



CITY OF DOVER

PLANNING TECHNICAL REVIEW COMMITTEE –AGENDA

Meeting Type: Regular Meeting
Meeting Location: 2nd Floor Conference Room – City Hall, Dover NH
Meeting Date: **Thursday, March 2, 2017**
Meeting Time: **10:30 AM**

1. 10:30 AM – 11:15 AM: Open Space Subdivision for Daniel W. Ayer, Assessor's Map N, Lots 18, 18-4, 18-5, 19, zoned R-40, located at Back Road and McKone Lane.
[*Previously heard on August 25, 2016*]. (P16-25) (17 lots)



CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES - P16-25

Application Type: Open Space Subdivision Plan Review
Applicant(s): Daniel W. Ayer
Owner(s): Daniel W. Ayer
Location: Back Road and McKone Lane (Tax Map N, Lot 18, 18-4, 18-5, and 19)
Date: August 25, 2016

INTENT: Subdivision Plan Review to create an open space subdivision containing 17 total single family residential lots plus open space lots.

UNITS PROPOSED: Seventeen (17) new single family dwelling units.

AGENDA ITEM #: 2

ACRES: Total acres: 44.9
Phase 2 acres: 29.38

ZONING DISTRICT: Rural Residential (R-40) District

EXISTING LAND USE: Residential/Vacant

SURROUNDING LAND USE: Residential

ZBA ACTION: None

PERMITS REQUIRED:

- Conditional Use Permit
- AOT
- DES Shoreland
- DES Wetlands

WAIVERS REQUESTED: None requested but one for cul-de-sac length would be required

ATTENDANCE:

Chris Parker, Planning
Elena Piekut, Zoning
David White, Engineering
Jim Maxfield, Fire/Building
Frank Torr, Planning Board
Dan Barufaldi, Economic Development
Marn Speidel, Police

Others:

Dan Ayer, Owner
Kevin McEneaney, Applicant
Brian Scott
Donna Benton, Planning

Plan Review

Planning Comments:

- Impact fees will be assessed and Sewer investment fees will be assessed
- Please provide:
 - a revised current use plan
 - an existing conditions plan
 - a lot merger plan and necessary paperwork
 - a perimeter landscape plan per Chapter 155.36.F
 - a standard traffic assessment
 - a fiscal impact assessment
 - Home Owner's Association documents to be reviewed by the City's Legal Counsel
 - a letter explaining where all of these changes have been made on the plan sheet
 - documentation from Assessing Department on lot numbers
- Please revise plat to:
 - Locate street lights and provide details
 - Relocate the Eversource pole to increase the amount of underground utilities
 - Indicate phase lines for construction
 - Include previous plans from Sievert into this set
 - note Planning Board file number (P16-25) on all sheets
 - renumber sheet numbers to not use letters
 - clearly indicate the sewer line and pumps on each lot
 - revise PSNH to indicate Eversource (throughout set)
 - indicate soil types
 - show contours 100' beyond project limits
 - indicate wetland buffer placards are necessary
 - indicate perimeter buffer signs every 50'
 - have the PE, LLS, and Wetland Scientist or Soil Scientist sign and stamp final plans
 - revise the construction materials of the private drive to the satisfaction of the Fire Department and Community Services Department
 - On the cover sheet:
 - Revise note 41 to add McKone to the list of paved roadways and indicate that new roads are private
 - overall declutter the sheet
 - revise note 19 to add that lot numbers be assigned by the assessing department
 - add the other necessary permits under permit status (Shoreland and AOT)
 - On sheet 2, use different line weight to indicate new lots
 - On sheet 3, indicate dock as existing and add a note about potential future trail
 - Fix ROW on McKone Lane
 - Add location, names and widths of existing and proposed streets, including pavement widths, grades, and curbs



CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES - P16-25

Application Type: Open Space Subdivision Plan Review
Applicant(s): Daniel W. Ayer
Owner(s): Daniel W. Ayer
Location: Back Road and McKone Lane (Tax Map N, Lot 18, 18-4, 18-5, and 19)
Date: August 25, 2016

- Indicate underground electric lines and add note regarding easements
- Show connection between "Hawk" and "Eagle"

Planning Board Comments:

- Hawk Drive turnaround is too small
- Connectivity concerns

Economic Development Comments:

- Connectivity concerns have now been addressed

Engineering Comments:

- Improve interconnectivity of the roadway system. This would also address the lack of proper turn arounds for fire apparatus
- How will lot N 18-6 be sewer off McKone lane?- Indicate on plan
- Note that existing house will be tied into City sewer, when the system fails
- Driveway widths should be 22 ft wide
- Add note that driveway and house locations are conceptual
- There should be a minimum of 6ft of separation between utilities
- Drainage study to be reviewed. Looking at the site plan the current plan does not seem to address treatment of the road runoff
 - Need to comply with stormwater regs
 - The pre/post peak and volume must be the same or less and there needs to be a recharge component.
- The treatment of the runoff must capture sediment that contains pollutants before it enters wetlands or leaves the site
- There should be flared ends or headwalls on the pipes The larger crossings may need retaining walls to make up the grade difference.
- Please show better topo elevations in these areas
- Some of the steep areas may need guardrail installed
- Some form of marker and guardrail should be installed at the end of the roadway where it drops off
- Form a ditch from 5+00 to 8+50 and 26+50 to 29+50. It seems to run down the roadway until it can exit off the side
 - Install stone aprons on the inlet and outlets of the drainage

- Roadway cross culverts should be a minimum of 15 inch in diameter
- More detail is needed in the plan set for the sewer forcemain (Pipe size and type)
- Can pedestrian access/connectivity be added to the Eversource easements?

Police Department Comments:

- Connect Hawk and Whitely roads?
- Add hammerhead to the dead end

Fire/Inspections Comments:

- Private roads names shall end in Drive
- Provide alternative name to Eagle Lane and Hawk Drive
- Indicate the location of the nearest hydrant from access points (McKone and Back Road)
- Provide any phasing plan if applicable
- Clarify note 41 on coversheet to indicate at what point the road will be paved
- 10' wide construction entrance shall be wider to allow access
- Provide turning radius template for truck 1 throughout subdivision
- Dead-end roads more than 300' long shall be provided with a turnaround at the end at least 90' in diameter
- Add a note that the site shall be accessible in all weather conditions.
- Fire Department access to be revised to the satisfaction of the Fire Chief

Meeting adjourned at 12:15 on a motion by Frank Torr and seconded by Dave White.

S:\Department\Planning\Planning_Share\Planning Board\TRC\2016\TRC\MINUTES\2016.08.25_PlanningTechnicalReviewCommittee.Ayers.BackRd.Minutes.docx

TECHNICAL REVIEW COMMITTEE MINUTES - P16-25

Application Type: Open Space Subdivision Plan Review

Applicant(s): Daniel W. Ayer

Owner(s): Daniel W. Ayer

Location: Back Road and McKone Lane (Tax Map N, Lot 18, 18-4, 18-5, and 19)

Date: August 25, 2016

Plan Review

Planning Comments:

RECEIVED
Planning Office

FEB 16 2017

Dover, New Hampshire

- ☐ Impact fees will be assessed and Sewer investment fees will be assessed
- ☐ Please provide:
 - a revised current use plan
 - an existing conditions plan - Added sheet 3
 - a lot merger plan and necessary paperwork
 - a perimeter landscape plan per Chapter 155.36.F - Existing treelines shown on Existing Conditions sheet 3 of 22
 - a standard traffic assessment - A standard traffic assessment letter has been provided.
 - a fiscal impact assessment
 - Home Owner's Association documents to be reviewed by the City's Legal Counsel - This was provided by the land owner.
 - a letter explaining where all of these changes have been made on the plan sheet - This document
 - documentation from Assessing Department on lot numbers - KMM discussion
- ☐ Please revise plat to:
 - Locate street lights and provide details
 - Relocate the Eversource pole to increase the amount of underground utilities - This has been shown on sheet P3.
 - Indicate phase lines for construction - There is no phasing for the road construction only the lot development. The lots to be developed under phase 2 include Lots 18, 18-7,8,9 & 21. All other lots are developed under phase 1.
 - Include previous plans from Sievert into this set - The low pressure sewer design system has been added to the road profile sheets P1-P3 and detail sheet D5)
 - note Planning Board file number (P16-25) on all sheets - Done
 - renumber sheet numbers to not use letters - Done, renumbered to sheets 9 to 12 of 22
 - clearly indicate the sewer line and pumps on each lot - The sewer force main and tanks have been shown on the plan profile sheets P1-P3)
 - revise PSNH to indicate Eversource (throughout set) - Done
 - indicate soil types - Done, shown on Existing Conditions sheet 3 of 22
 - show contours 100' beyond project limits - KMM to discuss
 - indicate wetland buffer placards are necessary - Added note 43 on Cover Sheet, shown on individual lots #
 - indicate perimeter buffer signs every 50' - Added note 44 on Cover Sheet, shown on individual lots #
 - have the PE, LLS, and Wetland Scientist or Soil Scientist sign and stamp final plans - To be included on Final Plans
 - revise the construction materials of the private drive to the satisfaction of the Fire Department and Community Services Department - The road cross sections have been revised to meet DPW standards and shown on sheet D3
 - On the cover sheet:

- Revise note 41 to add McKone to the list of paved roadways and indicate that new roads are private – **Done, see below, Fire/inspection comments**
- overall declutter the sheet - ???
- revise note 19 to add that lot numbers be assigned by the assessing department – **KMM discussion**
- add the other necessary permits under permit status (Shoreland and AOT)
- On sheet 2, use different line weight to indicate new lots – **Done, made yellow in color**
- On sheet 3, indicate dock as existing and add a note about potential future trail – **Now Sheet 4, dock only**
- Fix ROW on McKone Lane – **KMM, discussion with Planning Dept.**
- Add location, names and widths of existing and proposed streets, including pavement widths, grades, and curbs – **Added road names and R.O.W. widths to sheets 3 and 4 of 22.**
- Indicate underground electric lines and add note regarding easements – **Added to Topographic Sheets 9 to 12 of 22.**
- Show connection between “Hawk” and “Eagle” – **Road now travels from Back Road to McKone Lane**

Planning Board Comments:

- ☐ Hawk Drive turnaround is too small – **Road now travels from Back Road to McKone Lane**
- ☐ Connectivity concerns – **Road now travels from Back Road to McKone Lane**

Economic Development Comments:

- ☐ Connectivity concerns have now been addressed – **Road now travels from Back Road to McKone Lane**

Engineering Comments:

- Improve interconnectivity of the roadway system. This would also address the lack of proper turn arounds for fire apparatus – **Road now travels from Back Road to McKone Lane**
- ☐ How will lot N 18-6 be sewer off McKone lane?-Indicate on plan – **this lot is serviced from Falcon Dr. Sheet 20**
- ☐ Note that existing house will be tied into City sewer, when the system fails - **Added note 42 to Cover Sheet also shown on sheet P3**
- ☐ Driveway widths should be 22 ft wide – **Conceptual drives are 20 ft. wide.**
- ☐ Add note that driveway and house locations are conceptual – **Noted on plan sheets**
- ☐ There should be a minimum of 6ft of separation between utilities – **revised to accommodate the utilities have been placed on opposite sides of the roadway. Separation distances are detailed in the standard trench detail sheet D4**
- ☐ Drainage study to be reviewed. Looking at the site plan the current plan does not seem to address treatment of the road runoff – **Copies of the complete drainage study have been provided.**
- ☐ Need to comply with stormwater regs – **The design complies with the stormwater regulations and will require an AOT permit.**
- ☐ The pre/post peak and volume must be the same or less and there needs to be a recharge component. – **See drainage report.**
- ☐ The treatment of the runoff must capture sediment that contains pollutants before it enters wetlands or leaves the site – **This has been accomplished with the revised design of the stormwater treatment practices.**
- ☐ There should be flared ends or headwalls on the pipes The larger crossings may need retaining walls to make up the grade difference. – **This has been added to the design shown on sheets P1-P3 and sheet D4**
- ☐ Please show better topo elevations in these areas – **Topo has been shown on the plan profile sheets. Also, road cross sections have been provided.**
- ☐ Some of the steep areas may need guardrail installed – **Guardrail has been added where required shown on sheets P1-P3 and sheet D3.**
- ☐ Some form of marker and guardrail should be installed at the end of the roadway where it drops off – **N/A due to continuation of roadway.**
- ☐ Form a ditch from 5+00 to 8+50 and 26+50 to 29+50. It seems to run down the roadway until it can exit off the side – **This drainage have been designed and shown on sheets P1-P3 and the cross sections.**
- ☐ Install stone aprons on the inlet and outlets of the drainage – **Stone aprons have been design and added. Sheets P1-P3 and D4**
- ☐ Roadway cross culverts should be a minimum of 15 inch in diameter – **This requirement is met.**

- ☐ More detail is needed in the plan set for the sewer forcemain (Pipe size and type) – This information has been provided sheets P1-P3 and D5
- ☐ Can pedestrian access/connectivity be added to the Eversource easements? – If Eversource grants that access then yes.

Police Department Comments:

- ☐ Connect Hawk and Whitely roads? – Road now travels from Back Road to McKone Lane
- ☐ Add hammerhead to the dead end – Road now travels from Back Road to McKone Lane

Fire/Inspections Comments:

- ☐ Private roads names shall end in Drive – Eagan Drive and Whiteley Drive
- ☐ Provide alternative name to Eagle Lane and Hawk Drive – Eagan Drive and Whiteley Drive
- ☐ Indicate the location of the nearest hydrant from access points (McKone and Back Road) – Added two notes to sheets 3 & 4, 1,275 ft. to Henry Law Avenue along McKone Lane; and 2,450 ft. to Back Road, Henry Law Avenue & Mulligan Intersection.
- ☐ Provide any phasing plan if applicable – Explanation in previous section.
- ☐ Clarify note 41 on coversheet to indicate at what point the road will be paved – revised to read “The roadways (Eagan Drive & Whiteley Drive) shall be paved to base coating upon the completion of all work associated with roadway sub-construction.”
- ☐ 10' wide construction entrance shall be wider to allow access – Detail calls for 10 ft. minimum or full width of Entrance requirement.
- ☐ Provide turning radius template for truck 1 throughout subdivision – Road now travels from Back Road to McKone Lane
- ☐ Dead-end roads more than 300' long shall be provided with a turnaround at the end at least 90' in diameter – Road now travels from Back Road to McKone Lane
- ☐ Add a note that the site shall be accessible in all weather conditions.
- ☐ Fire Department access to be revised to the satisfaction of the Fire Chief

The project has been named “The Narrows an Open Space Subdivision”



ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL

5 Railroad Street • P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-4979
Email: mjs@mjs-engineering.com

January 26, 2017

City of Dover
Planning Department
288 Central Ave.
Dover, NH 03820

RECEIVED
Planning Office
FEB 16 2017

Dover, New Hampshire

**Re: Estimated Trip Generation for The Narrows
17 Lot Conservation Subdivision
Back Road and McKone Lane**

Dear Dover Planning Board Members:

MJS Engineering, PC has prepared a traffic volume estimate as defined in the Institute of Transportation Engineers, Trip Generation Manual for your review. This information is provided for use in determining the traffic generation from the proposed subdivision on the existing Town roads.

