MAJOR SITE PLAN & SPECIAL PERMIT

LARGE SCALE SOLAR ARRAY

PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
COUNTY OF HAMPSHIRE, MASSACHUSETTS

TOWN OF WARE

ZONE - RR
AREA -60,000 S.F.
FRONTAGE - 150'
FRONT - 25 FT. (SOLAR)
SIDE - 25 FT. (SOLAR)
REAR - 25 FT. (SOLAR)
50 FT. MIN BUFFER TO RESIDENTIAL USE

RECORD PARCELS (ASSESSORS)

WARE 35-0-12

RECORD OWNERS

F.T. SMITH TRUCKING AND EXCAVATING
PO BOX 124
NEW BRAINTREE, MA
DB.8579 PG.277

DEVELOPER/APPLICANT

WARE SOLAR III LLC
MELINK SOLAR DEVELOPMENT
276 N. FOREST AVE. NE
MARIETTA, GA 30060

SITE LOCATION MAP
SCALE 1" = 500'

DRAWING LIST

DWG. #	DRAWING TITLE	DATED/ LAST REVISED	REV. #
C1.1	COVER SHEET	03-05-20	2
C1.2	EXISTING CONDITIONS PLAN	10-28-19	1
C2.1	SOIL EROSION & SEDIMENT CONTROL PLAN	03-05-20	2
C2.2	SITE PLAN	03-05-20	2
C2.3	GRADING & DRAINAGE PLAN (SECTION 1)	03-05-20	2
C2.4	GRADING & DRAINAGE PLAN (SECTION 2)	03-05-20	2
C2.5	VEHICLE CIRCULATION PLAN	10-21-19	0
C3.1	SITE & DRAINAGE DETAILS	10-28-19	1
C3.2	SITE DETAILS - 2	10-21-19	0
C3.3	SOIL EROSION & SEDIMENT CONTROL AND LANDSCAPE DETAILS	03-05-20	1

TOWN OF WARE PLANNING BOARD

DATE:

BERTIN ENGINEERING
39 ELM STREET
SOUTHBRIDGE, MA 01550
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www.bertinengineering.com
CIVIL • SURVEYING • TRAFFIC • STRUCTURAL • ENVIRONMENTAL • MECHANICAL • LANDSCAPE

CALISTO J. BERTIN, P.E.
PROFESSIONAL ENGINEER
CT LIC. NO. 12950 NJ LIC. NO. 28845
MA LIC. NO. 40595 NY LIC. NO. 60022
NH LIC. NO. 9368 RI LIC. NO. 6694

NO.	DATE	REVISION
2	03-05-20	REVISION TO DRAWING LIST
1	10-28-19	REVISION TO RECORD OWNERS LIST AND DRAWING LIST

DRAWING TITLE
COVER SHEET

PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

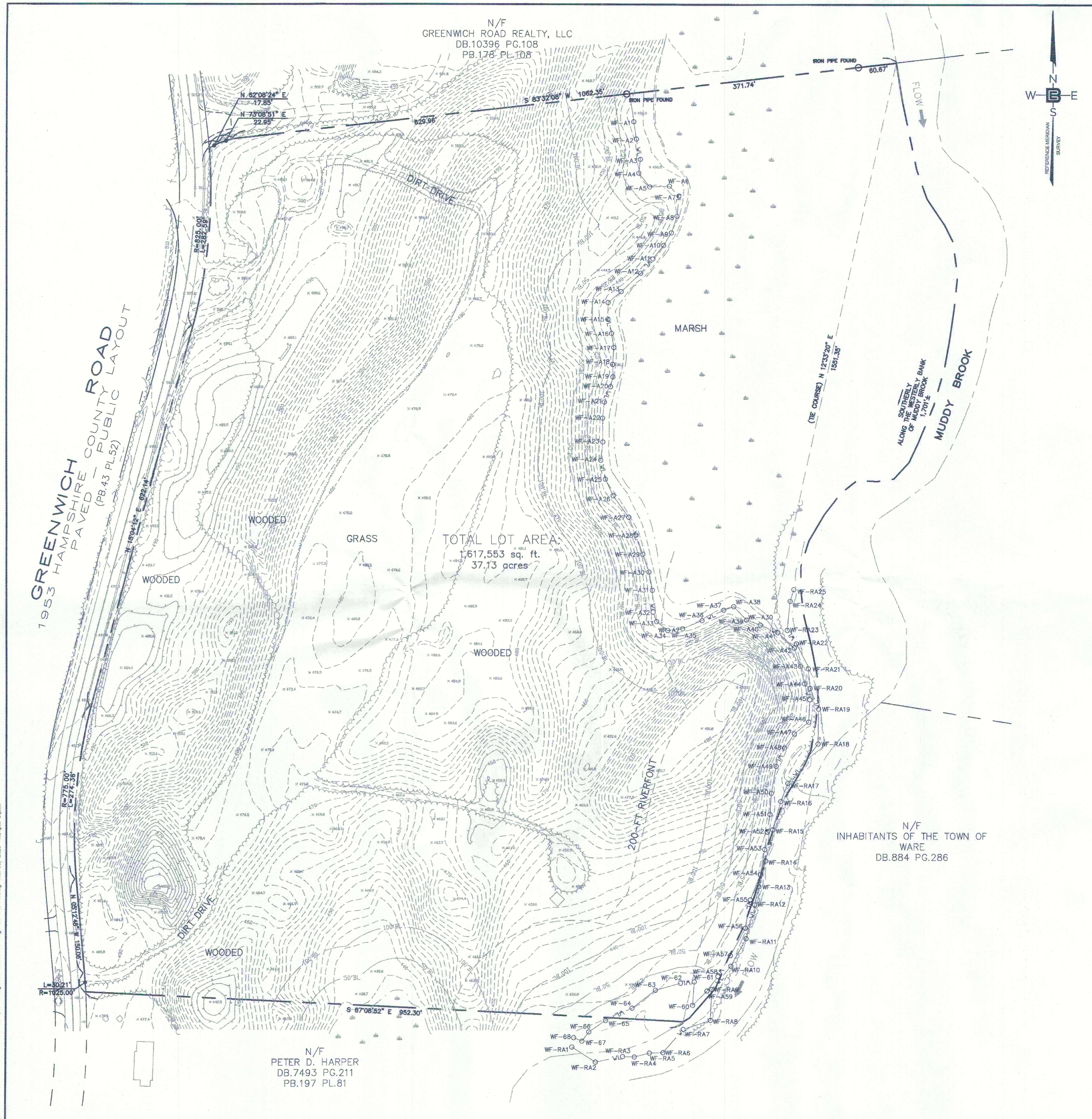
CLIENT
WARE SOLAR III LLC
276 N. FOREST AVE. NE
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

DRAWN BY J.A.S.	CHECKED BY C.J.B.
SCALE 1" = 40'	PROJECT NO. 18M-216
DATE 10-21-19	REVISION NO. 2

DRAWING NO.
C1.1

317-463 Rev 2 3.11.20



LEGEND

CB	CATCH BASIN		IRON PIPE
UP	UTILITY POLE		DRILL HOLE
IR	REBAR		REBAR SET
DH	DRILL HOLE		BOUND SYMBOL
IP	IRON PIPE		UTILITY POLE
FND	FOUND		STONE WALL
BND	BOUND		WELL
AP:	ASSESSORS PARCEL		BENCH MARK
HYD.	HYDRANT		HYDRANT
GUY	GUY WIRE		GUY WIRE
	STUMP WITH WIRE		TREE WITH WIRE

TAX MAP REFERENCES:
WARE ASSESSORS
TAX MAP 35, LOT 12

RECORD OWNER:
F.T. SMITH TRUCKING AND EXCAVATING
PO BOX 124
NEW BRAINTREE, MA
DB.8579 PG.277

PLAN REFERENCES:
(HAMPSHIRE COUNTY REGISTRY OF DEEDS)
PLAN BOOK 43 PLAN 52
PLAN BOOK 187 PLAN 175
PLAN BOOK 197 PLAN 81

GENERAL NOTES:
1. BOUNDARIES SHOWN ARE THE RESULTS OF AN ACTUAL FIELD SURVEY JANUARY 2 THRU JANUARY 22, 2019. SURVEY BASED ON AVAILABLE MAPS, DEEDS OF RECORD AND PHYSICAL EVIDENCE, BUT ARE SUBJECT TO ALL EASEMENTS, RIGHT OF WAYS, AGREEMENTS, AND RIGHTS AND ENCUMBRANCES OF RECORD THAT AN ACCURATE AND THOROUGH TITLE SEARCH MAY DISCLOSE.

2. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND AND DEPICT THEM ON THE SURVEY; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

3. HORIZONTAL DATUM BASED ON NAD 83 MA11, VIA GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS).

4. VERTICAL DATUM BASED ON NAVD 88, GEOID 12B,VIA GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS).

5. BY GEOGRAPHICAL PLOTTING A PORTION OF THE SITE IS LOCATED WITHIN A FLOOD HAZARD ZONE A AS PER THE FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NO. # 250172 0010B WITH AN EFFECTIVE DATE OF AUGUST 17, 1981.

6. WETLANDS DELINIATED BY ECOTEC, INC IN SEPTEMBER 2019.

7. TOPOGRAPHICS PROVIDED FROM EASTERN TOPOGRAPHICS WITH A PHOTO DATE OF APRIL 12, 1998, COMPILATION DATE OF JANUARY 7, 2018 WITH A SCALE OF 1"=50' AND A CONTOUR INTERVAL OF 2FT.

8. ABUTTERS NAMES ARE IN RESPECT TO THE LATEST ASSESSORS RECORDS AVAILABLE.

WETLANDS LEGEND

○	WETLAND FLAG
—WL—	WETLANDS BOUNDARY LINE
—50'BL—	50 FT WETLANDS BUFFER LINE
—100'BL—	100 FT WETLANDS BUFFER LINE

GRAPHIC SCALE
80 0 40 80 160 320
(IN FEET)
1 inch = 80 ft.

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NH LIC. NO. 9365 RI LIC. NO. 6694

NO.	DATE	REVISION	
1	10-28-19	REVISION OF SOUTHERN PROPERTY OWNER INFORMATION.	E.Q.

DRAWING TITLE
EXISTING CONDITIONS PLAN

PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

CLIENT
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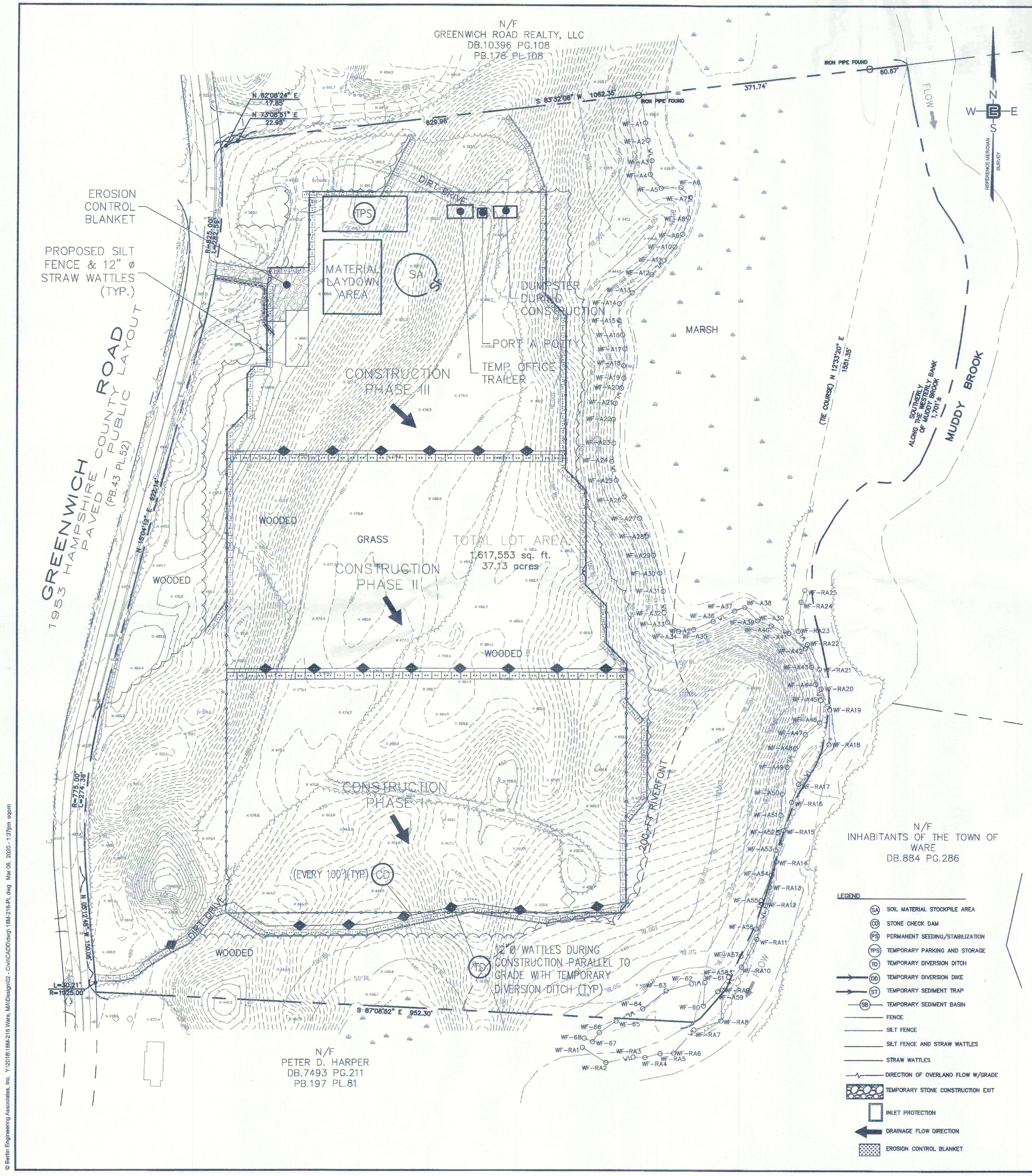
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

DRAWN BY J.A.S.	CHECKED BY C.J.B.
SCALE 1" = 80'	PROJECT NO. 18M-216
DATE 10-21-19	REVISION NO. 1

DRAWING NO.
C1.2



GENERAL EROSION NOTES:

A. THE STORM WATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("SITE MAP"), AND WRITTEN DOCUMENTATION SUBMITTED TO THE TOWN FOR APPROVAL.

B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF MASSACHUSETTS NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENT.

C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMP'S) AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DIRECTED BY CONDITIONS AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

D. BMP'S AND CONTROLS SHALL CONFORM TO FEDERAL, STATE OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

E. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

G. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS AND TOILET FACILITIES.

H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEANUP FUEL OR CHEMICAL SPILLS AND LEAKS.

J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS; MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATER OF THE STATE.

L. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.

M. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 15 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.

N. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.

O. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS, OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

P. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENTS IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.

Q. ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BMP'S. STOCKPILE AND BORROW AREA LOCATION SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

R. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

S. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW WATTLES, ETC) TO PREVENT EROSION.

T. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACK FILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

U. NO OVERNIGHT PARKING OF HYDRAULIC EQUIPMENT WILL BE ALLOWED IN THE BUFFER ZONE TO ANY RESOURCE AREA.

V. ANY DISTURBED AREAS OUTSIDE OF THE GROWING SEASON ARE TO BE TREATED WITH WINTER RYE, STRAW MULCH, AND/OR EROSION CONTROL BLANKETS IF ON SLOPES STEEPER THAN 3:1.

