



The Dubai Group, Inc.

84 Range Road, Windham, NH 03087

603-458-6462 thedubaygroup.com

MEMORANDUM

To: Concord Zoning Board

Date: July 25, 2019

From: Doug MacGuire, PE

Re: Project Narrative
Glen Ellen – Phase II

Glen Ellen was originally submitted and conditionally approved in 2008. Glen Ellen is an open space subdivision which includes the creation of 4 frontage lots, 1 farmhouse lot (existing structures), and 30 condominium units. Due to the recession, the project was brought back to the Town to be phased. The first phasing allowed for the subdivision of the four frontage lots, farmhouse lot, and creation of the open space easement. The intention of this current submission is to proceed forward with the second phase of the project, which involves the subdivision of the condominium lot and developing the first thirteen condominium units. The plan reflects the applicable portions of the previously approved subdivision plan of the thirteen condominium units. If and when the applicant intends to build the remaining portion of condominiums (units 14-30) with supporting infrastructure, that portion of the project will be submitted as the Phase III Site Plan application.

The purpose of the second phase of this project is to subdivide and develop a vacant site for 13 condominium units with supporting infrastructure. The proposed subdivision is to divide the existing lot 7-Z-48 into two lots. The newly subdivided parcel (7-Z-48-A) has a total land area of 23.469 acres, located at Hoit Road, Concord NH. It is located within the Open Space Residential District (RO) in Concord. The parcel also is within the Shoreland Protection Overlay District and the Flood Hazard Overlay District for small portions of the parcel. The newly subdivided parcel isn't within either of those overlay districts. The existing site has no engineered drainage control or improvements on-site.

No wetland impacts are proposed on-site. The soils on-site are SCS Hydrologic Soil Group "B" and "C". The site is undeveloped, and the lot is a mixture of trees and grass cover, with wetlands on the central southern portion of the property.

The proposed development consists of developing a newly subdivided vacant lot in Concord NH with 13 condominiums, with supporting infrastructure. The proposed condominiums will be located on the proposed Shelburne Lane, which will be located off Gorham Drive. The condominiums will be serviced by septic systems and wells. The drainage systems have been designed in accordance with NHDES requirements, and they include a detention pond and various treatment swales.



View over parcel 7-Z-49 (subdivided parcel in Phase I) towards project area.



View looking into project parcel (approximate proposed location of Gorham Drive).



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MEMORANDUM

To: Concord Conservation Commission

Date: August 8, 2019

From: Jessica McNeill, EIT

Re: Project Narrative - CUP
Glen Ellen – Phase II

Glen Ellen was originally submitted and conditionally approved in 2008. Glen Ellen is an open space subdivision which includes the creation of 4 frontage lots, 1 farmhouse lot (existing structures), and 30 condominium units. Due to the recession, the project was brought back to the Town to be phased. The first phasing allowed for the subdivision of the four frontage lots, farmhouse lot, and creation of the open space easement. The intention of this current submission is to proceed forward with the second phase of the project, which involves developing the first thirteen condominium units. The plan reflects the applicable portions of the previously approved plan of the thirteen condominium units. The purpose of the second phase of this project is to develop a vacant site for 13 condominium units with supporting infrastructure.

We respectfully request a Conditional Use Permit (CUP) to allow for a drainage improvement to be located within the wetland buffer. This CUP request was previously approved with the original submission of all three phases. In particular, the request is to allow a treatment swale to be graded within the wetland buffer west of the proposed Gorham Drive entrance. This swale is located to provide treatment for the runoff from Gorham Drive. The total area of disturbance is approximately 2,000 SF.

- 1. The disturbance of the buffer is necessary to the establishment of an allowable principal or accessory use on the buildable land area of the lot;*

The disturbance to the buffer is necessary due to the location of Gorham Drive. The runoff from Gorham Drive needs to be collected and treated in order to meet NHDES requirements. The drainage improvement will collect and infiltrate the runoff prior to discharging to the wetland.

