

Town of Windham

Planning Department
8 School Road
Windham, ME 04062

voice 207.894.5960

fax 207.892.1916

MEMO

DATE: May 24, 2019

TO: Windham Planning Board
FROM: Jennifer Curtis, Planner
Cc: Amanda Lessard, Planning Director
Dustin Roma, P.E., DM Roma Consulting Engineers
Development Review Team

RE: 18-12 Highland Woods Subdivision– Final Subdivision Plan
Planning Board Meeting: May 29, 2019

Overview –

The applicant (MTR Development, LLC) is proposing a 12-lot cluster subdivision on a 38.43-acre property located on Highland Cliff Road. A new 1,500-foot dead-end road is proposed to the development. The applicant proposes public access to the open space in exchange for a density bonus.

This project first appeared as a Preliminary Plan at the Board meeting on November 26, 2018. At that meeting the applicant was proposing a 22-lot cluster subdivision with a proposed land swap with the abutter (Map 7 Lot 29) in order to allow the road to end at the property to better connect with the abutting proposed development on Land of Nod Road.

This project appeared before the board a second time as a revised Preliminary Plan at the Board meeting on January 28, 2019. The revision reflected a cluster of 11 lots and Lot 12/remaining land to be transferred to a separate corporation also owned by the applicant. A waiver of the cul-de-sac requirement was granted, as the applicant indicated they still intended to continue the road for the second phase, and hopefully connect to the abutting property. The Board approved the Preliminary Plan.

The project is coming before the Board again as the applicant submitted a Final Plan on May 8, 2019. The application includes the permit from DEP.

In reviewing the Final Application, staff also noted that

- At the January 28, 2019 meeting, the Board requested that an easement for road access to then adjoining lot TM 7, Lot 29. The Plan no longer provides a right-of-way to TM 7, Lot 29. The Board may want to require that or an alternative means of complying with 911,M,3 and 911,M,5,b,(5),iii to facilitate connections with future developments at

adjacent lots, and permit convenient movement of traffic or facilitate emergency access and evacuation.

- At the January 28, 2019 meeting, the Board requested notes on the plan detailing the landscaping plan for a buffer with the abutting properties to lots 6 & 7, and that it be a deeded no-cut buffer.
- Street trees are not shown on the plan

The applicant has provided a response that is included in the packet, but not addressed in the memo.

New comments from the staff memo dated May 24, 2019 appear as underlined text below.

Tax Map: 7, Lots: 36, Zone: Farm (F) and Stream Protection (SP).

SUBDIVISION REVIEW

Staff Comments:

1. Waivers:

- a) §911.K.4.g – Cluster subdivision, open space performance standard.
Approve August 13, 2018
- b) §911.M.5.b.6.ii – Sidewalks or shoulders performance standard.
Approved June 25, 2018
- c) §911.M.5.b.5.ii – Public Dead-end Street performance standard.

2. Complete Application:

MOTION: The application for 18-12 – Highland Woods Subdivision, is found complete in regard to the submission requirements based on the application checklist, pending the following items:

- 1. The Town must receive digital transfer of the subdivision plan data (GIS).
- 2. Map and lot numbers for all lots as assigned by the Town of Windham Assessing Department must be shown on any plans prepared for Planning Board signature.
- 3. Permanent monuments need to be placed on the ground and recorded on the plan for all lot boundaries.

The Planning Board retains the right to request more information where review criteria are not fully addressed.

- 3. Public Hearing: A public hearing was held the Planning Board meeting on June 25, 2018.
- 4. Site Walk: A site walk was held on Monday June 25, 2018 at 5:30pm.

Findings of Fact and conclusions for the

Windham Planning Board,

MOTION: The Final Subdivision application for 18-12 Highland Woods Subdivision on Tax Map: 7, Lot: 36 is to be **(approved with conditions/denied)** with the following findings of fact and conclusions.