W. ALL TREE CLEARING DEBRIS SHALL BE REMOVED FROM THE SITE; NO MATERIAL SHALL BE BURIED ON-SITE.

MAINTENANCE:

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RE-SEEDED AS NEEDED.

3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED, SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCES.

4. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO A PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCE AS CONDITIONS DEMAND.

5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.

6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.

SEQUENCE OF CONSTRUCTION

THE FOLLOWING NARRATIVE DESCRIBES THE PLANNED CONSTRUCTION SEQUENCE WITH AN EMPHASIS ON THE TIMING AND SEQUENCE OF EROSION/SEDIMENTATION CONTROL MEASURES:

THE FOLLOWING CONSTRUCTION SEQUENCE WILL BE REQUIRED TO INSURE THE EFFECTIVENESS OF THE EROSION/SEDIMENT CONTROL MEASURES IS OPTIMIZED.

1. INSTALL STABILIZED CONSTRUCTION EXIT(S) AND SWPPP ENTRANCE SIGN.
2. INSTALL EROSION CONTROL BARRIERS ON THE ENTIRE SITE (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE AND WATTLES.)
3. INSPECTIONS WILL BE CONDUCTED AFTER INSTALLATION OF EROSION CONTROL BARRIERS ARE INSTALLED.
4. PREPARE TEMPORARY PARKING AND STORAGE AREA UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: PARKING, LAY DOWN, PORTA POTTY, MATERIAL STORAGE CONTAINERS, ETC., DENOTE THEM ON THE SITE MAPS IMMEDIATELY AND NOTE ANY CHANGES IN THE LOCATIONS AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.
5. CLEAR AND GRUB AREA FOR SEDIMENT BASINS. CONSTRUCT AND STABILIZE SEDIMENT BASINS. HALT ALL ACTIVITIES AND CONTACT THE CIVIL ENGINEERING CONSULTANT TO PERFORM INSPECTION AND CERTIFICATION OF BMP'S. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH ENGINEER AND ALL GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.
6. BEGIN CLEARING THE SITE.
7. INSTALL TEMPORARY DIVERSION DITCHES AND CHECK DAMS.
8. BEGIN GRADING THE SITE AS NEEDED.
9. START INSTALLATION OF DRAINAGE AND SITE WORK.
10. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 15 DAYS OR MORE. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE COMPLETED.

FINAL PHASE

1. PERMANENTLY STABILIZE ANY REMAINING EXPOSED AREAS.
2. TEMPORARY DRAINAGE DITCHES TO BE REMOVED AND STABILIZED.
3. SEDIMENT FROM BASINS TO BE REMOVED AND DISPOSED OF OFFSITE AND BASINS ARE TO BE CONVERTED TO FINAL DETENTION BASINS AS SHOWN ON SITE PLAN.
4. ONCE ENTIRE SITE IS STABILIZED, CALL FOR FINAL INSPECTION FROM SITE MONITOR.
5. ONCE FINAL INSPECTION IS COMPLETE AND APPROVED, ALL EROSION CONTROL SILT FENCE AND WATTLES ARE TO BE REMOVED.

NOTES:

1. ONCE CONSTRUCTION IS COMPLETED, ALL DISTURBED AREAS ARE TO BE STABILIZED WITH LOAM AND SEED UNLESS OTHERWISE SPECIFIED.
2. INSPECTIONS WILL BE CONDUCTED WEEKLY AND AFTER 0.5 INCH RAIN EVENTS. COPIES OF WEEKLY REPORTS AND RAIN EVENT REPORTS SHALL BE SUBMITTED TO THE CONSERVATION COMMISSION WITHIN SEVEN DAYS OF THE INSPECTION.
3. EXTRA EROSION CONTROL MATERIALS (STRAW WATTLES, SILT FENCE) EQUAL TO 200 LF SHALL BE KEPT ON SITE FOR EMERGENCY REPAIRS. THESE MATERIALS SHALL BE KEPT COVERED.

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
ROUGH GRADE / SEDIMENT CONTROL																		
TEMPORARY CONTROL MEASURES																		
STRIP & STOCKPILE TOPSOIL																		
STORM FACILITIES																		
TEMPORARY CONSTRUCTION ROADS																		
FOUNDATION / BUILDING CONSTRUCTION																		
SITE CONSTRUCTION																		
PERMANENT CONTROL STRUCTURES																		
FINISH GRADING																		
LANDSCAPING/SEED/FINAL STABILIZATION																		

NOTE: PRIOR TO ANY WORK TAKING PLACE

1. A PRE-CONSTRUCTION MEETING SHOULD BE SCHEDULED BETWEEN BERTIN ENGINEERING AND CONSTRUCTION MANAGER. ALL ASPECTS OF EROSION CONTROLS AND CONSTRUCTION OF PROJECT ARE TO BE DISCUSSED
2. WATTLES AND SILTATION FENCE TO BE INSTALLED. INSTALL STABILIZED CONSTRUCTION ENTRANCE (SITE TRACKING PAD)
3. INSPECTIONS WILL BE CONDUCTED WEEKLY AND AFTER 0.5 INCH RAIN EVENTS. COPIES OF WEEKLY REPORTS AND RAIN EVENT REPORTS SHALL BE SUBMITTED TO THE CONSERVATION COMMISSION WITHIN SEVEN DAYS OF THE INSPECTION.

ACREAGE SUMMARY
IN ACRES

SEEDED AREA	14.26 AC±
TOTAL DISTURBED	19.72 AC±

SEDIMENTATION BASINS

CONTRACTOR TO LOCATE TEMPORARY SEDIMENTATION BASINS TO PREVENT SEDIMENT FROM LEAVING THE LIMIT OF WORK. TEMPORARY SEDIMENTATION BASINS ARE TO BE INSTALLED IN LOCATIONS UPSTREAM OF ANY EROSION CONTROL BARRIERS WHERE EXCESS SEDIMENT IS OBSERVED DURING THE CONSTRUCTION PROCESS. REMOVE AND PROPERLY DISPOSE OF SEDIMENT WHEN IT ACCUMULATES TO ONE-HALF DESIGN VOLUME. REMOVE BASIN AFTER DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, INSPECTED, AND APPROVED. BEFORE REMOVING DAM, DRAIN WATER AND REMOVE SEDIMENT; PLACE WASTE MATERIAL IN DESIGNATED DISPOSAL AREAS. SMOOTH SITE TO BLEND WITH SURROUNDING AREA AND STABILIZE. TEMPORARY SEDIMENTATION BASINS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS.

DESIGN RECOMMENDATIONS:

- DRAINAGE AREA NOT MORE THAN 100 ACRES.
- THE SEDIMENT BASIN SHOULD HAVE A MINIMUM VOLUME BASED ON Y INCH OF STORAGE FOR EACH ACRE OF DRAINAGE AREA. THIS VOLUME EQUATES TO 1800 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
- LENGTH-TO-WIDTH RATIO SHOULD BE 2:1 OR GREATER; DIVERT INFLOW TO UPPER END OF BASIN TO AVOID SHORT-CIRCUITING FLOW. LENGTH IS DEFINED AS THE AVERAGE DISTANCE FROM THE INLET TO THE OUTLET OF THE TRAP. BAFFLES TO SPREAD THE FLOW THROUGHOUT THE BASIN SHOULD BE INCLUDED.
- KEEP SEDIMENT POOL DEWATERED BETWEEN STORMS.
- CONSTRUCT SIDE SLOPES 2:1 OR FLATTER IN POOL AREA.
- PLACE 6" BARREL AND RISER ON FIRM, EVEN FOUNDATION. INSTALL ANTI-SEEP COLLAR SLIGHTLY AROUND PIPE. COVER PIPE TO A DEPTH OF 2 FEET MINIMUM OF HAND-COMPACTED BACKFILL BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. INSTALL TRASH GUARD WITH BARS SPACED 2-3 INCHES APART. INSTALL RIPRAP APRON AT PIPE OUTLET, WIDTH 5 FT MINIMUM. EXTEND APRON TO STABLE GRADE (LENGTH 10 FT MINIMUM). USE WELL-GRADED STONE WITH "D50" OF 9 INCHES MINIMUM.

TOWN OF WARE PLANNING BOARD

DATE:

GRAPHIC SCALE
0 40 80 160 320
(IN FEET)
1 inch = 80 ft.

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NO.	DATE	REVISION	
2	03-05-20	SILT FENCE LAYOUT AND ACREAGE SUMMARY TABLE REVISION.	E.Q.
1	10-28-19	PROPOSED FENCE LINE / SILT FENCE REVISION.	E.Q.

DRAWING TITLE
SOIL EROSION & SEDIMENT CONTROL PLAN PLAN

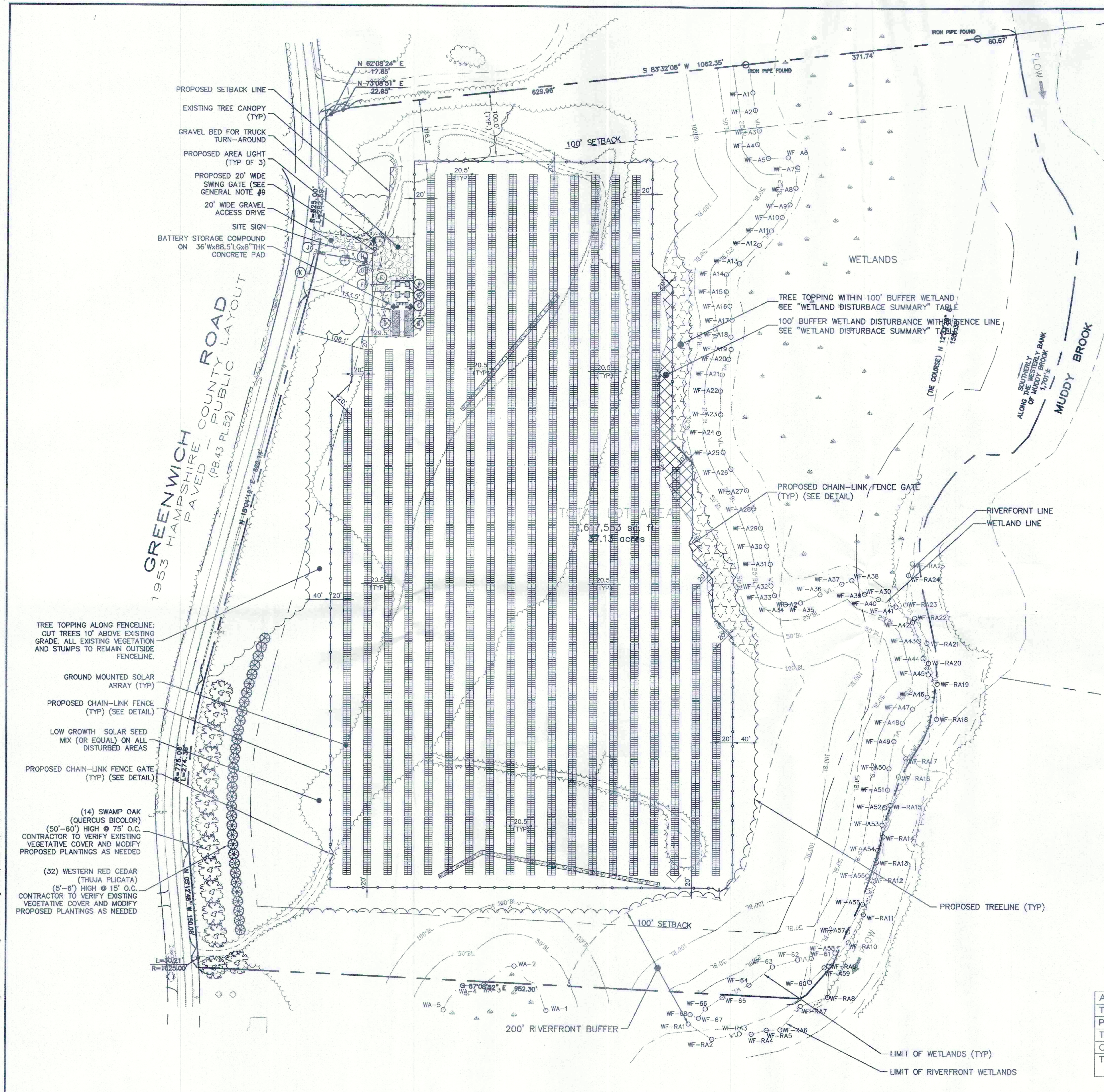
PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

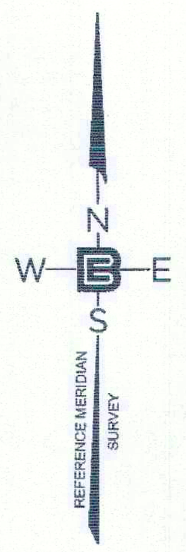
CLIENT
WARE SOLAR III LLC
276 N. FOREST AVE. NE
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

DRAWN BY E.Q.	CHECKED BY C.J.B.
SCALE 1" = 80'	PROJECT NO. 18M-216
DATE 10-21-19	REVISION NO. 2

DRAWING NO.
C2.1





GENERAL NOTES

1. ALL FEATURES ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
   PROPOSED FEATURES AS SHOWN IN FULL TONE
   EXISTING FEATURES ARE SHOWN IN HALF TONE
   EXISTING FEATURES TO BE REMOVED ARE SHOWN AS DASHED, OR ARE NOTED.
2. LOCATION OF ALL UNDERGROUND UTILITIES IS APPROXIMATE AND SHOULD BE VERIFIED BEFORE EXCAVATION OR CONSTRUCTION BEGINS. CALL DIG SAFE SYSTEM, INC.: 811 OR 1-888-344-7233.
4. UNLESS OTHERWISE NOTED, MAINTAIN EXISTING YARD GRADES AND SLOPES.
5. ALL UTILITY CONNECTIONS ARE TO BE IN ACCORDANCE WITH LOCAL CODE.
6. THE SITE PLAN(S) SUPERSEDES ALL STANDARD DRAWINGS.
7. ALL WETLANDS DELINEATED BY ECOTEC INC. IN SEPTEMBER 2019.
8. THE FENCING WILL INCORPORATE A DESIGN OF THE EPC'S CHOOSING THAT WILL FACILITATE WILDLIFE MOVEMENT ACROSS THE PROPERTY.
9. ALL GATES TO BE INSTALLED WITH KNOX BOX AND SIGNAGE WITH EMERGENCY CONTACT INFORMATION SUBJECT TO NATIONAL GRID FINAL DESIGN AND CONSTRUCTION. KNOX BOX KEY TO BE GIVEN TO LOCAL FIRE DEPARTMENT.
10. NO PESTICIDES OR HERBICIDES ARE TO BE USED DURING CONSTRUCTION OR MAINTENANCE.
11. ROADWAY ALIGNMENT CAN BE ALTERED IF FIELD CONDITIONS ARE UNSUITABLE. ENGINEER'S APPROVAL REQUIRED PRIOR TO ALTERATION.

