

TOWN OF NAPLES PLANNING BOARD APPLICATION

P.O. Box 1757, Naples, Maine 04055
Phone: (207) 693-6364 / Fax: (207) 693-3667
www.townofnaples.org

Major Site Plan Review Application

Date: Aug 3, 2018

Owner/Applicant Name: Allen Land Co., LLC.

Mailing Address: PO Box 1499 Naples, ME. 04055

Telephone: 207-939-9722 Email: JCAboats@yahoo.com

Property Owner: Allen Land Co., LLC.

Property Location: 29 Seaplane Cove Rd. Map & Lot: U-01 Lot 7B

Any easements, covenants, or deed restrictions related to the property? See Attached Deed

Zoning District: Village Waivers requested: Yes

A list must be submitted for waivers

Name, address, & phone # of applicants engineer, land surveyor or planner: Dustin Roma
DMA Eng. Surveying 59 Harvest Hill Rd Windham, ME 04062
Email & dustin@dmroma.com 207-310-0506

The undersigned, being the applicant, owner or legally authorized representatives, states that all information contained in this application is true and correct to the best of his/her knowledge and hereby does submit the information for review by the Town and in accordance with applicable ordinances, statues, and regulation of the Town, State and Federal governments.

Date: 8/3/18 Signature: Gas C. Allen

Fee Schedule:

- Advertising: \$50.00
- Fee per abutter: \$7.00
- Under 1,000 sq. ft. gross floor area: \$300.00
- 1,000 – 10,000 sq. ft. gross floor area: \$400.00
- Over 10,000 sq. ft. gross floor area: \$400.00
- **Plus \$25.00 for each 1,000 sq. ft. over 10,000
- Development without building: \$400.00
- Modification of approved plan: \$100.00
- Commercial Initial permit: \$100.00
- Commercial Annual Renewal: \$50.00
- Aquatic Structure (non commercial): \$50.00
- Review Escrow: TBD

Applicants Total: \$ _____

Please include 9 copies of all supporting documents, including a letter of intent, when submitting your application to the Town Secretary. Completed applications should be received 21 days before the meeting date.

Request for Minor Site Plan Amendment 'Naples Marina' proposed Boat Storage Building
James C. Allen, Allen Land Company, LLC., Naples, Maine

Location & Owner:

James C. Allen, Allen Land Company, LLC., Naples, Maine
Mailing Address: PO Box 1499, Naples, ME

Project Location: 29 Seaplane Drive, Naples, Maine
TOWN OF NAPLES TAX MAP U-01 LOTS 7-B
Cumberland County Registry of Deeds:
Bk33425 Pg327 (Refer to Exhibit A for Deed)

Intent of Minor Site Plan Review Application:

- This a request for a 100' x 200' proposed Boat Storage Building abutting the two existing Seaplane Hangers.
- Boat Storage Building dimensions 100-ft by 200-ft by appx height of 38-ft.

Boat House Storage Building Site Description: *(See attached Building Plans)*

- Proposed Boat Storage Building has been positioned to maintain NFPA commercial building code setback of 25-ft between buildings in groups positioned for safety.
- Separation will also provide for proper snow removal shed from building roofs. New structure to appx. match frontline of abutting building and shall parallel off-set 25' to each building sidewalls.
- Proposed Boat Storage Building is located to best maintain existing evergreen tree buffer Tree and sapling & shrub understory with forest floor vegetation.
- This new proposed building location is positioned to visually shield new building from aesthetic views.
- Note that view from Sebago Road is additionally shielded by highway roadside trees and vegetation. Internal views of lots are protected by maintaining this existing tree/vegetative buffer and it should be considered that the increased separation distance to these abutters minimizes visual sighting.
- Building Storage Plans designed by Hancock Lumber are attached to this page.
- New building accompanies two existing similar storage buildings on Marina grounds used for Boat Storage and Repair and historic Seaplane Storage.
- These buildings are located beyond the Shoreland Zone 250-ft setback on this lot.

Natural Trees & Vegetation Visual Buffer Maintained:

- Abutting existing Seaplane Building 80-ft W x 100-ft L @ comparable appx. height.
- Proposed Boat Storage Building is located to retain varying 20' to 40' full evergreen and deciduous tree w/ understory shrub buffer to visual shield project building.
- Any construction disturbance to visual buffer will be infill re-planted with like native evergreen species to complement. Plantings maintained to be sustainable.
- Note existing tree buffer already shields this entire area from public Sebago Road view but owner's intent is also to provide visual buffer to customers also internally coming into Naples Marina and Seaplane Cove Rd.
- USGS topographical contours review of site depicts level terrain which processes Stormwater Run-off on in building sideline stone trenches for drainage w/ buffers.

USDA County Soils Mapping Designation on Lots: *(Refer to attached Exhibit I.)*

- The on-site soils investigation concurs with USDA Cumberland County Soil Survey mapped Deerfield soil types. *(Refer to Exhibit I.)*
- These are sandy loam types of native soil on the lots that are rated as well and mostly well drained soils that absorb stormwater run-off. The slope averaging 3% or less.
- Deerfield Soils on project area are moderate to well drained and will process stormwater run-off on site.
- Setbacks are maintained and exceed for streams and wetlands. No Vernal Pools are designated on the project site or Marina Lots.

Erosion & Sedimentation Control Plan for Construction:

- Prior to any soil disturbance during construction proper Erosion & Sedimentation (E&S) Control measures shall be in place downslope of soil disturbance activity.
- This proposed work areas' E&S control measures may include silt fence, hay bale, or berms of bark mulch.
- Such Erosion & Sedimentation Control measures for this project shall follow the Maine Department of Environmental Protection's Best Management Practices as published.
- Proper DEP installation of a combination of silt fence, bark mulch and staked hay bales will be utilized to contain any sediment run-off from disturbed area.
- They shall remain in place during construction and until disturbed soil has been re-stabilized with vegetation.

Abutter List to Project Lot (Map U-01 / Lot 7-B)

- **U-01 Lot 5**
ALLEN LAND CO. LLC
PO BOX 1499, NAPLES, ME 04055
- **U-01 Lot 6**
ALLEN, JAMES C. and BIANCO, CYNTHIA J.
PO BOX 1499, NAPLES, ME 04055
- **U-01 Lot 7**
BUILD, JAMES M.
PO BOX 1616, NAPLES, ME 04055
- **U-01 Lot 7-A**
NAPLES CAUSEWAY DEVELOPMENT, LLC
PO BOX 1365, WINDHAM, ME 04062
- **U-01 Lot 7-C**
BUILD, JAMES & MARY,
PO BOX 1616, NAPLES, ME 04055
- **U-01 Lot 7-D**
BUILD, JAMES & MARY
PO BOX 1616, NAPLES, ME 04055
- **U-01 Lot 8**
MARCH, JONATHAN
594 MAIN ST
SO GLASTONBURY, CT 06073
- **U-01 Lot 9**
CEBRA, RICHARD,
15 STEAMBOAT LANDING ROAD, NAPLES, ME 04055
- **U-01 Lot 11**
LIZOTTE-HEBERT, BEVERLY and HEBERT, JOSEPH M.
PO BOX 51, REHOBOTH, MA 02769
- **U-01 Lot 14**
BARTER, JANICE C.
51 SEBAGO ROAD, NAPLES, ME 04055
- **U-01 Lot 14-A**
CEBRA, PHILLIPPA and CEBRA, RICHARD
61 SEBAGO ROAD, NAPLES, ME 04055
- **U-01 Lot 15**
CORNERSTONE GOSPEL CHURCH
25 SEBAGO ROAD, NAPLES, ME 04055
- **U-01 Lot 15-A**
CORNERSTONE GOSPEL CHURCH
25 SEBAGO ROAD, NAPLES, ME 04055
- **U-01 Lot 15-B**
MARSHALL, RONALD B. and MARSHALL, JANICE M.
PO BOX 937, NAPLES, ME 04055

Stormwater Run-Off Analysis:

- The construction of this new Boat Storage Building minimizes any environmental stormwater run-off quality and quantity activity.
- This construction site project also minimizes existing and post construction phosphorous and nitrate run-off. This is done with roof drip edge gravel trenching and underdrains.
- The project lot contours are flat and generally average less than 3% slopes. The owner has encouraged run-off to drain away from the pond as much as possible. The surface grading of the flat new building area will be directed away from the lake toward the back field for natural processing of stormwater run-off.
- Rain runoff from the proposed building roof and the abutting drip-edge drainage trenches and underdrains slope away from the Pond. This includes underground gravel sumps to delay surplus run-off in order to allow for processing by the sandy soils.
- The Deerfield Soils on the Project Lot are moderately to well- drained deep Sandy Soils and are rated for drainage. This soil type allows for on-site absorption of stormwater run-off for natural control of water quantity and quality treatment.
- The native trees, shrubs, and ground vegetation meet the run-off treatment requirements of Maine Department of Environmental Protection, Chapter 500: Stormwater Management.

Conclusion:

This improved surface grading and drainage trench and drip edge roof run-off will match the intent of regulations to prevent run-off to Pond and will redirect existing and capture in impervious stormwater impacts.

This proposed Boat Storage Building provides an opportunity to redirect existing rainwater and decrease the phosphorus laden run-off toward Pond. The new building stormwater run-offs are directed to the drip edge gravel drainage trenches.

Abutting tree, shrubs and vegetation buffers are being not only preserved for buffers but especially for natural processing of stormwater quantity and quality controls.

Site Work Conducted & Application Prepared for Dustin Roma, P.E. by:

Donald E. Murphy, *Wetland Scientist & Environmental Land Use Consultant*
312 Bolsters Mills Road, Harrison, ME 04040
Cell: 207-693-2040 / E-mail: murphylanduse@gmail.com
Report date 8/3/2018

* = Please Waive

SECTION 5. SUBMISSION REQUIREMENTS

A formal application for Site Plan Review shall contain at least the following exhibits and information:

- A. A fully executed and signed copy of the application for Site Plan Review; and, eight (8) copies of a site plan drawn at a scale sufficient to allow review of the items listed under Criteria and Standards, but not more than one hundred (100) feet to the inch for that portion of the total tract of land being proposed for development, and showing the following:
1. Owner's name, address and signature.
 2. Name and addresses of all abutting property owners plus a description of the project, to be used by the Planning Board to notify the abutters by certified mail of the proposed project, proof of mailing receipts to be kept on file at the Town Office. Owners of abutting properties shall be those listed in the most recent tax records of the Town of Naples.
 3. Perimeter survey of the parcel made and certified by a registered land surveyor relating to reference points showing true north point, graphic scale, corner of parcel, date of survey and total acreage.
 4. Total area of any land within 500 feet of the proposed project which is owner by the applicant.
 5. Zoning classifications(s) of the property and the location of zoning district boundaries if the property is located in tow or more zoning districts.
 6. Soil types and location of soil boundaries as certified by a registered engineer or certified soil scientist.
 7. The location of all building setbacks as required by the Town Ordinances.
 8. The location, size and character of all signs and exterior lighting.
 9. The lot area of the parcel, street frontage and the Town Ordinances requirements for minimum lot size and frontage.
 10. The location of all existing and proposed buildings (including size and height), driveways, sidewalks, parking spaces, loading areas, open spaces, large trees, open drainage courses, signs, exterior lighting, service areas, easements and landscaping.

