, you are not required to attend. You may also submit written comments regarding the application prior to the hearing if you so desire. For further information regarding the specific date this will be heard please contact Jeff Folger, Environmental Planner/Conservation Officer, Planning Department, 860-644-2511, ext. 229.

Furthermore, in accordance with the Rules & Regulations of the South Windsor Planning & Zoning Commission, you are hereby notified that an application has been filed on the property abutting yours and is subject to a hearing by the Planning & Zoning Commission. The application and plans are on file with the South Windsor Planning Department.

As an abutting property owner, you are invited to the hearing(s) to ask questions and/or give comments, however, you are not required to attend. You may also submit written comments regarding the application(s) prior to the meeting if you so desire. For further information regarding the specific date this application will be heard, please contact Michele Lipe, AICP, Town Planner, at the South Windsor Planning Department at 860-644-2511, ext. 252.

If you have any questions regarding the specifics of the plans, please feel free to contact our office at 860-291-8755. Thank you.

Sincerely,
DESIGN PROFESSIONALS, INC.

Benjamin P. Wheeler, PLA
Director of Operations

Cc: Town of South Windsor
Client

TOWN OF SOUTH WINDSOR, CONNECTICUT DIRECT ABUTTERS

Parcel ID	Site Address	Owner Name	Mailing Address	Mailing City	Mailing State	Mailing Zip
7800579	579 BARBER HILL ROAD	DZEN PROPERTIES LLC	187 WINDSORVILLE ROAD	ELLINGTON	CT	06029-0000
63600612	612 NIEDERWERFER ROAD	COULTER MARK	35 NIEDERWERFER ROAD	BROAD BROOK	CT	06016-0000
63600570	570 NIEDERWERFER ROAD	PAIXAO FERNANDO S & NUNO F	570 NIEDERWERFER ROAD	SOUTH WINDSOR	CT	06074-0000
7800476	476 BARBER HILL ROAD	CONN STATE OF	165 CAPITOL AVE	HARTFORD	CT	06106-0000
63600495	495 NIEDERWERFER ROAD	RAMSDELL EDWARD A & AMANND A	495 NIEDERWERFER ROAD	SOUTH WINDSOR	CT	06074-0000
63600528	528 NIEDERWERFER ROAD	BRITO MICHAEL M	528 NIEDERWERFER ROAD	SOUTH WINDSOR	CT	06074-0000
63600354	354 NIEDERWERFER ROAD	BURKE PAULINE L/U	354 NIEDERWERFER ROAD	SOUTH WINDSOR	CT	06074-0000
63600582	582 NIEDERWERFER ROAD	CONN LIGHT & POWER CO	PO BOX 270	HARTFORD	CT	06141-0270-0000
7800537	537 BARBER HILL ROAD	DZEN PROPERTIES LLC	187 WINDSORVILLE ROAD	ELLINGTON	CT	06029-0000
7800534	534 BARBER HILL ROAD	GEDRIM THERESA	655 NEVERS ROAD	SOUTH WINDSOR	CT	06074-0000
7800503	503 BARBER HILL ROAD	GEDRIM THERESA	655 NEVERS ROAD	SOUTH WINDSOR	CT	06074-0000
7800577	577 BARBER HILL ROAD	HAMM JUDITH R & JEFFREY J	577 BARBER HILL ROAD	SOUTH WINDSOR	CT	06074-0000
63600610	610 NIEDERWERFER ROAD	COOKSLEY DAVID C	610 NIEDERWERFER RD	SOUTH WINDSOR	CT	06074-0000
63600588	588 NIEDERWERFER ROAD	SARRIS ALEXANDER E	588 NIEDERWERFER ROAD	SOUTH WINDSOR	CT	06074-0000

TOWN OF EAST WINDSOR, CONNECTICUT DIRECT ABUTTERS

Parcel ID	Site Address	Owner Name	Mailing Address	Mailing City	Mailing State	Mailing Zip
009 71 009	BARBER HILL RD	DZEN PROPERTIES LLC	187 WINDSORVILLE RD	ELLINGTON	CT	06029-0000
009 71 008	92 BARBER HILL RD	MCCONNELL TIMOTHY P & SOPHIE P	92 BARBER HILL RD	BROAD BROOK	CT	060169715-0000
010 84 007	35 NIEDERWERFER RD	COULTER MARK P	35 NIEDERWERFER RD	BROAD BROOK	CT	060160000-0000
009 73 010	BARBER HILL RD	DZEN PROPERTIES LLC	87 BARBER HILL RD	BROAD BROOK	CT	06016-0000
010 73 009	34 NIEDERWERFER RD	RABIDA WILLIAM & MAMIE	34 NIEDERWERFER RD	BROAD BROOK	CT	060169713-0000