Calculations:

The following calculations are based on the Institute of Transportation Engineers, Trip Generation Manual, Land Use 210, Single Family Detached Housing.

Per Land use 210, Single Family Detached Housing:

Average Daily Trips = 9.57 trips per day/dwelling unit

Peak Hour Trips(morning) = 0.77 trips/dwelling unit

Directional Split = 74% exiting, 26% entering

Peak Hour Trips(afternoon) = 1.02 trips/dwelling unit

Directional Split = 64% entering, 36% exiting

Given:

Subdivision = 17 lots = 16 dwelling units

There is one existing dwelling unit on the lot of record.

Average Daily Trips:

Average Daily Trips = 16 dwelling units x 9.57 trips per day/dwelling unit

Average Daily Trips = 153.12 trips/day

Average Daily Trips = 153 trips/day

Trips during Peak Hour(morning):

Peak Hour Trips(morning) = 16 dwelling units x 0.77 trips/dwelling unit

Peak Hour Trips(morning) = 12.32 trips/day

Peak Hour Trips(morning) = 12 trips/day

Directional Split = 74% exiting, 26% entering

Exiting Trips = 9 trips/day

Entering Trips = 3 trips/day

Trips during Peak Hour(afternoon):

Peak Hour Trips(afternoon) = 16 dwelling units x 1.02 trips/dwelling unit

Peak Hour Trips(morning) = 16.32 trips/day

Peak Hour Trips(morning) = 16 trips/day

Directional Split = 64% exiting, 36% entering

Exiting Trips = 10 trips/day

Entering Trips = 6 trips/day

Conclusion:

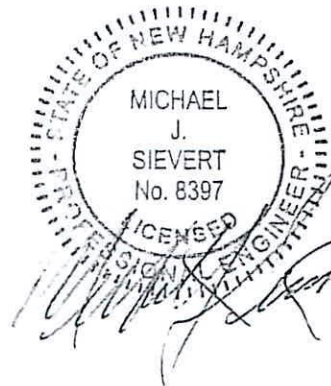
As calculated above, this subdivision will generate 153 average daily trips when the built out is complete. The lot development is separated into two phases with 11 of the lots being built in the first phase. Therefore, this traffic will be spread out over several years. The subdivision has two points of access, one on Back Road and one on McKone Lane to Henry Law Ave. This will also separate the traffic entering and exiting the subdivision. Given the layout of the subdivision, with the disposition of the lots closer to Back Road than to Henry Law Ave., we estimate that the greater majority of the vehicles will use the Back Road entrance. If 15% - 25% of the lots use McKone Lane, to Henry Law Ave., for access, since two to four of the lots are right off the end of McKone Lane, this will spread out the traffic impact to the two locations on town roads. Either way, this is an insignificant amount of traffic for the existing town roads that provide access to the subdivision.

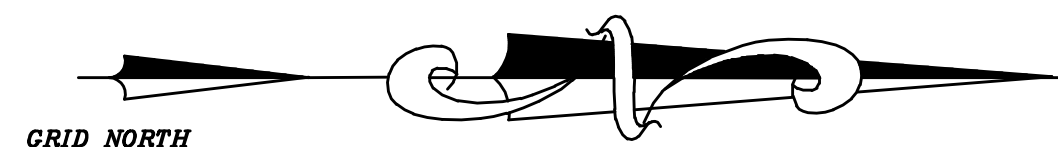
If you require additional information or have any questions or comments, please call (603) 659-4979 x302.

Sincerely,



Michael J. Sievert PE
President





"I HEREBY CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL GROUND SURVEY PERFORMED WITH A TOTAL STATION, BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID SURVEY MEETS OR EXCEEDS THE MINIMUM PRECISION REQUIREMENTS FOR SURVEY CLASSIFICATION "U" AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS."