

CONSERVATION COMMISSION DETAILED AGENDA

Date: March 9, 2023

Time: 6:30 pm



DECISIONS

I. WETLANDS DECISIONS

1. 130 Lane Nine– NOI- Site improvements to an existing lakefront property -DEP File# 300-1153

- Owner/Applicant: J. Tasse Representative: M. Thibeault, Landscape Evolution
- Request: Issue an Order of Conditions
- Documents Presented: n/a
- Jurisdiction:
 - **Buffer Zone** 10.53(1): General Provisions
 - Sturbridge Wetland Bylaw Regs.: 365-1.1E - H.; 365-1.2, 365-1.3 see: <https://ecode360.com/35319582>
- Project Summary: Project includes the removal and replacement of existing timber steps with stone steps. Project also includes terracing the hillside to construct a pervious patio with rock wall. Native plantings will be transplanted and invasive species removed.
- Staff Notes:
 - See past notes from Feb. 16th detailed agenda.
 - NHESP letter received. No concerns.
 - Representative has requested a continuation to provide information needed as noted in 2-16-23 detailed agenda.
- Staff Recommendations: Continue to next meeting as requested. Next meeting is March 30th.

2. 68 Paradise Lane –NOI – Raze and rebuild of a lakefront home – DEP File #300-1155

- Owner/Applicant: Jeffery Buchanan Representatives: S. Morrison, EcoTec
- Request: Issue OOC.
- Documents Presented: colored site plans
- Jurisdiction: Buffer Zone & SWB Regs 365-1.1E - H.; 365-1.2, 365-1.3
 - **10.53(1): General Provisions** “For work in the Buffer Zone subject to review under 310 CMR 10.02(2)(b)3., the Issuing Authority shall impose conditions to protect the interests of the Act identified for the adjacent Resource Area. ... where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to a Resource Area to protect the interest of [the Act]. ... The purpose of preconstruction review of work in the Buffer Zone is to ensure that adjacent Resource Areas are not adversely affected during or after completion of the work.”
 - SWB Regs. 365-1.1E - H.; 365-1.2, 365-1.3 (see: <https://ecode360.com/35319582>)
- Project Summary:
 - Project includes the raze and rebuild of the existing house. A permeable driveway, grading, stormwater improvements and corrective grading w/ wetland impacts are also included.
- Staff Notes:
 - Proof of abutter notifications required to open hearing.
 - Proof of legal ad received.
 - DEP File # issued w/ no comments.
 - Site visit was postponed due to weather conditions and needs to be rescheduled.
 - Project is not within Priority or Estimated Habitat.
 - Site contains Bank associated with Big Alum Pond and 2 Bordering Vegetated Wetlands along the eastern and western sides of the property. Bank is an existing concrete wall with stairs.
 - Majority of property is within the 25’ no disturb setback and all of site within the 50’ no build setback. (see: <https://ecode360.com/35319582> for SWB Regs on new structures)

**Conservation
Agent**

Rebecca Gendreau

**Administrative
Assistant**

Erin Carson

**Conservation
Commission
Members**

Ed Goodwin

Erik Gaspar

Roy Bishop

Ted Winglass

Karsten Stueber

308 Main Street.

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01566

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- BVW lines require verification. Unless the BVW line is clearly distinguishable, wetland verification is not possible or recommended at this time of year.
 - 50 feet of BVW impacted noted in NOI. 55 feet noted on plan. Engineer to verify. Bank impact proposed for addition of pipes to allow weeping. Bank impact to be articulated and added. The addition of pipes to drain the area may impact the areas ability to function as a wetland and it should be reviewed if this will benefit the wetland or be detrimental.
 - BLSF noted at elevation 723.4. Appears to slightly fall on the property 724 shown on the property however small amount of work may be within the BLSF for the replication. Engineer should verify if any work is within BLSF.
 - New structure is within the 25' no disturb and 50' no build setback. Structure has been moved out of the 50' no build associated with the lake, which is an improvement, but does increase in footprint within 25' of the BVWs.
 - Wetland encompasses part of lawn area that is over the shoreline stairs. Stair repairs recently made. Weeping pipes installed. Pipes had previously been located here and failure of pipes may have assisted with wetland expansion in the area.
 - Project team is proposing to regrade area to direct runoff away from the stairs and fill portion of wetland at stairs. Proposing 55 sq feet of impact and replication of 105.
 - Improvements proposed to stormwater here to include providing a deep sump catch basin for road runoff treatment and a vegetated bioretention area. These will be beneficial but could be improved by expanding retention areas. The ~50 ft drain pipe could be reduced to provide for a larger retention area.
 - Additional improvements made within the wetland on the western side to remove accumulated sediment at culvert outlet. Is this on the subject parcel? Corrective grading proposed here also.
 - Project includes dry wells for roof runoff infiltration. Do these areas support these structures? Depth to groundwater concerns?
 - Staff have been to this site w/ previous owners on various occasions. They had many concerns with saturation throughout most of the site. Site was saturated on various occasions that staff visited.
 - Engineer should provide information on depth to groundwater to verify that a partial foundation can be installed here & BMPs. Project team should describe what would be required during construction and long term if high groundwater is encountered.
 - Staff recommend that helical pilings be looked at to minimize disturbance and to eliminate these concerns. Staff are aware that a partial basement is preferred but this is a challenging site. Utilities could be located in the proposed garage.
 - Footing drain shown to discharge just outside of the wetland.
 - Alternative analysis should be provided demonstrating no alternatives to the proposal per bylaw regs. Can a narrower structure be provided or reduced parking to decrease impervious or partially impervious surfaces? Could the proposed 2-car garage be minimized to expand living space and keep from expanding closer to the BVWs? Parking appears to have been significantly increased. New structure is moved away from the lake but encroaches on wetlands.
 - A waiver would be required. Mitigation provided on revised plan. All options to meet the SWB standards must be explored and documented in able to be eligible for a waiver.
 - A breakdown of the existing structure and new structure within 25' and 50' of resource areas is shown on the plan. This also includes impervious areas. What are the impervious areas used for the calculations? How much increase in parking areas (shown as permeable driveway) is proposed? Include in table.
 - Will need an O & M Plan for all stormwater BMPs and pervious structures.
 - The board may want to consider a vegetated buffer along the BVW lines to create a no disturb buffer and want to consider concrete bounds or other markers clearly identifying the wetlands or that no disturb buffer as outlined in SWB Regs 365-1.1 which states: "At the discretion of the Commission, concrete bounds or other appropriate permanent markers clearly delineating the twenty-five-foot "no disturb" buffer, or any alternative approved-width "no disturb" buffer the Commission imposes for each property, are to be installed prior to the start of any work on-site."
- Staff Recommendations: Schedule site visit to review site. Continue hearing to the next meeting on March 30, 2023 to allow for site visit and to address comments. It should be noted that it may be necessary to continue out into the growing season if needed for wetland verification.