Legal Description
#534 Barber Hill Road
South Windsor, CT

Beginning at a point in the easterly street line of Barber Hill Road on the town line between South Windsor and East Windsor, said point is located 4.68' easterly of a granite town line monument and is the northwesterly corner of the parcel herein described and the southwesterly corner of land now or formerly Dzen Properties LLC;

Thence N88°09'14"E along the southerly property line of land now or formerly Dzen Properties LLC, a distance of 1,950.00 feet to a point on the westerly street line of Niederwerfer Road, said being the southeasterly corner of land now or formerly Dzen Properties LLC, and is located 8.91' westerly of a granite town line monument;

Thence southerly along the westerly street line of Niederwerfer Road along a curve to the right having a radius of 6,250.00 feet, a delta of 3°02'39" and a length of 332.06 feet to a point;

Thence S24°06'20"E along the westerly street line of Niederwerfer Road a distance of 330.62 feet to a point;

Thence continuing along the westerly street line of Niederwerfer Road along a curve to the left having a radius of 2,000.00 feet a delta of 2°21'52" and a length of 82.54' to a point;

Thence S26°28'12"E continuing along the westerly street line of Niederwerfer Road a distance of 242.14 feet to a point;

Thence continuing along the westerly street line of Niederwerfer Road along a curve to the right having a radius of 4,125.00 feet, a delta of 3°04'28" and a length of 221.34' to a point being the southeasterly corner of the parcel herein described;

Thence S88°15'53"W a distance of 800.11 feet to a point;

Thence S87°56'25"W a distance of 165.00 feet to a point;

Thence S89°04'19"W a distance of 368.96 feet to a point;

Thence S76°08'31"W a distance of 136.10 feet to a point;

Thence S88°16'10"W a distance of 695.00 feet to a point;

Thence S89°21'17"W a distance of 262.10 feet to a point being the northwesterly corner of land of the State of Connecticut, the last six courses being along land of the State of Connecticut;

Thence N02°23'48"W along the easterly street line of Barber Hill Road a distance of 693.54 feet to a point;

Thence continuing along the easterly street line of Barber Hill Road, N01°44'06"W a distance of 383.04 feet to the point and place of beginning.

Parcel contains 56.131 acres

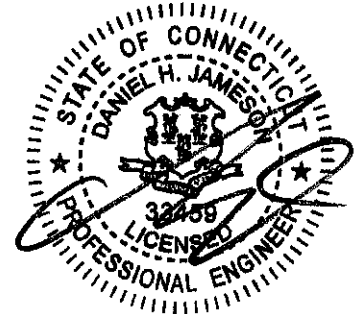


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FAX: 860.291.8757
www.designprofessionalsinc.com

Traffic Statement
Chestnut Ridge
Open Space Subdivision
534 Barber Hill Road
South Windsor, Connecticut

Prepared For:
Horseshoe Lane Associates, LLC
DPI Project Number 1704
January 13, 2020



6/13/2020

Introduction

The applicant, Horseshoe Lane Associates, LLC, is proposing a 19 lot single-family subdivision on the property known as 534 Barber Hill Road in South Windsor, Connecticut. Barber Hill Road is an existing two-lane rural road located at the west end of the site. Niederwerfer Road is an existing two-lane rural road located at the east end of the site.

A proposed public street to be known as Gedrim Place is designed in a loop configuration and have two intersections with Barber Hill Road. Both intersections will have stop control on Gedrim Place with Barber Hill Road maintaining free-flow traffic. All of the proposed lots will have driveways on Gedrim Place. No driveways will have direct access to Barber Hill Road. The proposed lots and street will not have any access to Niederwerfer Road.

The 56.13 acre tract can be classified as an undeveloped agricultural and woodland area and currently generates no traffic flow. The proposed location of the northern intersection of Gedrim Place and Barber Hill Road is approximately 1,950 feet south of the nearest intersection (Griffin Road in East Windsor). The proposed location of the southern intersection of Gedrim Place and Barber Hill Road is approximately 960 feet north of the nearest intersection (Vintage Lane in South Windsor).

