

**TOWN OF COLUMBIA
PLANNING AND ZONING COMMISSION**

Adella G. Urban Administrative Offices Conference Room
323 Route 87, Columbia, CT
Monday, April 08, 2024 7:00 pm

Regular Meeting – HYBRID

Join Zoom Meeting:
<https://us02web.zoom.us/j/86107049333>

Meeting ID: **861 0704 9333**

or join by phone 1-646-558-8656 same ID.

THIS IS A HYBRID PUBLIC MEETING. THE PUBLIC CAN ATTEND IN-PERSON OR ELECTRONICALLY. THE INFORMATION PROVIDED IN THIS AGENDA CONTAINS THE LINK TO ACCESS THE MEETING ELECTRONICALLY.

AGENDA

1. **CALL TO ORDER**
2. **ROLL CALL AND SEATING OF ALTERNATES**
3. **ADDITIONS/CHANGES TO AGENDA**
4. **APPROVAL OF PZC REGULAR MEETING MINUTES of March 11, 2024**
5. **AUDIENCE OF CITIZENS**
6. **OPEN PUBLIC HEARING FOR:**

6.1 PZC 2324-03: Special Permit Application for USS Vineyard Solar LLC., for a Ground Mounted Solar Array as an Accessory Use at 468 Route 87, Map 030, Lot 038, Zone RA, Lot Area 56.32, Section 8.15.

CLOSE OR SCHEDULE TO CONTINUE PUBLIC HEARING

7. **UNFINISHED BUSINESS (Discussion/Possible Action)**

7.1 PZC 2324-02: Special Permit Application for Dava Siedman of Fairview Farm, LLC., for a Major Impact Home Occupation at 301 Rte. 66, Map 028, Lot 021, Zone RA, Lot Area 6.4, Section 8.5.4.

(Received 2/12/24) (Applicant WITHDREW Application on 3/26/2024)

7.2 PZC 2324-03: Special Permit Application for USS Vineyard Solar LLC., for a Ground Mounted Solar Array as an Accessory Use at 468 Route 87, Map 030, Lot 038, Zone RA, Lot Area 56.32, Section 8.15.

(Discussion/Possible Action or Public Hearing Continuation of Special Permit Application)

8. NEW BUSINESS (Discussion/Possible Action)

8.1 PZC 2324-04: Site Plan Application for Robert Caldwell of Caldwell Realty LLC., to Construct a Vehicle Repair Shop at 41 Route 6, Map 002, Lot 020, Zone CM-1, Lot Area 9.68, Section 31.2.6.
(Receive/Discussion/Possible Action on Site Plan Application)

9. REGULATION REVISIONS (Discussion)

9.1 Section 52.7.19 Planned Neighborhood Housing

10. COMMUNICATIONS AND REPORTS:

11. COMMISSION OPEN DISCUSSION:

12. AUDIENCE OF CITIZENS:

13. EXECUTIVE SESSION:

Pending Legal Action per State Statutes Section 1-200(6)(B)

14. ADJOURNMENT

File Copy



TOWN OF COLUMBIA

323 Jonathan Trumbull Highway, Columbia, CT 06237
(860) 228-0440 FAX: (860) 228-2847

RECEIVED

MAR 14 2024

TOWN OF COLUMBIA
BUILDING & LAND USE

Date Submitted: 3/5/24

Fee Paid: \$610 check # 2315
MKH

PZC-2324-03

SPECIAL PERMIT APPLICATION

See Sections 51 and 52 of the Columbia Zoning Regulations for Special Permit requirements.

New Special Permit Application

Fee: \$610 (\$100 PZC fee + \$ 450 LN cost + \$60 state fee)

Modification to Approved Special Permit

Fee (if no PH): \$310 (\$100 PZC fee + \$150 LN cost + \$60 state fee)

Location of Property

Address: 468 Route 87 Columbia, CT

Assessor's Map 30 Lot 38 Zone RA Lot Area 56.32

Proposed Activity

Proposed Use: Ground Mounted Solar Array as and Accessory Use

Applicable Zoning Regulation Section(s): 8.15

Proposed construction: New Bldg Addition Interior Signs Site Work None
(check all that apply)

Applicant/Agent Information

Primary Contact

Name: USS Vineyard Solar LLC

Business Name: United States Solar Corp

Business Mailing Address: 100 N 6th Street, Suite 410B, Minneapolis, MN 55403

Phone: 612-225-4682 Cell: Email: dan.csaplar@us-solar.com

Interest in property: Owner Option Lessee Legal Engr Survey Other

Property Owner Information (if different from above)

Primary Contact

Name: Walter and Nancy Tabor

Address: 15 Robert Drive Columbia, CT. 06237

Phone: 860-933-1605 Cell: Email: waltertabor@yahoo.com

SPECIAL PERMIT APPLICATION CHECKLIST

Applications are considered complete only when all of the information as required by the Columbia Zoning Regulations per Sections 51 and 52 is received. Failure to submit, or formally request a waiver, all the required items is grounds for denial by the Commission. In addition to the items below, the Commission may require additional information in order to determine if the proposal conforms to the Regulations.

Office	Applicant*	
	x	Completed Application with original signatures (plus 10 copies)
	x	Detailed Statement of Use that includes the nature and intensity of the proposed operation, number of employees and hours of operation (10 copies)
	x	Names and addresses of property owners within 200' of subject property
	N/A	Four (4) copies of a full scale site plan on an A2 survey, plus ten (10) reduced copies at 11" x 17", that include the following information:
	x	<ul style="list-style-type: none"> • Date, written and graphic scales, north arrow, seals & signatures of engineer, surveyor and other professionals
	x	<ul style="list-style-type: none"> • Lot dimensions with accurate linear and angular dimensions with any easements and deed restrictions noted; adjacent roads and abutter information
	x	<ul style="list-style-type: none"> • Existing and proposed topography, locations of wetlands and waterbodies, drainage swales and other site features (stone walls, trees, ledges)
	x	<ul style="list-style-type: none"> • Existing and proposed structures including dimensions and elevations
	N/A	<ul style="list-style-type: none"> • Table of proposed frontage, setbacks, and coverage with Zoning requirements
	N/A	<ul style="list-style-type: none"> • Location and results of test pits; location of proposed well and septic system
	x	<ul style="list-style-type: none"> • Location and description of proposed stormwater system including pre and post development calculations; location and description of utilities and tanks
	x	<ul style="list-style-type: none"> • Location of parking, driveways, sidewalks and access and egress points
	x	<ul style="list-style-type: none"> • Parking plan with calculations per category of use in zoning regulations
	x	<ul style="list-style-type: none"> • Erosion and Sedimentation plan and narrative
	N/A	<ul style="list-style-type: none"> • Outdoor lighting plan including details and specifications
	N/A	<ul style="list-style-type: none"> • Landscaping and screening plan including material specifications and details
	N/A	Four (4) copies of architectural plans, plus ten (10) reduced copies at 11" x 17"
	x	Completed Sign Application if requesting approval under Section 62.9
	x	Copy of approval letters from other Commissions or agencies
	x	Copies of all drainage reports, traffic or environmental studies

* For each item listed, indicate the following:

✓ = provided NA = not applicable W = written waiver request attached

Other Information

Is the property located within 500' of Columbia's town boundary? Yes No

Is the property within a FIRM Flood Zone A, A1-30? Yes No

Does the proposal require Inland Wetland's Approval? Yes No
If yes, date of approval tbd (submit copy of approval letter)

Does the proposal require ZBA approval? Yes No
If yes, date of approval _____ (submit copy of approval letter)

Does the proposal require CONN-DOT approval? Yes No
If yes, date of approval _____ (submit copy of approval letter)

Required Information

1. Copy of assessor's card
2. Completed and signed Special Permit Application including a completed checklist and written waivers (if any)
3. Application fee – Check payable to the Town of Columbia

Prior to submitting an application,

applicants are strongly encouraged to discuss the potential land use or pending application with the Town Planner 860-228-0440 or TPlanner@ColumbiaCT.org

By signing this application, I am certifying that all information submitted is true and accurate and that I have submitted all required documentation. I hereby permit Columbia staff and Commission members to enter onto and inspect this site during reasonable hours for the purpose of reviewing the site before and after a permit is granted.

Signature of Owner _____ Date _____

Signature of Applicant Dan Csaplar Date 3/5/24

Signature of Authorized Agent _____ Date _____

COVER LETTER

3/5/2024

Zoning Commission
Town of Columbia Planning
323 Route 87
Columbia, CT 06237

RE: Special Permit Application by USS Vineyard Solar LLC

Dear Commissioners,

Attached, please find an application for a Special Permit to construct and operate a 1 megawatt solar photovoltaic energy generation facility (the "Project") located at 468 Route 87. USS Vineyard Solar LLC is wholly owned by United States Solar Corporation ("US Solar"), the turnkey developer of the Project. The Project has been designed in compliance with standards established in your Zoning Regulations.

The Project site is ideal for a community solar facility due to proximity to three-phase electrical infrastructure, substantial wooded buffers, and significant setbacks from public views. Eversource has approved the Project's interconnection at the existing entrance to the Heartstone Farm & Winery. The northern, southern and western boundaries of the Project are obscured by a substantial wooded buffer that will remain intact. The Project is set back over 2,500ft from Route 87 and over 350ft from Beaudet Terrace. Residences on Beaudet Terrace along the Project's eastern border are shielded from views of the project by an existing wooded buffer composed of canopy and mid-story trees, as well as ground level shrubs and vegetation.

The Project will generate enough electricity to power approximately 750-1,000 homes annually and interconnect directly to Eversource's existing distribution system. Residents and businesses who are Eversource customers may subscribe to a portion of the electricity generated and receive bill credits on their utility bills. In this way, residents and businesses will have the opportunity to receive a direct economic benefit from the project.

Construction is expected to last 3-6 months, with most equipment deliveries in the first month and most electrical testing in the later stages of construction. Construction employees will park within the Project premises. There will be no permanent storage on-site. After construction, the array sits and generates electricity. The array will be remotely monitored, and we will send out an operation and maintenance crew roughly once a quarter to perform routine maintenance.

Please contact us with any questions, comments, or points for clarification. We appreciate the coordination and insights already provided by Town staff and look forward to working with all parties involved.

Sincerely,



Dan Csaplar
Senior Project Developer
United States Solar Corporation
33 Arch Street, Floor 17
Boston, MA 02110

USS Vineyard Solar LLC

Town of Columbia, Tolland County, CT

Sediment Erosion and Sediment Control Plans

Know what's below.
Call before you dig.

Westwood Surveying & Engineering
 203.331.1438
 10780 Woodville Road, Suite #100
 Middletown, CT 06457
 www.westwood-surveying.com



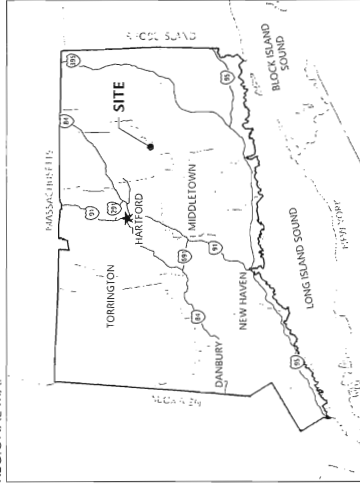
PREPARED FOR:

USS SOLAR

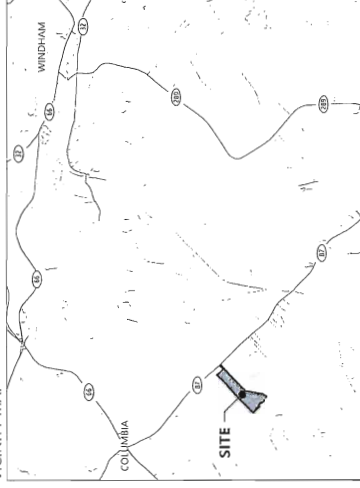
100 N 6th St #410B
 Minneapolis, MN 55403

REVISION	DATE	DESCRIPTION
A.	01/24/2024	ISSUE PERMITS
B.	02/19/2024	ISSUE PERMITS
C.	03/07/2024	ISSUE PERMITS
D.	03/14/2024	ISSUE PERMITS
E.	03/14/2024	ISSUE PERMITS

REGIONAL MAP



VICINITY MAP



SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
C001	Overall Existing Conditions
C101	Existing Conditions
C102	Existing Conditions
C103	Existing Conditions
C104	Existing Conditions
C105	Existing Conditions
C107	Overall Site Plan
C201	Pre-Construction Erosion Control - Phase 1
C202	Pre-Construction Erosion Control - Phase 2
C203	Pre-Construction Erosion Control - Phase 3
C301	Construction Erosion Control - Phase 1
C302	Construction Erosion Control - Phase 2
C303	Construction Erosion Control - Phase 3
C401	Final Erosion Control - Phase 1
C402	Final Erosion Control - Phase 2
C403	Final Erosion Control - Phase 3

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
C501	Final Erosion Control - Phase 1
C502	Final Erosion Control - Phase 2
C503	Final Erosion Control - Phase 3
C601	Final Erosion Control - Phase 1
C602	Final Erosion Control - Phase 2
C603	Final Erosion Control - Phase 3
C701	Final Erosion Control - Phase 1
C702	Final Erosion Control - Phase 2
C703	Final Erosion Control - Phase 3
C801	Final Erosion Control - Phase 1
C802	Final Erosion Control - Phase 2
C803	Final Erosion Control - Phase 3

CONTACT INFORMATION

PROJECT OWNER/DEVELOPER	UNITED STATES SOLAR CORPORATION	CONTACT	PHONE	ADDRESS
PROJECT MANAGER <td>WESTWOOD SURVEYING AND ENGINEERING, P.C.</td> <td>DAN CUPPAR</td> <td>617-225-4842</td> <td>33 BRACKETT STREET, BOSTON, MA 02118</td>	WESTWOOD SURVEYING AND ENGINEERING, P.C.	DAN CUPPAR	617-225-4842	33 BRACKETT STREET, BOSTON, MA 02118
PROJECT CIVIL ENGINEER <td>WESTWOOD SURVEYING AND ENGINEERING, P.C.</td> <td>MIKE KELLY</td> <td>603-871-6883</td> <td>800 WASHINGTON ST, BOSTON, MA 02118</td>	WESTWOOD SURVEYING AND ENGINEERING, P.C.	MIKE KELLY	603-871-6883	800 WASHINGTON ST, BOSTON, MA 02118
		JOE BRETNICH, P.E.	317-853-7177	184.5 BROAD ST #120, LANCASTER, PA 17604

PROJECT LOCATION (APPROXIMATE CENTER OF SITE)
 LATITUDE = 41.9396° N
 LONGITUDE = 72.9116° W
 PERFORMED BY: GZA GEOENVIRONMENTAL, INC.
 DATE RECEIVED: 06-09-2021

PROJECT COORDINATE SYSTEM
 NAD83 2011 CONNECTICUT STATE PLANE (ZONE 18 F001)

USS Vineyard Solar LLC
 Town of Columbia, Tolland County, Connecticut

COVER

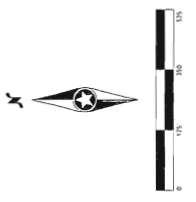
ISSUED FOR PERMIT

DATE 03/04/2024

SHEET C001



NO.	DATE	COMMENTS
A.	11/18/2022	315C Permit
B.	03/14/2024	315C Permit
C.	03/14/2024	315C Permit
D.	03/14/2024	315C Permit
E.	03/14/2024	315C Permit



