

RIVERSIDE SOLAR PROJECT

TOWNS OF LYME & BROWNVILLE
JEFFERSON COUNTY, NEW YORK

LAT: 44.063697°
LONG: -76.096369°

PREPARED FOR:

AES CLEAN ENERGY
2180 SOUTH 1300 EAST, SUITE 600
SALT LAKE CITY, UT 84106

CIVIL ENGINEER:

TRC ENGINEERS, LLC
249 WESTERN AVE.
AUGUSTA, ME 04330

ELECTRICAL ENGINEER:

TRC ENGINEERS, LLC
249 WESTERN AVE.
AUGUSTA, ME 04330

ENVIRONMENTAL SERVICES:

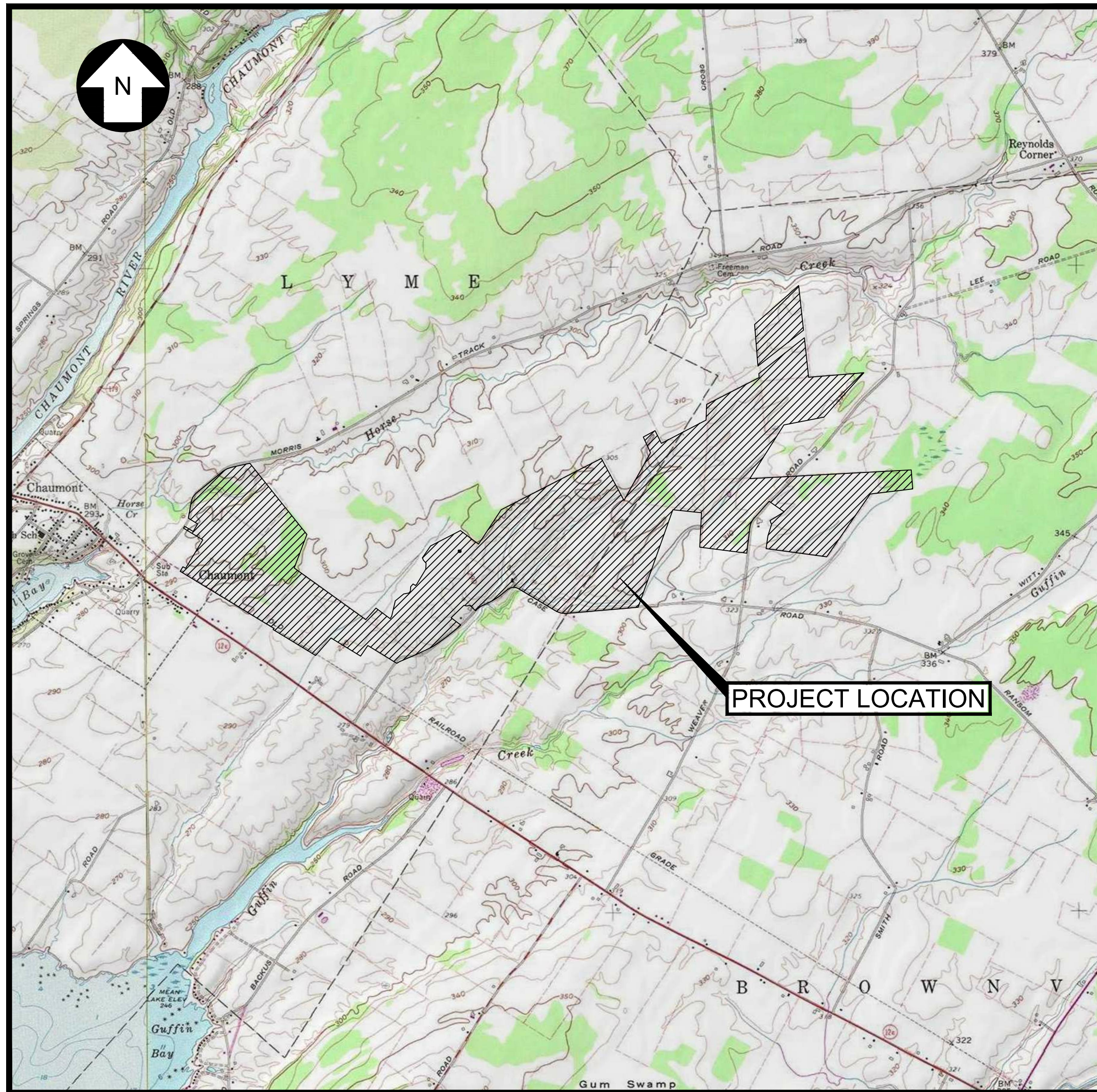
TRC ENVIRONMENTAL, LLC
215 GREENFIELD PARKWAY, SUITE 102
LIVERPOOL, NY 13088

GEOTECHNICAL ENGINEER:

ANS GEO, INC.
4405 SOUTH CLINTON AVE.
SOUTH PLAINFIELD, NJ 07080

SURVEY PROVIDED BY:

THEW ASSOCIATES PLLC
6431 US HIGHWAY 11
CANTON, NY 13617



LOCATION MAP

N.T.S.

POINT OF INTERCONNECT

DC CAPACITY: 130,845.88 kW
AC CAPACITY: 100,000.00 kW
DESIGN TEMP: 31°C
MINIMUM TEMP: -32°C

GENERAL DRAWING INDEX:

PV-G.00.01 COVER SHEET
PV-G.01.01 THRU 02 GENERAL NOTES & LEGEND
PV-G.01.03 OVERALL SITE LAYOUT & KEY SHEET

CIVIL DRAWING INDEX:

PV-C.00.01 THRU 17 EXISTING CONDITIONS & CLEARING PLAN
PV-C.01.01 THRU 17 SITE PLAN
PV-C.03.01 THRU 03 EROSION & SEDIMENTATION CONTROL DETAILS
PV-C.04.01 THRU 17 GRADING, DRAINAGE, AND EROSION CONTROL PLAN
PV-C.05.01 GRADING & DRAINAGE DETAILS
PV-C.06.01 DRIVEWAY AND ACCESS ROAD DETAILS
PV-C.07.01 WATER CROSSING DETAILS
PV-C.08.01 SITE ENTRANCE DETAILS
PV-C.08.03 GATE LIGHTING
PV-C.10.01 THRU 02 FENCING DETAILS
PV-C.11.01 ARRAY & RACKING DETAILS
PV-C.11.02 EQUIPMENT PAD DETAILS
PV-C.11.03 EQUIPMENT PAD DETAILS

COLLECTION SYSTEM DRAWING INDEX:

PV-C.12.01 TRENCH, BORING AND CROSSING DETAILS
PV-C.12.02 WETLAND CROSSING DETAILS
PV-C.12.03 SYSTEM SECTIONALIZING ENCLOSURE

LANDSCAPING DRAWING INDEX:

PV-C.13.00 OVERALL LANDSCAPE PLAN
PV-C.13.01 THRU 06 ENLARGED LANDSCAPE PLAN
PV-C.14.01 THRU 05 LANDSCAPE NOTES AND DETAILS

SUBSTATION DRAWING INDEX:

HV-P.01.01 STATION PLAN GENERAL ARRANGEMENT: OVERALL ELECTRICAL PLAN
HV-P.02.01 ELECTRICAL EQUIPMENT ELEVATIONS: SECTIONS A-A
HV-P.02.02 ELECTRICAL EQUIPMENT ELEVATIONS: SECTIONS B-B, C-C, D-D, E-E, F-F, G-G
HV-P.13.01 LIGHTING PLAN
HV-P.14.01 CONTROL HOUSE PLAN
HV-P.15.01 CONTROL HOUSE ELEVATION: SECTIONS A-A, B-B
HV-P.15.02 CONTROL HOUSE ELEVATION: SECTIONS C-C, D-D

TRANSMISSION DRAWING INDEX:

HV-C.09.01 PRELIMINARY TRANSMISSION INTERCONNECTION PLAN
HV-C.09.02 PRELIMINARY INTERCONNECTION PLAN AND PROFILE
HV-C.09.03 TERMINAL DEADEND STRUCTURE DRAWING
HV-E.15.01 PRELIMINARY HOOKSTICK OPERATED IN-LINE TRANSMISSION SWITCH

aes

2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679-3500

TRC

249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

COVER SHEET

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

AS SHOWN

SHEET NO:

PV-G.00.01

REV:

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UNDER NEW YORK STATE EDUCATION LAW ARTICLE
145 (ENGINEERING), SECTION 7209 (2), IT IS A
VIOLATION OF THE LAW FOR ANY PERSON, UNLESS
ACTING UNDER THE DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

ENGINEERS OF RECORD:

THE CIVIL ENGINEERING AND LANDSCAPING PLANS WERE PREPARED UNDER THE DIRECTION OF PATRICK M MARTIN, PE (NY 100151)
THE SUBSTATION ENGINEERING PLANS WERE PREPARED UNDER THE DIRECTION OF CHARLES PASCALE, PE (NY 072988)
THE TRANSMISSION AND COLLECTION ENGINEERING PLANS WERE PREPARED UNDER THE DIRECTION OF KEVIN MARTIN, PE (NY 099090)

PRELIMINARY
NOT FOR CONSTRUCTION



AES THINWALL 2924 4210101

GENERAL NOTES:

SURVEY NOTES:

- PRELIMINARY SURVEY PROVIDED BY THEW ASSOCIATES PLLC, BASED ON AN INSTRUMENT SURVEY COMPLETED JULY 2020.
- THIS SURVEY IS REFERENCED HORIZONTALLY TO THE NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT (NAD83/2011), PROJECTED ON THE NEW YORK STATE PLANE COORDINATE SYSTEM (CENTRAL ZONE) AND VERTICALLY TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVd88).
- NORTH ARROW AS SHOWN INDICATES GRID NORTH REFERENCED TO NAD83 AND PROJECTED ON THE NEW YORK STATE PLANE COORDINATE SYSTEM (CENTRAL ZONE).
- THE SUBSURFACE UTILITIES SHOWN HEREON ARE OF QUALITY LEVEL "C" AS DEFINED BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) IN THE "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". THE SUBSURFACE UTILITIES SHOWN HEREON ARE BASED ON PHYSICAL EVIDENCE LOCATED DURING THE FIELD SURVEY AND EXISTING UTILITY DRAWINGS. THE SURVEYOR FURTHER DOES NOT WARRANT OR CERTIFY THAT THE SUBSURFACE UTILITIES ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY CERTIFY THAT THE UTILITIES ARE DEPICTED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE SUBSURFACE UTILITIES.
- ELEVATIONS AND CONTOURS SHOWN REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVd88-GEOD12B) AND ARE BASED ON PUBLICLY AVAILABLE LIDAR.
- WETLAND BOUNDARY INFORMATION PROVIDED BY TRC DATED JANUARY 2021.
- ZONING BOUNDARY INFORMATION OBTAINED FROM THE TOWNS OF LYME AND BROWNVILLE.
- SOILS INFORMATION FROM USDA-NRCS WEB SOIL SURVEY JEFFERSON COUNTY, NY DATED JANUARY 2021.
- FLOOD ZONE CLASSIFICATION:
SITE LIES PARTIALLY INSIDE THE ZONE A FLOODPLAIN (1% ANNUAL RECURRENCE INTERVAL); AS SHOWN ON THE FOLLOWING MAPS
NUMBERED:

3603430050C - DATED SEPTEMBER 2, 1993
3603430041C - DATED SEPTEMBER 2, 1993
3603290001D - DATED SEPTEMBER 8, 1999
361063C-01 - DATED JUNE 2, 1992

REMOVAL NOTES:

- TREE REMOVAL SHALL BE IN CONFORMANCE WITH THE EXISTING CONDITIONS & CLEARING PLAN.
- IN AREAS INDICATED FOR SELECTIVE TREE CLEARING, ONLY TREES OVER THE MAXIMUM HEIGHT INDICATED SHALL BE CUT DOWN. ONLY HAND CUTTING SHALL BE ALLOWED. LEAVE TIMBER IN PLACE UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION PLANS OR ENVIRONMENTAL MONITOR.
- TREES AND OTHER VEGETATION MAY BE REDUCED TO CHIPS BY THE USE OF CHIPPING MACHINES OR STUMP GRINDER AND USED AS REQUIRED FOR EROSION CONTROL. ALL OTHER CHIPS AND WOOD WASTE RESULTING FROM REMOVAL OPERATIONS SHALL BE DISPOSED OF OFF-SITE AT A FACILITY AND IN A MANNER APPROVED BY THE OWNER.
- ALL EXISTING DEBRIS, RUBBISH, AND ABANDONED ITEMS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF OFF-SITE IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- ALL DEMOLITION WASTE, DEBRIS AND RUBBISH SHALL BE PROPERLY REMOVED FROM THE SITE AS IT OCCURS. ALL MATERIALS SHALL BE PROPERLY DISPOSED OF OFF-SITE IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
- TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING IMPROVEMENTS AND FACILITIES TO REMAIN IN PLACE. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND REPLACEMENT OF DAMAGED ITEMS AS A RESULT OF CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

CONTRACTOR NOTES:

- UNLESS INDICATED OTHERWISE, REFER TO THE LATEST EDITION OF THE STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS FOR GENERAL REQUIREMENTS, PRODUCTS AND EXECUTION RELATED TO CONSTRUCTION OF BUT NOT LIMITED TO; CLEARING, GRUBBING, ROADS, UTILITY TRENCH EXCAVATION, BORROW, SUBGRADE, SUBBASE, GRANULAR FILL, AND AGGREGATE BASE.
- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL MARK OR DELINEATE THE FOLLOWING PROJECT FEATURES USING APPROPRIATE MEANS, INCLUDING BUT NOT LIMITED TO LATH MARKERS, SURVEYORS RIBBON, PIN FLAGS, BARRIER FENCE, OR SUITABLE EQUIVALENT.
A. PROPOSED FACILITY COMPONENTS DEPICTED ON THE CONSTRUCTION DRAWINGS
B. STREAMS AND WETLANDS
C. VEHICLE TRAVEL CORRIDORS, STREAM CROSSING LOCATIONS
D. LIMITS OF CLEARING AND DISTURBANCE
E. PROTECTED CULTURAL AND NATURAL RESOURCES
- THE CONTRACTOR SHALL NOTE THE CONDITION OF ANY EXISTING FEATURES NOT INDICATED FOR REMOVAL THAT MAY BE IMPACTED BY PROJECT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY DAMAGED FEATURES AT THEIR EXPENSE.
- DISRUPTION TO REGULATED WETLANDS AND PROTECTED HABITAT SHALL BE MINIMIZED. THE CONTRACTOR SHALL NOTIFY NYSDEC'S FIELD REPRESENTATIVE, THE DPS STAFF REPRESENTATIVE, AND THE APPLICANT'S REPRESENTATIVE OF ANY ACTIVITIES THAT VIOLATE OR MAY VIOLATE EITHER THE TERMS OF THE CERTIFICATE OR THE ENVIRONMENTAL CONSERVATION LAW, DPS AND DEC STAFFS' FIELD REPRESENTATIVES WILL WORK COOPERATIVELY TO DETERMINE WHETHER STOP WORK AUTHORITY WILL BE EXERCISED, OR WHETHER TO DIRECT THE APPLICANT TO TAKE ACTION TO FURTHER MINIMIZE IMPACTS TO STREAMS AND WETLANDS.
- RESTRICTED ACTIVITIES PERTAIN TO A BUFFER ZONE OF 100 FEET ON EITHER SIDE OF THE BOUNDARIES OF WATER-RELATED RESOURCES (STREAMS, WETLANDS, SPRINGS, WELLS, DRAINAGE, ETC.) AND INCLUDE THE FOLLOWING RESTRICTIONS:
A. NO DEPOSITION OF SLASH WITHIN IDENTIFIABLE STREAM CHANNELS OR WOOD CHIPS WITHIN 25 FEET OF WETLANDS;
B. NO UNNECESSARY REMOVAL OF WOOD VEGETATION WITHIN WETLAND AND STREAM BUFFERS OR DEGRADATION OF STREAM BANKS;
C. NO EQUIPMENT WASHING OR REFUELING EXCEPT AS SPECIFICALLY PERMITTED BY THE FINAL PROJECT DOCUMENTS;
D. AND NO STORAGE, MIXING, OR HANDLING OF ANY PETROLEUM OR CHEMICAL MATERIALS IN OPEN CONTAINERS.
- AT THE END OF EACH WORK DAY ALL EQUIPMENT AND MACHINERY SHALL BE STORED AND SAFELY CONTAINED MORE THAN 100 FEET LANDWARD OF ANY REGULATED WETLAND OR WATER BODY.
- FUEL AND OTHER CHEMICAL STORAGE TANKS SHALL BE CONTAINED AND LOCATED IN AREAS MORE THAN 300 FEET LANDWARD OF ANY REGULATED WETLAND OR WATER BODY.
- ALL MOBILE EQUIPMENT, EXCLUDING DEWATERING PUMPS, SHALL BE FUELED IN LOCATIONS THAT ARE A MINIMUM OF 100 FEET FROM THE TOP OF STREAM BANK, WETLAND, OR WATER BODY. DEWATERING PUMPS OPERATING CLOSER THAN 100 FEET FROM THE STREAM BANK WETLAND, OR WATER BODY MUST BE ON AN IMPERVIOUS SURFACE WITH ABSORBENTS CAPABLE OF CONTAINING ANY LEAKAGE OF PETROLEUM PRODUCTS.

- ALL EQUIPMENT USED WITHIN BED OR BANKS OF STREAMS OR IN REGULATED WETLANDS AND 100-FOOT WETLAND BUFFER ZONES MUST BE INSPECTED DAILY FOR LEAKS OF PETROLEUM, OTHER FLUIDS, OR CONTAMINANTS. EQUIPMENT FOUND TO BE LEAKING SHALL BE REMOVED FROM THE WORK SITE; LEAKS CONTAINED AND SPILLS CLEANED UP IMMEDIATELY.
- "AVOID, DO NOT CROSS" INDICATES THAT AN AREA DOES NOT HAVE A DESIGNATED ACCESS ROUTE AND THAT EQUIPMENT IS RESTRICTED FROM CROSSING OR OPERATING IN THAT AREA. THIS DESIGNATION IS APPLIED TO ALL WETLANDS, STREAMS, AND ASSOCIATED BUFFERS THAT DO NOT HAVE APPROVED EQUIPMENT ACCESS, AS INDICATED.
- THE NATIVE SUBSOIL AT THE RIVERSIDE SOLAR PROJECT SITE IS VERY SENSITIVE TO MOISTURE AND WILL LOSE STRENGTH RAPIDLY WHEN EXPOSED TO WATER. THE CONTRACTOR SHALL UTILIZE APPROPRIATE WET WEATHER CONSTRUCTION TECHNIQUES DURING CONSTRUCTION OF THE FACILITY. WET WEATHER CONSTRUCTION TECHNIQUES MAY INCLUDE LIMITING EXPOSURE OF SUBSOILS TO THAT WHICH CAN BE COMPLETED OR COVERED BY THE END OF EACH WORKDAY; TEMPORARY CONSTRUCTION ROADS AND PLATFORMS BUILT WITH CONSTRUCTION MATTING OR GEOTEXTILES AND CRUSHED STONE; TEMPORARY FILL, AND OTHER METHODS.
- REFER TO THE PROJECT GEOTECHNICAL REPORT FOR MORE SPECIFIC CUT AND FILL CONSTRUCTION REQUIREMENTS.
- ALL VEHICLE TRAFFIC AND PARKING SHALL BE CONFINED TO THE TEMPORARY ACCESS ROADS, DESIGNATED WORK AREAS, AND/OR DESIGNATED PARKING AND MATERIAL LAYDOWN AREAS.
- EXISTING FARM FENCES NOT INDICATED FOR REMOVAL SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. WHERE EXISTING FENCE OR GATES MUST BE TEMPORARILY REMOVED OR ALTERED, TEMPORARY FENCING AND GATES SHALL BE PROVIDED TO MATCH THE FUNCTION OF THE EXISTING SYSTEM. AT THE END OF CONSTRUCTION, RESTORE THE FENCE AND GATE TO MATCH THAT EXISTING AT THE START OF THE WORK.
- THE CONTRACTOR SHALL IDENTIFY AND PROTECT ALL OIL/GAS WELLS AND PIPELINES DURING CONSTRUCTION ACTIVITIES.

GENERAL ENVIRONMENTAL RESTRICTIONS:

- ALL EQUIPMENT ACCESS, STORAGE OF EQUIPMENT, MATERIALS, EMPLOYEE PARKING, AND OTHER CONSTRUCTION ACTIVITIES ARE RESTRICTED TO THE DESIGNATED ACCESS ROADS, LAYDOWN AREAS, SUBSTATION SITE, COLLECTION LINE AND TRANSMISSION LINE ROUTES AS INDICATED BY THE PROJECT DOCUMENTS.
- FUGITIVE DUST RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICAL BY IMPLEMENTING APPROPRIATE CONTROL MEASURES. THESE MEASURES INCLUDE THE APPLICATION OF MULCH, WATER, OR STONE ON ACCESS ROADS, EXPOSED SOILS, STOCKPILED SOILS, OR UNPAVED PUBLIC ROADS WHEN DRY, WINDY CONDITIONS EXIST. A WATERING VEHICLE (OR A VEHICLE CONTAINING AN APPROVED CHEMICAL TREATMENT) SHALL BE MADE AVAILABLE AS NEEDED.
- CONTRACTOR SHALL MAINTAIN ALL EQUIPMENT IN GOOD OPERATING CONDITION. ALL MOTORS AND ENGINES SHALL BE MUFFLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND SHALL COMPLY WITH STATE ENVIRONMENTAL LAW, SUBCHAPTER E, PART 450 (NOISE FROM HEAVY MOTOR VEHICLES). ANY FAULTY NOISE SUPPRESSOR SHALL BE REPAIRED OR REPLACED IMMEDIATELY. EQUIPMENT SHALL NOT BE LEFT RUNNING UNNECESSARILY. EXISTING TALL GROWING VEGETATION SHALL BE RETAINED TO THE MAXIMUM EXTENT PRACTICABLE, TO SERVE AS A NOISE BUFFER.
- CONSTRUCTION AND ROUTINE MAINTENANCE ACTIVITIES ON THE FACILITY SHALL BE LIMITED TO 7 A.M. TO 8 P.M. MONDAY THROUGH SATURDAY AND 8 A.M. TO 8 P.M. ON SUNDAY AND NATIONAL HOLIDAYS, WITH THE EXCEPTION OF CONSTRUCTION AND DELIVERY ACTIVITIES, WHICH MAY OCCUR DURING EXTENDED HOURS BEYOND THIS SCHEDULE ON AN AS-NEEDED BASIS.
- IN PROTECTED STREAMS WITH THE STANDARD OF SUPPORTING TROUT SPECIES, ALL INSTREAM WORK, AS WELL AS ANY WORK THAT MAY RESULT IN THE SUSPENSION OF SEDIMENT, IS PROHIBITED DURING THE TROUT SPAWNING AND INCUBATION PERIOD COMMENCING OCTOBER 1 AND ENDING MAY 31, UNLESS THE CERTIFICATE HOLDER RECEIVES PRIOR APPROVAL FROM THE DEC REGION 6 SUPERVISOR OF NATURAL RESOURCES.
- MINIMIZE VEGETATION REMOVAL WITHIN WETLANDS, WETLAND BUFFERS, AND STREAM BUFFERS (100 FEET FROM STATE REGULATED WETLANDS AND 25 FEET FROM OTHER WATER BODIES) OUTSIDE OF THE ARRAY SECURITY FENCE. VEGETATION TALLER THAN FIVE (5) FEET SHALL BE CUT TO A HEIGHT OF FIVE (5) FEET. VEGETATION SHORTER THAN FIVE (5) FEET SHALL NOT BE CLEARED OR CUT.
- WHERE REQUIRED, ONLY CLEARING BY HAND IS ALLOWED WITHIN WETLANDS, WETLAND BUFFERS, AND STREAM BUFFERS. NO STUMP REMOVAL OR GRUBBING SHALL OCCUR WITHIN ANY STATE JURISDICTIONAL STREAM OR WETLAND BUFFER, EXCEPT AT PERMANENT ACCESS ROAD CROSSING LOCATIONS.
- ALL FILL MATERIALS SHALL CONSIST OF CLEAN SOIL, SAND, AND/OR GRAVEL THAT IS FREE OF THE FOLLOWING SUBSTANCES: ASPHALT, SLAG, FLY ASH, DEMOLITION DEBRIS, BROKEN CONCRETE, GARBAGE, HOUSEHOLD REFUSE, TIRES, WOODY MATERIALS, AND METAL OBJECTS. REASONABLE EFFORTS SHALL BE MADE TO USE FILL MATERIALS THAT ARE VISUALLY FREE OF INVASIVE SPECIES BASED ON ONSITE AND SOURCE INSPECTIONS. THE INTRODUCTION OF MATERIALS TOXIC TO AQUATIC LIFE IS EXPRESSLY PROHIBITED.
- INDIRECT IMPACTS TO STREAMS AND WETLANDS SHALL BE CONTROLLED THROUGH THE EMPLOYMENT OF APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH APPROVED PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP). MEASURES TO BE EMPLOYED SHALL INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCES, CHECK DAMS, MULCH, TEMPORARY SEEDING, AND OTHER PRACTICES AS OUTLINED IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (LATEST EDITION).
- EXPOSED SOIL SHALL BE SEEDDED AND/OR MULCHED AS SOON AS PRACTICABLE AFTER FINAL GRADING. TEMPORARY SEED AND MULCH SHALL BE USED DURING PERIODS OF PLANNED EXTENDED SHUT-DOWNS, INTERRUPTED CONSTRUCTION AND DURING PERIODS OF HOT WEATHER WHEN PERMANENT SEEDING IS LIKELY TO FAIL.
- IN THE EVENT THAT ARCHAEOLOGICAL MATERIALS, HUMAN REMAINS, OR EVIDENCE OF HUMAN BURIALS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE VICINITY OF THE FIND SHALL BE IMMEDIATELY HALTED AND THE "UNANTICIPATED DISCOVERY PLAN" SHALL BE IMPLEMENTED.
- THE CONTRACTOR SHALL LOCATE AND DISTRIBUTE EXCESS EXCAVATION MATERIAL IN NON-AGRICULTURE UPLAND AREAS (I.E., OUTSIDE OF WETLANDS, STREAMS, AND AGRICULTURAL FIELDS), WHERE PRACTICAL, SUCH MATERIAL SHALL BE USED AS ROAD FILL OR BACKFILL AROUND STRUCTURES. EROSION CONTROL PRACTICES SHALL BE INSTALLED, AND EXPOSED SOILS STABILIZED IN ACCORDANCE WITH THE SWPPP.
- EXCESS CONCRETE SHALL BE PROPERLY DISPOSED OF OFF SITE.

SPECIFIC WETLAND CROSSING RESTRICTIONS:

- EXCEPT WHERE CROSSED BY PERMANENT ROADS OR THROUGH USE OF TEMPORARY MATTING, STREAMS SHALL NOT BE CROSSED BY MOTORIZED EQUIPMENT. TEMPORARY ACCESS ACROSS WETLANDS SHALL BE REMOVED AT THE EARLIEST TIMEFRAME PRACTICAL.
- WORK WITHIN AND ACCESS ACROSS WETLANDS SHALL BE DESIGNED AND EXECUTED SO AS NOT TO ALTER THE PRE-DISTURBANCE FLOW REGIME.
- WETLAND TOPSOIL AND SUBSOIL SHALL BE SEGREGATED AND RETAINED FOR BACKFILL WITHIN THE WETLAND FROM WHICH IT ORIGINATED. WETLAND EXCAVATION SHALL BE BACKFILLED WITH SOILS TO MATCH NATURAL STRATA AND IN-SITU DENSITIES.
- DURING EXCAVATION IN WETLANDS, TEMPORARY SPOIL STOCKPILES SHALL BE PLACED ON GEOTEXTILE BLANKETS AND/OR CONSTRUCTION MATTING. FOLLOWING BACKFILL, ANY EXCESS SPOILS NOT USED AS STRUCTURE BACKFILL SHALL BE DISPOSED OF AT AN UPLAND SITE AS APPROVED BY THE ENVIRONMENTAL INSPECTOR (NO BACK-BLADING OR OTHERWISE SPREADING OF EXCESS SPOIL OVER THE WETLAND SURFACE SHALL BE PERMITTED).
- EROSION CONTROL AND OTHER WETLAND PROTECTION MEASURES SHALL BE IMPLEMENTED AS SPECIFIED IN THE SWPPP.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCING AND SEDIMENT BARRIERS AS INDICATED WHENEVER EXCAVATION OR FILLING ACTIVITIES OCCUR ADJACENT TO OR WITHIN STREAM AND WETLAND

AREAS.

AGRICULTURAL LAND-RELATED RESTRICTIONS:

- AGRICULTURAL MITIGATION, RESTORATION, AND CLEAN UP MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:
A. USE OF CONSTRUCTION MATTING,
B. CONSTRUCTION OF TEMPORARY ACCESS ROADS AND ACCESS ROAD REMOVAL,
C. TOPSOIL STRIPPING,
D. PLACEMENT OF GEOTEXTILE AND STONE BEARING LAYER,
E. REGRADING AND SPREADING PREVIOUSLY STRIPPED TOPSOIL,
F. SURFACE AND DEEP TILLAGE,
G. DRAINAGE SYSTEM REPAIR OR ALTERATION.
- IN ACTIVE LIVESTOCK-USE AREAS, ANY CHERRY TREE SLASH (TOXIC TO LIVESTOCK) GENERATED DURING CLEARING SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO BE AVAILABLE TO LIVESTOCK.
- ANY WORK ON AGRICULTURAL LANDS SHALL INCLUDE THE FOLLOWING PRE-CONSTRUCTION TREATMENTS:
A. ALL TOPSOIL WILL BE PROTECTED BY APPROPRIATE MEANS, INCLUDING STRIPPING AND STOCKPILING.
B. UPON COMPLETION OF CONSTRUCTION ACTIVITIES, ALL IMPORTED MATERIAL SUCH AS GRAVEL SHALL BE COMPLETELY REMOVED FROM TEMPORARY CONSTRUCTION, AND THE UNDERLYING SOIL RESTORED AS PRESCRIBED BY PERMIT CONDITIONS.
- TEMPORARY GRAVEL ROADS, TEMPORARY CULVERTS, TIMBER MATS, AND SIMILAR TEMPORARY MEASURES SHALL BE REMOVED AND THE IMPACTED AREAS RESTORED WITHIN THE TIMEFRAME PRESCRIBED BY THE PERMIT.
- PERMANENT ACCESS AND HAUL ROADS SHALL BE CONSTRUCTED AS INDICATED ON THE FINAL CONSTRUCTION DRAWINGS.
- ALL TEMPORARY ACCESS ROUTES ACROSS AGRICULTURAL FIELDS SHALL BE THE MINIMUM WIDTH NECESSARY TO ACCOMMODATE CONSTRUCTION TRAFFIC.
- IMMEDIATELY FOLLOWING CONSTRUCTION ACTIVITY, THE WORK AREAS SHALL BE THOROUGHLY CLEARED OF ALL CONSTRUCTION DEBRIS, REFUSE AND METAL OBJECTS SUCH AS NUTS, BOLTS, SPIKES, WIRE, PIECES OF STEEL, AND OTHER ASSORTED ITEMS.
- LIMITS OF DISTURBANCE, LIMITS OF CLEARING, BUFFER DELINEATIONS AND OTHER TEMPORARY MARKINGS SHALL UTILIZE WOOD STAKES, BARRIER FENCES AND SIMILAR METHODS. NO PIN FLAGS SHALL BE USED IN AGRICULTURAL FIELDS.
- THE NEW YORK DEPARTMENT OF AGRICULTURE AND MARKETS (NYS DAM) GUIDELINES FOR AGRICULTURE AND MITIGATION FOR SOLAR POWER PROJECTS SHALL BE FOLLOWED TO THE EXTENT PRACTICABLE. WHEN DEVIATIONS FROM THE GUIDELINES ARE NECESSARY NYS DAM SHALL BE CONSULTED.
- ALL EXISTING DRAINAGE AND EROSION CONTROL FEATURES NOT INDICATED FOR REMOVAL INCLUDING BUT NOT LIMITED TO DRAINAGE DITCHES, DIVERSIONS, DRAIN TILE, CULVERTS ETC; SHALL BE AVOIDED OR PROTECTED FROM DAMAGE. ANY FEATURES DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION IMMEDIATELY.
- TOPSOIL STRIPPED FROM WORK SITES IN AGRICULTURAL AREAS SHALL BE SEGREGATED FROM OTHER SOIL PRODUCTS AND STOCKPILED IN AREAS IMMEDIATELY ADJACENT TO WHERE IT WAS REMOVED. THE TOPSOIL SHALL BE USED FOR RESTORATION OF THAT SITE.
- AT THE COMPLETION OF WORK, ALL DISTURBED AGRICULTURAL AREAS SHALL BE DECOMPACTED TO A DEPTH OF 18 INCHES PRIOR TO REPLACEMENT OF TOPSOIL. ALL ROCKS 4 INCH DIAMETER AND LARGER SHALL BE REMOVED.
- FOLLOWING DECOMPACTION OF SUBSOIL, TOPSOIL SHALL BE SPREAD, DECOMPACTED, ROCKS REMOVED, AND SEEDDED. SEED MIX SHALL BE IN ACCORDANCE WITH LAND OWNER REQUIREMENTS.
- SOIL DECOMPACTION SHALL USE A DEEP RIPPER, OR HEAVY DUTY CHISEL-PLOW. DECOMPACT SOIL TO A MAX. COMPRESSIVE STRENGTH OF 250 PSI AS MEASURED USING A SOIL PENETROMETER.
- SOIL RESTORATION SHALL NOT OCCUR FROM OCTOBER 1 THROUGH MAY 30 UNLESS FAVORABLE, DRY SOIL CONDITIONS EXIST. CONCURRENCE OF THE ENVIRONMENTAL MONITOR SHALL BE OBTAINED PRIOR TO THE START OF RESTORATION ACTIVITIES.

NON-AGRICULTURAL LAND RESTRICTIONS:

- NON-AGRICULTURAL LAND MITIGATION, RESTORATION, AND CLEAN UP MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:
A. TOPSOIL STRIPPING AND STOCKPILING,
B. USE OF CONSTRUCTION MATTING,
C. CONSTRUCTION OF TEMPORARY HAUL ROADS AND HAUL ROAD REMOVAL,
D. PLACEMENT AND COMPACTION OF STONE BEARING LAYER WITH OR WITHOUT GEOSYNTHETIC LAYER,
E. SURFACE TILLAGE,
F. REGRADING AND SPREADING PREVIOUSLY STRIPPED TOPSOIL,
G. DRAINAGE SYSTEM REPAIR OR ALTERATION.
- TEMPORARY GRAVEL ROADS, TEMPORARY CULVERTS, TIMBER MATS, AND SIMILAR TEMPORARY MEASURES SHALL BE REMOVED AND THE IMPACTED AREAS RESTORED WITHIN THE TIMEFRAME PRESCRIBED BY THE PERMIT.
- RESTORATION OF DISTURBED AREAS, TEMPORARY ROADS AND WORK PLATFORMS ON NON-AGRICULTURAL LANDS SHALL INCLUDE THE FOLLOWING PRE- AND POST-CONSTRUCTION TREATMENTS:
A. TOPSOIL WITHIN CONSTRUCTION AREA SUBJECT TO VEHICLE TRAFFIC, MATERIAL STOCKPILING OR OTHER POTENTIALLY HARMFUL ACTIVITY SHALL BE STRIPPED AND STOCKPILED.
B. UPON COMPLETION OF CONSTRUCTION ACTIVITIES, ALL TEMPORARY ROADS AND WORK SITES SHALL BE SCARIFIED/DECOMPACTED AND STOCKPILED SOIL SPREAD AND THE AREA STABILIZED AND ALLOWED TO RE-VEGETATE NATURALLY.
C. APPROVED SWPPP/ESC CONTROLS, INCLUDING BIODEGRADABLE MEASURES, SHALL BE PROVIDED AND SHALL REMAIN IN PLACE UNTIL THE RESTORED AREA HAS BEEN RE-VEGETATED.
- ACCESS ROUTES SHALL BE CONSTRUCTED AS INDICATED ON THE FINAL CONSTRUCTION DRAWINGS, WITH CONSTRUCTION ACTIVITIES RESTRICTED TO DESIGNATED CORRIDORS/RIGHTS-OF-WAY.
- ALL EXISTING DRAINAGE AND EROSION CONTROL FEATURES NOT INDICATED FOR REMOVAL INCLUDING BUT NOT LIMITED TO DRAINAGE DITCHES, DIVERSIONS, DRAIN TILE, CULVERTS ETC; SHALL BE AVOIDED OR PROTECTED FROM DAMAGE. ANY FEATURES DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION IMMEDIATELY.
- TOPSOIL STRIPPED FROM WORK SITES SHALL BE SEGREGATED FROM OTHER SOIL PRODUCTS AND STOCKPILED IN AREAS IMMEDIATELY ADJACENT TO WHERE IT WAS REMOVED. THE TOPSOIL SHALL BE USED FOR RESTORATION OF THAT SITE.

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

PRELIMINARY
NOT FOR CONSTRUCTION



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USER: jacob123@pman11y 101016.dwg



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Salt Lake City, UT 84106-2749
(801) 679 - 3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
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2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
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-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

GENERAL NOTES &
LEGEND

PROJ NUM:	422208
DES:	E. BROWN
DWN:	E. BROWN
CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021
SCALE AT 22" x 34":	

AS SHOWN

SHEET NO:	REV:
PV-G.01.01	2

1. EROSION AND SEDIMENTATION CONTROL MEASURES FOR THIS PROJECT SHALL BE INSTALLED AND MAINTAINED IN FULL COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT IN ACCORDANCE WITH NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION STATE DISCHARGE POLLUTANT ELIMINATION SYSTEM GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY (GP-0-20-001).
2. REFER TO THE CONSTRUCTION SEQUENCE IN THE SWPPP.
3. THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL PRACTICES IN ACCORDANCE WITH THE DESIGN AND SWPPP THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED FOR THE ACCESS ROUTES AT EACH JUNCTION WITH A PUBLIC ROAD UNLESS OTHERWISE INDICATED.
5. INSTALL SILT FENCE ON THE DOWNSLOPE SIDE OF DISTURBED AREAS AS NECESSARY.
6. PLACE CHECK DAMS IN ALL SWALES/DITCHES INDICATED OR DIRECTED IN ACCORDANCE WITH THE 2016 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (NYSDEC "BLUE BOOK").
7. THE CONTRACTOR SHALL PLACE SOIL AND EXCESS EXCAVATED EARTH IN TEMPORARY STOCK PILE AREAS THAT DO NOT INTERFERE WITH CONSTRUCTION ACTIVITIES, STORMWATER RUNOFF, AND ARE NOT IN ENVIRONMENTALLY SENSITIVE AREAS. STOCK PILES SHALL BE STABILIZED AS STIPULATED OR DIRECTED.
8. ALL DISTURBED AREAS SHALL BE STABILIZED PER THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
9. AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL DE-COMPACT, ROUGH GRADE, RE-APPLY STOCKPILED TOPSOIL, FINE GRADE, SEED, AND MULCH ALL DISTURBED AREAS PLANNED FOR VEGETATIVE COVER.
10. CONSTRUCTION WORK AREAS AND ACCESS ROUTES MAY BE IMPROVED AS NECESSARY TO ALLOW CONSTRUCTION ACCESS. ANY IMPROVEMENTS, UNLESS DEEMED PERMANENT, MUST BE REMOVED OR RESTORED AT THE COMPLETION OF CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT, DESIGN, AND OPERATION OF CONCRETE WASHOUTS. THE CONCRETE WASHOUTS SHALL BE INSTALLED A MINIMUM OF 100 FEET AWAY FROM ANY WETLAND, WATERBODY, OR STREAM, AND LOCATED OUTSIDE WETLAND ADJACENT AREAS TO THE MAXIMUM EXTENT PRACTICABLE. DISPOSAL OF WASTE CONCRETE OR WASH WATER SHALL BE AT LEAST 100 FEET FROM ANY WETLAND, WATERBODY, OR STREAM. CONCRETE WASTE MATERIAL SHALL NOT BE ALLOWED TO DISCHARGE FROM THE CONCRETE WASHOUT.
12. EROSION CONTROL FEATURES INDICATED ON THE DRAWINGS ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL DEPLOY ADDITIONAL CONTROLS AS NECESSARY. PARTICULARLY FOR THOSE ITEMS CONSTRUCTED DURING WINTER MONTHS OR WHICH DO NOT HAVE AN ADEQUATE STAND OF VEGETATIVE GROUND COVER.

TOWN OF BROWNVILLE ZONING SUMMARY - SOLAR ENERGY LAW		
DIMENSION	LARGE SOLAR PHOTOVOLTAIC ENERGY SYSTEM REQUIREMENTS	PROVIDED
MAXIMUM HEIGHT (SOLAR ARRAY)	20 FEET	8' - 11"
** MINIMUM FRONT YARD SETBACK	100 FEET	100 FEET/200 FEET
** MINIMUM SIDE YARD SETBACK	50 FEET	50 FEET/100 FEET
** MINIMUM REAR YARD SETBACK	50 FEET	50 FEET
MINIMUM ACCESS ROAD WIDTH	ALLOW FOR PASSAGE OF EMERGENCY VEHICLES	20 FEET
MAXIMUM FENCE HEIGHT	PER PLANNING BOARD REQUIREMENT	7'-0"

** SETBACK IS DOUBLED WHEN PANELS FACE THIS PROPERTY LINE




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Call 811
before you dig

APPLICATION RATE SHALL BE APPROXIMATELY 42 LBS PER ACRE, WITH A COVER CROP OF ANNUAL RYEGRASS AT 12 LBS PER ACRE.

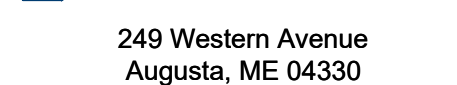
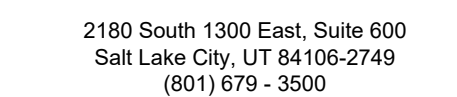
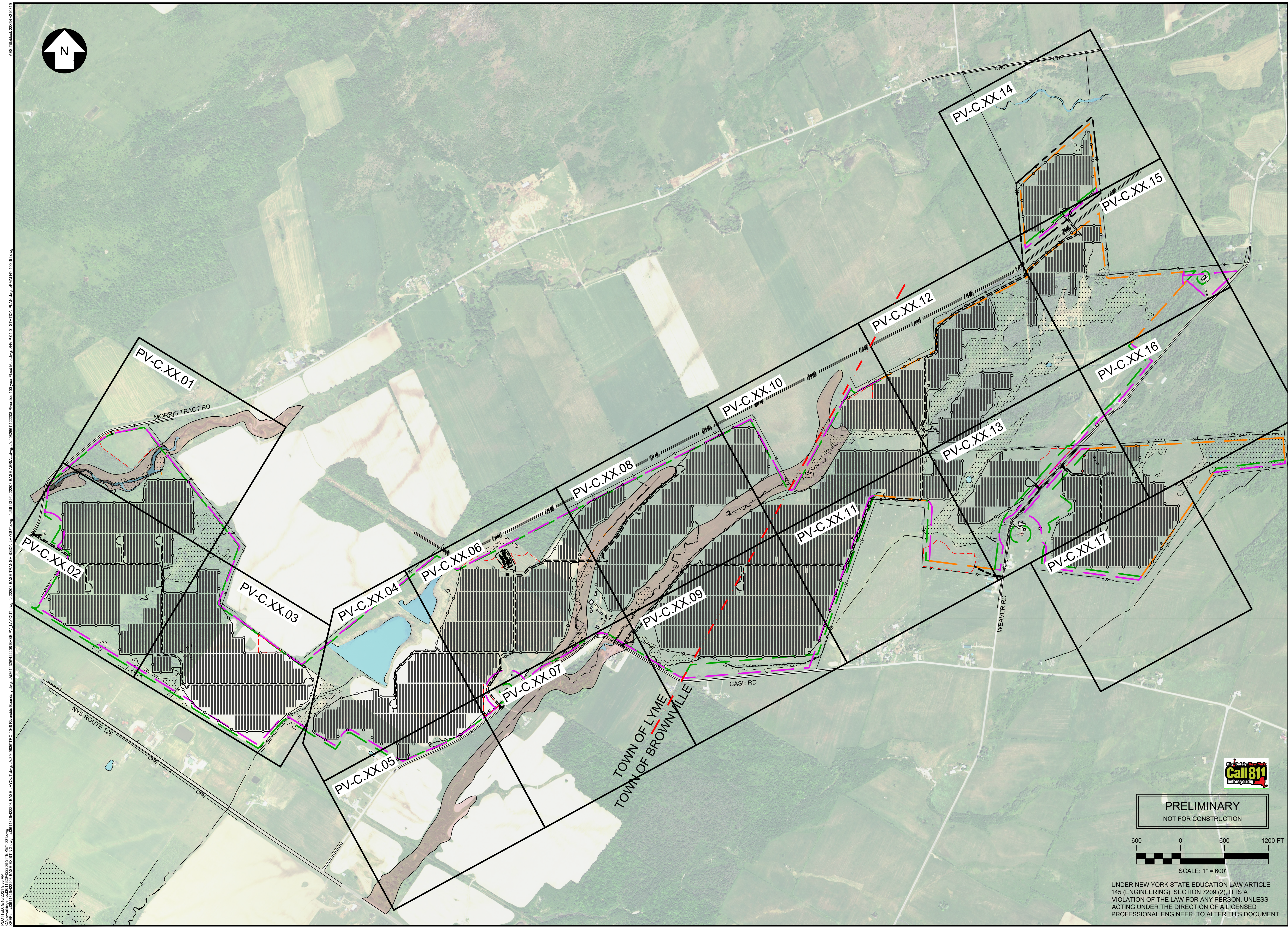
PROPERTY AREA (ACRES)	936
FENCED AREA (ACRES)	547.2
FENCE LENGTH (LF)	79,475
HAUL ROAD LENGTH (LF)	18,175

SOILS INFORMATION OBTAINED FROM NRCS MEDIUM INTENSITY SOIL SURVEY OF JEFFERSON COUNTY, NY
DATED JUNE 2020, DOWNLOADED FROM THE NRCS WEB SOIL SURVEY WEBSITE.



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PROJECT TITLE:		
RIVERSIDE SOLAR PROJECT		
PROJECT LOCATION:		
TOWNS OF LYME & BROWNVILLE JEFFERSON CO., NY		
SHEET TITLE & DESCRIPTION:		
GENERAL NOTES & LEGEND		

PROJ NUM:	422208	
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DWN:	E. BROWN	
CHK:	P. MARTIN	
APV:	-	
DATE:	04/15/2021	
SCALE AT 22" x 34":		
AS NOTED		
SHEET NO: PV-G.01.02		REV: 2



PE STAMP:



KEY PLAN:

REVISIONS

[illegible]

PROJECT TITLE:		
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RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

OVERALL SITE LAYOUT & KEY SHEET

PROJ NUM:	422208
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DATE:	04/15/2021

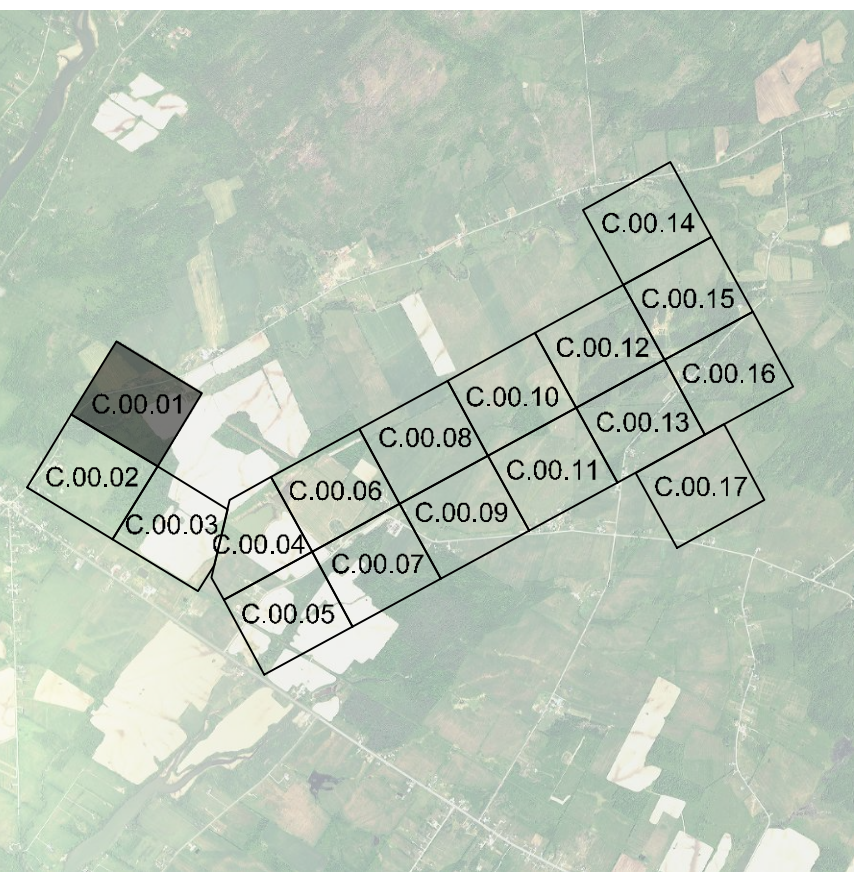
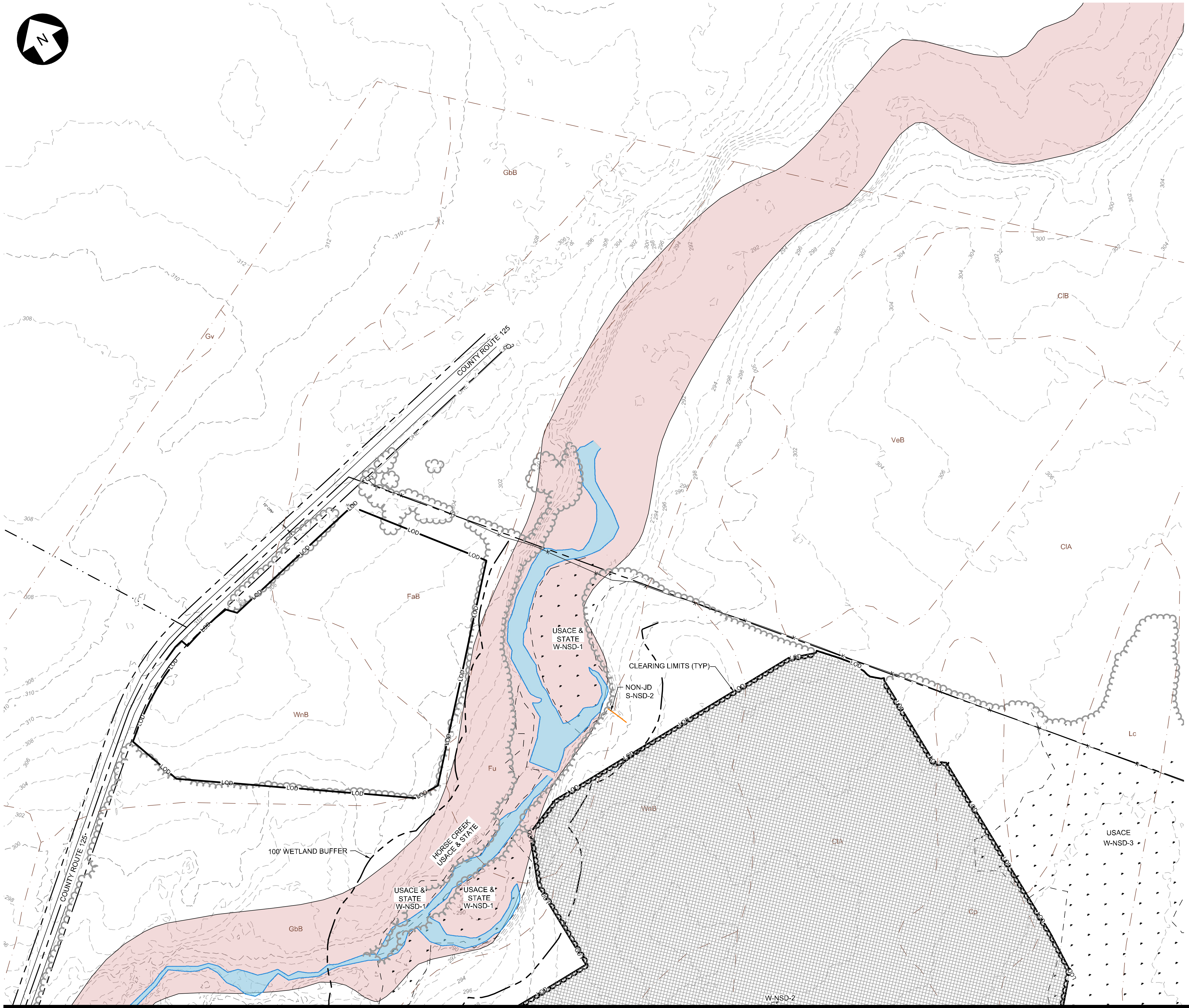
SCALE AT 22" x 34":

$$1'' = 600'$$

SHEET NO:
PV-G.01.03

REV: 2

PROJECT: 422208, EXIST & CLEARING.dwg
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DATE: 09/10/2021
DRAWN BY: P. MARTIN
CHECKED BY: P. MARTIN
SCALE: 1"=100'

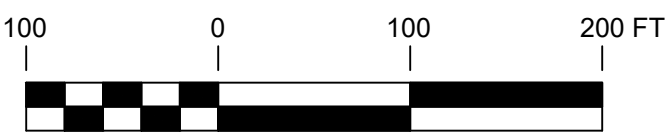


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- OVERHEAD ELECTRIC
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
- GRAVEL ROAD
- MINOR CONTOUR
- MAJOR CONTOUR
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- FEMA ZONE A
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- USACE JURISDICTIONAL STREAM
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- TOWN BOUNDARY
- RIGHT OF WAY
- PAVED ROAD
- LIMITS OF DISTURBANCE
- NO-BUILD AREA
- TREE CLEARING LIMITS

PRELIMINARY
NOT FOR CONSTRUCTION



SCALE: 1" = 100'

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PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

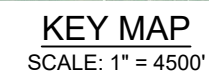
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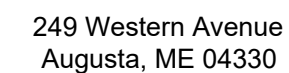
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	PROPERTY BOUNDARY
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REVISIONS:

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RIVERSIDE SOLAR
PROJECT

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

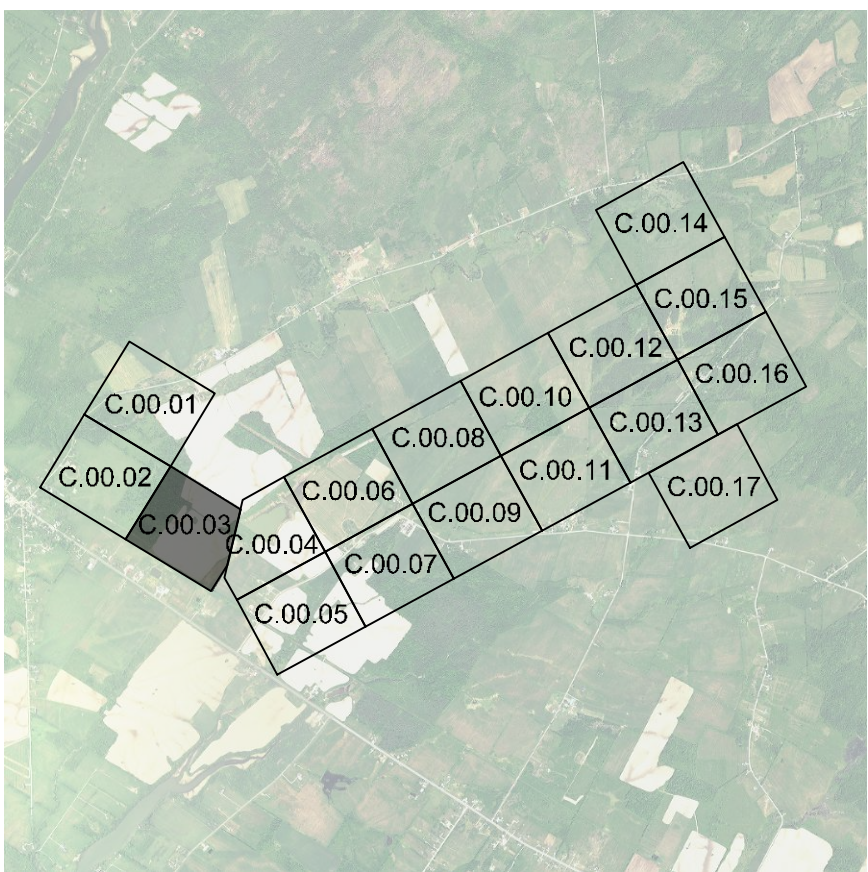
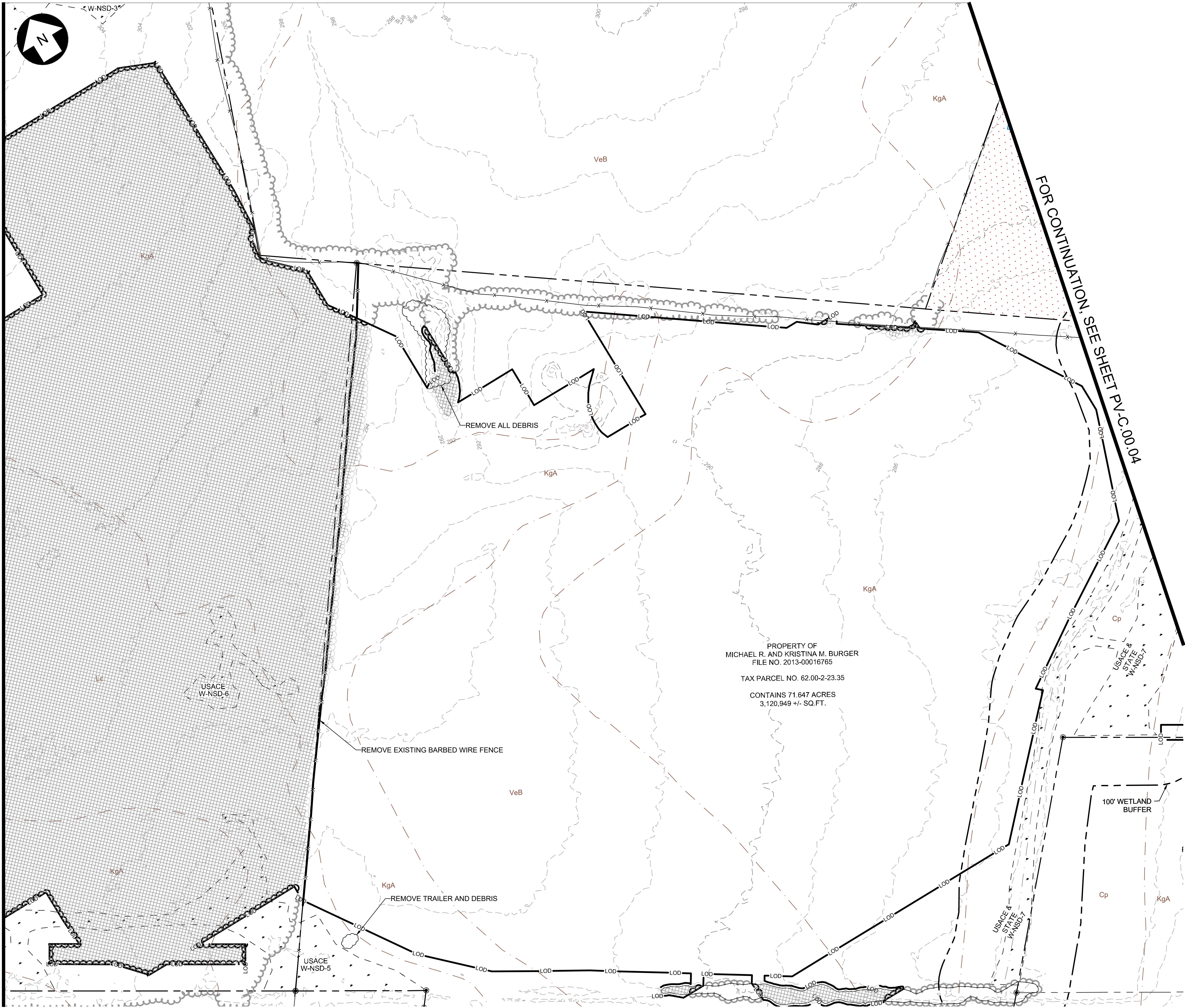
EXISTING CONDITIONS & CLEARING PLAN

PROJ NUM:	422208
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DWN:	E. BROWN
CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021
SCALE AT 22" x 34":	

SHEET NO:	REV
PV-C.00.02	2

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DATE: 09/10/2021
DRAWN BY: J. BROWN
CHECKED BY: P. MARTIN
APPROVED BY: J. BROWN
SCALE: 1"=100'

FOR CONTINUATION, SEE SHEET PV-C.00.02

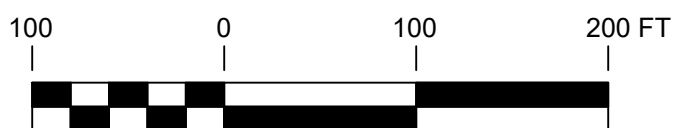


KEY MAP
SCALE: 1" = 4500'

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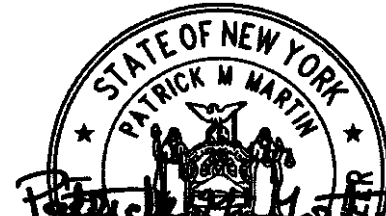
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RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

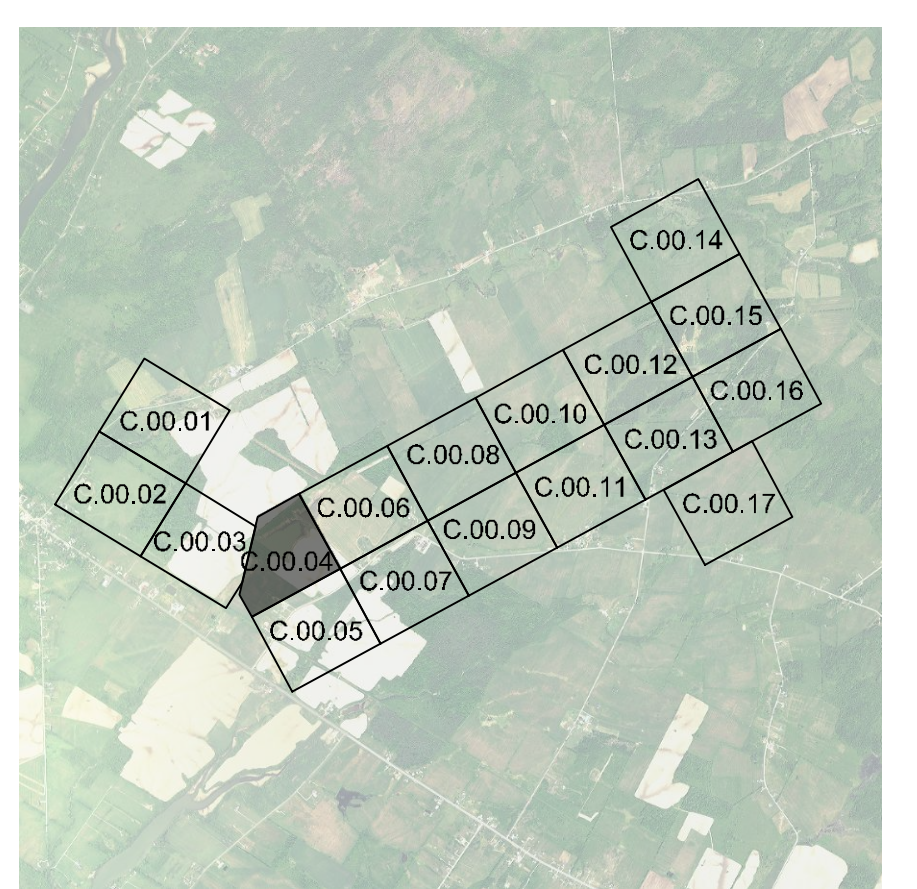
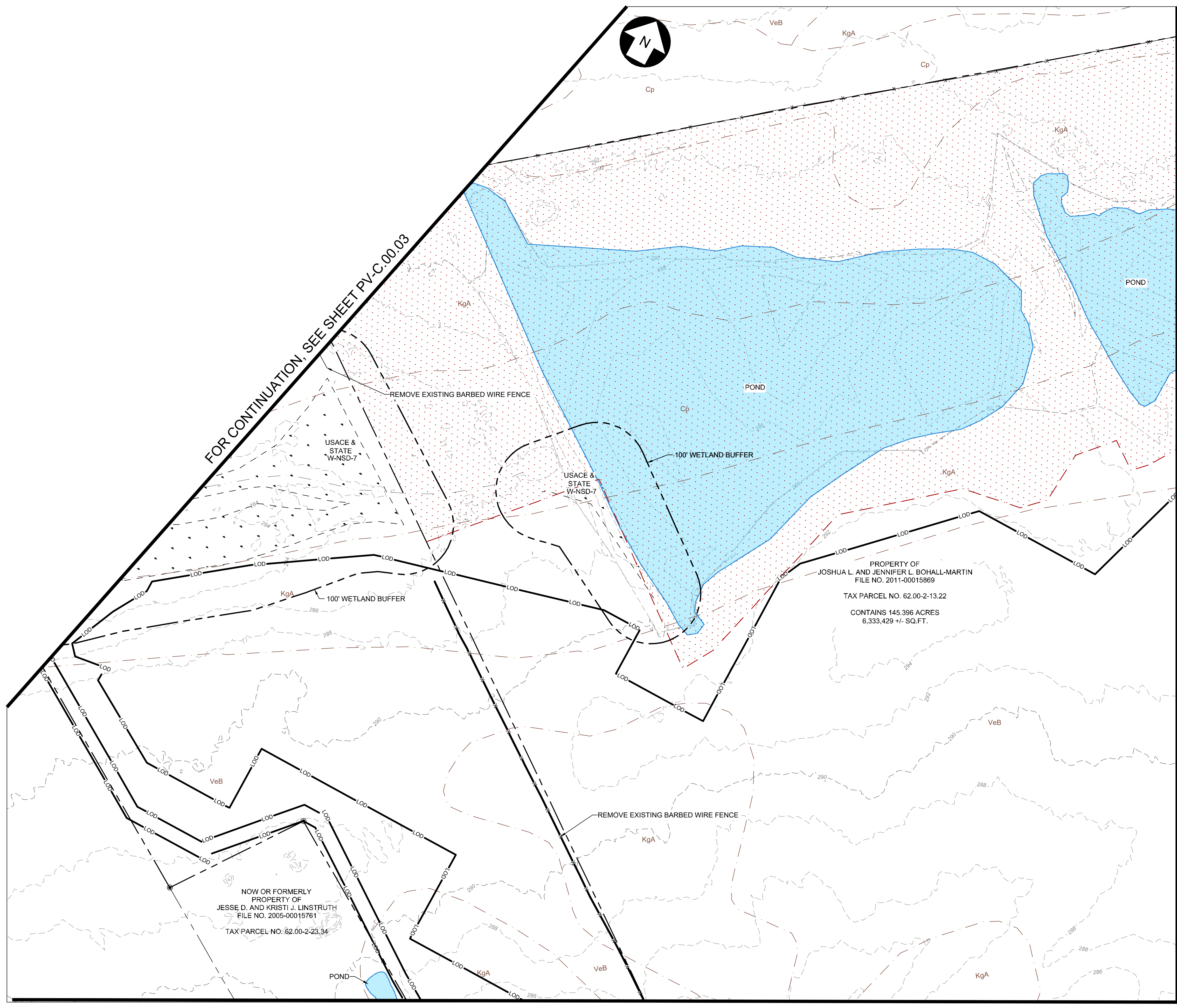
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1"=100'

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PV-C.00.03

REV:
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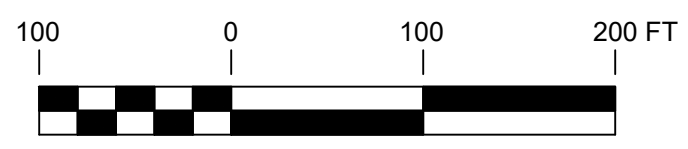


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PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME & BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

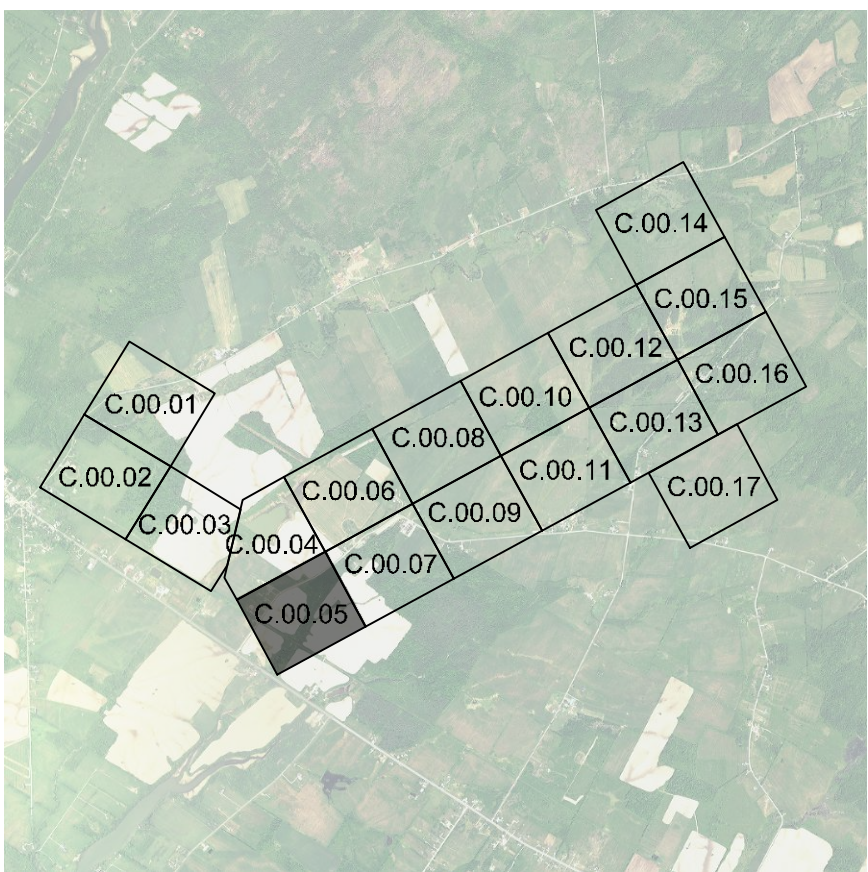
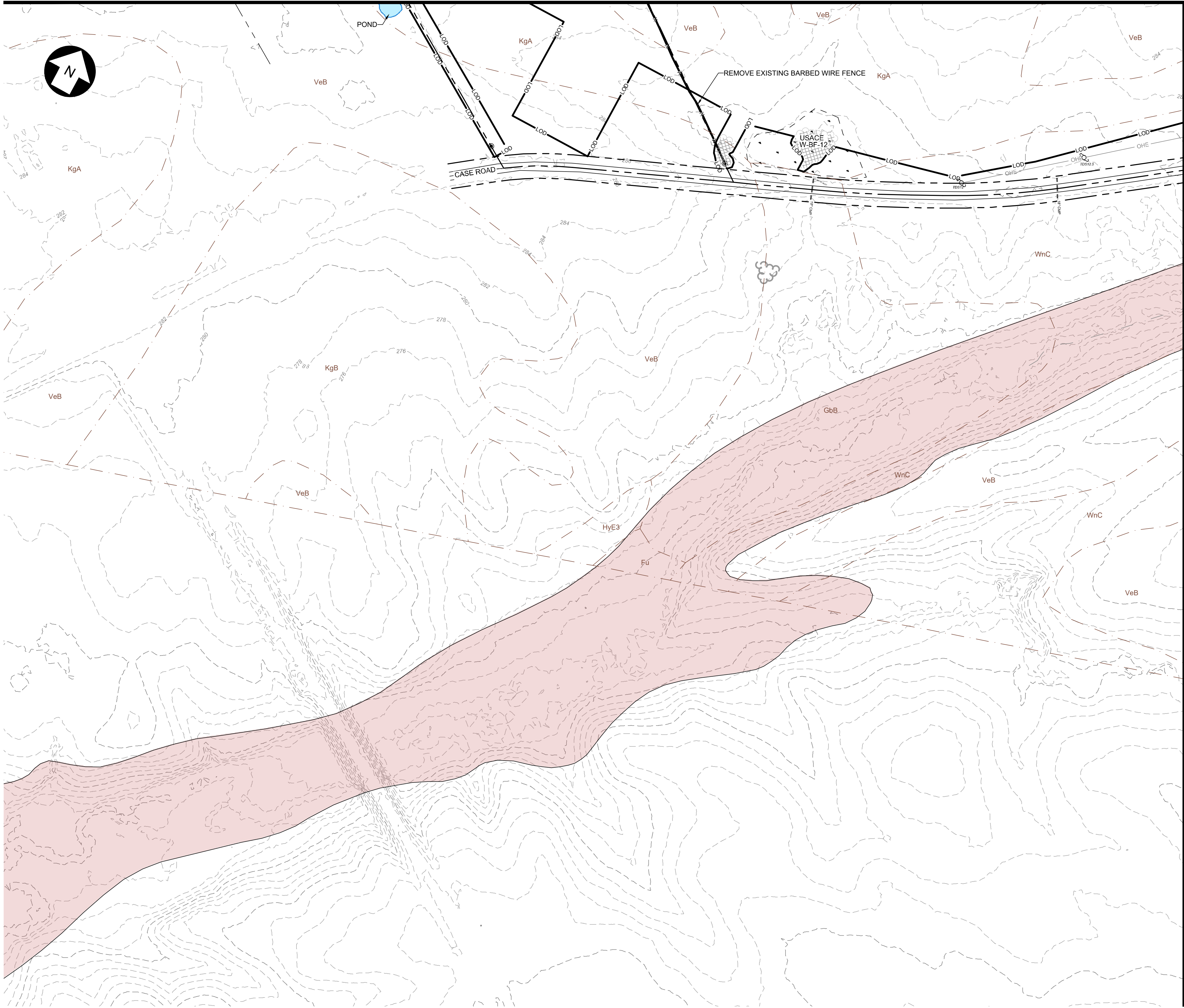
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DATE:	04/15/2021
SCALE AT 22" x 34":	

1"=100'

SHEET NO:	PV-C.00.04	REV:	2
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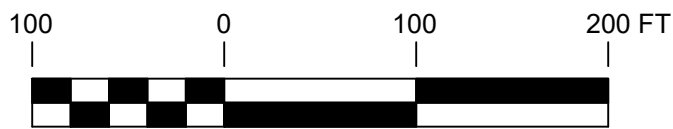


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PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

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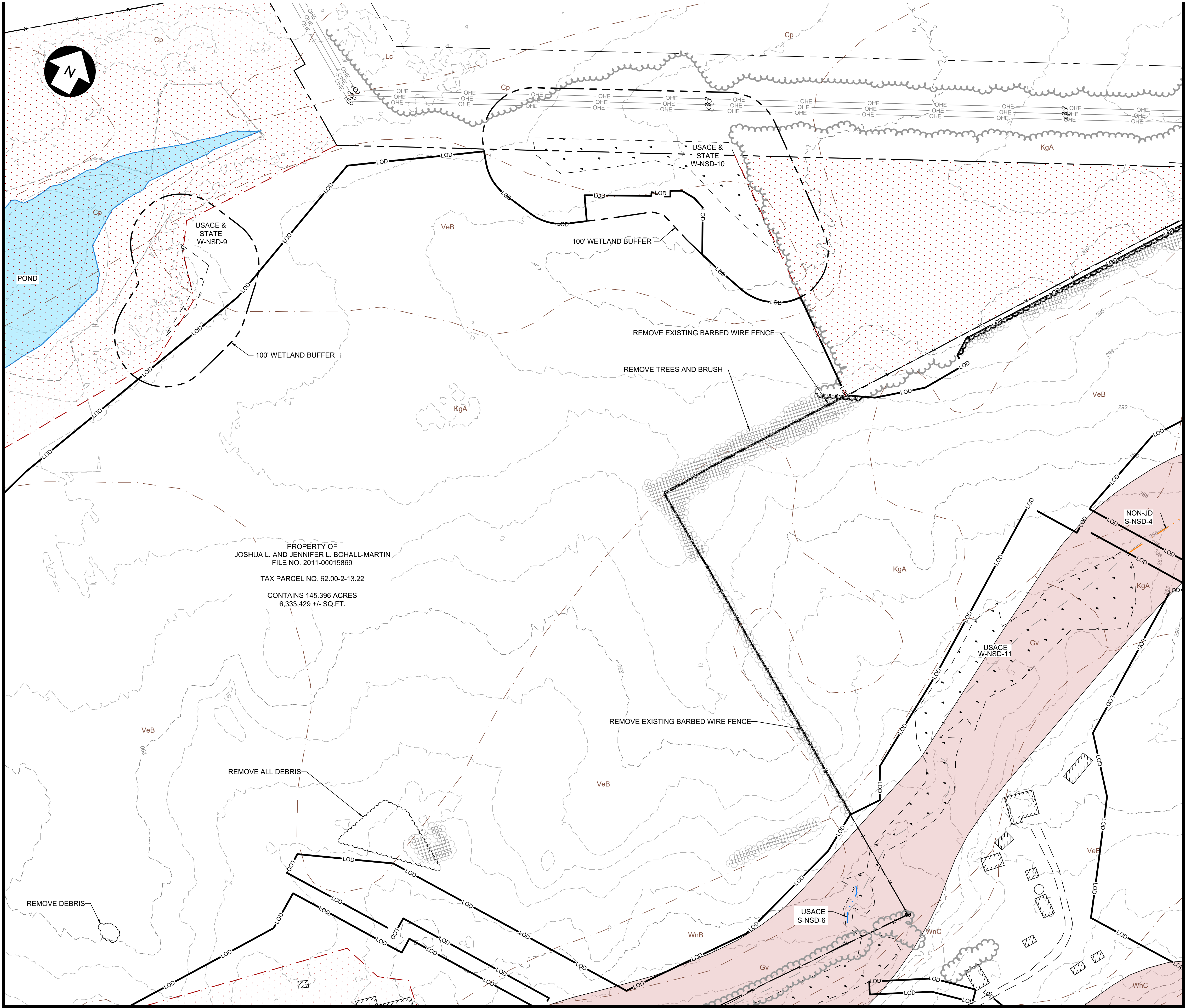
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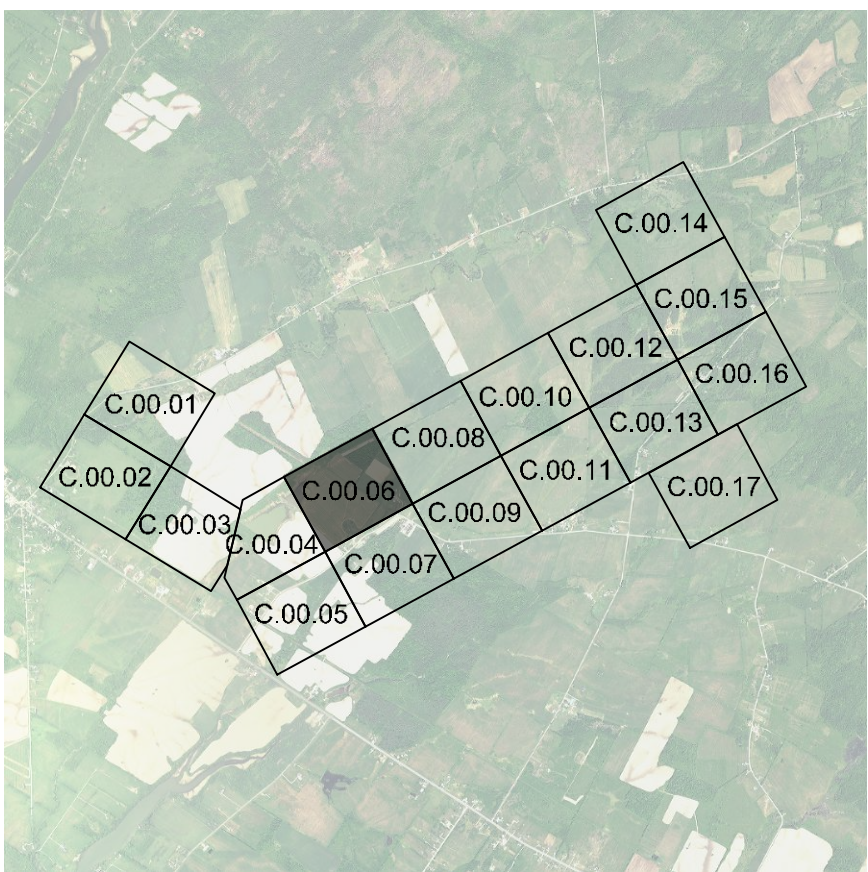
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DRAWN BY: P. MARTIN
CHECKED BY: P. MARTIN
SCALE: 1"=100'

FOR CONTINUATION, SEE SHEET PV-C.00.04



FOR CONTINUATION, SEE SHEET PV-C.00.07

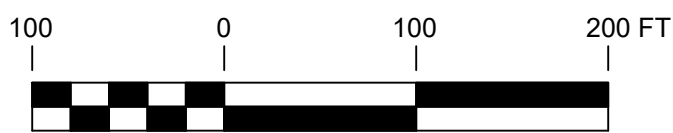


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
- GRAVEL ROAD
- MINOR CONTOUR
- MAJOR CONTOUR
- WETLAND
- FEMA ZONE A
- WATER SURFACE
- USACE JURISDICTIONAL STREAM
- USACE NON-JURISDICTIONAL STREAM
- ALTA SURVEY STREAM
- EXISTING TREELINE
- TREELINE TO BE REMOVED
- PROPOSED TREELINE
- SELECTIVE TREE CLEARING
- BUILDING
- UTILITY POLE
- CULVERT
- WETLAND BUFFER
- TOWN BOUNDARY
- RIGHT OF WAY
- PAVED ROAD
- LIMITS OF DISTURBANCE
- NO-BUILD AREA
- TREE CLEARING LIMITS

PRELIMINARY
NOT FOR CONSTRUCTION



UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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249 Western Avenue
Augusta, ME 04330

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KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
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2	09/10/2021	ISSUED FOR PERMIT
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-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

1"=100'

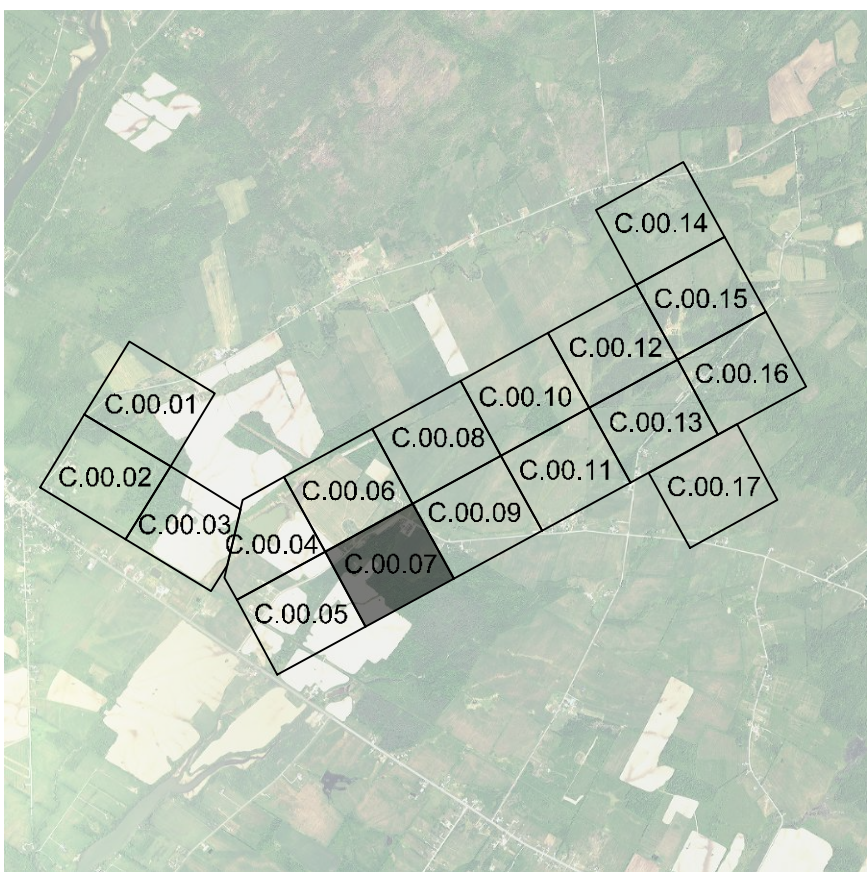
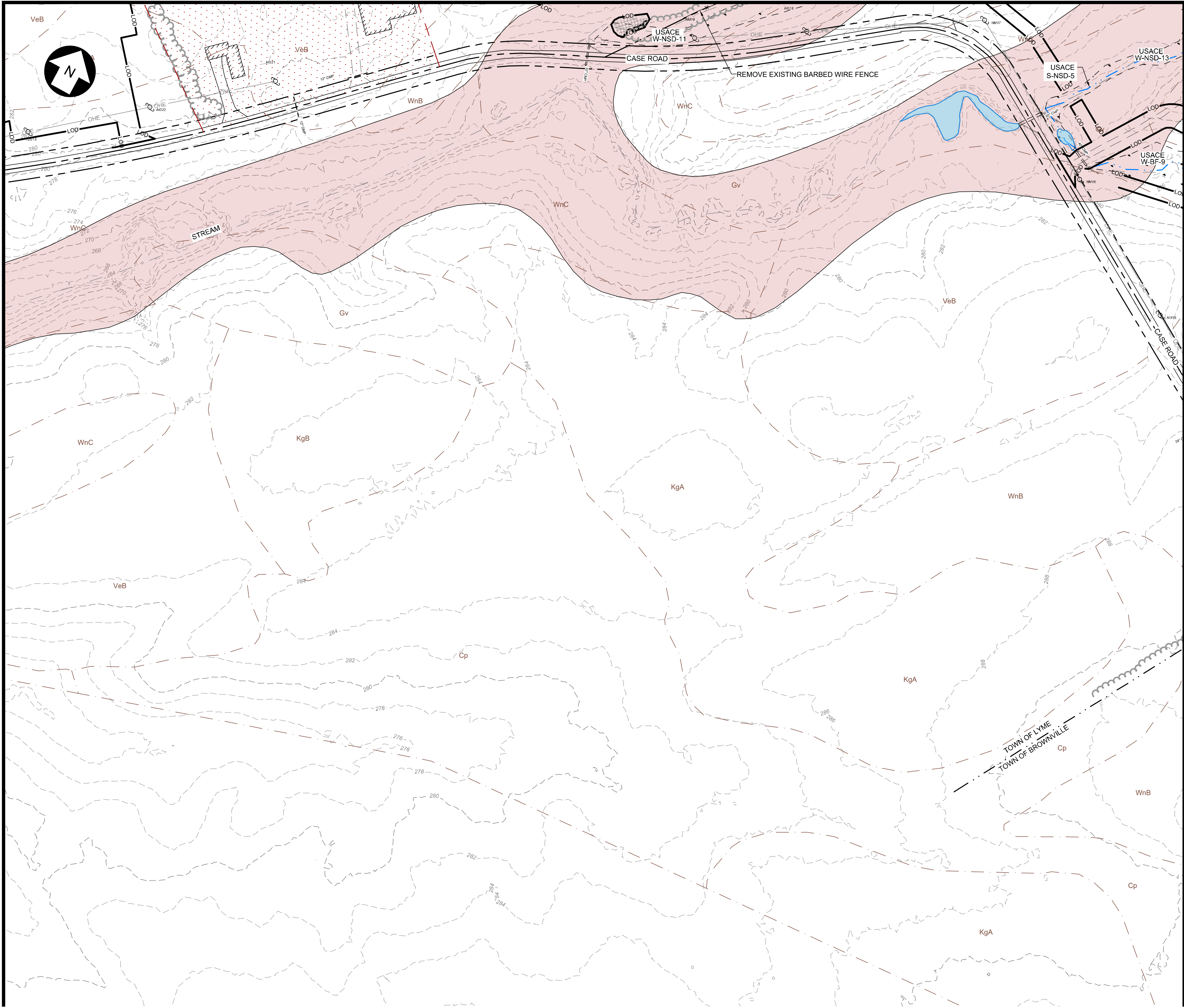
SHEET NO:

PV-C.00.06

REV:

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FOR CONTINUATION, SEE SHEET PV-C.00.06

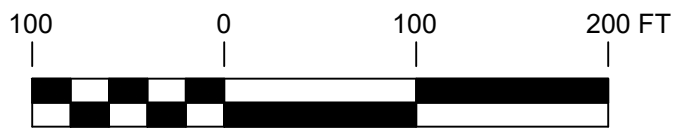


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
- GRAVEL ROAD
- MINOR CONTOUR
- MAJOR CONTOUR
- WETLAND
- FEMA ZONE A
- WATER SURFACE
- USACE JURISDICTIONAL STREAM
- USACE NON-JURISDICTIONAL STREAM
- ALTA SURVEY STREAM
- EXISTING TREELINE
- TREELINE TO BE REMOVED
- PROPOSED TREELINE
- SELECTIVE TREE CLEARING
- BUILDING
- UTILITY POLE
- CULVERT
- WETLAND BUFFER
- TOWN BOUNDARY
- RIGHT OF WAY
- PAVED ROAD
- LOD
- LIMITS OF DISTURBANCE
- NO-BUILD AREA
- TREE CLEARING LIMITS

PRELIMINARY
NOT FOR CONSTRUCTION



SCALE: 1" = 100'

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FOR CONTINUATION, SEE SHEET PV-C.00.05

FOR CONTINUATION, SEE SHEET PV-C.00.09



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NO.	DATE	DESCRIPTION
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-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

1"=100'

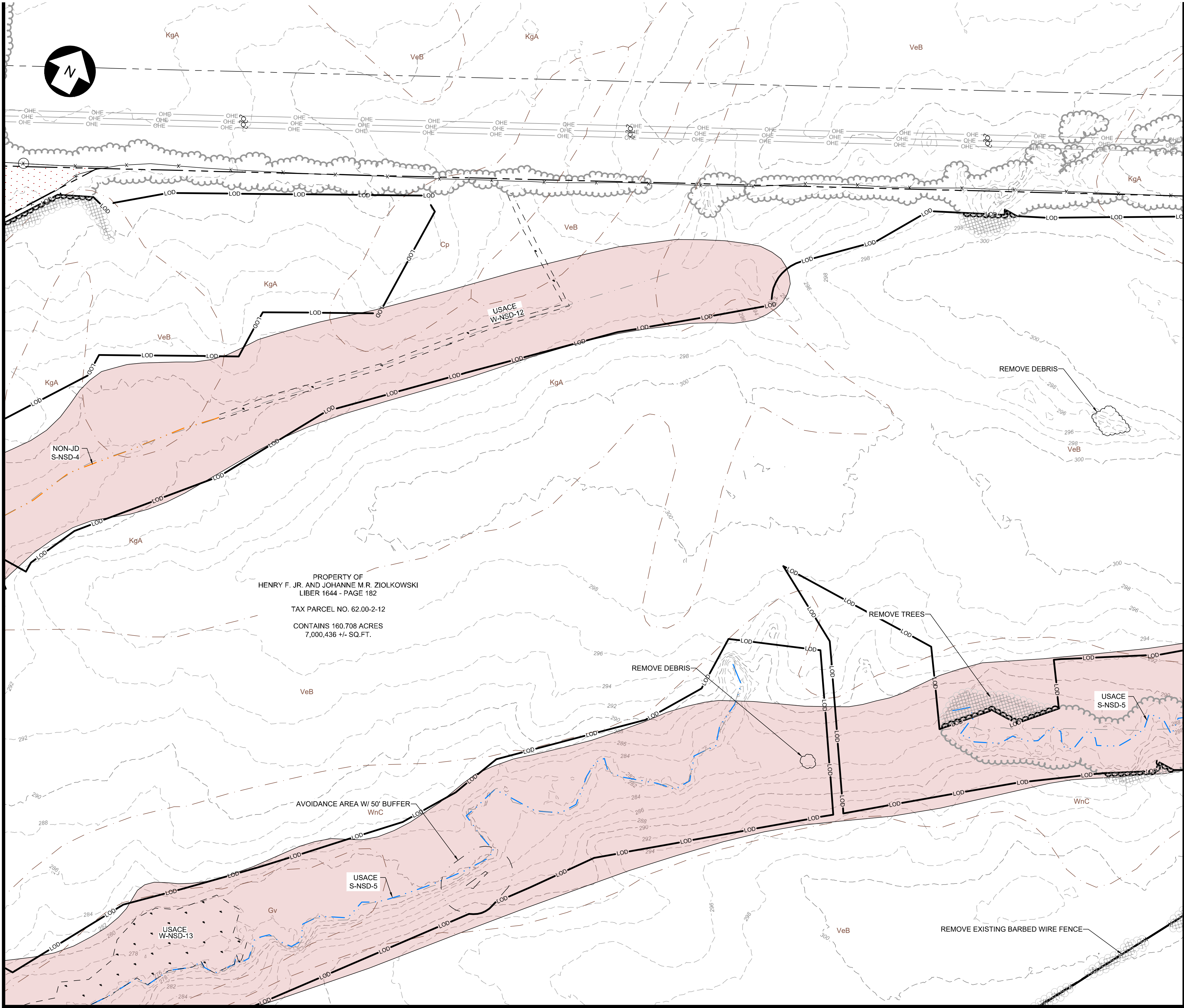
SHEET NO:

PV-C.00.07

REV:

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PROJECT: 422208, PV-C.00.06
DATE: 04/15/2021
DRAWN BY: E. BROWN
CHECKED BY: P. MARTIN
SCALE: 1"=100'
SHEET: 1 OF 1
FOR CONTINUATION, SEE SHEET PV-C.00.06

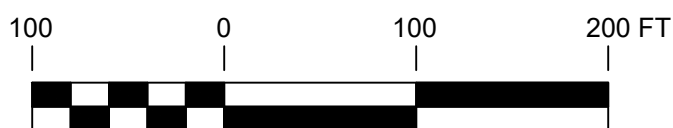


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
- GRAVEL ROAD
- MINOR CONTOUR
- MAJOR CONTOUR
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- FEMA ZONE A
- WATER SURFACE
- USACE JURISDICTIONAL STREAM
- USACE NON-JURISDICTIONAL STREAM
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- WETLAND BUFFER
- TOWN BOUNDARY
- RIGHT OF WAY
- PAVED ROAD
- LIMITS OF DISTURBANCE
- NO-BUILD AREA
- TREE CLEARING LIMITS

PRELIMINARY
NOT FOR CONSTRUCTION



SCALE: 1" = 100'

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-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

1"=100'

SHEET NO:

PV-C.00.08

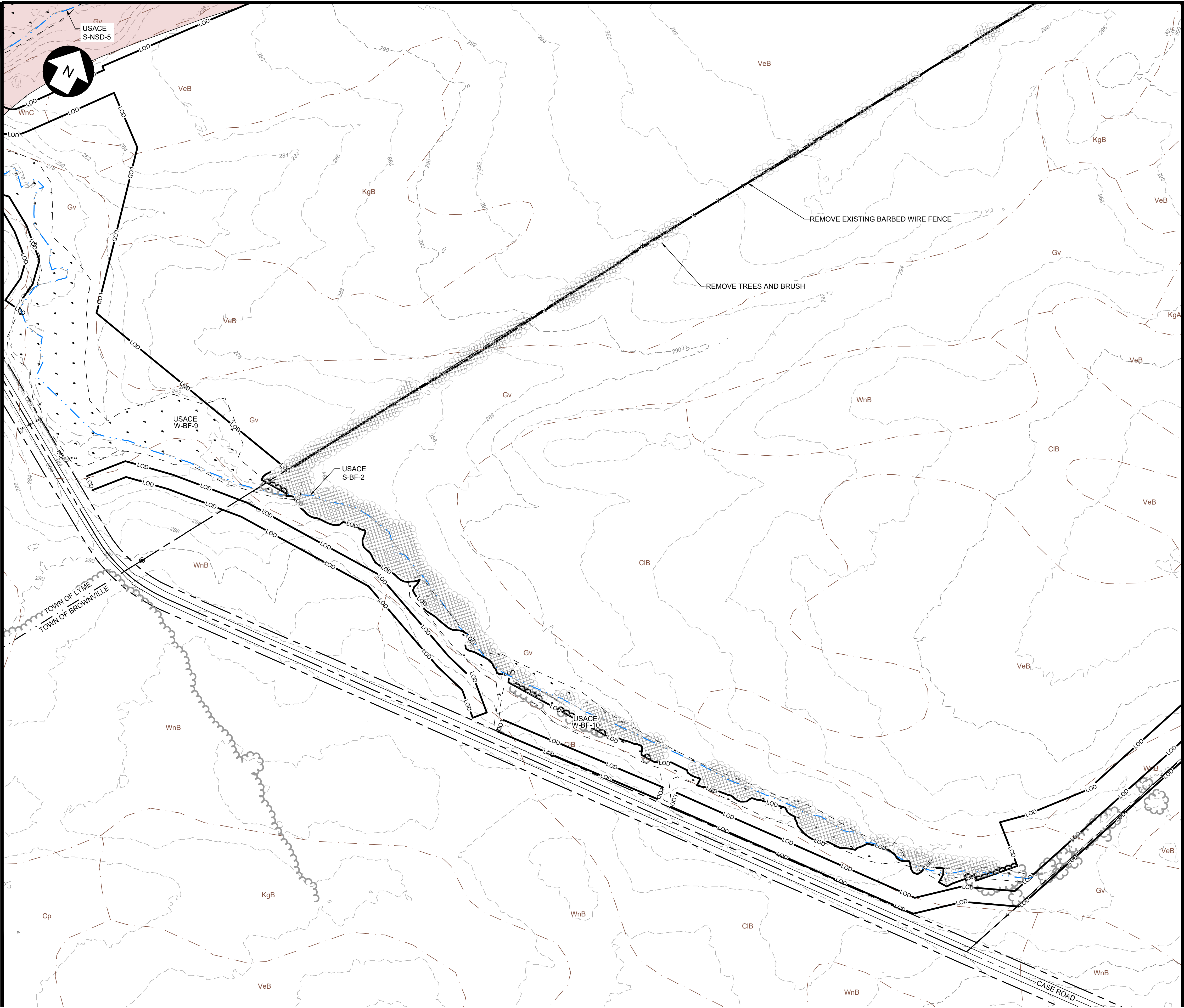
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FOR CONTINUATION, SEE SHEET PV-C.00.08

FOR CONTINUATION, SEE SHEET PV-C.00.07

FOR CONTINUATION, SEE SHEET PV-C.00.11

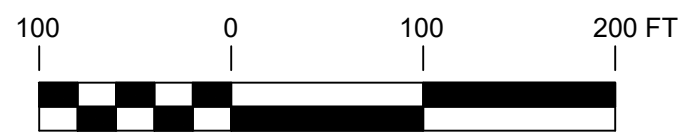


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
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PRELIMINARY
NOT FOR CONSTRUCTION



SCALE: 1" = 100'

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-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

1"=100'

SHEET NO:

PV-C.00.09

REV:

2

PE STAMP:



KEY PLAN:

PROJECT TITLE:		

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS & CLEARING PLAN

PROJ	422208
NUM:	

DES: F BROWN

DWN:	E. BROWN
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DWN.	E. BROWN
	E. WHITE

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34"=

1"=100'

SHEET NO:

PV-C.00.10

REV:

2



LEGEND

- | | |
|--|---------------------------------|
| | PROPERTY BOUNDARY |
| | 94C SETBACK |
| | TOWN SETBACK |
| | 94C / TOWN SETBACK |
| | SOIL BOUNDARY |
| | OVERHEAD ELECTRIC |
| | BARBED WIRE FENCE |
| | FENCE TO BE REMOVED |
| | GRAVEL ROAD |
| | MINOR CONTOUR |
| | MAJOR CONTOUR |
| | WETLAND |
| | FEMA ZONE A |
| | WATER SURFACE |
| | USACE JURISDICTIONAL STREAM |
| | USACE NON-JURISDICTIONAL STREAM |
| | ALTA SURVEY STREAM |
| | EXISTING TREELINE |
| | TREELINE TO BE REMOVED |
| | PROPOSED TREELINE |
| | SELECTIVE TREE CLEARING |
| | BUILDING |
| | UTILITY POLE |
| | CULVERT |
| | WETLAND BUFFER |
| | TOWN BOUNDARY |
| | RIGHT OF WAY |
| | PAVED ROAD |
| | LIMITS OF DISTURBANCE |
| | NO-BUILD AREA |
| | TREE CLEARING LIMITS |

PRELIMINARY
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FOR CONTINUATION, SEE SHEET PV-C.00.08

FOR CONTINUATION, SEE SHEET PV-C.00.11

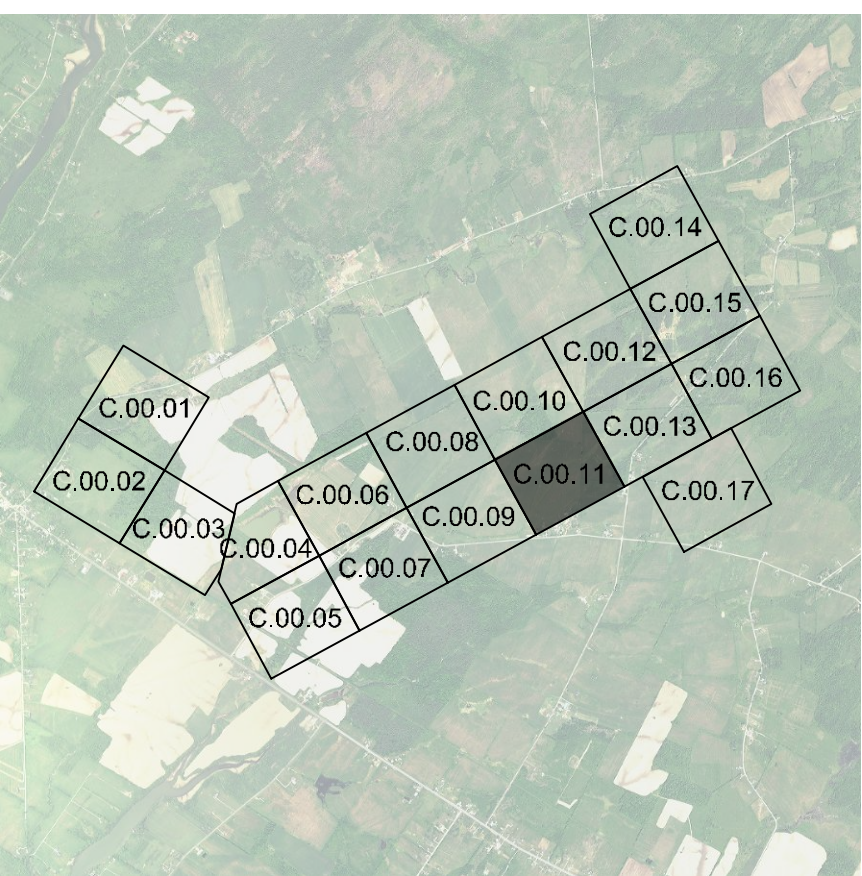
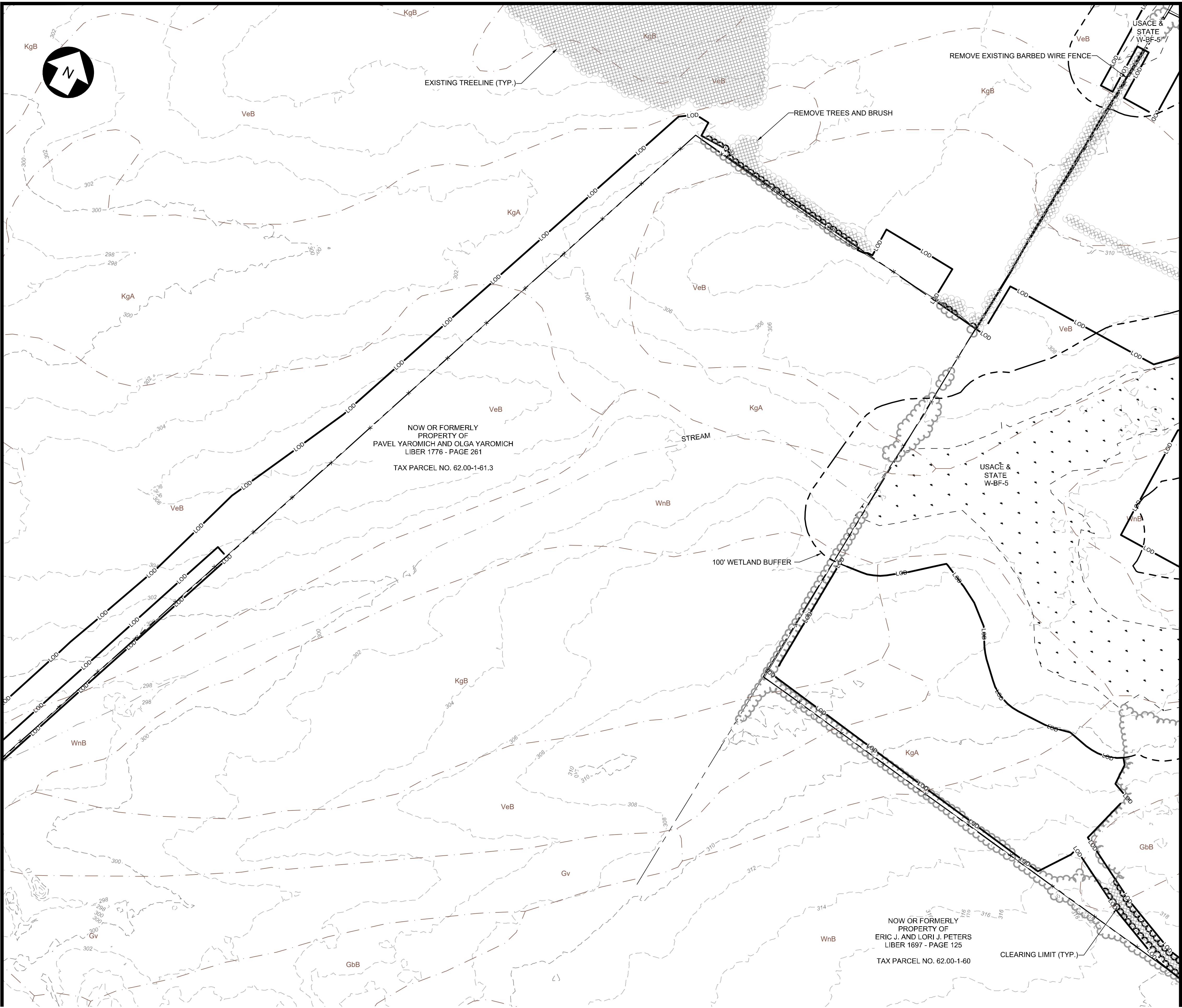
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FOR CONTINUATION, SEE SHEET PV-C.00.09

FOR CONTINUATION, SEE SHEET PV-C.00.13

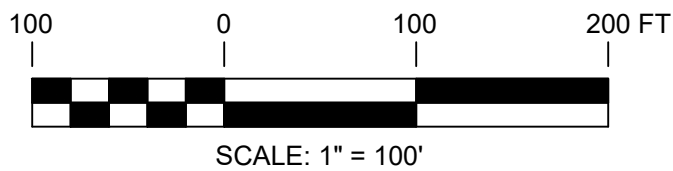


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
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PE STAMP:



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KEY PLAN:

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NO.	DATE	DESCRIPTION
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-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

1"=100'

SHEET NO:

PV-C.00.11

REV:

2

PROJECT: 422208, EXIST & CLEARING.DWG
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DATE: 04/15/2021
DRAWN BY: P. MARTIN
CHECKED BY: E. BROWN
DESIGNED BY: E. BROWN
PROJECT LOCATION: TOWNS OF LYME & BROWNVILLE, JEFFERSON CO., NY
SHEET NO.: PV-C.00.12
REV: 2

FOR CONTINUATION, SEE SHEET PV-C.00.10



FOR CONTINUATION, SEE SHEET PV-C.00.13

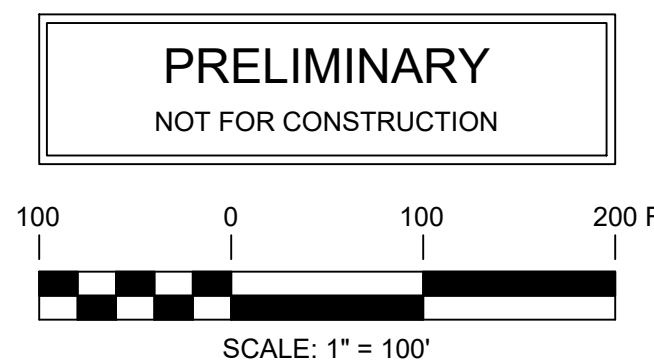
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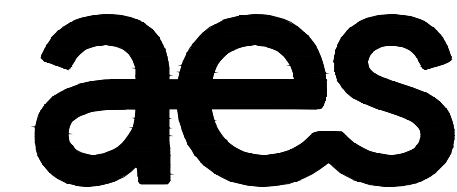
KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
- GRAVEL ROAD
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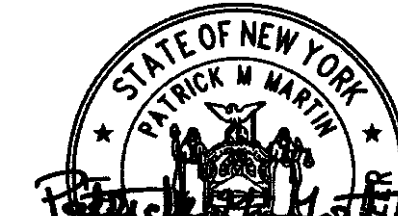


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-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ NUM:	422208
DES:	E. BROWN
DWN:	E. BROWN
CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021
SCALE AT 22" x 34":	

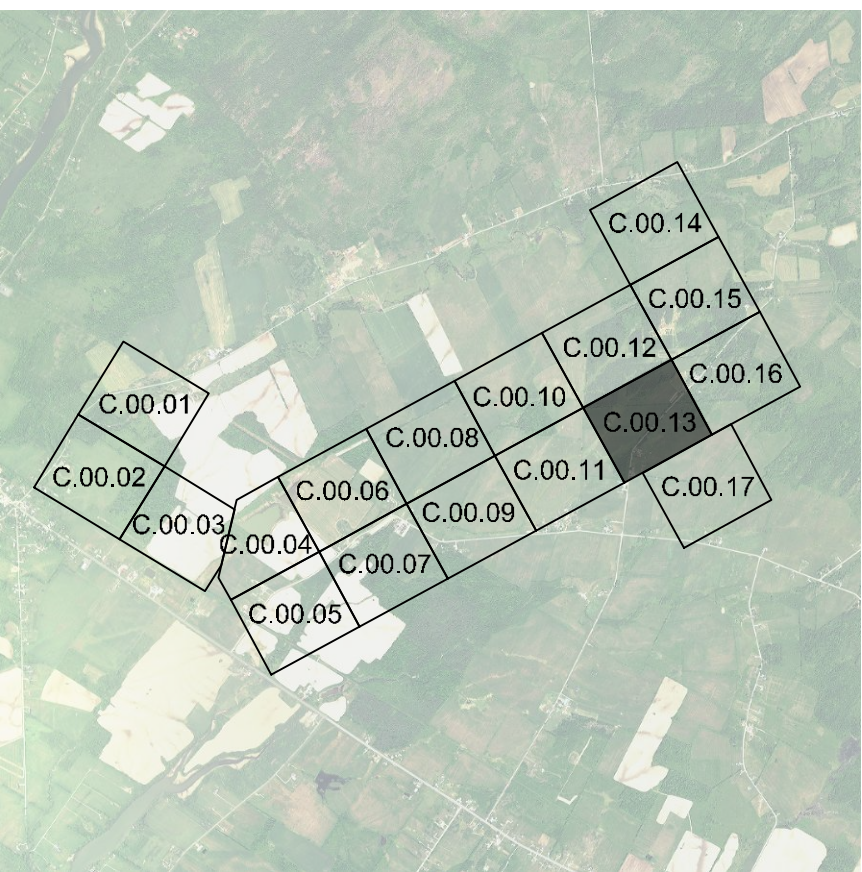
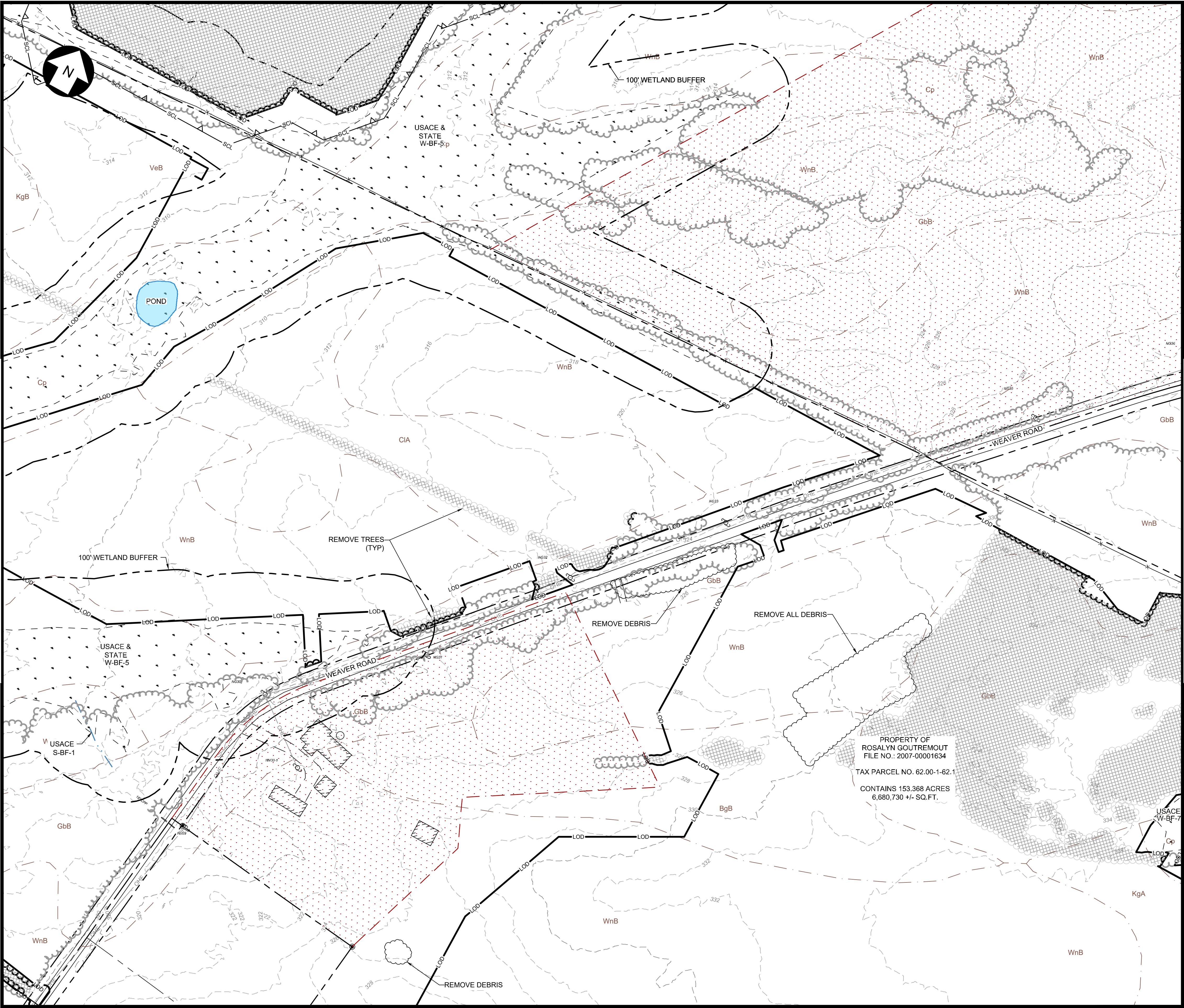
1"=100'

SHEET NO:	PV-C.00.12	REV:	2
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FOR CONTINUATION, SEE SHEET PV-C.00.12

FOR CONTINUATION, SEE SHEET PV-C.00.11

FOR CONTINUATION, SEE SHEET PV-C.00.17

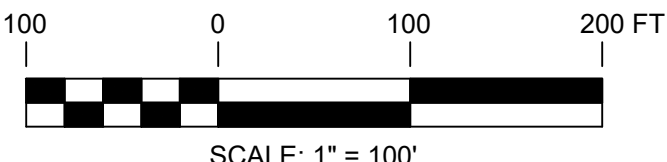


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
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- BARBED WIRE FENCE
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PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
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JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM:

422208

DES:

E. BROWN

DWN:

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CHK:

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APV:

DATE: 04/15/2021

SCALE AT 22" x 34":

1"=100'

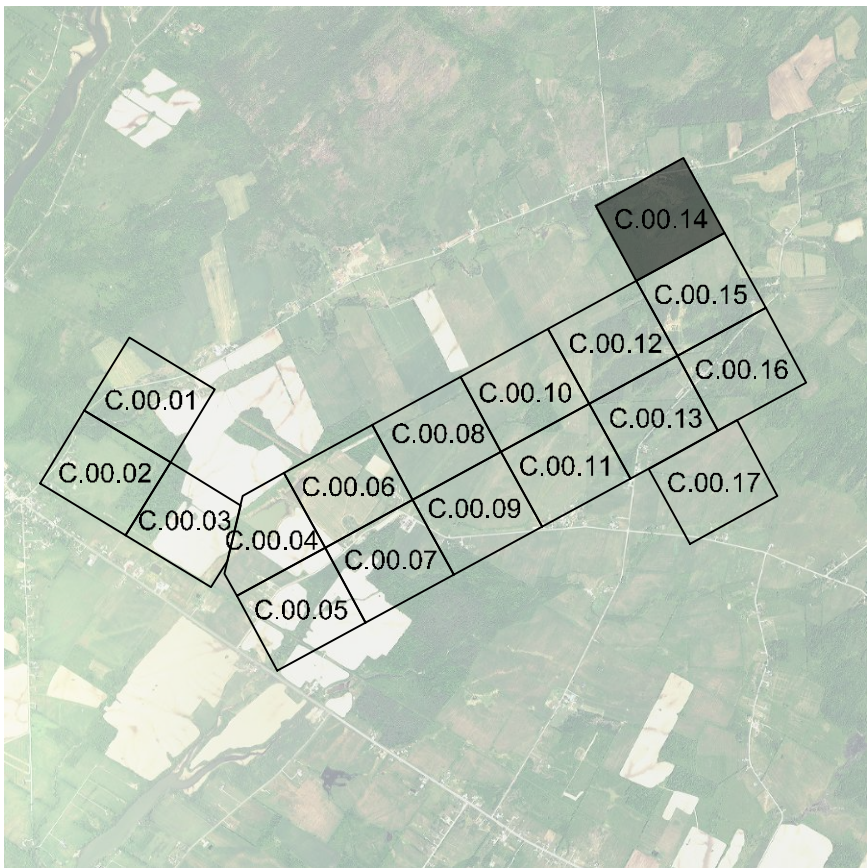
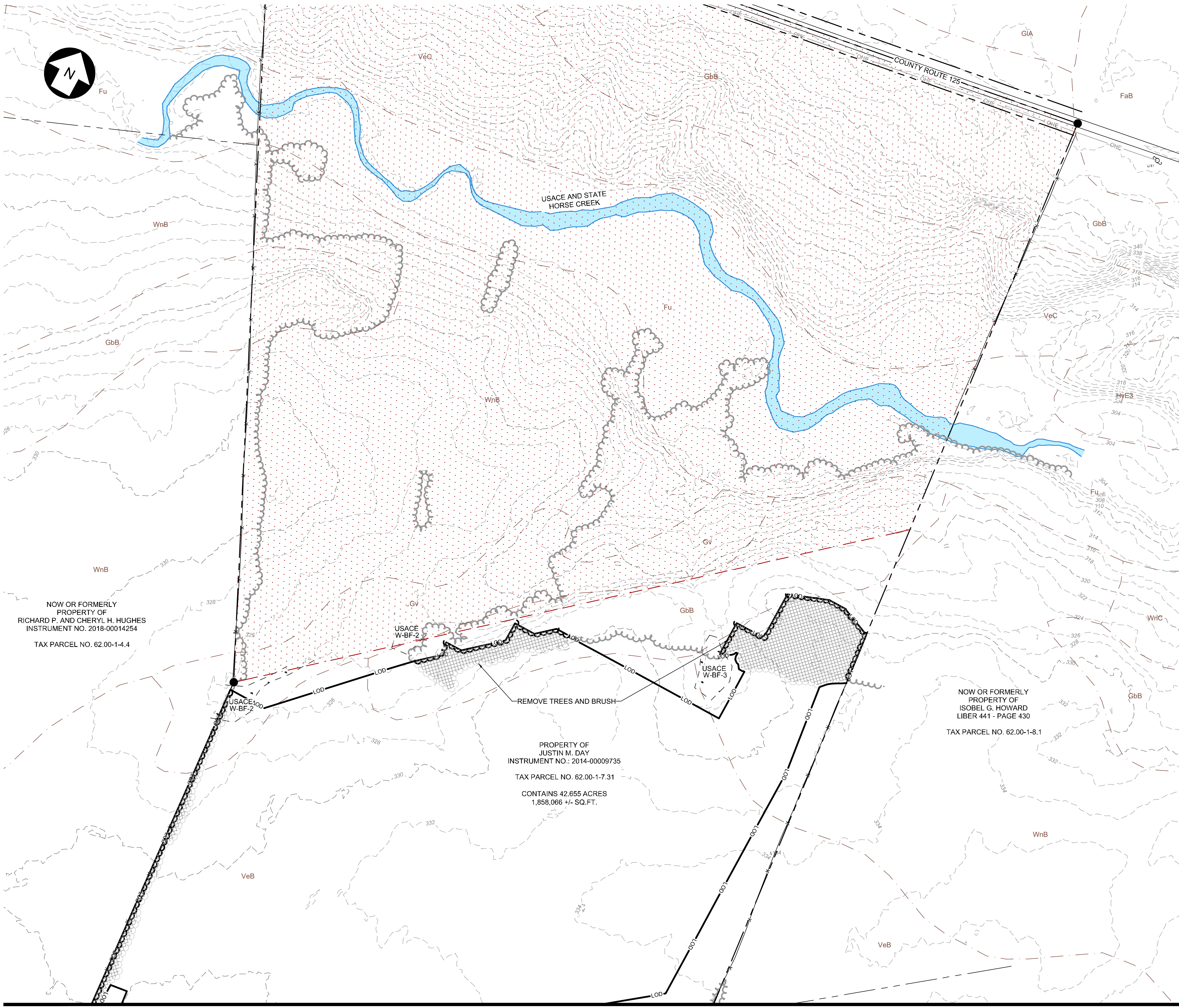
SHEET NO:

PV-C.00.13

REV:

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PROJECT: 422208-EXIST & CLEARING.dwg
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DATE: 09/10/2021
DRAWN BY: P. MARTIN
CHECKED BY: P. MARTIN
APPROVED BY: P. MARTIN
SCALE: 1"=100'

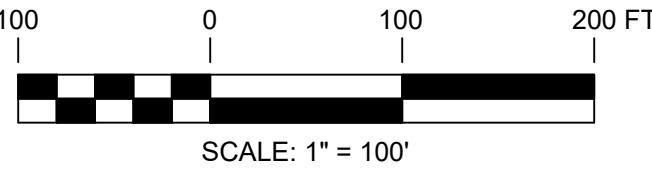


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
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- TOWN BOUNDARY
- RIGHT OF WAY
- PAVED ROAD
- LIMITS OF DISTURBANCE
- NO-BUILD AREA
- TREE CLEARING LIMITS

PRELIMINARY
NOT FOR CONSTRUCTION



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2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679 - 3500

TRC

249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

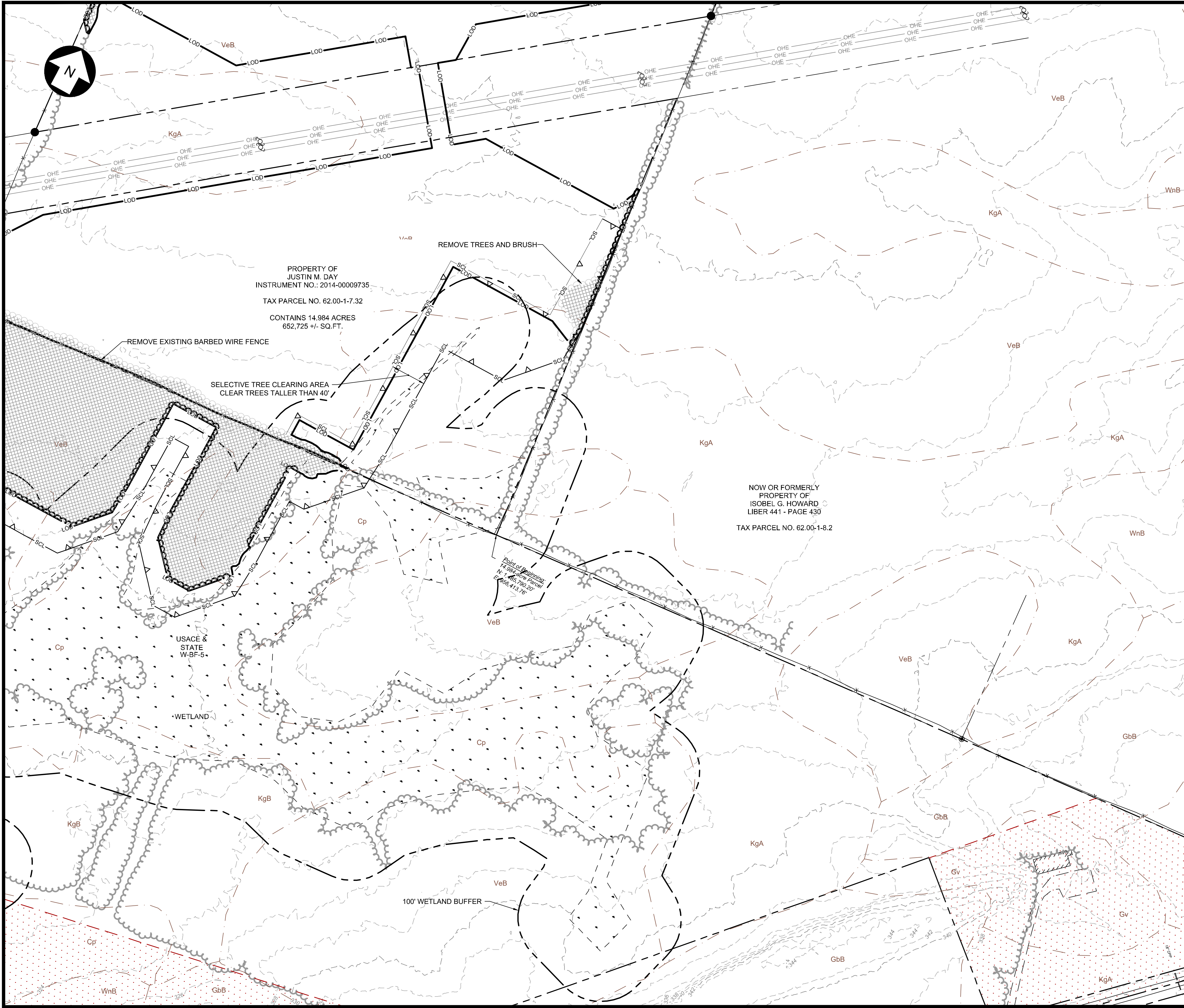
PROJ NUM:	422208
DES:	E. BROWN
DWN:	E. BROWN
CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021
SCALE AT 22" x 34":	

1"=100'

SHEET NO:	REV:
PV-C.00.14	2

FOR CONTINUATION, SEE SHEET PV-C.00.14

FOR CONTINUATION, SEE SHEET PV-C.00.12



KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
- GRAVEL ROAD
- MINOR CONTOUR
- MAJOR CONTOUR
- WETLAND
- FEMA ZONE A
- WATER SURFACE
- USACE JURISDICTIONAL STREAM
- USACE NON-JURISDICTIONAL STREAM
- ALTA SURVEY STREAM
- EXISTING TREELINE
- TREELINE TO BE REMOVED
- PROPOSED TREELINE
- SELECTIVE TREE CLEARING
- BUILDING
- UTILITY POLE
- CULVERT
- WETLAND BUFFER
- TOWN BOUNDARY
- RIGHT OF WAY
- PAVED ROAD
- LIMITS OF DISTURBANCE
- NO-BUILD AREA
- TREE CLEARING LIMITS

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9/12/2021

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
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-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
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JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EXISTING CONDITIONS
& CLEARING PLAN

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

1"=100'

SHEET NO:

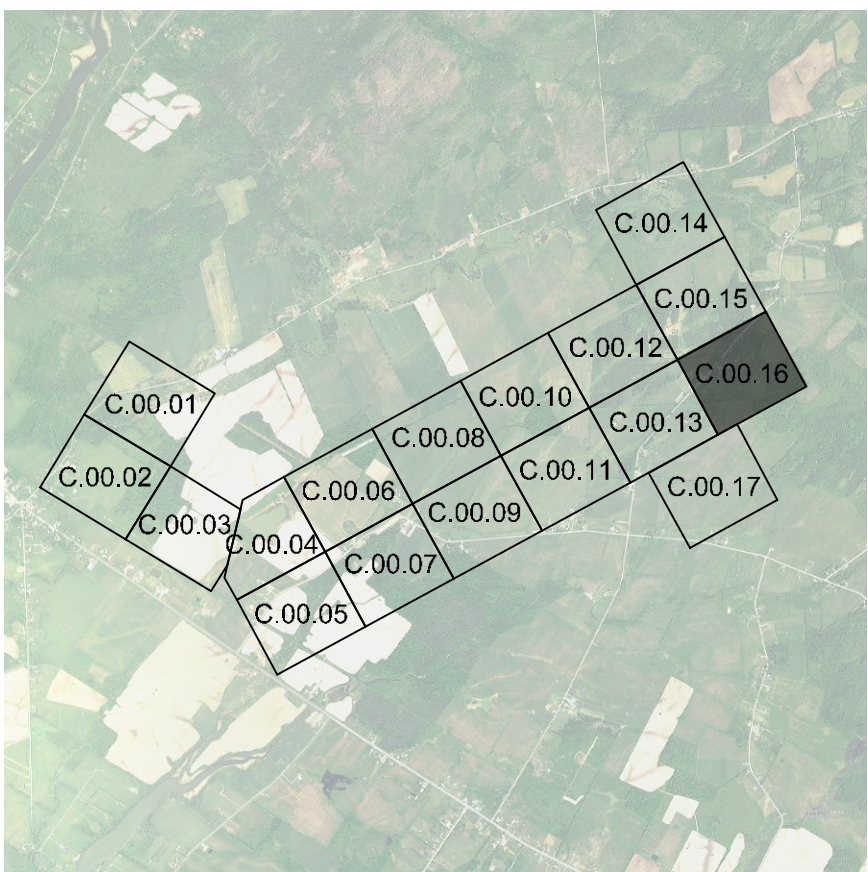
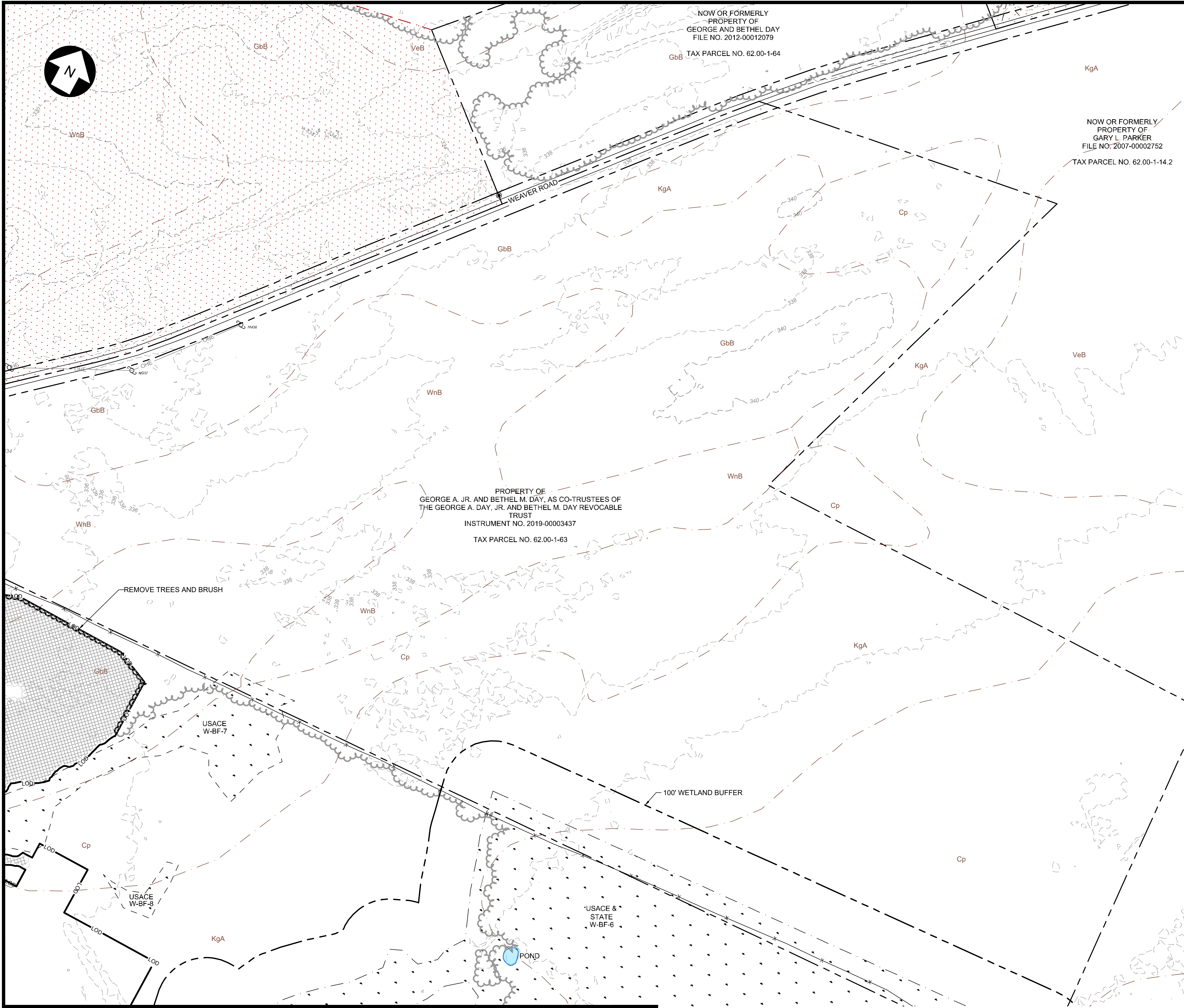
PV-C.00.15

REV:

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FOR CONTINUATION, SEE SHEET PV-C.00.15

FOR CONTINUATION, SEE SHEET PV-C.00.13

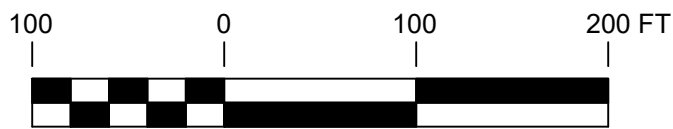


KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
- GRAVEL ROAD
- MINOR CONTOUR
- MAJOR CONTOUR
- WETLAND
- FEMA ZONE A
- WATER SURFACE
- USACE JURISDICTIONAL STREAM
- USACE NON-JURISDICTIONAL STREAM
- ALTA SURVEY STREAM
- EXISTING TREELINE
- TREELINE TO BE REMOVED
- PROPOSED TREELINE
- SELECTIVE TREE CLEARING
- BUILDING
- UTILITY POLE
- CULVERT
- WETLAND BUFFER
- TOWN BOUNDARY
- RIGHT OF WAY
- PAVED ROAD
- LIMITS OF DISTURBANCE
- NO-BUILD AREA
- TREE CLEARING LIMITS

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KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
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2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

**RIVERSIDE SOLAR
PROJECT**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**EXISTING CONDITIONS
& CLEARING PLAN**

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

1"=100'

SHEET NO:

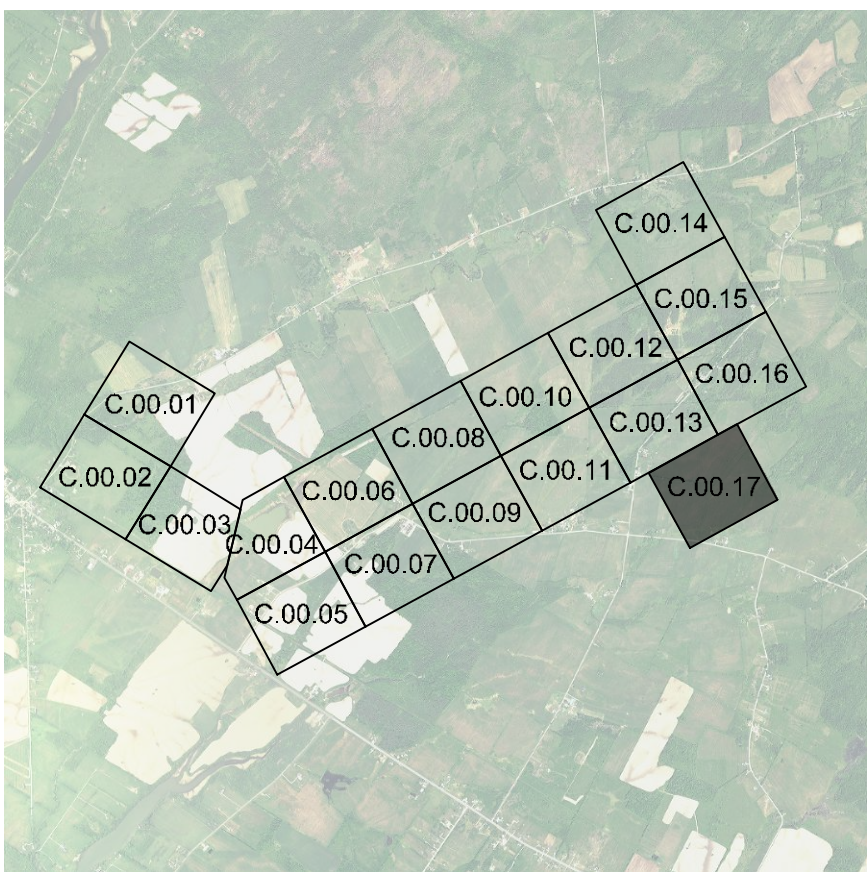
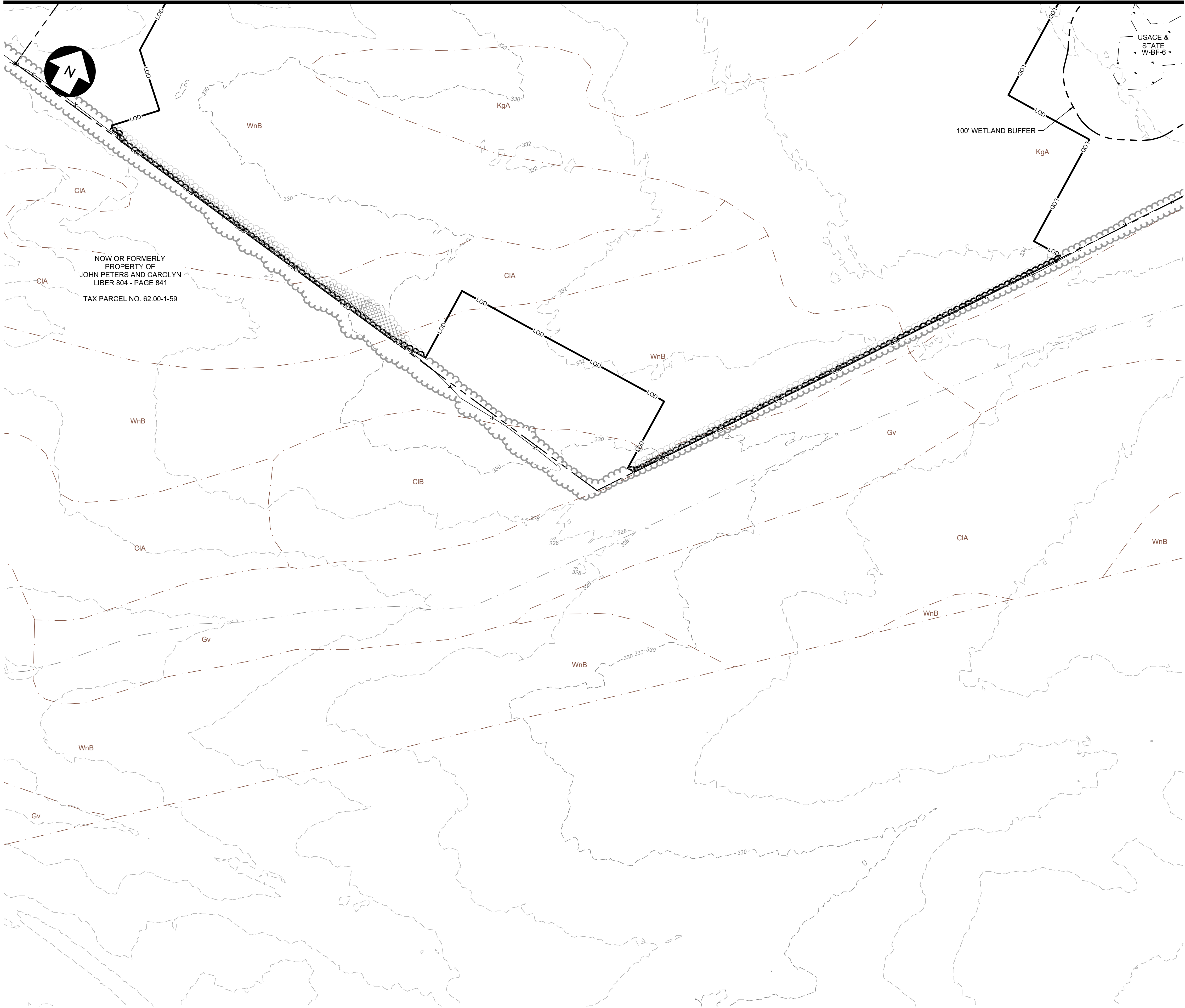
PV-C.00.16

REV:

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FOR CONTINUATION, SEE SHEET PV-C.00.13

FOR CONTINUATION, SEE SHEET PV-C.00.16



KEY MAP
SCALE: 1" = 4500'

LEGEND

- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- SOIL BOUNDARY
- OHE
- BARBED WIRE FENCE
- FENCE TO BE REMOVED
- GRAVEL ROAD
- MINOR CONTOUR
- MAJOR CONTOUR
- WETLAND
- FEMA ZONE A
- WATER SURFACE
- USACE JURISDICTIONAL STREAM
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- EXISTING TREELINE
- TREELINE TO BE REMOVED
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- SELECTIVE TREE CLEARING
- BUILDING
- UTILITY POLE
- CULVERT
- WETLAND BUFFER
- TOWN BOUNDARY
- RIGHT OF WAY
- PAVED ROAD
- LIMITS OF DISTURBANCE
- NO-BUILD AREA
- TREE CLEARING LIMITS



PRELIMINARY
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SCALE: 1" = 100'

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

**RIVERSIDE SOLAR
PROJECT**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**EXISTING CONDITIONS
& CLEARING PLAN**

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

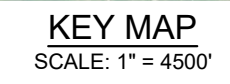
1"=100'

SHEET NO:

PV-C.00.17

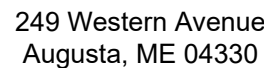
REV:

2



Dig Safe. New York.
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before you dig

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REVISIONS:

PROJECT TITLE:

PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

PROJ	422208
NUM:	

DES: E. BROWN

DWN: B PARKER

CHK: P. MARTIN

ADV:

DATE 01/15/2004

DATE: 04/15/2021

SCALE AT 22.804:

[illegible] $1'' = 100'$

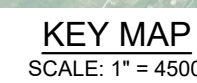
SHEET NO:

REV:

PV-C.01.05

2

FOR CONTINUATION, SEE SHEET PV-C.01.07



EXISTING

EXISTING

PROPOSED

Figure 1: Standard Symbols for Environmental Features

Symbol	Feature
Black dashed line	PROPERTY BOUNDARY
Purple solid line	94C SETBACK
Green solid line	TOWN SETBACK
Orange solid line	94C / TOWN SETBACK
Black dashed line with 'LOD' label	LIMIT OF DISTURBANCE
Black dashed line with 'SF' label	SILT FENCE
Black dashed line with 'OHE' label	OVERHEAD ELECTRIC
Black dashed line with 'X' label	UNDERGROUND ELECTRIC
Black dashed line with 'X' label	CHAIN LINK FENCE
Black dashed line with 'X' label	BARBED WIRE FENCE
Black dashed line with 'X' label	GRAVEL ROAD
Black dashed line	BASELINE
Black dashed line with 'X' label	PV ARRAY
Black dashed line with 'X' label	EQUIPMENT PADS & BOLLARDS
Black dashed line with '598' label	MINOR CONTOUR
Black dashed line with '600' label	MAJOR CONTOUR
Black dashed line with 'X' label	WETLAND
Black dashed line with 'X' label	NO BUILD AREA
Black dashed line with 'X' label	FEMA ZONE A
Black dashed line with 'X' label	WATER SURFACE
Black dashed line with 'X' label	JURISDICTIONAL STREAM
Black dashed line with 'X' label	NON-JURISDICTIONAL STREAM
Black dashed line with 'X' label	ALTA SURVEY STREAM
Black dashed line with 'X' label	TREELINE
Black dashed line with 'X' label	BUILDING
Black dashed line with 'X' label	UTILITY POLE
Black dashed line with 'X' label	CULVERT
Black dashed line with 'X' label	WETLAND/STREAM BUFFER
Black dashed line with 'X' label	LAYDOWN YARD
Black dashed line with 'X' label	TOWN BOUNDARY
Black dashed line with 'X' label	COLLECTION LINE
Black dashed line with 'X' label	RIGHT OF WAY
Black dashed line with 'X' label	PAVED ROAD
Black dashed line with 'X' label	HORIZONTAL DIRECTIONAL DRILL AND BORE PITS



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An aerial photograph of a watershed area, overlaid with a grid of 16 numbered sub-watersheds. The sub-watersheds are labeled as follows:

- C.01.01
- C.01.02
- C.01.03
- C.01.04
- C.01.05
- C.01.06** (highlighted in dark gray)
- C.01.07
- C.01.08
- C.01.09
- C.01.10
- C.01.11
- C.01.12
- C.01.13
- C.01.14
- C.01.15
- C.01.16
- C.01.17

The map shows a network of streams and surrounding land use, including agricultural fields and forested areas.

KEY MAP
SCALE: 1" = 4500'

EXISTING

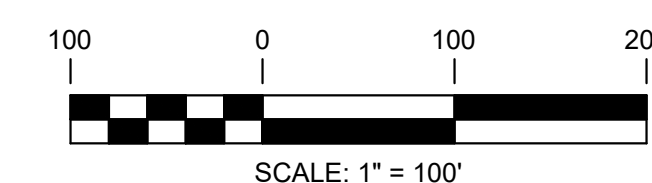
- PROPERTY BOUNDARY
- 94C SETBACK
- TOWN SETBACK
- 94C / TOWN SETBACK
- LIMIT OF DISTURBANCE
- SILT FENCE
- OHE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- CHAIN LINK FENCE
- BARBED WIRE FENCE
- GRAVEL ROAD
- BASELINE
- PV ARRAY
- EQUIPMENT PADS & BOLLARDS
- 598
- 600
- MINOR CONTOUR
- MAJOR CONTOUR
- WETLAND
- NO BUILD AREA
- FEMA ZONE A
- WATER SURFACE
- JURISDICTIONAL STREAM
- NON-JURISDICTIONAL STREAM
- ALTA SURVEY STREAM
- TREELINE
- BUILDING
- UTILITY POLE
- CULVERT
- WETLAND/STREAM BUFFER
- LAYDOWN YARD
- TOWN BOUNDARY
- COLLECTION LINE
- RIGHT OF WAY
- PAVED ROAD
- HORIZONTAL
- DIRECTIONAL DRILL

PROPOSED

- LOD
- SF
- SF
- X
- Gravel Road
- Baseline
- PV Array
- EQUIPMENT PADS & BOLLARDS
- 598
- 600
- MINOR CONTOUR
- MAJOR CONTOUR
- WETLAND
- NO BUILD AREA
- FEMA ZONE A
- WATER SURFACE
- JURISDICTIONAL STREAM
- NON-JURISDICTIONAL STREAM
- ALTA SURVEY STREAM
- TREELINE
- BUILDING
- UTILITY POLE
- CULVERT
- WETLAND/STREAM BUFFER
- LAYDOWN YARD
- TOWN BOUNDARY
- COLLECTION LINE
- RIGHT OF WAY
- PAVED ROAD
- HORIZONTAL
- DIRECTIONAL DRILL

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Call 811
before you dig

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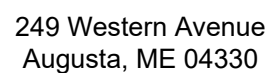
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SHEET NO:
PV-C.01.06

REV: 2

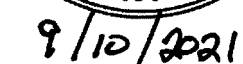
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FOR CONTINUATION, SEE SHEET PV-C.01.07



249 Western Avenue
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PE STAMP:



KEY PLAN:

[illegible]

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

SITE PLAN

DES: E. BROWN

DWN:	B. PARKER
------	-----------

DWN.	B. PARKER
	E. ALLEN

CHK:	P. MARTIN
------	-----------

DATE: 04/15/2021

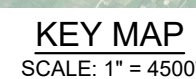
SCALE AT 22" x 34":

1"-100"

	$T = 100$

SHEET NO: _____

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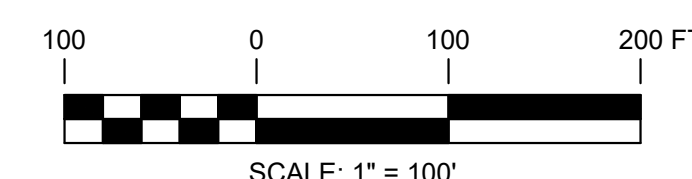


LEGEND

EXISTING		EXISTING	PROPOSED	
	PROPERTY BOUNDARY			
	94C SETBACK			
	TOWN SETBACK			
	94C / TOWN SETBACK			
	LIMIT OF DISTURBANCE			LOD
	SILT FENCE			SF
	OVERHEAD ELECTRIC			SF
	UNDERGROUND ELECTRIC			
	CHAIN LINK FENCE			
	BARBED WIRE FENCE			
	GRAVEL ROAD			
	BASELINE			
	PV ARRAY			
	EQUIPMENT PADS & BOLLARDS			
	MINOR CONTOUR			598
	MAJOR CONTOUR			600
	WETLAND			
	NO BUILD AREA			
	FEMA ZONE A			
	WATER SURFACE			
	JURISDICTIONAL STREAM			
	NON-JURISDICTIONAL STREAM			
	ALTA SURVEY STREAM			
	TREELINE			
	BUILDING			
	UTILITY POLE			
	CULVERT			
	WETLAND/STREAM BUFFER			
	LAYDOWN YARD			
	TOWN BOUNDARY			
	COLLECTION LINE			E1
	RIGHT OF WAY			
	PAVED ROAD			
	HORIZONTAL DIRECTIONAL DRILL AND BORE PITS			



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FOR CONTINUATION, SEE SHEET PV-C.01.05

FOR CONTINUATION, SEE SHEET PV-C.01.09

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9/10/2021

REVISIONS:

PROJECT TITLE:	
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PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

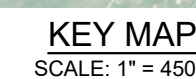
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DATE: 04/15/2021

SCALE AT 22" x 34":

$$1'' = 100'$$

SHEET NO:
PV-C.01.08



EXISTING	PROPOSED
PROPERTY BOUNDARY	
94C SETBACK	
TOWN SETBACK	
94C / TOWN SETBACK	
LIMIT OF DISTURBANCE	LOD
SILT FENCE	SF SF
OVERHEAD ELECTRIC	
UNDERGROUND ELECTRIC	
CHAIN LINK FENCE	
BARBED WIRE FENCE	
GRAVEL ROAD	
BASELINE	
PV ARRAY	
EQUIPMENT PADS & BOLLARDS	
MINOR CONTOUR	598
MAJOR CONTOUR	600
WETLAND	
NO BUILD AREA	
FEMA ZONE A	
WATER SURFACE	
JURISDICTION STREAM	
NON-JURISDICTION STREAM	
ALTA SURVEY STREAM	
TREELINE	
BUILDING	
UTILITY POLE	
CULVERT	
WETLAND/STREAM BUFFER	
LAYDOWN YARD	
TOWN BOUNDARY	
COLLECTION LINE	E1
RIGHT OF WAY	
PAVED ROAD	
HORIZONTAL	
DIRECTIONAL DRILL	
AND BORE PITS	



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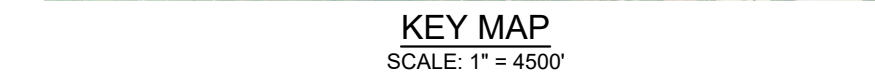
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FOR CONTINUATION. SEE SHEET PV-C.01.10

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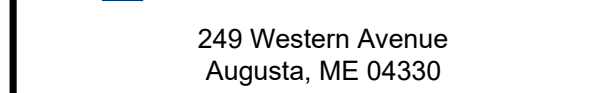
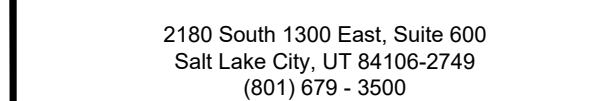


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UNDER NEW YORK STATE EDUCATION LAW, ARTICLE 129, SECTION 101(1)(1)



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REVISIONS:

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RIVERSIDE SOLAR

--

TOWNS OF LYME &

--	--

SITE PLAN

PROJ	422208
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PE STAMP:



KEY PLAN:

REVISIONS:

[illegible]

PROJECT TITLE:		
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RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

SITE PLAN

PROJ	422208
NUM:	

DES: E. BROWN

DWN: B PARKER

CHK:	B. MARTIN
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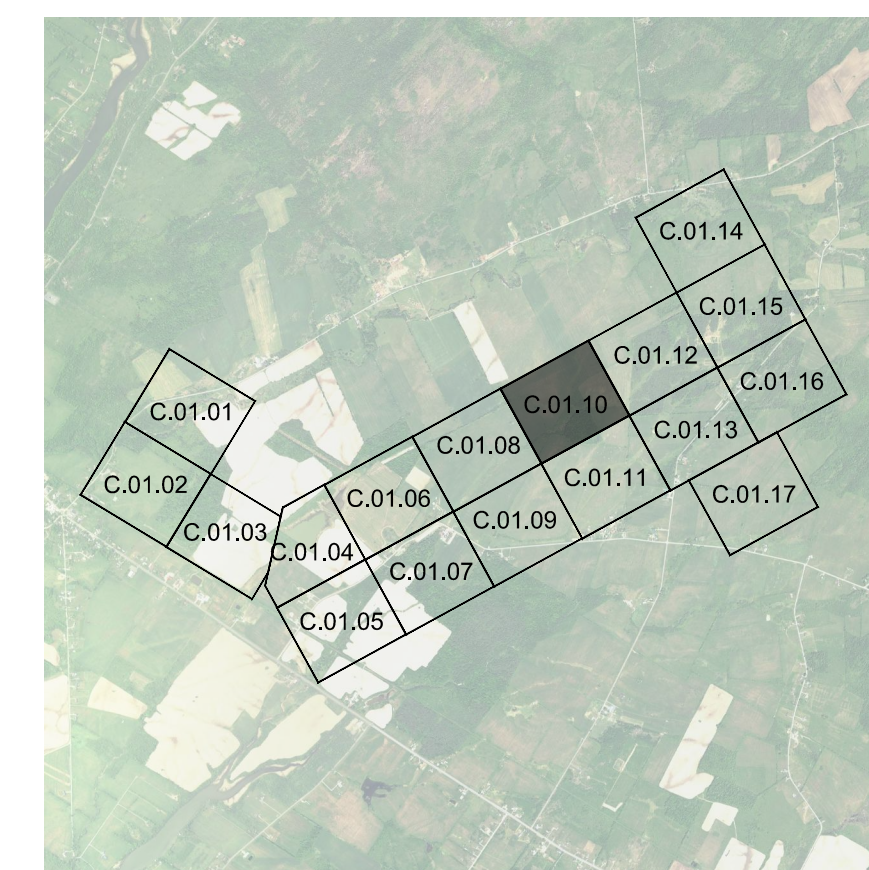
CHIR:	F. MARTIN
ADV:	

APV.	-
DATE	01/15/2001

SCALE AT 22" x 34"

$$1'' = 100'$$

SHEET NO:
PV-C.01.10

REV
2

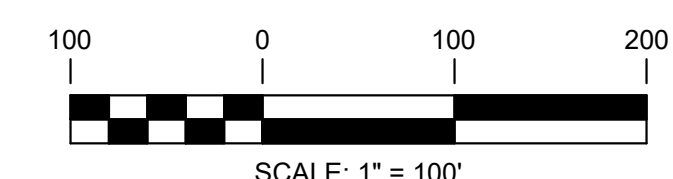
KEY MAP
SCALE: 1" = 4500'

LEGEND

EXISTING		LEGEND	PROPOSED	
	PROPERTY BOUNDARY			LOD
	94C SETBACK			SF
	TOWN SETBACK			SF
	94C / TOWN SETBACK			
	LIMIT OF DISTURBANCE			SF
	OHE			SF
	OVERHEAD ELECTRIC			SF
	UNDERGROUND ELECTRIC			SF
	CHAIN LINK FENCE			SF
	BARBED WIRE FENCE			SF
	GRAVEL ROAD			SF
	BASELINE			SF
	PV ARRAY			SF
	EQUIPMENT PADS & BOLLARDS			SF
	MINOR CONTOUR			SF
	MAJOR CONTOUR			SF
	WETLAND			SF
	NO BUILD AREA			SF
	FEMA ZONE A			SF
	WATER SURFACE			SF
	JURISDICTIONAL STREAM			SF
	NON-JURISDICTIONAL STREAM			SF
	ALTA SURVEY STREAM			SF
	TREELINE			SF
	BUILDING			SF
	UTILITY POLE			SF
	CULVERT			SF
	WETLAND/STREAM BUFFER			SF
	LAYDOWN YARD			SF
	TOWN BOUNDARY			SF
	COLLECTION LINE			SF
	RIGHT OF WAY			SF
	PAVED ROAD			SF
	HORIZONTAL			SF
	DIRECTIONAL DRILL			SF



PRELIMINARY
NOT FOR CONSTRUCTION



UNDER NEW YORK STATE EDUCATION LAW ARTICLE
145 (ENGINEERING), SECTION 7209 (2), IT IS A
VIOLATION OF THE LAW FOR ANY PERSON, UNLESS
ACTING UNDER THE DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

FOR CONTINUATION, SEE SHEET PV-C.01.11

FOR CONTINUATION. SEE SHEET PV-C-01.12

FOR CONTINUATION, SEE SHEET PV-C.01.08

[illegible]

9/10/202

REVISIONS:

PROJECT TITLE:

PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

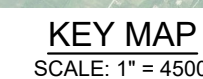
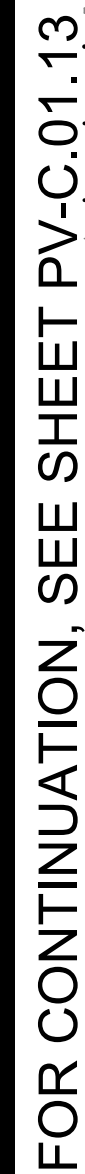
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SCALE AT 22" x 34":

SHEET NO:
PV-C.01.11

REV: 2

FOR CONTINUATION, SEE SHEET PV-C.01.09



EXISTING

PROPOSED

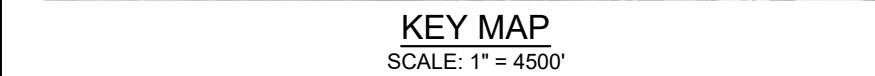
- Dig! Safely. New York**
Call 811
before you dig

A horizontal temperature scale ranging from 100 to 200 F. Below the scale is a black and white calibration bar with alternating segments of black and white.

UNDER NEW YORK STATE EDUCATION LAW ARTICLE
145 (ENGINEERING), SECTION 7209 (2), IT IS A
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ACTING UNDER THE DIRECTION OF A LICENSED
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PLOTTED: 9/28/2021 7:13 PM
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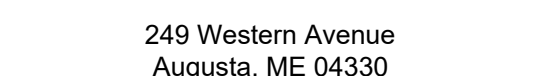
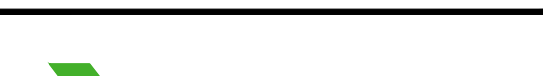


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SCALE: 1" = 100'

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING) SECTION 7209 (2) IT IS A



STAMP



Petruck M. M. M.

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1

--	--

RIVERSIDE SOLAR

--	--

TOWNS OF LYME &

--	--

SITE PLAN

DES:	E. BROWN
------	----------

DWN:	B. PARKER
------	-----------

CHK:	P. MARTIN
------	-----------

APV:	-
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DATE: 04/15/2021

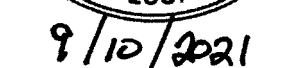
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411-1001

1"=100'	
SHEET NO:	REV:

SHEET NO.	REV.
PV-C.01.13	2

PE STAMP:



KEY PLAN:

[illegible]

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

SITE PLAN

PROJ NUM:	422208
DES:	E. BROWN
DWN:	B. PARKER
CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021
SCALE AT 22" x 34":	

$$1'' = 100'$$

SHEET NO:	PV-C.01.15
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LEGEND

EXISTING	PROPOSED
PROPERTY BOUNDARY	PROPERTY BOUNDARY
94C SETBACK	94C SETBACK
TOWN SETBACK	TOWN SETBACK
94C / TOWN SETBACK	94C / TOWN SETBACK
LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE
SILT FENCE	SILT FENCE
OVERHEAD ELECTRIC	OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC	UNDERGROUND ELECTRIC
CHAIN LINK FENCE	CHAIN LINK FENCE
BARBED WIRE FENCE	BARBED WIRE FENCE
GRAVEL ROAD	GRAVEL ROAD
BASELINE	BASELINE
PV ARRAY	PV ARRAY
EQUIPMENT PADS & BOLLARDS	EQUIPMENT PADS & BOLLARDS
598	598
MINOR CONTOUR	MINOR CONTOUR
600	600
MAJOR CONTOUR	MAJOR CONTOUR
WETLAND	WETLAND
NO BUILD AREA	NO BUILD AREA
FEMA ZONE A	FEMA ZONE A
WATER SURFACE	WATER SURFACE
JURISDICTIONAL STREAM	JURISDICTIONAL STREAM
NON-JURISDICTIONAL STREAM	NON-JURISDICTIONAL STREAM
ALTA SURVEY STREAM	ALTA SURVEY STREAM
TREELINE	TREELINE
BUILDING	BUILDING
UTILITY POLE	UTILITY POLE
CULVERT	CULVERT
WETLAND/STREAM BUFFER	WETLAND/STREAM BUFFER
LAYDOWN YARD	LAYDOWN YARD
TOWN BOUNDARY	TOWN BOUNDARY
COLLECTION LINE	COLLECTION LINE
RIGHT OF WAY	RIGHT OF WAY
PAVED ROAD	PAVED ROAD
HORIZONTAL	HORIZONTAL
DIRECTIONAL DRILL	DIRECTIONAL DRILL



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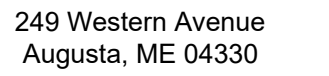


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FOR CONTINUATION, SEE SHEET PV-C.01.14

FOR CONTINUATION, SEE SHEET PV-C.01.16

FOR CONTINUATION, SEE SHEET PV-C.01.12



REVISIONS:

PROJECT TITLE:

PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

DATE: 04/15/2021

SCALE AT 22" x 34":

SHEET NO:
PV-C.01.16

REV:
2

FOR CONTINUATION, SEE SHEET PV-C.01.17



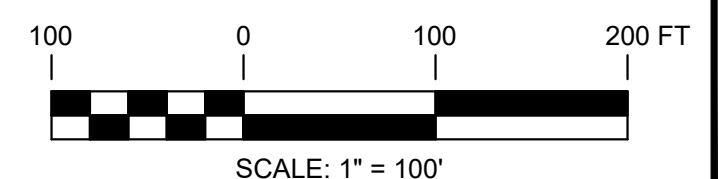
KEY MAP
SCALE: 1" = 4500'

LEGEND

EXISTING		PROPOSED
	PROPERTY BOUNDARY	
	94C SETBACK	
	TOWN SETBACK	
	94C / TOWN SETBACK	
	LIMIT OF DISTURBANCE	LOD
	SILT FENCE	SF SF
	OHE	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC	
	CHAIN LINK FENCE	
	BARBED WIRE FENCE	
	GRAVEL ROAD	
	BASELINE	
	PV ARRAY	
	EQUIPMENT PADS & BOLLARDS	
	MINOR CONTOUR	
	MAJOR CONTOUR	
	WETLAND	
	NO BUILD AREA	
	FEMA ZONE A	
	WATER SURFACE	
	JURISDICTIONAL STREAM	
	NON-JURISDICTIONAL STREAM	
	ALTA SURVEY STREAM	
	TREELINE	
	BUILDING	
	UTILITY POLE	
	CULVERT	
	WETLAND/STREAM BUFFER	
	LAYDOWN YARD	
	TOWN BOUNDARY	
	COLLECTION LINE	
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	PAVED ROAD	
	HORIZONTAL	
	DIRECTIONAL DRILL	



PRELIMINARY
NOT FOR CONSTRUCTION

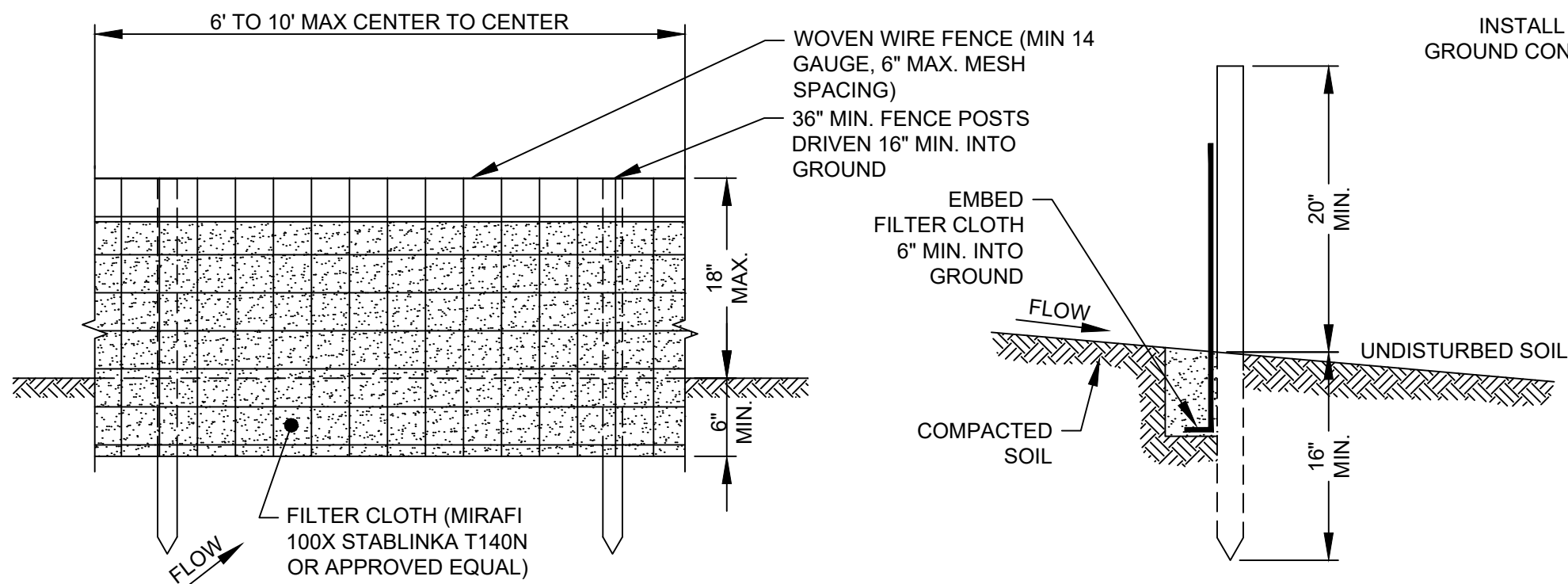


UNDER NEW YORK STATE EDUCATION LAW ARTICLE
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FOR CONTINUATION, SEE SHEET PV-C.01.13

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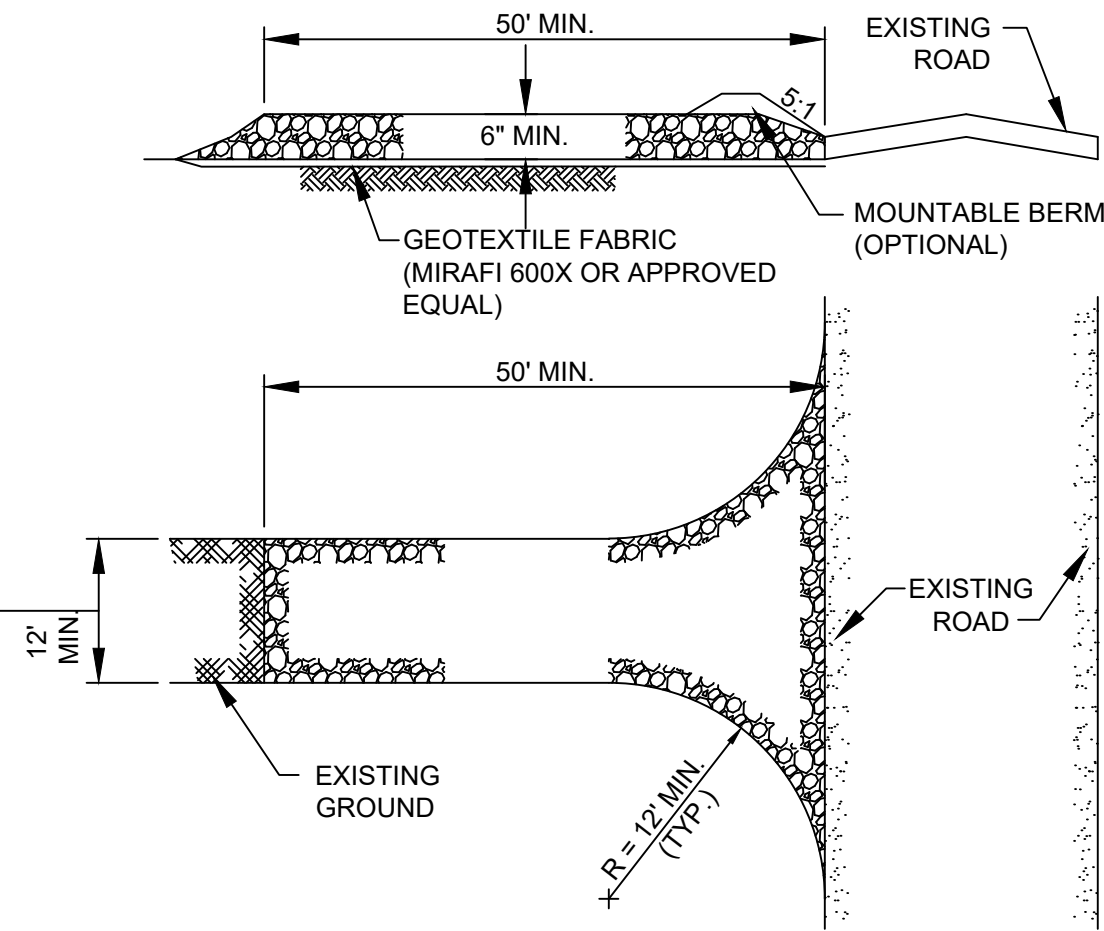
AES THINWALL 22034 4/2018



1. WOVEN WIRE FENCE SHALL BE FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MIDSECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BUILD-UP REACHES 3/4 THE HEIGHT OF THE FENCE.
5. STANDARD SILT FENCE MAY BE USED ON SLOPES < 10%.
- POSTS: STEEL "T" OR "U" TYPE OR 2" HARDWOOD.
- FENCE: WOVEN WIRE, 14 GA 6" MAX MESH OPENING.
- FILTER CLOTH: FILTER X, MIRAFI 100X, STABLINKA T140N OR APPROVED EQUAL.
- PREFABRICATED UNIT: ENVIROFENCE OR APPROVED EQUAL

REINFORCED SILT FENCE DETAILS

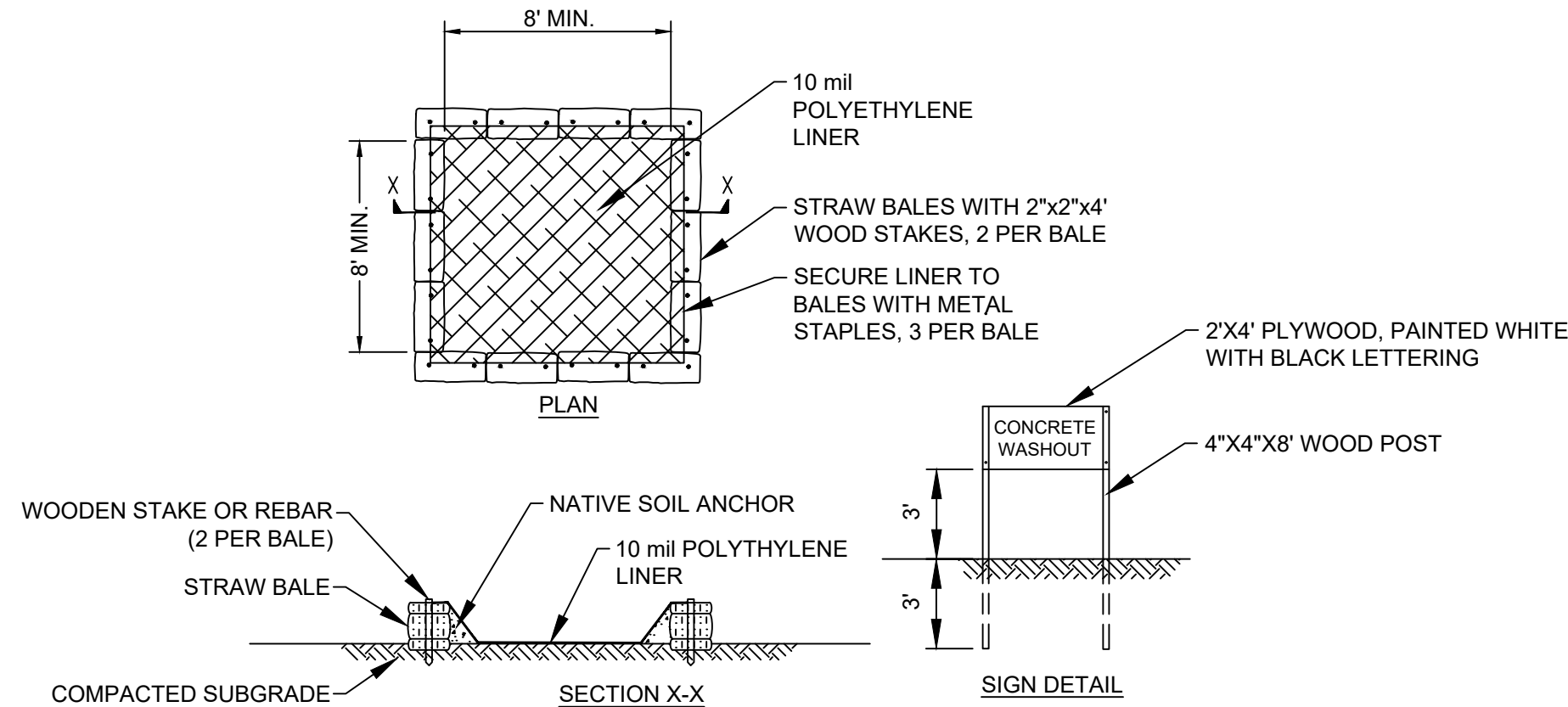
SCALE: N.T.S.



1. STONE SIZE - USE 1" - 4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MIN. BUT NOT LESS THAN THE FULL ROAD WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. PROVIDE TWENTY-FOUR (24) FOOT WIDTH IF THERE IS ONLY A SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION ENTRANCE

SCALE: N.T.S.



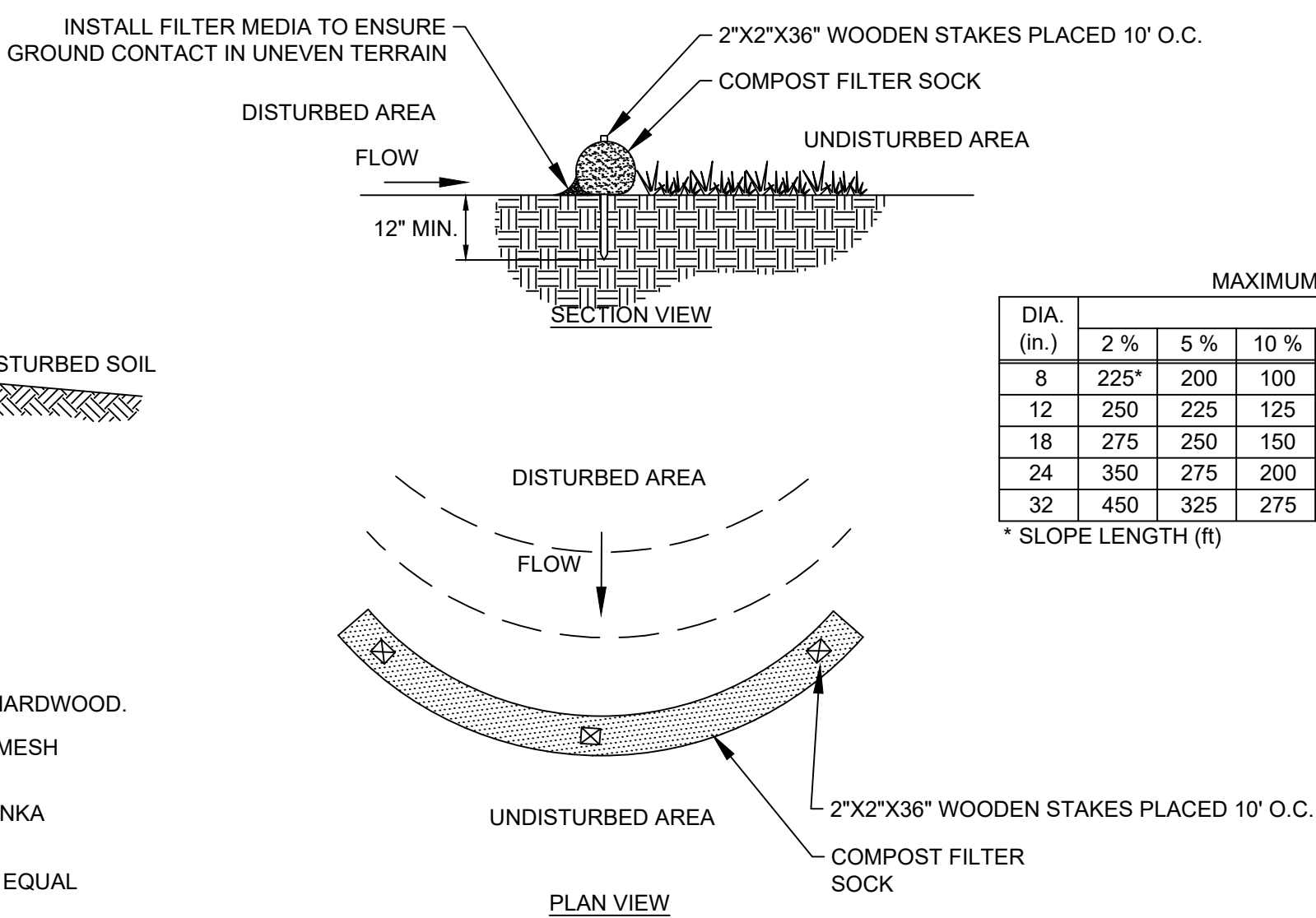
NOTES:

1. DIMENSIONS SHOWN ABOVE ARE MINIMUM. SIZE FACILITY FOR ADEQUATE CAPACITY TO CONTAIN SOLIDS, WASH WATER AND RAINFALL, AND TO ALLOW EVAPORATION.
2. LOCATE THE FACILITY A MINIMUM OF 100' FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS OR OTHER SURFACE WATERS.
3. INSPECT FACILITY DAILY AND REPAIR ANY DAMAGE OR LEAKS IMMEDIATELY.
4. DISPOSE OF HARDENED MATERIAL OFF-SITE AT AN APPROPRIATE CONSTRUCTION WASTE FACILITY WHEN ACCUMULATION REACHES 75% OF THE WASHOUT CAPACITY.

TYPICAL CONCRETE WASHOUT

SCALE: N.T.S.

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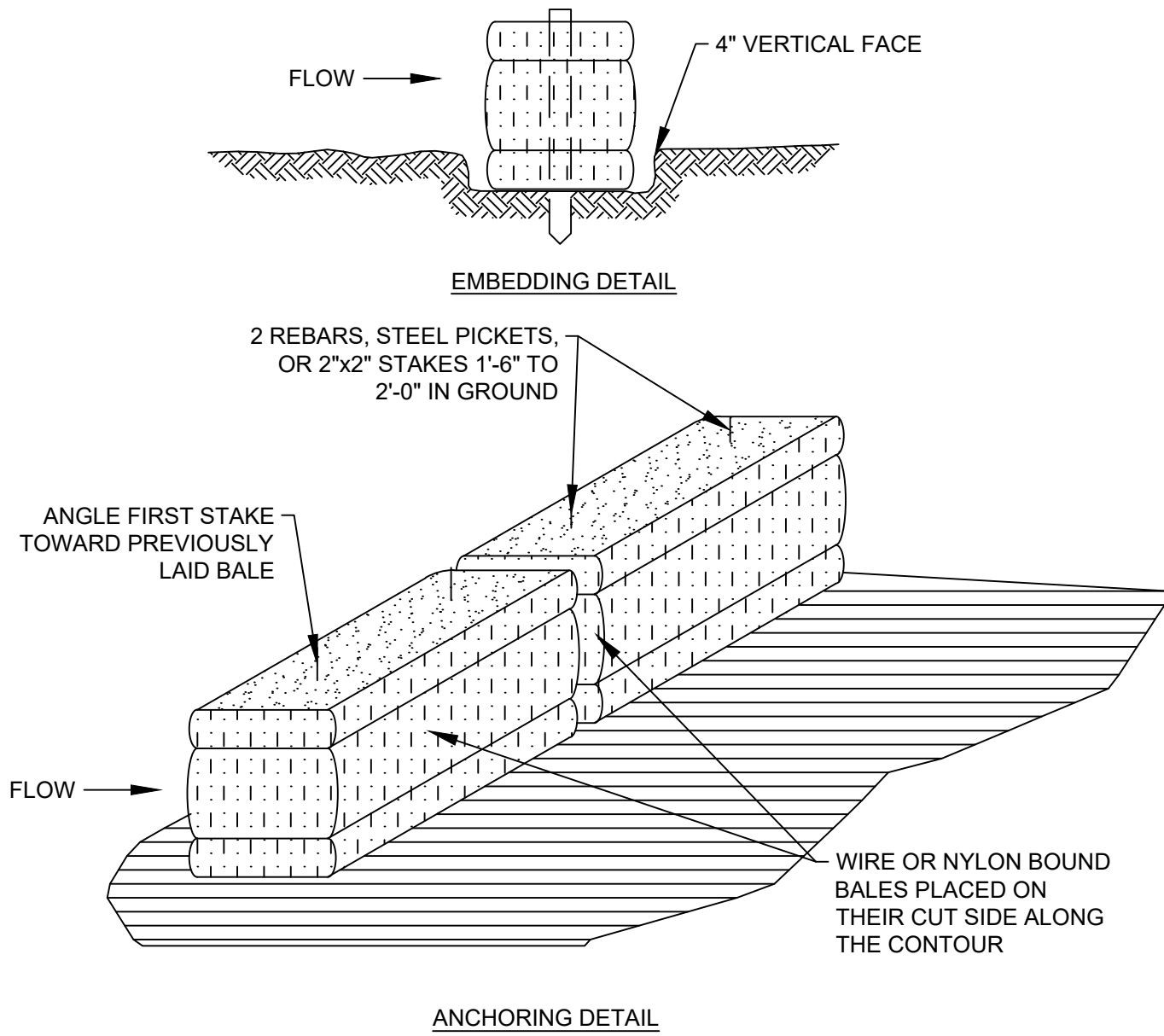


DIA. (in.)	MAXIMUM SLOPE LENGTH						
	2 %	5 %	10 %	20 %	25 %	33 %	50 %
8	225*	200	100	50	20	--	--
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50

* SLOPE LENGTH (ft)

TYPICAL COMPOST FILTER SOCK

SCALE: N.T.S.

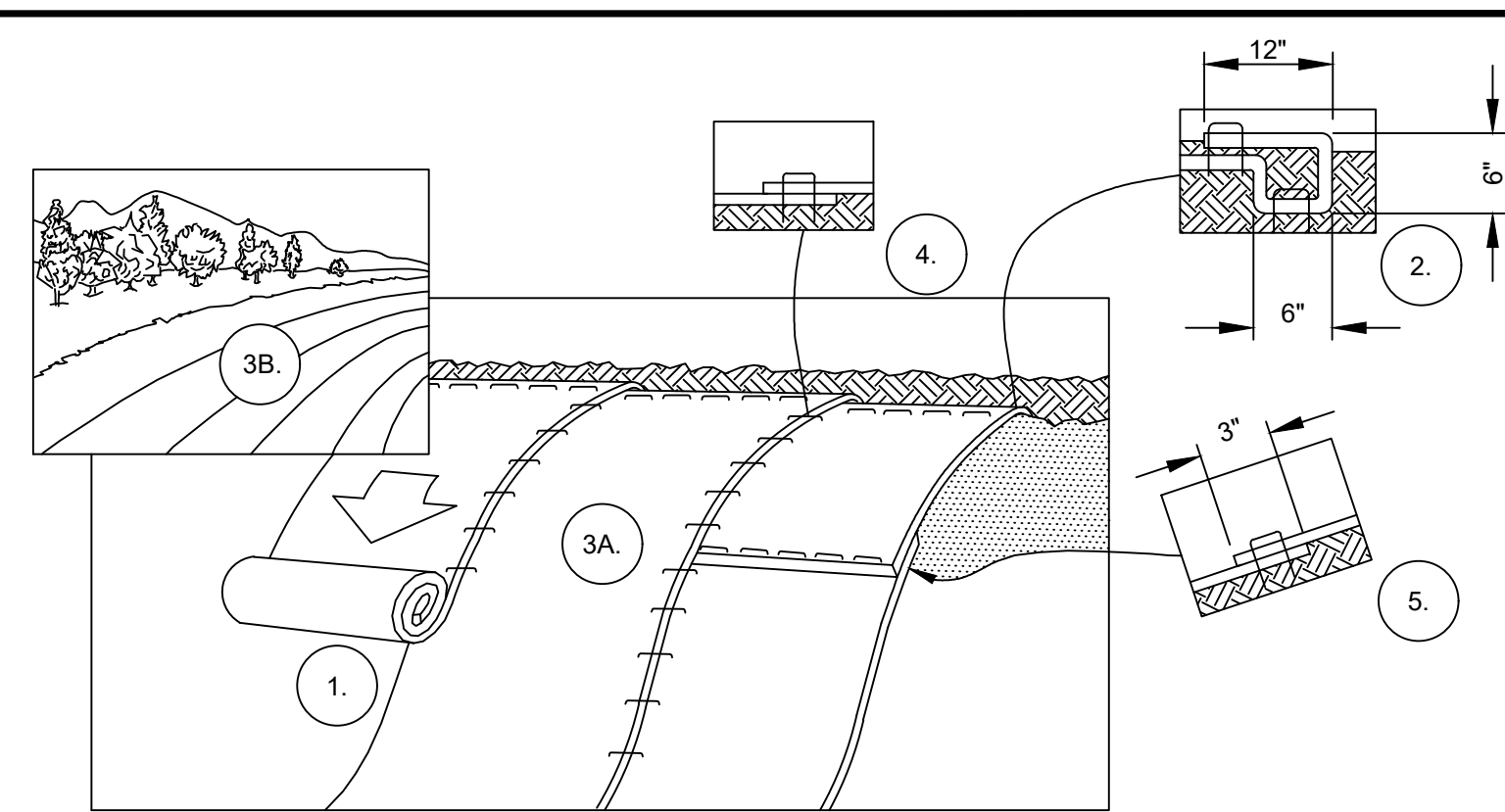


NOTES:

1. STRAW BALES SHALL BE USED ONLY AS REINFORCEMENT FOR SILT FENCE WHERE NEEDED.
2. BALES SHALL BE PLACED IN A ROW AT THE TOE OF A SLOPE OR ON THE CONTOUR, WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
3. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
4. BALES SHALL BE SECURELY ANCHORED IN PLACE BY DRIVING EITHER TWO STAKES OR RE-BARS THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE TOP OF BALE.
5. INSPECTIONS SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STRAW BALE BARRIER

SCALE: N.T.S.



EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL.

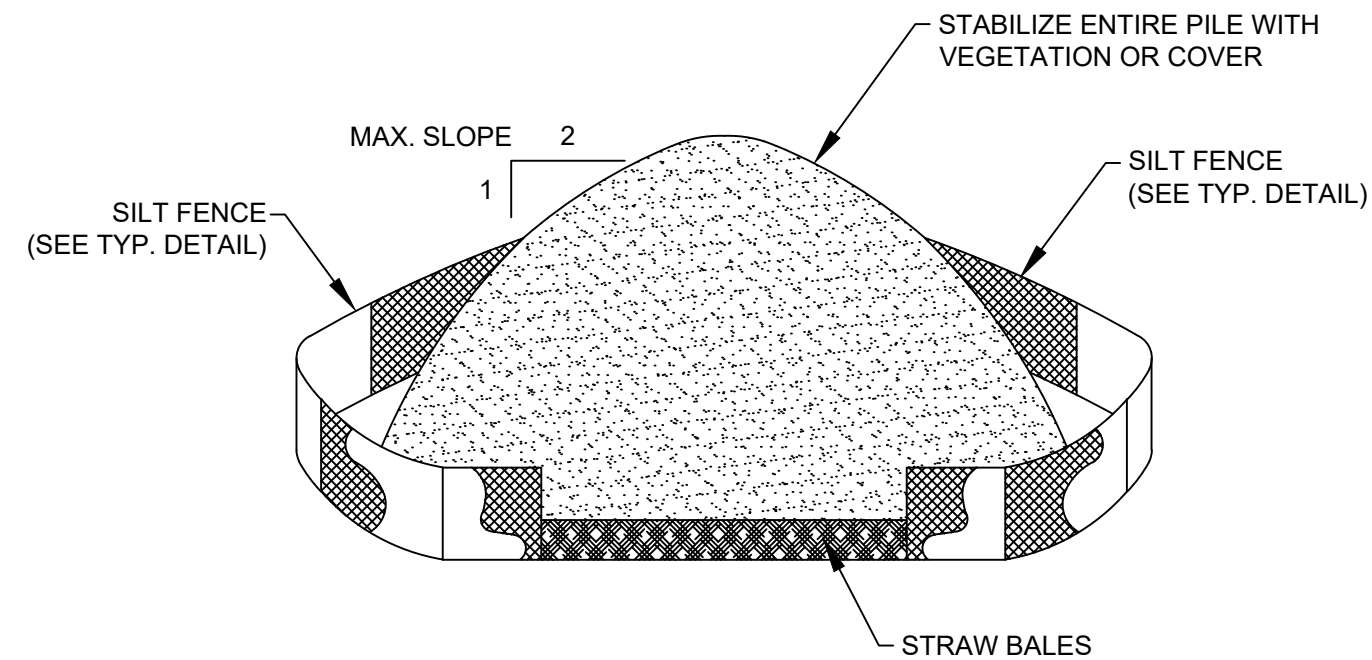
1. PREPARE SOIL BEFORE INSTALLING BLANKETS BY SMOOTHING THE SURFACE, REMOVING DEBRIS AND LARGE STONES, AND APPLICATION OF ANY NECESSARY LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

NOTE:

*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL BLANKET INSTALLATION

SCALE: N.T.S.



INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAW BALES, THEN STABILIZED WITH VEGETATION OR COVERED.

TYPICAL TOPSOIL STOCKPILE

SCALE: N.T.S.



PRELIMINARY
NOT FOR CONSTRUCTION

aes

2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679 - 3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EROSION & SEDIMENT
CONTROL DETAILS 1

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

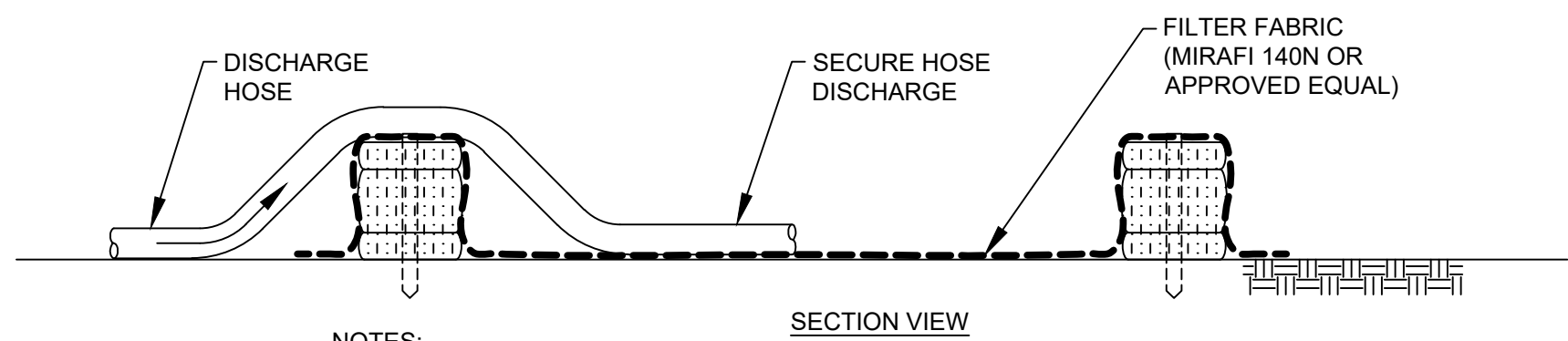
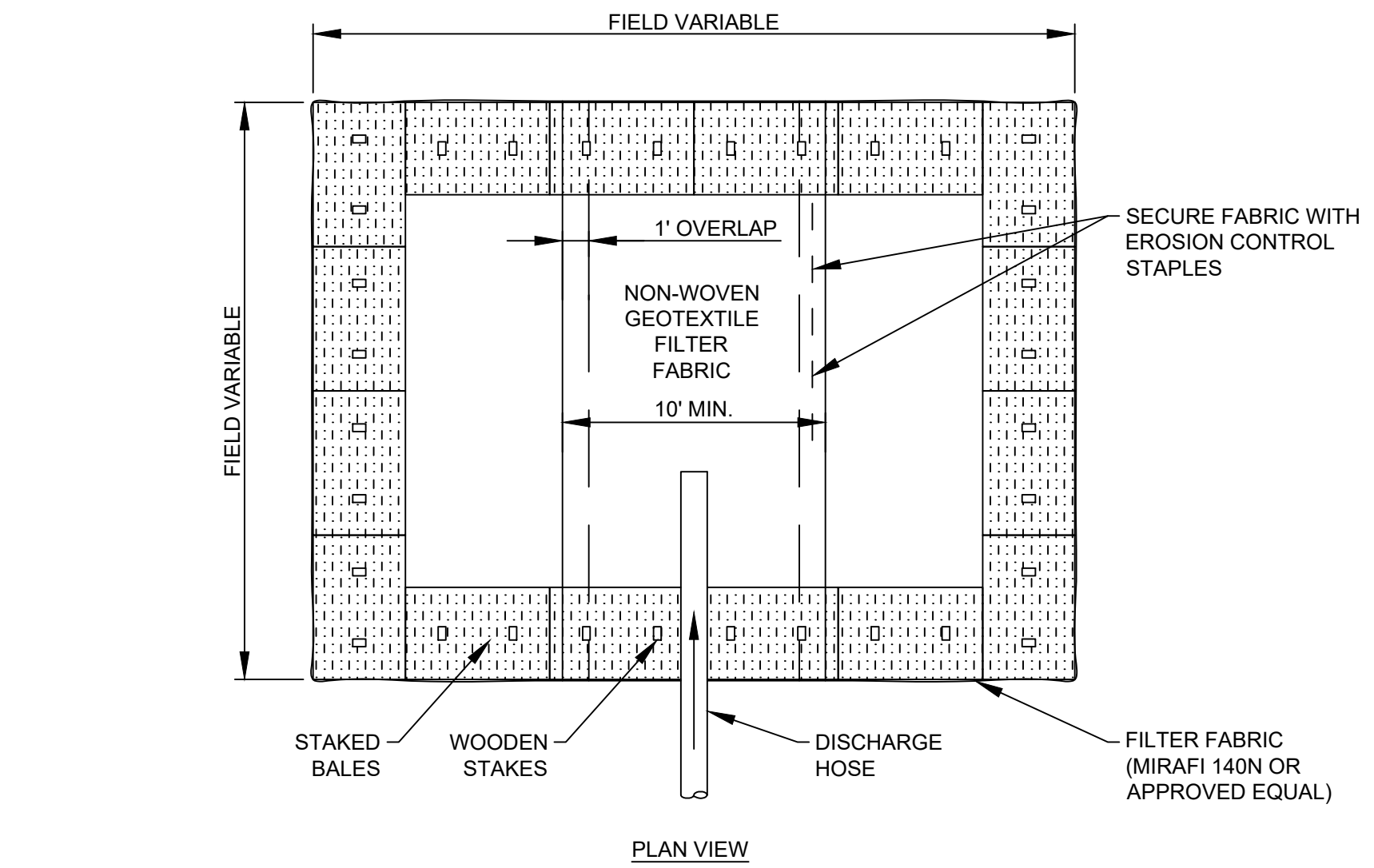
AS SHOWN

SHEET NO:
PV-C.03.01

REV:
2

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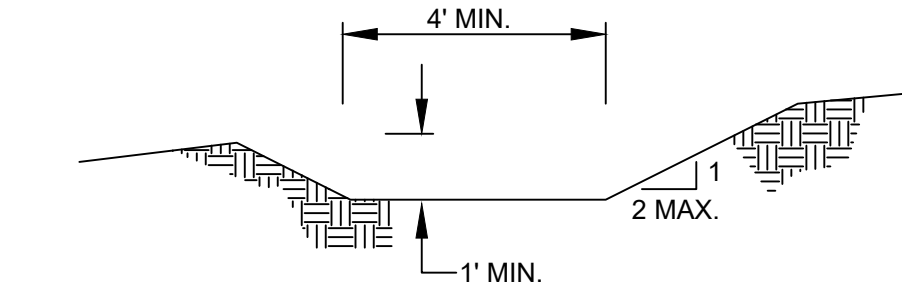
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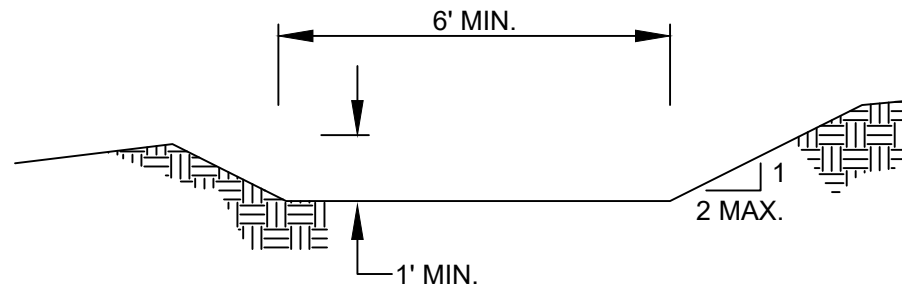
- NOTES:
1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
 2. THE BASIN SHALL BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.
 2. LOCATE THE FACILITY A MINIMUM OF 100' FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS OR OTHER SURFACE WATERS.
 3. CLEAN AND REMOVE AS SOON AS DEWATERING IS COMPLETE.

TYPICAL DEWATERING BASIN

SCALE: N.T.S.



SECTION VIEW
SWALE TYPE A (< 5 ACRES)



SECTION VIEW
SWALE TYPE B (5 - 10 ACRES)

- NOTES:
1. ALL CONSTRUCTION DITCHES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
 2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
 3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT A NON-EROSIVE VELOCITY.
 4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTION OF THE DITCH.
 5. DITCHES SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH IMPEDE NORMAL FLOW.
 6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
 7. ALL EXCAVATED MATERIAL NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SUCH THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DITCH.
 8. STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW:

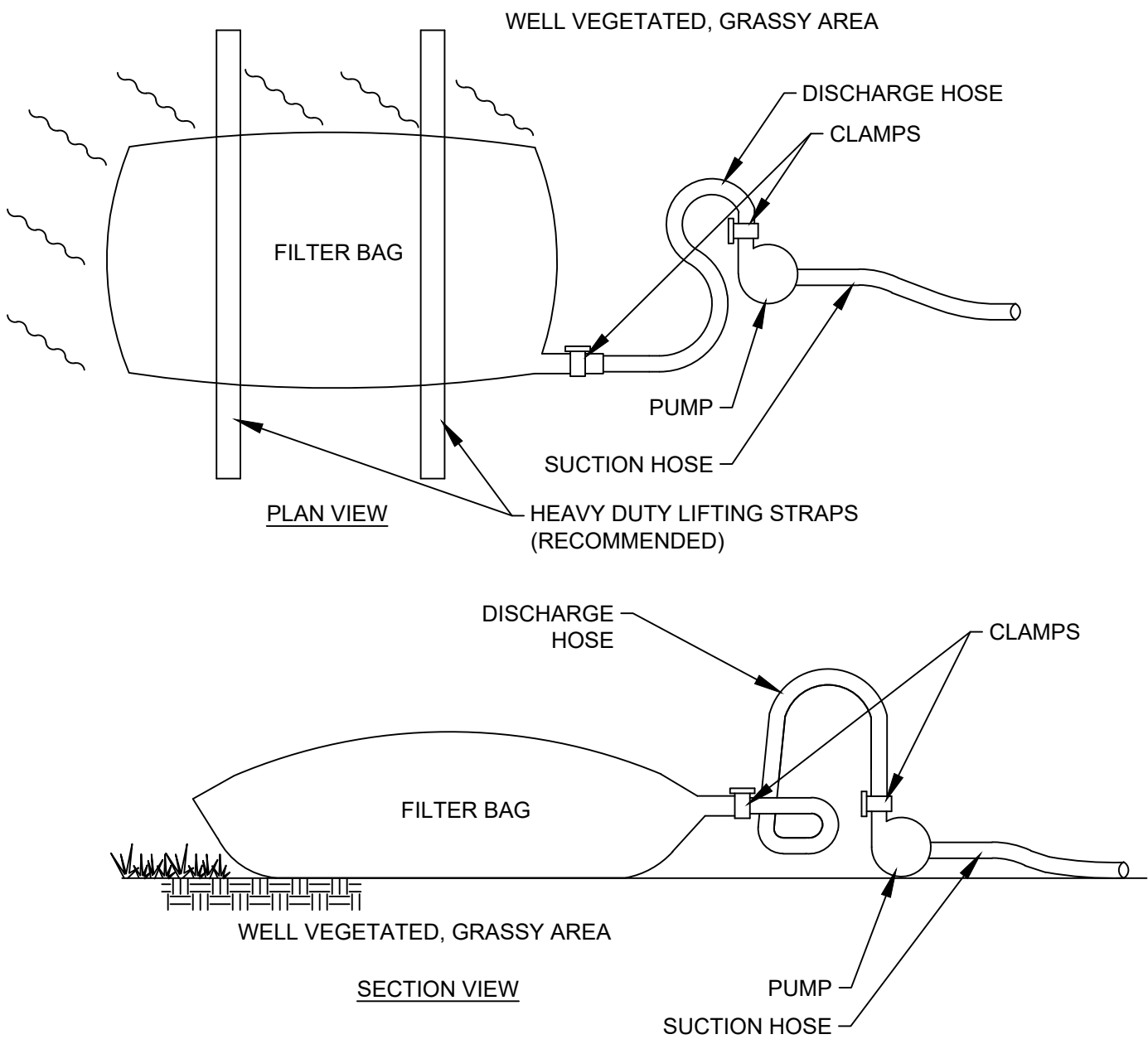
CHANNEL GRADE	TYPE A DITCH (< 5 ACRES)	TYPE B DITCH (5 - 10 ACRES)
0.5-3.0%	SEED & STRAW MULCH	SEED & STRAW MULCH
3.1-5.0%	SEED & STRAW MULCH	SEED AND COVER W/ RECP
5.1-8.0%	SEED AND COVER W/ RECP	LINED 4-8" RIP RAP OR GEOTEXTILE
8.1-10%	LINED 4-8" RIP RAP OR GEOTEXTILE	ENGINEERED DESIGN

9. INSPECT AND PROVIDE MAINTENANCE AFTER EACH RAIN EVENT.
10. FIGURE IS BASED ON NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

TEMPORARY SWALE DETAIL

SCALE: N.T.S.

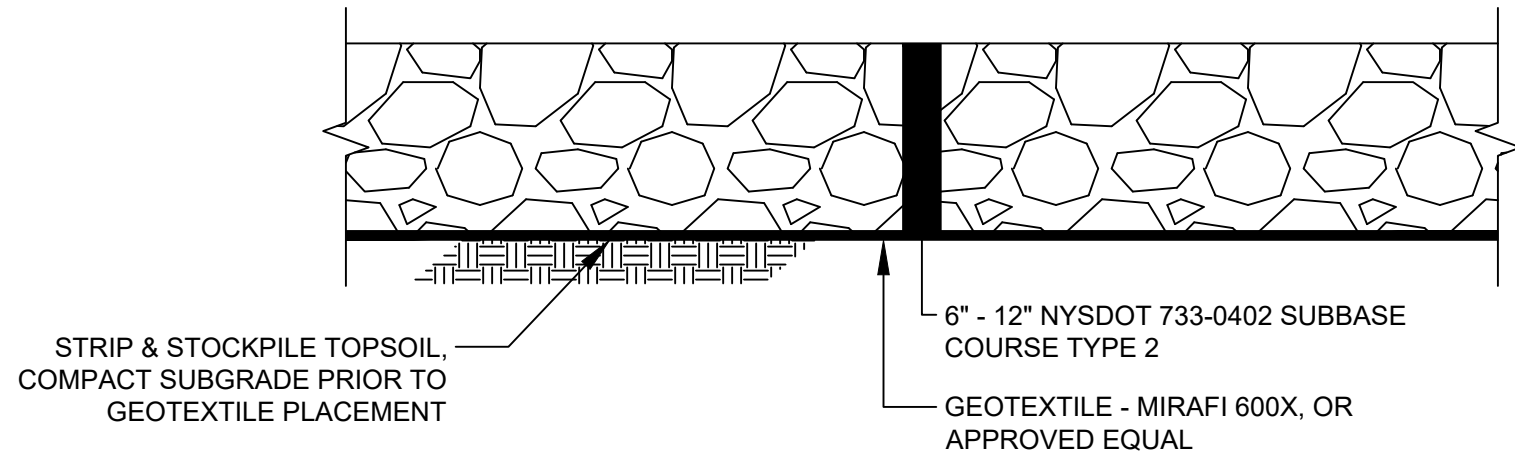
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- NOTES:
1. THE GEOTEXTILE MATERIAL USED TO CONSTRUCT THE FILTER BAG SHALL MEET OR EXCEED THE SPECIFICATIONS PROVIDED IN THE 'NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL - 2016' OR LATEST EDITION. THE BAG SHALL BE SEWN WITH A DOUBLE NEEDLE MACHINE USING HIGH STRENGTH DOUBLE STITCHED 'J' TYPE SEAMS (ASTM D4884).
 2. GEOTEXTILE FILTER BAGS SHALL BE SIZED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS BASED ON THE PUMP DISCHARGE RATE.
 3. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 75% FULL. THE ACCUMULATED SEDIMENT DISPOSAL SHALL BE MANAGED IN CONFORMANCE WITH THE PROJECT SWPPP.
 4. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. IT IS RECOMMENDED THAT BAGS BE PLACED ON STRAPS AS SHOWN TO FACILITATE REMOVAL.
 5. BAGS SHALL BE LOCATED IN A WELL-VEGETATED (GRASSY) AREA AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE THEIR DISCHARGE CAPACITY.
 6. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
 7. BAGS SHALL NOT BE PLACED WITHIN 50 FEET OF WETLANDS, STREAMS, OR OTHER SURFACE WATERS.
 8. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. A COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS PLACED WHERE A GRASSY AREA IS NOT AVAILABLE. A COMPOST FILTER SOCK MUST BE PLACED BELOW ANY BAG DISCHARGING TO A SPECIAL PROTECTION SURFACE WATER.
 9. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
 10. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 50 PERCENT OF THE MAXIMUM RATE SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PROVIDE FLOATING SUCTION SCREENS AT THE WATER SOURCE.
 11. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

SEDIMENT FILTER BAG

SCALE: N.T.S.



TEMPORARY LAYDOWN YARD TYPICAL SECTION

SCALE: N.T.S.

aes
2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 678-3500

TRC
249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EROSION & SEDIMENT
CONTROL DETAILS 2

PROJ
NUM: 422208

DES: E. BROWN

DWN: B. PARKER

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

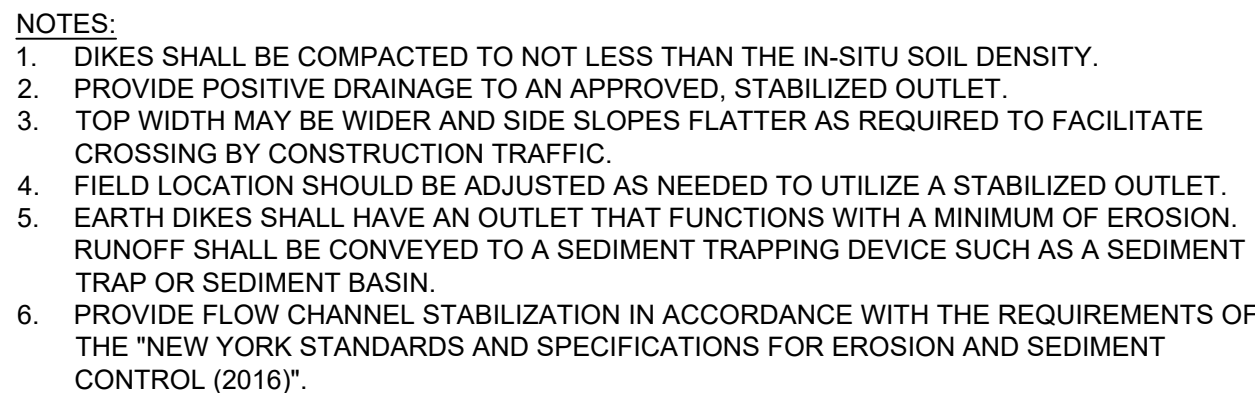


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NOT FOR CONSTRUCTION

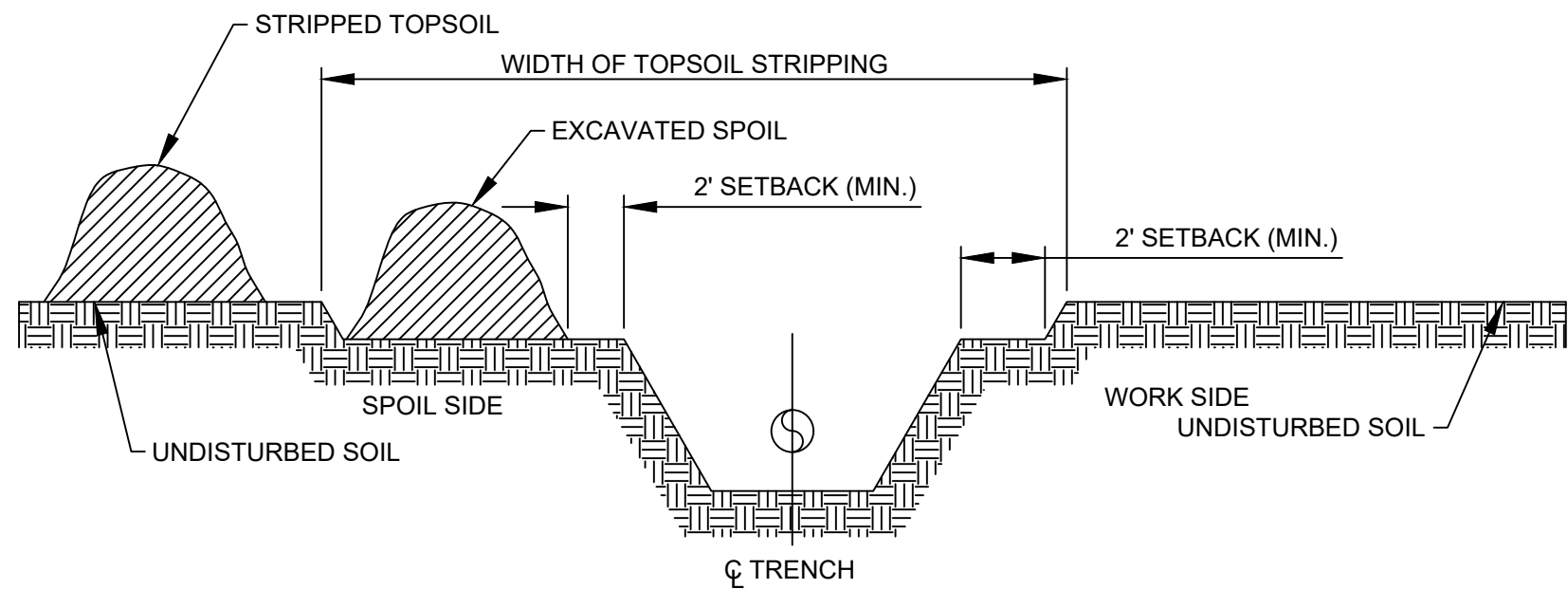
AS SHOWN

SHEET NO:
PV-C.03.02

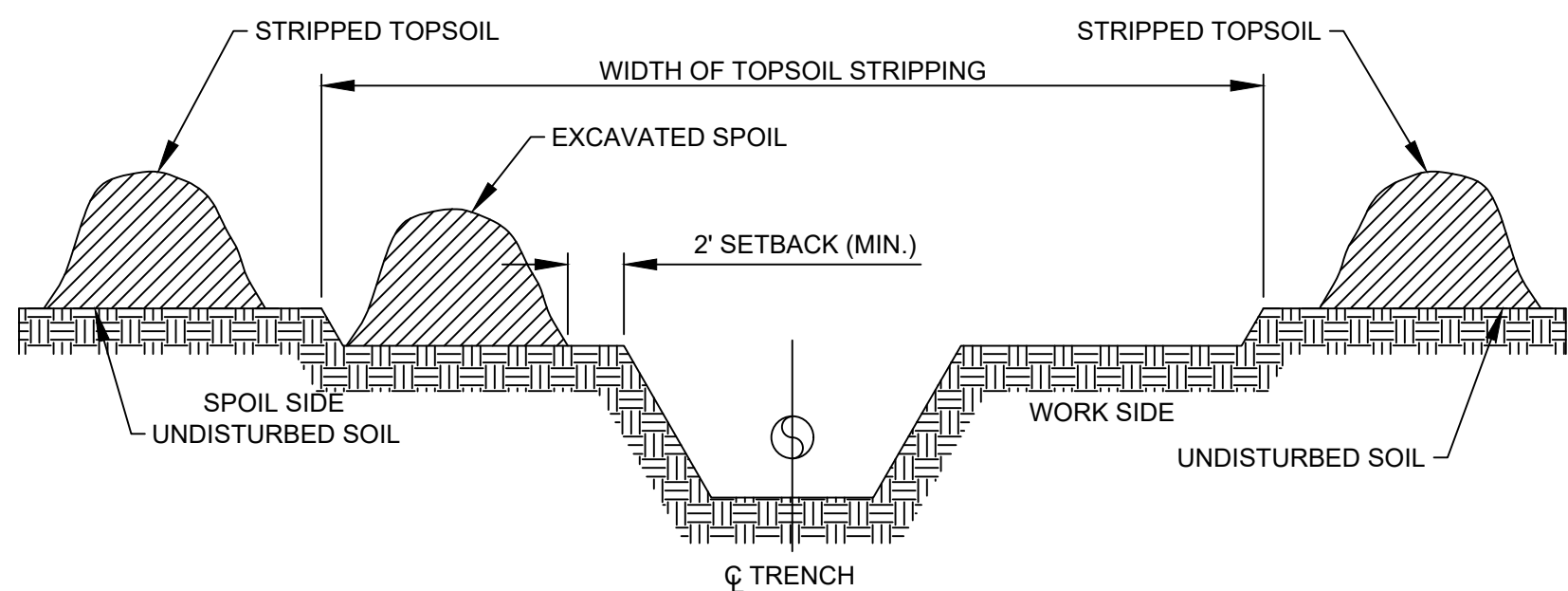
REV:
2



TYPICAL EARTH DIKE DETAIL



DITCH PLUS SPOILSIDE TOPSOIL SEGREGATION



FULL WIDTH TOPSOIL STRIPPING

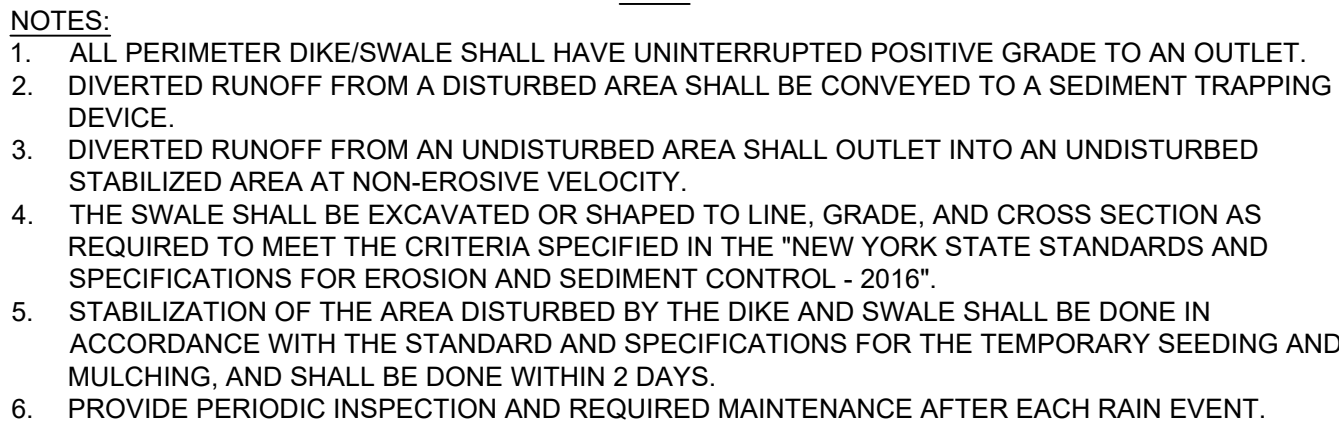
NOTES

1. TOPSOIL MAY BE IN LOCATIONS AS SHOWN ABOVE, OR AT OTHER APPROVED LOCATIONS.
2. LEAVE GAPS IN SPOIL PILES FOR WATER RUN-OFF.
3. CONSTRUCTION R.O.W. MAY BE EXPANDED UP TO FULL R.O.W. WIDTH IN NON-WETLAND AREAS, FOR TOPSOIL SALVAGE.

TOPSOIL SEGREGATION METHODS - COLLECTOR

SCALE: N.T.S.

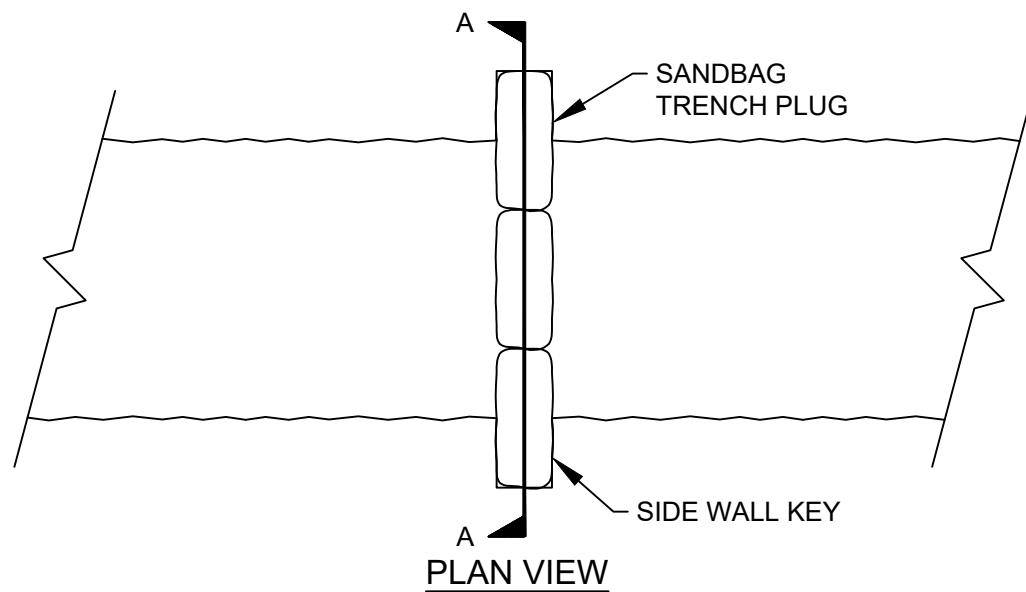
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



DRAINAGE AREA LIMIT= 2 ACRES

TYPICAL PERIMETER DIKE/SWALE

SCALE: N.T.S.



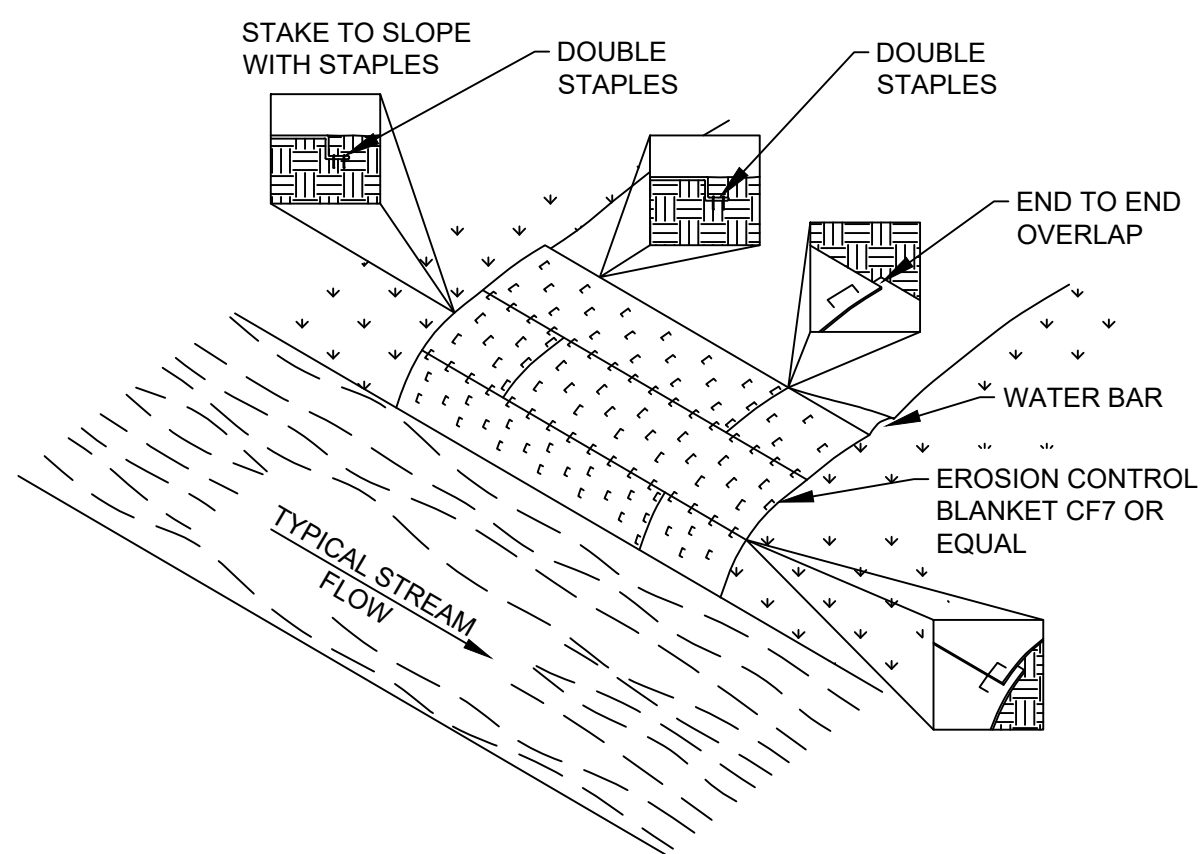
SECTION A

NOTES:

1. AFTER TRENCH EXCAVATION, HAND DRESS BOTTOM OF TRENCH IN VICINITY OF PLANNED PLUG CONSTRUCTION.
2. EXCAVATE KEY INTO TRENCH SIDE WALL. EXCAVATE TO PROVIDE VERTICAL SURFACE NOT LESS THAN 6" INTO BANK.
3. CONSTRUCT SANDBAG TRENCH PLUG USING SANDBAGS FILLED WITH CLEAN, FINE SAND.
4. BACK FILL KEY WAY TO PROVIDE COMPACTED NATIVE SOIL AGAINST SANDBAGS
5. BACK FILL TRENCH CONCURRENT WITH CABLE PLACEMENT. REMOVE SANDBAG TRENCH PLUG AS CABLE IS PLACED.
6. PROVIDE STREAM BED AND EMBANKMENT PROTECTION PER "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" - 2016.

TYPICAL TRENCH PLUG

SCALE: N.T.S.



NOTES:

1. EROSION CONTROL MATTING SHALL BE PLACED ON THE BANKS OF FLOWING STREAMS WHERE VEGETATION HAS BEEN REMOVED OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
2. THE EROSION CONTROL MATTING SHALL MEET THE REQUIREMENTS SPECIFIED IN THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" - 2016 AND/OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
3. STAPLES SHALL BE MADE OF 11 GAUGE WIRE, U-SHAPED WITH 6" LEGS AND A 1" CROWN. STAPLES SHALL BE DRIVEN INTO THE GROUND TO THE FULL LENGTH OF THE STAPLE LEGS. ALTERNATELY 1" WOODEN PEGS 6" LONG AND BEVELED TO SECURE MATTING.
4. MATTING SHALL BE INSTALLED ACCORDING TO MANUFACTURER SPECIFICATIONS OR AS FOLLOWS:
 - 4.1. THE TOP OF THE BLANKET SHALL EXTEND 2' PAST THE UPPER EDGE OF THE HIGH WATER MARK. IF A WATERBED IS PRESENT ON THE APPROACH SLOPE, THE BLANKET SHALL BEGIN ON THE UPHILL SIDE OF THE WATERBED.
 - 4.2. INSTALL BLANKET(S) ACROSS THE SLOPE IN THE DIRECTION OF WATER FLOW.
 - 4.3. ANCHOR ("KEY") THE UPSTREAM EDGE OF THE BLANKET(S) INTO THE SLOPE USING A 6" WIDE BY 6" DEEP TRENCH. DOUBLE STAPLE EVERY 12" BEFORE BACK FILLING AND COMPACTING TRENCH.
 - 4.4. ANCHOR ("KEY") THE UPPER EDGE OF THE BLANKET INTO THE SLOPE USING A 6" WIDE BY 6" DEEP TRENCH. DOUBLE STAPLE EVERY 12" BEFORE BACK FILLING AND COMPACTING TRENCH.
 - 4.5. THE EDGES OF PARALLEL BLANKETS SHALL BE OVERLAPPED A MINIMUM OF 6". THE UPPER BLANKET SHALL BE PLACED OVER THE LOWER BLANKET (SHINGLE STYLE) AND STAPLED EVERY 12" ALONG THE LENGTH OF THE EDGE.
 - 4.6. WHEN BLANKET ENDS ARE TO ADJOINING BLANKETS, THE UPSTREAM BLANKET SHALL BE PLACED OVER THE DOWNSTREAM BLANKET (SHINGLE STYLE) WITH APPROXIMATELY 6" OF OVERLAP, STAPLE THROUGH THE OVERLAP AREA EVERY 12".
 - 4.7. STAPLE DOWN THE CENTER OF THE BLANKET(S), THREE STAPLES IN EVERY SQUARE YARD.
5. IN LIVESTOCK AREAS WHERE EROSION CONTROL MATTING IS APPLIED TO STREAM BANKS, FENCING SHALL BE USED IF NECESSARY TO EXCLUDE LIVESTOCK, WITH PERMISSION OF THE LANDOWNER.
6. MONITOR FOR WASHOUTS, STAPLE INTEGRITY OR MAT MOVEMENT. REPLACE OR REPAIR AS NECESSARY.

TYPICAL STREAM BANK MATTING

SCALE: N.T.S.



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

[illegible]

PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EROSION & SEDIMENT CONTROL DETAILS 3

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PROJ NUM:	422208
DES:	E. BROWN
DWN:	B. PARKER
CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021

SCALE AT 22" x 34":

AS NOTED

SHEET NO:
PV-C.03.03

REV: 2



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KEY PLAN:

[illegible]

PROJECT TITLE:		

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

GRADING, DRAINAGE, AND EROSION CONTROL PLAN

PROJ	422208
NUM:	

DES: E. BROWN

DWN:	B. PARKER
------	-----------

DWN.	B. PARKER
	E. ALLEN

CHK:	P. MARTIN
------	-----------

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

$$1'' = 100'$$

SHEET NO:
PV-C.04.01



KEY MAP
SCALE: 1" = 4500'

LEGEND

EXISTING		LEGEND		PROPOSED	
	PROPERTY BOUNDARY		PROPERTY BOUNDARY		PROPERTY BOUNDARY
	94C SETBACK		94C SETBACK		94C SETBACK
	TOWN SETBACK		TOWN SETBACK		TOWN SETBACK
	94C / TOWN SETBACK		94C / TOWN SETBACK		94C / TOWN SETBACK
	LIMIT OF DISTURBANCE		LIMIT OF DISTURBANCE		LIMIT OF DISTURBANCE
	SILT FENCE		SILT FENCE		SILT FENCE
	OVERHEAD ELECTRIC		OVERHEAD ELECTRIC		OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC		UNDERGROUND ELECTRIC		UNDERGROUND ELECTRIC
	CHAIN LINK FENCE		CHAIN LINK FENCE		CHAIN LINK FENCE
	BARBED WIRE FENCE		BARBED WIRE FENCE		BARBED WIRE FENCE
	GRAVEL ROAD		GRAVEL ROAD		GRAVEL ROAD
	BASELINE		BASELINE		BASELINE
	PV ARRAY		PV ARRAY		PV ARRAY
	EQUIPMENT PADS & BOLLARDS		EQUIPMENT PADS & BOLLARDS		EQUIPMENT PADS & BOLLARDS
	MINOR CONTOUR		MINOR CONTOUR		MINOR CONTOUR
	MAJOR CONTOUR		MAJOR CONTOUR		MAJOR CONTOUR
	WETLAND		WETLAND		WETLAND
	NO BUILD AREA		NO BUILD AREA		NO BUILD AREA
	FEMA ZONE A		FEMA ZONE A		FEMA ZONE A
	WATER SURFACE		WATER SURFACE		WATER SURFACE
	JURISDICTIONAL STREAM		JURISDICTIONAL STREAM		JURISDICTIONAL STREAM
	NON-JURISDICTIONAL STREAM		NON-JURISDICTIONAL STREAM		NON-JURISDICTIONAL STREAM
	ALTA SURVEY STREAM		ALTA SURVEY STREAM		ALTA SURVEY STREAM
	TREELINE		TREELINE		TREELINE
	BUILDING		BUILDING		BUILDING
	UTILITY POLE		UTILITY POLE		UTILITY POLE
	CULVERT		CULVERT		CULVERT
	WETLAND/STREAM BUFFER		WETLAND/STREAM BUFFER		WETLAND/STREAM BUFFER
	TOWN BOUNDARY		TOWN BOUNDARY		TOWN BOUNDARY
	COLLECTION LINE		COLLECTION LINE		COLLECTION LINE
	RIGHT OF WAY		RIGHT OF WAY		RIGHT OF WAY
	PAVED ROAD		PAVED ROAD		PAVED ROAD
	HORIZONTAL		HORIZONTAL		HORIZONTAL
	DIRECTIONAL DRILL		DIRECTIONAL DRILL		DIRECTIONAL DRILL



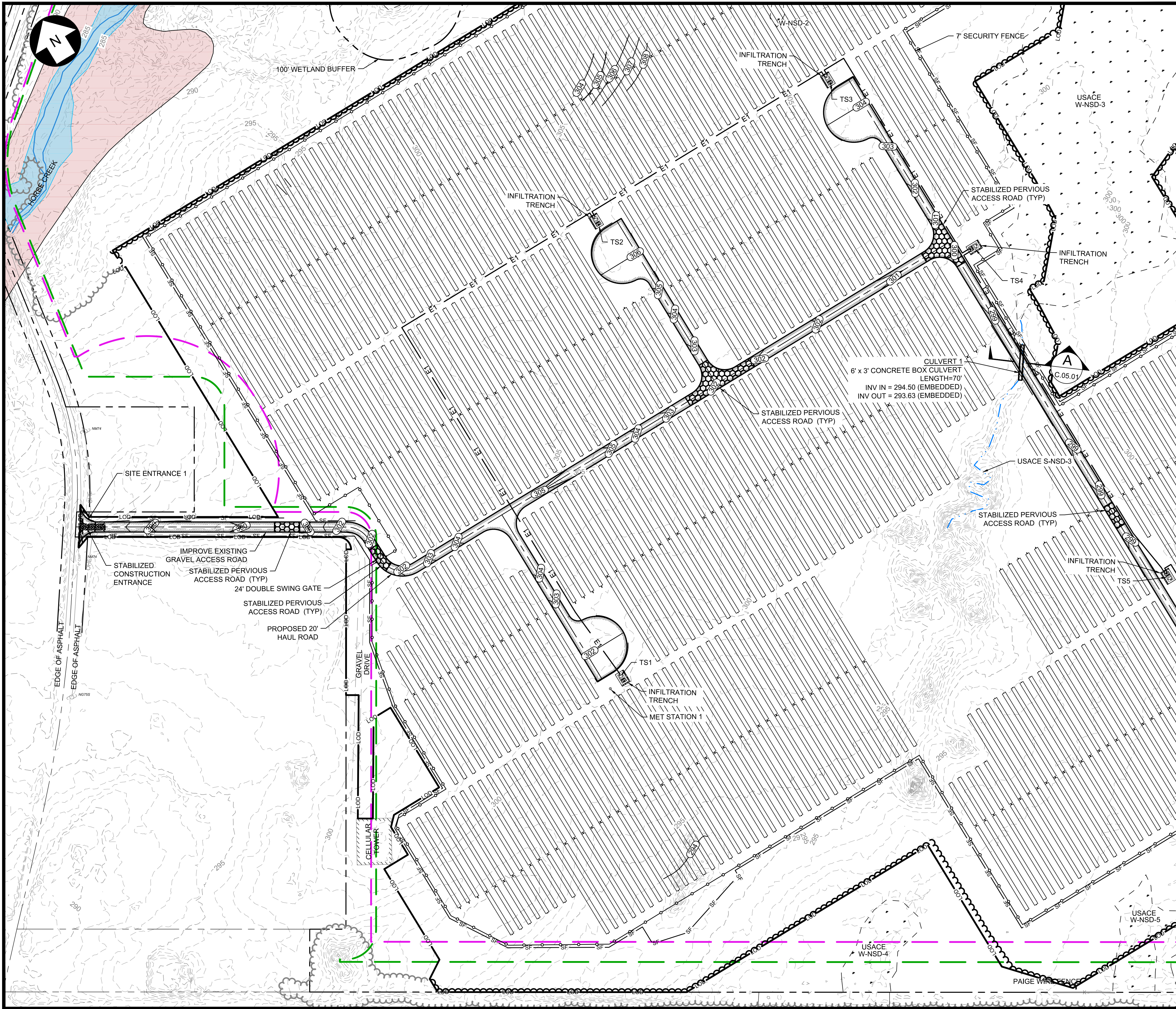
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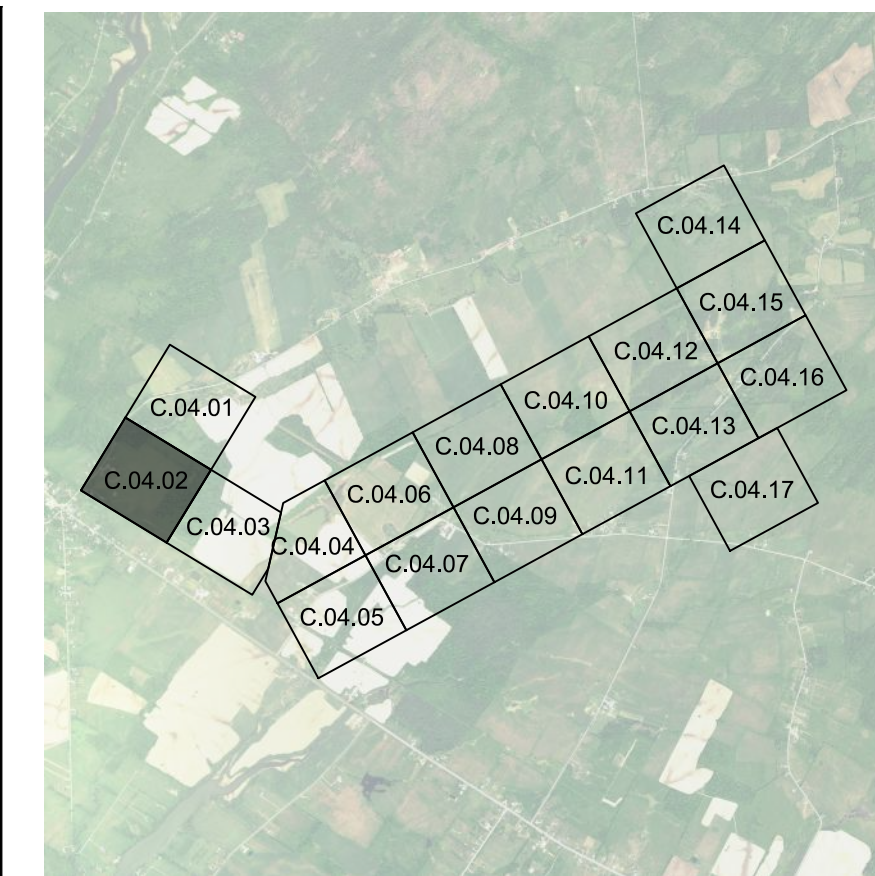
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FOR CONTINUATION, SEE SHEET PV-C.04.02

FOR CONTINUATION, SEE SHEET PV-C.04.01



FOR CONTINUATION, SEE SHEET PV-C.04.03

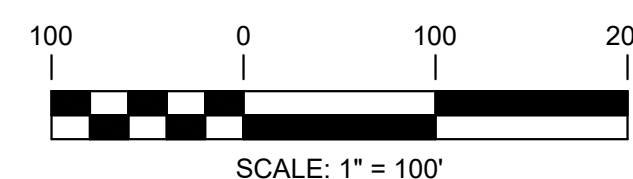


KEY MAP
SCALE: 1" = 4500'

LEGEND	
EXISTING	PROPOSED
--- PROPERTY BOUNDARY	--- LOD
--- 94C SETBACK	--- SF
--- TOWN SETBACK	--- SF
--- 94C / TOWN SETBACK	--- SF
--- LIMIT OF DISTURBANCE	--- SF
--- OHE	--- SF
--- OVERHEAD ELECTRIC	--- SF
--- UNDERGROUND ELECTRIC	--- SF
--- CHAIN LINK FENCE	--- SF
--- BARBED WIRE FENCE	--- SF
--- GRAVEL ROAD	--- SF
--- BASELINE	--- SF
--- PV ARRAY	--- SF
--- EQUIPMENT PADS & BOLLARDS	--- SF
--- 598	--- 598
--- 600	--- 600
--- MINOR CONTOUR	--- 598
--- MAJOR CONTOUR	--- 600
--- WETLAND	--- 598
--- NO BUILD AREA	--- 600
--- FEMA ZONE A	--- 598
--- WATER SURFACE	--- 600
--- JURISDICTIONAL STREAM	--- 598
--- NON-JURISDICTIONAL STREAM	--- 600
--- ALTA SURVEY STREAM	--- 598
--- TREELINE	--- 600
--- BUILDING	--- 598
--- UTILITY POLE	--- 600
--- WETLAND/STREAM BUFFER	--- 598
--- LAYDOWN YARD	--- 600
--- TOWN BOUNDARY	--- 598
--- COLLECTION LINE	--- 600
--- RIGHT OF WAY	--- 598
--- PAVED ROAD	--- 600
--- HORIZONTAL	--- 598
--- DIRECTIONAL DRILL	--- 600
--- AND BORE PIT	--- 598



PRELIMINARY
NOT FOR CONSTRUCTION



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aes

2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679-3500

TRC

249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
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-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

GRADING, DRAINAGE,
AND EROSION
CONTROL PLAN

PROJ NUM:	422208
DES:	E. BROWN
DWN:	B. PARKER
CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021
SCALE AT 22" x 34":	1"=100'
SHEET NO:	PV-C.04.02
REV:	2

PE STAMP:



KEY PLAN:

[illegible]

PROJECT TITLE:	
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RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

GRADING, DRAINAGE, AND EROSION CONTROL PLAN

PROJ	422208
NUM:	

DES: E. BROWN

DWN: B PARKER

CHK:	B. MARTIN
------	-----------

CHIR:	F. MARTIN
ADV:	

AP-V.	-
DATE	01/15/2001

SCALE AT 22" x 34":

$$1'' = 100'$$

SHEET NO:
PV-C.04.04

REV:
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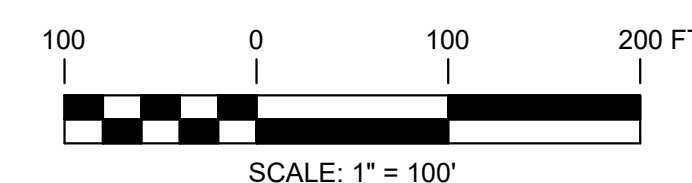
KEY MAP
SCALE: 1" = 4500'

LEGEND

EXISTING	LEGEND	PROPOSED
	PROPERTY BOUNDARY	
	94C SETBACK	
	TOWN SETBACK	
	94C / TOWN SETBACK	
	LIMIT OF DISTURBANCE	
	SILT FENCE	
	OVERHEAD ELECTRIC	
	UNDERGROUND ELECTRIC	
	CHAIN LINK FENCE	
	BARBED WIRE FENCE	
	GRAVEL ROAD	
	BASELINE	
	PV ARRAY	
	EQUIPMENT PADS & BOLLARDS	
	MINOR CONTOUR	
	MAJOR CONTOUR	
	WETLAND	
	NO BUILD AREA	
	FEMA ZONE A	
	WATER SURFACE	
	JURISDICTIONAL STREAM	
	NON-JURISDICTIONAL STREAM	
	ALTA SURVEY STREAM	
	TREELINE	
	BUILDING	
	UTILITY POLE	
	CULVERT	
	WETLAND/STREAM BUFFER	
	LAYDOWN YARD	
	TOWN BOUNDARY	
	COLLECTION LINE	
	RIGHT OF WAY	
	PAVED ROAD	
	HORIZONTAL DIRECTIONAL DRILL AND ROPE D	



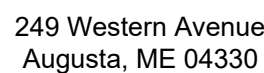
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FOR CONTINUATION, SEE SHEET PV-C.04.05



REVISIONS:

PROJECT TITLE:

PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

DATE: 04/15/2021
SCALE AT 22" x 34":

SHEET NO:

REV:

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FOR CONTINUATION, SEE SHEET PV-C.04.07

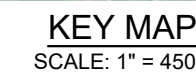


EXISTING

PROPOSED

- Call 811**
before you dig

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REVISIONS:

PROJECT TITLE:

PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

GRADING, DRAINAGE, AND EROSION CONTROL PLAN

SCALE AT 22" x 34":

SHEET NO:	REV:
PV-C.04.07	2



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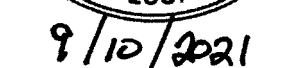
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PE STAMP:



KEY PLAN:

[illegible]

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

GRADING, DRAINAGE, AND EROSION CONTROL PLAN

PROJ	422208
NUM:	

DES: E. BROWN

DWN: B PARKER

CHK:	B. MARTIN
------	-----------

CHIR:	F. MARTIN
ADV:	

APV.	-
DATE	01/15/2001

SCALE AT 22" x 34":

$$1'' = 100'$$

SHEET NO:
PV-C.04.10

REV: 2



KEY MAP
SCALE: 1" = 450'

LEGEND

EXISTING

PROPOSED

PROPERTY BOUNDARY

94C SETBACK

TOWN SETBACK

94C / TOWN SETBACK

LIMIT OF DISTURBANCE

LOD

SILT FENCE

SF

SF

OHE

OVERHEAD ELECTRIC

UNDERGROUND ELECTRIC

CHAIN LINK FENCE

BARBED WIRE FENCE

GRAVEL ROAD

BASELINE

PV ARRAY

EQUIPMENT PADS & BOLLARDS

598

600

MINOR CONTOUR

MAJOR CONTOUR

WETLAND

NO BUILD AREA

FEMA ZONE A

WATER SURFACE

JURISDICTIONAL STREAM

NON-JURISDICTIONAL STREAM

ALTA SURVEY STREAM

TREELINE

BUILDING

UTILITY POLE

CULVERT

WETLAND/STREAM BUFFER

LAYDOWN YARD

TOWN BOUNDARY

COLLECTION LINE

RIGHT OF WAY

PAVED ROAD

HORIZONTAL DIRECTIONAL DRILL

E1

PRELIMINARY
NOT FOR CONSTRUCTION

PRELIMINARY
NOT FOR CONSTRUCTION



UNDER NEW YORK STATE EDUCATION LAW ARTICLE
145 (ENGINEERING), SECTION 7209 (2), IT IS A
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FOR CONTINUATION, SEE SHEET PV-C.04.08

FOR CONTINUATION, SEE SHEET PV-C.04.11

FOR CONTINUATION SEE SHEET PV-C 04 12

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REVISIONS:

PROJECT TITLE:

PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

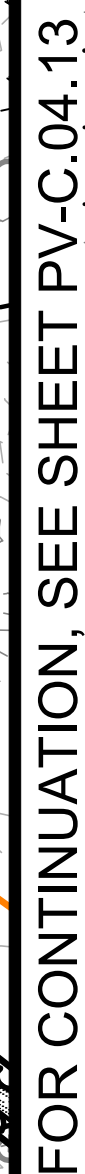
DATE: 04/15/2021

SCALE AT 22" x 34":

SHEET NO:
PV-C.04.11

REV: 2

FOR CONTINUATION, SEE SHEET PV-C.04.09



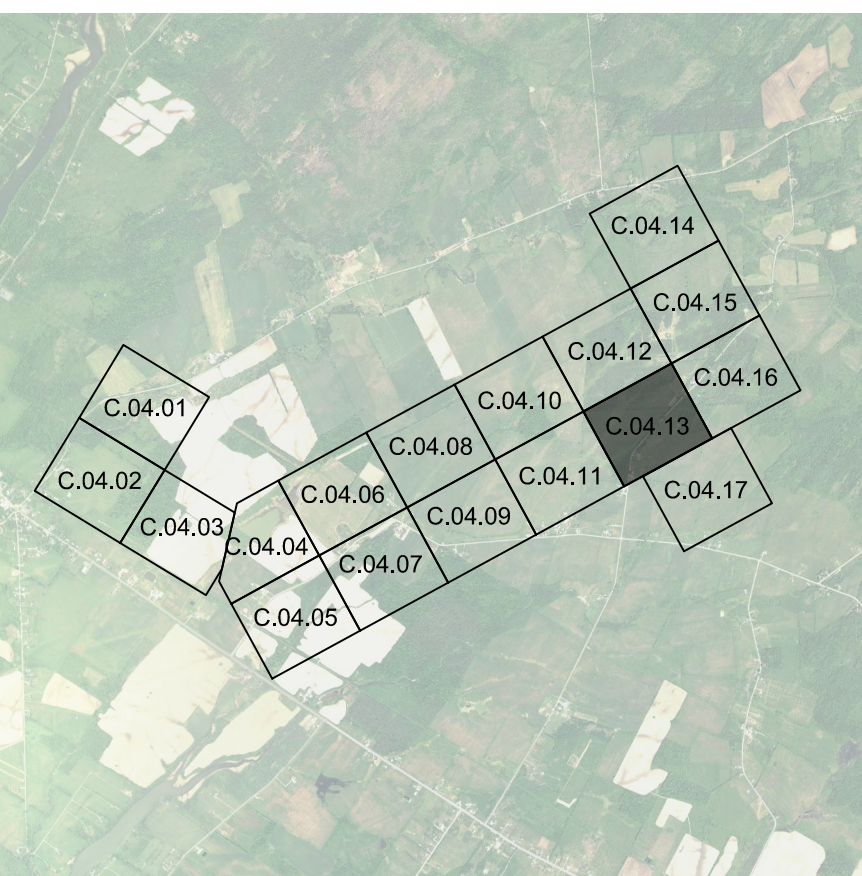
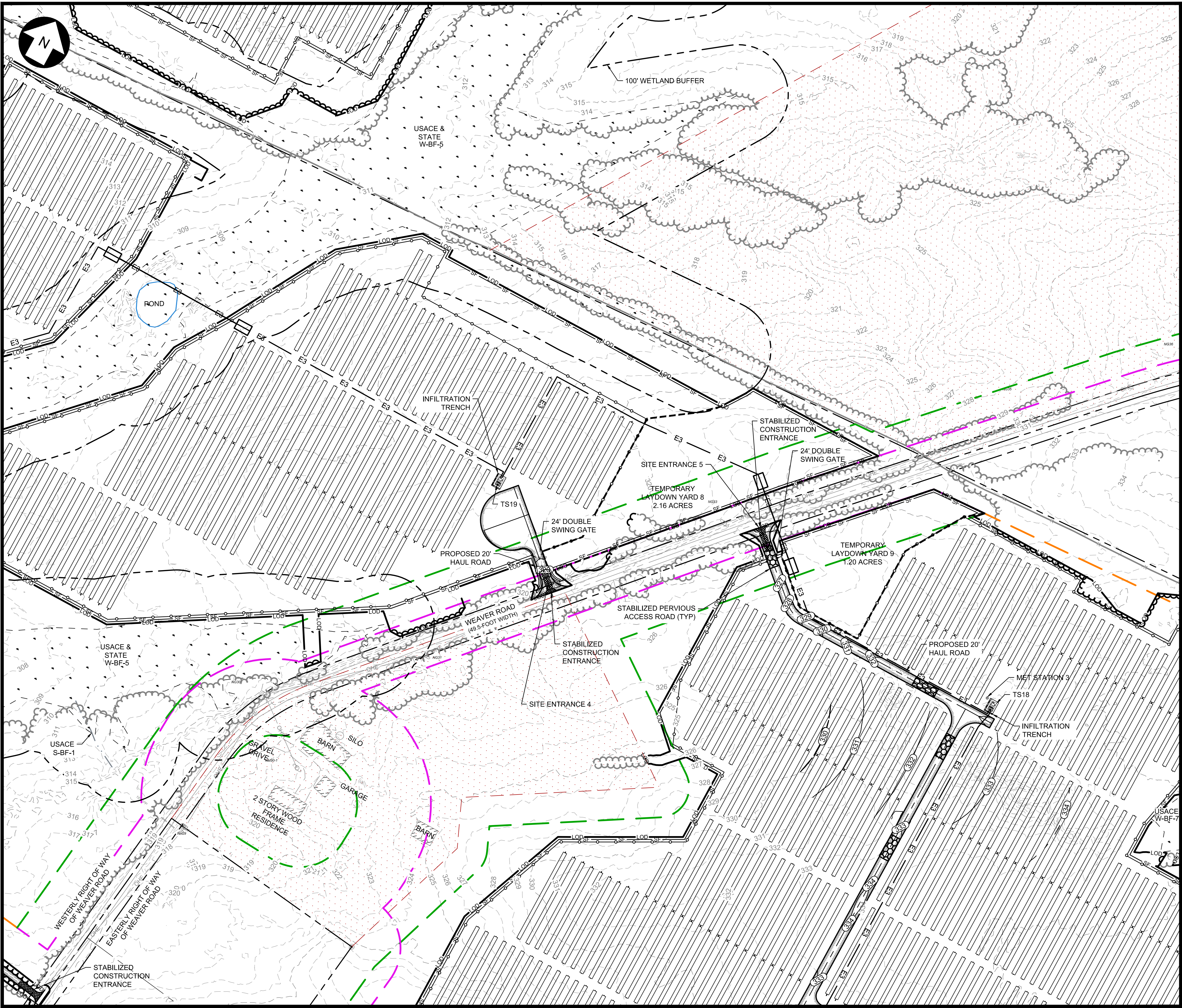
EXISTING	PROPOSED
	PROPERTY BOUNDARY
	94C SETBACK
	TOWN SETBACK
	94C / TOWN SETBACK
	LIMIT OF DISTURBANCE
	OHE
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	CHAIN LINK FENCE
	BARBED WIRE FENCE
	GRAVEL ROAD
	BASELINE
	PV ARRAY
	EQUIPMENT PADS & BOLLARDS
	MINOR CONTOUR
	MAJOR CONTOUR
	WETLAND
	NO BUILD AREA
	FEMA ZONE A
	WATER SURFACE
	JURISDICTIONAL STREAM
	NON-JURISDICTIONAL STREAM
	ALTA SURVEY STREAM
	TREELINE
	BUILDING
	UTILITY POLE
	CULVERT
	WETLAND/STREAM BUFFER
	LAYDOWN YARD
	TOWN BOUNDARY
	COLLECTION LINE
	RIGHT OF WAY
	PAVED ROAD
	HORIZONTAL
	DIRECTIONAL DRILL



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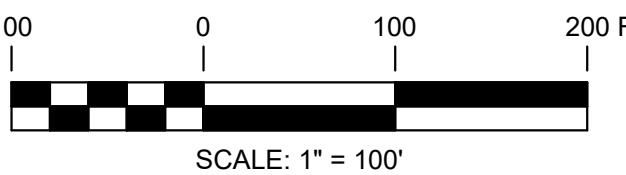
FOR CONTINUATION, SEE SHEET PV-C.04.13



KEY MAP
SCALE: 1" = 4500'

LEGEND	
EXISTING	PROPOSED
--- PROPERTY BOUNDARY	--- LOD
--- 94C SETBACK	--- SF
--- TOWN SETBACK	--- SF
--- 94C / TOWN SETBACK	--- SF
--- LIMIT OF DISTURBANCE	--- SF
--- SILT FENCE	--- SF
--- OVERHEAD ELECTRIC	--- SF
--- UNDERGROUND ELECTRIC	--- SF
--- CHAIN LINK FENCE	--- SF
--- BARBED WIRE FENCE	--- SF
--- GRAVEL ROAD	--- SF
--- BASELINE	--- SF
--- PV ARRAY	--- SF
--- EQUIPMENT PADS & BOLLARDS	--- SF
--- 598 MINOR CONTOUR	--- 598
--- 600 MAJOR CONTOUR	--- 600
--- WETLAND	--- SF
--- NO BUILD AREA	--- SF
--- FEMA ZONE A	--- SF
--- WATER SURFACE	--- SF
--- JURISDICTIONAL STREAM	--- SF
--- NON-JURISDICTIONAL STREAM	--- SF
--- ALTA SURVEY STREAM	--- SF
--- TREELINE	--- SF
--- BUILDING	--- SF
--- UTILITY POLE	--- SF
--- CULVERT	--- SF
--- WETLAND/STREAM BUFFER	--- SF
--- LAYDOWN YARD	--- SF
--- TOWN BOUNDARY	--- SF
--- COLLECTION LINE	--- SF
--- RIGHT OF WAY	--- SF
--- PAVED ROAD	--- SF
--- HORIZONTAL DIRECTIONAL DRILL AND BORE PIT	--- SF

PRELIMINARY
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Augusta, ME 04330

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NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

GRADING, DRAINAGE,
AND EROSION
CONTROL PLAN

PROJ NUM:	422208
DES:	E. BROWN
DWN:	B. PARKER
CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021
SCALE AT 22" x 34":	

1"=100'

SHEET NO:	REV:
PV-C.04.13	2

PE STAMP:



KEY PLAN:

[illegible]

PROJECT TITLE:		
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RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

GRADING, DRAINAGE, AND EROSION CONTROL PLAN

PROJ	422208
NUM:	

DES: E. BROWN

DW/N:	B. PARKER
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DWN	B. PARKER
CHW	D. MARTIN

CHK:	P. MARTIN

APV: -

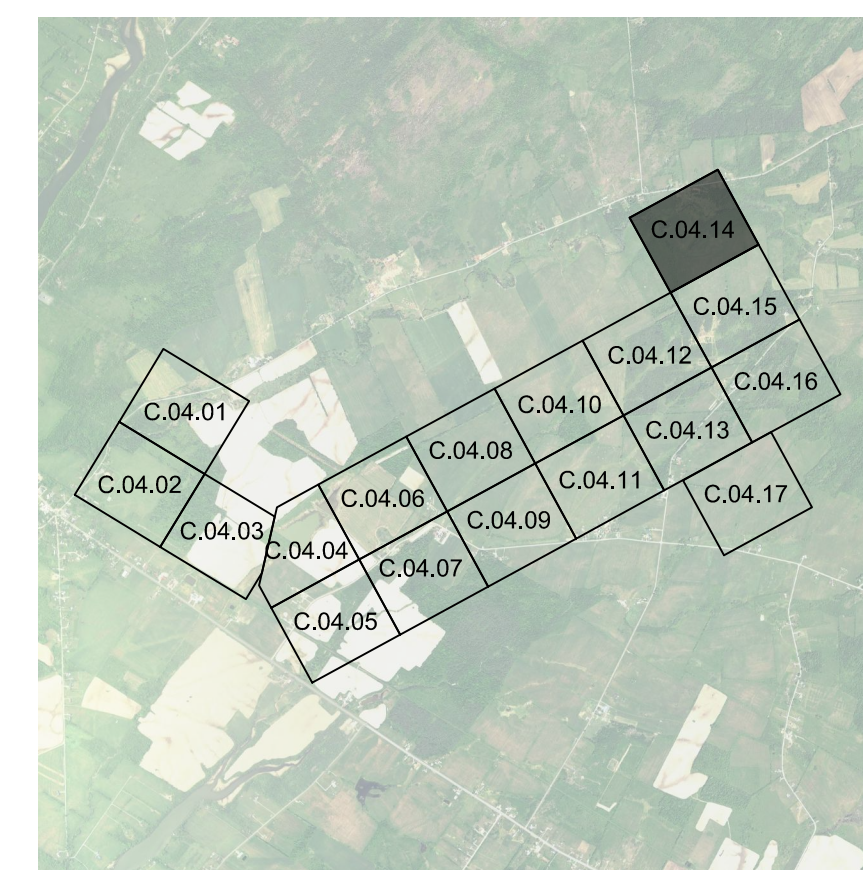
DATE: 04/15/2021

SCALE AT 22" x 34":

$$1'' = 100'$$

SHEET NO:
PV-C.04.14

REV: 2



KEY MAP
SCALE: 1" = 450'

LEGEND

EXISTING		PROPOSED
	PROPERTY BOUNDARY	
	94C SETBACK	
	TOWN SETBACK	
	94C / TOWN SETBACK	
	LIMIT OF DISTURBANCE	LOD
	SILT FENCE	SF SF
	OVERHEAD ELECTRIC	
	UNDERGROUND ELECTRIC	
	CHAIN LINK FENCE	
	BARBED WIRE FENCE	
	GRAVEL ROAD	
	BASELINE	
	PV ARRAY	
	EQUIPMENT PADS & BOLLARDS	
	MINOR CONTOUR	
	MAJOR CONTOUR	
	WETLAND	
	NO BUILD AREA	
	FEMA ZONE A	
	WATER SURFACE	
	JURISDICTIONAL STREAM	
	NON-JURISDICTIONAL STREAM	
	ALTA SURVEY STREAM	
	TREELINE	
	BUILDING	
	UTILITY POLE	
	CULVERT	
	WETLAND/STREAM BUFFER	
	LAYDOWN YARD	
	TOWN BOUNDARY	
	COLLECTION LINE	E1
	RIGHT OF WAY	
	PAVED ROAD	
	HORIZONTAL	
	DIRECTIONAL DRILL	

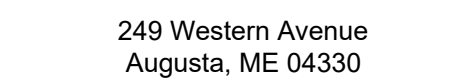


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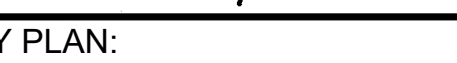


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PROJECT TITLE:	
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PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

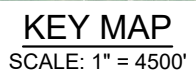
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PROJ NUM:	422208
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CHK:	P. MARTIN
APV:	-
DATE:	04/15/2021

SCALE AT 22" x 34":

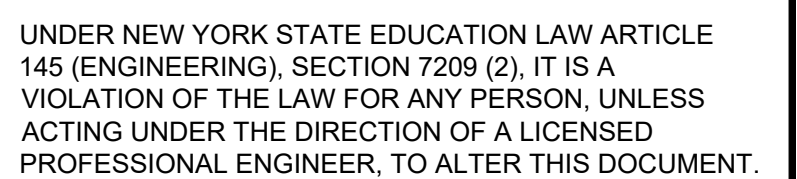
1"=100'

SHEET NO:
PV-C.04.15

REV:
2

LEGEND

EXISTING	PROPOSED
PROPERTY BOUNDARY	
94C SETBACK	
TOWN SETBACK	
94C / TOWN SETBACK	
LIMIT OF DISTURBANCE	
	LOD
OHE	
OVERHEAD ELECTRIC	SF
UNDERGROUND ELECTRIC	SF
CHAIN LINK FENCE	
BARBED WIRE FENCE	
GRAVEL ROAD	
BASELINE	
PV ARRAY	
EQUIPMENT PADS & BOLLARDS	
598	
MINOR CONTOUR	
600	
MAJOR CONTOUR	
WETLAND	
NO BUILD AREA	
FEMA ZONE A	
WATER SURFACE	
JURISDICTIONAL STREAM	
NON-JURISDICTIONAL STREAM	
ALTA SURVEY STREAM	
TREELINE	
BUILDING	
UTILITY POLE	
CULVERT	
WETLAND/STREAM BUFFER	
LAYDOWN YARD	
TOWN BOUNDARY	
COLLECTION LINE	
RIGHT OF WAY	
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HORIZONTAL	
DIRECTIONAL DRILL	



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FOR CONTINUATION, SEE SHEET PV-C.04.16

FOR CONTINUATION, SEE SHEET PV-C.04.12

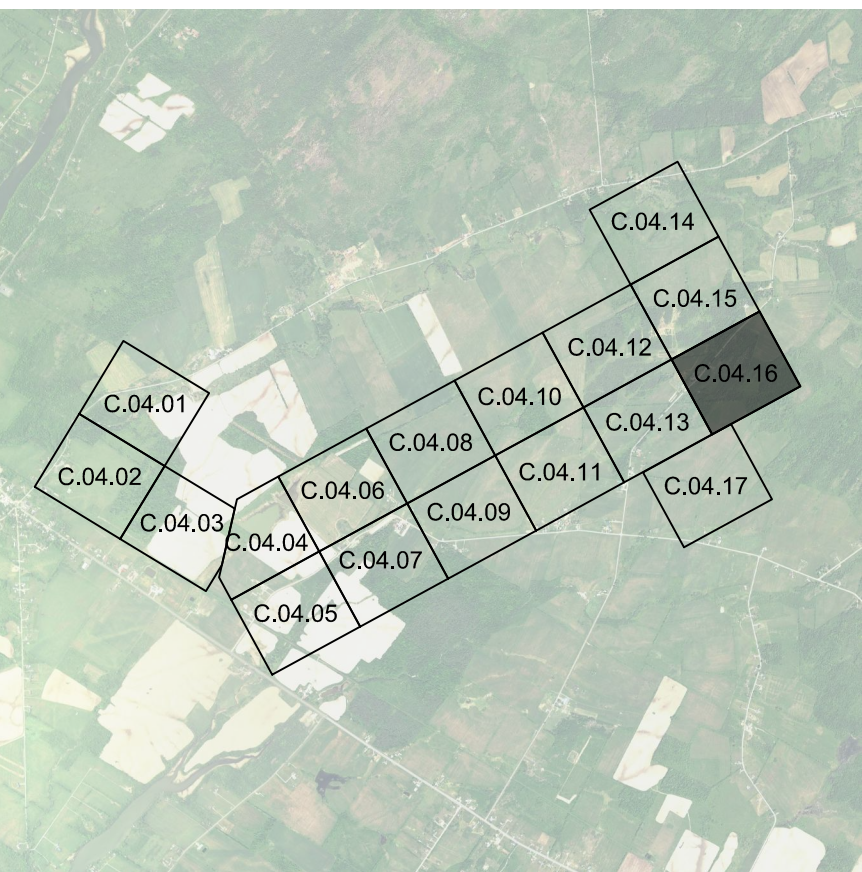
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FOR CONTINUATION, SEE SHEET PV-C.04.13



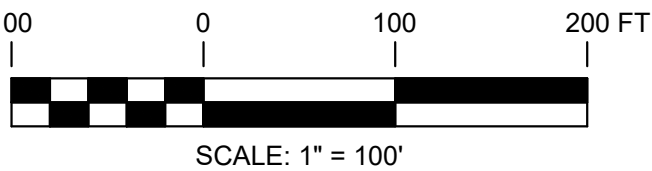
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KEY MAP
SCALE: 1" = 4500'

LEGEND	
EXISTING	PROPOSED
---	PROPERTY BOUNDARY
---	94C SETBACK
---	TOWN SETBACK
---	94C / TOWN SETBACK
---	LIMIT OF DISTURBANCE
---	SILT FENCE
---	OVERHEAD ELECTRIC
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---	BARBED WIRE FENCE
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---	MAJOR CONTOUR
---	WETLAND
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---	FEMA ZONE A
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---	JURISDICTIONAL STREAM
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---	BUILDING
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---	PAVED ROAD
---	HORIZONTAL DIRECTIONAL DRILL AND BORE PIT

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KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
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-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

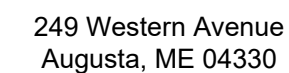
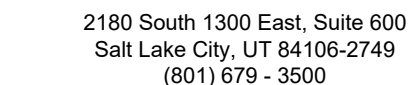
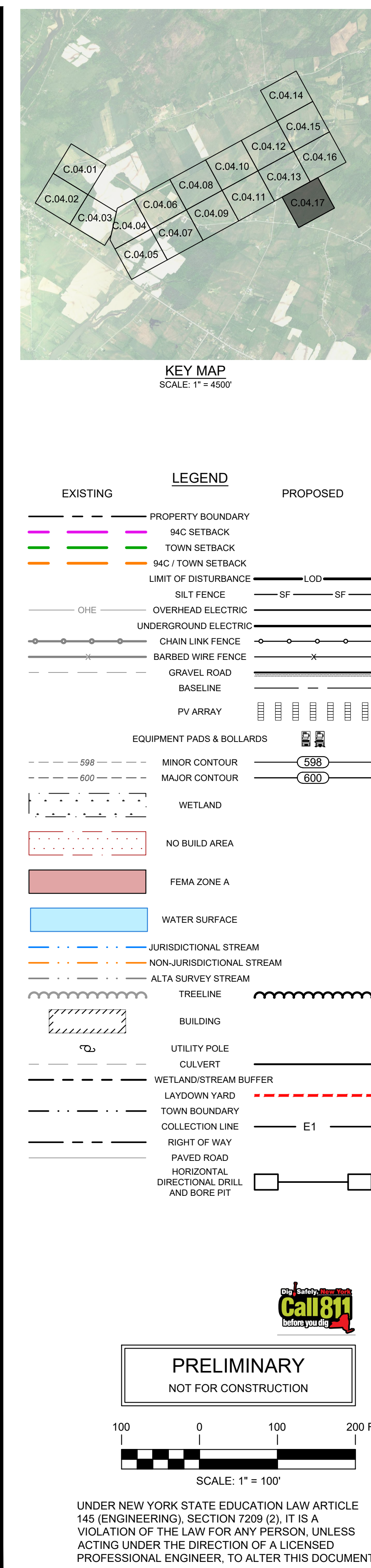
GRADING, DRAINAGE,
AND EROSION
CONTROL PLAN

PROJ NUM:	422208
DES:	E. BROWN
DWN:	B. PARKER
CHK:	B. MARTIN
APV:	-
DATE:	04/15/2021

SCALE AT 22" x 34":

1"=100'

SHEET NO:	PV-C.04.16	REV:	2
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KEY PLAN:

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PROJECT TITLE:	
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RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

GRADING, DRAINAGE, AND EROSION CONTROL PLAN

PROJ	422208
NUM:	

DES: E. BROWN

DWN: B PARKER

CHK:	B. MARTIN
------	-----------

CHIR:	F. MARTIN
ADV:	

APV.	-
DATE	01/15/2001

SCALE AT 22" x 34": _____

$$1'' = 100'$$

SHEET NO:

PV-C.04.17

REV:

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9/10/22

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RIVERSIDE SOLAR
PROJECT

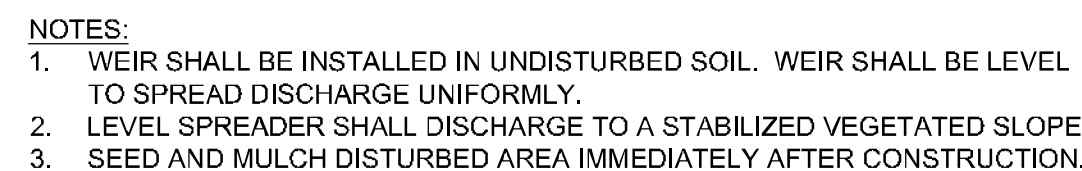
TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

GRADING AND DRAINAGE DETAILS

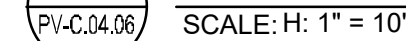
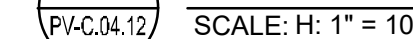
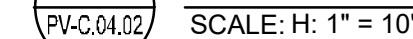
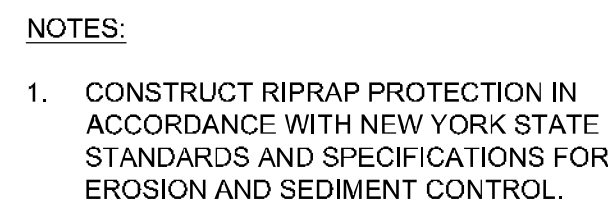
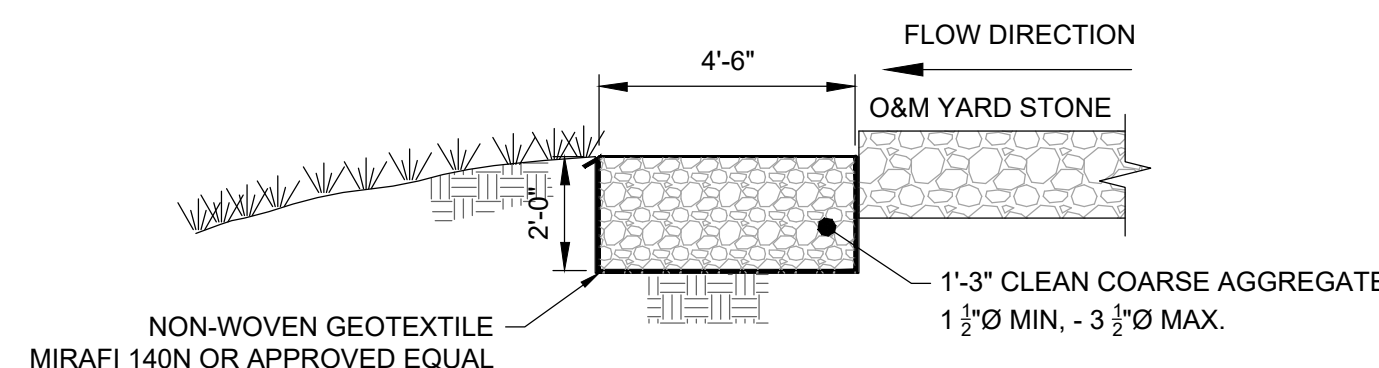
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REV: 2

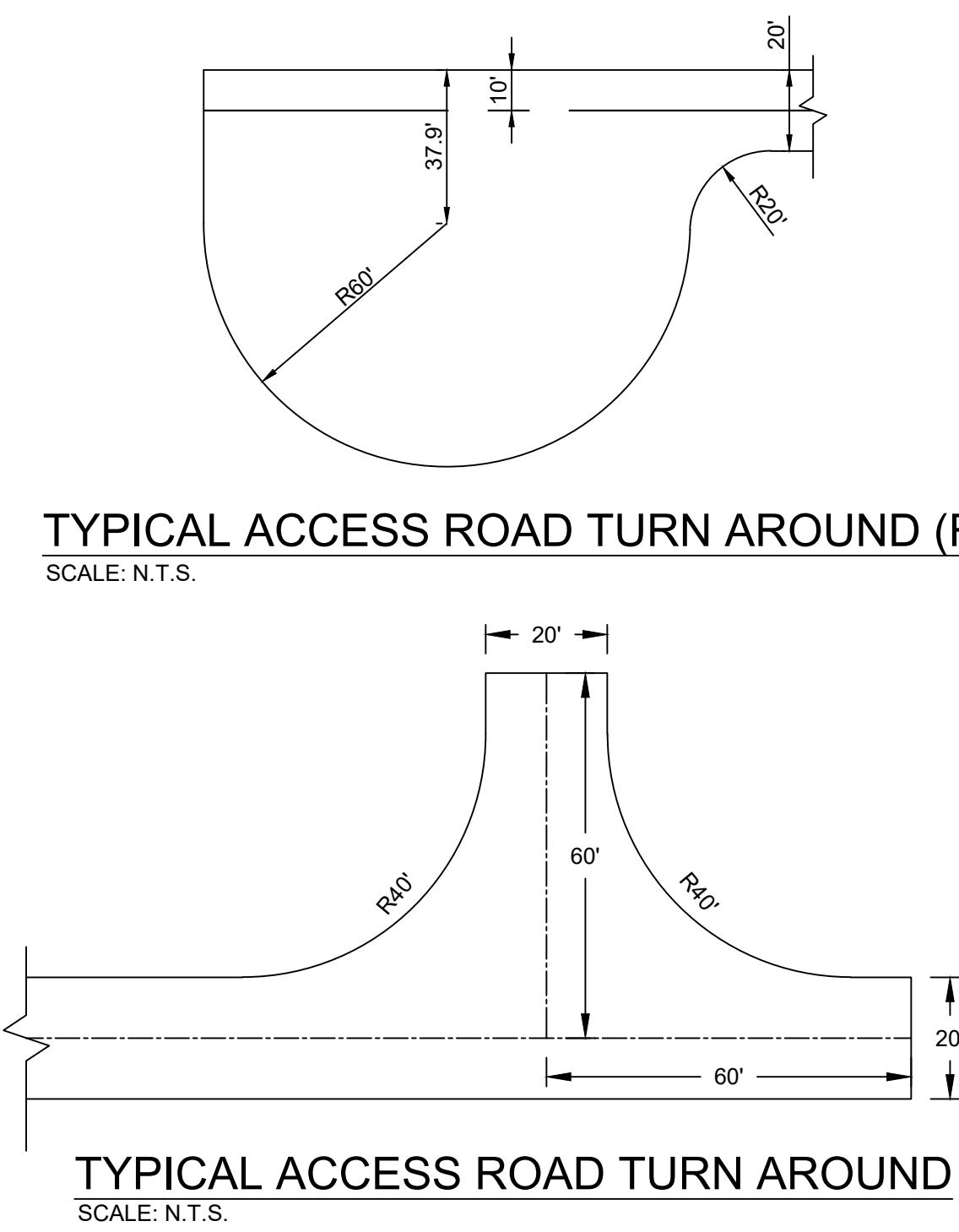
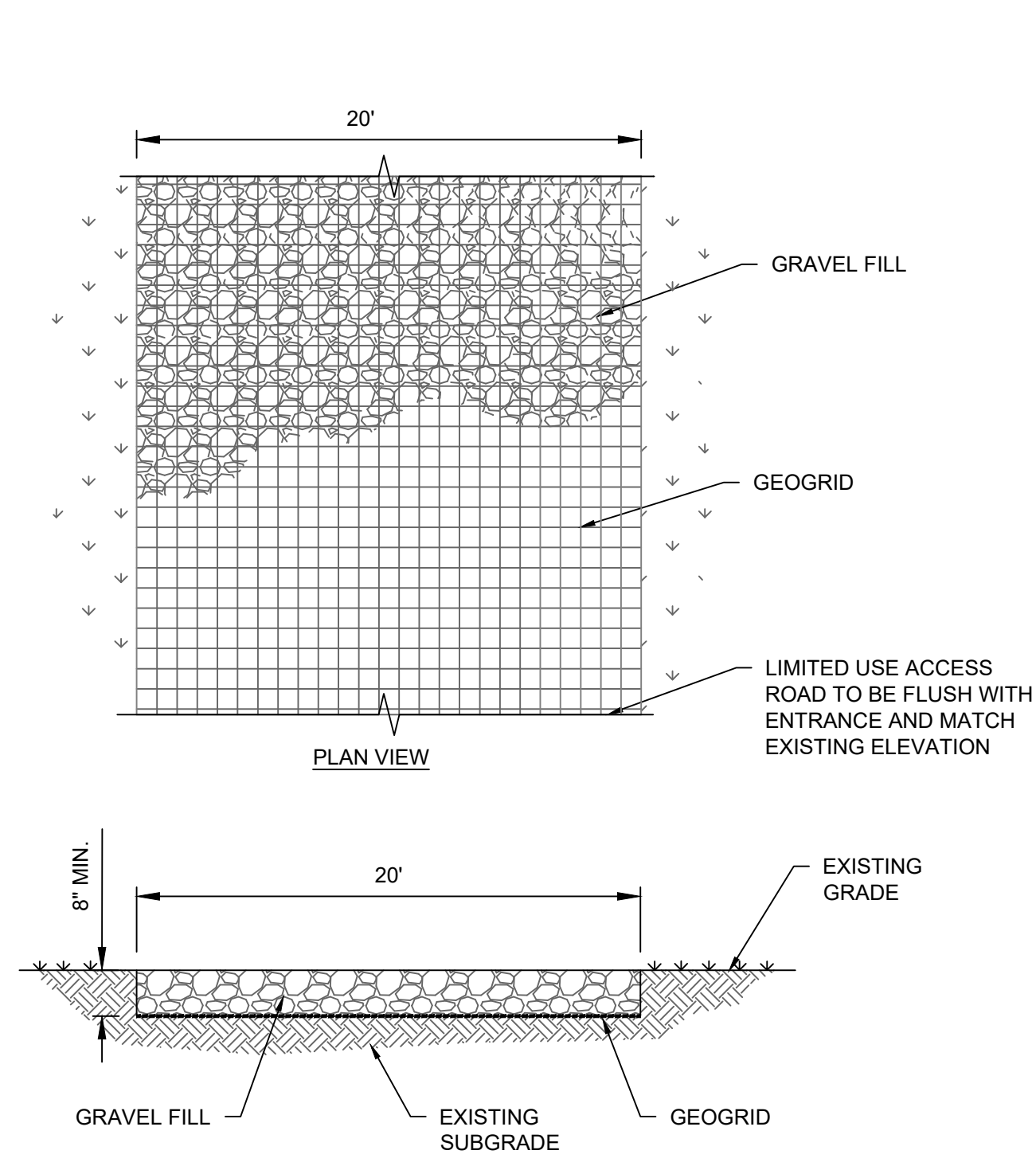


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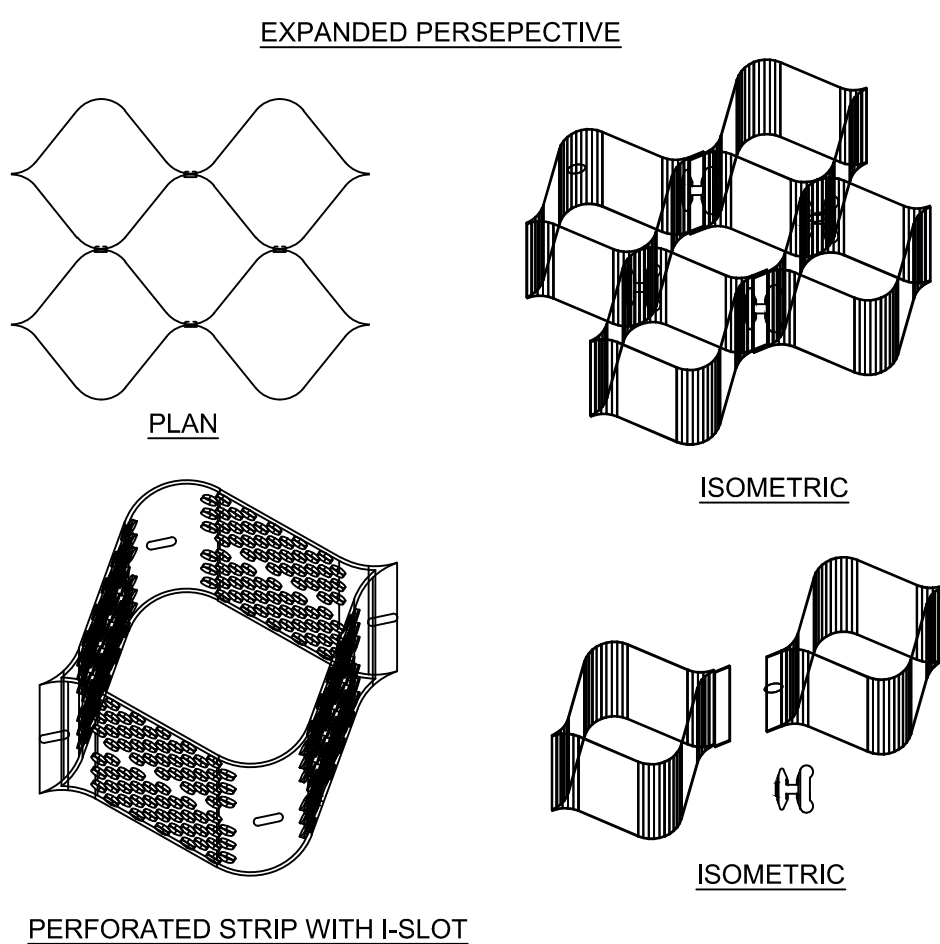
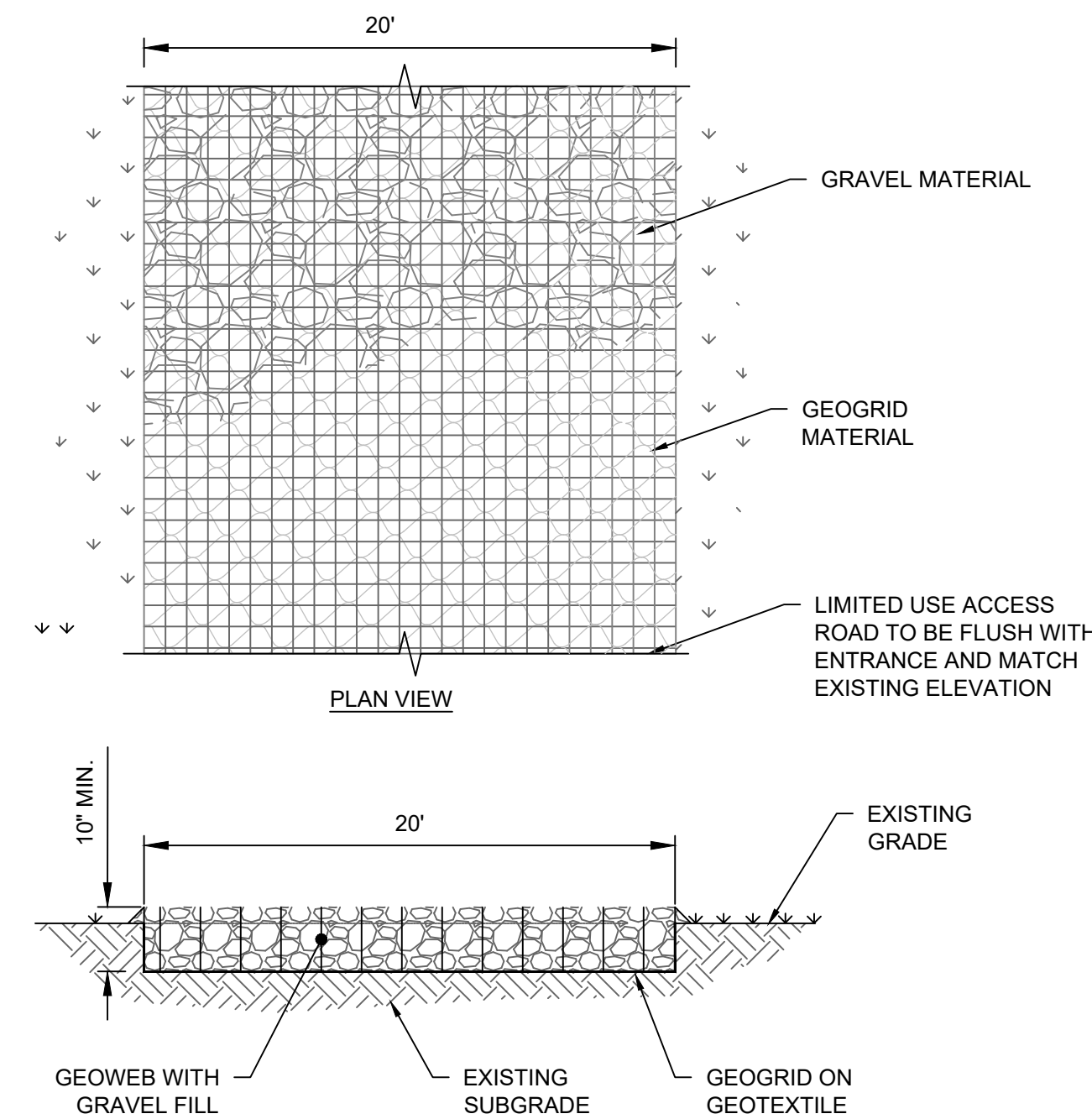
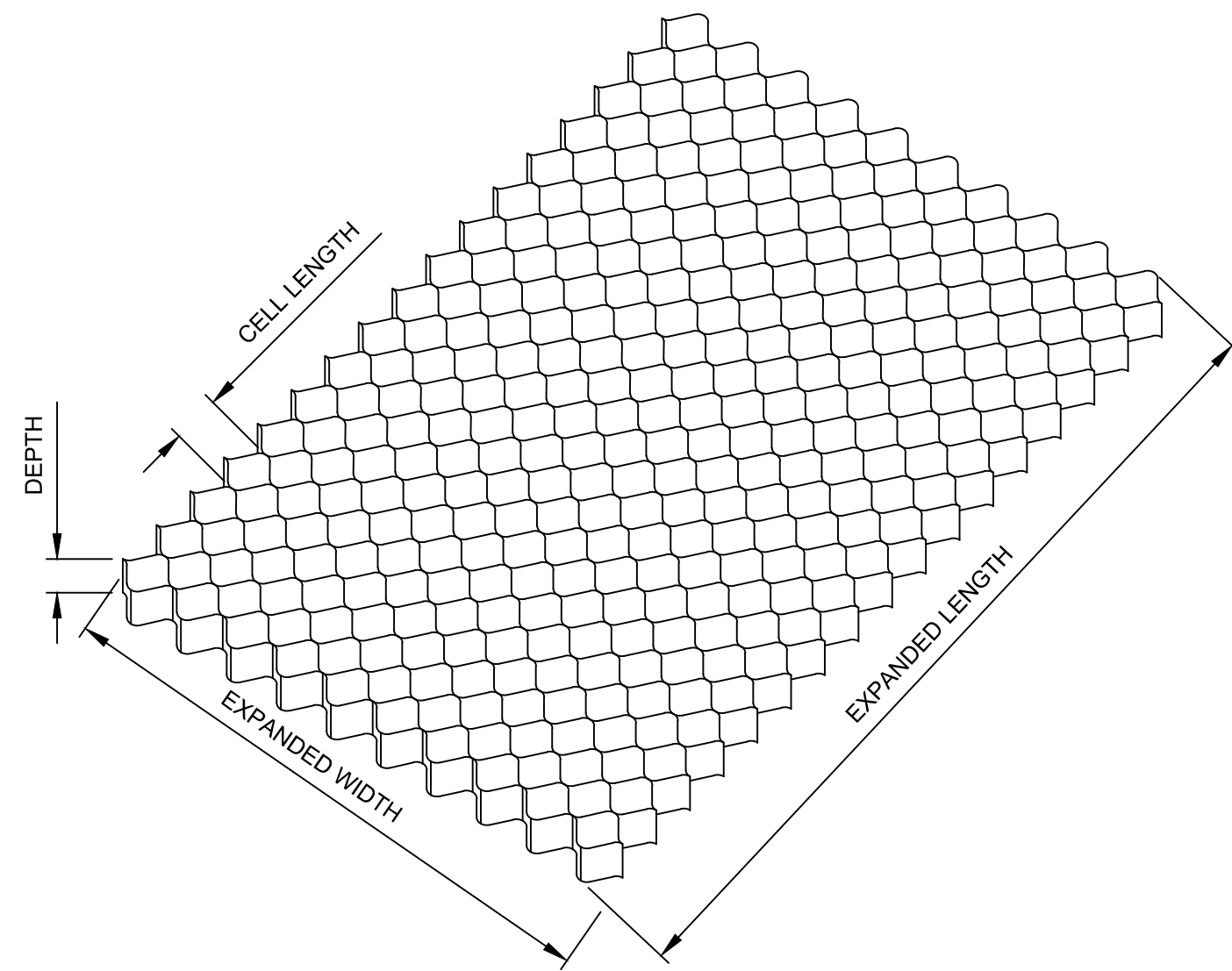


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LIMITED USE PERVIOUS ACCESS ROAD
SCALE: N.T.S.



STABILIZED LIMITED USE PERVIOUS ACCESS ROAD
SCALE: N.T.S.

UNDER NEW YORK STATE EDUCATION LAW ARTICLE
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- PERVIOUS ACCESS ROAD GENERAL NOTES
1. LIMITED USE PERVIOUS ACCESS ROAD IS LIMITED TO ACCESS ROADS USED ON AN OCCASIONAL BASIS ONLY (I.E. PROVIDE ACCESS FOR MOWING, EQUIPMENT REPAIR OR MAINTENANCE, EMERGENCY VEHICLES, ETC.).
 2. LIMITED USE PERVIOUS ACCESS ROAD IS RESTRICTED TO POST-CONSTRUCTION, LOW IMPACT, MAINTENANCE/EQUIPMENT REPAIR ACTIVITIES ASSOCIATED WITH RENEWABLE ENERGY PROJECTS IN NEW YORK STATE.
 3. CONSTRUCT LIMITED USE PERVIOUS ACCESS ROAD TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION PLANS.
 4. USE OF STABILIZED PERVIOUS ACCESS ROAD:
 - 4.1. STABILIZED PERVIOUS ACCESS ROADS SHALL BE CONSTRUCTED IN AREAS WHERE THE SLOPE OF THE ROAD EXCEEDS 8%. GEOTEXTILE IS NOT REQUIRED FOR THIS SPECIFIC APPLICATION. THE GEOWEB WILL HOLD THE ROAD MATERIAL IN PLACE UNDER TRAFFIC LOADS.
 - 4.2. STABILIZED PERVIOUS ACCESS ROADS SHALL BE CONSTRUCTED IN AREAS WITH SOFT OR PLACID SOILS, WHERE ADDITIONAL STRUCTURAL SUPPORT IS NEEDED TO SUPPORT TRAFFIC LOADS. GEOTEXTILE IS REQUIRED FOR THIS APPLICATION.
 - 4.3. STABILIZED PERVIOUS ROAD SECTION IS INTENDED AS A STABILIZATION METHOD FOR ROAD MATERIALS IN LOCATIONS WHERE STORMWATER RUNOFF MAY FLOW ACROSS THE ACCESS ROAD. THE OPEN-GRADED STONE WILL ALLOW LOW FLOWS TO PASS THROUGH THE ROAD MATERIAL WHILE HIGHER FLOWS WILL PASS OVER THE ROAD. THE CELLULAR CONFINEMENT SYSTEM (GEOWEB) WILL PREVENT EROSION OF THE ROAD MATERIAL. THIS APPROACH MINIMIZES IMPACTS TO EXISTING RUNOFF PATTERNS.
 5. STABILIZED PERVIOUS ROAD SECTIONS SHALL BE INSTALLED AT NATURAL LOW POINTS OF THE ACCESS ROADS AND TERRAIN WHERE STORMWATER RUNOFF IS LIKELY TO BE CONCENTRATED DUE TO EXISTING HYDROLOGY/TOPOGRAPHY, AND CULVERT INSTALLATION IS IMPRACTICAL DUE TO LIMITED COVER.
 6. REMOVE STUMPS, ROCKS AND DEBRIS AS NECESSARY. FILL VOIDS TO MATCH EXISTING NATIVE SOILS AND COMPACTION LEVEL.
 7. REMOVED TOPSOIL MAY BE STOCKPILED FOR LATER USE OR SPREAD IN ADJACENT AREAS AS DIRECTED BY THE PROJECT ENGINEER. DO NOT PLACE IN AN AREA THAT IMPEDES STORMWATER DRAINAGE.
 8. PREPARE SUBGRADE AS NEEDED TO ACHIEVE LINES AND GRADES SHOWN ON CONSTRUCTION PLANS.
 9. REMOVE REFUSE SOILS AS DIRECTED BY THE PROJECT ENGINEER OR ENVIRONMENTAL INSPECTOR. DO NOT PLACE IN AN AREA THAT IMPEDES STORMWATER DRAINAGE.
 10. ROADWAY WIDTH TO BE INSTALLED AS SHOWN ON PLANS.
 11. THE LIMITED USE PERVIOUS ACCESS ROAD CROSS SLOPE SHALL NOT EXCEED 2.5% THE LONGITUDINAL SLOPE OF THE ACCESS DRIVE SHALL NOT EXCEED 8% UNLESS OTHERWISE INDICATED ON THE GRADING PLANS. IN NO CASE SHALL THE SLOPE EXCEED 12%.
 12. LIMITED USE PERVIOUS ACCESS ROAD IS NOT TO BE UTILIZED FOR CONSTRUCTION TRAFFIC WHICH MAY SUBJECT THE ACCESS ROAD TO SEDIMENT TRACKING.
 13. PRIOR TO PERVIOUS ACCESS ROAD CONSTRUCTION, SOIL PENETROMETER TESTING SHALL BE PERFORMED AT NO GREATER THAN 100-FOOT INTERVALS ALONG THE ACCESS ROAD ALIGNMENT AFTER THE SUBGRADE HAS BEEN PREPARED AND PRIOR TO PLACEMENT OF GEOTEXTILE AND GRAVEL. SOIL PENETROMETER TESTING SHALL BE PERFORMED AGAIN TO VERIFY THAT SOIL COMPACTION DOES NOT EXCEED PRE-CONSTRUCTION CONDITIONS. SOIL RESTORATION PRACTICES SHALL BE REQUIRED TO DE-COMPACT SOILS IN AREAS WHERE THIS CRITERION IS NOT MET.
 14. TO ENSURE THAT SOIL IS NOT TRACKED ONTO THE LIMITED USE PERVIOUS ACCESS ROAD, IT SHALL NOT BE USED BY CONSTRUCTION VEHICLES TRANSPORTING SOIL, FILL MATERIAL, ETC. IF ACCESS IS COMPLETED DURING THE INITIAL PHASES OF CONSTRUCTION, A STABILIZED CONSTRUCTION ACCESS/ENTRANCE IS REQUIRED TO REMOVE SEDIMENT FROM CONSTRUCTION VEHICLES AND EQUIPMENT PRIOR TO ENTERING THE LIMITED USE PERVIOUS ACCESS ROAD. MAINTENANCE OF THE PERVIOUS ACCESS ROAD WILL BE REQUIRED IF SEDIMENT IS OBSERVED WITHIN THE CLEAN STONE.
 15. THE LIMITED USE PERVIOUS ACCESS ROAD SHALL NOT BE CONSTRUCTED OR USED UNTIL ALL AREAS SUBJECT TO RUNOFF ONTO THE PERVIOUS ACCESS ROAD HAVE ACHIEVED FINAL STABILIZATION.
 16. IF A ROADSIDE DITCH IS NOT UTILIZED TO CAPTURE RUNOFF FROM THE ACCESS ROAD, THE PERVIOUS ACCESS ROAD WILL HAVE A WELL-ESTABLISHED PERENNIAL VEGETATIVE COVER, WHICH SHALL CONSIST OF UNIFORM VEGETATION, 20 FEET PARALLEL TO THE DOWN GRADIENT SIDE OF THE ACCESS ROAD. POST-CONSTRUCTION OPERATION AND MAINTENANCE PRACTICES WILL MAINTAIN THIS VEGETATIVE COVER TO ENSURE STABILIZATION FOR THE LIFE OF THE ACCESS ROAD.

GEOGRID MATERIAL NOTES:

1. GEOGRID, OR APPROVED EQUIVALENT PRODUCT, SHALL BE USED FOR ALL CONDITIONS IN ORDER TO ASSIST IN MATERIAL SEPARATION FROM NATIVE SOILS AND PRESERVE STRUCTURAL STRENGTH.
2. GRAVEL FILL MATERIAL SHALL CONSIST OF 1-1/2" CLEAN, WASHED, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY, MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-0201, SIZE DESIGNATION 3, 4A OR 4 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED.
3. GEOGRID SHALL BE MIRAFI BXG110 OR APPROVED EQUAL. GEOGRID SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED HAUL ROAD SLOPES.
4. IF MORE THAN ONE ROLL WIDTH IS REQUIRED, ROLLS SHOULD OVERLAP A MINIMUM OF SIX INCHES.
5. REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER TYING AND CONNECTIONS.
6. LIMITED USE PERVIOUS ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH 1-1/2" WASHED CRUSHED STONE MEETING NYSDOT ITEM 703-0201, SIZE DESIGNATION 3, 4A OR 4 OF TABLE 703-4 SPECIFICATIONS.

BASIS OF DESIGN: TENCATE MIRAFI BXG110 GEOGRIDS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM

GEOWEB MATERIAL NOTES:

1. CELLULAR CONFINEMENT SYSTEM SHALL BE PRESTO GEOSYSTEM GEOWEB GW30V, OR APPROVED EQUIVALENT PRODUCT. MINIMUM CELL DEPTH SHALL BE 6".
2. INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. GRAVEL FILL MATERIAL SHALL CONSIST OF CLEAN, WASHED, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY, MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-02, SIZE DESIGNATION 3, 4A OR 4 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED
4. ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH 2"4" WASHED CRUSHED STONE MEETING NYSDOT ITEM 703-0201, SIZE DESIGNATION 3, 4A OR 4 OF TABLE 703-4 SPECIFICATIONS
5. THE TOP EDGES OF ADJACENT CELL WALLS SHALL BE FLUSH WHEN CONNECTING. ALIGN THE I-SLOTS FOR INTERLEAVE AND END TO END CONNECTIONS. THE GEOWEB PANELS SHALL BE CONNECTED WITH ATTRA KEYS AT EACH INTERLEAVE AND END TO END CONNECTIONS. REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER INSTALLATION, TYING AND CONNECTIONS.

BASIS OF DESIGN: PRESTO GEOSYSTEMS GEOWEB; 670 NORTH PERKINS STREET, APPLETON, WI; 800-548-3424 OR 920-738-1222; INFO@PRESTOGEO.COM; WWW.PRESTOGEO.COM

WOVEN GEOTEXTILE MATERIAL NOTES:

1. GEOTEXTILE SHALL BE RS280I OR APPROVED EQUIVALENT.
2. SPECIFIED GEOTEXTILE WILL ONLY BE UTILIZED IN PLACID SOILS, OR AS DIRECTED BY PROJECT ENGINEER OR ENVIRONMENTAL INSPECTOR

BASIS OF DESIGN: TENCATE MIRAFI RSI-SERIES WOVEN GEOSYNTHETICS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM

PERVIOUS ACCESS ROAD DESIGN NOTES:

1. THE LIMITED USE PERVIOUS ACCESS ROAD CROSS SLOPE SHALL NOT EXCEED 2.5%. THE LONGITUDINAL SLOPE OF THE ACCESS DRIVE SHALL NOT EXCEED 12%.
2. A DRAINAGE DITCH IS REQUIRED FOR CIRCUMSTANCES WHERE CONCENTRATING FLOW CAN NOT BE AVOIDED. THE INTENTION OF THIS DESIGN IS TO MINIMIZE ALTERATIONS TO HYDROLOGY, HOWEVER WHEN DEALING WITH 2%-15% GRADES NOT PARALLEL TO THE CONTOUR, A ROADSIDE DITCH MAY BE REQUIRED. THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS FOR GRASSED WATERWAYS AND VEGETATED WATERWAYS ARE APPLICABLE FOR SIZING AND STABILIZATION. DIMENSIONS OF ANY DITCHES TO BE CONSTRUCTED SHALL BE SPECIFIED IN THIS DESIGN. THE HYDROLOGICAL ANALYSIS, RUNOFF CALCULATIONS, AND A SEPARATE DETAIL FOR THE SPECIFIC GRASSED WATERWAY WOULD BE INCLUDED IN THIS PRACTICE. RUNOFF DISCHARGES WILL BE SUBJECT TO THE OUTLET REQUIREMENTS OF THE REFERENCED STANDARD. INCREASED POST-DEVELOPMENT RUNOFF FROM THE ASSOCIATED ROADSIDE DITCH MAY REQUIRE ADDITIONAL PRACTICES TO ATTENUATE RUNOFF TO PRE-DEVELOPMENT CONDITIONS.
3. THE DESIGN PROFESSIONAL MUST ACCOUNT FOR THE LIMITED USE PERVIOUS ACCESS ROAD IN THEIR SITE ASSESSMENT/HYDROLOGY ANALYSIS. IF THE HYDROLOGY ANALYSIS SHOWS THAT THE HYDROLOGY HAS BEEN ALTERED FROM PRE- TO POST-DEVELOPMENT CONDITIONS (SEE APPENDIX A OF GP-0-20-001 FOR THE DEFINITION OF PRE-DEVELOPMENT CONDITIONS), THE HYDROLOGICAL DESIGN MUST INCLUDE THE NECESSARY DETENTION/RETENTION PRACTICES TO ATTENUATE THE RATES (10 AND 100 YEAR EVENTS) TO PRE-DEVELOPMENT CONDITIONS.

GEOWEB MATERIAL NOTES:

1. THE GEOWEB, OR COMPARABLE PRODUCT, IS SHALL BE USED ON ROAD PROFILES EXCEEDING 8%. THE GEOWEB PRODUCT IS INTENDED TO LIMIT SHIFTING STONE MATERIAL DURING USE.
2. GEOWEB SYSTEM SHALL BE PRESTO GEOSYSTEM GEOWEB OR APPROVED EQUAL. GEOWEB SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED ACCESS ROAD SLOPES.

BASIS OF DESIGN: PRESTO GEOSYSTEMS GEOWEB; 670 NORTH PERKINS STREET, APPLETON, WI; 800-548-3424 OR 920-738-1222; INFO@PRESTOGEO.COM;
WWW.PRESTOGEO.COM

WOVEN GEOTEXTILE MATERIAL NOTES:

1. SPECIFIED GEOTEXTILE WILL ONLY BE UTILIZED IN PLACID SOILS. PLACID SOILS CONSIST OF POORLY DRAINED SOILS COMPOSED OF FINELY TEXTURED PARTICLES AND ARE PRONE TO RUTTING. PLACID SOILS ARE TYPICALLY PRESENT IN LOW-LYING AREAS WITH GEOLOGIC SOILS GROUP (HSG) OF C OR D, OR AS SPECIFIED FROM AN ENVIRONMENTAL SCIENTIST, SOIL SCIENTIST, OR GEOTECHNICAL DATA.
2. THE CONCERN FOR POTENTIAL REDUCTION OF NATIVE INFILTRATION RATES DUE TO THE GEOTEXTILE MATERIAL WOULD NOT BE A SIGNIFICANT CONCERN IN POORLY DRAINED SOILS WHERE SEGREGATION OF PEROUS CONC AND NATIVE MATERIALS IS CRUCIAL FOR LONG TERM OPERATION AND MAINTENANCE.

BASIS OF DESIGN: TENCATE MIRAFI RSI-SERIES WOVEN GEOSYNTHETICS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM



PRELIMINARY
NOT FOR CONSTRUCTION



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

[illegible]

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

DRIVEWAY AND ROAD DETAILS

□ □ □ □

PROJ NUM:	422208
DES:	E. BROWN
DWN:	E. BROWN
CHK:	P. MARTIN
APV:	-

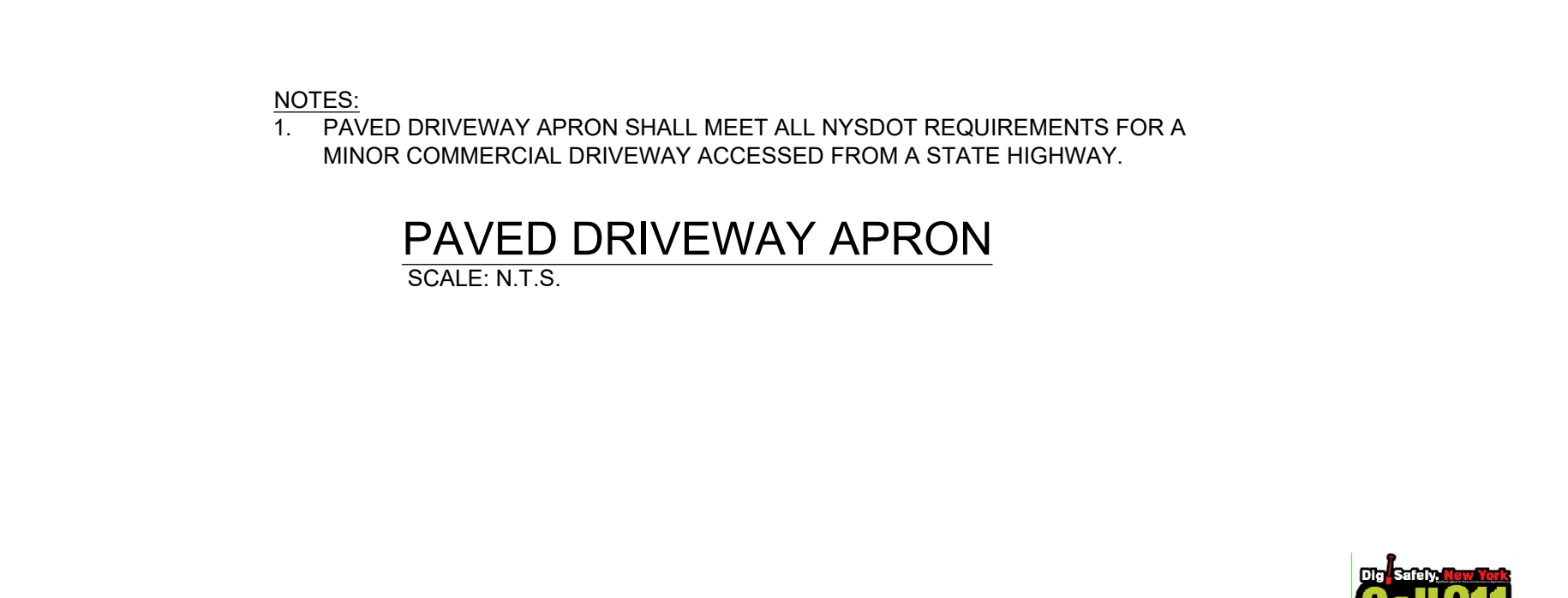
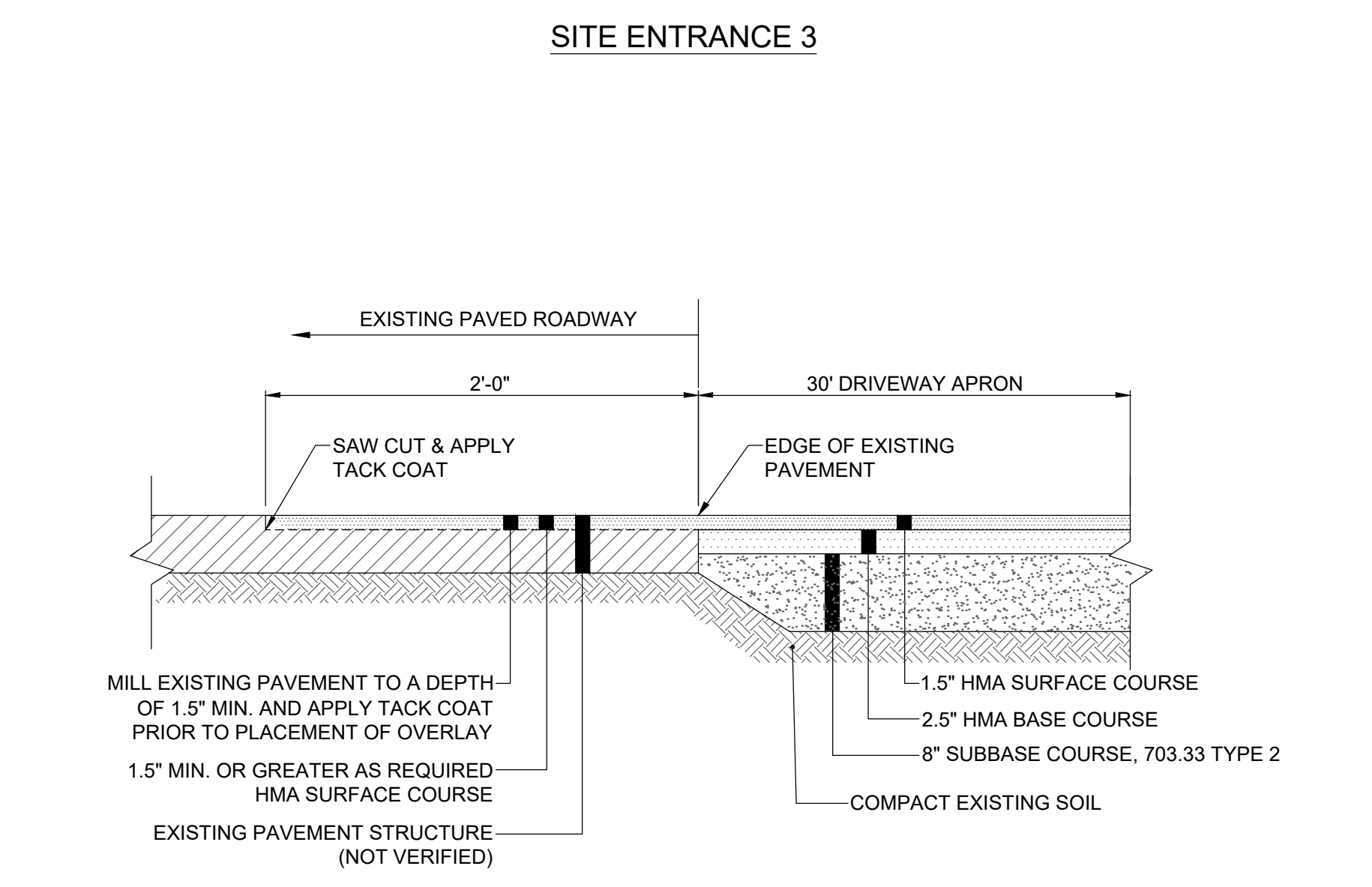
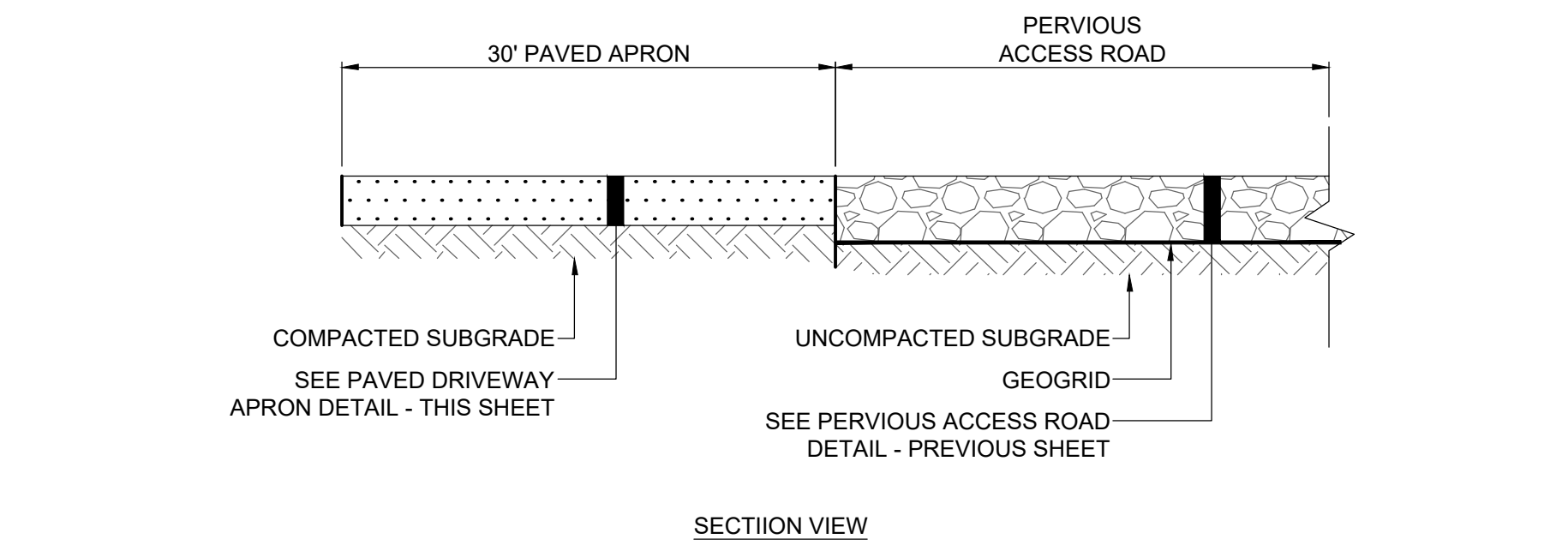
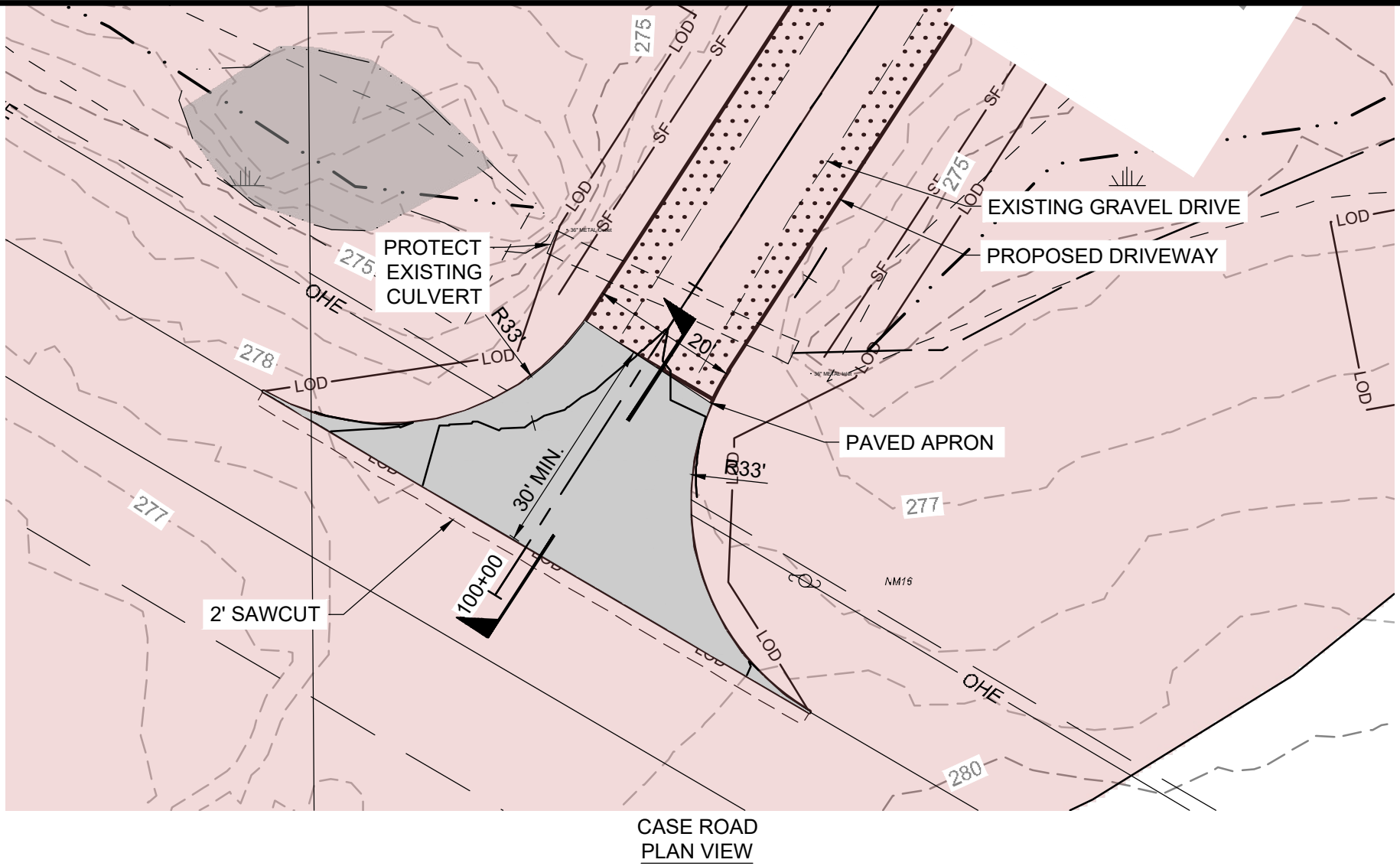
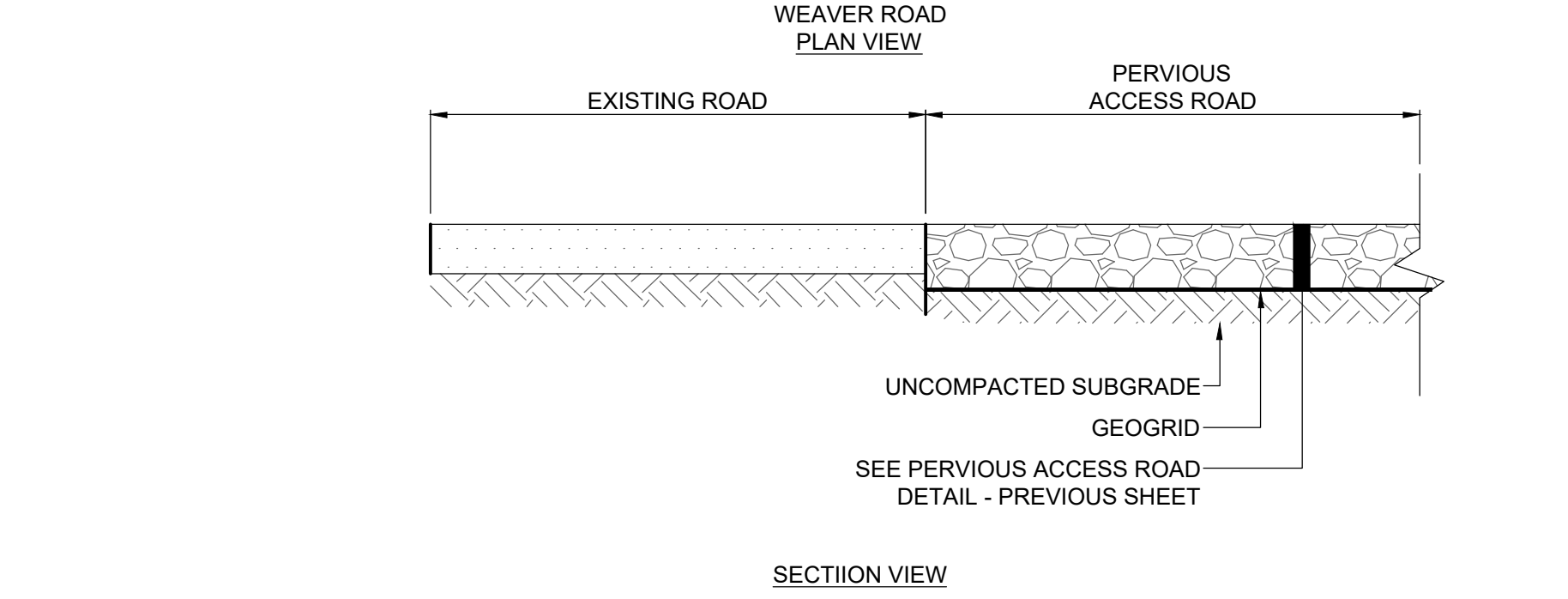
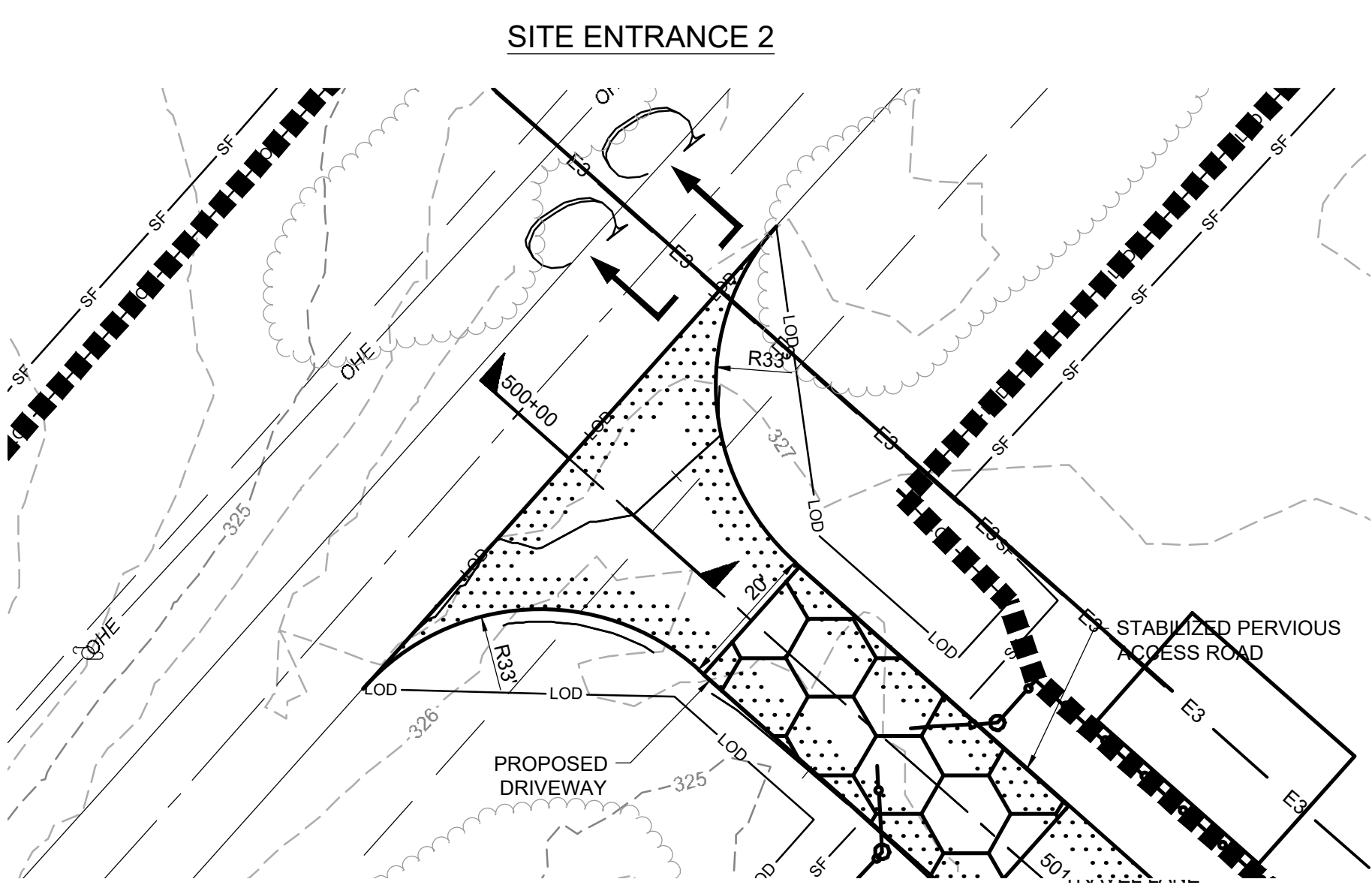
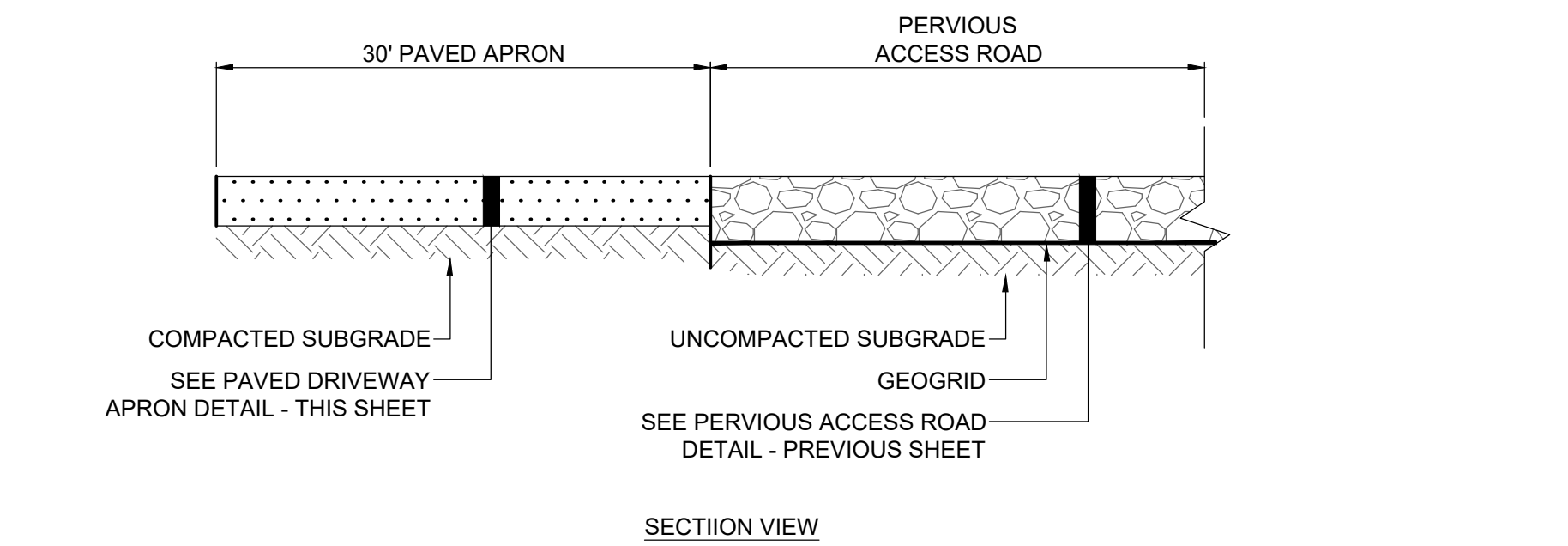
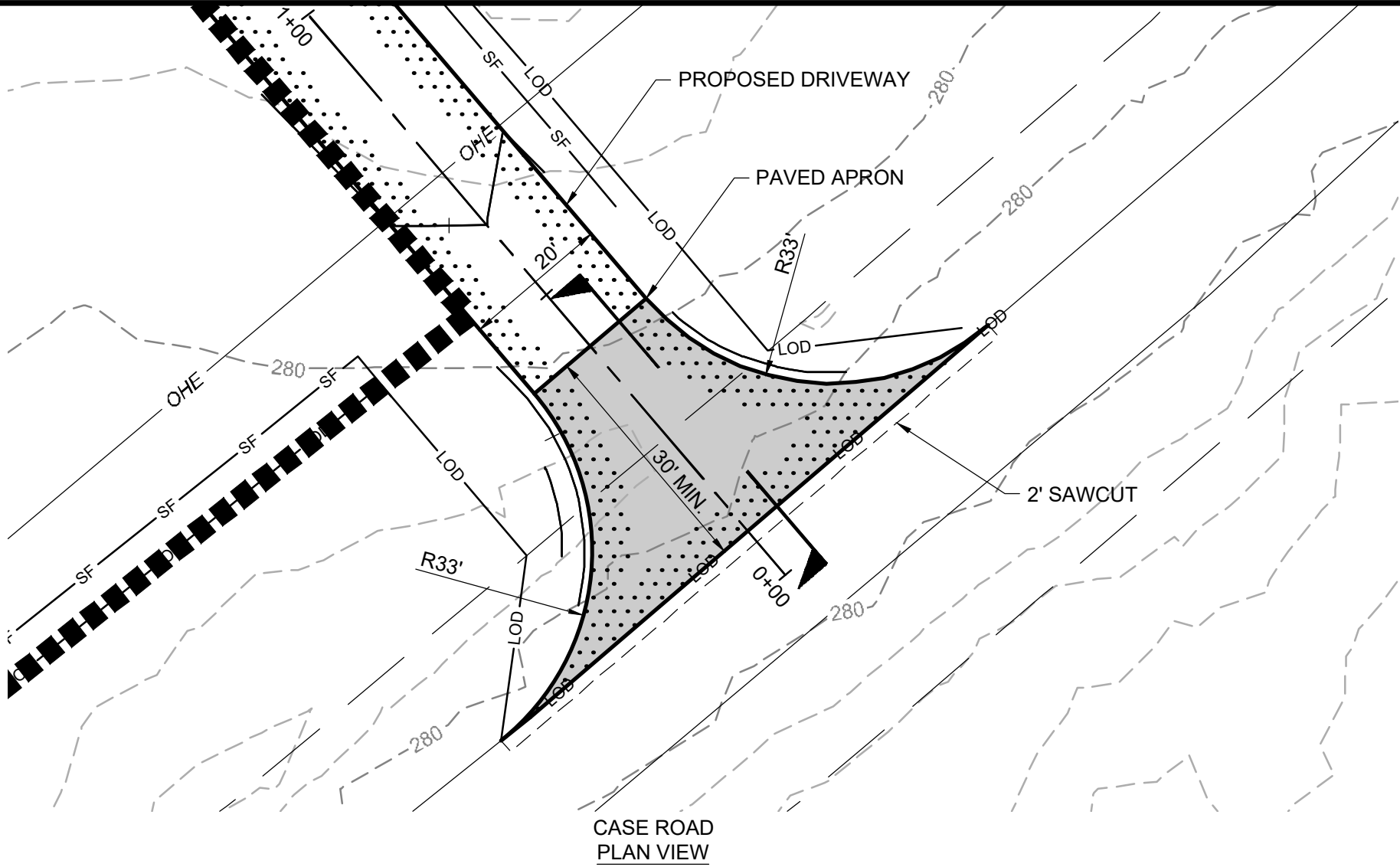
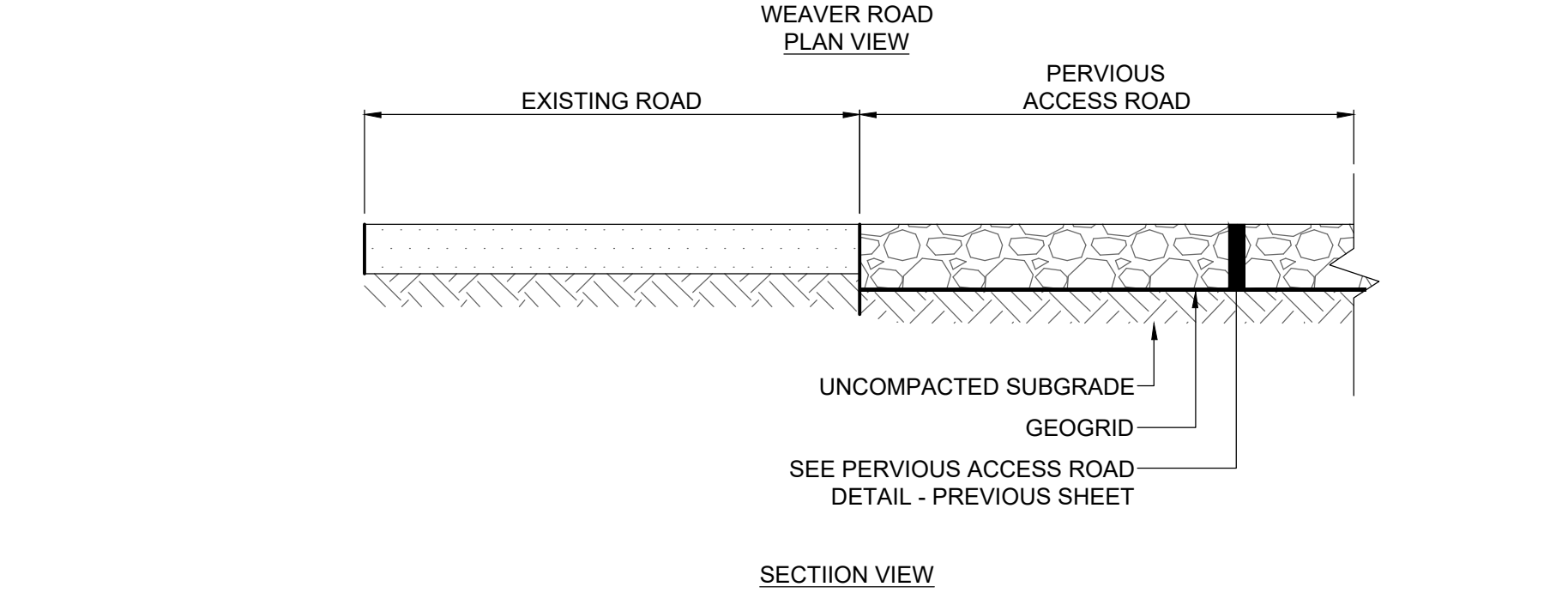
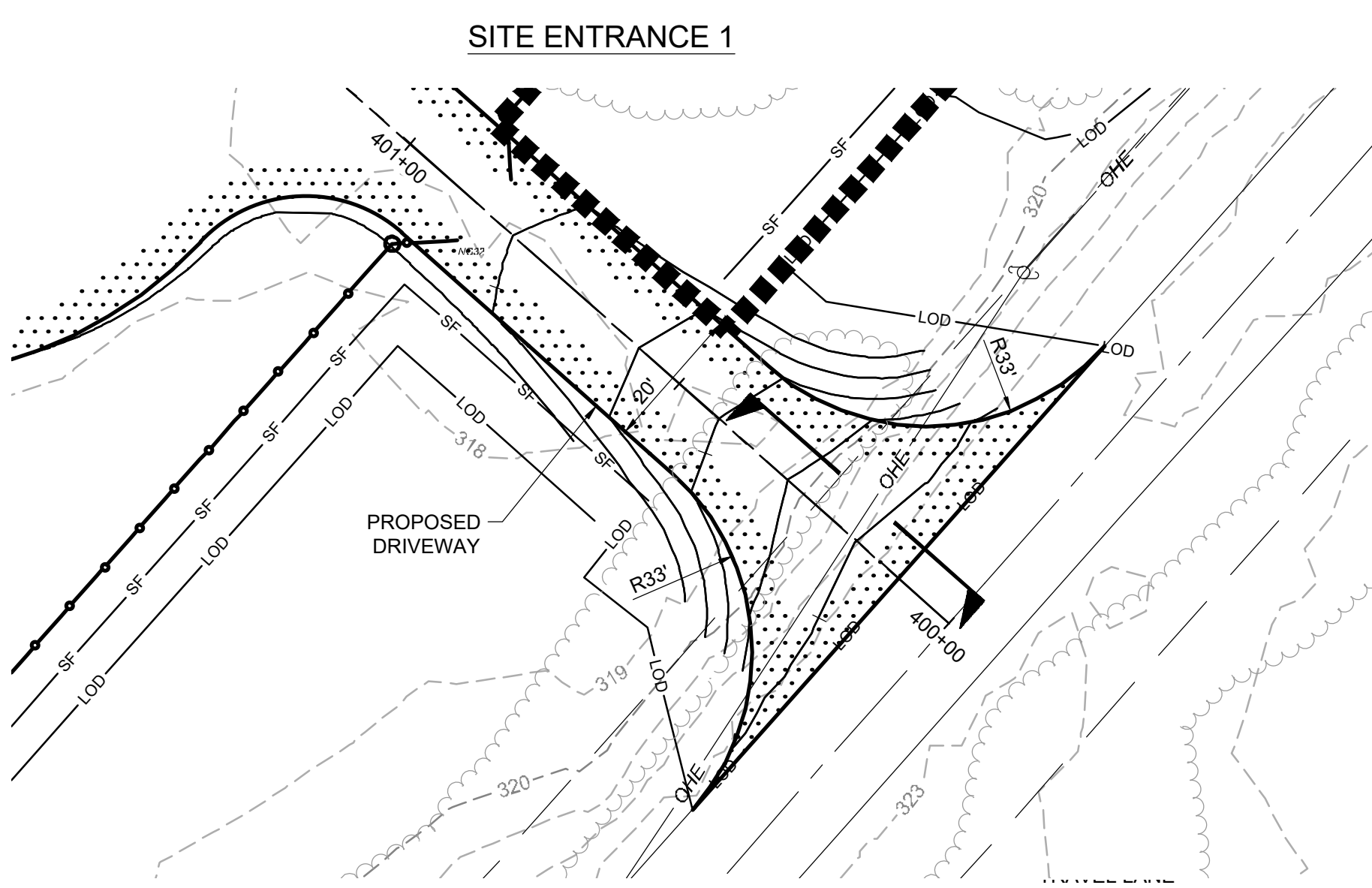
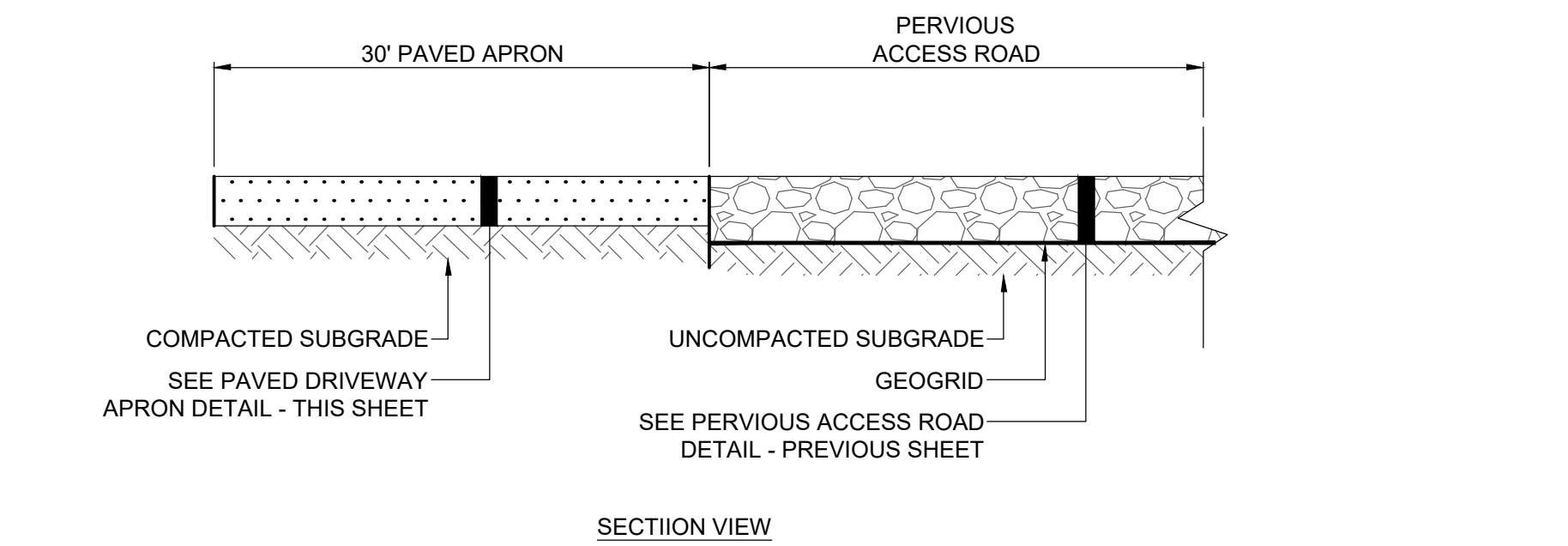
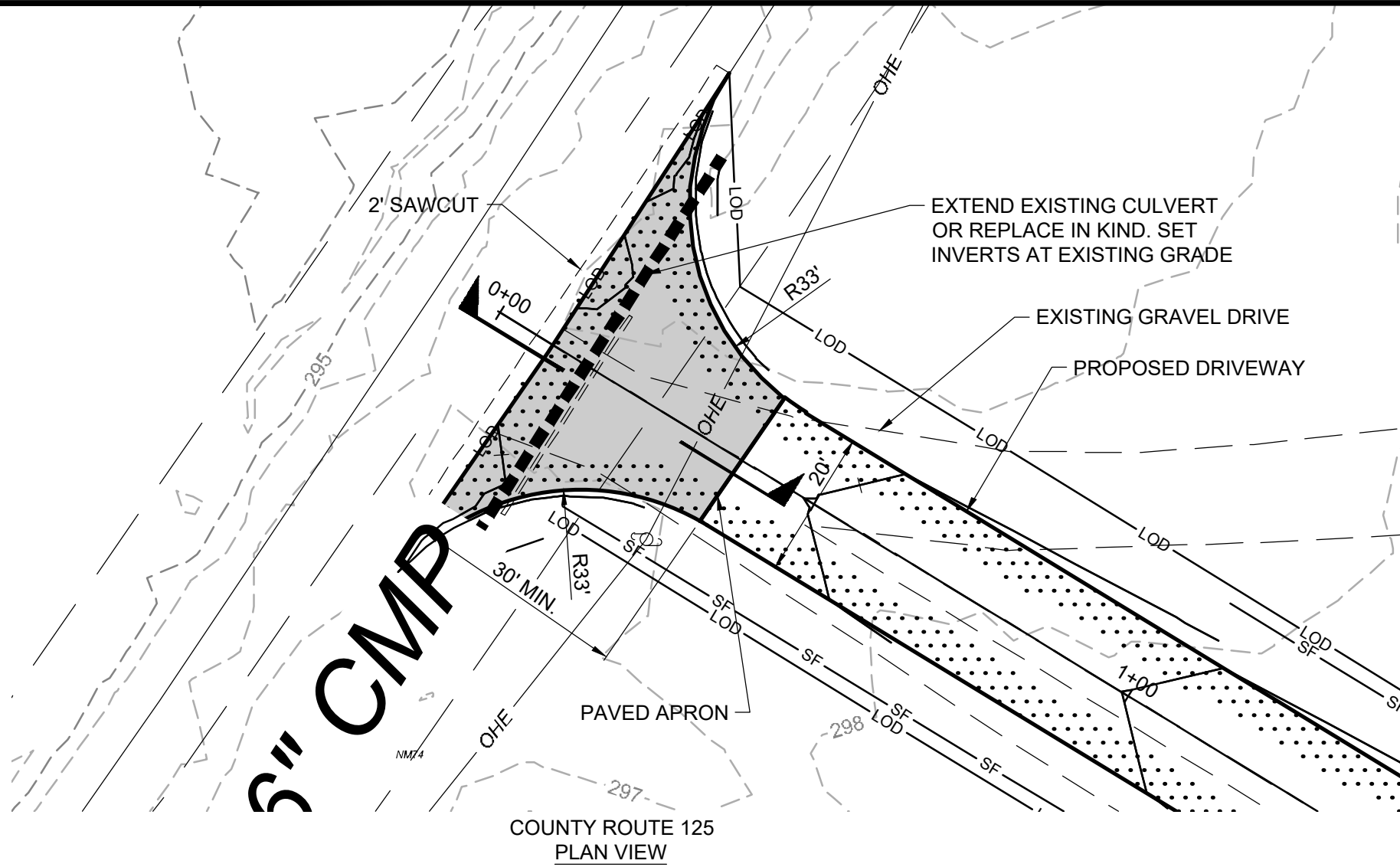
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AS SHOWN

SHEET NO:
PV-C.06.01

REV: 2

PROJECT: 4422208 - CIVIL DETAILS.dwg
DRAWN BY: JLM/2021
CHECKED BY: JLM/2021
DATE: 04/15/2021
SCALE: 1"=20'
SHEET: 1 OF 1
PROJECT: 4422208 - CIVIL DETAILS.dwg
DRAWN BY: JLM/2021
CHECKED BY: JLM/2021
DATE: 04/15/2021
SCALE: 1"=20'
SHEET: 1 OF 1



NOTES:
1. PAVED DRIVEWAY APRON SHALL MEET ALL NYSDOT REQUIREMENTS FOR A MINOR COMMERCIAL DRIVEWAY ACCESSED FROM A STATE HIGHWAY.

PAVED DRIVEWAY APRON
SCALE: N.T.S.

PRELIMINARY
NOT FOR CONSTRUCTION

AS SHOWN

aes
2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679-3500

TRC
249 Western Avenue
Augusta, ME 04330

PE STAMP:

KEY PLAN:

REVISIONS:
NO. DATE DESCRIPTION
1 08/05/2021 ISSUED FOR PERMIT
2 09/10/2021 ISSUED FOR PERMIT
- - -
- - -
- - -
- - -
- - -
- - -

PROJECT TITLE:
RIVERSIDE SOLAR PROJECT

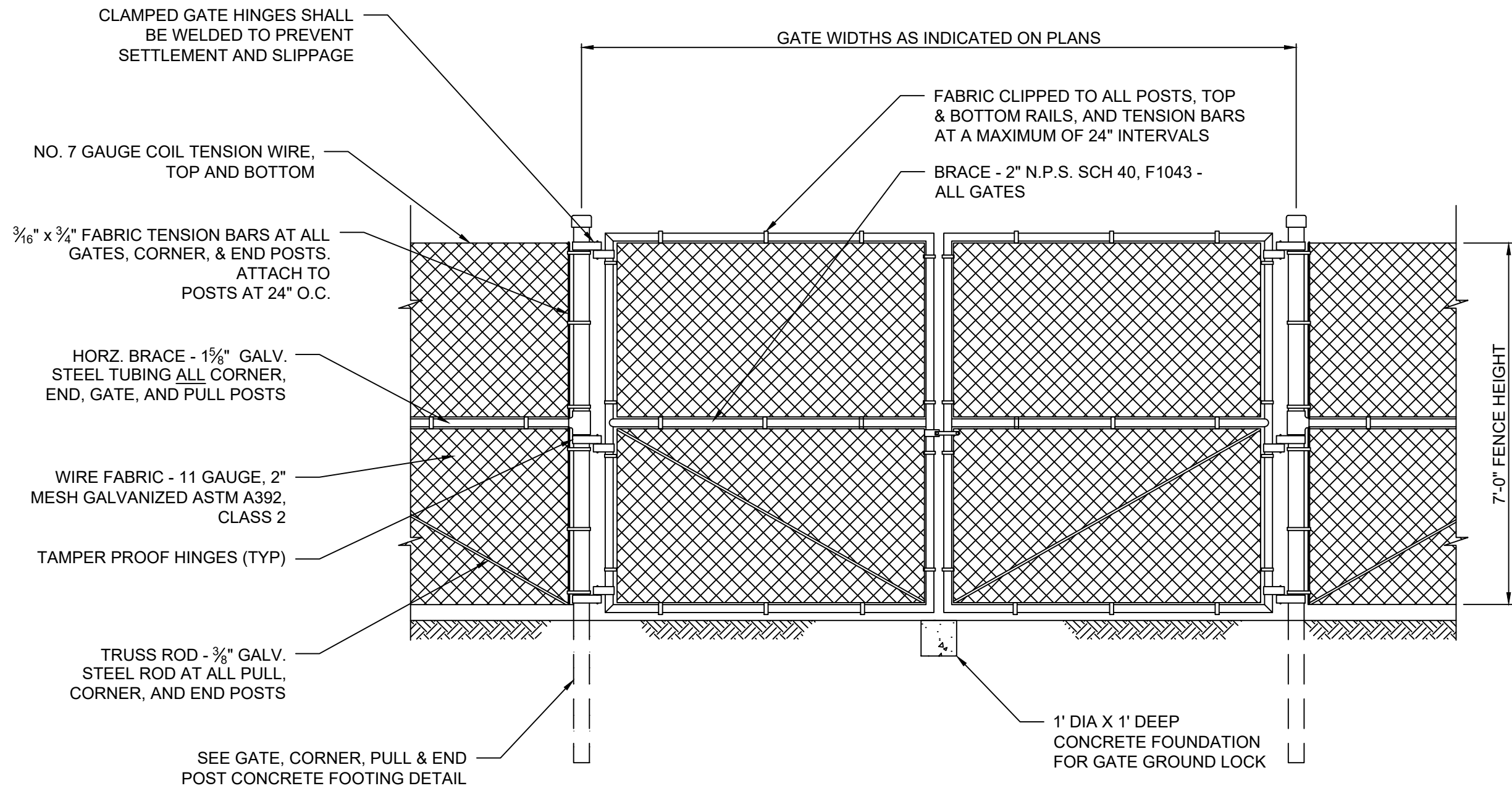
PROJECT LOCATION:
**TOWNS OF LYME & BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:
SITE ENTRANCE DETAILS

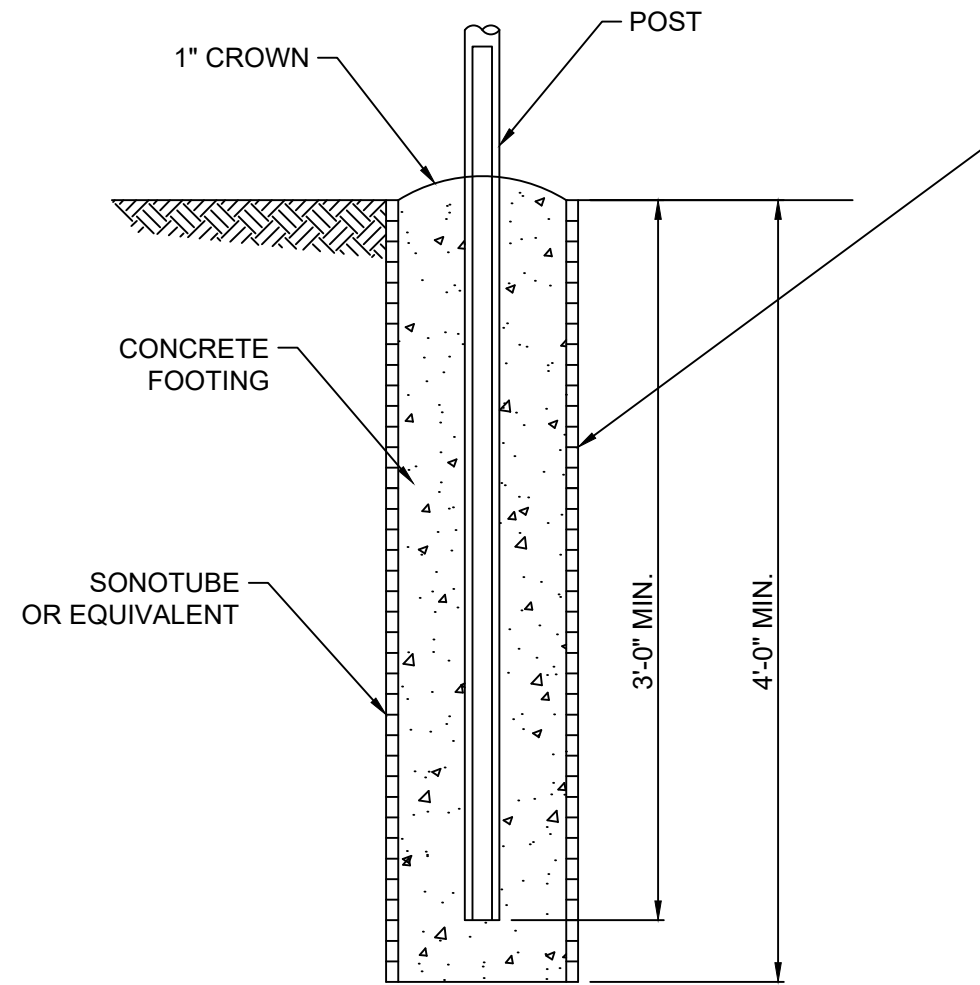
PROJ NUM: 422208
DES: E. BROWN
DWN: E. BROWN
CHK: P. MARTIN
APV: -
DATE: 04/15/2021
SCALE AT 22" x 34":
AS SHOWN

SHEET NO: PV-C.08.01
REV: 2

AES THINWALL 22534 V210101
PLATTEN 01/05/2021 11:41 AM
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USER: J3559PM1 BY: J3559PM1
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



SWING GATE FRAME
NOT TO SCALE

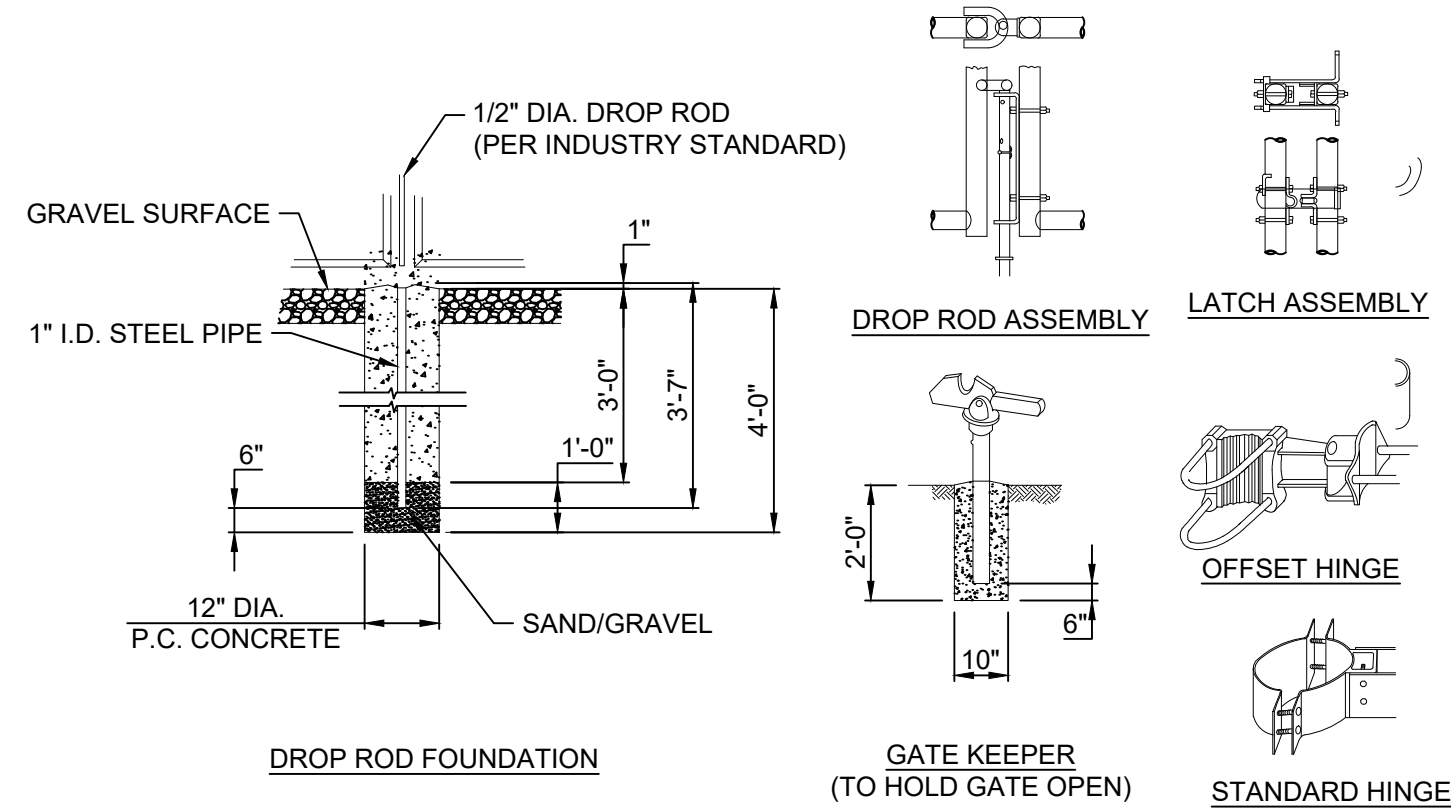


POST USE	GATE	CORNER	PULL	END
NOMINAL PIPE SIZE (INCHES)	4	2 3/8	2 3/8	2 3/8
SONOTUBE SIZE (INCHES)	12	12	12	12

- FOOTING NOTES:
- UNLESS OTHERWISE INDICATED, FENCE POST SIZES ARE INDUSTRY STANDARD NOMINAL SIZES IN ACCORDANCE WITH ASTM F 1083, GALVANIZED STEEL PIPE.
 - BACKFILL SONOTUBE WITH MIN. 3,000 PSI CONCRETE.
 - ALL CONCRETE SHALL BE SINGLE POUR TO FINAL GRADE.
 - WHEN INSTALLING POSTS IN CLAY:
 - POST HOLE DEPTH SHALL BE INCREASED TO 6 FEET.
 - BACKFILL 4 FEET WITH CONCRETE.
 - BACKFILL FINAL 2 FEET WITH NATIVE SOIL.
 - WHEN INSTALLING POSTS IN LEDGE, CORE AND GROUT POSTS IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
 - LINE POSTS SHALL BE DRIVEN TO A DEPTH OF 6 FEET BELOW GRADE, AND NOT SET IN CONCRETE.

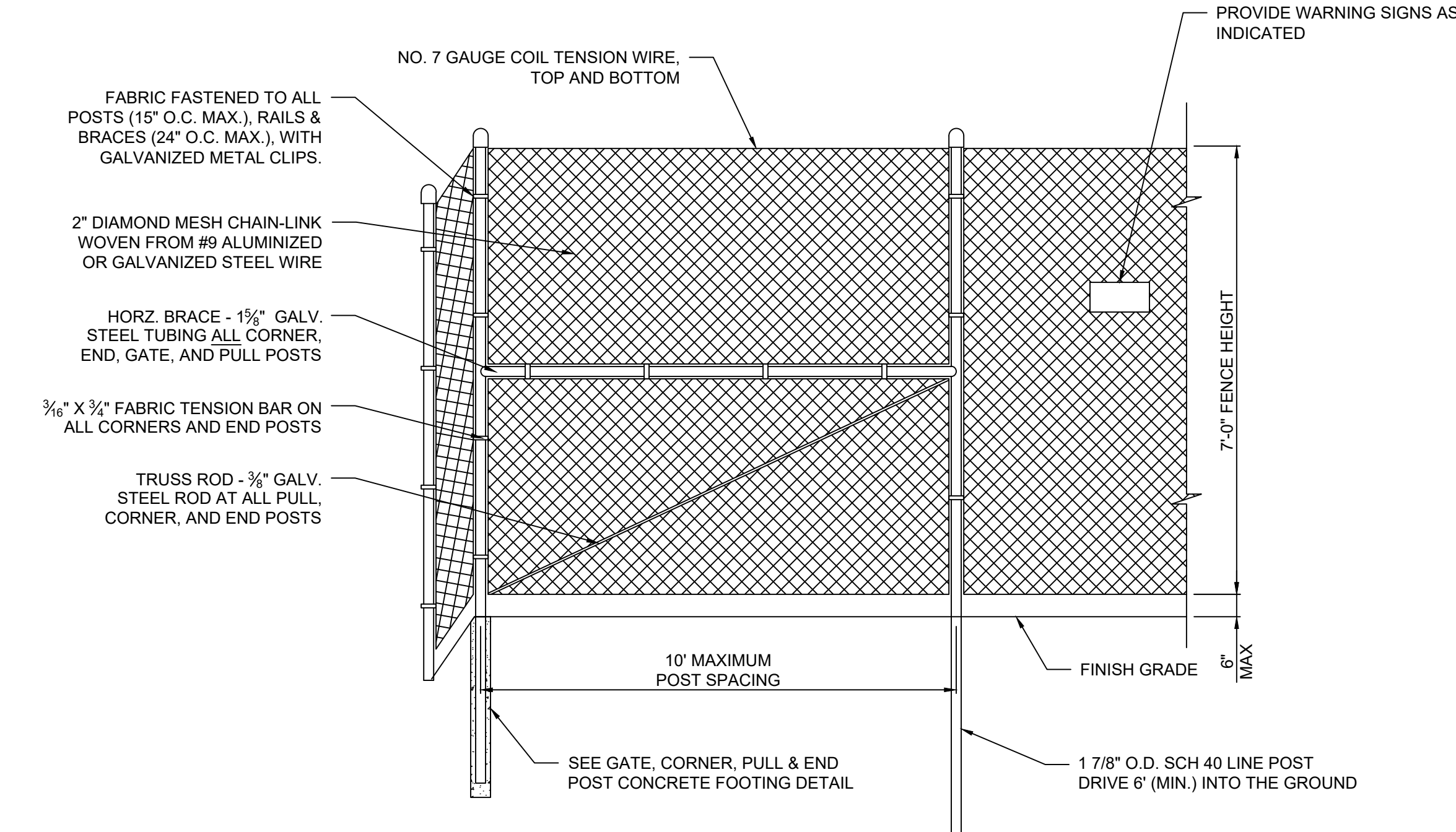
GATE, END, BRACE & CORNER POST CONCRETE FOOTING DETAIL
NOT TO SCALE

- POSTS SHALL BE STEEL PIPE, ASTM F1083 STANDARD WEIGHT. POSTS SHALL BE DRIVEN 6" INTO UNDISTURBED SUBGRADE SOIL FOR LINE POSTS OR SET IN 2'-0" DIA. X 5' MIN DEEP CONCRETE FOR CORNER AND GATE POST.
- LINE POSTS - 1 1/2" SCH 40 (O.D. = 1 7/8")
 - GATE POSTS - 3 1/2" SCH 40 (O.D. = 4")
 - CORNER AND PULL POSTS - 2" SCH 40 (O.D. = 2 3/8")



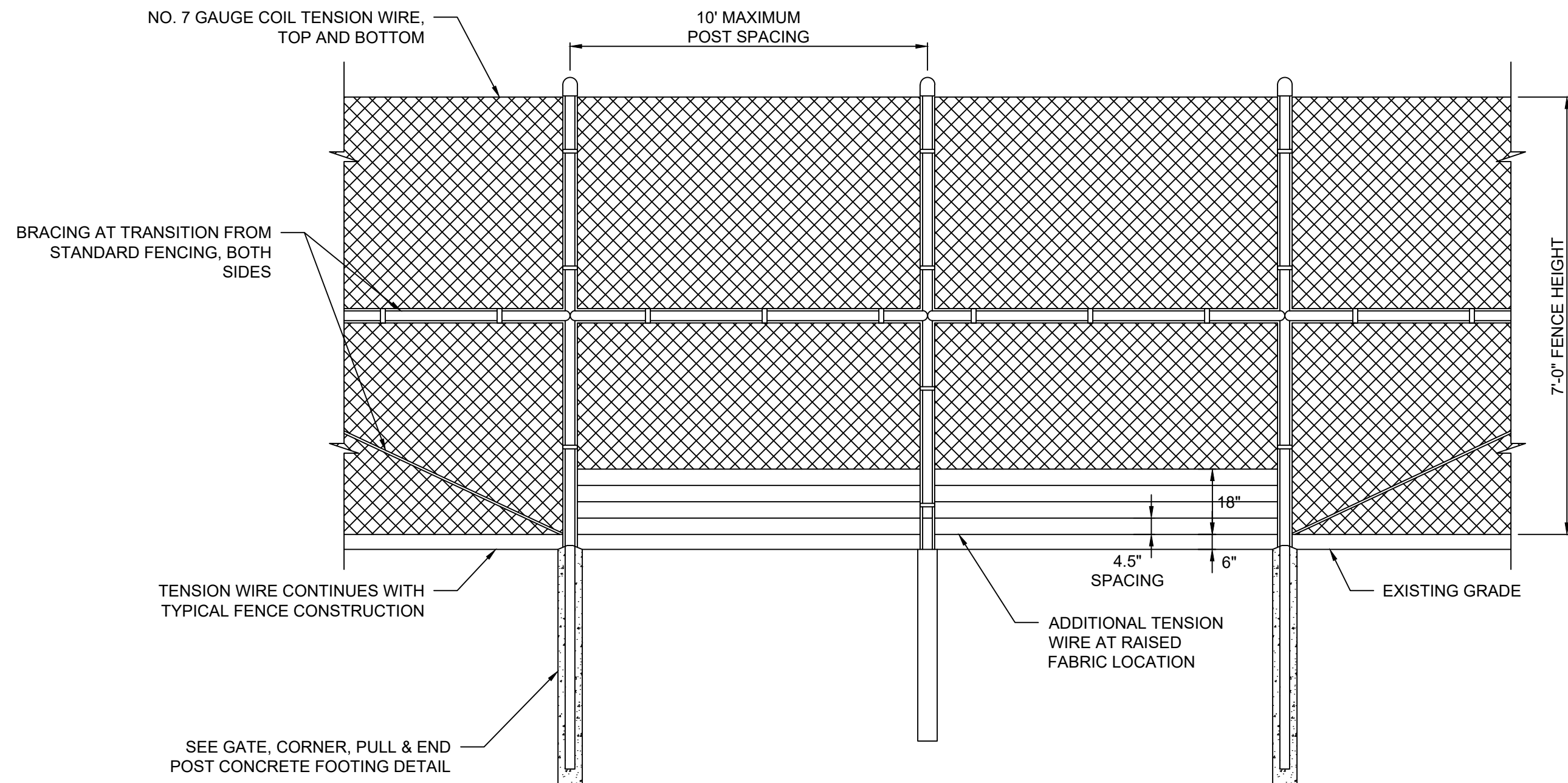
ACCESS GATE DETAILS
NOT TO SCALE

- GENERAL FENCING NOTES:
- ALL ITEMS SHALL BE GALVANIZED AND ZINC COATED TO ASTM SPECIFICATIONS, INCLUDING ALL POSTS, RAILS, GATES, AND HARDWARE.
 - GATE FENCE FABRIC SHALL BE MOUNTED INSIDE THE FRAME.
 - ALL SWING GATE OPENINGS SHALL BE 24 FEET UNLESS OTHERWISE SPECIFIED.
 - SWING GATES SHALL BE CONSTRUCTED WITH DROP RODS, PADLOCKS, LATCH ASSEMBLY, GATE KEEPERS, AND KNOX BOX.
 - BOLTS AND HINGES SHALL BE OF A TAMPER-PROOF TYPE.
 - EXPOSED BOLTS AND NUTS SHALL BE SPOT WELDED.
 - REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL FENCE AND GATE REQUIREMENTS



ARRAY FENCE DETAILS
NOT TO SCALE

- FENCING NOTES:
- FENCING CONTRACTOR TO DESIGN AND INSTALL FENCE PER LOCAL REQUIREMENTS AND/OR SUGGESTED PRACTICE FOR ALL COMPONENTS NOT SPECIFICALLY CALLED OUT.
 - THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL EXISTING SITE CONDITIONS AND WITH DESIGN DOCUMENTS PROVIDED BY THE VARIOUS DESIGN PROFESSIONALS INVOLVED IN THIS PROJECT.
 - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DETAILS, AND SPATIAL RELATIONSHIPS SHOWN ON THESE DRAWINGS IN CONJUNCTION WITH ALL OTHER RELATED DESIGN DRAWINGS. ANY DISCREPANCIES, CONFLICTS, OR OMISSIONS FOUND SHALL BE REPORTED TO THE ENGINEER AND OTHER DESIGN PROFESSIONALS AS APPROPRIATE FOR RESOLUTION PRIOR TO PROCEEDING WITH ANY WORK ON THE PROJECT.
 - THE CONTRACTOR SHALL REVIEW ALL SUBMITTALS, INCLUDING SHOP DRAWINGS, AND VERIFY CORRECTNESS OF THEM PRIOR TO SUBMISSION TO OWNER.
 - MAXIMUM SPACING BETWEEN BRACES SHALL BE 500 FEET. CORNER BRACES TO BE PROVIDED WHERE CORNER ANGLE IS 15° OR MORE AND WHERE SPACING REACHES 500 FEET.
 - SEE ELECTRICAL SHEETS FOR REQUIRED SIGNAGE.
 - ALL STEEL SHALL BE GALVANIZED PER ASTM A123 UNLESS CORROSION ANALYSIS REPORT RECOMMENDS ADDITIONAL CORROSION PROTECTION.
 - FOUNDATION CONCRETE SHALL MEET NEW YORK DOT SPECIFICATIONS FOR CLASS A3 CONCRETE.
 - FACILITY LAYOUT RELATIVE TO THE PROJECT WETLANDS AND BOUNDARY SHALL BE CONFIRMED BY A LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION.



STORMWATER FENCING DETAILS
NOT TO SCALE

- STORMWATER FENCING NOTES:
- THE STORMWATER FENCES SHOULD BE INSPECTED AFTER RUNOFF PRODUCING STORM EVENTS AND CLEARED OF DEBRIS.
 - POST REPLACEMENT SHOULD BE AVOIDED IF POSSIBLE AND MINIMIZED WITHIN THE WETLAND CROSSINGS. CONTRACTOR MUST NOT ALLOW VEHICLES TO CROSS THE WETLANDS EXCEPT WHEN ABSOLUTELY REQUIRED TO INSTALL THE STORMWATER FENCING.
 - TENSION WIRE STRANDS AT THE BOTTOM, WITH A MAXIMUM OF 6 INCHES BETWEEN STRANDS FOR 24 INCHES (STARTING FROM THE GROUND.)
 - ADDITIONAL BRACING OR LARGER POST SIZE MAY BE REQUIRED TO SPAN WETLANDS ONSITE.

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2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679 - 3500

TRC

249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ARRAY FENCING
DETAILS

PROJ
NUM: 422208

DES: E. BROWN

DWN: E. BROWN

CHK: P. MARTIN

APV: -

DATE: 04/15/2021

SCALE AT 24" x 36":

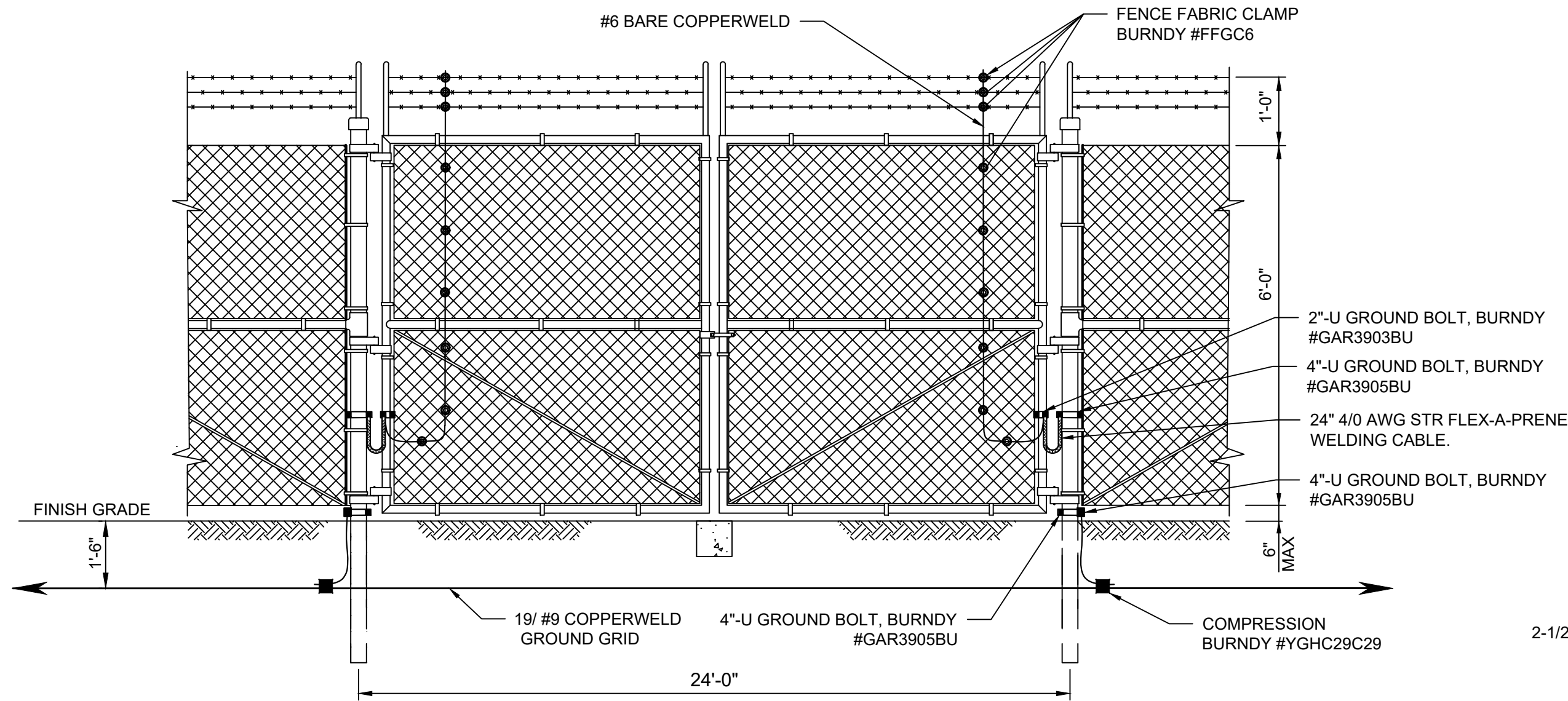
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PV-C.10.01

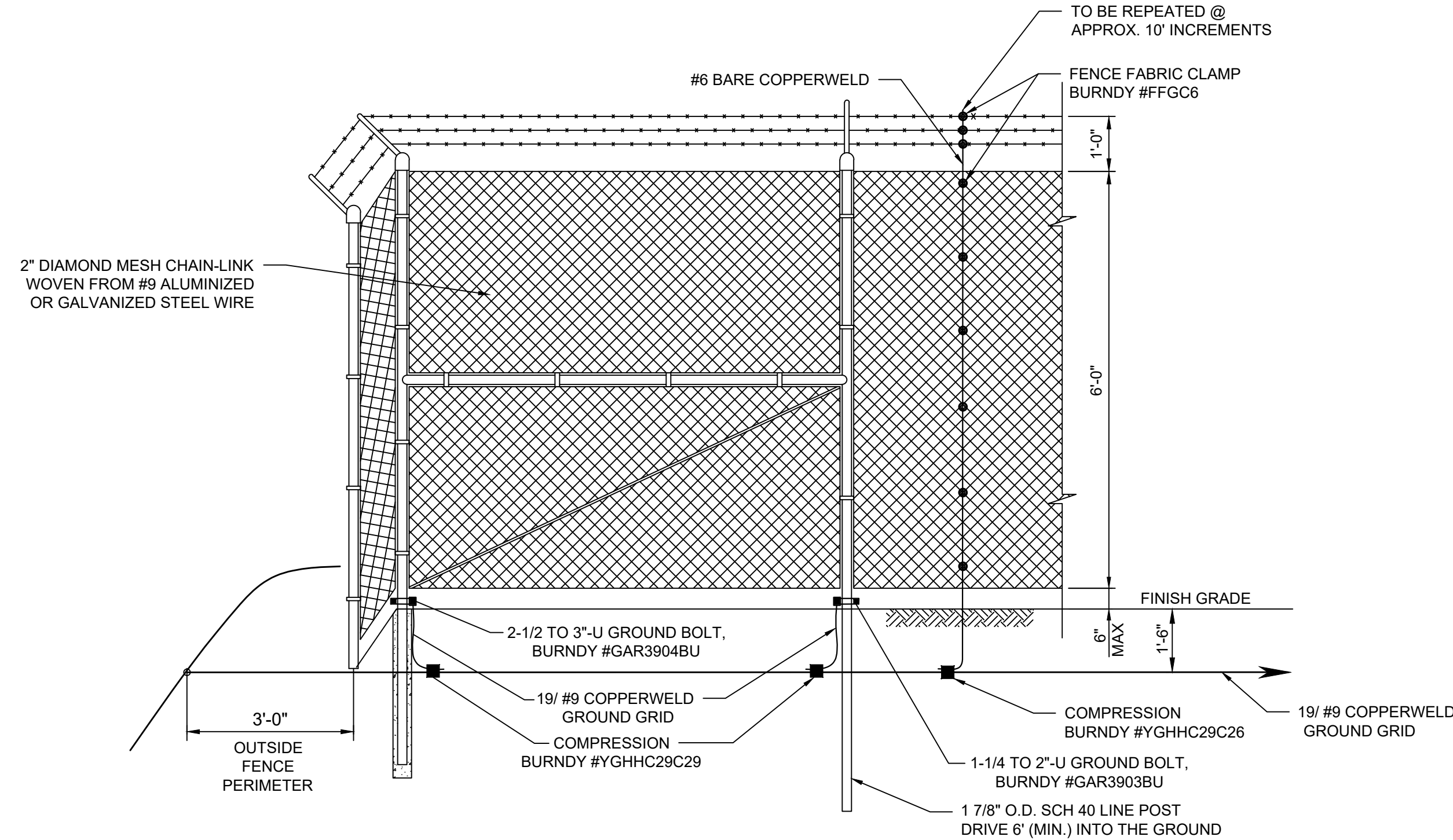
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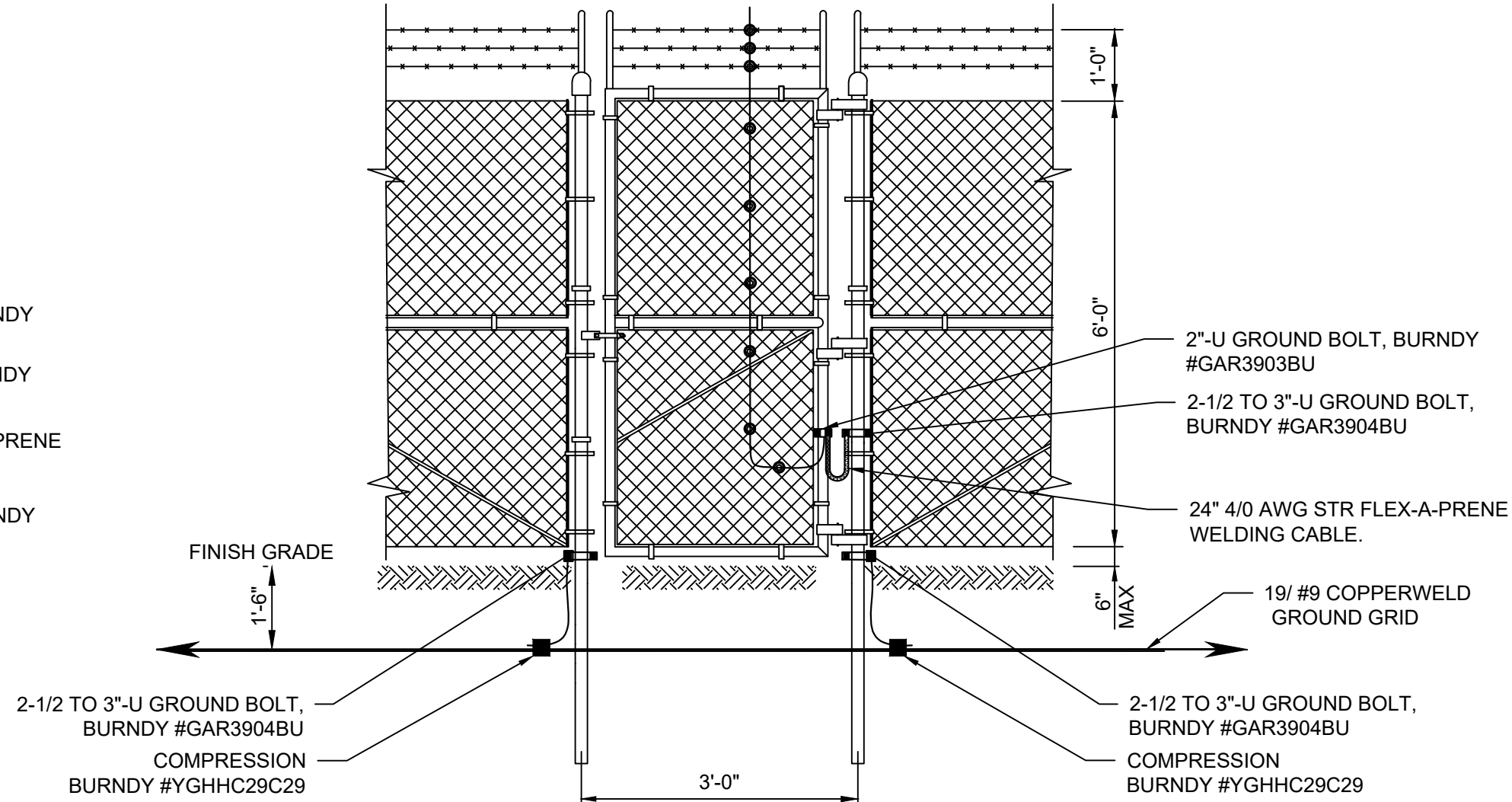


VEHICLE SWING GATE FRAME GROUNDING
NOT TO SCALE



SUBSTATION FENCE GROUNDING DETAILS
NOT TO SCALE

POST USE	GATE	CORNER	PULL	END	LINE
NOMINAL PIPE SIZE (INCHES)	4	2 3/8	2 3/8	2 3/8	1 7/8
SONOTUBE SIZE (INCHES)	12	12	12	12	12



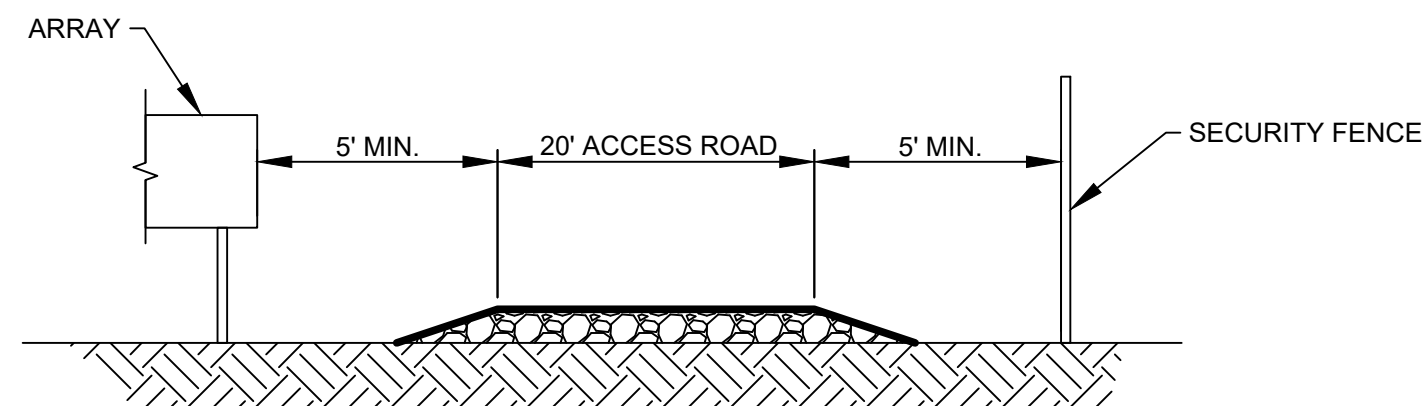
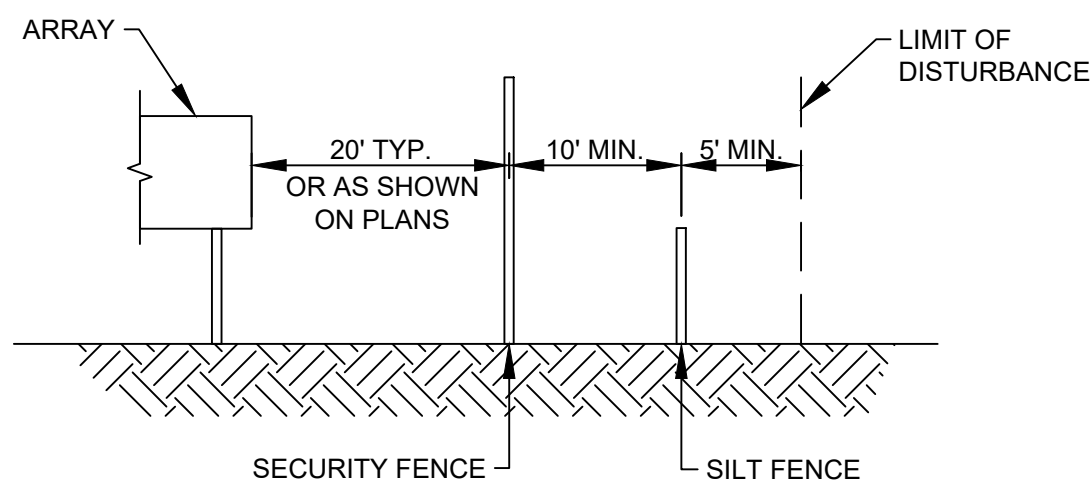
PERSONNEL SWING GATE FRAME GROUNDING
NOT TO SCALE

FENCING NOTES:

- FENCING CONTRACTOR TO DESIGN AND INSTALL FENCE PER LOCAL REQUIREMENTS AND/OR SUGGESTED PRACTICE FOR ALL COMPONENTS NOT SPECIFICALLY CALLED OUT.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL EXISTING SITE CONDITIONS AND WITH DESIGN DOCUMENTS PROVIDED BY THE VARIOUS DESIGN PROFESSIONALS INVOLVED IN THIS PROJECT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DETAILS, AND SPATIAL RELATIONSHIPS SHOWN ON THESE DRAWINGS IN CONJUNCTION WITH ALL OTHER RELATED DESIGN DRAWINGS. ANY DISCREPANCIES, CONFLICTS, OR OMISSIONS FOUND SHALL BE REPORTED TO THE ENGINEER AND OTHER DESIGN PROFESSIONALS AS APPROPRIATE FOR RESOLUTION PRIOR TO PROCEEDING WITH ANY WORK ON THE PROJECT.
- THE CONTRACTOR SHALL REVIEW ALL SUBMITTALS, INCLUDING SHOP DRAWINGS, AND VERIFY CORRECTNESS OF THEM PRIOR TO SUBMISSION TO OWNER.
- MAXIMUM SPACING BETWEEN BRACES SHALL BE 500 FEET. CORNER BRACES TO BE PROVIDED WHERE CORNER ANGLE IS 15° OR MORE AND WHERE SPACING REACHES 500 FEET.
- ALL STEEL SHALL BE GALVANIZED PER ASTM A123 UNLESS CORROSION ANALYSIS REPORT RECOMMENDS ADDITIONAL CORROSION PROTECTION.
- FOUNDATION CONCRETE SHALL MEET NEW YORK DOT SPECIFICATIONS FOR CLASS A3 CONCRETE.
- FACILITY LAYOUT RELATIVE TO THE PROJECT WETLANDS AND BOUNDARY SHALL BE CONFIRMED BY A LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION.

GENERAL FENCING NOTES:

- ALL ITEMS SHALL BE GALVANIZED AND ZINC COATED TO ASTM SPECIFICATIONS, INCLUDING ALL POSTS, RAILS, GATES, AND HARDWARE.
- GATE FENCE FABRIC SHALL BE MOUNTED INSIDE THE FRAME.
- ALL SWING GATE OPENINGS SHALL BE 24 FEET UNLESS OTHERWISE SPECIFIED.
- SWING GATES SHALL BE CONSTRUCTED WITH DROP RODS, PADLOCKS, LATCH ASSEMBLY, AND GATE KEEPERS.
- BOLTS AND NUTS SHALL BE OF A TAMPER-PROOF TYPE.
- EXPOSED BOLTS AND NUTS SHALL BE SPOT WELDED.
- REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL FENCE AND GATE REQUIREMENTS



NOTE:
TYPICAL SPACING TO BE USED UNLESS OTHERWISE SHOWN ON DESIGN PLANS.

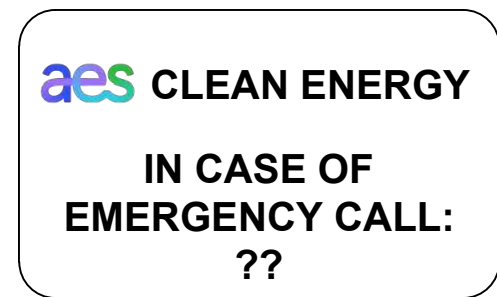
TYPICAL SPACING REQUIREMENTS
NOT TO SCALE



NOTES:
1. DIMENSIONS: 30" X 24".
2. SIGNS SHALL BE 0.080" (MIN.) RUST-FREE ALUMINUM.
3. INSTALL AT LOCATIONS SHOWN ON PLANS.



NOTES:
1. DIMENSIONS: 18" X 12".
2. SIGNS SHALL BE 0.040" (MIN.) RUST-FREE ALUMINUM.
3. ATTACH TO OUTSIDE OF PERIMETER FENCE EVERY 200' MAX.



NOTES:
1. DIMENSIONS: 18" X 12".
2. SIGNS SHALL BE 0.040" (MIN.) RUST-FREE ALUMINUM.
3. ATTACH TO ACCESS GATES.



NOTES:
1. DIMENSIONS: 18" X 12".
2. SIGNS SHALL BE 0.040" (MIN.) RUST-FREE ALUMINUM.
3. ATTACH TO SUBSTATION ACCESS GATE AND SECURITY FENCE.

SITE SIGNAGE
NOT TO SCALE



PRELIMINARY
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UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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2180 South 1300 East, Suite 600
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PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

SUBSTATION FENCING
DETAILS

PROJ
NUM:

422208

DES:

E. BROWN

DWN:

E. BROWN

CHK:

P. MARTIN

APV:

-

DATE:

04/15/2021

SCALE AT 24" x 36":

AS NOTED

SHEET NO:

PV-C.10.02

REV:

2

7%
LOWER
LCOE

31%
LOWER
LIFETIME
O&M

Three decades of field-tested design improvements have resulted in the DuraTrack® HZ V3 — the most durable, reliable tracking system under the sun. While our single-bolt module clamp and forgiving tolerances streamline installation, and our flexibly linked architecture maximizes power density, it's our innovative use of fewer components and a failure-free wind management system that makes Array Technologies the best choice for solar trackers. **Better. Stronger. Smarter.**

HIGHEST POWER DENSITY.
Higher density means more power and more profit. CUMMINS offers the unique ability to maximize the power density of each site, boosting 100 modes per rev and higher torque outputs.

LEADING TERRAIN ADAPTABILITY.
Our flexibly built ISX15 is designed with adjusting elbows and pivoting levers, enabling the engine to adapt to the most challenging terrain. We market for the following natural and custom built creating a more efficient generation platform from every site.

FEWER COMPONENTS. GREATER RELIABILITY.
Air was harnessed on a philosophy of engineering simplicity. Minimizing potential failure points (157 times fewer components than competitors from Cummins and Caterpillar) ISX15 consistently delivers higher stability and superior upsets.

FAILURE-FREE WORK DESIGN.
Our CUMMINS ISX15 was designed to be harnessed on the wildest conditions on the planet. It fits and holds on the market best reliably handles even the most demanding work with a 3x4 input ratio. CUMMINS ISX15 is designed for long-term, full capacity system operation without the need for complex maintenance and replacement.

ZERO SCHEDULED MAINTENANCE.
Maintenance-free pistons and gears. Bearing parts, and industrial grade components – all of which are covered by our 10-year, 1-million-hour warranty. No scheduled maintenance required. While our competitors require scheduled maintenance every 1000 hours, we average only one per year.

[illegible]

Key Features

 <p>Multi-Busbar Technology</p> <p>Better light trapping and current collection to improve module power output and reliability.</p>	 <p>Longer Life-Time Power Yield</p> <p>0.43% annual power degradation and 30 year linear power warranty.</p>
 <p>Light-weight design</p> <p>Light-weight design with transparent backsheet for easy installation and low BOS cost.</p>	 <p>Enhanced Mechanical Load</p> <p>Certified to withstand: wind load (2400 Pascals) and snow load (2400 Pascals).</p>

LINEAR PERFORMANCE WARRANTY

Continuous Power Output (kW)

1000
800
645

Additional value from Jinko Solar's linear warranty

12 Year Product Warranty

30 Year Linear Power Warranty

0.45% Annual Degradation Over 30 years

1 6 12 30 years

Engineering Drawings

Electrical Performance & Temperature Dependence

Packaging Configuration

Top View (mm)

Side View (mm)

Mechanical Characteristics

Category	Parameter	Value
Case Type	Material	High-Temperature Resin
	RoHS Compliant	Yes
	Lead-Free	Yes
	Flame Retardant	UL94V-0
Dimensions	Length (mm)	20.0 ± 0.1
	Width (mm)	10.0 ± 0.1
	Height (mm)	10.0 ± 0.1
	Weight (g)	0.15 ± 0.01
Environmental	Operating Temp. (°C)	-40 to +125
	Storage Temp. (°C)	-55 to +150
	Humidity (%)	10 to 90
	Shock (g)	10 to 100

Specifications

Parameter	Model A1000-20x10	Model A1000-20x10	Model A1000-20x10	Model A1000-20x10
Input Type	5VDC	5VDC	5VDC	5VDC
Output Power (mW)	1000	1000	1000	1000
Maximum Power Voltage (V)	5.0	5.0	5.0	5.0
Maximum Power Current (mA)	200	200	200	200
Open-Circuit Voltage (V)	5.0	5.0	5.0	5.0
Short-Circuit Current (mA)	200	200	200	200
Modulation Efficiency (%)	90	90	90	90
Operating Temperature (°C)	-40 to +125	-40 to +125	-40 to +125	-40 to +125
Storage Temperature (°C)	-55 to +150	-55 to +150	-55 to +150	-55 to +150
Humidity (%)	10 to 90	10 to 90	10 to 90	10 to 90
Shock (g)	10 to 100	10 to 100	10 to 100	10 to 100

Environmental Performance

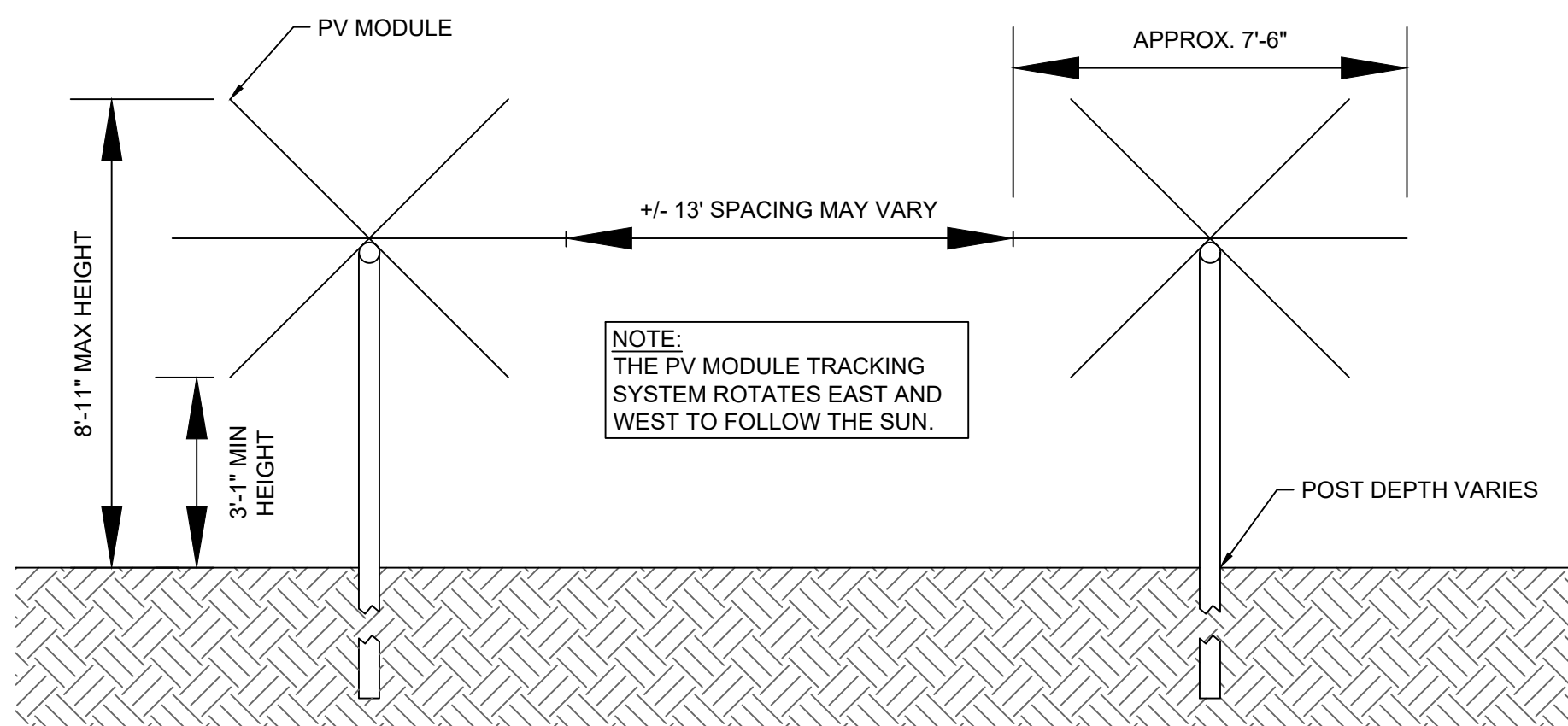
Parameter	Value
Operating Temp. (°C)	-40 to +125
Storage Temp. (°C)	-55 to +150
Humidity (%)	10 to 90
Shock (g)	10 to 100

Performance & Environmental Data

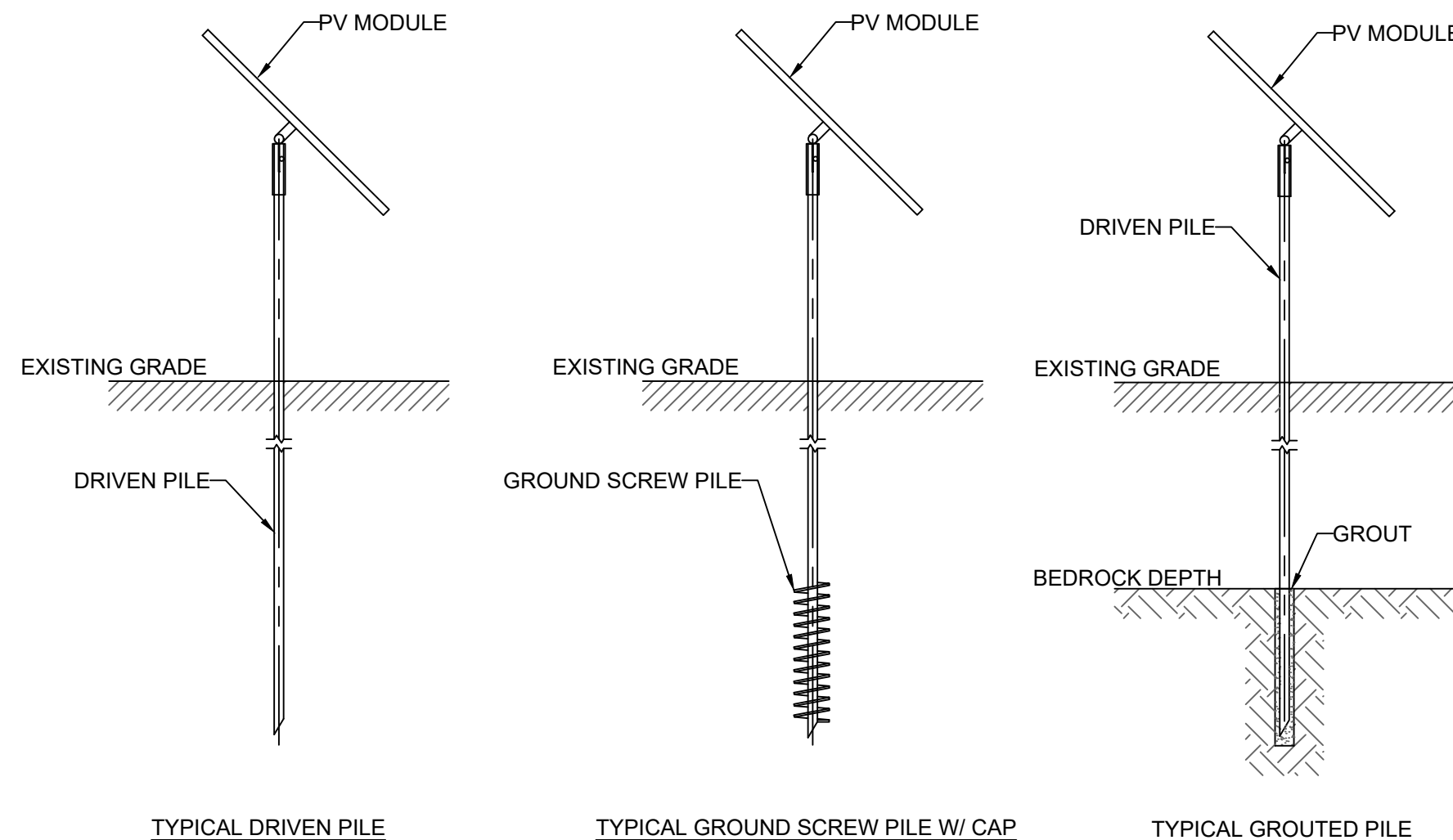
Parameter	Model A1000-20x10	Model A1000-20x10	Model A1000-20x10	Model A1000-20x10
Input Type	5VDC	5VDC	5VDC	5VDC
Output Power (mW)	1000	1000	1000	1000
Maximum Power Voltage (V)	5.0	5.0	5.0	5.0
Maximum Power Current (mA)	200	200	200	200
Open-Circuit Voltage (V)	5.0	5.0	5.0	5.0
Short-Circuit Current (mA)	200	200	200	200
Modulation Efficiency (%)	90	90	90	90
Operating Temperature (°C)	-40 to +125	-40 to +125	-40 to +125	-40 to +125
Storage Temperature (°C)	-55 to +150	-55 to +150	-55 to +150	-55 to +150
Humidity (%)	10 to 90	10 to 90	10 to 90	10 to 90
Shock (g)	10 to 100	10 to 100	10 to 100	10 to 100

BI-FUNCTIONAL OUTPUT-REARSIDE POWER GAIN

Parameter	Model A1000-20x10	Model A1000-20x10	Model A1000-20x10	Model A1000-20x10
5V	Maximum Power (mW)	1000	1000	1000
10V	Maximum Power (mW)	1000	1000	1000
20V	Maximum Power (mW)	1000	1000	1000
30V	Maximum Power (mW)	1000	1000	1000
40V	Maximum Power (mW)	1000	1000	1000
50V	Maximum Power (mW)	1000	1000	1000
60V	Maximum Power (mW)	1000	1000	1000
70V	Maximum Power (mW)	1000	1000	1000
80V	Maximum Power (mW)	1000	1000	1000
90V	Maximum Power (mW)	1000	1000	1000
100V	Maximum Power (mW)	1000	1000	1000






TRACKER RACK SECTION DETAIL



TYPICAL RACK FOUNDATION DETAILS

PRELIMINARY
NOT FOR CONSTRUCTION

Dig! Safety. New York
Call 811
before you dig

<div><div></div><div>2180 South 1300 East, Suite 600 Salt Lake City, UT 84106-2749 (801) 679 - 3500</div></div>		
<div><div></div><div>249 Western Avenue Augusta, ME 04330</div></div>		
PE STAMP:		
<div></div>		
KEY PLAN:		
REVISIONS:		
NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
PROJECT TITLE:		
RIVERSIDE SOLAR PROJECT		
PROJECT LOCATION:		
TOWNS OF LYME & BROWNVILLE JEFFERSON CO., NY		
SHEET TITLE & DESCRIPTION:		
ARRAY & RACKING DETAILS		

PROJ NUM:	422208	
DES:	E. BROWN	
DWN:	E. BROWN	
CHK:	P. MARTIN	
APV:	-	
DATE:	04/15/2021	
SCALE AT 22" x 34":		
AS NOTED		
SHEET NO:	PV-C.11.01	REV: 2

PE STAMP:



KEY PLAN:

PROJECT TITLE:	
----------------	--

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EQUIPMENT PAD DETAILS

SCALE AT 22" x 34":

AS NOTED

SHEET NO:
PV-C.11.02

REV: 2



1. THE TOTAL WEIGHT OF THE TURNKEY STATION IS ABOUT 36 KIPS.
2. THE TURNKEY STATION IS INSTALLED ON THE 10 FOUNDATIONS, THE FOUNDATION SIZE MUST MEET THE REQUIREMENTS OF THE BEARING CAPACITY OF THE BEARING STRATUM. THE DEPTH OF THE FOUNDATION MUST REACH THE BEARING STRATUM WITH THE SUFFICIENT BEARING CAPACITY, THE BEARING CAPACITY SHALL BE DETERMINED WITH REFERENCE TO THE GEOLOGICAL SURVEY REPORT. THE GROUND SURFACE MUST BE SOLID AND FLAT, WITH NO RISK OF COLLAPSE OR SLIDING.
3. THE TURNKEY STATION IS RECOMMENDED TO BE PLACED AT LEAST 4 INCHES ABOVE THE GROUND BUT WHEN THE INVERTER BOTTOM IS 8 INCHES HIGHER THAN THE GROUND , IT IS RECOMMENDED TO CONSTRUCT AN AUXILIARY O&M PLATFORM ON THE TOP OF THE PILE , FOR THE SPECIFIC DESIGN, REFER TO THE DRAWING OF THE DESIGN INSTITUTE.
4. THE UPPER SURFACES OF THE STRIP FOUNDATIONS SHOULD BE AT THE SAME LEVEL (ERROR SHOULD BE WITHIN 0.25 INCHES).
5. NOT FOR CONSTRUCTION. THESE DRAWINGS ARE FOR INFORMATION PURPOSE, SHOWING THE FACTORS TO BE CONSIDERED WHEN DESIGNING THE FOUNDATIONS; THE FINAL ENGINEERING DRAWINGS MUST BE PREPARED BY PROFESSIONAL PERSONNEL.

EQUIPMENT PAD (EVENLY DISTRIBUTION)

SCALE: N.T.S.

EQUIPMENT PAD DETAILS PREPARED AND PROVIDED BY SUNGROW.

PRELIMINARY
NOT FOR CONSTRUCTION

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



PE STAMP:



KEY PLAN:

[illegible]

PROJECT TITLE:	
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RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

EQUIPMENT PAD
DETAILS

PROJ	422208
NUM:	

DES: C. WINTERMUTE

DWN: C. WINTERMITE

CHK: P. MARTIN

APV:

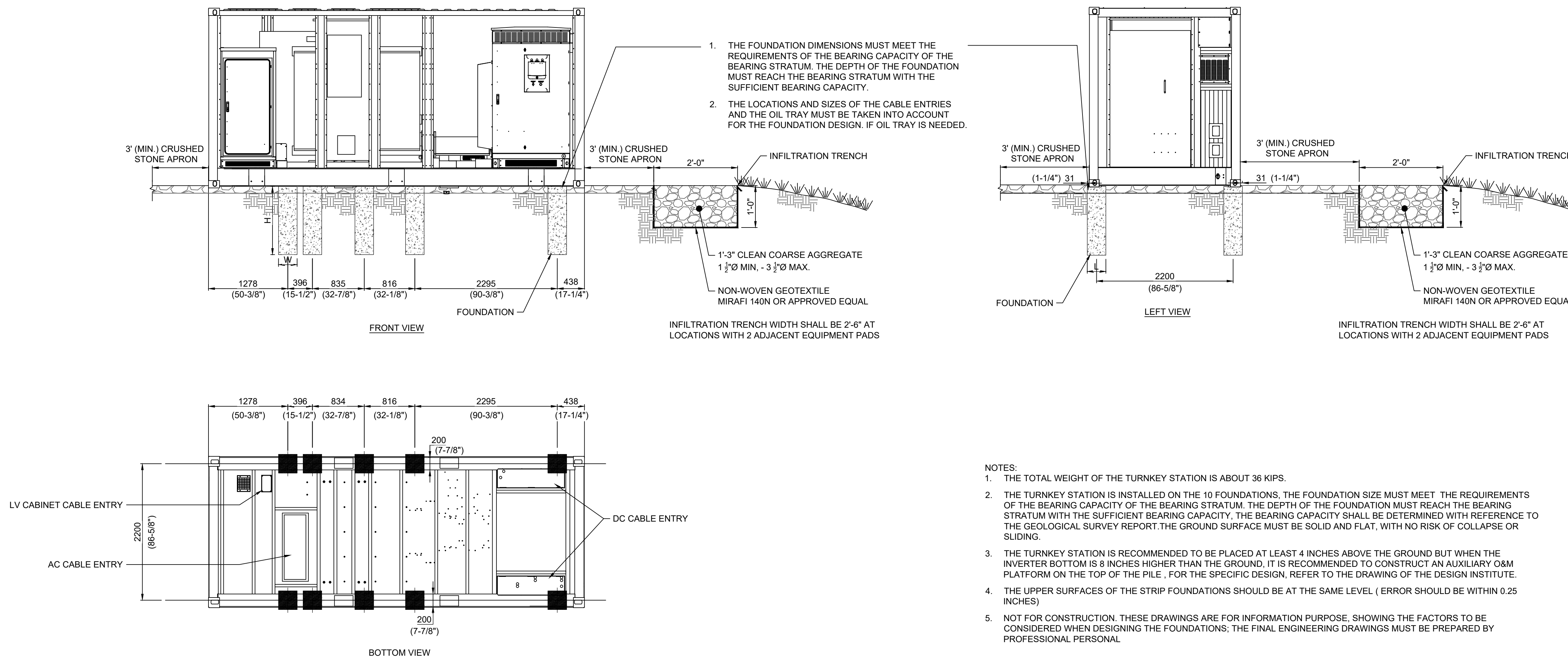
DATE: 04/15/2021

SCALE AT 22" x 34":

AS NOTED

SHEET NO:
PV-C.11.03

REV: 2



NOTES:

1. THE TOTAL WEIGHT OF THE TURNKEY STATION IS ABOUT 36 KIPS.
2. THE TURNKEY STATION IS INSTALLED ON THE 10 FOUNDATIONS, THE FOUNDATION SIZE MUST MEET THE REQUIREMENTS OF THE BEARING CAPACITY OF THE BEARING STRUTUM. THE DEPTH OF THE FOUNDATION MUST REACH THE BEARING STRUTUM WITH THE SUFFICIENT BEARING CAPACITY. THE BEARING CAPACITY SHALL BE DETERMINED WITH REFERENCE TO THE GEOLOGICAL SURVEY REPORT. THE GROUND SURFACE MUST BE SOLID AND FLAT, WITH NO RISK OF COLLAPSE OR SLIDING.
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4. THE UPPER SURFACES OF THE STRIP FOUNDATIONS SHOULD BE AT THE SAME LEVEL (ERROR SHOULD BE WITHIN 0.25 INCHES)
5. NOT FOR CONSTRUCTION. THESE DRAWINGS ARE FOR INFORMATION PURPOSE, SHOWING THE FACTORS TO BE CONSIDERED WHEN DESIGNING THE FOUNDATIONS; THE FINAL ENGINEERING DRAWINGS MUST BE PREPARED BY PROFESSIONAL PERSONAL

EQUIPMENT PAD (OPTIMIZED DISTRIBUTION)

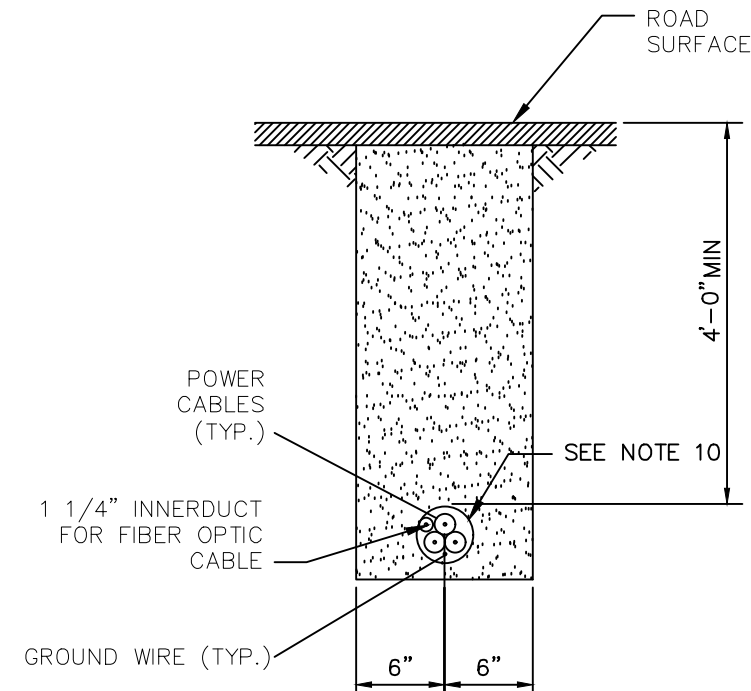
SCALE: N.T.S.

EQUIPMENT PAD DETAILS PREPARED AND PROVIDED BY SUNGROW.

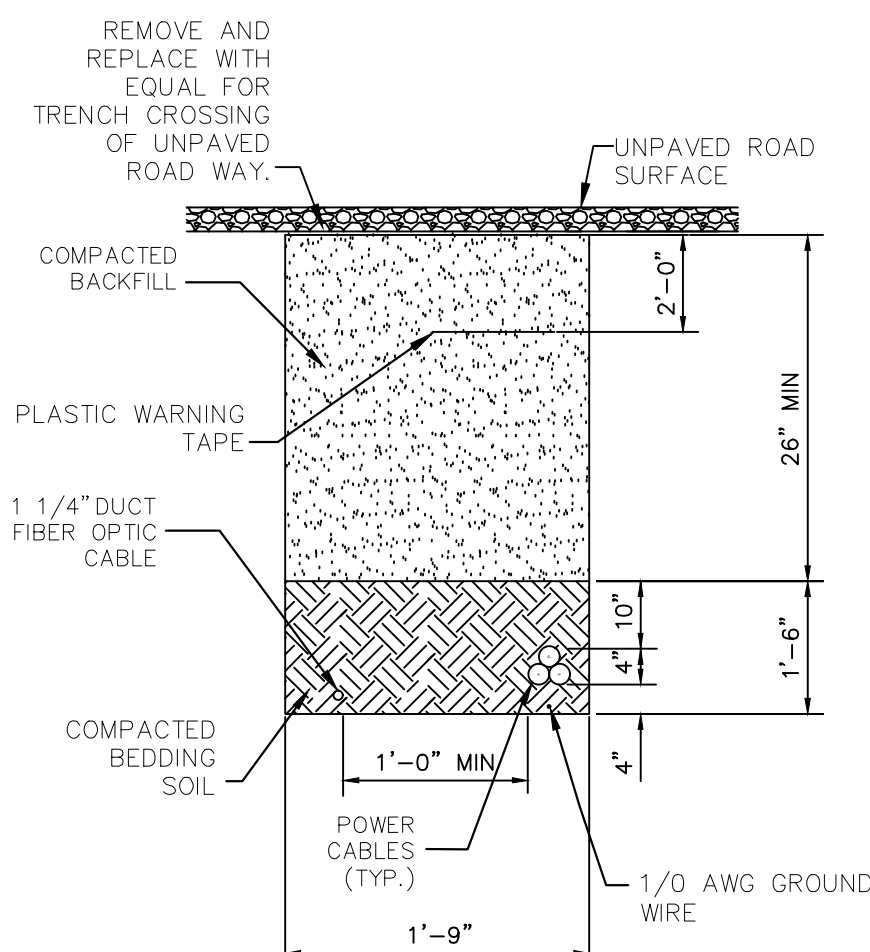
PRELIMINARY
NOT FOR CONSTRUCTION

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145 (ENGINEERING), SECTION 7209 (2), IT IS A
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ACTING UNDER THE DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.





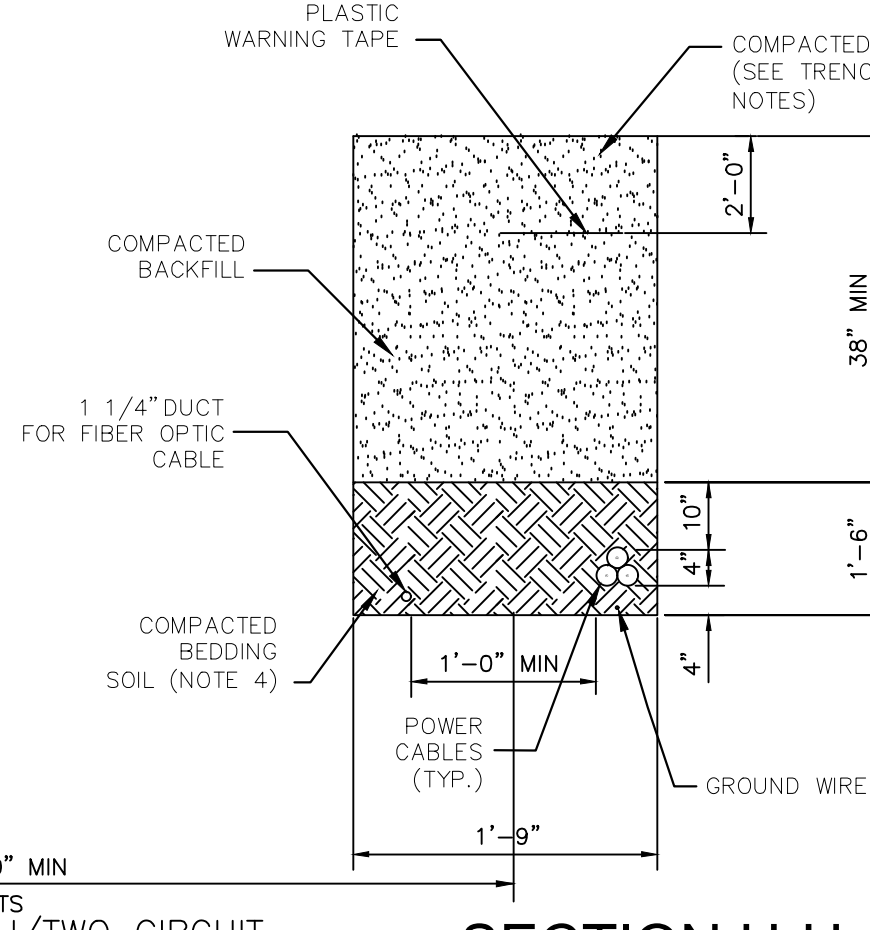
SECTION C-C
SCALE: N.T.S.



SECTION E-E

SECTION B-B

SCALE: N.T.S.

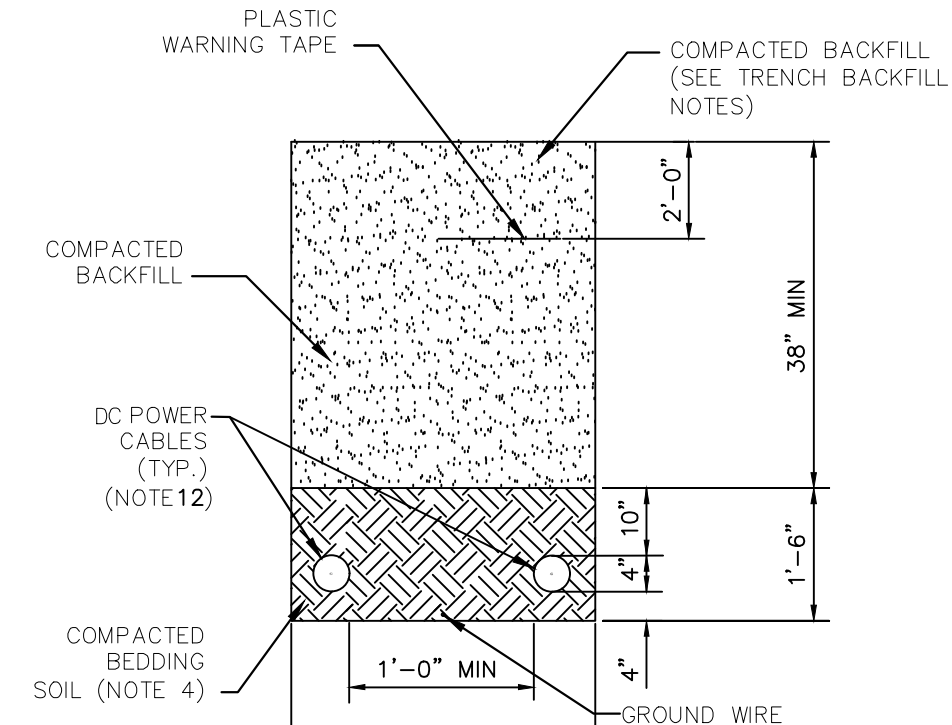


SECTION H-H
SCALE: N.T.S.

SCALE: N.T.S.

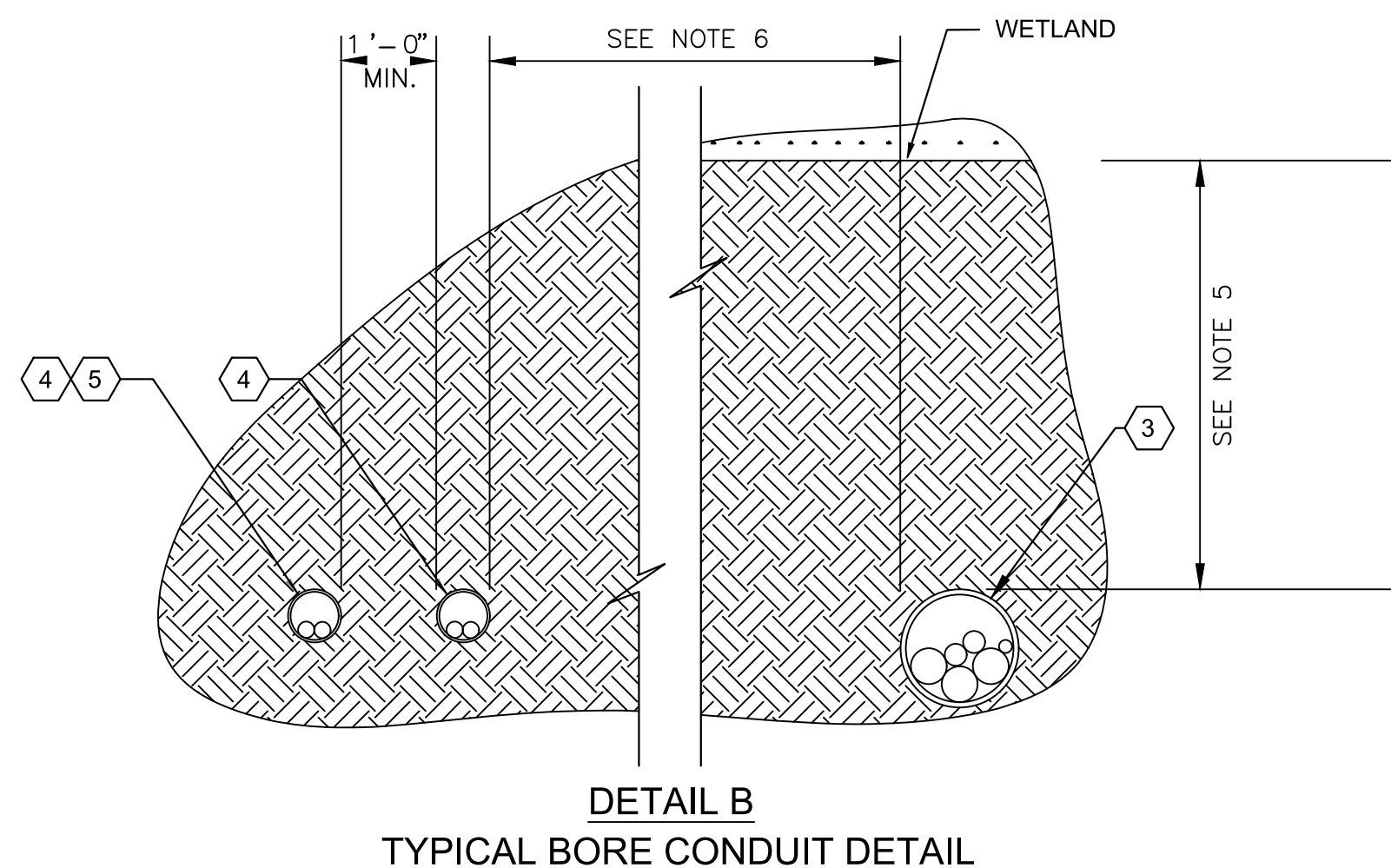
1. BACKFILLING OPERATIONS SHALL NOT BE CONDUCTED UNDER FREEZING TEMPERATURE OR FROZEN SOIL CONDITIONS.
2. THE BEDDING AND PADDING BACKFILL MATERIAL FOR THE TRENCH SHALL BE EXCAVATED SOIL FREE OF ROCKS (NO ROCKS LARGER THAN 3/8" DIAMETER) AND FREE OF WOOD, ROOTS, VEGETABLE MATTER, TOPSOIL OR OTHER DELETERIOUS MATERIAL.
3. TOPSOIL CONSISTS OF ORGANIC SILT AND SILTY SAND IN ACCORDANCE WITH THE UNITES SOIL CLASSIFICATION SYSTEMS (USCS).
4. SUITABLE PROTECTIVE BEDDING AND PADDING SOIL WITH A MINIMUM COVER ON ALL SIDES OF ALL CABLE AND / OR CONDUIT SYSTEMS SHALL BE PROVIDED. CONTRACTOR TO INSTALL GPS BALL MARKER AT EACH BORING PIT, NO DEEPER THAN 5'-0"
5. ALL THE LAYERS SHALL BE SUFFICIENTLY COMPACTED TO ACHIEVE THE NECESSARY THERMAL RESISTIVITY. COMPACTING BY HAND OR ROLL SHALL NOT BE PERMITTED.
6. BACKFILL SHALL BE PLACED IN THREE LIFTS (1 FOOT BOTTOM LIFT, 1 FOOT CENTER LIFT AND 2 FOOT TOP LIFT WITH TOPSOIL HEAPED FOR FINAL COMPLETION.
7. COMPACTED BACKFILL ABOVE CABLE SHALL NOT HAVE ROCKS LARGER THAN 1.5" DIAMETER.
8. ALL BACKFILL SHALL BE 140CM/W (TO BE VERIFIED BY AGENCY MODELING) OR LESS, AT 2% MOISTURE CONTENT SHALL BE USED.
9. ALL BACKFILL SHALL BE COMPACTED TO THE LESSOR OF 93 PERCENT OF THE ASTM D698 DRY-DENSITY VALUE OR THE NATIVE IN-SITU DENSITY.
10. USE 6" BORE-GARD SCHEDULE 40 FOR POWER CABLES 4/0 AWG TO 500 KCMW. USE 8" HDPE SDR 13.5 FOR POWER CABLES 750 MCM TO 1000 KCMW.
11. ALL BACKFILL REQUIRED TO MATCH DENSITY OF EXISTING ADJACENT SOILS, TYP.
12. ADD CONDUITS AS REQUIRED

THE CONTRACTOR/INSTALLER SHALL EXERCISE DUE CAUTION DURING ALL EXCAVATION/FOUNDATION/DEMOLITION WORK.



SECTION I-I
SCALE: N.T.S.

SCALE: N.T.S.



GENERAL NOTES:

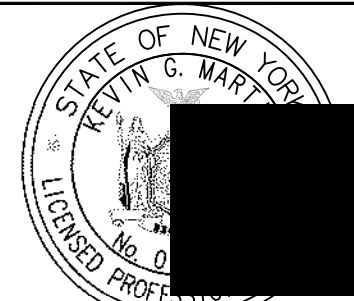
1. CONTACT STATE CALL CENTER (811) FOR MARK-OUT OF ALL EXISTING UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION. MAINTAIN FIELD MARKINGS AS NECESSARY TO AVOID INTERFERENCE WITH EXISTING UNDERGROUND FACILITIES FOR DURATION OF CONSTRUCTION.
2. MAINTAIN 12" MINIMUM CLEAR DISTANCE FROM ALL FOREIGN SYSTEMS, INCLUDING CULVERTS.
3. PROVIDE GPS BALL MARKER. INSTALL NO DEEPER THAN 5'-0" AT EACH BORING PIT.
4. HANDLE AND DISPOSE OF DRILL SLURRY PER PROJECT ENVIRONMENTAL STANDARDS.
5. CONTRACTOR TO DETERMINE WETLAND DEPTH AND LOWEST POINT FOR BORING. BORE DEPTH SHALL BE A MINIMUM OF 10FT BELOW WETLANDS LOWEST POINT. DESIGN BORE IN ACCORDANCE WITH ASCE MANUAL NO. 108. BORING CONTRACTOR SHALL RETAIN FULL RESPONSIBILITY FOR BORE DESIGN AND EXECUTION
6. SOME LOCATIONS WILL REQUIRE BOTH MV COLLECTION BORES WITH ADJACENT DC COLLECTION CIRCUIT BORES. MAINTAIN A MINIMUM 10' SEPARATION DISTANCE FROM MV COLLECTION CIRCUIT HDD AND THE NEAREST DC COLLECTION CIRCUIT HDD.

KEYED NOTES:

- 1 PIT FOR DIRECTIONAL DRILLING, JACKING, RAMMING, OR BORING. RECOMPACT DISTURBED SOILS TO PRE-EXCAVATION DENSITY.
- 2 RECEIVING PIT. RECOMPACT DISTURBED SOILS TO PRE-EXCAVATION DENSITY.
- 3 USE 6" BORE-GUARD SCHEDULE 40 FOR POWER CABLES 4/0 AWG TO 500 MCM. USE 8" HDPE SDR 13.5 FOR POWER CABLES 750 MCM TO 1250 MCM.
- 4 USE MINIMUM 4" BORE-GUARD SCHEDULE 40 FOR DC COLLECTION CIRCUITS UP TO 750 KCMIL. NO MORE THAN 2 CURRENT CARRYING CONDUCTORS PER CONDUIT.
- 5 ADD ADDITIONAL HDD CONDUITS FOR THE REQUIRED NUMBER OF DC COLLECTION CIRCUITS. MAINTAIN A MINIMUM OF 12" SEPARATION BETWEEN DC HDD CONDUITS.



PE STAMP:



Kevin G. Martin E=kgmartin@trccompanies.com,
O=TRC Companies, OU="Supervisors"
Transmission Operations", CN=Kevin G. Martin

KEY PLAN:

REVISIONS:		
NO.	DATE	DESCRIPTION
2	9/29/2021	ISSUED FOR PERMIT

PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

WETLAND CROSSING DETAILS

PROJ	422208
------	--------

DES: A SII VA

DWN: A. SILVA

CHK: A. GROSHEV

APV: K. MARTIN

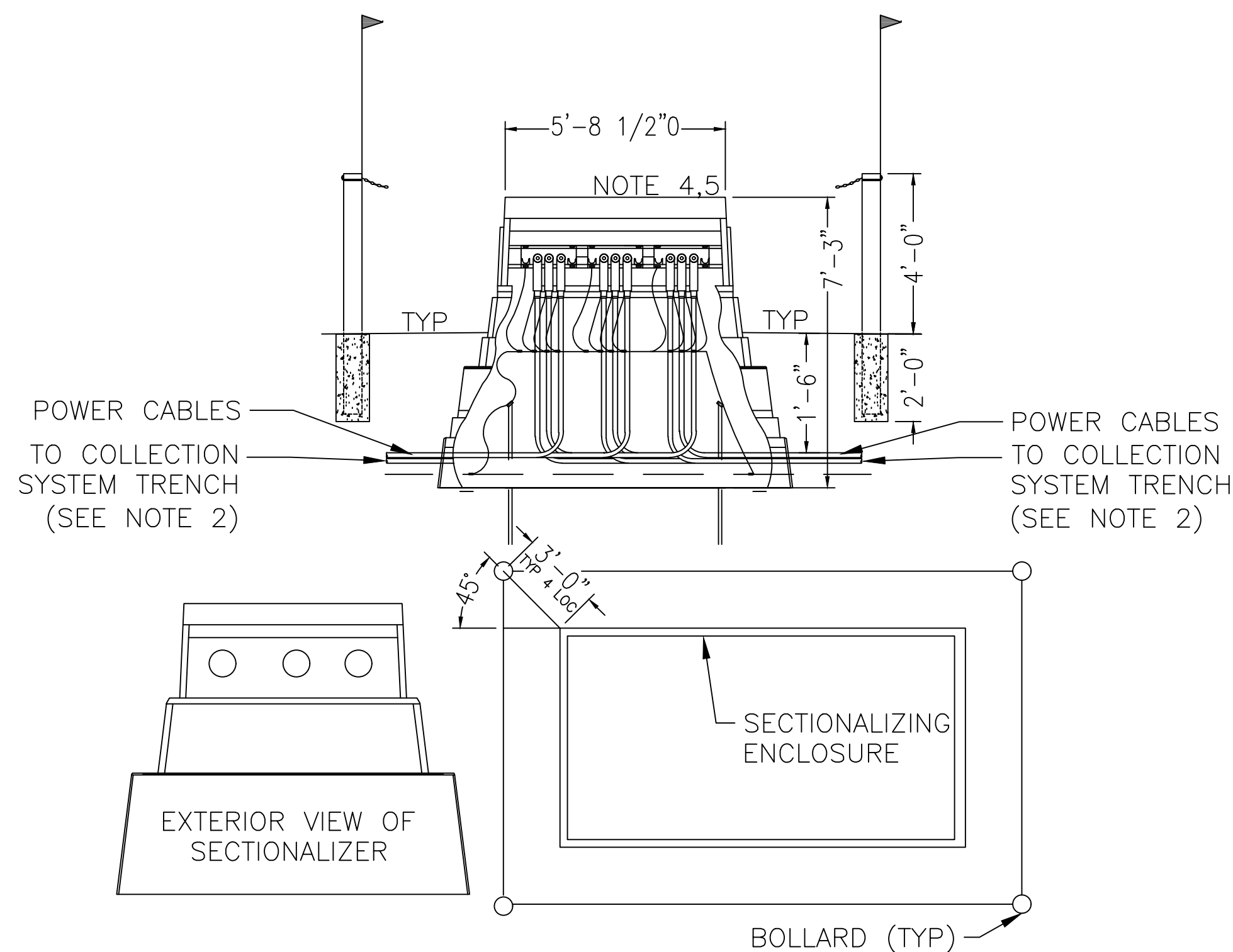
DATE: 9/29/2021

SCALE AT 22" x 34":

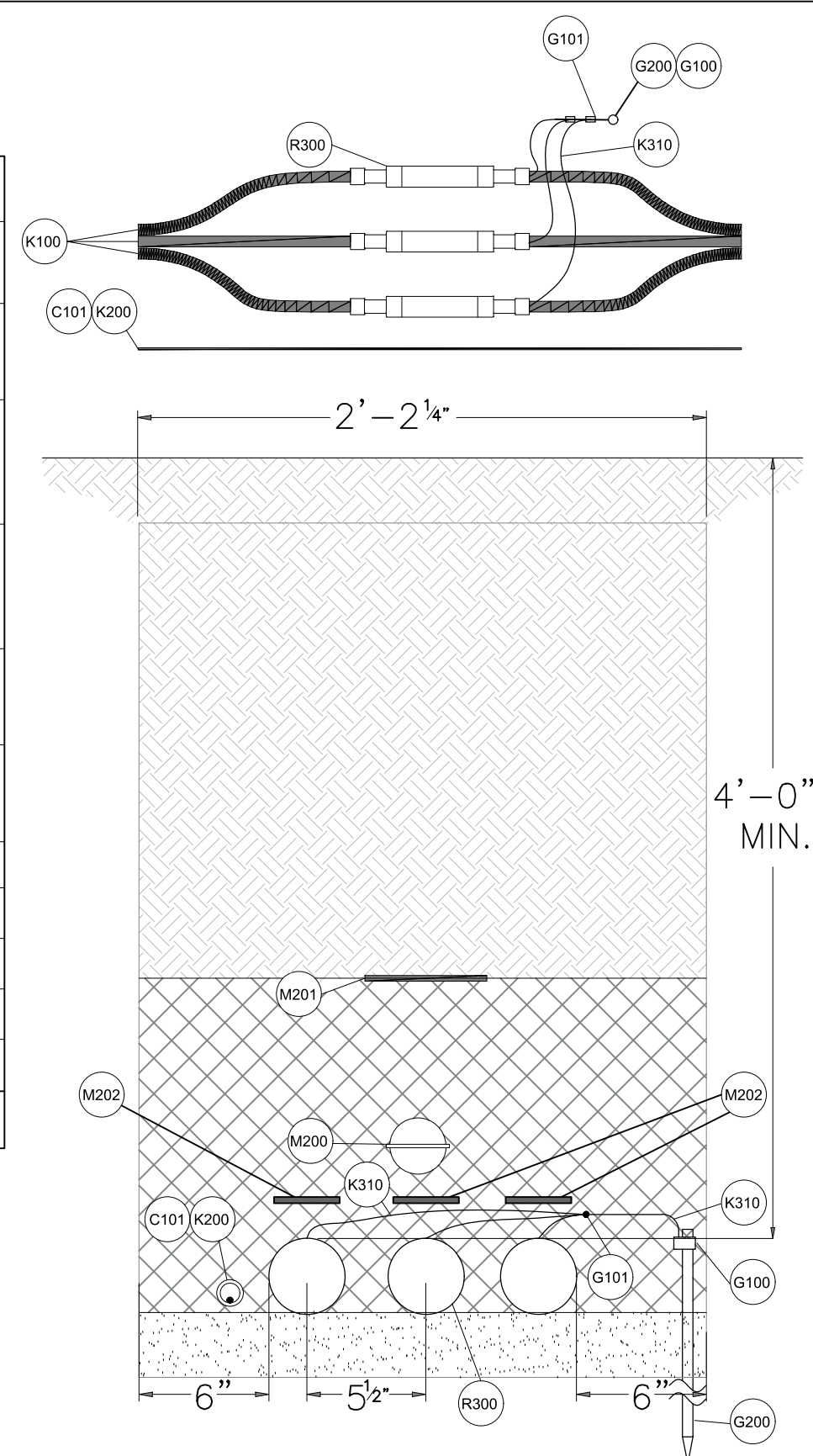
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SHEET NO:
PV-C.12.02

REV:
2

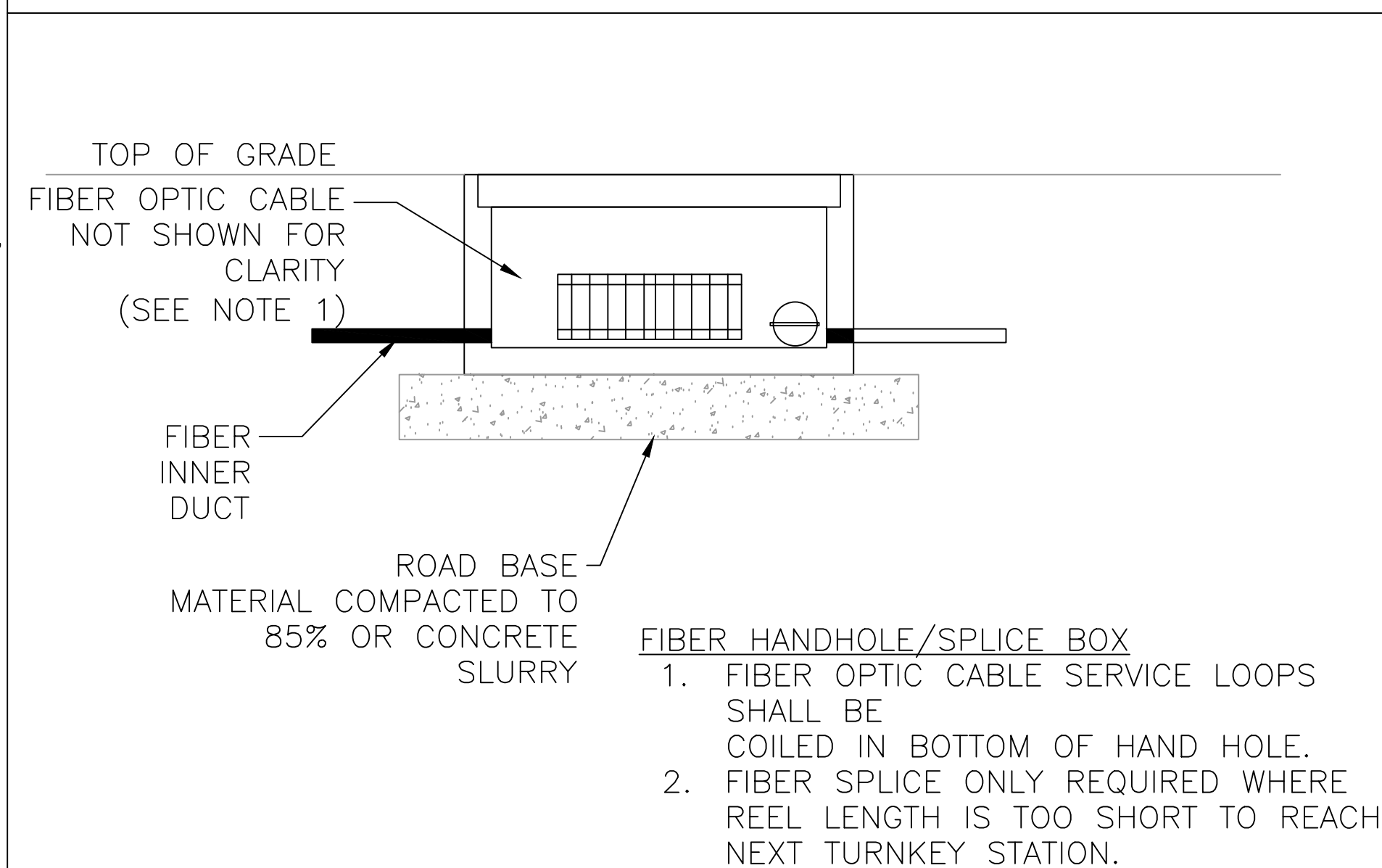
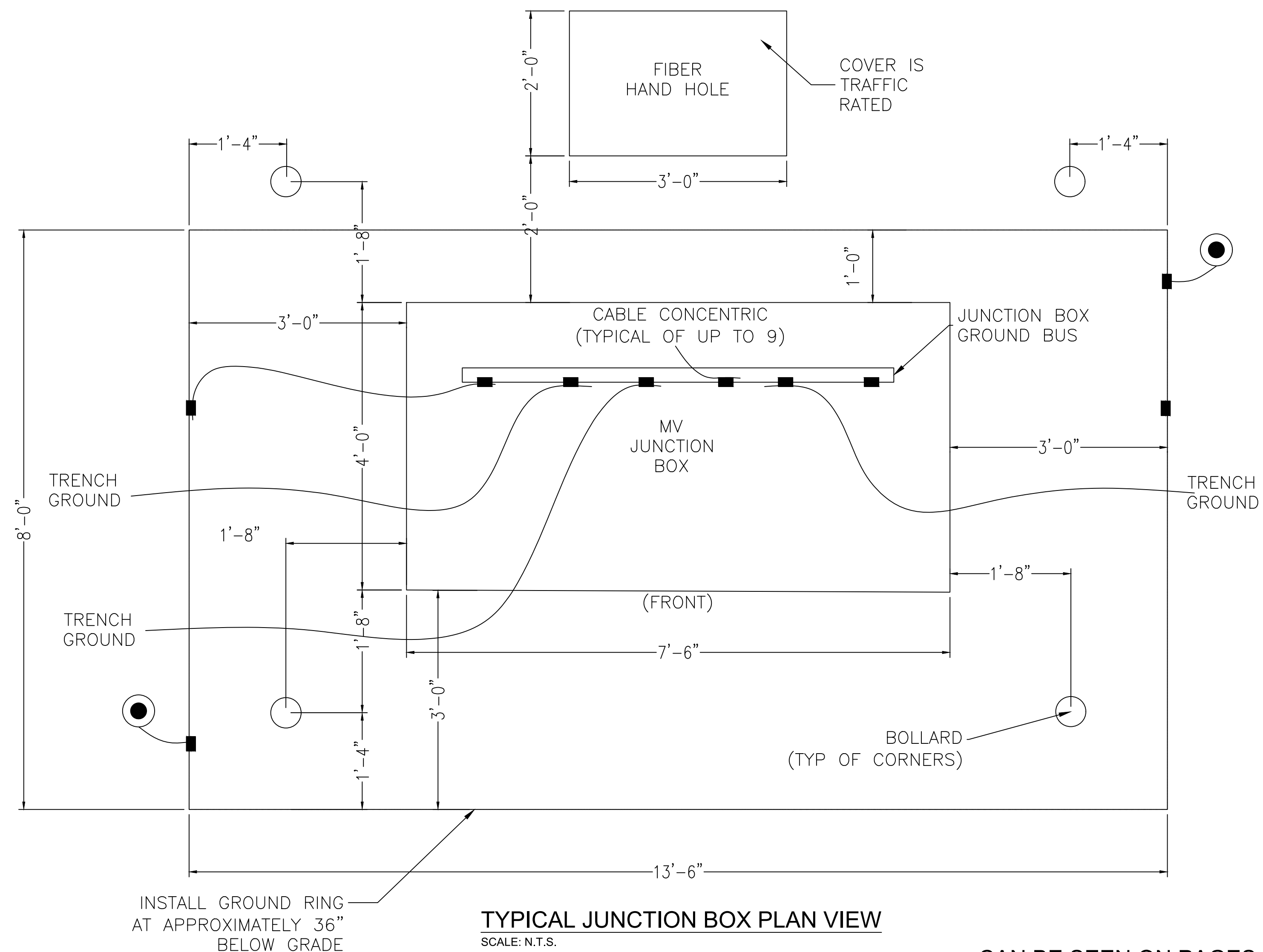


BILL OF MATERIALS		
MARK	QTY	DESCRIPTION
C101	A/R	HDPE INNER DUCT, 1.25" SDR 13.5
G100	1	GROUNDING CONNECTOR, COMPRESSION, #2 Cu TO GROUND ROD
G101	2	GROUNDING CONNECTOR, #2 AWG SOLID TO TRENCH GROUND
G200	1	GROUND ROD, 5/8" x 10' COPPER
K100	A/R	35kV CABLE PER CABLE SCHEDULE
K200	A/R	12F – FIBER OPTIC CABLE
K310	A/R	#2AWG SOLID Cu, BARE
M200	1	MARKER BALL
M201	A/R	WARNING TAPE
M202	3	PHASE MARKINGS
R300	3	SPLICE KIT, 35kV INLINE



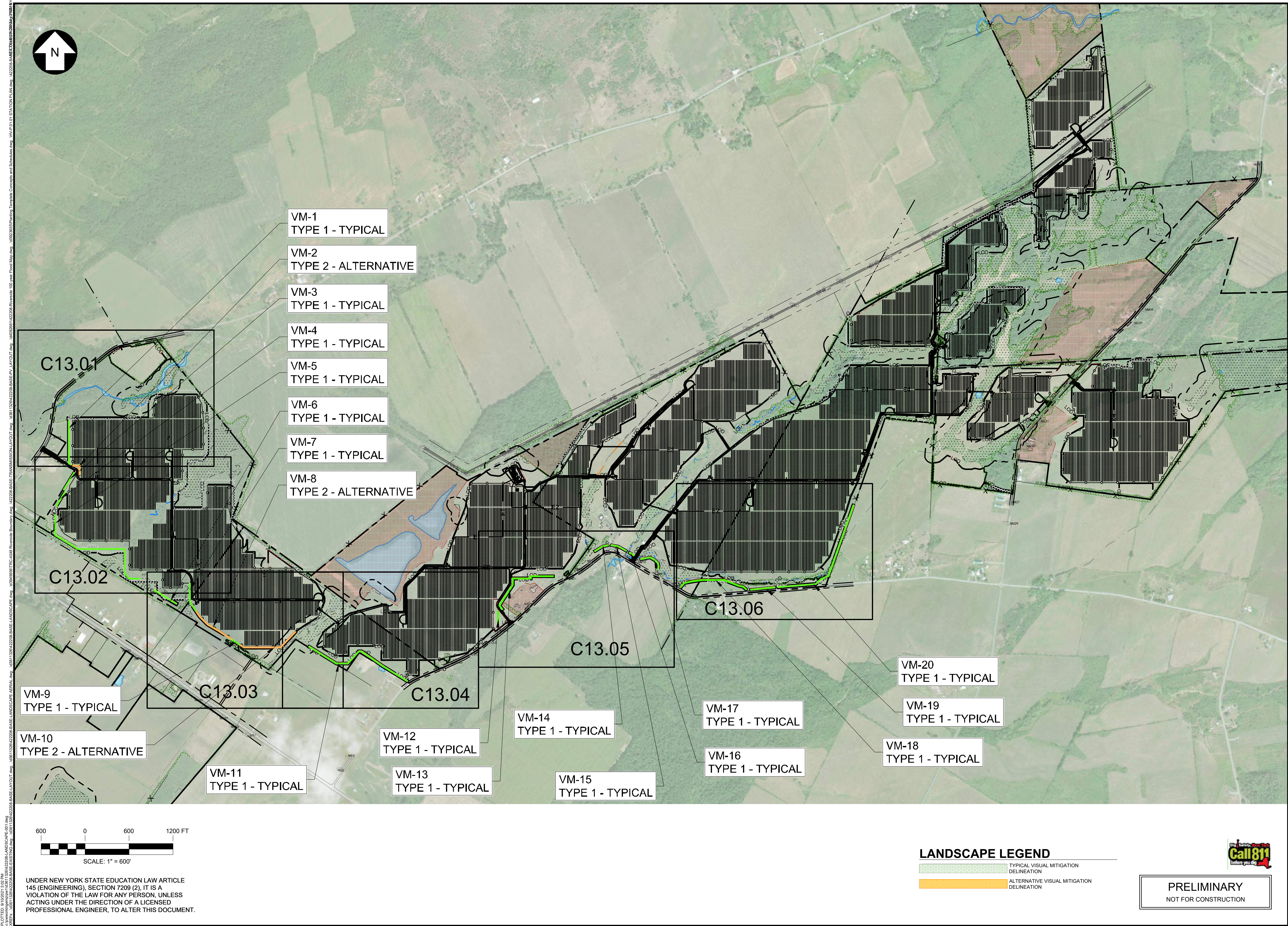
POWER CABLE SPLICE DETAIL

SCALE: N.T.S.



