Matthew J. Slater Town Supervisor

TOWN OF YORKTOWN PLANNING BOARD

Albert. A. Capellini Community and Cultural Center, 1974 Commerce Street, Yorktown Heights, New York 10598, Phone: (914) 962-6565, Fax: (914) 962-3986

PUBLIC MEETING AGENDA YORKTOWN TOWN HALL BOARD ROOM

363 Underhill Avenue, Yorktown Heights, NY 10598

November 22, 2021 7:00 PM

- 1. Correspondence
- 2. Meeting Minutes November 8, 2021

REGULAR SESSION

3. Bird Bus Sales & Service

Decision Statement

Location: 35.08-1-21 & 22; 3805 Crompond Road Contact: JMC Site Development Consultants

Description: Proposed Bird Bus sales & service facility at former car dealership site on 2.71 acres in the

C-4 zone.

4. Maryel School of New York at St. Andrew's Lutheran Church

Decision Statement

Location: 37.09-1-24; 2405 Crompond Road Contact: Celi Cacho & Pastor Dave Dockweiler

Description: Proposed reuse of the former Montessori School classrooms within the church for a private bilingual elementary school on 5 acres in the R1-40 zone.

5. Par 3 Golf Course

Adjourned Public Hearing

Location: 16.07-1-38; 795 Route 6

Contact: James Martorano Jr., Parks & Recreation Superintendent

Description: Proposed Par 3 golf course and clubhouse with restaurant on Town owned Parkland.

WORK SESSION

6. Granite Knolls Park Solar Project

Discussion Site Plan & Special Permit

Location: 26.09-1-22; 2975 Stony Street

Contact: HESP Solar LLC and Bergmann PC

Description: Proposed 1.3 MW-AC community solar project including ground mounted solar panels, solar carport system, and a battery storage system at Granite Knolls Park.

7. Yorktown Energy Storage Tier 2 Battery Storage System

Discussion Amended Battery Components

Location: 6.17-1-24; 3901 Gomer Court, Jefferson Valley

Contact: Greg Gibbons, PV Engineers, P.C.

Description: Approved Tier 2 (5,000kW/15,000kWh) battery energy storage system which will be no more than 15% of the lot coverage with a maximum of five containers.

8. Nadine's Restaurant

Discussion Special Use Permit for Outdoor Seating

Location: 59.14-1-23 & 24; 715 Saw Mill River Road

Contact: Keith Staudohar, Cronin Engineering

Description: Applicant request to make permanent the 70 seat outdoor seating area created in response to the pandemic.

9. 3668 Barger Street

Discussion Site Plan

Location: 16.07-1-44; 3668 Barger Street

Contact: JB Hernandez, ARQ Architecture, P.C.

Description: Request for site plan approval of existing site and proposed 300 square foot office

building on 1.40 acres in the C-4 zone.

Last Revised - November 18, 2021

Correspondence

Draft Minutes

Bird Bus

Robyn Steinberg

From: Garcia, Cynthia <CGarcia@dep.nyc.gov> **Sent:** Monday, November 15, 2021 11:54 AM

To: Paul J. Dumont, PE; Zachariah, Mariyam; Robyn Steinberg

Cc: Chris-David Fleurant, EIT

Subject: RE: Proposed Bird Bus School Bus Dealership, 3805 Crompond Road, Yorktown, NY

[JMC 21005]

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Paul,

Thank you for submitting Figure SK-1 for review which shows that no new impervious surface is being proposed as part of the reoccupation of the former dealership. As such, DEP review and approval of a SWPPP is not required for this action.

Best,

Cynthia Garcia | Bureau of Water Supply | SEQRA Coordination Section 465 Columbus Ave., Valhalla, NY 10595
(O) 914 749 5302 | (F) 914 749 5472 | cgarcia@dep.nyc.gov

From: Paul J. Dumont, PE <PDumont@jmcpllc.com>

Sent: Friday, November 12, 2021 9:46 AM

To: Garcia, Cynthia <CGarcia@dep.nyc.gov>; Zachariah, Mariyam <MZachariah@dep.nyc.gov>

Cc: Chris-David Fleurant, EIT < CFleurant@jmcpllc.com>

Subject: [EXTERNAL] Proposed Bird Bus School Bus Dealership, 3805 Crompond Road, Yorktown, NY [JMC 21005]

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. Forward suspect email to phish@cyber.nyc.gov as an attachment (Click the More button, then forward as attachment).

Cynthia and Mariyam,

I hope this email finds you well. We were forwarded the attached correspondence from the Town of Yorktown regarding the above referenced project. Accordingly, we have prepared the attached figure which summarizes impervious / pervious coverage for the project. The project involves the reoccupation of the former Kia Dealership with limited site work. There are no new impervious surfaces proposed.

Could you please review the above and attached and provide a Letter of No Jurisdiction that we can provide to the Town Planning Department? Thank you.

Sincerely,

PAUL J. DUMONT, PE Design Manager



SITE DEVELOPMENT CONSULTANTS

120 Bedford Road • Armonk, NY 10504 V 914 273-5225, x215 • F 914 273-2102

www.jmcpllc.com

SITE PLANNING | CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | TRANSPORTATION ENGINEERING | LAND SURVEYING | 3D SCANNING & MODELING

JMC PLANNING ENGINEERING LANDSCAPE ARCHITECTURE & LAND SURVEYING, PLLC | JMC SITE DEVELOPMENT CONSULTANTS, LLC | JOHN MEYER CONSULTING, INC.

Agreement for transfer of information

The information in this (these) file(s) is the internal property of JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC | JMC Site Development Consultants, LLC | John Meyer Consulting, Inc. (JMC) and has been prepared by JMC for exclusive use by its staff.

It is provided herewith for information only and is not to be relied upon by any parties other than JMC's staff and employees. Any reliance thereupon by any party other than JMC's staff and employees shall be at that user's sole risk; and said user choosing to rely upon this information agrees, that by relying on it, he/she accepts full responsibility for all work related thereto and agrees to indemnify and hold JMC harmless from any and all liability arising from or relating to the use of or reliance upon said information.

The party receiving this information is responsible for requesting any future updated and/or current copy of the information hereon prior to considering this information final. No update notification will be sent. Any comments or questions are to be directed in writing to the preparer at JMC.

By extracting these files, you agree to these terms and conditions.

12-12-79 (3/99)-9c SEQR

State Environmental Quality Review

NEGATIVE DECLARATION Notice of Determination of Non-Significance	
Project Number Date: November 22, 2021	
This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.	
The Town of Yorktown, Planning Board, as lead agency, has determined that the proposed action described below will not have a significant environmental impact and a Draft Impact Statement will not be prepared.	е
Name of Action: Bird Bus Sales & Service	
SEQR Status: Type 1 Unlisted	E
Conditioned Negative Declaration: ☐ Yes ✓ No	
Description of Action:	
It is proposed to renovate and reoccupy the property with a school bus dealership. The site consists of 2.74 acres in the C-4 zoning district and is located at 3805 Crompond Road, Cortlar Manor, also known as Section 35.08, Block 1, Lots 21 & 22 on the Town of Yorktown Tax Map.	
Location: (Include street address and the name of the municipality/county. A location map of appropriate scale is also recommended.)	of
3805Crompond Road, Yorktown Heights, NY 10598, Westchester County	

Reasons Supporting This Determination:

(See 617.7(a)-(c) for requirements of this determination; see 617.7(d) for Conditioned Negative Declaration)

- 1) This negative declaration is based on a Short Environmental Assessment Form dated September 10, 2021.
- 2) The plan conforms to the Town's Land Use and Zoning Policies.
- 3) For reason of its size, this project will not have an impact on town services.
- 4) The existing building will be reused.
- 5) The site must comply with Town Lighting and Noise regulations and will therefore not have a significant impact on the surrounding residential properties.

If Conditioned Negative Declaration, provide on attachment the specific mitigation measures imposed, and identify comment period (not less than 30 days from date of publication In the ENB)

For Further Information:

Contact Person: Robyn Steinberg, Town Planner

Address: 1974 Crompond Road, Yorktown Heights, NY 10598

Telephone Number: (914) 962-6565

For Type 1 Actions and Conditioned Negative Declarations, a Copy of this Notice is sent to:

Chief Executive Officer, Town / City / Village of

Other involved agencies (If any)

Applicant (If any)

Environmental Notice Bulletin, 625 Broadway, Albany, NY 12233-1750 (Type One Actions only)

PLANNING BOARD TOWN OF YORKTOWN

RESOLUTION APPROVING SITE PLAN AND SPECIAL USE PERMIT BIRD BUS SALES & SERVICE

On motion of	, seconded by	, and unanimously voted in favor by Bock,
LaScala, and Garriga	n, the following resolutio	n was adopted:

DATE: NOVEMBER 22, 2021

WHEREAS in accordance with the Planning Board's Land Development Regulations, Town of Yorktown Town Code Chapter 195, adopted February 4, 1969 and as amended, a formal application for the approval of a site plan titled "Bird Bus Sales & Service," prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying PLLC, dated September 10, 2021, was submitted to the Planning Board on behalf of Bird Bus Sales & Service (hereinafter referred to as "the Applicant"); and

WHEREAS the property owned by Bird Bus Sales & Service is located at 3805 Crompond Road, Cortlandt Manor, also known as Section 38.05, Block 1, Lots 21 & 22 on the Town of Yorktown Tax Map (hereinafter referred to as "the Property"); and

WHEREAS an application fee of \$5,002.00 covering 2.71 acres has been received by this board; and

WHEREAS pursuant to SEQRA:

RESOLUTION NUMBER: #00-00

- 1. The action has been identified as an Unlisted action.
- 2. The Planning Board has been declared lead agency on November 22, 2021.
- 3. A negative declaration has been adopted on November 22, 2021 on the basis of a Short EAF dated September 10, 2021.

WHEREAS the applicant has submitted as part of his application the following maps and documents:

- 1. A drawing, cover sheet, titled "Bird Bus Sales & Service," prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying PLLC, dated September 10, 2021, and last revised November 19, 2021; and
- 2. A drawing, Sheet C-010, titled "Existing Conditions Map & Demolition Plan," prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying PLLC, dated September 10, 2021, and last revised November 19, 2021; and
- 3. A drawing, Sheet-100, titled "Preliminary Layout & Landscape Plan," prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying PLLC, dated

- September 10, 2021, and last revised November 19, 2021; and
- 4. A drawing, Sheet C-900, titled "Construction Details," prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying PLLC, dated September 10, 2021, and last revised November 19, 2021; and
- 5. A drawing, A1.1, titled "Proposed Alteration for Bird Bus Proposed Floor Plans," prepared by Joseph R. Crocco Architects, dated April 19, 2021 and last revised October 14, 2021; and
- 6. A drawing, A2.1, titled "Proposed Alteration for Bird Bus Elevations," prepared by Joseph R. Crocco Architects, dated April 19, 2021 and last revised October 14, 2021; and
- 7. A drawing, A2.2, titled "Proposed Alteration for Bird Bus Renderings," prepared by Joseph R. Crocco Architects, dated April 19, 2021 and last revised October 14, 2021; and
- 8. A drawing, titled "School Bus Dealership 3805 Crompond Road, Yorktown, NY," prepared by CREE Lighting, dated October 11, 2021; and

WHEREAS pursuant to the Town of Yorktown Town Code Section 300-71: New and/or used car automobile sales, subsection B, the subject site is more than 2 acres and has more than 200 feet of frontage on Route 202 and:

- (2) The building coverage is 12.7%, where a maximum of 20% is allowed;
- (3) The paved area for vehicle storage is 15% where a maximum of 40% is allowed;
- (4) All outdoor lighting is shielded and directed away from residential areas;
- (5) (Reserved)
- (6) (Reserved)
- (7) The access drive from Garden Lane is an existing condition and located along the portion of Garden Lane that is abutted by commercial properties;
- (8) Storage of all buses is located on a paved surface that is screened, employee parking is located behind the main building, and customer parking is located in front of the main building, however this is an existing condition that will also be screened by proposed landscaping;
- (9) (Reserved)
- (10) A total of 18 customer parking spaces and a total of 10 employee parking spaces are proposed on the site;
- (11) The gas tank is located behind the main building next to the service area, out of view from both Route 202 and Garden Lane, and will not be for general public convenience;
- (12) (Reserved)
- (13) Landscaping is proposed to screen the site from the surrounding roadways;
- (14) The existing building is more than 15 ft from each property line except on the west where the existing building is 9 ft from the property line;
- (15) All operations, including repairs and service, shall take place within the fully enclosed building;

- (16) A total of 48 vehicles will be stored on site where 59 vehicles are allowed on the site;
- (17) All storage and parking areas will be paved;
- (18) No loading, unloading or transfer operation shall be permitted on the street, at the curb or within the required front yard and the applicant has indicated that vehicles will be driven on site one at a time;
- (19) Suitable landscaping and fencing are provided to prevent nuisances to neighborhood properties;
- (20) No parking or storage of automobiles may take place on any landscaping or any other areas not specifically designated for such use by the approved site plan; and

WHEREAS the Planning Board has referred this application to the following boards and agencies and has received and considered reports of the following:

Boards & Agencies Report Date

ABACA 10/08/2021. 11/19/2021 NYC DEP 10/25/2021, 11/15/2021 Westchester County Planning Board 10/12/2021

WHEREAS the requirements of this Board's Land Development Regulations, Town Code Chapter 195, have been met; and

WHEREAS a Public Informational Hearing was held in accordance with §195-39(B)(1) of the Yorktown Town Code on the said site plan application at the Town Hall in Yorktown Heights, New York on September 27, 2021; and

WHEREAS having reviewed all current site plans, building plans, comments and reports from Town professional staff, the public, and other interested and involved agencies associated with the application before it; and having conducted a public hearing held in accordance with §195-39(B)(2) of the Yorktown Town Code on the said site plan application commencing on and closing on October 18, 2021 at Town Hall in Yorktown Heights, New York;

BE IT NOW RESOLVED the Planning Board has determined the Applicant has complied with all requirements of Town of Yorktown Town Code Section 300-71; and

BE IT FURTHER RESOLVED that the application of Bird Bus Sales & Service for the approval of a site plan titled Bird Bus Sales & Service" as prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying PLLC, dated September 10, 2021, and last revised November 19, 2021, be approved subject to the modifications and conditions listed below, and that the Chairman of this Board be and hereby is authorized to endorse this Board's approval of said plan upon compliance by the applicant with the requirements as noted below; and

RESOLVED all site lighting shall comply with Town of Yorktown Town Code Chapter 200: Lighting requiring that all light fixtures be fully shielded and the Applicant has indicated that all building fixtures will be fit with shields; and

RESOLVED the existing light foundations along Route 202 that are noted on the site plan to remain utilized will not be utilized without an amended Lighting Plan approved by the Planning Board; and

RESOLVED site operations shall comply with the Town of Yorktown Chapter 216: Peace and Good Order and Section 216-2(A) which limits excessive noise between the hours of 11:00 p.m. and 7:00 a.m., prevailing time; and

Additional requirements prior to signature by the Planning Board Chairman:

1. Submission of fees as per town requirements in the form of separate checks made payable to the Town of Yorktown:

ABACA Review \$6,175.00 General Development \$2,133.00

2. Submission of inspection fee to the Engineering Department as required by the Town Engineer. Fees to be determined after Planning Board approval and a complete final set of drawings and site work estimate are submitted to the Town Engineer.

Additional requirements:

- 3. Proposed plan must comply with all current applicable ADA standards.
- 4. Applicant must obtain approval from the NYS DOT to install the landscaping proposed in the landscape islands located in their right of way. Should this approval not be granted, the landscaping shall not be required.
- 5. Applicant must obtain all necessary permits from outside agencies.
- 6. Upon completion of the project, the Applicant must submit an as-built survey, on paper and in digital AutoCAD DWG readable format, showing all improvements on the site.

BE IT FURTHER RESOLVED that unless a building permit has been issued by **November 22, 2022**, or a time extension has been granted by the Planning Board, this approval will be null and void.

BIRD BUS SALES & SERVICE

TAX MAP SECTION 35.08 | BLOCK 01 | LOTS 21 & 22 WESTCHESTER COUNTY 3805 CROMPOND ROAD TOWN OF YORKTOWN, NY

Applicant: BIRD BUS SALES 1 WAREHOUSE LANE ELMSFORD, NY 10523 (516) 233-6199

Owner:

CROMPOND REALTY, LLC YORKTOWN HEIGHTS, NY 10598

Architect:

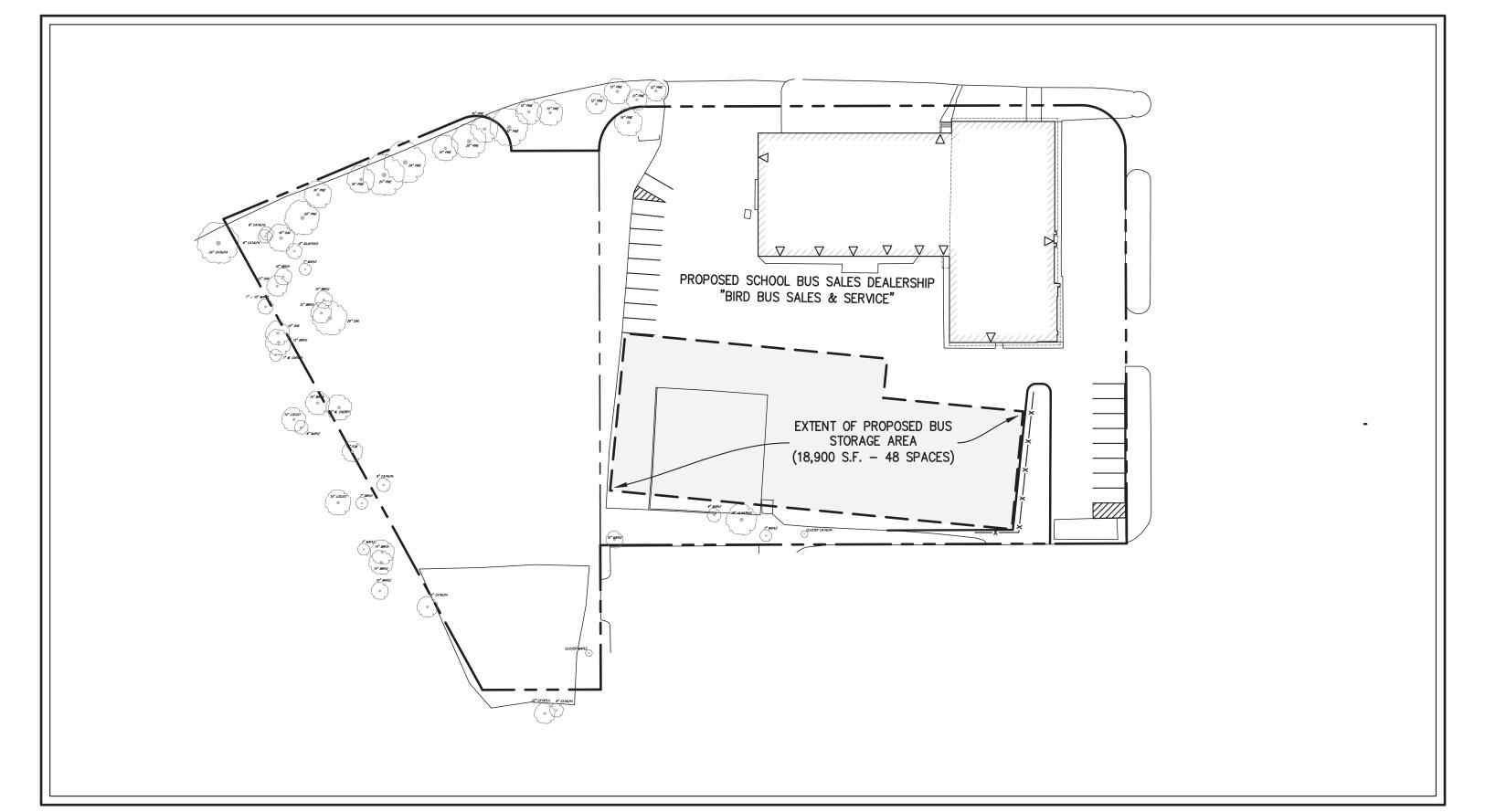
JOSEPH R. CROCCO ARCHITECTS 4 MACDONALD AVE #5 **ARMONK, NY 10504** (914) 273-2774



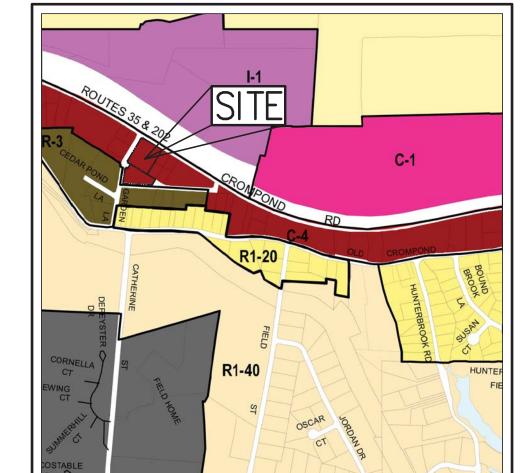
Site Planner, Civil & Traffic Engineer, **Surveyor and Landscape Architect:** 120 BEDFORD ROAD **ARMONK, NY 10504**

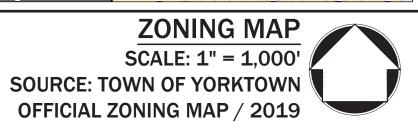
Surveyor:

HOPPE LAND SURVEYING, PC **111 ROUTE 303 TAPPAN, NY 10983** (845) 359-5050









LEGEND							
	SITE PROPERTY LINE						
	LOT LINE						
C-4 I-1	COMMERCIAL GENERAL DISTRICT LIGHT INDUSTRIAL PARK DISTRICT						
R-3	MULTIFAMILY RESIDENTIAL DISTRICT						
R1-40	SINGLE-FAMILY RESIDENTIAL DISTRICT						





REVISED PER ABACA COMMENTS

REVISED PER TOWN COMMENTS

REVISED PER TOWN COMMENTS

Previous Editions Obsolete

SUBSURFACE UTILITY LOCATIONS ARE BASED ON

A COMPILATION OF FIELD EVIDENCE, AVAILABLE

RECORD PLANS AND/OR UTILITY MARK-OUTS.

GUARANTEED. VERIFY THE ACTUAL LOCATION

Call before you dig

THE LOCATION OR COMPLETENESS OF

UNDERGROUND INFORMATION CANNOT BE

OF ALL UTILITIES PRIOR TO EXCAVATION

OR CONSTRUCTION.

JMC Drawing List:

C-000 COVER SHEET

C-010 EXISTING CONDITIONS MAP & DEMOLITION PLAN

C-100 SITE LAYOUT & LANDSCAPING PLAN

C-900 CONSTRUCTION DETAILS

TABLE OF LAND USE									
SECTION 35.08, BLOCK 1, LOT ZONE "C-4" - "GENEARL COMPROPOSED USE: NEW AND/OR	S 21 & 22 MMERCIAL" R USED CAR AL	JTOMOBILE SAI	LES						
DESCRIPTION		REQUIRED	EXISTING	PROPOSED					
LOT AREA	(FEET)	N/A	119,917	119,917					
LOT WIDTH	(FEET)	25	250	250					
LOT DEPTH	(FEET)	100	300	300					
BUILDING HEIGHT	(STORIES / FEET)	1 / 35	1 / <35	1 / <35					
YARDS									
FRONT BUILDING SETBACK	(FEET)	15 ⁽¹⁾	41	41					
REAR BUILDING SETBACK	(FEET)	15 ⁽¹⁾	89	89					
SIDE BUILDING SETBACK	(FEET)	15 ⁽¹⁾	9 ⁽²⁾	9 ⁽²⁾					
SPECIAL PERMIT CRITERIA FOR AU	TOMOBILE SALES								
BUILDING COVERAGE	(PERCENT)	20 ⁽³⁾	12.7	12.7					
PAVED AREA FOR VEHICLE STORAGE	(PERCENT)	40 ⁽⁴⁾	_	15.8					
PERMITTED VEHICLE STORAGE	(VEHICLES)	59 ⁽⁵⁾	_	48					
CUSTOMER PARKING SPACES	(SPACES)	10 ⁽⁶⁾	_	18					
EMPLOYEE PARKING SPACES	(SPACES)	10 ⁽⁶⁾	_	10					

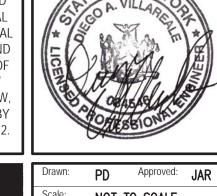
11/05/2021

11/19/2021

- 1. PER SECTION 300-71(B)(14) OF THE TOWN OF YORKTOWN CODE, NO BUILDING SHALL BE LOCATED CLOSER THAN 15 FEET TO ANY LOT LINE.
- 3. PER SECTION 300-71(B)(2) OF THE TOWN OF YORKTOWN CODE, BUILDING COVERAGE SHALL NOT EXCEED 20% OF THE LOT AREA.
- 4. PER SECTION 300-71(B)(3) OF THE TOWN OF YORKTOWN CODE, PAVING FOR STORAGE OR DISPLAY OF NEW AND/OR USED CARS SHALL NOT COVER
- 5. PER SECTION 300-71(B)(16) OF THE TOWN OF YORKTOWN CODE, NO MORE THAN ONE MOTOR VEHICLE FOR EVERY 2,000 SQUARE FEET OF LOT AREA SHALL BE STORED OUTSIDE AT ANY TIME, AND NO OUTDOOR STORAGE OF PARTIALLY DISMANTLED OR WRECKED MOTOR VEHICLES SHALL BE PERMITTED. ALL OUTDOOR AUTOMOBILE STORAGE AREAS SHALL BE SCREENED BY FENCING AND YEAR-ROUND LANDSCAPING. BASED ON A TOTAL LOT AREA OF 119,917 SQUARE FEET, 59 VEHICLES ARE PERMITTED TO BE STORED ON THE PROPERTY.
- 6. PER SECTION 300-71(B)(10) OF THE TOWN OF YORKTOWN CODE, TEN CUSTOMER PARKING SPACES SHALL BE PROVIDED AND SHALL BE SO MARKED. IN ADDITION, EMPLOYÈE PARKING AT THE RATE OF ONE SPACE PER TWO EMPLOYEES OF MAXIMUM SHIFT SHALL BE PROVIDED IN THE REAR PORTION

OF THE LOT AND SHALL BE SO MARKED. BASED ON A NUMBER OF 20 EMPLOYEES ON THE MAXIMUM SHIFT, 10 EMPLOYEE PARKING SPACES ARE REQUIRED.

> ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, **EXCEPT AS PROVIDED FOR BY** SECTION 7209, SUBSECTION 2



JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC JMC Site Development Consultants, LLC John Meyer Consulting, Inc. 120 BEDFORD ROAD • ARMONK, NY 10504 voice 914.273.5225 • fax 914.273.2102 www.jmcpllc.com

NOT TO SCALE ²roject No: **21005** C - 000

GENERAL CONSTRUCTION NOTES APPLY TO ALL WORK HEREIN:

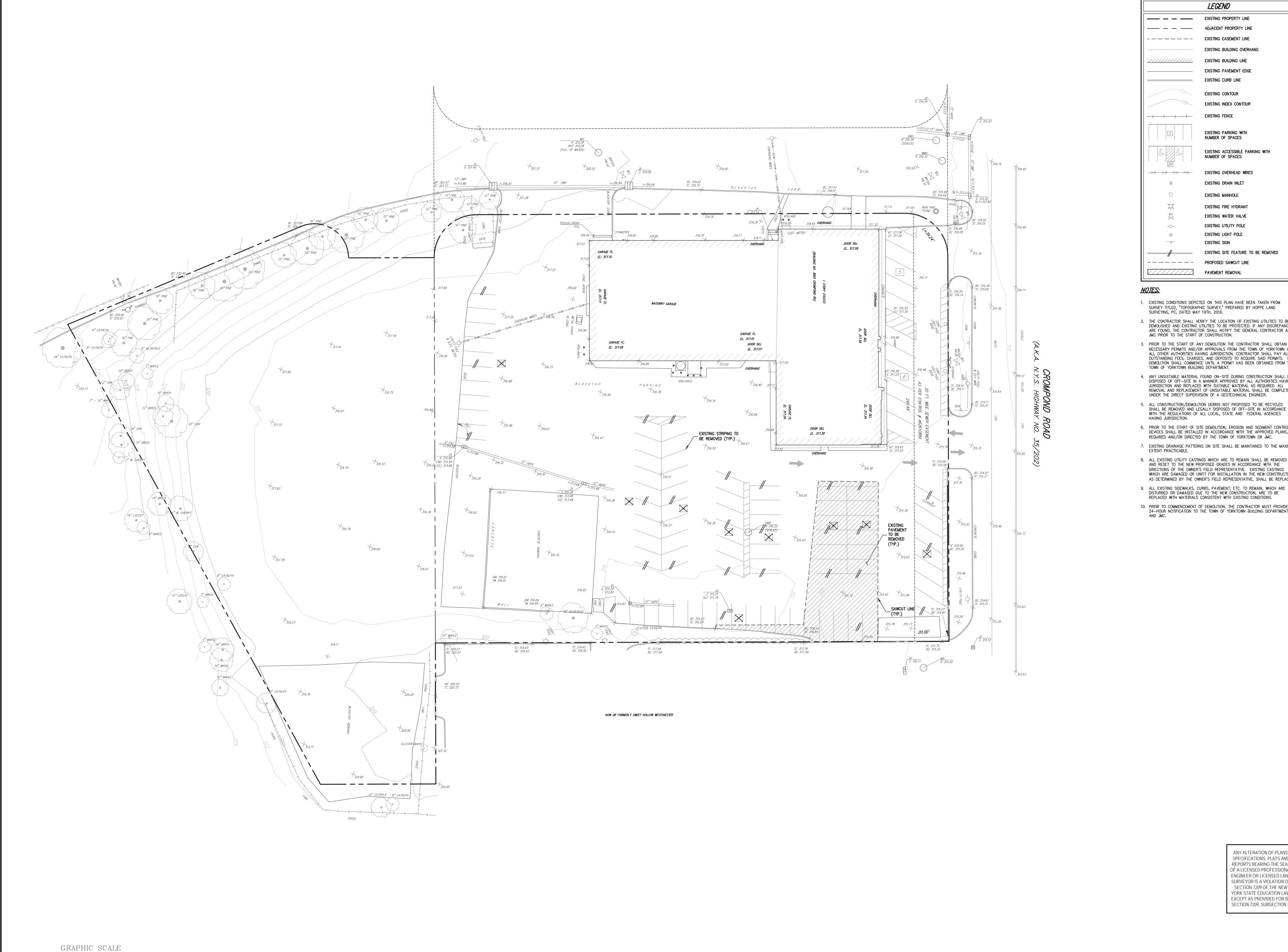
1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 "DIG SAFELY" (1–800–962–7962) TO HAVE UNDERGROUND UTILITIES LOCATED INCLUDING ARRANGING FOR A PRIVATE MARKOUT ON-SITE WHERE APPLICABLE. EXPLORATORY EXCAVATIONS SHALL COMPLY WITH CODE 753 REQUIREMENTS. NO WORK SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE NOTIFIED THE CONTRACTOR THAT THEIR UTILITIES HAVE BEEN LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, INSOFAR AS THEY MAY BE ENDANGERED BY THE CONTRACTOR'S OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, IMMEDIATELY REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION OF UTILITY SERVICE.

2. CONTRACTOR SHALL HAND DIG TEST PITS TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING UTILITIES DEPTHS AND ADVISE OF ANY CONFLICTS WITH PROPOSED UTILITIES. IF CONFLICTS ARE PRESENT. THE OWNER'S FIELD REPRESENTATIVE, JMC, PLLC AND THE APPLICABLE MUNICIPALITY OR AGENCY SHALL BE NOTIFIED IN WRITING. THE EXISTING/PROPOSED UTILITIES RELOCATION SHALL BE DESIGNED BY JMC, PLLC.

3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL LOCAL PERMITS REQUIRED.

4. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES, AND REGULATIONS. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL SAFETY CODES. APPLICABLE SAFETY CODES MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS, AND ADDITIONS THERETO, TO THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA); AND APPLICABLE SAFETY, HEALTH REGULATIONS AND BUILDING CODES FOR CONSTRUCTION IN THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE PROVISION OF SECTION 107-05 (SAFETY AND HEALTH REQUIREMENTS) OF THE NYSDOT STANDARD SPECIFICATIONS. IF THE CONTRACTOR PERFORMS ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THE AFFECTED ARÉA SHALL BE DISCONTINUED AND IMMEDIATE ACTION SHALL BE TAKEN TO CORRECT THE SITUATION TO THE SATISFACTION OF THE APPROVAL AUTHORITY HAVING JURISDICTION.

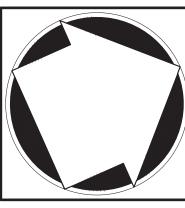
5. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AFFECTED BY THE SCOPE OF WORK SHOWN HEREON AT ALL TIMES TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE. RAMPING CONSTRUCTION TO PROVIDE ACCESS MAY BE CONSTRUCTED WITH SUBBASE MATERIAL EXCEPT THAT TEMPORARY ASPHALT CONCRETE SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE PEDESTRIAN ACCESS AT ALL TIMES.



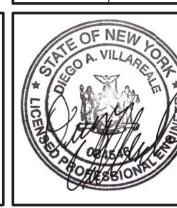
(IN FEET) 1 inch = 20 ft.

LEGEND ---- EXISTING PROPERTY LINE —— — — ADJACENT PROPERTY LINE ---- EXISTING EASEMENT LINE EXISTING BUILDING OVERHANG EXISTING BUILDING LINE EXISTING PAVEMENT EDGE EXISTING CURB LINE EXISTING CONTOUR EXISTING INDEX CONTOUR EXISTING FENCE EXISTING PARKING WITH NUMBER OF SPACES EXISTING ACCESSIBLE PARKING WITH NUMBER OF SPACES —OHW——OHW——OHW— EXISTING OVERHEAD WIRES 1 2 % EXISTING DRAIN INLET EXISTING MANHOLE EXISTING FIRE HYDRANT EXISTING WATER VALVE EXISTING UTILITY POLE EXISTING LIGHT POLE EXISTING SIGN EXISTING SITE FEATURE TO BE REMOVED ---- PROPOSED SAWCUT LINE PAVEMENT REMOVAL 1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES TO BE DEMOLISHED AND EXISTING UTILITIES TO BE PROTECTED. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR AND THE STANT 3. PRIOR TO THE START OF ANY DEMOLITION THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND/OR APPROVALS FROM THE TOWN OF YORKTOWN AND OUTSTANDING FEES, CHARGES, AND DEPOSITS TO ACQUIRE SAID PERMITS. NO DEMOLITION SHALL COMMENCE UNTIL A PERMIT HAS BEEN OBTAINED FROM THE

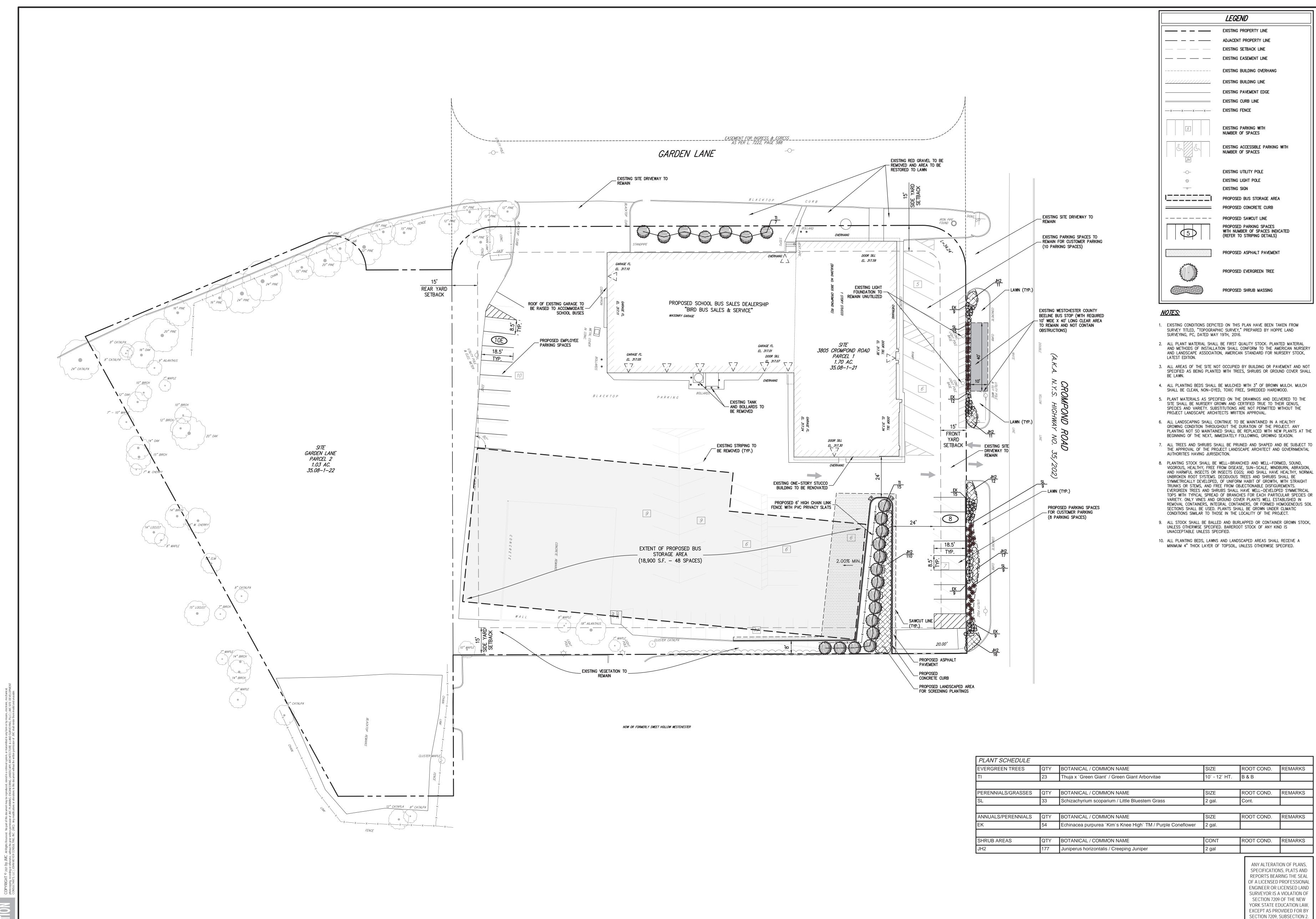
- SURVEY TITLED, "TOPOGRAPHIC SURVEY," PREPARED BY HOPPE LAND SURVEYING, PC, DATED MAY 19TH, 2016.
- JMC PRIOR TO THE START OF CONSTRUCTION.
- ALL OTHER AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL PAY ALL TOWN OF YORKTOWN BUILDING DEPARTMENT.
- 4. ANY UNSUITABLE MATERIAL FOUND ON-SITE DURING CONSTRUCTION SHALL BE DISPOSED OF OFF-SITE IN A MANNER APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND REPLACED WITH SUITABLE MATERIAL AS REQUIRED. ALL REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL SHALL BE COMPLETED UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER.
- SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF—SITE IN ACCORDANCE WITH THE REGULATIONS OF ALL LOCAL, STATE AND FEDERAL AGENCIES HAVING JURISDICTION.
- 6. PRIOR TO THE START OF SITE DEMOLITION, EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS, AS REQUIRED AND/OR DIRECTED BY THE TOWN OF YORKTOWN OR JMC.
- 7. EXISTING DRAINAGE PATTERNS ON SITE SHALL BE MAINTAINED TO THE MAXIMUM EXTENT PRACTICABLE.
- 8. ALL EXISTING UTILITY CASTINGS WHICH ARE TO REMAIN SHALL BE REMOVED AND RESET TO THE NEW PROPOSED GRADES IN ACCORDANCE WITH THE DIRECTIONS OF THE OWNER'S FIELD REPRESENTATIVE. EXISTING CASTINGS WHICH ARE DAMAGED OR UNFIT FOR INSTALLATION IN THE NEW CONSTRUCTION, AS DETERMINED BY THE OWNER'S FIELD REPRESENTATIVE, SHALL BE REPLACED.
- ALL EXISTING SIDEWALKS, CURBS, PAVEMENT, ETC. TO REMAIN, WHICH ARE DISTURBED OR DAMAGED DUE TO THE NEW CONSTRUCTION, ARE TO BE REPLACED WITH MATERIALS CONSISTENT WITH EXISTING CONDITIONS.
- PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONTRACTOR MUST PROVIDE 24—HOUR NOTIFICATION TO THE TOWN OF YORKTOWN BUILDING DEPARTMENT AND JMC.



ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL
OF A LICENSED PROFESSIONAL
ENGINEER OR LICENSED LAND
SURVEYOR IS A VIOLATION OF
SECTION 7209 OF THE NEW
YORK STATE EDUCATION LAW,
EXCEPT AS PROVIDED FOR BY
SECTION 7209, SUBSECTION 2.

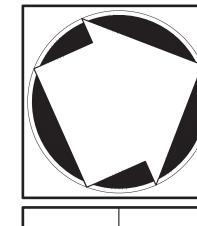


Project No: 21005 21005-SITE C-010 EXIST.scr



VARIETY. ONLY VINES AND GROUND COVER PLANTS WELL ESTABLISHED IN REMOVAL CONTAINERS, INTEGRAL CONTAINERS, OR FORMED HOMOGENEOUS SOIL SECTIONS SHALL BE USED. PLANTS SHALL BE GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. ALL STOCK SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN STOCK, UNLESS OTHERWISE SPECIFIED. BAREROOT STOCK OF ANY KIND IS

1 2 2



ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL
OF A LICENSED PROFESSIONAL
ENGINEER OR LICENSED LAND
SURVEYOR IS A VIOLATION OF
SECTION 7209 OF THE NEW
YORK STATE EDUCATION LAW,
EXCEPT AS PROVIDED FOR BY
SECTION 7209, SUBSECTION 2.

REMARKS

REMARKS

ROOT COND.

ROOT COND.