BATTERY STORAGE COMPOUND EQUIPMENT LEGEND

- A (2) MV TRANSFORMERS
- B (2) INVERTERS WITH RECOMBINERS
- C (5) AC/DC CONVERTER
- D (2) 12'x40' BATTERY STORAGE CONTAINER
- E UNDERGROUND ELECTRIC FROM EQUIPMENT TO UTILITY POLE

SYMBOL KEY OF PROPOSED ELECTRICAL EQUIPMENT

- K UTILITY OWNED JUNCTION POLE/POINT OF INTERCONNECTION ON ASH STREET
- J UTILITY OWNED GOAB POLE
- I UTILITY OWNED RECLOSER POLE
- H POINT OF COMMON COUPLING/BI-DIRECTIONAL METER POLE
- G CUSTOMER OWNED GOAB POLE WITH 200A FUSED CUT-OUTS
- F CUSTOMER OWNED RISER AND RECLOSER POLE DOWN BOX

SOLAR FIELD SEED MIX

30%	BEACON HARD FESCUE	7-9"
30%	CHARIOT HARD FESCUE	7-9"
20%	MATTERHORN HARD FESCUE	7-9"
10%	HIGHLAND COLONIAL BENTGRASS	6-8"
10%	SHARK CREEPING BENTGRASS	6-8"

SEEDING RATE 150 LBS PER ACRE
HEIGHT 6-9"

WETLAND DISTURBANCE SUMMARY				
WETLAND BUFFER	BUFFER DISTURBANCE WITHIN FENCE LINE		TREE TOPPING WITHIN BUFFER	
	SQUARE FEET	ACRES	SQUARE FEET	ACRES
25' BUFFER LINE	0	0	0	0
50' BUFFER LINE	0	0	0	0
100' BUFFER LINE	9823	0.23	21,359	0.49

LIGHTING SCHEDULE

TYP	SYMBOL	DESCRIPTION	LAMP	LUMENS	MOUNTING/BALLAST	LLF	QTY
A1		LSI INDUSTRIES, (1) XGBM-FT-LED-SS-NW	(1) LEDs	17994	12 Ft., 4000K Neutral White LEDs Forward Throw Distribution	0.85	1
A2		LSI INDUSTRIES, (2) XGBM-FT-LED-SS-NW-HSS	(2) LEDs	13314	12 Ft., 4000K Neutral White LEDs Forward Throw Distribution with House Side Shields	0.85	2

LEGEND

- WETLAND FLAG
- —WL— WETLANDS BOUNDARY LINE
- —50'BL— 50 FT WETLANDS BUFFER LINE
- —100'BL— 100 FT WETLANDS BUFFER LINE
- SOLAR PANELS
- GRAVEL DRIVE
- —A— 5.0 FOOTCANDLE LINE
- —B— 1.0 FOOTCANDLE LINE
- —C— 0.5 FOOTCANDLE LINE

AREAS

FENCED	14.49 AC
TREE REMOVAL	2.98 AC
TREE TOPPING	2.90 AC

PRELIMINARY SOLAR PANEL OUTPUT

ARRAY	TOTAL
TOTAL NUMBER OF RACKS	193
PANELS PER RACK	54
TOTAL NUMBER OF PANELS	193 x 54 = 10,422
OUTPUT PER PANEL	400W
TOTAL OUTPUT	400W x 10,422 = 4,168,800 W (4.17 MW)

PANEL COUNT AND ARRANGEMENT SUBJECT TO CHANGE BASED ON AVAILABILITY AND MANUFACTURER

TOWN OF WARE PLANNING BOARD

DATE:

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

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MA LIC. NO. 40595 NY LIC. NO. 60022
NH LIC. NO. 9365 RI LIC. NO. 5694

NO.	DATE	REVISION	
2	03-05-20	LANDSCAPING ALONG GREENWICH ROAD AND INFILTRATION TRENCH REVISION.	E.Q.
1	10-28-19	REVISED SOLAR PANEL LAYOUT ALONG FENCE LINE AND FENCE LINE THROUGHOUT SITE. REVISED SETBACK LINE TO 100 FEET, ADDITION OF GATES ALONG FENCE LINE ADDITON OF WETLAND DISTURBANCE SUMMARY TABLE AND ADDITION OF LANDSCAPING ALONG SOUTHWESTERN PORTION.	E.Q.

DRAWING TITLE
SITE PLAN

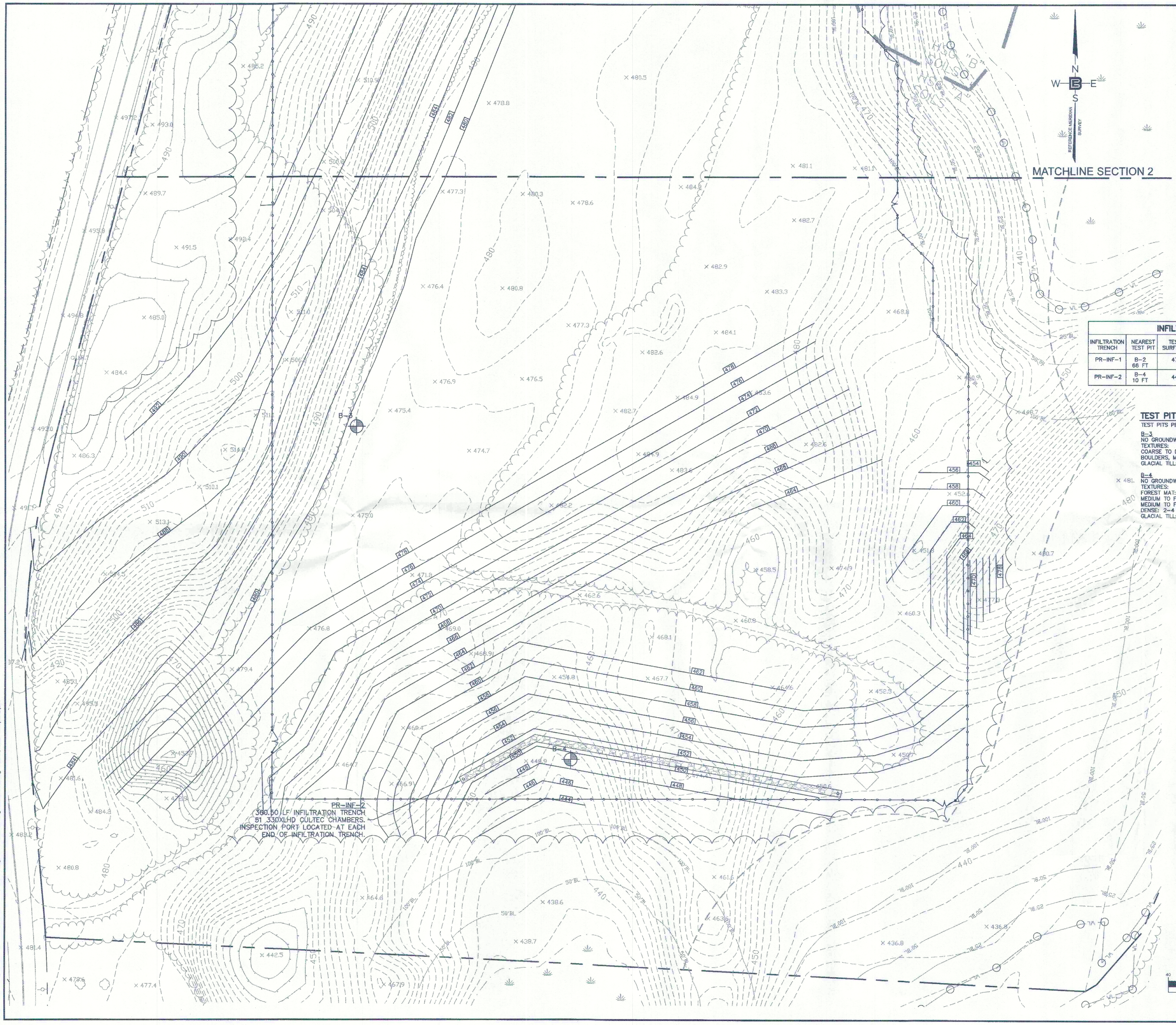
PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

CLIENT
WARE SOLAR III LLC
276 N. FOREST AVE. NE
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

DRAWN BY	CHECKED BY
E.Q.	C.J.B.
SCALE 1" = 80'	PROJECT NO. 18M-216
DATE 10-21-19	REVISION NO. 2

DRAWING NO.
C2.2



INFILTRATION TRENCH DEPTH ANALYSIS

INFILTRATION TRENCH	NEAREST TEST PIT	TEST PIT EXIST. SURFACE ELEVATION	TEST PIT PROP. SURFACE ELEVATION	G.W. ELEV.	TRENCH DEPTH ELEV.	G.W SEPERATION
PR-INF-1	B-2 66 FT	478.00 FT	478.00 FT	461.00 FT	478.96 FT	17.96 FT
PR-INF-2	B-4 10 FT	447.00 FT	449.00 FT	435.00 FT	444.96 FT	9.96 FT

TEST PIT DATA

TEST PITS PERFORMED BY JTC INC. ON SEPTEMBER 20, 2019

B-3
NO GROUNDWATER OR MOTTLING ENCOUNTERED
TEXTURES:
COARSE TO DINE SAND, LITTLE GRAVEL, SILT TRACES, OCCASIONAL COBBLES AND BOULDERS, MEDIUM DENSE TO VERY DENSE, DRY: 0–2 FEET;
GLACIAL TILL: 2–11 FEET;

B-4
NO GROUNDWATER OR MOTTLING ENCOUNTERED
TEXTURES:
FOREST MAT: 0–4 INCHES;
MEDIUM TO FINE SAND, SOME SILT WITH ROOTS: 0–2 FEET;
MEDIUM TO FINE SAND, OCCASIONAL COBBLES AND BOULDERS, MEDIUM DENSE TO VERY DENSE: 2–4 FEET;
GLACIAL TILL: 5–12 FEET;

LEGEND

CB	CATCH BASIN		IRON PIPE
UP	UTILITY POLE		DRILL HOLE
IR	REBAR		REBAR SET
DH	DRILL HOLE		BOUND SYMBOL
IP	IRON PIPE		UTILITY POLE
FND	FOUND		STONE WALL
BND	BOUND		WELL
AP:	ASSESSORS PARCEL		BENCH MARK
HYD.	HYDRANT		HYDRANT
GUY	GUY WIRE		GUY WIRE
	STUMP WITH WIRE		TREE WITH WIRE

WETLANDS LEGEND

	WETLAND FLAG
—WL—	WETLANDS BOUNDARY LINE
—50'BL—	50 FT WETLANDS BUFFER LINE
—100'BL—	100 FT WETLANDS BUFFER LINE

TOWN OF WARE PLANNING BOARD

DATE:

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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MA LIC. NO. 40595 NY LIC. NO. 60022
NH LIC. NO. 9368 RI LIC. NO. 6694

NO.	DATE	REVISION	
2	03-05-19	REVISED GRADING AND DRAINAGE AND ADDITION OF INFILTRATION TRENCH TABLE. REVISION OF TEST PIT DATA TO INCLUDE MOTTLING.	E.Q.
1	10-28-19	REVISION OF GRADING ON SOUTHERN PORTION, ADDITION OF SPOT SHOTS AND INF. BASINS ADDITION OF BORING LOCATIONS AND SUMMARIES.	E.Q.

DRAWING TITLE
GRADING & DRAINAGE PLAN (SECTION 1)

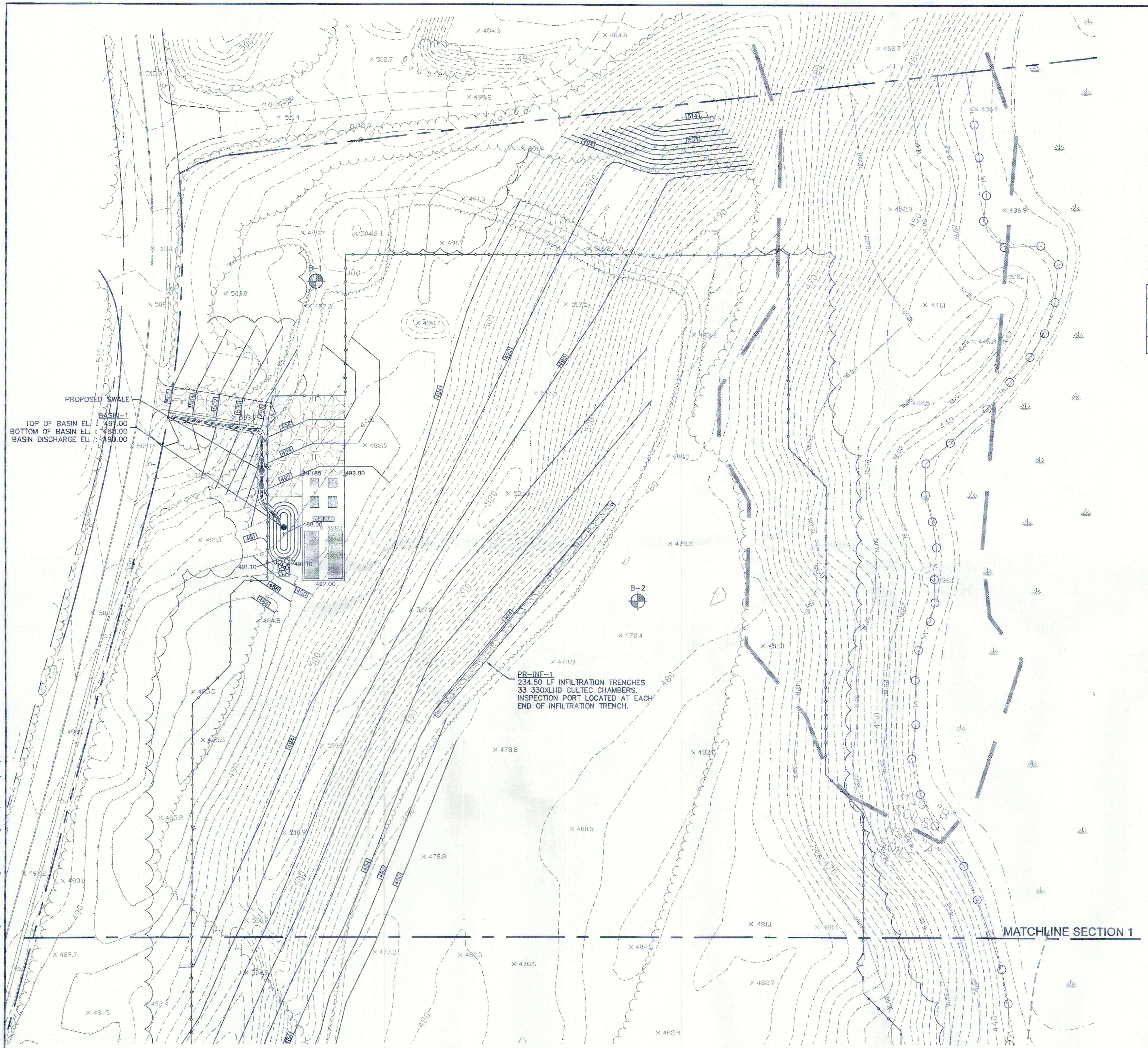
PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

CLIENT
WARE SOLAR III LLC
276 N. FOREST AVE. NE
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

