

October 14, 2020

MEMORANDUM

FORMAL ACTION & RECOMMENDATIONS MEETING OF 10-15-20

To: Conservation Commission/Inland Wetlands and Watercourses Agency

From: Tom Mocko, Environmental Planner

Re: **Application of Dependable Construction, LLC** (Dan Gassner, Member) for: **an inland wetlands and watercourses permit; and recommendations to the Town Plan & Zoning Commission for subdivision approval and approval of a Section 6.8 (rear lot) Special Permit** concerning the proposed **29-lot Stallion Ridge Open Space Subdivision** – 37-acre site, formerly an equestrian facility at **524 Bell Street** – Rural Residence & Groundwater Protection Zone (overlay) 1 – Alter & Pearson, LLC – Hallisey, Pearson & Cassidy Engineering Associates, C.E. & L.S. – James Sipperly, Soil Scientist & Connecticut Wetland Scientist

REVIEW: The Commission reviewed this proposal four times during 2019 beginning on Valentine's Day. A new civil engineering firm has since completed the design for this proposed open space subdivision. The proposal now comprehensively reacts to most all of the previously stated concerns from the Commission's members; an apparent exception relates to proposing alternative energy options (e.g. solar, heat pump, geothermal) to the proposed house lots.

The proposed open spaces for this open space subdivision are to be given in the form of private conservations easements on the majority of individual building lots throughout the project.

Public MDC water supply and Town sanitary sewers are being extended northerly up Bell Street from where they currently exist. For the most part, the proposed partly-gravity sewer line being extended northerly up Bell Street is now shallower than previously designed; the proposed depths primarily range from four to five feet below road grade. A pressurized, forced-main sanitary sewer system is proposed for all of the proposed 29 lots.

Basements will be kept dry using sump-pumps where gravity footing/foundation drains are not achievable due to the land surface grades/topography.

Natural gas is not available to serve the proposed subdivision, so the developer plans to install underground propane tanks on most all of the lots as the source for heating homes. A condition of approval will serve to address requiring proposed tanks to be located in areas of high seasonal groundwater be properly anchored to prevent them from floating out of the ground.

The proposed mitigation measures to address stormwater detention and water quality after development include:

- Using a combination infiltration and level spreader structure on each of lots 1 through 5 (sheet 8) for each house's roof runoff; do we want to prescribe using an in-line filtration structure in order to lengthen the lifespan and effectiveness of the proposed infiltration and level spreader structures;
- Constructing a bioswale or grass conveyance swale (sheet 9) from the southeast corner of lot 24 and then across the rear of lots 23, 22, 21 and 20 before entering an inlet to a 15-inch pipe;
- Constructing a riprap swale in the northeast portion of lot 25 (sheet 9) in order to convey a portion of the existing Bell Street runoff into the site's central wetlands;
- Constructing small bio-retention basins or rain gardens in the rear of lots 25, 26, 27, 28 & 29 (sheets 9 & 10) in order to provide treatment before discharging into the site's central wetlands;
- Constructing a combined "meadow filter strip" in the southeast corner of lot 11 and northeast corner of lot 12 (sheet 9); and
- Constructing two, interconnecting stormwater (detention & water quality) basins, that perform the majority of project's mitigation, in the southerly portions of lots 16 & 17 (sheet 10).

These stormwater mitigation structures were creatively designed and should be very effective once constructed; nice job.

The plans' proposed soil erosion and sediment control plan, narrative, notes and details are conservatively well devised for this site which contains sizable land areas of the finer-textured, silt loam soils which are often problematic with erosion and sediment transport. The plan involves construction occurring in four phases. Phase 1 involves extending the utilities and sidewalks along Bell Street. Phase 2 includes individual lot development of lots 1, 2, 3, 4 & 5 along Bell Street. Phase 3 involves construction of Stallion Ridge Road and lots 6 through 24, inclusive. Phase 4 involves individual lot development of lots 25, 26, 27, 28 & 29 along Bell Street. More effective types of sediment barriers (e.g. silt saxe) are included on the site where warranted. Plan sheets 11, 12, 14, 20, 21, 24, 25, 26 & 27 contain the erosion and sedimentation control related aspects.

Remember the 48-inch white oak tree and that the plan remains to passively save it.

Also, for your review and attached to your email are:

- Consultant Jim Sipperly's reports dated 10-14-20 (wetlands soil scientist report) and 10-05-19 (invasive plants control plan); and
- The new wetlands permit application.

Items that should be on the plans, but were not detected on them are having the soil scientist's

signature within the provided signature block on the applicable site plan sheets, specifying what species of native street trees will thrive on the site to plant on each lot, and adding the third required street tree symbol on the site plans for each lot.

Draft motions with assigned conditions of approval should be available and emailed prior to the meeting

TM:gfm