FINDINGS OF FACT

A. POLLUTION

- A portion of the subdivision is within the mapped 100 year floodplain of a tributary to Colley Wright Brook that is located just beyond the northern corner of the property. The 100-yr floodplain is shown on the rear of Lots 14 and 15 8 and Open Space 2.
- This subdivision is not located over a significant sand and gravel aquifer.
- A hydrogeologic assessment must be submitted as part of the Preliminary Plan as the subdivision is not served by public sewer and the subdivision has an average density of more than one dwelling unit per 100,000 square feet.
- A hydrogeologic assessment prepared by Stephen B. Marcotte, P.G. of Summit Geoengineering Services dated July 23, 2018 concludes that the proposed subsurface wastewater disposal systems will not result in an increase of nitrate-nitrogen above 10 mg/L in groundwater at the property boundary.
- A hydrogeologic assessment prepared by Stephen B. Marcotte, P.G. of Summit Geoengineering Services dated October 26, 2018 concludes that the proposed subsurface wastewater disposal systems will not result in an increase of nitrate-nitrogen above 10 mg/L in groundwater at the property boundary.
- In an email dated November 20, 2018, Town Engineer Jon Earle P.E., asked for clarification as lots 9-22 appear to have the test pit located outside of the footprint where the disposal field is being proposed and subsequent plume.
- In the plan dated May 8, 2019, additional test pits # 40, 41, and 42 correspond to the locations of the disposal field footprints for lots 9, 10, and 11.

B. WATER

- All lots will be served by individual wells.
- The closest fire hydrants are located on Pope Road at Albion Road and at Roosevelt Trail at Pope Road, over a mile from the subdivision. At the Development Team meeting on May 1, 2018, Fire Chief Brent Libby recommended that the new houses in this subdivision include sprinkler systems that meet NFPA standards.
- A note should be added to the plan that all new homes shall be equipped with sprinkler systems that meet NFPA and the Town of Windham standards.
- Note 13 on the subdivision plan dated January 7, 2019 states that all dwellings within the subdivision shall include sprinkler systems meeting NFPA standards.
- In accordance with cluster subdivision standards in Section 911.K3.b the applicant must demonstrate on the plan that it is possible to locate a subsurface wastewater disposal field and a well on each lot. When determined that it is necessary for specific lots, by the Planning Board, as a Condition of Approval, the location of these elements shall be

elements of the subdivision plan, and any future changes to the location of these elements will require an amended subdivision review.

- A plan of wastewater disposal systems is shown on Sheet WW-1 dated July 23, 2018.
- A plan of wastewater disposal systems is shown on Sheet WW-1 dated October 26, 2018. Well exclusion areas should be noted the final subdivision plan.
- A note should be added to the final subdivision plan about the well exclusion areas.

C. SOIL EROSION

- An erosion and sedimentation plan, prepared by DM Roma Consulting Engineers, dated June 4, 2018, has been submitted as part of the Preliminary Plan. Notes and details are shown on Drawing D-1.
- Phase 1 of his project will require a Stormwater Permit Maine Department of Environmental Protection (DEP). Phase 2 of this project will require a Site Location of Development permit from Maine Department of Environmental Protection (DEP). The permits must be submitted with the applicable Final Plan submission.
- A stormwater management plan that meets the water quality and quantity standards as well as the flooding standard of Section 3 DEP Chapter 500 Stormwater Management must be submitted as part of the Preliminary Plan.
- Wetlands were delineated by Sweet Associates on September 8, 2017. Freshwater wetlands are shown on the plan. This project requires a Maine Department of Environmental Protection (DEP) Natural Resources Protection Act (NRPA) Tier-1 permit for wetland alterations. The permit must be submitted with the Final Plan. Note 1 on Sheet PP-1 state that there will be approximately 14,365 S.F. of total wetland impact associated with the proposed development. This note should also be on Sheets SB-1 and ASB-1.
- A stormwater management plan has been submitted as part of the June 4, 2018 Preliminary Plan submission. The project proposes to treat the 3.09 acres of new impervious area with five (5) underdrained filter basins.
- The stormwater treatment table is shown on Sheet SWP-2 of the preliminary subdivision plan set. A note should be added to the recording plan that describes the assumed impervious and developed area for each lot.
- Note 10 on the subdivision plan sheets SB-1 and SB-2 states that all buildings will require the installation of a roof drip edge filter for stormwater treatment.
- The plan also includes an inspection, maintenance and housekeeping plan. The owner is responsible for the maintenance of all stormwater management structures and related site components until such time that a homeowner's association is created.
- In an email dated June 14, 2018, Town Engineer Jon Earle P.E., notes that a waiver from the flooding standard for minor increase in peak flows should be requested for Study Point #1 (10 and 25 year storm) and Study Point #3 (10 year storm). Chapter 500 water quality standard have been met. He also noted that the minimum culvert size allowed in a public way is 15 inches and requested additional ground topography for the footprints for each of the 5 filter basins rather than relying on the LIDAR aerial survey.
- In an email dated July 31, 2018, Town Engineer Jon Earle P.E., stated that stormwater comments from June 14th have not been addressed.