- 2. The proposed disturbance to the buffer cannot practicably be located otherwise on the lot to eliminate or reduce the impact to the buffer and represents the minimum extent of disturbance necessary to achieve the reasonable use of those portions of the lot consisting of buildable land;*

The location of the proposed disturbance cannot change because of where the collection of the Gorham Drive runoff occurs. The impact to the buffer is minimized throughout Phase II by being the only disturbance proposed to the wetland buffer. All other drainage improvements and grading has been kept outside of the buffer.



3. *The proposed disturbance to the buffer minimizes the environmental impact to the abutting wetland, and to downstream property and hydrologically connected water and wetland resources;*

The disturbance minimizes the impact to the abutting wetland by providing treatment prior to discharging to the wetland. The treatment meets NHDES Env-Wq 1500 requirements. The stormwater analysis shows a decrease in post-development runoff to the wetland when compared to pre-development conditions.

4. *Where applicable, wetland permit(s) have been received or are obtained from the NHDES and USACOE;*

No wetland permits are required, because no impacts to the wetlands are proposed.

5. *Where applicable, permits or proof of compliance with all other state and/or federal regulations have been received or are obtained.*

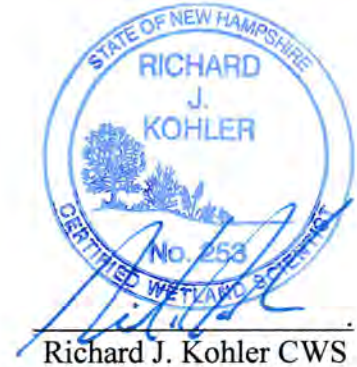
All applicable permits will be obtained.

August 6, 2019

The Dubai Group Inc.

Engineers | Planners | Surveyors
84 Range Road, Windham, NH 03087
P- 603.458.6462 C- 603.203.4755
www.TheDubayGroup.com

RE: Glen Ellen Phase II
Map 07 Block Z Lot 48
Hoit Road Concord, NH.



WETLAND DELINEATION ASSESSMENT & CERTIFICATION
PER THE ARMY CORPS OF ENGINEERS
REGIONAL MANUAL

SITE ASSESSMENT METHOD:
Performed August 6, 2019

Using the reference plan dated July 17, 2019 and aerial photographs (attached) I navigated the subject Wetland Boundaries, as denoted on the attachments.

Applying the three parameter methodology I determined what I would consider to be the jurisdictional wetland boundary within eight sample plots of the subject wetland areas.

FINDINGS:

Per my sample plots and navigation along the observed edge of the wetlands, I was able to recreate the polygon illustrating the jurisdiction wetland boundary as shown on the reference plan.

Further, I consistently observed wetland flagging remnants along a coincidental line with my determined boundary.

SUMMARY:

Per my site evaluation I have determined, and certify, as a Licensed Wetland Scientist in the state of New Hampshire that the Jurisdictional Wetland Boundary, as illustrated on the subject reference plan "GLEN ELLEN PHASE II" dated July 17, 2019, are correct and consistent with the methodology by which they were delineated and stated on the plan.