3. SHLO SE of 248 Podunk Road– NOI – MA DOT Geotechnical Soil Borings – DEP File #300-1154

- Owner: MassDot District 3 Applicant: MA Electric Company Representatives: H. Graf BSC Group
- Request: Issue OOC.
- Documents Presented:n/a
- Jurisdiction:
 - Buffer Zone 10.53(1): General Provisions
- Project Summary
 - Project includes exploratory geotechnical soil borings to plan for road maintenance and stormwater design along the unpaved section of Podunk Road.
- Staff Notes:
 - Proof of abutter notifications required to open hearing.
 - Proof of legal ad received.
 - DEP File # issued w/ comments: "Although a file # is being issued, please note the following: While the proposed project appears to have been designed in conjunction with MassDOT and is noted as having received DOT approval in submitted materials, MassDEP maintains that a signature from MassDOT should be submitted for a completed application."
 - Site visit was postponed due to weather conditions and needs to be rescheduled.
 - Project is not within Priority or Estimated Habitat.
 - Project includes tree removal required for soil borings.
 - Appears work is within both the state layout for Rt. 49 but also on town land. Staff have verbally been made aware that the town has an agreement in place for allowing work. NOI needs to be revised to reflect this and include approvals for work on town land.
 - Property owner permissions required as noted by DEP.
 - Most exploratory work is exempt (under the WPA) but tree removal is not. NOI filed for tree removal under WPA and for soil borings and tree removal under the bylaw. Tree and brush removal is needed to create a 20' wide cleared path to access the area. 59 trees need to be removed ranging from 2' to 9' diameter at breast height.
 - Future project will include improvements to the abandoned roadway, stormwater management and an extension of a feeder line for a future solar connection in Charlton which will be filed separately.
 - Wetland lines require verification. Unless the BVW line is clearly distinguishable, wetland verification is not possible or recommended at this time of year. BVW data sheets not included for review. Must be provided.
 - Tree removal and future work will be cited within the 25 foot no disturb setback. Work is proposed within previously disturbed areas but these have been abandoned for some time. A site visit is needed to review the area and see if current proposal will have impact on adjacent resource areas.
 - LOW shown on figure. Is additional tree removal required between the paved section of Podunk Rd to the LOW area shown? Appears area may also be grown in and is within the buffer zone.
 - It's unclear if future feeder lines may require additional tree removal or other concerns which may not meet permitting standards. It's strongly recommended that the bylaw and WPA performance standards are considered for any future designs and any potential alternative routes if permitting standards cannot be met.
- Staff Recommendations: Schedule site visit to review site and for additional information. Continue to next hearing at this time – March 30, 2023. It should be noted that it may be necessary to continue out into the growing season if needed for wetland verification.

4. 505 Main Street – NOI – Demo of a commercial building, replace with a multi-family residential building with associated parking – DEP File #300-1152

- Owner: J. Bounphasaysonh Applicant: STL Group Representatives: R. Mendez, Graves Engineering
- Request: Issue OOC.
- Documents Presented: n/a
- Jurisdiction:
 - **Buffer Zone** 10.53(1): General Provisions
 - Sturbridge Wetland Bylaw Regs.: 365-1.1E - H.; 365-1.2, 365-1.3 see: <https://ecode360.com/35319582>)
- Project Status Summary
 - Project includes the demolition of a commercial building and replacement with residential multi-family with increased impervious surface. Project was continued from 1-26-23 meeting w/ no discussion per applicant.
- Staff Notes:
 - See past notes from Feb. 16th detailed agenda.