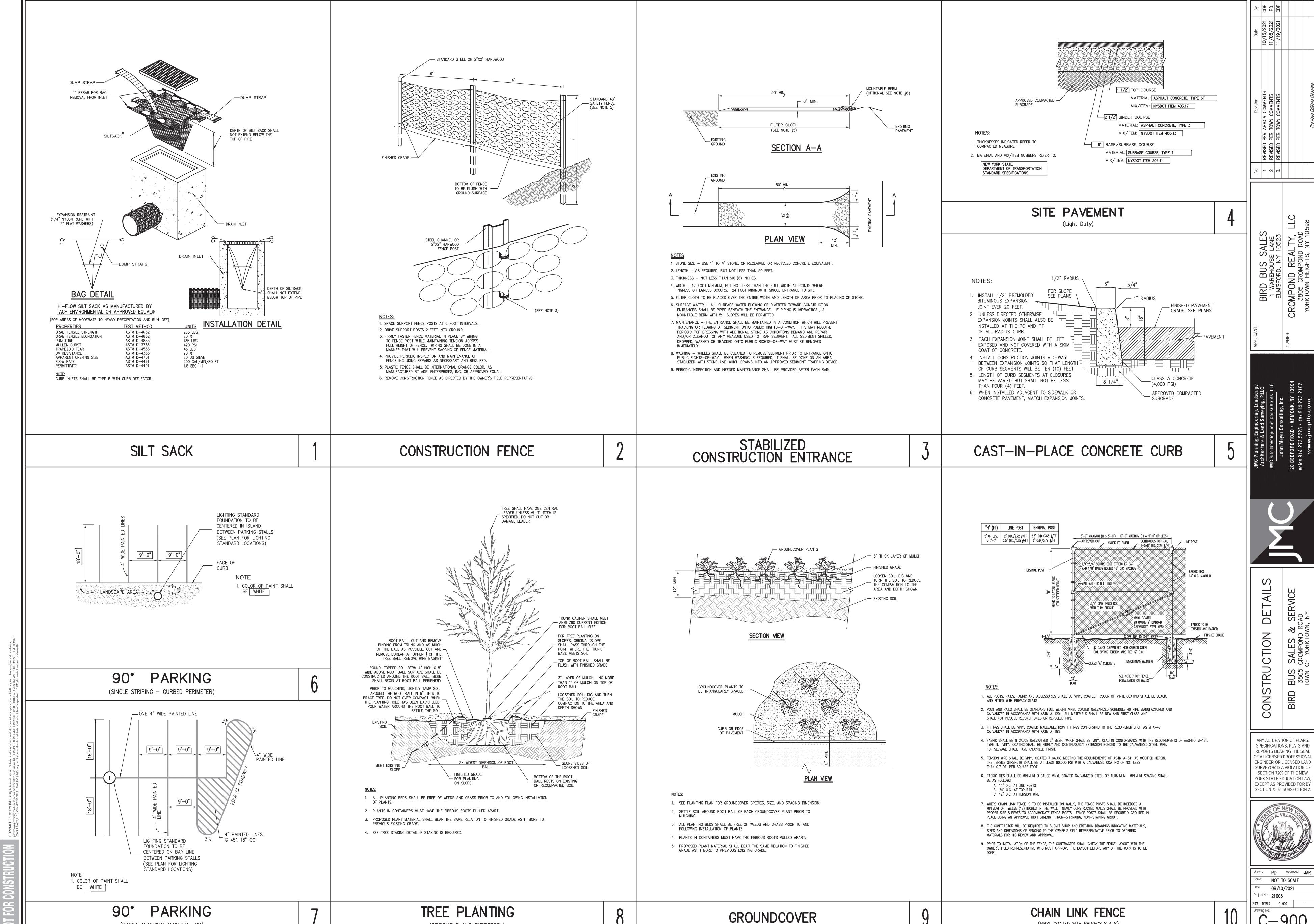
ROOT COND. REMARKS



Project No: 21005 21005-SITE C-100 LAY.scr

GRAPHIC SCALE

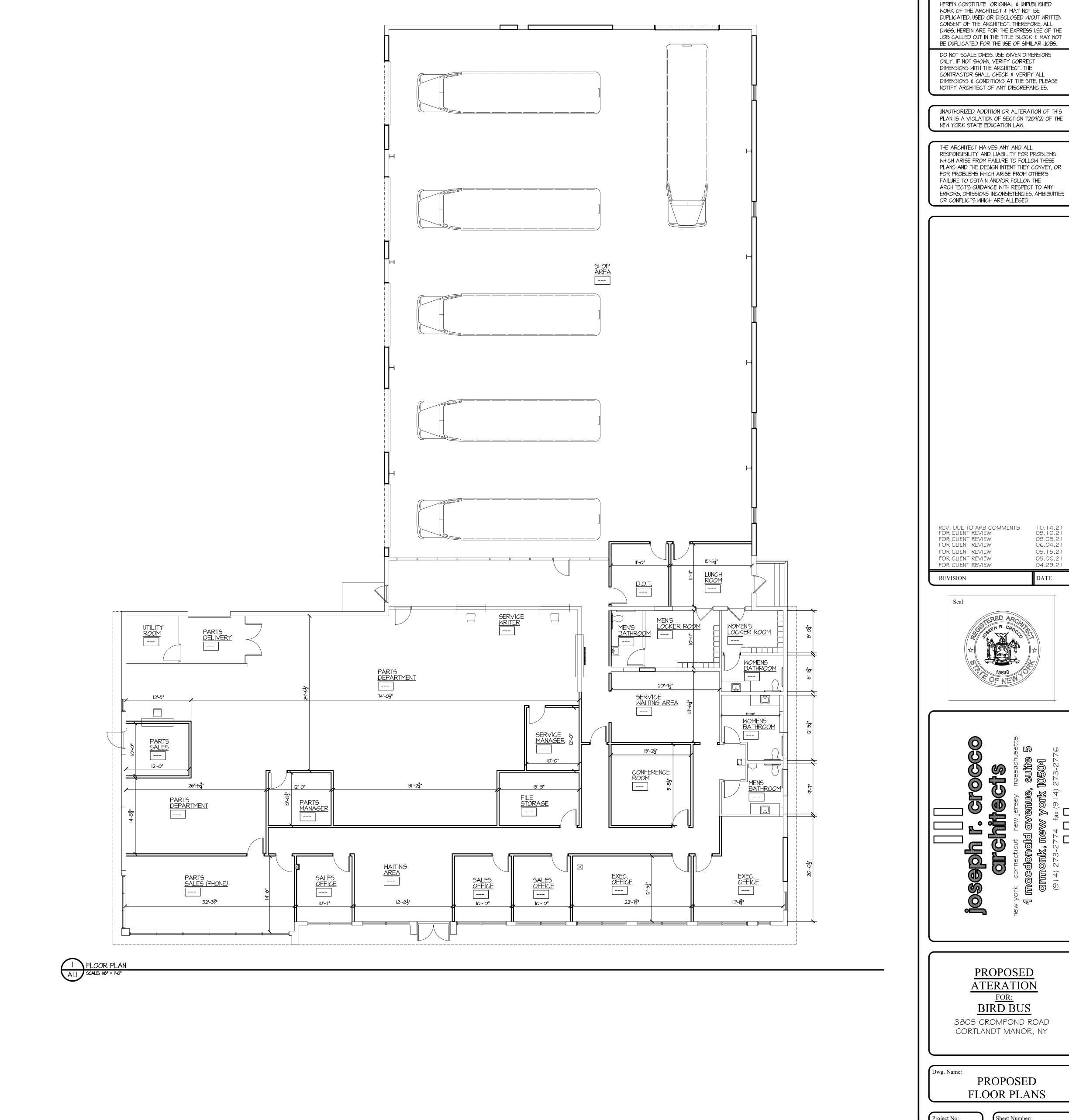
(IN FEET) 1 inch = 20 ft.



(DECIDUOUS AND EVERGREEN)

(SINGLE STRIPING—PAINTED END)

(VINYL COATED WITH PRIVACY SLATS)



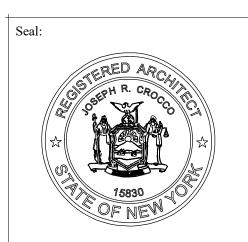
ALL DRAWINGS & WRITTEN MAT'L. APPEARING HEREIN CONSTITUTE ORIGINAL & UNPUBLISHED WORK OF THE ARCHITECT & MAY NOT BE DUPLICATED, USED OR DISCLOSED WOUT WRITTEN CONSENT OF THE ARCHITECT. THEREFORE, ALL DWGS. HEREIN ARE FOR THE EXPRESS USE OF THE JOB CALLED OUT IN THE TITLE BLOCK & MAY NOT

DO NOT SCALE DWGS. USE GIVEN DIMENSIONS ONLY. IF NOT SHOWN, VERIFY CORRECT DIMENSIONS WITH THE ARCHITECT. THE CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT THE SITE. PLEASE NOTIFY ARCHITECT OF ANY DISCREPANCIES.

UNAUTHORIZED ADDITION OR ALTERATION OF THIS PLAN IS A VIOLATION OF SECTION 7209(2) OF THE

THE ARCHITECT WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHER'S FAILURE TO OBTAIN AND/OR FOLLOW THE ARCHITECT'S GUIDANCE WITH RESPECT TO ANY

REV. DUE TO ARB COMMENTS FOR CLIENT REVIEW 10.14.21 09.10.21 09.08.21 06.04.21 05.15.21 05.06.21 04.29.21

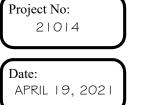


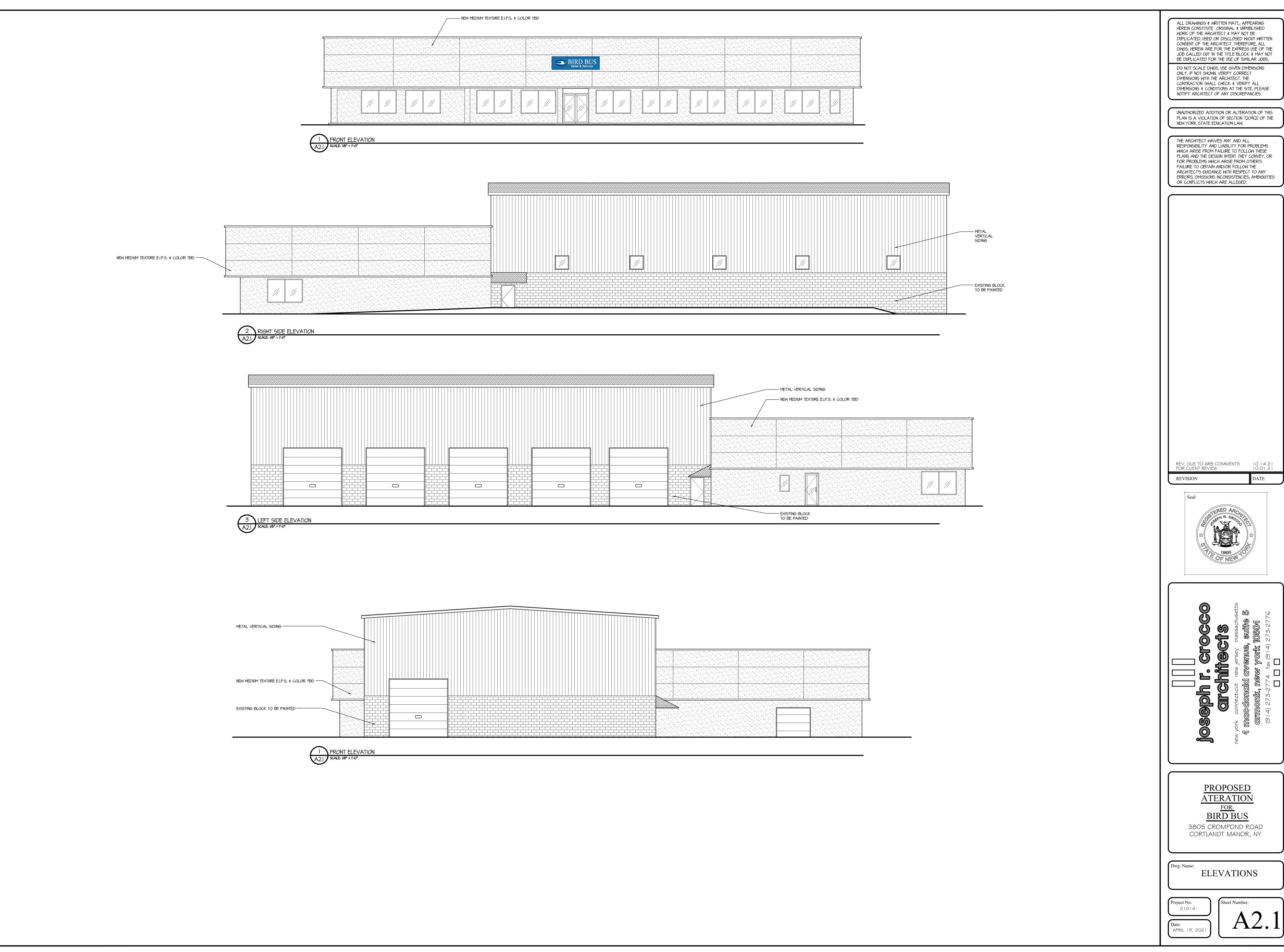


PROPOSED ATERATION

3805 CROMPOND ROAD CORTLANDT MANOR, NY

PROPOSED FLOOR PLANS









EAST FACING



2 WEST FACING A2.2 SCALE: N.T.5 ALL DRAWINGS & WRITTEN MAT'L. APPEARING
HEREIN CONSTITUTE ORIGINAL & UNPUBLISHED
WORK OF THE ARCHITECT & MAY NOT BE
DUPLICATED, USED OR DISCLOSED WOUT WRITTEN
CONSENT OF THE ARCHITECT. THEREFORE, ALL
DWGS. HEREIN ARE FOR THE EXPRESS USE OF THE
JOB CALLED OUT IN THE TITLE BLOCK & MAY NOT
BE DUPLICATED FOR THE USE OF SIMILAR JOBS.

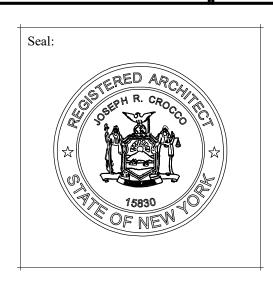
DO NOT SCALE DWGS. USE GIVEN DIMENSIONS
ONLY. IF NOT SHOWN, VERIFY CORRECT
DIMENSIONS WITH THE ARCHITECT. THE
CONTRACTOR SHALL CHECK & VERIFY ALL
DIMENSIONS & CONDITIONS AT THE SITE. PLEASE
NOTIFY ARCHITECT OF ANY DISCREPANCIES.

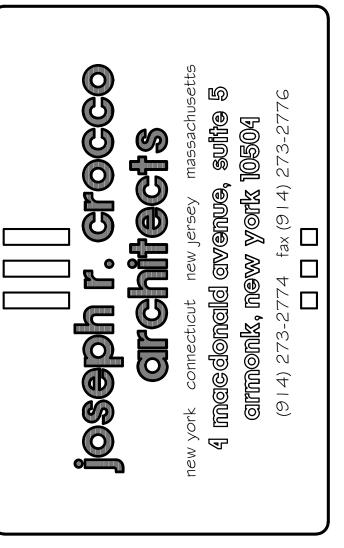
UNAUTHORIZED ADDITION OR ALTERATION OF THIS PLAN IS A VIOLATION OF SECTION 1209(2) OF THE NEW YORK STATE EDUCATION LAW.

THE ARCHITECT WAIVES ANY AND ALL
RESPONSIBILITY AND LIABILITY FOR PROBLEMS
WHICH ARISE FROM FAILURE TO FOLLOW THESE
PLANS AND THE DESIGN INTENT THEY CONVEY, OR
FOR PROBLEMS WHICH ARISE FROM OTHER'S
FAILURE TO OBTAIN AND/OR FOLLOW THE
ARCHITECT'S GUIDANCE WITH RESPECT TO ANY
ERRORS, OMISSIONS INCONSISTENCIES, AMBIGUITIES
OR CONFLICTS WHICH ARE ALLEGED.

REV. DUE TO ARB COMMENTS
FOR CLIENT REVIEW

10.14.21
10.01.21





PROPOSED
ATERATION
FOR:
BIRD BUS

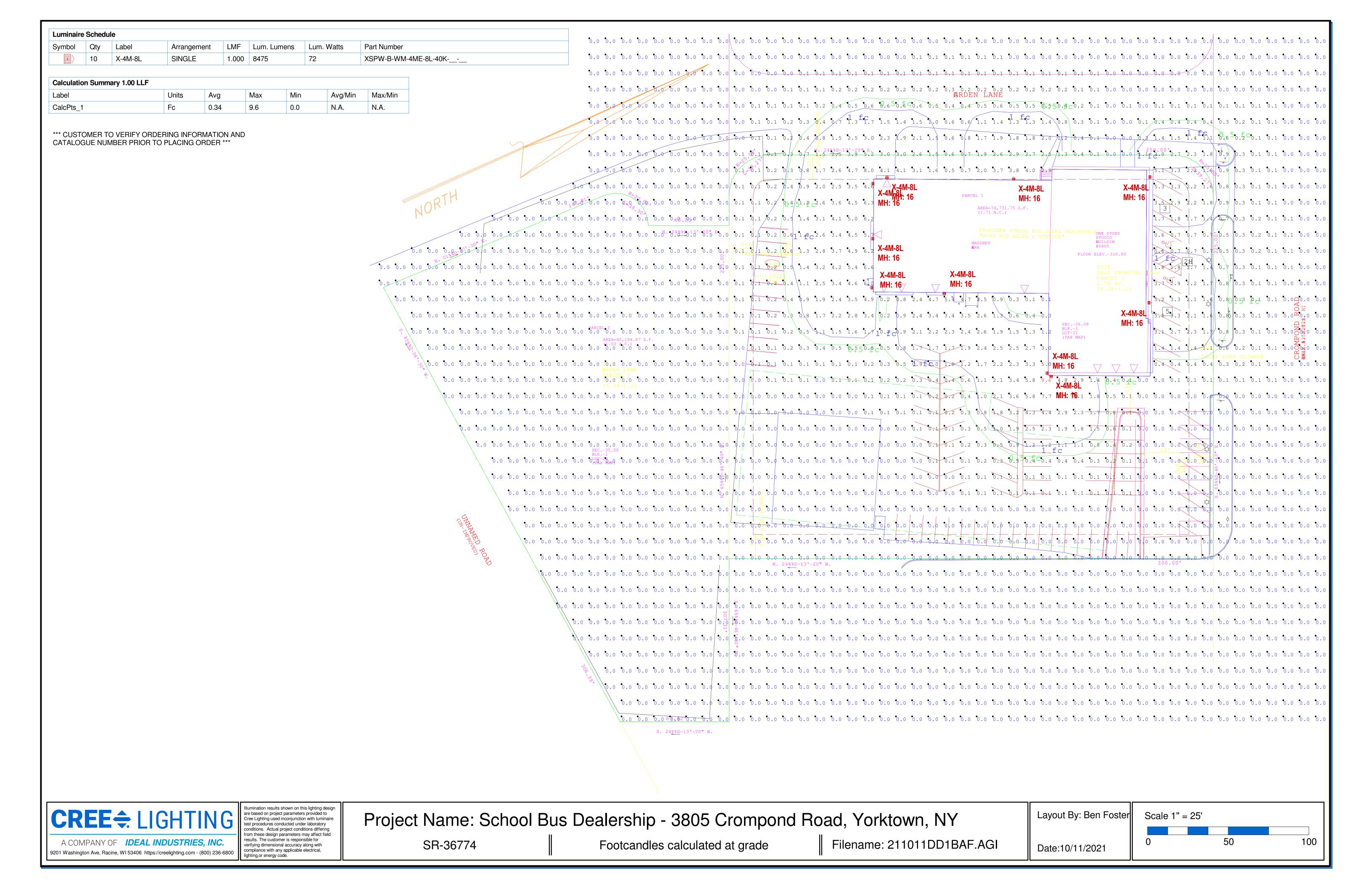
3805 CROMPOND ROAD CORTLANDT MANOR, NY

Dwg. Name: RENDERINGS

Project No: 2 | 0 | 4

Date: APRIL | 19, 202 |

A2.2



XSP Series

XSPW™ LED Wall Mount Luminaire featuring Cree TrueWhite® Technology

Rev. Date: VersionB V4 02/25/2020

Product Description

The XSPW™ LED wall mount luminaire has a slim, low profile design intended for outdoor wall mounted applications. The rugged lightweight aluminum housing and mounting box are designed for installation over standard single gang J-Boxes and mud ring single gang J-Boxes. The luminaire allows for through-wired or conduit entry from the top, bottom, sides and rear. The housing design is intended specifically for LED technology including a weathertight LED driver compartment and thermal management. Optic design features industry-leading NanoOptic® Precision Delivery Grid™ system in multiple distributions.

Applications: General area and security lighting

Performance Summary

NanoOptic[®] Precision Delivery Grid[™] optic

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty[†]: 10 years on luminaire/10 years on Colorfast DeltaGuard[®] finish

*See http://creelighting.com/warranty for warranty terms

Accessories

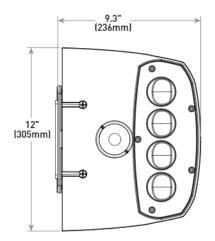
Field-Installed

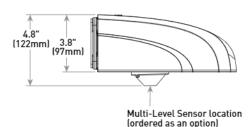
Beauty Plate

WM-PLT12** - 12" (305mm) Square WM-PLT14** - 14" (356mm) Square - Covers holes left by incumbent wall packs Hand-Held Remote XA-SENSREM

- For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required







Lumen Package	Weight		
2L, 4L, 6L	11.0 lbs. (5.0kg)		
8L	11.8 lbs. (5.4kg)		

Ordering Information

Example: XSPW-B-WM-2ME-2L-30K-UL-BK

XSPW	В	WM						
Product	Version	Mounting	Optic	Lumen Package*	сст	Voltage	Color Options	Options
XSPW	В	WM Wall	2ME Type II Medium 3ME Type III Medium 4ME Type IV Medium	2L 2,490 lumens 4L 4,270 lumens 6L 6,100 lumens 8L 8,475 lumens	30K 3000K - 70 CRI 40K 4000K - 70 CRI 50K 5000K - 90 CRI 57K 5700K - 70 CRI	UL Universal 120-277V UH Universal 347-480V 34 347V - For use with P option only	BK Black BZ Bronze SV Silver WH White	ML Multi-Level - Refer to ML spec sheet for details - Available with UL voltage only P Button Photocell - Not available with ML or PML options - Available with UL and 34 voltages only PML Programmable Multi-Level - Refer to PML spec sheet for details - Available with UL voltage only

^{*} Lumen Package selection codes identify approximate light output only. Actual lumen output levels may vary depending on CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values















^{**} Must specify color

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS

- · Slim, low profile design
- Luminaire housing specifically designed for LED applications with advanced LED thermal management and driver
- Luminaire mounting box designed for installation over standard single gang J-Boxes and mud ring single gang J-Boxes
- · Luminaire can also be direct mounted to a wall and surface wired
- Secures to wall with four 3/16" (5mm) screws (by others)
- · Conduit entry from top, bottom, sides, and rear
- Exclusive Colorfast DeltaGuard® finish features an E-coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, black, white and bronze are available
- Weight: 2L, 4L, 6L 11.0 lbs. (5.0kg); 8L 11.8 lbs. (5.4kg)

ELECTRICAL SYSTEM

- Input Voltage: 120-277V or 347-480V, 50/60Hz
- Power Factor: > 0.9 at full load
- Total Harmonic Distortion: < 20% at full load
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- 10V Source Current: 0.15 mA
- · Refer to Dimming spec sheet for details
- Operating Temperature Range: -40°C +50°C (-40°F +122°F)

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- · Suitable for wet locations
- Designed for downlight applications only
- · Enclosure rated IP66 per IEC 60598
- ANSI C136.2 10kV surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- · Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT. Please refer to https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/fsa-products/ for most current information
- DLC and DLC Premium qualified versions available. Please refer to https://www.designlights.org/search/ for most current information
- CA RESIDENTS WARNING: Cancer and Reproductive Harm www.p65warnings.ca.gov

Lumen Package	007/001	System Watts	F.//			Total Cu	rrent (A)		
	CCT/CRI	120- 480V	Efficacy	120V	208V	240V	277V	347V	480\
	30K/70 CRI	20	125	0.17	0.10	0.08	0.07	0.06	0.05
01	40K/70 CRI	19	131	0.16	0.09	0.08	0.07	0.06	0.04
2L	50K/90 CRI	24	104	0.20	0.11	0.10	0.08	0.07	0.05
	57K/70 CRI	19	131	0.16	0.09	0.08	0.07	0.06	0.04
	30K/70 CRI	33	129	0.28	0.16	0.14	0.13	0.10	0.07
,,	40K/70 CRI	31	138	0.27	0.15	0.13	0.12	0.09	0.07
4L	50K/90 CRI	40	107	0.34	0.20	0.17	0.16	0.12	0.09
	57K/70 CRI	31	138	0.26	0.15	0.13	0.12	0.09	0.07
	30K/70 CRI	51	120	0.43	0.25	0.22	0.19	0.14	0.11
,,	40K/70 CRI	47	130	0.40	0.23	0.20	0.18	0.14	0.10
6L	50K/90 CRI	60	102	0.51	0.29	0.25	0.23	0.17	0.13
	57K/70 CRI	47	130	0.40	0.23	0.20	0.17	0.14	0.10
	30K/70 CRI	77	110	0.65	0.38	0.32	0.28	0.22	0.16
01	40K/70 CRI	72	118	0.61	0.35	0.31	0.27	0.21	0.15
8L	50K/90 CRI	78	89	0.66	0.37	0.33	0.29	0.22	0.16
	57K/70 CRI	71	119	0.60	0.35	0.30	0.26	0.20	0.15

^{*} Electrical data at 25° C (77° F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347- 480V +/- 10%

XSPW Series Ambient Adjusted Lumen Maintenance Factors ¹										
Ambient	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Estimated ³ LMF	100K hr Estimated ³ LMF					
5°C (41°F)	1.03	0.98	0.96	0.94	0.92					
10°C (50°F)	1.03	0.98	0.96	0.94	0.92					
15°C (59°F)	1.02	0.97	0.95	0.93	0.92					
20°C (68°F)	1.01	0.96	0.95	0.93	0.91					
25°C (77°F)	1.00	0.96	0.94	0.92	0.90					
30°C (86°F)	0.99	0.95	0.93	0.91	0.89					
35°C (95°F)	0.98	0.94	0.92	0.90	0.88					
40°C (104°F)	0.97	0.93	0.91	0.89	0.87					

¹Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the <u>Temperature Zone Reference Document</u> for outdoor average nighttime ambient conditions.

conditions.

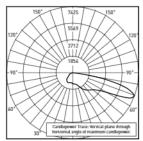
In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to Ky the pested duration in the IES LM 90 report for the LED.

up to 6x the tested duration in the IES LM-80 report for the LED.

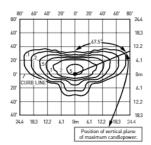
³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/wall-mount/xsp-series-wall



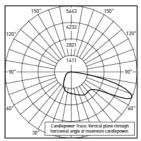
CESTL Test Report #: PL12798-001A XSPW-B-**-2ME-8L-40K-UL Initial Delivered Lumens: 8,622



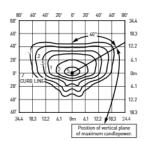
XSPW-B-**-2ME-8L-40K-UL Mounting Height: 15' (4.6) A.F.G. Initial Delivered Lumens: 8,475 Initial FC at grade

Type II Medium Distribution										
	3000K		4000K		5000K		5700K			
Lumen Package	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11								
2L	2,490	B1 U0 G1								
4L	4,270	B1 U0 G1								
6L	6,100	B1 U0 G2								
8L	8,475	B2 U0 G2	8,475	B2 U0 G2	6,925	B1 U0 G2	8,475	B2 U0 G2		

3ME



CESTL Test Report #: PL12366-007A XSPW-B-**-3ME-8L-40K-UL Initial Delivered Lumens: 8,543



XSPW-B-**-3ME-8L-40K-UL Mounting Height: 15' (4.6m) A.F.G. Initial Delivered Lumens: 8,475 Initial FC at grade

Type III Medium Distribution									
	3000K		4000K		5000K		5700K		
Lumen Package	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11							
2L	2,490	B1 U0 G1							
4L	4,270	B1 U0 G1							
6L	6,100	B1 U0 G2							
8L	8,475	B2 U0 G2	8,475	B2 U0 G2	6,925	B1 U0 G2	8,475	B2 U0 G2	

^{*} Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

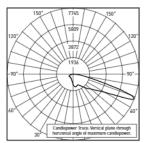


[•] Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
•• For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

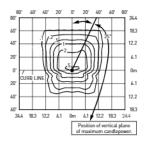
Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult: http://creelighting.com/products/outdoor/wall-mount/xsp-series-wall

4ME



RESTL Test Report #: PL14415-001A XSPW-B-**-4ME-8L-40K-UL Initial Delivered Lumens: 8,763



XSPW-B-**-4ME-8L-40K-UL Mounting Height: 15' (4.6m) A.F.G. Initial Delivered Lumens: 8,475 Initial FC at grade

Type IV Medium Distribution										
	3000K		4000K	4000K		5000K		5700K		
Lumen Package	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11								
2L	2,490	B1 U0 G1								
4L	4,270	B1 U0 G1								
6L	6,100	B1 U0 G2								
8L	8,475	B1 U0 G2	8,475	B1 U0 G2	6,925	B1 U0 G2	8,475	B1 U0 G2		

[•] Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
•• For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

Maryel School

PLANNING BOARD TOWN OF YORKTOWN

RESOLUTION APPROVING MARYEL SCHOOL AT ST. ANDREW'S CHURCH

DATE:

RESOLUTION NUMBER: #00-00

1120201011111112	214 7700 00	211121		
On motion of	, seconded by	, and unanimous	ly voted in favor by Boc	k
LaScala, and Garrigan, the	following resolution	n was adopted:		
WHEREAS the 5.00 acre Crompond Road, also kn Tax Map (hereinafter refe	own as Section 37.09	9, Block 1, Lot 24 or		

WHEREAS the Montessori School operated a private elementary school for pre-kindergarten through third grade students within the St. Andrew's Lutheran Church for over 48 years and where at its peak educated a maximum of 64 students in pre-kindergarten through sixth grades; and

WHEREAS the Maryel School of New York has requested to reoccupy the same space used by the Montessori School within the church's main building; and

WHEREAS on April 13, 1962 the Planning Board approved a site plan for the St. Andrew's Lutheran Church; and

WHEREAS the following has been submitted in support of this request:

- 1. An as-built survey, titled "Survey of Property prepared for St. Andrew's," prepared by J. Henry Carpenter & Co. Land Surveying & Mapping, and dated September 12, 2002; and
- 2. A letter from St. Andrew's Lutheran Church dated October 27, 2021 summarizing the history of the school use at the church; and
- 3. A letter from the Maryel School of New York dated October 22, 2021 outlining the school's proposed use of the building and strategic plan; and
- 4. A floor plan of the church showing the Maryel School Plan; and
- 5. A memo from the Fire Inspector dated October 15, 2021; and

WHEREAS the school must provide at least one off-street parking space for each teacher and other members of a school staff and the Maryel School strategic plan states the maximum

capacity of the school is 8 classrooms with 2 teachers per classroom for a total of 16 teachers where 119 parking spaces exist on the site; and

WHEREAS the expected maximum enrollment of the Maryel School is 80 pre-kindergarten through fifth grade students; and

BE IT NOW RESOLVED the Planning Board determines the Maryel School may reoccupy former Montessori School space at St. Andrew's Lutheran Church; and

BE IT FURTHER RESOLVED the Maryel School must obtain all necessary permits from outside agencies; and

RESOLVED all requirements listed in the Fire Inspector's memo dated October 15, 2021 must be completed.

F:\Office\WordPerfect\Current_Projects\Maryel School at St. Andrew's\Maryel Draft Resolution.docx

ST. ANDREWS LUTHERAN CHURCH

Mr. Livingstone appeared before the Board, representing the applicant. The Town Engineer presented a joint report prepared by his office and the Planning Consultant under date of April 12, 1962. The report was read and the contents of the same were discussed. Mr. Livingstone was in accord with the recommendations set forth in paragraph "6" of the report. After some discussion, and upon motion duly made and carried, with all present voting aye, the parking plan as submitted, dated September, 1960 and prepared by Kempa and Schwartz, was approved on condition that the applicant submit a revised parking plan complying with the items as set forth in paragraph "6" of the joint report, within 90 days from the date of the meeting, and that upon such submission and approval by the Town Engineer, the Chairman was authorized to sign said revised parking plan.

(See following page for joint report)

MEMORANDUM

TO: Flanning Board, Town of Yorktown, N. Y.

FROM: Robert Mickle, Planning Consultant, and Robert Germeroth,

Town Engineer
DATE: April 12, 1962

SUBJECT: Parking Plan Review for St. Andrews Lutheran Church

As required by the Town Zoning Ordinance for any new non-residential building or extension, a proposed parking plan has been submitted for approval for the above named property. Based on your standard procedure we have reviewed this plan in accordance with the applicable zoning requirements.

The following check list shows how the proposed plan conforms to the zoning requirements and includes our recommendations for changes or additional improvements based on these requirements.

1. Name and Location of Property: St. Andrews Lutheran Church Route 202, Yorktown Heights

2. Zoning District: R1-20 Residence

3. Proposed Use: Sanctuary and Social Hall

L. Permitted in District: Yes

5. Comparison of Zoning Requirements and Proposed Plan:-

1 2 2 2 4	ZONING	SHOWN ON PLAN
ITEM Lot Area	20,000 sq. ft.	l acres
Min. Lot Width	100 ft.	hos st. 350 st.
Min. Lot Depth	100 ft.	350 16.
Min. Yards for Bldgs.	10.01	200 ft.
Front	ho ft.	60 ft.
Side	20 ft. 40 ft.	285 1%.
Rear	35 ft.	22 ft.
Max. Bldg. Height	J) 100	
Max. Height - other	no limit	none
Church Spire Max. Bldg. Coverage	20%	3-1/2%
Off-street parking		£3
std-church, 1 space per	for 254 seats =	53 spaces
5 seats or persons	51 spaces	
Min. Yards for Parking	10 64	85 ft.
Front	μο ft. 5 ft.	12 ft.
Other	9' x 20'	10' x 20'
Parking Space Size	7 1 20	
Aisle Width#	17 ft.	10 ft.
609 Parking	- ,	
Access Drive Width* One way traffic	io ft.	11 ft.
Two way traffic	18 ft.	none
the man contract		

ITEM Signs# traffic

Access Drive and Parking Area Improvements

surface markings
Off-Street Loading
std
Sidewalks

ZCNING
signs at entrances
and exits
graded, drained and
surfaced as req. by
Town Engineer
may be required

s 1 ad by

none may be required

SHOWN ON PLAN

1 ent.sign "One Way Only"

8 1 exit sign as approved

gravel surfacing

none

none
60 ft. walk between service drive and bldg.
metes & bounds survey

Property Dimensions

metes & bounds survey

- # Recommended minimum standard in this case to comply with general zoning provisions relating to this item.
- 6. Recommended Changes or Additions.
 - A Provide only one entrance drive from Route 202. This drive should be located so that it can serve as a main entrance and exit drive for existing and future development. Since Rte. 202 is a State road, this matter was discussed with the resident engineer of N.Y.S. Department of Public Works for this area. He was also of the opinion that it would be best to have only one entrance from Rte. 202. Existing drive shown "to be eliminated".

It is our opinion that the best location for this access, with respect to obtaining good site distance along Rte. 202, would be at the location of the present proposed drive, as shown on plan.

- B Location of access drive to Rte. 202 must be approved by local office of N.Y.S. Dept. of Public Works, copy of their approval to be submitted to Planning Board. Plan to show all improvements for access required by them such as: culvert to carry road drainage under drive, guard posts, etc.
- C Due to probable grade (about 5%) on the new drive from 202, there are likely to be problems in maintaining the proposed gravel surface. For this reason, consideration should be given to providing an oil treated surface for a distance of 250 ft. in from Rte. 202.
- D Reverse direction of stalls on north side of front parking lot so that they can be used by incoming traffic.
- E Check perpendicular depth of all parking stalls and aisle width. For 60° parking, as shown, minimum depth = 20 ft., minimum aisle width = 17 ft. In some places only 10' to 12' aisle is shown.
- F Show location and size of culvert to be placed in ditch line where new exit road meets Viewland Drive (Town road).

7. General Recommendations.

In general the proposed parking plan complies with most of the requirements for the type of use shown. It is our recommendation that the proposed plan could either (1) be approved subject to the items being completed as shown in Paragraph 6 above or (2) the applicant be requested to submit a revised plan showing these items, which could then be approved by the Planning Board.

ROBERT MICKLE

Robert Germfroth



2405 CROMPOND ROAD YORKTOWN HEIGHTS, NEW YORK 10598

October 27, 2021

We at St. Andrew's are delighted that Juan and Celi Cacho have approached us about renting our available space to use as a school.

Our Montessori School (OMS) was the prior tenant that rented the space we are looking to rent now to the Maryel School of New York. OMS rented this space from us for over 40 years through June 15, 2020. OMS rented additional space not included in Maryel's proposal. At its peak (1989-1990), OMS used the large room to educate 64 children under the supervision of 4 teachers. The following documentation demonstrates that OMS operated continuously at this location for many years.

On pages 2-4 of this document you will find screen shots from OMS's website describe how OMS used the space. These pages can be found at

http://www.ourmontessorischool.com/covid-19.php To summarize, the grades were preschool/kindergarten through 3^{rd} grade and the ages of the students ranged from three to eight years. The number of students attending ranged from 40 - 60 over the last ten years.

Page 6, a letter from Yorktown School Superintendent verifying the education being provided at our location is consistent with public schooling-dated Feb 6, 1985.

Pages 7-12 is a copy of OMS annual report from this location-dated 2019-2020.

Pages 13 includes 2 Certificates of Occupancy the first from 1968, the second from 2002.

Pages 14-16 are copies of various Fire Inspections on this site for OMS with signatures from Ed Kolisz and Joh Landi.

Pages 17-20 is a copy of a report from New York State Office of Child and Family Services, page 18 and 20 state that an elementary school has operated at our location-dated March 26, 2007 Page 21 is the tuition schedule of their elementary school grades 1-6 for the year 2020-2021 published before going out of business.

The proposal from Maryel School reflects usage of our building that very similar to the way in which it was used by OMS.

Thank you for your consideration of this proposal,

Pastor Dave Dockweiler



Friday, October 22, 2021

Planning Department Town of Yorktown John A. Tegeder, R.A.

Maryel is a private, co-educational day school offering high quality bilingual education from Preschool through 5th Grade. The school is currently located in Manhattan and it is our desire to establish a sister school at 2405 Crompond Road, Yorktown Heights, NY.

This location has the following space available and we are not planning to do structural renovations to the current space:

7 Classrooms (divided by temporary walls)
Reception Area
Large Gym/Indoor playroom
2 Bathrooms
School Office
Kitchen (Shared with the Church during the weekends)
Reception area (Shared with the Church during the weekends)
Outdoor Playground

(See survey and floor plan attached)

Strategic Plan (5 Years)

Year 1: 2022-2023 School Year (Expected enrollment: 25-32 students)

Maryel will offer enrollment to children in grades Pk3 through 1st grade. We will use four classrooms. Each group will have one Head Teacher and one Assistant Teacher.

PK3: 8 studentsPK4: 8 students

Kindergarten: 8 studentsFirst Grade: 8 students

Year 2: 2023-2024 School Year (Expected enrollment: 40-44 students)

Maryel will offer enrollment to children in grades Pk3 through 2nd grade. We will use five classrooms. Each group will have one Head Teacher and one Assistant Teacher.

PK3: 10 studentsPK4: 10 students

Kindergarten: 8 studentsFirst Grade: 8 studentsSecond Grade: 8 students

Year 3: 2024-2025 School Year (Expected enrollment: 50-56 students)

Maryel will offer enrollment to children in grades Pk3 through 3rd grade. We will use six classrooms. Each group will have one Head Teacher and one Assistant Teacher.

PK3: 10 studentsPK4: 10 students

Kindergarten: 10 studentsFirst Grade: 10 studentsSecond Grade: 8 studentsThird Grade: 8 students

Year 4: 2025-2026 School Year (Expected enrollment: 60-66students)

Maryel will offer enrollment to children in grades Pk3 through 4th grade. We will use seven classrooms. Each group will have one Head Teacher and one Assistant Teacher.

PK3: 10 studentsPK4: 10 students

Kindergarten: 10 students
First Grade: 10 students
Second Grade: 10 students
Third Grade: 8 students
Fourth Grade: 8 students

Year 5: 2026-2027 School Year (Expected enrollment: 70-80students)

Maryel will offer enrollment to children in grades Pk3 through 5th grade. We will use seven existing classrooms and we will expand the school premises using additional space that it will need to be built to accommodate the new grade. Each group will have one Head Teacher and one Assistant Teacher.

PK3: 10 studentsPK4: 10 students

- Kindergarten: 10 students

First Grade: 10 students
Second Grade: 10 students
Third Grade: 10 students
Fourth Grade: 10 students
Fifth Grade: 10 students

LICENSES

Preschool (ages 3-5)

Maryel School does not require licensure/registration from the Office of Children and Family services to operate the preschool program since the preschool program will be located on the school grounds. (See attached the policy statement from the Office of Children and Family Services)

Elementary School (Kindergarten-5th Grade)

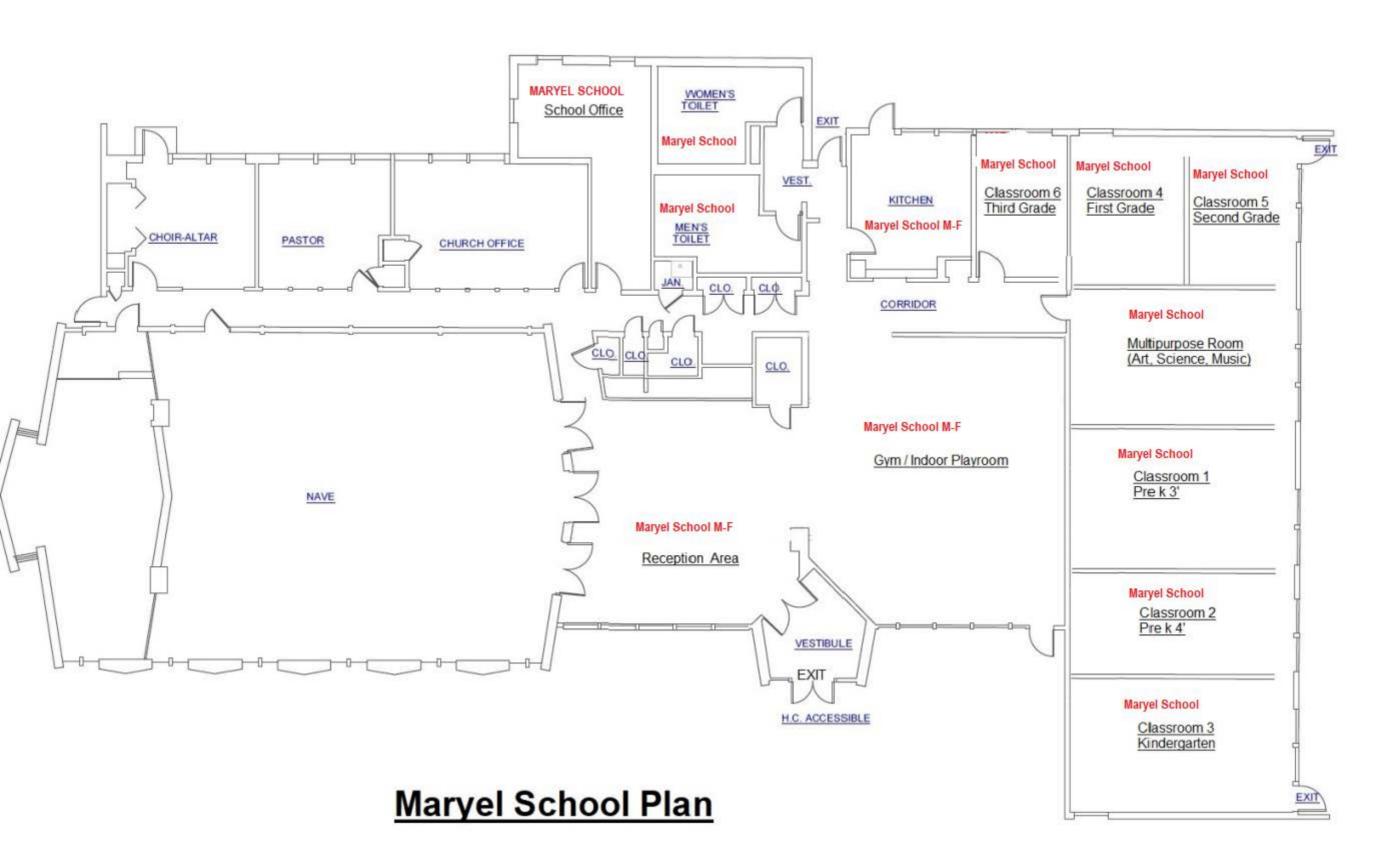
Maryel School is currently licensed by the New York State Education Department to operate a nonpublic school from Preschool to 5th Grade at 28 East 35th Street, New York, NY 10016. In order to open a new location will need to apply for Commissioner's consent and submit a Certificate of No Objection, Certificate of Use, Certificate of Compliance, or equivalent document that states that educational use is allowed in this location.

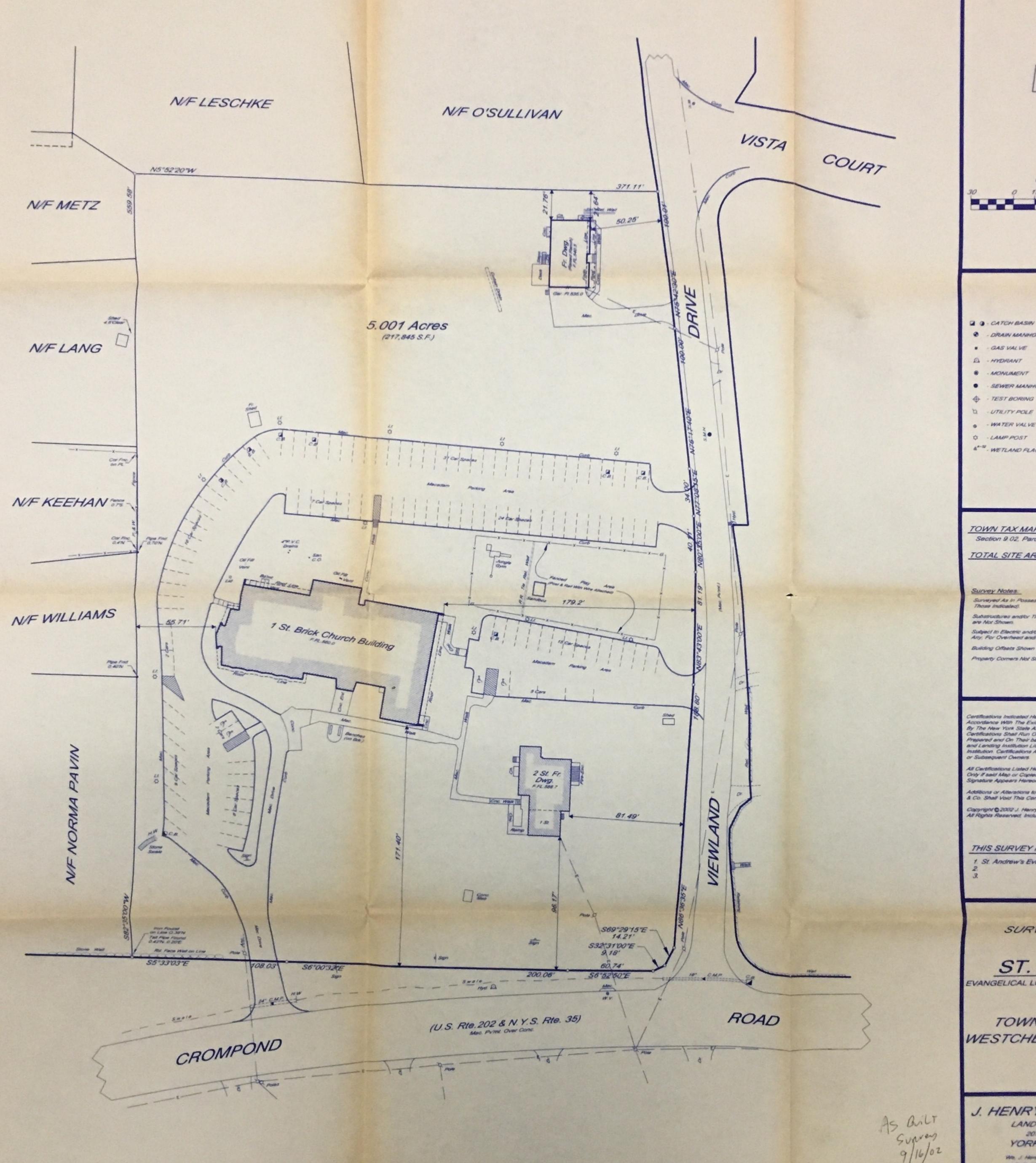
As mentioned before, It is our desire to establish a new bilingual elementary school in this location which we believe would be a great addition to Yorktown educational system. For that reason we ask you to please consider this petition.