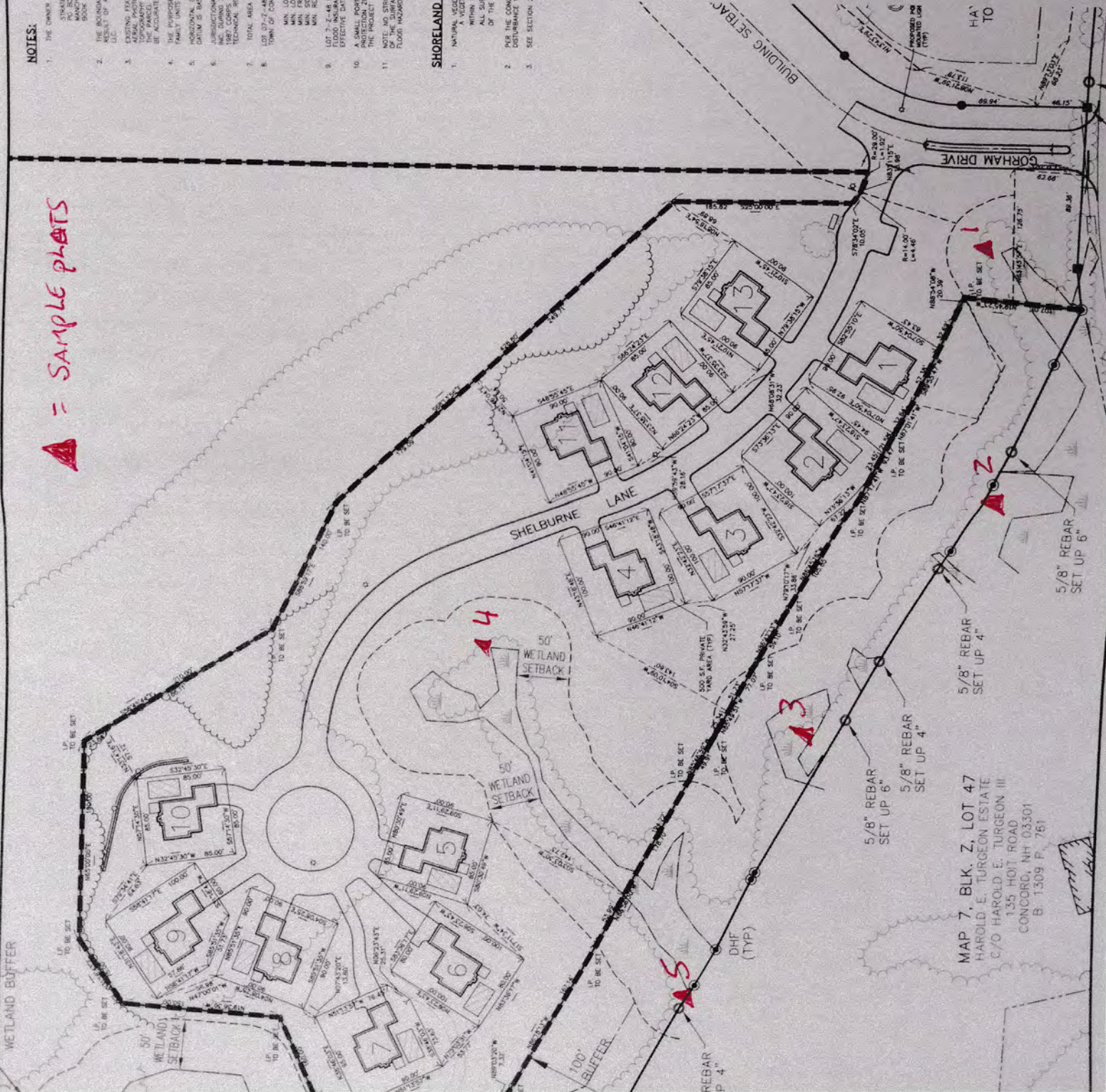
A = SAMPLE PLATS

NOTES:

1. THE OWNER OF RECORD:
STRATEGIC CONTRACTING COMPANY, LLC
PO BOX 4756
CONCORD, NH 03308
BOOK 3451 PAGE 1515
2. THE BOUNDARY INFORMATION SHOWN HEREON IS BASED ON THE RESULT OF A FIELD SURVEY PERFORMED BY PROMISED LAND SURVEY, LLC
3. EXISTING FEATURES AND TOPOGRAPHY SHOWN HEREON ARE BASED ON AERIAL PHOTOGRAPHS AND FIELD SURVEY DATA. EXISTING TOPOGRAPHY WITHIN DENSE WOODS THAT LIES WITHIN PORTIONS OF THE PARCEL PROPOSED CONVEYANCE IS NOT SHOWN AND IS NOT TO BE CONSIDERED FOR THE PURPOSES OF THIS PLAN IS TO SHOW THE LAYOUT OF 13 SINGLE FAMILY LOTS ON THE PROPOSED NEWLY SUBDIVIDED PARCEL 7-2-48. DATUM IS BASED ON NAD 83.
4. JURISDICTIONAL WETLANDS DELINEATED BY NH SOIL CONSULTANTS, INC. DURING 2/2003, 5/2005, AND 7/2006 IN ACCORDANCE WITH 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT 17-0-1-1.
5. TOTAL AREA OF THE PARCEL IS 1,022.359 SQ. FT. OR 23.469 ACRES.
6. LOT 7-2-48 IS ZONED OPEN SPACE RESIDENTIAL DISTRICT PER TOWN OF CONCORD ZONING MAP.
7. MIN. LOT FRONTAGE: 20.0 FT.
MIN. LOT DEPTH: 10.0 FT.
MIN. FRONT YARD: 5.0 FT.
MIN. SIDE YARD: 5.0 FT.
MIN. REAR YARD: 5.0 FT.
8. LOT 7-2-48 PARTIALLY LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FLOOD INSURANCE RATE MAP NUMBER 530120301A, WITH AN EFFECTIVE DATE OF APRIL 16, 2010.
9. A SMALL PORTION OF LOT 7-2-48 LIES WITHIN THE SHORELAND FLOOD HAZARD DISTRICT. THE PROJECT WILL BE LOCATED WITHIN THE SHORELAND FLOOD HAZARD DISTRICT.
10. NOTE: NO STRUCTURES MAY BE LOCATED WITHIN ANY PORTION OF THE SURFACE CONFIGURATION OF THE LAND BE FORWARDED IN THE FLOOD HAZARD DISTRICT.

SHORELAND PROTECTION DISTRICT:

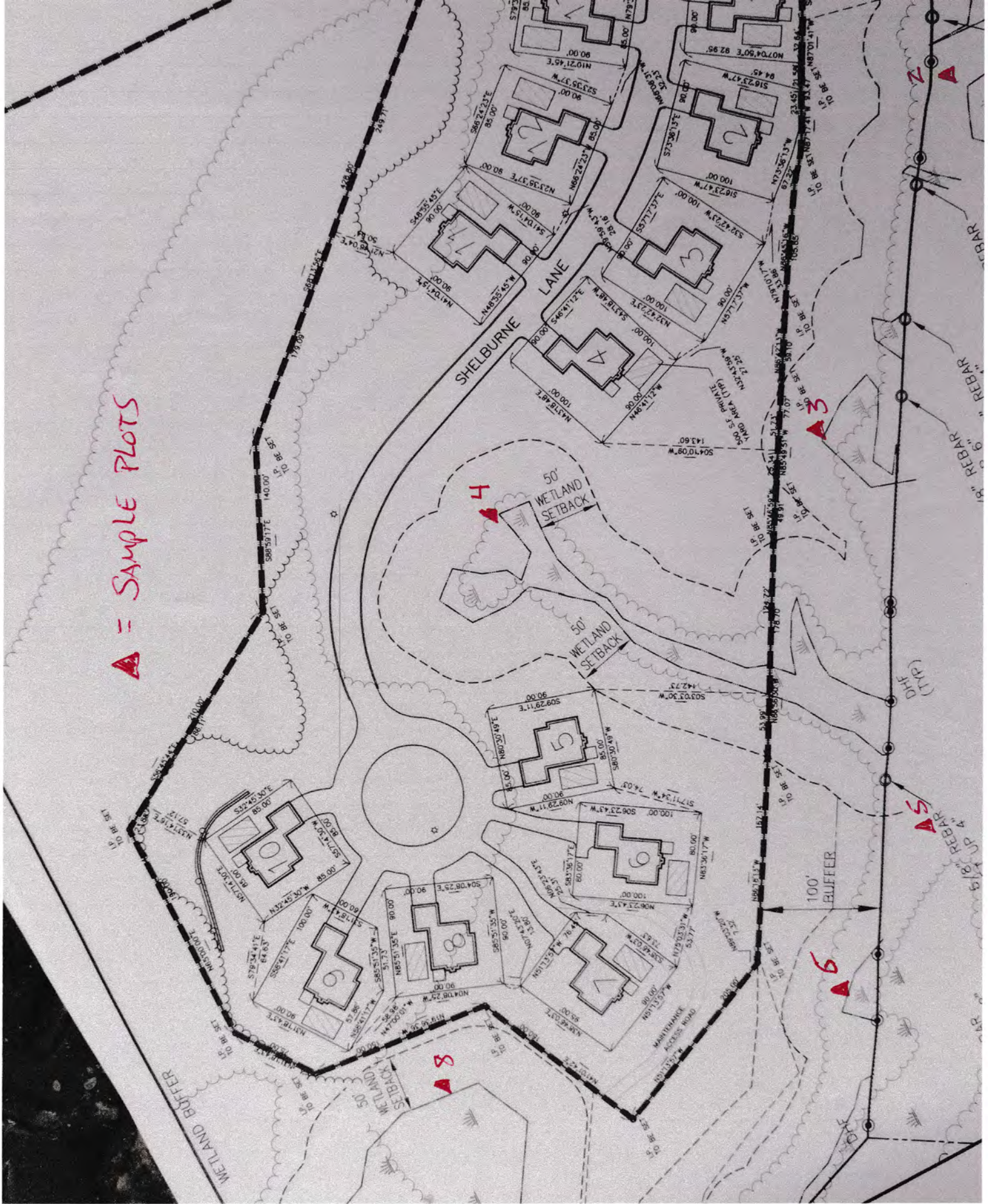
1. NATURAL VEGETATION BUFFER REQUIREMENTS:
A VEGETATIVE BUFFER SHALL BE MAINTAINED AND MANAGED WITHIN SEVENTY-FIVE (75) FEET OF THE REFERENCE LINE OF ALL SURFACE WATERS AS LISTED IN SECTION 28-3-3-1(2), LIMITS OF THE SP DISTRICT OF THE ORDINANCE.
2. PER THE CONCORD ZONING ORDINANCE THERE IS A 50' NO DISTURBANCE WETLAND BUFFER AS SHOWN.
3. SEE SECTION 28-3-3-1 FOR ALL REQUIREMENTS.