11. The location of all buildings within fifty (50) feet of the parcel to be developed and the location of intersecting roads or driveways within 200 feet of the parcel.
 - * 12. Existing and proposed topography of the site at two (2) foot contour intervals if major changes to the existing topography are being proposed.
 - * 13. All surface water features within 500 feet of the project boundaries, including perennial streams and wetlands *Flagged Not Mapped*
 14. Location and dimensions of on-site pedestrian and vehicular access ways, parking areas, loading and unloading facilities, design of entrances and exits of vehicles to and from the site on to public streets, curb and sidewalk.
 15. Location of all wells and septic systems within 150 feet of the property boundary.
 16. Existing land cover and vegetation conditions.
 - * 17. Drainage plan to describe the location and size of road culverts, road drainage ditches, phosphorus and runoff control measures and other similar features.
 - * 18. If the site is not to be served by a public sewer line, then an on-site soils investigation report by a Department of Human Services licensed site evaluator shall be provided.
 19. A list of waivers of any town requirements or ordinance provisions requested.
 20. A statement from the Fire Chief that the property is accessible by present fire apparatus and detailing any additional on-site fire protection facilities required. *Email Sent.*
- B. A soil and erosion control plan approved by the Cumberland County Soil & Water Conservation District, showing: *Pending*
1. The existing and proposed method of handling stormwater run-off.
 2. The direction of flow of the run-off through the use of arrows.
 3. The location, elevation and size of all catch basins, dry wells, drainage ditches, swales, retention basins and storm sewers.
 4. Engineering calculation used to determine drainage requirements based upon a 25 year storm frequency, if the project will significantly alter the existing patterns due to such factors as the amount of new impervious surfaces (such as paving and building area) being proposed.

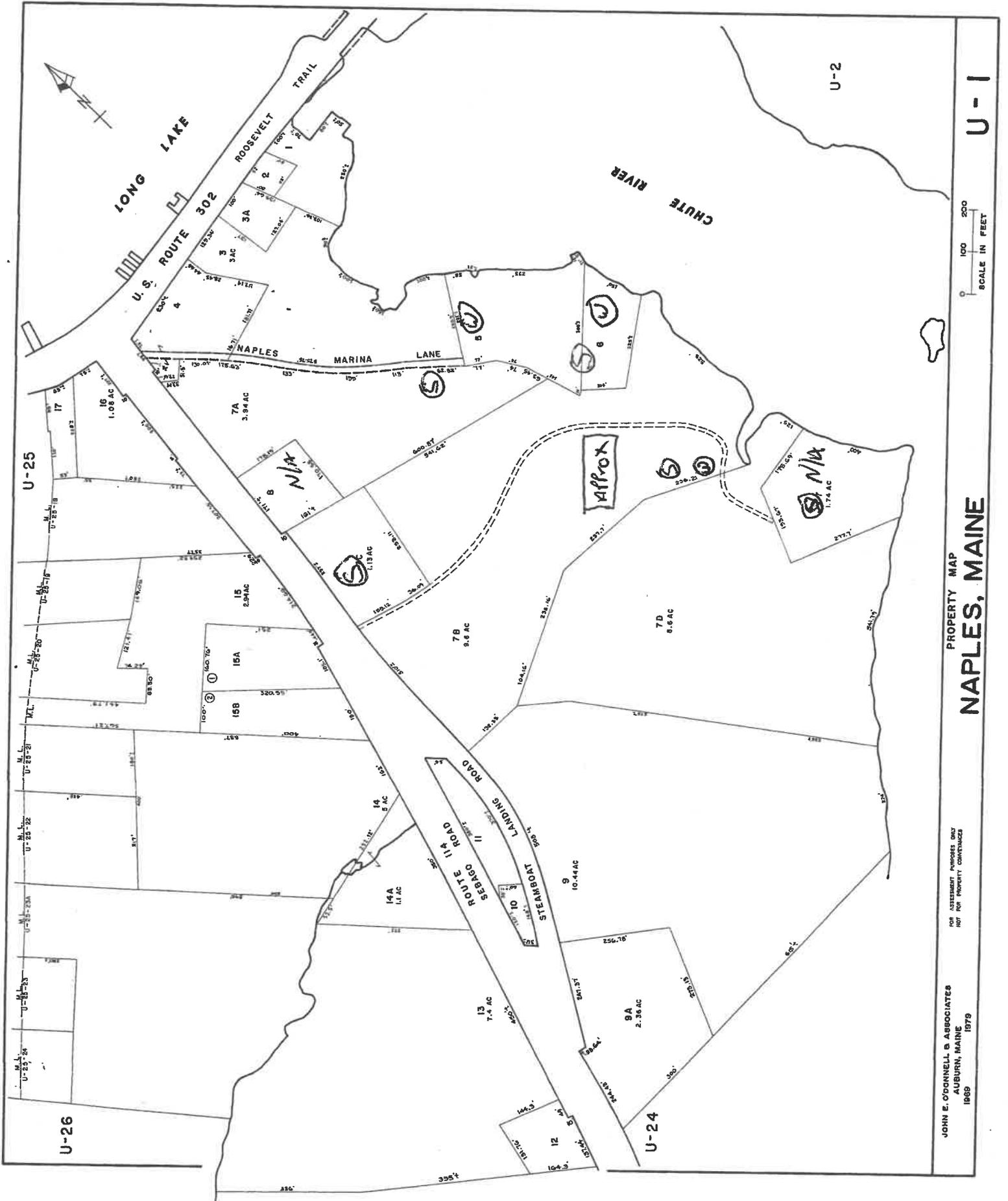
- * C. Phosphorus Analysis.
 1. A phosphorus analysis is require if proposed project is within the Shoreland Zone or the non-vegetated area exceeds 40,000 square feet.
 2. The analysis of phosphorus loading shall utilize the methods contained in the latest revised edition of the manual Phosphorus Control in Lake Watersheds, published by the Maine Department of Environmental Protection, and shall require third party review.
- * D. A utility plan showing provisions for water supply and waste water disposal including the size and location of all piping, holding tanks, leach field, etc.
- E. Building plans showing plans of al floors and all elevations.
- F. Copies of any proposed or existing easements, covenants and deed restrictions.
- * G. A description and design of proposed temporary and permanent signs, including location, size and lighting.
- * H. Copies of all required s state approvals and permits, provided however, that the Planning Board may approve site plans subject to the influence of specific state licenses and permits in cases where it is not feasible for the applicant to obtain at the time of Site Plan Review.

The Planning Board may waive any of these requirements when the Board determines that the scale or nature of the project is of a size that makes the information unnecessary.

SECTION 6. CRITERIA AND STANDARDS

The following criteria and standards are to be used by the Planning Board in judging applications for Site Plan Review and shall serve as minimum requirements for approval of a site plan. In all instances, the burden of proof shall be on the applicant to demonstrate compliance with each standard.

- A. **Preservation of Landscape:** The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal, retaining existing vegetation when and where desirable, and keep any grade changes in character with the general appearance of neighboring areas. Existing vegetation, buffering, landscaping and building siting are potential methods of preserving scenic vistas.
- B. **Relation of Proposed Building to the Environment:** proposed structures shall be related harmoniously to the terrain and to existing buildings in the vicinity which have a visual relationship to the proposed building. Special attention shall be paid to the scale of the proposed building(s), massing of the structure(s), and such natural features as slope, orientation, soil type and drainage courses.



U-1

SCALE IN FEET
0 100 200

PROPERTY MAP
NAPLES, MAINE

FOR ASSESSMENT PURPOSES ONLY
NOT FOR PROPERTY CONTAINERS

JOHN E. O'DONNELL & ASSOCIATES
AUBURN, MAINE 1879
1969

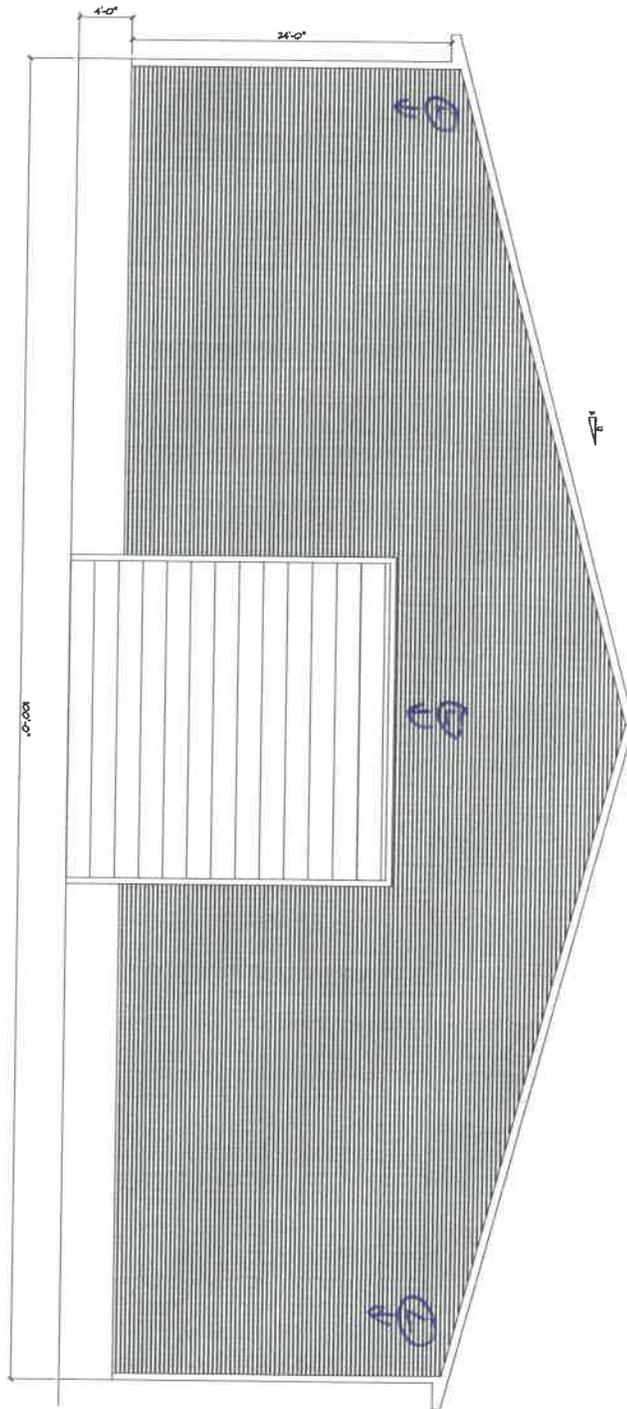
U-2

U-24

U-25

U-26

Lighting



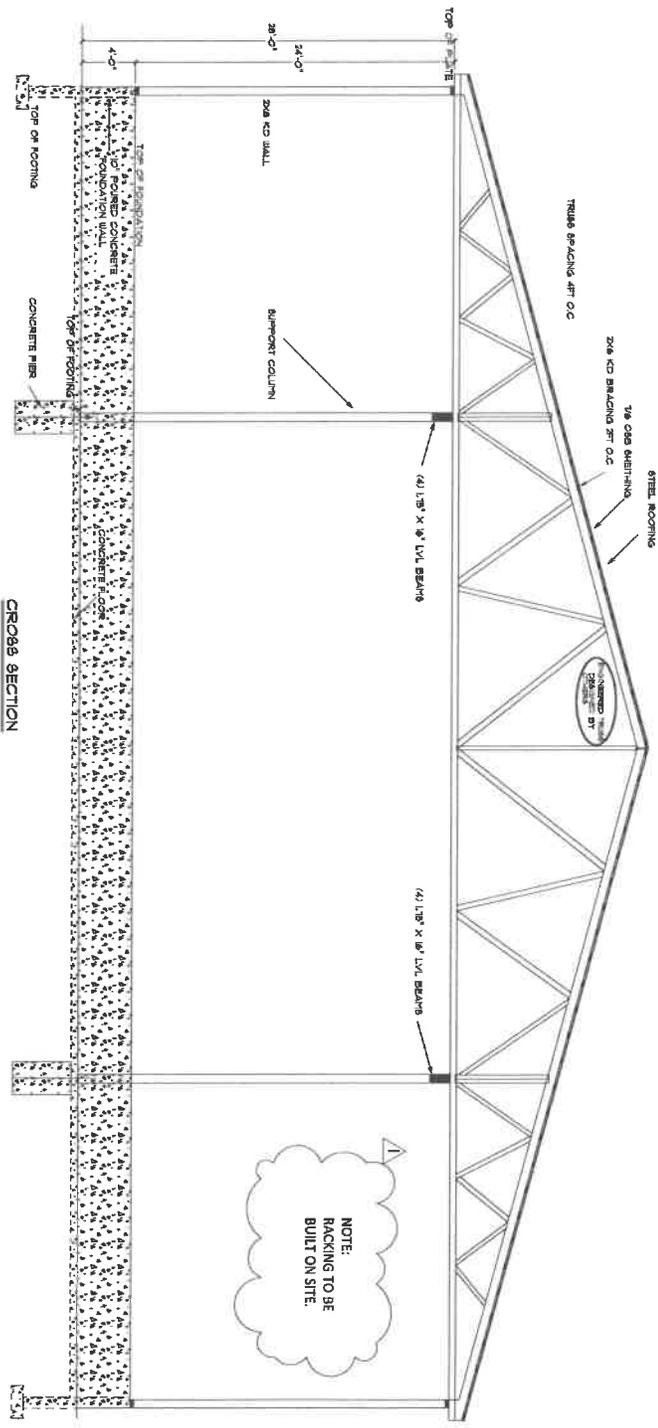
FRONT ELEVATION
SCALE = 1/4" = 1'