FIBER HANDHOLE/SPLICE BOX
SCALE: N.T.S.

- GENERAL NOTES:
1. INSTALL IR VIEW PORT PER INSTALLATION INSTRUCTIONS FOR FLK-CLKT, IF POSSIBLE DISPLAY TO FACE ROADWAY
 2. INSTALL ONE FULL COIL OF SLACK MV CABLE FOR EACH CIRCUIT, EACH PHASE, 500 KCMIL CABLE SHALL BE COILED INSIDE JUNCTION BOX, 750 KCMIL AND LARGER CABLE SHALL BE COILED OUTSIDE OF JUNCTION BOX, PROVIDE 3M 1422-XR/ID BALL MARKER. INSTALL NO DEEPER THAN 5'-0" AT EACH LOOP. AT THESE LOCATIONS PROVIDE A CONDUIT PAVEWAY/RACK TO HELP PULL IN SLACK CABLE.
 3. ATTACH LABELS TO EACH CONDUCTOR IDENTIFYING PHASING AND CIRCUIT # OF THE CABLES. PROVIDE LABELS AT ENTRY AND EXIT.
 4. CABLE TERMINATIONS NEAREST TO SUBSTATION SHALL HAVE SINGLE WRAP PHASING TAPE, SIDE AWAY FROM SUBSTATION SHALL HAVE DOUBLE WRAP PHASING TAPE.
 5. THE FOLLOWING TAPE SHALL BE USED FOR PHASE INDICATION: RED TAPE FOR PHASE A, WHITE TAPE FOR PHASE B, AND BLUE FOR PHASE C.
 6. FINISHED GRADE SHALL BE 2" ABOVE WHERE JUNCTION BOX SECTIONALIZER ATTACH.



2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679 - 3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

OVERALL LANDSCAPE
PLAN

PROJ
NUM: 422208

DES: M. ROSS

DWN: T. FIEBRANZ

CHK: M. ROSS

APV: -

DATE: 04/15/2021

SCALE AT 24" x 36":

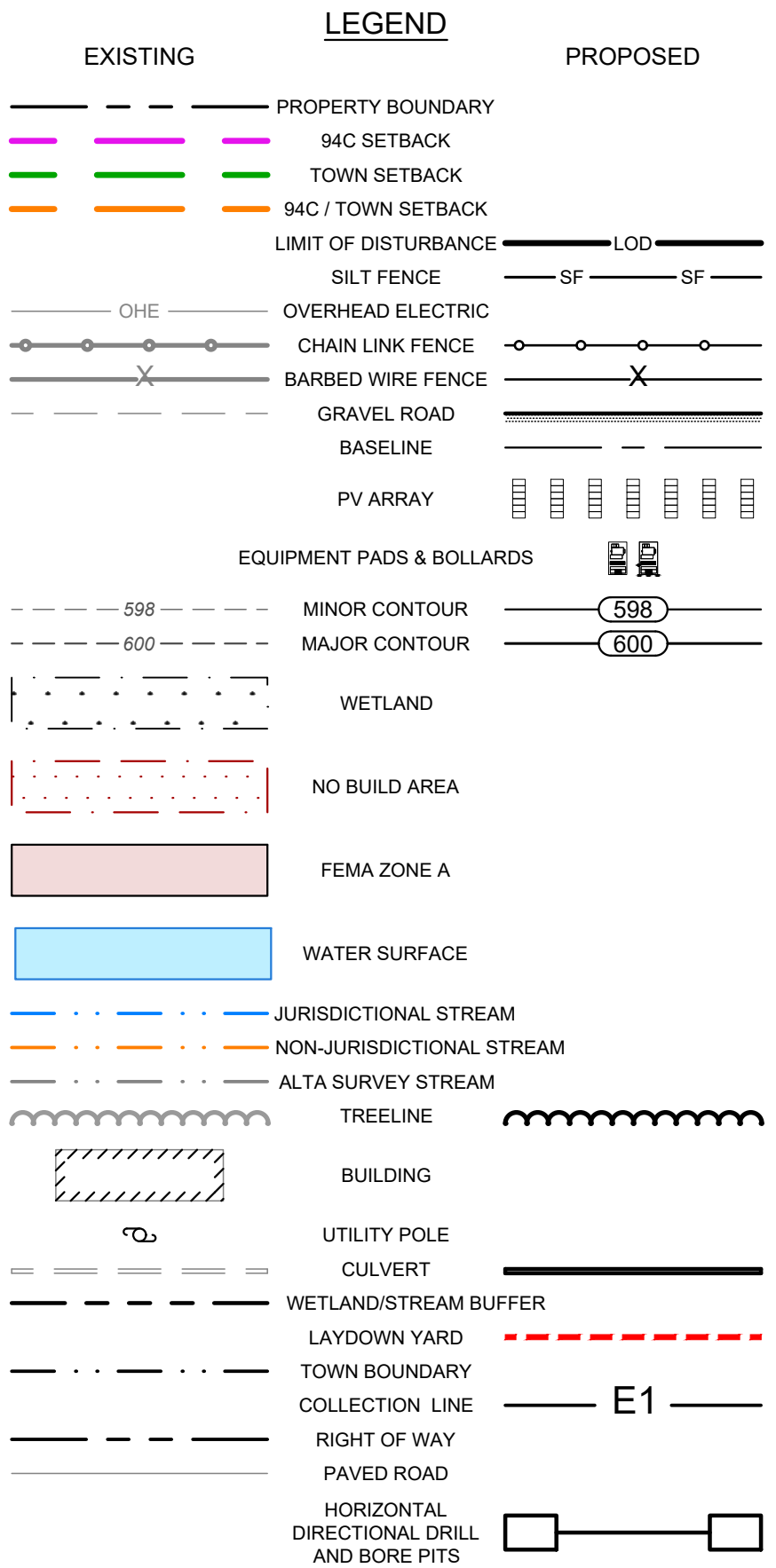
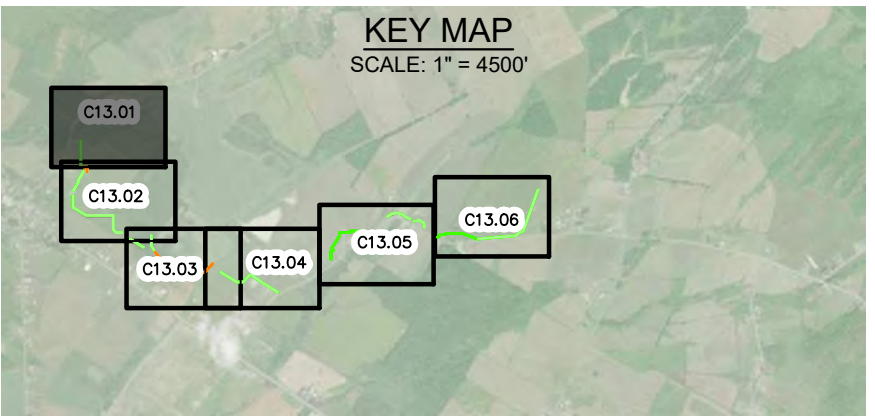
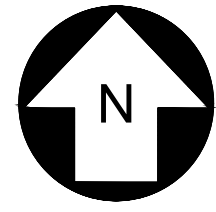
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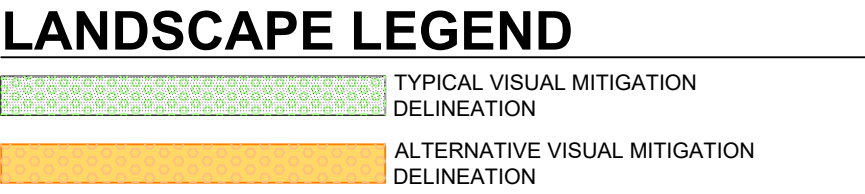
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REV:

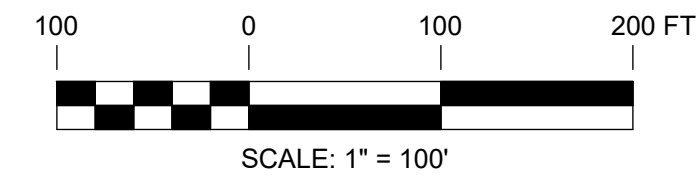
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VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUTDE
7	VM-1	N 44.067850	W 76.119674
8	VM-1	N 44.066255	W 76.119687
94	VM-1	N 44.066206	W 76.119578



PRELIMINARY
NOT FOR CONSTRUCTION



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FOR CONTINUATION, SEE SHEET PV-C.12.02

PE STAMP:



KEY PLAN:

REVISIONS:

[illegible]

PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ENLARGED LANDSCAPE PLAN

PROJ	422208
NUM:	

DES: M. ROSS

DOWN: T. FIEBRANZ

CHK: M ROSS

APV:

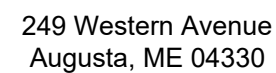
DATE: 04/15/2021

SCALE AT 24" x 36":

 $1'' = 100'$

SHEET NO:
PV-C.13.01

2

[illegible]

RIVERSIDE SOLAR
PROJECT

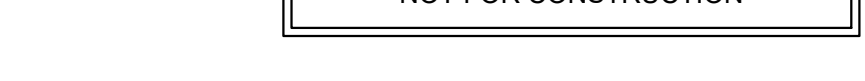
TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

ENLARGED LANDSCAPE
PLAN

CORRELATION COEFFICIENT:

1"=100'

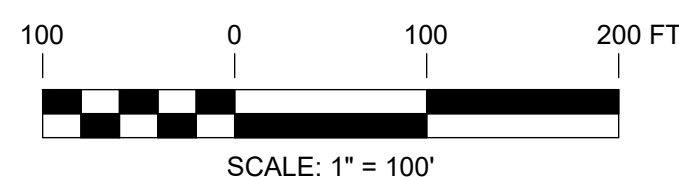
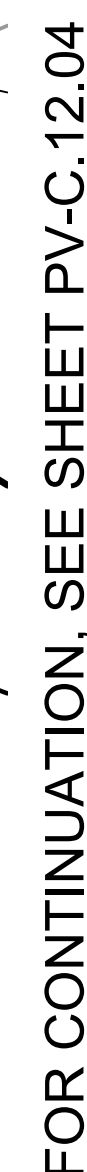
REV



PRELIMINARY
NOT FOR CONSTRUCTION

VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUTDE
19	VM-8	N 44.080679	W 76.113116
20	VM-8	N 44.060482	W 76.112938
21	VM-8	N 44.059623	W 76.11280
95	VM-8	N 44.060192	W 76.112533

VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUDE
24	VM-10	N 44.059427	W 76.110867
25	VM-10	N 44.059316	W 76.110635
26	VM-10	N 44.059309	W 76.108755
27	VM-10	N 44.059904	W 76.107952



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PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

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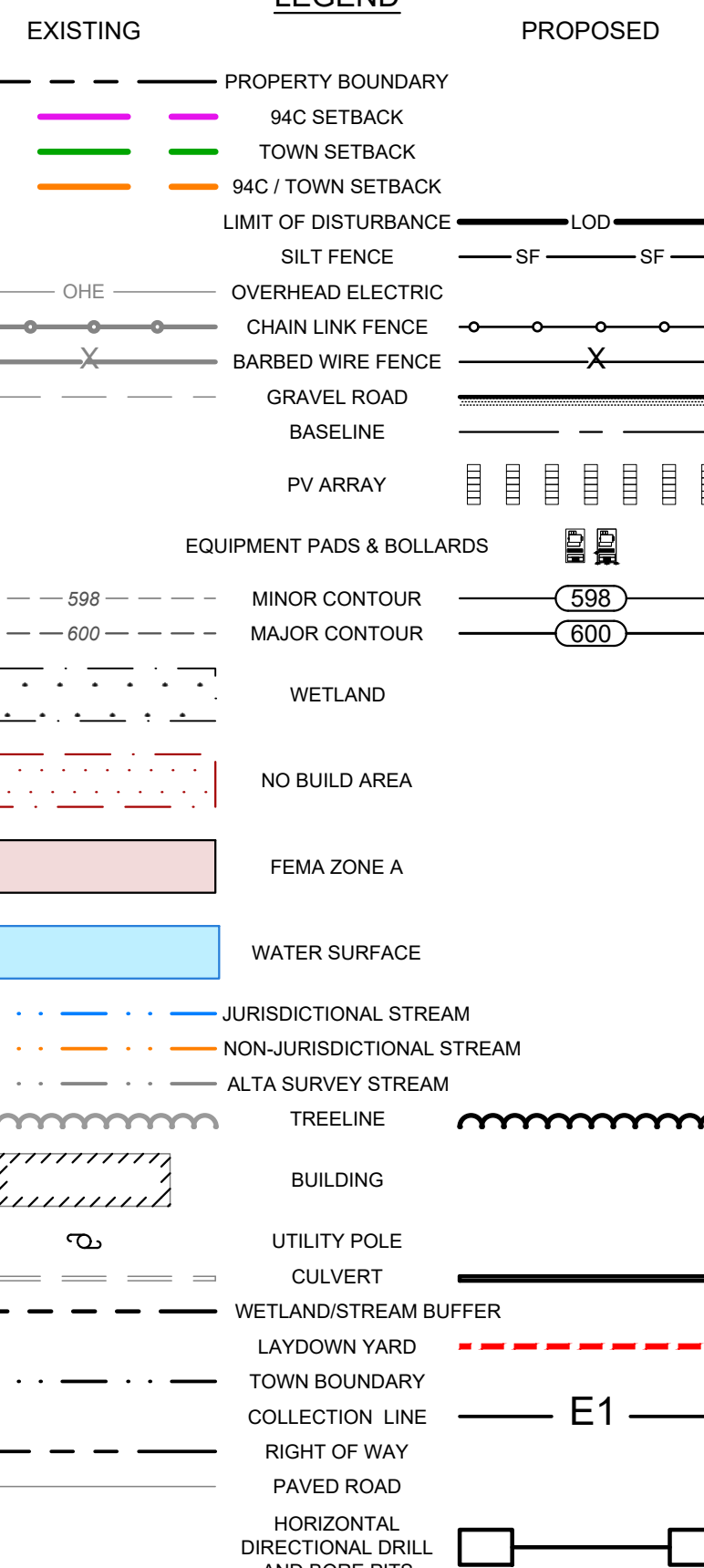
RIVERSIDE SOLAR
PROJECT

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

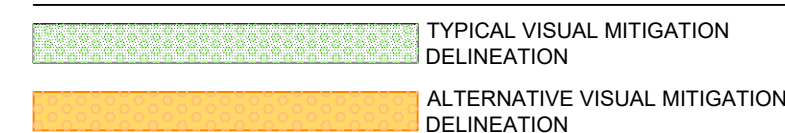
ENLARGED LANDSCAPE
PLAN

1"=100'

REV:



LANDSCAPE LEGEND

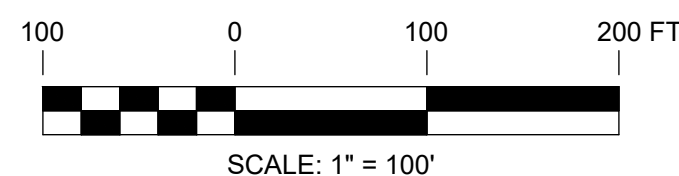


PRELIMINARY
NOT FOR CONSTRUCTION



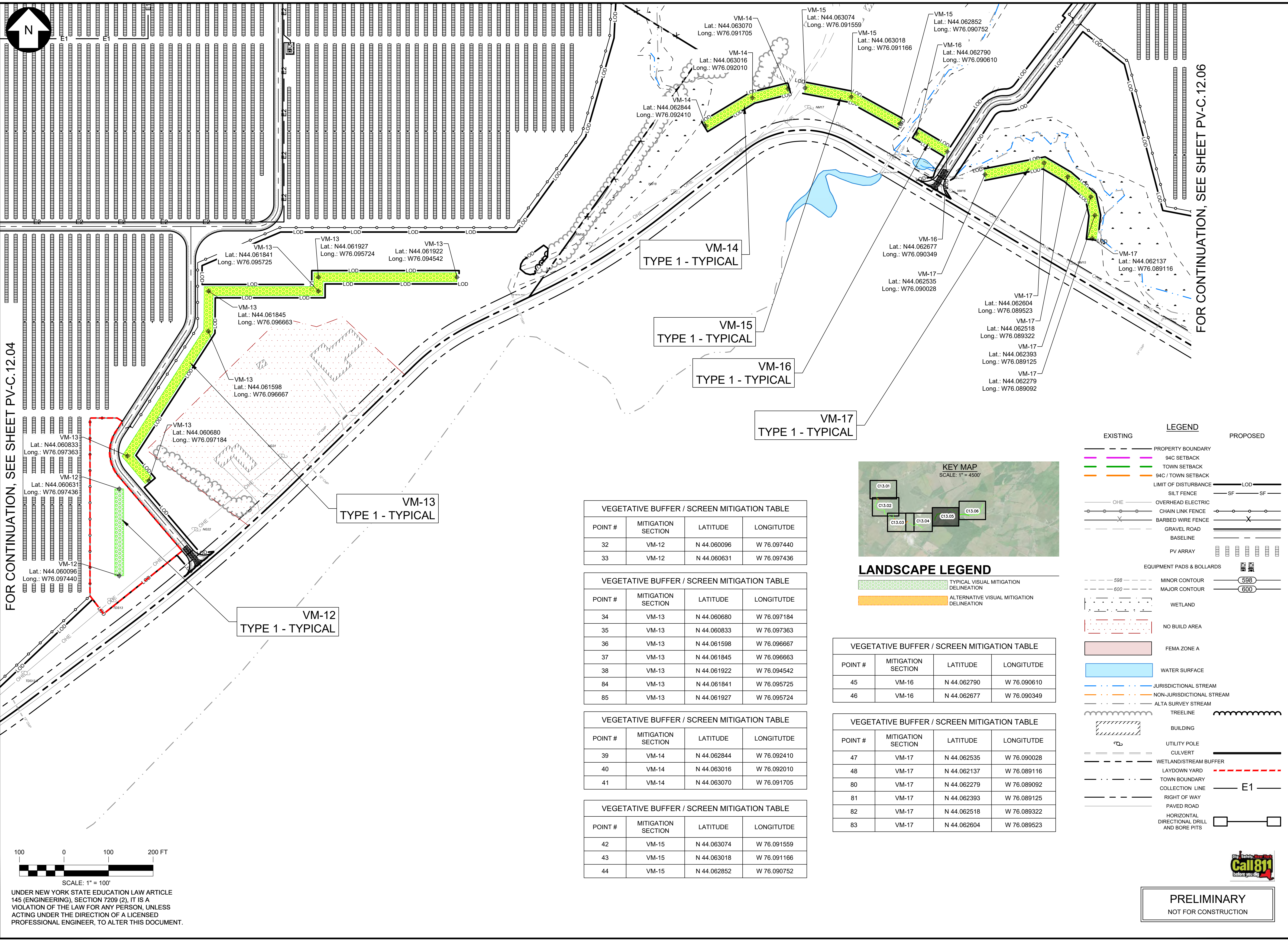
FOR CONTINUATION, SEE SHEET PV-C.12.05

FOR CONTINUATION, SEE SHEET PV-C.12.03



UNDER NEW YORK STATE EDUCATION LAW ARTICLE
145 (ENGINEERING), SECTION 7209 (2), IT IS A
VIOLATION OF THE LAW FOR ANY PERSON, UNLESS
ACTING UNDER THE DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PROJECT: 422208, TOWNS OF LYME & BROWNVILLE, JEFFERSON CO., NY
DATE: 04/15/2021, SCALE: 1"=100'
DESIGNER: M. ROSS
CHECKED: T. FIEBRANZ
APPROVED: M. ROSS
DATE: 04/15/2021, SCALE: 1"=100'
SHEET NO.: PV-C.13.05, REV: 2



FOR CONTINUATION, SEE SHEET PV-C.12.06

FOR CONTINUATION, SEE SHEET PV-C.12.04

VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUTDE
32	VM-12	N 44.060096	W 76.097440
33	VM-12	N 44.060631	W 76.097436

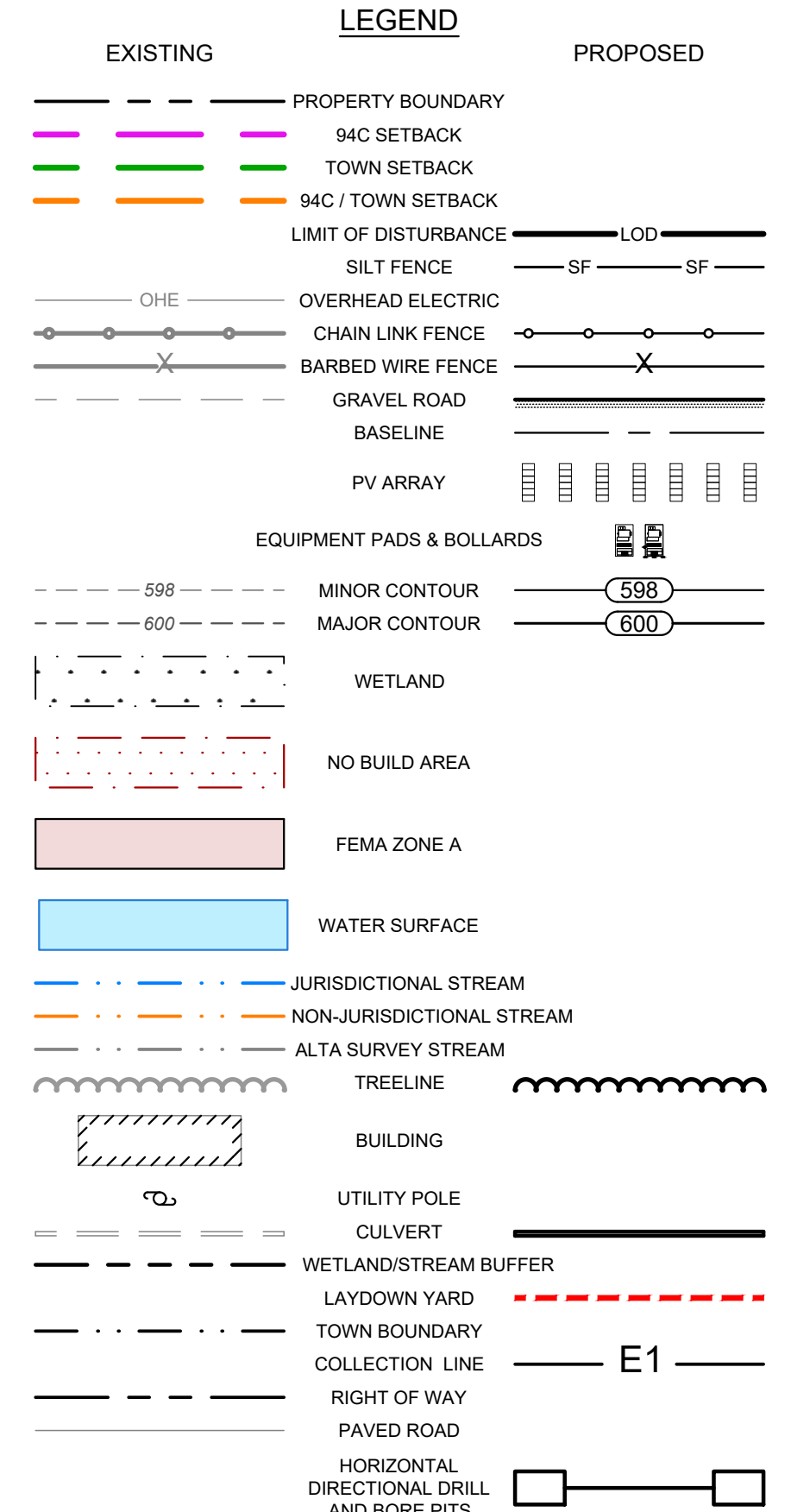
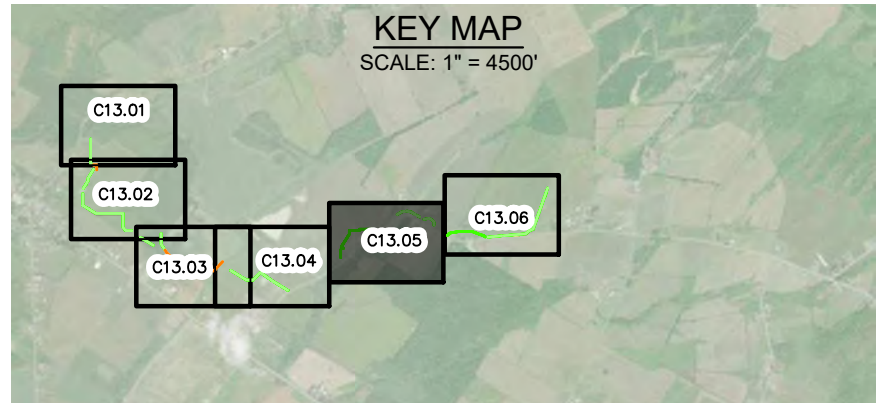
VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUTDE
34	VM-13	N 44.060680	W 76.097184
35	VM-13	N 44.060833	W 76.097363
36	VM-13	N 44.061598	W 76.096667
37	VM-13	N 44.061845	W 76.096663
38	VM-13	N 44.061922	W 76.094542
84	VM-13	N 44.061841	W 76.095725
85	VM-13	N 44.061927	W 76.095724

VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUTDE
39	VM-14	N 44.062844	W 76.092410
40	VM-14	N 44.063016	W 76.092010
41	VM-14	N 44.063070	W 76.091705

VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUTDE
42	VM-15	N 44.063074	W 76.091559
43	VM-15	N 44.063018	W 76.091166
44	VM-15	N 44.062852	W 76.090752

VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUTDE
45	VM-16	N 44.062790	W 76.090610
46	VM-16	N 44.062677	W 76.090349

VEGETATIVE BUFFER / SCREEN MITIGATION TABLE			
POINT #	MITIGATION SECTION	LATITUDE	LONGITUTDE
47	VM-17	N 44.062535	W 76.090028
48	VM-17	N 44.062137	W 76.089116
80	VM-17	N 44.062279	W 76.089092
81	VM-17	N 44.062393	W 76.089125
82	VM-17	N 44.062518	W 76.089322
83	VM-17	N 44.062604	W 76.089523



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PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ENLARGED LANDSCAPE
PLAN

PROJ NUM:	422208
DES:	M. ROSS
DWN:	T. FIEBRANZ
CHK:	M. ROSS
APV:	-
DATE:	04/15/2021
SCALE AT 24" x 36":	

1"=100'

SHEET NO:	PV-C.13.05	REV:	2
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PE STAMP:



9/10/202

KEY PLAN:

[illegible]

PROJECT TITLE:	
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RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ENLARGED LANDSCAPE
PLAN

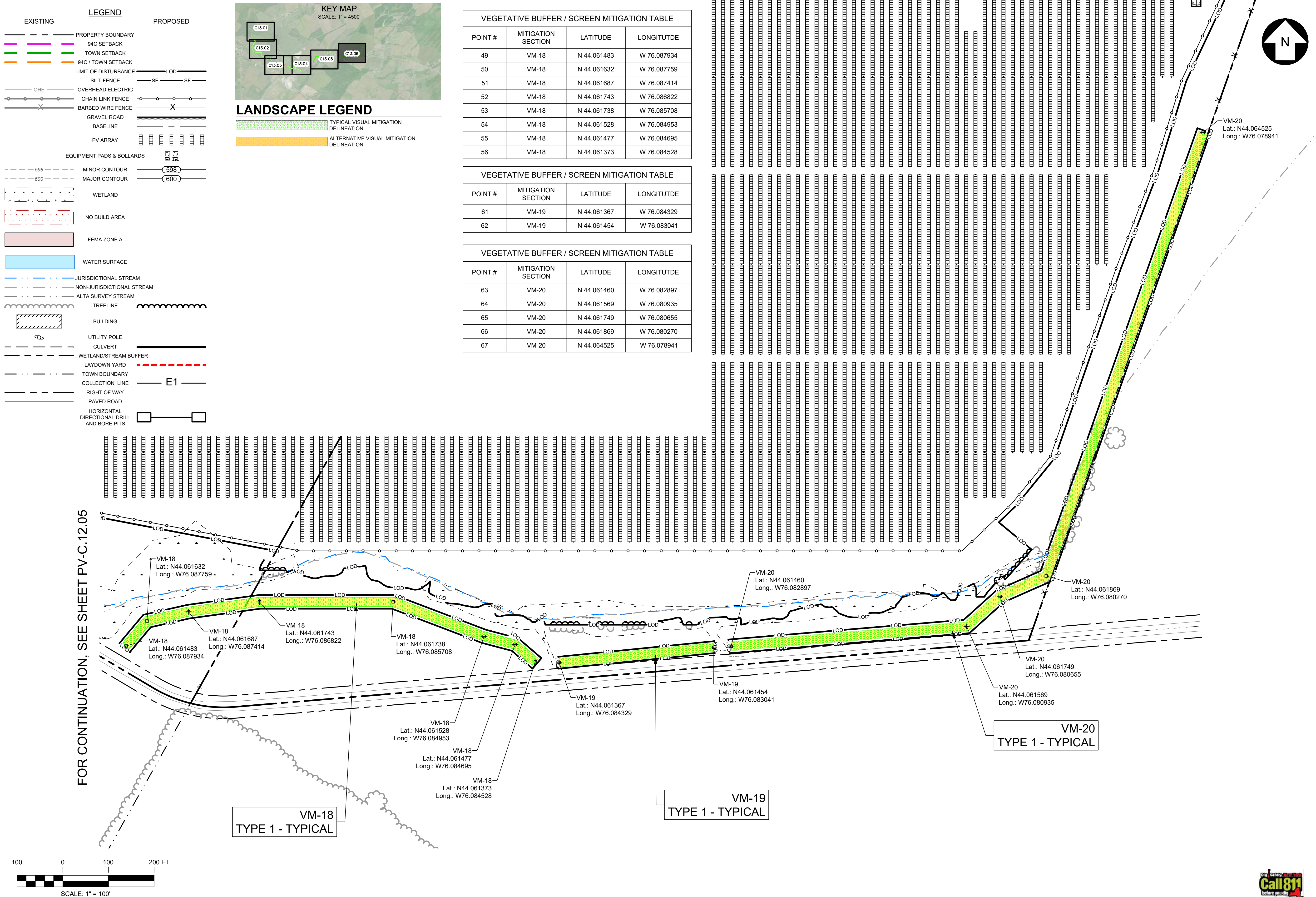
PROJ NUM:	422208
DES:	M. ROSS
DWN:	T. FIEBRANZ
CHK:	M. ROSS
APV:	-
DATE:	04/15/2021

SCALE AT 24" x 36":

$$1'' = 100'$$

SHEET NO:
PV-C.13.06

REV: 2



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AES-THM006-2204-021010

GENERAL LANDSCAPE AND SEEDING NOTES

1. THE LANDSCAPE PLAN AND DETAILS ARE FOR LANDSCAPING INFORMATION ONLY. PLEASE REFER TO THE SITE LAYOUT PLAN, GRADING PLAN AND/OR UTILITIES PLAN FOR ALL OTHER INFORMATION.
2. THE CONTRACTOR SHALL MONITOR AND GUARANTEE THAT ALL PLANTS, TREES, AND SHRUBS SHALL BE HEALTHY AND FREE OF DISEASE FOR TWO (2) YEARS AFTER SUBSTANTIAL COMPLETION AND ACCEPTANCE OF THE PROJECT BY THE OWNER. THE CONTRACTOR WILL BE QUALIFIED PER STATED REGULATIONS 900-6.4(i)(3) THE PERMITEE WILL RETAIN A QUALIFIED ARCHITECT, ARBORIST, OR ECOLOGIST TO INSPECT SCREEN PLANTINGS FOR TWO YEARS, CONTRACTOR SHALL REPLACE ANY DEAD OR UNHEALTHY PLANTS AT CONTRACTOR'S EXPENSE. FINAL ACCEPTANCE SHALL BE MADE IF ALL PLANTS MEET THE GUARANTEE REQUIREMENTS INCLUDING MAINTENANCE, MAINTENANCE RESPONSIBILITIES INCLUDE INVASIVE SPECIES MONITORING, REMOVAL, AND SUPPLEMENTATION. MONITORING OF THE PROJECT SITE SHALL OCCUR IN THE SPRING AND THE FALL TO DETERMINE THE PRESENCE OF INVASIVE SPECIES. SHOULD ANY INVASIVE SPECIES BE IDENTIFIED WITHIN THE PROJECT SITE, THE INVASIVE SPECIES SHALL BE REMOVED ACCORDING TO METHODS MOST LIKELY TO BE EFFECTIVE IN CONTROLLING THAT SPECIES AND SUPPLEMENTING ITS REPLACEMENT WITH APPROPRIATE VEGETATION AND SEED MIX IDENTIFIED (AND APPROVED) ON THIS PLAN AND/OR AN APPROVED EQUAL. ADDITIONAL MAINTENANCE RESPONSIBILITIES INCLUDE: APPROVED CULTIVATING, SPRAYING, WEEDING, WATERING, TIGHTENING OF TREE STRAP GUYS, PRUNING, FERTILIZING, MULCHING, AND ANY OTHER OPERATIONS NECESSARY TO MAINTAIN PLANT VIABILITY. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING, DURING THE CONTRACTOR'S GUARANTEE AND MONITORING TIME PERIOD, AND SHALL CONTINUE FOR THE DURATION OF SOLAR ARRAY USE BY THE OWNER/OPERATOR AFTER FINAL ACCEPTANCE. WATERING OF THE LANDSCAPE BUFFER AREAS SHALL BE IMPLEMENTED BY THE USE OF A WATERING TRUCK.
3. THE CONTRACTOR SHALL SUPPLY ALL LABOR, PLANTS, APPROVED SEEDING MIX, AND MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWING(S) AND LISTED IN THE PLANT SCHEDULE(S) AND/OR SEEDING TABLE(S). IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT SCHEDULE AND/OR SEEDING TABLE AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER QUANTITY SHALL APPLY. ALL PLANTS SHALL BE ACCLIMATED BY THE SUPPLY NURSERY TO THE LOCAL HARDINESS ZONE AND BE CERTIFIED THAT THE PLANTING MATERIAL HAS BEEN GROWN FOR A MINIMUM OF (2) TWO YEARS AT THE SOURCE AND OBTAINED WITHIN 200 MILES OF PROJECT SITE UNLESS OTHERWISE APPROVED BY OWNER, CERTIFIED LANDSCAPE INSPECTOR, LANDSCAPE ARCHITECT, OR LANDSCAPE CONTRACTOR.
4. THE LOCATIONS FOR PLANT MATERIAL ARE APPROXIMATE AND ARE SUBJECT TO FIELD ADJUSTMENT DUE TO SLOPE, VEGETATION, AND SITE FACTORS SUCH AS THE LOCATION OF ROCK OUTCROPS. PRIOR TO PLANTING THE CONTRACTOR SHALL ACCURATELY STAKE OUT THE LOCATIONS FOR ALL PLANTS. THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, LANDSCAPE ARCHITECT, OR LANDSCAPE CONTRACTOR SHALL APPROVE THE FIELD LOCATIONS OR ADJUSTMENTS OF THE PLANT MATERIAL.
5. ALL SHRUB MASSING SHALL BE MULCHED TO A DEPTH OF 2" AND SHREDDED HARDWOOD BARK MULCH SHALL BE USED FOR SHRUB MASSING AREAS IMMEDIATELY AFTER INSTALLATION OF THE PLANT MATERIAL HAS OCCURRED. THE CONTRACTOR'S OBLIGATION TO MULCH ANY/ALL PROPOSED PLANT MATERIAL IS SOLELY AT THE TIME OF PLANTING ONLY PER THE TREE AND SHRUB PLANTING DETAILS.
6. NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE OWNER, CERTIFIED LANDSCAPE ARCHITECT, LANDSCAPE INSPECTOR, CONTRACTOR, OR LANDSCAPE CONTRACTOR. STAKING THE LOCATION OF ALL TREES AND SHRUBS SHALL BE COMPLETED PRIOR TO PLANTING FOR APPROVAL BY THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, LANDSCAPE ARCHITECT, OR LANDSCAPE CONTRACTOR. STAKING OF THE INSTALLED TREE MUST BE COMPLETED THE SAME DAY AS IT IS INSTALLED. ALL TREES SHALL BE STAKED OR GUYED AS PER THE DETAIL. SEE LANDSCAPING PLAN(S) FOR PLANTING DETAILS.
7. COORDINATE PLANT MATERIAL LOCATIONS WITH SITE UTILITIES. SEE SITE LAYOUT, GRADING AND/OR UTILITY PLANS FOR STORM, SANITARY, GAS, ELECTRIC, TELEPHONE AND WATER LINES. UTILITY LOCATIONS ARE APPROXIMATE. EXERCISE CARE WHEN DIGGING IN AREAS OF POTENTIAL CONFLICT WITH UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONTRACTOR'S NEGLIGENCE AND SHALL REPLACE OR REPAIR ANY DAMAGE AT CONTRACTOR'S EXPENSE.
8. LANDSCAPE PLANTING PITS MUST BE FREE DRAINING. PAVEMENT, COMPACTED SUBGRADE, AND BLASTED ROCK SHALL BE REMOVED TO A DEPTH OF 2' OR TO A GREATER DEPTH IF REQUIRED BY PLANTING DETAILS OR SPECIFICATIONS. REPLACE SOIL WITH MODERATELY COMPACTED CLEAN FILL (AS DEFINED IN THE 94-C REGULATIONS) FREE FROM STONES AND RUBBISH 1" OR GREATER IN DIAMETER AND ANY OTHER MATERIAL. HARMFUL TO PLANT GROWTH AND DEVELOPMENT. PLANTING INSTALLATION SHALL BE AS DETAILED AND CONTAIN PLANTING MIX AS SPECIFIED UNLESS RECOMMENDED OTHERWISE BY SOIL ANALYSIS.

PLANTING SOIL MIXTURE:
2 PARTS PEAT MOSS
5 PARTS TOPSOIL
MYCORRHIZA INOCULANT - "TRANSPLANT 1-STEP" AS MANUFACTURED BY ROOTS, INC. OR APPROVED EQUAL. USE PER MANUFACTURER'S RECOMMENDATIONS FOR TREES AND SHRUBS. FERTILIZER/LIME APPLY AS RECOMMENDED BY SOIL ANALYSIS

- TREES, AND SHRUBS: TREES AND SHRUBS SHALL BE NURSERY GROWN UNLESS OTHERWISE NOTED AND HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCATION OF THE PROJECT. THEY SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY, WITH NORMAL HABIT OF GROWTH. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY AND WELL-DEVELOPED ROOT SYSTEMS. ALL TREES SHALL HAVE STRAIGHT SINGLE TRUNKS WITH THEIR MAIN LEADER INTACT UNLESS OTHERWISE STATED. THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, LANDSCAPE ARCHITECT, OR LANDSCAPE CONTRACTOR SHALL ONLY PERMIT SUBSTITUTIONS UPON WRITTEN APPROVAL. THEIR SIZES SHALL CONFORM TO THE MEASUREMENT SPECIFIED ON THE DRAWINGS. PLANTS LARGER THAN SPECIFIED ON THE DRAWINGS MAY BE USED IF APPROVED. THE USE OF SUCH PLANTS SHALL NOT INCREASE THE CONTRACT PRICE. ALL TREES AND SHRUBS SHALL BE MULCHED IN ACCORDANCE WITH THE RESPECTIVE PLANTING DETAIL(S) PROVIDED IN THE LANDSCAPING PLAN.

- ALL PRUNING SHALL CONFORM TO THE TREE CARE INDUSTRY ASSOCIATION (TCIA) ANSI A300 (PART 1) - 2017 PRUNING STANDARDS. PRUNING STANDARDS SHALL RECOGNIZE BUT, ARE NOT LIMITED TO, THE FOLLOWING PRUNING OBJECTIVES: MANAGE RISK, MANAGE HEALTH, DEVELOP STRUCTURE, PROVIDE CLEARANCE, MANAGE SIZE OR SHAPE, IMPROVE AESTHETICS, MANAGE PRODUCTION OF FRUIT, FLOWERS, OR OTHER PRODUCTS, AND/OR MANAGE WILDLIFE HABITAT. DEVELOPING STRUCTURE SHALL IMPROVE BRANCH AND TRUNK ARCHITECTURE, PROMOTE OR SUBORDINATE CERTAIN LEADERS, STEMS, OR BRANCHES; PROMOTE DESIRABLE BRANCH SPACING; PROMOTE OR DISCOURAGE GROWTH IN A PARTICULAR DIRECTION (DIRECTIONAL PRUNING); MINIMIZE FUTURE INTERFERENCE WITH TRAFFIC, LINES OF SIGHT, INFRASTRUCTURE, OR OTHER PLANTS; RESTORE PLANTS FOLLOWING DAMAGE; AND/OR REJUVENATE SHRUBS. PROVIDING CLEARANCE SHALL ENSURE SAFE AND RELIABLE UTILITY SERVICES; MINIMIZE CURRENT INTERFERENCE WITH TRAFFIC, LINES OF SITE, INFRASTRUCTURE, OR OTHER PLANTS; RAISE CROWN(S) FOR MOVEMENT OF TRAFFIC OR LIGHT PENETRATION; ENSURE LINES OF SIGHT OR DESIRED VIEWS; PROVIDE ACCESS TO SITES, BUILDINGS, OR OTHER STRUCTURES; AND/OR COMPLY WITH REGULATIONS.

- TOPSOIL SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES. CONTRACTOR SHALL SUBMIT TOPSOIL TO A CERTIFIED TESTING LABORATORY TO DETERMINE PH, FERTILITY, ORGANIC CONTENT AND MECHANICAL COMPOSITION. THE CONTRACTOR SHALL SUBMIT THE TEST RESULTS FROM REGIONAL EXTENSION OFFICE OF USDA TO THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, LANDSCAPE ARCHITECT, OR LANDSCAPE CONTRACTOR FOR REVIEW AND APPROVAL. CONTRACTOR SHALL INCORPORATE AMENDMENTS FOR GOOD PLANT GROWTH AND PROPER SOIL ACIDITY RECOMMENDED FROM THE TOPSOIL TEST.

- NO PHOSPHOROUS SHALL BE USED AT PLANTING TIME UNLESS SOIL TESTING HAS BEEN COMPLETED AND TESTED BY A HORTICULTURAL TESTING LAB AND SOIL TESTS SPECIFICALLY INDICATE A PHOSPHOROUS DEFICIENCY THAT IS HARMFUL, OR WILL PREVENT NEW LAWNS/GRASSES AND PLANTINGS FROM ESTABLISHING PROPERLY.

- IF SOIL TESTS INDICATE A PHOSPHOROUS DEFICIENCY THAT WILL IMPACT PLANT AND LAWN ESTABLISHMENT, PHOSPHOROUS SHALL BE APPLIED AT THE MINIMUM RECOMMENDED LEVEL PRESCRIBED IN THE SOIL TEST FOLLOWING ALL APPLICABLE STANDARDS, REQUIREMENTS, AND/OR REGULATIONS.

- ALL SLOPES GREATER THAN 3:1 RECEIVING A WILDFLOWER, WETLAND, AND/OR GRASS SEEDING MIXTURE SHALL BE COVERED WITH AN EROSION CONTROL BLANKET.

- ALL WILDFLOWERS AND GRASSES SOWED SHALL BE ALLOWED TO GROW TO THEIR NATURALLY OCCURRING HEIGHTS WHENEVER POSSIBLE. NATIVE WILDFLOWERS AND/OR GRASSES CAN BE MOWED/MAINTAINED (WITHIN ACCEPTABLE AREAS IDENTIFIED AND/OR APPROVED BY APPROPRIATE REGULATORY AGENCIES) AS OFTEN AS NEEDED TO KEEP THE VEGETATION AT A DESIRED AND/OR MANAGEABLE/MANICURED HEIGHT.

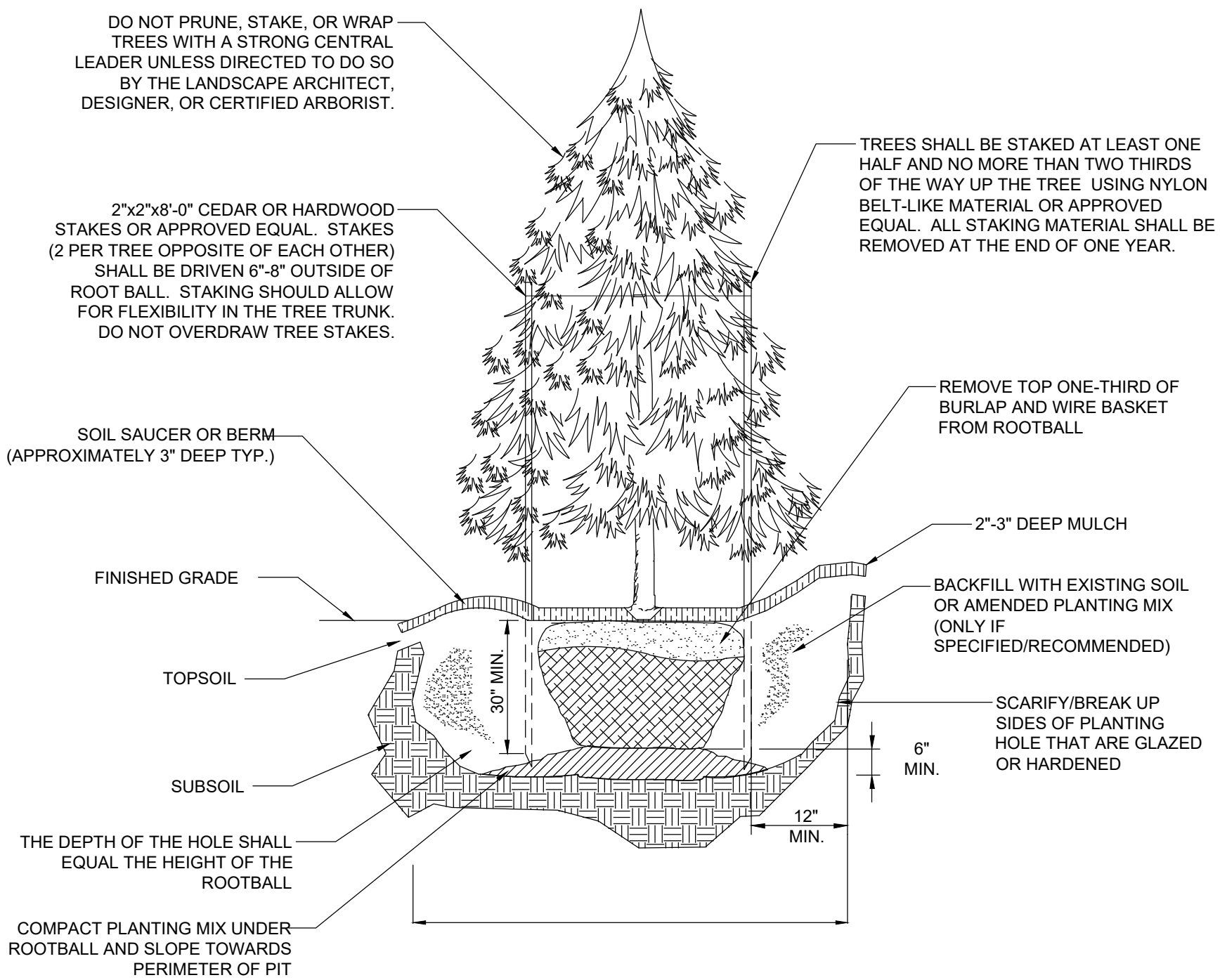
9. ALL PLANT MATERIAL SHALL CONFORM TO THE PLAN SIZE SPECIFICATIONS AS ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK LATEST EDITION.

FLOWERING HERBACEOUS LAYER/NORTHEAST NATIVE POLLINATOR SEED MIXES

NORTHEAST NATIVE WILDFLOWER & GRASS MIX		MIX CONCENTRATION	RATE (LBS/ACRE)	RATE (LBS/1000 FT ²)
BOTANICAL NAME	COMMON NAME			
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	40%		
BOUTELOUA CURTIPENDULA	SIDE-OATS GRAMA	23.40%		
COSMOS BIPINNATUS	COSMOS	7.30%		
COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS	3.50%		
ECHINACEA PURPUREA	PURPLE CONEFLOWER	3.50%		
ELYMUS VIRGINICUS	VIRGINIA WILDRYE	3%		
SORGHASTRUM NUTANS	INDIANGRASS	2.50%		
LUPINUS POLYPHYLLUS	BIGLEAF LUPINE	2.20%		
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	2%		
DELPHINIUM AJACIS	ROCKET LARKSPUR	2%		
RUDBECKIA HIRTA	BLACKEYED SUSAN	2%		
GAILLARDIA ARISTATA	BLANKET FLOWER	1.50%		
SENNA HEBECARPA	WILD SENNA	1%		
PENSTEMON DIGITALIS	TALL WHITE BEARDTONGUE	1%		
PAPAVER RHOEAS	SHIRLEY MIX (CORN POPPY, SHIRLEY MIX)	0.60%		
ANDROPOGON GERARDII	BIG BLUESTEM	0.50%	20	0.46
ELYMUS CANADENSIS	CANADA WILDRYE	0.50%		
COREOPSIS TINCTORIA	PLAINS COREOPSIS	0.50%		
LIATRIS SPICATA	BLAZING STAR	0.40%		
ASCLEPIAS SYRIACA	COMMON MILKWEED	0.40%		
ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	0.40%		
ZIZIA AUREA	GOLDEN ALEXANDERS	0.30%		
ASCLEPIAS INCARNATA	SWAMP MILKWEED	0.30%		
MONARDA FISTULOSA	WILD BERGAMONT	0.20%		
PENSTEMON LAEVIGATUS	APPALACHIAN BEARDTONGUE	0.20%		
SENNA MARILANDICA	MARYLAND SENNA	0.20%		
SOLIDAGO NEMORALIS	GRAY GOLDENROD	0.10%		
TRADESCANTIA OHIENSIS	OHIO SPIDERWORT	0.10%		
ASTER LAEVIS	SMOOTH BLUE ASTER	0.10%		
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.10%		
ASTER PRENANTHOIDES	ZIGZAG ASTER	0.10%		
HELIOPSIS	OXEYE SUNFLOWER	0.10%		
HELIANTHOIDES				

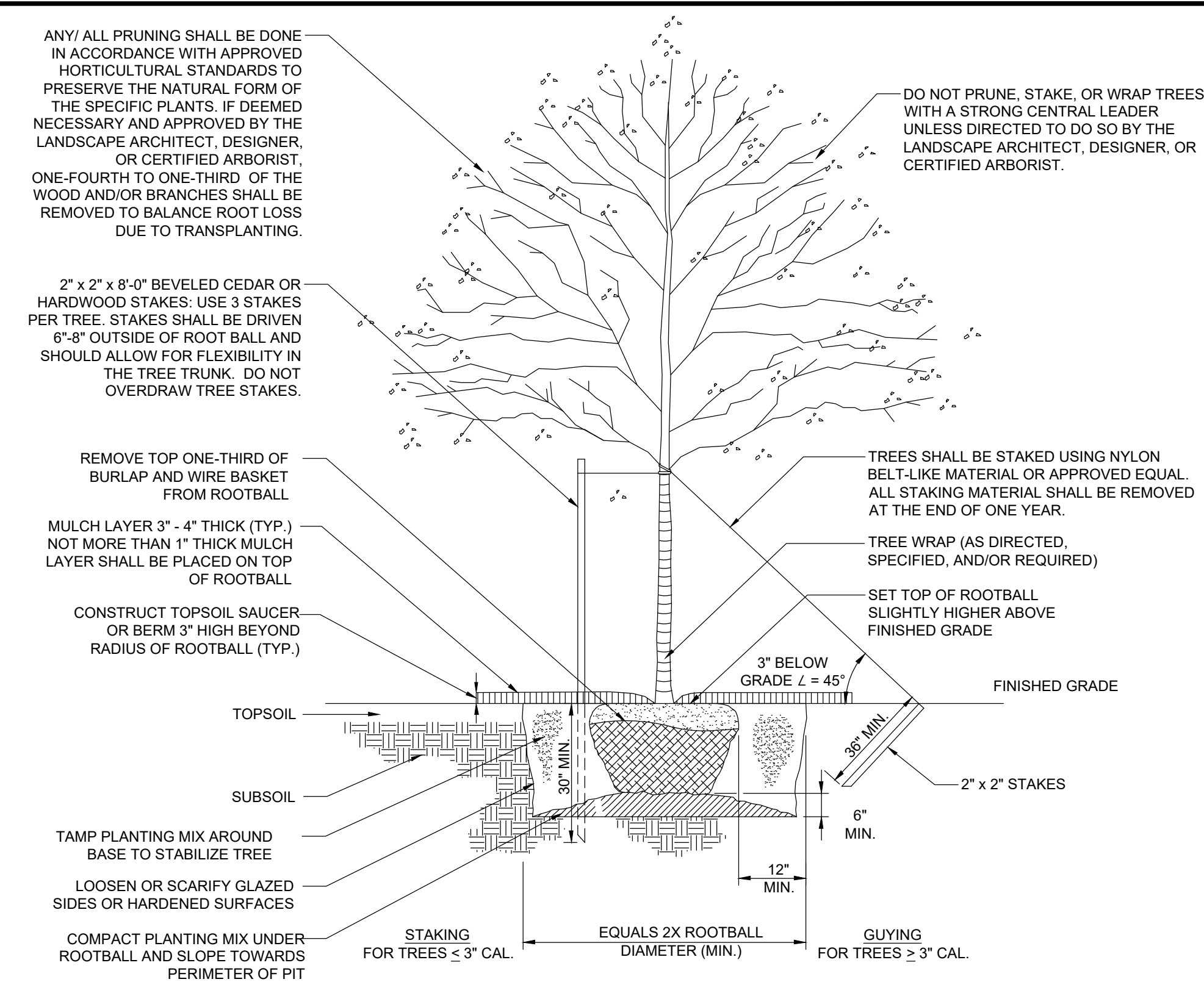
NOTE:

NATIVE POLLINATOR SEED MIXES ARE INTENDED TO PROVIDE A EXCELLENT WILDLIFE FOOD AND SHELTER THAT WILL ATTRACT A VARIETY OF POLLINATORS AND SONGBIRDS. THE NATIVE WILDFLOWERS AND GRASSES IN THIS MIX PROVIDE AN ATTRACTIVE DISPLAY OF COLOR FROM SPRING TO FALL. POLLINATOR SEED MIXES ARE INTENDED TO PROVIDE NECTAR AND FOOD SOURCES FOR A VARIETY OF POLLINATORS AND LARVA. THESE MIXES ARE COMPRISED OF A FAIRLY EVEN MIX OF NATIVE AND/OR INDIGENOUS WILDFLOWERS AND GRASSES. THE POLLINATOR SEED MIX IS INTENDED TO BE SOWN IN THE DESIGNATED 10 FOOT WIDE AREA OUTSIDE OF THE SOLAR ARRAY FIELD AND AROUND THE OUTER PERIMETER OF THE VEGETATIVE PLANTING BUFFER. SEE SHEET C-601



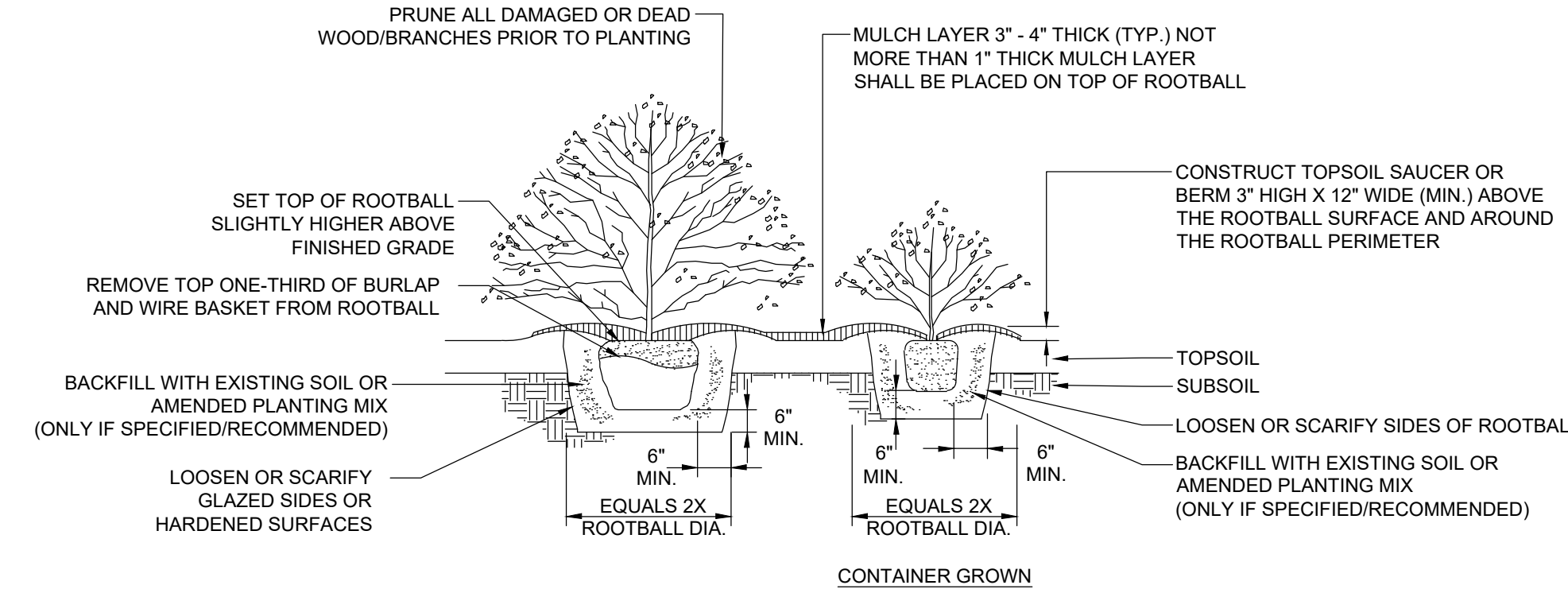
EVERGREEN TREE PLANTING DETAIL

N.T.S.



NATIVE/DECIDUOUS TREE PLANTING DETAIL

N.T.S.



SHRUB PLANTING DETAIL

N.T.S.

SOLAR FARM GRASS SEED MIXES

NATIVE/NATURALIZED SOLAR FARM SEED MIX		MIX CONCENTRATION	RATE (LBS/ACRE)	RATE (LBS/1000 FT ²)
BOTANICAL NAME	COMMON NAME			
FESTUCA RUBRA	CREeping RED FESCUE	34%		
FESTUCA OVINA	SHEEP FESCUE	33%		
FESTUCA BREVIPILA 'BEACON'	HARD FESCUE 'BEACON'	10%		
FESTUCA OVINA VAR. DURIUSCULA 'RHINO'	HARD FESCUE 'RHINO'	5%		
FESTUCA OVINA VAR. GLAUCA (F. ARVERNENSIS) (F. GLAUCA) 'BLUE RAY'	BLUE FESCUE 'BLUE RAY'	5%		
POA PRATENSIS 'ARGYLE'	KENTUCKY BLUEGRASS 'ARGYLE'	5%		
POA PRATENSIS 'SHAMROCK'	KENTUCKY BLUEGRASS 'SHAMROCK'	5%		
AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE	AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE	3%		
			262	6

NOTE:

GRASS SEED MIXES ARE COMPRISED OF GRASSES THAT ARE NATIVE AND/OR INDIGENOUS TO THE AREA AND/OR CONSIDERED FAVORABLE FOR WILDLIFE HABITAT AND SUSTAINABLE GROWTH. ADDITIONALLY, THE SOLAR FARM SEED MIX WAS DEVELOPED ESPECIALLY FOR NATIVE GRASS PLANTINGS AROUND SOLAR ARRAY FIELDS AND SHALL BE UTILIZED ACCORDINGLY. THESE GRASSES WILL MATURE OUT TO A HEIGHT OF APPROXIMATELY 2 TO 2 1/2 FEET HIGH. THERE ARE NO WILDFLOWER OR POLLINATOR SEED SPECIES CONTAINED IN THESE NATIVE GRASS SEED MIXES.

PRELIMINARY

NOT FOR CONSTRUCTION

aes

2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 679 - 3500

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
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-	-	-
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-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME & BROWNVILLE JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

LANDSCAPE NOTES AND DETAILS

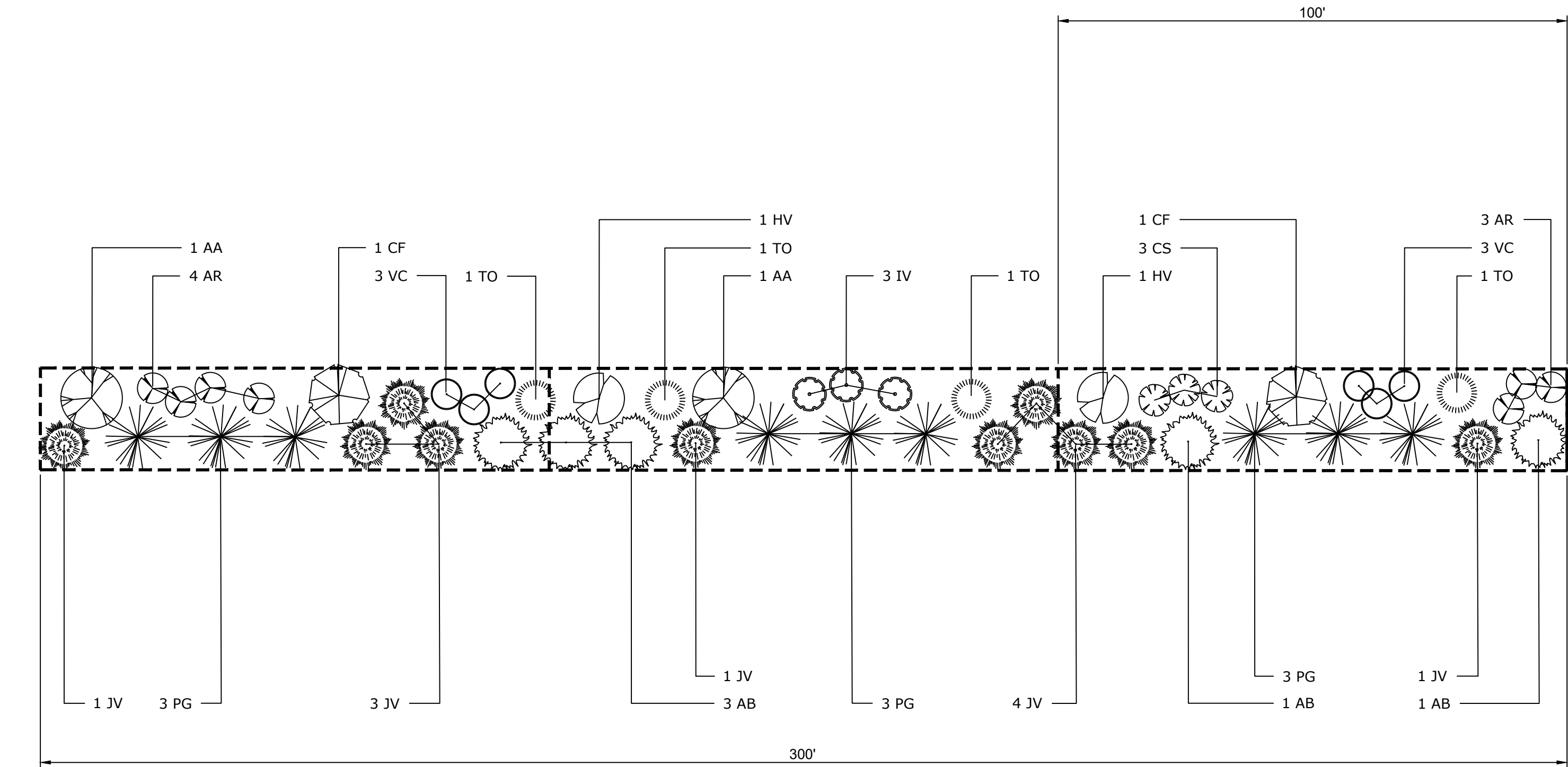
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SCALE AT 22" x 34":	

NONE

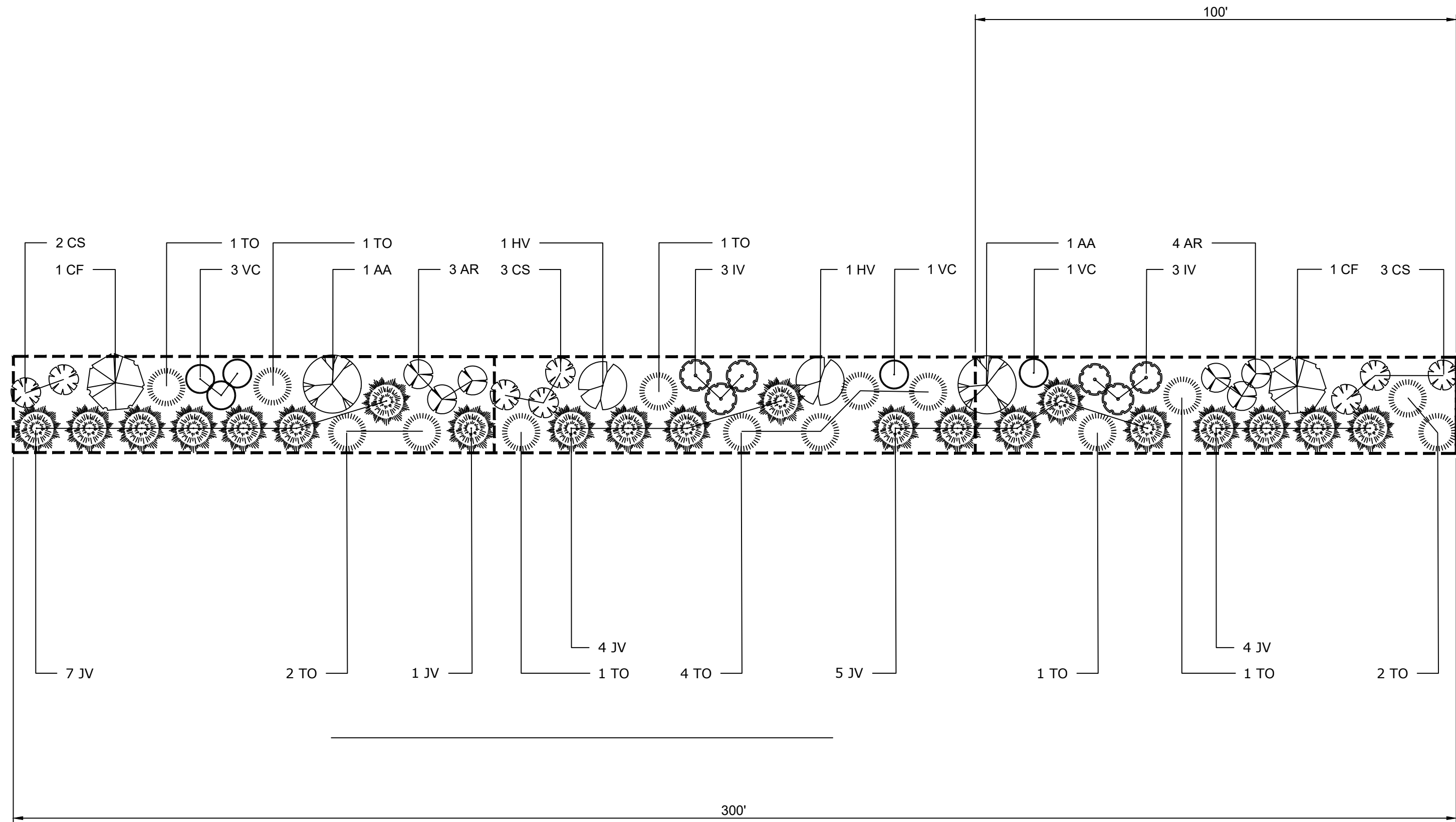
SHEET NO:	REV:
PV-C.14.01	2

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PROJECT: 422208 - PV - NY
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XREFs: c:\22034\22034-Planting Templates Concepts and Schedule.dwg P:\M\NY 10151.dwg



PLANTING TEMPLATE TYPE 1



ALTERNATIVE PLANTING TEMPLATE TYPE 2

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LEGEND

VISUAL MITIGATION PLANTING TEMPLATE - TYPE 1
LANDSCAPE PLANTING SCHEDULE (TYPICAL VISUAL BUFFER/SCREENING EFFORT)

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	2	6'-8' HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	5	5'-6' HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	2	1" CAL. MIN.	B&B	15'-25' HT.
JV	JUNIPERUS VIRGINIANA EASTERN RED CEDAR	10	5'-6' HT.	B&B	40'-50' HT.
PG	PICEA GLAUCA WHITE SPRUCE	9	5'-6' HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	4	5'-6' HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	7	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	3	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	2	3'-4' HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	3	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM Highbush Blueberry	6	24"-30" HT.	#3/5 CONT.	6'-12' HT.

LEGEND

VISUAL MITIGATION PLANTING TEMPLATE - TYPE 2
LANDSCAPE PLANTING SCHEDULE (ALTERNATIVE VISUAL BUFFER/SCREENING EFFORT)

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	2	6'-8' HT. CLUMP	B&B	15'-20' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	2	1" CAL. MIN.	B&B	15'-25' HT.
JV	JUNIPERUS VIRGINIANA EASTERN RED CEDAR	21	5'-6' HT.	B&B	40'-50' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	14	5'-6' HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	7	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	8	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	2	3'-4' HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	6	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM Highbush Blueberry	5	24"-30" HT.	#3/5 CONT.	6'-12' HT.



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-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

LANDSCAPE NOTES
AND DETAILS

PROJ
NUM: 422208

DES: M. ROSS

DWN: M. ROSS

CHK: M. ROSS

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

NONE

SHEET NO:
PV-C.14.02

REV:
2

AES Titleblock 22x34 v210119
P:\CITY OF LYME\2021\1011\1011.dwg
C:\Users\jgarcia\OneDrive\Documents\AES Titleblock 22x34 v210119.dwg
AES Titleblock 22x34 v210119

TYPE 2 - PLANTING SCHEDULES

LEGEND - VM2

LANDSCAPE PLANTING SCHEDULE

PLANTING TEMPLATE TYPE 2

TOTAL MITIGATION LENGTH = 185 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	2	6'-8' HT. CLUMP	B&B	15'-20' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	1	1" CAL. MIN.	B&B	15'-25' HT.
JV	JUNIPERUS VIRGINIANA EASTERN RED CEDAR	15	5'-6' HT.	B&B	40'-50' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	10	5'-6' HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	4	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	5	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	2	3'-4' HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	3	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	5	24"-30" HT.	#3/5 CONT.	6'-12' HT.

LEGEND - VM8

LANDSCAPE PLANTING SCHEDULE

PLANTING TEMPLATE TYPE 2

TOTAL MITIGATION LENGTH = 625 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	4	6'-8' HT. CLUMP	B&B	15'-20' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	5	1" CAL. MIN.	B&B	15'-25' HT.
JV	JUNIPERUS VIRGINIANA EASTERN RED CEDAR	44	5'-6' HT.	B&B	40'-50' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	28	5'-6' HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	14	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	18	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	4	3'-4' HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	12	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	10	24"-30" HT.	#3/5 CONT.	6'-12' HT.

LEGEND - VM10

LANDSCAPE PLANTING SCHEDULE

PLANTING TEMPLATE TYPE 2

TOTAL MITIGATION LENGTH = 870 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	6	6'-8' HT. CLUMP	B&B	15'-20' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	6	1" CAL. MIN.	B&B	15'-25' HT.
JV	JUNIPERUS VIRGINIANA EASTERN RED CEDAR	61	5'-6' HT.	B&B	40'-50' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	40	5'-6' HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	21	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	21	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	6	3'-4' HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	18	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	15	24"-30" HT.	#3/5 CONT.	6'-12' HT.

OVERALL PLANTING SCHEDULE FOR PROJECT SITE

LEGEND - OVERALL PLANTING TOTALS

LANDSCAPE PLANTING SCHEDULE

VISUAL MITIGATION PLANTING TEMPLATE TYPES 1 & 2

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	91	6'-8' HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	175	5'-6' HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	84	1" CAL. MIN.	B&B	15'-25' HT.
JV	JUNIPERUS VIRGINIANA EASTERN RED CEDAR	480	5'-6' HT.	B&B	40'-50' HT.
PG	PICEA GLAUCA WHITE SPRUCE	326	5'-6' HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	215	5'-6' HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	298	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	139	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	82	3'-4' HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	138	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	233	24"-30" HT.	#3/5 CONT.	6'-12' HT.

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-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

LANDSCAPE NOTES
AND DETAILS

PROJ
NUM: 422208

DES: M.ROSS

DWN: M.ROSS

CHK: M.ROSS

APV: -

DATE: 04/15/2021

SCALE AT 22" x 34":

NONE

SHEET NO:

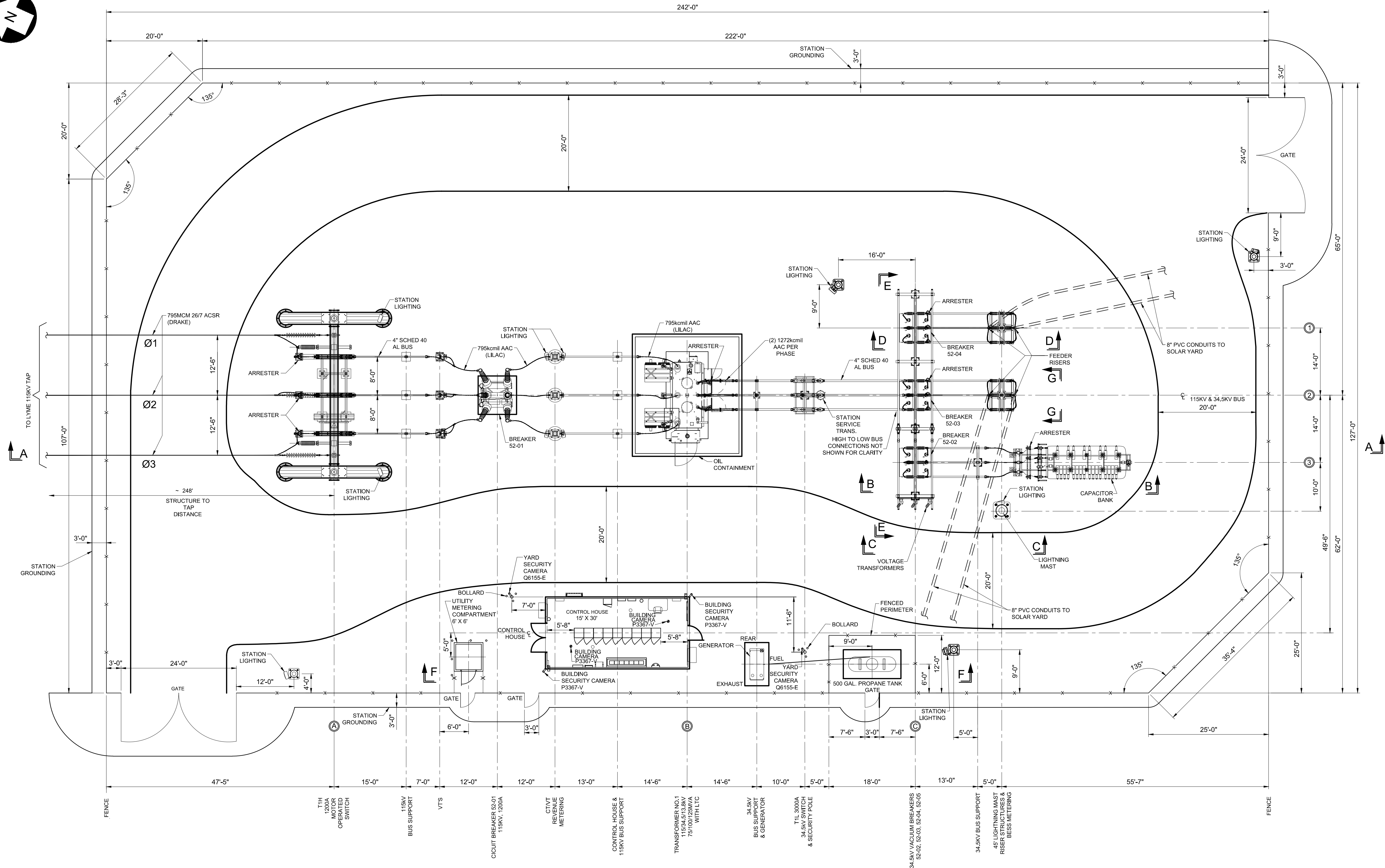
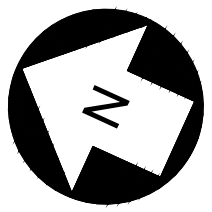
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PROJ: 422208
SHEET: 3/32
DATE: 03/22/21
SCALE: 1" = 30'
DRAWN BY: C. PASCALE
CHECKED BY: D. FARRELL
DESIGNED BY: D. FARRELL
PROJECT: RIVERSIDE SOLAR COLLECTION SUBSTATION
LOCATION: TOWNS OF LYME & BROWNVILLE, JEFFERSON CO., NY
SHEET TITLE: GENERAL ARRANGEMENT
OVERALL ELECTRICAL PLAN
PROJ NUM: 422208
DES: D. FARRELL
DWN: D. FARRELL
CHK: C. PASCALE
APV: C. PASCALE
DATE: 03/22/21
SCALE AT 22" x 34": 3/32" = 1'-0"
SHEET NO: HV-P.01.01
REV: 2



REFERENCE DRAWINGS:
1. HV-P.02.01 FOR SECTION A-A
2. HV-P.02.02 FOR SECTIONS B-B THRU G-G



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PROJECT TITLE:

**RIVERSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

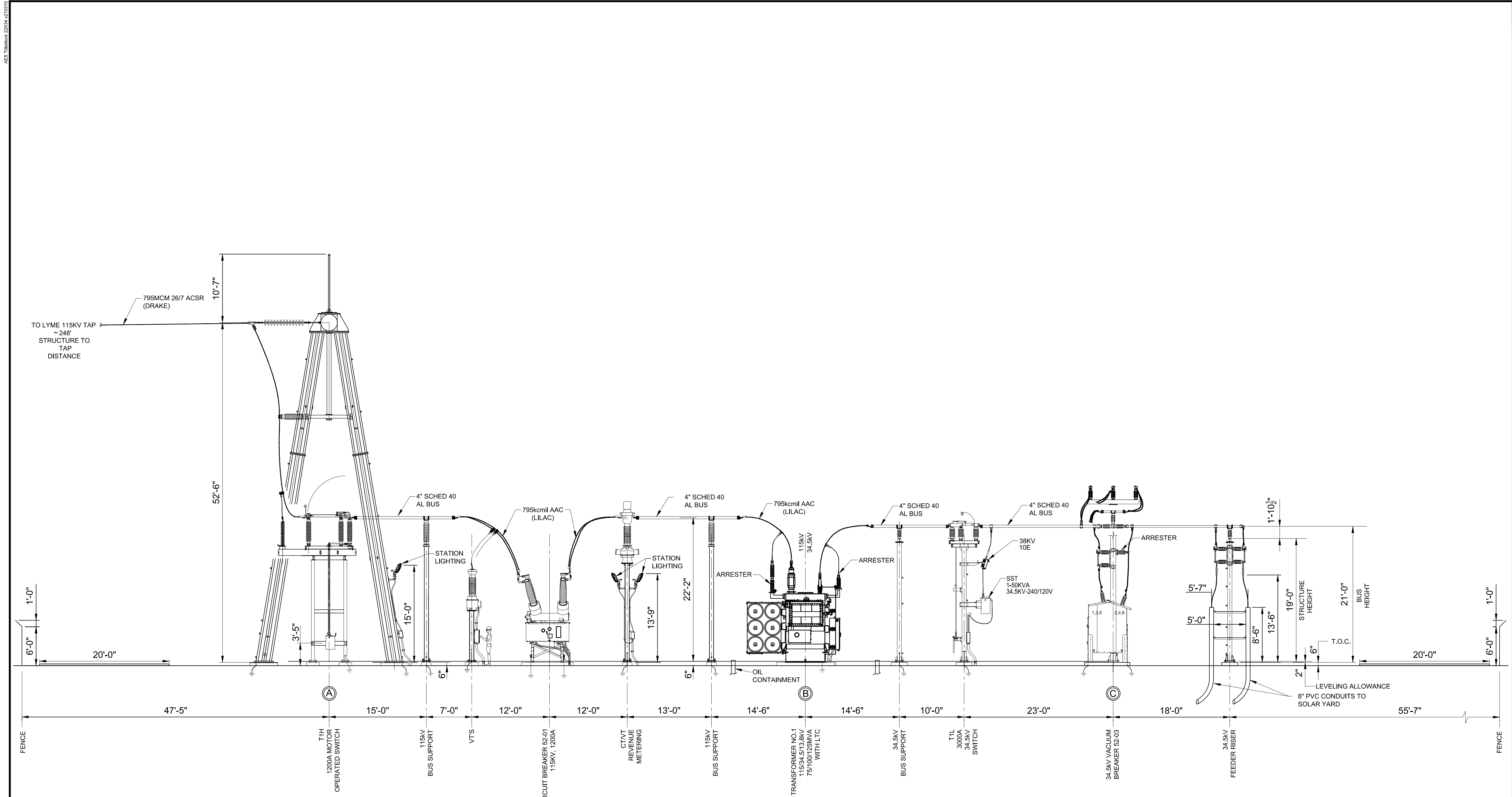
SHEET TITLE & DESCRIPTION:

**GENERAL
ARRANGEMENT**

**OVERALL ELECTRICAL
PLAN**

PROJ NUM:	422208
DES:	D. FARRELL
DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
DATE:	03/22/21
SCALE AT 22" x 34":	3/32" = 1'-0"
SHEET NO:	HV-P.01.01
REV:	2

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SECTION A-A

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SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**ELECTRICAL
EQUIPMENT
ELEVATIONS**

SECTION A-A

PROJ
NUM: 422208

DES: D. FARRELL

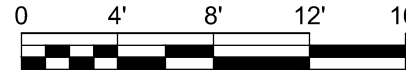
DWN: D.FARRELL

CHK: C. PASCALE

APV: C. PASCALE

DATE: 03/22/2021

SCALE AT 22" x 34":



1/8" = 1'-0"

SHEET NO:

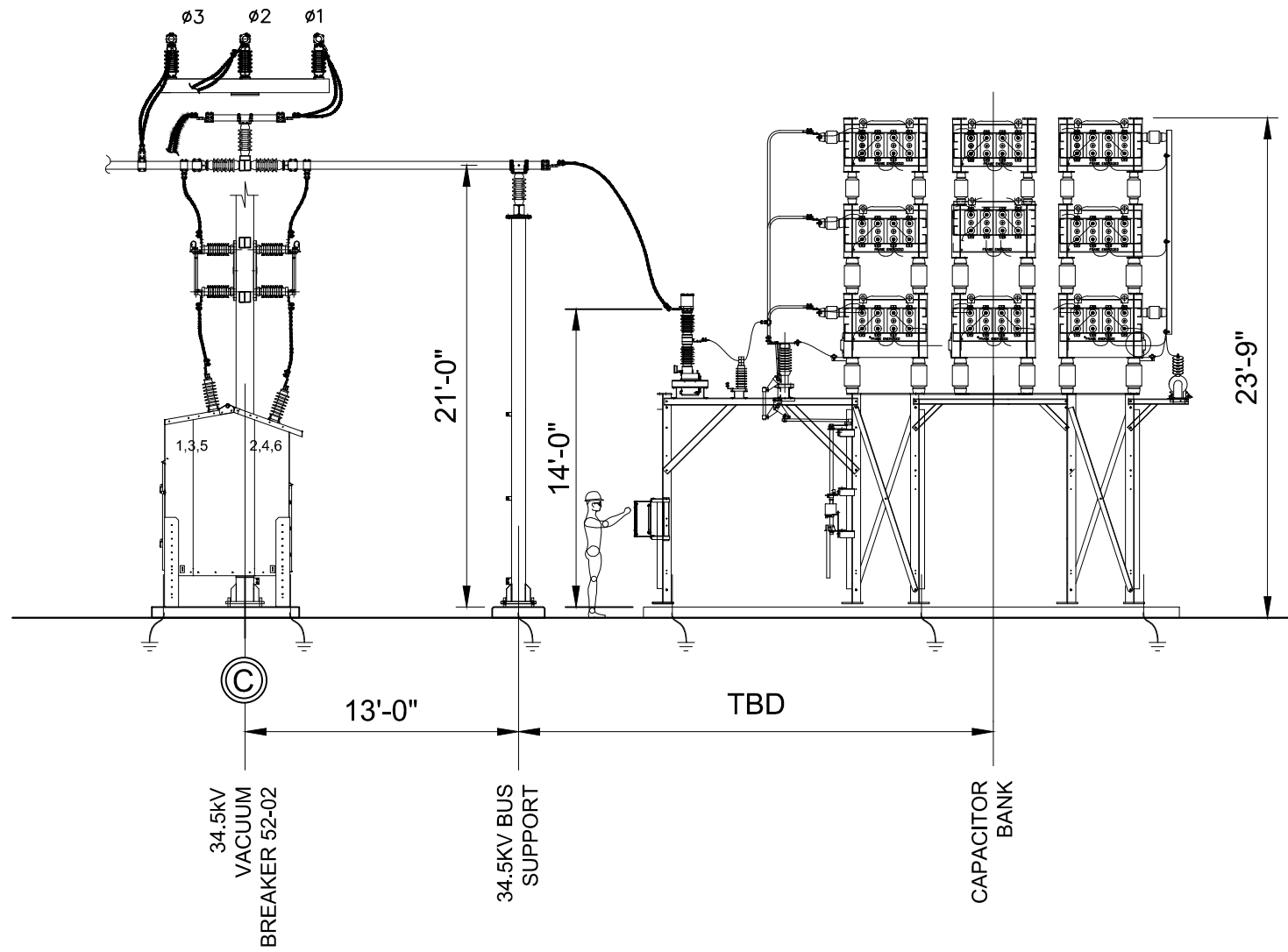
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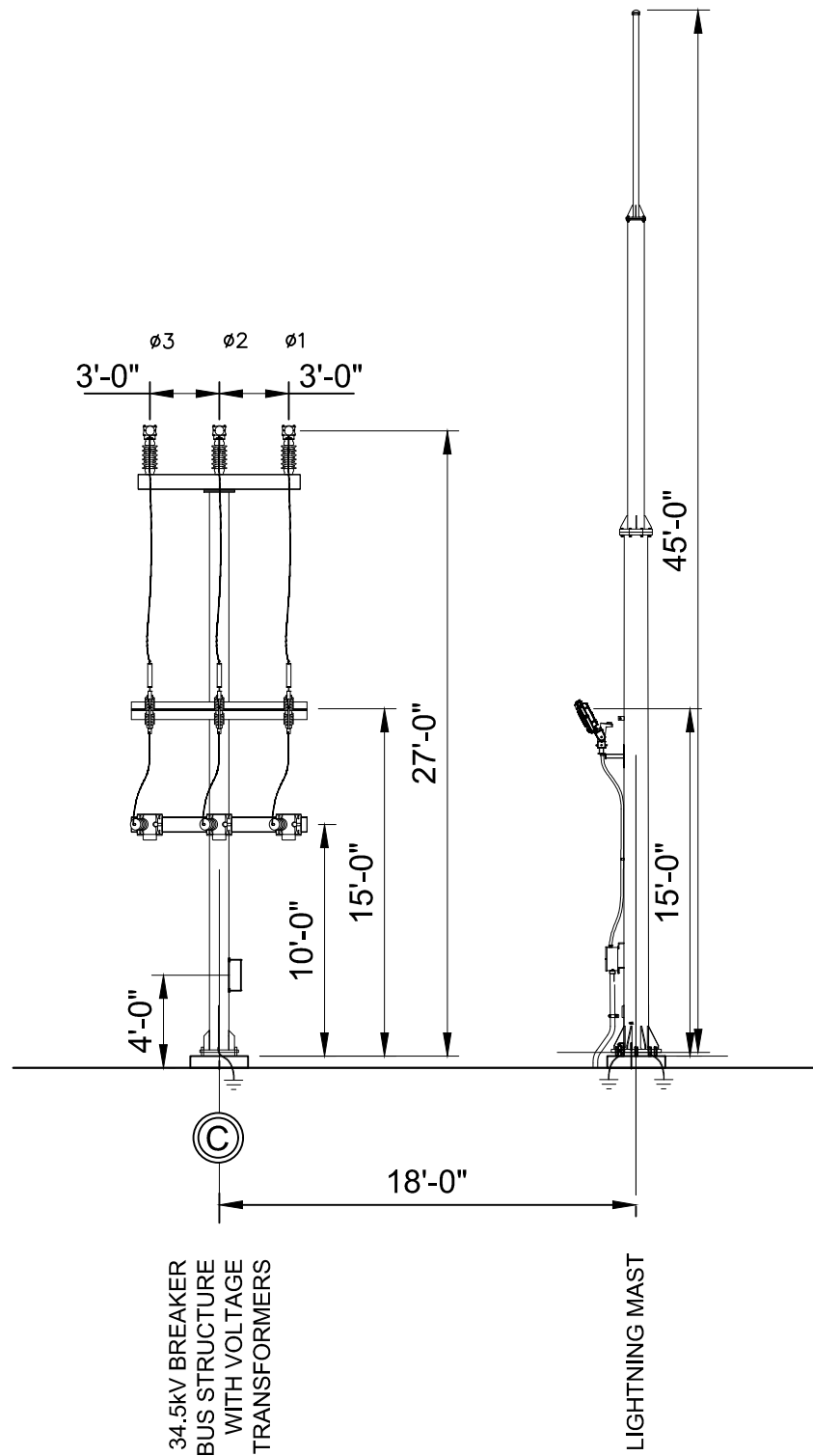
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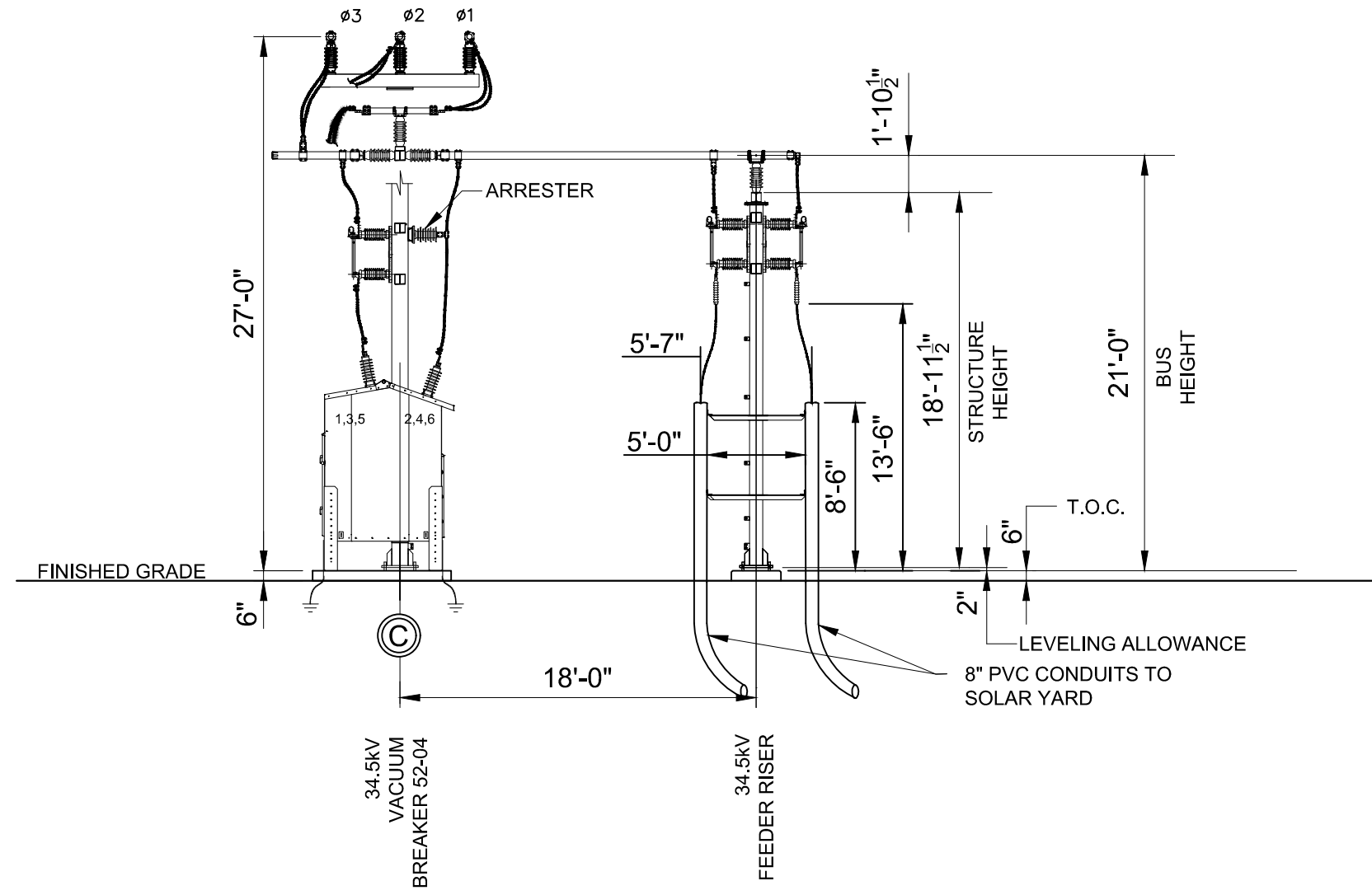
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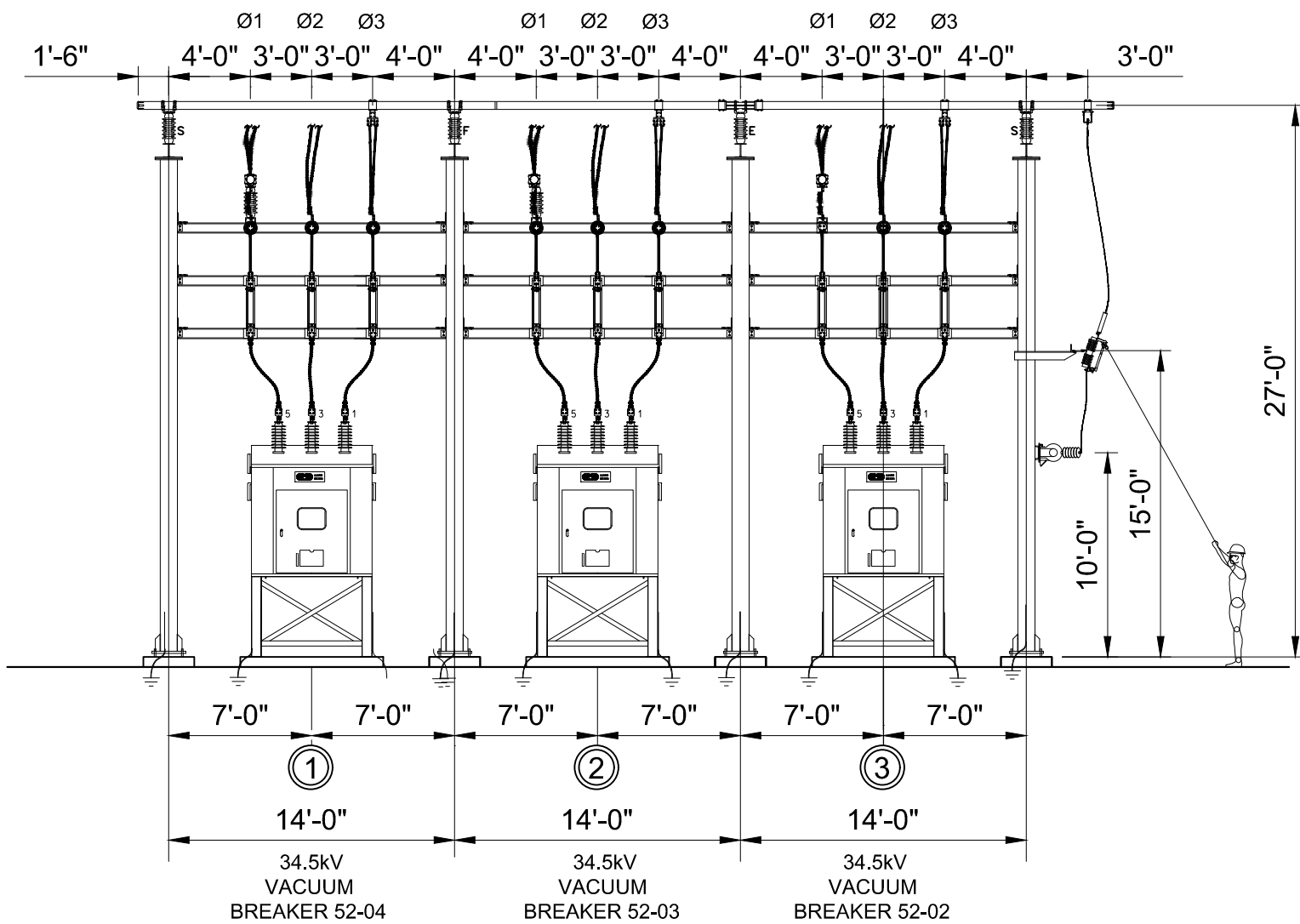
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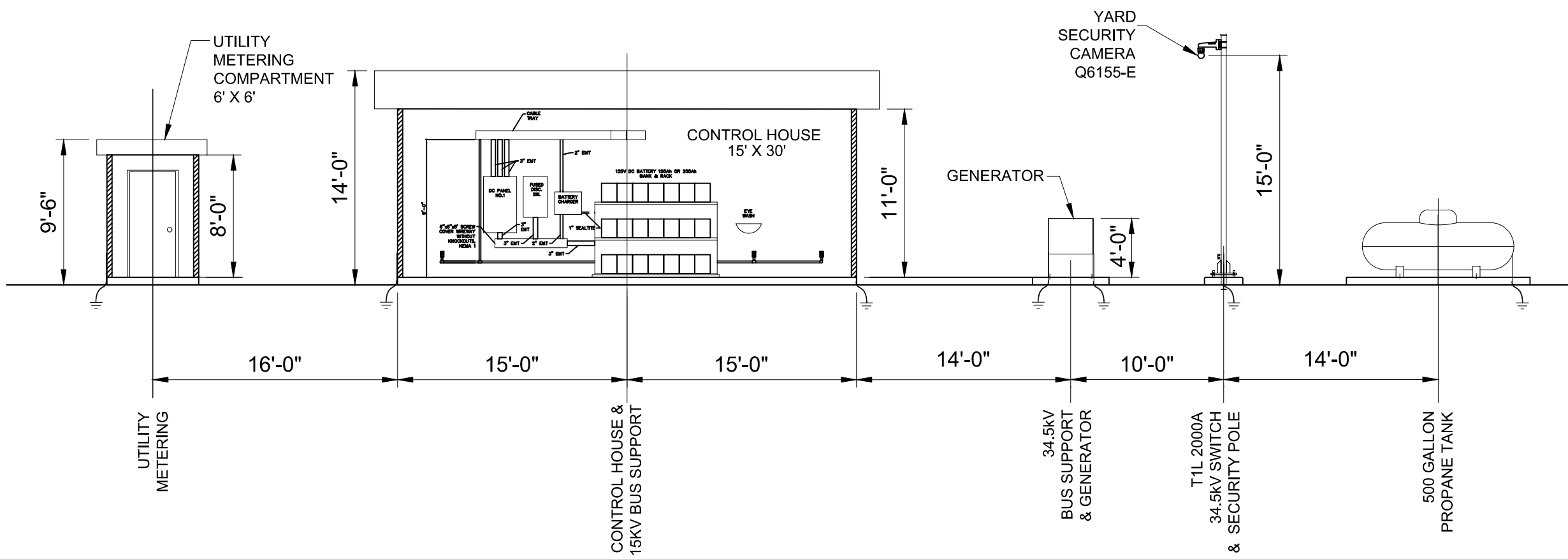
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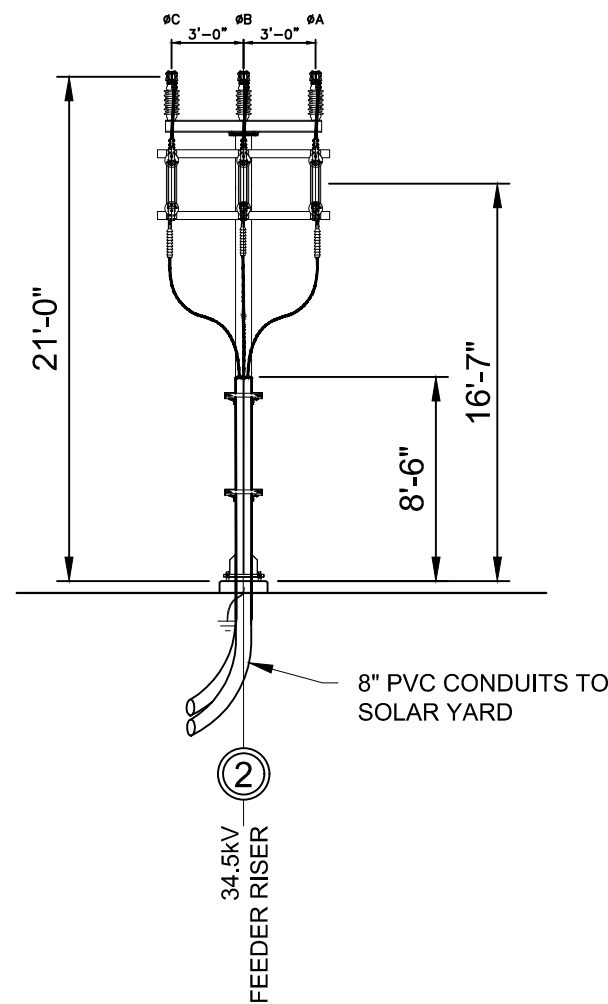
SECTION D-D



SECTION E-E



SECTION F-F



SECTION G-G



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**RIVERSIDE SOLAR
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SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

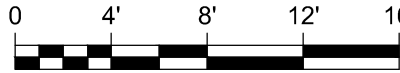
SHEET TITLE & DESCRIPTION:

**ELECTRICAL
EQUIPMENT
ELEVATIONS**

**SECTIONS B-B, C-C
D-D, E-E, F-F, G-G**

PROJ NUM:	422208
DES:	D. FARRELL
DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
DATE:	03/22/2021

SCALE AT 22" x 34":



1/8" = 1'-0"

SHEET NO:

HV-P.02.02

REV:

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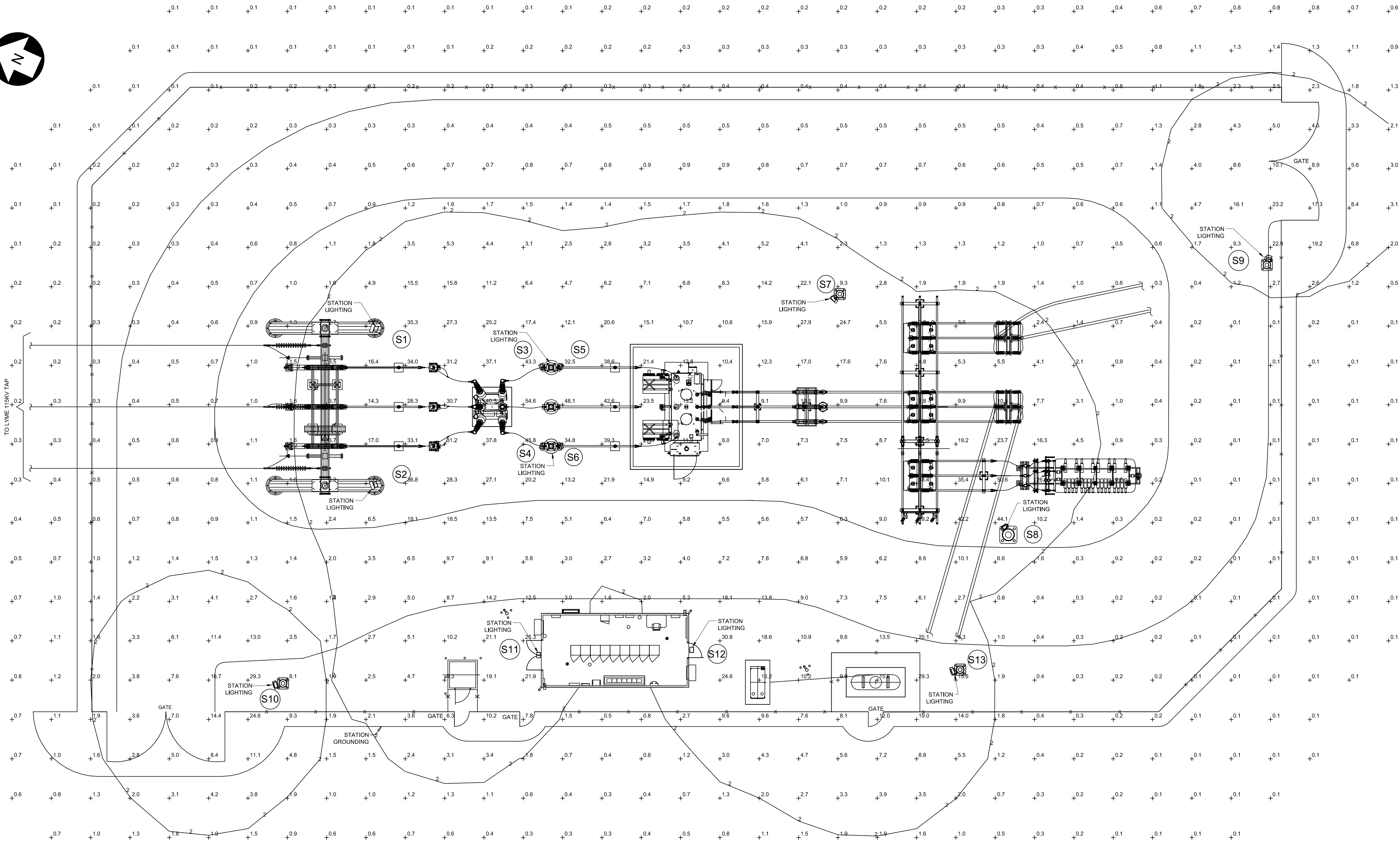
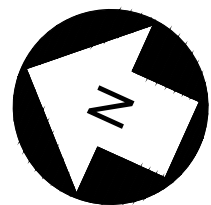


TABLE 1 - LIGHTING FIXTURE SCHEDULE								
FIXTURE						LAMP	PHOTO-ELECTRIC CONTROL	
TYPE	WATTAGE	LIGHT SOURCE	VOLTAGE	WEIGHT (LBS)	LUMENS	NEMA CLASS	MANUFACTURER (GE) ITEM #	MANUFACTURER ITEM #
A1	25W	LED	120V	9.5	2,900	N/A	GE EVOLVE EWS31A7D140	N/A
A3	150W	LED	120V	26	18,800	7X6	GE EVOLVE EFH101AA76740	N/A
A5	297W	LED	120V	26	37,800	7X6	GE EVOLVE EFH101EE76740	N/A

FIXTURE SCHEDULE			
LIGHT NO.	TYPE	WATTAGE	VOLTAGE
S1	A3	150W	120VAC
S2	A3	150W	120VAC
S3	A3	150W	120VAC
S4	A3	150W	120VAC
S5	A3	150W	120VAC
S6	A3	150W	120VAC
S7	A3	150W	120VAC
S8	A5	297W	120VAC
S9	A3	150W	120VAC
S10	A3	150W	120VAC
S11	A3	150W	120VAC
S12	A3	150W	120VAC
S13	A3	150W	120VAC

- NOTES:
- STATION LIGHTING IS COMPRISED OF (12) 150W, 120V AC LED AND (1) 297 W, 120V AC LED FLOODLIGHTS.
 - LIGHTS TO BE MOUNTED ON INDICATED STRUCTURES 15' ABOVE FINISHED GRADE.
 - YARD CONTOUR IS 2 FT CANDLES (F.C.) AVERAGE FOR THIS STATION. 2 FT CANDLES IS THE EQUIVALENT OF 22 LUMENS PER SQUARE METER.

AVERAGE = 4.8 F.C.
MAX = 54.8 F.C.
MIN = 0.1 F.C.



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PROJECT TITLE:

**RIVERSIDE SOLAR
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SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**GENERAL
ARRANGEMENT**

LIGHTING PLAN

PROJ NUM: 422208

DES: D. FARRELL

DWN: D. FARRELL

CHK: C. PASCALE

APV: C. PASCALE

DATE: 04/15/2021

SCALE AT 22" x 34":



3/32" = 1'-0"

SHEET NO:

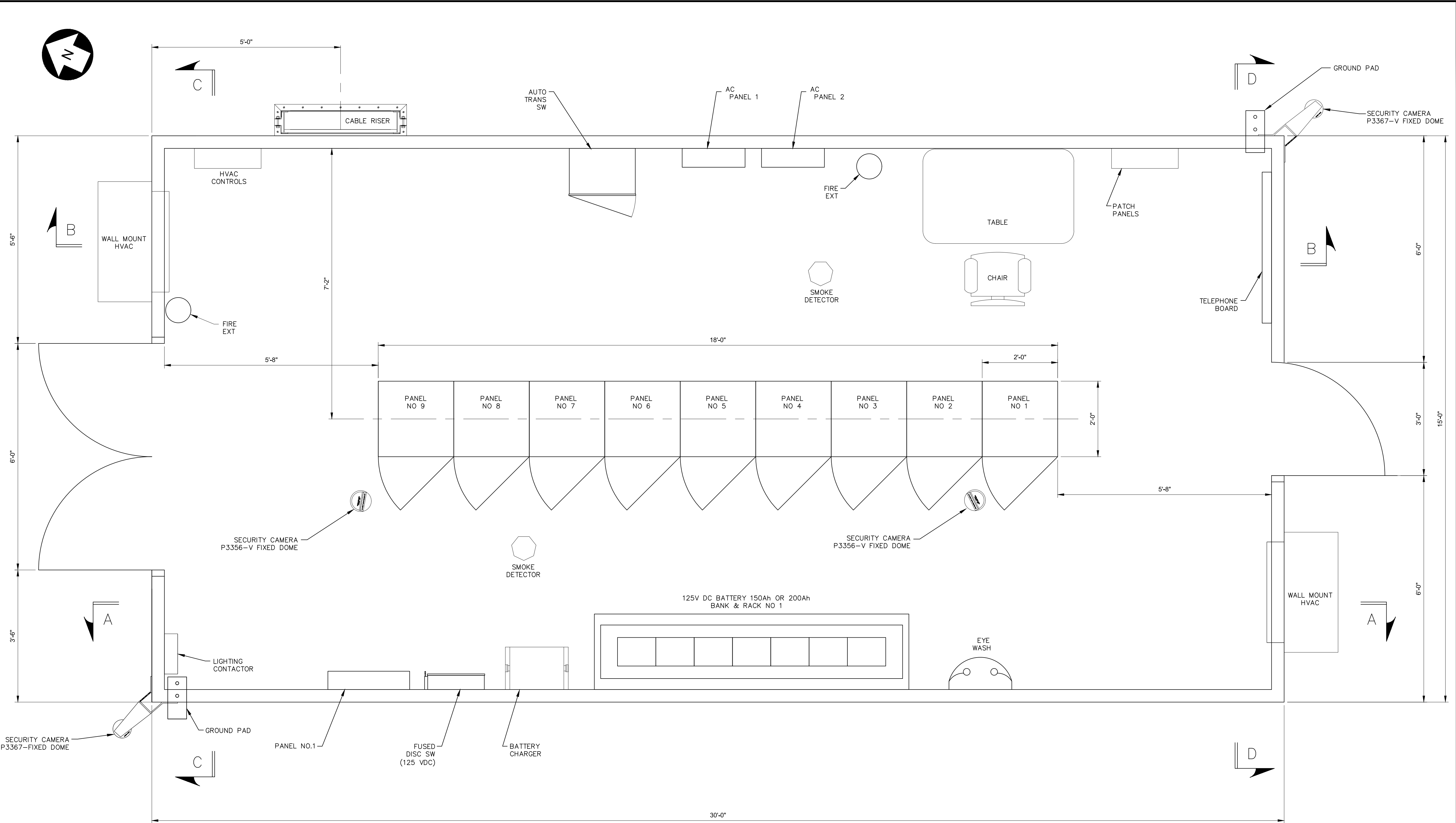
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REV:

2

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PLOTTED: 9/8/2021 5:17 PM
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EQUIPMENT ENCLOSURE
PLAN VIEW
SCALE: 3/4" = 1'-0"

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SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**GENERAL
ARRANGEMENT**

CONTROL HOUSE PLAN

PROJ
NUM: 422208

DES: D. FARRELL

DWN: D. FARRELL

CHK: C. PASCALE

APV: C. PASCALE

DATE: 04/15/2021

SCALE AT 22" x 34":



3/4" = 1'-0"

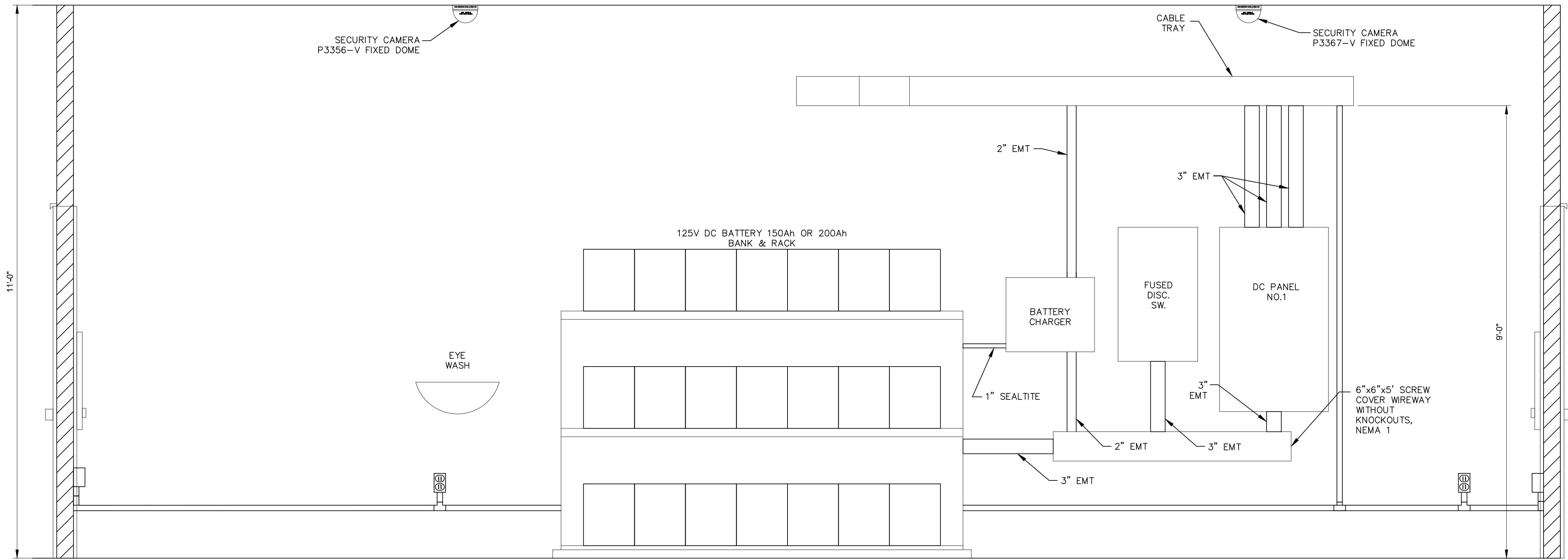
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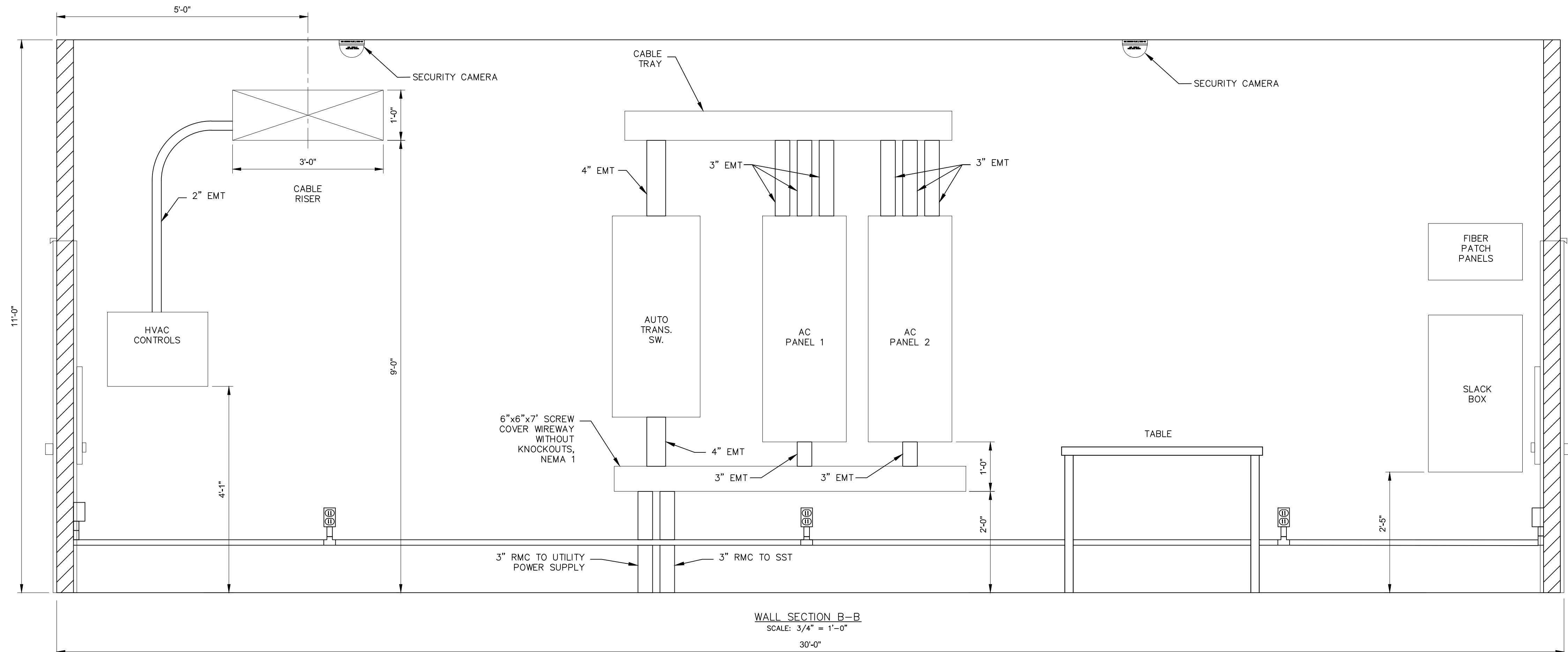
REV:

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WALL SECTION A-A
SCALE: 3/4" = 1'-0"



WALL SECTION B-B
SCALE: 3/4" = 1'-0"

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(801) 579-3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

**RIVERSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**GENERAL
ARRANGEMENT**

**CONTROL HOUSE ELEV.
SECTIONS A-A, B-B**

PROJ
NUM: 422208

DES: D. FARRELL

DWN: D. FARRELL

CHK: C. PASCALE

APV: C. PASCALE

DATE: 04/15/2021

SCALE AT 22" x 34":



3/4" = 1'-0"

SHEET NO:

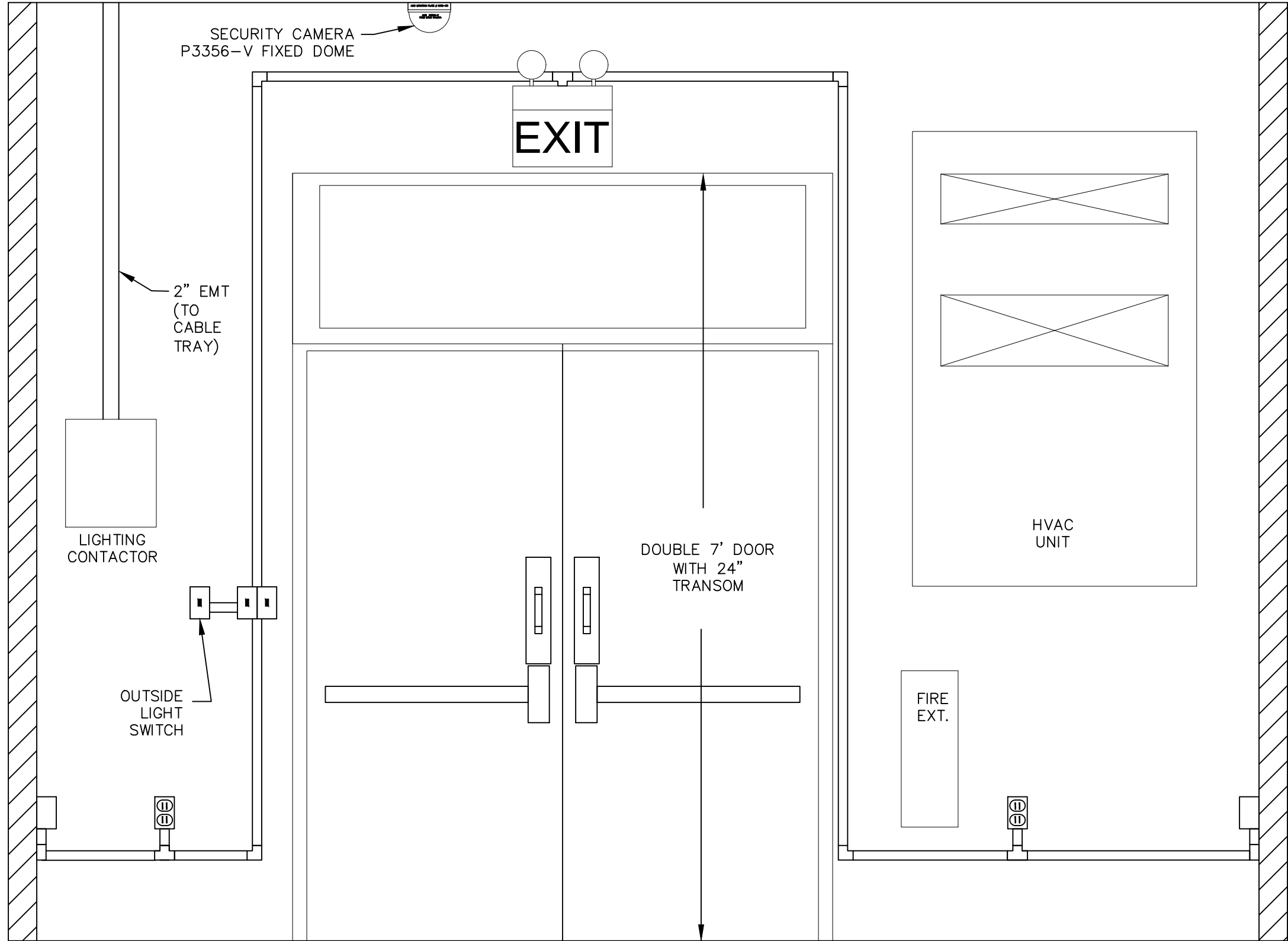
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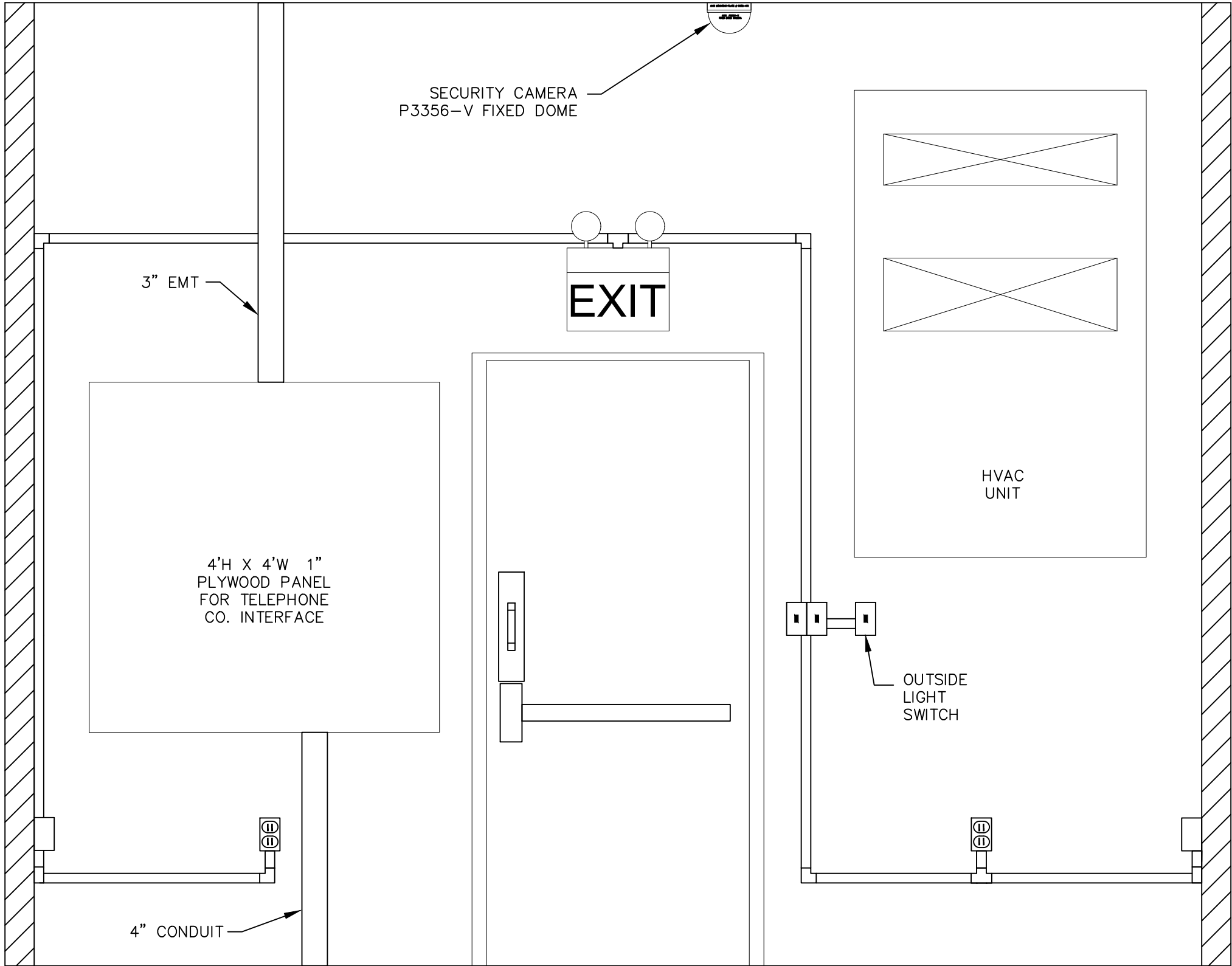
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PLOTTED: 9/8/2021 5:19 PM
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AES Titleblock 22x34 v210319



WALL SECTION C-C
SCALE: 3/4" = 1'-0"



WALL SECTION D-D
SCALE: 3/4" = 1'-0"



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Salt Lake City, UT 84106-2749
(801) 579-3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

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PROJECT TITLE:

**RIVERSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**GENERAL
ARRANGEMENT**

**CONTROL HOUSE ELEV.
SECTIONS C-C, D-D**

PROJ NUM:	422208
DES:	D. FARRELL
DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
DATE:	04/15/2021

SCALE AT 22" x 34":



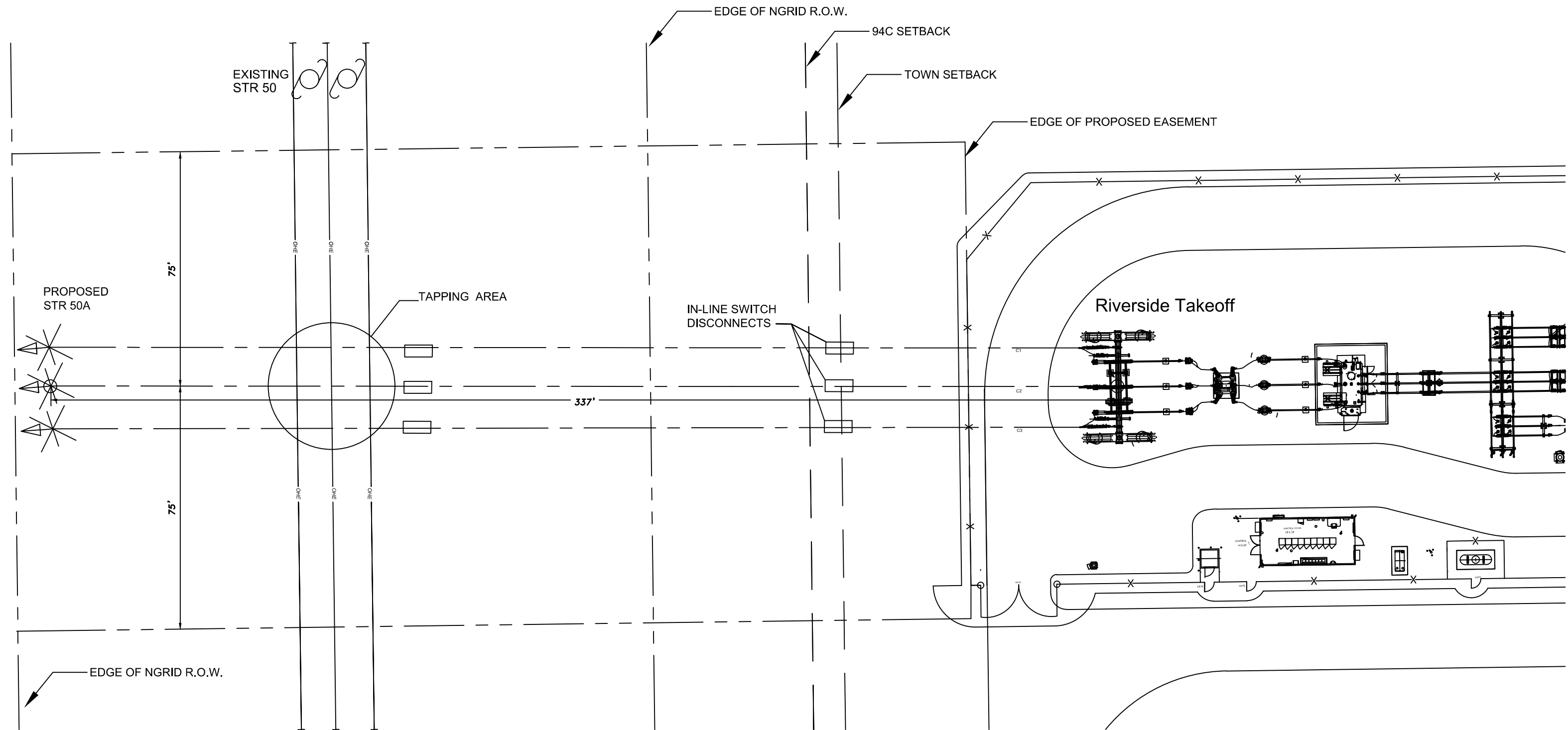
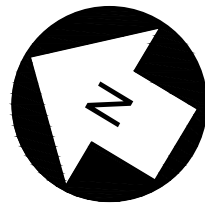
3/4" = 1'-0"

SHEET NO:	REV:
HV-P.15.02	2

UNDER NEW YORK STATE EDUCATION LAW ARTICLE
145 (ENGINEERING), SECTION 7209 (2), IT IS A
VIOLATION OF THE LAW FOR ANY PERSON, UNLESS
ACTING UNDER THE DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

PLOTTED: 9/8/2021 5:20 PM
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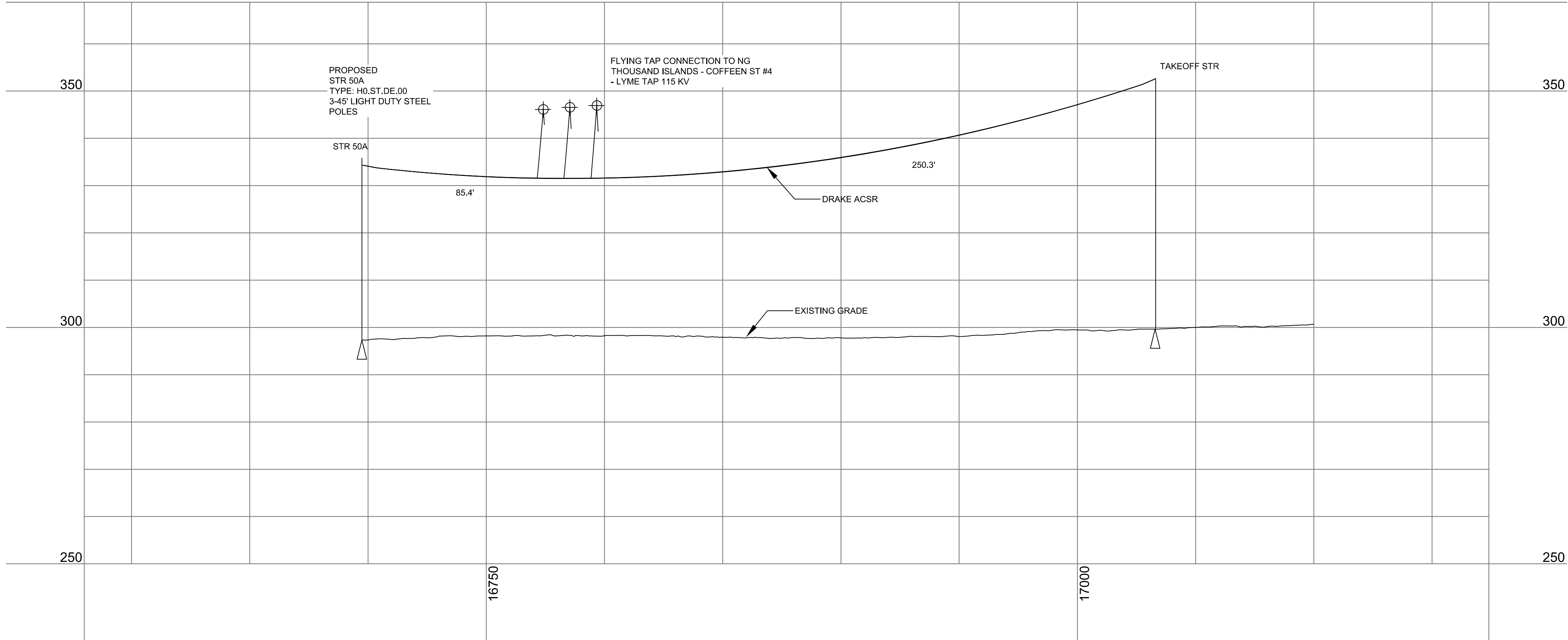
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PLOTTED: 06/20/2021 4:26 PM
C:\Users\AKS\OneDrive\AKS\132942235\LINE PLAN AND PROFILE.dwg



PLAN VIEW

30.0 ft. Horiz. Scale

15.0 ft. Vert. Scale



PROFILE VIEW

PRELIMINARY
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(801) 679 - 3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



Kevin G. Martin

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
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-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

INTERCONNECTION
PLAN AND PROFILE

PROJ NUM:	422208
DES:	D. LYONS
DWN:	D. LYONS
CHK:	K. DRZEWIECKI
APV:	K. MARTIN
DATE:	6/21/2021
SCALE AT 22" x 34":	

NTS

SHEET NO:

HV-C.09.02

REV:

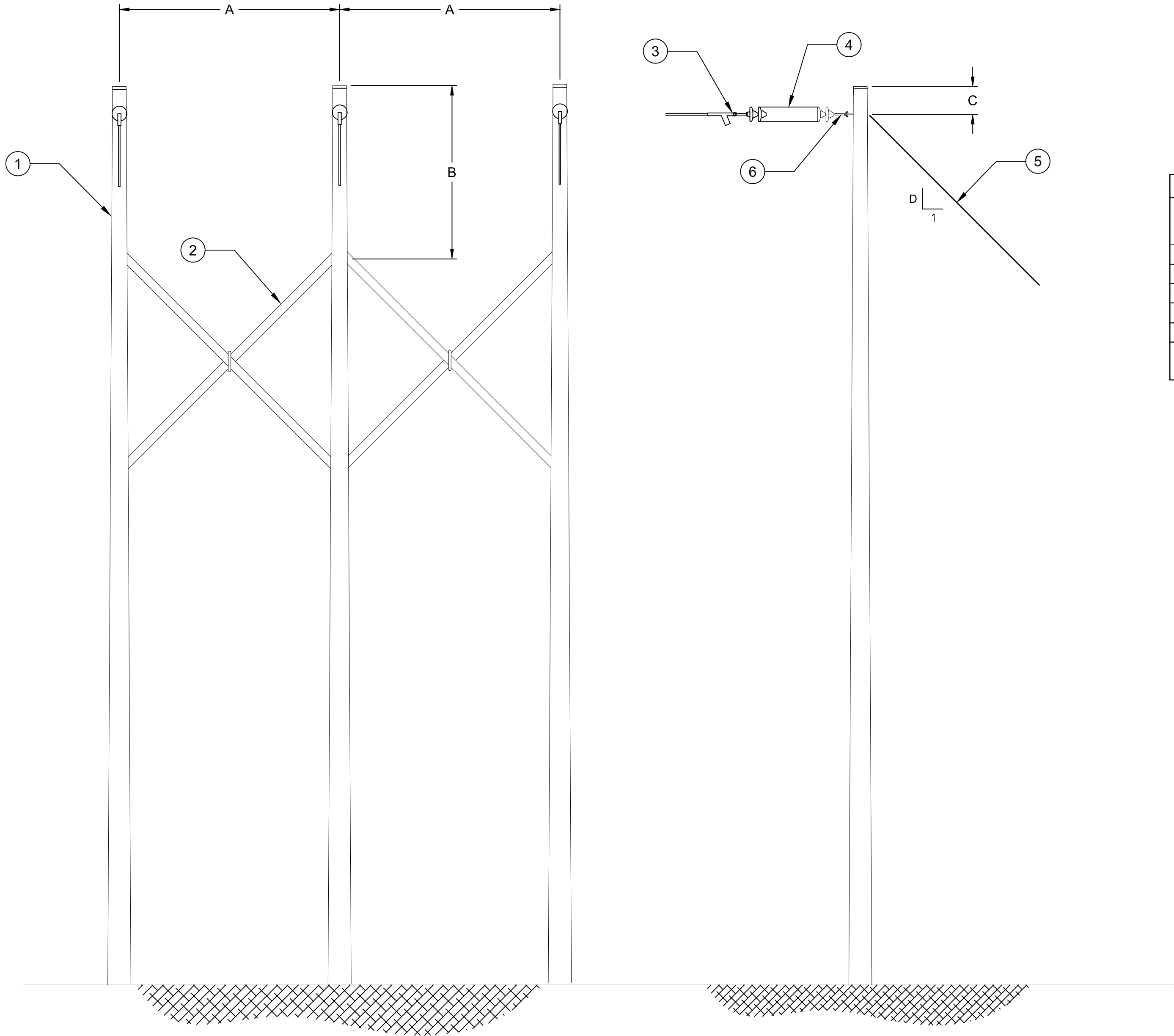
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XREF: USB1130617 ANSI Form 1000

CONFIDENTIALITY STATEMENT: THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION OF NATIONAL GRID. IT IS TO BE USED BY AUTHORIZED CONTRACTORS FOR NATIONAL GRID SOLELY IN CONNECTION WITH THE SPECIFIC PROJECT FOR WHICH IT HAS BEEN TRANSMITTED. ANY OTHER USE, ITS REPRODUCTION WITHOUT PRIOR EXPRESS WRITTEN AUTHORIZATION OF NATIONAL GRID IS STRICTLY PROHIBITED.

AES Titleblock 22/04.12/15/19

H0.ST.DT.00



FRONT ELEVATION

SIDE ELEVATION

ASSEMBLY LIST				
Tag	STANDARD ASSEMBLY ID	MU VARIABLE		Description
		01	02	
1	PO.ST.00.00	3	3	Pole (PO), Steel (ST)
2	BR.XB.FT.00	-	2	Brace (BR), X-Brace (XB, Fixed Type (FT)
3	CN.DE.QU.00	3	3	Conductor (CN), Deadend (DE), Quadrant Clamp (QU)
4	IN.00.00.00	3	3	Insulator Disc (IN)
5	GU.ID.IN.SN	3	3	Guy (GU), Individual (IN), Insulated (IN), Single (SN)
6	IN.DE.SS.PO.HW	3	3	Insulator (IN), Deadend (DE), Single String (SS), Pole Attached, Terminal (PO), Hardware (HW)

DIMENSION TABLE						
	A	B	C	D	DISCS/ STRING	VOLTAGE
1	9'-0"	-	11"	1	6	69 kV
2	12'-6"	6'-0"	11"	1	10	115 kV

REVISIONS		VERSION	
NO.	DATE	DESCRIPTION	VERSION
1	08/05/2021	ISSUED FOR PERMIT	1
2	09/10/2021	ISSUED FOR PERMIT	2
-	-	-	3
-	-	-	4
-	-	-	5
-	-	-	6
-	-	-	7

PREPARED BY	JLC	03/03/11
APPROVED BY	NTS	1 of 1
SCALE	1 of 1	1 of 1
SHEET	1 of 1	1 of 1

MACRO UNIT	UNSHIELDED H-FRAME (H0)	STEEL (ST)	TERMINAL DEADEND (DT)
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nationalgrid	4
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249 Western Avenue
Augusta, ME 04330

PE STAMP:



Kevin G. Martin

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWN OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

TERMINAL DEADEND
STRUCTURE DRAWING

PROJ
NUM:

422208

DES:

D. LYONS

DWN:

D. LYONS

CHK:

K. DRZEWIECKI

APV:

K. MARTIN

DATE:

06/21/2021

SCALE AT 24" x 36":

NTS

SHEET NO:

HV-C.09.03

REV:

2

PRELIMINARY

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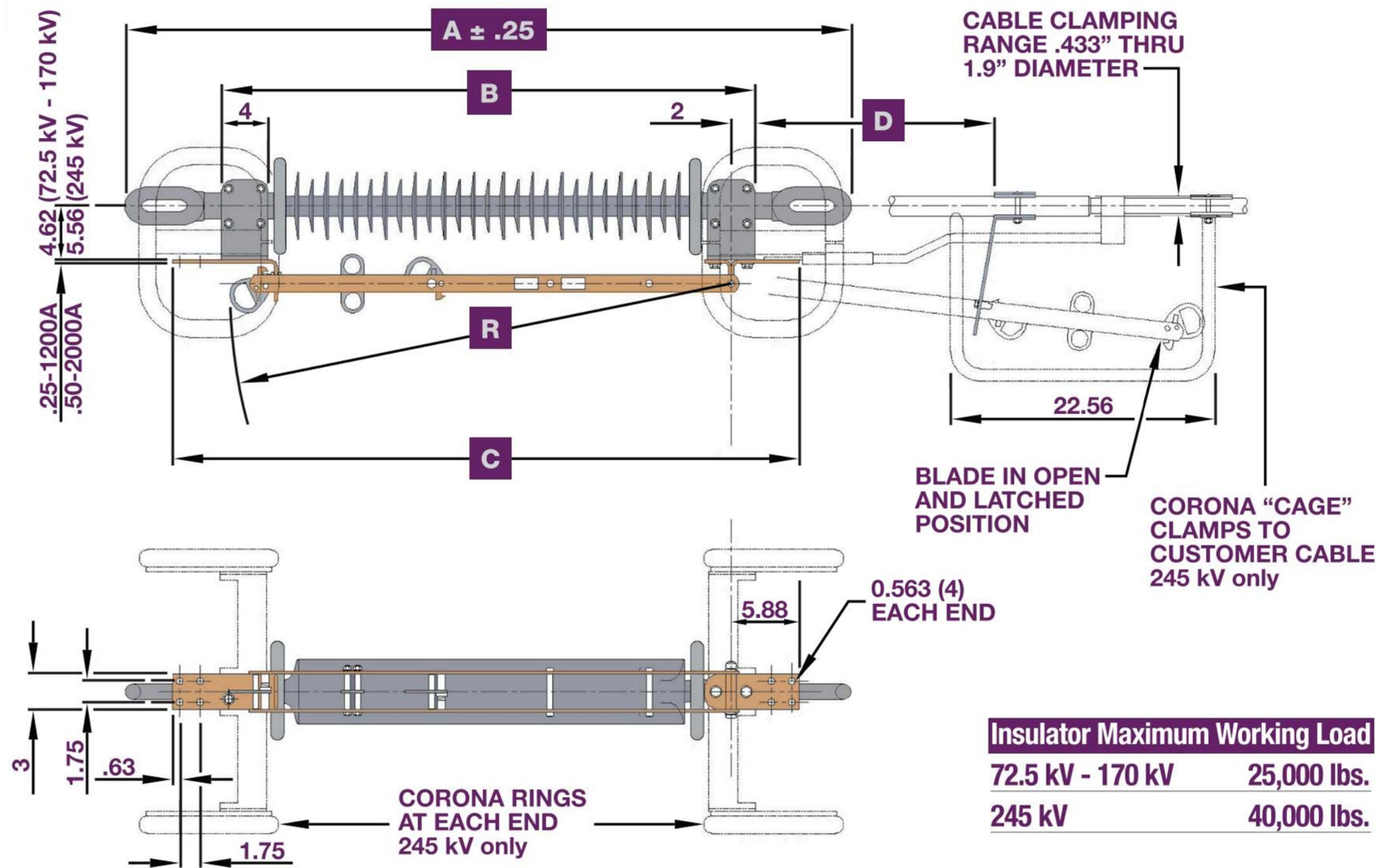
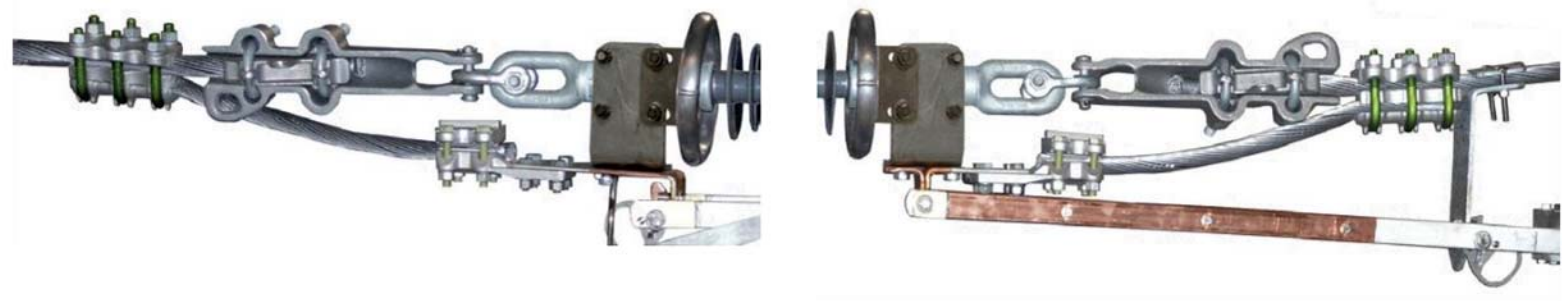
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Ratings and Dimensions

Connection

The ILO-C can be installed in the transmission line with a compression connection or a bolted connection as shown in the adjacent photos.



Ratings								Dimensions in Inches					
Max. kV	kV BIL	Pos. critical flashover value - kV	Amp.	Momentary kA	Peak kA	Short-Time kA	Style Number	A	B	C	D	R	Wt. lbs.
72.5	350	435	1200	61	99	38	C02A520G01	50.4	37.6	45.25	17	34.75	54
123	550	672	1200	61	99	38	C02A520G02	64.6	53	60.63	30.18	50.25	64
145	650	813	1200	61	99	38	C02A520G03	75.2	62.2	69.83	39.31	59.5	70
170	750	937	1200	61	99	38	C02A520G04	83.5	70.4	78	47.62	67.65	81
245	1050	1300	1200	61	99	38	C02A027G02	113.6	95.81	103.63	72	92.65	138
72.5	350	435	2000	100	164	63	C02B007G01	50.4	37.6	45.25	17	34.75	66
123	550	672	2000	100	164	63	C02B007G02	64.6	53	60.63	30.18	50.25	76
145	650	813	2000	100	164	63	C02B007G03	75.2	62.2	69.83	39.31	59.5	88
170	750	937	2000	100	164	63	C02B007G04	83.5	70.4	78	47.62	67.65	93
245	1050	1300	2000	100	164	63	C02B008G02	113.6	95.81	103.63	72	92.65	162

CLEAVELAND/PRICE INC.

14000 Rt. 993, Trafford, PA 15085 p 724-864-4177 f 724-864-9040
e sales@cleavelandprice.com w cleavelandprice.com

This brochure describes a standard product and does not show variations in design that may be available. Contact the factory for additional details.
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TRC
249 Western Avenue
Augusta, ME 04330

PE STAMP:



Kevin G. Martin

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

HOOKSTICK OPERATED
IN-LINE
TRANSMISSION SWITCH

PROJ
NUM: 422208
DES: D.LYONS
DWN: D. LYONS
CHK: K. DRZEWIECKI
APV: K. MARTIN
DATE: 06/21/2021
SCALE AT 22" x 34":

SHEET NO:
HV-E.15.01

REV:
2

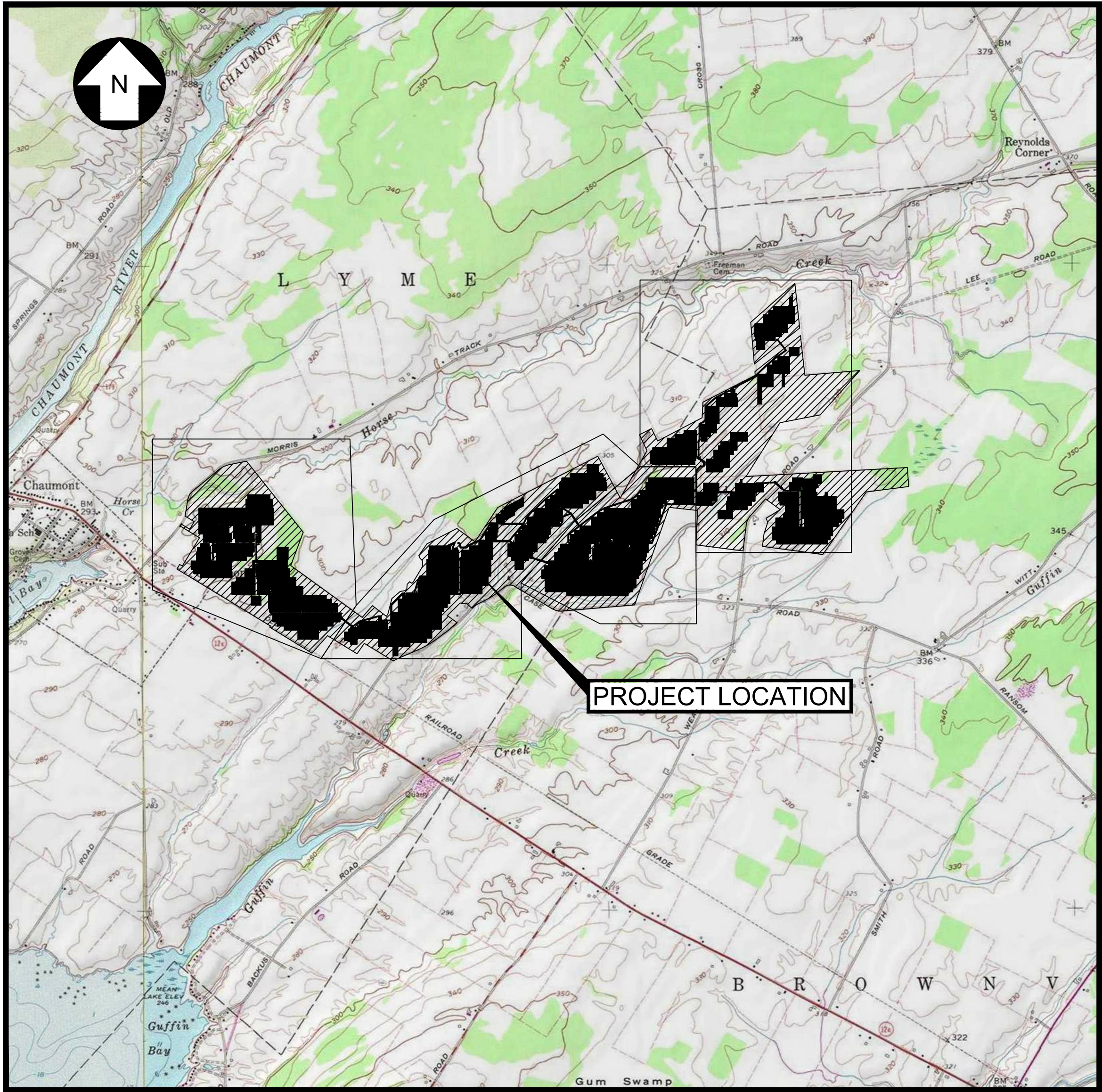
RIVERSIDE SOLAR PROJECT

ELECTRICAL PERMIT SET TOWNS OF LYME & BROWNVILLE JEFFERSON COUNTY, NEW YORK

LAT: 44.063697°
LONG: -76.096369°

PREPARED FOR:
AES CLEAN ENERGY
2180 SOUTH 1300 EAST, SUITE 600
SALT LAKE CITY, UT 84106

ELECTRICAL ENGINEER:
TRC ENGINEERS, LLC
249 WESTERN AVE.
AUGUSTA, ME 04330



LOCATION MAP
N.T.S.

POINT OF INTERCONNECT

DC CAPACITY: 130,854.88 kW
AC CAPACITY: 100,000.00 kW
DESIGN TEMP: 31°C
MINIMUM TEMP: -32°C

PV SYSTEM DRAWING INDEX:

PV-E.02.01	ELECTRICAL ONE-LINE DIAGRAM: FEEDER 1
PV-E.02.02	ELECTRICAL ONE-LINE DIAGRAM: FEEDER 1
PV-E.02.03	ELECTRICAL ONE-LINE DIAGRAM: FEEDER 2
PV-E.02.04	ELECTRICAL ONE-LINE DIAGRAM: FEEDER 2
PV-E.02.05	ELECTRICAL ONE-LINE DIAGRAM: FEEDER 3
PV-E.02.06	ELECTRICAL ONE-LINE DIAGRAM: FEEDER 3
PV-E.02.07	ELECTRICAL ONE-LINE DIAGRAM: FEEDER 4
PV-E.02.08	ELECTRICAL ONE-LINE DIAGRAM: FEEDER 4
PV-E.02.09	ELECTRICAL THREE-LINE DIAGRAM: FEEDER 1
PV-E.02.10	ELECTRICAL THREE-LINE DIAGRAM: FEEDER 2
PV-E.02.11	ELECTRICAL THREE-LINE DIAGRAM: FEEDER 3
PV-E.02.12	ELECTRICAL THREE-LINE DIAGRAM: FEEDER 4
PV-E.02.13	ELECTRICAL COLLECTION ONE LINE DIAGRAM

SUBSTATION DRAWING INDEX:

HV-E.02.01	ONE-LINE DIAGRAM
HV-E.04.01	THREE-LINE DIAGRAM
HV-E.04.02	THREE-LINE DIAGRAM
HV-E.04.03	THREE-LINE DIAGRAM
HV-E.04.04	THREE-LINE DIAGRAM



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KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

COVER SHEET

PROJ
NUM: 422208

DES: A. QUIROZ

DWN: E. BROWN

CHK: B. TYLOCK

APV: B. TYLOCK

DATE: 04/15/2021

SCALE AT 22" x 34":

AS SHOWN

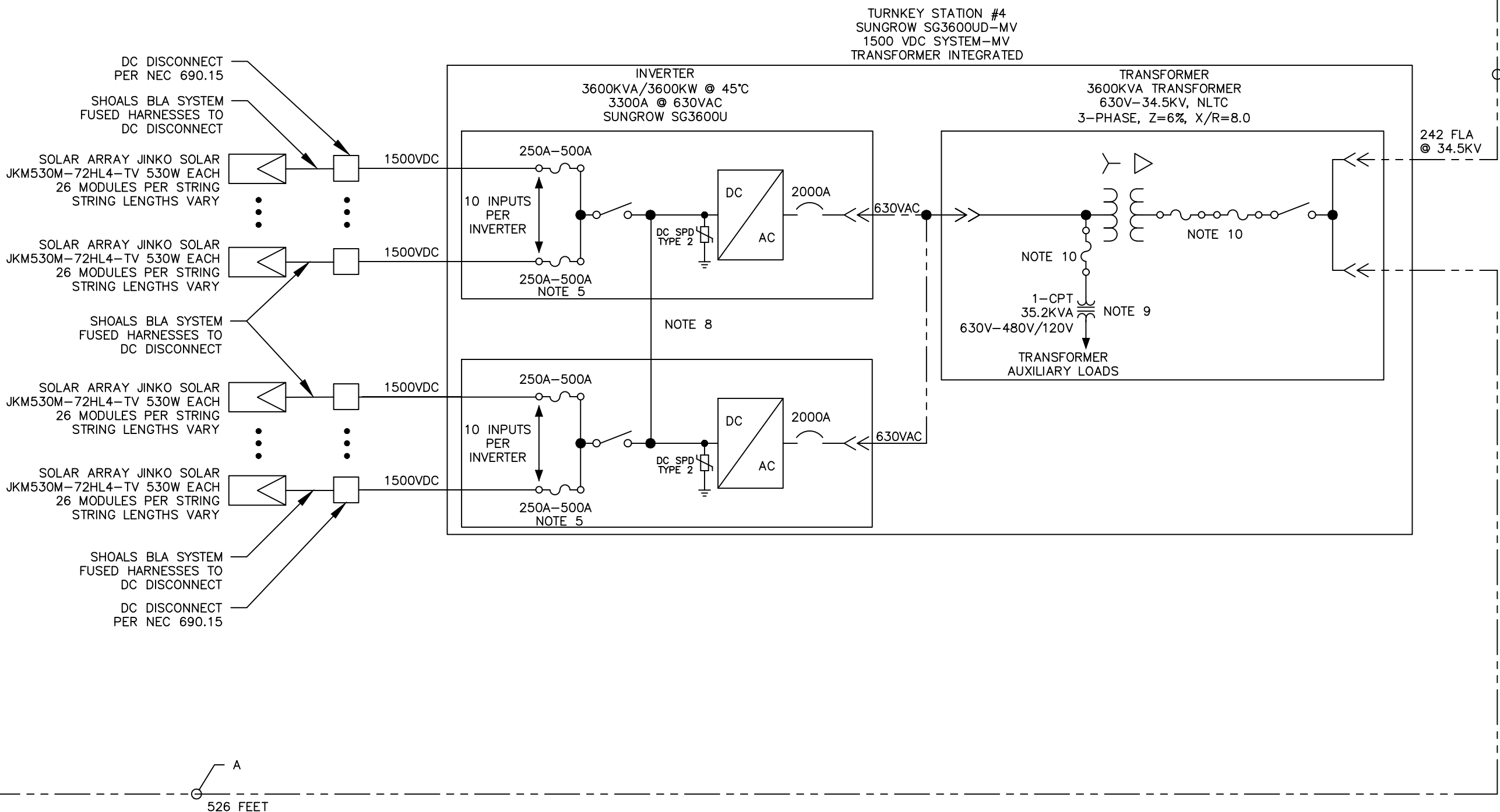
SHEET NO:
PV-G.00.01

REV:
2

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PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

ENGINEERS OF RECORD:

THE ELECTRICAL ENGINEERING PLANS WERE PREPARED UNDER THE DIRECTION OF CHARLES PASCALE, PE (NY 072988)
THE COLLECTION ENGINEERING PLANS WERE PREPARED UNDER THE DIRECTION OF KEVIN MARTIN, PE (099090)



PV SYSTEM SPECIFICATIONS (FEEDER 1)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	58,188 X JINKO SOLAR JK530M-72HL4-TV 530W	PV MODULES	246,896 X JINKO SOLAR JK530M-72HL4-TV 530W
DC RATING AT STC	30,839.64 KW	DC RATING AT STC	130,854.88 KW
INVERTERS	(7) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	23,333.33 KW	AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO ⊗ POI	1.322	DC/AC RATIO ⊗ POI	1.31
DC/AC RATIO ⊗ INVERTER	1.224	DC/AC RATIO ⊗ INVERTER	1.21

NOTES:

1. THIS DRAWING IS PROVIDED FOR PERMIT TO ORES UNDER SECTION 1741- C.
2. THIS DRAWING IS FOR CONCEPTUAL USE ONLY AND SHALL NOT BE USED FOR ANY CONTRACTS OR CONSTRUCTION.
3. COLLECTOR SYSTEM CONDUCTOR SIZE AND SPECIFICATIONS TO BE VERIFIED DURING THE DETAILED DESIGN.
4. THE TRANSFORMER SYSTEM IMPEDANCE WILL BE DETERMINED THROUGH GROWING FUTURE VALUES TO BE SUBMITTED TO THE UTILITY WHEN AVAILABLE.
5. FUSE SIZE VARIES BASED ON NUMBER OF STRINGS CONNECTED. FINAL FUSE SIZE TO BE CONFIRMED AT THE ISSUING OF THE CONSTRUCTION DRAWING SET.
6. INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORTED UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
7. AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
8. THE TWO DC BUS BARS ARE CONNECTED TOGETHER.
9. WHEN 1 MPTT IS SELECTED, ONE MPTT IS STANDARD.
10. OPTIONAL, AT TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
11. FINAL FUSE SIZES TBD BY MANUFACTURER.

A circular professional seal for Charles Pascale, a Licensed Professional Engineer in the State of New York. The seal features the text "STATE OF NEW YORK" at the top and "LICENSED PROFESSIONAL ENGINEER" at the bottom. In the center, it reads "CHARLES PASCALE" and "072988". The seal also includes a small emblem of the State of New York and a signature.

KEY PLAN:

PROJECT TITLE:

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL ONE LINE DIAGRAM

SCALE AT 22" x 34":

NONE

SHEET NO:
PV-E.02.01

REV:

2

AES Titleblock 2/23/24 V2 10319

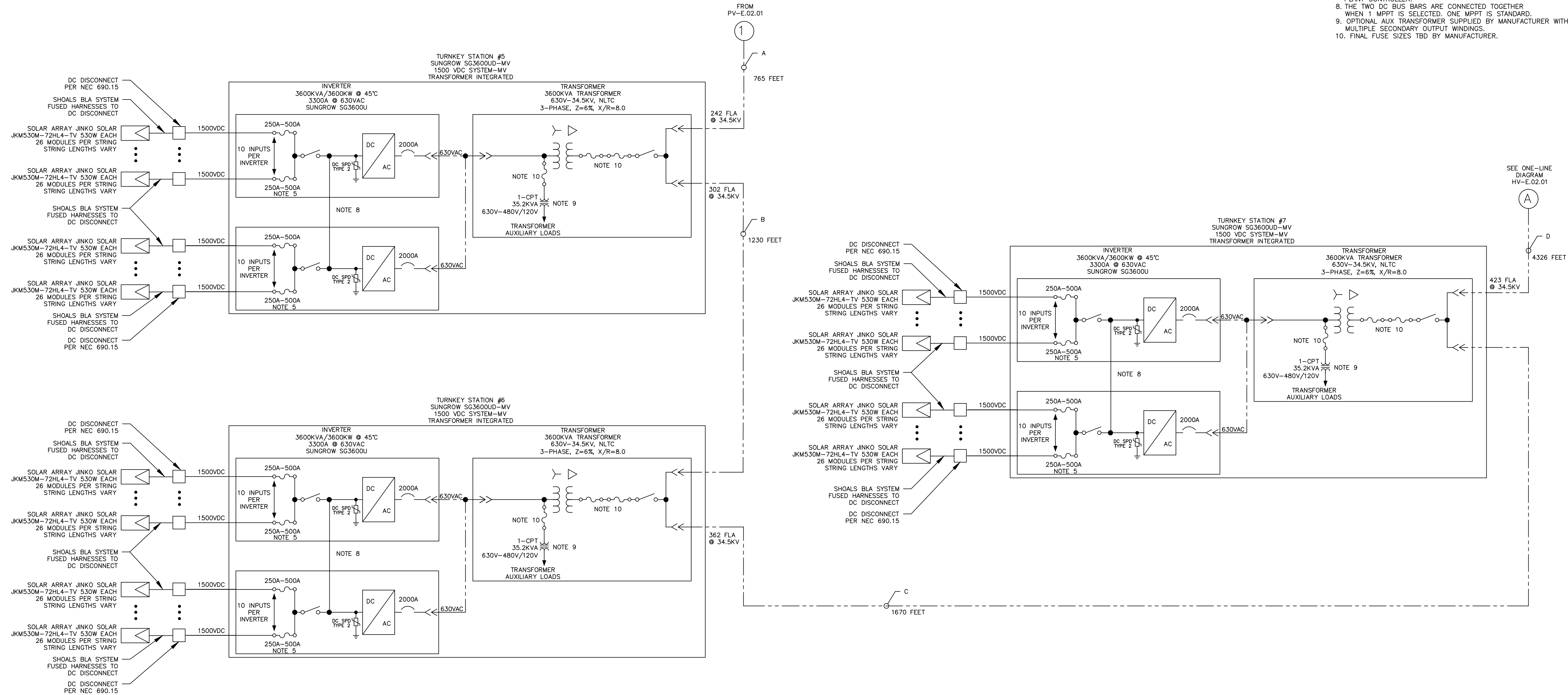
PLOTTED: 9/26/2021 12:17 PM
XREF: \\engineering\proj\1081152942206_Electrical One Line Diagram.dwg

INPUT	STRINGS PER INPUT						
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1	16	16	15	16	17	15	17
2	16	16	15	13	16	17	15
3	16	16	15	16	15	17	16
4	16	16	15	16	16	17	16
5	16	16	15	16	16	17	16
6	16	16	13	16	16	17	17
7	14	16	16	16	16	17	17
8	16	16	16	16	16	17	17
9	16	16	16	12	16	17	17
10	14	16	16	17	16	16	16
11	17	16	16	17	16	16	16
12	17	16	16	17	16	17	16
13	16	18	16	17	16	17	16
14	16	16	16	17	16	16	16
15	16	16	16	17	16	16	16
16	16	16	16	17	16	16	14
17	16	15	14	17	17	16	15
18	16	16	16	15	17	16	16
19	16	18	16	15	17	16	16
20	16	16	16	15	17	16	16

PV SYSTEM SPECIFICATIONS (FEEDER 1)				PV SYSTEM SPECIFICATIONS TOTAL SYSTEM			
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INVERTERS	(7) X SUNGROW SG3600U			INVERTERS	(30) X SUNGROW SG3600U		
AC RATING ^{NOTE 7}	23,333.33 KW			AC RATING ^{NOTE 7}	100,000.00 KW		
DC/AC RATIO @ POI	1.322			DC/AC RATIO @ POI	1.31		
DC/AC RATIO @ INVERTER	1.224			DC/AC RATIO @ INVERTER	1.21		

CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 750 AL, PVC JACKET DB EPR INSULATION, MV-105

- NOTES:
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 - THIS DRAWING IS FOR CONCEPTUAL USE ONLY AND SHALL NOT BE USED FOR ANY CONTRACTS OR CONSTRUCTION.
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 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.



UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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Salt Lake City, UT 84108-2749
(801) 679 - 3500

249 Western Avenue
Augusta, ME 04330

PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME & BROWNVILLE
JEFFERSON CO., NY

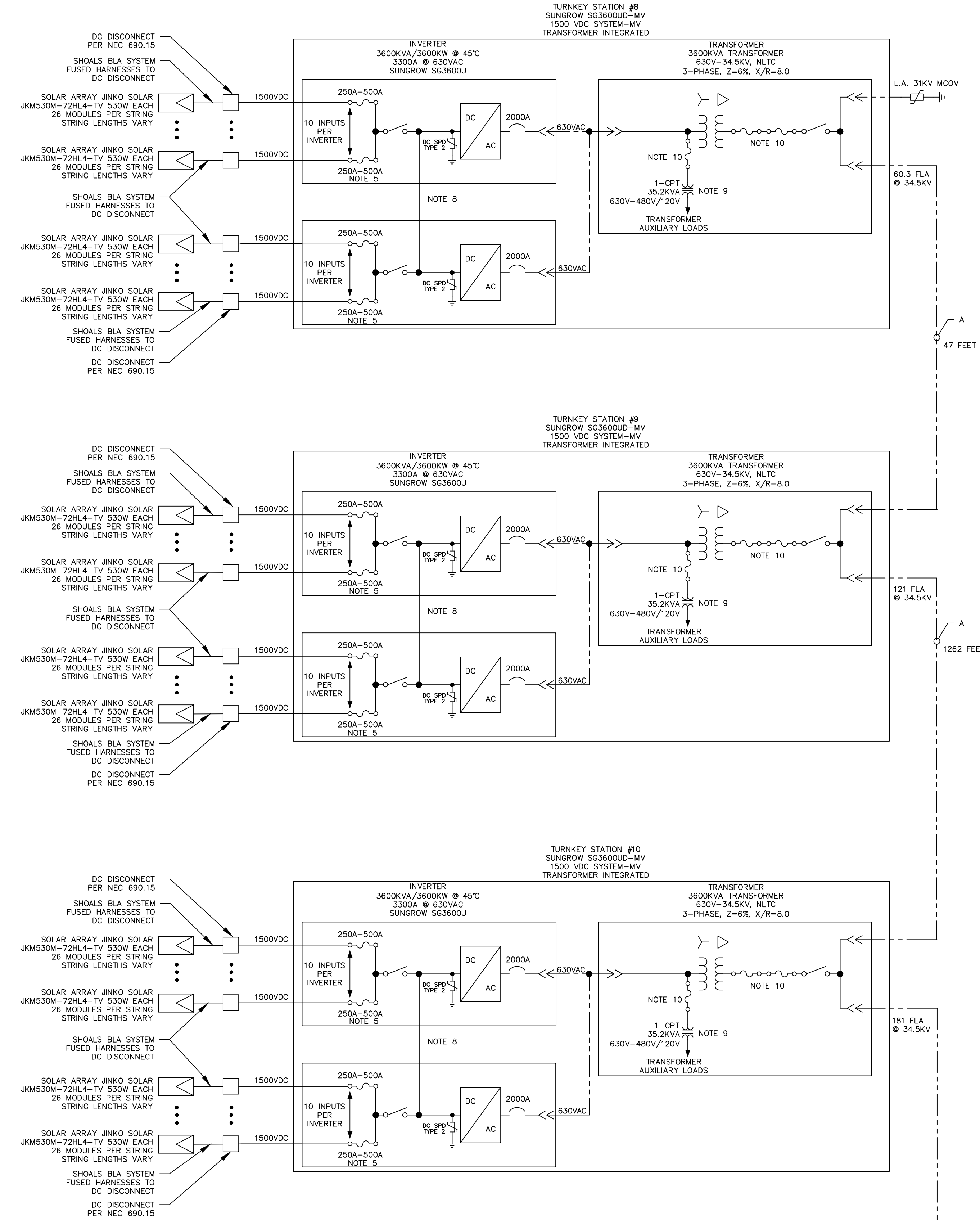
SHEET TITLE & DESCRIPTION:

ELECTRICAL ONE LINE
DIAGRAM

PROJ NUM:	422208
DES:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	C. PASCALE
DATE:	03/21/2021
SCALE AT 22" x 34":	
NONE	
SHEET NO:	PV-E.02.02
REV:	2

AES Titleblock 2/23/24 V2 10319

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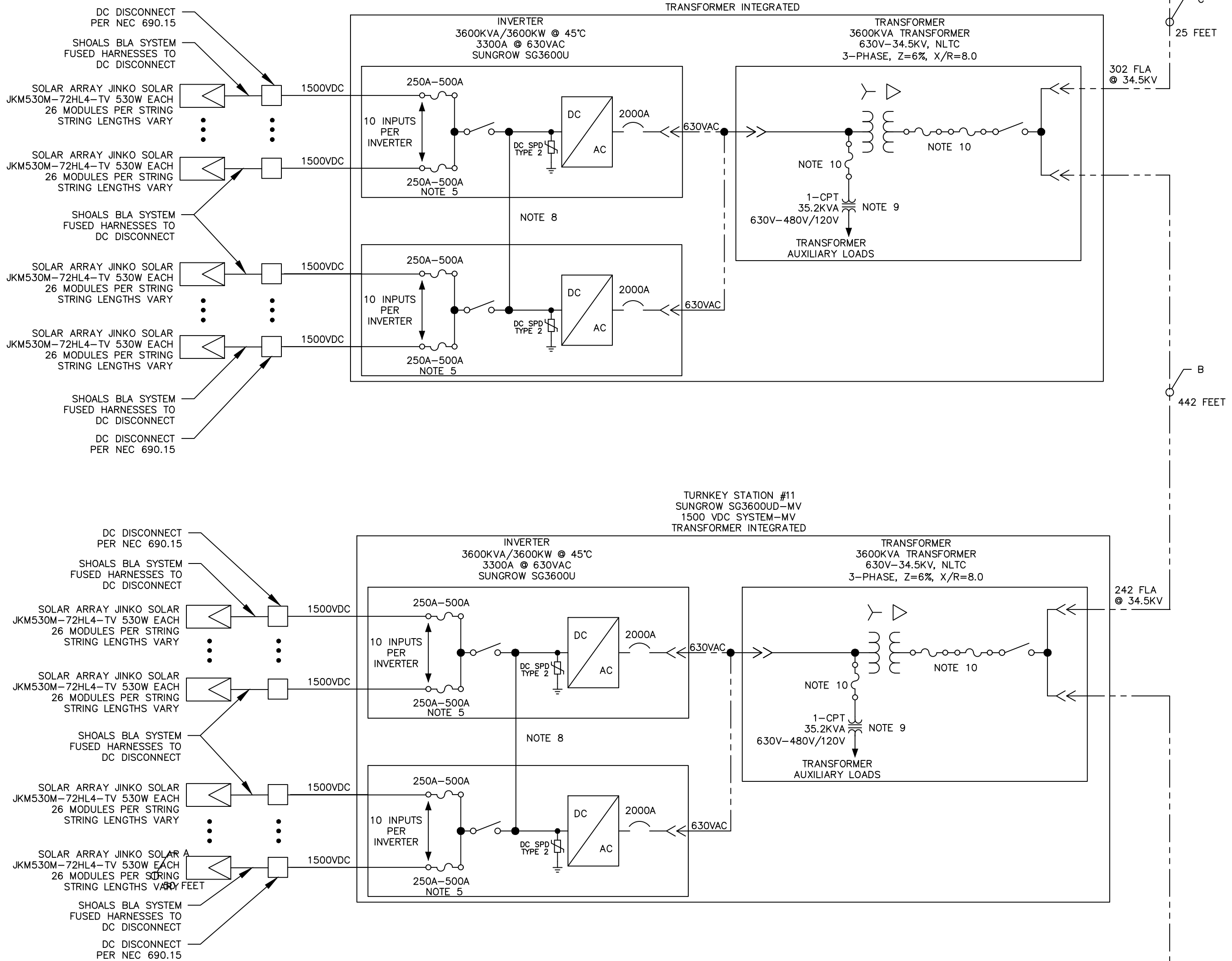
STRINGS PER INPUT									
INPUT	TS9	TS10	TS11	TS12	TS13	TS14	TS15		
1	16	17	16	18	15	16	17	16	
2	16	17	16	18	16	16	17	16	
3	16	17	16	18	16	17	17	15	
4	16	17	16	18	16	17	17	17	
5	16	16	16	18	15	17	17	16	
6	16	16	16	18	15	17	17	17	
7	16	16	16	18	17	17	17	16	
8	16	16	16	18	16	17	17	16	
9	16	16	16	18	16	17	16	16	
10	16	16	16	18	17	17	14	16	
11	16	16	16	18	15	17	15	14	
12	16	16	17	18	15	17	15	12	
13	16	17	17	18	15	17	17	14	
14	16	17	18	18	17	17	17	16	
15	16	17	18	18	18	17	17	16	
16	16	17	18	18	16	17	17	15	
17	16	17	18	15	18	17	17	15	
18	16	17	18	16	18	17	17	16	
19	16	15	18	16	18	16	17	17	
20	16	15	18	16	18	16	17	16	

PV SYSTEM SPECIFICATIONS (FEEDER 2)		
PV MODULES	68,510 X JINKO SOLAR JKM530M-72HL4-TV	530W
DC RATING AT STC	36,310.30	
INVERTERS	(8) X SUNGROW SG3600U	
AC RATING ^{NOTE 7}	26,666.67 KW	
DC/AC RATIO @ POI	1.362	
DC/AC RATIO @ INVERTER	1.261	

PV SYSTEM SPECIFICATIONS TOTAL SYSTEM		
PV MODULES	246,896 X JINKO SOLAR JKM530M-72HL4-TV	530W
DC RATING AT STC	130,854.88 KW	
INVERTERS	(30) X SUNGROW SG3600U	
AC RATING ^{NOTE 7}	100,000.00 KW	
DC/AC RATIO @ POI	1.31	
DC/AC RATIO @ INVERTER	1.21	

CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105

- NOTES:
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 - FUSE SIZE VARIES BASED ON NUMBER OF STRINGS CONNECTED. FINAL FUSE SIZE TO BE CONFIRMED AT THE ISSUING OF THE CONSTRUCTION DRAWING SET.
 - INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
 - AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
 - THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.



PRELIMINARY
NOT FOR CONSTRUCTION

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2180 South 1300 East, Suite 600
Salt Lake City, UT 84108-2749
(801) 679-3500



249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL ONE LINE
DIAGRAM

PROJ
NUM:

422208

DES:

A. QUIROZ

DWN:

A. QUIROZ

CHK:

B. TYLOCK

APV:

C. PASCALE

DATE:

03/21/2021

SCALE AT 22" x 34":

NONE

SHEET NO:

PV-E.02.03

REV:

2

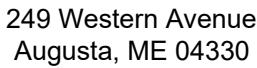
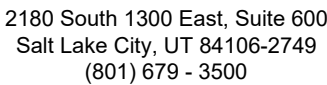
PV SYSTEM SPECIFICATIONS (FEEDER 2)			PV SYSTEM SPECIFICATIONS TOTAL SYSTEM		
PV MODULES	68,510 X JINKO SOLAR JKM530M-72HL4-TV 530W		PV MODULES	246,896 X JINKO SOLAR JKM530M-72HL4-TV 530W	
DC RATING AT STC	36,310.30		DC RATING AT STC	130,854.88 KW	
INVERTERS	(8) X SUNGROW SG3600U		INVERTERS	(30) X SUNGROW SG3600U	
AC RATING ^{NOTE 7}	26,666.67 KW		AC RATING ^{NOTE 7}	100,000.00 KW	
DC/AC RATIO ⊗ POI	1.362		DC/AC RATIO ⊗ POI	1.31	
DC/AC RATIO ⊗ INVERTER	1.261		DC/AC RATIO ⊗ INVERTER	1.21	
CONDUIT & WIRE SCHEDULE					
NO.	DESCRIPTION	CONDUCTORS			
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105			
B	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105			
C	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105			

NOTES:

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4. THE TRANSFORMER SYSTEM IMPEDANCE WILL BE DETERMINED THROUGH SUNGROW. FINAL VALUES TO BE SUBMITTED TO THE UTILITY WHEN AVAILABLE.
5. FUSE SIZE Varies BASED ON NUMBER OF STRINGS CONNECTED. FINAL FUSE SIZE TO BE CONFIRMED AT THE ISSUING OF THE CONSTRUCTION DRAWING SET.
6. INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
7. AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
8. THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MW IS SELECTED, ONE WPTT IS STANDARD.
9. OPTIONAL AC TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
10. FINAL FUSE SIZES TBD BY MANUFACTURER.



UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



PE STAMP:



KEY PLAN:

[illegible]

PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL ONE LINE DIAGRAM

PROJ	422208
NUM:	

DES: A. C

DWN: A. C.

CHK: B. TYLOCK

APV: C. PASCALI

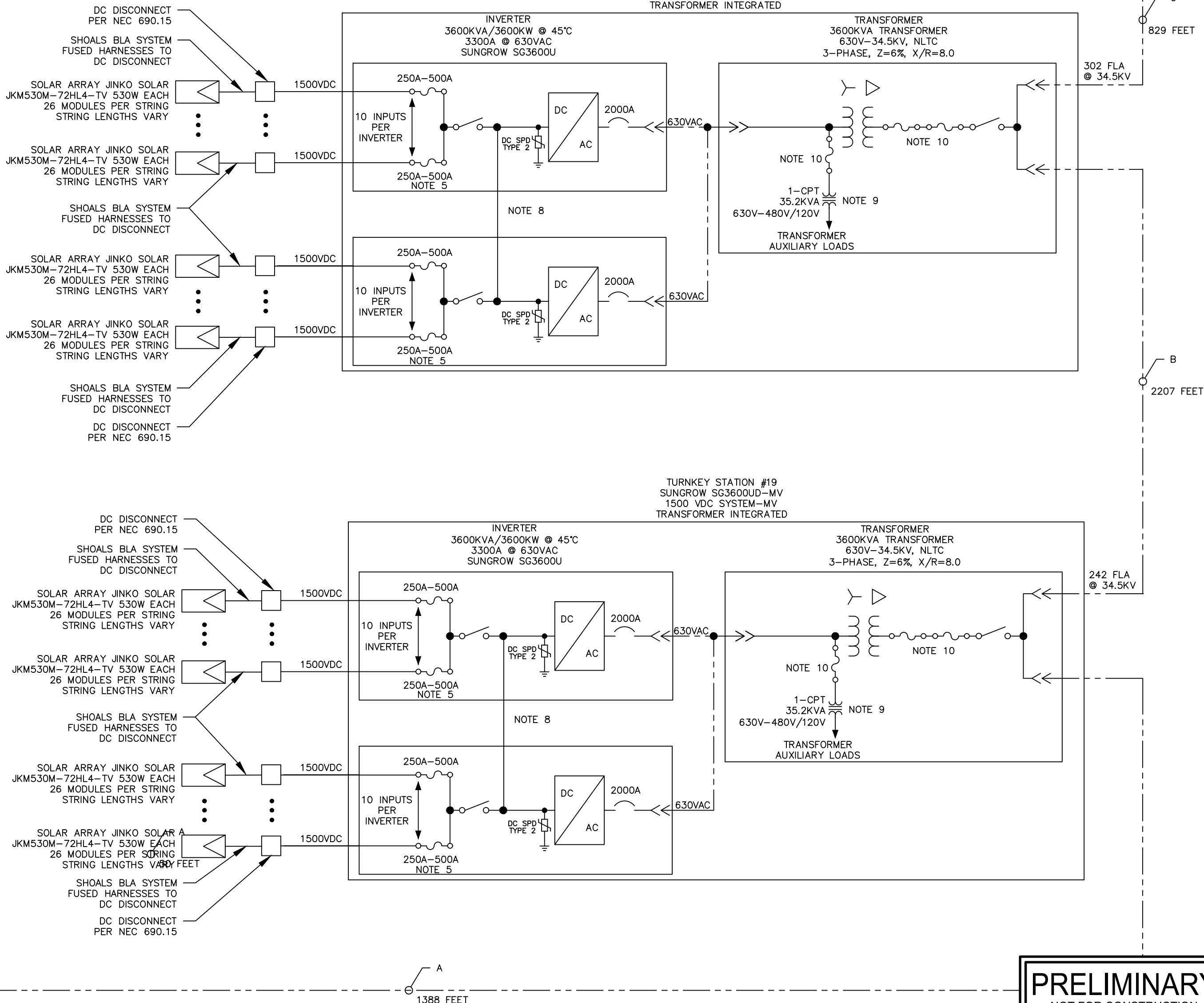
DATE: _____ C _____

NONE

SHEET NO:
PV-E.02.04

REV:

2



PV SYSTEM SPECIFICATIONS (FEEDER 3)			PV SYSTEM SPECIFICATIONS TOTAL SYSTEM		
PV MODULES	72,748 X JINKO SOLAR JK530M-72HL4-TV	530W	PV MODULES	246,896 X JINKO SOLAR JK530M-72HL4-TV	530W
DC RATING AT STC	38,556.44 KW		DC RATING AT STC	130,854.88 KW	
INVERTERS	(9) X SUNGROW SG3600U		INVERTERS	(30) X SUNGROW SG3600U	
AC RATING ^{NOTE 7}	30,000.00 KW		AC RATING ^{NOTE 7}	100,000.00 KW	
DC/AC RATIO ⊗ POI	1.285		DC/AC RATIO ⊗ POI	1.31	
DC/AC RATIO ⊗ INVERTER	1.190		DC/AC RATIO ⊗ INVERTER	1.21	
CONDUIT & WIRE SCHEDULE					
NO.	DESCRIPTION	CONDUCTORS			
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105			
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105			
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105			

- NOTES:
1. THIS DRAWING IS PROVIDED FOR PERMIT TO ORES UNDER SECTION 34-C.
 2. THIS DRAWING IS FOR CONCEPTUAL USE ONLY AND SHALL NOT BE USED FOR ANY CONTRACTS OR CONSTRUCTION.
 3. COLLECTOR SYSTEM CONDUCTOR SIZE AND SPECIFICATIONS TO BE VERIFIED DURING THE DETAILED DESIGN.
 4. THE TRANSFORMER SYSTEM IMPEDANCE WILL BE DETERMINED DURING UNLOADING. FINAL VALUES TO BE SUBMITTED TO THE UTILITY WHEN AVAILABLE.
 5. FUSE SIZE VARIES BASED ON NUMBER OF STRINGS CONNECTED. FINAL FUSE SIZE TO BE CONFIRMED AT THE ISSUING OF THE CONSTRUCTION DRAWING SET.
 6. INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 S/A AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
 7. AC RATING MEASURED AT THE POI IS ADJUSTED TO 100MW BY THE PLANT CONTROLLER.
 8. THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 9. TRANSFERAL AUXILIARY TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 10. FINAL FUSE SIZES TBD BY MANUFACTURER.

REVISIONS:		
NO.	DATE	DESCRIPTION
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

RIVERSIDE SOLAR
PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL ONE LINE DIAGRAM

PROJ NUM:	422208
DES:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	C. PASCALE
DATE:	03/21/2021
SCALE AT 22" x 34":	

NONE

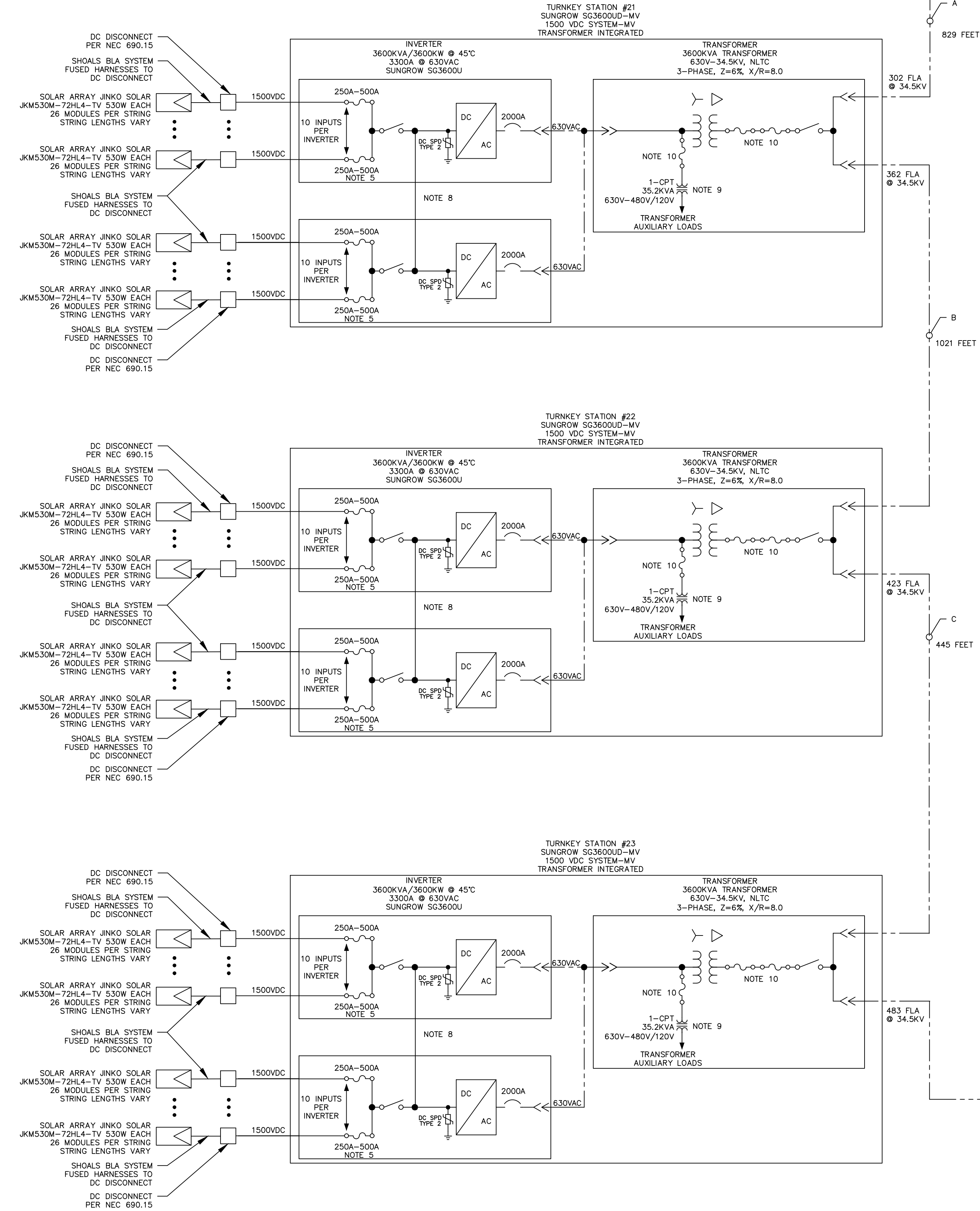
SHEET NO:
PV-E.02.05

REV:

2

AES Titleblock 2/23/24 V2 10319
PLOTTED: 9/26/2021 12:25 PM
XREF: \\engineering\proj\152492206_Electrical One Line Diagram.dwg

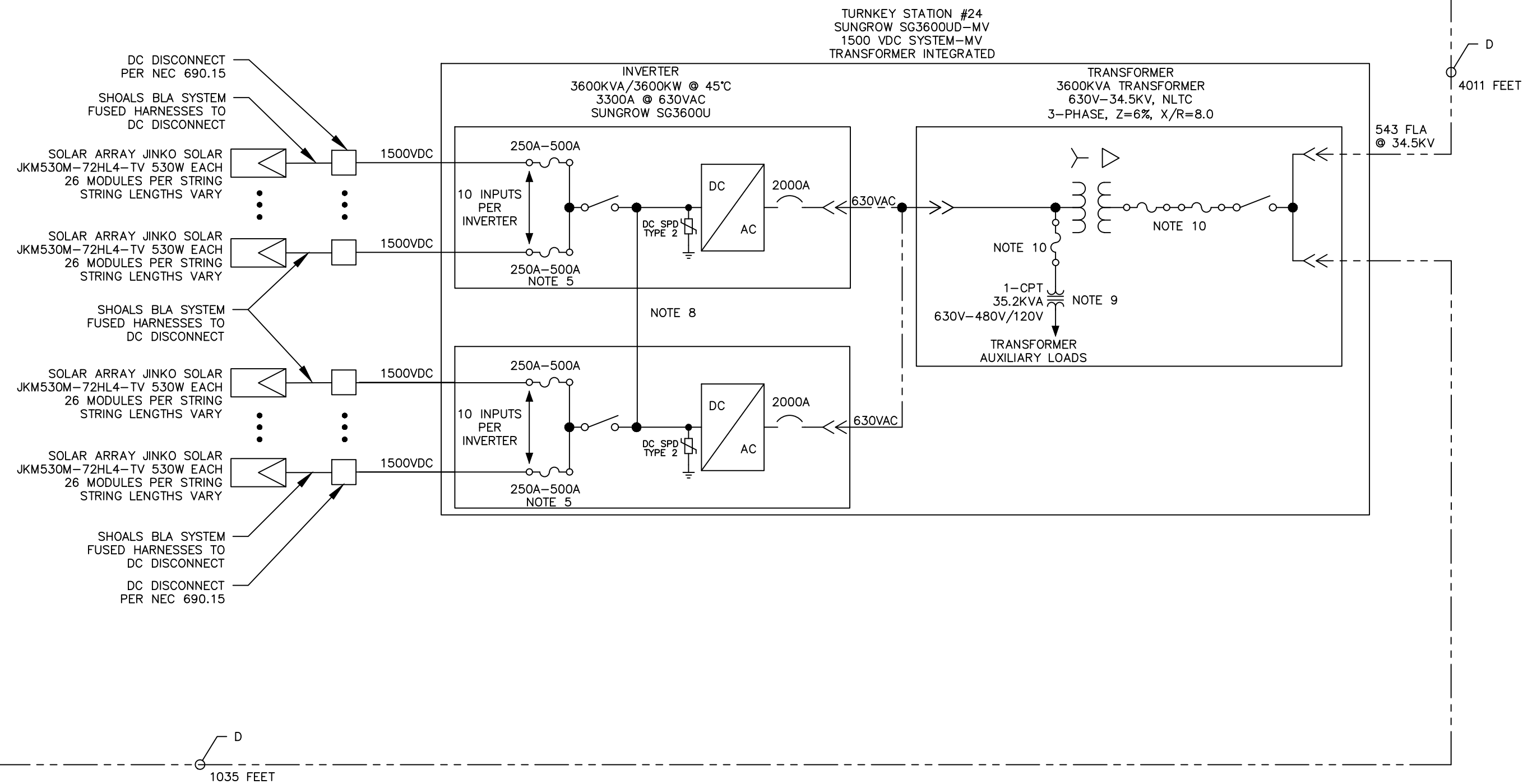
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



STRINGS PER INPUT															
INPUT	TS16	TS17	TS18	TS19	TS20	TS21	TS22	TS23	TS24						
1	16	16	15	15	17	16	14	16	16						
2	16	16	15	15	17	16	17	16	16						
3	16	16	16	15	17	17	16	16	16						
4	16	16	16	13	17	17	16	16	16						
5	16	16	16	14	17	17	17	16	16						
6	16	13	16	14	17	17	17	14	12						
7	16	15	16	14	17	17	16	16	16						
8	15	16	16	17	16	17	16	16	16						
9	16	16	16	17	15	17	16	16	16						
10	16	14	14	15	15	17	16	16	16						
11	16	16	16	16	16	17	17	16	16						
12	16	16	14	16	16	17	16	16	16						
13	16	16	15	17	16	15	16	16	16						
14	16	16	17	16	16	12	16	16	16						
15	16	16	17	16	14	15	17	16	17						
16	16	16	16	17	16	16	15	16	16						
17	16	17	17	17	17	16	16	16	17						
18	16	17	17	17	17	16	16	14	17						
19	0	17	0	17	17	16	16	15	17						
20	0	0	0	17	17	16	16	17	17						

PV SYSTEM SPECIFICATIONS (FEEDER 3)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	72,748 X JINKO SOLAR JKM530M-72HL4-TV 530W	PV MODULES	246,896 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	38,556.44 KW	DC RATING AT STC	130,854.88 KW
INVERTERS	(9) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	30,000.00 KW	AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.285	DC/AC RATIO @ POI	1.31
DC/AC RATIO @ INVERTER	1.190	DC/AC RATIO @ INVERTER	1.21
CONDUIT & WIRE SCHEDULE			
NO.	DESCRIPTION	CONDUCTORS	
A	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105	
B	FEEDER CIRCUIT	3 X 250 AL, PVC JACKET DB EPR INSULATION, MV-105	
C	FEEDER CIRCUIT	3 X 350 AL, PVC JACKET DB EPR INSULATION, MV-105	
D	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105	

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 - AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
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 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.



PRELIMINARY
NOT FOR CONSTRUCTION

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2180 South 1300 East, Suite 600
Salt Lake City, UT 84108-2749
(801) 679 - 3500

TRC

249 Western Avenue
Augusta, ME 04330

PE STAMP:



KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

**RIVERSIDE SOLAR
PROJECT**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**ELECTRICAL ONE LINE
DIAGRAM**

PROJ
NUM:

422208

DEN:

A. QUIROZ

DWN:

A. QUIROZ

CHK:

B. TYLOCK

APV:

C. PASCALE

DATE:

03/21/2021

SCALE AT 22" x 34":

NONE

SHEET NO:

PV-E.02.06

REV:

2

PV SYSTEM SPECIFICATIONS (FEEDER 4)			PV SYSTEM SPECIFICATIONS TOTAL SYSTEM		
PV MODULES	47,450 X JINKO SOLAR JK530M-72HL4-TV	530W	PV MODULES	246,896 X JINKO SOLAR JK530M-72HL4-TV	530W
DC RATING AT STC	25,148.50		DC RATING AT STC	130,854.88 KW	
INVERTERS	(6) X SUNGROW SG3600U		INVERTERS	(30) X SUNGROW SG3600U	
AC RATING ^{NOTE 7}	20,000.00 KW		AC RATING ^{NOTE 7}	100,000.00 KW	
DC/AC RATIO ⊗ POI	1.257		DC/AC RATIO ⊗ POI	1.31	
DC/AC RATIO ⊗ INVERTER	1.164		DC/AC RATIO ⊗ INVERTER	1.21	
CONDUIT & WIRE SCHEDULE					
NO.	DESCRIPTION	CONDUCTORS			
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105			

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Salt Lake City, UT 84106-2749
(801) 679 - 3500

 **TRC**

249 Western Avenue
Augusta, ME 04330

A circular professional seal for the State of New York. The outer ring contains the text "STATE OF NEW YORK" at the top and "LICENSED PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the name "CHARLES PASCALE" is written in an arc. Below the name is a central emblem featuring a shield with a sun, a plow, and a sheaf of wheat, flanked by two figures. Below the emblem is the license number "072988". A signature is written across the seal.

REVISIONS:

PROJECT TITLE:

PROJECT LOCATION:

SHEET TITLE & DESCRIPTION:

PROJ	422208
NUM:	

DES: A. QUIROZ

DWN: A QUIROZ

CHK: B. TYLOCK

ADVA C. PASCALE

DATE 09/01/2001

SCALE AT 22" x 34"

NONE

SHEET NO:
PV-E.02.07

RFV-

2



UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

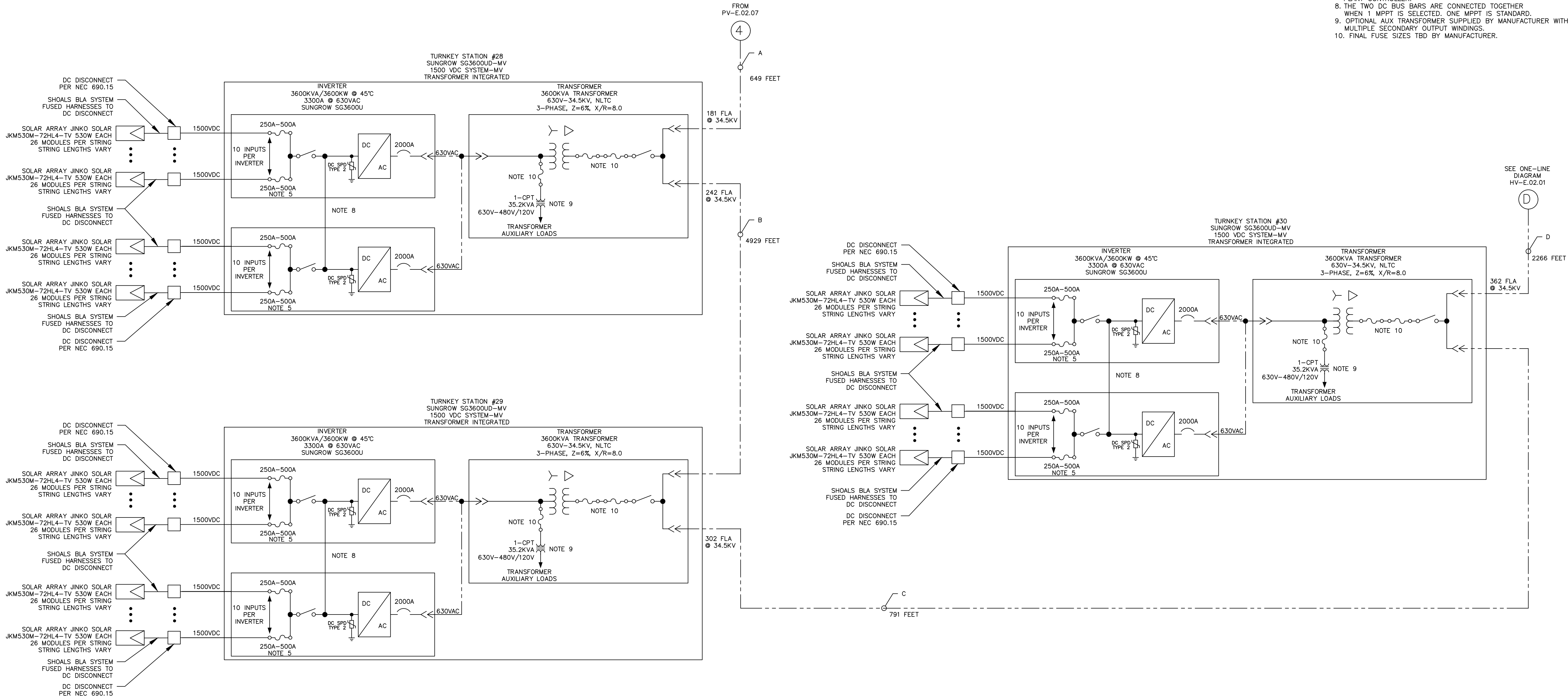
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INPUT	STRINGS PER INPUT									
	TS25	TS26	TS27	TS28	TS29	TS30	TS31	TS32	TS33	TS34
1	16	16	14	15	14	16				
2	13	16	16	15	14	16				
3	16	16	16	15	17	16				
4	16	16	14	14	17	16				
5	16	16	16	14	17	15				
6	16	17	16	13	17	15				
7	16	17	16	14	17	17				
8	13	17	15	16	16	16				
9	14	15	15	16	16	16				
10	15	16	14	14	16	16				
11	16	16	16	17	16	16				
12	16	15	17	16	16	16				
13	16	16	16	16	17	16				
14	16	17	16	17	17	16				
15	16	17	16	16	14	14				
16	16	16	16	16	17	17				
17	13	17	16	16	16	16				
18	13	16	16	16	17	16				
19	13	16	0	16	17	16				
20	0	16	0	0	16	16				

PV SYSTEM SPECIFICATIONS (FEEDER 4)		PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	47,450 X JINKO SOLAR JKM530M-72HL4-TV 530W	PV MODULES	246,896 X JINKO SOLAR JKM530M-72HL4-TV 530W
DC RATING AT STC	25,148.50	DC RATING AT STC	130,854.88 KW
INVERTERS	(6) X SUNGROW SG3600U	INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	20,000.00 KW	AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO @ POI	1.257	DC/AC RATIO @ POI	1.31
DC/AC RATIO @ INVERTER	1.164	DC/AC RATIO @ INVERTER	1.21

CONDUIT & WIRE SCHEDULE		
NO.	DESCRIPTION	CONDUCTORS
A	FEEDER CIRCUIT	3 X 1/0 AL, PVC JACKET DB EPR INSULATION, MV-105
B	FEEDER CIRCUIT	3 X 2/0 AL, PVC JACKET DB EPR INSULATION, MV-105
C	FEEDER CIRCUIT	3 X 4/0 AL, PVC JACKET DB EPR INSULATION, MV-105
D	FEEDER CIRCUIT	3 X 500 AL, PVC JACKET DB EPR INSULATION, MV-105

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 - FUSE SIZE VARIES BASED ON NUMBER OF STRINGS CONNECTED. FINAL FUSE SIZE TO BE CONFIRMED AT THE ISSUING OF THE CONSTRUCTION DRAWING SET.
 - INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
 - AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
 - THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.



PRELIMINARY
NOT FOR CONSTRUCTION

2180 South 1300 East, Suite 600
Salt Lake City, UT 84108-2749
(801) 679 - 3500

249 Western Avenue
Augusta, ME 04330

PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME & BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

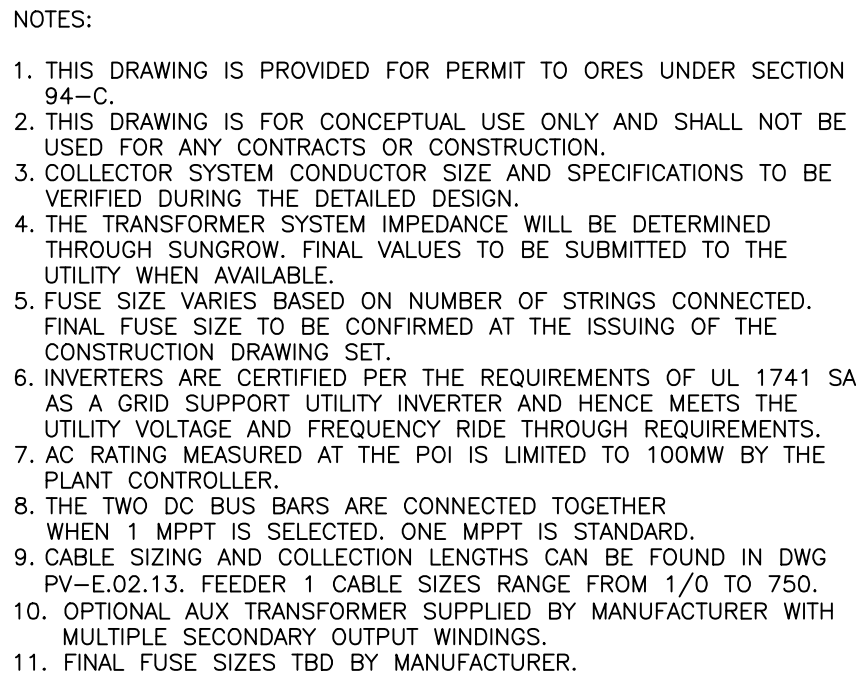
ELECTRICAL ONE LINE
DIAGRAM

PROJ NUM:	422208
DES:	A. QUIROZ
DWN:	A. QUIROZ
CHK:	B. TYLOCK
APV:	C. PASCALE
DATE:	03/21/2021
SCALE AT 22" x 34":	

NONE

SHEET NO: PV-E.02.08

REV: 2



FEEDER 1 TURNKEY STATION (TS) PV STRINGING				
TURNKEY STATION (TS)	PV SERIES MODULES	INPUT NUMBER	PARALLEL STRINGS	PV MODULES PER TS
1	26	20	SEE TABLE 1	8,268
2	26	20	SEE TABLE 1	8,268
3	26	20	SEE TABLE 1	8,060
4	26	20	SEE TABLE 1	8,268
5	26	20	SEE TABLE 1	8,424
6	26	20	SEE TABLE 1	8,554
7	26	20	SEE TABLE 1	8,346
TOTAL PV MODULES ON FEEDER 1				58,188

	STRINGS PER INPUT						
INPUT	TS1	TS2	TS3	TS4	TS5	TS6	TS7
1	16	16	15	16	17	15	17
2	16	16	15	16	17	15	17
3	16	16	15	16	17	15	17
4	16	16	15	16	17	15	17
5	16	16	15	16	17	15	17
6	16	16	13	16	16	17	17
7	14	16	16	16	16	17	17
8	16	16	16	16	16	17	17
9	16	16	16	16	16	17	17
10	16	16	16	16	16	17	17
11	17	16	16	17	16	16	16
12	17	16	16	17	16	17	16
13	16	18	16	17	16	17	16
14	16	16	16	17	16	16	16
15	16	16	16	17	16	16	16
16	16	16	16	17	16	16	16
17	16	16	14	17	16	16	16
18	16	16	16	17	17	16	16
19	16	16	16	15	17	16	16
20	16	16	16	15	17	16	16

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PV SYSTEM SPECIFICATIONS (FEEDER 1)	
PV MODULES	58,188 X JINKO SOLAR JK530M-72HL4-TV 530W
DC RATING AT STC	30,839.64 KW
INVERTERS	(7) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	23,333.33 KW
DC/AC RATIO ⊗ POI	1.322
DC/AC RATIO ⊗ INVERTER	1.224

PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	246,896 X JINKO SOLAR JK5530M-72HL4-TV 530W
DC RATING AT STC	130,854.88 KW
INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO ⊗ PO	1.31
DC/AC RATIO ⊗ INVERTER	1.21

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KEY PLAN:

REVISIONS:

[illegible]

PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL THREE-LINE DIAGRAM

PROJ	422208
NUM:	

DES: A. QUIROGA

DWN: A. QUIROGA

CHK: B. TYLOO

APV: C. PASCA

DATE: 03/21/20

NONE

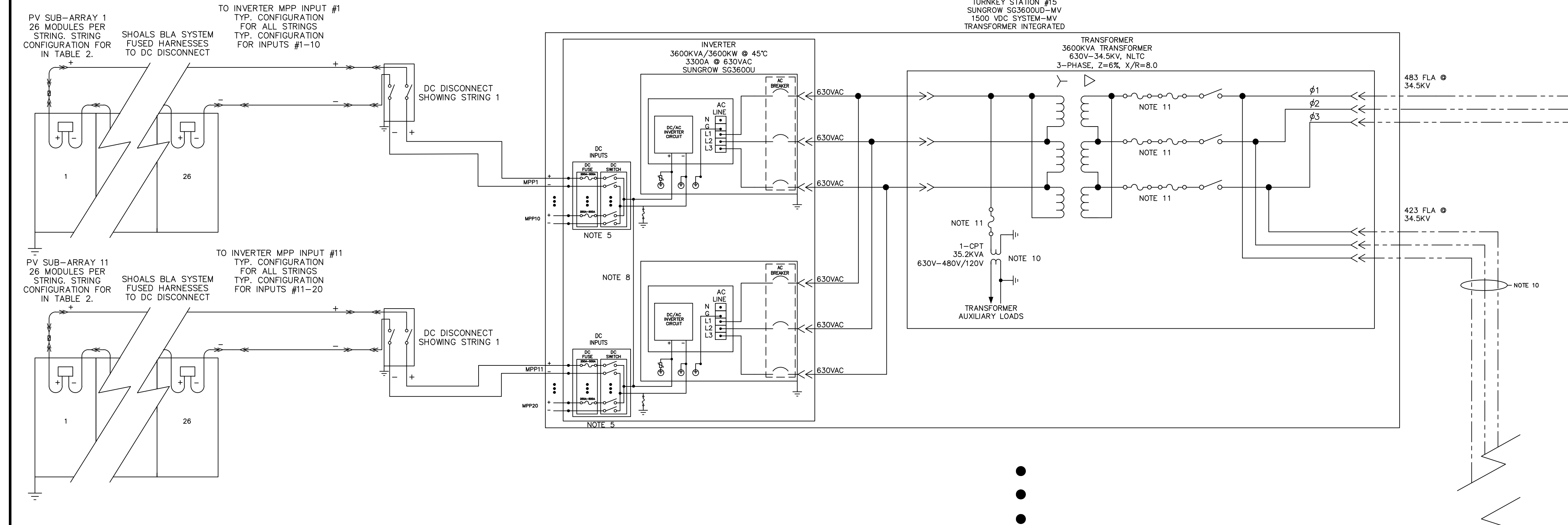
SHEET NO

PV-E.02.09

REV:

2

AES Titleblock 2/23/24 V2 10319



PV SYSTEM SPECIFICATIONS (FEEDER 2)		
PV MODULES	68,510 X JINKO SOLAR JKMS30M-72HL4-TV	530W
DC RATING AT STC	36,310.30	
INVERTERS	(8) X SUNGROW SG3600U	
AC RATING ^{NOTE 7}	26,666.67 KW	
DC/AC RATIO @ POI	1.362	
DC/AC RATIO @ INVERTER	1.261	

PV SYSTEM SPECIFICATIONS TOTAL SYSTEM		
PV MODULES	246,896 X JINKO SOLAR JKMS30M-72HL4-TV	530W
DC RATING AT STC	130,854.88 KW	
INVERTERS	(30) X SUNGROW SG3600U	
AC RATING ^{NOTE 7}	100,000.00 KW	
DC/AC RATIO @ POI	1.31	
DC/AC RATIO @ INVERTER	1.21	

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 - COLLECTOR SYSTEM CONDUCTOR SIZE AND SPECIFICATIONS TO BE VERIFIED DURING THE DETAILED DESIGN.
 - THE TRANSFORMER SYSTEM IMPEDANCE WILL BE DETERMINED THROUGH SUNGROW. FINAL VALUES TO BE SUBMITTED TO THE UTILITY WHEN AVAILABLE.
 - FUSE SIZE VARIES BASED ON NUMBER OF STRINGS CONNECTED. FINAL FUSE SIZE TO BE CONFIRMED AT THE ISSUING OF THE CONSTRUCTION DRAWING SET.
 - INVERTERS ARE CERTIFIED PER THE REQUIREMENTS OF UL 1741 SA AS A GRID SUPPORT UTILITY INVERTER AND HENCE MEETS THE UTILITY VOLTAGE AND FREQUENCY RIDE THROUGH REQUIREMENTS.
 - AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
 - THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 - CABLE SIZING AND COLLECTION LENGTHS CAN BE FOUND IN DWG PV-E.02.13. FEEDER 1 CABLE SIZES RANGE FROM 1/0 TO 750.
 - OPTIONAL AUX TRANSFORMER SUPPLIED BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 - FINAL FUSE SIZES TBD BY MANUFACTURER.

FEEDER 2 TURNKEY STATION (TS) PV STRINGING				
TURNKEY STATION (TS)	PV SERIES MODULES	INPUT NUMBER	PARALLEL STRINGS	PV MODULES PER TS
8	26	20	SEE TABLE 2	8,086
9	26	20	SEE TABLE 2	8,528
10	26	20	SEE TABLE 2	8,736
11	26	20	SEE TABLE 2	9,126
12	26	20	SEE TABLE 2	8,554
13	26	20	SEE TABLE 2	8,736
14	26	20	SEE TABLE 2	8,632
15	26	20	SEE TABLE 2	8,112
TOTAL PV MODULES FOR TS ON FEEDER 2				68,510

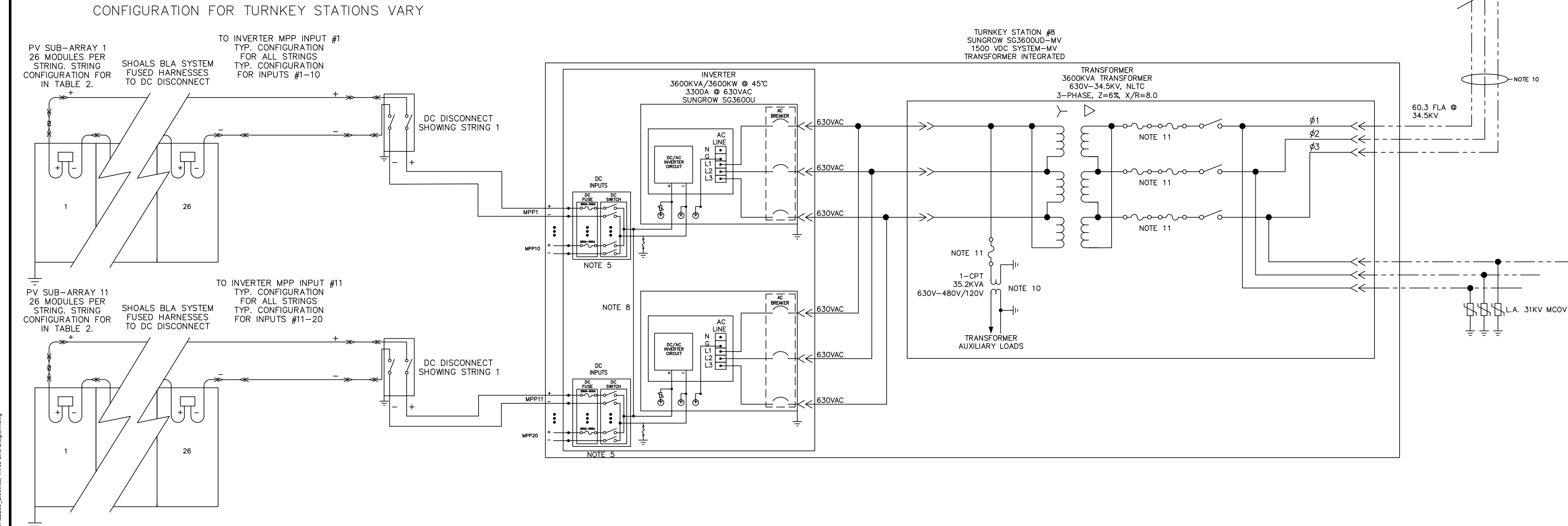


TABLE 2 STRINGS PER INPUT										
INPUT	TS8	TS9	TS10	TS11	TS12	TS13	TS14	TS15		
1	16	17	16	18	15	16	17	16		
2	16	17	16	18	16	16	17	16		
3	16	17	16	18	16	17	17	15		
4	14	17	16	18	16	17	17	17		
5	16	16	16	18	15	17	17	16		
6	16	16	16	18	15	17	17	17		
7	16	16	16	18	17	17	17	16		
8	16	16	16	18	16	17	17	16		
9	16	16	16	18	16	17	16	16		
10	13	16	16	18	17	17	14	16		
11	12	16	16	18	15	17	15	14		
12	16	16	17	18	15	17	15	12		
13	16	17	17	18	15	17	17	14		
14	16	17	18	18	17	17	17	16		
15	16	17	18	18	18	17	17	16		
16	16	17	18	18	18	17	17	15		
17	16	17	18	15	18	17	17	15		
18	16	17	18	16	18	17	17	16		
19	16	15	18	16	18	16	17	17		
20	16	15	18	16	18	16	17	16		

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PROJECT TITLE:

**RIVERSIDE SOLAR
PROJECT**

PROJECT LOCATION:

**TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

**ELECTRICAL
THREE-LINE DIAGRAM**

PROJ
NUM:

422208

DES:

A. QUIROZ

DWN:

A. QUIROZ

CHK:

B. TYLOCK

APV:

C. PASCALE

DATE:

03/21/2021

SCALE AT 22" x 34":

NONE

SHEET NO:

PV-E.02.10

REV:

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XREF: \\snp\engineering\p\1081152\922208_Electrical Three-Line Diagram.dwg

PV SUB-ARRAY 1
26 MODULES PER
STRING. STRING
CONFIGURATION FOR
IN TABLE 3.

SHOALS BLA SYSTEM
FUSED HARNESSSES
TO DC DISCONNECT

TO INVERTER MPP INPUT #1
TYP. CONFIGURATION
FOR ALL STRINGS
TYP. CONFIGURATION
FOR INPUTS #1-10

DC DISCONNECT
SHOWING STRING 1

PV SUB-ARRAY 11
26 MODULES PER
STRING. STRING
CONFIGURATION FOR
IN TABLE 3.

SHOALS BLA SYSTEM
FUSED HARNESSSES
TO DC DISCONNECT

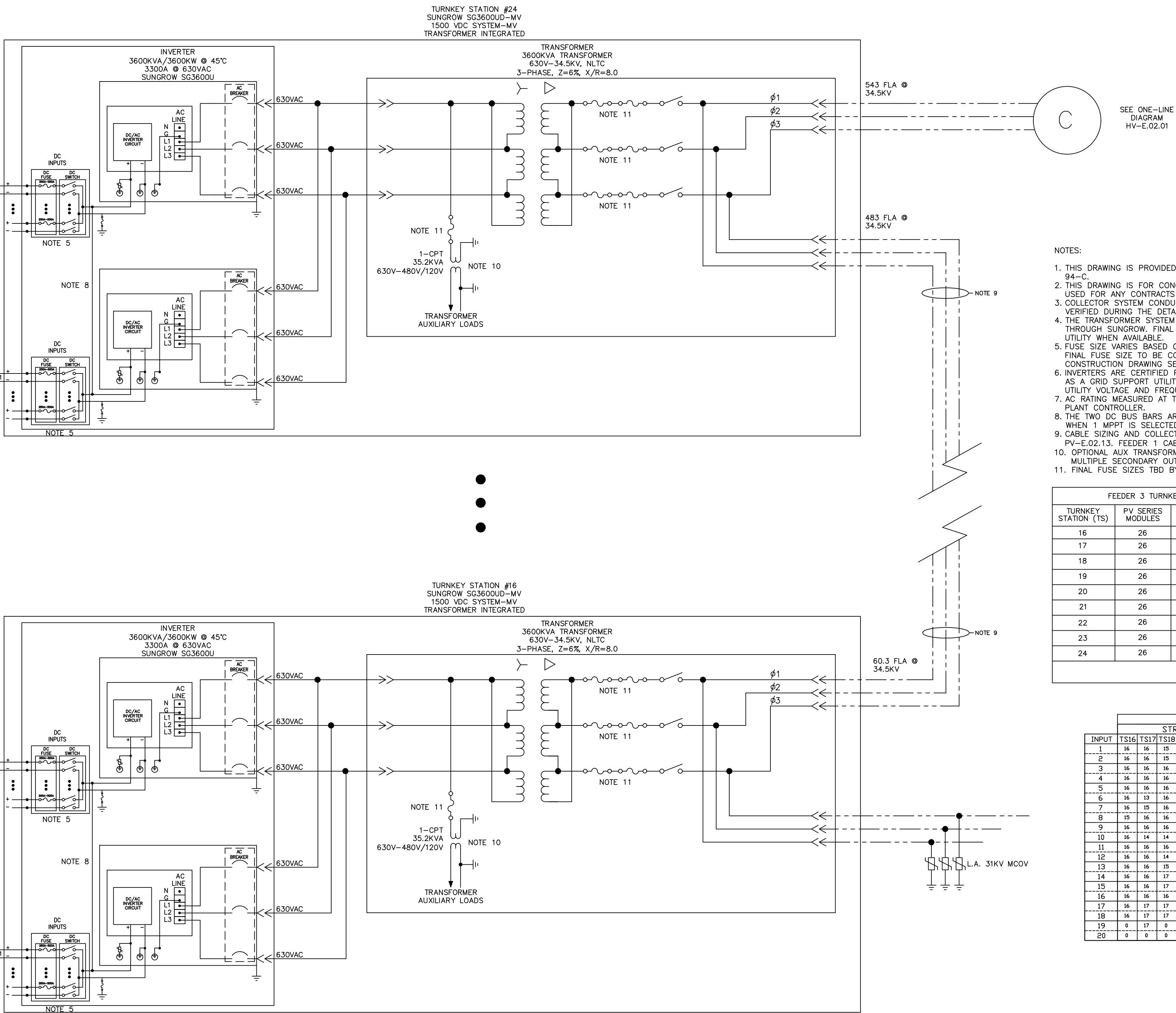
TO INVERTER MPP INPUT #11
TYP. CONFIGURATION
FOR ALL STRINGS
TYP. CONFIGURATION
FOR INPUTS #11-20

DC DISCONNECT
SHOWING STRING 1

The figure contains two identical circuit diagrams, one for inverter MPP input #1 and one for inverter MPP input #11. Each diagram shows a PV sub-array with 26 modules per string, configured for a string configuration in Table 3. The sub-array is connected to a DC disconnect switch, which is then connected to the inverter MPP input. The diagrams also show a DC disconnect switch for string 1, which is connected to the inverter MPP input. The sub-array is connected to a DC disconnect switch, which is then connected to the inverter MPP input. The diagrams also show a DC disconnect switch for string 1, which is connected to the inverter MPP input.

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PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	246,896 X JINKO SOLAR JK6530M-72HL4-TV 530W
DC RATING AT STC	130,854.88 KW
INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 2}	100,000.00 KW
DC/AC RATIO ⊗ POI	1.31
DC/AC RATIO ⊗ INVERTER	1.21



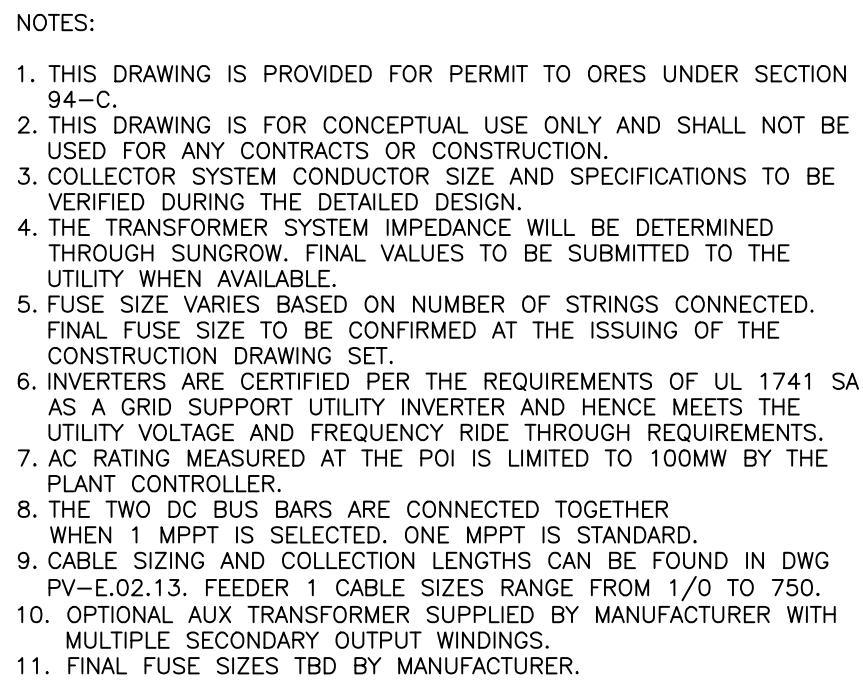
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 7. AC RATING MEASURED AT THE POI IS LIMITED TO 100MW BY THE PLANT CONTROLLER.
 8. THE TWO DC BUS BARS ARE CONNECTED TOGETHER WHEN 1 MPPT IS SELECTED. ONE MPPT IS STANDARD.
 9. CABLE SIZING AND COLLECTION LENGTHS CAN BE FOUND IN DWG PV-E0213. FEEDER 1 CABLE SIZES RANGE FROM 1/0 TO 750.
 10. OPTION 4 TO DRAWING PV-E0213 BY MANUFACTURER WITH MULTIPLE SECONDARY OUTPUT WINDINGS.
 11. FINAL FUSE SIZES TBD BY MANUFACTURER.

FEEDER 3 TURNKEY STATION (TS) PV STRINGING				
TURNKEY STATION (TS)	PV SERIES MODULES	INPUT NUMBER	PARALLEL STRINGS	PV MODULES PER TS
16	26	18	SEE TABLE 3	7,462
17	26	19	SEE TABLE 3	7,826
18	26	18	SEE TABLE 3	7,410
19	26	20	SEE TABLE 3	8,190
20	26	20	SEE TABLE 3	8,502
21	26	20	SEE TABLE 3	8,424
22	26	20	SEE TABLE 3	8,372
23	26	20	SEE TABLE 3	8,216
24	26	20	SEE TABLE 3	8,346
TOTAL PV MODULES ON FEEDER 3				72,748

TABLE 3									
STRINGS PER INPUT									
INPUT	TS16	TS17	TS18	TS19	TS20	TS21	TS22	TS23	TS24
1	16	16	15	15	17	16	14	16	16
2	16	16	15	15	17	17	17	16	16
3	15	16	15	15	17	17	16	16	16
4	15	16	16	16	13	17	17	16	16
5	16	16	16	14	17	17	17	16	16
6	16	13	16	14	17	17	17	14	18
7	16	15	16	14	17	17	16	16	16
8	15	16	16	17	16	17	16	16	16
9	16	16	16	17	19	16	16	16	16
10	16	16	14	14	15	17	17	16	16
11	16	16	16	16	16	17	17	16	16
12	16	16	14	16	16	17	16	16	16
13	16	16	15	17	16	15	16	16	16
14	16	16	17	16	16	12	16	16	16
15	16	16	17	16	14	15	17	16	17
16	16	16	16	17	16	16	15	16	16
17	17	17	17	17	16	16	16	16	16
18	16	17	17	17	17	16	16	14	17
19	0	17	0	17	17	16	16	15	17
20	0	0	0	17	17	16	16	17	17

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CONFIGURATION FOR TURNKEY STATIONS VARY



FEEDER 4 TURKEY STATION (TS) PV STRINGING				
TURNKEY STATION (TS)	PV SERIES MODULES	INPUT NUMBER	PARALLEL STRINGS	PV MODULES PER TS
25	26	19	SEE TABLE 4	7,436
26	26	20	SEE TABLE 4	8,424
27	26	18	SEE TABLE 4	7,306
28	26	19	SEE TABLE 4	7,592
29	26	20	SEE TABLE 4	8,424
30	26	20	SEE TABLE 4	8,268
TOTAL FOR TS			PV MODULES ON FEEDER 4	47,450

		TABLE 4							
		STRINGS PER INPUT							
INPUT		T\$2\$T	S\$2\$T	T\$2\$T	S\$2\$T	S\$2\$T	S\$2\$T	S\$2\$T	S\$3\$0
1	16	16	14	15	14	16			
2	16	16	16	16	16	16			
3	16	16	16	15	17	16			
4	16	16	14	14	17	16			
5	16	16	16	14	17	15			
6	17	17	16	13	17	15			
7	16	17	16	14	17	17			
8	13	17	15	16	16	16			
9	14	15	15	16	16	16			
10	16	16	16	14	16	16			
11	15	16	16	17	16	16			
12	16	15	17	16	16	16			
13	16	16	16	16	17	16			
14	16	17	16	17	17	16			
15	16	17	16	16	17	14			
16	16	17	16	16	17	17			
17	17	17	16	16	16	16			
18	13	16	16	16	17	16			
19	13	16	0	16	17	16			
20	0	16	0	0	16	16			

PV SYSTEM SPECIFICATIONS (FEEDER 4)	
PV MODULES	47,450 X JINKO SOLAR JK530M-72HL4-TV 530W
DC RATING AT STC	25,148.50
INVERTERS	(6) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	20,000.00 KW
DC/AC RATIO ⊗ POI	1.257
DC/AC RATIO ⊗ INVERTER	1.164

PV SYSTEM SPECIFICATIONS TOTAL SYSTEM	
PV MODULES	246,896 X JINKO SOLAR JK530M-72HL4-TV 530W
DC RATING AT STC	130,854.88 KW
INVERTERS	(30) X SUNGROW SG3600U
AC RATING ^{NOTE 7}	100,000.00 KW
DC/AC RATIO ⊗ PO	1.31
DC/AC RATIO ⊗ INVERTER	1.21

A circular professional seal for the State of New York. The outer ring contains the text "STATE OF NEW YORK" at the top and "LICENSED PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the name "CHARLES PASCALE" is written in an arc. Below the name is a signature. At the bottom of the seal is the license number "072988". In the center is the State of New York coat of arms, which features a shield with a sun rising over mountains, a river, and a plow. Above the shield is an eagle with wings spread, and below it is a banner with the word "EUREKA".

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KEY PLAN:

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PROJECT TITLE:

RIVERSIDE SOLAR PROJECT

PROJECT LOCATION:

TOWNS OF LYME &
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JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

ELECTRICAL THREE-LINE DIAGRAM

PROJ	422208
NUM:	

DES: A. QUIROGA

DWN: A. QUIROGA

CHK: B. TYLOO

APV: C. PASCA

DATE: 03/21/20

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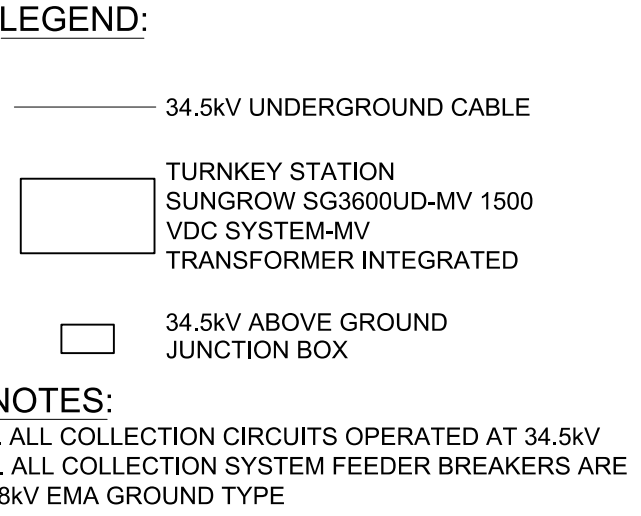
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PV-E.02.12

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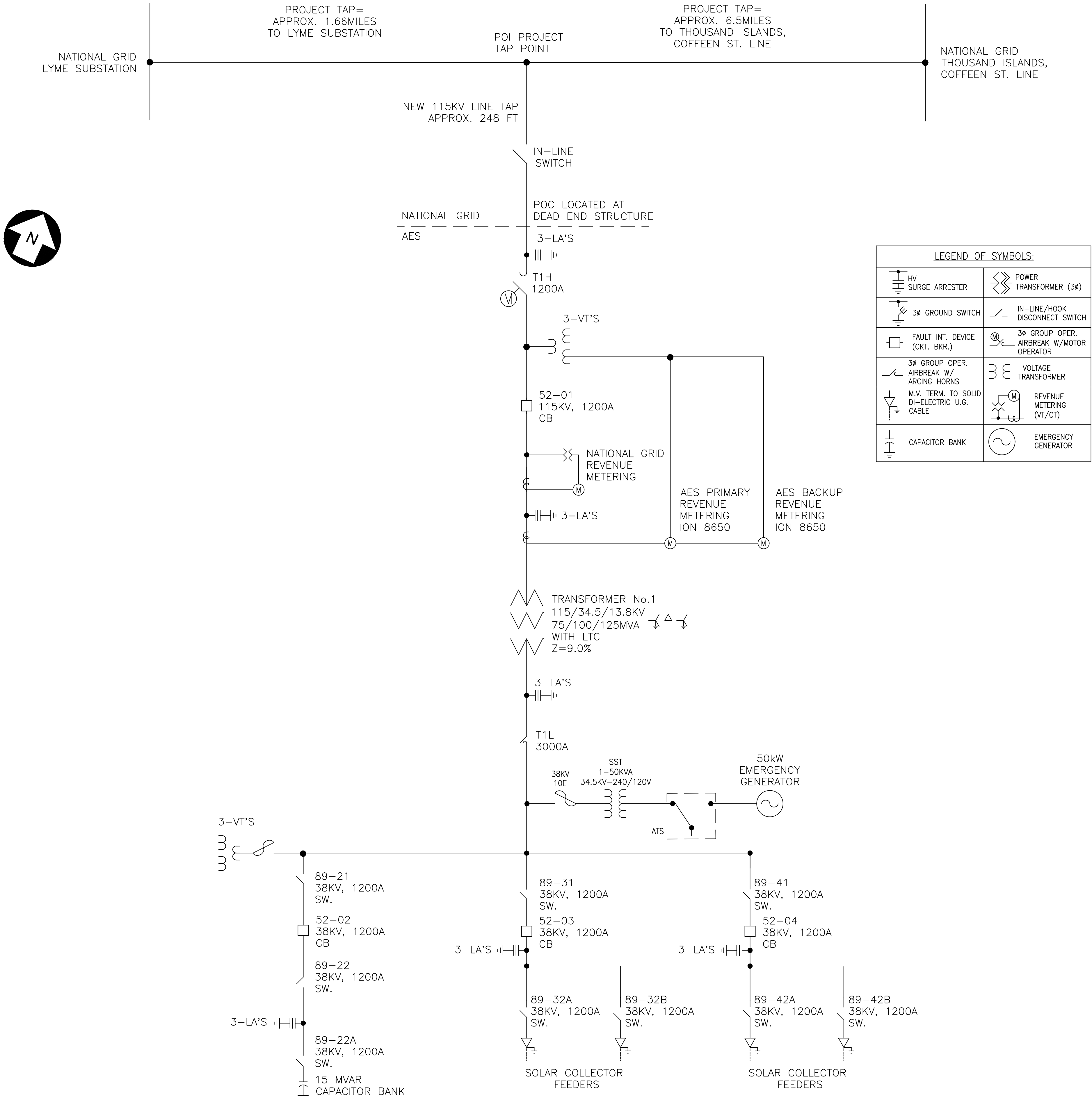


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1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

RIVERSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV

PROJECT LOCATION:

TOWNS OF LYME &
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JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

SWITCHING
ONE - LINE DIAGRAM

PROJ
NUM: 422208

DES: D. FARRELL

DWN: D. FARRELL

CHK: C. PASCALE

APV: C. PASCALE

DATE: 03/22/2021

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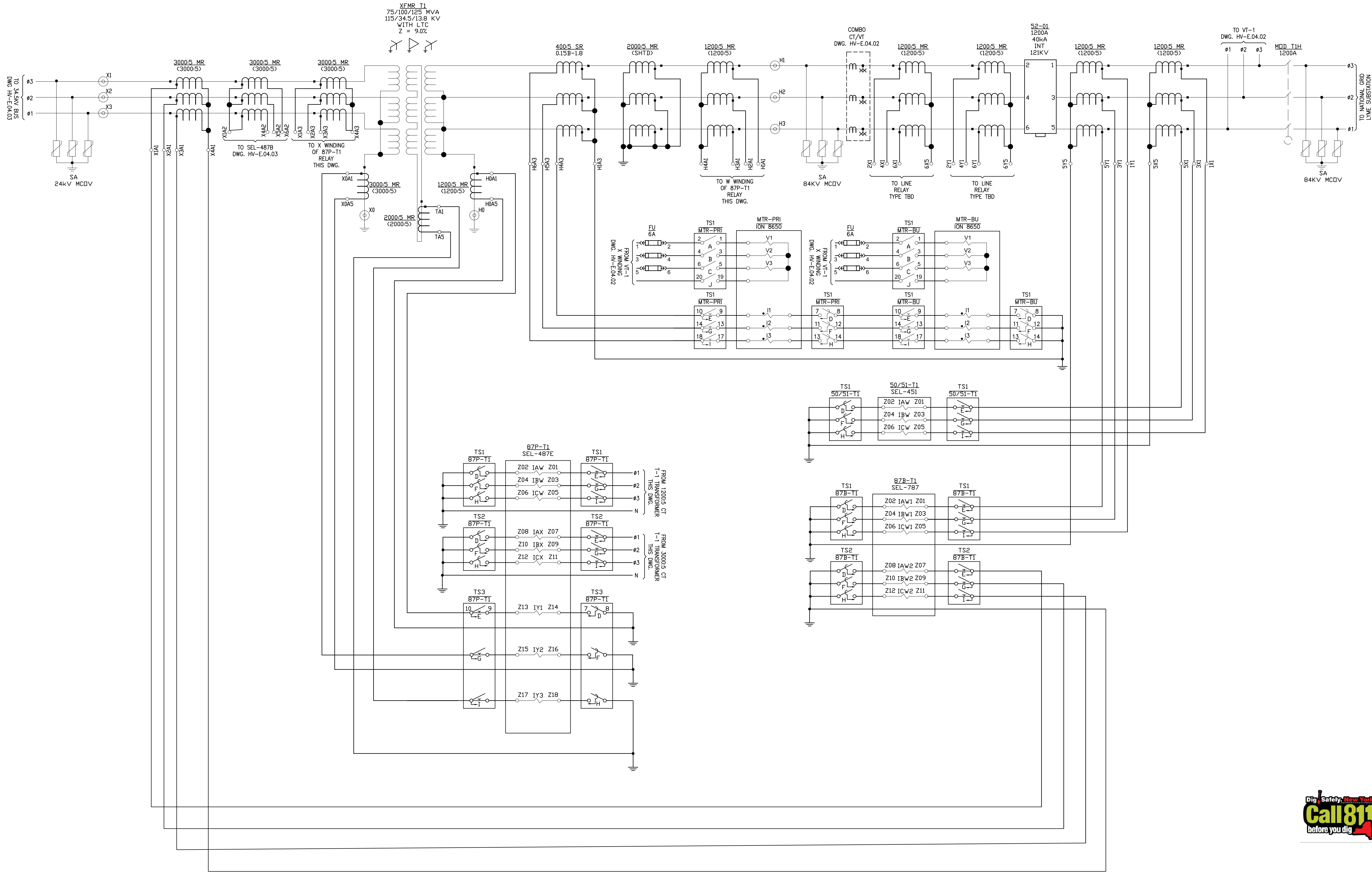
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**RIVERSIDE SOLAR
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SUBSTATION
115KV-34.5KV**

PROJECT LOCATION:

**TOWNS OF LYME &
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JEFFERSON CO., NY**

SHEET TITLE & DESCRIPTION:

THREE - LINE DIAGRAM

PROJ NUM:	422208
DES:	D. FARRELL
DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
DATE:	04/15/2021
SCALE AT 22" x 34":	

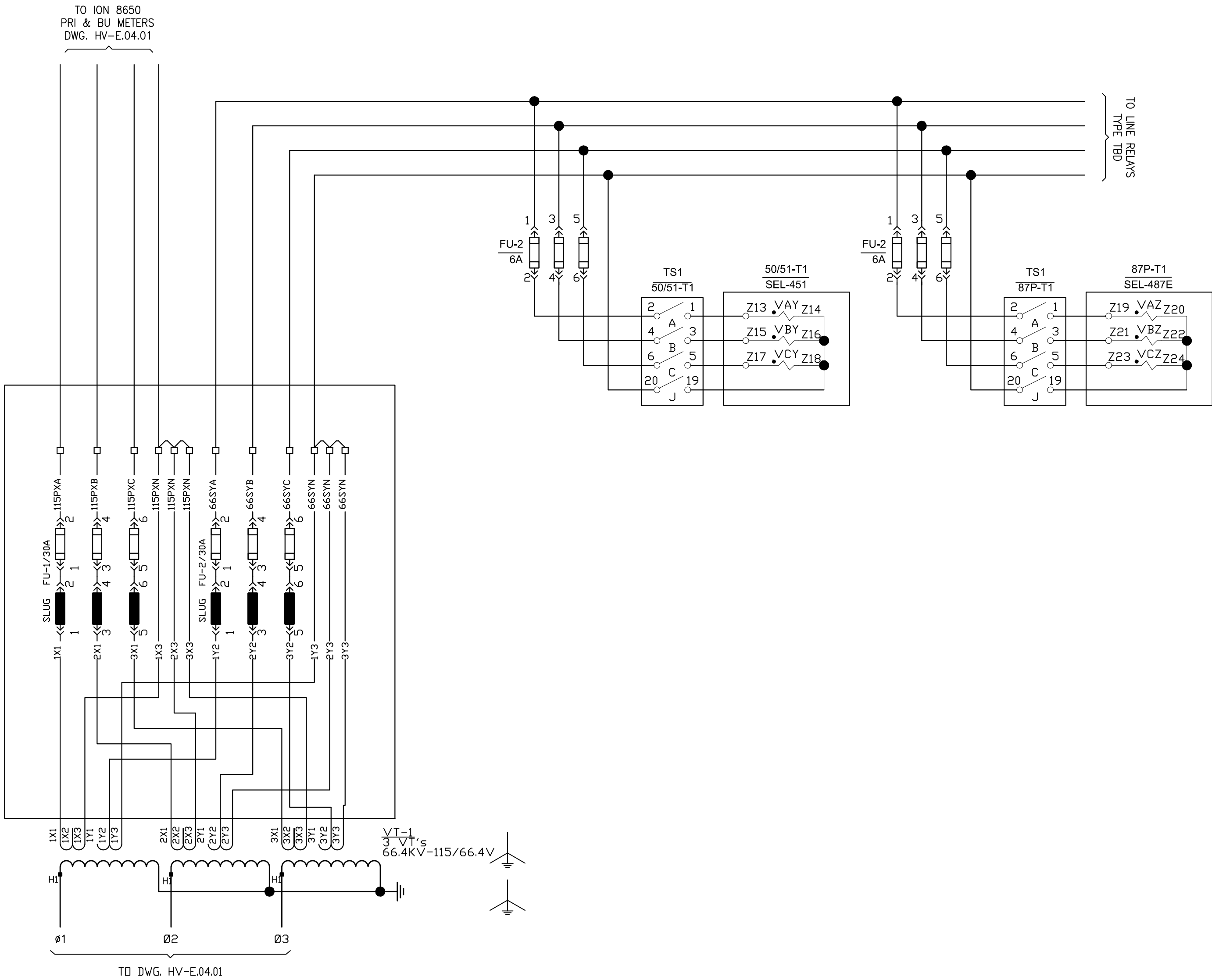
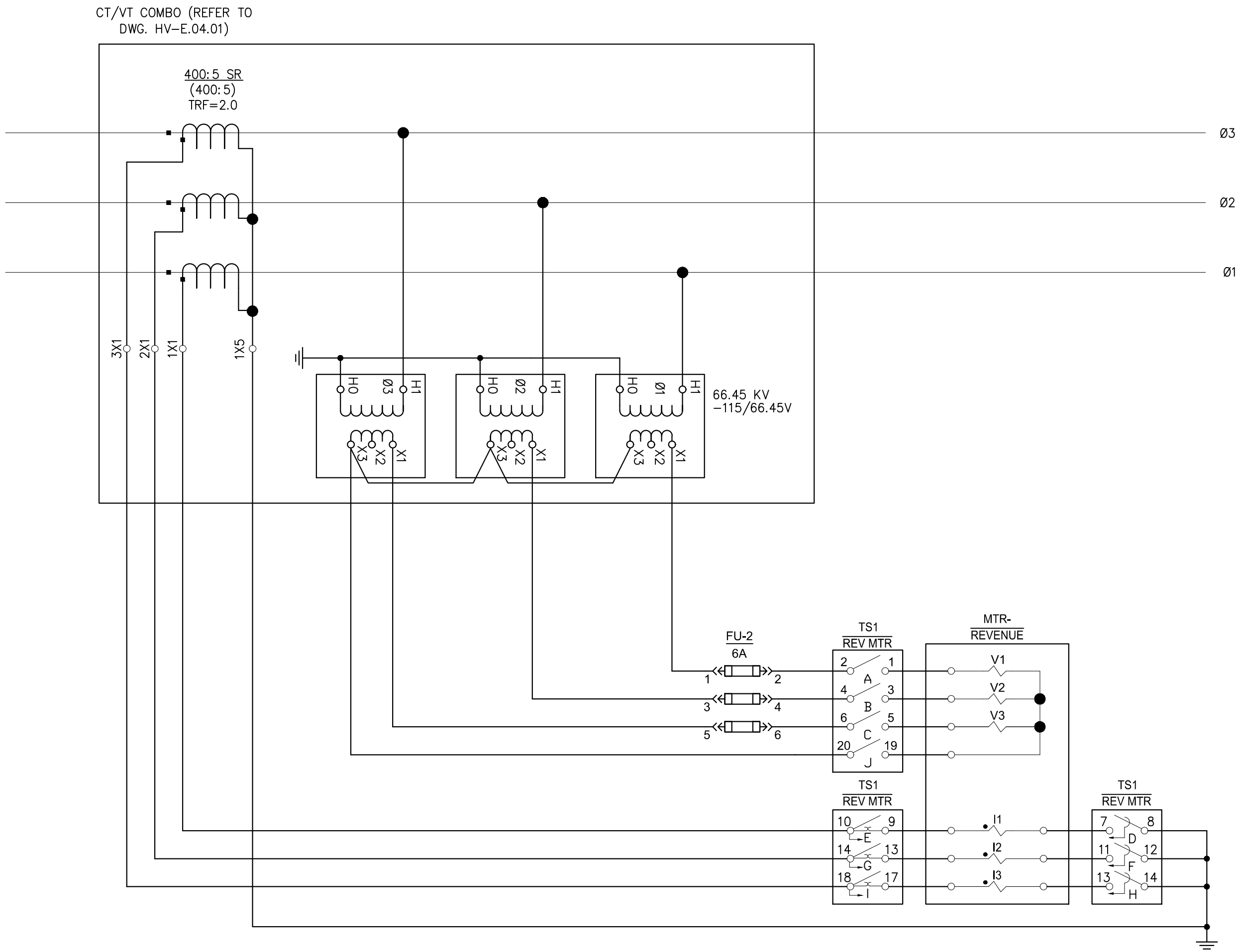
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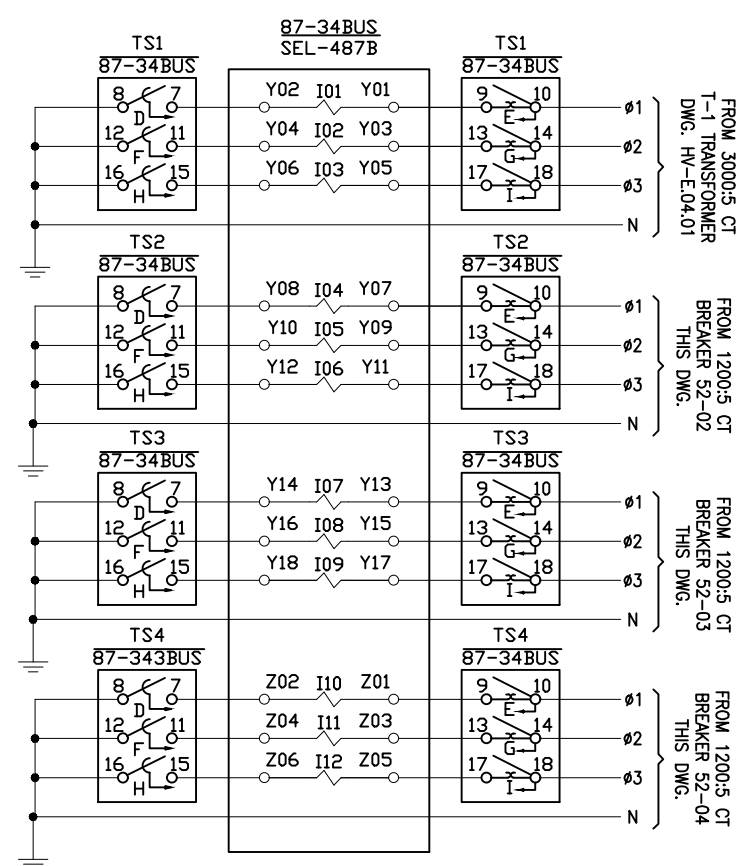
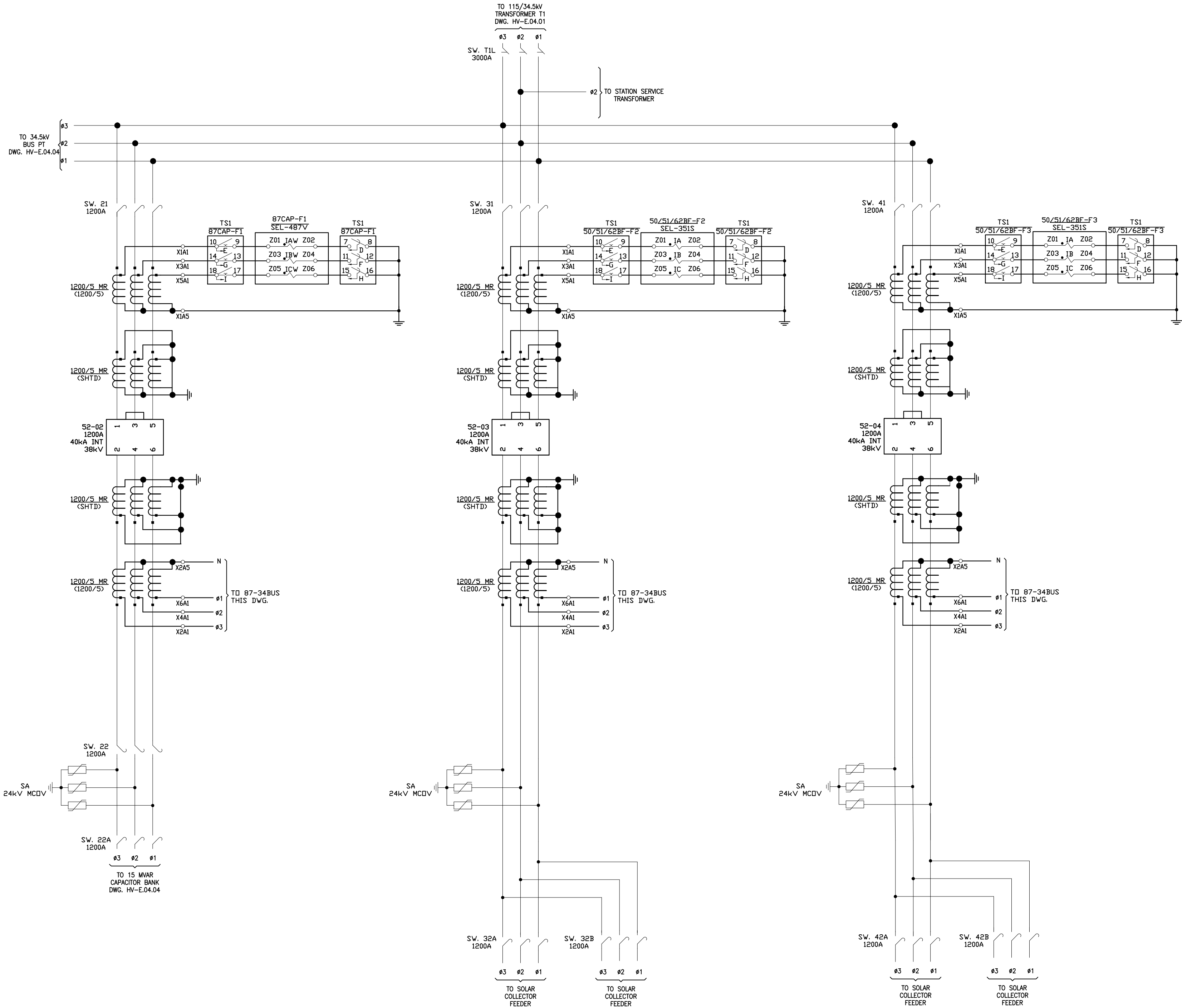
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PROJ NUM:	422208
DES:	D. FARRELL
DWN:	D. FARRELL
CHK:	C. PASCALE
APV:	C. PASCALE
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SUBSTATION
115KV-34.5KV**

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BROWNVILLE
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THREE - LINE DIAGRAM

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SCALE AT 22" x 34":	

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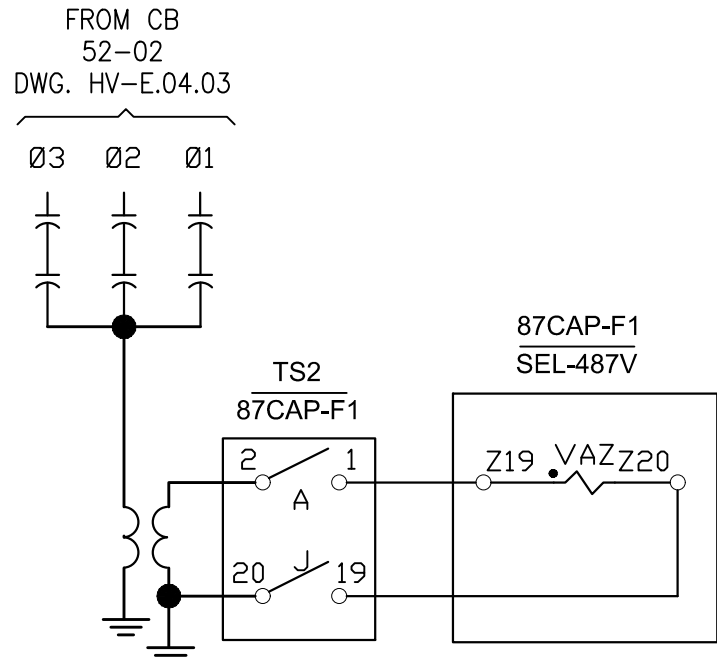
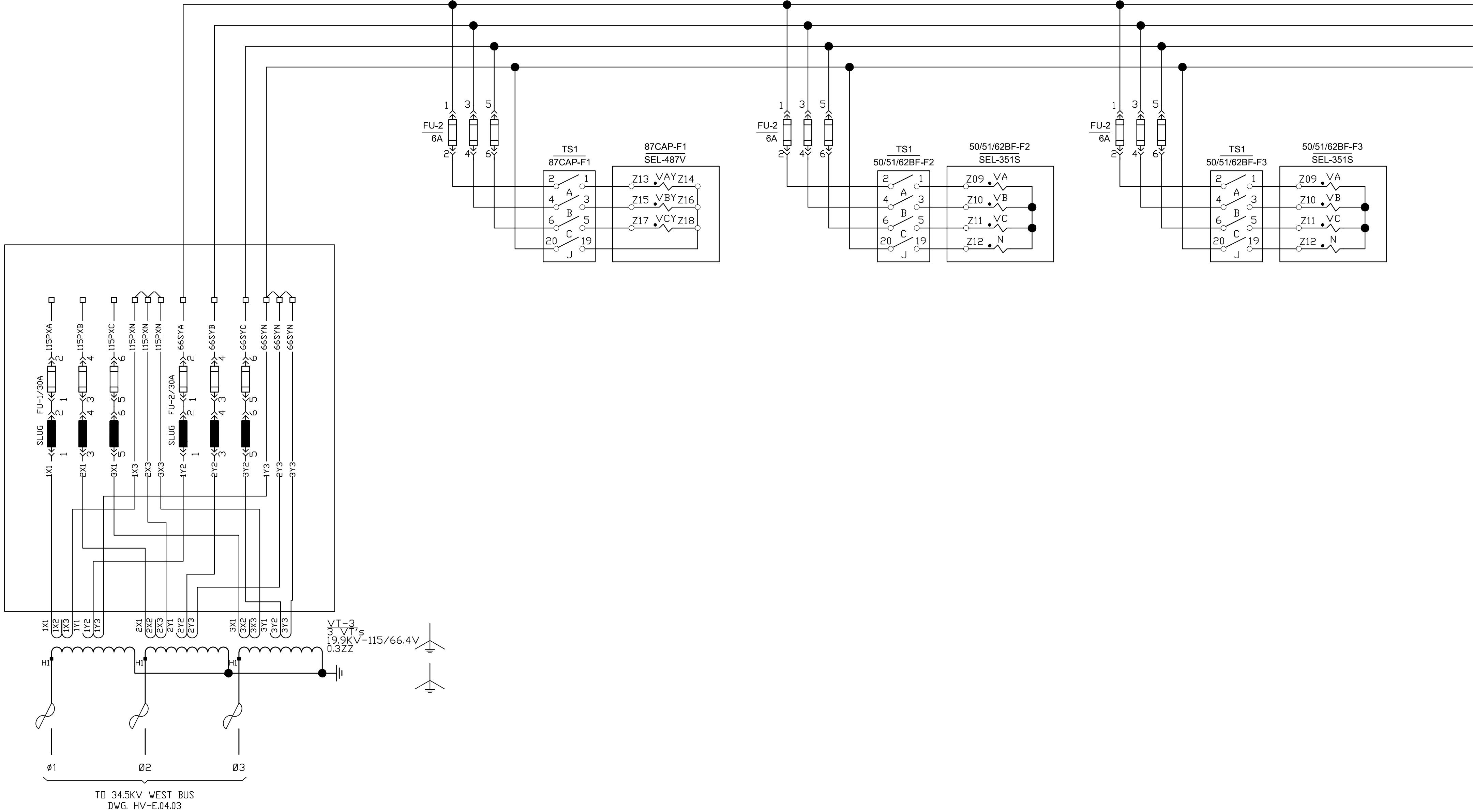


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UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

PRELIMINARY
NOT FOR CONSTRUCTION



2180 South 1300 East, Suite 600
Salt Lake City, UT 84106-2749
(801) 579 - 3500

249 Western Avenue
Augusta, ME 04330

PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/05/2021	ISSUED FOR PERMIT
2	09/10/2021	ISSUED FOR PERMIT

PROJECT TITLE:

RIVERSIDE SOLAR
COLLECTION
SUBSTATION
115KV-34.5KV

PROJECT LOCATION:

TOWNS OF LYME &
BROWNVILLE
JEFFERSON CO., NY

SHEET TITLE & DESCRIPTION:

THREE - LINE DIAGRAM

PROJ
NUM: 422208

DES: D. FARRELL

DWN: D. FARRELL

CHK: C. PASCALE

APV: C. PASCALE

DATE: 04/15/2021

SCALE AT 22" x 34":

NONE

SHEET NO: HV-E.04.04

REV: 2