- The November 5, 2018 preliminary plan submission includes a wetland delineation by Mainely Soils LLC dated October 2, 2018. The preliminary plan note 5 that there will be approximately 14,365 square feet of wetland impact associated with the proposed development.
- The November 5, 2018 preliminary plan submission includes a high-intensity soil survey prepared by Longview Partners, LLC dated October 2018.
- Revised stormwater treatment calculations have been submitted as part of the November 5, 2018 Preliminary Plan submission.
- In an email dated November 20, 2018, Town Engineer Jon Earle P.E., requested a table with the individual lot assumptions for impervious and developed areas in addition to the watershed subcatchment assumptions for impervious/developed areas.
- A revised stormwater management plan has been submitted as part of the January 7, 2019 Preliminary Plan submission. The project proposes to treat the total developed area of 7.4 acres (1.04 acres of new impervious area) with three (3) underdrained filter basins and roofline drip edges around each building.
- A lot area summary table is shown on the January 7, 2019 subdivision plan that shows the individual lot assumption for impervious and developed areas and Note 10 requires the installation of roof drip edge filters.
- In an email dated January 22, 2018 Town Engineer Jon Earle P.E., noted that the project meets Chapter 500 basic, general and flooding standards. He also request that additional ground topography for the footprints for each of the filter basins be submitted with the final plan rather than relying solely on LIDAR aerial survey.
- A Stormwater Management Law, Natural Resources Protection Act, Tier 1 Wetland Alteration, Water Quality Certification Permit was submitted as part of the Final Plan submission. The plan should include the permit # in reference notes.
- In an email dated May 16, 2019 Town Engineer Mark Arienti, P.E., requested that additional ground topography for the footprints for each of the 3 filter basins rather than relying solely on LIDAR aerial survey as part of the Final Plan submission.
- In an email dated May 16, 2019 Town Engineer Mark Arienti, P.E., noted that the stormwater plan was previously reviewed (1/22/19) by Jonathan Earle and found to be in compliance with the Basic and General standards, but requested that a spillway analysis for the underdrained soil filters for a 25-yr storm with the spillway as the sole outlet; as it was not included.
- In an email dated May 16, 2019 Town Engineer Mark Arienti, P.E., noted that the Hydrocad modeling output included in the Stormwater Management Report does not appear to include the post-development results for filter basins 1, 2, and 3, and requested it.

D. TRAFFIC

- The subdivision lots will have frontage on a new 1,500-foot-long subdivision street which intersects with Highland Cliff Road, a paved public road.
- The new road will be built to a Minor Local Street standard, as is required in cluster subdivisions.