- Representative has requested a continuation.
5. Staff Recommendations: Continue to next meeting as requested. Next meeting is March 30th.
6. **Lot 3, 20 Fiske Hill Road & 30 Main Street (Future Road named Berry Farm) – NOI-Construction of a 68 lot manufactured housing community-DEP File# 300-xxxx**
- Owner: M. Sosik Applicant: Justin Stelmok Representative: B. Madden, LEC Environmental
 - Request: Issue an Order of Conditions
 - Documents Presented: colored plans
 - Jurisdiction: Buffer Zone & Vernal Pool Habitat (Sturbridge Wetland Bylaw see <https://ecode360.com/35320117> & <https://ecode360.com/35319610>).
 - Project Description: Construction of a 68 lot manufactured home community with associated appurtenances.
 - Staff Notes: Project was previously being reviewed under DEP File #300-1132 and was withdrawn without prejudice then re-filed and was being reviewed under DEP File #300-1150. Project was again withdrawn and re-filed. Project hearing postponed at the 2-16-23 meeting.
 - Proof of abutter notifications & proof of legal ad received.
 - DEP File # and comments have not been received.
 - Site visit was postponed due to the weather and ground conditions.
 - Applicant has requested that the board waive the local filing fee. The board did elect to do so for the 2nd application. A \$50 local filing fee was assessed for this project. It would appear that the \$50 fee would have been expended by now and that a new fee should be assessed. The current fee would be \$750. Fees cover town expenses through permitting and construction of a project. As this will be a phased multi-year project, staff would recommend requiring the fee.
 - Applicant is requesting to waive requirements for soliciting proposals for peer review as it has been conducted by Oxbow Associates under the past filings.
 - Board does need to vote to continue w/ Oxbow Associates and Pare Corp. peer reviews. Pare Corp. review is being conducted jointly through the Planning Board.
 - Past peer review reports have been included in the application packet.
 - New materials included:
 - Vernal Pool Monitoring Plan
 - Reduced Salt Application Plan
 - Response to DEP Comments
 - Project site is an approx. 41.4 acre lot which has recently been subdivided from a larger parcel. The subdivision contains commercial and residential lots as the original properties (30 Main & 20 Fiske Hill) were located in both zones (residential and commercial). A roadway w/ the lot subdivision was proposed and permitted under DEP File #300-1086 by the property owner. At that time, one vernal pool was located within the buffer zone of that work. A small amount of work was proposed at the extent of the 200-foot vernal pool buffer zone. At that time, it was noted that future work could present challenges meeting performance standards based on that proposal. This was due to the presence of the vernal pool and the location of wetlands. A potential hardship could be created by the proposal.
 - SWB 365-3.11 states:
 - A. A self-imposed hardship is a circumstance brought on by decisions made by the landowner, such as:
 - (1) Failure to consider wetlands when subdividing land.
 - (2) Selling off upland access which results in a project that cannot meet performance standards.
 - (3) Purchasing land knowing that all upland access to the property interior had previously been subdivided off.
 - (4) Disregarding impacts to the resource area.
 - B. The applicant or landowner is advised to prevent situations where they may create their own hardship by not carefully considering all likely impacts to areas subject to the Wetland Protection Act or the Sturbridge Wetlands Bylaw and Regulations.
 - C. Projects may not be segmented in such a way that would limit the ability of the Conservation Commission to review all options and alternatives and take into consideration the resource area impacts.
 - D. The applicant must disclose full development plans, even if such plans are not required as part of the notice of intent process.
 - E. In determining whether a self-imposed hardship has been created, the SCC shall take into account whether alternatives exist/existed, including any lots currently or formerly owned by an applicant, and any other land which can be reasonably obtained.

F. No special consideration will be given for not being aware of the requirements of the Wetlands Protection Act, 310 CMR 10.00, the Town of Sturbridge Wetlands Bylaw, the Town of Sturbridge Conservation Commission Regulations or Policies or any part thereof.

G. No special consideration will be given for self-imposed hardships. No special consideration will be given for not being aware of the requirements of the Wetlands Protection Act, 310 CMR 10.00, the Town of Sturbridge Wetlands Bylaw, the Town of Sturbridge Conservation Commission Regulations or Policies or any part thereof. No special consideration will be given for those who seek and obtain Planning Board subdivision approval and partially develop parcels, lots or projects of any type prior to delineating and determining resource area boundaries and the 200-foot buffer zone to same."