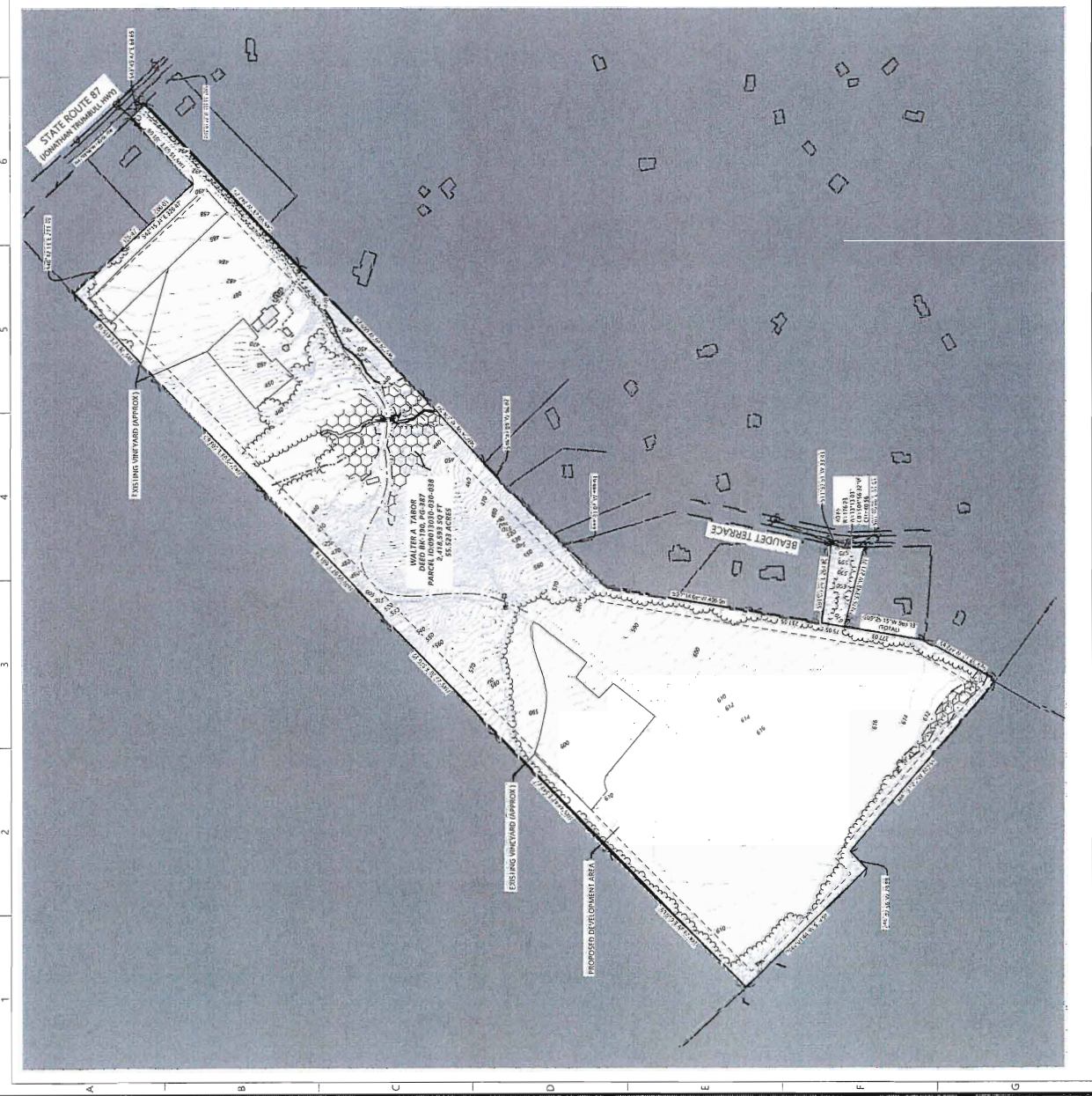
USS Vineyard Solar LLC
 Town of Columbia, Tolland County, Connecticut

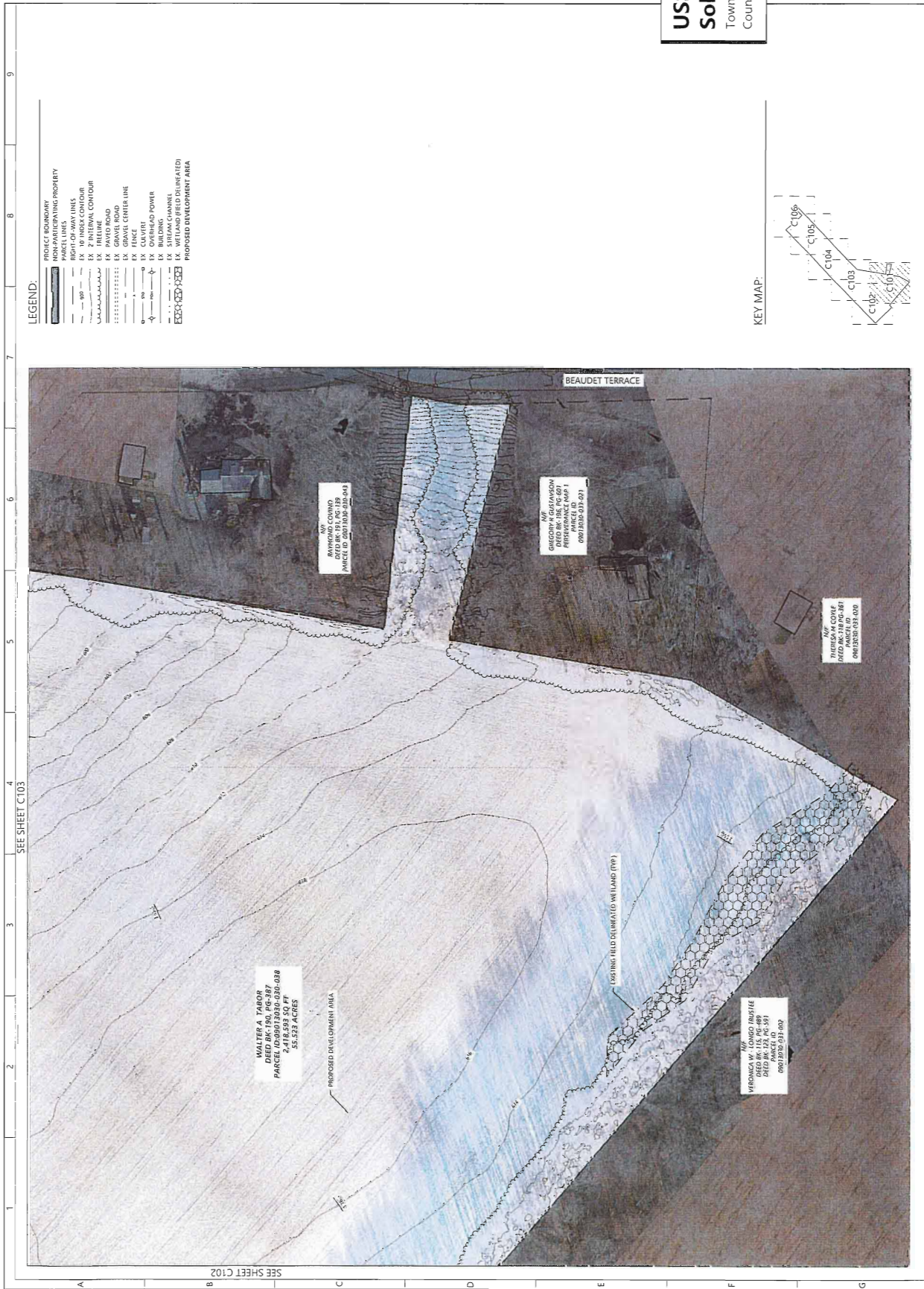
Overall Existing Conditions

ISSUED FOR PERMIT
 DATE: 03/04/2024
 SHEET: C100

LEGEND:

—	PROJECT BOUNDARY
---	NON-PARTICIPATING PROPERTY
---	RIGHT-OF-WAY LINES
---	EX 10' BUFFER CONTOUR
---	EX 10' BUFFER CONTOUR
---	EX FINISH
---	EX PAVED ROAD
---	EX GRAVEL ROAD
---	EX DRIVE
---	EX FENCE
---	EX CULVERT
---	EX STREAM CHANNEL
---	EX BURIED POWER
---	EX BURIED WATER
---	PROPOSED DEVELOPMENT AREA

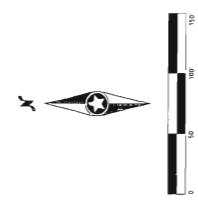




- LEGEND:**
- PROJECT BOUNDARY
 - EXISTING PROPERTY
 - PARCEL LINES
 - RIGHT-OF-WAY LINES
 - PROPERTY LINES
 - 2' INTERNAL CONTOUR
 - 1'5" FRETLINE
 - PAVED ROAD
 - GRAVEL CENTER LINE
 - FENCE
 - OVERHEAD POWER
 - BUILDING
 - WETLAND FIELD DELIMITED
 - PROPOSED DEVELOPMENT AREA

Westwood
Surveying & Engineering
 100 N. GUY ST. #4100
 MINNEAPOLIS, MN 55403
 (612) 339-1100
 www.westwoodse.com

US SOLAR
 100 N. GUY ST. #4100
 MINNEAPOLIS, MN 55403

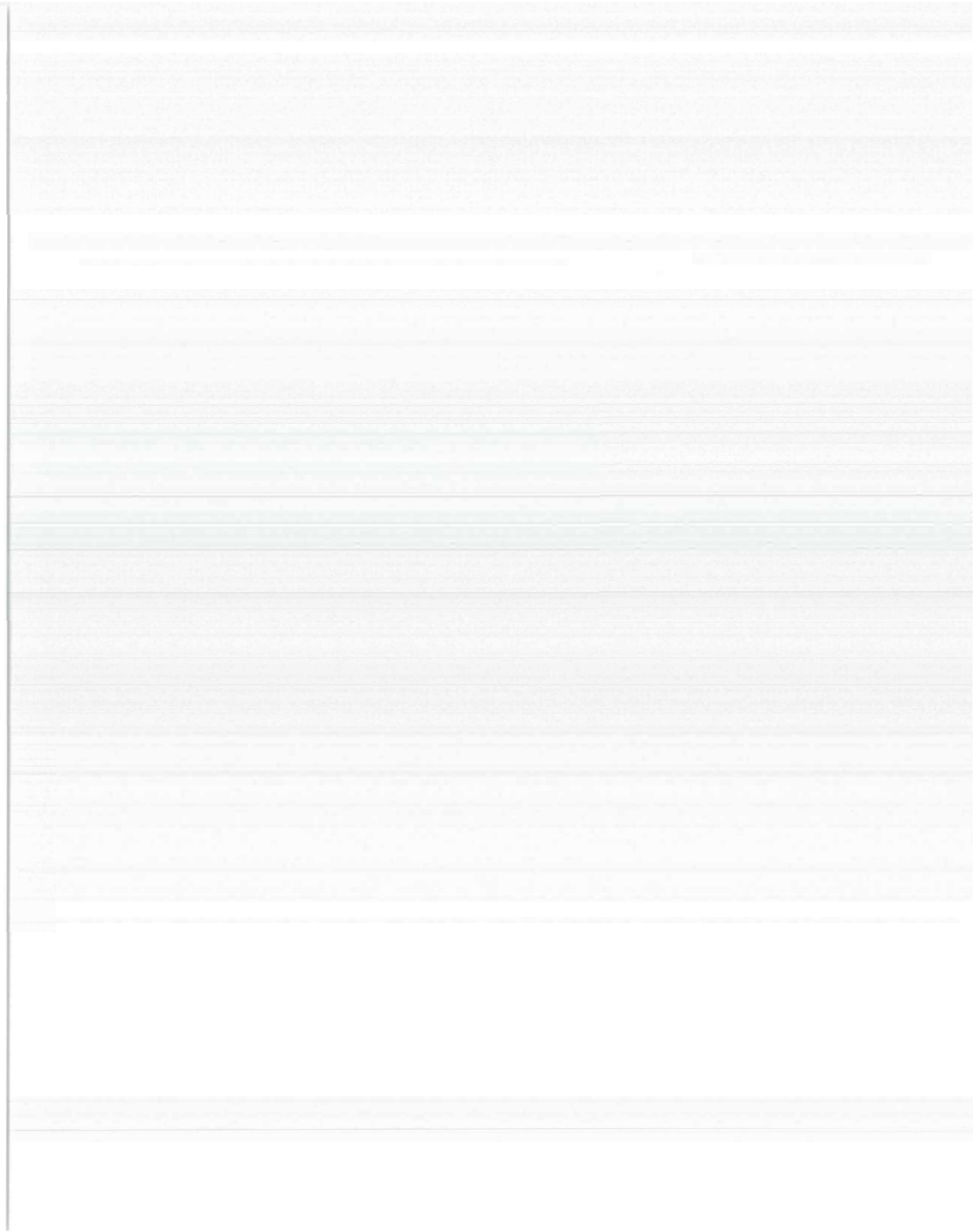
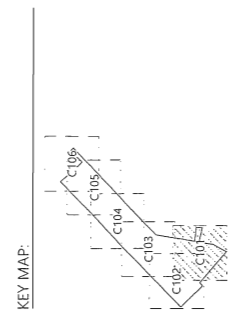


USS Vineyard
Solar LLC
 Town of Columbia, Tolland
 County, Connecticut

Existing Conditions

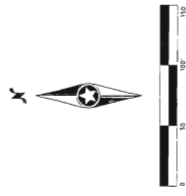
ISSUED FOR PERMIT DATE 03/04/2024

SHEET C101



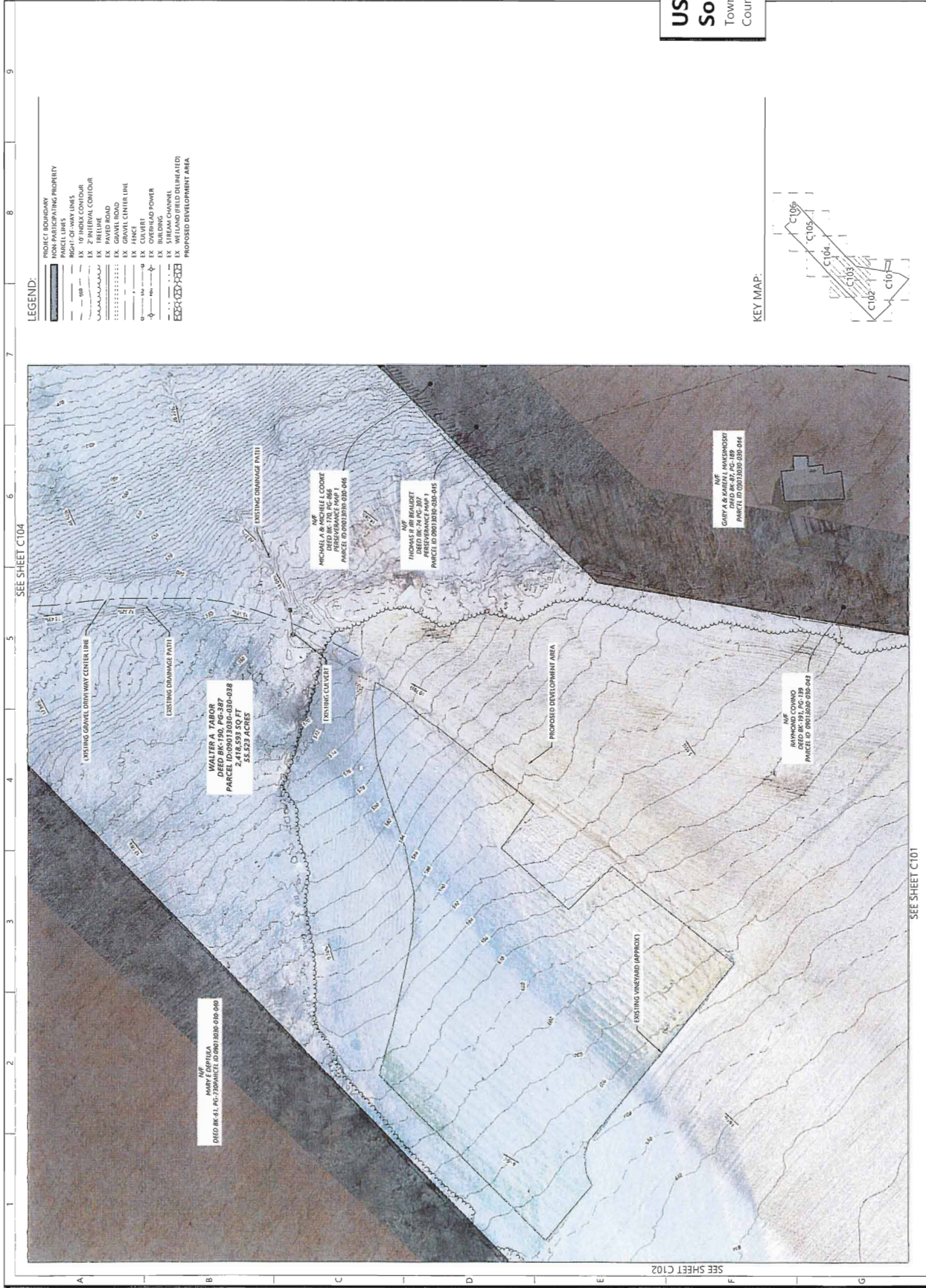


NO.	DATE	DESCRIPTION
1	03/04/2024	ISSUE FOR PERMIT
2	03/04/2024	REVISED PER PERMIT COMMENTS
3	03/04/2024	REVISED PER PERMIT COMMENTS
4	03/04/2024	REVISED PER PERMIT COMMENTS
5	03/04/2024	REVISED PER PERMIT COMMENTS
6	03/04/2024	REVISED PER PERMIT COMMENTS
7	03/04/2024	REVISED PER PERMIT COMMENTS
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9	03/04/2024	REVISED PER PERMIT COMMENTS
10	03/04/2024	REVISED PER PERMIT COMMENTS



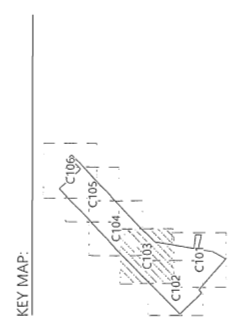
USS Vineyard Solar LLC
 Town of Columbia, Tolland County, Connecticut

Existing Conditions
 ISSUED FOR PERMIT
 DATE 03/04/2024
 SHEET C103



LEGEND:

	PROJECT BOUNDARY
	RIGHT-OF-WAY LINE
	PARCEL LINE
	2' INTERNAL CONTOUR
	10' EXTERNAL CONTOUR
	PAVEMENT ROAD
	GRAVEL CENTERLINE
	FENCE
	OVERHEAD POWER
	BUILDING
	WETLAND
	WETLAND FIELD DESIGNATOR
	PROPOSED DEVELOPMENT AREA



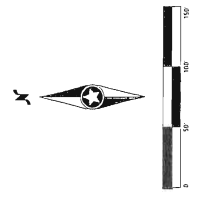
SEE SHEET C104

SEE SHEET C101

SEE SHEET C102



REVISION	DATE	BY	CHKD
A	11/20/2023	JSE	JSE
B	12/17/2023	JSE	JSE
C	12/20/2023	JSE	JSE
D	01/17/2024	JSE	JSE
E	01/24/2024	JSE	JSE

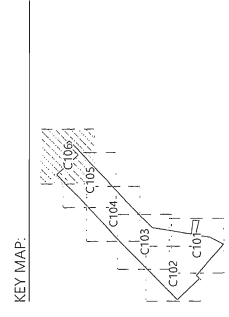
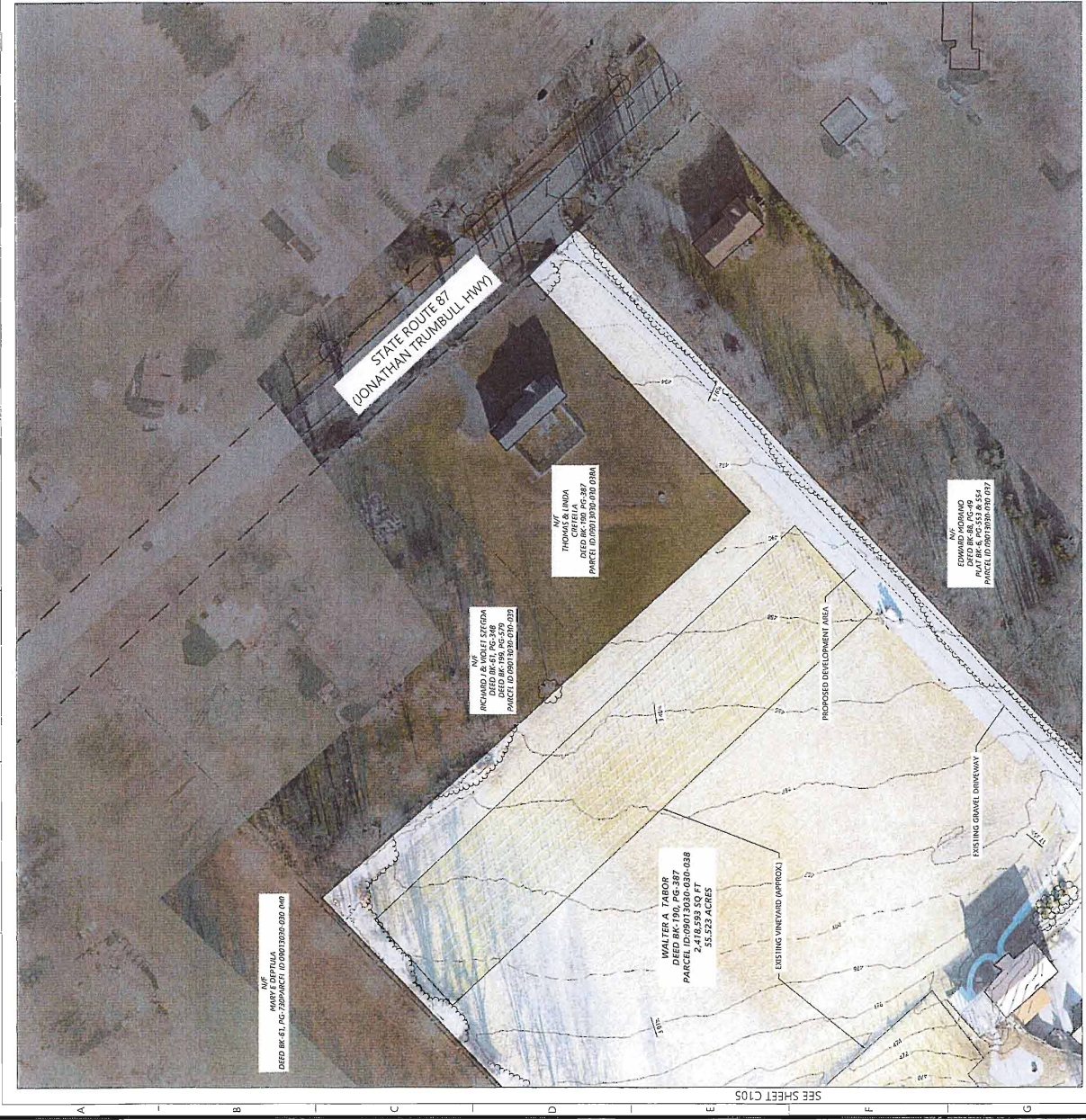


USS Vineyard Solar LLC
 Town of Columbia, Tolland
 County, Connecticut

Existing Conditions
 ISSUED FOR PERMIT
 DATE 03/04/2024
 SHEET C106

LEGEND:

	PROJECT BOUNDARY
	NON-PARTICIPATING PROPERTY
	PARCEL LINES
	EXISTING 2' INTERVAL CONTOUR
	EXISTING 2' INTERVAL CONTOUR
	EXISTING FIRELINE
	EXISTING ROAD
	EXISTING GRAVEL ROAD
	EXISTING GRAVEL CENTRAL LINE
	EXISTING GRAVEL DRIVE
	EXISTING OVERHEAD POWER
	EXISTING BUILDING
	EXISTING WETLAND
	EXISTING WETLAND FIELD DELINEATED
	PROPOSED DEVELOPMENT AREA



1 2 3 4 5 6 7 8 9

A B C D E

SEE SHEET C105



REVISION	DATE	DESCRIPTION
A.	11/08/2022	15% Plan
B.	10/10/2023	15% Plan
C.	10/27/2023	15% Plan
D.	01/17/2024	15% Plan
E.	03/04/2024	15% Plan



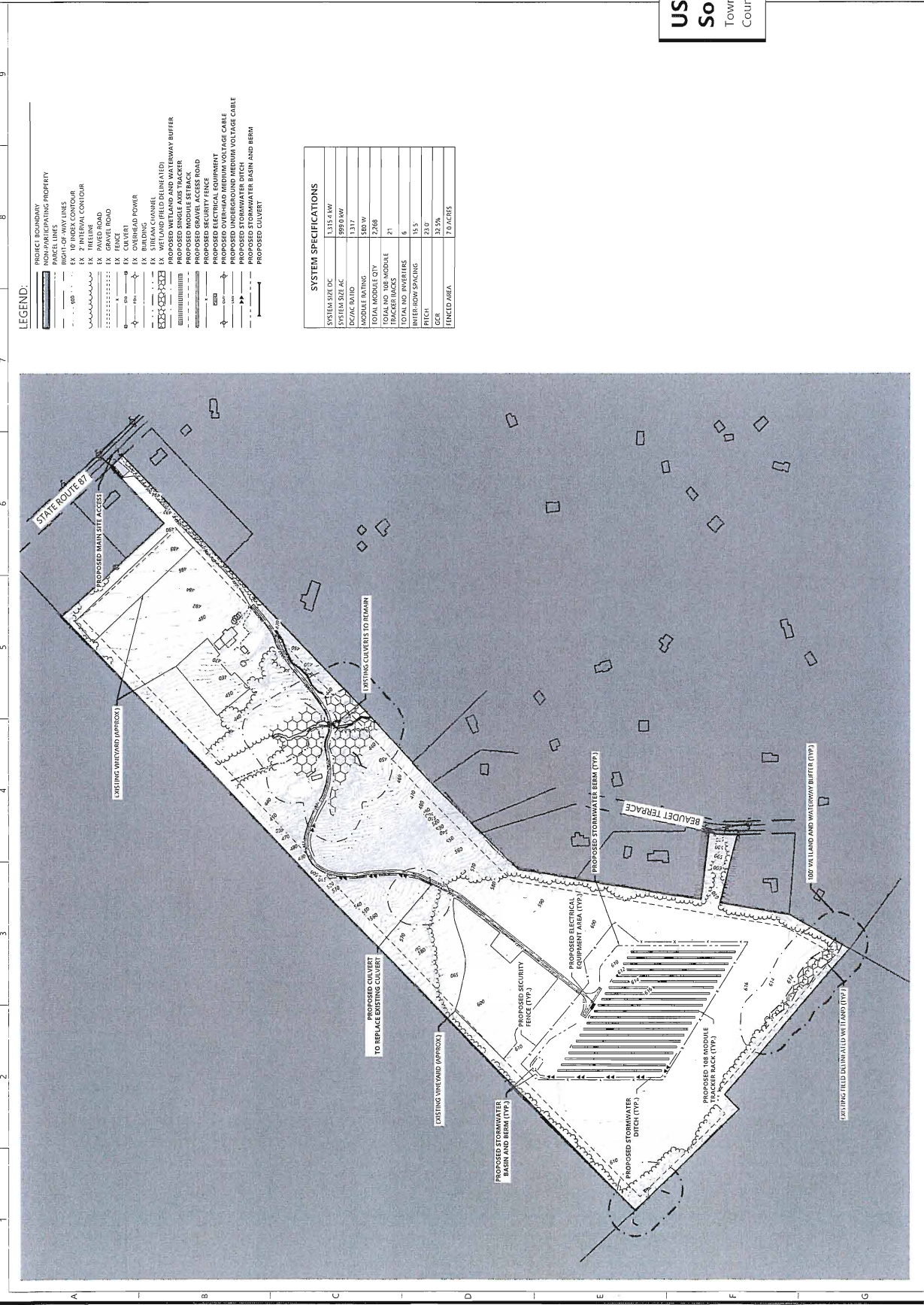
USS Vineyard Solar LLC
 Town of Columbia, Tolland County, Connecticut

Overall Site Plan

ISSUED FOR PERMIT

DATE 03/04/2024

SHEET C107



LEGEND

- PROJECT BOUNDARY
- NON-PARTICIPATING PROPERTY
- PARCEL LINES
- EX. 10' BUFFER
- EX. 2' INTERVAL CONTOUR
- EX. GRAVEL ROAD
- EX. PAVED ROAD
- EX. FENCE
- EX. OVERHEAD POWER
- EX. BUILDING
- EX. WETLAND FIELD DRAINAGE
- EX. WETLAND FIELD DRAINAGE
- PROPOSED WETLAND AND WATERWAY BUFFER
- PROPOSED SECURITY FENCE
- PROPOSED SECURITY FENCE
- PROPOSED OVERHEAD MEDIUM VOLTAGE CABLE
- PROPOSED UNDERGROUND MEDIUM VOLTAGE CABLE
- PROPOSED STORMWATER BASIN AND BERM
- PROPOSED CULVERT

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	1317.6 kW
SYSTEM SIZE AC	890 kW
DC/AC RATIO	1.5:1
MODULE BATTING	500 W
TOTAL MODULE QTY	2,268
TOTAL NO. 100' MODULE TRACKER RACK	21
TOTAL NO. INVERTERS	6
WATER-ROW SPACING	15.5'
PITCH	23.0°
GER	32.5%
FENCED AREA	7.0 ACRES



NO.	DESCRIPTION
1.	11/19/2023, SEC. Plans
2.	10/17/2023, SEC. Plans
3.	10/17/2023, SEC. Plans
4.	04/17/2024, SEC. Plans
5.	04/17/2024, SEC. Plans



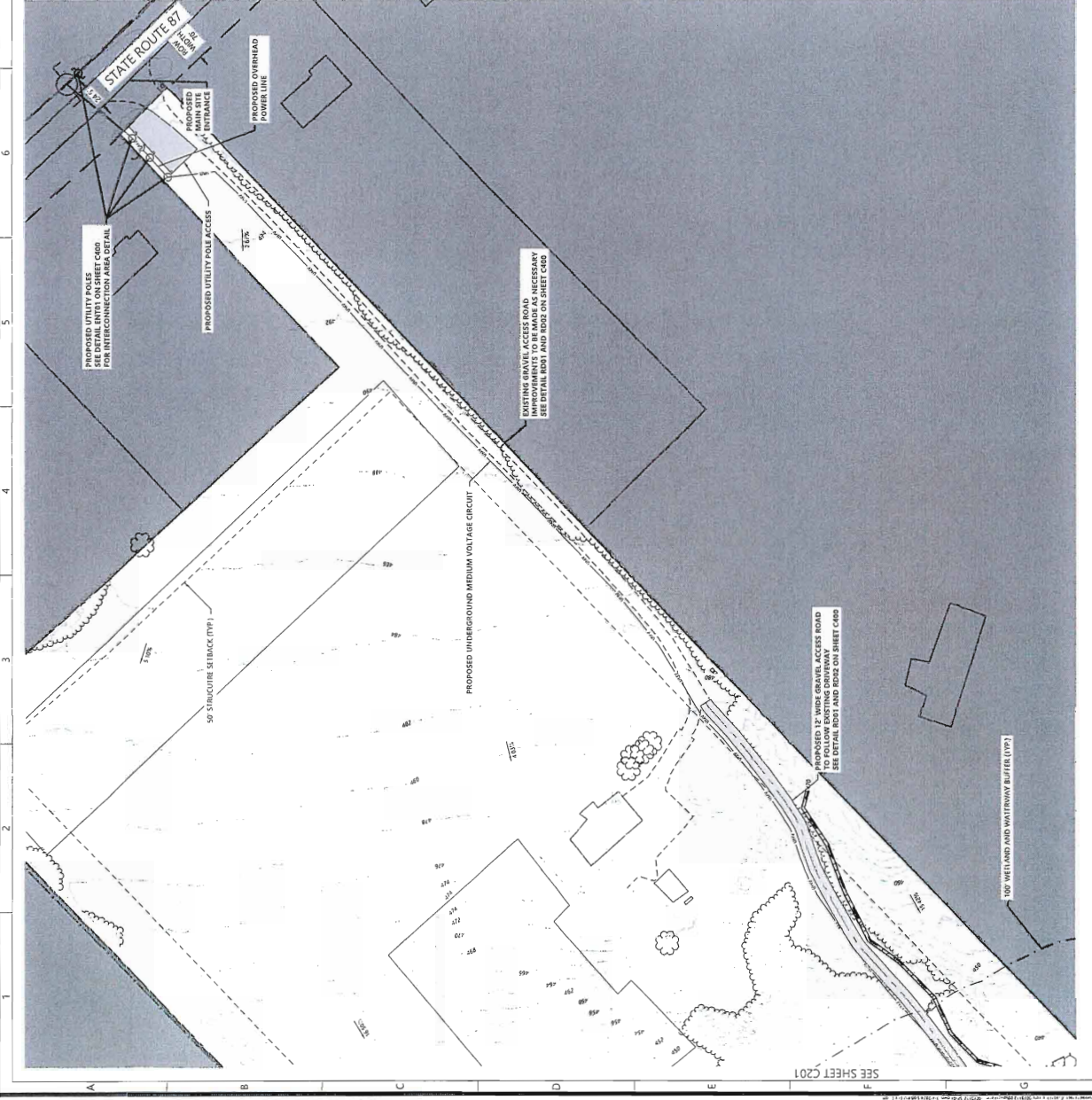
USS Vineyard Solar LLC
 Town of Columbia, Tolland County, Connecticut

PV Site Plan

ISSUED FOR PERMIT

DATE 03/04/2024

SHEET C202



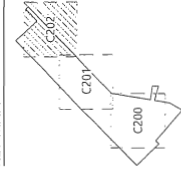
LEGEND:

- PROJECT BOUNDARY
- NON-PARTICIPATING PROPERTY
- FENCE LINES
- EX 10' INTERIOR CONTOUR
- EX 2' INTERNAL CONTOUR
- EX GRAVEL ROAD
- EX GRAVEL ROAD
- EX FENCE
- EX OVERHEAD POWER
- EX BUILDING
- EX WETLAND (FIELD DETERMINED)
- EX WETLAND (FIELD DETERMINED) AND WATERWAY BUFFER
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED SECURITY FENCE
- PROPOSED UNDERGROUND MEDIUM VOLTAGE CABLE
- PROPOSED OVERHEAD MEDIUM VOLTAGE CABLE
- PROPOSED STORMWATER DITCH - RIP RAP LINED
- PROPOSED STORMWATER BASIN AND BERM
- PROPOSED CULVERT

STRUCTURAL SETBACKS	
FRONT YARD	PROVIDED
SIDE YARD	25'
REAR YARD	50'

TOWN OF COLUMBIA, CT RESIDENTIAL AGRICULTURAL ZONING MINIMUM SETBACK REQUIREMENTS

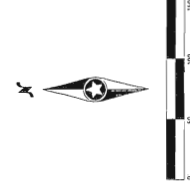
KEY MAP:



SEE SHEET C201



NO.	DATE	COMMIT
A.	11/20/2023	SEC Permit
B.	12/19/2023	SEC Permit
C.	01/23/2024	SEC Permit
D.	01/27/2024	SEC Permit
E.	03/04/2024	SEC Permit



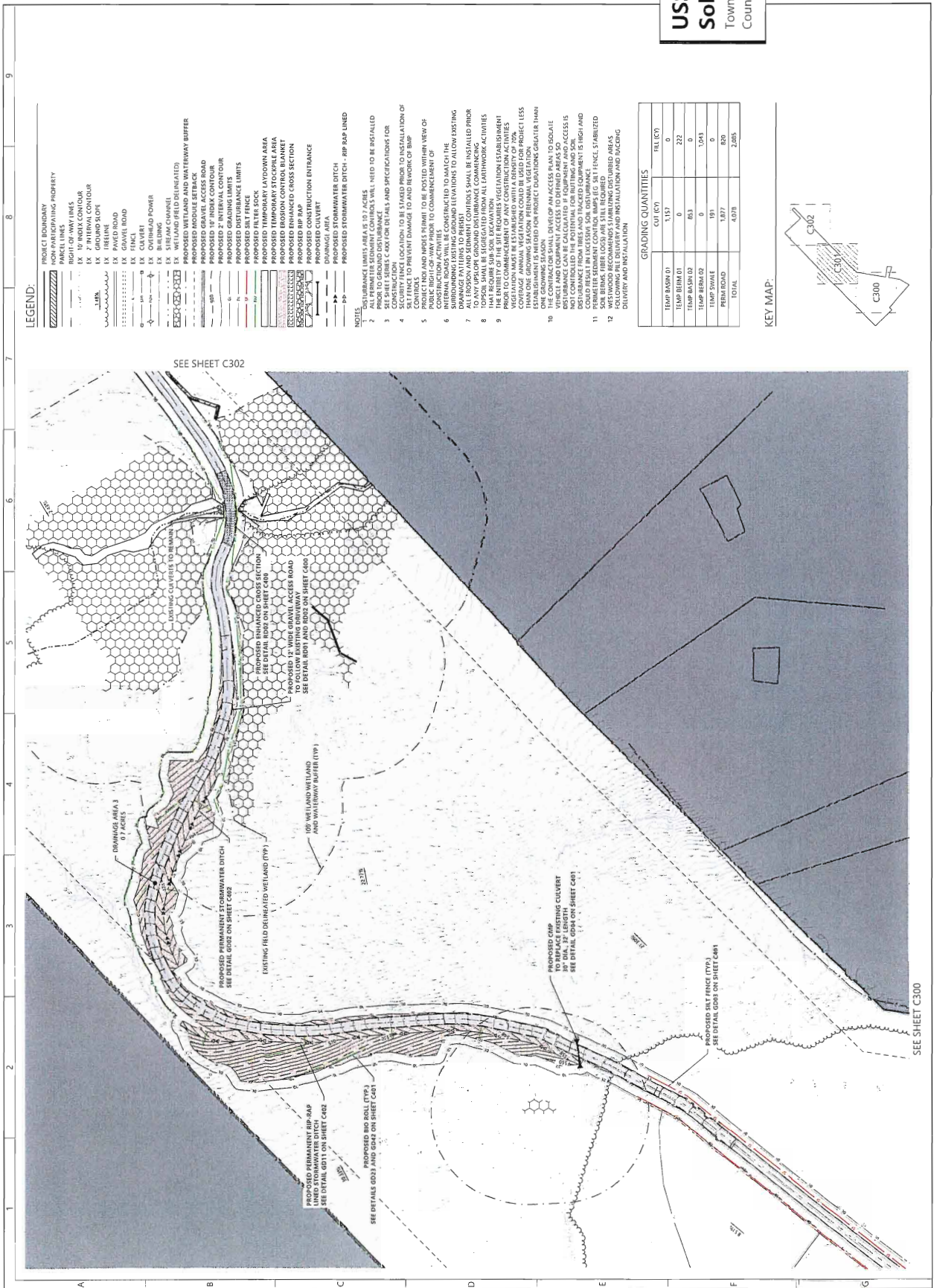
USS Vineyard
Solar LLC
 Town of Columbia, Tolland
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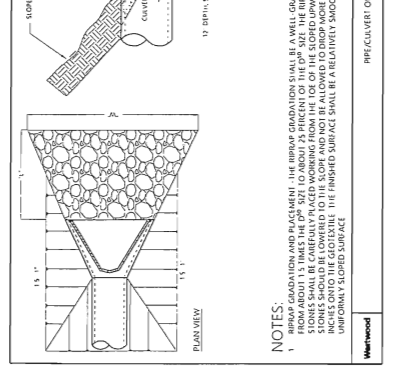
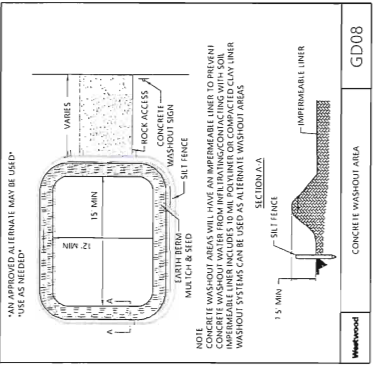
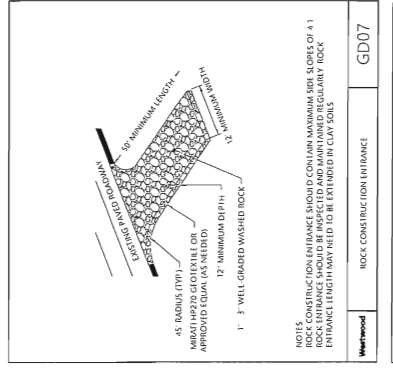
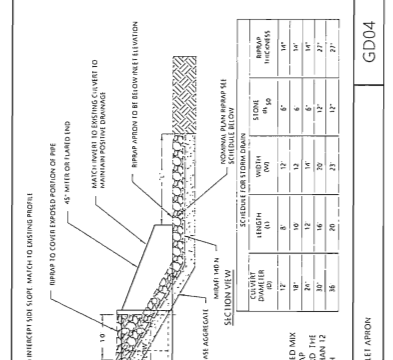
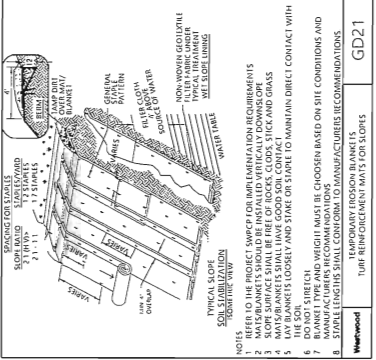
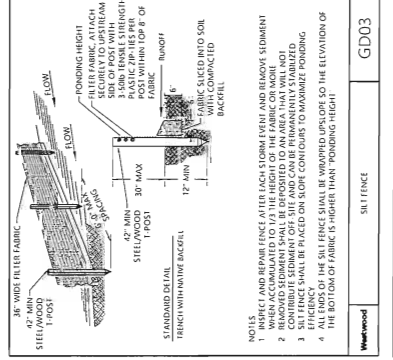
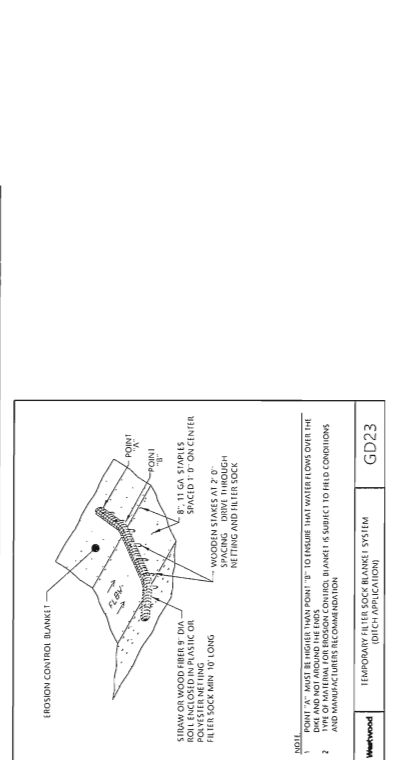
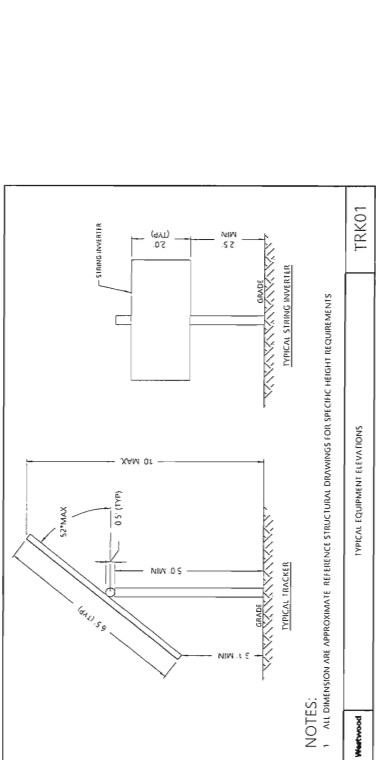
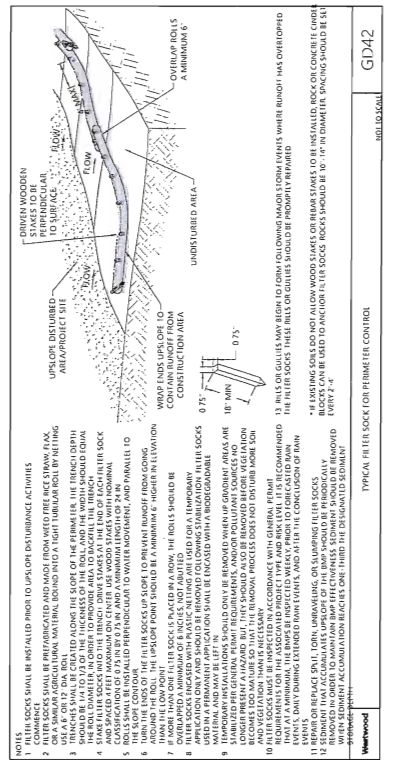
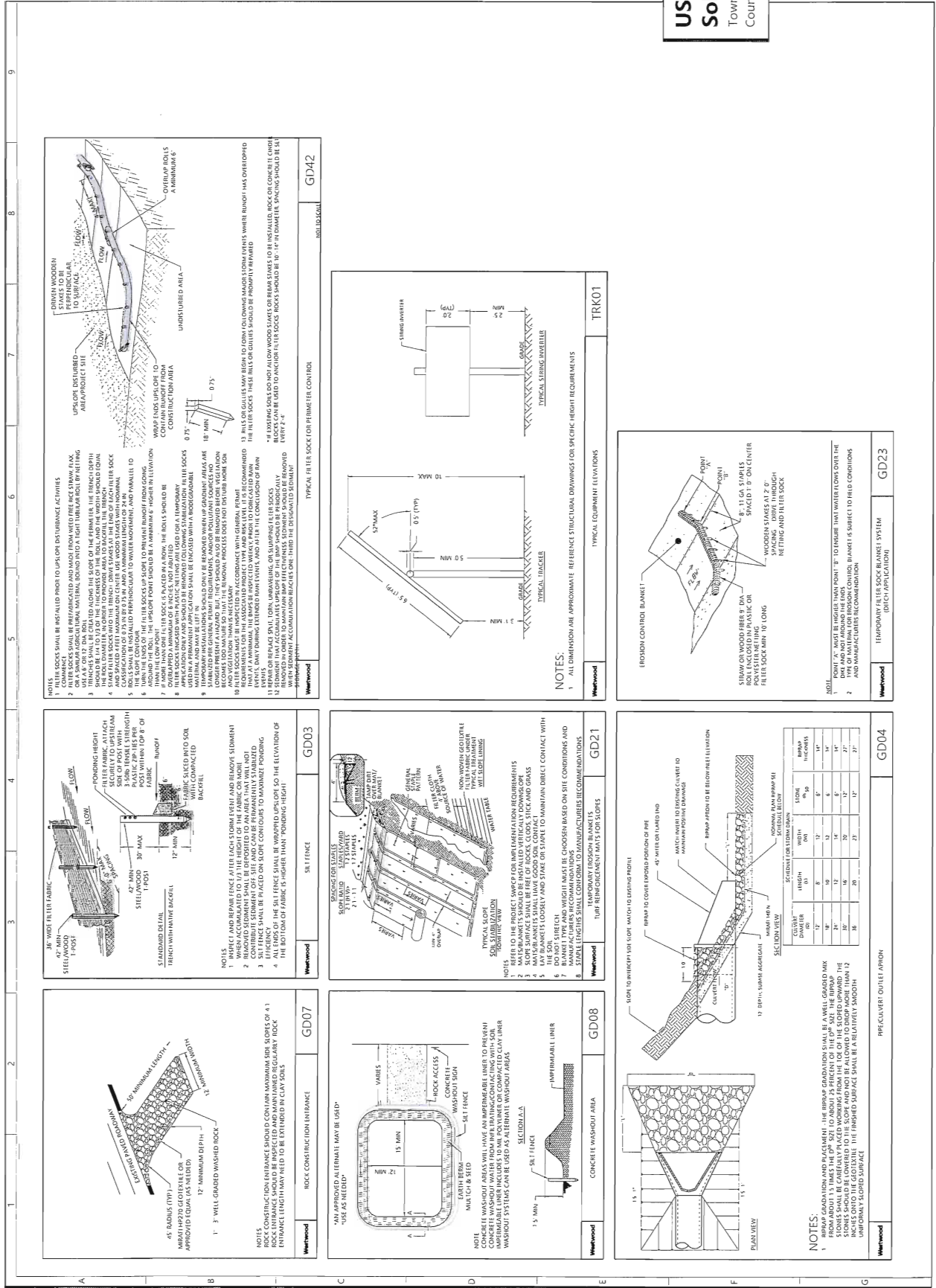
Sedimentation and
 Erosion Control -
 Phase 1

ISSUED FOR PERMIT

DATE 03/04/2024

SHEET C301





USS Vineyard Solar LLC
 Town of Columbia, Tolland County, Connecticut

Construction Details

ISSUED FOR PERMIT
 DATE: 03/04/2024
 SHEET: C401



TOWN OF COLUMBIA RECEIVED
 323 Jonathan Trumbull Highway, Columbia, CT 06237
 (860) 228-0440 FAX: (860) 228-2847

APR 01 2024

Date Submitted: _____
 TOWN OF COLUMBIA
 BUILDING & LAND USE

Fee Paid: 410.00

SITE PLAN APPLICATION - P2C-2324-04

See Sections 51 of the Columbia Zoning Regulations for Site Plan requirements.

- With Site Improvements With NO Site Improvements Modification of Prev. Approval
 Fee: \$410 (\$200 PZC fee + \$150 LN cost + 60 state fee) Fee: \$310 (\$100 PZC fee + \$150 LN cost + 60 state fee) Fee: \$310 (\$100 PZC fee + \$150 LN cost + 60 state fee)

Location of Property

Address: RT. 6 Columbia, CT
 Assessor's Map 2 Lot 20 Zone CM-1 Lot Area 9.68AC

Proposed Activity

Proposed Use: Vehicle Repair
 Applicable Zoning Regulation Section(s): 31.2.6
 Proposed construction: New Bldg Addition Interior Signs Site Work None
 (check all that apply)

Applicant/Agent Information

Primary Contact

Name: ROBERT CALDWELL
 Business Name: _____
 Business Mailing Address: 1 Homestead Ln, Columbia, CT 06237
 Phone: _____ Cell: 860-982-3745 Email: RKC97@icloud.com
 Interest in property: Owner Option Lessee Legal Engr Survey Other

Property Owner Information (if different from above)

Primary Contact

Name: Caldwell Realty LLC
 Address: 1 Homestead Ln, Columbia, CT 06237
 Phone: _____ Cell: SAME Email: _____

SITE PLAN APPLICATION CHECKLIST

Applications are considered complete only when all of the information as required by the Columbia Zoning Regulations per Sections 51 is received. Failure to submit, or formally request a waiver, all the required items is grounds for denial by the Commission. In addition to the items below, the Commission may require additional information in order to determine if the proposal conforms to the Regulations.

Office	Applicant*	
	✓	Completed Application with original signatures (plus 10 copies)
	✓	Detailed Statement of Use that includes the nature and intensity of the proposed operation, number of employees and hours of operation (10 copies)
		Completed Sign Application if requesting approval under Section 62.9
		Copy of approval letters from other Commissions or agencies
		Copies of all drainage reports, traffic or environmental studies
WITH SITE or STRUCTURE IMPROVEMENTS		
	✓	Four (4) copies of a full scale site plan on an A2 survey, plus ten (10) reduced copies at 11" x 17", that include the following information:
	✓	<ul style="list-style-type: none"> • Date, written and graphic scales, north arrow, seals & signatures of engineer, surveyor and other professionals
	✓	<ul style="list-style-type: none"> • Lot dimensions with accurate linear and angular dimensions with any easements and deed restrictions noted; adjacent roads and abutter information
	✓	<ul style="list-style-type: none"> • Existing and proposed topography, locations of wetlands and waterbodies, drainage swales and other site features (stone walls, trees, ledges)
	✓	<ul style="list-style-type: none"> • Existing and proposed structures including dimensions and elevations
	✓	<ul style="list-style-type: none"> • Table of proposed frontage, setbacks, and coverage with Zoning requirements
	✓	<ul style="list-style-type: none"> • Location and results of test pits; location of proposed well and septic system
	✓	<ul style="list-style-type: none"> • Location and description of proposed stormwater system including pre and post development calculations; location and description of utilities and tanks
	✓	<ul style="list-style-type: none"> • Location of parking, driveways, sidewalks and access and egress points
	✓	<ul style="list-style-type: none"> • Parking plan with calculations per category of use in zoning regulations
	✓	<ul style="list-style-type: none"> • Erosion and Sedimentation plan and narrative
	NA	<ul style="list-style-type: none"> • Outdoor lighting plan including details and specifications
	NA	<ul style="list-style-type: none"> • Landscaping and screening plan including material specifications and details
	✓	Four (4) copies of architectural plans, plus ten (10) reduced copies at 11" x 17"

* For each item listed, indicate the following

✓ = provided NA = not applicable W = written waiver request attached

Other Information

Is the property within a FIRM Flood Zone A, A1-30? Yes No
Does the proposal require Inland Wetland's Approval? Yes No
If yes, date of approval _____ (submit copy of approval letter)
Does the proposal require ZBA approval? Yes No
If yes, date of approval _____ (submit copy of approval letter)
Does the proposal require CONN-DOT approval? Yes No
If yes, date of approval 3/16/23 (submit copy of approval letter)

Required Information

1. ✓ Copy of assessor's card
2. ✓ Completed and signed Site Plan Application including a completed checklist and written waivers (if any)
3. Application fee – Check payable to the Town of Columbia

Prior to submitting an application,

applicants are strongly encouraged to discuss the potential land use or pending application with the Town Planner 860-228-0440 or TPlanner@ColumbiaCT.org

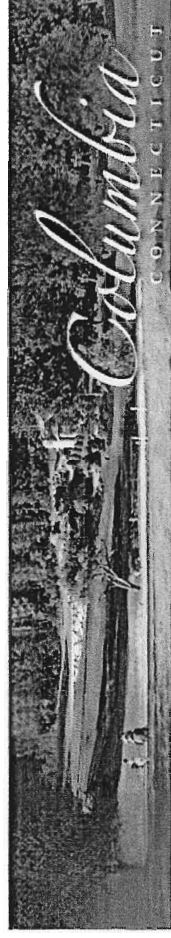
By signing this application, I am certifying that all information submitted is true and accurate and that I have submitted all required documentation. I hereby permit Columbia staff and Commission members to enter onto and inspect this site during reasonable hours for the purpose of reviewing the site before and after a permit is granted.

Signature of Owner *Robb Caldwell* Date 11-2-23

Signature of Applicant *Robb Caldwell* Date 11-2-23

Signature of Authorized Agent _____ Date _____

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2021.



Information on the Property Records for the Municipality of Columbia was last updated on 4/1/2024.



Parcel Information

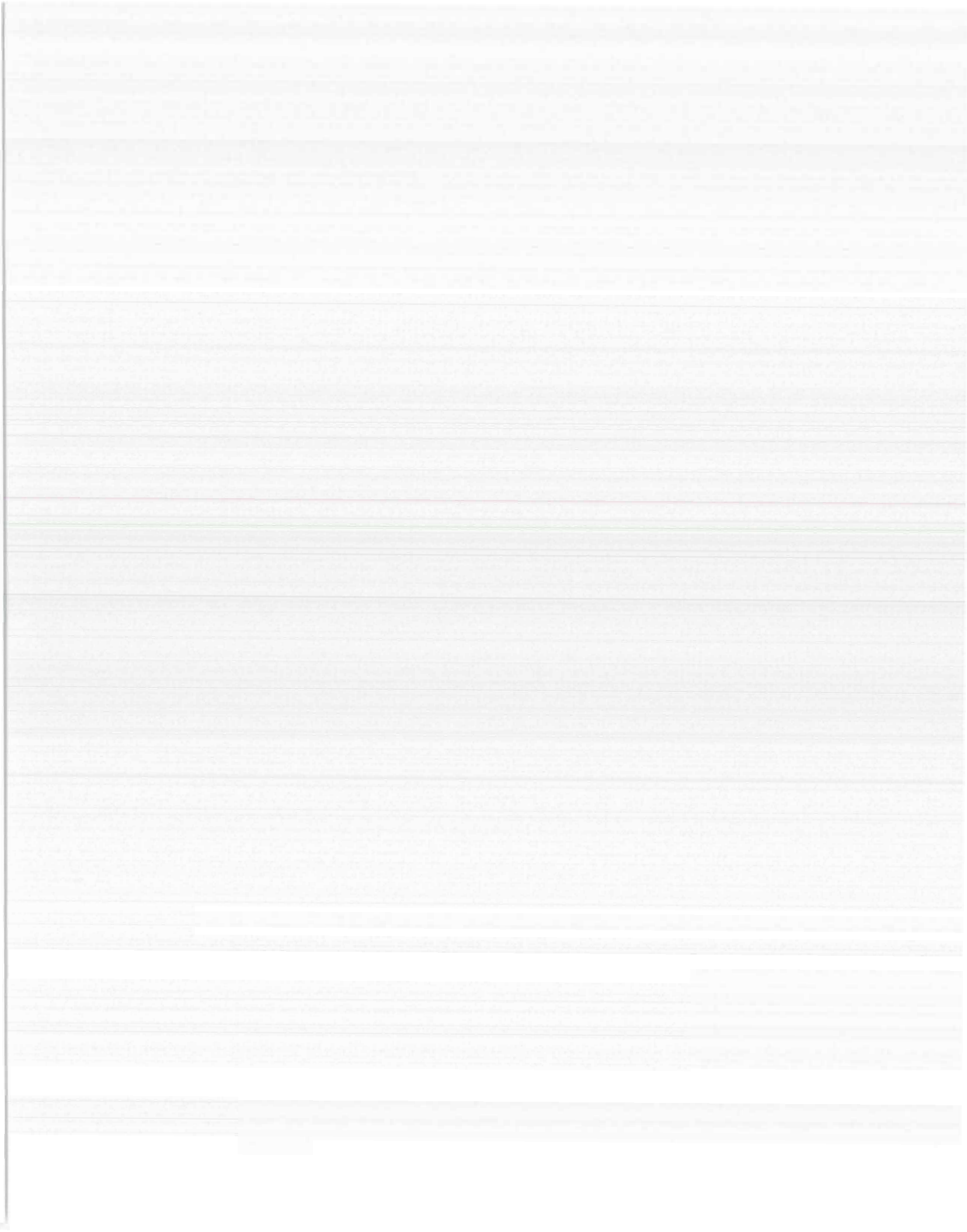
Location:	RT 6	Property Use:	Vacant Land	Primary Use:	Commercial Vacant Land
Unique ID:	00039100	Map Block Lot:	002 020	Acres:	9.6000
490 Acres:	0.00	Zone:	C	Volume / Page:	0245/0534
Developers Map / Lot:		Census:	8601		

Value Information

	Appraised Value	Assessed Value
Land	104,000	72,800
Buildings	0	0

Owner's Information

Owner's Data
CALDWELL REALTY LLC 1 HOMESTEAD LN COLUMBIA, CT 06237



Appraised Value Assessed Value

Detached Outbuildings	0	0
Total	104,000	72,800

Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Sale Price
CALDWELL REALTY LLC	0245	0534	08/10/2022	Warranty Deed	\$110,000
VERBURG DENNIS N & MICHELLE N	0171	0797	04/26/2006		\$100,000
COLUMBIA BURYING GROUND ASSN	0036	0325	09/18/1958		\$0

Information Published With Permission From The Assessor



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

DISTRICT II
171 Salem Turnpike
Norwich, Connecticut 06360
Phone:



March 16, 2023

Mr. Mark A. Reynolds, P.E.
Rob Hellstrom Land Surveying, LLC
P.O. Box 378
Hebron, CT 06248

Dear Mr. Reynolds:

Subject: Robert Caldwell
Willimantic Road / Route 66
Town of Columbia

The Department of Transportation (Department) has reviewed your latest plans for the above-noted subject received February 3, 2023, entitled, "Robert Caldwell" dated January 26, 2022. Your submittal/application to work within the State right of way or perform work that may affect State property is denied based on the following comments:

1. Proof of Town approval must be submitted prior to the issuance of an encroachment permit.
2. Revise plans to show the commercial drive is a minimum of 20' wide with a STOP sign, stop bar, and 50' of DYCL.
3. Please provide a detail for the breakaway sign support system in the plan set. If you would like a PDF version of the Breakaway Sign Support detail sent to you electronically, please email Mr. Gary Brigham at gary.brigham@ct.gov.
4. If there are any intended utility connections, indicate where the connections will be made and if they are underground or overhead. If utility connections will be made in the roadway, plans must show limits of pavement restoration according to current ConnDOT standards for any proposed utility cuts on Route 66. Excavations into a lane will require restoration from the curb to the center line of the roadway or the closest pavement seam. Excavations crossing the center line will require curb to curb restoration. Milling limits must extend a minimum of 10' beyond the edges of the trench and services with less than 150' separation must be combined to provide a single milled and paved surface. If roadway excavations are required, you will need to include the latest Department of Transportation detail sheet for Pavement Restoration on the plans. If you would like a PDF version of the "Pavement Restoration" details sent to you electronically, please email Mr. Gary Brigham at gary.brigham@ct.gov.
5. Remove the portion of the retaining wall in the State's right of way or provide details for the proposed retaining wall.

When you resubmit, please provide two sets of plans, 40 scale or larger, reflecting the above-noted comments. Please note that any resubmission may generate additional comments and concerns and in no way guarantees the issuance of an encroachment permit. An encroachment permit must be obtained prior to performing any work within or affecting the highway right of way. If you have any questions in regard to this matter, please contact Mr. Gary Brigham of this office at (860) 823-3114, or by email at gary.brigham@ct.gov.

Sincerely,

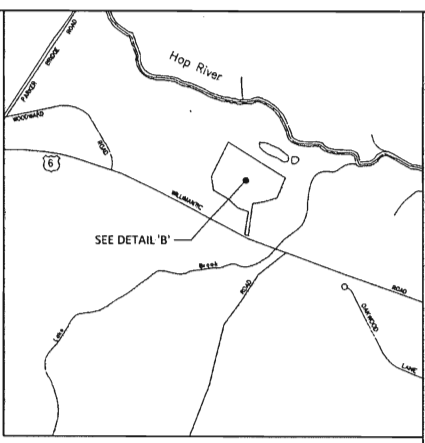
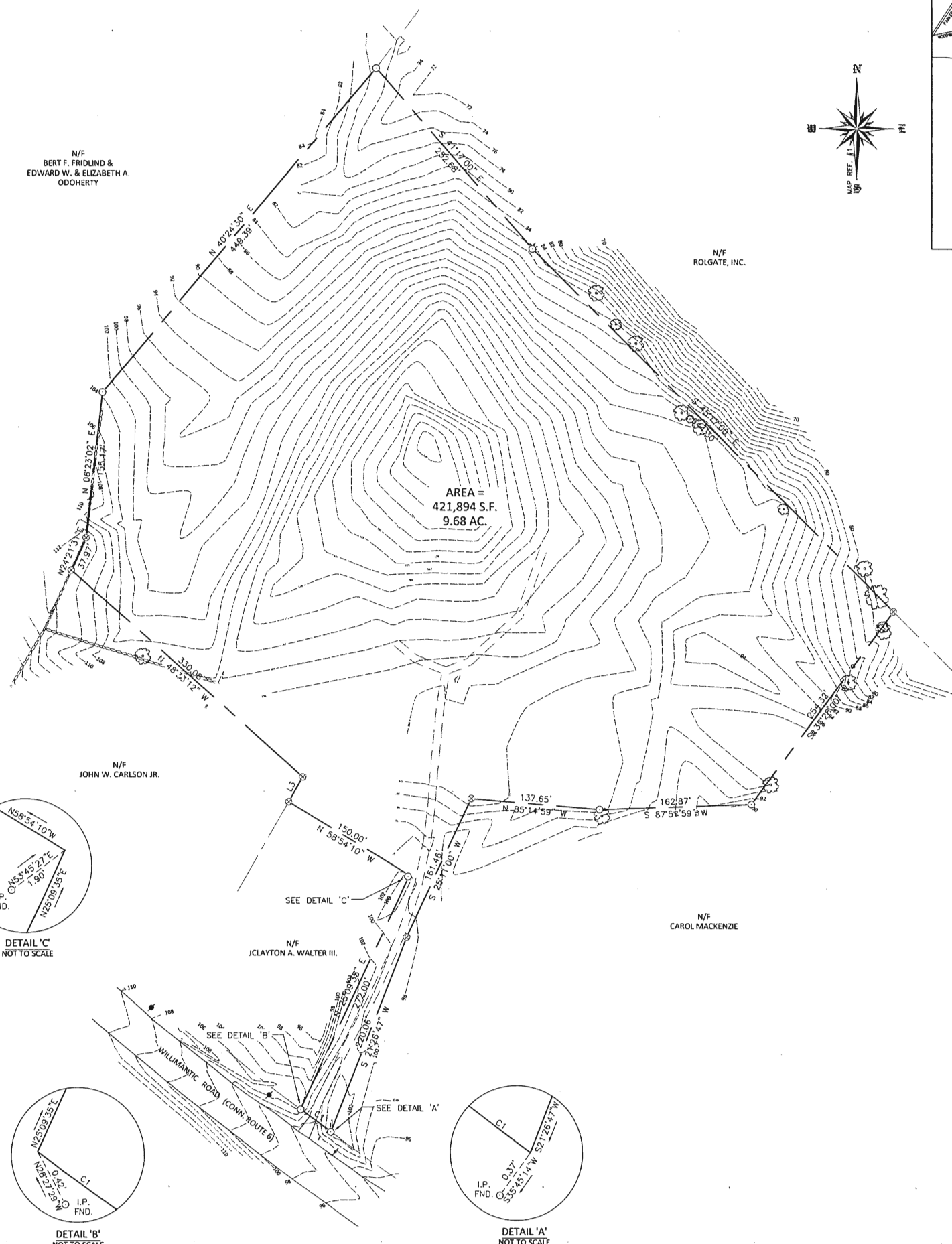
Carlos M. Wimberly
Special Services Section Manager
Bureau of Highway Operations

cc: Columbia Planning and Zoning

LEGEND

THESE STANDARD SYMBOLS WILL BE FOUND IN THE DRAWING.

- PROPERTY LINE
- UTILITY POLE
- ⊗ ANGLE POINT
- IRON PIN FOUND



LOCATION MAP
SCALE: 1" = 1000'

IMPROVEMENT LOCATION SURVEY
- PREPARED FOR -
ROBERT CALDWELL
DEPICTING PROPOSED BUILDING AND SEPTIC
WILLIAMANTIC ROAD (CT. ROUTE 66)
COLUMBIA, CONNECTICUT

ROB HELLSTROM
LAND SURVEYING LLC
32 MAIN STREET
HEBRON, CONNECTICUT
(860)-228-9853

Mailing Address:
P.O. BOX 378
HEBRON, CT 06248
www.rhslc.com
Email: hellstromsurveying@yahoo.com

DATE: MARCH 27, 2024

SHEET NO.: 1 OF 3
JOB NO.: 2022-122
SCALE: 1" = 60'
BY: SAM
FILE NO.: 22-122-SITEPLAN

- MAP REFERENCES**
- "MAP SHOWING A PROPOSED TRANSFER OF LAND IN, COLUMBIA, TOLLAND COUNTY, CONN. SECTION "A" TO BE TRANSFERRED FROM MRS. ETHEL BLACK TO RALPH J. & ELEANOR J. CABIT, SECTION "B" TO BE TRANSFERRED FROM RALPH J. & ELEANOR J. CABIT TO MRS. ETHEL BLACK" BY EVERETT G. GARDNER, VERNON, CONN., CLASS A-2, SCALE: 1"=40', DATE: AUGUST 1958
- MAP STANDARD NOTES**
- THIS SURVEY (OR MAP) HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019.
- TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY
BOUNDARY DETERMINATION: RESURVEY
HORIZONTAL ACCURACY CLASS: "A-2"
VERTICAL ACCURACY CLASS: T-2
VERTICAL DATUM: ASSUMED
- THE INTENDED PURPOSE OF THIS MAP IS TO SHOW THE PROPERTY BOUNDARY, TOPOGRAPHY, PROPOSED BUILDING AND SEPTIC LOCATION.

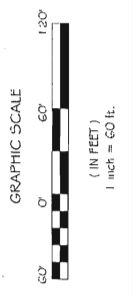
RECEIVED
APR 01 2024
TOWN OF COLUMBIA
BUILDING & LAND USE

RES CIVIL ENGINEERING CONSULTANTS
63 NORWICH AVENUE
COLCHESTER, CT
(860) 516-0033

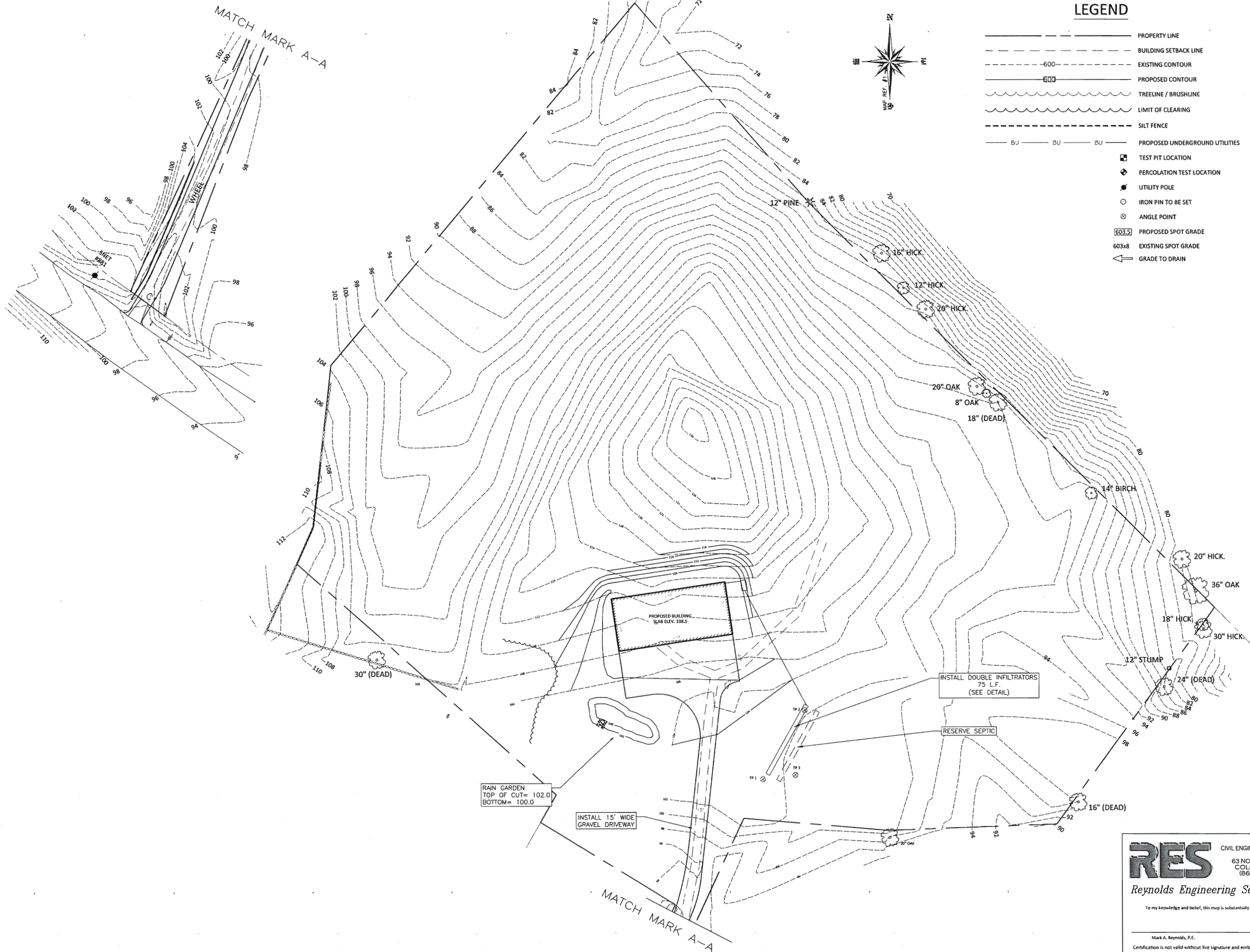
Reynolds Engineering Services, LLC

To my knowledge and belief, this map is substantially correct as noted hereon.

Mark A. Reynolds, P.E. CT LIC # 19789
Certification is not valid without live signature and embossed (impression) type seal.



NO.	DATE	DESCRIPTION



- LEGEND**
- — — — — PROPERTY LINE
 - - - - - BUILDING SETBACK LINE
 - - - - - EXISTING CONTOUR
 - — — — — PROPOSED CONTOUR
 - — — — — TREELINE / BRUSHLINE
 - — — — — LIMIT OF CLEARING
 - - - - - SILT FENCE
 - BU — BU — BU — PROPOSED UNDERGROUND UTILITIES
 - ⊠ TEST PIT LOCATION
 - ⊕ PERCOLATION TEST LOCATION
 - ⊙ UTILITY POLE
 - IRON PIN TO BE SET
 - ⊙ ANGLE POINT
 - 603.5 PROPOSED SPOT GRADE
 - 603x8 EXISTING SPOT GRADE
 - ↖ GRADE TO DRAIN

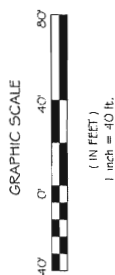
**ROB HELLSSTROM
LAND SURVEYING LLC**
 32 MAIN STREET
 HEBRON, CONNECTICUT
 (860)-228-9853
 Mailing Address:
 P.O. BOX 378
 HEBRON, CT 06248
 www.rhllc.com
 Email: hellsstromsurveying@yahoo.com

IMPROVEMENT LOCATION SURVEY
 — PREPARED FOR —
ROBERT CALDWELL
 DEPICTING PROPOSED BUILDING AND SEPTIC
 WILLIMANTIC ROAD (CT. ROUTE 66)
 COLUMBIA, CONNECTICUT

NO.	DATE	DESCRIPTION

ALL RIGHTS RESERVED
 TO MY KNOWLEDGE AND BELIEF, THIS MAP IS
 SUBSTANTIALLY CORRECT AS NOTED HEREON.
 THIS DRAWING IS NOT VALID UNLESS IT BEARS
 AN ORIGINAL AND EMBOSSED SEAL.

RES CIVIL ENGINEERING CONSULTANTS
 63 NORWICH AVENUE
 COLCHESTER, CT
 (860) 516-0033
 Reynolds Engineering Services, LLC
 To my knowledge and belief, this map is substantially correct as noted hereon.
 Mark A. Reynolds, P.E. CT LIC.# 15789
 Certification is not valid without live signature and embossed (impression) type seal.

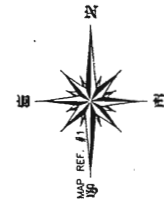


DATE: MARCH 27, 2024 BY: SAM SCALE: 1" = 40' SHEET NO.: 2 OF 3 JOB NO.: 2022-122 FILE NO.: 22-122_SITPLAN

ZONE COMPLIANCE CHART		
ZONE- CM-1	REQUIRED	PROVIDED
MINIMUM LOT AREA (SQ. FT)	90,000	9.69 acres
MINIMUM FRONTAGE	100'	113'
MINIMUM BUILDING SETBACKS: FRONT	50'	1.41'
REAR	75' (ABUTTING RA DISTRICT)	4'
	30' (NOT ABUTTING RA DISTRICT)	31.2'
SIDE	75' (ABUTTING RA DISTRICT)	X
	30' (NOT ABUTTING RA DISTRICT)	35.6'
MAXIMUM STORIES:	3	1 STORY
MAXIMUM HEIGHT:	40'	<40X
MAXIMUM LOT COVERAGE:	25%	<<25%

LEGEND

- PROPERTY LINE
- BUILDING SETBACK LINE
- - - - - EXISTING CONTOUR
- PROPOSED CONTOUR
- ~~~~~ TREELINE / BRUSHLINE
- LIMIT OF CLEARING
- SILT FENCE
- BU ----- BU ----- BU ----- PROPOSED UNDERGROUND UTILITIES
- ⊠ TEST PIT LOCATION
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- ⊙ IRON PIN TO BE SET
- ⊙ ANGLE POINT
- 603.5 PROPOSED SPOT GRADE
- 603x8 EXISTING SPOT GRADE
- ← GRADE TO DRAIN



SEPTIC SYSTEM INVERTS

- ① INVERT @ HOUSE - 383.75 MIN.
- ② INVERT IN @ SEPTIC TANK - 382.75
- ③ INVERT OUT @ SEPTIC TANK - 382.5
- ④ D-BOX / FLOWLINE @ UNITS - 382.2
- BOTTOM OF UNITS - 381.2
- EXISTING GRADE - 382.9 - 383.7
- FINISHED GRADE OVER UNITS - 383.2 MIN.

48 LF OF 4" PVC PIPE SCHD 40 (ASTM D 1785 OR APPROVED EQUAL) MINIMUM SLOPE 1/4" PER FOOT

1,000 GAL. PRECAST SEPTIC TANK WITH EFFLUENT FILTER AT OUTLET (SEE DETAIL) INSTALL RISERS WITHIN 12" OF FIN. GRADE

ALL ROOF RUNOFF TO BE PIPED TO RAIN GARDEN 58'± 4" SCHD 40 PVC

PROPOSED BUILDING SLAB ELEV. 108.5

INSTALL DOUBLE INFILTRATORS 75 L.F. (SEE DETAIL)

RESERVE SEPTIC

8" WIDE 2" CRUSHED STONE SPILLWAY EL. = 101.5

RAIN GARDEN TOP OF CUT = 102.0 BOTTOM = 100.0

INSTALL & MAINTAIN SILT FENCE (TYP.)

INSTALL 15' WIDE GRAVEL DRIVEWAY

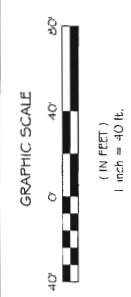
- THERE ARE NO WELLS LOCATED WITHIN 75' OF THE PROPOSED SEPTIC SYSTEM ON THIS LOT.
- THIS PROPERTY IS NOT LOCATED WITHIN A FLOOD ZONE.
- BENCHMARK TO BE SET IN THE FIELD AT TIME OF CONSTRUCTION.
- CONTRACTOR TO PRESERVE & PROTECT ALL EXISTING UTILITIES. PRIOR TO THE START OF CONSTRUCTION CONTACT 'CALL BEFORE YOU DIG' 1-800-922-4455

ROB HELLSSTROM LAND SURVEYING LLC
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IMPROVEMENT LOCATION SURVEY
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 WILLIMANTIC ROAD (CT. ROUTE 66)
 COLUMBIA, CONNECTICUT

NO.	DATE	DESCRIPTION

ROBERT W. HELLSSTROM, L.S. # 13636



RES CIVIL ENGINEERING CONSULTANTS
 63 NORWICH AVENUE
 COLCHESTER, CT (860) 516-0033
Reynolds Engineering Services, LLC
 To my knowledge and belief, this map is substantially correct as noted hereon.
 Mark A. Reynolds, P.E. CT LIC# 15789
 Certification is not valid without live signature and embossed (impression) type seal.

JOB NO.: 2022-122
 FILE NO.: 22-122-SITEPLAN
 SHEET NO.: 2 OF 3
 SCALE: 1" = 40'
 BY: SAM
 DATE: JUNE 27, 2022

SOILS INFORMATION

PERCOLATION TEST #P

HOLE DEPTH: 19.5'

TIME	DEPTH	PRESOAK
8:41	7.5'	DRY
9:56	9.12'	DRY
10:12	11'	DRY
10:17	12.1/8'	DRY
10:22	13.3/8"	DRY
10:37	14.1/2"	DRY
10:42	15.5/8"	DRY
10:52	17.1/4"	DRY
11:02	18.3/4"	DRY
11:04	19.5'	DRY

PERC RATE: 6.7 min./inch

MINIMUM LEACHING SYSTEM SPREAD (MLSS) CALCULATIONS:

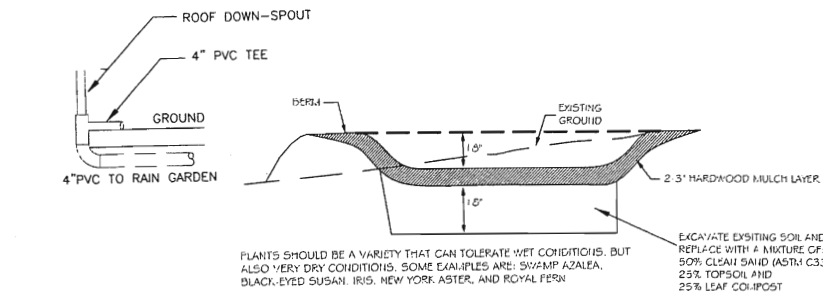
Reversing Soil Depth: 49"
 Slope: 2.1 - 3.0%
 Hydraulic Factor: 28
 Flow Factor: 1.5 (3 Bedroom)
 Perc. Factor: 1.0
 HF (28) x FF (1.5) x PF (1.0) = 42 L.F.

OPERATION AND MAINTENANCE PLAN - RAIN GARDENS

- THE HOMEOWNER SHALL NOT REMOVE A RAIN GARDEN, SEWER OR RE-ROUTE ANY DRAINAGE LINE LEADING TO THE RAIN GARDEN OR TAKE ANY OTHER ACTION WHICH PREVENTS SURFACE RUNOFF FROM REACHING THE RAIN GARDEN AND FLOWING THROUGH IT AS DESIGNED.
- THE HOMEOWNER SHALL PERIODICALLY REMOVE SEDIMENT, LEAVES, LITTER, OR OTHER MATERIALS WHICH MAY HAVE ACCUMULATED IN THE RAIN GARDEN.

NOTE:
 1. RAIN GARDEN DEPTH IS 18 INCHES.
 2. EXCESS RUNOFF IS CALCULATED AS THE DIFFERENCE IN RUNOFF BETWEEN THE SUBDIVISION PRE-DEVELOPMENT SITE DRAINAGE MODEL RUNOFF CURVE NUMBER (5.6) AND THE PROPOSED COVER, ROOFS (RCN-98), AND DRIVEWAYS (RCN-98) FOR THE 100-YEAR RAINFALL (7.92").

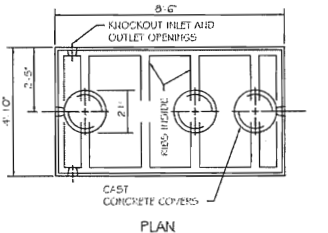
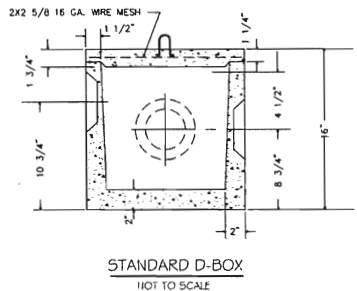
RCN RUNOFF	INCHES
56	2.72"
61	3.37"
98	7.67"



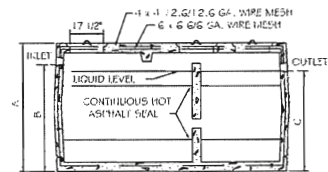
RAIN GARDEN SIZING TABLE (CONCEPTUAL DESIGN)

LOT	ROOF (SF)	DRIVEWAY (SF)	LAWN (SF)	EXCESS RUNOFF ROOF/DRIVE (INCHES)	EXCESS RUNOFF LAWN (INCHES)	EXCESS RUNOFF (CF)	PROPOSED RAIN GARDEN DIMENSIONS (WIDTH (FT) LENGTH (FT))	RAIN GARDEN VOLUME (CF)
8	1,850	1,100	N/A	4.95	N/A	1,217	25 35	1,312

RAIN GARDEN DETAIL CROSS SECTION



CAPACITIES	A	B	C
1000 GAL.	66.5"	57"	53.75"



1000 GALLON 2 COMPARTMENT SEPTIC TANK NOT TO SCALE

LEACHING SYSTEM CONSTRUCTION NOTES:

- TOPSOIL TO BE STRIPPED OFF PRIOR TO FILLING. FILL MATERIAL BETWEEN AND BEYOND TRENCHES TO BE PERVIOUS, GOOD QUALITY AND CLEAN MEDIUM SAND (SELECT FILL) PLACED AND COMPACTED IN 6" LIFTS. SELECT FILL SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
- THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 3 INCHES.
 - THE FILL SHALL NOT CONTAIN MORE THAN 45 PERCENT GRAVEL (GRAVEL IS BETWEEN NO. 4 & 3" SIEVES) NO MORE THAN 45 PERCENT OF THE MATERIAL CAN BE RETAINED ON THE NO. 4 SIEVE.
 - THE FILL LESS THE GRAVEL SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE	#4	#10	#40	#100	#200	
% PASSING	100	70-100	10-50	0-20	0-5	WET SIEVE
% PASSING	100	70-100	10-75	0-5	0-2.5	DRY SIEVE

** PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

DOCUMENTATION OF TEST RESULTS ARE TO BE PROVIDED TO THE HEALTH DISTRICT.
 FILL MATERIAL TO BE PLACED PRIOR TO TRENCH EXCAVATION. NO TRAFFIC OTHER THAN TRACK-DRIVEN EQUIPMENT IS TO CROSS, DUMP, UNLOAD OR OTHERWISE COMPACT THE FILL AREA AFTER TOPSOIL REMOVAL. FILL MATERIAL TO BE DUMPED AT THE EDGE OF THE STRIPPED AREA AND SPREAD AND COMPACTED WITH TRACK-DRIVEN VEHICLES. STOCKPILING IS TO TAKE PLACE UPGRADIENT OF THE LEACHING AREA. THE AREA DOWN GRADIENT OF THE LEACHING AREA IS NOT TO BE DISTURBED.

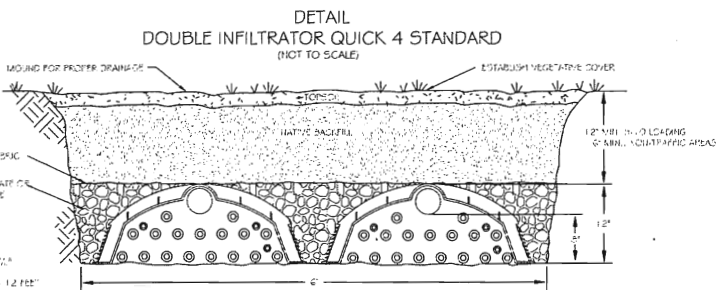
DESIGN NOTES:

- ALL CONSTRUCTION TO CONFORM TO STANDARDS OF THE CONNECTICUT PUBLIC HEALTH CODE AND TO THE SATISFACTION OF THE TOWN SANITARIAN.
- PERCOLATION RATE FOR DESIGN: 1.0 - 1.20 MIN PER INCH DEPTH TO RESTRICTIVE LAYER: MOTTILING @ 13"
- REQUIRED EFFECTIVE LEACHING AREA FOR 3 BEDROOM HOUSE = 675 SF.
- PROVIDED 116 LF OF 12" DOUBLE INFILTRATOR = 684.4 SF
- THIS SYSTEM HAS NOT BEEN DESIGNED FOR THE USE OF LARGE CAPACITY (+ 100 GALLONS), DISCHARGE TYPE BATHTUBS, RESIDENTIAL GARBAGE DISPOSALS ARE NOT ANTICIPATED FOR THIS DESIGN. IN THE EVENT THAT SUCH AN INSTALLATION IS CONTEMPLATED FOR THE PROPOSED HOUSE, A LARGER SEPTIC TANK AND INCREASED LEACHING FIELD CAPACITY WILL BE REQUIRED.
- THE DESIGN SHOWN HEREON CONFORMS TO ALL APPLICABLE STATE AND LOCAL HEALTH CODE REQUIREMENTS AND TO GOOD ENGINEERING PRACTICE. WE CAN NOT GUARANTEE AGAINST FAILURE DUE TO IMPROPER INSTALLATION, IMPROPER MAINTENANCE OR TO NATURAL PHENOMENA BEYOND THE SCOPE OF NORMAL FIELD INVESTIGATION.
- A 1,000 GALLON, 2 COMPARTMENT SEPTIC TANK IS REQUIRED. PROVIDED WITH AN OUTLET FILTER DEVICE (TUF-TITE-2F-4 OR APPROVED EQUAL)

SEPTIC SYSTEM CONSTRUCTION NOTES:

- CONSTRUCTION SEQUENCE:**
- STRIP & STOCKPILE TOPSOIL FROM LEACHING AREA.
 - PLACE & COMPACT SELECT FILL TO 6" BELOW FINISHED GRADE.
 - CONSTRUCT LEACHING UNITS TO DESIGN LINE & GRADE.
 - LOAM, FINE GRADE TO FINISHED GRADE AND SEED. PROTECT DISTURBED AREAS WITH EROSION CONTROLS UNTIL FIRST MOWING.
- ALL DISTRIBUTION PIPE IS TO BE ASTM D3034 SDR 35 (4" PVC) OR APPROVED EQUAL UNLESS NOTED.
- SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF 6" OF PROCESSED GRAVEL OR BROKEN STONE ON COMPACTED SUBGRADE.