DRAWN BY	CHECKED BY
E.Q.	C.J.B.
SCALE 1" = 40'	PROJECT NO. 18M-216
DATE 10-21-19	REVISION NO. 2

DRAWING NO.
C2.3



INFILTRATION TRENCH DEPTH ANALYSIS						
INFILTRATION TRENCH	NEAREST TEST PIT	TEST PIT EXIST. SURFACE ELEVATION	TEST PIT PROP. SURFACE ELEVATION	G.W. ELEV.	TRENCH DEPTH ELEV.	G.W SEPERATION
PR-INF-1	B-2 66 FT	478.00 FT	478.00 FT	461.00 FT	478.96 FT	17.96 FT
PR-INF-2	B-4 10 FT	447.00 FT	449.00 FT	435.00 FT	444.96 FT	9.96 FT

TEST PIT DATA

TEST PITS PERFORMED BY JTC INC. ON SEPTEMBER 20, 2019

B-1
NO GROUNDWATER OR MOTTLING ENCOUNTERED
TEXTURES:
TOPSOIL: 0-7 INCHES; FINE SAND, SOME SILT WITH ROOTS: 0-2 FEET;
FINE SAND, SILT TRACES, GRAVEL TRACES, OCCASIONAL COBBLES AND BOULDERS, MEDIUM DENSE TO VERY DENSE: 2-4 FEET;
GLACIAL TILL: 5-15.5 FEET;
GLACIAL TILL, COARSE TO FINE SAND, LITTLE GRAVEL, SILT TRACES. FREQUENT COBBLES AND BOULDERS, MEDIUM DENSE TO VERY DENSE, DRY: 10-11 FEET

B-2
NO GROUNDWATER OR MOTTLING ENCOUNTERED
TEXTURES:
TOPSOIL: 0-4 INCHES; FINE SAND, SOME SILT, WITH ROOTS: 0-2 FEET;
MEDIUM TO FINE SAND, LITTLE SILT, GRAVEL TRACES, MEDIUM DENSE, DRY: 2-4 FEET;
GLACIAL TILL, FINE SAND AND SILT, MEDIUM DENSE, DRY: 5-7 FEET;
GLACIAL TILL: 7-9 FEET;
GLACIAL TILL, SILT TRACES: 9-11 FEET;
GLACIAL TILL, MEDIUM TO FINE SAND, MEDIUM DENSE, DRY: 11-13 FEET;
GLACIAL TILL, STONE IN TIP OF SAMPLER: 16-17 FEET

LEGEND

CB	CATCH BASIN	IRON PIPE
UP	UTILITY POLE	DRILL HOLE
IR	REBAR	REBAR SET
DH	DRILL HOLE	BOUND SYMBOL
IP	IRON PIPE	UTILITY POLE
FND	FOUND	STONE WALL
BND	BOUND	WELL
AP:	ASSESSORS PARCEL	BENCH MARK
HYD.	HYDRANT	HYDRANT
GUY	GUY WIRE	GUY WIRE
	STUMP WITH WIRE	TREE WITH WIRE

WETLANDS LEGEND

	WETLAND FLAG
—WL—	WETLANDS BOUNDARY LINE
—50'BL—	50 FT WETLANDS BUFFER LINE
—100'BL—	100 FT WETLANDS BUFFER LINE

TOWN OF WARE PLANNING BOARD

DATE:

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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2	03-05-19	REVISED GRADING AND DRAINAGE AND ADDITION OF INFILTRATION TRENCH TABLE. REVISION OF TEST PIT DATA TO INCLUDE MOTTLING.	E.Q.
1	10-28-19	REVISION OF GRADING ON SOUTHERN PORTION, ADDITION OF SPOT SHOTS AND INF. BASINS ADDITION OF BORING LOCATIONS AND SUMMARIES.	E.Q.

DRAWING TITLE
GRADING & DRAINAGE PLAN (SECTION 2)

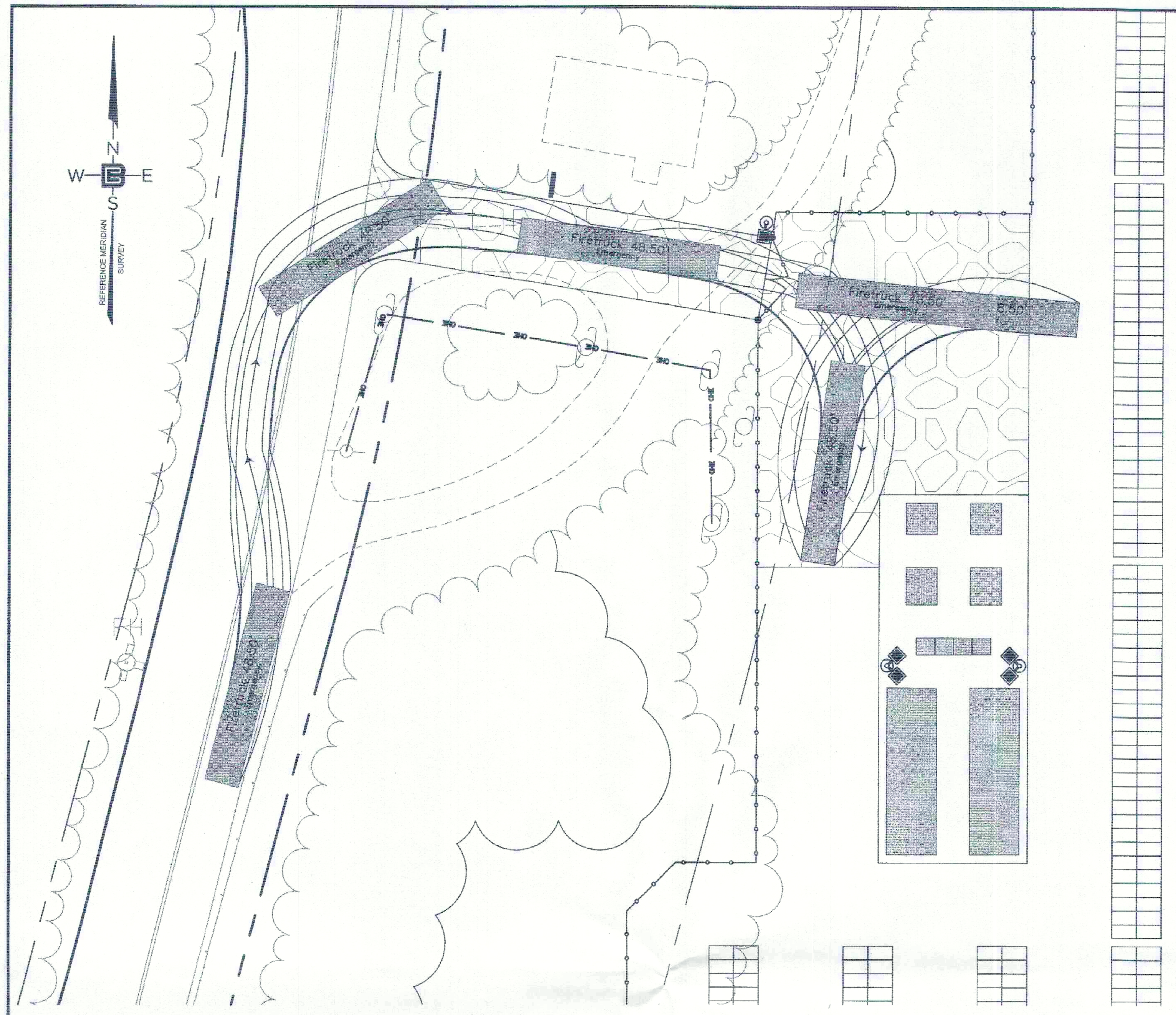
PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

CLIENT
WARE SOLAR III LLC
276 N. FOREST AVE. NE
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

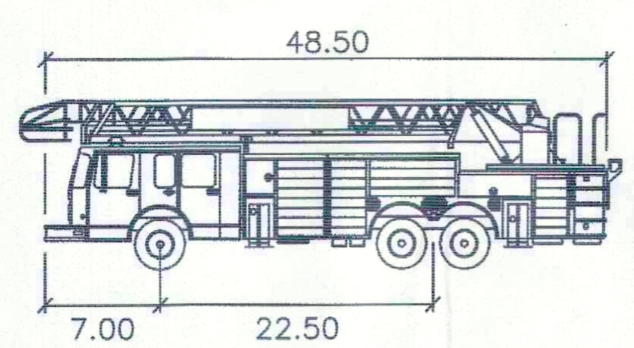
DRAWN BY E.Q.	CHECKED BY C.J.B.
SCALE 1" = 40'	PROJECT NO. 18M-216
DATE 10-21-19	REVISION NO. 2

DRAWING NO.
C2.4



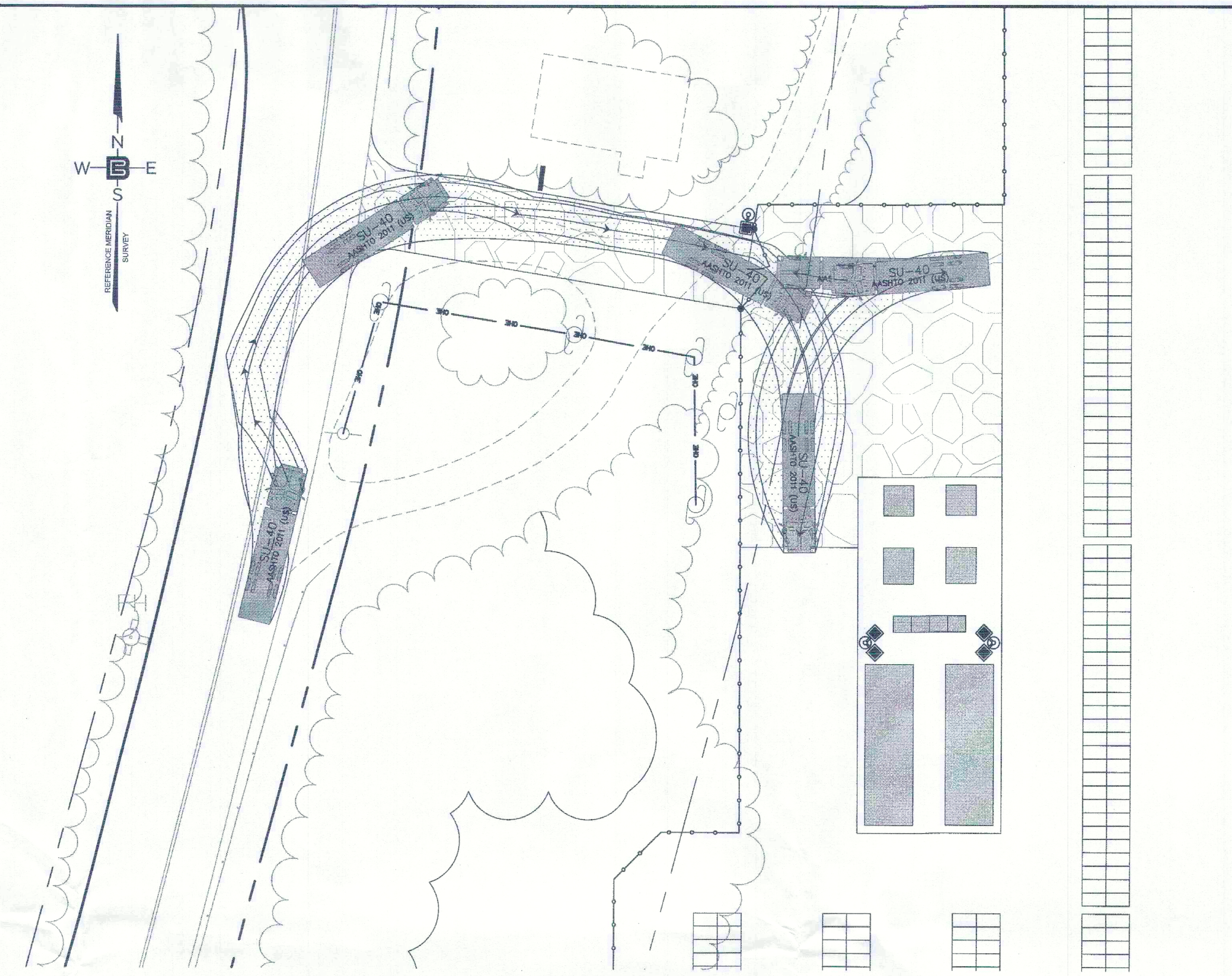
FIRETRUCK CIRCULATION PATH

SCALE: 1" = 20'



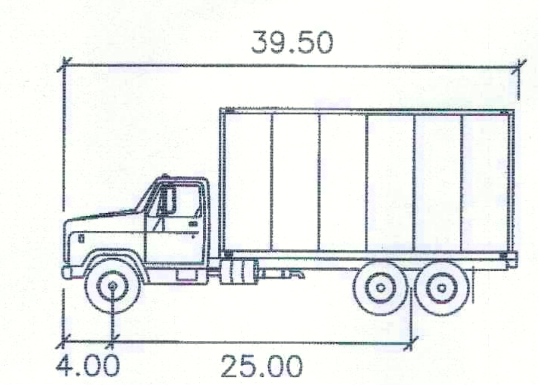
Firetruck

	feet
Width	: 8.25
Track	: 7.75
Lock to Lock Time	: 6.0
Steering Angle	: 31.6



SU-40 MAINTENANCE VEHICLE CIRCULATION PATH

SCALE: 1" = 20'



SU-40

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

TOWN OF WARE PLANNING BOARD

DATE:

GRAPHIC SCALE

(IN FEET)
1 inch = 80 ft.