- Project is also located within the Sturbridge Zoning Bylaw 300-4.1E as noted in the SWB Regs 365-6.1 which states: "For projects occurring on slopes of 8% or greater, the wetland buffer zone shall extend to 500 feet from the edge of wetlands to provide needed additional protection. Per the Town of Sturbridge Zoning Bylaw, § **300-4.1E**, "No soil removal or grade alterations on slopes in excess of 8% shall be permitted within 500 feet of any area subject to protection under the Massachusetts Wetlands Protection Act without prior Conservation Commission reviewing and issuing of an order of conditions."
- In addition to the original vernal pool located, two more vernal pools were identified within the buffer zone of this proposal (68 lot manufactured home community).
- As noted in SWB Regs 365-1.4 Sturbridge has a Vernal pool buffer which states that: "the first 100 feet is to be considered the minimum "no disturb" buffer. This buffer zone may be extended to 200 feet based on site conditions and impacts to critical wildlife habitat needed to keep the pool viable.
- SWB Regs 365-5.6 E. state: "Any work with in the 200-foot buffer zone to a vernal pool shall not cause a significant adverse impact to any function of a vernal pool. It shall not result in a measurable decrease in extant wildlife populations or biological community composition, structure and species richness of the site or in the vicinity, exclusive of the present or future state of adjacent or nearby property, or impair, damage or reduce in value for wildlife purposes identified specific habitat features. The Commission shall take into account indirect effects, including but not limited to effects of nearby human activities, on a case-by-case basis."
- See Attachment 2 of this agenda, for a colored plan which outlines the overall limit of work for the project and the applicable state and local buffer zones. Work is primarily located outside of the 50 foot no new structure setback but it does approach the 25 foot no disturb setback in one location.
- See Attachment 3 of this agenda, for a colored plan which outlines the vernal pool buffer zones. Work has been cited outside of the 100 foot VP BZ but is located within the 200 foot VP BZ. Please note that the boundaries of the vernal pool do not coincide with the boundaries of the bordering vegetated wetlands. They are smaller in size. This was established and agreed upon by peer reviewers.
- The current proposal includes construction of roadways, houses with driveways, decks and garages, stormwater drainage and a community center. Most of the project is located outside of the 100-foot wetland buffer zone but within the 500-foot buffer zone.
- Direct and indirect impacts to vernal pools has been a significant concern throughout the review of this project. See Oxbow peer review reports. Not only is the loss of habitat a concern but habitat fragmentation and impacts to water quality.
- Through previous filings, the project has been revised as a result of peer review comments specifically to address impacts to vernal pool habitat. As outlined in SWB Regs and noted above, vernal pool habitat extends beyond the wetland perimeter of the pool and includes upland areas. The project proposes substantial loss of habitat surrounding the vernal pools and bisects the habitat. This was noted of concern by Oxbow Associates. Oxbow noted a review of studies which stated that mole salamander populations exist and depend upon habitat over 540 feet from wetlands. Oxbow recommended that the board require that the 200-foot vernal pool habitat be protected for these reasons as outlined in the regulations. There does appear to be substantial impacts within 540 feet to the vernal pools on this lot.
- A crossing structure is proposed within one location to provide habitat connectivity. A 4 sided box culvert 6'x4' is proposed. A re-created natural substrate will be provided and grates for light. A grated bridge or 3 sided structure would be best as natural light has been found for amphibians to use these structures. A few grates may not provide as much light for them to enter. In addition, maintenance is required to maintain the natural surface. Maintenance is proposed but needs follow up to ensure it is done. O & M compliance is challenging. An elevation or drop to enter the structure or loss of natural surface can prevent them from using it. This is the only connection provided. There are no forested strips provided between the developments for amphibians or other wildlife to cross. Are there any studies which support amphibian use of this structure? A full review of alternatives, pursuant to SWB Regs should be provided for the board to consider the 4-sided box culvert vs. Oxbow's recommendations. Staff had previously recommended

that another location of at least forest be provided to allow for crossing generally in location of house #13. The addition of forested strips may be extremely valuable for all wildlife trying to cross this site.

- The applicant is proposing land protection as shown on Sheet CR2 of the site plans. Some of the land protection extends upon Lot 4 which is to the west of 2 of the vernal pools. The land protections here are within 50-100 feet of the wetlands and includes some of the 100 ft. vernal pool buffer on this lot. Future development on this lot is of concern. An additional future open space parcel is shown on Lot 4, however, no permanent protections are solidified.
- A table is provided in the narrative outlining vernal pool impacts and protections. The table should also include a breakdown of wetland and upland habitat protections as the vernal pools are smaller than the wetlands and upland habitat is critical to their survival. If that breakdown is included in those calculations, then the table should be revised to state such.
- A peer review has also been conducted for compliance with the MA Stormwater Standards. It was found that the project is in compliance. Vernal pools are fragile systems. Impacts to water quality from runoff such as changes to temperature, pH, salinity and introduction of contaminants are a concern. These concerns aren't addressed by meeting the standards. There are no measures in place to control contaminants which may come from the road or from salt uses and changes in water temperature. A reduced salt program is proposed. The Regs currently prohibit salt use within 200 feet of wetlands. How much salt would this result in for this project? Are there any studies that may be available demonstrate no pH impacts with a reduced regime at vernal pools?
- In addition, impacts to water quantity from runoff is a concern. The proposal meets current stormwater standards as modeled, however, DEP is in the process of updating the standards. One change will be to use more current NOAA data that reflects more current weather patterns. Was the modeling done to reflect the newer data? Also, the modeling was done based on the existing conditions. It would be useful for the board for the project team to go over the modeling and stormwater design since the site has poorly drained soils and the site will be excavated in some areas and filled in others. Has this been accounted for in the stormwater analysis? How do you model for this?
- Certified vernal pools are considered Outstanding Water Resources under the Surface Water Quality Standards. The board and staff have requested that the pools be certified with the NHESP. Has this been done to date? Certified pools receive extra protections from discharges under those standards. It should be verified if review pursuant to these standards for indirect discharges is required.
- DEP originally had questions in regards to the stormwater system meeting standards and questions in regards to the test pit data? Responses provided. The project team should review this for the board. Test pits noted to have been rounded all at 36-41" and rounded to 36". Is each test pit log recorded on a DEP Form 11 or equivalent which can be provided or has been reviewed by the peer reviewer and verified?
- Additional stormwater questions that the board should consider: Does the report explain how fill will be addressed or affect the system design when placed on top of? What is the depth to groundwater for structures which provide infiltration? Was mounding analysis provided for structures where the bottom will be less than 4 feet above Seasonal High Groundwater? Will monitoring wells be required?
- A vernal pool monitoring program is proposed to assess biological community and water quality? Data will be useful but what will they do if impacts noted? The project will be permitted and board could not require changes to be made.
- Staff recommend that the board protect the 200-foot VP buffer zone as allowed and recommended by Oxbow and look at improvements within all jurisdictional areas to minimize impacts. An alternative analysis to the 4-sided structure should be provided and additional protections to ensure no water quality impacts be explored. Addition of stormwater contaminant BMPs, forested swaths and additional measures to expand groundwater infiltration versus runoff should be explored.
- Correspondence received from an abutter and the Open Space Committee. Both raise concerns with the proposed project. These have been provided in advance to the board.
- Staff Recommendations: Staff recommend that the site visit is rescheduled and hearing continued to the next hearing for peer reviewers to present findings. Next meeting is March 30, 2023.