DATE	DESCRIPTION
REVISION	
SCALE	NTS
CHECKED BY	
DRAWN BY	JMACK
FILE	

DRAFTING BY:
JMACK DRAFTING
87 PERCH POINT
SHAPLEIGH ME 04076
207-252-5277
JMDEVLP@GMAIL.COM

PROJECT FOR:
NAPLES MARINA
100 FT X 200 FT BOAT STORAGE BUILDING

THESE PLANS HAVE NOT BEEN PREPARED NOR
REVIEWED BY A REGISTERED ARCHITECT NOR
PROFESSIONAL ENGINEER



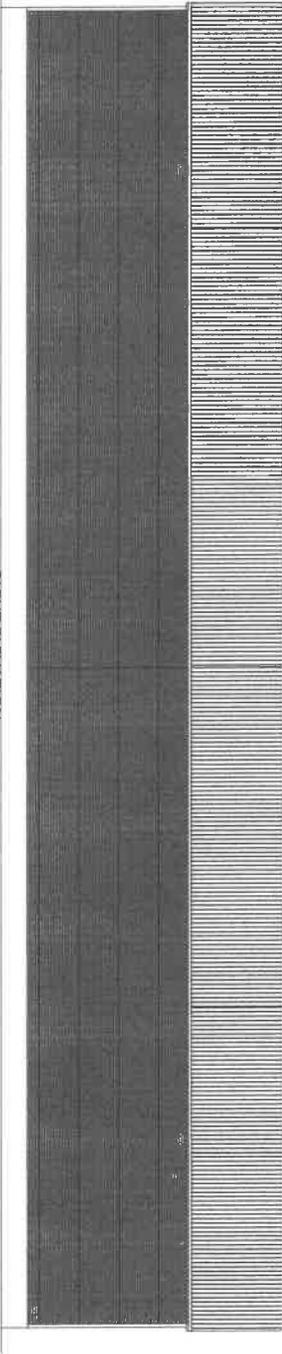
CROSS SECTION
SCALE = 1/4" = 1'

NOTE:
RACKING TO BE
BUILT ON SITE.

DRAFTING BY:
JMACK DRAFTING
87 PERCH POINT
SHAPLEIGH ME 04076
207-252-5277
JMDEVLP@GMAIL.COM

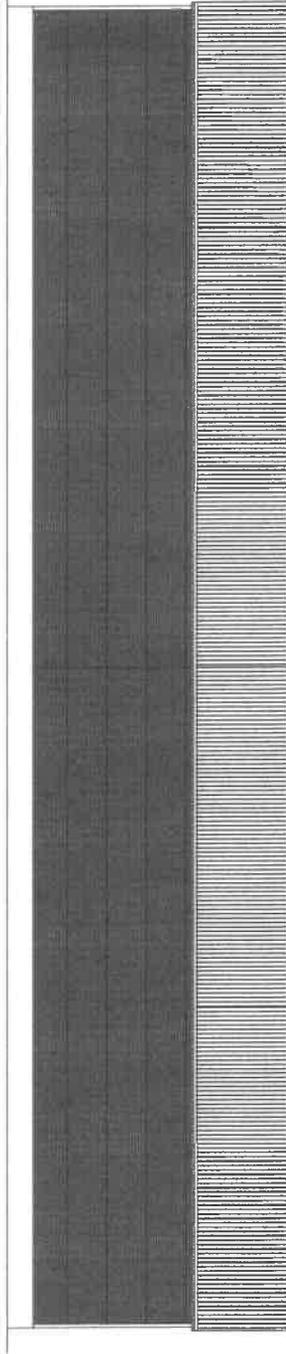
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RIGHT ELEVATION

SCALE: 1/8" = 1'-0"



LEFT ELEVATION

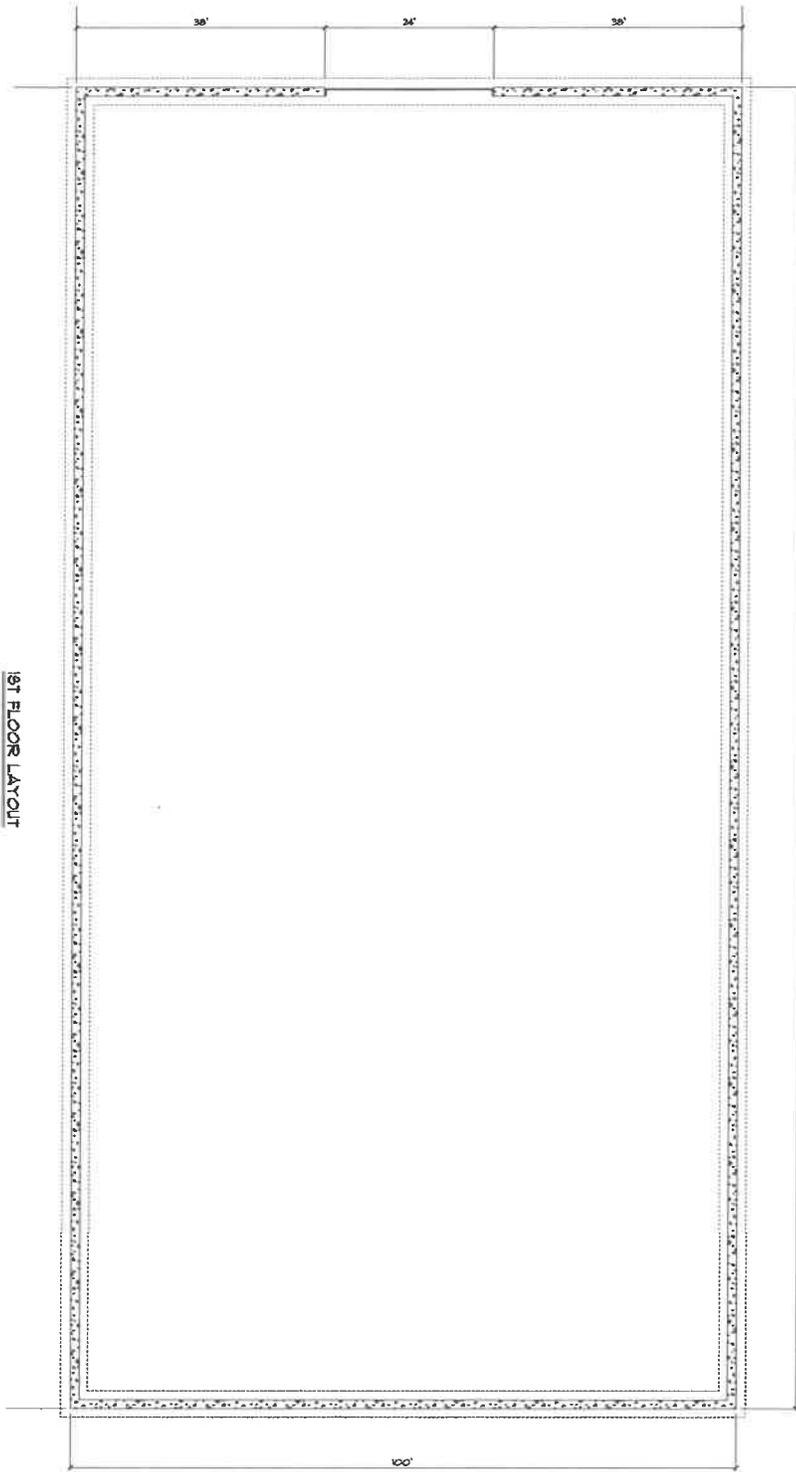
SCALE: 1/8" = 1'-0"

DATE	1/27/2021
SCALE	N/S
DESIGNED BY	
DRAWN BY	JMACK
CHECKED BY	
FILE	

DRAFTING BY:
JMACK DRAFTING
 87 PERCH POINT
 SHAPLEIGH ME 04076
 207-252-5277
 JMDEVLP@GMAIL.COM

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NAPLES MARINA
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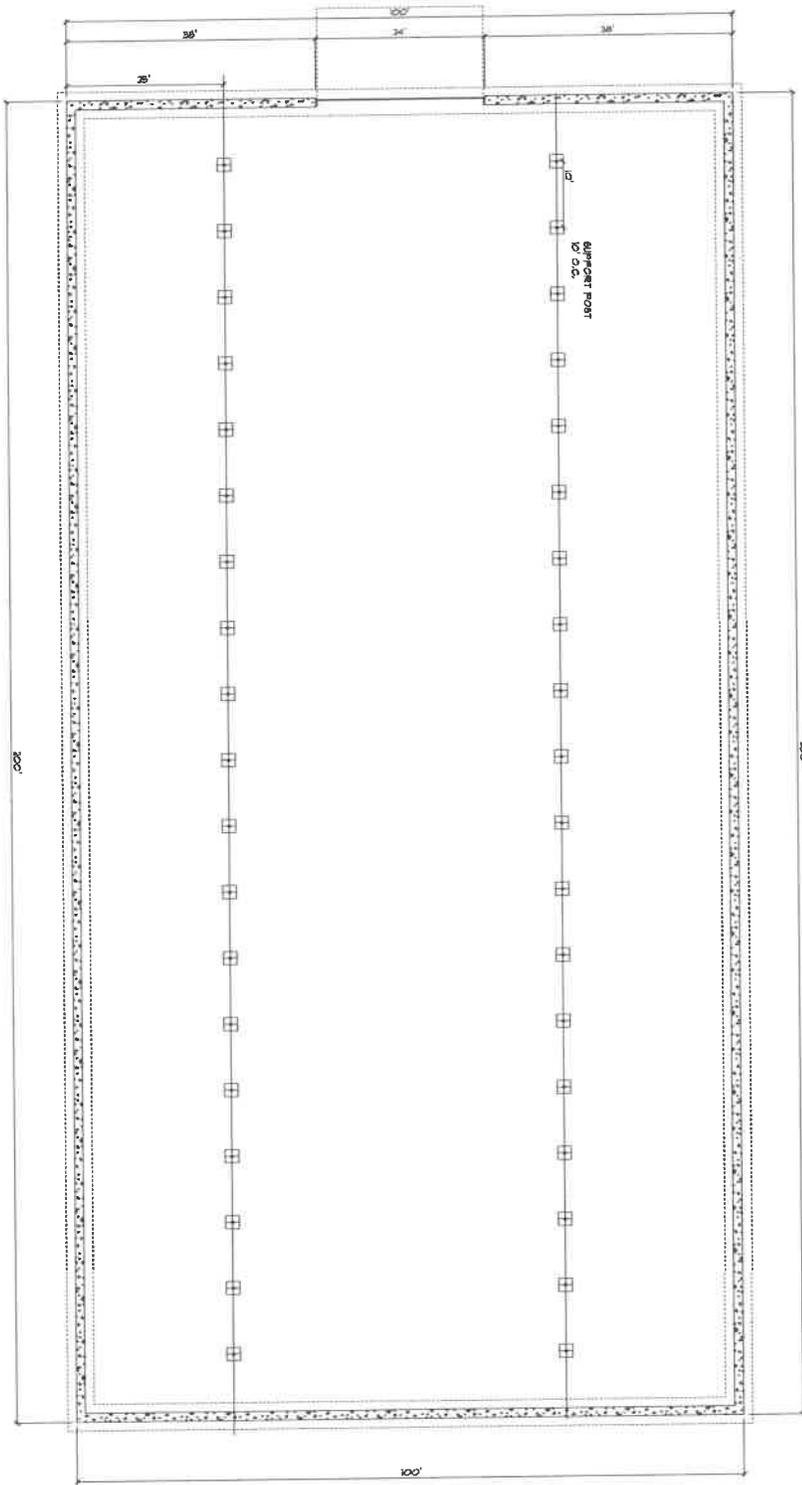
1ST FLOOR LAYOUT
SCALE: 1/8" = 1'-0"