Refer to site plans entitled "**Chestnut Ridge – Open Space Subdivision**" dated **January 10, 2020, as amended**, prepared by Design Professionals Inc., accompanying this report, for more information regarding the proposed development.

Existing Traffic

The existing traffic volume on Barber Hill Road is relatively low. The Connecticut Department of Transportation does not include Barber Hill Road as a location where they periodically conduct Average Daily Trip counts. Given the low volume of existing and proposed site generated traffic, manual traffic counts were not completed for this report.

Site Generated Traffic

Projected trip estimates were approximated based on studies published in the Institute of Transportation Engineers (ITE) Trip Generation Manual 9th Edition. The manual provides Average and Fitted Curve trip generation estimates based on over 340 case studies for **Single Family Detached Houses (ITE Land Use Code 210)**. The Fitted Curve Equation was used to determine the expected trip generation from the proposed 19 single-family dwelling units. See **Appendix A** for the ITE trip generation estimates for weekday daily trips, AM-peak, and PM-peak hour trip data sheets with calculations outlining how the trip generation estimates were derived. ITE estimated values for the total number of trips generated by the proposed development were calculated as follows:

Daily Weekday Trips	AM Peak Hour Weekday Trips	PM Peak Hour Weekday Trips
Entering: 114 Trips	Entering: 7 Trips	Entering: 18 Trips
<u>Exiting: 114 Trips</u>	<u>Exiting: 20 Trips</u>	<u>Exiting: 10 Trips</u>
Total = 228 Trips	Total = 27 Trips	Total = 28 Trips

A trip is defined by ITE as “a single or one-direction vehicle movement with either the origin or the destination (exiting or entering) inside a study site.”

Since there are two proposed street connections on Barber Hill Road and the proposed lots are evenly distributed along Gedrim Place, it can be approximated that half of the estimated trips will be attributed to each proposed intersection with Barber Hill Road for each category above.

Sight Distance

Connecticut DOT provides guidelines for acceptable Intersection Sight Distance (ISD). The posted speed limits on Barber Hill Road are 35 mph. The CT DOT 2003 Highway Design Manual specifies the minimum ISD required for 35 MPH is 390 feet. The field observed sight distances at the proposed intersections are as follows:

North Intersection of Gedrim Place & Barber Hill Road

Looking North: 1,475 feet +/-
Looking South: 640 feet +/-

South Intersection of Gedrim Place & Barber Hill Road

Looking North: 570 feet +/-
Looking South: 1,000 feet +/-

Based on the ISD guidelines, the observed sight distances are adequate for vehicles travelling up to 50 MPH on Barber Hill Road (555 feet required).

Conclusion:

As seen from the calculations, the proposed 19 lot development will generate minimal traffic. With the existing low volumes on Barber Hill Road, it is expected that the additional traffic will not result in an observable impact to the surrounding roadway network. Additionally, with adequate sight distance provided for the proposed development, no major safety concerns are expected as a result of this proposed development.

APENDIX A
ITE Trip Generation Estimates

Single-Family Detached Housing (210)

**Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday**

Number of Studies: 355

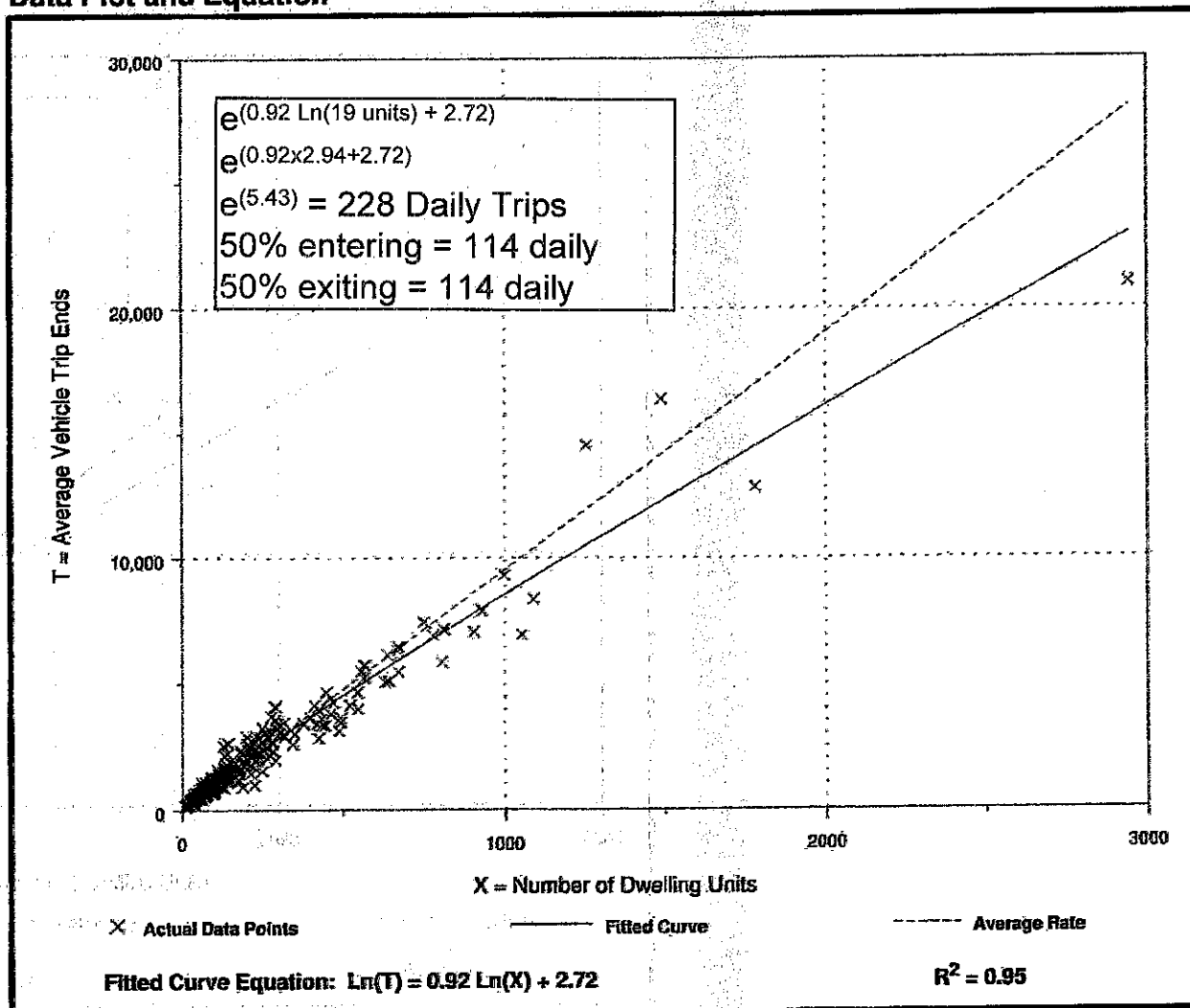
Avg. Number of Dwelling Units: 198

Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.52	4.31 - 21.85	3.70

Data Plot and Equation



Single-Family Detached Housing (210)