II. WETLAND DECISIONS

III. ADMINISTRATIVE DECISIONS

7. Minutes o 1/5/23 & 2/16/23 to be approved

- Staff Recommendations: Vote to accept the 1/5/23 & 2/16/23 minutes.

IV. OLD BUSINESS

8. 226 Roy Road DEP File #300-964

- Staff Notes: An update is to be provided on the status of project compliance.

9. 110 Brookfield Road

- Staff Notes: Property owner to return with plan to bring project into compliance to discuss with the board.

10. 71 Paradise Lane DEP File #300-929

- Staff Notes: Property owner requested to attend meeting. Plan established to bring project into compliance which was to be executed last summer. Staff are not aware that work has been completed. Last email had not been replied to. Letter sent requesting attendance at the meeting.

V. ADMINISTRATIVE UPDATES

- Committee Updates: CPA, Trails, Open Space, and Lakes

VI. CORRESPONDENCE

VII. NEW BUSINESS

11. Agent's Report

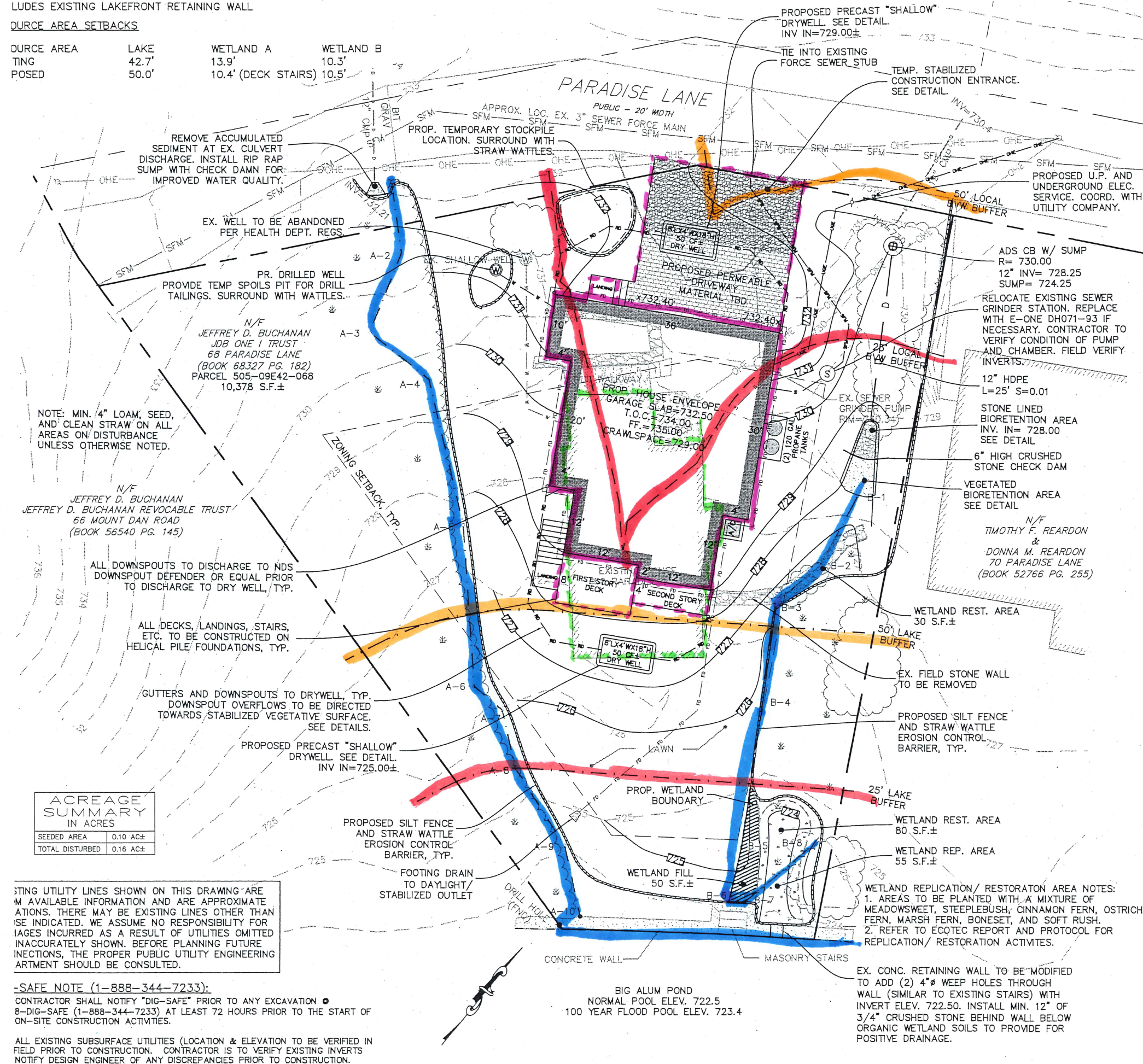
12. Next Meeting-Thursday March 30, 2023 and Site Visit Schedule-Tentative-TBD

Attachment 1

JING COVERAGE	0 S.F.	0 S.F.	134 S.F.	0 S.F.	658 S.F.	822 S.F.	182 S.F.	656 S.F.
VIOUS AREA*	0 S.F.	0 S.F.	134 S.F.	0 S.F.	761 S.F.	668 S.F.	536 S.F.	632 S.F.
LUDES EXISTING LAKEFRONT RETAINING WALL								

SOURCE AREA SETBACKS

SOURCE AREA	LAKE	WETLAND A	WETLAND B
TING	42.7'	13.9'	10.3'
POSED	50.0'	10.4' (DECK STAIRS)	10.5'



NOTE: MIN. 4" LOAM, SEED, AND CLEAN STRAW ON ALL AREAS ON DISTURBANCE UNLESS OTHERWISE NOTED.

N/F
JEFFREY D. BUCHANAN
JDB ONE I TRUST
68 PARADISE LANE
(BOOK 68327 PG. 182)
PARCEL 505-09E42-068
10,378 S.F.±

N/F
JEFFREY D. BUCHANAN
JEFFREY D. BUCHANAN REVOCABLE TRUST
66 MOUNT DAN ROAD
(BOOK 56540 PG. 145)

N/F
TIMOTHY F. REARDON
&
DONNA M. REARDON
70 PARADISE LANE
(BOOK 52766 PG. 255)

ACREAGE SUMMARY IN ACRES	
SEEDING AREA	0.10 AC±
TOTAL DISTURBED	0.16 AC±

EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE BASED ON AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THERE MAY BE EXISTING LINES OTHER THAN THOSE INDICATED. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONSTRUCTION, THE PROPER PUBLIC UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED.

-SAFE NOTE (1-888-344-7233):
CONTRACTOR SHALL NOTIFY "DIG-SAFE" PRIOR TO ANY EXCAVATION OR
8-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO THE START OF ON-SITE CONSTRUCTION ACTIVITIES.