SCALE:	NTS
DRAWN BY:	JMACK
CHECKED BY:	
DATE:	

DRAFTING BY:
JMACK DRAFTING
87 PERCH POINT
SHAPLEIGH ME 04076
207-252-5277
JMDEVLP@GMAIL.COM

PROJECT FOR:
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PROFESSIONAL ENGINEER



FOUNDATION LAYOUT
SCALE: 1/8" = 1'

DATE:	3/17/2011
SCALE:	N/A
CREATED BY:	JMACK
DRAWN BY:	JMACK
FILE:	

DRAFTING BY:
JMACK DRAFTING
 87 PERCH POINT
 SHAPLEIGH ME 04076
 207-252-5277
 JMDEVLP@GMAIL.COM

PROJECT FOR:
NAPLES MARINA
 100 FT X 200 FT BOAT STORAGE BUILDING

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EXHIBITS INDEX

- A. Owner Deed Bk 33425 Pg 327
- B. Town of Naples Tax Map U-01
- C. Marina Lots - Naples Tax Map U-01 Lots 5, 6, 7-B
- D. Project Lot Survey Plan
- E. Aerial Imagery of Naples Marina
- F. Naples Shoreland Zone Area Map
- G. Naples Zoning Map
- H. Aerial Imagery of Lot Project Area w/ SLZ setbacks
- I. Aerial Imagery Plan of Soils *USDA Cumberland County Soils*
- J. Deerfield Soils Description for Stormwater Drainage

QUITCLAIM DEED WITH COVENANT
(Maine Statutory Short Form)

PINE AIR, LLC, a Maine limited liability company with a place of business in Naples, County of Cumberland and State of Maine, for One Dollar (\$1.00) and other valuable consideration, does hereby grant to **ALLEN LAND COMPANY, LLC**, a Maine limited liability company with a mailing address of P.O. Box 245, Naples, ME 04055, with Quitclaim Covenant, a certain lot or parcel of land with the buildings thereon situated in the Town of Naples, County of Cumberland and State of Maine, as more particularly described on **Exhibits A, B and C** attached hereto.

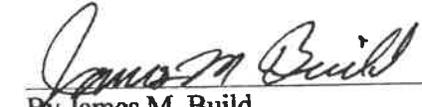
IN WITNESS WHEREOF, Pine Air, LLC has hereunto caused this instrument to be executed by James M. Build, its thereunto duly authorized Member, this 7th day of September, 2016.

MAINE REAL ESTATE TAX PAID



Witness

PINE AIR, LLC

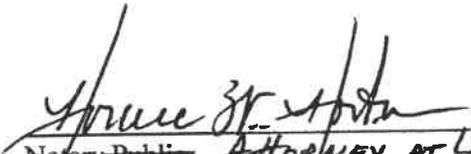


By James M. Build
Its Member

STATE OF MAINE
COUNTY OF CUMBERLAND

September 7, 2016

Personally appeared the above-named James M. Build, Member of Pine Air, LLC, and acknowledged the foregoing instrument to be his free act and deed in said capacity, and the free act and deed of Pine Air, LLC.



Notary Public *Attorney at Law*
Printed Name: *HORACE W. HORTON*

EXHIBIT A

A certain lot or parcel of land situated between the Chute River and the easterly line of State Route 114, also known as Sebago Road in the Town of Naples, County of Cumberland, State of Maine and being more particularly bounded and described as follows to wit:

Beginning at an one half inch rebar set on the easterly sideline of old Route 114 also known as Steamboat Landing Road at the northeasterly corner of land now or formerly of Grace E. Simms, with reference to a deed recorded in Book 14333 Page 272 of the Cumberland County Registry of Deeds (herein after CCRD). Said pins is on the northerly edge of a brook (sometimes a dry brook) that feeds into Chute River.

Thence northerly along the easterly sideline of said Steamboat Landing Road on a course of N 11°03'34" E a distance of fifty and ten hundredths (50.10) feet, more or less to a one half inch rebar set standing nine (9) inches high marking the northwest corner of a fifty (50) foot easement being reserved herein as access to other land of formerly of James M. Build, now owned by Pine Air, LLC, with reference to deed recorded in Book 30259 Page 84 in CCRD.

Thence continuing northerly along the easterly line of said road a distance of one hundred ninety six and two tenths (196.2) feet more or less to the intersection of the easterly line of Sebago Road.

Thence northerly along the easterly line of Sebago Road a distance of one hundred fifty one and six tenths (151.6) feet to a one half inch rebar set standing eleven (11) inches high marking the northwesterly corner of land adjacent to Sebago Road and the northwesterly corner of a fifty (50) foot right of way known as Seaplane Drive. Said pin being located a tie line distance of three hundred thirty two and seventy two hundredths (332.72) feet, more or less as measured on a course of N 10° 04' 13"E from the last noted pin at the northwest corner of an easement on the Steamboat Landing Road.

Thence easterly on a course of S 66° 55' 05" E through land formerly of James M. Build, now of Pine Air, LLC above referenced and along the northerly line of said right of way known as Seaplane Drive a distance of one hundred fifty nine and twelve hundredths (159.12) feet, more or less to a one half inch rebar set flush with the ground.

Thence S 71° 04' 36" E a distance of thirty six and nine hundredths (36.09) feet, more or less to a one half inch rebar set flush with the ground, marking the southeasterly corner of land being retained by Pine Air, LLC.

Thence N 21° 53' 15" E through land of said Pine Air, LLC a distance of two hundred fifty three and eleven hundredths (253.11) feet, more or less to a one half inch rebar set flush marking the northwesterly corner of land herein described.

Thence S 69° 38' 54" E along the southerly line of land now or formerly of Naples Causeway Development, LLC with reference to Book 28402 Page 282 in CCRD a distance of

five hundred forty one and sixty two hundredths (541.62) feet, more or less to a one half inch rebar set flush.

Thence S 9° 39' 39" E along the westerly line of land of Allen Land Co. LLC with reference to Book 16595 Page 200 in CCRD a distance of seventy seven and fifty five hundredths (77.55) feet, more or less to a one and one quarter (1-1/4) inch iron pipe found in concrete standing forty two (42) inches high.

Thence N 69° 46' 35" E a distance of nine and eighty four hundredths (9.84) feet, more or less to a seven eighths (7/8) inch galvanized pipe found standing thirty two (32) inches high at the northwest corner of land of James C. Allen and Cynthia J. Bianco land with reference to deed in Book 24999 Page 86 in CCRD.

Thence S 40° 59' 05" E along land of Allen and Bianco last above referenced a distance of one hundred three and sixty nine hundredths (103.69) feet, more or less, to a three (3) inch iron pipe found standing forty three (43) inches high.

Thence S 86° E along line of occupation one hundred thirty one (131) feet, more or less to the Chute River.

Thence southerly along the westerly shore of Chute River approximately five hundred twenty five (525) feet to a one half inch rebar set standing twelve (12) inches high at the confluence of a brook and Chute River on the east side of a paved driveway leading to the home and land of James M. Build. Said pin being a tie line distance of three hundred seventy one and eighteen hundredths (371.18) feet, more or less as measured on a course of S 12° 16' 53" W from the three (3) inch iron pipe at the southwest corner of land above noted as Allen and Bianco.

Thence N 50° 30' 00" W through land of Pine Air, LLC a distance of two hundred thirty six and twenty one hundredths (236.21) feet, more or less to a one half inch rebar set standing eleven (11) inches high.

Thence N 73° 40' 12" W through land of Pine Air, LLC a distance of two hundred thirty seven and seventy hundredths (237.70) feet, more or less to a one half inch rebar set flush and approximately twenty five (25) feet southerly of a utility pole numbered CMP Co. 54 which is an angle point in the existing utility line.

Thence S 75° 54' 37" W through land of Pine Air, LLC a distance of two hundred thirty eight and sixteen hundredths (238.16) feet, more or less to a one half inch rebar set flush marking the northeasterly corner of a fifty (50) foot easement being retained by Pine Air, LLC for access to its remaining land.

Thence continuing on the last course a distance of one hundred four and sixteen hundredths (104.16) feet, more or less to a one and five eighths (1-5/8) inch iron pipe found standing nineteen (19) inches high in concrete on the westerly side of a brook (sometimes a dry brook).

Thence N 75° 24' 12" W along the northerly line of land now or formerly of Grace E. Simms with reference to deed Book 14333 Page 272 in CCRD a distance of one hundred twenty three and thirty five hundredths (123.35) feet, more or less to the rebar at the point of beginning.

SUBJECT TO the following easements in favor of James M. Build, his successors, heirs and assigns forever as described in Easement Deed of near or even date herewith and recorded in the Cumberland County Registry of Deeds in Book ~~3342~~ ³³⁴² Page ~~318~~ ³¹⁸, and **EXCEPTING** and **RESERVING** unto Pine Air, LLC, its successors and assigns forever, said following described easements, all of which shall run with and benefit the land of said (1) James M. Build as described in said Easement Deed as the "Benefited Land," and (2) Pine Air, LLC as described in **Exhibit B** attached hereto and as described hereinafter as the "Retained Property":

1. Seaplane Drive Easement

An easement for pedestrian and vehicular (including trailers) ingress and egress, and the right, but not the obligation, of all maintenance customarily associated therewith, and for the installation, use and maintenance of any and all utilities, including those that run above ground and beneath ground, from the easterly sideline of Route 114 in Naples, Maine, along that certain fifty foot (50') wide parcel of land identified as "Seaplane Drive," as shown on Plan of Land to be Conveyed by Pine Air, LLC to Allen Land Co., LLC attached hereto as **Exhibit C** (the "Plan").

Notwithstanding the foregoing reference to perpetuity, said Seaplane Drive Easement shall terminate upon the sale of any of the remaining land of Pine Air, LLC, at which time the Grantee(s) shall have the affirmative obligation and covenant that the Grantee(s) shall create access to said property as described in Easement 2. (Steamboat Landing Road Easement) hereinafter described. Additionally upon the sale of the property owned by James M. Build and/or Mary S. Build, as described in Book 30259, Page 81, the Seaplane Drive Easement 1. hereinabove shall terminate.

2. Steamboat Landing Road Easement

An easement for pedestrian and vehicular (including trailers) ingress and egress, and all maintenance customarily associated therewith, and for the installation, use and maintenance of any and all utilities, including those that run above ground and beneath ground, from the easterly sideline of Steamboat Landing Road, so-called, in Naples, Maine, along that certain fifty foot (50') wide parcel of land identified as "50' Easement" as shown on the Plan. The owner of the premises conveyed herein shall have no obligation to maintain said easement.

3. Ramp Easement

An easement to use and the right, but not the obligation, to maintain the "boat ramp" located at the edge of the Chute River as shown on the Plan, and to any docks associated therewith whether or not shown upon the Plan, for the purpose of launching and retrieving

aircraft, keeping aircraft temporarily docked thereupon, and for the use of equipment such as trailers, tractors and the like for the purposes of transporting aircraft to and from said ramp. Further, said easement shall include the right of pedestrian and vehicular (including trailers) ingress and egress, and the right, but not obligation, of all maintenance customarily associated therewith, across the premises conveyed herein, including over and upon Seaplane Drive as described above, provided, however, that the use of said easement shall not interfere with the normal operations of the premises conveyed herein, including any future development. The parties hereby acknowledge that the path of travel may change from time to time based upon future development and use of the premises conveyed herein. The owner of the premises conveyed herein shall have no obligation to maintain said easement. Reference is also hereby made to the depiction and description of said easement on the Plan.

4. Utility Easement

A utility easement and the right to enter upon the premises conveyed herein for purposes of maintenance, repair and/or replacement of existing overhead utility wires, poles and fixtures and appurtenances which service the Benefited Property and the Retained Property.

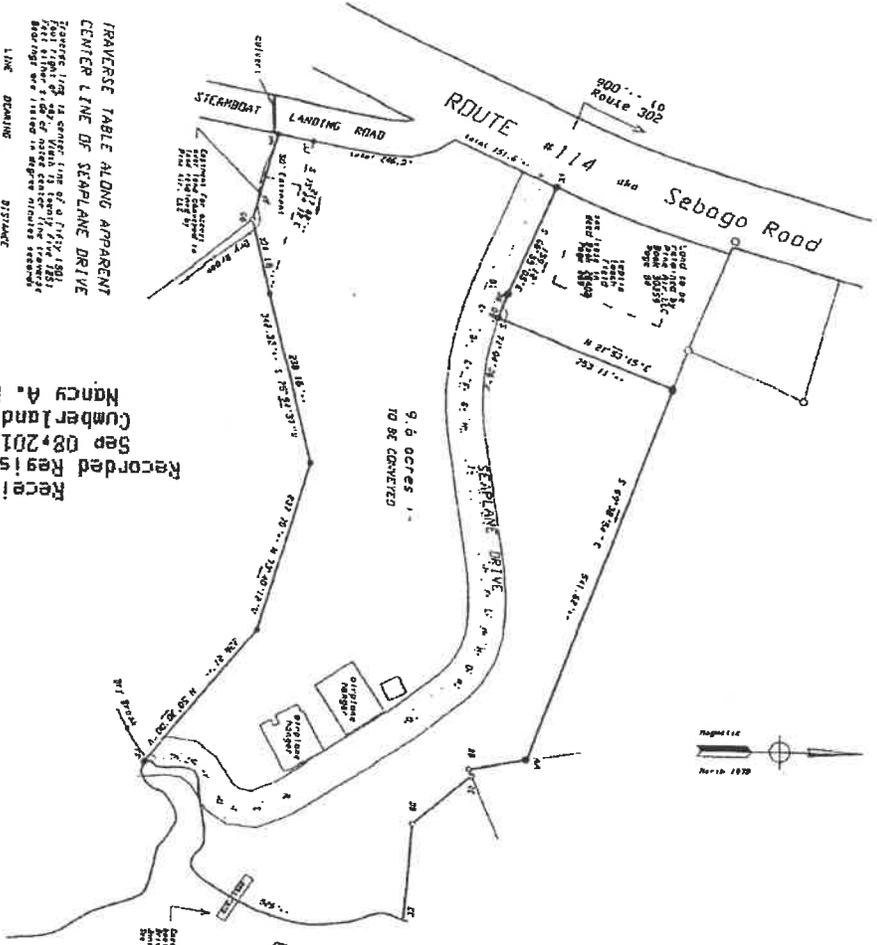
EXHIBIT B

"THE RETAINED PROPERTY"

A certain lot or parcel of land located at the mouth of Chutes River and Brandy Pond in the Town of Naples, County of Cumberland and State of Maine, on the easterly side of Route 114, also known as the Sebago Road, being a portion of Parcel A as described in Warranty Deed from Rosamond G. Bischoffberger to Rosamond G. Bischoffberger and James M. Build dated May 23, 1998 and recorded in the Cumberland County Registry of Deeds in Book 13851, Page 294, and being described in Warranty Deed of the late John M. Bischoffberger to Rosamond G. Bischoffberger dated June 11, 1984 and recorded in said Registry in Book 6481, Page 109. Excepting and reserving, however, the premises described in Exhibit A above and the premises described in deed of James M. Build to James M. Build dated October 29, 2012 and recorded in said Registry in Book 30259, Page 81.

EXHIBIT C

"THE PLAN"



TRaverse Table Along Apparent Center Line of Steamplane Drive

Traverse along the center line of a piece of land in the town of Sebago, Maine, as shown on the plan of the same land, recorded in the office of the Register of Deeds for Cumberland County, Maine, on the 11th day of September, 1914, and as shown on the plan of the same land, recorded in the office of the Register of Deeds for Cumberland County, Maine, on the 11th day of September, 1914.

LINE	BEARING	DISTANCE	STATION
1-2	N 89° 15' 19.7" E	100.00	1
2-3	S 89° 15' 19.7" E	100.00	2
3-4	S 89° 15' 19.7" E	100.00	3
4-5	S 89° 15' 19.7" E	100.00	4
5-6	S 89° 15' 19.7" E	100.00	5
6-7	S 89° 15' 19.7" E	100.00	6
7-8	S 89° 15' 19.7" E	100.00	7
8-9	S 89° 15' 19.7" E	100.00	8
9-10	S 89° 15' 19.7" E	100.00	9
10-11	S 89° 15' 19.7" E	100.00	10
11-12	S 89° 15' 19.7" E	100.00	11
12-13	S 89° 15' 19.7" E	100.00	12
13-14	S 89° 15' 19.7" E	100.00	13
14-15	S 89° 15' 19.7" E	100.00	14
15-16	S 89° 15' 19.7" E	100.00	15
16-17	S 89° 15' 19.7" E	100.00	16
17-18	S 89° 15' 19.7" E	100.00	17
18-19	S 89° 15' 19.7" E	100.00	18
19-20	S 89° 15' 19.7" E	100.00	19
20-21	S 89° 15' 19.7" E	100.00	20
21-22	S 89° 15' 19.7" E	100.00	21
22-23	S 89° 15' 19.7" E	100.00	22
23-24	S 89° 15' 19.7" E	100.00	23
24-25	S 89° 15' 19.7" E	100.00	24
25-26	S 89° 15' 19.7" E	100.00	25
26-27	S 89° 15' 19.7" E	100.00	26
27-28	S 89° 15' 19.7" E	100.00	27
28-29	S 89° 15' 19.7" E	100.00	28
29-30	S 89° 15' 19.7" E	100.00	29
30-31	S 89° 15' 19.7" E	100.00	30
31-32	S 89° 15' 19.7" E	100.00	31
32-33	S 89° 15' 19.7" E	100.00	32
33-34	S 89° 15' 19.7" E	100.00	33
34-35	S 89° 15' 19.7" E	100.00	34
35-36	S 89° 15' 19.7" E	100.00	35
36-37	S 89° 15' 19.7" E	100.00	36
37-38	S 89° 15' 19.7" E	100.00	37
38-39	S 89° 15' 19.7" E	100.00	38
39-40	S 89° 15' 19.7" E	100.00	39
40-41	S 89° 15' 19.7" E	100.00	40
41-42	S 89° 15' 19.7" E	100.00	41
42-43	S 89° 15' 19.7" E	100.00	42
43-44	S 89° 15' 19.7" E	100.00	43
44-45	S 89° 15' 19.7" E	100.00	44
45-46	S 89° 15' 19.7" E	100.00	45
46-47	S 89° 15' 19.7" E	100.00	46
47-48	S 89° 15' 19.7" E	100.00	47
48-49	S 89° 15' 19.7" E	100.00	48
49-50	S 89° 15' 19.7" E	100.00	49
50-51	S 89° 15' 19.7" E	100.00	50
51-52	S 89° 15' 19.7" E	100.00	51
52-53	S 89° 15' 19.7" E	100.00	52
53-54	S 89° 15' 19.7" E	100.00	53
54-55	S 89° 15' 19.7" E	100.00	54
55-56	S 89° 15' 19.7" E	100.00	55
56-57	S 89° 15' 19.7" E	100.00	56
57-58	S 89° 15' 19.7" E	100.00	57
58-59	S 89° 15' 19.7" E	100.00	58
59-60	S 89° 15' 19.7" E	100.00	59
60-61	S 89° 15' 19.7" E	100.00	60
61-62	S 89° 15' 19.7" E	100.00	61
62-63	S 89° 15' 19.7" E	100.00	62
63-64	S 89° 15' 19.7" E	100.00	63
64-65	S 89° 15' 19.7" E	100.00	64
65-66	S 89° 15' 19.7" E	100.00	65
66-67	S 89° 15' 19.7" E	100.00	66
67-68	S 89° 15' 19.7" E	100.00	67
68-69	S 89° 15' 19.7" E	100.00	68
69-70	S 89° 15' 19.7" E	100.00	69
70-71	S 89° 15' 19.7" E	100.00	70
71-72	S 89° 15' 19.7" E	100.00	71
72-73	S 89° 15' 19.7" E	100.00	72
73-74	S 89° 15' 19.7" E	100.00	73
74-75	S 89° 15' 19.7" E	100.00	74
75-76	S 89° 15' 19.7" E	100.00	75
76-77	S 89° 15' 19.7" E	100.00	76
77-78	S 89° 15' 19.7" E	100.00	77
78-79	S 89° 15' 19.7" E	100.00	78
79-80	S 89° 15' 19.7" E	100.00	79
80-81	S 89° 15' 19.7" E	100.00	80
81-82	S 89° 15' 19.7" E	100.00	81
82-83	S 89° 15' 19.7" E	100.00	82
83-84	S 89° 15' 19.7" E	100.00	83
84-85	S 89° 15' 19.7" E	100.00	84
85-86	S 89° 15' 19.7" E	100.00	85
86-87	S 89° 15' 19.7" E	100.00	86
87-88	S 89° 15' 19.7" E	100.00	87
88-89	S 89° 15' 19.7" E	100.00	88
89-90	S 89° 15' 19.7" E	100.00	89
90-91	S 89° 15' 19.7" E	100.00	90
91-92	S 89° 15' 19.7" E	100.00	91
92-93	S 89° 15' 19.7" E	100.00	92
93-94	S 89° 15' 19.7" E	100.00	93
94-95	S 89° 15' 19.7" E	100.00	94
95-96	S 89° 15' 19.7" E	100.00	95
96-97	S 89° 15' 19.7" E	100.00	96
97-98	S 89° 15' 19.7" E	100.00	97
98-99	S 89° 15' 19.7" E	100.00	98
99-100	S 89° 15' 19.7" E	100.00	99
100-101	S 89° 15' 19.7" E	100.00	100

Received
Recorded Register of Deeds
Sep 08, 2016 11:28:11A
Cumberland County
Nancy A. Lane



NOTES:

This plan is prepared for the purpose of demonstrating data to be conveyed by Pine Air, LLC to the abutting land owner Allen Land Co., LLC.

The existing boundary of the abutting land is shown based on a line of acquisition and deed description. The lot contained at abutter is purchasing the land shown herein.

Seaplane Drive is a right of way, 50 feet wide, appurtenant to the land shown herein. The right of way is shown as a line of acquisition and deed description. The right of way is shown as a line of acquisition and deed description.

Seaplane Drive will serve as the proposed line of Pine Air, LLC acquisition. The right of way is shown as a line of acquisition and deed description.

Seaplane Drive is a power way from Route 114 to the north and land of James M. Build. Utility easement shown based on utility lines found as shown.

Eastern and southeastern corner of land shown herein is for access and utility from Steamboat Landing Road to remaining land of Pine Air, LLC. The utility easement and access there is an easement over the lot shown herein and is to be conveyed to Steamboat Landing Road and the abutting land of James M. Build. The easement is for utility only and not for other purposes.