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NH LIC. NO. 9368 RI LIC. NO. 6694

REVISION

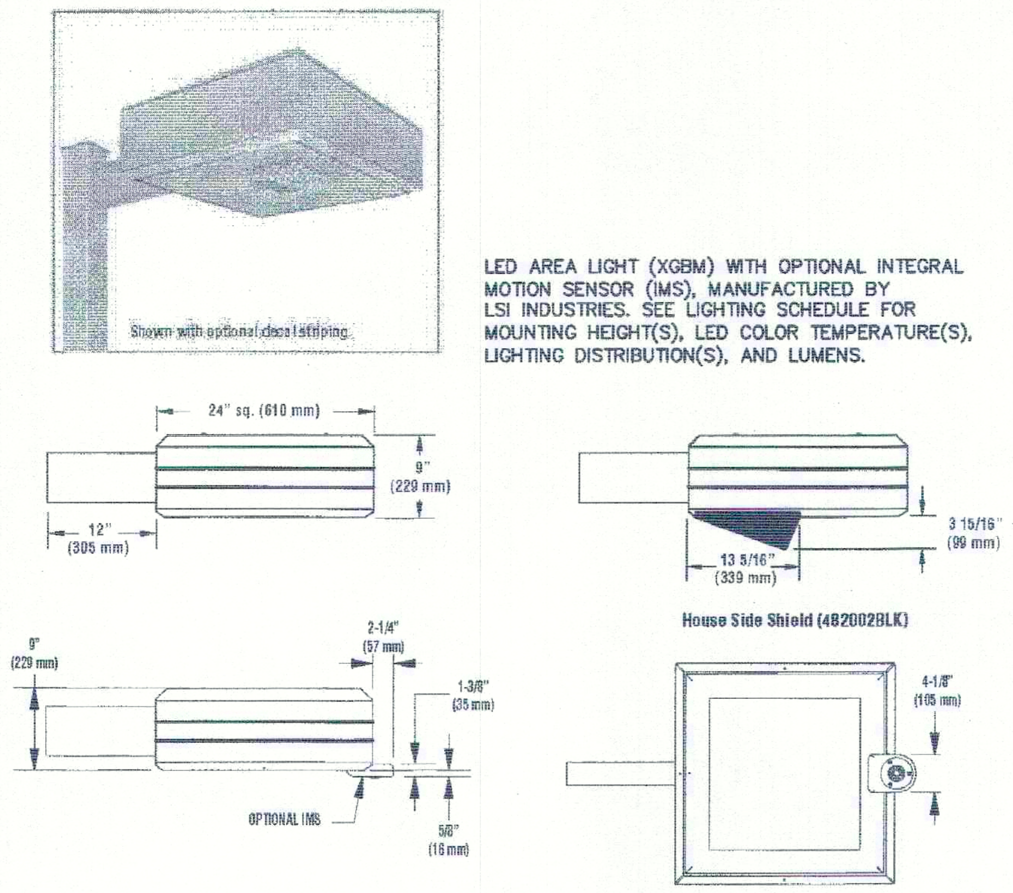
NO. | DATE

DRAWING TITLE
VEHICLE CIRCULATION PLAN

PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

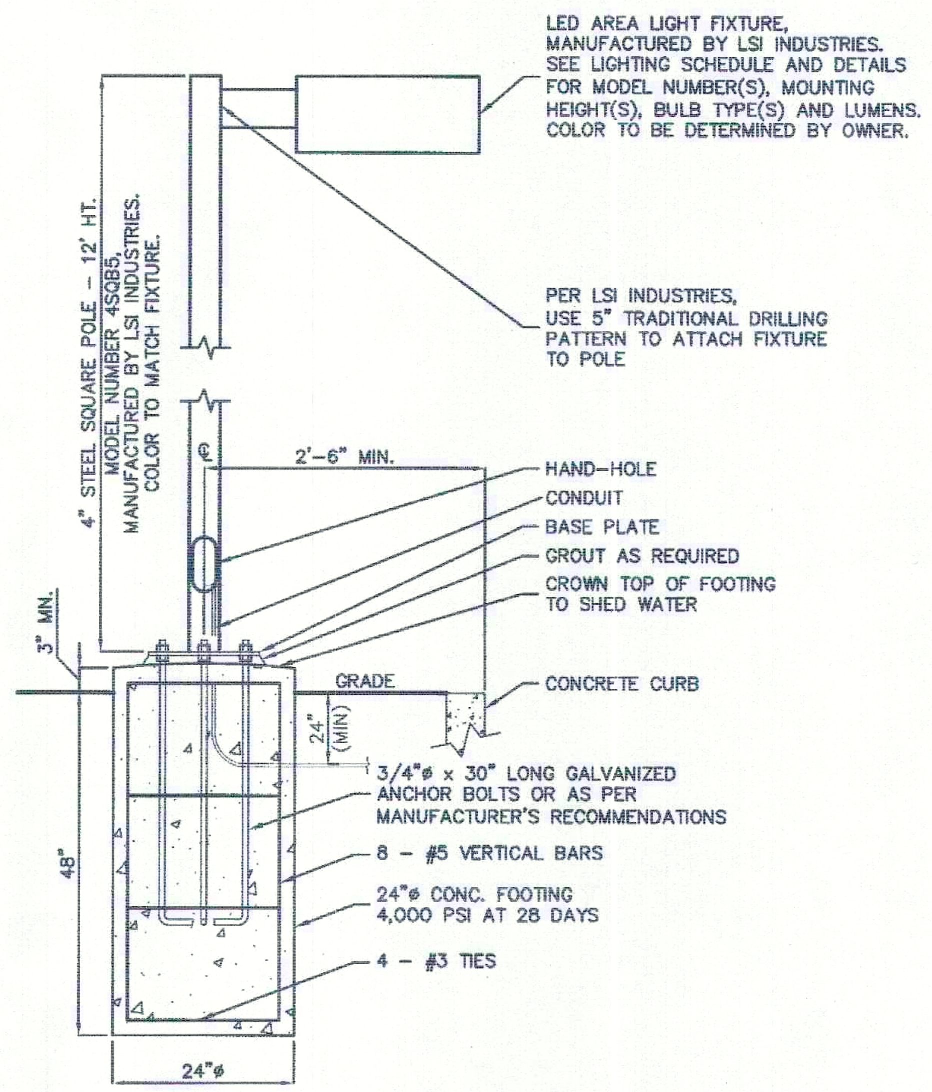
CLIENT
WARE SOLAR III LLC
276 N. FOREST AVE. NE
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION 24GA28068900 / 21MH00002800	
DRAWN BY J.A.S.	CHECKED BY C.J.B.
SCALE 1" = 20'	PROJECT NO. 18M-216
DATE 10-21-19	REVISION NO. 0
DRAWING NO. C2.5	



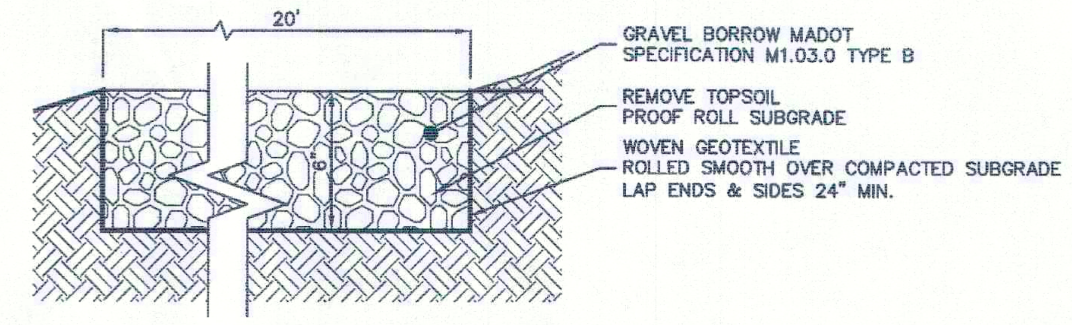
AREA LIGHT FIXTURE DETAIL

NOT TO SCALE



AREA LIGHT & FOOTING DETAIL

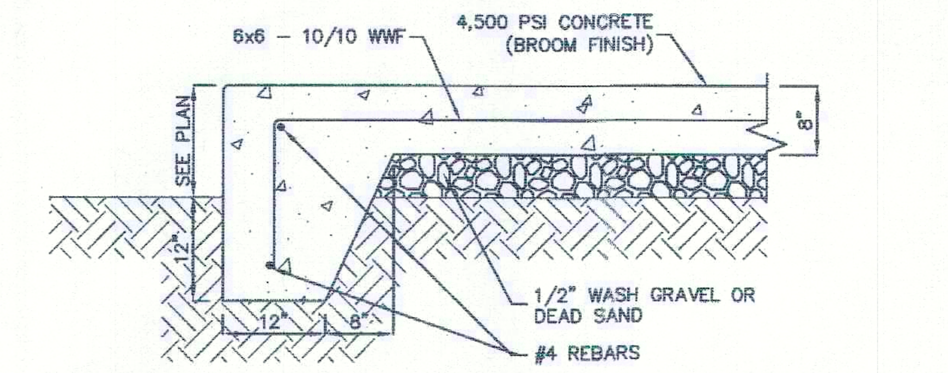
NOT TO SCALE



NOTE: CROSS SLOPE TO MATCH EXISTING SITE GRADING UNLESS OTHERWISE NOTED.