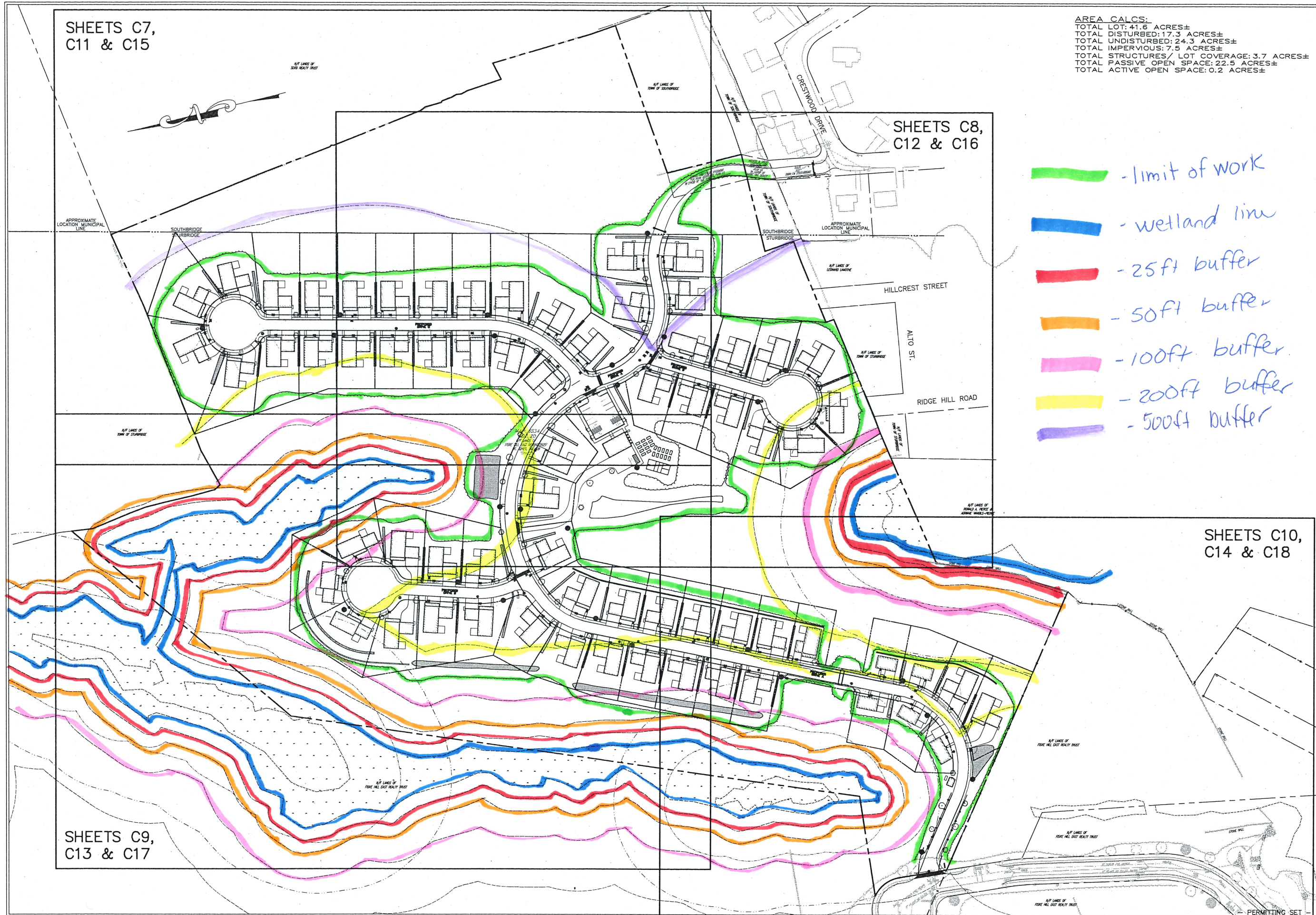
ALL EXISTING SUBSURFACE UTILITIES (LOCATION & ELEVATION TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION. CONTRACTOR IS TO VERIFY EXISTING INVERTS AND NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

- - current house
- - proposed
- - 25ft buffer
- - 50ft buffer

WETLAND REPLICATION/ RESTORATION AREA NOTES:
1. AREAS TO BE PLANTED WITH A MIXTURE OF MEADOWSWEET, STEEPLEBUSH, CINNAMON FERN, OSTRICH FERN, MARSH FERN, BONESET, AND SOFT RUSH.
2. REFER TO ECOTEC REPORT AND PROTOCOL FOR WETLAND REPLICATION/ RESTORATION ACTIVITIES.

EX. CONC. RETAINING WALL TO BE MODIFIED TO ADD (2) 4" Ø WEEP HOLES THROUGH WALL (SIMILAR TO EXISTING STAIRS) WITH INVERT ELEV. 722.50. INSTALL MIN. 12" OF 3/4" CRUSHED STONE BEHIND WALL BELOW ORGANIC WETLAND SOILS TO PROVIDE FOR POSITIVE DRAINAGE.

BIG ALUM POND
NORMAL POOL ELEV. 722.5
100 YEAR FLOOD POOL ELEV. 723.4

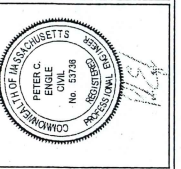


AREA CALCS:
 TOTAL LOT: 41.6 ACRES±
 TOTAL DISTURBED: 17.3 ACRES±
 TOTAL UNDISTURBED: 24.3 ACRES±
 TOTAL IMPERVIOUS: 7.5 ACRES±
 TOTAL STRUCTURES/ LOT COVERAGE: 3.7 ACRES±
 TOTAL PASSIVE OPEN SPACE: 22.5 ACRES±
 TOTAL ACTIVE OPEN SPACE: 0.2 ACRES±

- limit of work
- wetland line
- 25ft buffer
- 50ft buffer
- 100ft buffer
- 200ft buffer
- 500ft buffer