 - THERE ARE NO APPARENT WELLS OR SEPTIC FIELDS WITHIN 75' OF THE SEPTIC SYSTEM AS SHOWN ON THIS PLAN.
 - APPROVED STONE AGGREGATE FOR LEACHING TRENCHES SHALL BE BROKEN STONE, CRUSHED STONE, OR SCREENED GRAVEL MEETING CT DOT FROM 0.14A SPECIFICATION FOR M.O.I.01 FOR NO. 4 STONE.
 - THE DEPTH OF THE LEACHING GALLERY SHALL NOT EXCEED 1' INTO ORIGINAL GRADE.
 - THE LOCATION AND ELEVATION OF THE PROPOSED SEPTIC SYSTEM WITH BENCH MARK SHALL BE STAKED IN THE FIELD BY A LICENSED LAND SURVEYOR.

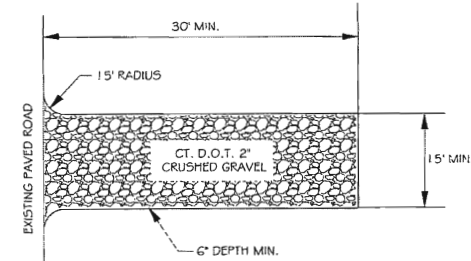
SIEVE SIZE	PERCENT PASSING (BY WEIGHT)
2-INCH	100
1-1/2-INCH	90-100
1-INCH	20-55
3/4-INCH	0-15
3/8-INCH	0-5
#40	0-3
#200	0-1.5



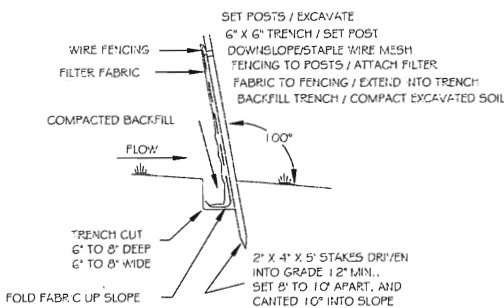
NOTES:
 - EFFECTIVE LEACHING AREA = 5.9 SQ. FT.
 - CENTER TO CENTER SPACING = 1.2 FEET
 - INSTALL WITH FILTERS ACCORDING TO MANUFACTURER'S CORRECT INSTALLATION INSTRUCTIONS

SEQUENCE OF ACTIVITY - HOUSE LOT DEVELOPMENT

- LIMITS OF DISTURBANCE:** Upon approval of individual site plan development, the limit of disturbance shall be established in the field for each proposed structure. Disturbance limits shall be bounded by staked hay bales or silt fence.
- EROSION CONTROLS:** Area to be disturbed shall be bounded by staked hay bales or silt fence. All erosion controls, including silt fence and anti-tracking pad shall be installed and inspected by the Land Use ZEO and Wetland Agent prior to stumps being pulled, grubbing, or excavation. The ZEO and Wetland Agent may modify the erosion control requirement based on field conditions so as to adequately control erosion and siltation from the site.
- TREES CLEARED:** Trees shall be cleared and cut to length and stacked or removed from the site. Then the pulling of stumps, grubbing and/or excavation shall begin.
- STONE WALLS:** All existing stone walls that will be removed due to street, driveway, house, septic system or other site construction shall be rebuilt elsewhere on the property, or the stones shall be used to enhance other existing walls on property.
- DRIVEWAYS:** All driveway and driveway shoulders shall be stripped, graded as shown on plan, and gravelled. All driveway shoulders shall be stabilized immediately upon grading, either by diverting runoff, mulching, or seeding and hay bales, silt fence or other approved measures the same day that cuts are made.
- TOPSOIL:** All topsoil shall be stripped and saved in an area as shown on the plan or as approved by the Planner and Wetland Agent. Topsoil shall not be removed from the site except as in compliance with the Zoning Regulations.
- CONSTRUCTION & DISTURBED AREA:** Excavation and construction shall commence following inspection and approval of erosion control and construction of the driveway. The disturbed areas shall be so as to contain runoff within the lot to the greatest extent possible.
 - SITES IN WINTER:** When a site will be open during the winter months, rough grading and 4-6 inch mulching must occur prior to construction in order to minimize erosion and uncontrolled runoff.
 - DRAINS:** Foundation and curtain drains shall be installed as shown on the approved plan. Any changes to the location of the drains or the solutions of any drains shall be approved by the Wetlands Agent prior to installation.
 - COMPLETE SITE WORK:** Final grading shall occur as soon as possible on all lots where there is potential for erosion and for degradation of wetlands and watercourses. Lots shall be first graded, seeded with perennial grasses suitable for the respective amount of sun or shade and mulched prior to Certificate of Zoning Compliance.
 - FINAL STABILIZATION:** Erosion controls shall be maintained on the lot as long as they are needed to control erosion and sedimentation.
 - EAS CONTROLS:** All EAS controls shall be inspected on a daily basis and maintained as necessary until all disturbed areas are permanently re-vegetated or otherwise stabilized. The responsibility of such inspection shall be that of _____.
 - System will be staked in field by licensed Land Surveyor and verified by engineer.



ANTI - TRACKING PAD DETAIL NOT TO SCALE



SILT FENCE

ROB HELLSTROM LAND SURVEYING LLC

32 MAIN STREET
 HEBRON, CONNECTICUT
 (860)-228-9853

Mailing Address:
 P.O. BOX 378
 HEBRON, CT 06248
 www.rhllc.com
 Email: hellstromsurveying@yahoo.com

NOTES & DETAILS
 PREPARED FOR
ROBERT CALDWELL

DEPICTING PROPOSED BUILDING AND SEPTIC
 WILLIMANTIC ROAD (CT. ROUTE 66)
 COLUMBIA, CONNECTICUT

JOB NO.: 2022-112
 FILE NO.: 22-122-SITEPLAN

SHEET NO.: 3 OF 3
 SCALE: AS NOTED

DATE: JUNE 27, 2022
 BY: SAM

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.
 THE DRAWING IS NOT VALID UNLESS IT BEARS AN ORIGINAL SURVEYOR AND LANDMARK SEAL.

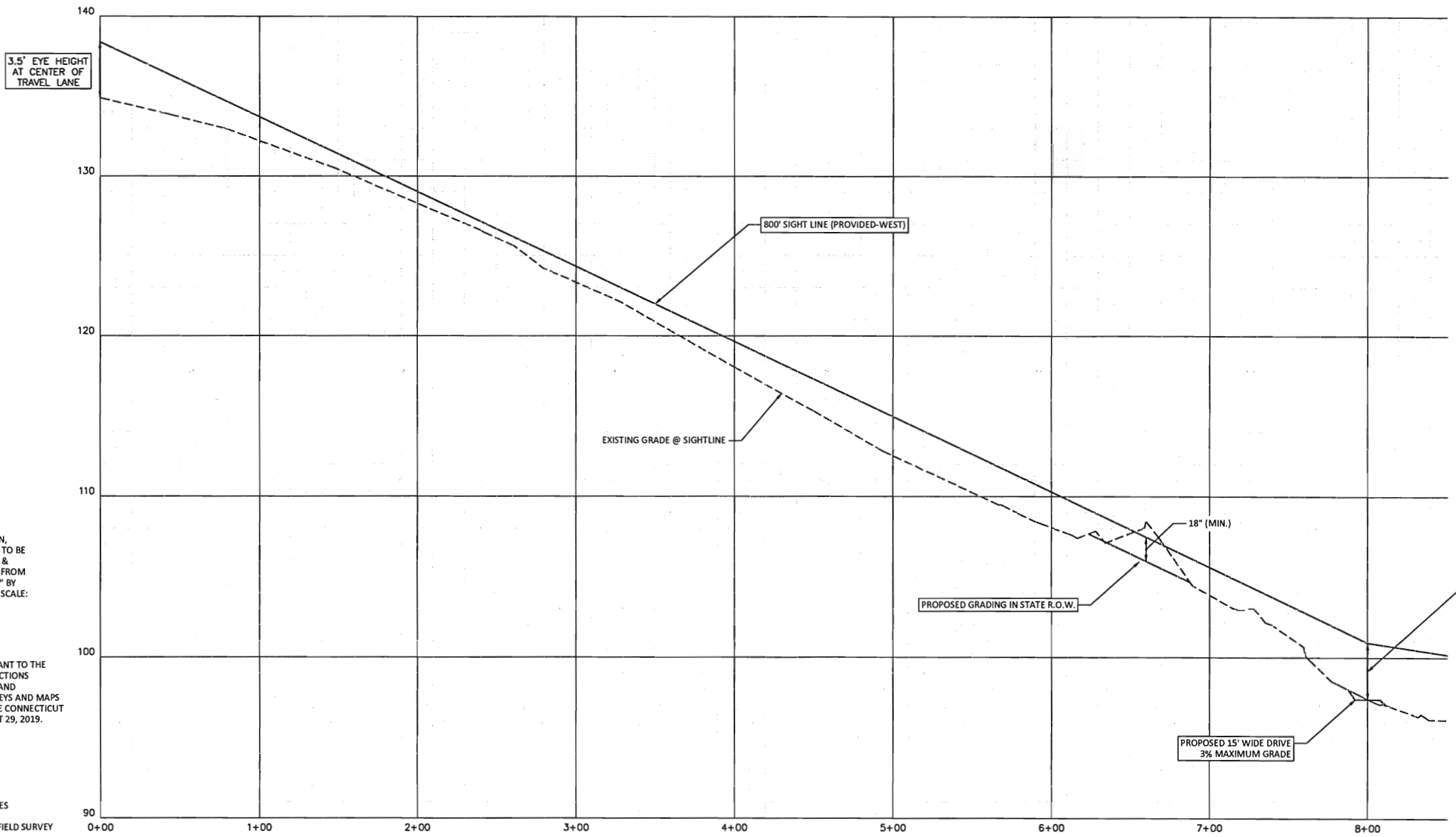
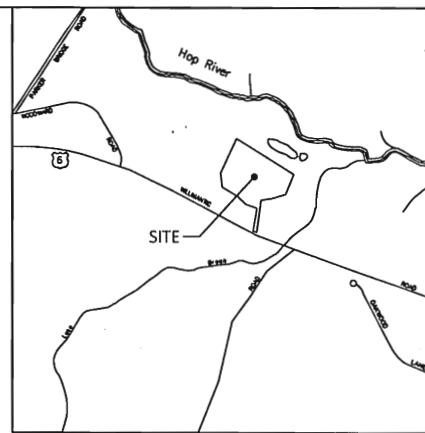
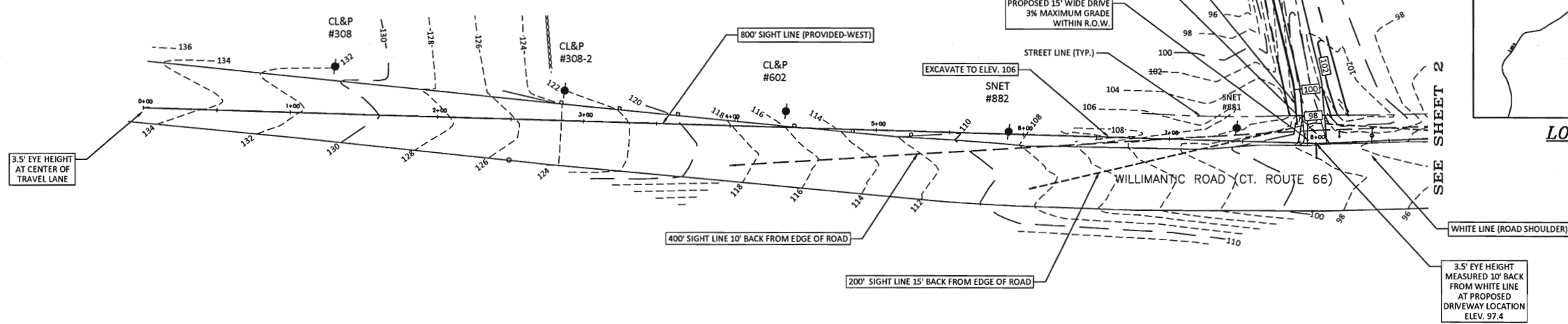
ROBERT W. HELLSTROM, L.S. #13626

RES CIVIL ENGINEERING CONSULTANTS
 63 NORWICH AVENUE
 COLCHESTER, CT
 (860) 516-0033
 Reynolds Engineering Services, LLC

Mark A. Reynolds, P.E. CT LIC # 19789
 Certification is not valid without the signature and embossed (impression) type seal.

LEGEND

- PROPERTY LINE
- - - -600- - - EXISTING CONTOUR
- SIGN
- GUIDE RAIL
- UTILITY POLE



MAP REFERENCES

- "MAP SHOWING A PROPOSED TRANSFER OF LAND IN, COLUMBIA, TOLLAND COUNTY, CONN. SECTION "A" TO BE TRANSFERRED FROM MRS. ETHEL BLACK TO RALPH J. & ELEANOR J. CABIT, SECTION "B" TO BE TRANSFERRED FROM RALPH J. & ELEANOR J. CABIT TO MRS. ETHEL BLACK" BY EVERETT O. GARDNER, VERNON, CONN., CLASS A-2, SCALE: 1"=40', DATE: AUGUST 1958

MAP STANDARD NOTES

- THIS SURVEY (OR MAP) HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019.
TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY
BOUNDARY DETERMINATION: RESURVEY
HORIZONTAL ACCURACY CLASS: "A-2"
VERTICAL ACCURACY CLASS: "1-2"
VERTICAL DATUM: ASSUMED
- INTENDED PURPOSE: TO SHOW PROVIDED SIGHT LINES
- TOPOGRAPHY DEPICTED HEREON IS THE RESULT OF FIELD SURVEY MEASUREMENTS PERFORMED ON 07/18/2022

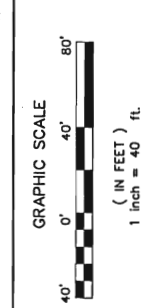
SCALE:
1" = 40' (HORIZONTAL)
1" = 4' (VERTICAL)

**ROB HELSTROM
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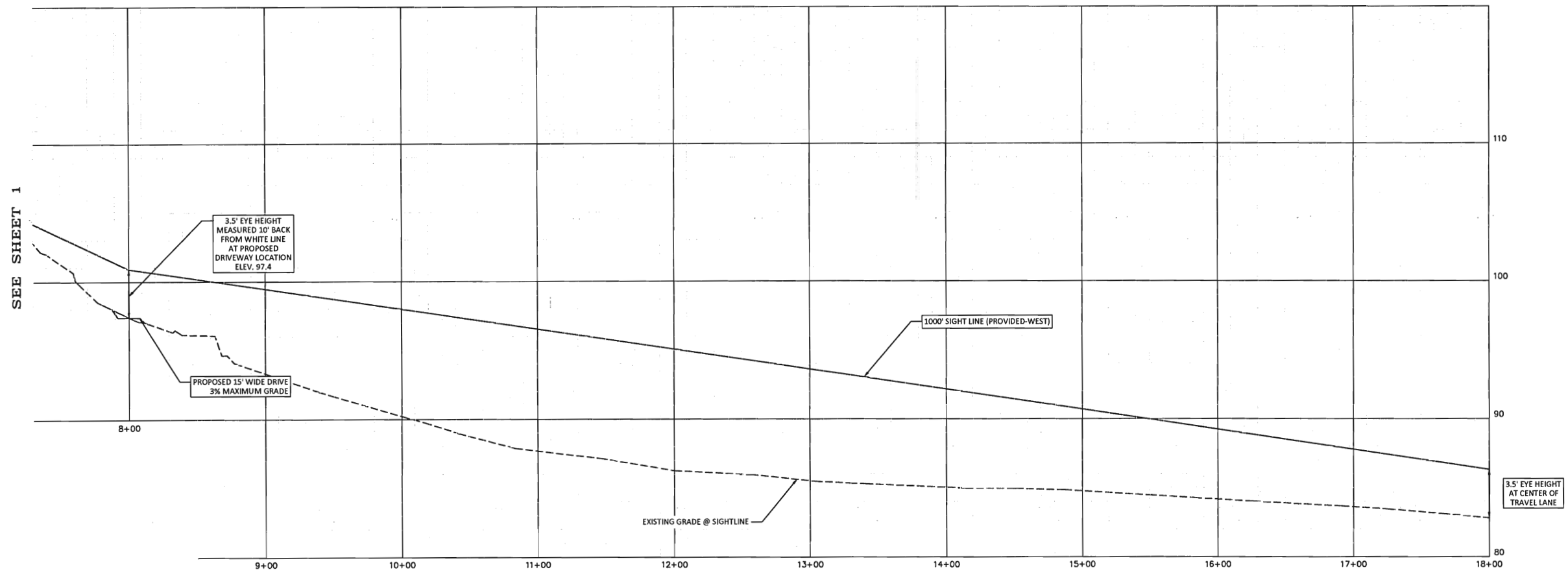
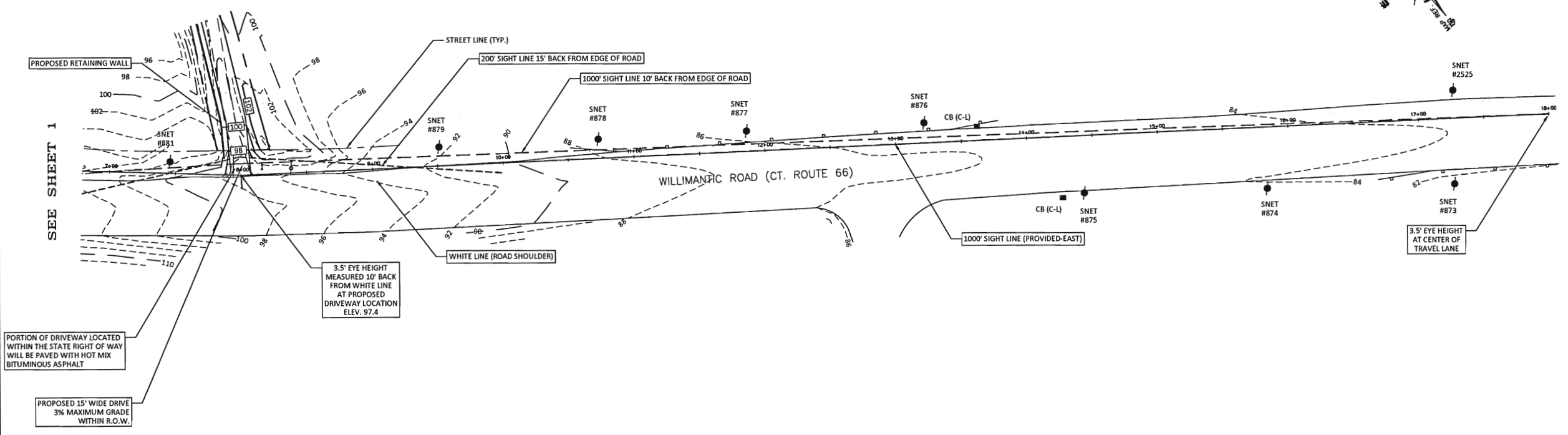
SIGHT LINE SURVEY
— PREPARED FOR —
ROBERT CALDWELL
DEPICTING PROPOSED BUILDING AND SEPTIC
WILLIMANTIC ROAD (CT. ROUTE 66)
COLUMBIA, CONNECTICUT

NO.	DATE	DESCRIPTION

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TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.
THIS DRAWING IS NOT VALID UNLESS IT BEARS AN ORIGINAL, INK SIGNATURE AND TACKLED SEAL.



SHEET NO.: 1 OF 2
JOB NO.: 2022-122
BY: SAM
DATE: JANUARY 26, 2022
FILE NO.: 22-122_SITEPLAN



SCALE:
 1" = 40' (HORIZONTAL)
 1" = 4' (VERTICAL)

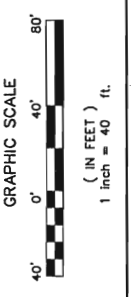
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 COLUMBIA, CONNECTICUT

SEE SHEET 1

SEE SHEET 1

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DATE: JANUARY 26, 2022 BY: SAM SHEET NO.: 2 OF 2 JOB NO.: 2022-122 FILE NO.: 22-122-SITEPLAN

REVISIONS

NO. DATE DESCRIPTION

ROBERT W. HELSTROM, L.L.S. #13626