Average Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

A.M. Peak Hour of Generator

Number of Studies: 343

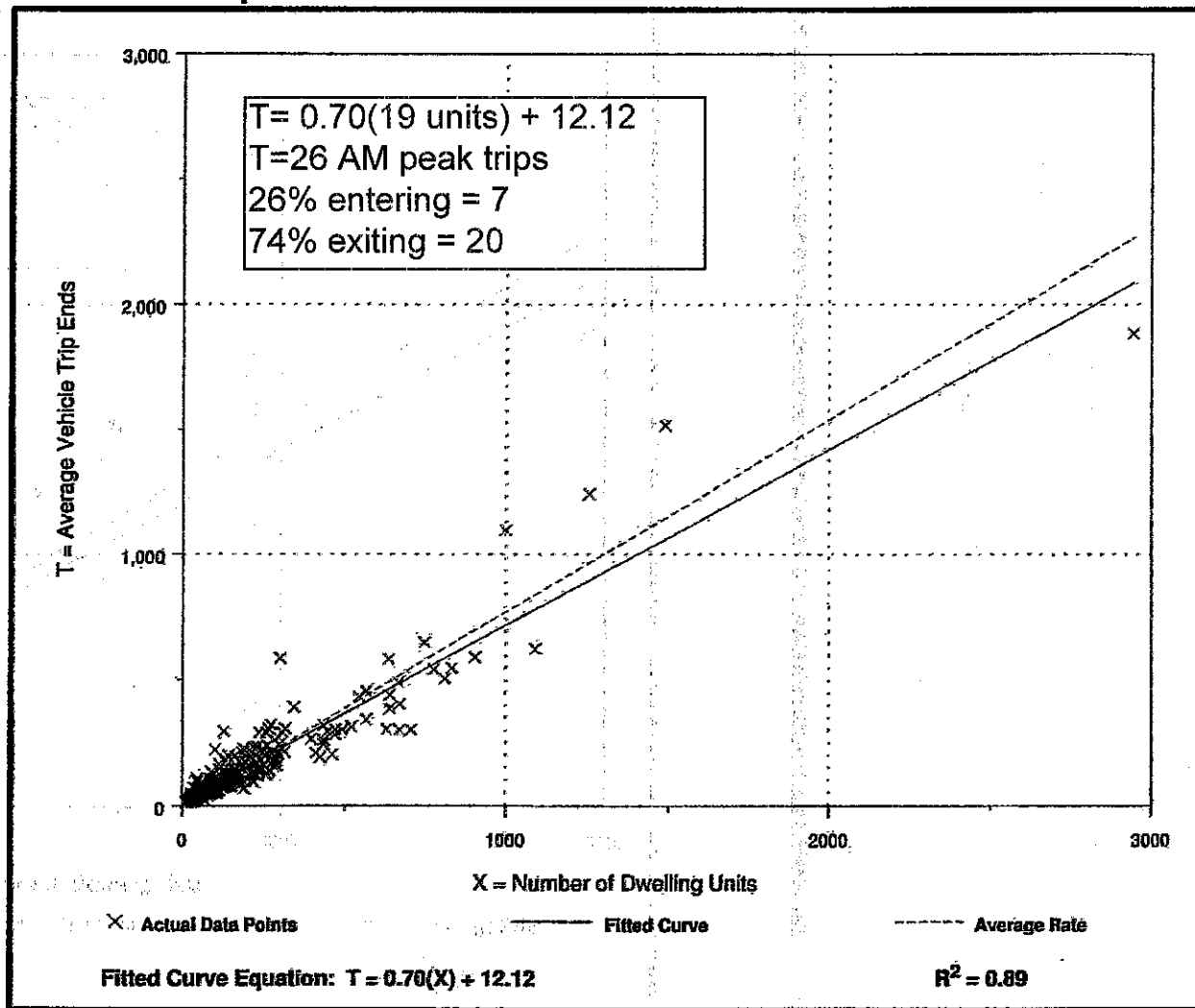
Avg. Number of Dwelling Units: 180

Directional Distribution: 26% entering, 74% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.77	0.33 - 2.27	0.91

Data Plot and Equation



Single-Family Detached Housing (210)