MAP 7, BLK. Z, LOT 47
HAROLD E. TURGEON ESTATE
C/O HAROLD E. TURGEON III
135 HOIT ROAD
CONCORD, NH 03301
B 1309 P. 761

BUILDING SETBACK
CORHAM DRIVE
HA' TO

▲ = SAMPLE PLOTS



153 HOIT RD. CONCORD





The Dubai Group, Inc.

84 Range Road - PO Box 174
Windham, NH 03087
(603) 458-6462

September 4, 2019

Beth Fenstermacher, Assistant City Planner
41 Green Street
Concord, NH 03301

**Re: Map 07, Lot 48
Site Plan Review
Glen Ellen Phase 2
Hoit Road
Concord, NH**

Dear Ms. Fenstermacher:

We have received the comment letter from the City of Concord dated August 21, 2019 for the above referenced project. Based on that review, we offer the following revised plans and responses to comments.

Planning Review Comments:

- 3.1 The correct nomenclature for lot referencing is Map 07Z Lot ## (there are no blocks, just map and lot numbers). Please revise for all lots on all plans, title blocks, and notes.

Dubay Group Response: Lot referencing has been revised on all plans, title blocks, and notes.

- 3.2 It is our understanding that the conservation easement area will not be subdivided to create a new lot. Please update all sheets with the correct lot references.

Dubay Group Response: This is correct. The lot lines have been adjusted to represent the conservation easement instead of a subdivision.