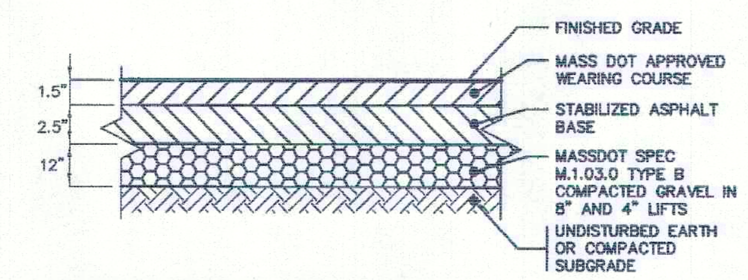
GRAVEL DRIVEWAY DETAIL

NOT TO SCALE



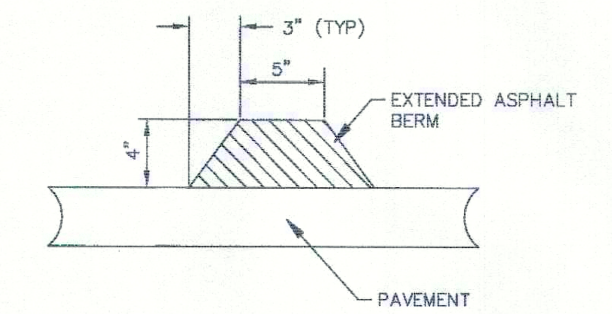
RAISED CONCRETE DETAIL

NOT TO SCALE



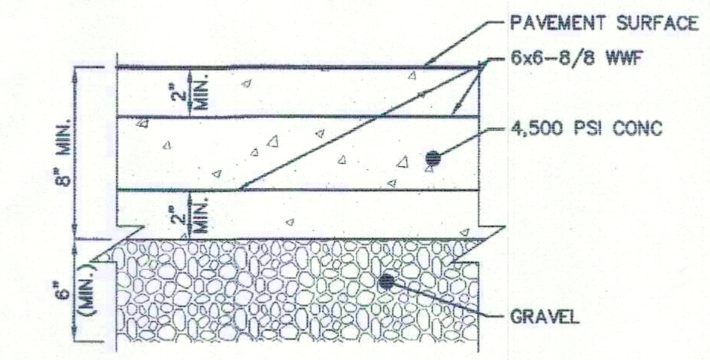
ASPHALT PAVEMENT DETAIL

NOT TO SCALE



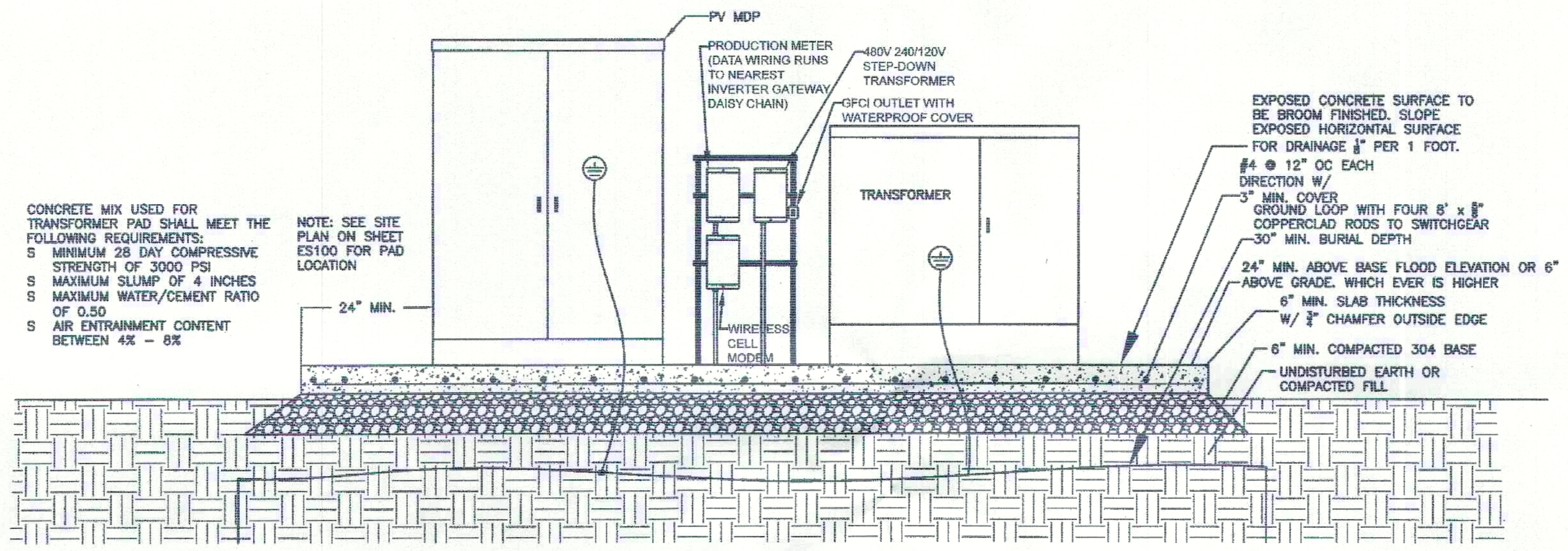
ASPHALT BERM

NOT TO SCALE



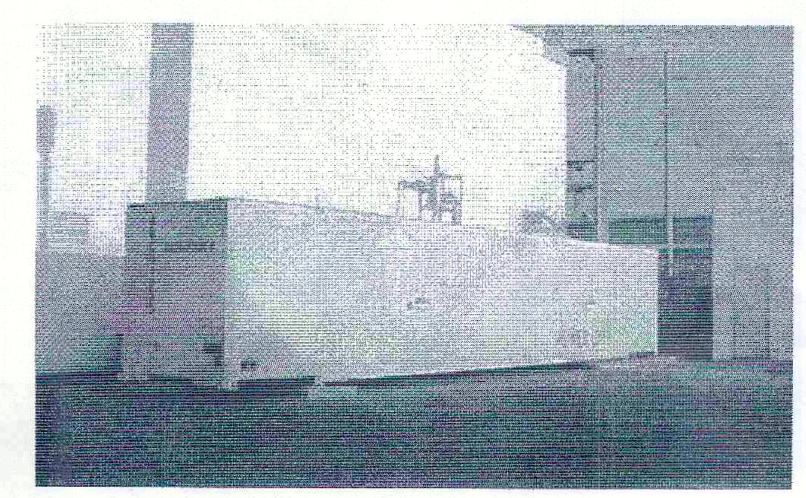
CONCRETE PAVEMENT DETAIL

NOT TO SCALE



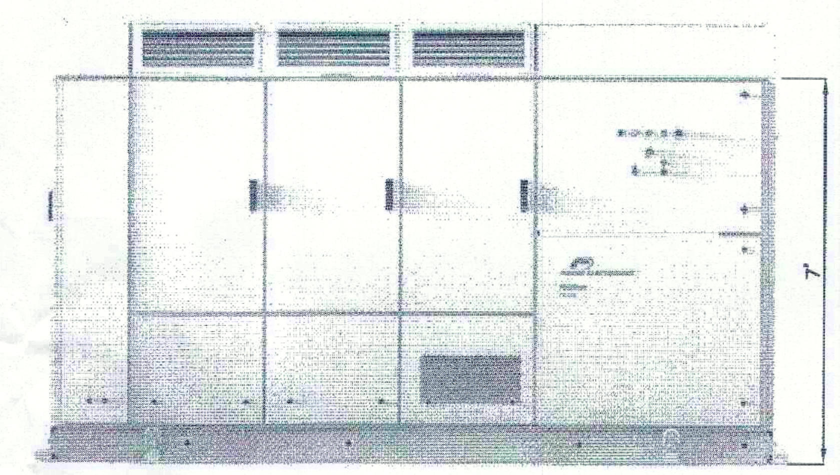
MAIN DISTRIBUTION PANEL AND TRANSFORMER PAD MOUNT DETAIL

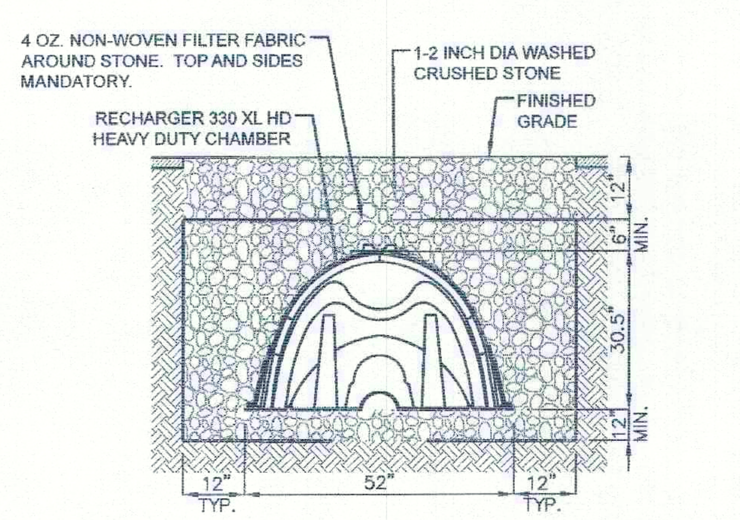
NOT TO SCALE



BATTERY STORAGE CONTAINER

NOT TO SCALE



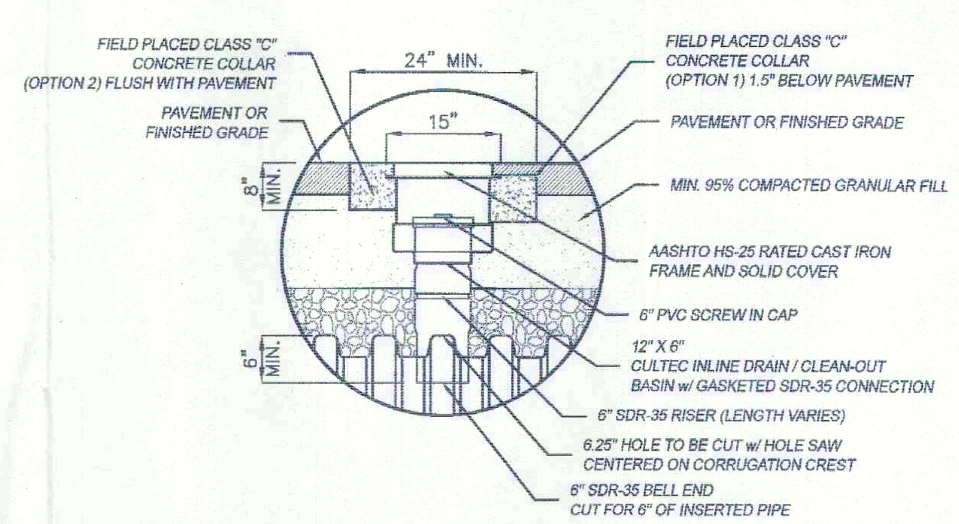


GENERAL NOTES
RECHARGER 330XL HD BY CULTEC, INC. OF BROOKFIELD, CT.
STORAGE PROVIDED = 11.32 CF/FT PER DESIGN UNIT.
REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
USE RECHARGER 330XL HD HEAVY DUTY FOR TRAFFIC AND/OR H-25 APPLICATIONS.

ALL RECHARGER 330XL HD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
ALL RECHARGER 330XL HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

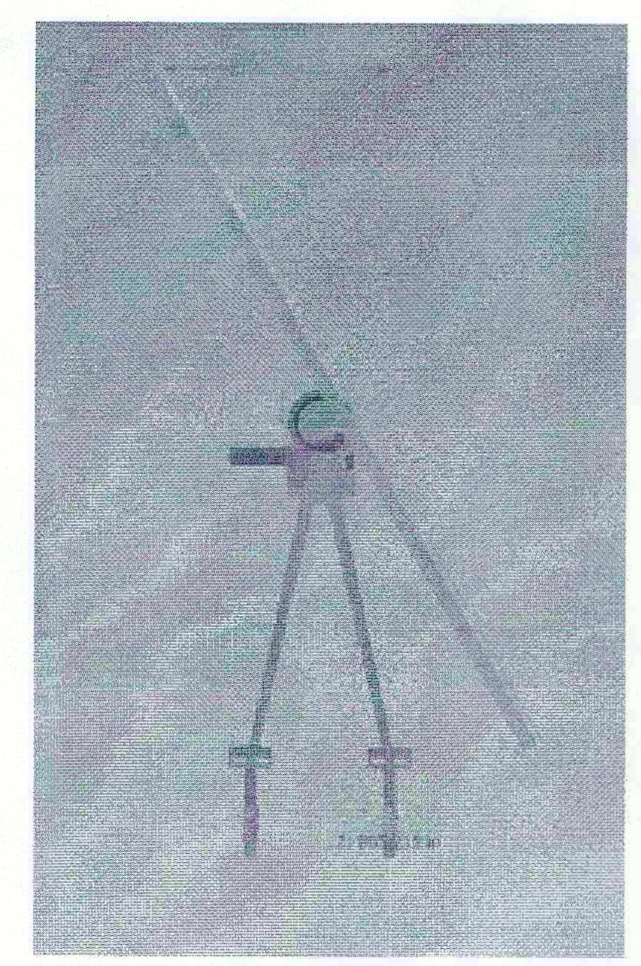
INFILTRATION TRENCH CROSS SECTION

NOT TO SCALE



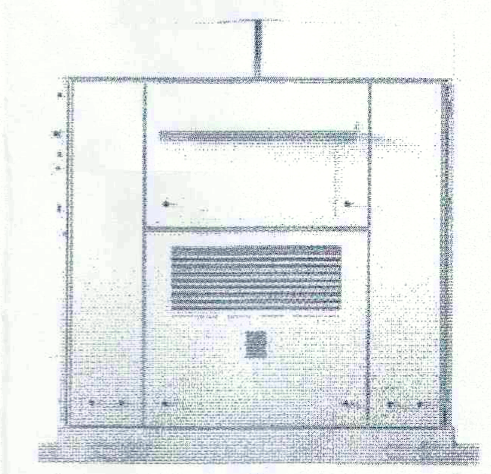
INSPECTION PORT DETAIL

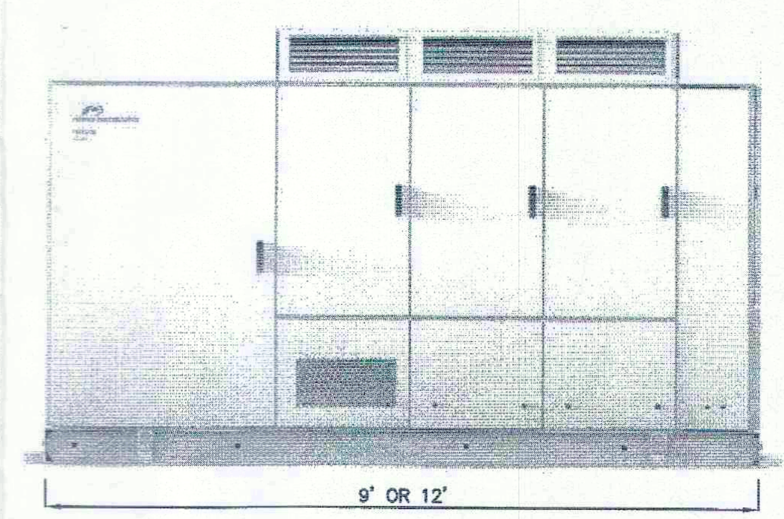
NOT TO SCALE



SOLAR PANEL & RACK SYSTEM

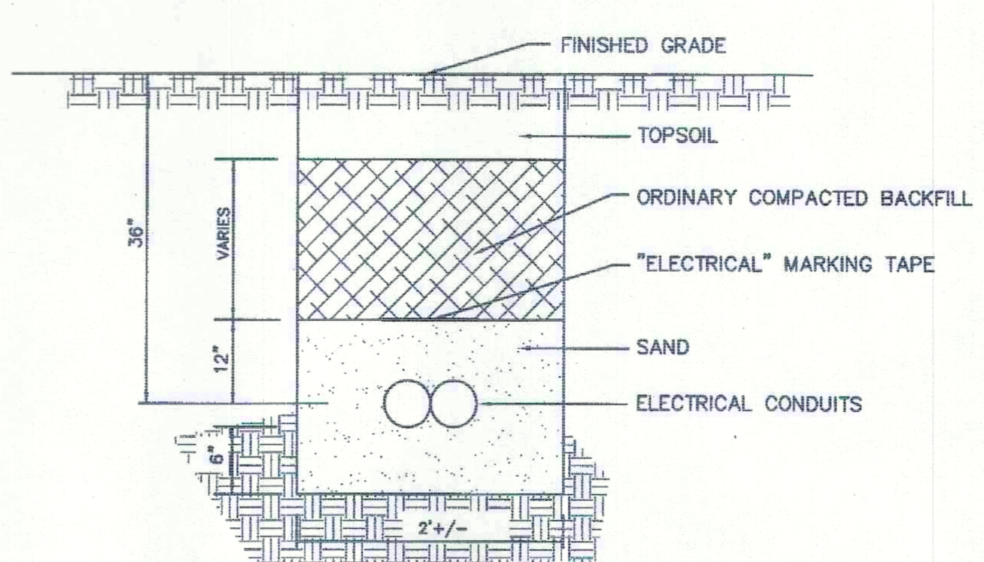
NOT TO SCALE





STRING INVERTER

NOT TO SCALE



TYPICAL ELECTRICAL TRENCH DETAIL

NOT TO SCALE

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MA LIC. NO. 40595 NY LIC. NO. 60022
NH LIC. NO. 9366 RI LIC. NO. 6694

NO.	DATE	REVISION	E.Q.
1	10-28-19	REVISION OF DRAWING TITLE, ADDITION OF DRAINAGE AND UTILITY DETAILS.	

DRAWING TITLE
SITE & DRAINAGE DETAILS

PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

CLIENT
WARE SOLAR III LLC
276 N. FOREST AVE. NE
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

DRAWN BY	CHECKED BY
J.A.S.	C.J.B.
SCALE	PROJECT NO.
AS SHOWN	18M-216
DATE	REVISION NO.
10-21-19	1

DRAWING NO.
C3.1

FIGURE 1

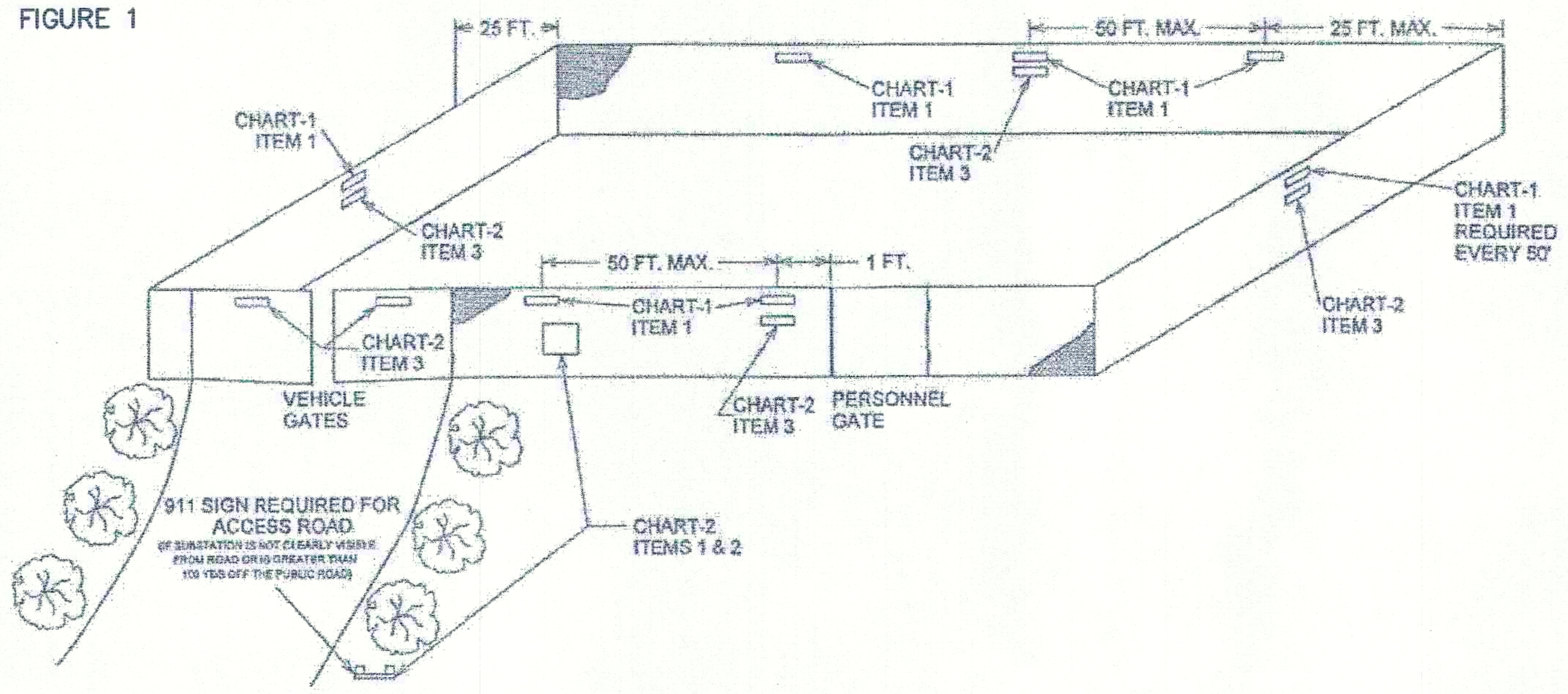
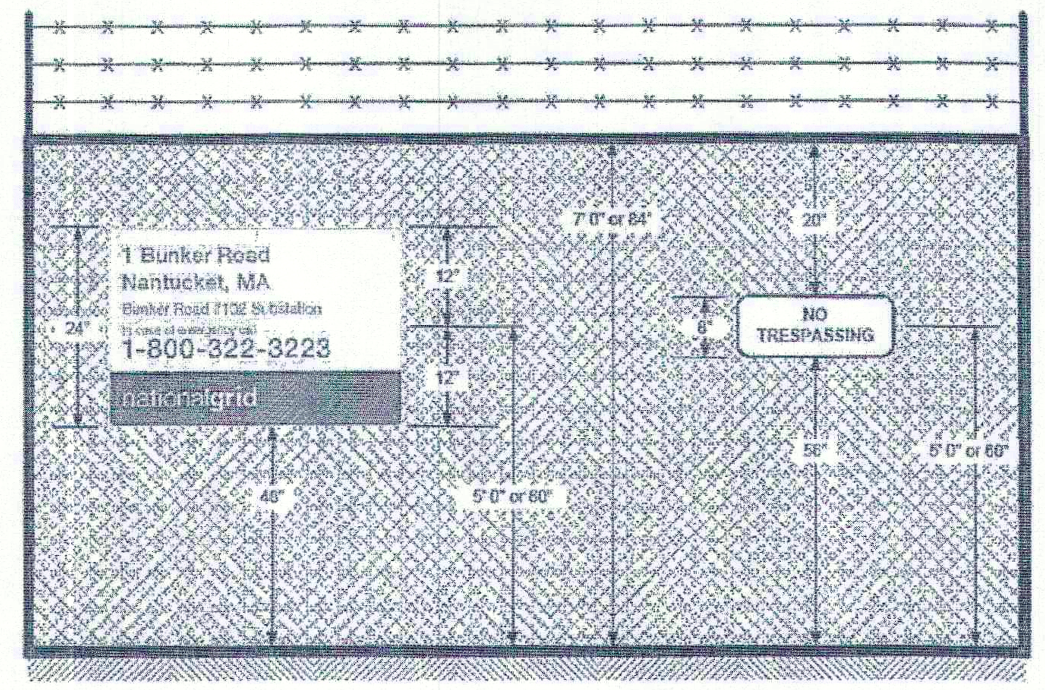