- Street design standards for dead end streets in Section 911.K.4.g requires a hammerhead turnarounds every 1,000 feet. The sketch plan shows a hammerhead at approximately 750 feet.
- Sight distance at Maysens Way for both directions along Highland Cliff Road should be shown on the Preliminary Plan. The preliminary plan submission dated June 4, 2018 states that the sight distance exceeds 500 feet looking left and exceeds 700 feet looking right.
- Section 911.M.3.d states that streetlights may be required at intersections with existing public streets. A streetlight on Highland Cliff Road at the intersection of Maysens Way would comply with the Town of Windham Streetlight Policy, adopted June 25, 2013.
- Based on the distance to uses that would generate pedestrian trips, sidewalks are not required. When sidewalks are not required for local streets, Section 911.M.5.b.6.ii requires that the applicant construct a sidewalk or a street with a widened shoulder. One (1) additional foot of paved shoulder, on each side of the street, shall be added to the required minimum shoulder width.
- A traffic impact analysis must be submitted with the Preliminary Plan submission as the subdivision is projected to generate more than 140 vehicle trips per day.
- The preliminary plan submission dated June 4, 2014 states that the proposed 22 residential lots are expected to generate 22 peak hour trip ends.
- There is a large property which abuts the proposed subdivision (Map 7 Lot 29). Section 911.M.3.a (page 9-51) and Section 911.M.5.b.5.iii (page 9-60) allows the Board to require the dedication of a right-of-way to provide continuation of the road where future development is possible.
- A road plan and profile, prepared by DM Roma Consulting Engineers, dated June 4, 2018, shown on Sheet 4, 5 and 6, was submitted as part of the Preliminary Plan. The roadway cross section is shown on Sheet 10.
- The Preliminary Plan dated June 4, 2018 shows on Sheet ASB-1 a private right-of-way to the abutting property Lot 32A, near the property line of Lot 29. This future right-of-way should also be shown on Sheet SB-1 and offered to the Town when the road right-of-way is offered for public acceptance.
- In an email dated June 14, 2018, Town Engineer Jon Earle P.E., asked if the road would be offered for public acceptance prior to the start of Phase 2. Binder pavement must over winter prior to surface paving. The sight distance is noted in the narrative but should also be shown on the plan. A stop sign and detail should be added to the plans.
- A traffic assessment prepared by William J. Bray, P.E. of Traffic Solutions dated July 22, 2018 concludes that the 22 lot residential subdivision can be expected to generate 209 daily trips; seventeen (17) trips in the morning peak hour and 22 trips during the afternoon peak commuter hours. Maine DOT's most recent three year accident safety audit shows a total of 4 vehicle crashes have been reported for the full length of Highland Cliff Road, and that vehicle sightlines measured in both direction from the proposed subdivision entrance onto Highland Cliff Road exceeds the sight distance standard.
- The road profile shown on Sheet D-1 dated July 23, 2018 reflects the waiver approved by the Planning Board on June 25, 2018 to require an additional foot of paved shoulder, and a reduced width gravel shoulder.
- In an email dated July 31, 2018, Town Engineer Jon Earle P.E. requested sight distance shown on the subdivision plan and a stop sign and construction detail.

- The Preliminary Plan dated November 5, 2018 shows a proposed land swap with the abutter to allow for the subdivision road to terminate at the property line for a connection to a future development. The plan shows a hammerhead turnaround at end of the proposed street. The Minor Local Street Standard requires a cul-de-sac. A written waiver request should be submitted.
- A road plan and profile, prepared by DM Roma Consulting Engineers, dated November 5, 2018, shown on Sheet 4, 5 and 6, was submitted as part of the Preliminary Plan. The roadway cross section is shown on Sheet 10.
- The Preliminary Plan dated January 7, 2019 shows the subdivision road to terminate with a hammerhead turnaround at end of the proposed street. The Minor Local Street Standard requires a cul-de-sac. A written waiver request should be submitted. A right-of-way to the abutting property is shown on Lot 12 and labeled for future road connection.
- In an email dated January 22, Town Engineer Jon Earle P.E. had no further comment as there is no change to the road cross section and the proposed second hammerhead design meets town standards. He recommended that the traffic impact analysis be revised for the final plan submission to show traffic generated for the reduced project size.
- A waiver request for the subdivision road to terminate with a hammerhead turnaround at the end of the proposed road was granted by the Planning Board on 1-28-19.
- In an email dated May 16, 2019 Town Engineer Mark Arienti, P.E., commented that as noted in the 1/22/19 review comments by Jonathan Earle, prior to final plan submission, the traffic study should be revised to show traffic generated from the reduced project size and not what was originally submitted.