- 3.3 On Sheet 2, Existing Conditions Plan, show the existing conservation easement area, including metes and bounds for the entire easement area. In addition, revise the notes as follows:

- Note 6, add the current wetlands certification information, including the wetland scientist name, and date of the certification
- Note 8, revise "Town" to "City". In this note, the dimensions should instead reference the cluster requirements, per Section 28-4-7 (e)(1), (2), and (3)

Dubay Group Response: Existing conservation easement area is now shown on the plan. The Wetland Scientist has determined that the Jurisdictional Wetland Boundaries as depicted on the plan are accurate



as delineated (see attached letter). "Town" has been changed to "City". Note 6 (previously 8) explains that the site is a cluster development and meets the open space requirements as shown on sheet 3.

- 3.4 Please provide the Shoreland Protection district boundaries on the plans.

Dubay Group Response: *Shoreland Protection District boundaries are now clearly shown on sheets 4-7.*

- 3.5 Per Section 16.03(21) of the Subdivision Regulations (SDR) provide an overview plan that shows the Phasing boundaries, per Section 16.03(21). In addition, please provide a call-out for the area of focus for the site plan drawings.

Dubay Group Response: *Sheet 3 (Phasing and Open Space Plan) has been added to the set to clearly show the phasing of the project and area of focus.*

- 3.6 Please provide a Phasing timeline for the completion of Phase II and the anticipated timeline for Phase III. In addition, provide anticipated phasing of Certificates of Occupancy (CO) for units within Phase II. For example, the City will require that the road and mailboxes to be completed prior to the issuance of the first Certificate of Occupancy. Provide information at which CO the landscaping and any other site improvements will be completed.

Dubay Group Response: *Phase 2 construction is anticipated to begin immediately upon approval and Phase 3 permitting will follow soon after with construction of Phase 3 in 2021. The applicant intends to fully build the Phase 2 roadway to binder with no anticipated construction phasing.*

- 3.7 The Condominium Plan shall be recorded at the Merrimack County Registry of Deeds (MCRD). The Applicant is responsible for insuring that all plans to be recorded are in compliance with the current standards of the MCRD.

Dubay Group Response: *Comment Noted.*

- 3.8 Per Section 17.02 SDR the Applicant shall provide copies of the condominium declaration and by-laws for review by the City Solicitor prior to final approval.

Dubay Group Response: *The applicant is working on the documents with their attorney and documents will be provided to the city for review.*



- 3.9 Per Section 16.03(20), provide calculations for the required open space calculations.

Dubay Group Response: *Sheet 3 (Phasing and Open Space Plan) has been added to the set and provides calculations for open space requirements.*

- 3.10 Per Section 12.03, the Landscape Plan shall be prepared and stamped by a NH Licensed Landscape Architect.

Dubay Group Response: *Final plans will be stamped as required.*

- 3.11 On Sheet 12, revise all of the planting details to meet the requirements of the City of Concord standard details, which require that the burlap, rope, and wire be removed completely prior to planting.

Dubay Group Response: *Details have been updated.*

- 3.12 Please provide additional information about solid waste removal. Will a centralized trash/recycling area be provided? If so, please provide a location and details for the dumpster pad and required screening.

Dubay Group Response: *Note 26 on Sheet 9 (Site Plan) explains that the condominium development will be serviced by individual trash/recycling pickup.*

- 3.13 Staff recommends that the applicant consider providing a sidewalk on at least one side of the street for safe pedestrian access throughout the development.

Dubay Group Response: *Any sidewalks installed would only benefit internal site pedestrian access as there is no existing sidewalks on Hoit Road. At 13 house units on a dead end cul-de-sac, traffic volumes would be very low and pedestrian access can be accommodated on the 24 ft wide roadway proposed.*



Engineering Review Comments:

Title Sheet

1. Within the title block, the proper lot number designation is Map 07Z, Lot 48, not Map 07 Block Z Lot 48. All references to map and lot designations in the plan set should be updated accordingly.

Dubay Group Response: Lot referencing has been revised on all plans, title blocks, and notes.

Existing Conditions Overview Plan

2. The plan needs to be stamped by a licensed land surveyor, not a professional engineer. This comment also applies to the Existing Conditions Plan.

Dubay Group Response: The Existing Conditions Overview Plan is now stamped by a licensed land surveyor.