REV		DATE	DESCRIPTION	MADE	APVD
1	11.10.22	TOWN, DEP., PEER ENG. COMMENTS	PE	PE	

PETER C. ENGLE, P.E.
 PROFESSIONAL ENGINEER
 MA LIC. NO. 53736

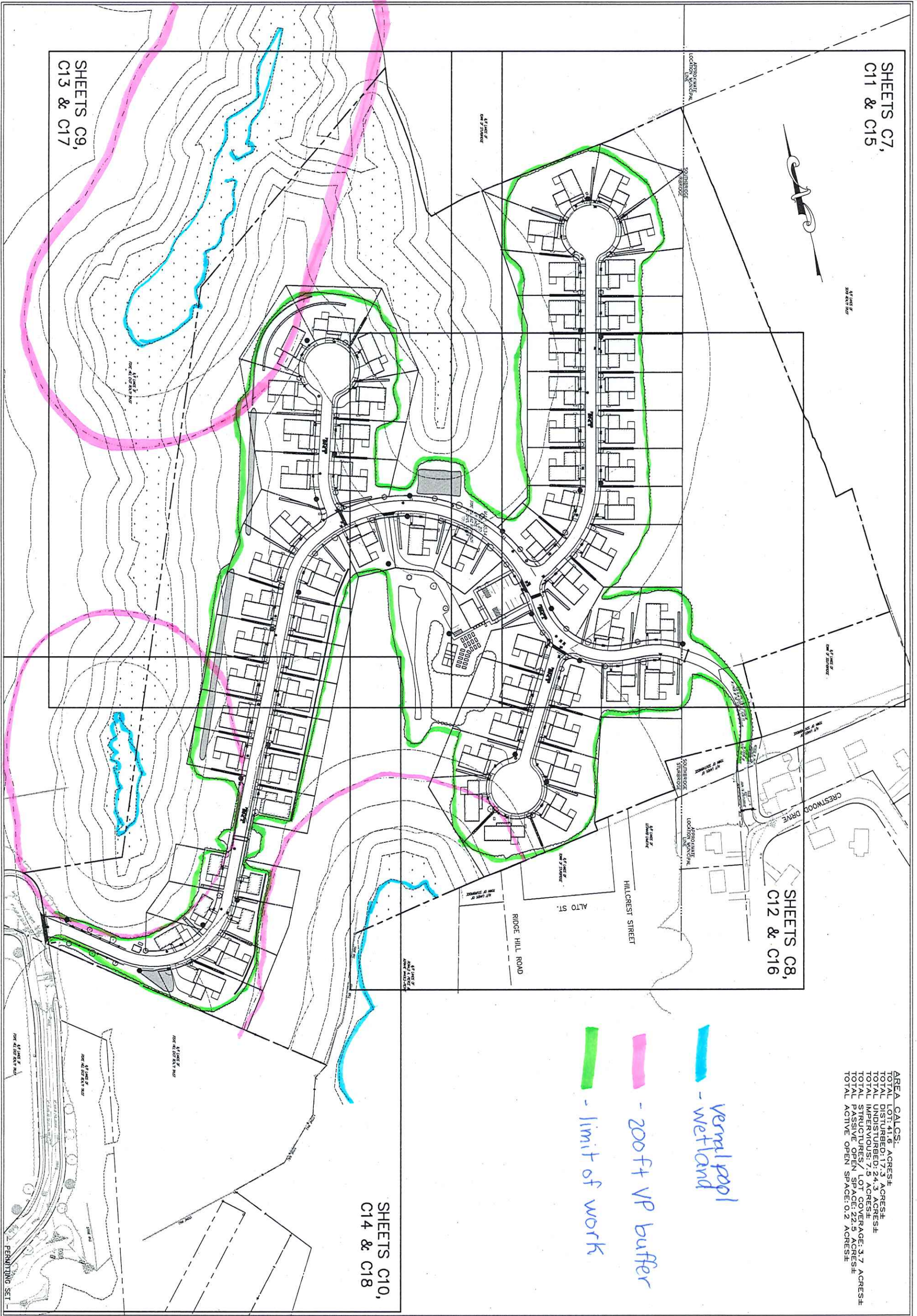


McCLURE
 ENGINEERING, INC.
 119 Worcester Road
 Charlton, MA 01507
 Tel: (508) 248-2005
 Fax (508) 248-4887
 Email: peng@mcclureengineers.com

SPECIAL PERMIT AND SITE PLAN
 "BLUEBERRY HILL ESTATES"
 LOT 3 BERRY FARMS ROAD
 STURBRIDGE, MA 01566
 PREPARED FOR
 JUSTIN STELLMOK
 557 SOUTHWEST CUTOFF
 WORCESTER, MA 01607

DRAWN BY:	WCN
DATE:	4/1/22
CHK BY:	CPM
SCALE:	1"=80'
PROJ. NO.	287-2118K

OVERALL LAYOUT /
 KEY PLAN
 SHEET C6 of 31



SHEETS C7,
C11 & C15

SHEETS C8,
C12 & C16

SHEETS C9,
C13 & C17

SHEETS C10,
C14 & C18

AREA CALCULATIONS:

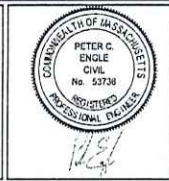
TOTAL LOT AREA:	41.6 ACRES#
TOTAL IMPERVIOUS:	7.5 ACRES#
TOTAL STRUCUTURES/ LOT COVERAGE:	3.7 ACRES#
TOTAL PASSIVE OPEN SPACE:	22.5 ACRES#
TOTAL ACTIVE OPEN SPACE:	0.2 ACRES#

- - wetland
- - 200ft VP buffer
- - limit of work

SHEET 06 OF 31
OVERALL LAYOUT / KEY PLAN

SPECIAL PERMIT AND SITE PLAN
"BLUEBERRY HILL ESTATES"
LOT 3 BERRY FARMS ROAD
STURBRIDGE, MA 01566
 PREPARED FOR
JUSTIN STELMOK
557 SOUTHWEST CUTOFF
WORCESTER, MA 01607

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 PROFESSIONAL ENGINEER
 MA LIC. NO. 53736

HOR. SCALE IN FEET: 1"=80'

REV	DATE	DESCRIPTION	MADE	APV'D
1	11.10.22	TOWN, DEP, PEER ENG. COMMENTS	PE	PE