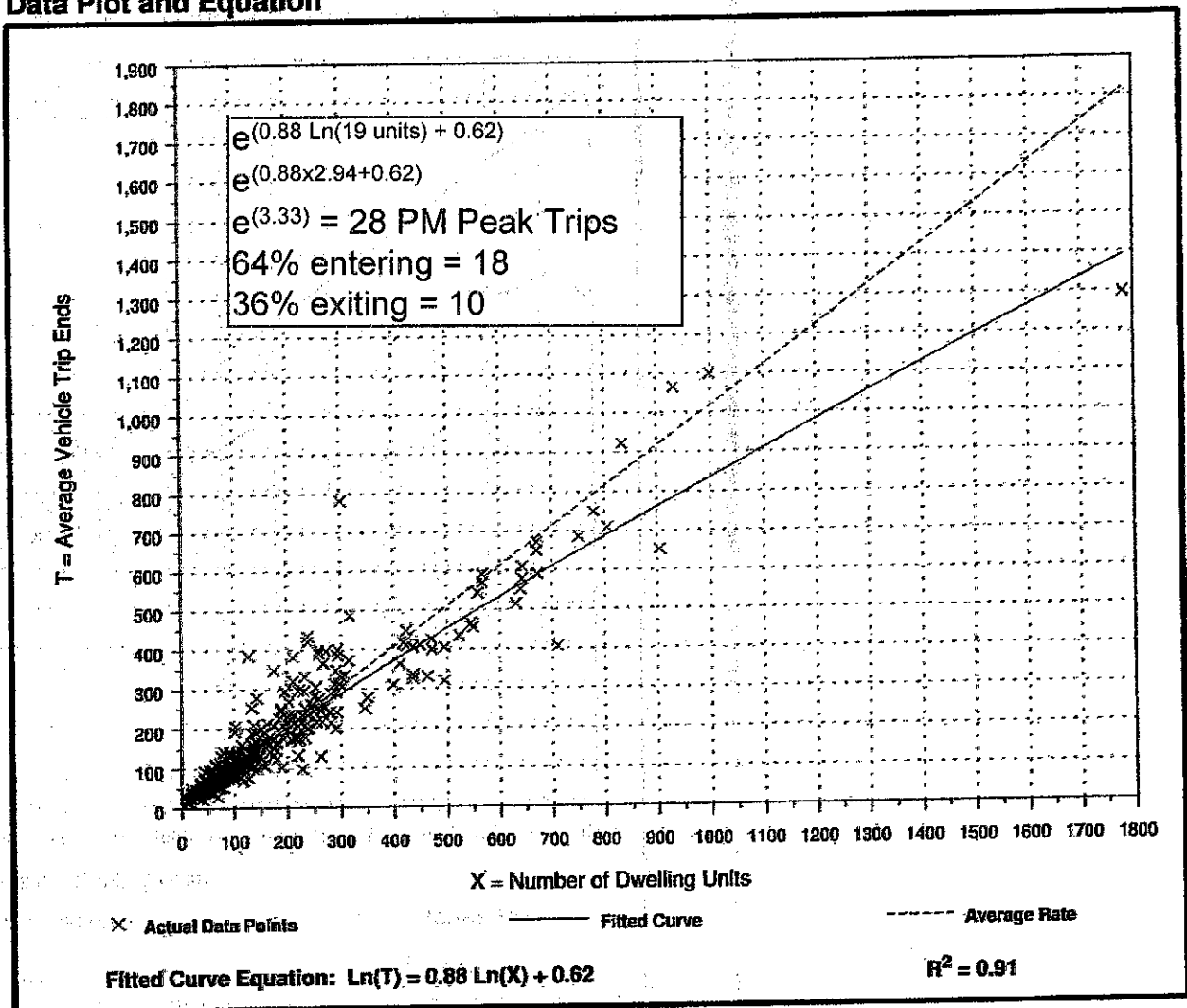
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
P.M. Peak Hour of Generator

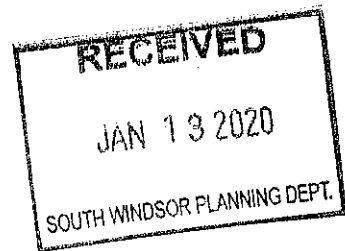
Number of Studies: 362
 Avg. Number of Dwelling Units: 174
 Directional Distribution: 64% entering, 36% exiting

Trip Generation per Dwelling Unit

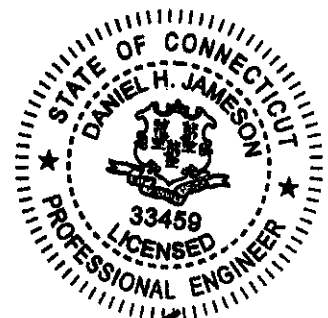
Average Rate	Range of Rates	Standard Deviation
1.02	0.42 - 2.98	1.05

Data Plot and Equation





Stormwater Management Report
Chestnut Ridge Open Space Subdivision
534 Barber Hill Road
South Windsor, Connecticut



[Signature]
9/13/2020

Prepared by:

Design Professionals, Inc.
21 Jeffrey Drive
South Windsor, CT 06074

January 10, 2019



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Water Quality	5
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A	Pre-Development Drainage HydroCAD Report
B	Post-Development Drainage HydroCAD Report
C	NRCS Soil Map & Data
D	Storm Sewer Analysis
E	Water Quality Calculations
	Water Quality Volume Calculation for Roadway Drainage
F	Drainage Area Maps
	Existing Conditions Drainage Area Map
	Proposed Conditions Drainage Area Map

Introduction

The applicant, Horseshoe Lane Associates, LLC, is proposing a 19 lot single-family subdivision on the property known as 534 Barber Hill Road in South Windsor, Connecticut. The property is referenced on the Town of South Windsor Tax Assessors map as GIS #07800534. The proposed development is a nineteen-lot open space subdivision. Associated site improvements will include but not be limited to construction of a new roadway, new homes with driveways and septic systems, utilities, landscaping, and stormwater management BMP's.