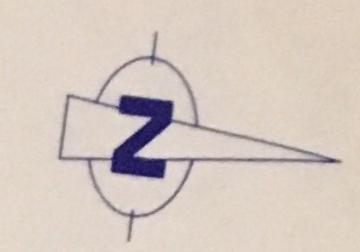
Sincerely,

Celi Cacho Head of School

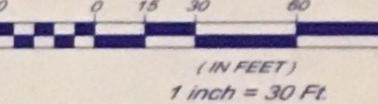
Maryel School of New York







GRAPHIC SCALE



LEGEND:

14 (- CATCH BASIN		- 37 CINE MINEL
	- DRAIN MANHOLE	*********	- STORM DRAIN
	- GAS VALVE	-t	- UTILITY WIRES
a	- HYDRANT		- WATER LINE
	- MONUMENT	-	- WIRE FENCE
	- SEWER MANHOLE		- WOODEN FENCE
0	- TEST BORING	0 *	- TREE LINETREE
b	- UTILITY POLE		- CONCRETE
	- WATER VALVE		- GAS LINE
•	- LAMP POST		- SAN SEWERLINE
4-1	WETLAND FLAG LOC	4	- WET AREA

TOWN TAX MAP DATA

Section 9.02, Parcel 12, Lot 16

TOTAL SITE AREA: 5.001 Acres, (217.845 S.F.)

Survey Notes.

Surveyed As in Possession/No Lines of Possession Other Than Those Indicated).

Substructures and/or Their Encroachments Below Grade, If Any, are Not Shown.

Subject to Electric and/or Telephone Company Easements, If Any, For Overhead and/or Underground Service.

Building Offsets Shown Taken to Siding or Trim.

Property Corners Not Staked

Certifications Indicated Hereon Signify That This Survey Was Prepared to Accordance With The Existing Code of Precise For Land Surveys Atlepted By The New York State Association of Professional Land Surveyors. Said Certifications Shall Run Only to the Person(s) For Whom the Survey Was Prepared and On Their behalf to the Title Company. Governmental Agency. and Landing Institution Listed hereon, and to the Assignees of the Lending Institution. Certifications Are Not Transferable to Additional Institutions

All Cartifications Listed Hereon are Valid For This Map and Copies Thereof Only if said Map or Copies Bear the Impressed Seel of the Surveyor Whose Signature Appears Hereon.

Additions or Alterations to This Map Other Than By J. Herry Carpenter A Co. Shall Void This Cartification.

Copyright © 2002 J. Henry Carpenter & Co. by James H. Seaboldt, L.S. All Rights Reserved, Including Rights of Reproduction.

THIS SURVEY IS HEREBY CERTIFIED ONLY TO 1. St. Andrew's Evangelical Lutheran Church of Yorktown

SURVEY OF PROPERTY

PREPARED FOR

ST. ANDREW'S

EVANGELICAL LUTHERAN CHURCH OF YORKTOWN

LOCATED IN

TOWN OF YORKTOWN WESTCHESTER COUNTY, N.Y.

DATE Supt 12 2002

J. HENRY CARPENTER & CO.

LAND SURVEYING & MAPPING 2070 SAW MILL RIVER ROAD YORKTOWN HEIGHTS, N.Y.

We, J. Henry Carpenser & Co., Do Henry Cordly Than on State 10, 2002 a Survey of the Promotes Shown Haveon was atticle and That This files is fitted in Accordance some or some is no assess



Town of Yorktown www.yorktownny.org

Building Department

Town Hall, 363 Underhill Avenue, Yorktown Heights, NY 10598 Tel. (914) 962-5722 ext.254

MEMORANDUM

Edward Kolisz, Fire Inspector

Office hours: Weekdays 9:00-10:00 a.m., 3:30-5:00 p.m. Fax (914) 962-1731 Email: ekolisz@yorktownny.org

TO: David Dockweiler, Pastor From: Edward Kolisz, Fire Inspector

2405 Crompond Rd., St. Andrews Lutheran Church

Date: October 15, 2021

I have researched your request to determine if the property located at 2405 Crompond Rd. could continue to be used as an elementary school and if a preschool could be added. According to our zoning map the property is located in an R1-20 zone. Per the Zoning Code section 300-21-c(1)(b)[6] preschools are an allowed main use by special permit in accordance with section 300-53. Per the Zoning Code section 300-21-c(1)(b)[8] private and parochial elementary schools are an allowed main use by special permit in accordance with section 300-55. In order to bring in a new school they would have to obtain Planning Department and Zoning board approvals in accordance with the Zoning Code of the Town. Please contact the Building Department with any questions.

Par 3 Golf



Barton & Loguidice

Memo To: John Tegeder, Director of Planning **Date:** September 15, 2021

and Planning Board Members

From: Leigh Jones, PLA Project No.: 2478.001.001

Managing Landscape Architect Phase No.: 02

Johanna Duffy, CWB, PWS®

Senior Managing Environmental Scientist

Re: Par 3 Golf Course Revitalization Project

Mitigation Plan Review

795 Route 6, Shrub Oak, New York

Westchester County

To: Town of Yorktown Planning Board

Barton & Loguidice, D.P.C. (B&L), has performed a technical review of the Mitigation Plan for Par 3 Golf Course, as requested by the Town of Yorktown Planning Department. We understand that redevelopment of a closed Town-owned Par 3 Golf Course, located at 795 Route 6, Shrub Oak, New York is proposed and currently under construction. The property is a total of 139 acres and is recognized as tax map ID 16.07-1-38. We acknowledge that multiple Town permits and approvals are being sought by the Applicant, including a Wetland Permit and a Tree Permit. As part of the redevelopment, the Town requested that the Applicant, R.C. Recreation Development Corp, LLC., submit a Mitigation Plan. To better understand the project site and the existing conditions, B&L's Leigh Jones was able to visit the property and complete a walk-thru of the project area on September 13, 2021. Her site photographs and site observations were also considered during the Mitigation Plan review.

B&L's comments on the submitted Mitigation Plan are as follows:

1. Before commenting specifically on the Mitigation Plan submitted and proposed by the Applicant, it should be noted that the water resource that runs through the interior of the golf course site is Shrub Oak Brook, (Stream 'A' on the attached map). This is mapped as a perennial waterbody that would be under federal jurisdiction by the U.S. Army Corps of Engineers (USACE). This water resource does not meet the definition of a protected stream under the New York State Department of Environmental Conservation's (NYSDEC) 6 NYCRR Part 608 regulations for Use and Protection of Waters. It should also be noted that a large portion of the golf course property is shown to be within a NYSDEC mapped Class 1 freshwater wetland (ID A-4). Any work proposed that would impact, negatively or positively (and including such actions as tree removal and tree planting), Shrub Oak Brook (Stream 'A') and/or the NYSDEC mapped wetland area, would require obtainment of federal and/or state permits from the USACE and NYSDEC, respectively. The history of such permit issuance for the property is unknown to B&L.

Memo To: John Tegeder, Director of Planning and Planning Board Members September 15, 2021 Page 2

- 2. The Mitigation Plan mentions that all invasive species will be removed "on the south side of the property between the fringe and the brook." This second brook will be referred to as Stream 'B' (see attached map). The proposed invasive species removal area should be outlined on a site map, and a complete list of what species will be hand removed should be provided. This area of the property will also receive new plantings. The locations of new plantings and a complete species list of the proposed plantings should be provided.
- 3. The Mitigation Plan should focus on planting native species in areas proposed to receive new shrubs and trees. Some of the species proposed for planting in the Mitigation Plan are not native. The use of native species and varieties is preferred.
- 4. New plantings are also proposed within multiple zones along the Shrub Oak Brook channel (Stream 'A'), interior to the golf course site. Specific species lists and planting locations should be provided. Where the "Terrace Zone", "Bank Zone", etc. fall in relation to the existing stream channel and existing riparian vegetation is unclear. The limits of these various planting zones should be shown on a site map with background aerial and topography.
- 5. Some of the vegetative species names, common and scientific, included in the Mitigation Plan are unclear (mostly due to miss-spellings). The proposed species should be revisited to ensure that correct scientific names of vegetation are included. This is important because it allows for confirmation that native varieties will be used and eliminates confusion as to what specifically will be planted on the site. The planting of non-native species and invasive species is not recommended.
- 6. Much of the Shrub Oak Brook channel (Stream 'A') that meanders through the site is currently vegetated by herbaceous species. Enhancing the corridor by adding shrub and tree plantings above the stream's regulated Ordinary High Water Elevation and outside of wetland areas would be beneficial, but the addition of herbaceous plantings in this corridor seems unnecessary given the density of plant cover observed in the field.

B&L looks forward to assisting the Town with a review of supplementary submitted information related to the proposed Mitigation Plan at the golf course site. If you have any questions on the provided comments, please do not hesitate to call or email.

Sincerely,

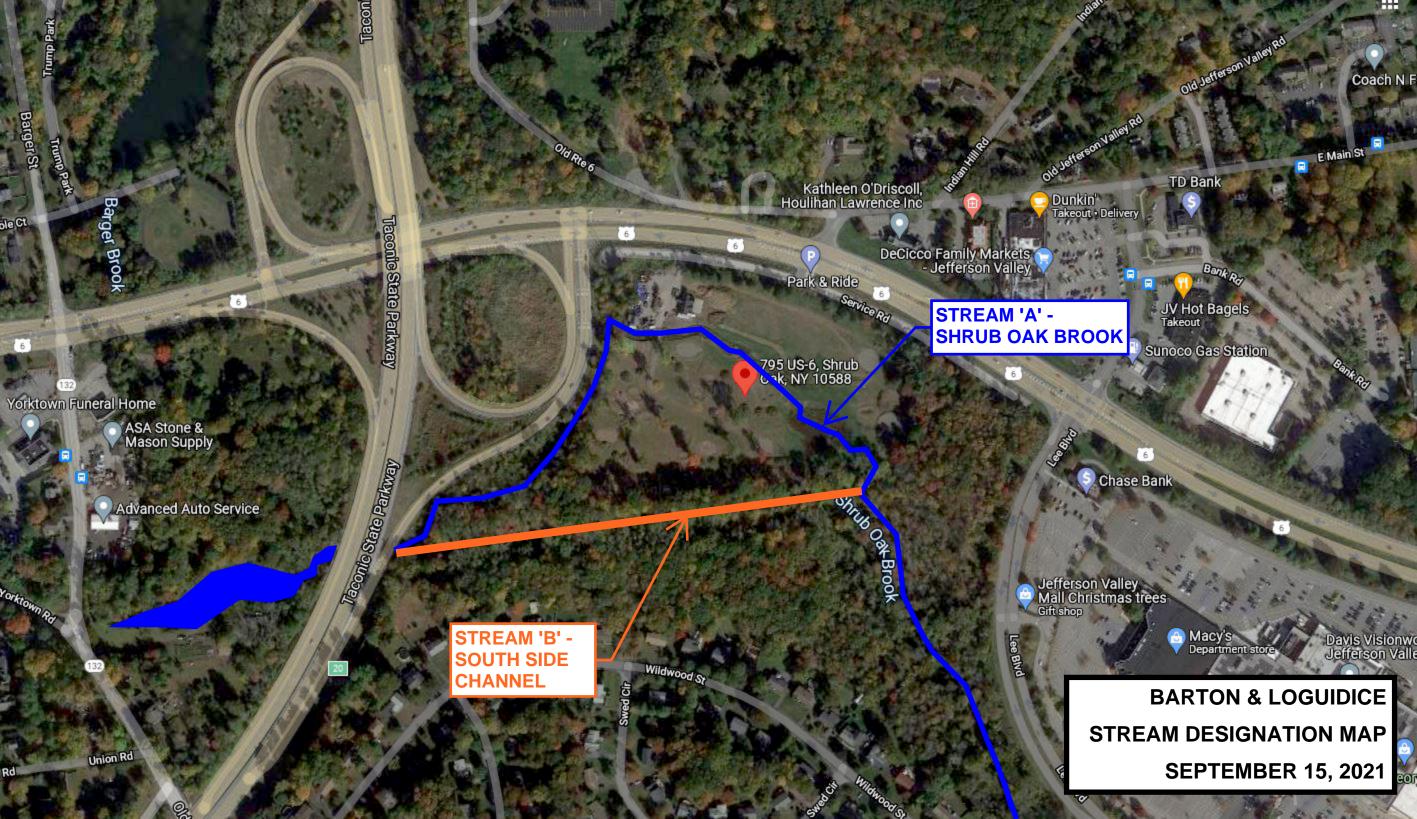
BARTON & LOGUIDICE, D.P.C.

Leigh G. Jones, PLA Managing Landscape Architect

JED/jms

Attachment

Johanna E. Duffy, CWB, PWS® Senior Managing Environmental Scientist



LEGEND

NOTES:

The Trees that were cut

down was due to fact that they

were either dangerous (swamp rot) or they needed to come down to

ensure proper sun light could get to

our fairways or greens. For the safety of the players and the lighting that

the course needs to survive and

thrive, those trees were the ones

chosen. Approximately 60 were

cut down. There was another

approximately 18 that were dead

or fallen already. We are planting

approximately **91** to replace those trees that we cut down .We will be

replanting approx..18-20% more trees then what we cut down.

DDODOSED DI ANTONO COUEDINI

RC Quercus rubra Red Cedar B&B 23 4'-6'
RB Betula nigra River Birch B&B 10 4'-6'

NS Picca ables Norway Spruce B&B 30 4'-6'
ARB Thuja Giant Green Arborvitae B&B 11 4'-6'
H liex Holiv B&B 4 2 6'

plants and shrubs that will be planted that will bring beauty and safety to the golf course. This design is designed to making this golf course beautiful but also designed for the safety of the player. There will be additional planting as soon as we get a feel for what the course needs and for the safety of the players. The list above plantings are what we are going to start with and if there are additional plantings needed we will convey that to Tree Committee. There will be no invasive species planted on this property and the soil that will be used for planting will be used for planting will

Soil and Seed Notes:

- All Soils for the plantings will be extracted from current property
 This will assure us of clean soil and no invasive seeds.
- We will be using sod for the Fairways and that will be a Kentucky Blue. This is a tough rooted sod and ideal for this use.
- Blue. This is a tough rooted sod and ideal for this use

 3. The Greens and Tee Boxes will be a 80/20 Perennial
- Irrigation water will come from the property itself.

Existing Tree Code The trees that are a

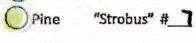
The trees that are on the existing Property will be color coded.

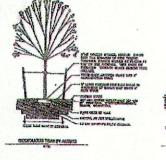
Maple "Acer" #2

Maple "Acer" #

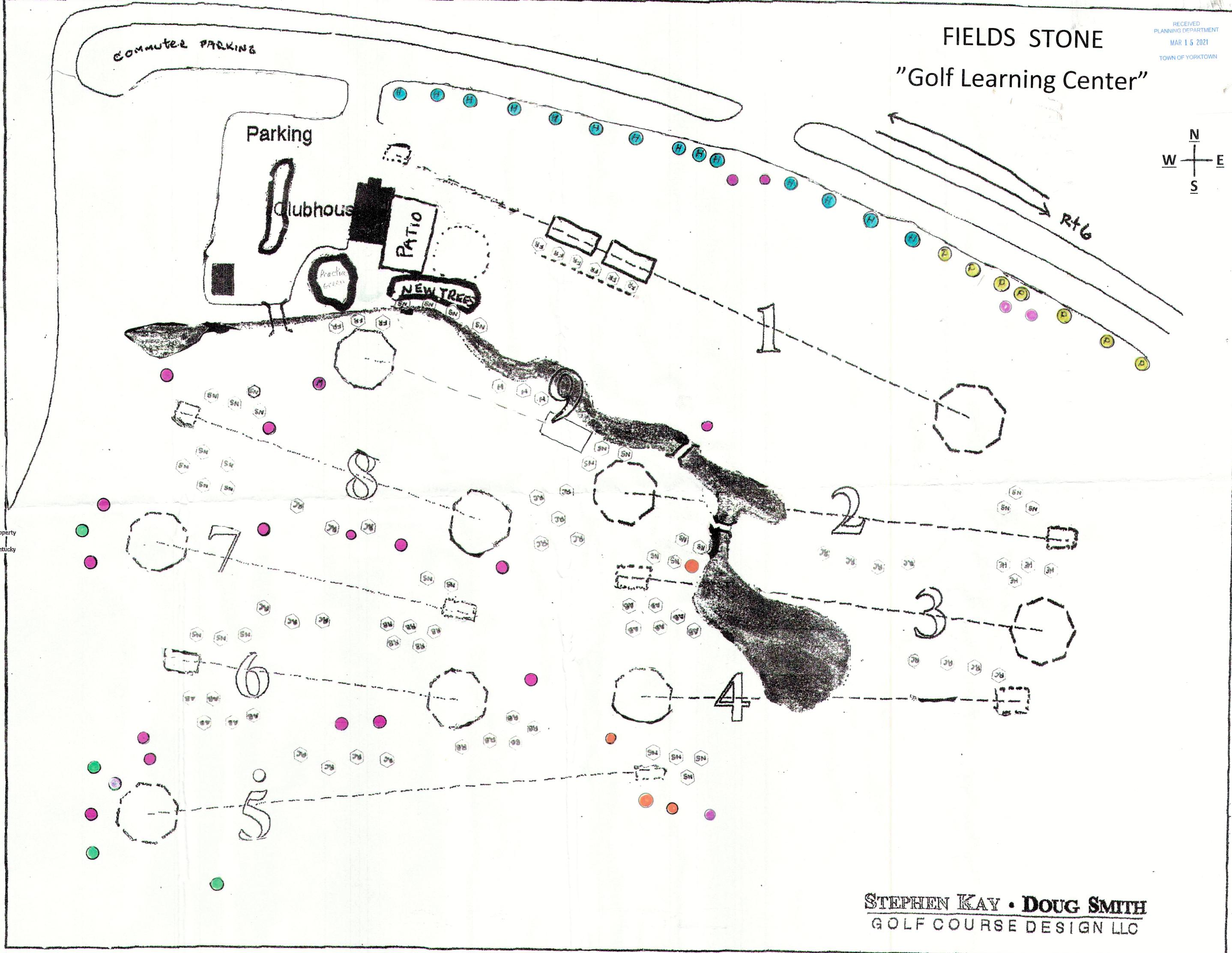
Ach "Fravious" #

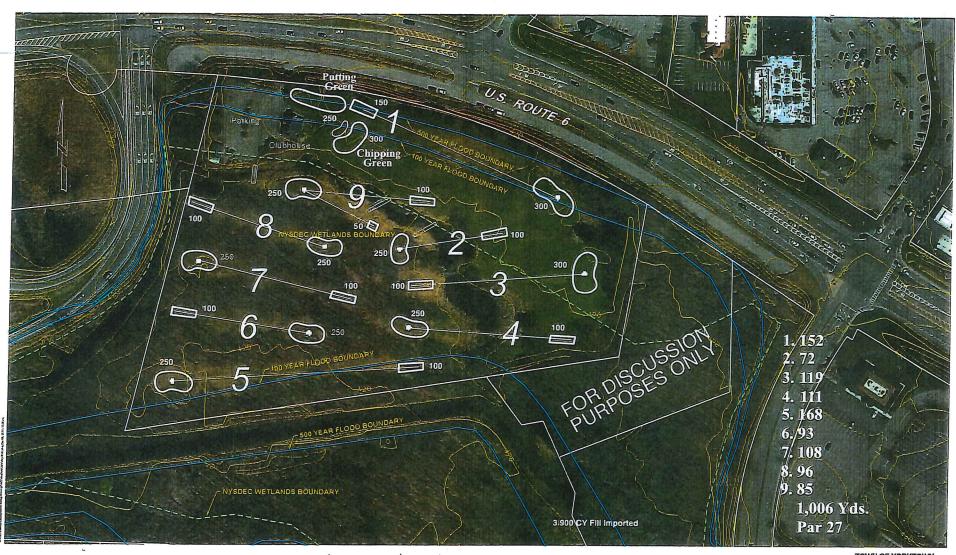
Hemlock "Tsuga" #14











TOWN OF YORKTOWN PARCEL 16,07-1-38

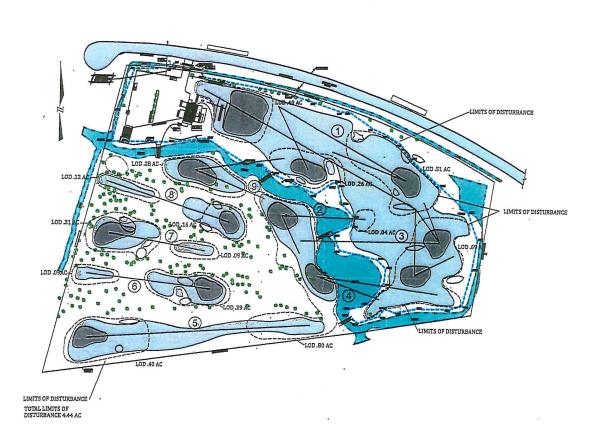
STEPHEN KAY · DOUG SMITH GOLF COURSE DESIGN LLC

December 9, 2014

Note: This layout is meant for discussion purposes only. It is preliminary and meant to re-create the previous layout that was abandoned.



Valley Fields Golf Course Yorktown, NY



SCORECARD

1 115

2 65

3 108

4 93

5 174

6 97

7 75

8 101

9 58

886

| DESCON_CONTANT| | 177 | 178 | 179 | 179 | 179 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170

LINKS ÁCROSS ÁMERICA

JEFFERSON CITY, NY

MASTER PLAN



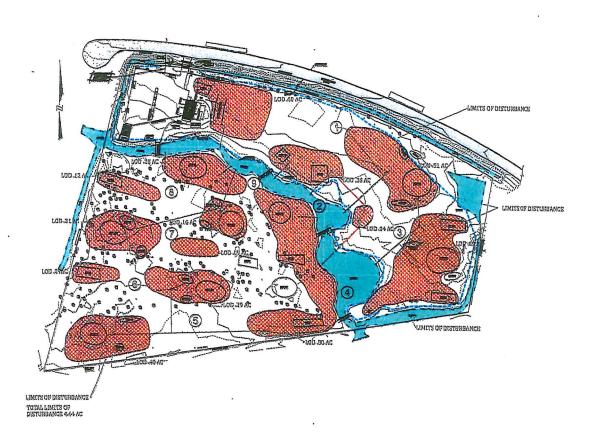
June 30, 2016 1

1"=50"



STRIPPING AREAS

SCORECARD



LINKS ACROSS AMERICA
JEFFERSON CITY, NY

STRIPPING PLAN

ī	14	
l		
ı	-	-
ł	7	
Ī	¥	

June 30, 2016



SCORECARD

- 1 115
- 2 65
- 3 108
- 4 93
- 5 174
- 6 97
- 7 75
- 101
- 9 58
 - 886

LINKS ACROSS AMERICA
JEFFERSON CITY, NY

GRADING & DRAINAGE PLAN



June 30, 2016	lamin -
PEARTED BY AL	7 3
	5
111 - COI	7 6



T-1 BENTGRASS



BLUEGRASS/FESCUE BLEND



SCORECARD

1	112

2 65

3 108

93

4

5 174

6 97

7 75

8 101

9 58

886

V T	DANSTRALLY	100	DATE	tendumen	"	4700
1000	B.J.	E				
DESIGN COMPANY	33.3,	=				
	1900					

TOTAL LIMITS OF DISTURBANCE 4.44 AC

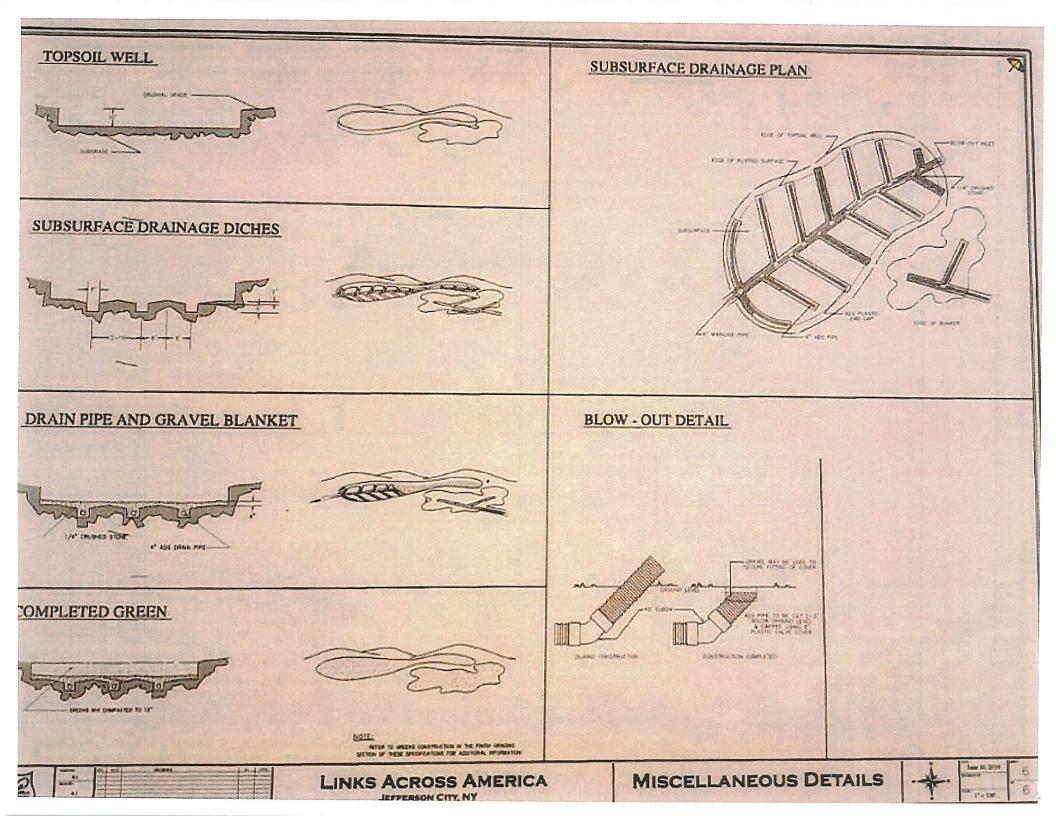
LINKS ACROSS AMERICA

JEFFERSON CITY, NY

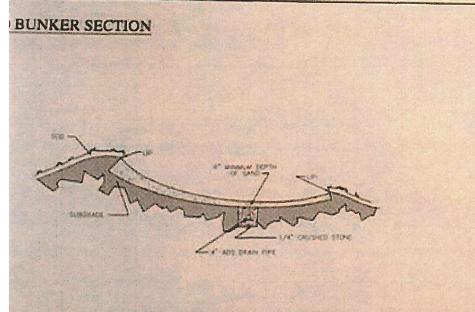
GRASSING PLAN

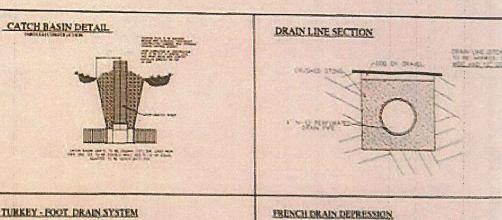


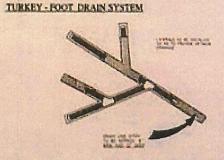
June 30, 2016	I MEXT
STARRED BYAN	4
1"=50'	6

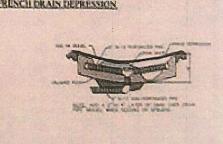


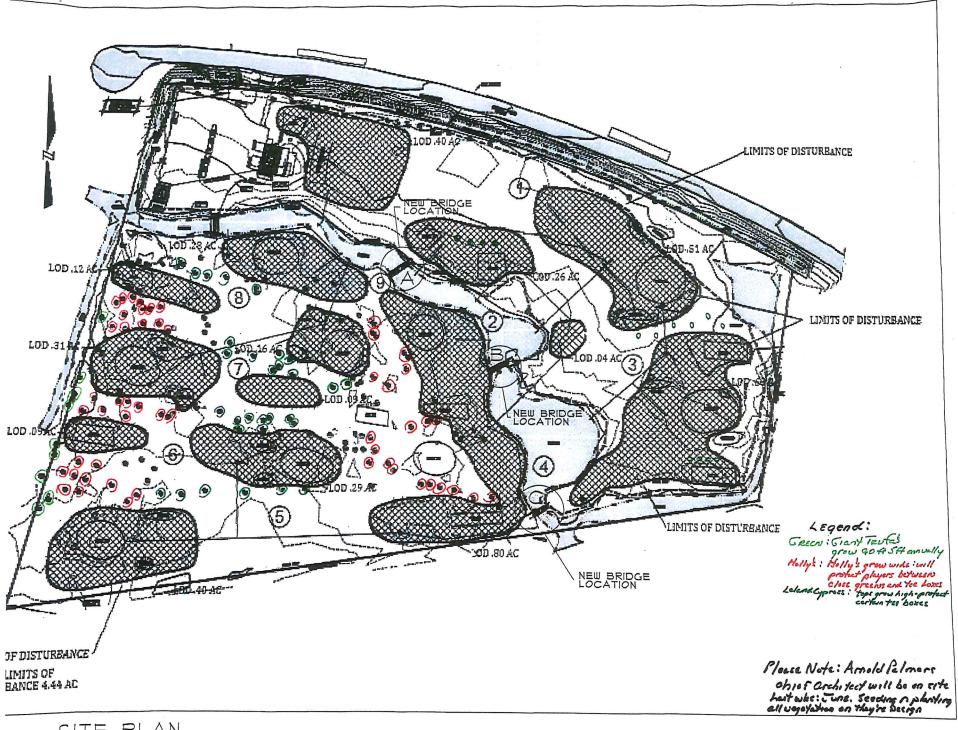
CANTRATH CANTRA

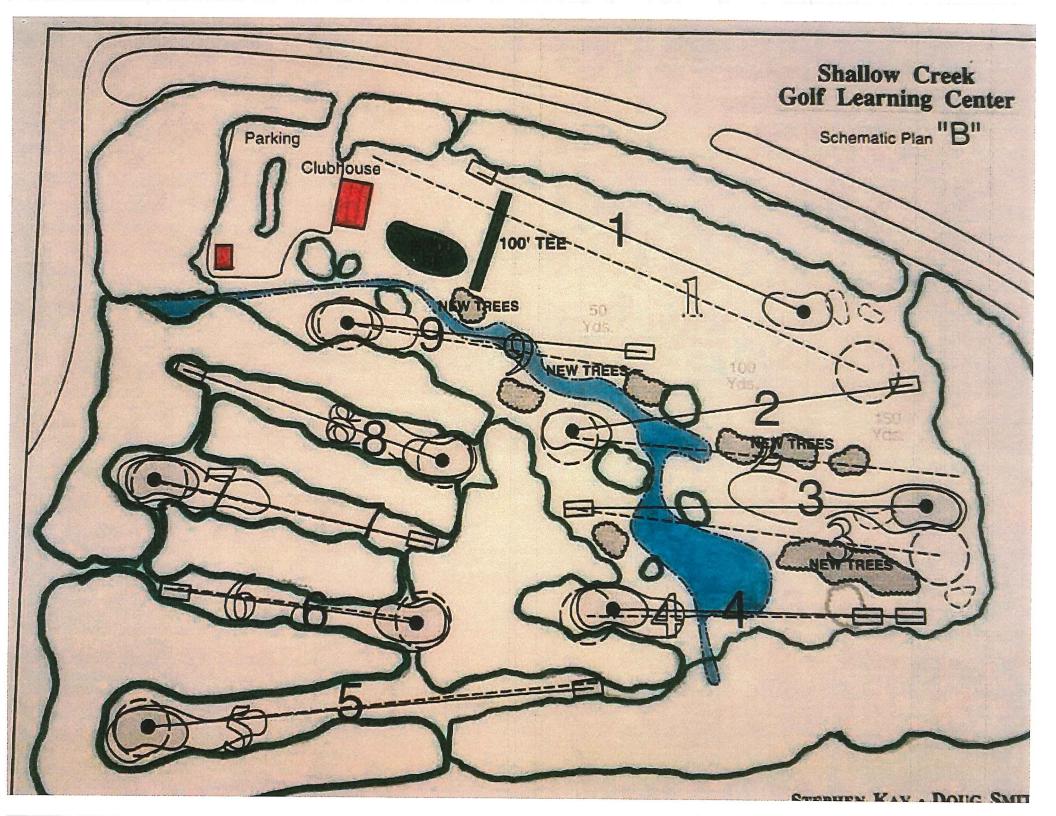


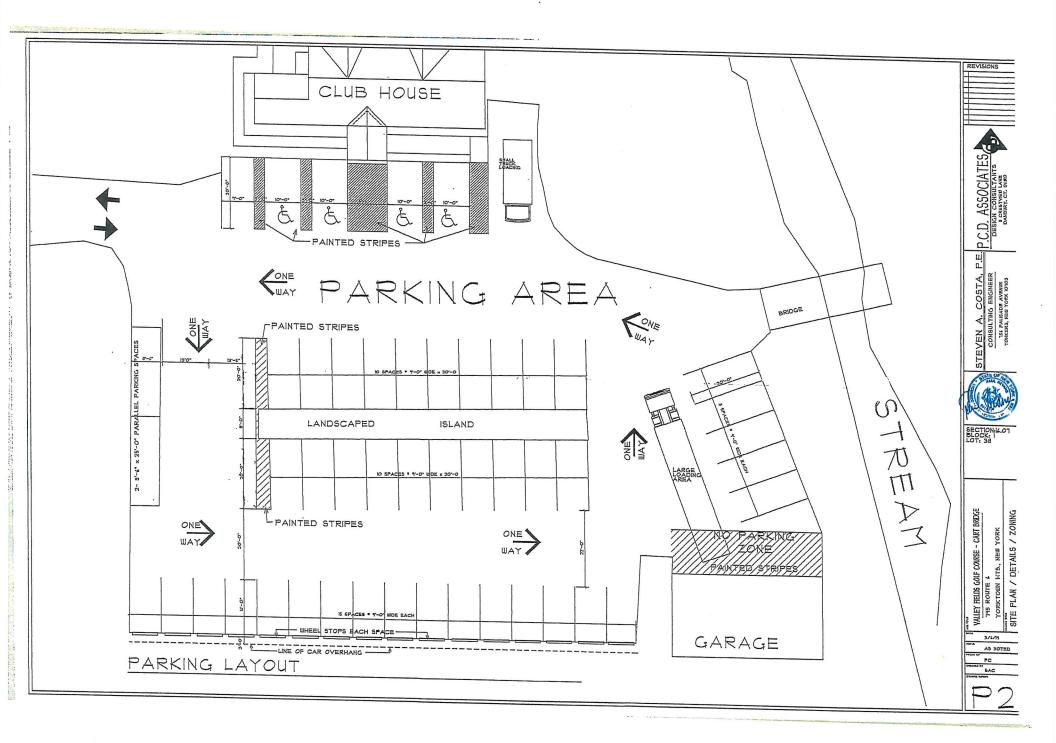


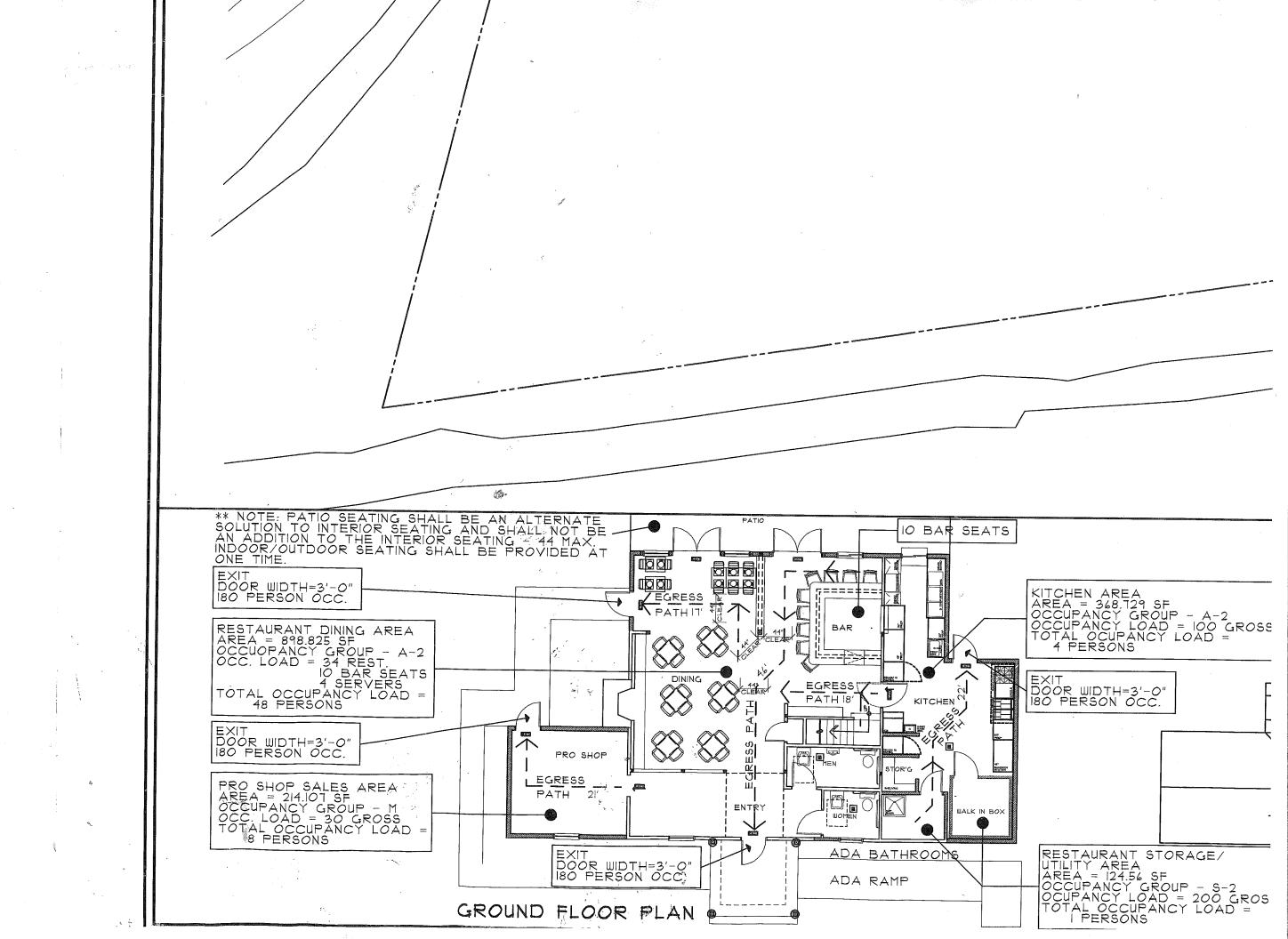












Granite Knolls Solar Projects



November 9, 2021

Robyn A. Steinberg, AICP Yorktown Planning Department 1974 Commerce Street, Room 222 Yorktown Heights, NY 10598 (914) 962-6565

RECEIVED
PLANNING DEPARTMENT
NOV 1 0 2021

TOWN OF YORKTOWN

Re:

Granite Knolls Park Solar Project

Dear Robyn;

This letter is provided in response to comments and questions we received from Patrick Cumiskey of the Yorktown Recreation Commission in an email dated, October 25, 2021 as well as comments received from the Planning Board at the last meeting we attended on October 18, 2021. Enclosed, please find the following updated materials for discussion at the November 22, 2021 Yorktown Planning Board Meeting:

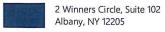
- Eight (8) copies of the Site Plans dated, November 9, 2021
- Eight (8) copies of the Full Environmental Assessment Form (EAF) dated, November 9, 2021
- Eight (8) copies of the Site Plan Application dated, November 9, 2021
- Eight (8) copies of the Large-Scale Solar Special Permit Addendum
- Eight (8) copies of the Battery Energy Storage System Cut Sheets
- Eight (8) copies of the Solar Panel Cut Sheets
- Eight (8) copies of the Web Soil Survey Farmland Classification Report

Provided below are the comments and questions from the email followed by our responses in bold.

The primary concern with the package provided is that the drawings are schematic at best, and offer little
to no details of the proposed carport construction and/or coordination of existing and proposed utilities.
These are listed as "0%" drawings, but the applicant needs to provide 60-90% drawings for any type of
proper evaluation of the proposed work to be made.

The proposed Site Plans are preliminary and not for construction at this time. More detailed Site Plans will be developed as the project progresses through the approval process. It is typical to receive Site Plan approval based on a 'Permit Set' and then provide a 'Construction Set' prior to receiving a Building Permit.

A typical solar canopy detail has been added to Sheet C009 of the Site Plans. All existing mapped utilities have been shown on the Site Plans. All footings, conduit and wiring will avoid any existing on-site utilities. In addition, Dig Safe is required to be called prior to all construction projects in New York State to mark out all existing utilities. Refer to the updated Site Plans included as an attachment to this letter.





2. It is imperative to know the various heights of the carport structures so we can verify if emergency vehicles and/or maintenance equipment will have proper vertical clearances and available turning radii. Verifying the type of foundations being installed, the wind loads the structures are being designed for, and the maintenance responsibilities and response time to any maintenance issues are imperative to know for the continued operation of the park.

The clearance height of the solar carport canopies is 13.5' which is the required height per New York State Fire Code for emergency apparatus. The available turning radii will not be changed from what is currently existing in the parking lot.

The type of foundation being installed for the solar carport canopies will most likely be a spread footing with piers. The final design will be based on a geotechnical investigation and stamped and signed by a NYS Professional Engineer.

The wind load will be either risk category 1 (105 mph) or risk category 2 (114 mph) per ASCE 7-16 requirements.

The maintenance of the solar carport canopy system and ground-mounted solar array will be the system owner.

3. The applicant stated that there will be no need to coordinate any drainage since no additional impervious surfaces were being added, but that's not true. Even if they have nothing to do with the planned paving of the parking lot other than to fund it, their work still needs to be coordinated with the paving and/or any additional drainage measures that will be required. Without the consideration of the planned paving they still need to confirm whether the additional runoff from the panels will lead to any type of erosion of the gravel lot below. Based on the comments is it assumed that there is no drip edge and/or gutter type collection being installed on the carport panels?? That could make ice accumulation a concern even if the park is closed during the winter.

No impervious surfaces are proposed as part of the project with the exception of a small equipment pad. The proposed driveway to access the utility owned poles will be constructed with pervious gravel which is approved by the NYSDEC and not considered an impervious surface. The ground-mounted solar panels are also not an impervious surface according to NYSDEC regulations because the area under the panels will be vegetated. Paving of the gravel parking lot is not included as part of the proposed project. In addition, the spacing provided between panels and the proposed level spreaders at the drip edge of all solar panels for the ground-mounted solar array are proposed in accordance with the NYSDEC Solar Panel Construction Stormwater Permitting/SWPPP Guidance document and Maryland's Stormwater Design Guidance – Solar Panel Installations. Refer to the updated Site Plans.

4. A composite utility drawings must be developed to both coordinate the new work with that of the existing utilities installed by the previous contractor, as well as to show such things as the duct banks/electrical transmission lines from the various panels to the battery storage area (not shown on the drawings). This will also help make a determination as to whether the paving should be done before or after installation (Mr. Paganelli had expressed his concern over the increased cost for needing to use flow-boy trucks when paving with an overhead restriction, But I remain more concerned that paving the lot and then have it being made into swiss cheese with foundation and utility installation will have a significant negative impact on the longevity of the new paving).



All existing mapped utilities are shown on the Site Plans. Construction of the proposed project will be coordinated with the existing utilities so there are no conflicts. Conduit/electrical lines will be determined after the site layout has been finalized. No duct banks are proposed as part of this project. The electrical connection to the existing overhead utility lines along Stony Street is shown on Sheet C005. Refer to the updated Site Plans.

5. I do not believe that applicant has properly accounted for the actual topography of the site with these plans, as the only topography shown is within the parking lot area. This is most critical for the proposed ground mount area shown to be installed on the northeast corner of the park adjacent to the overflow parking lot next to the maintenance shed. When speaking to the presenter after the meeting he assumed this was on a 15% slope and stated they would install them on the existing slope as is. This is more of a cliff with much sharper slope then they anticipate, so the concern is the need to then "fill" this area to allow for the installation of these types of panels. The panels show a gate as a means of entrance/exit into the proposed ground mount system right off the overflow parking lot, which is not reasonable without major fills being installed. There is also tree removal listed in this area without any mention of any type of remediation, which I believe would be required.

The existing topography in the area of the ground-mounted solar array has been added to the Site Plans and incorporated into the design. There is no fill proposed in order to construct the ground-mounted solar array. The solar panels and racking will be placed on the existing slope. No work is proposed along the western edge of the ground-mounted solar array near the existing overflow parking area and steep slope. The gate along the western edge of the proposed ground mounted solar array has been eliminated and a driveway has been added to the eastern edge of the array in order for the utility company to have access to the proposed utility poles. Refer to the updated Site Plans.

6. There are no details for any proposed construction roads, as well as any stabilized construction entrance/exits. Depending on when this construction occurs (to be discussed later), this information needs to be known for proper coordination.

The detail for the limited use pervious gravel driveway has been added to sheet C007. The stabilized construction entrance/exit detail has been added to Sheet C008. The driveway is required in order for the utility company to have access to the interconnection utility poles. Refer to the updated Site Plans.

7. As stated earlier and immediately picked up by the planning board, there are no details for any battery storage which as stated by the presenter, they have full intentions of installing. The location and transmission lines to/from the intended location must be coordinated, as well as the security measures being installed to prevent vandalism and/or fires.

Cut sheets have been provided for a typical Battery Energy Storage System (BESS). The location of the system is indicated on the Site Plans and it will be located within the fully enclosed chain link fence for security. The electrical lines to and from the Battery Energy Storage System will be designed by an Electrical Engineer when the layout is finalized. Refer to the updated Site Plans.



As to the application, the following are the errors that I believe are in the documents provided.

1. Page 1 of 6; Application for Site Plan Approval; Question #3: The total; acreage is listed as 73.17 +/- acres, but the total Granite Knolls parks is greater than 200 acres. The recreational facility is built on only a portion of the entire park. Should that be accounted for in this application?

The total acreage of the parcel the solar project is being proposed on is 73.17± acres (Tax Map # 26.09-1-22). The entirety of Granite Knolls Park may encompass additional parcels, but the proposed solar project is only on one parcel.

2. Page 3 of 6; Application for Site Plan Approval; Question #18 the applicant checked off "Yes" for the project being within 500 feet of state or county recreational areas or public building/institution. I believe this is in error as only town owned facilities are within 500 feet of this facility.

The Shrub Oak International School was thought to be a public building/institution. Since it is private, Question #18 on the Application for Site Plan Approval has been revised to 'No'. Refer to the revised Application for Site Plan Approval included as an attachment to this letter.

3. Page 4 of 6; Application for Site plan Approval; Question #22: the parcel is within the Lakeland Central School District, not Yorktown Central

The school district was determined to be Yorktown Central School District according to Westchester County GIS mapping, however, according to mapping located on the Town of Yorktown website, the school district is Lakeland Central School District. As such, Questions #22 has been revised to Lakeland Central School District. Refer to the revised Application for Site Plan Approval.

4. Page 1 of 2; Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum; General Project Information: The applicant checked off that the Existing Site Use is "residential" and not sure if that is applicable since it is actually recreational. Also, is the applicant the Town of Yorktown or is it HESP as a Lessee??

The Zoning District is Residential R1-160, however, the existing site use is recreational. The only other option on the application besides 'Residential' is 'Commercial'. Therefore, we have revised the Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum to list the existing site use as 'Commercial'. Refer to the updated Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum included as an attachment to this letter.

5. Page 1 of 2; Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum; Select Installation Type: In addition to the "Ground" type being checked off, the applicant also checked off "Rooftop". Not sure if that is intended to mean that the carport falls under the definition of rooftop, but there have been no discussions to date about panels being installed on any other existing structure such as the gazebo so that needs to be clarified.

The 'Rooftop' installation type was selected on the Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum to reflect the solar carport system installation. The application has been updated to remove the 'Rooftop' installation type to avoid any confusion.



There are no other solar systems being proposed as part of this project other than the ground-mounted solar array and the solar carport system. Refer to the updated Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum.

- 6. Page of 2 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section B.d: The YPRC should be listed under "Other local agencies".
 - Section B.d. of the Full Environmental Assessment Form (FEAF) has been updated to include the Yorktown Recreation Commission under 'Other local agencies'. Refer to the updated FEAF included as an attachment to this letter.
- 7. Page of 2 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section B.i.ii.: The applicant checked off "no", but the correct answer is yes as this facility is located within the Mohegan Lake Local Waterfront Revitalization Program.
 - Section B.i.ii. has been revised to check 'Yes' indicating that the project site is located in a community with an approved Local Waterfront Revitalization Program. Refer to the updated FEAF.
- 8. Page of 3 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section C.4.a: The Project is within the Lakeland Central School District, not Yorktown Central.
 - The school district was determined to be Yorktown Central School District according to Westchester County GIS mapping, however, according to mapping located on the Town of Yorktown website, the school district is Lakeland Central School District. As such, Section C.4.a. of the FEAF has been revised to Lakeland Central School District. Refer to the updated FEAF.
- 9. Page of 3 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section D.1.e.i: The applicant states in this section that the intended duration of construction is 6 months. This is not consistent with the same type of question on Page 8 of 13; Section D.2.m.i where the applicant states "Construction duration will not exceed 4 months" NOTE: THE SCHDULE FOR CONSTRUCTION IS PERHAPS THE BIGGEST CONCERN FOR THE YPRC AS RELATES TO THIS PROJECT (more to follow in this emails closing).
 - The proposed duration of construction is approximately 6± months. Section D.1.e.i. and Section D.2.m.i. have been coordinated to indicate this time frame. Refer to the updated FEAF.
- 10. Page of 4 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section D.1.g: The applicant clicks "Yes" to the question if the proposed action included non-residential construction, but then offers zero details as to the number of structures and/or dimensions. As noted earlier, neither the drawings provided nor the application itself offer any of these details for the carport or battery storage area(s), which is concerning.
 - Section D.1.g. has been updated to include additional detail on the total number of structures and approximate dimensions (in feet) of the largest proposed structure and the approximate extent of building space to be heated or cooled. Sheet C009 of the Site Plans have been updated to include a standard detail for the carport system canopy and cut sheets have been provided for a typical Battery Energy Storage System (BESS). Refer to the updated FEAF, Site Plans and Battery Energy Storage System Cut Sheets included as an attachment to this letter.



11. Page of 4 of 13; Full Environmental Assessment Form – Part 1 – Project and Setting; Section D.2.a: The applicant clicks off "no" as if there are no excavations with the assumption being they intend to leave any and all excavated materials on site. As discussed during the meeting, they will definitely need to excavate for foundations and utilities, but there are no plans showing the intended re-use of such excavated materials. This needs to be clarified if this will be used as the "fill" for the ground mount area? Any excavated material should be removed from the site, or a clear spoils reuse plan needs to be submitted so it is clear there will be no impacts to existing drainage of the facility and/or its current aesthetics.

There will be excavation as a result of the construction of the limited-use pervious gravel driveway. A plan for the material will be determined and provided to the Planning Board for review under separate cover as it is developed.

12. Page of 6 13; Full Environmental Assessment Form – Part 1 – Project and Setting; Section D.2.e: The applicant clicks off "no" that the proposed action will disturb more than one acre and create storm runoff. I do not believe this true, and that's whether this application needs to take into account the proposed paved paving or not. The hydrology of the storm water runoff will assuredly be changed as a result of the additional structures being installed and it needs to be looked at as far as the current SPDES design for the facility

The project is proposing to disturb 0.47± acres. Paving of the gravel parking lot is not included as part of the proposed project. The proposed driveway to access the utility owned poles will be constructed with pervious gravel which is approved by the NYSDEC and not considered an impervious surface. In addition, the required spacing between panels and level spreaders at the drip edge of all solar panels for the ground mounted solar array are proposed in accordance with the NYSDEC Solar Panel Construction Stormwater Permitting/SWPPP Guidance document and Maryland's Stormwater Design Guidance – Solar Panel Installations. Refer to the updated Site Plans.

13. Page of 9 of 13; Full Environmental Assessment Form – Part 1 – Project and Setting; Section E.1.a: The applicant should add "recreational" to the other section of this question.

Section E.1.a. of the FEAF has been updated to include 'Recreational' under 'Other'. Refer to the updated FEAF.

14. Page of 9 of 13; Full Environmental Assessment Form – Part 1 – Project and Setting; Section E.1.b: The estimated acreage listed is only for recreational facility portion of Granite Knolls Park, and does not take into account the rest of the parkland area.

The total acreage of the parcel the solar project is being proposed on is 73.17± acres (Tax Map # 26.09-1-22). The entirety of Granite Knolls Park may encompass additional parcels, but the proposed solar project is only on one parcel.

15. Page of 10 of 13; Full Environmental Assessment Form – Part 1 – Project and Setting; Section E.1.c: The applicant clicks off "no" that the project site is being used for public recreation; clear error.

Section E.1.c. has been updated to check 'Yes' indicating that the project site is presently used by member of the community for public recreation. Refer to the updated FEAF.



16. Page of 13 of 13; Full Environmental Assessment Form – Part 1 – Project and Setting; Section E.3.f: The applicant clicks off "yes" that the project site is located in or adjacent to archeological sensitive area. Is this accurate, and if so, what is this specifically in reference too? What restrictions would that then bring to this proposed use?

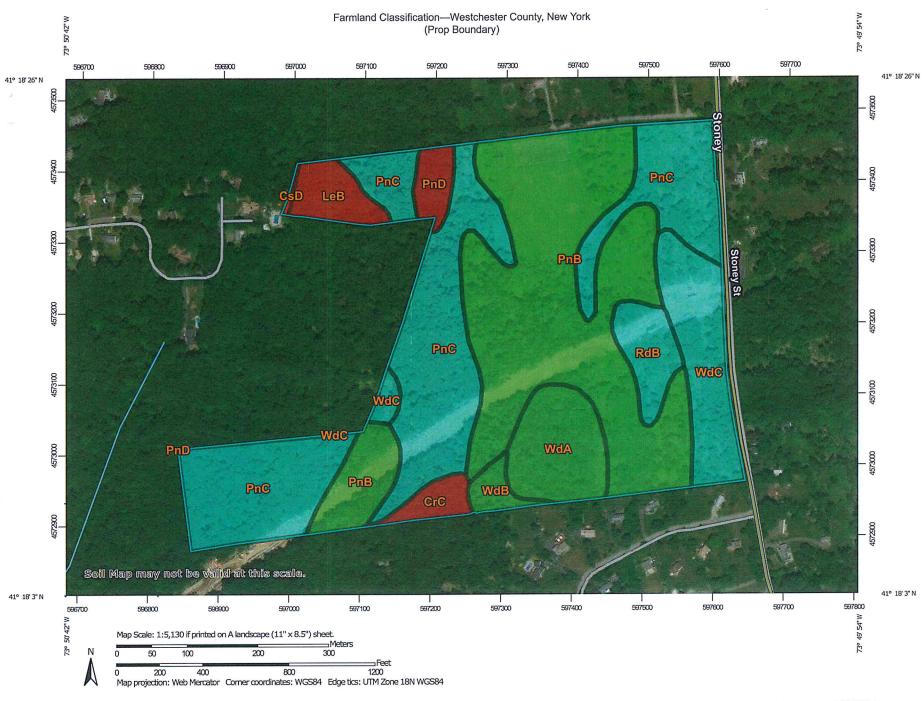
The project site is located adjacent to the Atlantic Bridge Gas Pipeline Project which is an expansion project associated with the Algonquin Gas Transmission Pipeline System. The Atlantic Bridge Gas Pipeline Project Site was identified by the NYSDEC as a potential archeological sensitive area. The pipeline project is approximately 300'± to the south of the proposed solar project. Therefore, the proposed solar project will not have an adverse impact on the pipeline project.

We believe that the responses provided above adequately address the comments from the Yorktown Recreation Commission. Should you have any questions or require additional information, do not hesitate to contact me at (518) 556-3631 or by email at eredding@bergmannpc.com.

Sincerely,

Eric Redding, PE, LEED AP

DISCIPLINE LEADER, BERGMANN



		MAP LEGEND		
Area of Interest (AOI) Area of Interest (AOI) Soils Soil Rating Polygons Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	Prime farmland if subsoiled, completely removing the root inhibiting soil layer Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 Prime farmland if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance Farmland of statewide importance, if drained Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated	Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated and drained Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough Farmland of statewide importance, if thawed Farmland of local importance Farmland of local importance, if irrigated	Farmland of unique importance Not rated or not available Soil Rating Lines Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Farmland Classification—Westchester County, New York (Prop Boundary)

1 10	Prime farmland if	page .	Farmland of statewide	- Name of the least	Farmland of statewide	parage.	Farmland of unique		Prime farmland if
	subsoiled, completely removing the root		importance, if drained and either protected from flooding or not frequently		importance, if irrigated and reclaimed of excess salts and sodium	* *	importance Not rated or not available		subsoiled, completely removing the root inhibiting soil layer
-	inhibiting soil layer Prime farmland if irrigated and the product of I (soil		flooding or not frequently flooded during the growing season		Farmland of statewide importance, if drained or		ting Points Not prime farmland	M	Prime farmland if irrigated and the product
	erodibility) x C (climate factor) does not exceed	, margaret	Farmland of statewide importance, if irrigated		either protected from flooding or not frequently		All areas are prime		of I (soil erodibility) x C (climate factor) does not
-	60 Prime farmland if irrigated and reclaimed of excess	ميحر	and drained Farmland of statewide importance, if irrigated		flooded during the growing season Farmland of statewide	101	farmland Prime farmland if drained	M	exceed 60 Prime farmland if irrigated and reclaimed
	salts and sodium Farmland of statewide		and either protected from flooding or not frequently	-	importance, if warm enough, and either		Prime farmland if protected from flooding or		of excess salts and sodium
_	importance Farmland of statewide		flooded during the growing season		drained or either protected from flooding or		not frequently flooded during the growing season		Farmland of statewide importance
~	importance, if drained Farmland of statewide	to the	Farmland of statewide importance, if subsoiled,		not frequently flooded during the growing season		Prime farmland if irrigated		Farmland of statewide importance, if drained
	importance, if protected from flooding or not	, de	completely removing the root inhibiting soil layer Farmland of statewide	and the same of	Farmland of statewide importance, if warm		Prime farmland if drained and either protected from		Farmland of statewide importance, if protected
	frequently flooded during the growing season Farmland of statewide		importance, if irrigated and the product of I (soil	-	enough Farmland of statewide		flooding or not frequently flooded during the growing season		from flooding or not frequently flooded during the growing season
100	importance, if irrigated		erodibility) x C (climate factor) does not exceed 60	party party	importance, if thawed Farmland of local		Prime farmland if irrigated and drained	100	Farmland of statewide importance, if irrigated
			00	- No. of the local division in the local div	importance Farmland of local		Prime farmland if irrigated and either protected from		
					importance, if irrigated		flooding or not frequently flooded during the growing season		
							growing season		
`									

Farmland Classification—Westchester County, New York (Prop Boundary)

	Farmland of statewide importance, if drained and either protected from	M	Farmland of statewide importance, if irrigated and reclaimed of excess		Farmland of unique importance Not rated or not available	The soil surveys that comprise your AOI were mapped at 1:12,000.
	flooding or not frequently		salts and sodium			Warning: Soil Map may not be valid at this scale.
	flooded during the growing season		Farmland of statewide importance, if drained or	Water Fea	tures Streams and Canals	Enlargement of maps beyond the scale of mapping can cause
<u> </u>	Farmland of statewide		either protected from	~		misunderstanding of the detail of mapping and accuracy of soil
_	importance, if irrigated and drained		flooding or not frequently flooded during the	Transport		line placement. The maps do not show the small areas of
	Farmland of statewide		growing season	+++	Rails	contrasting soils that could have been shown at a more detailed scale.
	importance, if irrigated	100	Farmland of statewide	~	Interstate Highways	soulc.
	and either protected from flooding or not frequently		importance, if warm enough, and either	Party of the last	US Routes	Please rely on the bar scale on each map sheet for map
	flooded during the		drained or either		Major Roads	measurements.
120000	growing season		protected from flooding or not frequently flooded		Local Roads	Source of Map: Natural Resources Conservation Service
	Farmland of statewide importance, if subsoiled,		during the growing	2000		Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)
	completely removing the		season Farmland of statewide	Backgrou		• • • • • • • • • • • • • • • • • • • •
	root inhibiting soil layer Farmland of statewide	100	importance, if warm		Aerial Photography	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts
	importance, if irrigated		enough			distance and area. A projection that preserves area, such as the
	and the product of I (soil erodibility) x C (climate	齫	Farmland of statewide importance, if thawed			Albers equal-area conic projection, should be used if more
	factor) does not exceed		Farmland of local			accurate calculations of distance or area are required.
	60		importance			This product is generated from the USDA-NRCS certified data
			Farmland of local importance, if irrigated			as of the version date(s) listed below.
			importance, ir imgated			Soil Survey Area: Westchester County, New York
						Survey Area Data: Version 17, Sep 1, 2021
						Soil map units are labeled (as space allows) for map scales
						1:50,000 or larger.
						Date(s) aerial images were photographed: Oct 7, 2013—Feb 26, 2017
						The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background
						imagery displayed on these maps. As a result, some minor
						shifting of map unit boundaries may be evident.

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	Not prime farmland	1.2	1.7%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	Not prime farmland	0.1	0.1%
LeB	Leicester loam, 2 to 8 percent slopes, very stony	Not prime farmland	2.1	2.9%
PnB	Paxton fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland	28.0	38.3%
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance	25.3	34.6%
PnD	Paxton fine sandy loam, 15 to 25 percent slopes	Not prime farmland	1.3	1.8%
RdB	Ridgebury complex, 3 to 8 percent slopes	Farmland of statewide importance	2.6	3.5%
WdA	Woodbridge loam, 0 to 3 percent slopes	All areas are prime farmland	4.9	6.6%
WdB	Woodbridge loam, 3 to 8 percent slopes	All areas are prime farmland	1.0	1.4%
WdC	Woodbridge loam, 8 to 15 percent slopes	Farmland of statewide importance	6.6	9.0%
Totals for Area of Inte	rest		73.2	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

NOV 1 8 2021

TOWN OF YORKTOWN PLANNING BOARD

TOWN OF YORKTOWN

Albert A. Ca	nellini Communi	ly and Cultural Center, 1974 Commerce Street,	Yorktown Helghts, New Y	ork 10598, Pho	ne (914) 962-6365, Fax (914) 962-3986
	permi Goni Muni	APPLICATION FOR			
			Date	11/09/202	21
1. N	Jame of Pro	oject: Granite Knolls Park			
		•	00.00 / 00		
2. 1	Fax Map De	esignation (Section, Block, Lot)	26.09-1-22	Marie Control	
3. Z	Zone: <u>R1-</u> 1	160 Total Acreage:	73.17 ±		***
4. I	s a stateme	nt of easements relating to prope	erty attached?	☐ Yes	☑ None exist
5. P	Project narre	ative (brief description of propos	ed development):		•
	•	ed project consists of a 1.4±		inted arra	av & 1 51+ acre solar
12	по ргороз	ed project contacts of a 17-12	doto ground mot	med and	19 G 1.012 dole 30ld
Ç	anopy sys	tem (Granite Knolls Park So	lar Project)		
6. C	ontact Pers Applican Attorney		☐ Architect ☐ Surveyor		Wetland Scientist Landscape Architect
7.	Applicant				
	Name	Susan Brodie			
	Firm	HESP Solar, LLC			
,	Address	400 Rella Boulevard, Suite	160, Suffern, NY	10901	
	Phone	(845) 405-0600	_		
3	Fax	N/A	_		
	Email	sbrodie@hespsolar.com	_		
		a a			
8.	Owner of R				
	Name	Town of Yorktown Parkland			
	Firm	N/A			
	Address	2975 Stony Street, Mohegan	Lake, NY 10547		
	Phone	N/A	_		
	Fax	N/A	_		
	Email	N/A			
1		Pr	age 1 of 6		

9.	Attorney		
	Name	TBD :	
	Firm		
	Address		
	Phone	•	
	Fax		
	Email		
			:
10.	Engineer	•	
	Name	Eric Redding, PE	
	Firm	Bergmann	
	Address	2 Winners Circle, Suite 102, Albany NY 12205	
	Phone	(518) 556-3631	
	Fax	N/A ·	
	Email	eredding@bergmannpc.com	
	Lic. No.	092442	
			'
11.	Surveyor		
	Name	Douglas Bogdan	
	Firm	Bergmann	
	Address	181 Washington Street #430, Conshohocken, PA 19428	
	Phone	(484) 567-7688	
	Fax	N/A	
	Email	dbogdan@bergmannpc.com	
	Lic. No.	050478	
12	. Architect	•	
	Name	TBD	
	Firm		
	Address		
	Phone		
	Fax		
	Email		
	Lic. No.		
		Page 2 of 6	

.

13. Wetlar	d Scientist/Specialist					
Name	Jacob Hill	·-,,,				
Firm	Bergmann					
Addres	2 Winners Circle, Suite 102, Albany NY 12205					
Phone	(518) 389-1105		*			
Fax	N/A					
Email	jhill@bergmannpc.com					
14. Lands	cape Architect					
Name	TBD					
Firm						
Addres	is					
Phone						
Fax						
Email						
Lic. N	D					
 16. Is this 17. Is this 18. Is this The This The Second Properties 	project within 500 feet of the Town line? project within 500 feet of the Putnam County line? project within the Sustainable Development Study Area? project within 500 feet of: ne right-of-way of any existing or proposed state or county road? ne boundary of an existing or proposed state or county park or any tate or county recreation area? ne boundary of state or county-owned land on which a public building/	☐Yes ☐Yes ☐Yes ☐Yes ☐Yes ☐Yes	NoNoNoNoNoNoNoNo			
institution is located?						
An existing or proposed county drainage line? The boundary of a farm located in an agricultural district?			☑ No ☑ No			
19. Does of land?	he entire development plan for this project propose the disturbance. Note: If project is phased, include all phases in determination.	e of more tl	han 5,000 SF o			
20. This project requires the following permits or approvals from the Town of Yorktown:						
□W	etland Permit					
Stormwater Permit						
Tree Permit						
Planning Board special permit: Large-Scale Solar Power Generation Systems and Facilities						
☐ Town Board variance or approval:						
☐ Zoning Board of Appeals variance or special permit:						
Page 3 of 6						

21. This project requires the Westchester County		pprovals from other	outside agencies:
□NYC DEP □NYS DEC			
Other:			
22. This parcel is in the fo			
School District	Lakeland Central	Water District	Yorktown Consolidated W.I
Fire District	Mohegan	Sewer District	Peekskill Sewer District
A Short or Full EAF with application when submitted		the applicant must	be attached to this
The applicant agrees to co Regulations, Zoning Ordi amendments thereto.	mply with the requiremenance, Tree Removal an	ents of the Road Spe d Excavation ordina	cifications, the Land Use nce, and any additions or
	ace/drainage control, ro he public hearing. Such c Town of Yorktown unt	ads and road widen execution and deliv il such dedication is	ing strips and descriptions of ery shall not operate to vest accepted in the form of a
the terms of the deeds to approving resolution shall	the roads in the proposed not operate to vest title	d subdivision as pro- of said roads in the	ubdivision as provided for by vided for by the terms of the Town of Yorktown until such rd at regular meeting of said
Applica	nt	Own	er of Record
HESP Solar, LLC	c/o Susan Brodie	Town of Yo	orktown Parkland
NAME PLIAG SIGNAT	L	A factive	(PLEASE PRINT) GNATURE
11 11 TATE	21	11118/20	ار DATE
Note: If the property owner	r is not the applicant for th	nis application, in addi	tion to the signature above, the

Note: If the property owner is <u>not</u> the applicant for this application, in addition to the signature above, the owner of the property must also complete and have notarized one of the owner affidavits on the following page.

Note: By signing this document the owner of the subject property grants permission for Town Officials to enter the property for the purpose of reviewing this application.

REFER TO AFFIDAVITS ON THE FOLLOWING PAGES

ONE OF THE FOLLOWING AFFIDAVITS MUST BE COMPLETED AFFIDAVIT TO BE COMPLETED BY OWNER, OTHER THAN CORPORATION STATE OF NEW YORK: COUNTY OF WESTCHESTER SS.: ____, being duly sworn, deposes and says that he is the owner in fee of the property described in the foregoing application for consideration of preliminary plat, and that the statements contained therein are true to the best of his knowledge and belief. Sworn before me this ______ date of ______, 20 ____ Notary Public AFFIDAVIT TO BE COMPLETED BY CORPORATION OWNER STATE OF NEW YORK; COUNTY OF WESTCHESTER SS.: in the County of ______, being duly sworn, deposes and says that he resides at ______, That he is the ______ of _____ the corporation which is owner in fee of the property described in the and that the statements contained therein foregoing application for ___ are true to the best of his knowledge and belief. Sworn before me this _____date of ______, 20 ____ Notary Public

*****************	***************************************
AFFIDAVIT TO BE COMPLETED BY A	GENT OF OWNER
JERSEY STATE OF NEW YORK; COUNTY OF WI	Bergen Estenester SS.:
the foregoing application for 5ik ken appear owner in fee to make such application and that and belief.	g duly sworn, deposes and says that he is the agent named in and that he has been duly authorized by the foregoing statements are true to the best of his knowledge
Sworn before me this	
AHARON KOROBKIN Commission # 50172281 Notary Public, State of New Jersey My Commission Expires September 20, 2026	F:\Office\WordPerfect\APPLICATION FORMS\APPSITEPLAN.wpd Last updated: December 2011

NOV 1 0 2021

TOWN OF YORKTOWN PLANNING BOARD

TOWN OF YORKTOWN

Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum

SENERAL PROJECT	INFORMATION
Project Name:	Granite Knolls Park Solar Project
Section, Block, Lo	ot:
Existing Site Use:	Residential Commercial Zone: R1-160
Is Applicant?	Property Owner Lessee
Proposed Lot Co	verage: 2.6%
ROVIDE THE TOTAL	SYSTEM CAPACITY RATING
capacity. The max	ar Energy system is a Solar Energy System that exceeds 20 kW DC as rated by its nameplate simum system capacity and the maximum area of land upon which the system shall be erected are
the parcel; or	megawatt AC on an area of land no larger than 10 acres, excluding any easement for accessing over1 but not to exceed 5 Megawatt AC on an area of land no larger than 20 acres, excluding for accessing the parcel.
•	acity Rating: kWh Power Rating 1,404 kW (Select One) AC or DC
SELECT INSTALLATI	ON TYPE
✓ Ground	Rooftop
PROPOSED SOLAR E	ENERGY SYSTEM INSTALLATION INFORMATION
Sponsor Compan	<u>y</u>
Contact Name	Susan Brodie
Business Name	HESP Solar, LLC
Address	400 Rella Boulevard, Suite 160, Suffern, NY 10901
Phone	(845) 405-0600
Email	sbrodie@hespsolar.com

Contractor/Installation Company

Contact Name	TBD	
Business Name	TBD	
Address	TBD	
Phone	TBD	
Email	TBD	

PROPOSED OWNER AND/OR OPERATOR (IF DIFFERENT FROM ABOVE)

Name	Town of Yorktown Parkland
Firm	N/A
Address	2975 Stoney Street, Mohegan Lake, NY 10547
Phone	N/A
Email	N/A

SUBMITTAL REQUIREMENTS

In order to submit a complete permit application for a new large-scale solar power generation system, the applicant must include:

- a) Completed Planning Board Special Use Permit Application with this Large Scale Solar Power Generation System Addendum.
- b) A special permit application fee of \$625.00 paid by check made payable to the Town of Yorktown.
- c) Required documents as listed in Section 300-84.1(F):
 - Equipment specification sheets shall be submitted for all photovoltaic panels, significant components, mounting systems, and inverters that are to be installed.
 - A property Operation and Maintenance Plan shall be submitted.
 - A carbon sequestration for tree loss calculation.
 - Proposed tree loss mitigation, if applicable.
 - A Decommissioning Plan
- d) All site plan application requirements pursuant to Section 300-85/1(I) of the Town of Yorktown Town Code.

Full Environmental Assessment Form Part 1 - Project and Setting

RECEIVED
PLANNING DEPARTMENT
NOV 1 0 2021

Instructions for Completing Part 1

TOWN OF YORKTOWN

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

± acre solar canopy system with a significant local sustainability and cate New York State's broader renew	arbon reduction benefits to the	
	8.	
Telephone: (845) 405-060	00	
E-Mail: sbrodie@hespsol	ar.com	
State: New York	Zip Code: 12585	
Telephone: (518) 556-363	31	
	E-Mail: eredding@bergmannpc.com	
	_	
State:	Zip Code:	
NY	12205	
Telephone: N/A		
E-Mail: _{N/A}		
State: New York	Zip Code: 10598	
	State: NY Telephone: (518) 556-363 E-Mail: eredding@bergm State: NY Telephone: N/A E-Mail: N/A	

B. Government Approvals

B. Government Approvals, Funding, or Sponassistance.)	nsorship. ("Funding" includes grants, loans, tax	relief, and any other	forms of financial
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application (Actual or p	
a. City Counsel, Town Board, □ Yes ✔No or Village Board of Trustees			
b. City, Town or Village ☐ Yes ☐ No Planning Board or Commission	Yorktown Planning Board - Site Plan Approval and Special Use Permit		
c. City, Town or ☐ Yes ☐ No Village Zoning Board of Appeals			
d. Other local agencies ✓ Yes □ No	Yorktown Parks and Recreation Department		
e. County agencies □Yes ♥No			
f. Regional agencies □ Yes ☑ No			
g. State agencies ⊄ Yes □ No	NYSERDA - Incentives		
h. Federal agencies □Yes ☑ No			
	or the waterfront area of a Designated Inland Wat with an approved Local Waterfront Revitalization Hazard Area?	-	□ Yes □ No □ Yes □ No □ Yes □ No
C. Planning and Zoning			
C.1. Planning and zoning actions.	J.		
only approval(s) which must be granted to enal • If Yes, complete sections C, F and G.	mendment of a plan, local law, ordinance, rule or ble the proposed action to proceed? inplete all remaining sections and questions in Pa	· ·	□ Yes □ No
C.2. Adopted land use plans.			
where the proposed action would be located?			□ Yes □ No
If Yes, does the comprehensive plan include spowould be located?	ecific recommendations for the site where the pro-	pposed action	□ Yes □ No
	ocal or regional special planning district (for exa lated State or Federal heritage area; watershed ma ion Program		□ Yes □ No
or an adopted municipal farmland protection If Yes, identify the plan(s):	ially within an area listed in an adopted municipan plan?	al open space plan,	□ Yes □ No
Open Space Plan (Private Institutions)			

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district? R-160 - One Family Residential b. Is the use permitted or allowed by a special or conditional use permit? c. Is a zoning change requested as part of the proposed action? If Yes, i. What is the proposed new zoning for the site? C.4. Existing community services. a. In what school district is the project site located? Lakeland Central
If Yes, what is the zoning classification(s) including any applicable overlay district? R-160 - One Family Residential b. Is the use permitted or allowed by a special or conditional use permit? c. Is a zoning change requested as part of the proposed action? If Yes, i. What is the proposed new zoning for the site? C.4. Existing community services.
c. Is a zoning change requested as part of the proposed action? If Yes, i. What is the proposed new zoning for the site? C.4. Existing community services.
c. Is a zoning change requested as part of the proposed action? If Yes, i. What is the proposed new zoning for the site? C.4. Existing community services.
If Yes, i. What is the proposed new zoning for the site? C.4. Existing community services.
a. In what school district is the project site located? <u>Lakeland Central</u>
b. What police or other public protection forces serve the project site? Yorktown P.D.
c. Which fire protection and emergency medical services serve the project site? Mohegan F.D.
d. What parks serve the project site? Granite Knolls Park, Sylvan Glen Town Preserve, Mcgregor Pond Preserves
D. Project Details
D.1. Proposed and Potential Development
a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Residential
b. a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 73.17 acres 73.17 acres
c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? Units: Units:
d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☐ No If Yes, i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
 ii. Is a cluster/conservation layout proposed? iii. Number of lots proposed? iv. Minimum and maximum proposed lot sizes? Minimum Maximum
e. Will the proposed action be constructed in multiple phases? i. If No, anticipated period of construction: ii. If Yes: • Total number of phases anticipated • Anticipated commencement date of phase 1 (including demolition) • Anticipated completion date of final phase • Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

0.70 .1 .		1 0			Tr. D.
	ct include new resid				□Yes No
If Yes, show nun	nbers of units propo		m) (1: 1	
	One Family	Two Family	Three Family	Multiple Family (four or more)	
Initial Phase					
At completion					
of all phases					
				T'	
	osed action include	new non-residentia	al construction (inclu	iding expansions)?	☑Yes□No
If Yes,	0				
i. Total number	of structures	29	10.41 01 1		
				$7.26 \pm \text{ft}$ width; and $166.65 \pm \text{length}$	
				0 square feet	
				l result in the impoundment of any	☐Yes ✓ No
	s creation of a wate	er supply, reservoir	, pond, lake, waste la	agoon or other storage?	
If Yes,					
i. Purpose of th	e impoundment:				
ii. If a water imp	ooundment, the prin	cipal source of the	water:	Ground water Surface water strear	ns Other specify:
iii. If other than	water, identify the t	ype of impounded/	contained liquids an	d their source.	
A mmovimoto	size of the manage	d imm over descent	Volume	:11:a.r. calland, surface and	
iv. Approximate	f the proposed dam	a impoundment.	volume:	million gallons; surface area:height;length	acres
v. Difficustions	method/meterials	for the proposed do	m or impounding et	neight; length ructure (e.g., earth fill, rock, wood, cond	wata).
vi. Construction	memod/materials .	ioi ilie proposed da	in or impounding st	ructure (e.g., earth fin, rock, wood, cond	reie).
	(0.00.000.000.000.000.000.000.000.000.0				
D.2. Project Op	perations				
		any exceptation m	ining or dredging d	uring construction, operations, or both?	∏Yes ✓ No
				s or foundations where all excavated	1 65 110
materials will		ation, grading or in	stanation of utilities	of foundations where an excavated	
If Yes:	romam onsito)				
	urnose of the excay	ation or dredging?			
ii How much m	aterial (including ro	ck earth sediment	s etc.) is proposed t	to be removed from the site?	
• Volume	(specify tons or cu	hic yards):	s, etc.) is proposed i		
• Over w	hat duration of time	.9			
iii Describe nati	ire and characteristi	cs of materials to b	e excavated or dred	ged, and plans to use, manage or dispose	e of them
iii. Describe nan	ire and onaracteristi	es of materials to t	o exercised of dred	god, and plans to ase, manage of disposi	e of them.
-		***************************************			
iv. Will there b	e onsite dewatering	or processing of ex	cavated materials?		☐ Yes ☐ No
If yes, descr	ibe				
-				1	1
	otal area to be dredg		200	acres	
				acres	
			or dredging?	feet	
	avation require blas				☐Yes ☐No
ix. Summarize si	te reclamation goal	s and plan:			
				crease in size of, or encroachment	☐Yes ✓ No
	ing wetland, waterb	oody, shoreline, bea	nch or adjacent area?		
If Yes:					
				water index number, wetland map numb	er or geographic
description):					
, 					

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placeme alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in squ	nt of structures, or are feet or acres:
iii. Will the proposed action cause or result in disturbance to bottom sediments? If Yes, describe:	□Yes □No
If Yes, describe:	☐Yes☐No
If Yes:	
acres of aquatic vegetation proposed to be removed:	
expected acreage of aquatic vegetation remaining after project completion:	
purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):	
proposed method of plant removal:	
if chemical/herbicide treatment will be used, specify product(s):	
c. Will the proposed action use, or create a new demand for water?	☐Yes Z No
If Yes:	100 100
i. Total anticipated water usage/demand per day: gallons/day	
ii. Will the proposed action obtain water from an existing public water supply?	☐Yes ☐No
If Yes:	
Name of district or service area:	
 Does the existing public water supply have capacity to serve the proposal? 	☐ Yes☐ No
• Is the project site in the existing district?	☐ Yes☐ No
Is expansion of the district needed?	☐ Yes☐ No
 Do existing lines serve the project site? 	☐ Yes☐ No
iii. Will line extension within an existing district be necessary to supply the project?	☐Yes ☐No
If Yes: • Describe extensions or capacity expansions proposed to serve this project:	
Source(s) of supply for the district:	
iv. Is a new water supply district or service area proposed to be formed to serve the project site? If, Yes:	☐ Yes☐No
Applicant/sponsor for new district:	
Date application submitted or anticipated:	
Proposed source(s) of supply for new district: If a walk is a section with a section of the section of th	
v. If a public water supply will not be used, describe plans to provide water supply for the project:	
vi. If water supply will be from wells (public or private), what is the maximum pumping capacity:	gallons/minute.
d. Will the proposed action generate liquid wastes?	☐ Yes ☑ No
If Yes:	
 i. Total anticipated liquid waste generation per day: gallons/day ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all 	
ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all	components and
approximate volumes or proportions of each):	
iii. Will the proposed action use any existing public wastewater treatment facilities?	□Yes☑No
If Yes:	
Name of wastewater treatment plant to be used:	
Name of district:	
Does the existing wastewater treatment plant have capacity to serve the project?	□Yes□No
• Is the project site in the existing district?	□Yes□No
• Is expansion of the district needed?	☐Yes ☐No

 Do existing sewer lines serve the project site? 	□Yes□No
 Will a line extension within an existing district be necessary to serve the project? 	□Yes □No
If Yes:	
Describe extensions or capacity expansions proposed to serve this project:	
iv. Will a new wastewater (sewage) treatment district be formed to serve the project site?	□Yes□No
If Yes:	
Applicant/sponsor for new district:	
Date application submitted or anticipated:	
• What is the receiving water for the wastewater discharge?	
v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including spec receiving water (name and classification if surface discharge or describe subsurface disposal plans):	ifying proposed
receiving water (name and classification it surface discharge of describe subsurface disposal plans).	
vi. Describe any plans or designs to capture, recycle or reuse liquid waste:	
e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point	□Yes No
sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point	
source (i.e. sheet flow) during construction or post construction?	
If Yes:	
i. How much impervious surface will the project create in relation to total size of project parcel?	
Square feet or acres (impervious surface) Square feet or acres (parcel size)	
ii. Describe types of new point sources.	
ii. Describe types of new point sources.	
iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent p	roperties,
groundwater, on-site surface water or off-site surface waters)?	
If to surface waters, identify receiving water bodies or wetlands:	
if to surface waters, identify receiving water bodies of wettailds.	
Will stormwater runoff flow to adjacent properties?	☐ Yes☐ No
iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?	
f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel	□Yes ☑No
combustion, waste incineration, or other processes or operations? If Yes, identify:	
<i>i.</i> Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)	
ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)	
iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)	
g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit,	☐Yes ☑No
or Federal Clean Air Act Title IV or Title V Permit?	1032110
If Yes:	
i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet	□Yes□No
ambient air quality standards for all or some parts of the year)	
ii. In addition to emissions as calculated in the application, the project will generate:	
•Tons/year (short tons) of Carbon Dioxide (CO ₂)	
•Tons/year (short tons) of Nitrous Oxide (N ₂ O)	
Tons/year (short tons) of Perfluorocarbons (PFCs)	
 Tons/year (short tons) of Sulfur Hexafluoride (SF₆) Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs) 	
•Ions/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs) • Tons/year (short tons) of Hazardous Air Pollutants (HAPs)	
- TOHAY YOR TAHOU DUBY OF HAZARUOUS AND FUHILIBRIS UNIVERSIT	

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? If Yes: i. Estimate methane generation in tons/year (metric): ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to ge electricity, flaring):	□Yes ✓ No enerate heat or
 i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): 	∐Yes ⊠ No
j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? If Yes: i. When is the peak traffic expected (Check all that apply):	Yes _ No s):
 iii. Parking spaces: Existing Proposed Net increase/decrease	☐Yes☐No access, describe: ☐Yes☐No ☐Yes☐No ☐Yes☐No
 k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? If Yes: i. Estimate annual electricity demand during operation of the proposed action: ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/l other): iii. Will the proposed action require a new, or an upgrade, to an existing substation? 	□Yes☑No local utility, or □Yes□No
1. Hours of operation. Answer all items which apply. i. During Construction: ii. During Operations: • Monday - Friday: 7:00 a.m 6:00 p.m. • Monday - Friday: N/A • Saturday: 7:00 a.m 6:00 p.m. • Saturday: N/A • Sunday: N/A • Sunday: N/A • Holidays: N/A • Holidays: N/A	

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?	✓Yes□No
If yes:	
i. Provide details including sources, time of day and duration:	
poise levels will temporarily increase during construction due to construction equipment during the hours of 7:00 a.m 6:00 p.m., Mouration will not exceed 6 ± months. No significant impact with respect to noise is anticipated during operations. Work will conform to it. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen?	onday - Saturday, Co local noise ordinance □Yes☑No
Describe: existing vegetation will remain around the boundary of the project site.	LI ES LINO
Describe: existing vegetation will remain around the boundary of the project site.	
Will the proposed action have outdoor lighting?	□Yes ☑ No
If yes:	I i es No
i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:	

i. Will proposed action remove existing natural barriers that could act as a light barrier or screen?	□Yes□No
Describe:	181
b. Does the proposed action have the potential to produce odors for more than one hour per day?	☐Yes ☑No
If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest	
occupied structures:	
	Dr. Dr.
b. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons)	□Yes ☑ No
or chemical products 185 gallons in above ground storage or any amount in underground storage?	
f Yes:	
i. Product(s) to be stored	
ii. Generally, describe the proposed storage facilities:	
q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides,	☐ Yes ☑No
insecticides) during construction or operation?	
if Yes:	
i. Describe proposed treatment(s):	
· · · · · · · · · · · · · · · · · · ·	
" W'll d	
ii. Will the proposed action use Integrated Pest Management Practices?	Yes No
r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?	☐ Yes ☑No
f Yes:	
i. Describe any solid waste(s) to be generated during construction or operation of the facility:	
• Construction: tons per (unit of time)	
• Operation: tons per (unit of time) ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste	
	5.
Construction:	
• Operation:	
iii. Proposed disposal methods/facilities for solid waste generated on-site:	
Construction:	
Operation:	

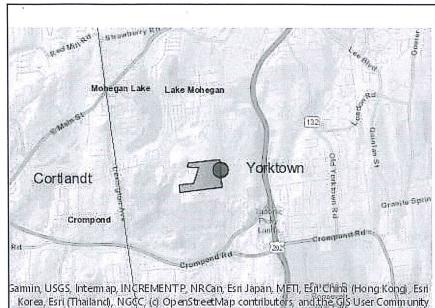
IfY	oes the proposed action include construction or modies: Type of management or handling of waste proposed other disposal activities):		•	□ Yes □ No					
	Anticipated rate of disposal/processing: Tons/month, if transfer or other non-comparison or thermal to the standard sta	treatment	or						
	ill the proposed action at the site involve the commer		rage, or disposal of hazardo	ous □ Yes □ No					
	aste?	, o.u., go., o.u., u. o.u., o.u.	ruge, or disposar or nasara	100					
If Y									
i.	Name(s) of all hazardous wastes or constituents to be	generated, handled or manage	ed at facility:						
ii.	Generally describe processes or activities involving h		ts:						
iii. iv.	Specify amount to be handled or generatedto Describe any proposals for on-site minimization, rec	ycling or reuse of hazardous of	onstituents:						
	XX211 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CC : 1 1 1 C :11							
	Will any hazardous wastes be disposed at an existing es: provide name and location of facility:			□ Yes □ No					
11 1	es. provide name and location of facinty.								
IfN	o: describe proposed management of any hazardous	wastes which will not be sent	to a hazardous waste facilit	y:					
		N. J. C.							
E. 9	Site and Setting of Proposed Action								
E. :	1. Land uses on and surrounding the project site								
i	Existing land uses. Check all uses that occur on, adjoining and near the Urban Industrial Commercial Residence Forest Agriculture Aquatic Other If mix of uses, generally describe:	project site. Iential (suburban) □ Rural r (specify): Recreational	(non-farm)						
_									
b. I	and uses and covertypes on the project site.								
	Land use or	Current	Acreage After	Change					
	Covertype	Acreage	Project Completion	(Acres +/-)					
•	Roads, buildings, and other paved or impervious surfaces	2.17±	2.17±	0.00					
•	Forested	47.22±	46.75±	- 0.47±					
0	Meadows, grasslands or brushlands (non-		0.1.55						
	agricultural, including abandoned agricultural)	23.72±	24.09 ±	+0.37±					
•	Agricultural (includes active orchards, field, greenhouse etc.)	0.00	0.00	0.00					
•	Surface water features	0.01±	0.01±	0.00					
	(lakes, ponds, streams, rivers, etc.)	U.UII	U.U II	0.00					
•	Wetlands (freshwater or tidal)	0.05±	0.05±	0.00					
•	Non-vegetated (bare rock, earth or fill)	0.00	0.00	0.00					
0	Other								
	Describe: Limited Use Pervious Gravel	0.00±							

c. Is the project site presently used by members of the community for public recreation? i. If Yes: explain: Parkland	⊌Yes□No
d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? If Yes, i. Identify Facilities: Shrub Oak International School	Ø Yes□No
e. Does the project site contain an existing dam? If Yes:	□Yes No
i. Dimensions of the dam and impoundment:	
• Dam height: feet	
• Dam length: feet	
• Surface area: acres	
Volume impounded: gallons OR acre-feet	
ii. Dam's existing hazard classification:iii. Provide date and summarize results of last inspection:	
iii. Provide date and summarize results of fast inspection.	
f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility.	☐Yes ✓ No ty?
If Yes: i. Has the facility been formally closed?	□Yes□ No
If yes, cite sources/documentation:	¥ *
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:	
iii. Describe any development constraints due to the prior solid waste activities:	
The boundary was been consisted to the dispersed of at the city and does the project city adjain	□Yes☑No
g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? If Yes:	I ESEZINO
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred	d:
h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? If Yes:	☐Yes ✓ No
 i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: 	□Yes□No
Yes – Spills Incidents database Provide DEC ID number(s):	
Yes – Environmental Site Remediation database Provide DEC ID number(s):	
ii. If site has been subject of RCRA corrective activities, describe control measures:	
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? If yes, provide DEC ID number(s):	□Yes☑No
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):	

v. Is the project site subject to an institutional control limiting property uses?	☐Yes No
 If yes, DEC site ID number:	
 Describe any use limitations: Describe any engineering controls: 	
 Will the project affect the institutional or engineering controls in place? Explain: 	□Yes□No
- DAPIGIII.	
E.2. Natural Resources On or Near Project Site	
a. What is the average depth to bedrock on the project site? 3.51 feet	_
b. Are there bedrock outcroppings on the project site? If Yes, what proportion of the site is comprised of bedrock outcroppings?%	□Yes☑No
c. Predominant soil type(s) present on project site: Paxton Fine Sandy Loam (3-8%) 36.6 %	
Paxton Fine Sandy Loam (8-15%) 33.8 % Woodbridge Loam (8-15%) 14.2 %	
d. What is the average depth to the water table on the project site? Average: 2.49 feet	
e. Drainage status of project site soils: ✓ Well Drained:	
✓ Moderately Well Drained: 20.5 % of site ✓ Poorly Drained 5.7 % of site	
f. Approximate proportion of proposed action site with slopes: 0-10%: 62.65 % of site 10-15%: 34.45 % of site	
 ✓ 10-15%: 34.45 % of site ✓ 15% or greater: 2.8 % of site 	
g. Are there any unique geologic features on the project site? If Yes, describe:	□Yes☑No
h. Surface water features. i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers,	∐Yes ⊮ No
ponds or lakes)? ii. Do any wetlands or other waterbodies adjoin the project site?	☑ Yes □ No
If Yes to either <i>i</i> or <i>ii</i> , continue. If No, skip to E.2.i. iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal,	✓ Yes □No
state or local agency?	E I ES LINO
 iv. For each identified regulated wetland and waterbody on the project site, provide the following information: Streams: Name TBD Classification NON WOT 	TUS
• Lakes or Ponds: Name Classification	
 Wetlands: Name TBD Approximate Size 0.5 A Wetland No. (if regulated by DEC) 	cres
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies?	☐Yes ☑ No
If yes, name of impaired water body/bodies and basis for listing as impaired:	
i. Is the project site in a designated Floodway?	☐Yes ☑ No
j. Is the project site in the 100-year Floodplain?	☐Yes ✓No
k. Is the project site in the 500-year Floodplain?	
	☐Yes ✓ No
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?	□Yes ☑No □Yes ☑No
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? If Yes: i. Name of aquifer:	

71(2)	
m. Identify the predominant wildlife species that occupy or use the project site:	
Various Migratory Birds	
Typical Northeastern Wildlife	
n. Does the project site contain a designated significant natural community? If Yes: i. Describe the habitat/community (composition, function, and basis for designation):	□Yes ☑ No
ii. Source(s) of description or evaluation:	
iii. Extent of community/habitat:	
• Currently: acres	
• Following completion of project as proposed: acres	
• Gain or loss (indicate + or -):	
 o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened specific species. i. Species and listing (endangered or threatened): 	☐ Yes ✓ No cies?
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of	□Yes ☑ No
special concern?	
If Yes:	
i. Species and listing:	
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing?	☐Yes ✓ No
If yes, give a brief description of how the proposed action may affect that use:	
11 yes, give a orier description of now the proposed action may affect that use.	
E.3. Designated Public Resources On or Near Project Site	
 a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? If Yes, provide county plus district name/number: 	∐Yes ⊮ No
b. Are agricultural lands consisting of highly productive soils present?	✓ Yes ✓ No
i. If Yes: acreage(s) on project site? 68.41 Acres	
ii. Source(s) of soil rating(s): NCRS Soil Survey	
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark?	∐Yes ∠ No
If Yes:	
i. Nature of the natural landmark: 🔲 Biological Community 🔲 Geological Feature	
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:	
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area?	☐ Yes ✓ No
If Yes:	
i. CEA name:	
ii. Basis for designation:	
iii. Designating agency and date:	

e. Does the project site contain, or is it substantially contiguous to, a buil which is listed on the National or State Register of Historic Places, or Office of Parks, Recreation and Historic Preservation to be eligible for	that has been determined by the Commission	
If Yes:		
i. Nature of historic/archaeological resource: Archaeological Site	☐ Historic Building or District	
ii. Name:		
iii. Brief description of attributes on which listing is based:		
f. Is the project site, or any portion of it, located in or adjacent to an area archaeological sites on the NY State Historic Preservation Office (SHI		☑ Yes □No
g. Have additional archaeological or historic site(s) or resources been ide If Yes:		□Yes ☑No
i. Describe possible resource(s):		
ii. Basis for identification:		
h. Is the project site within fives miles of any officially designated and p scenic or aesthetic resource? If Yes:	ublicly accessible federal, state, or local	☑ Yes □No
i. Identify resource: Westchester County GIS, Granite Knolls Parkii. Nature of, or basis for, designation (e.g., established highway overlo	als atota ar local norts atota historia trail ar	goonio byzyrovy
· · · · · · · · · · · · · · · · · · ·		scenic byway,
etc.): Local Park iii. Distance between project and resource:	iles.	
i. Is the project site located within a designated river corridor under the Program 6 NYCRR 666?		☐Yes☑No
If Yes: ! Identify the name of the river and its designation:		
i. Identify the name of the river and its designation:ii. Is the activity consistent with development restrictions contained in	6NYCRR Part 666?	□Yes□No
F. Additional Information Attach any additional information which may be needed to clarify you If you have identified any adverse impacts which could be associated as measures which you propose to avoid or minimize them.		npacts plus any
G. Verification I certify that the information provided is true to the best of my knowled Applicant/Sponsor Name HESP Solar, LLC c/o Susan Brodie	dge. Date <u>11/09/2021</u>	
Signature Exic Redding Bergmann c/o Eric Redding, PE as Agent for Applicant	Title Discipline Leader	



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYC Watershed Boundary
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.I. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No

E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No











LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 20.1%.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behaviour.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID Technology, Anti PID Technology¹, Hot-Spot Protect and Traceable Quality Tra.Q™.



EXTREME WEATHER RATING

High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).



A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance warranty².



STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

- ¹ APT test conditions according to IEC/TS 62804-1:2015, method B (-1500 V, 168 h)
- ² See data sheet on rear for further information.

RECEIVED PLANNING DEPARTMENT

NOV I 0 2021

TOWN OF YORKTOWN

THE IDEAL SOLUTION FOR:

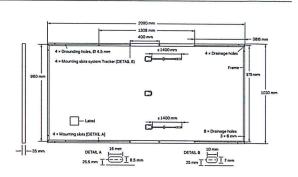


Rooftop arrays on commercial/industrial buildings



Ground-mounted solar power plants

Format	2080 mm × 1030 mm × 35 mm (including frame)
Weight	24.5 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodised aluminium
Cell	6 × 24 monocrystalline Q.ANTUM solar half cells
Junction box	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4mm² Solar cable; (+) ≥1400 mm, (-) ≥1400 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-6, Tongling TL-Cable01S, JMTHY JM601; IP68 or Friends PV2e: IP67

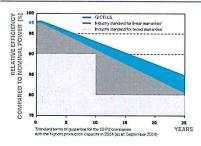


ELECTRICAL CHARACTERISTICS

PO	VER CLASS			405	410	415	420	425
MIN	IIMUM PERFORMANCE AT STANDAR	D TEST CONDITIO	NS, STC1 (PO	WER TOLERANCE	+5W/-0W)		***************************************	
	Power at MPP ¹	P _{MPP}	[W]	405	410	415	420	425
٤	Short Circuit Current ¹	I _{sc}	[A]	10.65	10.70	10.74	10.79	10.83
mnm	Open Circuit Voltage ¹	V _{oc}	[V]	48.14	48.38	48.63	48.88	49.13
Minim	Current at MPP	l _{MPP}	[A]	10.14	10.18	10.23	10.27	10.32
	Voltage at MPP	V_{MPP}	[V]	39.95	40.27	40.58	40.89	41.20
	Efficiency ¹	η	[%]	≥18.9	≥19.1	≥19.4	≥19.6	≥19.8
MIN	IIMUM PERFORMANCE AT NORMAL	OPERATING CONI	DITIONS, NM	OT²				***************************************
	Power at MPP	P _{MPP}	[W]	303.1	306.9	310.6	314.4	318.1
Minimum	Short Circuit Current	I _{sc}	[A]	8.58	8.62	8.65	8.69	8.73
	Open Circuit Voltage	Voc	[V]	45.38	45.62	45.86	46.09	46.33
	Current at MPP	I _{MPP}	[A]	7.98	8.01	8.05	8.09	8.12
	Voltage at MPP	V _{MPP}	[V]	37.99	38.29	38.59	38.88	39.17

 $^{1}\text{Measurement tolerances P}_{\textit{MPP}} \pm 3\%; I_{SC}; V_{OC} \pm 5\% \text{ at STC: } 1000 \text{W/m}^{2}, 25 \pm 2^{\circ}\text{C}, \text{AM 1.5 according to IEC 60904-3} \cdot ^{2}\text{800 W/m}^{2}, \text{NMOT, spectrum AM 1.5}$

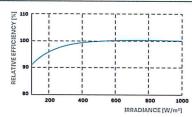
Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000W/m²).

TEMPERATURE COEFFICIENTS					Total five			5.346F		
Temperature Coefficient of I _{SC}	(a [%	/K]	+0.04	Temperature (Coefficient of Voc		β	[%/K]	-0.27
Temperature Coefficient of P_{MPP}	1	γ [%	/K]	-0.36	Nominal Modu	ıle Operating Tem	perature	NMOT	[°C]	43±3

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	V_{sys}	[V]	1000 (IEC)/1000 (UL)	PV module classification	Class II
Maximum Reverse Current	I _R	[A]	20	Fire Rating based on ANSI/UL 1703	C/TYPE 2
Max. Design Load, Push/Pull		[Pa]	3600/1600	Permitted Module Temperature	-40°C-+85°C
Max. Test Load, Push/Pull		[Pa]	5400/2400	on Continuous Duty	

QUALIFICATIONS AND CERTIFICATES

PACKAGING INFORMATION



IEC 61215:2016; IEC 61730:2016;



30
24
22
2131×1130×1200mm
788kg

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Copyright O Narada Power Source Co., Ltd. 2020 All rights reserved. V1.1-EN NESP NWI Series Feb 2020, Subject to revision without prior notice.

Narada Power Source Co., Ltd.

East Wing, No.822 Wen'er West Road, Hangzhou, Zhejiang, China. Tel (+86-571) 56975980 Email intl@narada.biz

Fax (+86-571) 56975955 Website www.naradapower.com

MPinarada

44 Oak St Newton, MA 02464 USA

Tel: 800-982-4339 sales@mpinarada.com www.mpinarada.com

RECEIVED PLANNING DEPARTMENT

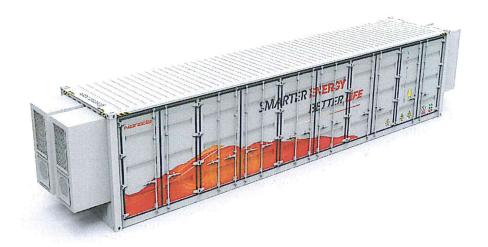
NOV 1 0 2021

TOWN OF YORKTOWN



Battery Energy Storage System(BESS)

NESP NWI (Outside Accessable) Series















Reliable Energy Storage Solution for Smart Grid





Being global, innovative, green and responsible is our core strategy. We are dedicated to achieve harmonious co-existence and sustainable development between enterprise and environment.

As a leader in ESS industry, Narada is devoted to build a smart energy network based on micro-grid and distributed energy storage solution.

- President of Narada

Introduction

Narada Power Source Co., Ltd. was established in 1994 and has been public listed in Shenzhen Stock Exchange Market since 2010. Narada is specialized in providing energy system integration products, solutions and operation services to Information and Communication Technology (ICT), Renewable Energy Storage, Electric Vehicle (EV) and other energy saving and environmental protection applications. With the development in decades, Narada has become the leader in global industrial batteries section, and "Narada" brand has been the famous and well-known brand in all over the world.

I Corporate Culture

Vision

SMART ENERGY WONDERFUL GREEN LIFE

Value

Credibility

0

Responsibility

Creativity

500

Devotion



I Global Presence



| Milestones

First Island Project

2010

Zhejiang , China 200kW/560kWh

Lead Carton

First Ramping Rate Control Project with Wind lienesu, Chica 2.555W/1.875Wh Lead Carbon

2013

2011 First BESS jointly with Solar in China Narada First BESS Trial Project in 2011 Marada factory 500kW/2MWh

Lead Carbon & Lithium Battery

2014 First Oversea Project 30kW/250kWh Lead Carbon India First Frequency Regulation Project

India PGCIL 1/89/1/895 Leed Carbon & Lithium Bettery

Largest Solar BESS project for Telecom Operator Abu Dhobi, United Areb Emirates 1MW/8.86A/Wh

Largest Energy Quality, Demanding Response & Arbitraga Solution

François Group — Jiangsu, China 12.5MW/100MWh Leed Carbon First Containerized Lithium Solution for Solar Out of Chino

First Energy Shifting & Arbitrage Project

Chiengmoi, Theiland

GCL—Zhejiang, Chino 1.5MW/12MWh

2016

Lithium Battery

Lead Carbon

9.6NW/9.6WWh Lithium Battery First & Largest Frequency

Henna China

Regulation Project Germany 30MW/50MWh

First Lithium Project for Distribution Upgrade Deferral

Load Carbon NARADA

Company of the self

2017

Nigeria & Tenzerian

& Voltage Support

WuXi Industry Zeco

First Large BESS Project in Africa



. CE

2019

UL 9540, UL 1973, IEC 62619 Certified NESP LFP SS-40AS MW Scale

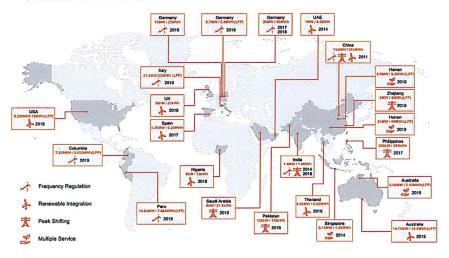
Containerized BESS Largest Project for Distribution Upgrade Deferral First VPP project for C&1

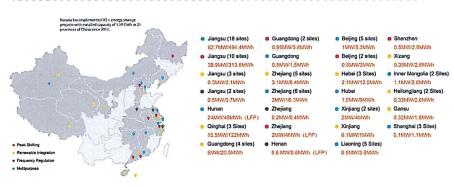
Application 360kW/240kWh per Site, 12 Sites in total Lithium Battery

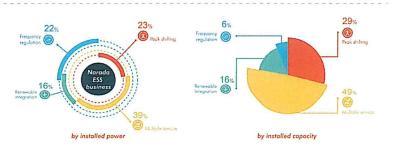
First BESS Project with the Largest Energy Capacity per Single Container in China Hanon Chino 24MW/48MWf

Lithium Battery

| Global Installations







I Cell Technology

1.Lithium Iron Phosphate

Best Lithium Option for BESS; The safest Lithium technology for BESS

2.Stacking plates

Stacking plates is good for high power operation and thermal dissipation

3. Prismatic Cell

Multi-layered Protection at cell level

4. Aluminum Case

Excellent Thermal Conductivity and Cooling Performance; Safe and efficient heat release from inside to outside



Cycle life

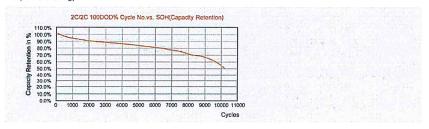
Sustainable Design

Continuously innovating to increase the energy density while maintaining the same form factor and cell dimensions, thus facilitating future upgrades to higher capacity, higher energy density. ESS with no change to pack design.

Cell Model		FE80B	FE105A	FE125A	Unit
Weight		2.20	2.30	2.35	kg
	Length	130		mm	
Dimensions	Width		36		mm
	Height		240		mm
Nominal Capacity		86	105	130	Ah
Nominal	Voltage		3.2		V
Allowed C-Rate		2	2	1	С
Recommended C-Rate		2	1	0.5	С

I Long Life and Wide Application & Experience

Wide application & experience on Telecom, BESS and Automotive, collecting knowhow and innovating superior and adaptive technology.



Module

I Rack





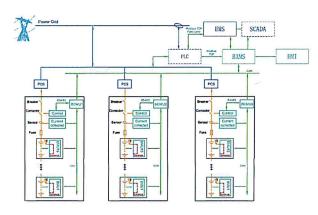
I Features of Module & Rack Design

- 1. Platform Design for Energy, Medium and Power Solutions
- 2. 0.5C to 2C options available for Frequency regulation, Peak Shaving, Energy Reserve, etc.
- 3. The Highest Energy density for LFP Energy Solution to optimize footprint and BOP cost
- 4. Passive & Active Thermal Ventilation System, Designed in both Module & Rack
- 5. Particular Considering for Containerized solution with proper aisle space
- 6. The Highest Lifetime Performance for Energy Storage System
- 7. Tested and Listed to UL and IEC Standard for Safety

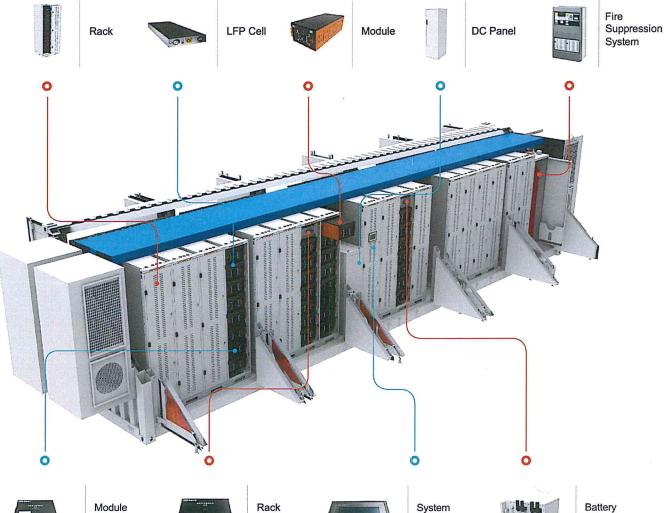
IBMS

BMS Function

- 1. Battery working condition Monitoring
- 2. State of Charge (SOC) estimation
- 3. State of Health (SOH) estimation
- 4. Discharge Control
- 5. Thermal Management
- 6. Fault Diagnosis Alarm
- 7. Information Monitor
- 8. Balance
- 9. Protection



I NESP Containerized Solution





Module BMS (BMU)



Rack BMS (BCMU)



System BMS (BAMS)



Battery Protection Unit (BPU)

COMPLETED NESP BESS

D.C.System

- Cell
- Module
- Rack
- BMS (Module, Rack, System
- Battery Protection Unit
- Container
- DC Panel
- HVAC System
- Fire Suppression System

A.C.System



PCS Partner List: Siemens, SMA, Sungrow, etc.

KPI for choosen: Country Certificate, Product Type,

I NESP Module & Rack Specification

Item		Module	Rack Type 1	Rack Type 2	Rack Type 3
Type No.		76.8NESP160	76880135	76880160	76880184
Cell Capacity	Ah	160	160	160	160
Energy	kWh	12.3	135	160	184
Nominal Volt	V	76.8	844.8	998.4	1152.0
Minimum Volt	V	67.2	739.2	873.6	1008.0
Maximum Volt	V	86.4	950.4	1123.2	1296.0
Dimension	mm	400*884*265	500*938*1860 (2 pcs)	500*938*2130 (2 pcs)	500*938*2400 (2 pcs)
(W x D x H)] """	400 004 200	500 500 1000 (2 pcs)	555 555 2155 (2 pcs)	555 555 2400 (2 pcs)
Weight	kg	110.7	1597.7	1859.1	2120.5

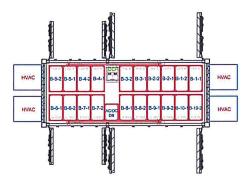
Item		Module	Rack Type 1	Rack Type 2	Rack Type 3
Type No.		76.8NESP200	768100169	768100200	768100230
Cell Capacity	Ah	200	200	200	200
Energy	kWh	15.4	169	200	230
Nominal Volt	V	76.8	844.8	998.4	1152.0
Minimum Volt	V	67.2	739.2	873.6	1008.0
Maximum Volt	V.	86.4	950.4	1123.2	1296.0
Dimension	mm	400*884*265	500*938*1860 (2 pcs)	500*938*2130 (2 pcs)	500*938*2400 (2 pcs)
(W x D x H)	1	400 004 203	300 330 1000 (2 pcs)	000 300 2100 (2 pcs)	300 330 2400 (2 pcs)
Weight	kg	133.5	1848.5	2155.5	2462.5

Item		Module	Rack Type 1	Rack Type 2	Rack Type 3	
Type No.		76.8NESP250	768125211	768125250	768125288	
Cell Capacity	Ah	250	250	250	250	
Energy	kWh	19.2	211	250	288	
Nominal Volt	ν	76.8	844.8	998.4	1152.0	
Minimum Volt	V	67.2	739.2	873.6	1008.0	
Maximum Volt	V	86.4	950.4	1123.2	1296.0	
Dimension	mm	400*884*265	500*938*1860 (2 pcs)	500*938*2130 (2 pcs)	500*938*2400 (2 pcs)	
(W x D x H)	111111	400 004 203	000 200 1000 (2 pcs)	500 500 2130 (2 pcs)	300 936 2400 (2 pcs	
Weight	kg	141	1931	2253	2575	

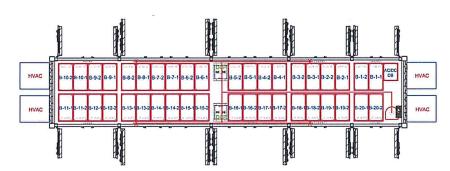
System Specification

Battery Type	Lithium-lon				L	FP			
Dattery Type	Liunum-ion	-			_				
Energy Poting	DC Nominal Energy	MWh	2.88	2.30	1.84	5.76	4.61	3.69	Energy @ C/2 Rate
Energy Rating	Discharge C-Rate	С	0.5	1.0	2.0	0.5	1.0	2.0	Up to 2C
Power Rating	Rated Power	MW	1.44	2.30	3.69	2.88	4.61	7.37	
	Nominal Voltage	Vdc	1152						at Rack
Battery Voltage	Voltage Range	Vdc	1008 ~ 1296					at Rack	
SOC Range	Recommended Range				5%~	-95%			
Physical Chara	cteristics				A Justine				
	Quantity	pcs				1			
Container Building	Dimensions (L x W x H)	ft		20'			40'		ISO HC
	Weight	ton	31.88	30.64	26.88	62.16	59.74	52.41	
System Perform	nance Characteristics				TIE's	7			
Efficiency	D.C. Round Trip Efficiency	%	95%	94%	93%	95%	94%	93%	C/2 P - 25°C
Aux Power	Max Aux Power	kW	14.4	27.6	51.6	28.8	55.3	103.2	Depends on HVAC
Interconnection	Parameters	A F							
	PCS A.C. Voltage	Vac			Custo	mized			
Point of Interconnect	POI Voltage	kV	Customized						
microdimod	A.C. Frequency	Hz			50Hz/	60Hz			
Environmental	Characteristics								
Environment	Operating Temperature	°C	-40 °C to 60 °C				Maximium		
conditions	Storage Temperature	°C	10 °C to 30 °C				Optimium		
Relative Humidity	Maximum Humidity	%			up to	95%			
Altitude	Above Sea Level	m			2000m	/ 600ft			
Applications	NAME AND RESERVO	Sept.	No. of the		REV RE				

| General Layout of Containerized Solution



0.5C	1.0C	2.00
20ft ISO HC Container	20ft ISO HC Container	20ft ISO HC Container
External Mounted HVAC	External Mounted HVAC	External Mounted HVAC
Max Rack Enery 288kWh	Max Rack Enery 230kWh	Max Rack Enery 184kWh
Max Container Energy 2.88MWh	Max Container Energy 2.30MWh	Max Container Energy 1.84MWh
Rated Power 1.44MW	Rated Power 2.30MW	Rated Power 3.69MW



0.5C	1.0C	2.0C
40ft ISO HC Container	40ft ISO HC Container	40ft ISO HC Container
External Mounted HVAC	External Mounted HVAC	External Mounted HVAC
Max Rack Enery 288kWh	Max Rack Enery 230kWh	Max Rack Enery 184kWh
Max Container Energy 5.76MWh	Max Container Energy 4.61MWh	Max Container Energy 3.69MWh
Rated Power 2.88MW	Rated Power 4.61MW	Rated Power 7.37MW

Codes & Standards

Safety	
UL 9540	Safety for Energy Storage Systems and Equipment
UL 9540A	Test Methods for Evaluating Thermal Runaway Fire Propagation - BESS
UL 1973	Batteries for Use in Stationary Applications
UL 1642	Standards for Lithium Batteries
IEC 62619	Safety for Secondary Lithium Cells and Batteries
IEC 61508, UL 991, UL 1998, UL60730-1	Functional Safety for Electrical Systems
NFPA 70E	Standard for Electrical Safety in the Workplace
NFPA 70	(NEC) National Electrical Code
ANSI/IEEE C-2	National Electric Safety Code
UL 60950	Electrical Insulation
NFPA 551 / NFPA 550	Fire Detection and Suppression
IEC 60812	
IEC 61025	Safety Analysis and Control System (FMEA, FTA)
MIL-STD-1629A	
UL1778	UPS for Ancillary
UL1598	
UL8750	— Luminaire
UL1012	Rectifier for D.C. power supply
UL1995	Air conditioner for cooling
UN 38.3 / IEC 62281	Transportation Safety of Lithium metal and lithium ion batteries
Performance Standards & Grid I	nterconnect
IEC61427-2 2015	Secondary cells and batteries for renewable energy storage – General requirements and methods of test – Part 2: On-grid applications
IEC 62620	Secondary Lithium Cells and Batteries for Industrial Application
PNNL-22010	Protocal for Measuring Performance of Energy Storage System
UL 1741 (SA)	Standards for Inverters, Converters, Controllers and Interconnection System Equipment
IEEE 1547	Standard for Interconnecting DR WITH EP
ANSI/IEC 60529	Degrees of Protection Provided by Enclosures
NEMA 250	Enclosures for Electrical Equipment
NEMA 250 / UL 50E	Environmental Considerations for Electrical Equipment Enclosures
IEEE 693-2005	Recommended Practice for Seismic Design of Electrical Equipment

I Global Track Record

Since 2011, Narada's BESS products have been successfully operating in over 17 countries, ranking Top 3 worldwide in terms of installed capacity according to Bloomberg's statistics and ranking the 1st in China in terms of installed capacity and power according to CNESA..

2011 420 MW/1.8 GWh

COUNTRIES



Europe

Germany

45MW / 75MWh

0.7MW / 0.9MWh (LFP)



21.6MW/22MWh (LFP)

UK

36 kW / 33 kWh

0.25 MW / 0.25 MWh

Asia pacific

India

1.4 MW / 1.4 MWh



Australia (2 sites)

20.4MW/20MWh (LFP)



Pakistan

150 kW / 150 kWh

Philippines 200 kW / 200 kWh

Thailand

0.55 MW / 0.62 MWh

Singapore

0.15 MW / 1.250 MWh

Saudi Arabia

9 kW / 21.6 kWh

Nigeria

6 kW / 13 kWh

Saudi Arabia

9 kW / 21.6 kWh

UAE

1MW / 8.9MWh (multiple sites)



0.25MW/0.12MWh 2019 (LFP)

China

Jiangsu (35 Sites)



Qinghai (3 Sites)

15.5 MW / 122 MWh

Guangdong (7 Sites)

6.2 MW / 26 MWh

Zhejiang

6.3 MW / 25 MWh

Zhejiang

2 MW / 4 MWh (LFP)



Beijing (7 Sites)

1.5 MW / 18.3 MWh

9.6 MW / 9.6 MWh (LFP)



Hebei (3 Sites)

2.1 MW / 12.5 MWh

1.5 MW / 9 MWh

Xinjiang (3 Sites)

2.1 MW / 5 MWh

Inner Mongolia (2 Sites)

1.1 MW / 2.6 MWh

Hunan

24 MW / 48 MWh (LFP)



TOWN OF YORKTOWN

From: Patrick Cumiskey [mailto:pjcumiskey27@gmail.com]

Sent: Monday, October 25, 2021 4:02 PM

To: Robyn Steinberg < rsteinberg@yorktownny.org>

Cc: Matt Talbert <mattfire56@yahoo.com>; Matthew Slater <mslater@yorktownny.org>;

James Martorano < imartorano@yorktownny.org>

Subject: Comments to Granite Knolls Solar Proposal Package

Robyn,

Further to my comments made during last week's public hearing on the Granite Knolls Solar Proposal Package, as requested by the members of the Planning Board the following is a list of issues that I see with the package provided to the YRPC for review. Please forward this to the members of the Planning Board and others as you see fit.

- 1. The primary concern with the package provided is that the drawings are schematic at best, and offer little to no details of the proposed carport construction and/or coordination of existing and proposed utilities. These are listed as "0%" drawings, but the applicant needs to provide 60-90% drawings for any type of proper evaluation of the proposed work to be made.
- 2. It is imperative to know the various heights of the carport structures so we can verify if emergency vehicles and/or maintenance equipment will have proper vertical clearances and available turning radii. Verifying the type of foundations being installed, the wind load the structures are being designed for, and the maintenance responsibilities and response time to any maintenance issues are imperative to know for the continued operation of the park.
- 3. The applicant stated that there will be no need to coordinate any drainage since no additional impervious surfaces were being added, but that's not true. Even if they have nothing to do with the planned paving of the parking lot other than to fund it, their work still needs to be coordinated with the paving and/or any additional drainage measures that will be required. Without the consideration of the planned paving they still need to confirm whether the additional runoff from the panels will lead to any type of erosion of the gravel lot below. Based on the comments, is it assumed that there is no drip edge and/or gutter type collection being installed on the carport panels?? That could make ice accumulation a concern even if the park is closed during the winter.
- 4. A composite utility drawings must be developed to both coordinate the new work with that of the existing utilities installed by the previous contractor, as well as to show such things as the duct banks/electrical transmission lines from the various panels to the battery storage area (not shown on the drawings). This will also help make a determination as to whether the paving should be done before or after installation (Mr. Paganelli had expressed his concern over the increased cost for needing to use flow-boy trucks when paving with an overhead restriction, but I remain more concerned that paving the lot and then have it being made into swiss cheese with foundation and utility installation will have a significant negative impact on the longevity of the new paving).
- 5. I do not believe the applicant has properly accounted for the actual topography of the site with these plans, as the only topography shown is within the parking lot area. This is most critical for the proposed ground mount area shown to be installed on the northeast corner of the park adjacent to the overflow parking lot next to the maintenance shed. When speaking to the presenter after the meeting he assumed this was on a 15% slope and stated they would install them on the existing slope as is. This is more of a cliff with a much sharper slope than they anticipate, so the concern is the need to then "fill" this area to allow for the installation of these types of panels. The plans show a gate as a means of entrance/exit into the proposed ground mount system right off the overflow parking lot, which is not reasonable without major fills being installed. There is also tree removal listed in this area without any mention of any type of remediation, which I believe would be required.
- 6. There are no details for any proposed construction roads, as well as any stabilized construction entrances/exits. Depending on when this construction occurs (to be discussed later), this information needs to be known for proper coordination.
- 7. As stated earlier and immediately picked up by the planning board, there are no details for any battery storage which, as stated by the presenter, they have full intentions of installing. The location and transmission lines to/from the intended location must be coordinated, as well as the security measures being installed to prevent vandalism and/or fires.

As to the application, the following are the errors that I believe are in the documents provided:

- 1. Page 1 of 6; Application for Site Plan Approval; Question #3: The total acreage is listed as 73.17 +/- acres, but the total Granite Knolls parks is greater than 200 acres. The recreational facility is built on only a portion of the entire park. Should that be accounted for in this application?
- 2. Page 3 of 6; Application for Site Plan Approval; Question #18: The applicant checked off "Yes" for the project being within 500 feet of state or county recreational areas or public building/institution. I believe this is in error as only town owned facilities are within 500 feet of this facility.
- 3. Page 4 of 6; Application for Site Plan Approval; Question #22: The parcel is within the Lakeland Central School District, not Yorktown Central.
- 4. Page 1 of 2; Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum; General Project Information: The applicant checked of the Existing Site Use is "residential" and not sure if that is applicable since it is actually recreational. Also, is the applicant the Town of Yorktown or is it HESC as a Lessee??
- 5. Page 1 of 2; Large Scale Solar Power Generation Systems & Facilities Special Permit Application Addendum; Select Installation Type: In addition to the "Ground" type being checked off, the applicant also checked off "Rooftop". Not sure if that is intended to mean that the carport falls under the definition of rooftop, but there have been no discussions to date about panels being installed on any other existing structure such as the gazebo so that needs to be clarified.
- 6. Page of 2 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section B.d: The YPRC should be listed under "Other lead agencies".
- 7. Page of 2 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section B.i.ii.: The applicant checked off "no", but the correct answer is yes as this facility is located within the Mohegan Lake Local Waterfront Revitalization Program.
- 8. Page of 3 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section C.4.a: The project is within the Lakeland Central School District, not Yorktown Central.
- 9. Page of 3 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section D.1.e.i: The applicant states in this section that the intended duration of construction is 6 months. This is not consistent with the same type of question on Page 8 of 13; Section D.2.m.i. where the applicant states "Construction duration will not exceed 4 months." *NOTE: THE SCHEDULE FOR CONSTRUCTION IS PERHAPS THE BIGGEST CONCERN FOR THE YPRC AS RELATES TO THIS PROJECT* (more to follow in this emails closing).
- 10. Page of 4 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section D.1.g: The applicant clicks "Yes" to the question if the proposed action included non-residential construction, but then offers zero details as to the number of structures and/or dimensions. As noted earlier, neither the drawings provided nor the application itself offer any of these details for the carport or battery storage area(s), which is concerning.
- 11. Page of 4 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section D.2.a: The applicant clicks off "no" as if there are no excavations with the assumption being they intend to leave any and all excavated materials on site. As discussed during the meeting, they will definitely need to excavate for foundations and utilities, but there are no plans showing the intended re-use of such excavated materials. This needs to be clarified if this will be used as the "fill" for the ground mount area? Any excavated material should be removed from the site, or a clear spoils reuse plan needs to be submitted so it is clear there will be no impacts to existing drainage of the facility and/or its current aesthetics.
- 12. Page of 6 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section D.2.e: The applicant clicks off "no" that the proposed action will disturb more than one acre and create storm runoff. I do not believe this is true, and that's whether this application needs to take into account the proposed paving or not. The hydrology of the storm water runoff will assuredly be changed as a result of the additional structures being installed and it needs to be looked at as far as the current SPDES design for the facility.
- 13. Page of 9 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section E.1.a: The applicant should add "recreational" to the other section of this question.
- 14. Page of 9 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section E.1.b: The estimated acreage listed is only for the recreational facility portion of Granite Knolls Park, and does not take into account the rest of the parkland area.

- 15. Page of 10 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section E.1.c: The applicant clicks off "no" that the project site is being used for public recreation; clear error.
- 16. Page of 13 of 13; Full Environmental Assessment Form Part 1 Project and Setting; Section E.3.f: The applicant clicks off "yes" that the project site is located in or adjacent to archeological sensitive area. Is this accurate, and if so, what is this specifically in reference too? What restrictions would that then bring to this proposed use?

As noted above, the schedule for this construction is critical to the YPRC as well as the many families that use this facility. After what we recently went through with the closure of Legacy Fields, we are sensitive to the needs of the community and have been consistent with our position that this work should be completed between mid-November and mid-March so as to have as little impact to our local sporting clubs and our recreational programs. While not ideal for construction operations, it is what is best for the town and that's what we need to push for during this review process. we would ask that the next submission require a proposed construction schedule for review.

We appreciate the Planning Board including the YPRC in its review of the project, and we look forward to receiving a more detailed package so that it can be properly vetted so as to limit the impact the use and long term operation of this facility. Any questions, feel free to call me on my cell (732-801-1413).

Regards,

PJ Cumiskey Vice-Chairman Yorktown Parks and Recreation Commission (YPRC)

Yorktown Energy Storage



November 9, 2021

Planning Board **Town of Yorktown** 363 Underhill Avenue Yorktown Heights, NY 10598

RE: Amendment - Special Use Permit Tier 2 Battery Storage System 3901 Gomer Court Yorktown, NY

Dear Members of the Planning Board:

Yorktown Energy Storage 1, LLC is requesting an amendment to the existing Special Use Permit for the Tier 2 Battery Storage Project at 3901 Gomer Court. The amendment request is due to technology upgrades afforded by the Fluence Gridstack battery storage system compared to the previous containerized design. Overall, the basics of the site and general functionality of the system are unchanged.

The benefits of the system are as follows:

- Improved safety and emergency operation systems due to smaller battery containers (24 cubes vs 5 large containers previously), each with self-contained HVAC and fire protection systems.
- Fluence Gridstack is UL9540a certified. UL9540A is the industry standard test method for evaluating thermal runaway fire propagation in battery energy storage systems.
- Reduced system fenced area (from 14,817 SF to 10,228 SF) and impervious area (from 3,660 SF to 3,465 SF)
- Reduced system height (from 13' to 9.5')

We are providing the following documentation for review (8 copies each):

- Revised Site Use Plan set dated 11/09/21 (24x36)
- Fluence Operations and Maintenance Manual
- Fluence Gridstack Dimension Specs
- FirePro Xtinguish Solid Aerosol Cut Sheet

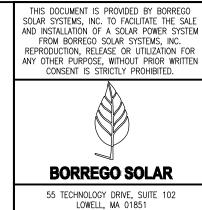
Please feel free to contact me via phone or email at 315-378-9567 or ggibbons@borregosolar.com should you have any questions.

Best,

Greg Gibbons, PE Project Engineer

SITE USE PLANS

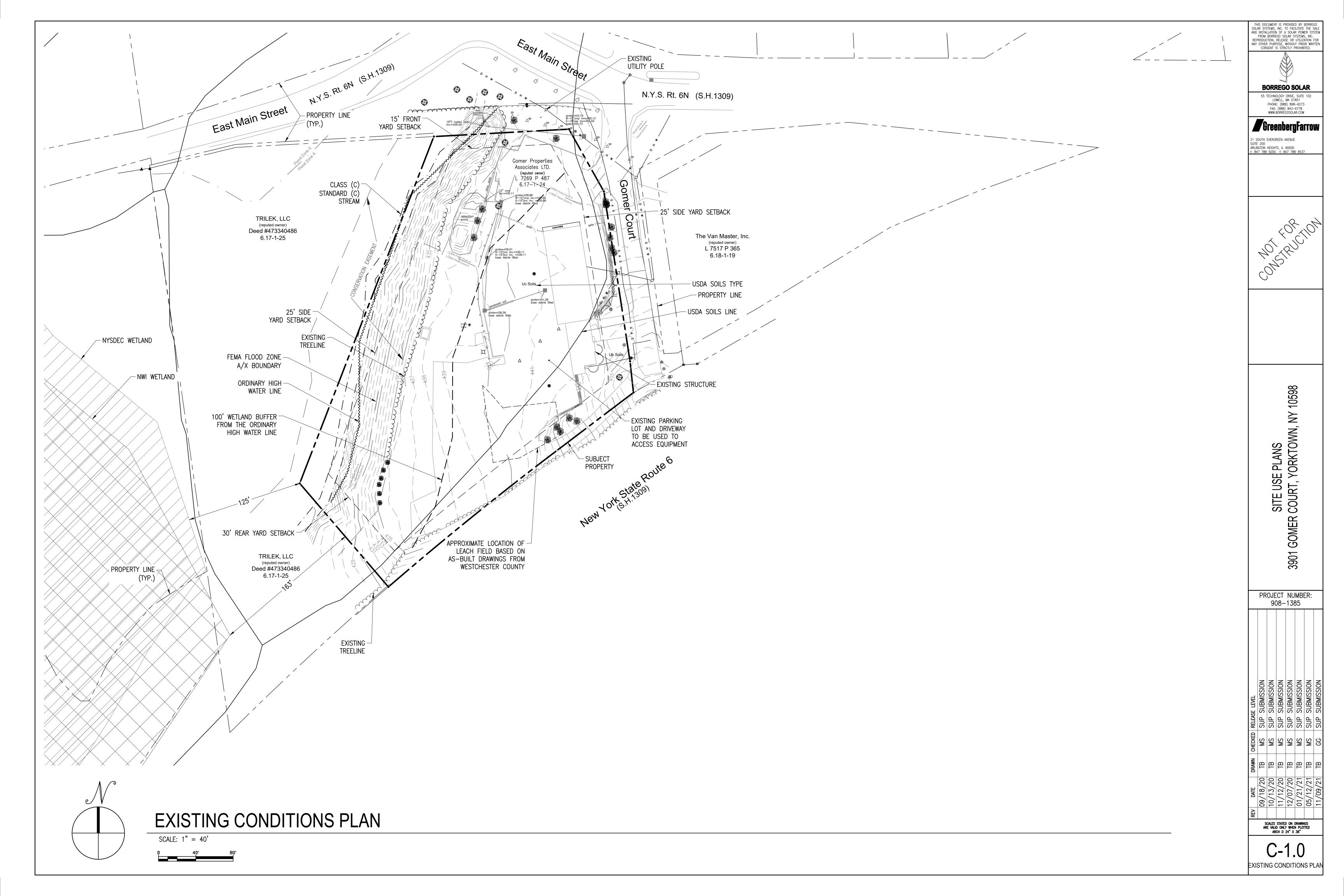
3901 GOMER COURT, YORKTOWN, NY 10598 5000 KW RATED / 15000 KWH ENERGY STORAGE SYSTEM

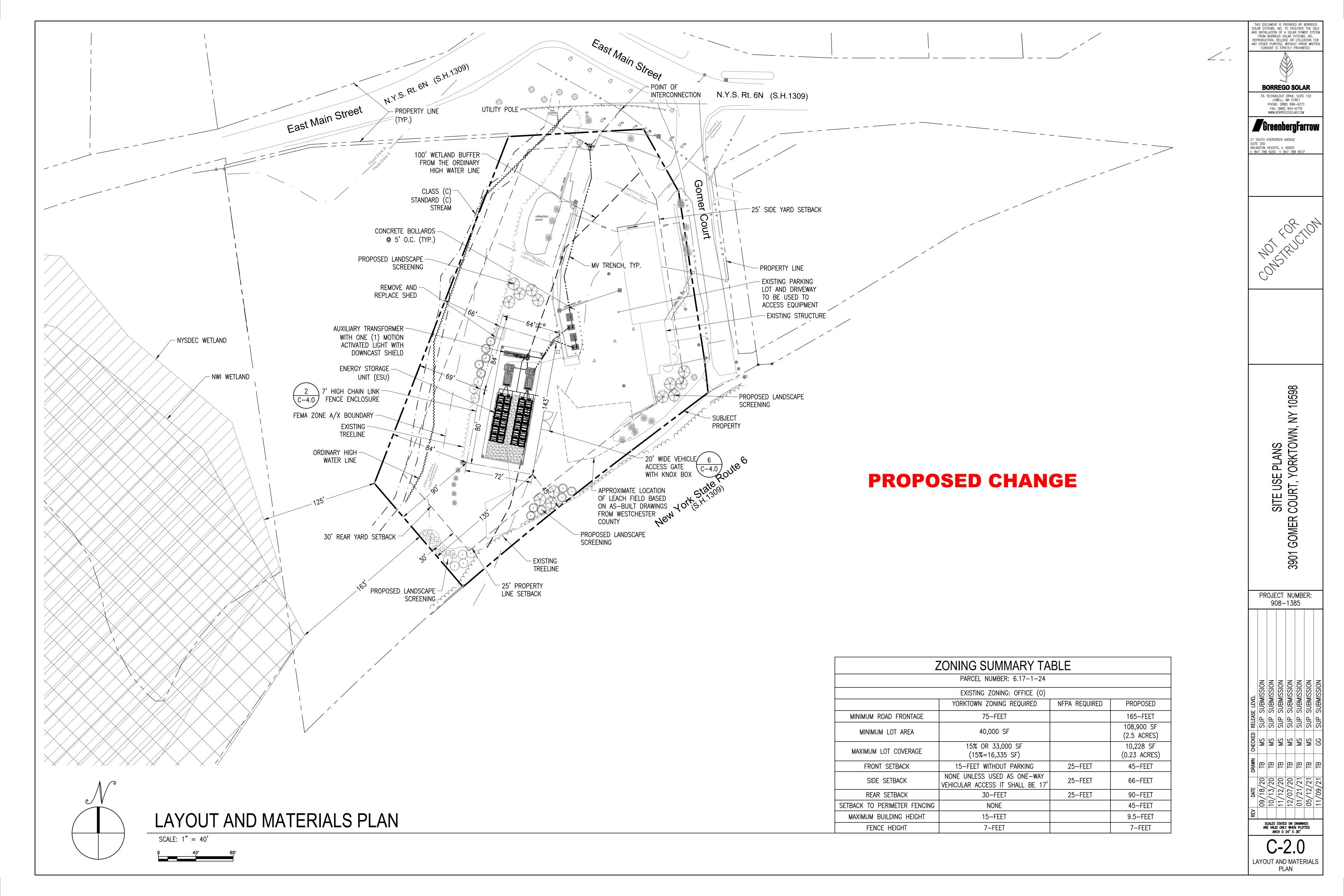


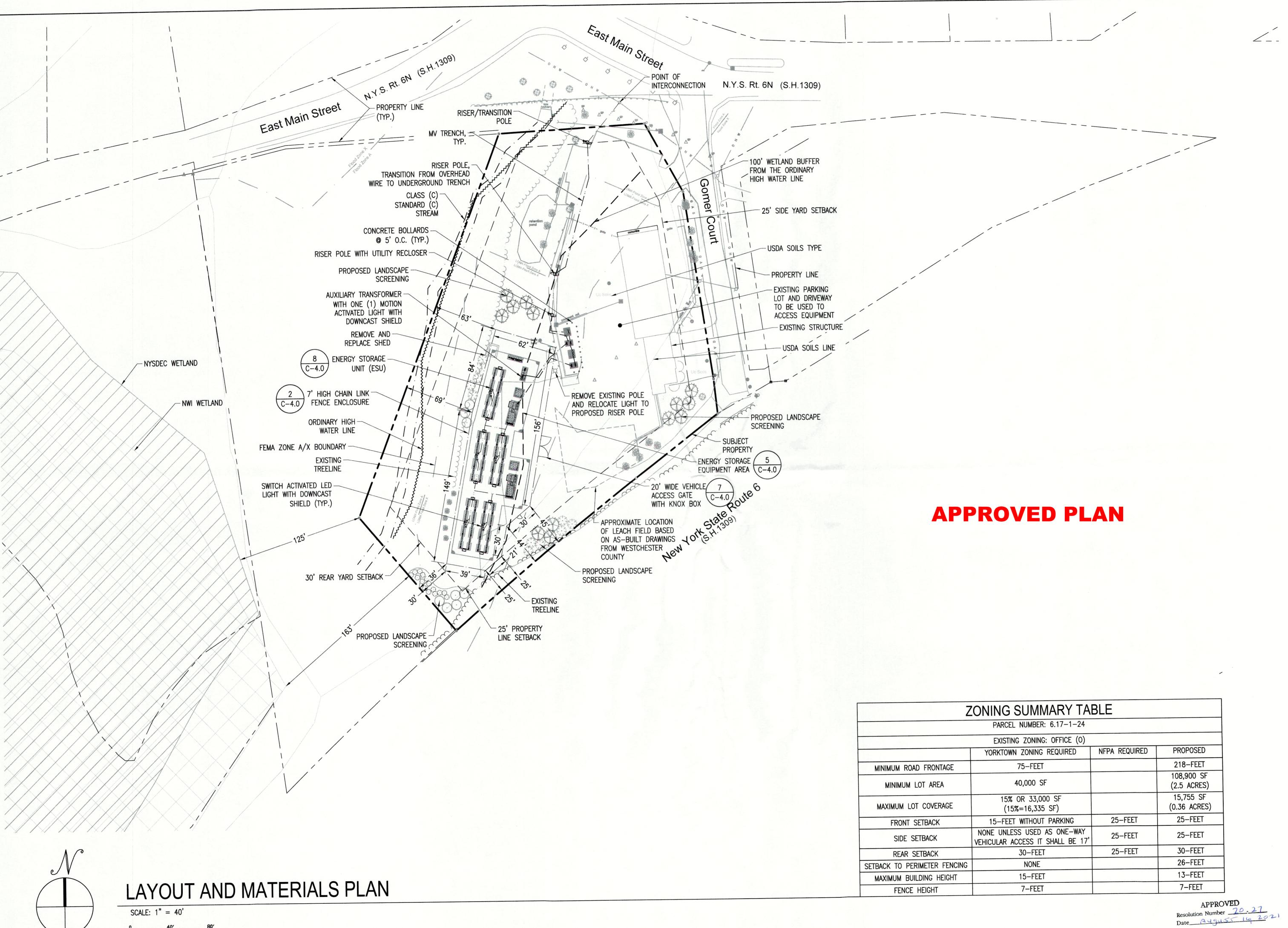
55 TECHNOLOGY DRIVE, SUITE 102 LOWELL, MA 01851 PHONE: (888) 898-6273 FAX: (888) 843-6778 WWW.BORREGOSOLAR.COM

21 SOUTH EVERGREEN AVENUE SUITE 200 ARLINGTON HEIGHTS, IL 60005

GENERAL NOTES	PROJECT SCOPE	LOCATION MAP	Sheet List Table	
 AS CONTAINED HEREIN, "CONTRACTOR" IS ASSUMED TO BE THE EPC PROVIDER HIRED BY THE SYSTEM/PROJECT OWNER. WHEN THERE IS A CONFLICT BETWEEN THESE GENERAL NOTES AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING: LOCAL BUILDING CODE, LOCAL ELECTRICAL CODE, ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK AND THOSE CODES AND STANDARDS LISTED IN THESE DRAWINGS. THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING A CONSTRUCTION LEVEL DESIGN AND ASSOCIATED DRAWINGS AND DETAILS. COORDINATE THESE DRAWINGS WITH SPECIFICATIONS AND MANUFACTURER INSTALLATION AND OPERATION MANUALS. UNLESS OTHERWISE NOTED, THE DESIGN REPRESENTED ON THESE PLANS IS BASED ON THE INFORMATION AND CRITERIA LISTED IN THE "BASIS OF DESIGN" SECTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY SUCH INFORMATION IN PREPARATION OF THE CONSTRUCTION DESIGN. THE EXISTING CONDITIONS REPRESENTED ON THESE PLANS ARE BASED ON PUBLICLY AVAILABLE INFORMATION AND THE SITE DISCOVERY SUMMARIZED IN THESE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF SUCH INFORMATION AND SUPPLEMENT WITH ANY ADDITIONAL REQUIRED INFORMATION. UNLESS INDICATED AS EXISTING (E), ALL PROPOSED MATERIALS AND EQUIPMENT SHALL BE CONSIDERED TO BE NEW. 	THIS PROJECT CONSISTS OF THE INSTALLATION OF ENERGY STORAGE EQUIPMENT, PER THE SYSTEM DESCRIPTION, BELOW. THE LITHIUM ION ENERGY STORAGE MODULES WILL BE INSTALLED IN PURPOSE BUILT CONTAINERS (CUBES) WITH INTEGRATED BATTERY MANAGMENT SYSTEM, HEATING, VENTILATION, AIR CONDITIONING UNIT(S), AND FIRE SUPPRESSION SYSTEMS. THE ENERGY STORAGE MODULES WILL BE WIRED IN SERIES AND CONNECTED TO THE POWER CONVERSION SYSTEM, WHICH WILL CONVERT DC TO AC WHILE THE BATTERIES ARE DISCHARGING.	JEFFERSON VALLEY 6	Sheet Number Sheet Title T-1 TITLE PAGE CIVIL C-1.0 EXISTING CONDITIONS PLAN C-2.0 LAYOUT AND MATERIALS PLAN C-2.2 VISUAL ANALYSIS SITE PHOTOS C-2.3 FEMA FLOODZONE COMPARISON C-2.4 CONSERVATION EASEMENT C-3.0 GRADING AND EROSION CONTROL PLAN C-4.0 CIVIL DETAILS C-5.0 DECOMMISSIONING PLAN C-6.0 LANDSCAPE PLAN ELECTRICAL E-3.3 AC THREE LINE DIAGRAM E-6.0 PLACARDS E-7.0 DATA SHEETS	10598
9. ALL EQUIPMENT AND COMPONENTS SHALL BE MOUNTED IN COMPLIANCE WITH THE MANUFACTURER'S REQUIREMENTS, CONSTRUCTION DETAILS, AND/OR PRUDENT INDUSTRY STANDARDS.	ENERGY STORAGE SYSTEM DESCRIPTION SYSTEM POWER CAPACITY 5000 KWAC SYSTEM ENERGY CAPACITY 15000 KWH POWER CONVERSION SYSTEM INFORMATION (2) POWER ELECTRONICS FREEMAQ PCSK FP3350K LIMITED TO 2500KW TRANSFORMER CAPACITY (2) 2500 KVA AGGREGATE NAMEPLATE CAPACITY 5000 KW MAXIMUM EXPORT TO UTILITY 5000 KW	AERIAL VIEW Donald J. Trump State Park Valley Mall Valley Mall		SITE USE PLANS SITE USE PLANS Building 1382 SITE USE PLANS S901 GOMER COURT, YORKTOWN, NY
APPLICABLE CODES AND STANDARDS	PROJECT DIRECTORY	GENERAL ABBREVIATIONS	BASIS OF DESIGN	
2017 NATIONAL ELECTRICAL CODE 2020 BUILDING CODE OF NEW YORK STATE NFPA 855 — STANDARD FOR THE INSTALLATION OF STATIONARY ENERGY STORAGE SYSTEMS UL—1741 — INVERTERS, COMBINER BOXES UL—1642 — STANDARD FOR LITHIUM BATTERIES UL—1973 — STANDARD FOR BATTERIES FOR USE IN LIGHT ELECTRIC RAIL (LER) APPLICATIONS AND STATIONARY APPLICATIONS UL—9540 — STANDARD FOR ENERGY STORAGE SYSTEM AND EQUIPMENT	LAND OWNER / HOST GOMER PROPERTIES ASSOCIATES LTD. ANN MARIE DRING 3901 GOMER COURT YORKTOWN, NY 10598 AUTHORITY HAVING JURISDICTION TOWN OF YORKTOWN 363 UNDERHILL AVENUE YORKTOWN HEIGHTS, NY 10598 UTILITY CON EDISON CIVIL ENGINEER FIRM: GREENBERGFARROW CONTACT: KERI WILLIAMS PHONE: (781)—929—1651 ELECTRICAL ENGINEER FIRM: BORREGO SOLAR SYSTEMS, INC. CONTACT: AHARON WRIGHT PHONE: (978)—221—3081 DESIGN ENGINEER FIRM: BORREGO SOLAR SYSTEMS, INC. CONTACT: CALEB LETOURNEAU PHONE: (978)—735—1606	(E) EXISTING AHJ AUTHORITY HAVING JURISDICTION AL ALUMINUM APPROX APPROXIMATE ARY ARRAY BLDG BUILDING BSS BORREGO SOLAR SYSTEM CL CENTERLINE DAS DATA ACQUISITION SYSTEM DIA DIAMETER DO DITTO EW EAST—WEST FBO FURNISHED BY OTHERS FF FORWARD FACING GALV GALVANIZED HDG HOT DIP GALVANIZED TD INSIDE DIAMETER UNSTALLED TO BE DETERMINE PV PHOTOVOLTAIC POLY VINYL CHLORIDE SS STAINLESS STEEL SSS SOLAR SUPPORT STRUCTURE FIND TO BE DETERMINED TYP TYPICAL TYP TYP TYPICAL TYP TYPICAL TYP TYPICAL TYP TYPICAL TYP TYPICAL TYP TYP	BOUNDARY & TOPOGRAPHIC SURVEY: LAWSON SURVEYING & MAPPING JUNE 2020 WETLAND STREAM AND DELINEATION REPORT: SHUMAKER CONSULTING ENGINEERING & LAND SURVEYING, D.P.C MARCH 2019 GEOTECHNICAL REPORT: GZA GEOENVIRONMENTAL OF NEW YORK APRIL 2021 APPLICABLE BUILDING CODE: 2020 BUILDING CODE OF NEW YORK STATE WIND CRITERIA: EXPOSURE CATEGORY: C WIND SPEED (V): 105 MPH TOPOGRAPHIC FACTOR (K _{zt}): 1.0 SNOW CRITERIA: GROUND SNOW (P _g): 30 PSF MIN. FLAT ROOF SNOW (P _{f_min}): 0 PSI EXPOSURE FACTOR: (C _e): 1.0 SEISMIC CRITERIA SITE CLASS: D S _S : 0.269 S _T : 0.060 S _{DS} : 0.284 S _{D1} : 0.096	REV DATE DRAWN CHECKED RELEASE LEVEL 09/18/20 TB MS SUP SUBMISSION 10/13/20 TB MS SUP SUBMISSION 11/12/20 TB MS SUP SUBMISSION 12/07/20 TB MS SUP SUBMISSION 01/21/21 TB MS SUP SUBMISSION 11/09/21 TB MS SUP SUBMISSION 11/09/21 TB MS SUP SUBMISSION 11/09/21 TB GG SUP SUBMISSION







THIS DOCUMENT IS PROVIDED BY PV ENGINEERS, P.C. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

Engineers

55 TECHNOLOGY DRIVE SHITE 102

55 TECHNOLOGY DRIVE, SUITE 102 LOWELL, MA 01851 PHONE: (888) 898-6273 FAX: (888) 843-6778

GreenbergFarrow

21 SOUTH EVERGREEN AVENUE
SUITE 200
ARLINGTON HEIGHTS, IL 60005
t: 847 788 9200 f: 847 788 9537

NOT RUCION



SITE USE PLANS 3901 GOMER COURT, YORKTOWN, NY 10598

SUP SUBMISSION

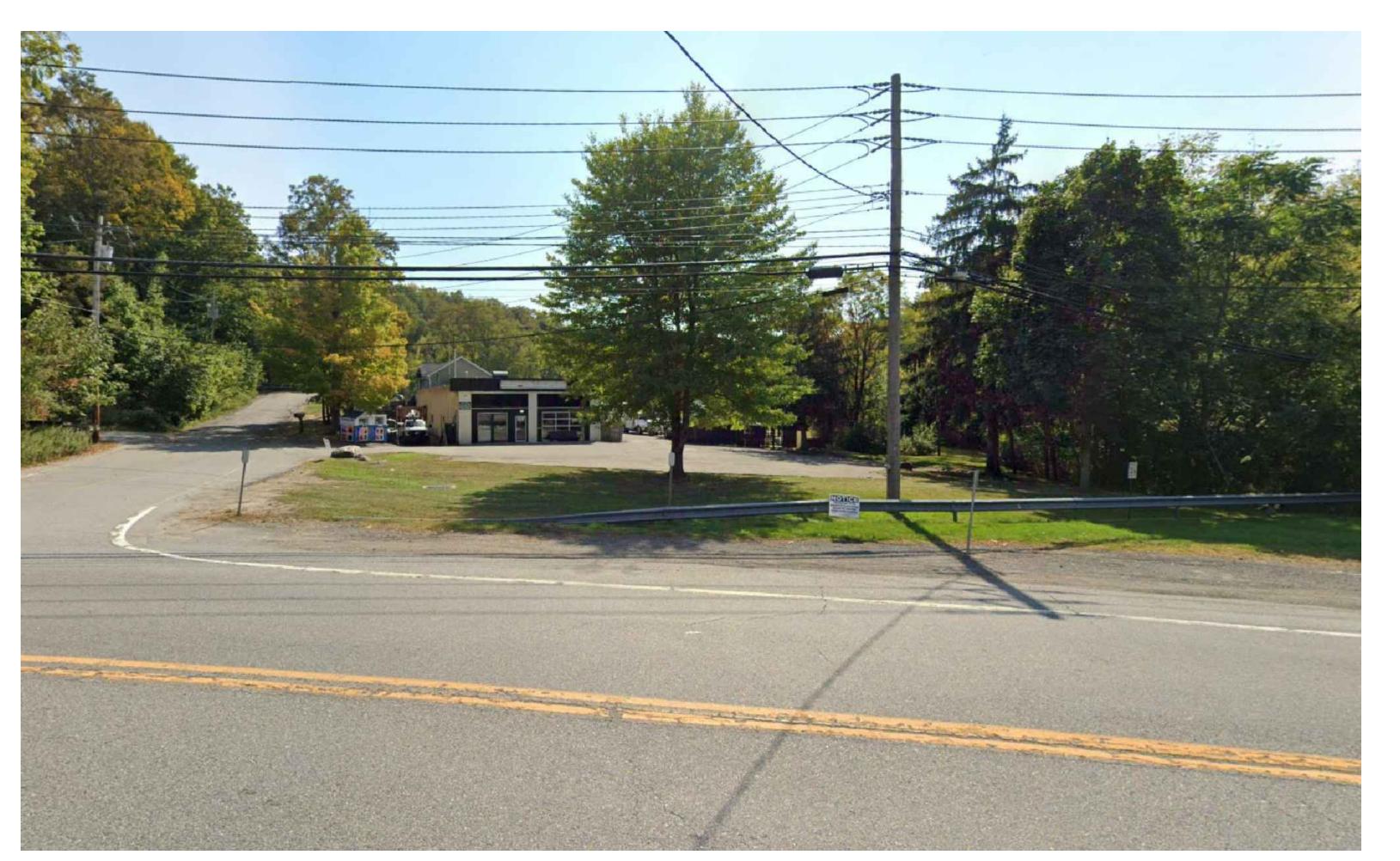
/16/20 TB MS /18/20 TB MS /13/20 TB MS /12/20 TB MS /07/20 TB MS /21/21 TB MS

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

C-2.0
LAYOUT AND MATERIALS
PLAN



VIEW 1 PHOTO



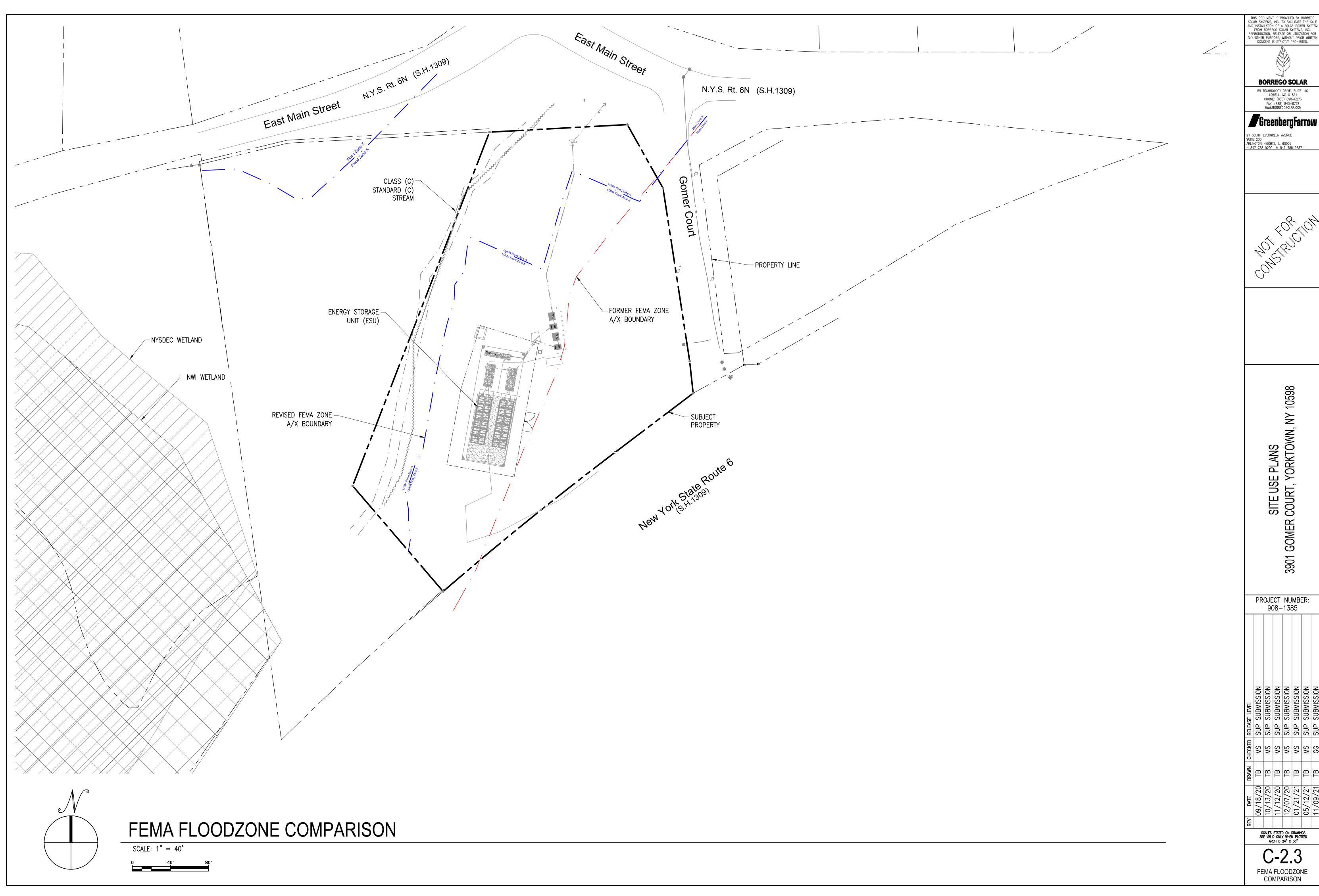
VIEW 2 PHOTO

	THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE OR UTILIZATION FOR
	ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.
	BORREGO SOLAR
	55 TECHNOLOGY DRIVE, SUITE 102 LOWELL, MA 01851 PHONE: (888) 898-6273 FAX: (888) 843-6778 WWW.BORREGOSOLAR.COM
,	GreenbergFarrow
1	21 SOUTH EVERGREEN AVENUE SUITE 200 ARLINGTON HEIGHTS, IL 60005 :: 847 788 9200 f: 847 788 9537
	A 20
	40,20
	Mostle and the second
	0,
_	
	8
	I, NY 10598
	∠ – –
	'LANS RKTOWN
	E PLAN YORKT

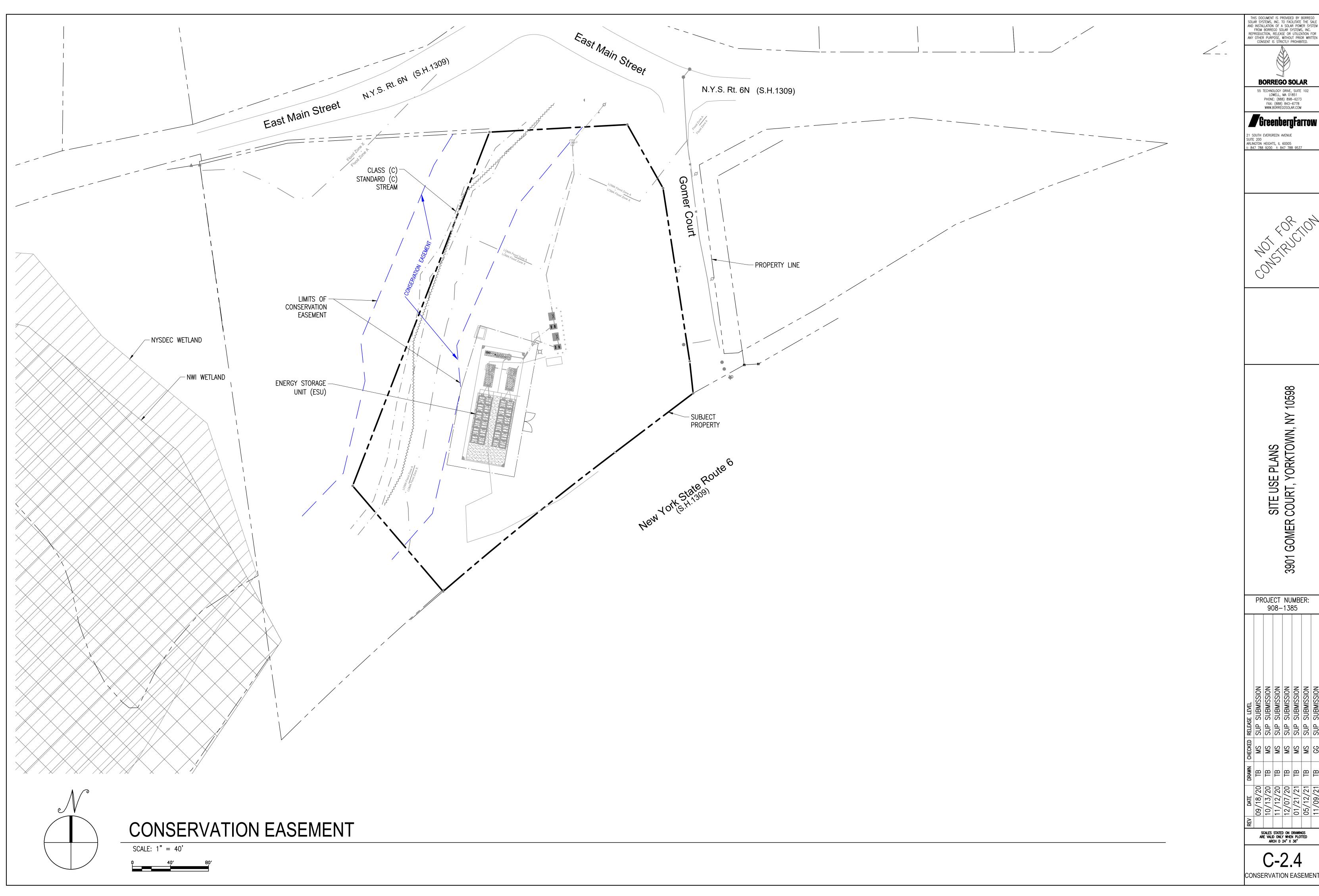
SITE USE PLANS
SITE USE PLANS
3901 GOMER COURT, YORKTOV

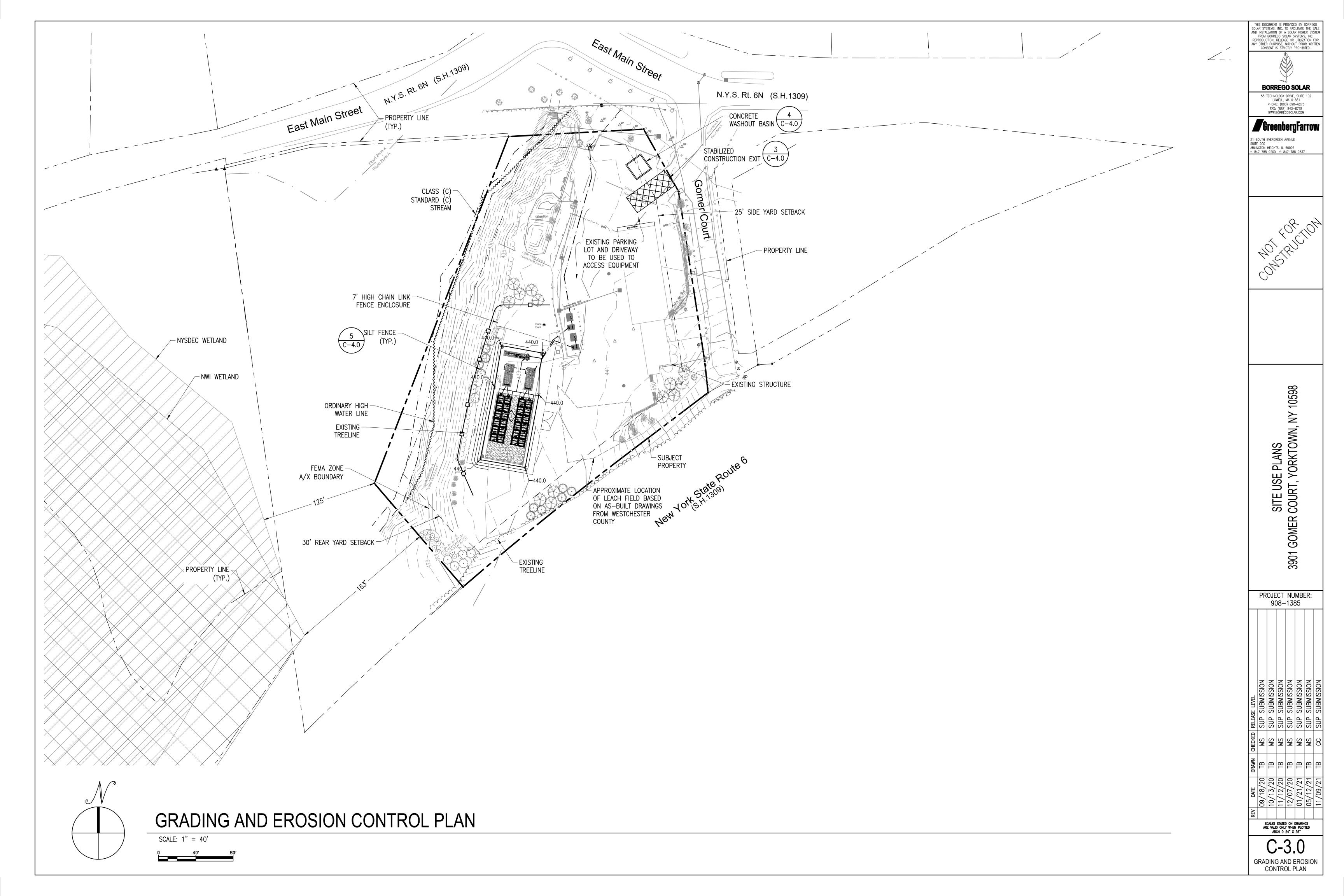
	908–1385						
DRAWN CHECKED RELEASE LEVEL	SUP SUBMISSION						
CHECKED	MS	MS	MS	MS	MS	MS	GG
DRAWN	TB						
DATE	09/18/20	10/13/20	11/12/20	12/07/20	01/21/21	05/12/21	11/09/21
E							

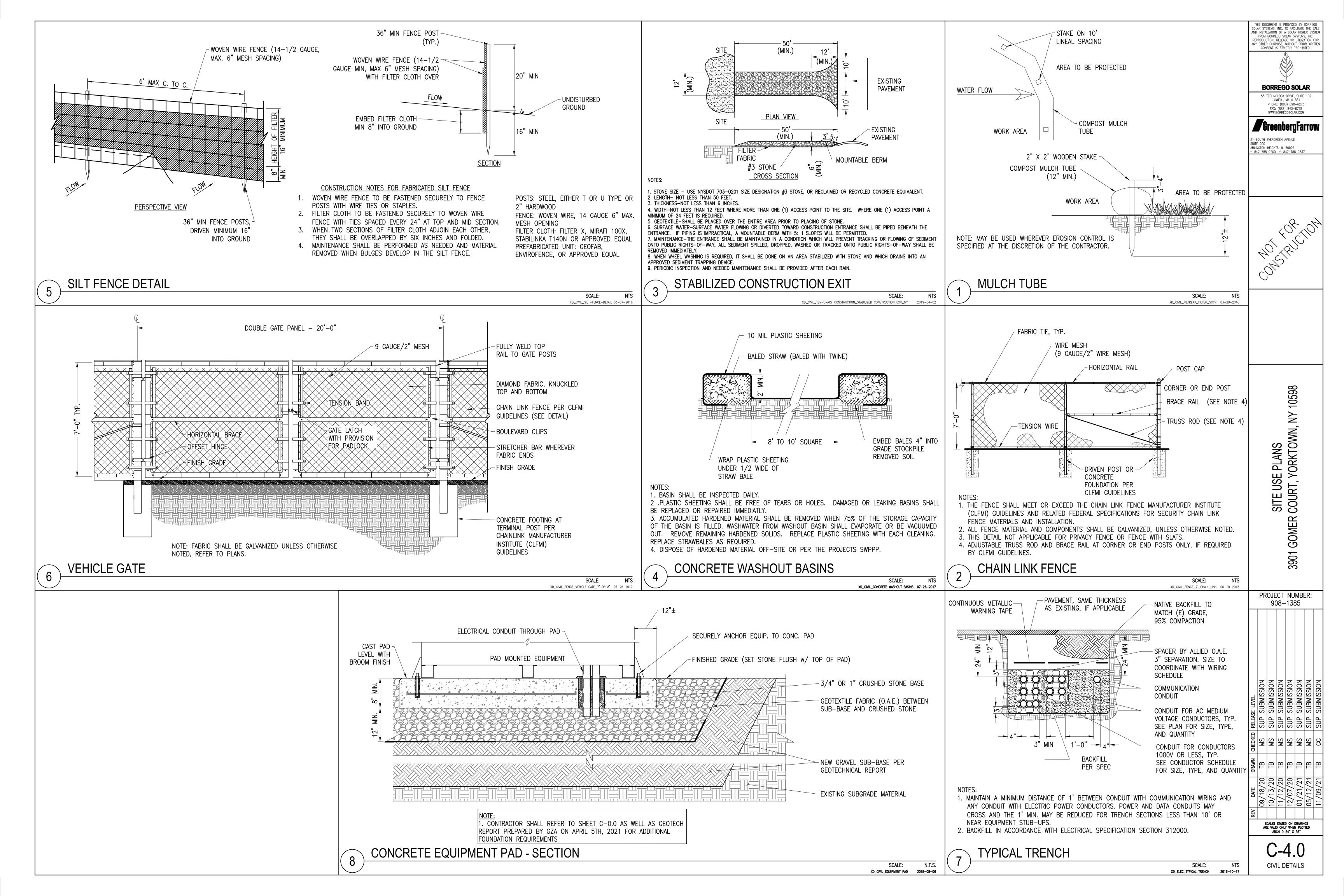
C-2.2
VISUAL ANALYSIS SITE PHOTOS

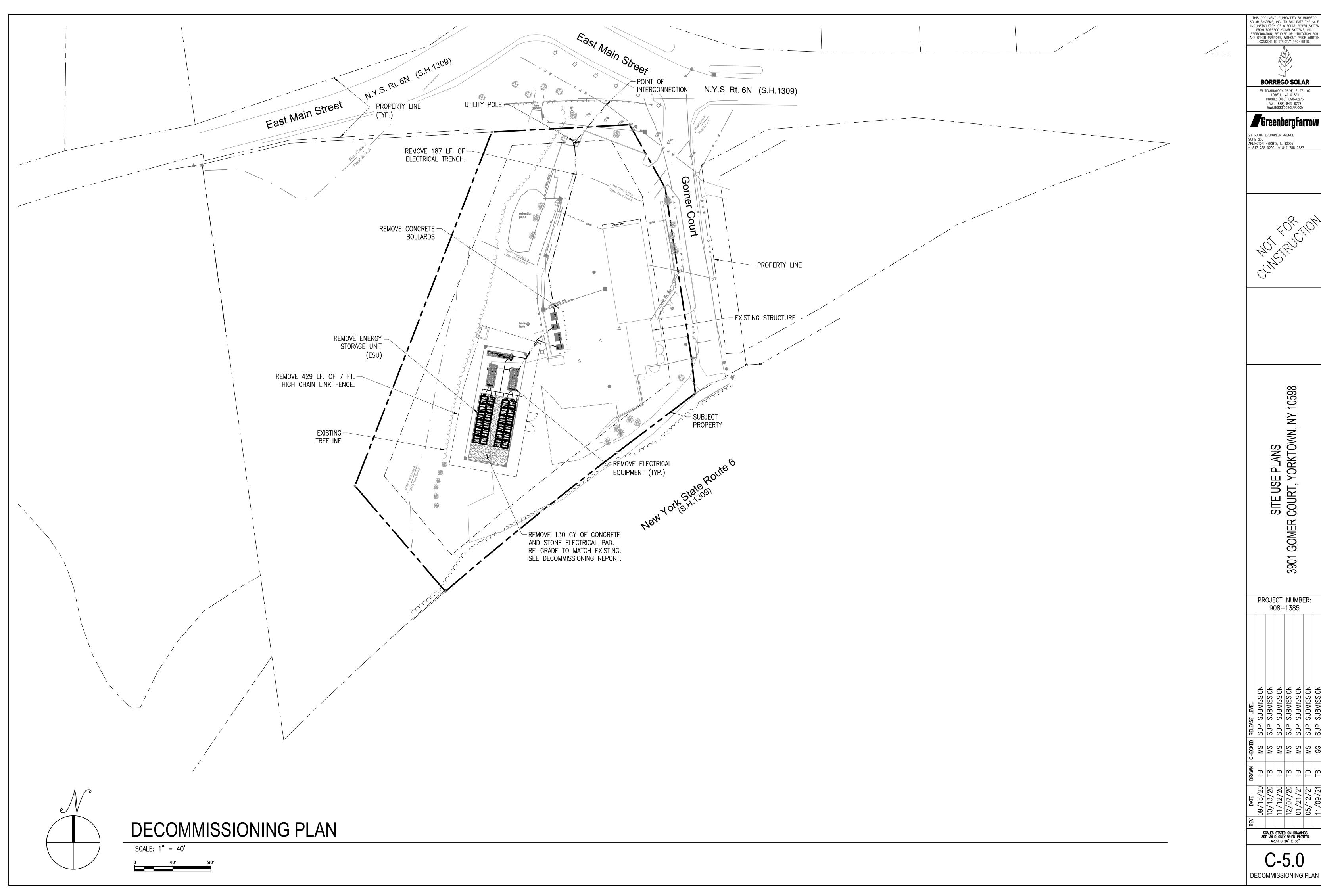


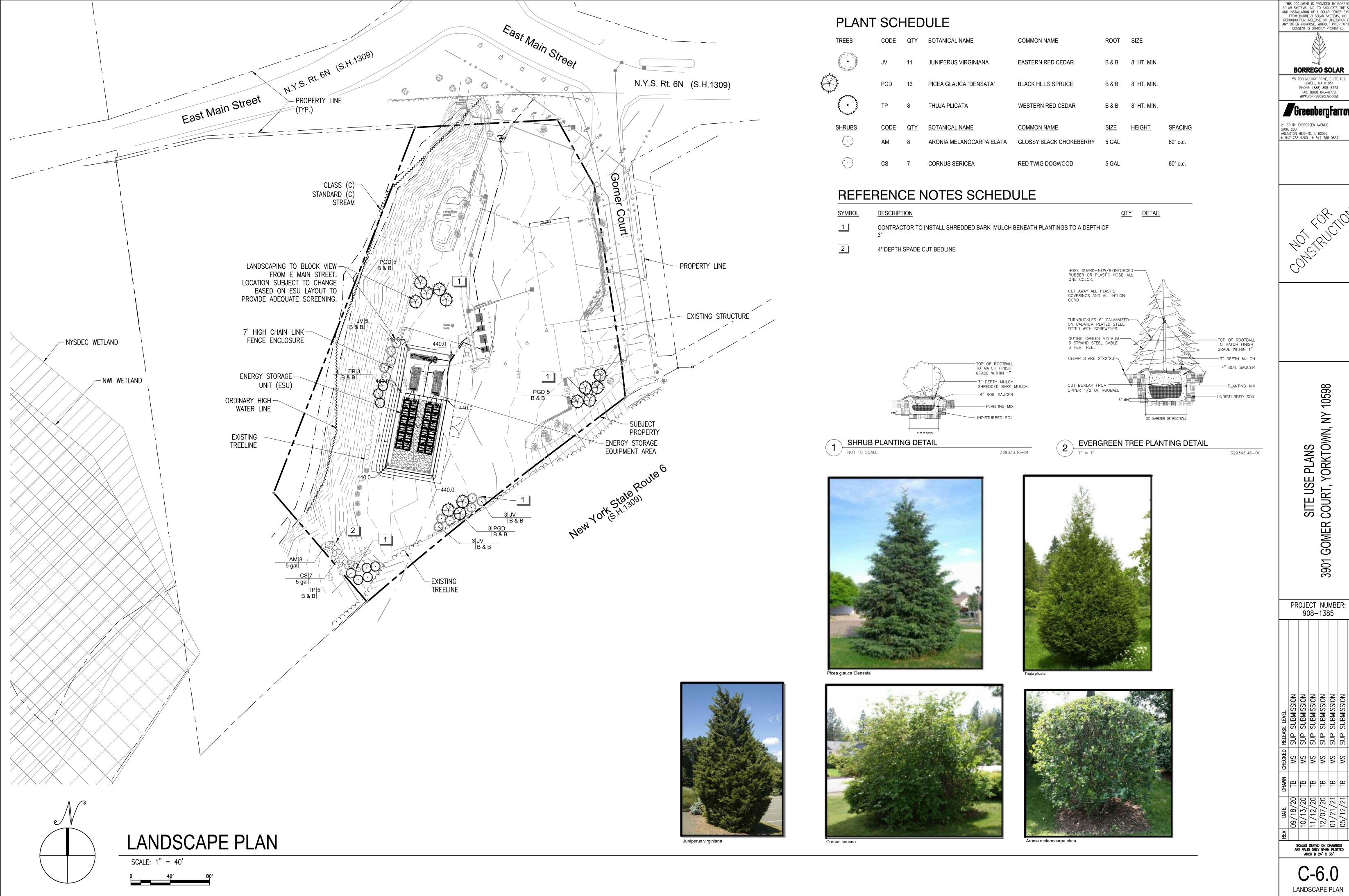
PROJECT NUMBER: 908-1385









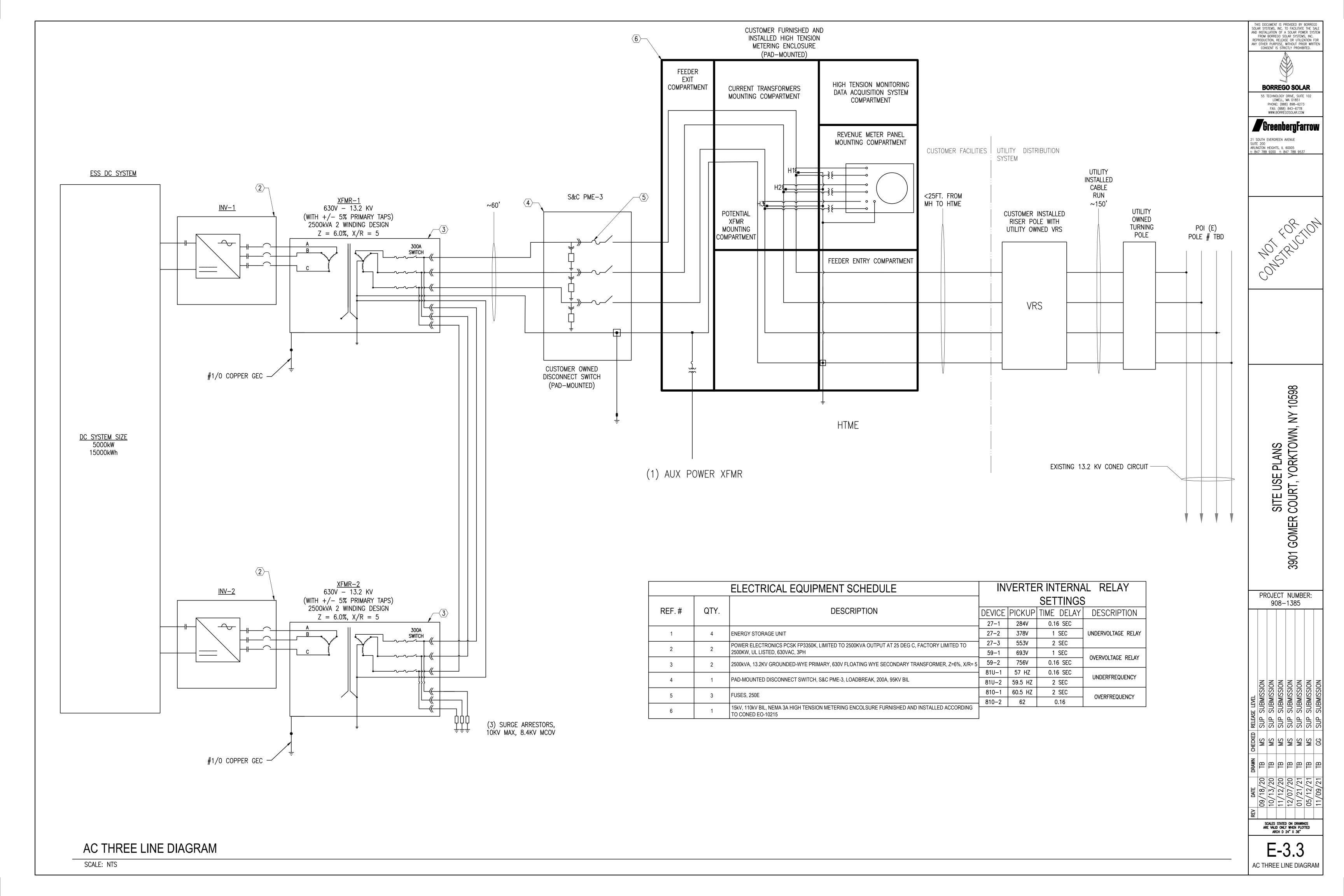


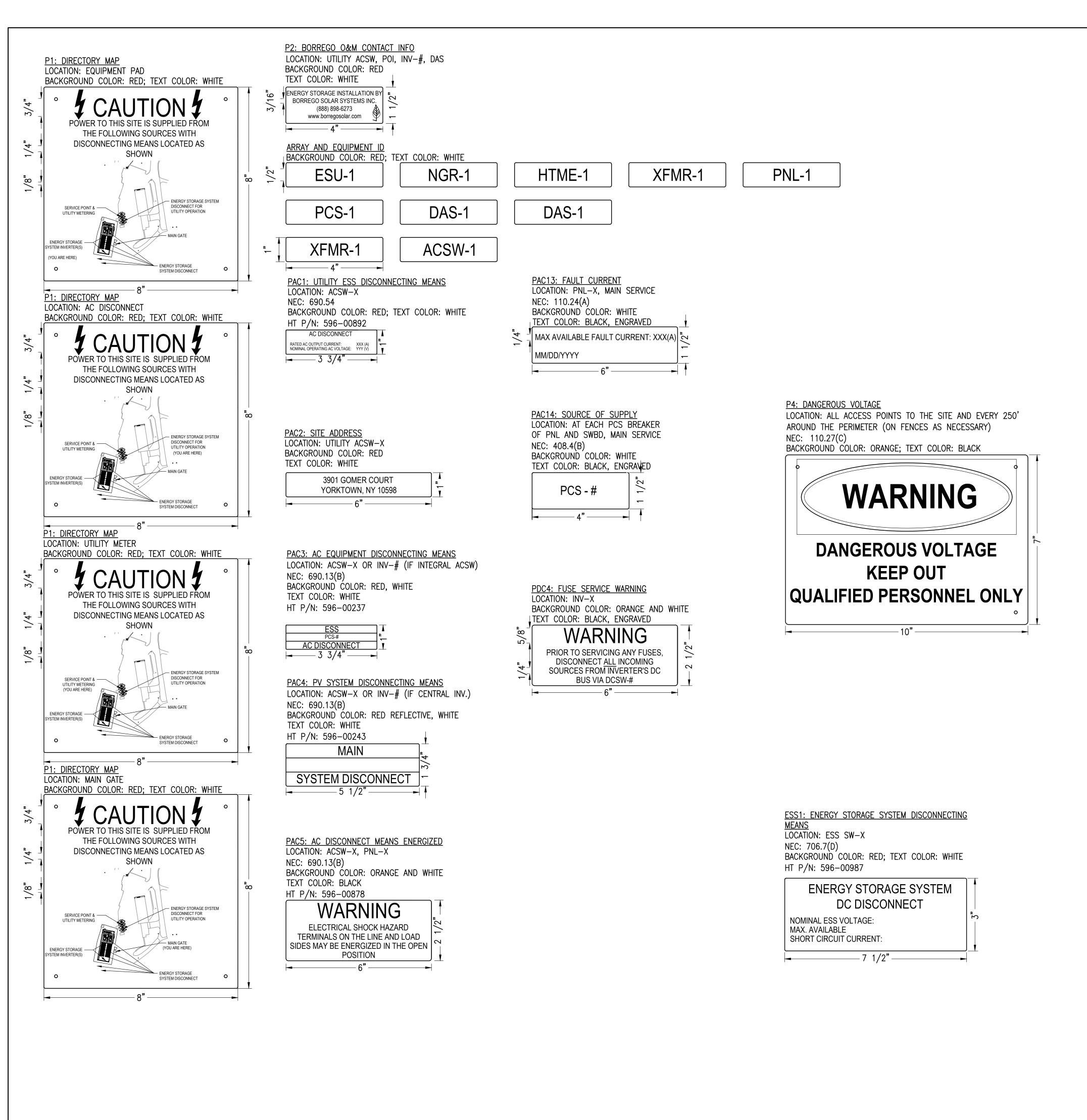
THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED. **BORREGO SOLAR** 55 TECHNOLOGY DRIVE, SUITE 102 LOWELL, MA 01851 PHONE: (888) 898-6273 FAX: (888) 843-6778 WWW.BORREGOSOLAR.COM

21 SOUTH EVERGREEN AVENUE SUITE 200 ARLINGTON HEIGHTS, IL 60005 t: 847 788 9200 f: 847 788 9537

10598 PLANS DRKTOWN, NY 1 SITE USE P 3901 GOMER COURT, YO

C-6.0





SHEET NOTES

GENERAL PLACARD NOTES:

NOT ALL PLACARDS DESCRIBED IN THESE NOTES MAY APPLY TO THIS PROJECT.
 FLECTRICAL SUBCONTRACTOR SHALL PROVIDE ALL PLACARDS AS REQUIRED BY THE N

2. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE ALL PLACARDS AS REQUIRED BY THE NEC, LOCAL FIRE DEPARTMENT, THE AUTHORITY HAVING JURISDICTION, AND LOCAL UTILITY REQUIREMENTS. PLACARDS IN ADDITION TO THOSE SHOWN HERE MAY BE REQUIRED BY THE NEC AND ARE THE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR.

3. PLACARDS SHALL USE ARIAL OR SIMILAR FONT, NON-BOLD.

4. FONT SIZES SHALL BE THE MINIMUM SHOWN IN THESE DRAWINGS.

. PLACARDS SHALL HAVE LETTERING IN CAPITAL LETTERS.

6. PLACARDS SHALL BE WEATHER RESISTANT AND SUITABLE FOR THE ENVIRONMENT AND COMPLY WITH ANSI Z535.4—2011.

7. PLACARDS SHALL BE ADHERED WHEN POSSIBLE AND MEET WITH UL969 STANDARDS. IF MECHANICALLY AFFIXED TO EQUIPMENT, USE RIVETS OR SCREWS. SEALANTS AND GASKETED HARDWARE SHALL BE USED TO MAINTAIN EQUIPMENT LISTINGS WHERE REQUIRED. NEMA 4R EQUIPMENT SHALL NOT BE DRILLED.

8. SUBMITTALS REQUIRED FOR PLACARDS AND FOR ADHESIVES USED TO SECURE PLACARDS TO EQUIPMENT.

INSIDE FROM THE EDGE.

EQUIPMENT ID PLACARDS:

1. SUBCONTRACTOR SHALL LABEL ALL ARRAYS, PULL BOXES, JUNCTION BOXES, COMBINER BOXES, DC SAFETY SWITCHES, CIRCUIT BREAKER SAFETY SWITCHES, MULTIPLE DISCONNECT SAFETY SWITCHES, DC CONTACTOR DISCONNECTS, REMOTE PV TIES, BI—POLAR ARRAY COMBINERS, INVERTERS, AC SAFETY SWITCHES, TRANSFORMERS, PANELBOARDS, CIRCUIT BREAKERS, SWITCHGEAR, RECTIFIERS, DATA MONITORING ENCLOSURES, AND METERING CABINETS. A PARTIAL LIST OF PLACARDS IS SHOWN HERE.

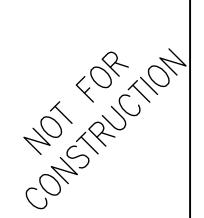
9. PLACARDS WITH MOUNTING HOLES SHOULD BE 1/8" THICKNESS AND HOLES SHOULD BE 1/2"

 EQUIPMENT ID PLACARDS — THE FIRST TYPE OF EACH REQUIRED EQUIPMENT ID PLACARD IS SHOWN HERE. ELECTRICAL SUBCONTRACTOR SHALL GENERATE PLACARDS FOR EACH PIECE OF EQUIPMENT AND NUMBER ALL EQUIPMENT PER THE NAMING AND NUMBERING CONVENTION DEFINED IN THESE PLANS. THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.



FAX: (888) 843-6778
WWW.BORREGOSOLAR.COM

21 SOUTH EVERGREEN AVENUE
SUITE 200
ARLINGTON HEIGHTS, IL 60005
t: 847 788 9200 f: 847 788 9537



V17

SITE USE PLANS 3901 GOMER COURT, YORKTOWN, NY 10598

	PROJECT NUMBER: 908-1385						
Drawn Checked Release Level	SUP SUBMISSION	SUP SUBMISSION	SUP SUBMISSION	SUP SUBMISSION	SUP SUBMISSION	SUP SUBMISSION	
CHECKED	MS	MS	MS	MS	MS	MS	•
DRAWN	TB	TB	TB	TB	TB	TB	
DATE	09/18/20	10/13/20	11/12/20	12/07/20	01/21/21	05/12/21	11
Æ							
	S AR	e vali	d onl'	O ON 1 Y WHEI 24" X	DRAWIN N PLOT 36"	gs Ited	

E-6.0

PLACARDS

FREEMAQ PCSK FREEMAQ MULTI PCSK

UTILITY SCALE BATTERY INVERTER

UP TO 3 INDEPENDENT BESS INPUTS

TECHNICAL CHARACTERISTICS

PROVEN HARDWARE AND ROBUST OUTDOOR DESIGN FEATURED WITH THE LATEST CONTROL

The Freemaq PCSK is a modular solution from 1700 kW to 3800 kW with configurable DC and AC voltages making it compatible with all battery technology and manufacturers. Power Electronics is a proven partner in the solar and energy storage market. The PCSK has been designed to be the lowest LCOE solution in the market for storage applications. The Power Electronics Freemaq PCSK offers proven hardware to meet storage and grid support challenges. The energy production industry is embracing renewable energy sources. However, high penetration creates power transmission instability challenges, thus Grid Operators require stringent dynamic and static grid support features for solar inverters and Power Conversion Systems (PCS). The MULTI PCSK can support two or three independent

battery systems and optimize the storage facility. The converters can perform grid support functions such as: Peak Shaving, Ramp Rate Control, Frequency Regulation, Load Leveling and Voltage Regulation, controlled by a Power Plant Controller or SCADA. The converters stations are turnkey solutions ready for connection to the battery container and MV power distribution wiring. Units are designed for concrete pads or piers, open skids or integrated into full container solutions.



Making a brighter future possible

Some of the benefits gained

Reduction in core losses

Improved payback on

Reduction in footprint

Reduced environmental

Envirotran solar transformer,

investment

from this custom rating include:

As a result of the increasing number of states that are adopting aggressive renewable and alternative energy portfolios, the solar energy market is growing nearly doubling year over year. Eaton, a key innovator and supplier in this expanding market, is proud to offer Cooper Power™ series Envirotran[™] transformers specifically designed for solar photovoltaic mediumvoltage applications. Eaton is working with top solar photovoltaic developers, integrators and inverter manufacturers to evolve the industry and change the

way we distribute power.

In accordance with this progressive stance, every Cooper Power series Envirotran solar transformer is filled with non-toxic, biodegradable Envirotemp™ FR3™ dielectric fluid made from renewable seed oils. On top of its biodegradability, Envirotemp FR3 • Improved fire safety fluid substantially extends the

life of the transformer insulation, saving valuable resources. What better way to distribute green power than to use a green Finally, when it comes time transformer? In fact, delaying for decommissioning of your conversion to Envirotran transformers places the burden virtually all materials, from of today's environmental issues the durable core and cabinet onto tomorrow's generations. Eaton can help you create a

on site-specific characteristics

site altitude, solar profile and

including temperature profile,

steel to the biodegradable Envirotemp FR3 fluid, can be easily and economically recycled customized transformer based Envirotran solar transformers, when evaluated on total ownership cost (TOC), can save you money on losses and maintenance. For example, the table below shows the savings you could experience

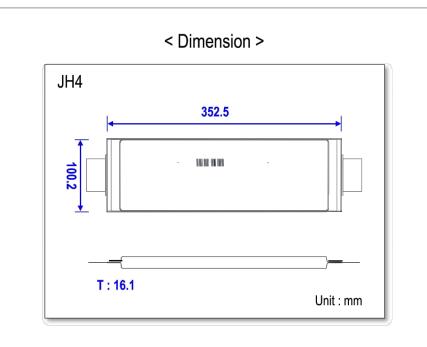
by allowing Eaton to site-optimize the transformer design.

Rating	No load	Load	No load loss 0	Load loss	Price	Total ownership cost
1000 kVA	1600 W	8280 W	\$15,720	\$3530 2	\$32,000	\$51,250
Optimized	1250 W	6690 W	\$12,280	\$5070 ❸	\$27,000	\$44,350
						14% savings

 Based on 20 years, 5% interest, 9c/kWh. 2 21% average loading. 3 28% average loading. Note: Values above for illustrative purposes only. Actual values will depend on many factors not

JH4 Cell Information

ltem	Unit	JH4
Nominal Capacity	Ah	72.5
Nominal Energy	Wh	266
Nominal Voltage	V	3.67
Energy Density	Wh/L	468
Specific Energy	Wh/kg	226
Voltage Range	V	3.0 ~ 4.2
Storage Temperature (for shipping state)	°C	-30 ~ 60
Weight	g	1,175
Volume	mL	569
Dimension (W/L/T)	mm	100.2 / 352.5 / 16.1
Observatory	(+)	NMC
Chemistry	(-)	Graphite





TBD

FREEMAQ PCSK & MULTI PCSK 69

FREEMAQ MULTI PCSK 630V

		FRAME 1	FRA	ME 2	
NUMBER OF MODULES		4		5	
REFERENCES		FP2235K2	FP3350K2	FP3350K3	
AC	AC Output Power (kVA/kW) @50°C [1]	2235	33	50	
	AC Output Power (kVA/kW) @40°C [1]	2310	34	65	
	Max. AC Output Current (A) @50°C	2047	30	70	
	Max. AC Output Current (A) @40°C	2117	31	75	
	Operating Grid Voltage (VAC)		630V ±10%		
	Operating Grid Frequency (Hz)		50/60 Hz		
	Current Harmonic Distortion (THDi)		< 3% per IEEE519		
	Power Factor (cosine phi)[2]		0.5 leading0.5 lagging		
	Reactive power compensation		Four quadrant operation		
DC	DC Voltage Range (full power)		891V-1310V		
	Maximum DC voltage		1500V		
	DC Voltage Ripple		< 3%		
	Max. DC continuous current (A)	2646	39	69	
	Max. DC shortcircuit current (A)		180kA / 5ms		
	Battery Technology	All type of batteries (BMS required)		red)	
	Number of separate DC inputs	2	2	3	
EFFICIENCY & AUX. SUPPLY	Efficiency (Max) (η)	98.79%	98.8	85%	
	Euroeta (η)	98.42%	98.	59%	
	Max. Power Consumption (kVA)	8	1	0	
CABINET	Dimensions [WxDxH] (ft)		12 x 7 x 7		
	Dimensions [WxDxH] (m)		3.7 x 2.2 x 2.2		
	Weight (lbs)	12125	126	577	
	Weight (kg)	5500	57	50	
	Type of ventilation		Forced air cooling		
ENVIROMENT	Degree of protection		NEMA 3R / IP55		
	Permissible Ambient Temperature	-35°C to +	60°C, >50°C / Active Power der	ating (>50°C)	
	Relative Humidity		4% to 100% non condensing	J	
	Max. Altitude (above sea level)	2000m	n / >2000m power derating (Ma	x. 4000m)	
	Noise level [3]		< 79 dBA		
CONTROL INTERFACE	Communication protocol		Modbus TCP		
	Power Plant Controller	Option	al. Third party SCADA systems	supported	
	Keyed ON/OFF switch	Standard			
PROTECTIONS	Ground Fault Protection	Insulation monitoring device			
	Humidity control		Active Heating		
	General AC Protection & Disconn.	Circuit Breaker			
	General DC Protection & Disconn.		DC switch [4]		
	Overvoltage Protection		AC and DC protection (type 2	2)	
CERTIFICATIONS	Safety	UL1741, CS	SA 22.2 No.107.1-16, IEC62109-	-1, IEC62109-2	
	Utility interconnect [5]	UL 1	741 SA - Feb. 2018, IEEE 1547.	.1-2005	

Why Envirotran solar transformer?

Powering Business Worldwide

Envirotran solar transformers are friendlier to the environment. While traditional liquid-filled transformers use mineral oil or synthetic oils, Envirotran transformers use the revolutionary, vegetable oil-based, dielectric coolant—Envirotemp FR3 fluid. Envirotemp FR3 fluid is made from soybeans, making it both non-toxic and non-hazardous. Moreover, because Envirotemp FR3 dielectric fluid is petroleum independent, it doubles as a valuable renewable resource with a carbon-neutral footprint.

Quality matters

Choosing Eaton's Cooper Power series reliable and durable Envirotran solar transformer allows you substantial cost savings, delayed capital expenditures and maximized power handling performance. It all starts with the superior performance of Envirotemp FR3 fluid, preserving and protecting the paper insulation found in each coil. This extended insulation life coupled with the non-hazardous properties of Envirotemp FR3 fluid makes the Envirotran solar transformer design an industry leader in quality

High fire point

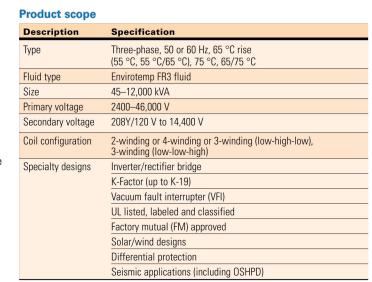
Envirotemp FR3 fluid, which has a fire point above 300 °C, highly reduces the likelihood of a fire within the transformer. In more than 30 years of field experience, no Cooper Power series less-flammable fluid-filled transformer has resulted in a pool fire. Mineral oil, while exhibiting reliable dielectric properties, typically does not provide an adequate margin of fire safety during transformer failure. With a fire point at nearly double (300 °C compared to 155 °C) of mineral oil, switching to Eaton's Cooper Power series Envirotran solar transformer filled with Envirotemp FR3 fluid will greatly minimize the long-term risk associated with catastrophic transformer failures.

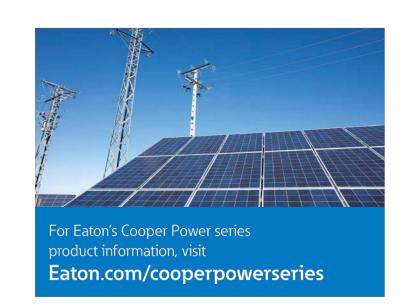
Cleveland, OH 44122

September 2017

Eaton's Power Systems Division 2300 Badger Drive Waukesha, WI 53188 United States Eaton.com/cooperpowerseries

Printed in USA Publication No. PA202009EN / Z19894 Supersedes B210-10040





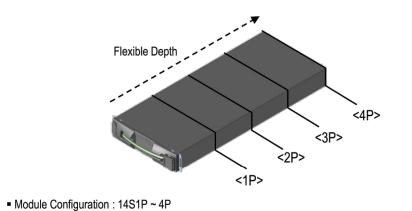
FAT • N

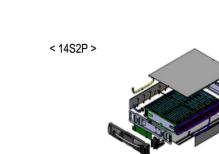
Eaton is a registered trademark. of their respective owners.

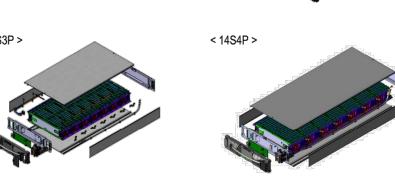
Follow us on social media to get the latest product and support information f **y** in □ &

JH4 – Module Specification

Module Structure







Module Configuration

Specification				
Cell type	JH4			
Configuration	14S1P	14S2P	14S3P	14S4P
Voltage Range (V)	42 ~ 58.8 (nominal : 51.8)			
Capacity (Ah)	72.5	145	217.5	290
Energy (kWh)	3.7	7.4	11.1	14.8
Max Constant Power	Cell : Max 0.5CP Module : TBD			
Dimension (mm, W x H x D)	445 110 x 338.8	445 x 110 x 586.6	445 x 110 x 846.4	445 x 110 x 1100
Weight (kg)	25	43.5	68	85

X All product specifications are tentative and subject to change

LG Chem

SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36"

DATA SHEETS

THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS, INC. TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS, INC. REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE, WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

BORREGO SOLAR

55 TECHNOLOGY DRIVE, SUITE 102 LOWELL, MA 01851

PHONE: (888) 898-6273 FAX: (888) 843-6778 WWW.BORREGOSOLAR.COM

GreenbergFarrow

PLANS DRKTOWN, NY

SITE USE PI

GOMER

PROJECT NUMBER:

908-1385

SOUTH EVERGREEN AVENUE SUITE 200 ARLINGTON HEIGHTS, IL 60005 t: 847 788 9200 f: 847 788 9537

[1] Values at 1.00•Vac nom and cos Φ= 1. Consult Power Electronics for derating curves. [3] Readings taken 1 meter from the back of the unit.

[4] Battery short circuit disconnection has to be done on the battery side. [5] Consult Power Electronics for other applicable standards / grid codes.



Fluence Advancion[®] Energy Storage System

Operations and Maintenance Manual





Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-			
Revision #: 05	Date: 25 June 2018			
Page 2 of 16				

Operation and Maintenance Manual Advancion 5, Short Duration

Revision #: 05

Revision Date: 25 June 2018



Document Control Number: 0000-OAM-FLU-ADV-03-5000



Web fluenceenergy.com

Support Tel. +1 408 520 1979

Mail Fluence

4300 Wilson Blvd Ste 900 Arlington VA 22203-4180 United States of America



Operation and Maintenance Manual 0000-OAM-FLU-ADV-03Revision #: 05 Date: 25 June 2018
Page 3 of 16

Table of Contents Page 5 INTRODUCTION 2. **SAFETY** 5 2.1 General 5 2.2 **Emergency Stop** 6 2.3 **General Hazard Information** 7 2.3.1 **Electrical** 7 2.3.2 Fire 7 2.3.3 Chemical 2.4 **Personal Protective Equipment (PPE)** 7 SYSTEM DESCRIPTION 8 3.1 **AC System** 8 3.2 **DC System** 8 3.3 **HVAC** 10 3.4 **Fire Protection System** 10 **Auxiliary Equipment** 3.5 11 **OPERATIONAL PLAN** 12 4.1 HMI and SCADA (control and reporting) 12 4.2 **Alarm Parameters** 12 4.3 **Standard Operation Procedures** 12 MAINTENANCE PLAN 5. 13 **Consolidated PM Plan & Schedule** 5.1 13 5.2 **Troubleshooting** 14 5.3 **Repair Activity** 14 **Critical Spares** 5.4 14 **ESCALATION** 15 **TRAINING** 15 7. **REVISION HISTORY** 15 8.



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-			
Revision #: 05	Date: 25 June 2018			
Page 4 of 16				

Abbreviations and Definitions

- 1. Advancion® 5 Fluence's fifth-generation energy storage system architecture.
- 2. AGC Automatic Generation Control, a system that adjusts the power output of multiple generators at different power plants in response to changes in system load.
- 3. ARC Automatic Resource Control, a mode of operation for the Advancion Control System where it automatically responds to an external dispatch signal.
- 4. Array An Advancion energy storage facility. An Array is composed of multiple Advancion Core subunits. The Array controller distributes charge and discharge signals to the Cores based on their optimal dispatch ranges, recent usage, system state, and a total system dispatch signal.
- 5. BESS Battery Energy Storage System. A general term for energy storage facilities that use batteries.
- 6. Center-pole A device or point in the Advancion Node Battery Module circuit, where the DC voltage may be divided in half. The exact implementation, if present, is site-specific.
- 7. Core A complete functional unit within the Advancion Array, which can be operated independently from one another or grouped to create larger units. An Advancion Core may be disconnected and serviced without affecting the operation of the other Cores in the Array. A Core is composed of several Nodes and automatically dispatch each Node at an optimum power level.
- 8. DCS Distributed Control System. Consists of a hierarchy of controllers connected by a communications network that operate in a closed-loop system to control an industrial process.
- 9. DCPM Direct Current Protection Module, the primary Battery Management System of an Advancion Node. The DCPM is an electronic system that manages charge and discharge operations and protects the battery modules from voltage and current conditions outside of the safe performance range.
- 10. EAF Equivalent Availability Factor, measures the percentage of time that a generation unit is available to generate electricity if called upon in the marketplace.
- 11. HMI Human-Machine Interface, the input-output de-vice through which the human operator controls the process, and which presents process data to a human operator.
- 12. MDU Market Dispatch Unit, a device that makes real-time changes in system operation based on market conditions.
- 13. Node Each Core is composed of multiple Advancion Nodes. Each Node interacts with a single DC Protection Module (DCPM) and Power Control System (PCS) to dispatch real and reactive power. Each Node can be disconnected and serviced without affecting the operation of other Nodes and often without any effect to typical operation of the Core. Nodes are designed to fully and independently characterize and control any energy storage technology using over 90 different characteristics common to all technologies. This is the "distributed technology" part of the solution.
- 14. PCS Power Conversion System, a bi-directional inverter that changes direct current to alternating current or vice-versa and is used to charge or discharge batteries.
- 15. PLC Programmable Logic Controller, an industrial computer used to control automated processes.
- 16. RTU Remote Terminal Unit, an industrial computer that transmits telemetry data from the market to a distributed control system.
- 17. SCADA Supervisory Control and Data Acquisition System. A software program that gathers, analyzes, and monitors data processes.
- 18. SDU Storage Dispatch Unit, software used to aggregate batteries and optimize their performance.
- 19. SEL-735 (Schweitzer Engineering Laboratories) Power Quality and Revenue Meter. Provides high-accuracy revenue and power quality measurement for electric utilities and industrial applications.
- 20. SOP Standard Operating Procedure



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-			
Revision #: 05	Date: 25 June 2018			
Page 5 of 16				

1. Introduction

This document serves as a guide for the safe operation and maintenance (O&M) of the Fluence Advancion® 5 System Battery Energy Storage System (BESS). The O&M Manual offers a framework to achieve a safe, trustworthy, and efficient performance of the system in compliance with applicable laws and regulations.

2. Safety

2.1 General

Each Fluence Advancion system is specially designed and configured to meet individual site needs as safely as possible. However, as with any utility scale generator or complex electrical system, risks are present. It is critical that only Qualified Persons operate or maintain the Advancion Energy Storage System in accordance with original design parameters and criteria. Failure to follow safe operating procedures, improper operation and/or maintenance of the BESS can result Death, Personal Injury, or Property Damage.

Fluence Energy Storage (Fluence ES) recommends that all BESS owners conduct orientation meetings with local first responders to ensure mutual understanding of Advancion component composition and necessary emergency actions.

Key Points:

- Only Qualified Persons are to operate and/or maintain the Advancion Array.
- Never operate the Advancion Array differently from design or with known unsafe conditions present.
- Only operate the Advancion Array in full compliance with relevant regulations, codes, standards or other requirements.
- Conduct site orientations with local first responders prior to system use.



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-			
Revision #: 05	Date: 25 June 2018			
Page 6 of 16				

2.2 Emergency Stop

The Advancion 5 Array is equipped with Master and Core Emergency Stop (E-Stop) buttons. Locations vary from site to site. General locations are:

- In a building installation, Control Room (Master E-Stop and Core E-Stops)
- In a building installation, Front and Back of each Core (Core E-Stop)
- In a battery enclosure, Control House (Master E-Stop)
- In a battery enclosure, one on each Core DC Panel and 2 externally mounted on each enclosure
- In a building installation, a Master E-Stop is located at the inside of the BESS access door.

All persons that work or visit the BESS should be familiar with E-Stop button locations and emergency exit paths prior to entering the BESS.

Pushing a Master E-Stop button shuts off AC and DC power flow.

- opens all Battery Storage Core DC Disconnects in DC Panels
- opens the AC Disconnect on the PCS
- opens all Node DCPM breakers
- de-energizes the HVAC

Pushing a Core E-Stop button performs similar actions to the Master E-Stop, but is limited to a single Core.

E-Stop buttons are intended to be used in emergencies and are not recommended for planned shutdown procedures during normal operation or scheduled maintenance.

Key Points:

- All E-Stop buttons are for emergency use only.
- All persons entering the Advancion Array should identify E-Stop locations upon entry.

Picture 1. Example of Core E-Stop Button



Picture 2. Example of Master E-Stop





Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 7 of 16			

2.3 General Hazard Information

General sources of potential hazards that may be encountered with the system are mentioned below. Please consult all Safety Data Sheets for hazardous materials and review component-specific safety information in subsystem documentation for additional information. Adherence to electrical safety codes, such as NFPA 70E, will protect personnel and equipment.

2.3.1 Electrical

This product carries high-voltage electrical current, which can cause shocks or severe bodily harm. Equipment, supplies, and loads must be appropriately installed and grounded in accordance with specifications and applicable electrical safety codes. The common voltages encountered in this system may cause electric shocks and can sustain an arc flash.

2.3.2 Fire

A damaged lithium-ion battery module may cause a fire or explosion. Review all manufacturer instructions for proper procedures for handling and storage of components. Improper connection or damage to an electrical line may cause a fire or arc flash.

2.3.3 Chemical

Safety Data Sheets (SDS) for all chemicals and equipment are provided with each Advancion 5 site. Personnel performing Operations and or Maintenance on the BESS shall have access to the SDS onsite and through Fluence ES support. Note that chemical hazards present can change with altered condition of components.

2.4 Personal Protective Equipment (PPE)

Use of suitable Personal Protective Equipment (PPE) is required to protect against injury. Each site must perform individual risk assessments to identify site specific hazards and develop mitigating strategies to include PPE. Sites managed by Fluence Energy Storage will also determine & implement applicable Fluence safety standards. Below are the minimum PPE requirements by work type performed on the Advancion 5 Array.

Visitor (Visual Observation Under Supervision of Qualified Person):

Hard Hat, Fire Resistant (FR) Smock, Safety Glasses.

Operator (FR CAT 2)

Cotton or natural fiber undergarments, FR Rated CAT 2 Long Sleeve Shirt and Pants, Hard Hat with Arc Rated Face Shield, Safety Glasses, Hearing Protection, Leather Gloves, Leather Shoes.

Key Points

- Appropriate PPE should always be worn during work in and around an Advancion® 5 Array.
- Level of PPE required is risk-dependent which must be determined on site by site basis with help of Qualified Persons.



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 8 of 16			

3. System Description

The Fluence Advancion® system is a 5th generation grid connected battery energy storage system, with an unparalleled host of reliable capabilities ranging from Ancillary Services to Reserve Capacity. Please refer to the Fluence Advancion 5 User Manual for a full description of capabilities and system description.

3.1 AC System

The typical Advancion 5 AC system consists of low-voltage and medium-voltage equipment, and site-specific grid connection equipment.

Each Node PCS attaches to the low-voltage AC system via a bolted cable-to-terminal connector and includes a 600Vac main breaker with a 65kA interrupt rating. Low-voltage 3-phase AC power runs from each Node to a collection panel. Power from the low-voltage collection panel is fed to an isolation transformer, to connect to the Array medium-voltage AC bus.

The main ac breaker is labelled with incident arc flash energy and approach boundary information. The breaker can be safely operated from the approach boundary. See site-specific single line drawings for details.

There is one Power Quality Meter (ex. SEL-735) installed in the Array for the group of medium voltage (MV) breakers feeding all isolation transformers, and there may be many on a string connected to one MV breaker.

The power connection to the external grid is site-specific. The Array may interact with the external grid at medium-voltage, or at high-voltage if a step-up transformer is required by the grid or utility.

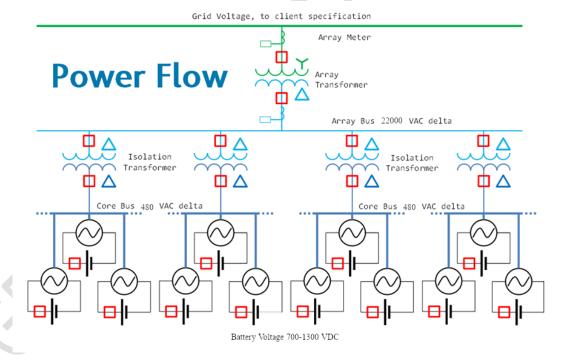


Figure 1. Generic AC System Design

3.2 DC System

Each Node includes a Power Conversion System (PCS) interacting with a DC Panel. Each DC Panel is equipped with a main DC Disconnect, main fuse, a main DC bus and multiple feeder circuits. Each feeder circuit is connected to one DC Protection Module (DCPM). Each DCPM is connected to a string of Lithium Ion Batteries. The DC voltage varies between approximately 700 and 1300V, depending on battery state of charge. Previously, the PCS was a rack-mounted unit, but Advancion 5 uses a separate, multi-cabinet system. This new system may include 3 to 7 input cabinets, each containing multiple busbars. For single-line systems,



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 9 of 16			

each of the battery racks (17 batteries and a DCPM) is paralleled onto a single DC bus for short-duration systems.

Figure 2. Generic Node (Labeled) Advancion 4 vs Advancion 5



The DC-Protection Module (DCPM) in each battery rack includes over current protection by means of fuses and disconnecting contactors. In addition, some DCPMs may include a disconnect switch, depending on vendor, that can isolate the DC battery strings. This makes it possible to change the batteries or perform maintenance without taking the whole Core out of commission when using LG batteries. The DCPM and battery strings must be properly connected to make sure the batteries do not experience excessive voltage or current conditions.



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 10 of 16			

As an additional safety measure, the maximum PCS power demand (nominally, 300 kW) is limited to match the design rating of the battery system. At the DC input panel, safety is also provided in the form of a 1600 A DC main disconnect and main fuse; alternatively, some systems might have a main disconnect rated for 3200A. Each PCS Module has 400A DC contactors which allow for connection and disconnection of the DC grid (battery racks).

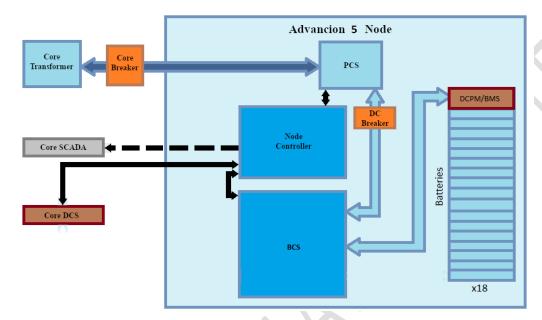


Figure 3. Generic Node (DC Flow)

3.3 HVAC

An Advancion® Array includes HVAC units to control operating temperatures. These units must be well maintained to ensure maximum system life and component Warranty compliance. Actively managed environmental conditions are a requirement for successful operation.

3.4 Fire Protection System

Each Advancion® Energy Storage System is equipped with a Fire Protection System (FPS) designed to detect fires early, alarm appropriate personnel, and suppress fires. The type and design of the FPS deployed can be different depending on site-specific requirements. Please see site specific details for a complete explanation of system design and capabilities. Below are summaries for two FPS configurations.

Building

A typical Advancion 5 FPS installation within a building consists of multiple sensors including smoke detectors, Heat Sensors, and Tamper/Flow Water Detectors. The Alarm system is configurable to communicate with both local site control rooms and external monitoring teams. Alarms are recognized by audio and visual means through sirens and flashing strobe lights located both inside and outside the BESS.

The typical suppression system used is a dry pipe Double Pre-Action Water Sprinkler System. Water is charged into the pipes when two initiating sensors indicate likelihood of fire. Each sprinkler head releases water only if elevated temperature is detected in its response zone.

Fire warning is relayed to the operator as soon as possible, to allow for investigation through onsite sensors or in person, before suppression systems are engaged.



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 11 of 16			

Enclosure

A typical Advancion 5 FPS installation for a containerized solution is very similar to the building design with a couple of exceptions. Smoke and Heat sensors are used in conjunction with a waterless gaseous clean-agent suppressant system. Like the water system used in the buildings, there are two steps before the suppressant is discharged. First step is a pre-alarm condition followed by an actual alarm. Once the alarm is sounded, suppressant discharge is delayed approximately 30 seconds to enable operator escape from the BESS. For details, please refer to site-specific settings in the FPS manual.

3.5 Auxiliary Equipment

Multiple pieces of necessary auxiliary equipment support each Advancion 5 site. A typical list of equipment is as follows:

- Telco racks with servers, switches, routers, firewalls, and Uninterruptible Power Supplies (UPS)
- Environmental monitoring system
- Medium voltage Power Quality Meters / High Voltage Meter*
- Low voltage relays
- Ground Fault Detection Systems
- Real Time Automation Controller (RTAC)
- Cameras and/or Intrusion Sensors
- Lighting Control Panels

^{*}High voltage equipment may not apply to each installation.



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 12 of 16			

4. Operational Plan

4.1 HMI and SCADA (control and reporting)

The Array is primarily controlled by system operators through the Human Machine Interface (HMI). The HMI is explained in detail in the HMI User Manual and during the Operations Training Course.

SCADA is also available which enables trending, analysis, data extract and automated reporting. Please see Advancion® 5 HMI and SCADA User Manuals for details.

4.2 Alarm Parameters

Alarm parameters are defined by Fluence ES for each site. Warnings and alarms are presented through the HMI and SCADA systems. These key alarm parameters for the power electronics are set by Fluence ES and can be changed depending on service life and performance needs.

Hi Warn Location Data Nominal Low Limit Low Warn Hi Limit **BMS** SOC % 55 0 3 97 100 **BMS** DC V 625 800 600 800 825 **PCS** DC V 800 600 625 800 825 AC V PCS 480 432 450 505 528 PCS DC CHG A 230 250 PCS DC DCHG A 230 250 PCS AC CHG A 230 250 AC DCHG A PCS 230 250 **PCS** TEMP °C 23 70 75 10 15 23 **BMS** CELL °C 15 18 43 48

0

0

3

3

97

97

100

100

Table 1. Example Advancion Alarm Parameters

4.3 Standard Operation Procedures

SOC %

SOC %

Fluence ES provides a general set of system SOPs to enable consistent operations and support user training. Operation SOPs include:

System start-up / shut down

CORE

ARRAY

- Resetting and Clearing Faults
- Adjusting SOC (battery State of Charge)
- Reconnecting Inactive Nodes through HMI



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 13 of 16			

5. Maintenance Plan

The maintenance plan below is the Fluence ES recommended minimum starting point to guide the effective management of the Advancion® Array to achieve designed potential. A site-specific maintenance plan is developed for each site in the Fluence ES Computerized Maintenance Management System (CMMS)

5.1 Consolidated PM Plan & Schedule

Table 2. PM Activities Schedule

Task Description		Description Component Frequency			
1	Meter Calibration	Power & Revenue Every 3 yrs. Meters		OEM Manual	
2	Transformer testing: (DGA, IR, Doble, Megger)	Isolation & Auxiliary transformers	Complete Every 3 yrs. IR/Oil – 1/yr.	OEM or Regulatory Standards	
3	Annual Performance Test	Array	1/Yr.	Fluence ES Performance Test Standard	
4	Cooling System Maintenance.	HVAC/Chillers	HVAC/Chillers Complete 1/yr. Filter 1/mo. (varies by vendor)		
5	Switchboard UPS Battery Maintenance	125 v DC	1/Yr.	OEM Manual	
6	Fire Protection System Maintenance	Fire Protection System	1/Yr. – Building 2/Yr. Container	OEM Manual	
7	Building/Container Housekeeping	Building/Container. Network / Telco Racks			
8	Node IR - DC/AC Connections	DC Connectors	1/Yr.	Fluence ES Standard Procedure	
9	Ambient condition check	PCS	4/Yr.	OEM Manual	
10	Power measurements	PCS	4/Yr.	OEM Manual	
11	Power/control connection inspection	PCS	2/Yr. (1/Yr. fasten connections)	OEM Manual	
12	Cabinet door seals	PCS	4/Yr.	OEM Manual	
13	Visual damage to doors, gratings, cabinet	PCS	4/Yr.		
14	Cable input sealing	PCS	4/Yr.	OEM Manual	
15	Check cabinet paint for damage or corrosion	PCS	4/Yr.	OEM Manual	
16	Safety notices and stickers on and in the switch cabinet	PCS 4/Yr.		OEM Manual	
17	Check nameplate	PCS	4/Yr.	OEM Manual	



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 14 of 16			

18 Check bottom connection panels PCS 4/Yr. OEM Manual 19 IGBT's module PCS 1/Yr. OEM Manual 20 Correct capacitor PCS 1/Yr. OEM Manual 21 Inductances PCS 2/Yr. for evidence of overheating 1/Yr. for connections and temperatures OEM Manual damage and overheating 1/Yr. for visual damage and overheating 1/Yr. to verify connections 23 AC Contactor/circuit breakers PCS 2/Yr. OEM Manual 24 UPS (if included) PCS 2/Yr. OEM Manual 25 Cooling fans PCS 2/Yr. OEM Manual 26 Gratings PCS 2/Yr. OEM Manual 27 Dust Filters PCS 2/Yr. inspection 1/Yr. cleaning OEM Manual 28 Historical data and errors PCS 1/Yr. OEM Manual 29 Protections PCS 1/Yr. OEM Manual		▼			
20 Correct capacitor PCS 1/Yr. OEM Manual 21 Inductances PCS 2/Yr. for evidence of overheating 1/Yr. for connections and temperatures 22 Auxiliary Transformers PCS 2/Yr. for visual damage and overheating 1/Yr. to verify connections 23 AC Contactor/circuit breakers PCS 2/Yr. OEM Manual 24 UPS (if included) PCS 2/Yr. OEM Manual 25 Cooling fans PCS 2/Yr. OEM Manual 26 Gratings PCS 2/Yr. OEM Manual 27 Dust Filters PCS 2/Yr. OEM Manual 28 Historical data and errors PCS 1/Yr. OEM Manual	18		PCS	4/Yr.	OEM Manual
PCS 2/Yr. for evidence of overheating 1/Yr. for connections and temperatures Auxiliary Transformers PCS 2/Yr. for visual damage and overheating 1/Yr. to verify connections AC Contactor/circuit breakers PCS 2/Yr. OEM Manual Yr. OEM Manual Common Manual Common Manual Common Manual Common Manual Description OEM Manual Description OEM Manual Description OEM Manual Common Manual Dust Filters PCS 2/Yr. OEM Manual Description OEM Manual	19	IGBT's module	PCS	1/Yr.	OEM Manual
overheating 1/Yr. for connections and temperatures 2/Yr. for visual damage and overheating 1/Yr. to verify connections 2 AC Contactor/circuit breakers PCS 2/Yr. OEM Manual 2 UPS (if included) PCS 2/Yr. OEM Manual 2 Cooling fans PCS 2/Yr. OEM Manual 2 Common fans PCS 2/Yr. OEM Manual 3 Common fans PCS 2/Yr. OEM Manual 4 Common fans PCS 2/Yr. OEM Manual 4 Common fans PCS 2/Yr. OEM Manual 5 Common fans PCS 2/Yr. OEM Manual 6 Common fans PCS 1/Yr. OEM Manual	20	Correct capacitor	PCS	1/Yr.	OEM Manual
damage and overheating 1/Yr. to verify connections 23 AC Contactor/circuit breakers PCS 2/Yr. OEM Manual 24 UPS (if included) PCS 2/Yr. OEM Manual 25 Cooling fans PCS 2/Yr. OEM Manual 26 Gratings PCS 2/Yr. OEM Manual 27 Dust Filters PCS 2/Yr. OEM Manual 28 Historical data and errors PCS 1/Yr. OEM Manual	21	Inductances	PCS	overheating 1/Yr. for connections	
24UPS (if included)PCS2/Yr.OEM Manual25Cooling fansPCS2/Yr.OEM Manual26GratingsPCS2/Yr.OEM Manual27Dust FiltersPCS2/Yr. inspection 1/Yr. cleaningOEM Manual28Historical data and errorsPCS1/Yr.OEM Manual	22	Auxiliary Transformers	PCS	damage and overheating 1/Yr. to verify	
25 Cooling fans PCS 2/Yr. OEM Manual 26 Gratings PCS 2/Yr. OEM Manual 27 Dust Filters PCS 2/Yr. inspection 1/Yr. cleaning 28 Historical data and errors PCS 1/Yr. OEM Manual	23	AC Contactor/circuit breakers	PCS	2/Yr.	OEM Manual
26 Gratings PCS 2/Yr. OEM Manual 27 Dust Filters PCS 2/Yr. inspection OEM Manual 1/Yr. cleaning 28 Historical data and errors PCS 1/Yr. OEM Manual	24	UPS (if included)	PCS	2/Yr. OEM Manual	
27 Dust Filters PCS 2/Yr. inspection OEM Manual 1/Yr. cleaning 28 Historical data and errors PCS 1/Yr. OEM Manual	25	Cooling fans	PCS	2/Yr.	OEM Manual
28 Historical data and errors PCS 1/Yr. OEM Manual	26	Gratings	PCS	2/Yr.	OEM Manual
	27	Dust Filters	PCS		OEM Manual
29 Protections PCS 1/Yr. OEM Manual	28	Historical data and errors	PCS	1/Yr.	OEM Manual
	29	Protections	PCS	1/Yr.	OEM Manual

5.2 Troubleshooting

Fluence Energy Storage provides a Troubleshooting Standard Operation Procedure with each new site commissioning. Please refer to that document for detailed instructions for identifying failed components.

5.3 Repair Activity

Please reference Fluence Energy Storage provided Standard Operation Procedures for performing component replacements (PCS, UPS, Node Controller, DCPM, etc.) Projects under warranty are to remove failed component and follow OEM Return Material Authorization (RMA) process. Any unauthorized repair activity within a component can result in voiding part warranty.

5.4 Critical Spares

To support optimal maintenance activities, critical spares lists are provided by Fluence-ES. An overview of the minimum critical spares is provided in the CMMS.



Operation and Maintenance Manual	0000-OAM-FLU-ADV-03-		
Revision #: 05	Date: 25 June 2018		
Page 15 of 16			

6. Escalation

Fluence ES is committed to fully supporting each Advancion® site. Our primary point of contact is our 24/7 Operations group who log each issue raised into our workflow tracking tool and progressively escalate the issue within the ES Support team.

24/7 Support may be contacted at +1 (408) 520-1979.

7. Training

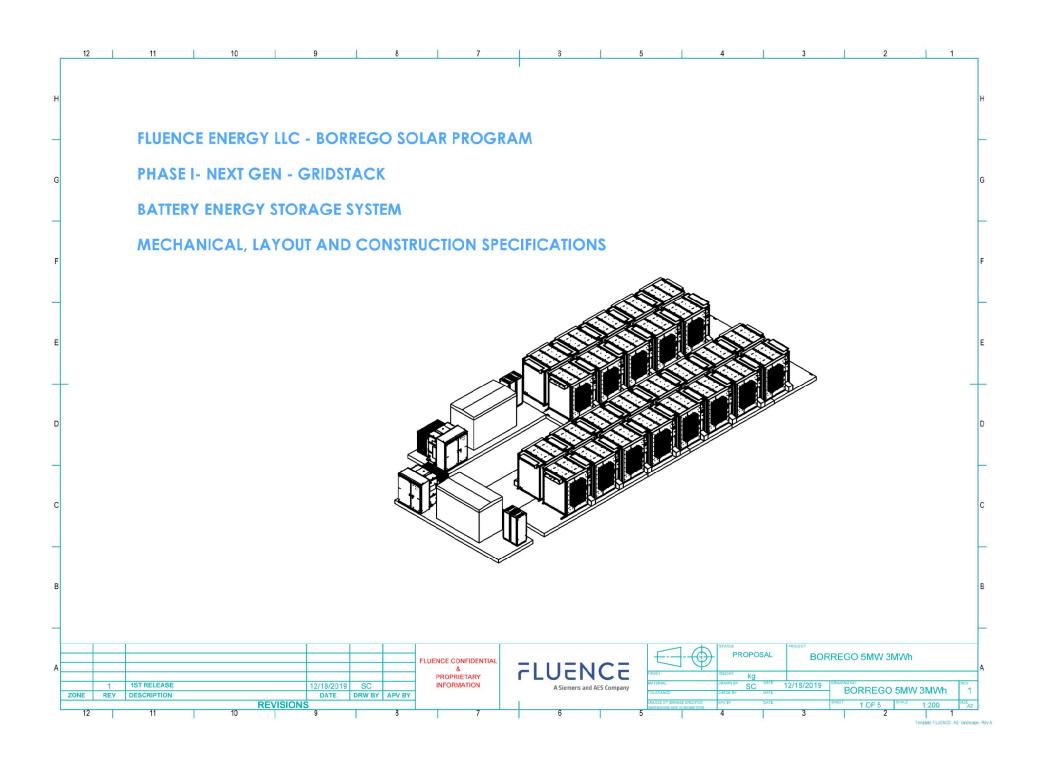
Fluence ES Support Services offers three training courses (Orientation, Operations, and Maintenance) with each site commissioning. Additional refresher training is available upon request. See training program summary documents.

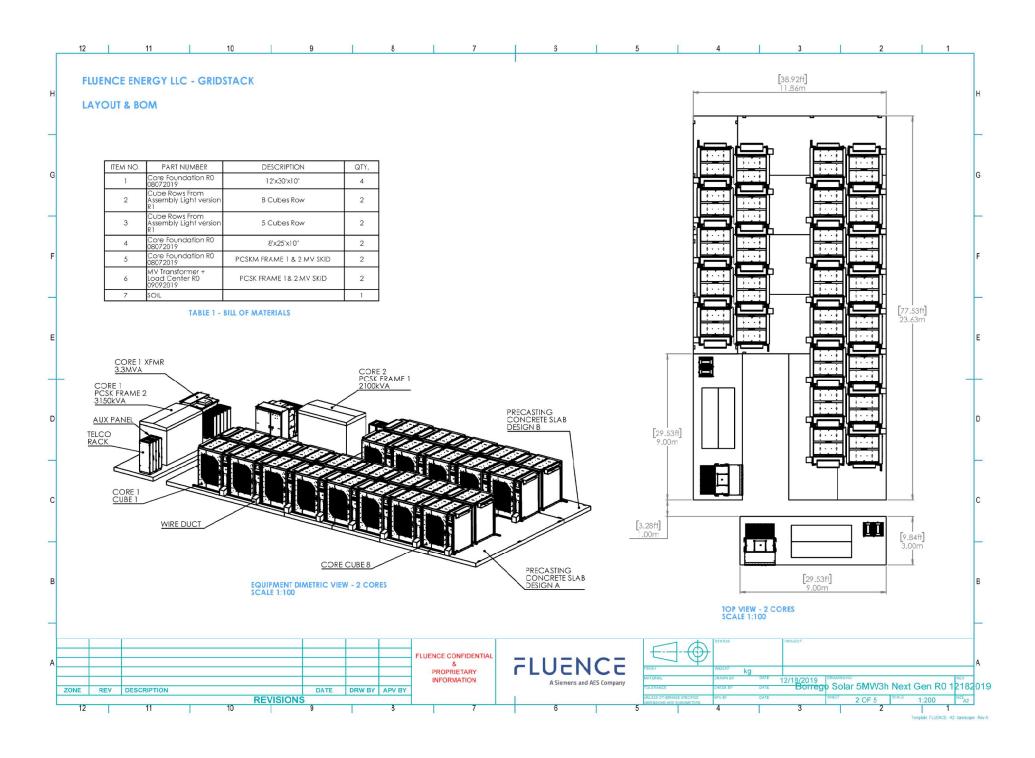
8. Revision History

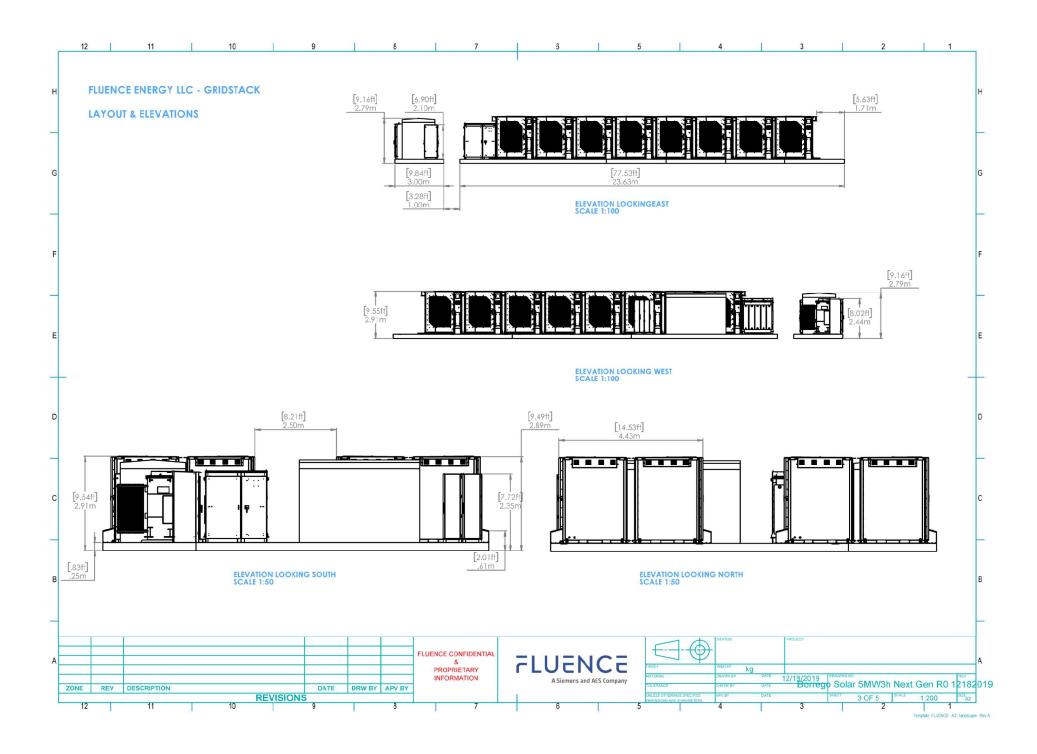
Document Control Number 0000-OAM-FLU-GEN-03-5000

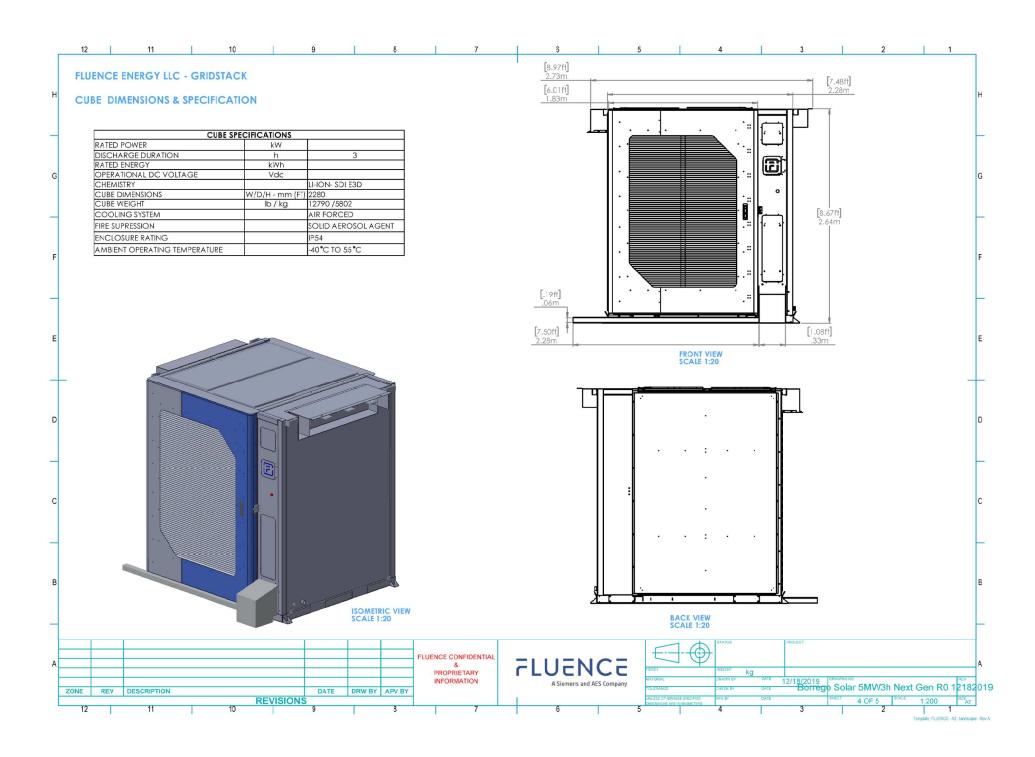
Revision	Authored By	Sections Revised	Reviewed By	Approved By	Date
03	Johnathan McClure	Glossary	Charlene Lee	Jeff Gibbons	07 Mar 2017
04	Johnathan McClure	Whole Document	Irina Beloreshka	Jeff Gibbons	27 Nov 2017
05	Sean Poole	Whole Document		•	

GENERAL FERNANDEL CHARLES AND A STATE OF THE STATE OF THE



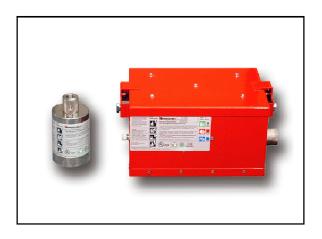








FirePro® Xtinguish



APPLICATIONS

- Data centers (server room)
- Computer rooms
- Central stations (call centers)
- Mechanical / electrical control rooms
- Shipping warehouse
- Plant rooms

LISTED

EX16201

- Engine rooms
- Vehicle storage rooms (hangar bay)

PRODUCT LISTINGS

California State Fire

Marshal

410:0205

STANDARD FEATURES

- UL Listed for Class A, B, C fires
- Environmentally friendly (Green Label)
- Available in 10 models
- UL Listed for 10 years shelf life
- Easy installation, requires no piping or pressurized bottles
- Minimal maintenance
- Requires far less real estate compared to a typical Halon system
- · Minimal cleanup on post fire
- Safe to handle
- Mounting brackets included for all models
- Compatible with HCVR-3 Fire Alarm Control Panel

DESCRIPTION

FNX Series products are a SBK aerosol forming solid compound (containing no pyrotechnic substances) that is used to extinguish Class A, B, C fires. The FNX Series products are electrically activated. The condensed aerosol extinguishing mechanism works by removing the active chemical particles involved in the flame chain reaction.

TRANSPORTATION CLASSIFICATION

Class 9

• UN Identification: 3335 (Air) & 3077 (Ocean)

Packaging group: PGIII

Shipping guidelines for maximum weight:

Ground: NoneOcean: None

Cargo Air: 400 kg (881 lbs)
Passenger Air: 30 kg (66 lbs)

BSI/A.1/3.46/62-133

Hochiki America Corporation

7051 Village Drive, Suite 100 Buena Park, CA 90621-2268 Phone: 714/522-2246 Fax: 714/522-2268 Technical Support: 800/845-6692 or technical support@hochiki.com

1SO 9001:2008

SPECIFICATIONS

Canister Type					
Model	FNX-20S	FNX-40S	FNX-80S		
Mass of SBK	20g	40g	80g		
Product weight	310g ±5%	610g ±5%	870g ±5%		
Supply Voltage	6 ~ 36 VDC	6 ~ 36 VDC	6 ~ 36 VDC		
Initiation Current	0.8 A	0.8 A	0.8 A		
Heating Element Resistance	1.6 - 3.6 Ohms	1.6 - 3.6 Ohms	1.6 - 3.6 Ohms		
Supervision Current	5 mA	5 mA	5 m A		
Ignition Time	4 seconds	4 seconds	4 seconds		
Discharge Time	3 — 6 seconds	5 – 10 seconds	5 – 10 seconds		
Min. Discharge Clearance (Human)	0.3ft (100mm)	0.3ft (100mm)	0.3ft (100mm)		
Max. Mounting Height	3.2ft (1m)	3.2ft (1m)	6.5ft (2m)		
Storage Temperature	-58°F (-50°C) - 122°F (50°C)	-58°F (-50°C) - 122°F (50°C)	-58°F (-50°C) - 122°F (50°C)		
Self-Activation Temperature	572°F (300°C)	572°F (300°C)	572°F (300°C)		
Dimensions	6.4"H (165mm) x 1.2"D (32mm)	5.5"H (140mm) x 2.0"D (51mm)	7.2"H (185mm) x 2.0"D (51mm)		

Canister Type				
Model	FNX-100S	FNX-200S	FNX-500S	
Mass of SBK	100g	200g	500g	
Product weight	1370g ±5%	1840g ±5%	3340g	
Supply Voltage	6 ~ 36 VDC	6 ~ 36 VDC	6 ~ 36 VDC	
Initiation Current	0.8 A	0.8 A	0.8 A	
Heating Element Resistance	1.6 - 3.6 Ohms	1.6 - 3.6 Ohms	1.6 - 3.6 Ohms	
Supervision Current	5mA	5 mA	5 m A	
Ignition Time	4 seconds	4 seconds	4 seconds	
Discharge Time	5 – 10 seconds	5 – 10 seconds	5 – 10 seconds	
Min. Discharge Clearance	1.3ft (400mm)	0.9ft (300mm)	1.6ft (500mm)	
Max. Mounting Height	3.2ft (1m)	6.5ft (2m)	6.5ft (2m)	
Storage Temperature	-58°F (-50°C) - 122°F (50°C)	-58°F (-50°C) - 122°F (50°C)	-58°F (-50°C) - 122°F (50°C)	
Self-Activation Temperature	572°F (300°C)	572°F (300°C)	572°F (300°C)	
Dimensions	6.1"H (155mm) x 3.4"D (84mm)	7.2"H (185mm) x 3.4"D (84mm)	11.6"H (295mm) x 3.4"D (84mm)	

Box Type				
Model	FNX-1200	FNX-2000	FNX-3000	FNX-5700
Mass of SBK	1200g	2000g	3000g	5700g
Product weight	10900g ±5%	15500g ±5%	16300g ±5%	26400g ±5%
Supply Voltage	6 ~ 36 VDC	6 ~ 36 VDC	6 ~ 36 VDC	6 ~ 36 VDC
Initiation Current	0.8 A	0.8 A	0.8 A	0.8 A
Heating Element Resistance	1.6 - 3.6 Ohms	1.6 - 3.6 Ohms	1.6 - 3.6 Ohms	1.6 - 3.6 Ohms
Supervision Current	5 mA	5 mA	5 m A	5 mA
Ignition Time	4 seconds	4 seconds	4 seconds	4 seconds
Discharge Time	15 – 20 seconds	15 – 20 seconds	15 – 20 seconds	15 - 20 seconds
Min. Discharge Clearance (Human)	5.4ft (1650mm)	4.9ft (1500mm)	6.5ft (2000mm)	6.5ft (2000mm)
Max. Mounting Height	11.4ft (3.5m)	11.4ft (3.5m)	11.4ft (3.5m)	16.4ft (5m)
Storage Temperature	-58°F (-50°C) - 122°F (50°C)	-58°F (-50°C) - 122°F (50°C)	-58°F (-50°C) - 122°F (50°C)	-58°F (-50°C) - 122°F (50°C)
Self-Activation Temperature	572°F (300°C)	572°F (300°C)	572°F (300°C)	572°F (300°C)
Dimensions	6.5"H (167mm) x 11.8"L (300mm) x 8.5"W (216mm)	7.2"H (185mm) x 11.8"L (300mm) x 11.8"W (300mm)	7.2"H (185mm) x 11.8"L (300mm) x 11.8"W (300mm)	11.8"H (300mm) x 11.8"L (300mm) x 11.8"W (300mm)

Nadine's Restaurant Outdoor Seating

From: Keith Staudohar < <u>keith@croninengineering.net</u>>

Sent: Friday, November 12, 2021 11:43 AM

To: Robyn Steinberg < rsteinberg@yorktownny.org>

Cc: chris@nadinesrestaurant.com; Patrick Bell <patrick@croninengineering.net>

Subject: <u>nadines restaurant resubmission</u>

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Robyn,

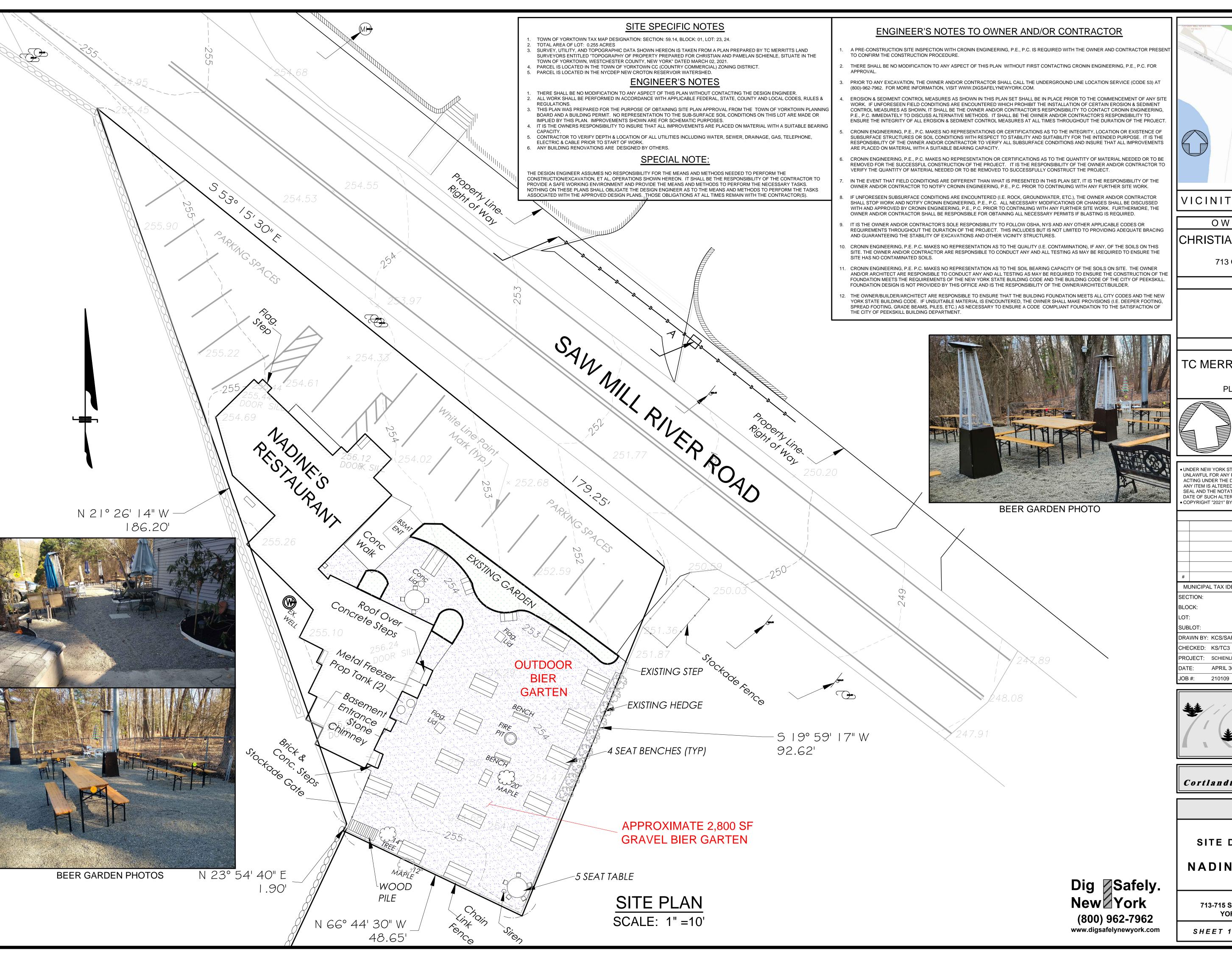
As discussed, here is the resubmission for Schienle, Nadine's Restaurant.

Kindly review and place on the November 22, 2021 Planning Board agenda for consideration of the issuance of a Special Use Permit for the outdoor dining area.

Thanks.

Keith

Keith Staudohar CPESC, CPSWQ Cronin Engineering P.E. P.C. 39 Arlo Lane Cortlandt Manor, NY 10567 914-736-3664 keith@croninengineering.net





VICINITY MAP

SCALE: $1'' = \pm 200'$

OWNER/APPLICANT

CHRISTIAN & PAMELAN SCHIENLE

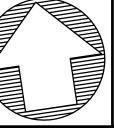
713 OLD CROTON LAKE ROAD

ARCHITECT

SURVEYOR

TC MERRITTS LAND SURVEYORS

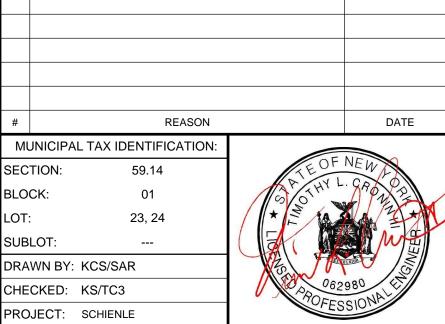
394 BEDFORD ROAD PLEASANTVILLE NY 10570



SCALE: AS NOTED

UNDER NEW YORK STATE EDUCATIONAL LAW ARTICLE 145, SECTION 7209 (2), IT UNLAWFUL FOR ANY PERSON TO ALTER ANY ITEM ON THIS DRAWING, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS



CRONIN ENGINEERING (914) 736-3664

TIMOTHY L. CRONIN III, P.E. LICENSE #062980

APRIL 30, 2021

39 Arlo Lane Cortlandt Manor, New York 10567

SITE PLAN

SITE DEVELOPMENT PLAN FOR NADINES RESTAURANT

LOCATION: 713-715 SAW MILL RIVER ROAD, ROUTE 118 YORKTOWN HEIGHTS, NY 10598

SHEET 1 OF 1

SP-1.1

§ 300-80. Sidewalk cafes. [Added 7-15-1997 by L.L. No. 10-1997]

A. Legislative intent. No person shall engage in the operation of a sidewalk cafe or outdoor dining area, except upon the granting of a permit pursuant to this section.

B. Permitting authority.

- (1) The Building Inspector is hereby authorized to grant annual revocable permits for outdoor dining areas providing seating for 12 customers or fewer on privately owned property in nonresidential zoning districts upon the terms and conditions set forth.
- (2) The Planning Board is hereby authorized to grant permits for outdoor dining areas on privately owned property in all nonresidential zoning districts which seek to provide seating for 13 or more customers subject to the requirements of this Code and upon the conditions set forth in this section. The Planning Board may issue a permit renewable on an annual basis by the Building Department for a period not longer than five years. Outdoor dining areas approved pursuant to a site plan application shall not be subject to this section.

C. Terms and conditions.

- (1) Clear path. There shall be at all times an adequate area for pedestrian movement. The minimum distance shall be determined by the permitting authority.
- (2) Furnishings. The furnishings of a sidewalk cafe or outdoor dining area shall consist of readily removable, umbrellas, covers, tables, chairs, etc. The number and location of tables shall comply with the standards for dining facilities set forth by the New York State Uniform Fire Prevention and Building Code. No furnishing or other object may be attached, even in a temporary manner, to the sidewalk or other property or to any building or structure, and no furnishings or other object shall extend beyond the area delineated pursuant to this chapter. All furnishings shall be removed from the sidewalk and stored in an approved manner when the sidewalk cafe is not in operation.
- (3) Signage. Signage shall be limited to what may be an integral part of the furnishings.
- (4) Waste receptacles. The applicant shall maintain a sufficient number of receptacles for the disposal of waste properly covered to prevent infestation of insects and rodents. Such receptacles shall be emptied as often as is necessary, but in no event less than once per day. No structure or enclosure to accommodate the storage of garbage may be erected or placed adjacent to the sidewalk cafe or outdoor dining area.
- (5) Accessory use only. No sidewalk cafe or outdoor dining area may be operated, except as an accessory to an operating commercial food and beverage vendor, operating either as a restaurant, retail food store or vendor of food/beverages on the first floor of a premises, abutting the principal place of business of such

§ 300-80

- entity and by the entity which operates the restaurant or retail food store.
- (6) Hours of operation. No sidewalk cafe or outdoor dining area shall operate other than between 6:00 a.m. and 11:00 p.m. or when the entity with which it is associated is not open to the public.
- (7) Preparation of food and beverages. All food and beverages to be served at sidewalk cafes or outdoor dining areas shall be prepared within the existing restaurant or retail food store.
- (8) Alcoholic beverages. The applicant shall be responsible for obtaining, maintaining in full force and effect and complying with terms and conditions of any permit which may be required under any other law or regulation for the serving of food and beverages, including alcoholic beverages, at a sidewalk cafe or outdoor dining area.
- (9) Operation. Sidewalk cafes and the public or private property upon which they are located and the surrounding area and outdoor dining areas shall at all times be kept free and clear of litter, debris and any substance that may damage the sidewalk or cause pedestrian injury. A sidewalk cafe or outdoor dining area shall not be used as a waiting area for the restaurant or retail food store to which it is an accessory.
- (10) No live or mechanical music shall be permitted to operate other than between 12:00 p.m. and 10:00 p.m. [Amended 6-16-2020 by L.L. No. 5-2020]
- (11) Design guidelines. All tables and chairs shall be uniform in color, material and style.
- (12) Fees. Fees per seat per year shall be in an amount as set forth in the Master Fee Schedule.¹ [Amended 6-6-2017 by L.L. No. 9-2017]
- (13) Notice of violation; revocation or suspension of license or permit; imposition of administrative sanctions. Upon a finding by the permitting authority that the permittee has violated any provision of this section or the terms and conditions of the permit or has engaged in any practice in conjunction with the permitted activity which constitutes a danger to the health or safety of any patron or pedestrian, the Building Inspector shall give notice to the permittee to correct such violation or cease such practice within 24 hours. If the permittee fails to comply with such notice, the permitting authority may suspend the license, during which time the permittee shall be entitled to appeal the decision to the Zoning Board of Appeals (ZBA) for hearing and/or determination. The permittee may be represented by counsel to present evidence in his behalf and confront the evidence against him. Upon considering the evidence presented at the hearing, the ZBA shall either reinstate the permit or further condition the reinstatement of the permit. Any violation for operating an outdoor dining facility without a permit shall be subject to a fine not to exceed \$250 per day

§ 300-80

per violation. Said violations shall be heard and adjudicated as a violation of this chapter.

D. Temporary permits. [Added 6-16-2020 by L.L. No. 5-2020]

- (1) Notwithstanding anything in § 300-80B to the contrary, the Building Inspector is authorized to issue temporary permits for the operation of sidewalk cafes or outdoor dining areas in non-residential zoning districts, regardless of the quantity of seating.
- (2) The temporary permits issued under § 300-80D(1) shall be upon the terms and conditions set for in § 300-80C, except that the fees referenced in § 300-80C(12) shall not be required for such temporary permits.
- (3) Notwithstanding any other provision of law to the contrary, the Building Inspector is authorized to issue temporary structure (e.g., tents) permits in connection with any permits issued under § 300-80D(1), and there shall be no fees required for the issuance of any such temporary structure permits.
- (4) The temporary permits issued under § 300-80D(1) and temporary structure permits issued under § 300-80D(3) shall expire on January 1, 2021.
- (5) The authority of the Building Inspector to issue permits under § 300-80D shall terminate on January 1, 2021.

3668 Barger St

From: Robert Macintyre < rim@arqpc.com>
Sent: Tuesday, November 2, 2021 7:12 PM

To: Robyn Steinberg < rsteinberg@yorktownny.org >

Cc: Jorge B Hernandez <<u>jb@arqpc.com</u>> **Subject:** 3668 Barger Street Yorktown

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Robyn.

Attached please find the preliminary Dwgs for the Proposed Site Plan for the above noted-property location that you met with JB about recently. You will be receiving the written letter by the end of the week.

Regards, Bob



Robert MacIntyre Manager of Administration

Email: rjm@arqpc.com

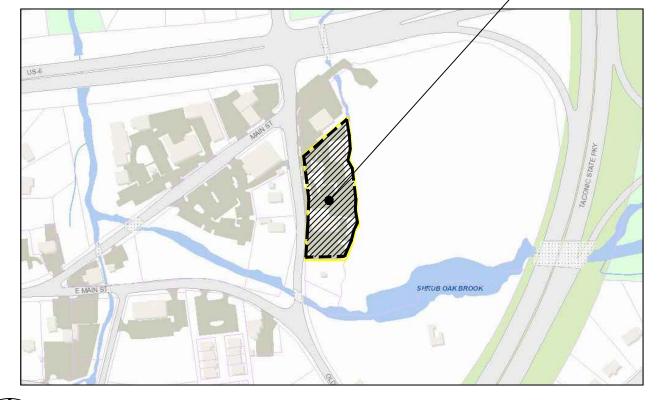
Office: (914) 944-3377 100 Executive Blvd. Suite 204 Ossining, NY 10562

AMMENDED SITE PLAN 3668 BARGER ST. SHRUB OAK, NEW YORK 10588

SITE



SITE



OCATION MAP

SAFE DIG

Before You Dig, Drill or Blast! CALL US TOLL FREE 1-800-962-7962 NY Industrial Code Rule 753 requires no less than two working days notice, but not more than ten days notice.

GENERAL NOTES

CODES: ALL WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE RULES, REGULATIONS AND CODES OF AGENCIES HAVING JURISDICTION. ABSENT OTHER STANDARDS 2020 RC OF NYS, 2020 ERC OF NYS, 2020 PMC OF NYS, & THE 2020 ECC OF NYS. VERIFICATION: VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE. REPORT DIFFERENCES FROM CONSTRUCTION DOCUMENTS TO OWNER AND ARCHITECT. CLAIMS FOR EXTRA PAYMENTS RESULTING FROM CONTRACTOR'S FAILURE TO DO SO WILL NOT BE APPROVED. ARCHITECT SHALL DECIDE ANY NECESSARY ADJUSTMENTS BETWEEN FIELD MEASUREMENTS AND DRAWINGS. A PRECONSTRUCTION MEETING SHALL BE SCHEDULED ON THE SITE WITH THE PROJECT MANAGER, OWNER, ARCHITECT, PRIOR TO THE COMMENCEMENT OF WORK. CONFIRM ALL SITE AND FOUNDATION DIMENSIONS WITH MODULAR PLANS PRIOR TO CONSTRUCTION.

DRAWINGS: BY SUBMITTING A BID OR STARTING WORK, CONTRACTOR AGREES THAT HE HAS EXAMINED THE DRAWINGS AND SPECIFICATIONS AND FOUND THEM ADEQUATE FOR PROPER COMPLETION OF PROJECT. CLAIMS FOR EXTRA CHARGES BECAUSE OF ALLEGED INADEQUATE DRAWINGS OR SPECIFICATIONS WILL NOT BE ALLOWED UNLESS NOTIFICATION WAS MADE IN WRITING TO ARCHITECT PRIOR TO SUBMISSION OR BEGINNING.

CONTRACTS: AIA DOCUMENTS A105 AND A205, STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR, AND GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION-1993 SMALL PROJECTS EDITIONS. UTILITY STAKEOUT: PRIOR TO DEMOLITION OR EXCAVATION, CONTRACTOR SHALL REQUEST FOR A CODE 53 UNDERGROUND UTILITY STAKE-OUT. 1-800-962-7962. CONTRACTOR WILL CONTACT THE UNDERGROUND LINES LOCATION SERVICES (CODE 753) PRIOR TO COMMENCING

USE OF PREMISES: CONTRACTOR SHALL STORE MATERIALS, DISPOSE OF DEBRIS, COORDINATE AND SCHEDULE ALL WORK IN COOPERATION WITH OWNER FOR MINIMUM DISRUPTION. MAINTAIN SAFE ACCESS TO ALL AREAS AT ALL TIMES. PERMITS: OWNER SHALL SECURE AND PAY FOR ALL PERMITS, TESTS AND CERTIFICATES REQUIRED. ELECTRICAL AND PLUMBING CONTRACTORS SHALL APPLY FOR AND PAY FOR INDIVIDUAL PERMITS, INSPECTIONS AND APPROVALS AS REQUIRED. KEEP APPROVED PERMIT DRAWINGS

CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS IF BLASTING IS REQUIRED. LICENSE: CONTRACTOR MUST BE LICENSED BY WESTCHESTER COUNTY AND PROVIDE OWNER AND BUILDING DEPARTMENT A COPY OF CERTIFICATE NUMBER.

INSURANCE: PRIOR TO STARTING WORK, CONTRACTOR SHALL SUPPLY OWNER AND BUILDING DEPARTMENT WITH CERTIFICATES OF WORKMEN'S COMPENSATION INSURANCE, LIABILITY INSURANCE FOR BODILY INJURY, PROPERTY DAMAGE, AUTOMOTIVE AND OTHER INSURANCES REQUIRED BY LAW OR BY OWNER IN THE AMOUNTS AND TERMS SATISFACTORY TO THE OWNER TO RENDER THE OWNER HARMLESS IN CASE OF ACCIDENT TO PERSONS OR PROPERTY INVOLVED IN THIS PROJECT, MAINTAIN SUCH INSURANCE IN FULL FORCE DURING ENTIRE TIME OF

LATENT DEFECTS: NO RESPONSIBILITY IS ASSUMED BY ARCHITECT FOR INFORMATION SUPPLIED BY OTHERS AND RELIED UPON BY ARCHITECT TO BE ACCURATE FOR LATENT DEFECTS IN STRUCTURE IMPOSSIBLE TO DETECT WITHOUT SUBSTANTIAL PROBING OR TESTING. SUPERVISION: ARCHITECT HAS NOT BEEN RETAINED BY THE OWNER TO PROVIDE OBSERVATION AND SUPERVISION OF CONSTRUCTION OPERATIONS AND CERTIFICATION OF PAYMENTS.

PRIOR TO DEMOLITION COORDINATE AND STAKEOUT EXISTING UTILITIES AS REQUIRED. COORDINATE SHUT OFF AND REMOVALS WITH UTILITY COMPANIES.

1. CLEAR SITE AS REQUIRED. 2. REMOVE ALL DEBRIS FROM SITE TO A LEGAL DISPOSAL FACILITY. CONTRACTOR SHALL PAY FOR ALL NECESSARY DUMPSTERS AND CARTING FEE'S.

COOPERATION: CONTRACTORS AND SUBCONTRACTORS SHALL COORDINATE THEIR WORK WITH ADJACENT WORK AND COOPERATE WITH OTHER TRADES TO FACILITATE PROGRESS OF WORK. EACH TRADE SHALL AFFORD OTHER TRADES REASONABLE OPPORTUNITY FOR INSTALLATION OF THEIR WORK AND FOR TEMPORARY STORAGE OF THEIR TOOLS AND MATERIALS.

LANDSCAPE: ALL LAWN AREAS DAMAGED BY NEW CONSTRUCTION OR CONSTRUCTION OPERATIONS SHALL BE REPLACED AS ORIGINAL. LAWNS MAY BE SODDED OR SEEDED WITH BLUEGRASS AND/OR RYEGRASS TO ESTABLISH 98% OR BETTER COVER. REVIEW TREES AND SHRUB REMOVAL REQUIRED FOR CONSTRUCTION WITH OWNER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TYING UP PLANT MATERIAL IN THE WAY OF SITE ACCESS PRIOR TO CONSTRUCTION.

SEDIMENT AND EROSION CONTROL: SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN EACH AREA BEFORE ANY DEMOLITION AND ANY SUBSTANTIAL AMOUNT OF SITE PREPARATION, CLEARING AND GRUBBING, EXCAVATION AND FILLING SHALL BE STARTED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE WESTCHESTER COUNTY PUBLICATION BEST MANAGEMENT PRACTICES MANUAL-CONSTRUCTION RELATED ACTIVITIES, LATEST EDITION.

ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS TO ENSURE THEIR PROPERLY FUNCTIONING.

EROSION BLANKET SHALL BE 'WIENCO TEX' EROSION CONTROL MATS 6,3MM WT 400P OR EQUAL APPROVED. INSTALL AS PER MANUFACTURER SPEC'S

<u>FOOTING DRAINS:</u> 6" DIAM. PERFORATED HDPE SCHEDULE 35 PIPE. SURROUND WITH 12" MIN. OF 3/4" GRAVEL OVER PIPE. INSTALL FILTER FABRIC BETWEEN EARTH AND GRAVEL.

RAIN LEADER DRAINS: 6" DIAM. SOLID HDPE SCHEDULE 35 PIPE.

EXCAVATION: EXCAVATION SHALL BE PROTECTED FROM FROST DURING COLD WEATHER. DO NOT BACKFILL AGAINST FOUNDATION WALLS OR PLACE HEAVY EQUIPMENT CLOSER THAN 8' FROM WALLS BEFORE FIRST FLOOR FRAMING IS IN PLACE. FOUNDATIONS: ALL FOUNDATIONS SHALL BEAR ON FIRM UNDISTURBED SOIL HAVING A MINIMUM DESIGN BEARING PRESSURE OF 4000#/sq.ft. EXCAVATE A MINIMUM OF 2'-O" INTO EXISTING SOIL. NOTIFY ARCHITECT IN SUFFICIENT TIME TO INSPECT BEARING MATERIAL PRIOR TO PLACING

FOUNDATION CONCRETE. CONTINUOUS FOOTINGS MAY BE STEPPED WHERE NECESSARY, BUT NO MORE THAN ONE (1) FOOT VERTICALLY TO TWO (2) FEET HORIZONTALLY. MAINTAIN A MINIMUM COVER OVER FOUNDATION BOTTOMS OF 3'-6".

CONCRETE AND MASONRY: CALCIUM CHLORIDE OR ANY ADMIXTURE CONTAINING CHLORINE SALTS, SHALL NOT BE USED IN ANY CONCRETE. ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED.

BRACING: PROVIDE ADEQUATE TEMPORARY SUPPORT AT ALL TIMES.

CONCRETE: STONE AGGREGATE, 4000psi STRENGTH AT 28 DAYS. ROD REINFORCEMENT: ASTM A 615 GRADE 60.

VAPOR BARRIER: 6ml. PVC WITH 6' SEALED LAP JOINTS.

SILL SEALER: 1" COMPRESSIBLE FIBERGLASS.

SILL ANCHOR: 1/2" DIAMETER, 12" LONG, 3" HOOK, 6' ON CENTER MAXIMUM; 1' MAXIMUM FROM CORNERS & ENDS. MORTAR: TYPE "S", 1800 PSI STRENGTH.

WATERPROOFING: "SONNEBORN" OR EQUAL. LIQUID COLD-APPLIED WATERPROOFING MEMBRANE.

CARPENTRY: DOUBLE JOISTS UNDER ALL INTERIOR PARTITIONS, AND AROUND ALL OPENINGS.

FRAMING LUMBER: DOUGLAS FIR #2 OR BETTER, FB=875 PSI.

STUDS: DOUGLAS FIR STUD GRADE, 2x4 INTERIOR WALLS, 16"O.C. UNLESS NOTED OTHERWISE.

JOIST HANGERS: "SIMPSON" OR EQUAL, GALVANIZED STEEL TO FIT FRAMING MEMBER. INSTALL FRAMING ANCHORS AT ALL FLUSH FRAMED CONNECTIONS AND AS INDICATED ON PLANS. TREATED WOOD: PRESSURE TREATED SOUTHERN YELLOW PINE. ABOYEGROUND .25 LBS/CU.FT. GROUND CONTACT .40 LBS./CU.FT.

DECKING FRAMING LUMBER: SOUTHERN YELLOW PINE #1 UP TO 2" THICK; #2 FOR ALL OTHER. ALL LUMBER SHALL BE PRESSURED TREATED MINIMUM .04 LB/CU.FT. FB=1500psi (2x10), FB=1750psi (2x8). DECKING: 5/4X4 T&G MAHOGANY DECKING. FINISH WITH 2 COATS OF OIL BASED STAIN PRESERVATIVE.

DECK HANDRAIL AND POST ASSEMBLY: WESTERN CEDAR-CLEAR, PAINTED.

INTERIOR FINISHES

WALLS: 1/2" GYPSUM DRYWALL, %" TYPE "X" AT GARAGE, JOINTS TAPED AND FINISHED.

CEILINGS: 1/2" GYPSUM DRYWALL, 5%" TYPE "X" AT GARAGE PROVIDE 5/8" TYPE-X FIRE-RATED GYPSUM DRYWALL OVER BOILER AND HW TANK.

PAINTING: BENJAMIN MOORE & CO. OR EQUAL; COLORS SELECTED BY OWNER. PRIME AND PAINT ALL NEW INTERIOR TRIM, CASINGS, MOULDINGS, DOORS, WINDOWS, ETC. PRIME AND PAINT ALL NEW DRYWALL SURFACES. INTERIOR TRIM: MATCH MODULAR STANDARD PROFILES, SPECIES AND FINISH.

WINDOWS: "ANDERSEN" 400 SERIES VINYL CLAD WOOD WINDOWS WITH HIGH-PERFORMANCE LOW-E INSULATING GLASS, AND INSECT SCREENS, STANDARD HARDWARE, AS SCHEDULED. PRIME AND APPLY TWO FINISH COATS PAINT TO INTERIOR SASH AND FRAME. CAULK: SILICON SEALANT WITH COLOR TO MATCH ADJACENT SURFACES.

FLASHING: 16oz. COPPER, OR EQUAL.

INTERIOR DOORS: MATCH MODULAR STYLE AND FINISH.

DOOR HARDWARE: AS MANUFACTURED BY "SCHLAGE" OR EQUAL

ELECTRICAL: THE DESIGN AND INSTALLATION OF ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LOCAL CODES AND THE NATIONAL ELECTRICAL CONTRACTOR MUST BE INSURE AND LICENSED IN WESTCHESTER COUNTY.

SEE PLAN FOR FIXTURE TYPE. REVIEW ALL FIXTURES WITH OWNER BEFORE ORDERING. PLUMBING: THE DESIGN AND INSTALLATION OF ALL PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE LOCAL CODES AND THE NEW YORK STATE BUILDING CODE. PLUMBING CONTRACTOR MUST BE INSURED AND LICENSED IN WESTCHESTER COUNTY, NY. INSULATE ALL HOT

WATER SUPPLY PIPES LOCATED IN BASEMENT FROM BOILER TO FIRST FLOOR PENETRATIONS. UTILITIES: COORDINATE THE LOCATION AND SIZE OF ALL NEW UTILITY SPECIFICATIONS.

ZONING & PARKING ANALYSIS

TONING DATA - VODI/TOL/N

TAX MAP DESIGNATION:		SECT: 16.07	BLOCK: 1	LOT: 4
ZONING DISTRICT: C4 (BUSINESS)		EXISTING. BUSINESS		
		REQ'MENTS	EXISTING	PROPOSED
LOT AREA	SQ. FT.	NONE	61,132	N.C.
LOT WIDTH	FT.	25	389.1'	N.C.
LOT DEPTH	FT.	100	159.2	N.C.
FRONT YARD MAIN BUILDING ACCESSORY BUILDING	FT.	15 15	15 15	N.C.
SIDE YARD MAIN AND ACCESSORY BUILDING	FT.	×	27.9'	N.C.
REAR YARD MAIN BUILDING ACCESSORY BUILDING	FT.	3O 3O	74.2	N.C.
MAXIMUM HEIGHT MAIN BUILDING ACCESSORY BUILDING	FT.	35 2O	84.2'	N.C.
MAX. BUILDING COVERAGE	%	30	EXIST.	N.C.
REQUIRED OFF-STREET PARKING	#300-182(A)(11)			
REQUIRED OFF-STREET LOADING	#300=102	(A)(TI)		

*NONE, BUT IF PROVIDED SHALL BE 10 FEET; IF USED AS ONE-WAY VEHICULAR ACCESS. SHALL BE 17 FEET; TWO-WAY VEHICULAR ACCESS, 25 FEET; IF ADJOINS AN R DISTRICT, SHALL BE 50 FEET.

PARKING REQUIREMENTS TENANT #2 AUTOMOBILE REPAIR SHOP AUTOMOBILE REPAIR SHOP #300-182(A)(11) (PUBLIC GARAGE) (#300-182(a)(11) 4 EMPLOYEES

TOTAL REQ'D



100 EXECUTIVE BLVD. SUITE 204 OSSINING, NY 10562 PHONE: (914) 944-3377 FAX: (866) 567-6240

JORGE B. HERNANDEZ R.A. A.I.A. LICENSE NUMBER: 030424-1 CERTIFICATE NUMBER: 0973256

REVISIONS	DATE	E
		+

DRAWING TITLE

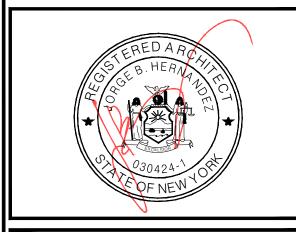
PROJECT: TITLESHEE1

PROJECT ADDRESS: 3668 BARGER ST. SHRUB OAK NY, 10588

	DOB	EXAMINER	SIGNATURE:
--	-----	----------	------------

DOB BSCAN STICKER:			

SEAL & SIGNATURE



DATE.:	DWG. NO.:
9/22/2021	
PROJECT NO.:	=
21-123	-
DRAWING BY:	
ARQ	CAD FILE NO.:
CHECKED BY:	