3. Within the title block, the proper lot number designation is Map 07Z, Lot 48, not Map 07 Block Z Lot 48. This needs to be corrected within the various notes, and within the plan view: Map 2, Block Z, Lot 6 should be Map 2Z, Lot 6; Map 8, Block Z, Lot 16 should be Map 8Z, Lot 16; etc.

Dubay Group Response: Lot referencing has been revised on all plans, title blocks, and notes.

4. The plan should reference and delineate, at a minimum, the following deeds: Book 3342, Page 1005; Book 3342, Page 1023; Book 3342, Page 1026; Book 3342, Page 1029; and Book 3342, Page 1032.

Dubay Group Response: The Plan now references the above deeds.

Existing Conditions Plan

5. The plan should include more data and information to the east of the site, and include a proper match line that doesn't cut off text and other symbols.

Dubay Group Response: The Existing Condition Plan has now been broken up into 4 sheets (4-7) to include previously cut off sections of the plan.



6. Bearing and distance information should be provided for all segments of the property boundary. The information for portions of the lot that are located outside of the view area can be shown on the Existing Conditions Overview Plan.

Dubay Group Response: *As previously mentioned, the Existing Conditions Plan has been broken up into four sheets and now includes bearing and distance information for all segments of the property boundary.*

7. Within the title block, the proper lot number designation is Map 07Z, Lot 48, not Map 07 Block Z Lot 48. This needs to be corrected within the various notes, and within the plan view: Map 7, Block Z, Lot 51 should be Map 7Z, Lot 51; Map 8, Block Z, Lot 14 should be Map 8Z, Lot 14; etc.

Dubay Group Response: *Lot referencing has been revised on all plans, title blocks, and notes.*

8. The plan should reference and delineate, at a minimum, the following deeds: Book 3342, Page 1005; Book 3342, Page 1023; Book 3342, Page 1026; Book 3342, Page 1029; and Book 3342, Page 1032.

Dubay Group Response: *The Plan now references the above deeds.*

Subdivision Plans

9. It is Engineering's understanding that the Subdivision Plan will be removed from the plan set and that a subdivision is not being proposed.

Dubay Group Response: *This is correct.*

Condominium Plan

10. It is Engineering's understanding that the Condominium Plan is in the process of being revised. As such, we have not reviewed the plan at this time.

Dubay Group Response: *The Condominium Plan has been updated to reflect the elimination of the subdivision.*



Site Plan

1. The following notes should be added to the plan
 - a. All work shall be performed in accordance with the City of Concord's Construction Standards and Details (latest edition).
 - b. All utilities shall be installed underground in accordance with Section 25.02(1) of the Site Plan Regulations.
 - c. Upon completion of construction the contractor shall submit as-built drawings to the Engineering Services Division.
 - d. The contractor shall set up a preconstruction meeting with the Engineering Services Division to discuss construction requirements, site inspections, associated fees, schedules, etc.
 - e. The contractor shall obtain a Driveway Permit from the Engineering Services Division for the proposed driveway.

Dubay Group Response: All aforementioned notes have been added to the Site Plan (Sheet 9).

2. There are text conflicts in the area of the main entrance drive off of Graham Road.

Dubay Group Response: Text conflicts near the entrance of the site plan have been resolved.

3. Slope granite curb should be called out for Gorham Drive as specified on the detail.

Dubay Group Response: It is now noted on the site plan where sloped granite curbing will be constructed.

4. A surface material and width should be specified for the maintenance access road and a detail should be provided.

Dubay Group Response: A dimension for width has been added to the plan and surface materials have been detailed on the Detail Sheet 3 (Sheet 18).

5. Parking stall striping should be added to the spaces located across from the mailboxes.

Dubay Group Response: Parking stall striping has been added to the plan.



Grading, Drainage, & Utilities Plan

6. Additional spot grades and grading information should be provided around the cul-de- sac.

Dubay Group Response: *Additional spot grades were added as requested.*

7. Catch basin(s) should be provided at the inside edge of pavement in the cul-de sac to provide for drainage during winter months when the center island may be blocked by snow banks.