LINE TABLE PERIMETER DATA

LINE	BEARING	DISTANCE	LINE
1-2	N 89° 15' 19.7" E	100.00	112 LINK
2-3	S 89° 15' 19.7" E	100.00	113 LINK
3-4	S 89° 15' 19.7" E	100.00	114 LINK
4-5	S 89° 15' 19.7" E	100.00	115 LINK
5-6	S 89° 15' 19.7" E	100.00	116 LINK
6-7	S 89° 15' 19.7" E	100.00	117 LINK
7-8	S 89° 15' 19.7" E	100.00	118 LINK
8-9	S 89° 15' 19.7" E	100.00	119 LINK
9-10	S 89° 15' 19.7" E	100.00	120 LINK
10-11	S 89° 15' 19.7" E	100.00	121 LINK
11-12	S 89° 15' 19.7" E	100.00	122 LINK
12-13	S 89° 15' 19.7" E	100.00	123 LINK
13-14	S 89° 15' 19.7" E	100.00	124 LINK
14-15	S 89° 15' 19.7" E	100.00	125 LINK
15-16	S 89° 15' 19.7" E	100.00	126 LINK
16-17	S 89° 15' 19.7" E	100.00	127 LINK
17-18	S 89° 15' 19.7" E	100.00	128 LINK
18-19	S 89° 15' 19.7" E	100.00	129 LINK
19-20	S 89° 15' 19.7" E	100.00	130 LINK
20-21	S 89° 15' 19.7" E	100.00	131 LINK
21-22	S 89° 15' 19.7" E	100.00	132 LINK
22-23	S 89° 15' 19.7" E	100.00	133 LINK
23-24	S 89° 15' 19.7" E	100.00	134 LINK
24-25	S 89° 15' 19.7" E	100.00	135 LINK
25-26	S 89° 15' 19.7" E	100.00	136 LINK
26-27	S 89° 15' 19.7" E	100.00	137 LINK
27-28	S 89° 15' 19.7" E	100.00	138 LINK
28-29	S 89° 15' 19.7" E	100.00	139 LINK
29-30	S 89° 15' 19.7" E	100.00	140 LINK
30-31	S 89° 15' 19.7" E	100.00	141 LINK
31-32	S 89° 15' 19.7" E	100.00	142 LINK
32-33	S 89° 15' 19.7" E	100.00	143 LINK
33-34	S 89° 15' 19.7" E	100.00	144 LINK
34-35	S 89° 15' 19.7" E	100.00	145 LINK
35-36	S 89° 15' 19.7" E	100.00	146 LINK
36-37	S 89° 15' 19.7" E	100.00	147 LINK
37-38	S 89° 15' 19.7" E	100.00	148 LINK
38-39	S 89° 15' 19.7" E	100.00	149 LINK
39-40	S 89° 15' 19.7" E	100.00	150 LINK
40-41	S 89° 15' 19.7" E	100.00	151 LINK
41-42	S 89° 15' 19.7" E	100.00	152 LINK
42-43	S 89° 15' 19.7" E	100.00	153 LINK
43-44	S 89° 15' 19.7" E	100.00	154 LINK
44-45	S 89° 15' 19.7" E	100.00	155 LINK
45-46	S 89° 15' 19.7" E	100.00	156 LINK
46-47	S 89° 15' 19.7" E	100.00	157 LINK
47-48	S 89° 15' 19.7" E	100.00	158 LINK
48-49	S 89° 15' 19.7" E	100.00	159 LINK
49-50	S 89° 15' 19.7" E	100.00	160 LINK
50-51	S 89° 15' 19.7" E	100.00	161 LINK
51-52	S 89° 15' 19.7" E	100.00	162 LINK
52-53	S 89° 15' 19.7" E	100.00	163 LINK
53-54	S 89° 15' 19.7" E	100.00	164 LINK
54-55	S 89° 15' 19.7" E	100.00	165 LINK
55-56	S 89° 15' 19.7" E	100.00	166 LINK
56-57	S 89° 15' 19.7" E	100.00	167 LINK
57-58	S 89° 15' 19.7" E	100.00	168 LINK
58-59	S 89° 15' 19.7" E	100.00	169 LINK
59-60	S 89° 15' 19.7" E	100.00	170 LINK
60-61	S 89° 15' 19.7" E	100.00	171 LINK
61-62	S 89° 15' 19.7" E	100.00	172 LINK
62-63	S 89° 15' 19.7" E	100.00	173 LINK
63-64	S 89° 15' 19.7" E	100.00	174 LINK
64-65	S 89° 15' 19.7" E	100.00	175 LINK
65-66	S 89° 15' 19.7" E	100.00	176 LINK
66-67	S 89° 15' 19.7" E	100.00	177 LINK
67-68	S 89° 15' 19.7" E	100.00	178 LINK
68-69	S 89° 15' 19.7" E	100.00	179 LINK
69-70	S 89° 15' 19.7" E	100.00	180 LINK
70-71	S 89° 15' 19.7" E	100.00	181 LINK
71-72	S 89° 15' 19.7" E	100.00	182 LINK
72-73	S 89° 15' 19.7" E	100.00	183 LINK
73-74	S 89° 15' 19.7" E	100.00	184 LINK
74-75	S 89° 15' 19.7" E	100.00	185 LINK
75-76	S 89° 15' 19.7" E	100.00	186 LINK
76-77	S 89° 15' 19.7" E	100.00	187 LINK
77-78	S 89° 15' 19.7" E	100.00	188 LINK
78-79	S 89° 15' 19.7" E	100.00	189 LINK
79-80	S 89° 15' 19.7" E	100.00	190 LINK
80-81	S 89° 15' 19.7" E	100.00	191 LINK
81-82	S 89° 15' 19.7" E	100.00	192 LINK
82-83	S 89° 15' 19.7" E	100.00	193 LINK
83-84	S 89° 15' 19.7" E	100.00	194 LINK
84-85	S 89° 15' 19.7" E	100.00	195 LINK
85-86	S 89° 15' 19.7" E	100.00	196 LINK
86-87	S 89° 15' 19.7" E	100.00	197 LINK
87-88	S 89° 15' 19.7" E	100.00	198 LINK
88-89	S 89° 15' 19.7" E	100.00	199 LINK
89-90	S 89° 15' 19.7" E	100.00	200 LINK

SHEET 2 OF 2

THIS PLAN VOID IF NOT RECORDED WITH SHEET 1 OF 2

Plan of Land to be Conveyed by
PINE AIR, LLC TO ALLEN LAND CO., LLC

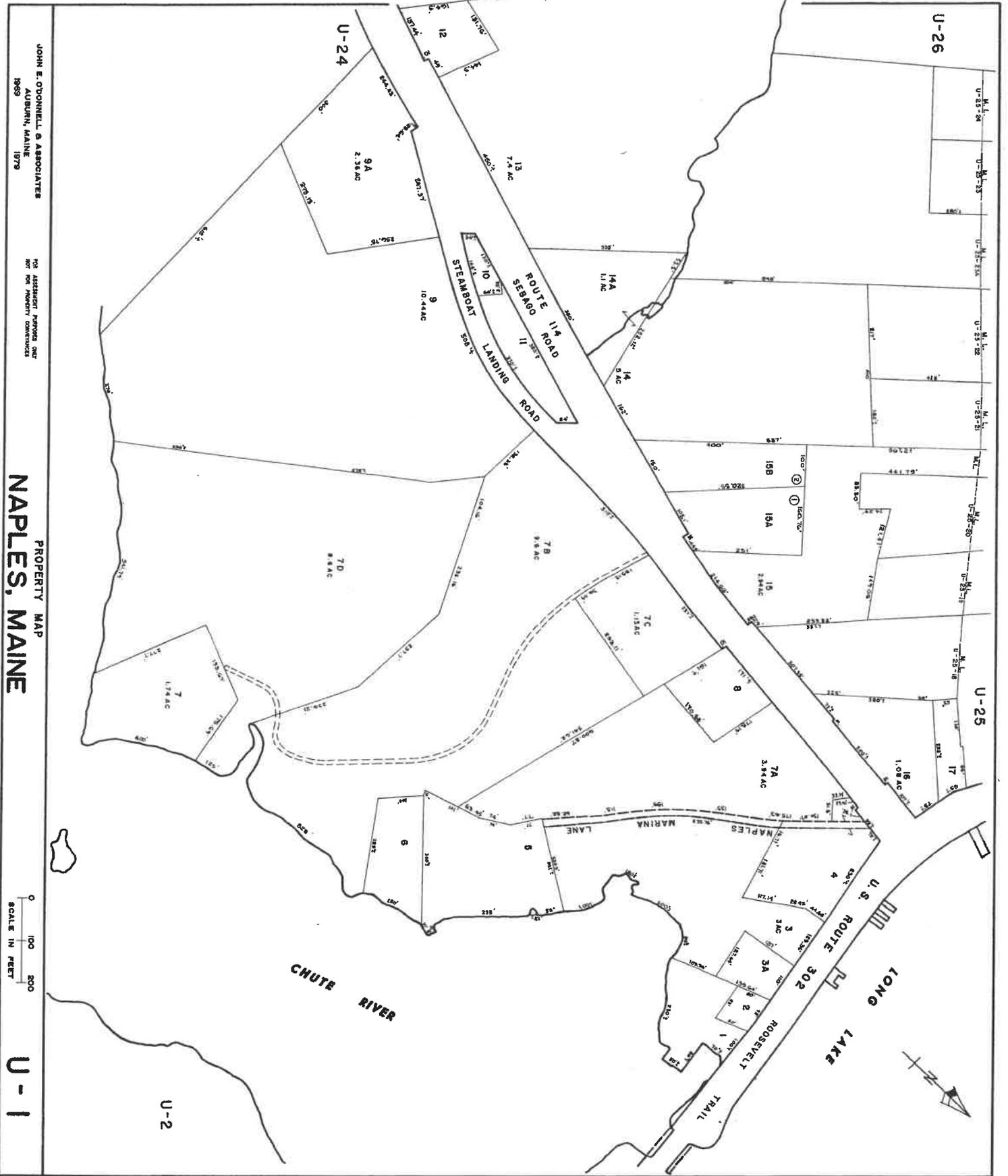
Location	Name	Address	State
50 Seaplane Cove	Hopkiss	Cumberland	Maine

Surveyor:
James M. Build
50 Seaplane Cove
Hopkiss, Maine 04055

Prepared by:
HEART OF MAINE SURVEYING
P.O. BOX 3 · 151 South Road
Scarborough, Maine 04942