E. SEWERAGE

- The development will be served by individual private subsurface wastewater disposal systems.
- Soil test pit analysis prepared by Alexander A. Finamore, LSE dated June 8, 2018 show that each lot has adequate soils to support a private septic system. Test pit locations are shown on the plan.
- Additional soil test pit analysis prepared by Alexander A. Finamore, LSE dated October 17, 2018 show that each lot has adequate soils to support a private septic system. Test pit locations are shown on the plan.

F. SOLID WASTE

- Residents of the single-family dwellings will participate in the Town's pay-per-bag garbage program.
- Development of these lots should not produce an undue burden on the Town's ability to collect and dispose of solid waste.

G. AESTHETICS

- The site is currently undeveloped. It is wooded and includes a large contiguous wetland area near the center of the parcel.
- There are no documented rare botanical features or significant wildlife habitat documented on the site.
- A landscape plan is required for the preliminary plan submission. Street trees are required at least every fifty (50) feet (§ 911.E.1.b). Street trees are not shown on the Final Plan.
- Limits of tree clearing are shown on the plan. Note 11 on the preliminary plan states that clearing of trees is not allowed in areas where tree cover is depicted on the plan for a period of at least five (5) years from the date of Planning Board approval.
- At the January 28, 2019 meeting, the Board requested notes on the plan detailing the landscaping plan for a buffer with the abutting properties to lots 6 & 7, and that it be a deeded no-cut buffer.

H. CONFORMITY WITH LOCAL PLANS AND ORDINANCES

- Comprehensive Plan:
 - The plan does meet the goals of the 2017 Comprehensive Plan.
- Land Use Ordinance:
 - All lots fall within the minimum and maximum lot sizes of 30,000-50,000 square feet (one lot 60,000 sf max) and frontage (100 feet or 50 feet on cul-de-sac) for cluster lots in the F zoning district.
 - Net residential density calculations are shown on the Plan.
 - No more than 30% of the lots have direct vehicular access onto an existing public road.
 - The total area of reserved open space equals or exceeds 50% of the gross land area of the property to be subdivided.
 - The open space reserved includes 50% of the land suitable for development.
 - The open space in the subdivision is required to be contiguous but is shown as three areas on the preliminary plan. The Board approved a waiver from this standard. The January 7, 2019 preliminary plan shows two (2) areas of open space.
- Subdivision Ordinance
 - A landscaping plan must be submitted with the Preliminary Plan.
 - Standard notes and the standard condition of approval must be shown on the plans.
 - The subdivision is utilizing the 20% density bonus to gain four (4) additional lots. In order to be eligible, the open space must be open for general public use, not just homeowners within the subdivision. Access easement for the open space must be recorded in the registry prior to the issuance of building permits. See Condition of Approval #2.
 - The Tax Map and Lot numbers provided by the Tax Assessor must be shown on the Final Plan.
 - In an email dated May 16, 2019 Town Engineer Mark Arienti, P.E., commented that the applicant should provide monumentation/pins at all lot corners in conformance with 911.A.3.b. One or more of the rear lot pins are missing on Lots 5, 8, 9, 10 and 11.

- Subdivision plan data compatible with the Town GIS must be submitted as part of the Final Plan submission.
- Others:
 - Chapter 221 Street Naming and Addressing: The Assessing Department approved the road name, Maysens Way, shown on the preliminary plan.
 - On April 24, 2018 the Town adopted a Moratorium Ordinance on Mineral Extraction. At the Development Team meeting on May 1, 2018 the applicant indicated that existing material found on site would be used for the construction of the roadway. The applicant should specify the amount of material that is proposed to be taken off site.
 - The preliminary plan submission dated June 4, 2018 states the area that will be occupied by the Phase 2 lots will be graded as generally shown on Sheet 7 of the plan set and the sand and gravel material that will be excavated from the Phase 2 area will be used by the landowner and is not intended for public sale. In an email dated June 14, 2018, Town Engineer Jon Earle P.E requested that the excess sand and gravel material be quantified.
 - The July 23, 2018 submission provides an estimate of excavation quantities of a net cut of 78,865 cubic yards.
 - The November 5, 2018 submission includes a revised road plan and profile. In an email dated November 20, 2018 Town Engineer Jon Earle, PE stated that it does appear that the work will result in the same amount of cut and fill volumes. He requested a submission in excavation quantities as part of the final plan submission.
 - The revised plans that include only 11 house lots do not propose removal of a significant amount of fill material