The property consists of 56.13 acres. Approximately 22.06± acres are proposed to be disturbed for the construction of the subdivision. For more information, please refer to the plans entitled "Chestnut Ridge ~ Open Space Subdivision ~ 534 Barber Hill Road ~ South Windsor, CT" prepared by Design Professionals, Inc., and dated January 10, 2020, as amended.

Pre-Development Site Conditions

The existing 56.13 acre tract can be classified as an undeveloped agricultural and woodland areas. A topographic survey conducted by Design Professionals, Inc. (DPI) and Town topography was utilized in analyzing the surrounding area draining through the site (referenced on the Existing Conditions Drainage Area Map included in **Appendix F**). The topography of the survey indicated that runoff exits the property in two locations:

- **DP#1** –Wetlands along the eastern boundary of existing farmland area.
- **DP#2** – Overland flow to Barberhill Road.

Existing conditions watershed delineations are identified in the Existing Conditions Drainage Map located in **Appendix F**.

Based on Natural Resources Conservation Service (NRCS) Hydrologic Soil Group (HSG) mapping, soils types B, C, & C/ D are located on site. See **Appendix D** for The NRCS Soil Map & Data.

An evaluation was performed to quantify the peak rate of stormwater discharge offsite to **Design Points #1 and #2** for the 2-, 10-, 25-, 50- and 100-year storm events. The Natural Resources Conservation Service's TR-55 Manual was followed in predicting the peak rates of runoff and volumes. HydroCAD computer modeling software was utilized. Please refer to the Table in the Analysis section. The Pre-Development Drainage HydroCAD Report located in **Appendix A**.

Post-Development Site Conditions

The subject project proposes the construction a new 1,400+/- ft roadway and nineteen homes. All runoff generated from the roadway will be collected in an underground storm water catchment system and be conveyed to a proposed Forebay (PP1) and wet bottom Water Quality Depression (PP2). All runoff from the road will be treated within the basin before discharging to toward the wetlands (**DP#1**). Model results indicated that the proposed water quality basin (PP2) will allow

for 1' of free board for the 100-yr storm within area at least 50 feet away from the nearest septic reserve area.

A small portion of the developed land will continue to drain towards Barber Hill Road (DP#2) as it currently does in its existing condition. Peak flow rates to Barber Hill Road were maintained at equal to or less than existing for all design storm events.

See **Appendix B** for the Post Development Condition HydroCAD report. The Proposed Conditions Drainage Map for the site is located in **Appendix F**.

Analysis of Results

The following table contains the data for the pre-development and post-development conditions generated from the HydroCAD software:

Reach		2 year	10 year	25 year	50 year	100 year
DP#1 – Wetlands to the West of Farmland	Pre	25.89	78.35	116.54	146.24	180.20
	Post	20.37	64.44	97.09	122.62	151.93
DP#2 – Overland flow to Barber Hill Road	Pre	1.25	2.88	3.96	4.77	5.68
	Post	0.51	1.70	2.57	3.26	4.04

As seen in the table above, we expect the subject project will result in peak runoff rates in the proposed condition that are less than the peak runoff rates of the existing condition for 2-, 10-, 25- and 100-year design storms.

Storm Sewer Collection System

The proposed subsurface stormwater collection and conveyance system was designed to adequately convey proposed runoff under 10- year storm event conditions. The design of the storm sewers followed the guidelines set forth in the Connecticut Department of Transportation's Drainage Manual. It is estimated that during a 10-year storm event, all proposed subsurface culverts will convey storm runoff without resulting in any unacceptable flooding conditions. AutoDesk Storm and Sanitary Analysis computer software was used for analysis. The computations are included as **Appendix C**.

Water Quality

The proposed Forebay and Water Quality Depression (PP1 & PP2), were sized in accordance with the 2004 Connecticut Stormwater Quality Manual, to provide 10% and 100% of the determined water quality volume respectively. See **Appendix E** for calculations. The proposed

temporary sediment basin was sized in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

Conclusion

The proposed stormwater management system as discussed herein and shown on the referenced plans is appropriate for the proposed development on the subject site, is consistent with Town and State requirements, and should not pose any detrimental impacts to the environment.

RE: Project Name CHESTNUT RIDGE SUBDIVISION Appl # 20-04P

Address: 534 BARBER HILL ROAD

NOTE: Complete Stormwater Management Report is available for review in the Planning Department in the Town Hall, 2nd Floor, 1540 Sullivan Avenue, South Windsor