DATE: August 31, 2015

NOT DRAWN TO A SPECIFIC SCALE



JOHN E. O'DONNELL & ASSOCIATES
 AUBURN, MAINE
 1969

NO ASSURANCE PROVIDED
 FOR ANY PARTIAL ENCUMBRANCES

PROPERTY MAP
 NAPLES, MAINE

0 100 200
 SCALE IN FEET

U-1

U-2

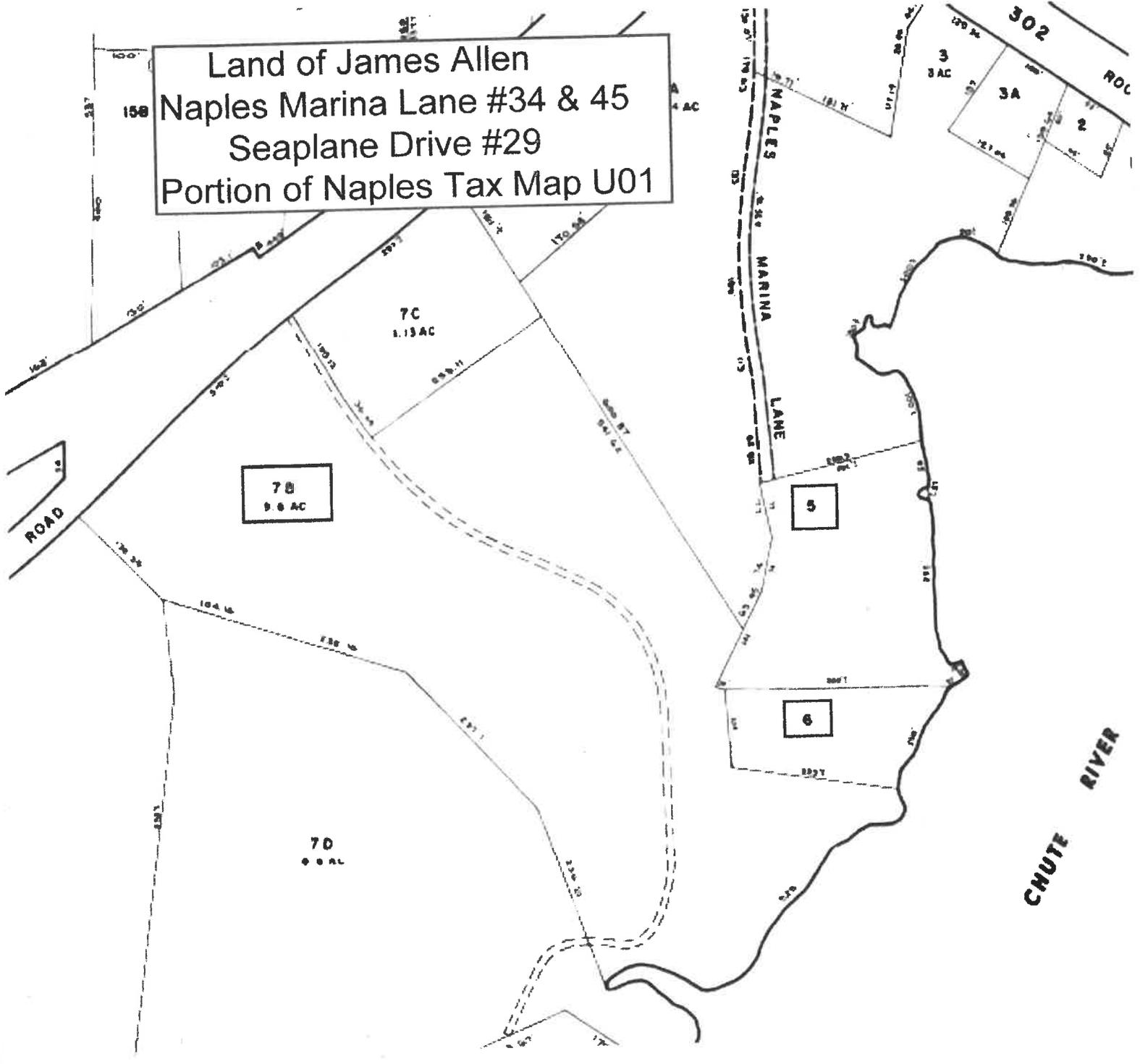
U-24

U-26

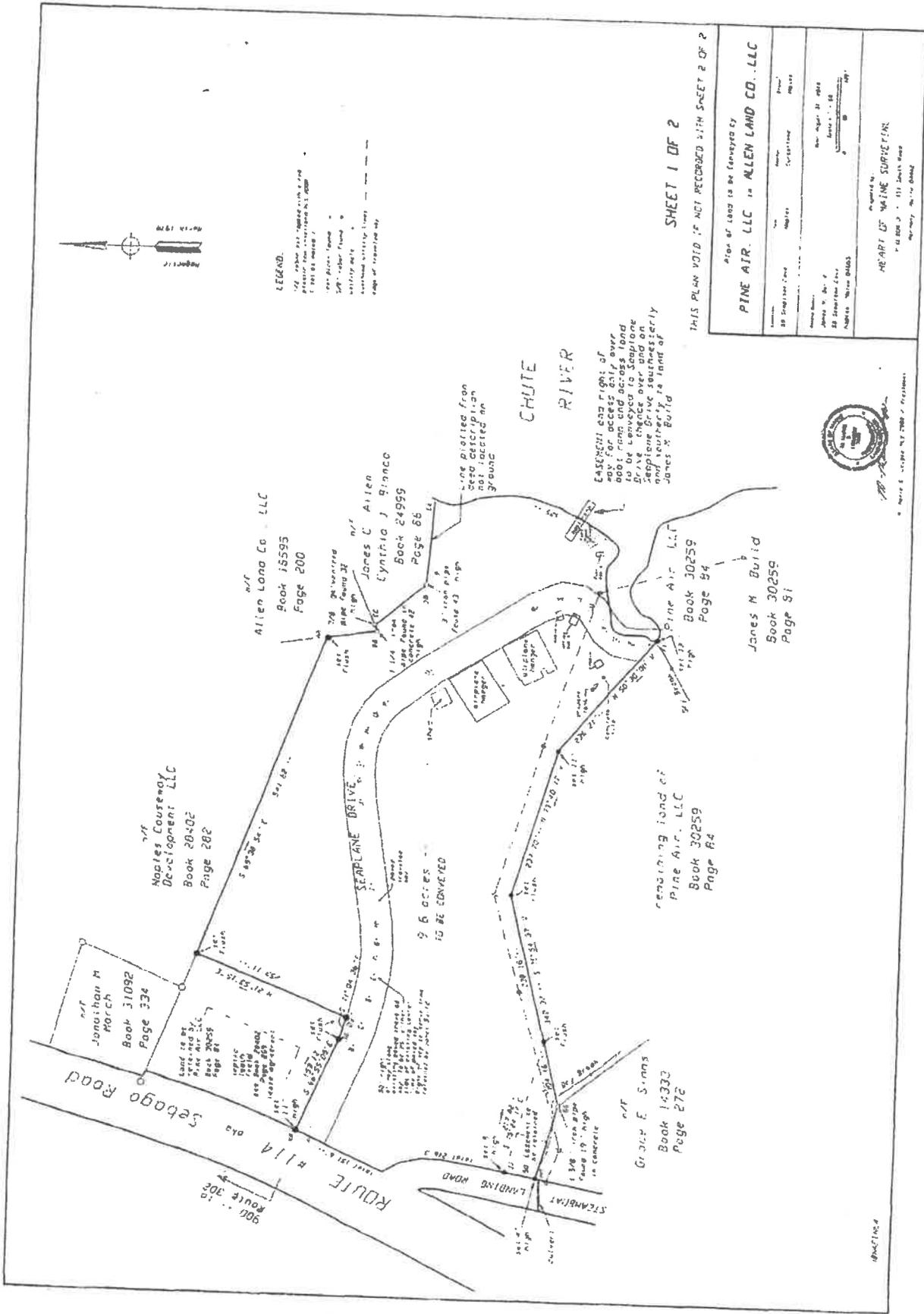
U-25

C

Land of James Allen
Naples Marina Lane #34 & 45
Seaplane Drive #29
Portion of Naples Tax Map U01



D



M.



Naples Marina Lots
 Land of James C. Allen
 Tax Map U01 Lot 7-B
 Allen Land Company LLC
 Tax Map U01 Lots 5 & 6

e w/ survey line

Google earth

400 ft



Marina Lots in SLZ -
250-ft setback
Commercial District

Project Boat Storage
100' W x 200' L
Outside SLZ 250-ft.

NAPLES SHORELAND ZONING

Village Zoning
District

Lauren Ln

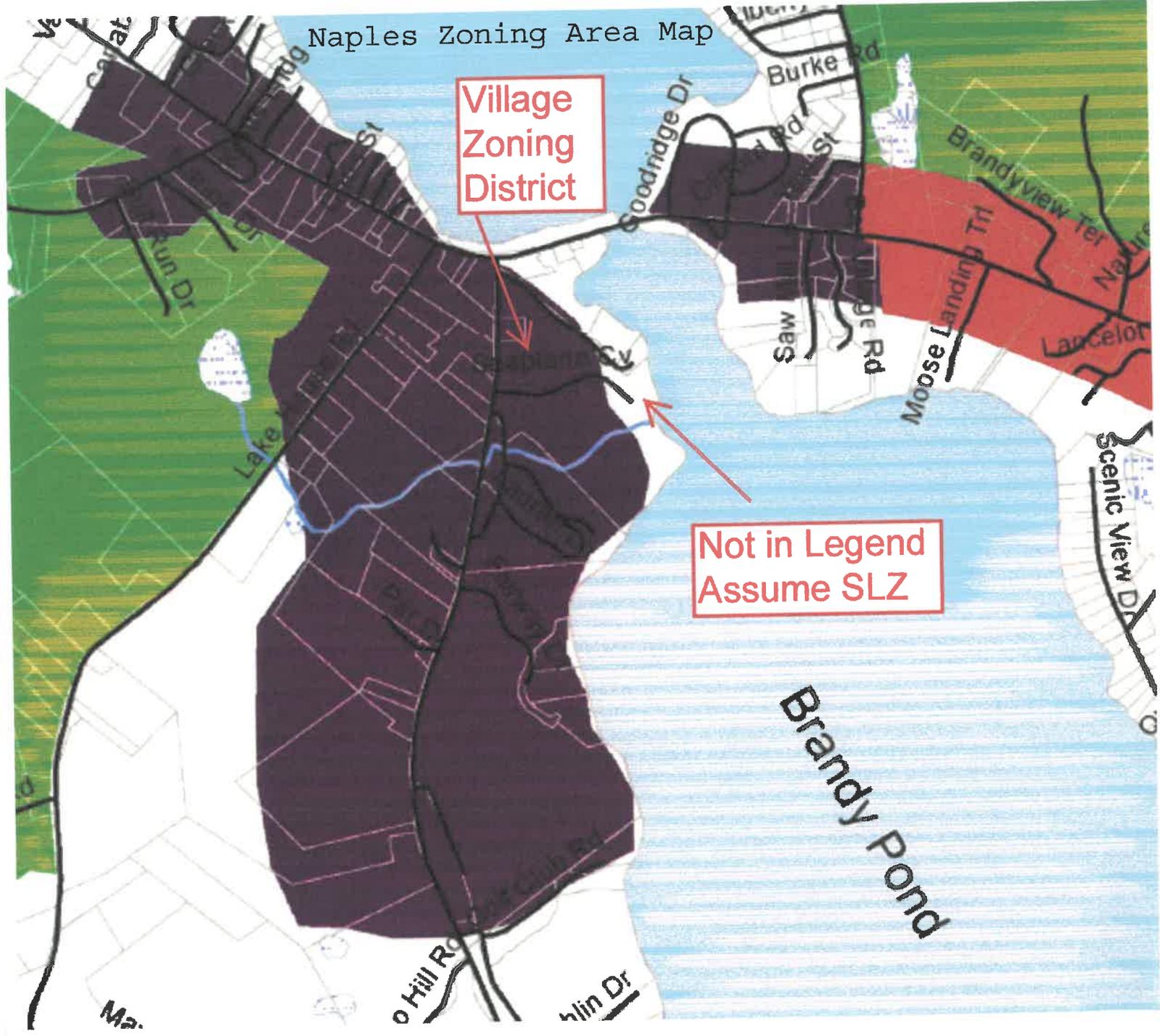
Fairway

D

Naples Zoning Area Map

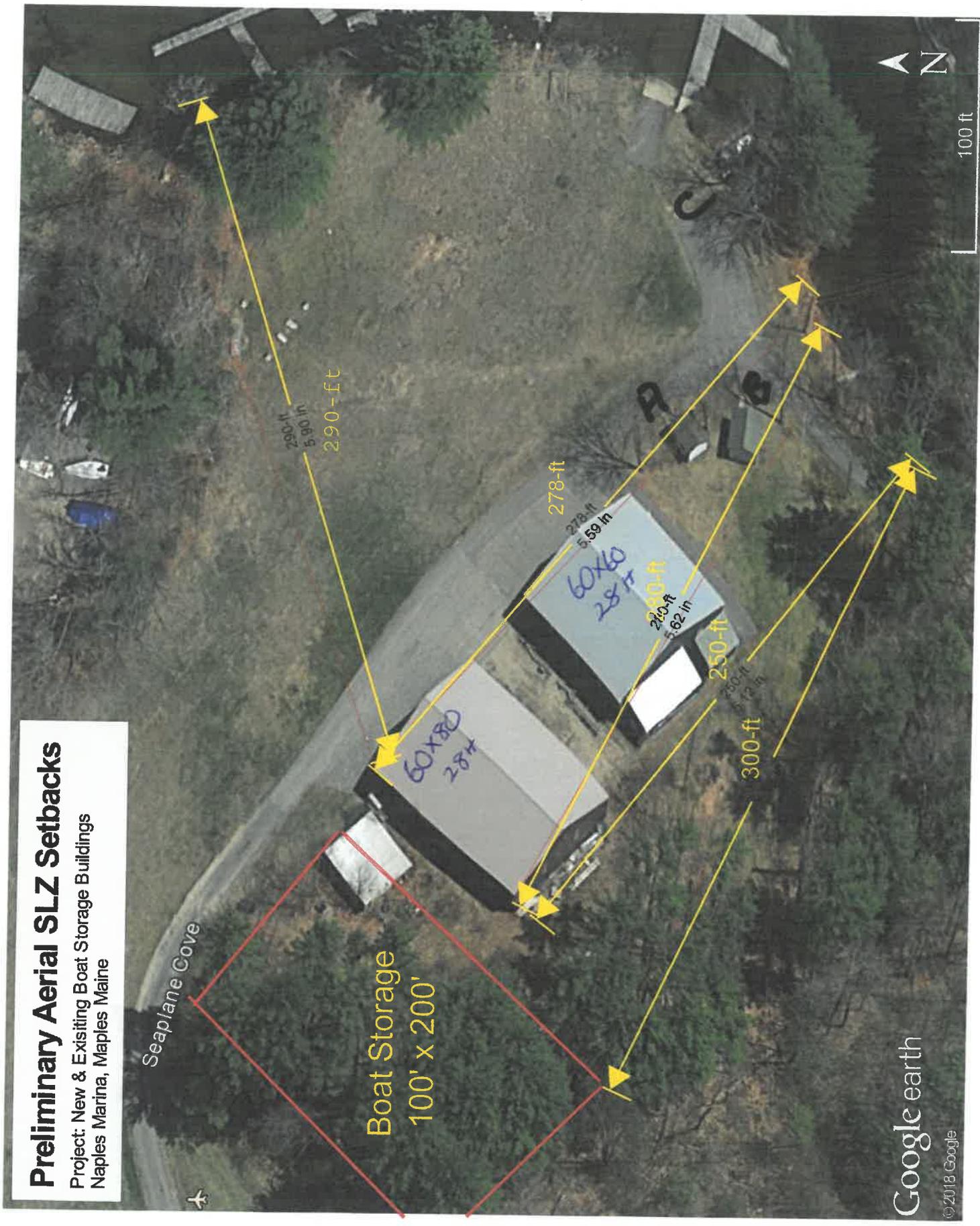
Village Zoning District

Not in Legend Assume SLZ



- A. 10x14x10 ft
- B. 12x16x10 ft
- C. 7x12x10 ft

H.



Preliminary Aerial SLZ Setbacks

Project: New & Existing Boat Storage Buildings
 Naples Marina, Naples Maine

Seaplane Cove

Boat Storage
 100' x 200'

290-ft
 2600 ft
 5.90 in

278-ft
 278 ft
 5.59 in

60x60
 28ft
 250-ft
 250 ft
 5.62 in

300-ft
 300 ft
 5.72 in

100 ft

Google earth

© 2018 Google

SSURGO | me005, me613 | 0.23 seconds | 0.92 cache ratio | BBOX: (-70.6048, 43.9656) (-70.5968, 43.969) | 61 acres

Naples Marina Lots

- Sails Series Mapping
- Land of James C. Allen
- Tax Map U01 Lot 7-B
- Allen Land Company LLC
- Tax Map U01 Lots 5 & 6



split need to update w/ survey line

Google earth

LOCATION DEERFIELD

MA+CT ME NH NY RI VT

Established Series
Rev. CAW-MFF-JTI
05/2018

DEERFIELD SERIES

The Deerfield series consists of very deep, moderately well drained soils formed in glaciofluvial deposits. They are nearly level to strongly sloping soils on terraces, deltas, and outwash plains. Slope ranges from 0 to 15 percent. Saturated hydraulic conductivity is high or very high. Mean annual temperature is about 9 degrees C. and mean annual precipitation is about 1194 mm.

TAXONOMIC CLASS: Mixed, mesic Aquic Udipsamments

TYPICAL PEDON: Deerfield loamy fine sand in a hayfield at an elevation of about 19 meters. (Colors are for moist soil.)

Ap --0 to 23 cm; very dark brown (10YR 2/2) loamy fine sand; weak fine and medium granular structure; very friable; common fine roots; moderately acid; abrupt smooth boundary. (15 to 30 cm thick)

Bw1 --23 to 43 cm; strong brown (7.5YR 5/6) loamy fine sand; weak fine and medium granular structure; very friable; common fine roots; moderately acid; clear smooth boundary.

Bw2 --43 to 64 cm; yellowish brown (10YR 5/6) loamy fine sand; weak fine granular structure; very friable; few fine faint brownish yellow (10YR 6/6), moist, masses of oxidized iron accumulation; strongly acid; clear wavy boundary. (Combined thickness of the Bw horizons is 13 to 69 cm.)

BC --64 to 84 cm; yellowish brown (10YR 5/6) fine sand; single grain structure; loose; common fine and medium distinct strong brown (7.5YR 5/8) masses of oxidized iron accumulation and common fine and medium distinct light brownish gray (10YR 6/2) iron depletions; strongly acid; clear broken boundary. (0 to 51 cm thick)

C1 --84 to 102 cm; light brownish gray (10YR 6/2) stratified sand and fine sand; single grain structure; loose; common fine prominent strong brown (7.5YR 5/8) masses of oxidized iron accumulation; strongly acid; clear wavy boundary.

C2 --102 to 152 cm; light brownish gray (10YR 6/2) stratified sand and gravelly sand; single grain structure; loose; common fine and medium prominent strong brown (7.5YR 5/8) masses of oxidized iron accumulation; 10 percent rounded fine granite and quartzite gravel; very strongly acid; individual strata contain up to 20 percent gravel.

TYPE LOCATION: Essex County, Massachusetts; Town of Andover, 2,525 feet north-northwest (345 deg) of the intersection of Laurel Lane and Old River Road, in a hayfield. USGS Lawrence, Massachusetts topographic quadrangle; Lat. 42 degrees 41 minutes 49.57 seconds N. and long. 71 degrees 12 minutes 52.52 seconds W., WGS 84.

RANGE IN CHARACTERISTICS: Solum thickness ranges from 38 to 100 cm. Gravel, generally fine gravel, ranges from 0 to less than 15 percent in the solum and 0 to 20 percent in the substratum. Reaction ranges from extremely acid through slightly acid unless limed. Iron depletions with chroma of two or less are between depths of 38 and 100 cm from the mineral soil surface.

The O horizon, where present, has a hue of 5YR to 10YR, value of 2 to 3, and chroma of 1 to 3. It is slightly to highly decomposed plant material.

The Ap horizon has hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 to 3. It is fine sandy loam, sandy loam, loamy fine sand, loamy sand, fine sand, or sand. Undisturbed pedons commonly have an O horizon and a thin sequence of A, E, and Bs, Bhs or Bh horizons. They may also have an AB or AE horizon. The Ap or A horizon has weak or moderate very fine to medium granular structure and is friable or very friable.

The Bw horizon has hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 3 to 6. Texture of the upper part of the Bw horizon, within a depth of 25 cm from the soil surface, has the same range as the A horizon. Below 25 cm the texture is loamy fine sand, loamy sand, fine sand, sand or coarse sand. Structure is weak, very fine to medium granular or subangular blocky, or is single grain. Moist consistence is friable, very friable, or loose.

The BC horizon has hue of 7.5YR to 2.5Y, value of 3 to 6, and chroma of 2 to 4. Texture range is the same as the lower part of the Bw horizon. Structure is weak, very fine to medium subangular blocky, or is single grain. Moist consistence is friable, very friable, or loose.

The C horizon has hue of 7.5YR to 5Y, value of 4 to 6, and chroma of 1 to 4. Texture is loamy fine sand, loamy sand, fine sand, sand or coarse sand. Stratified textures of these textures and gravel, coarse sand, or loamy coarse sand are present in some pedons. It is single grain or massive. Moist consistence is friable, very friable or loose.

COMPETING SERIES: These are the Algansee, Altmar, Birchwood, Brems, Brockatonorton, Elnora, Fortress, Livonia, Meckling, Morocco, Ottokee, Partridge, Succotash, Tedrow, and Zaborowsky series. The Algansee, Brems, Brockatonorton, Meckling, Morocco, Ottokee, Partridge, Tedrow, and Zaborowsky soils are from outside of region R. Algansee soils have an irregular decrease of organic matter with depth. Altmar soils have rock fragments dominated by sandstone. Birchwood soils formed in sandy sediments over glacial till. Brems and Ottokee soils have sola more than 100 cm thick, and Ottokee soils have lamellae. Elnora soils contain more fine sand in the lower part of the series control section. Fortress soils formed in anthropotransported soil material from eolian sand, outwash, ordredging activities. Livonia soils formed in glaciolacustrine parent material with neutral to moderately alkaline reaction and average less than 960 mm of annual precipitation. Meckling soils are calcareous throughout. Morocco soils have redox features within a depth of 38 cm. Partridge soils have bedrock at depths of 50 to 100 cm. Succotash soils formed in sandy eolian and/or marine overwash deposits. Tedrow and Zaborowsky soils have carbonates.

GEOGRAPHIC SETTING: Deerfield soils are level to strongly sloping soils on outwash terraces, outwash deltas, and outwash plains. Slope gradients are commonly 0 to 3 percent, but range to 15 percent. The soils formed in thick deposits of sand derived mainly from granite, gneiss and quartzite, but in places containing materials from schist and sandstone. The sand is poorly graded; medium sand is generally dominant and typically contains little or no gravel. The mean annual precipitation typically ranges from 965 to 1397 mm but the range includes as low as 660 mm in some places east of Adirondack Mountains in the Champlain Valley of New York. The mean annual temperature ranges from 7 to 11 degrees C. The frost-free period ranges from 120 to 200 days.

GEOGRAPHICALLY ASSOCIATED SOILS: Deerfield soils are in a drainage sequence that includes the excessively drained Carver and Windsor soils, the somewhat poorly drained Wareham and Pipestone soils, and the very poorly drained Scarboro soils. The well drained Agawam, moderately well drained Ninigret, and poorly drained Walpole soils are terrace associates that are loamy over stratified sand and gravel. The somewhat excessively drained Merrimac and the excessively drained Hinckley and Penwood soils are on nearby glaciofluvial landforms and have sandy and gravelly substrata. The excessively drained Plymouth, somewhat excessively drained Gloucester, well drained Canton, Charlton, Cheshire, Essex and Paxton, and moderately well drained Woodbridge soils are on nearby glacial till uplands.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Moderately well drained. Runoff is

negligible to low. Saturated hydraulic conductivity is high or very high.

USE AND VEGETATION: Mainly cleared and used for truck crops, tobacco, potatoes, hay, pasture and silage corn. Forested areas have pitch pine, white pine, gray birch, red maple, oaks, and sugar maple. Many areas are in urban uses.

DISTRIBUTION AND EXTENT: New Hampshire, Vermont, Maine, Massachusetts, Rhode Island, Connecticut, and New York. (MLRAs 101, 142, 144A, 144B, 145, and 149B) The soils of this series are moderately extensive.

SOIL SURVEY REGIONAL OFFICE (SSRO) RESPONSIBLE: Amherst, Massachusetts.

SERIES ESTABLISHED: Franklin County, Massachusetts, 1964.

REMARKS: Diagnostic horizons and features recognized in this pedon include:

Ochric epipedon - the zone from 0 to 23 cm (Ap horizon).

Redox depletions with chroma of 2 or less - the zone from 64 to 152 cm. (BC, Cg1, and Cg2 horizons).

ADDITIONAL DATA: Full characterization data for pedons with User Pedon IDs of S1959MA005001, S1970MA011004, S1991MA023005, S2005CT003003, and S2013NY085002. Pedons analyzed by the KSSL, Lincoln, NE. The laboratory characterization data for these pedons and similar soils is available through the National Cooperative Soil Survey Soil Characterization Database: <http://ncsslslabdatamart.sc.egov.usda.gov/>

National Cooperative Soil Survey
U.S.A.