Dubay Group Response: *The cul-de-sac drains to one low point at STA 10+39.17 (see profile). A catch basin has been added to the inside pavement edge at this location to dewater the area during snow conditions which may prevent the water from reaching the middle of the cul-de-sac.*

8. Portions of several of the septic systems are located in close proximity or within other unit's condominium lots. The condominium documents should include provisions for this or the systems should be setback at least 5 ft from the lots to allow for future replacement and/or maintenance.

Dubay Group Response: *The condominium documents will address the septic issue.*

9. It is unclear why the 15" drain line between CB 2 and CB 3 is perforated. If it is intended to function as an underdrain, a solid 15" line should be specified with a perforated underdrain running next to it to the downstream basin.

Dubay Group Response: *The drain line between CB 2 and CB 3 has been updated to not be perforated.*

10. The proposed 6" underdrain between CB 3 and CB 6 should be shown on the Grading Plan.

Dubay Group Response: *The underdrain has been added to the Grading Plan to reflect what was previously shown in the Roadway Profile.*

Site Details

11. The Street Sign Detail should reference MUTCD standards and should include a private street designation.



Dubay Group Response: *The street sign detail now references MUTCD.*

Pre-Development Watershed Plan

12. The pre-development drainage area should be divided into two so that the pre and post runoff rates can be evaluated for each of the abutting lots (7Z-42 and 7Z-47).

Dubay Group Response: *The watershed plan has been divided as requested.*

Post-Development Watershed Plan

13. The drainage area boundaries are unclear on the plan.

Dubay Group Response: *The drainage area boundaries have now been outlined in blue to help clarify.*

Drainage Analysis

14. An additional Design Point should be included so that the pre and post discharge rates can be evaluated for each of the abutting two properties (7Z-42 and 7Z-47).

Dubay Group Response: *As requested, both abutting properties have been evaluated individually. The drainage report narrative shows the resulting flow to each property. Lot 47 has a reduction in drainage flow during all storm events while Lot 42 has minor increases. A comparison chart was also provided which shows the combined flows from both nodes resulting in an overall decrease from the property. This is acceptable as both properties drain to Hayward Brook and the node providing the minor increase outlets directly to the brook. The node which travels through an abutting property to the brook experiences a decrease. Therefore, there is no adverse impact on abutting properties and the overall discharge from the site to Hayward Brook is shown to be reduced during all storms.*

15. The peak flow runoff volume information should be provided for the 10 year storm event in the summary table in accordance with Section 22.07(3) of the Site Plan Regulations.

Dubay Group Response: *The 10 year storm is included in the summary table within the drainage analysis narrative.*

16. It appears that 100 ft of sheet flow would be more appropriate based on the ground cover and slope than the 50 ft used for Subcatchment A in the pre and post development calculations.



Dubay Group Response: Sheet flow has been updated to be 100'.

17. The berm elevation used in the calculations for the detention pond is 0.5 ft higher than the elevation shown on the Grading Plan.

Dubay Group Response: Spot shots have been added to the proposed basin berm to designate the intended height.

18. A minimum of 1 ft of freeboard should be provided in the detention basin for the 50 yr storm event.

Dubay Group Response: The basin has been modified to provide approximately 0.67 feet of freeboard during the 50-year storm and was also checked for overtopping during the 100-year storm. The pond now has 0.29 feet of freeboard during the 100-year storm.

General Comments

19. The applicant should submit a plan that outlines what improvements will be complete before certificates of occupancies are issued for the units. If the improvements will be phased than the phasing may need to be evaluated in the drainage calculations to ensure that pre and post development drainage rates are maintained throughout the phases.

Dubay Group Response: No construction phasing is proposed. The roadway for Phase 2 will be constructed in its entirety to binder pavement course prior to CO.

Please let me know if there are any further questions or comments.

Sincerely,

The Dubay Group, Inc.

Doug MacGuire, PE
Vice President