FIGURE 2

Substation Sign Placement Details

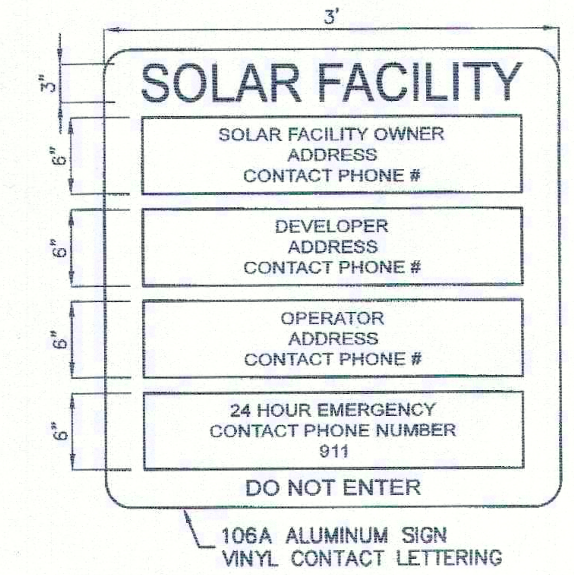


NOTES:

1. SIGN CHAIN-LINK FENCES USING "DANGER" SIGN (CHART-1 ITEM 1).
2. SIGN CHAIN-LINK FENCES USING "NO TRESPASSING" SIGN (CHART-2 ITEM 3).
3. SIGN 4"x4" POSTS AT ACCESS ROAD AND CHAIN-LINK FENCES USING STATION "911" SIGN (CHART-2 ITEM 1 & 2).
4. ALL SIGNS SHALL BE MOUNTED AS CLOSE TO A HEIGHT OF 60" (1525mm) ABOVE GRADE TO THE CENTERLINE OF THE SIGN AS POSSIBLE. ATTACH SIGNS AS LEVEL AS POSSIBLE.
5. SIGN ALL GATES AT A HEIGHT OF 60" (1525mm) ABOVE GRADE TO THE CENTERLINE OF SIGN WITH SIGN AT GATE CENTER.
6. FENCE SIDES THAT CONTAIN NO GATES SHOULD HAVE SYMMETRICAL SIGN PLACEMENT AS MUCH AS IS POSSIBLE.
7. MAXIMUM DISTANCE BETWEEN SIGNS ALONG FENCE PERIMETER NOT TO EXCEED 50 FEET.
8. REFER TO FIGURE 1 AND 2 FOR PLACEMENT DETAIL.
9. SIGN UNHINGED SIDE OF SINGLE GATES AT A HEIGHT OF 60" (1525mm) ABOVE GRADE TO CENTERLINE OF SIGN ONE FOOT FROM GATE POST.
10. ALL FIGURES AND NOTES TAKEN FROM "NATIONALGRID" ENGINEERING DOCUMENT #ST.03.06.001, PG 14 OF 22, VERSION 1.0 DATED 3-9-09.

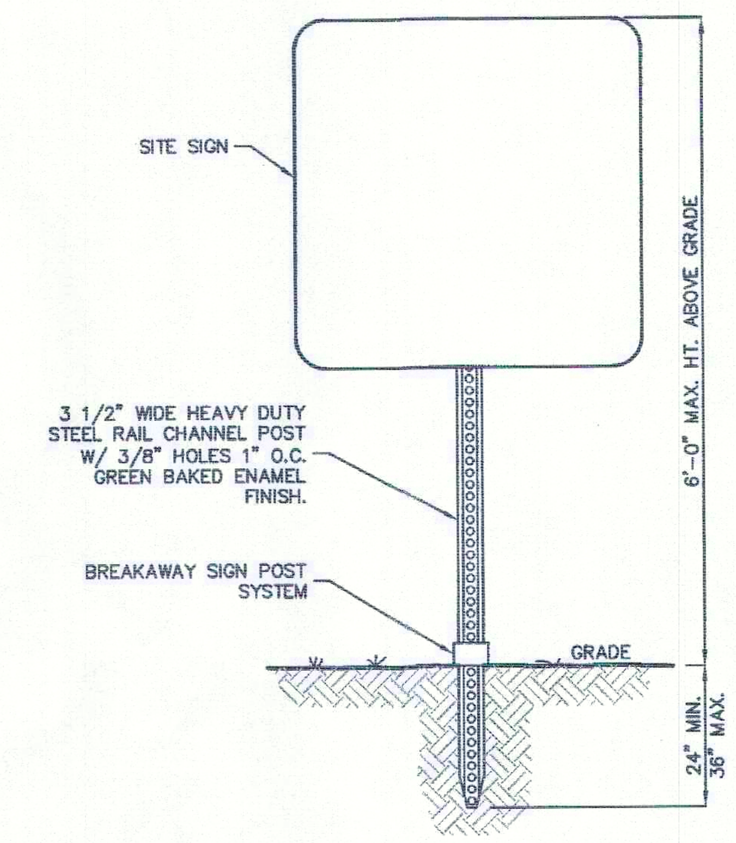
SIGN PLACEMENT ON PERIMETER GATES & FENCES

NOT TO SCALE



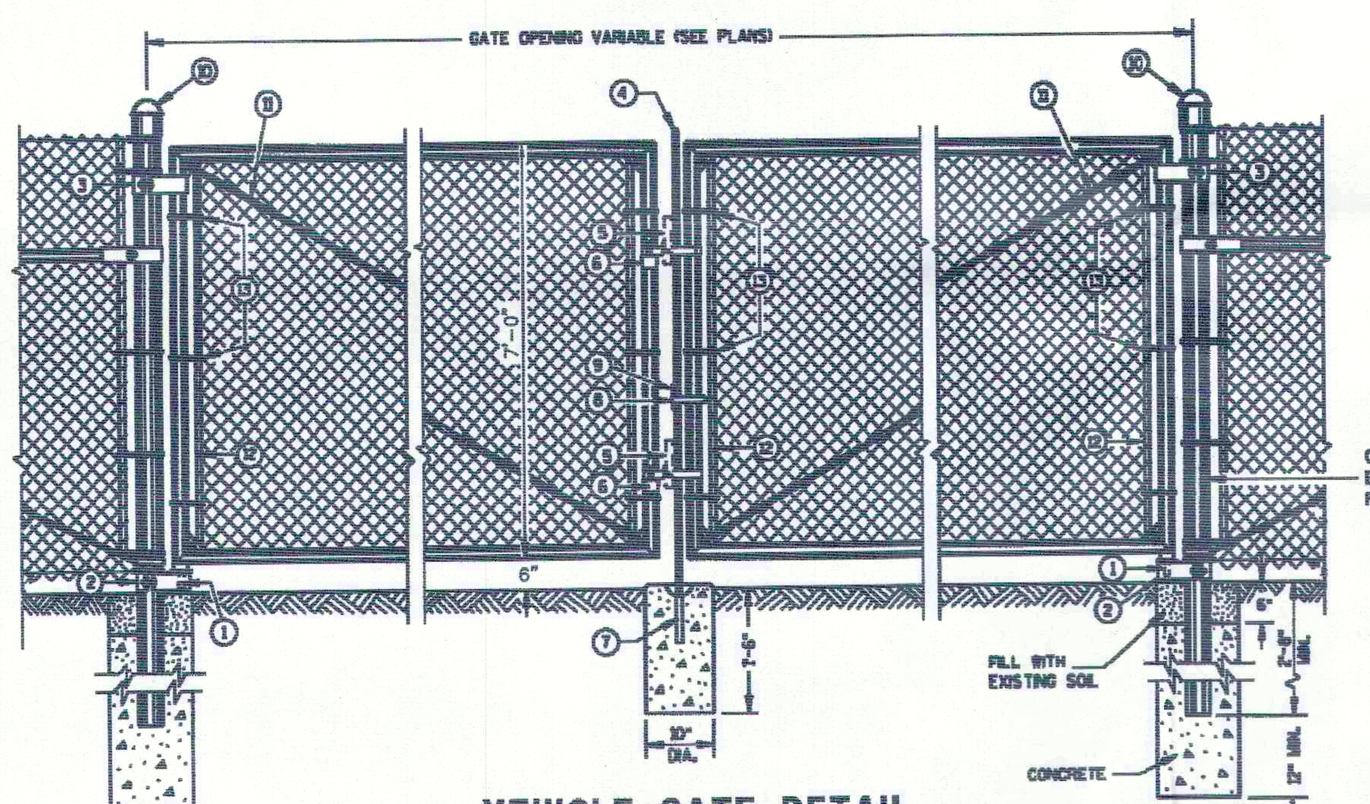
SITE SIGN DETAIL

NOT TO SCALE



SITE SIGN INSTALLATION DETAIL

NOT TO SCALE



LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

VEHICLE GATE DETAIL

NOTES

1. FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.
2. FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.
3. MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS ##	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

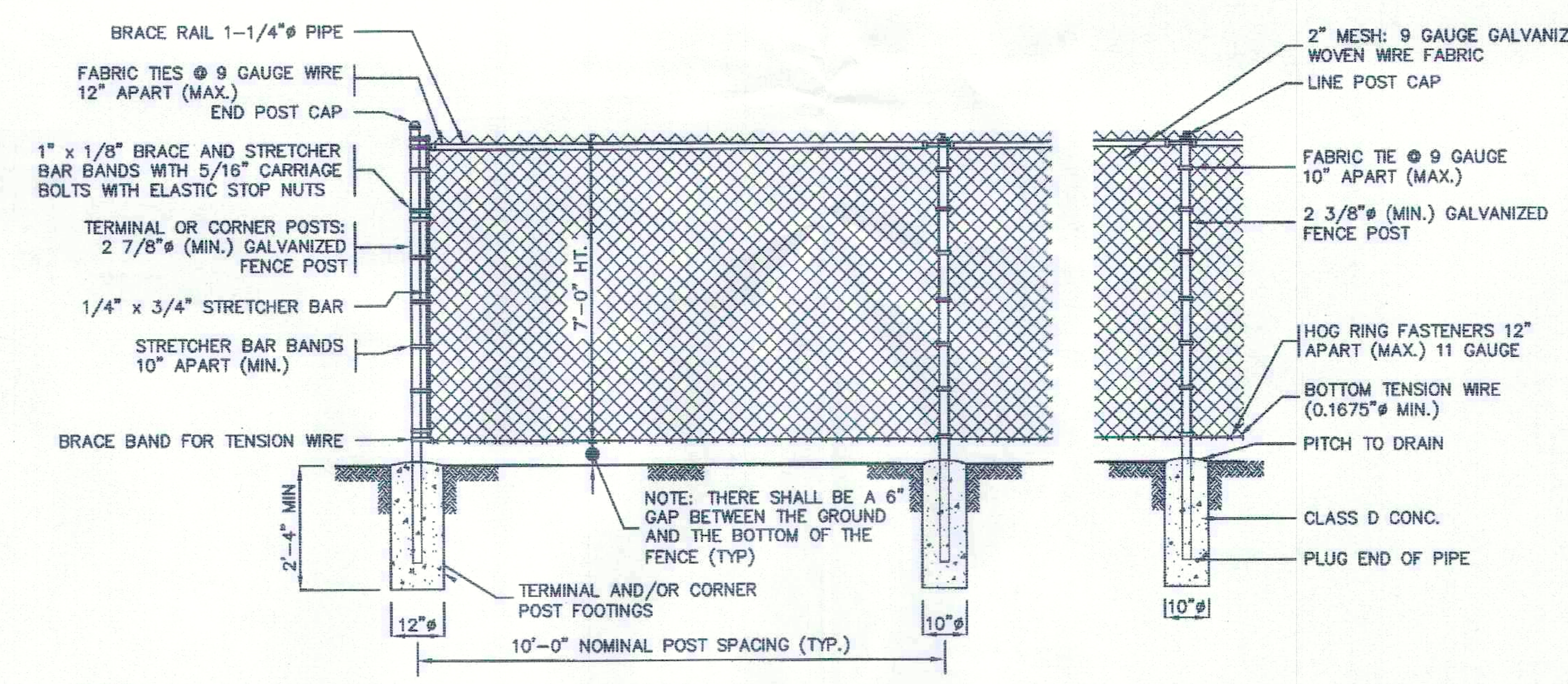
POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.480
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

CHAIN LINK FENCE GATE DETAIL

NOT TO SCALE



NOTES

1. ALL TIES, HOG RINGS AND CLIPS SHALL BE GALVANIZED.
2. FABRIC SHALL BE GALVANIZED WIRE, ALL PIPE TO CONFORM TO CURRENT ASTM DESIGNATION F 1083, SCHEDULE 40, PLAIN END.
3. BRACE RAIL AND ROD AT CORNER AND END SECTION ONLY.
4. ALL REFERENCES TO PIPE DIAMETER ARE ASTM NOMINAL SIZE.
5. WITH THE APPROVAL OF THE ENGINEER, IN SOFT MARSHY GROUND, POSTS MAY BE DRIVEN, THE CONCRETE FOOTING DELETED AND APPROVED DRIVE ANCHORS USED.

CHAIN LINK FENCE DETAIL

NOT TO SCALE

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PROFESSIONAL ENGINEER
CT LIC. NO. 12950 NJ LIC. NO. 28845
MA LIC. NO. 40595 NY LIC. NO. 60022
NH LIC. NO. 9368 RI LIC. NO. 6694

REVISION

NO.	DATE

DRAWING TITLE

SITE DETAILS - 2

PROJECT

LARGE SCALE SOLAR ARRAY

PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

CLIENT

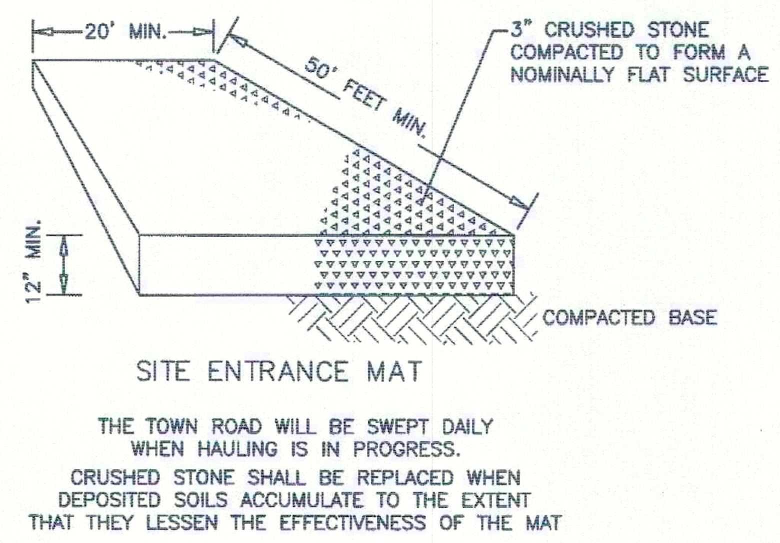
WARE SOLAR III LLC
276 N. FOREST AVE. NE
MARIETTA, GA 30060

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

DRAWN BY	CHECKED BY
J.A.S.	C.J.B.
SCALE: AS SHOWN	PROJECT NO.: 18M-216
DATE: 10-21-19	REVISION NO.: 0

DRAWING NO.