I. FINANCIAL AND TECHNICAL CAPACITY

- A cost estimate for the project was included in the November 5, 2018 submission.
- A letter from Andrew M Cook, Senior Vice President at People's United Bank, dated June 7, 2018 was submitted as evidence of financial capacity.
- The applicant has provided information on the licensed professionals working on this project as evidence of technical capacity

J. RIVER, STREAM OR BROOK IMPACTS

- This project is located within the Colley Wright Brook watershed.
- The 75 foot Stream Protection District for the tributary to Colley Wright Brook that is located just beyond the northern corner of the property is shown on the plan at the rear of Lots 8 and Open Space 2 on the preliminary plan.
- The project will not adversely impact any river, stream, or brook.

CONCLUSIONS

1. The proposed subdivision **will not** result in undue water or air pollution.
2. The proposed subdivision **has** sufficient water available for the reasonably foreseeable needs of the site plan.
3. The proposed subdivision **will not** cause an unreasonable burden on an existing water supply.
4. The proposed subdivision **will not** cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results.
5. The proposed subdivision **will not** cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed.
6. The proposed subdivision **will** provide for adequate sewage waste disposal.
7. The proposed subdivision **will not** cause an unreasonable burden on the municipality's ability to dispose of solid waste.
8. The proposed subdivision **will not** have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline.
9. The proposed subdivision **conforms** with a duly adopted site plan regulation or ordinance, comprehensive plan, development plan, or land use plan.
10. The developer **has** adequate financial and technical capacity to meet the standards of this section.
11. The proposed subdivision **is not** situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in Title 38, Chapter 3, subchapter I, article 2-B M.R.S.A.
12. The proposed subdivision **will not** alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water.
13. The proposed subdivision **is** situated entirely or partially within a floodplain.
14. All freshwater wetlands within the proposed subdivision **have** been identified on the plan.
15. Any river, stream, or brook within or abutting the subdivision **has** been identified on any maps submitted as part of the application.
16. The proposed subdivision **will** provide for adequate storm water management.
17. ~~If any lots in the proposed subdivision have shore frontage on a river, stream, brook, or great pond as these features are defined in Title 38, section 480-B, none of the lots created within the subdivision have a lot depth to shore frontage ratio greater than 5 to 1.~~
N/A
18. The long-term cumulative effects of the proposed subdivision **will not** unreasonably increase a great pond's phosphorus concentration during the construction phase and life of the proposed subdivision.
19. ~~For any proposed subdivision that crosses municipal boundaries, the proposed subdivision **will/will not** cause unreasonable traffic congestion or unsafe conditions with respect to the use of existing public ways in an adjoining municipality in which part of the subdivision is located. (N/A)~~
20. Timber on the parcel being subdivided **has not** been harvested in violation of rules adopted pursuant to Title 12, section 8869, subsection 14.

CONDITIONS OF APPROVAL

1. Approval is dependant upon, and limited to, the proposals and plans contained in the application dated April 23, 2018, as amended January 7, 2019 and supporting documents and oral representations submitted and affirmed by the applicant, and conditions, if any, imposed by the Planning Board, and any variation from such plans, proposals and supporting documents and representations are subject to review and approval by the Planning Board or the Town Planner in accordance with Section 913 of the Subdivision Ordinance.
2. An access easement for public use of the open space must be recorded in the Cumberland County Registry of Deeds prior to the issuance of building permits.