C3.2



TRACKING PAD DETAIL

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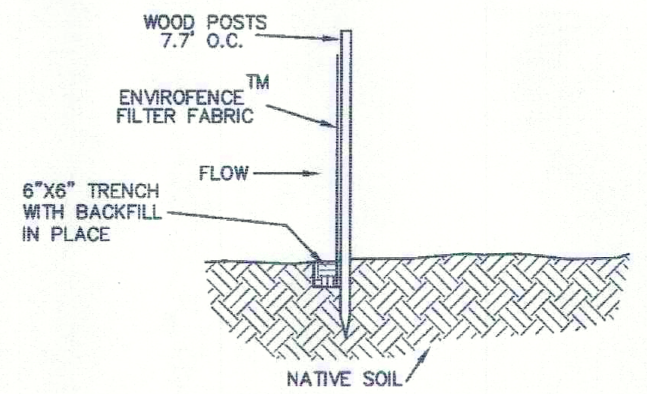

SILT FENCE DETAIL

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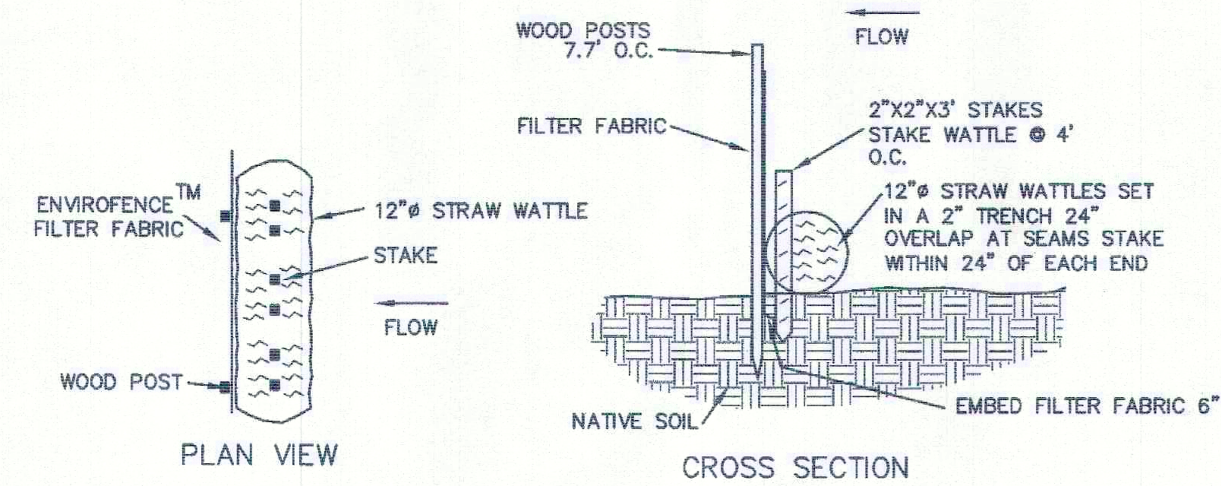
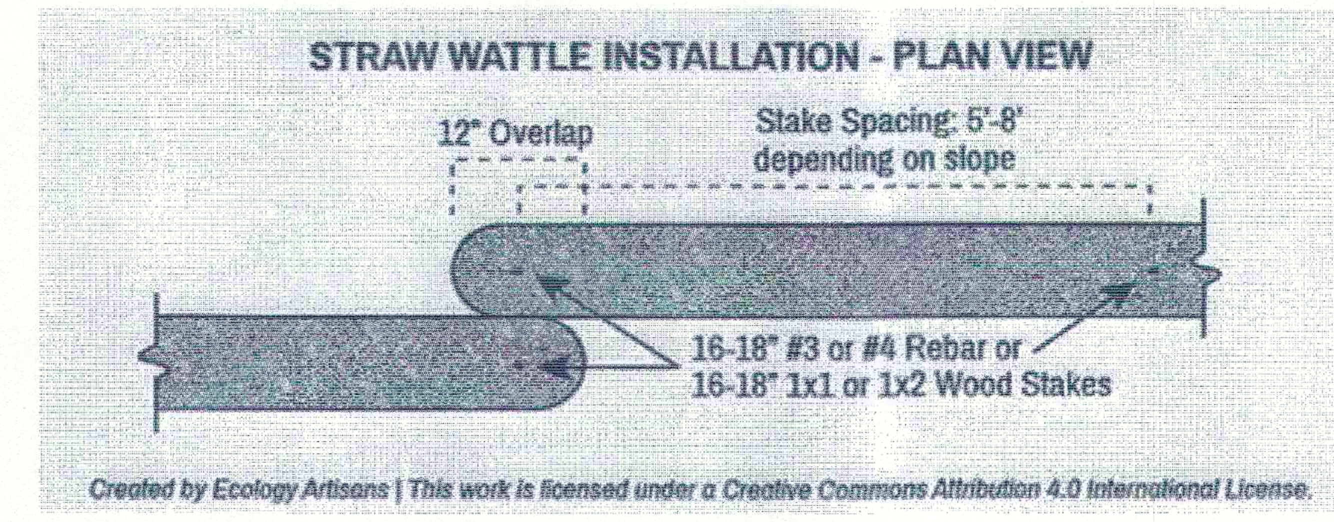


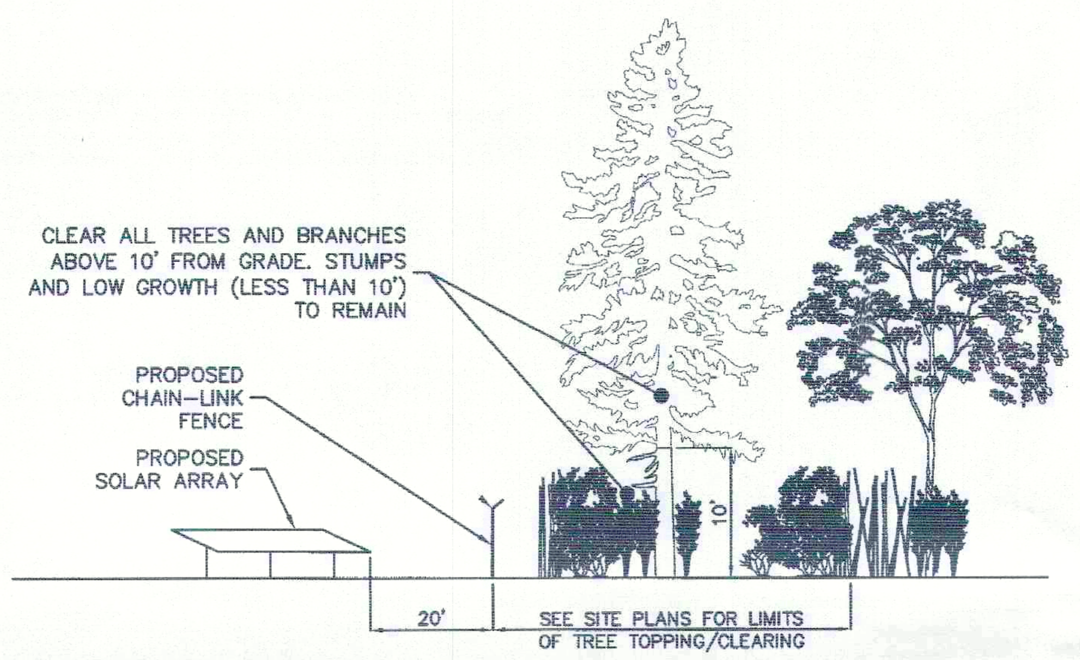
SILT FENCE AND STRAW WATTLE DETAIL

NOT TO SCALE



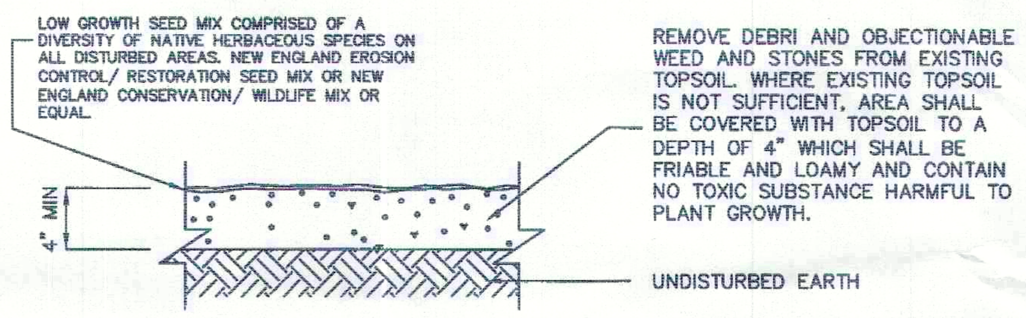
WATTLE INSTALLATION DETAIL

NOT TO SCALE



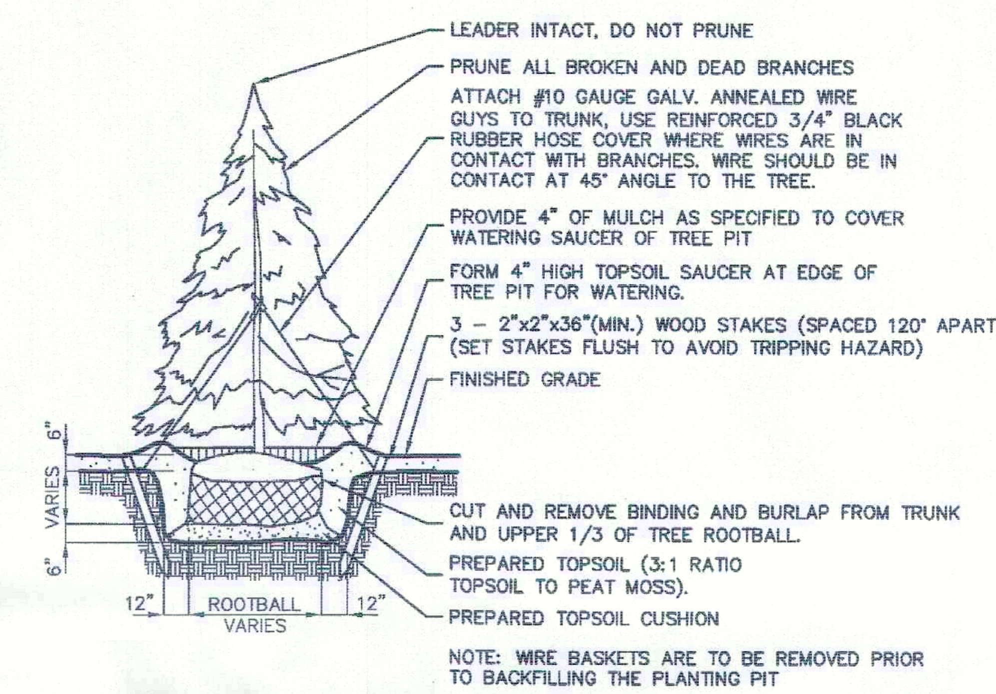
TREE CLEARING DETAIL

NOT TO SCALE



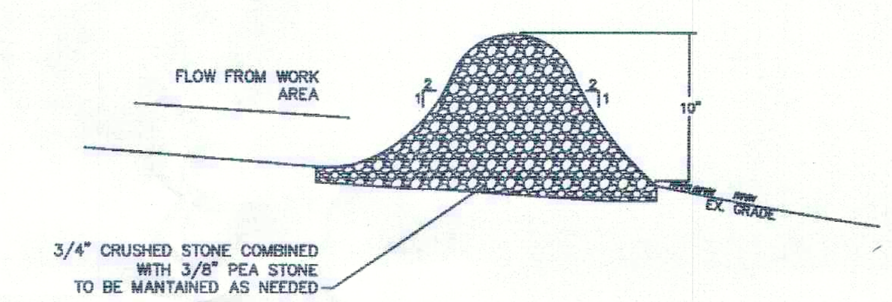
TOP SOIL & SEED DETAIL

NOT TO SCALE



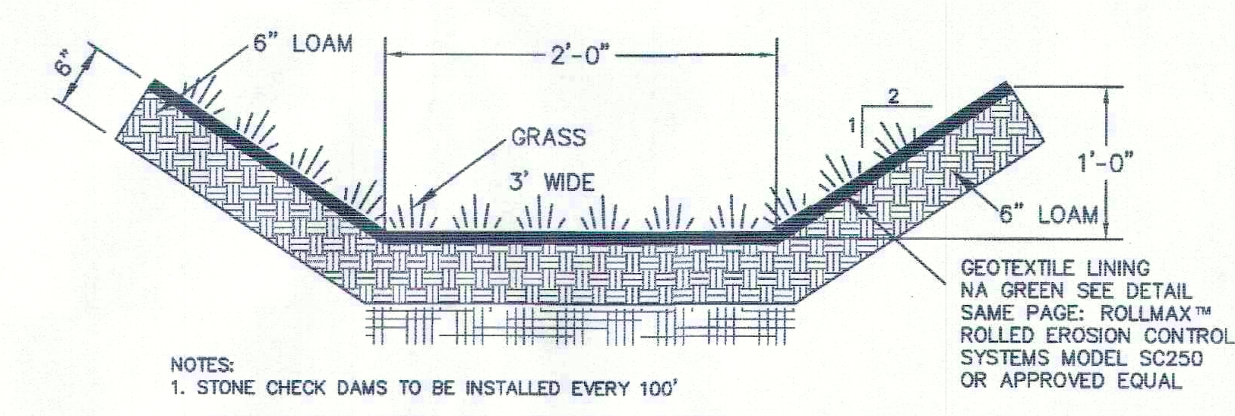
EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



STONE CHECK DAM DETAIL

NOT TO SCALE



NOTES:
1. STONE CHECK DAMS TO BE INSTALLED EVERY 100'
2. SWALE TO BE MAINTAINED PER MAINTENANCE SCHEDULE.

GRASS SWALE

NOT TO SCALE

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MA LIC. NO. 40595 NY LIC. NO. 060022
NH LIC. NO. 11366 RI LIC. NO. 6694

NO	DATE	REVISION
1	03-05-20	ADDITION OF GRASS SWALE DETAIL

DRAWING TITLE
SOIL EROSION & SEDIMENT CONTROL AND LANDSCAPE DETAILS

PROJECT
LARGE SCALE SOLAR ARRAY
PARCEL NUMBER 35-0-12
GREENWICH ROAD
TOWN OF WARE
HAMPSHIRE COUNTY, MASSACHUSETTS

CLIENT
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J.A.S.	C.J.B.
SCALE AS SHOWN	PROJECT NO. 18M-216
DATE 10-21-19	REVISION NO. 1

DRAWING NO.
C3.3