### PROPERTY OWNERS WITHIN 200' PER TOWN OF HACKETTSTOWN MUNICIPAL ASSESSOR, CERTIFIED LIST RECEIVED 12/09/2020

15A HACKETTSTOWN BOARD OF EDUCATION 315 WASHINGTON ST HACKETTSTOWN NJ 07840 15D HACKETTSTOWN COMMUNITY HOSPITAL 651 WILLOW GROVE ST HACKETTSTOWN NJ 07840

2 GALLO, PAUL J & PATRICIA M 322 HÜRLEY DR HACKETTSTOWN NJ 07840 322 HURLEY DR

07840 KRAMER, NICHOLAS P & EVALYN 509 WILLOW GROVE ST HACKETTSTOWN NJ 07840 509 WILLOW GROVE ST

CLARK, STEPHEN R & SUSAN K 104 MORGAN TERR HACKETTSTOWN NJ 0784 KO, CHRISTINA POB 397 17 OLMSTED LANE MENDHAM NJ 07945 604-R WILLOW GROVE ST FL

> HACKETTSTOWN COMM HOSP C/O SALVADO 602 WILLOW GROVE ST 475 SOUTH ST 2ND FLOOR MORRISTOWN NJ 07962 HADGKISS, JAMES E & DEBRA L 600 WILLOW GROVE ST HACKETTSTOWN NJ 07840 600 WILLOW GROVE ST 516 WILLOW GROVE ST 100 PINÉ ST HACKETTSTOWN NJ 07840 TRSG HOLDINGS LLC RANDOLPH ORAL SUR 616 WILLOW GROVE ST 447 ROUTE 10 E SUITE 5 RANDOLPH NJ 07869 WILLOW GROVE REALTY C/O SKRAPITS 616 WILLOW GROVE ST

511 WILLOW GROVE ST

JAJ REALTY LLC C/O DR KAVATHIA 616 WILLOW GROVE ST 616 WILLOW ST UNIT 1A HACKETTSTOWN NJ 07840 119.03 14.01 134 BROOK HOLLOW DR

119.03 14.02 136 BROOK HOLLOW DR 119.03 14.03 138 BROOK HOLLOW DR 119.03 14.04 140 BROOK HOLLOW DR 119.03 14.05 142 BROOK HOLLOW DR 119.03 14.06 144 BROOK HOLLOW DR 07840

119.03 14.07 130 BROOK HOLLOW DR 2 GARG, ANIL & ANJU PO BOX 338 WASHINGTON NJ 119.03 14.08 132 BROOK HOLLOW DR 119.03 14.09 126 BROOK HOLLOW DR 119.03 14.10

FIGURELLI, GERARDO V & MARIA R 112 SAXTON DR HACKETTSTOWN NJ 07840 119.03 14.14 110 SAXTON DR 07840 108 SAXTON DR 2 MARELLI, VINCENT D 106 SAXTON DR HACKETTSTOWN NJ 119.03 14.16 106 SAXTON DR 07840

104 SAXTON DR 119.03 14.18 114 SAXTON DR 116 SAXTON DR 102 SAXTON DR 4C NISOS LEMNOS LLC 268 MAIN ST HACKETTSTOWN NJ 620 WILLOW GROVE ST

WILLOW GROVE ST

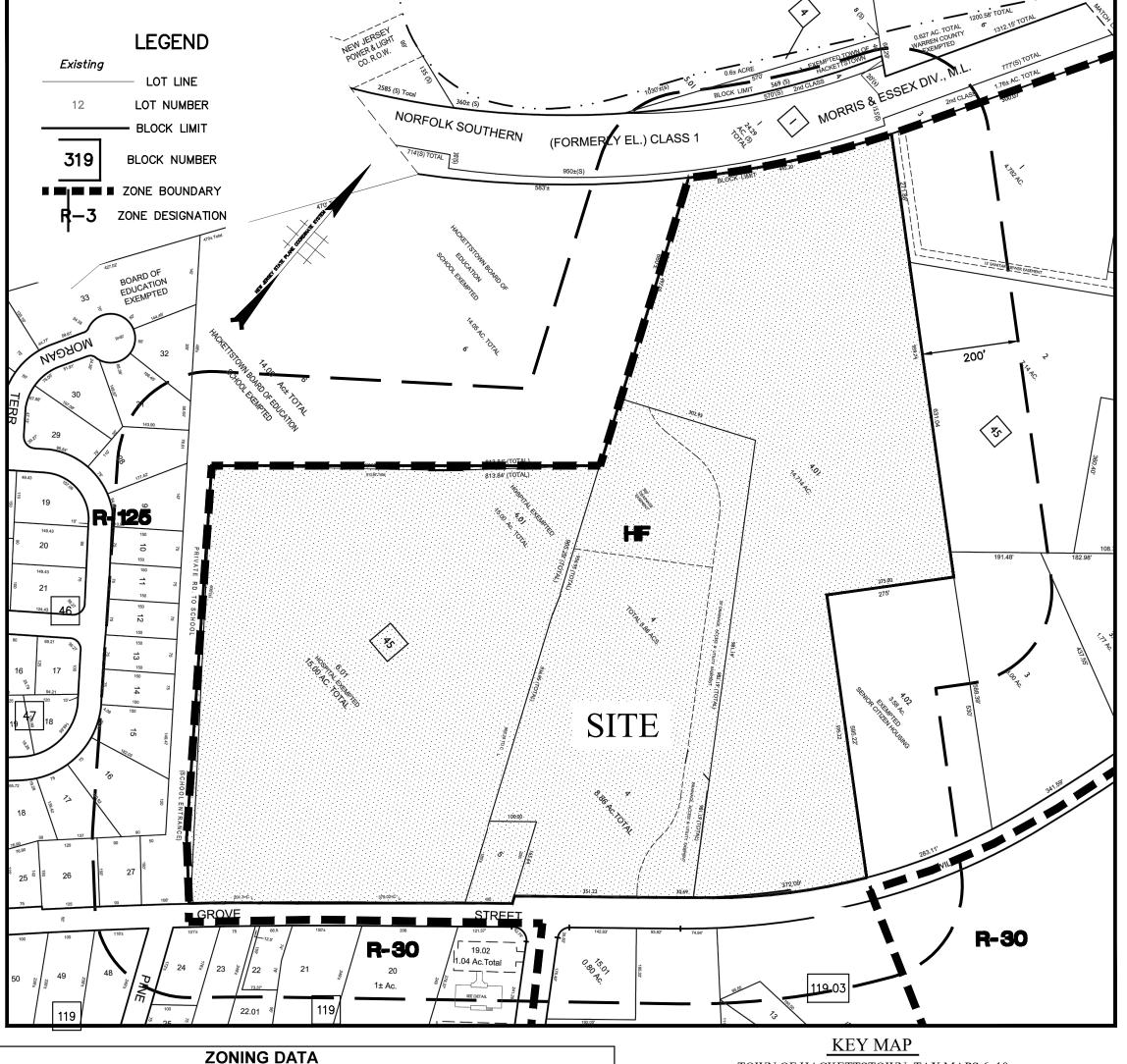
SUBDIVIDED FROM L15

4C NISOS LEMNOS LLC 268 MAIN ST HACKETTSTOWN NJ UTILITY CONTACTS HACKETTSTOWN MUNICIPAL UTILITY AUTHORITY PO BOX 450 HURLEY DR HACKETTSTOWN, NJ 07840

GPU ENERGY 300 MADISON AVE ELIZABETHTOWN GAS CO 520 GREEN LN UNION, NJ 07083 COMCAST CABLEVISION 155 PORT MURRAY RD PORT MURRAY, NJ 07865 VERIZON-NJ, INC 900 CLINTON AVE FLOOR 2 IRVINGTON, NJ 07111

## MAJOR SITE PLAN SOLAR CARPORTS FOR HACKETTSTOWN MEDICAL CENTER

BLOCK 45, LOT 4 (FORMERLY LOTS 4, 4.01, 5, & 6.01) TOWN OF HACKTTSTOWN, WARREN COUNTY, NEW JERSEY



	ZONING [	DATA			
CITATION	STANDARD	REQUIRED	EXISTING	PROPOSED	COMPLIES
§409	"HF" HEALTH FACILITIES				
§409 A.	PERMITTED PRINCIPAL USES	MULTIPLE	HOSPITAL	NO CHANGE	Υ
§409 B.	PERMITTED ACCESSORY USES	MULTIPLE	N/A	SOLAR CARPORTS	N
§409 C.	MAX. HEIGHT	40'/3 STORIES	4 STORIES	NO CHANGE	Υ
§409 D.	AREA AND YARD REQUIREMENTS				
	MIN. LOT AREA	45,000 S.F.	1,692,531 S.F.	NO CHANGE	Υ
	MIN. LOT FRONTAGE	150 FEET	1,446 FEET	NO CHANGE	Υ
	MIN. LOT WIDTH	150 FEET	1,340 FEET	NO CHANGE	Υ
	MIN. LOT DEPTH	200 FEET	1,580 FEET	NO CHANGE	Υ
	MIN. SIDE YARD	30 FEET	30 FEET	30 FEET	Υ
	MIN. FRONT YARD	50 FEET	50 FEET	50 FEET	Υ
	MIN. REAR YARD	30 FEET	30 FEET	30 FEET	Υ
	ACCESSORY BUILDING DISTANCE TO SIDE LINE	20 FEET	N/A	N/A	Υ
	ACCESSORY BUILDING DISTANCE TO REAR LINE	20 FEET	N/A	N/A	Υ
	ACCESSORY BUILDING DISTANCE TO OTHER BUILDING	20 FEET	N/A	N/A	Υ
	MAX. FLOOR AREA RATIO	0.30	0.18	NO CHANGE	Υ
	MAX. LOT COVERAGE	75%	33.9%	33.9%	Υ
	MIN. BUILDING TO BUILDING FOR PEDESTRIAN CIRCULATION	20 FEET	0 FEET	NO CHANGE	N
	MIN. BUILDING TO BUILDING FOR PARKING OR VEHICLE CIRCULATION	50 FEET	186 FEET	NO CHANGE	Y
	MAX. BUILDING TO BUILDING ABUTTING RESIDENTIAL USE OR DISTRICT	50 FEET	N/A	N/A	Y
§409 E.	GENERAL REQUIREMENTS				
	BUILDING USE	1 USE PER BUILDING, EXCEPT FOR ONE	1 PER BUILDING	NO CHANGE	у
	OUTDOOR STORAGE	NONE	NONE	NONE	Υ
	LANDSCAPING	IN AREAS WITHOUT OTHER USE	WHERE NEEDED	NO CHANGE	Y
	PARKING SETBACK	20 FEET	20 FEET	NO CHANGE	Υ
§409 F.	MINIMUM OFF STREET PARKING				
	HOSPITALS, CLINICS, AND OTHER HEALTH FACILITIES	1 SPACE PER 400 S.F. OF NET HABITABLE FLOOR AREA	887 SPACES	NO CHANGE	Υ
	MEDICAL/DENTAL OFFICES	N/A	COMPLIES	COMPLIES	Υ
	NON-MEDICAL/DENTAL PROFESSIONAL AND BUSINESS OFFICES AND HOSPITAL PHARMACIES	N/A	N/A	N/A	Υ
	ADDITIONAL STANDARDS	VARIES	COMPLIES	NO CHANGE	Υ
§409 G.	SIGNS				
ľ	MULTIPLE	VARIES	COMPLIES	NO CHANGE	Υ
§409 H.	MINIMUM OFF-STREET LOADING				
-	SPACE FOR PRINCIPAL USES	15 FEET BY 40 FEET	COMPLIES	NO CHANGE	Υ
	TRASH AND GARBAGE PICK-UP LOCATION FOR EACH BUILDING SERPARTED FROM PARKING SPACES	1 PER BUILDING	COMPLIES	NO CHANGE	Υ

## TOWN OF HACKETTSTOWN, TAX MAPS 6, 10 SCALE: 1'' = 200'GRAPHIC SCALE 1 inch=200 feet

## GENERAL NOTES

- 1. THIS SITE IS COMMONLY KNOWN AS BLOCK 45, LOT 4 (FORMERLY KNOWN AS LOTS 4, 4.01, 5, & 6.01) AS SHOWN ON THE TOWN OF HACKETTSTOWN TAX MAP SHEETS NO. 6 & 10, IN WARREN COUNTY, NEW JERSEY.
- 2. THIS SITE IS LOCATED WITHIN THE HEALTH FACILITIES (HF) ZONE.
- 3. THE ENTIRE TRACT CONTAINS 1,692,531 SQUARE FEET (38.85 ACRES).
- 7. PROJECT DATUMS

HACKETTSTOWN, NJ 07840

HORIZONTAL: NAD 1983 VERTICAL: NAVD 1988 **APPLICANT:** 

8. OWNER:

ATLANTIC HEALTH SYSTEM, INC. ABOVE GRID SOLAR CARPORT 2020 LLC 651 WILLOW GROVE STREET 516 Rt 33 WEST, BUILDING 2, SUITE 101

MILLSTONE, NJ 08535

BOUNDARY AND PHYSICAL INFORMATION SHOWN HEREON TAKEN FROMALTA SURVEY ENTITLED "ALTA/NSPS LAND TITLE SURVEY FOR 20-007-NJ - HACKETTSTOWN MC", PREPARED BY PARTNER ENGINEERING AND SCIENCE, INC., FIELD WORK COMPLETED 06/09/2021.

O. TOPOGRAPHIC (CONTOUR) INFORMATION SHOWN HEREON BASED UPON THE FOLLOWING

- 10.A. A MAP ENTITLED, "ALTA/ACSM LAND TITLE SURVEY, HACKETTSTOWN COMMUNITY HOSPITAL, TOWN OF HACKETTSTOWN, WARREN COUNTY, NEW JERSEY", DATED 10/10/97, PREPARED BY CHERRY, WEBER & ASSOCIATES, P.C., PHILLIPSBURG,
- 10.B. A MAP ENTITLED, "SURVEY & MINOR SUBDIVISION, KINGSHIRE MANOR ASSISTED LIVING RESIDENCE, TOWN OF HACKETTSTOWN, WARREN COUNTY, NEW JERSEY", DATED JAN. 1996, REVISED TO 2/18/98, PREPARED BY CHERRY, WEBER & ASSOCIATES, P.C., PHILLIPSBURG, N.J.
- 10.C. A MAP ENTITLED, "ALTA/ACSM LAND TITLE SURVEY, HOSPITAL PREMISES EASEMENT AREA, TOWN OF HACKETTSTOWN, WARREN COUNTY, NEW JERSEY" DATED JUNE 2002 REVISED TO 6/27/02, PREPARED BY CHERRY, WEBER & ASSOCIATES, P.C., PHILLIPSBURG, N.J.
- COMMUNITY HOSPITAL, DATED JANUARY 7, 2003, RECORDED IN DEED BOOK 1855.

10.D. A DEED BETWEEN HACKETTSTOWN COMMUNITY HOSPITAL AND HACKETTSTOWN

- 10.E. A DEED BETWEEN ADVENTIST MANAGEMENT SERVICES, INC. AND HACKETTSTOWN HACKETTSTOWN I, L.L.C., DATED JULY 3, 2002, RECORDED IN DEED BOOK 1816,
- 10.F. FIELD DATA DATE OF FIELD SURVEY AUGUST 2004.
- 10.G. A MAP ENTITLED, "OVERALL SURVEY & SITE PLAN, MOBILE M.R.I. UNIT, HACKETTSTOWN, WARREN COUNTY, NEW JERSEY", DATED NOVEMBER 2004, PREPARED BY CHERRY, WEBER & ASSOCIATES, P.C., PHILLIPSBURG, N.J.
- 11. TREE, LANDSCAPE, AND LIGHTING INFORMATION SHOWN HEREON VERIFIED IN FIELD BY PARTNER ENGINEERING AND SCIENCE, INC. ON 06/22/2021.
- 12. CARPORT DESIGN FOR "HACKETTSTOWN MEDICAL CENTER", PREPARED BY PARASOL STRUCTURES, DATED 06/30/2021.
- 13. LOCATIONS OF LINE INVERTERS, ELECTRIC VEHICLE CHARGING STATIONS, AND OTHER COLUMN-MOUNTED ACCESSORIES SHOWN ON PLANS MAY BE SUBJECT TO CHANGE DURING CONSTRUCTION.

## **INDEX OF SHEETS**

## SITE PLAN

1. COVER SHEET

2. EXISTING CONDITIONS PLAN

3. LAYOUT PLAN

4. DRAINAGE AND UTILITY PLAN

5. TREE REPLACEMENT & LIGHT RELOCATION PLAN

- 6. LIGHTING PLAN
- 7. SOIL EROSION AND SEDIMENT CONTROL PLAN
- 8. SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
- 9. LANDSCAPE AND LIGHTING DETAILS
- 10. CONSTRUCTION DETAILS

## <u>SURVEY</u>

1. OF 2. ALTA/NSPS LAND TITLE SURVEY FOR 20-007-NJ - HACKETTSTOWN MEDICAL 2. OF 2. ALTA/NSPS LAND TITLE SURVEY FOR 20-007-NJ - HACKETTSTOWN MEDICAL

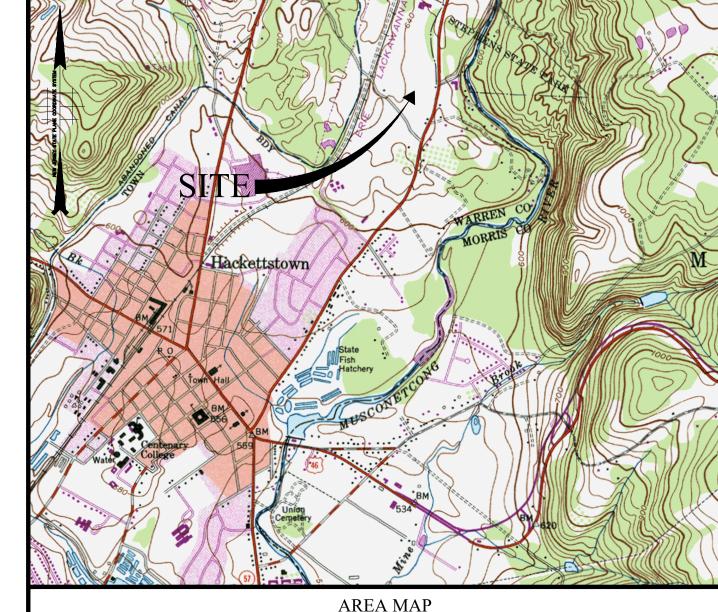
## CARPORT DESIGN PLANS

COVER SHEET

OVERALL SITE PLAN — FOUNDATION LAYOUT OVERALL SITE PLAN - PV ARRAY LAYOUT

S012 - S014 SITE PLAN - FOUNDATION LAYOUT S015 - S017 SITE PLAN - PV ARRAY LAYOUT

TYP. FOUNDATION S101 - S111 CANOPY PLANS S301 - S303 CANOPY SECTION





USGS HACKETTSTOWN QUADRANGLE

GRAPHIC SCALE 1 inch=2,000 feet



APPLICATION NO.	
APPROVED BY THE TOWN	OF HACKETTSTOWN LAND USE
BOARD AS A MAJOR SITE	PLAN
ON	
	_
TOWN ENGINEER	DATE

CHAIRPERSON DATE

**SECRETARY** DATE

_						
	NO.	DATE	REVISION	DRAWN	CHK'D	REL'D

					$\overline{}$
NO.	DATE	REVISION	DRAWN	CHK'D	REL'D

LOT 4 (FORMERLY 4, 4.01, 5, & 6.01) ATLANTIC HEALTH SYSTEM, INC. **Engineering and Science, Inc.** 651 WILLOW GROVE ST. HACKETTSTOWN, NJ 07840 PHONE (908) 852-3130

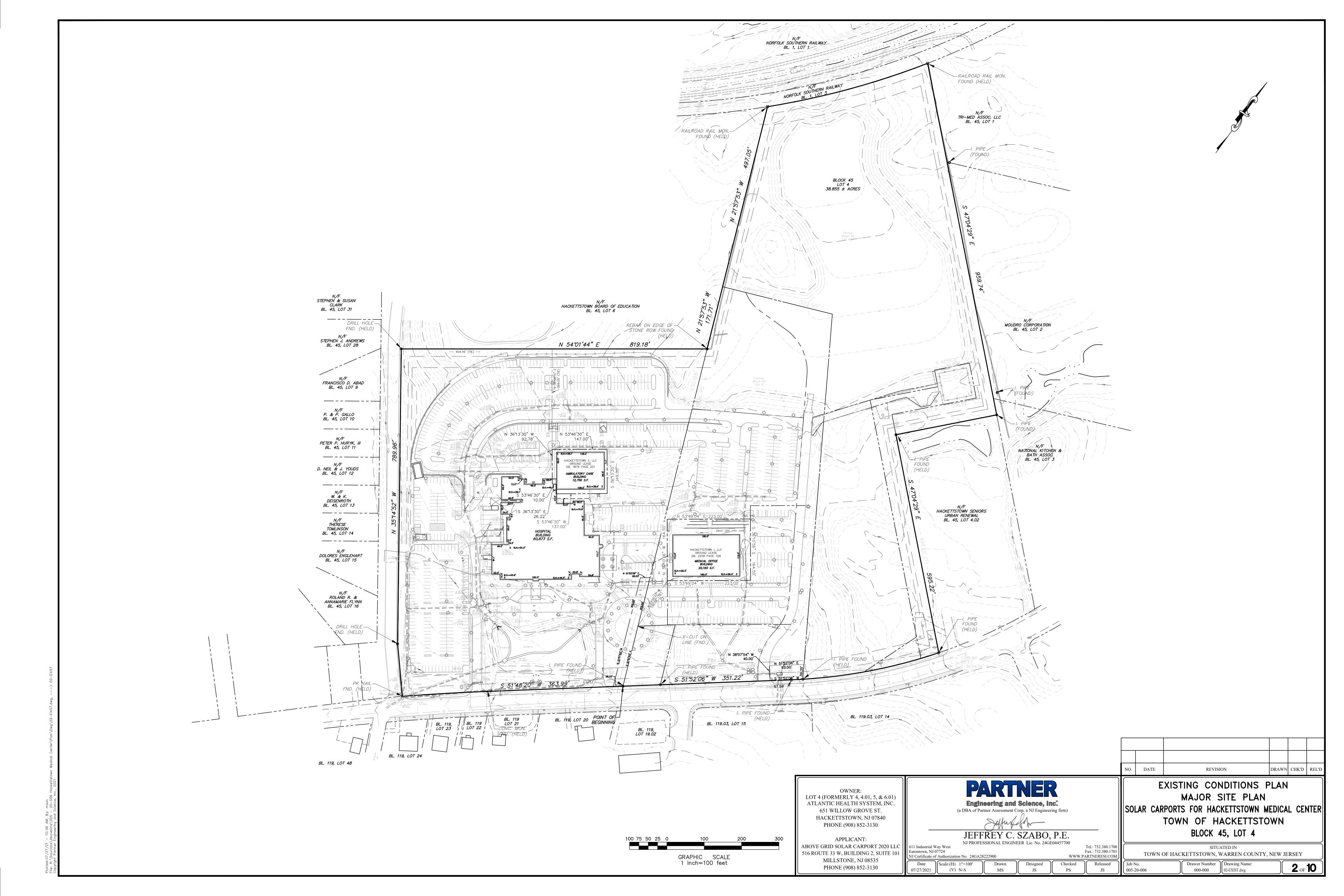
Seffur Soft JEFFREY C. SZABO, P.E 611 Industrial Way West Eatontown, NJ 07724 NI Certificate of Authorization No. 24GA28222900

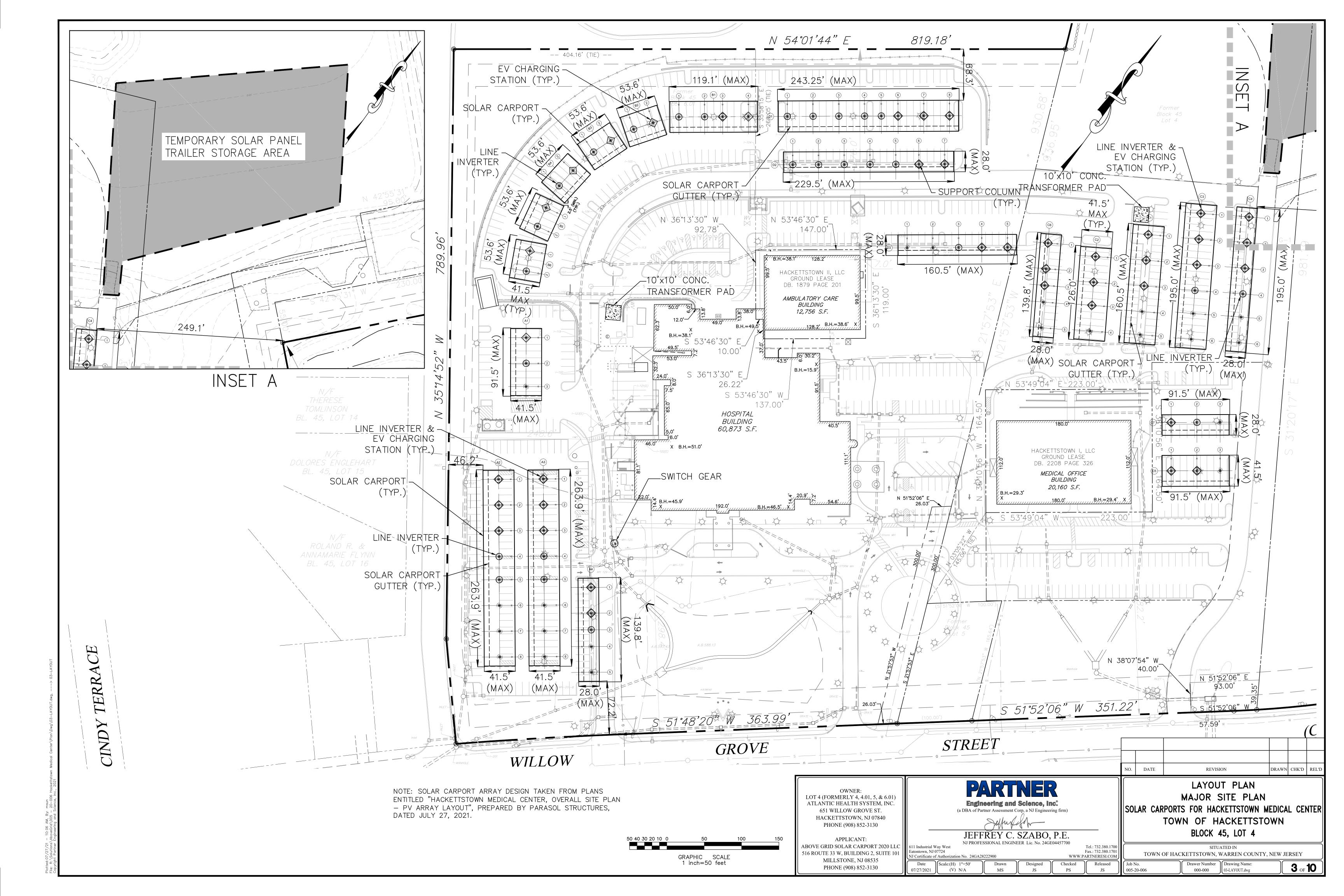
COVER SHEET MAJOR SITE PLAN SOLAR CARPORTS FOR HACKETTSTOWN MEDICAL CENTER TOWN OF HACKETTSTOWN BLOCK 45, LOT 4

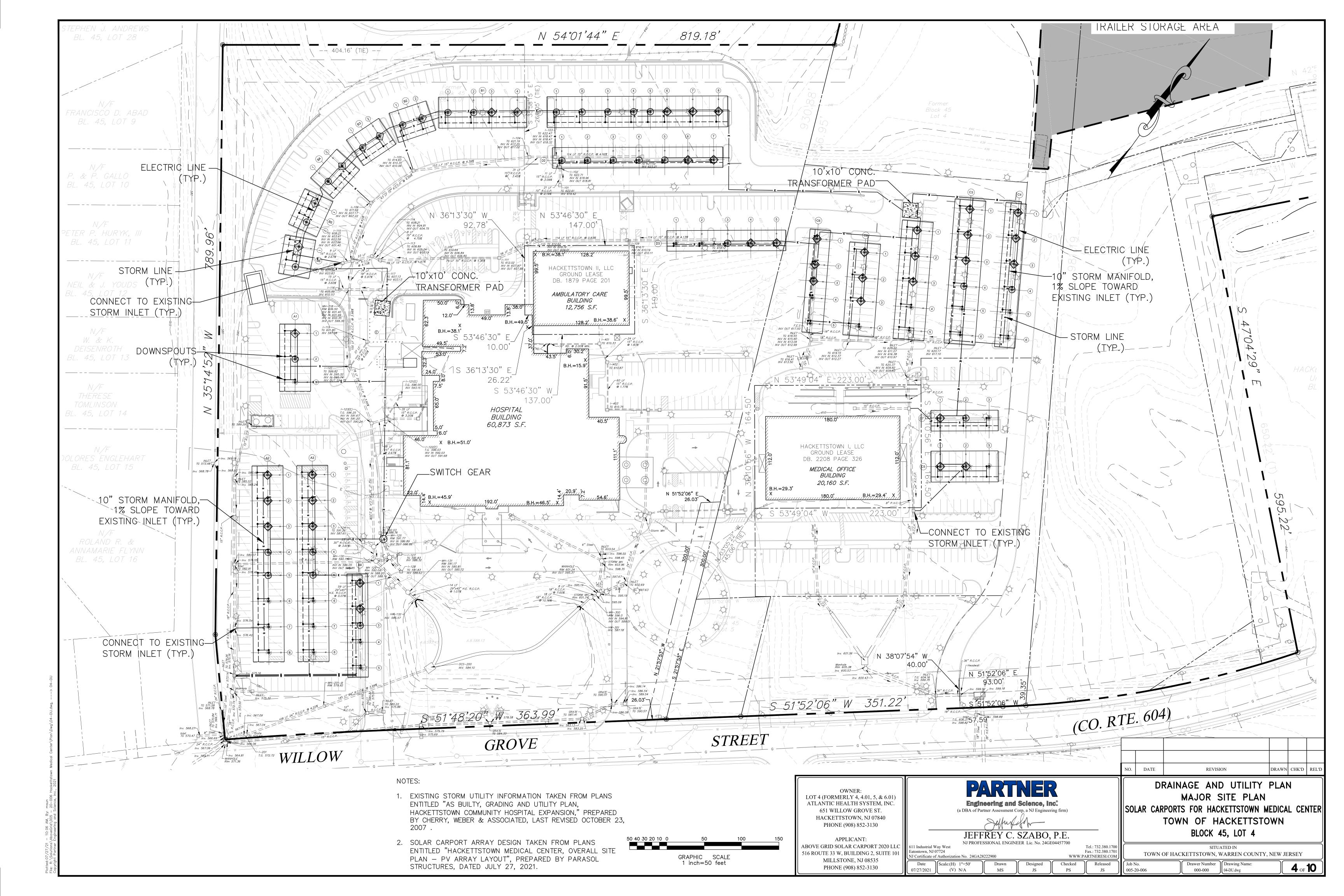
TOWN OF HACKETTSTOWN, WARREN COUNTY, NEW JERSEY Drawer Number | Drawing Name 1 of 10

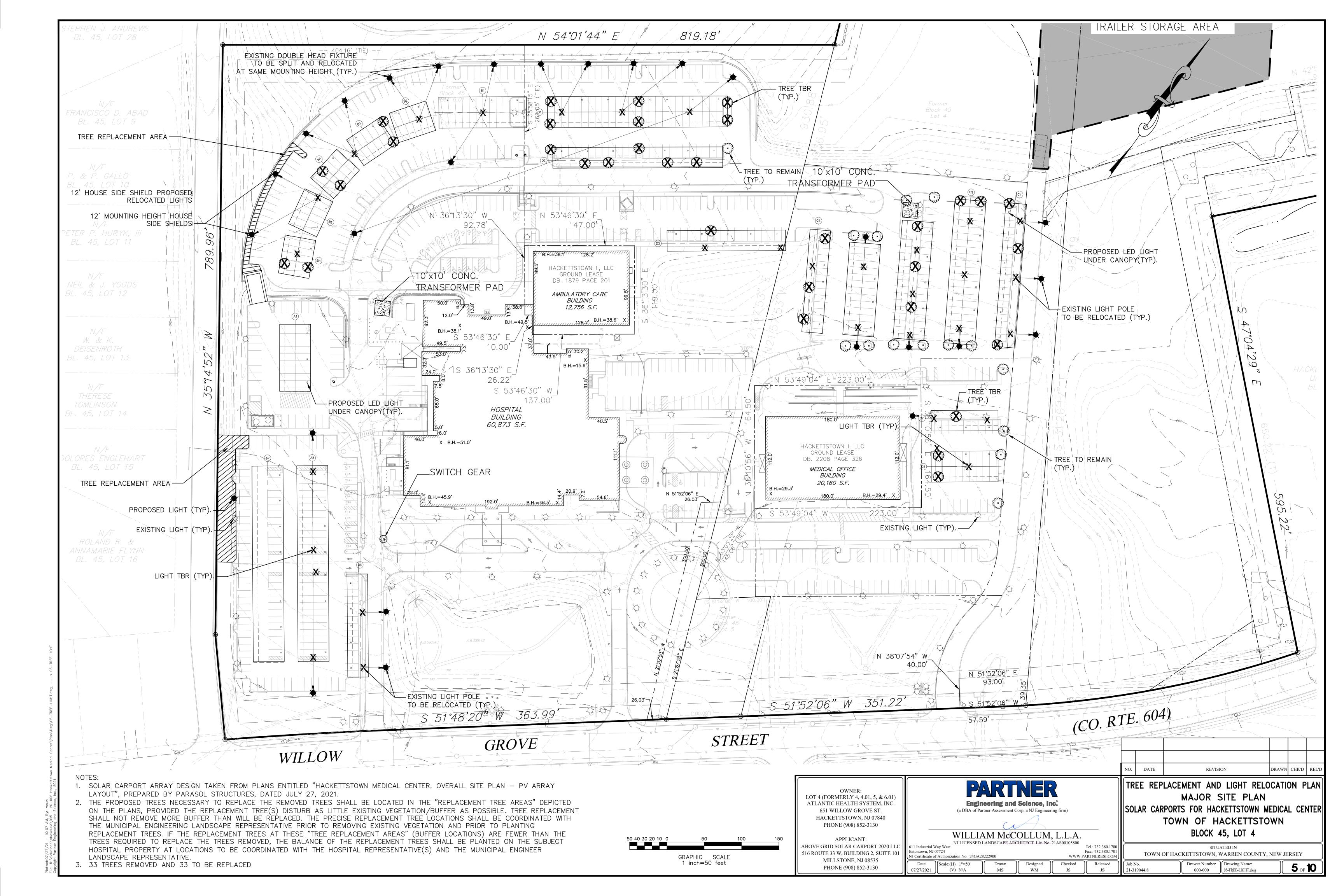
APPLICANT: ABOVE GRID SOLAR CARPORT 2020 LLC 516 ROUTE 33 W, BUILDING 2, SUITE 101 MILLSTONE, NJ 08535 PHONE (908) 852-3130

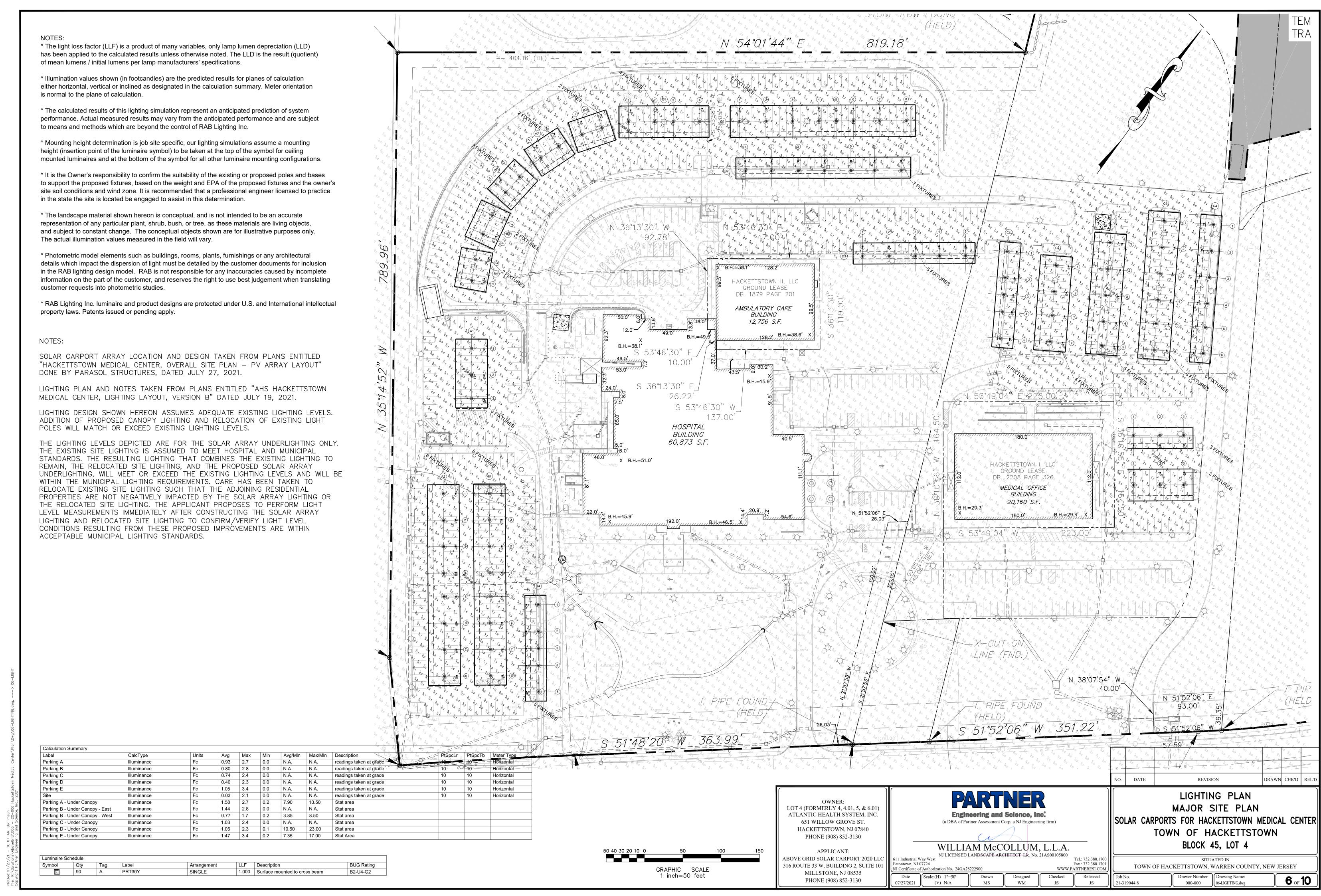
NJ PROFESSIONAL ENGINEER Lic. No. 24GE04457700 Tel.: 732.380.1700 Fax.: 732.380.170 WWW.PARTNERESI.COM Checked Scale:(H) AS SHOWN Drawn Designed Released

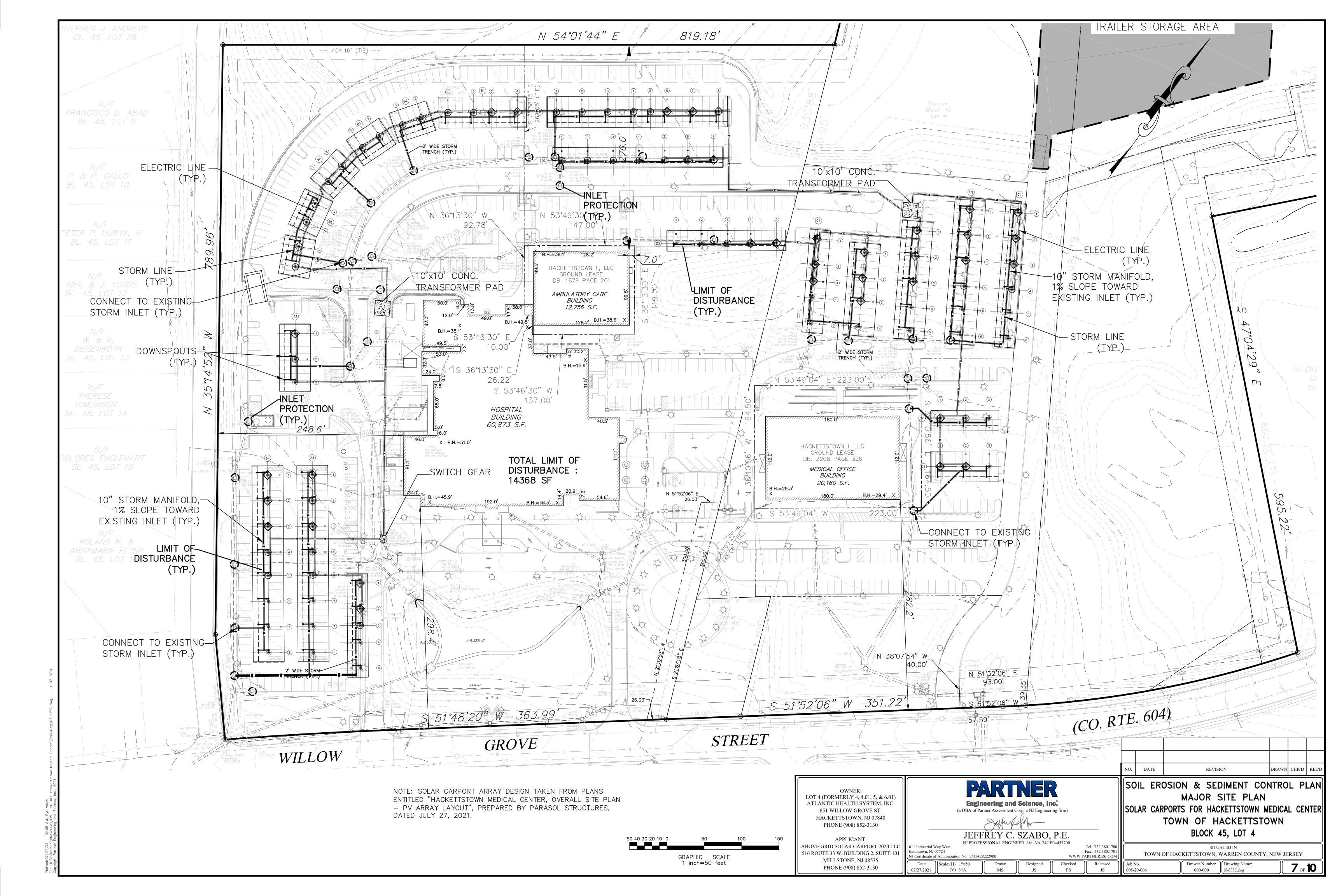












#### UPPER DELAWARE CONSERVATION DISTRICT SOIL <u> ROSION AND SEDIMENT CONTROL GENERAL NOTE</u>

- 1. THE DISTRICT SHALL BE REPRESENTED AT THE PROJECT PRECONSTRUCTION MEETING WITH THE TOWNSHIP ENGINEER, CONTRACTORS, AND UTILITY REPRESENTATIVES. IF THE TOWNSHIP ENGINEER DOES NOT SCHEDULE A PRECONSTRUCTION MEETING, IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO SCHEDULE ONE BEFORE ANY LAND DISTURBANCE. TWO WEEKS NOTICE MUST BE GIVEN FOR SCHEDULING PRECONSTRUCTION MEETINGS
- . FAILURE OF THE AFOREMENTIONED PLAN SHALL NOT RELIEVE THE APPLICANT OF ANY OF ITS RESPONSIBILITIES RELEVANT TO THE APPROPRIATE STATUTES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE DISTRICT IN THE EVENT OF ANY UNFORESEEN PROBLEMS INCURRED
- 3. ANY CHANGES OF APPROVED PLANS SHALL REQUIRE AN ADDITIONAL SUBMITTAL TO THE DISTRICT INCLUDING
- 4. A 48 HOUR START OF LAND DISTURBANCE NOTIFICATION SHALL BE GIVEN 5. IN THAT N.J.S.A. 4-24-39 ET SEQ REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BY THE MUNICIPALITY BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK RELATIVE TO APPROVED PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS WILL BE COMPLETED BEFORE THE DISTRICT ISSUES A CERTIFICATE OF COMPLIANCE. TWO WEEKS NOTICE MUST BE GIVEN TO THE DISTRICT TO SCHEDULE INSPECTION
- FOR CERTIFICATE OF COMPLIANCE RELEASE. 6. FINAL STABILIZATION OF ALL LAND DISTURBANCES ASSOCIATED WITH UNDERGROUND UTILITIES, IRRESPECTIVE OF
- 7. A CASH BOND OF NOT LESS THAN \$2,500. (PER DISTURBED ACRE OR PART THEREOF, OR A LOT) WILL BE POSTED WITH THE UPPER DELAWARE CONSERVATION DISTRICT DURING THE NONGROWING SEASON IF A CERTIFICATE OF COMPLIANCE IS NEEDED AND SOIL EROSION AND SEDIMENT CONTROL MEASURES FOR
- 8. SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE SWEPT AT THE END OF EACH WORKING DAY.
- 9. NO BUILDING PERMITS WILL BE RELEASED UNTIL ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS
- 10. DUST TO BE CONTROLLED WITH WATER, CALCIUM CHLORIDE OR OTHER METHOD APPROVED BY THE SOIL
- 11. TRACKING PAD TO BE KEPT CLEAN AND REPAIRED AS NECESSARY.
- 12. SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, FEBRUARY 2014. 13. SEE DETAIL SHEETS FOR ADDITIONAL SOIL AND SEDIMENT CONTROL DETAILS

PHASING, IS THE ULTIMATE RESPONSIBILITY OF THE OWNER

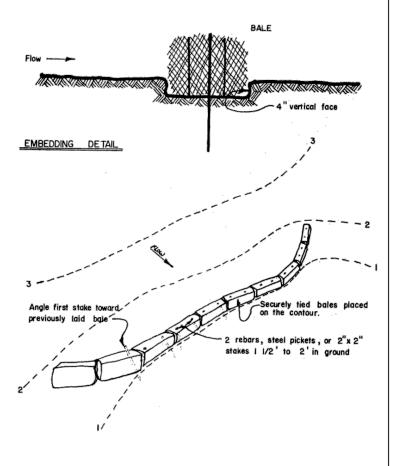
## CONSTRUCTION SEQUENCE

	PHASE		<u>DURAT</u>
1.	TEMPORARY SOIL EROSION FACILITIES	1	WEEK
2.	TRENCHING/ UTILITY INSTALL	2	WEEKS
3.	CARPORT ERECTION	2	MONTHS
4.	TRENCH BACKFILL AND PAVEMENT REPAIR	1	WEEK
5.	INSTALL UTILITY PADS	1	WEEK
6.	REMOVE SEDIMENT PRECAUTIONS	1	WEEK

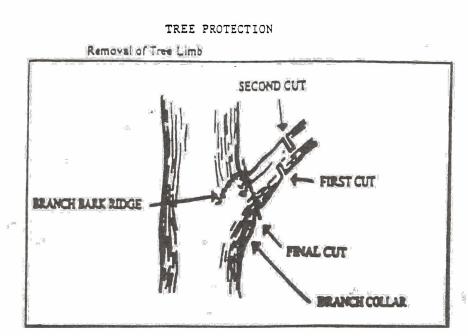
ITEMS AND DURATIONS OF CONSTRUCTION WILL OCCUR APPROXIMATELY AS FOLLOWS:

\* TEMPORARY SEEDING SHALL ALSO BE PERFORMED WHEN NECESSARY IN ACCORDANCE WITH NOTE NO. 2 OF THE SOIL EROSION AND SEDIMENT CONTROL

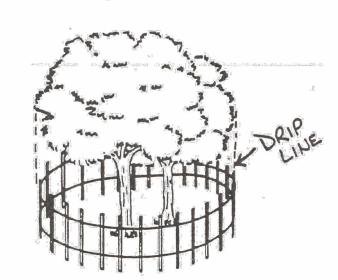
## Standards for Soil Erosion and Sediment Control in New Jersey



## Figure 23-1: Placement and Anchoring Detail Bale Sediment Barriers



Correct fencing for tree protection



## <u>SPPP REQUIRED INSPECTIONS AND REPORTS</u>

THE PERMITTEE SHALL CONDUCT AND DOCUMENT ROUTINE INSPECTIONS OF THE FACILITY TO IDENTIFY AREAS CONTRIBUTING TO THE STORMWATER DISCHARGE AUTHORIZED BY THIS PERMIT AND EVALUATE WHETHER THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) IDENTIFIED LINDER E.1 OF THE 5G3-CONSTRUCTION ACTIVITY STORMWATER (GP) PART NARRATIVE REQUIREMENTS, INCLUDING THIS SOIL EROSION AND SEDIMENT CONTROL PLAN IS BEING PROPERLY IMPLEMENTED AND MAINTAINED, OR WHETHER ADDITIONAL MEASURES ARE NEEDED TO IMPLEMENT THE SPPP (ROUTINE INSPECTIONS MINIMUM WEEKLY).

- DATES AND DESCRIPTIONS OF THE CHARACTER AND AMOUNT OF ANY SPILLS OF HAZARDOUS MATERIALS

RECORDS OF REPORTS FILED WITH REGULATORY AGENCIES IF REPORTABLE QUANTITIES OF HAZARDOUS MATERIALS SPILLED

- A VISIBLE SIGN SHALL BE POSTED ON THE SITE TO IDENTIFY THE

THE PERMITTEE SHALL PREPARE AN ANNUAL REPORT SUMMARIZING EACH INSPECTION PERFORMED UNDER 1.A., ABOVE. THIS REPORT SHALL BE

ACCOMPANIED BY AN ANNUAL CERTIFICATION, ON A FORM PROVIDED

NONCOMPLIANCE, THOSE INCIDENTS SHALL BE IDENTIFIED IN CERTIFICATION. IF THERE ARE INCIDENTS OF NONCOMPLIANCE,

THE NJDEP THAT THE FACILITY IS IN COMPLIANCE WITH ITS SPPP AND THIS PERMIT, EXCEPT THAT IF THERE ARE ANY INCIDENTS OF

REPORT SHALL IDENTIFY THE STEPS BEING TAKEN TO REMEDY TH NONCOMPLIANCE AND TO PREVENT SUCH INCIDENTS FROM RECURRING

THE REPORT AND CERTIFICATION SHALL BE SIGNED AND DATED BY THE PERMITTEE IN ACCORDANCE WITH N.J.A.C. 7:14A-4.9. AND SHALL E

OF ALL INSPECTION REPORTS AND RECORD KEEPING. THIS PERIOD MAY EXTENDED BY WRITTEN REQUEST FROM THE DEPARTMENT AT ANY TIME

A. ALL INSTANCES OF NONCOMPLIANCE NOT REPORTED UNDER N.J.A.C.

A. THE SOIL CONSERVATION DISTRICT WILL PROVIDE THE DEPARTMENT A COPY

B. THE BUILDER OF A SINGLE FAMILY HOME THAT IS AUTHORIZED UNDER

C. THE DOT SHALL PROVIDE WRITTEN NOTIFICATION TO THE DEPARTMENT

MITIGATION NOTES FOR ACIDIC SOIL

TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOILS.

SERVE AS THE NOTIFICATION OF COMPLETION.

AS NOTIFICATION OF COMPLETION.

ACID-PRODUCING SOIL

OR MORE.

FENCE POST - 8 ft ON CENTERS -

FABRIC SECURED TO POST -

WITH METAL FASTENERS WITH

FASTENER AND FABRIC

DIG 6" IN DEEP TRENCH.

BURY BOTTOM FLAP, RAMP

SILT FENCE

ACID-PRODUCING SOILS ARE ENCOUNTERED

THE REPORT OF COMPLIANCE ISSUED UNDER N.J.A.C. 2:90-1 FOR

COMPLETED CONSTRUCTION ACTIVITIES, EXCEPT SINGLE FAMILY HOME CONSTRUCTION UNDER B. BELOW. THE REPORT OF COMPLIANCE SHALL

THIS PERMIT, BUT NOT WITHIN THE DEFINITION OF "PROJECT" AT N.J.S.A.

4:24-41G, SHALL SEND A COPY OF THE FINAL CERTIFICATE OF OCCUPANCY TO THE SOIL CONSERVATION DISTRICT. THE SOIL CONSERVATION DISTRICT WILL PROVIDE A COPY OF THE FINAL CERTIFICATION OF OCCUPANCY TO THE DEPARTMENT, WHICH WILL SERVE

LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH

TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM

LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.

STORED MORE THAN 48 HOURS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF

MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH

SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE

RATE OF 10 TONS PER ACRE (OR 450 POUNDS PER 1,000 SQUARE FEET

OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5.0 OR MORE EXCEPT AS FOLLOWS:

EQUIPMENT USED FOR MOVEMENT OF HIGH ACID—PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID—PRODUCING SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO

STREAMS OR STORMWATER CONVEYANCES. AND TO PROTECT MACHINERY

CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH

TOPSOILING AND SEEDING OF THE SITE (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PERMANENT VEGETATIVE COVER FOR SOIL

STABILIZATION, AND TOPSOILING), MONITORING MUST CONTINUE FOR A

MINIMUM OF 6 MONTHS TO ENSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID-PRODUCING SOIL PROBLEMS EMERGE. IF PROBLEMS

STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.

- DRAWSTRING RUNNING THROUGH

FABRIC ALONG TOP OF FENCE

NON-VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SEDIMENT BARRIER, WOOD

8. FOLLOWING BURIAL OR REMOVAL OF HIGH ACID-PRODUCING SOIL

ACID—PRODUCING SOILS FROM, AROUND, OR OFF THE SITE

AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE

COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A PH OR 5

DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES, AND OTHERS, TO PREVENT POTENTIAL LATERAL LEACHING

NOT POSSÍBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SII FENCE SHALL BE INSTALLED AT THE TOE OF THE SLOPE TO CONTA

5. HIGH ACID-PRODUCING SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS OR DREDGED SEDIMENT)

3. STOCKPILES OF HIGH ACID-PRODUCING SOIL SHOULD BE LOCATED ON

4. TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOIL MATERIAL TO

7:140A-6.10 SHALL BE REPORTED TO THE DEPARTMENT ANNUALLY.

MAINTAINED FOR A PERIOD OF AT LEAST FIVE YEARS ALONG WITH COPIES

ANNUAL REPORTS AND CERTIFICATIONS.

(SEE N.J.A.C. 7:14A-6.6)

NONCOMPLIANCE,

3. REPORTS OF NONCOMPLIANCE

4. NOTIFICATION OF COMPLETION

- MATERIAL MANAGEMENT TO PREVENT OR REDUCE WASTE ANY PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS, PETROLEUM PRODUCTS, ANTI-FREEZE, PAINTS AND PAINT THINNERS, CLEANING SOLVENTS AND ACIDS, DETERGENTS, CHEMICAL ADDITIVES, AND CONCRETE CURING THE CONTRACTOR SHALL KEEP THE FOLLOWING RECORDS RELATED TO COMPOUNDS SHALL BE STORED IN CONTAINERS IN A DRY COVERED AREA, MANUFACTURER - DATES WHEN MAJOR GRADING ACTIVITIES OCCUR AND THE AREAS WHICH RECOMMENDED APPLICATION RATES, USES, AND METHODS SHALL BE STRICTLY FOLLOWED TO THE EXTENT NECESSARY TO PREVENT OR MINIMIZE THE PRESENCE OF WASTE FROM SUCH - DATES AND DETAILS CONCERNING THE INSTALLATION OF STRUCTURAL MATERIALS IN THE STORMWATER DISCHARGE AUTHORIZED BY THIS PERMIT. (THE PRECEDING DATES WHEN CONSTRUCTION ACTIVITIES CEASE IN AN AREA SENTENCE DOES NOT APPLY TO ANY MANUFACTURERS' RECOMMENDATIONS ABOUT FERTILIZER DATES WHEN AN AREA IS STABILIZED, EITHER TEMPORARILY OR OTHER MATERIAL THAT CONFLICT WITH THE EROSION AND SEDIMENT CONTROL COMPONENT OF THE FACILITY'S SPPP.) DATES OF RAINFALL AND THE AMOUNT OF RAINFALL
  - WASTE HANDLING THE FOLLOWING REQUIREMENTS APPLY ONLY TO CONSTRUCTION SITE WASTE THAT HAS THE POTENTIAL TO BE TRANSPORTED BY THE STORMWATER DISCHARGE AUTHORIZED BY THIS PERMIT. THE HANDLING AT THE CONSTRUCTION SITE OF WASTE BUILDING MATERIAL AND RUBBLE AND OTHER CONSTRUCTION SITE WASTES, INCLUDING LITTER HAZARDOUS AND SANITARY WASTES, SHALL CONFORM WITH THE STATE SOLID WASTE MANAGEMENT ACT, N.J.S.A. 13:1E-1 ET SEQ., AND ITS IMPLEMENTING RULES AT N.J.A.C. 7:26 7:26A, AND 7:26G; THE NEW JERSEY PESTICIDE CONTROL CODE AT N.J.A.C. 7:30; THE STATE LITTER STATUTE (N.J.S.A. 13:1E-99.3): AND OSHA REQUIREMENTS FOR SANITATION AT 29 C.F.R 1926 (EXCEPT WHERE SUCH CONFORMANCE IS NOT RELEVANT TO THE STORMWATER DISCHARGE AUTHORIZED BY THIS PERMIT). CONSTRUCTION SITES SHALL HAVE ONE OR MORE DESIGNATED WASTE COLLECTION AREAS ONSITE OR ADJACENT TO THE SITE, AND AN ADEQUATE NUMBER OF CONTAINERS FOR WASTE. STAGED WASTE CONTAINERS SHALL BE MAINTAINED SO

CONSTRUCTION SITE WASTE CONTROL COMPONENT OF

(THIS IS FOR CONSTRUCTION WASTE ONLY)

THE CONSTRUCTION SITE WASTE CONTROL COMPONENT OF THE SPPP CONSISTS OF THE

REQUIREMENTS IN 2., 3., AND 4. BELOW. THESE REQUIREMENTS BECOME OPERATIVE ON MARCH 3, 2004 AND APPLY ONLY TO CONSTRUCTION ACTIVITIES THAT COMMENCE ON OR AFTER

MARCH 3, 2004. PUBLIC PROJECTS THAT HAVE GONE OUT FOR BID OR HAVE BEEN AWARDED

A CONTRACT PRIOR TO MARCH 3. 2004 ARE EXEMPT FROM IMPLEMENTING THE NEW

REQUIREMENTS FOR CONSTRUCTION SITE WASTE MANAGEMENT. CONSTRUCTION ACTIVITIES THA

COMMENCED PRIOR TO MARCH 3. 2004 BUT DID NOT OBTAIN CERTIFICATION (OR APPROVA

FROM EXEMPT MUNICIPALITY) REQUIRED UNDER THE SOIL EROSION AND SEDIMENT CONTROL ACT ARE NOT EXEMPT FROM THE REQUIREMENTS IN THIS SECTION. ANY OTHER NEW CONSTRUCTION ACTIVITY FOR WHICH AN RFA IS SUBMITTED ON OR AFTER MARCH 3, 2004 OR

WHICH RECEIVE AUTOMATIC RENEWAL OF AUTHORIZATION UNDER THIS PERMIT AFTER MARCH 3,

THE STORMWATER POLLUTION PREVENTION PLAN (SPPP)

A. CONSTRUCTION SITE WASTES INCLUDE BUT ARE NOT LIMITED TO: "CONSTRUCTION AND DEMOLITION WASTE," AS DEFINED IN N.J.A.C. 7:26-1.4 AS FOLLOWS: "WASTE BUILDING MATERIAL AND RUBBLE RESULTING FROM CONSTRUCTION, REMODELING, REPAIR, AND DEMOLITION OPERATIONS ON HOUSES, COMMERCIAL BUILDINGS, PAVEMENTS AND OTHER STRUCTURES. THE FOLLOWING MATERIALS MAY BE FOUND IN CONSTRUCTION AND DEMOLITION WASTE: TREATED AND UNTREATED WOOD SCRAP; TREE PARTS, TREE STUMPS AND BRUSH; CONCRETE, ASPHALT, BRICKS, BLOCKS AND OTHER MASONRY; PLASTER AND WALLBOARD; ROOFING MATERIALS; CORRUGATED CARDBOARD AND MISCELLANEOUS PAPER: FERROUS AND NON-FERROUS METAL; NON-ASBESTOS BUILDING INSULATION; PLASTIC SCRAP; DIRT; CARPETS AN PADDING; GLASS (WINDOW AND DOOR); AND OTHER MISCELLANEOUS MATERIALS; BUT

CONTAINER. SPILLS, LEAKS, AND OVERFLOWS, WHICH DO OCCUR, SHALL BE CLEANUP

- SHALL NOT INCLUDE OTHER SOLID WASTE TYPES."

  ANY WASTE BUILDING MATERIAL AND RUBBLE RESULTING FROM SUCH OPERATIONS THAT IS HAZARDOUS FOR PURPOSES OF N.J.A.C. 7:26G (THE HAZARDOUS WASTE III. DISCARDED (INCLUDING SPILLED) PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS PETROLEUM PRODUCTS, ANTI-FRÉEZE, PAINTS AND PAINT THINNERS, PAINT CHIPS AND SANDBLASTING GRITS, CLEANING SOLVENTS, ACIDS FOR CLEANING MASONRY
- SURFACES, DETERGENTS, CHEMICAL ADDITIVES USED FOR SOIL STABILIZATION (E.G., CALCIUM CHLORIDE), AND CONCRETE CURING COMPOUNDS. IV. OTHER "LITTER," AS DEFINED AT N.J.S.A. 13:1E-215.D AS FOLLOWS: "ANY USED OR UNCONSUMED SUBSTANCE OR WASTE MATERIAL WHICH HAS BEEN DISCARDED WHETHER MADE OF ALUMINUM, GLASS, PLASTIC, RUBBER, PAPER, OR OTHER NATURAL OR SYNTHETIC MATERIAL, OR ANY COMBINATION THEREOF, INCLUDING, BUT NOT LIMITED TO, ANY BOTTLE, JAR OR CAN, OR ANY TOP, CAP OR DETACHABLE TAR OF ANY BOTTLE, JAR OR CAN, ANY UNLIGHTED CIGARETTE, CIGAR, MATCH OR ANY FLAMING OR GLOWING MATERIAL OR ANY GARBAGE, TRASH, REFUSE, DEBRIS, RUBBISH, GRASS CLIPPINGS OR OTHER LAWN OR GARDEN WASTE, NEWSPAPERS, MAGAZINES, GLASS, METAL, PLASTIC OR PAPER CONTAINERS OR OTHER PACKAGING
- OR CONSTRUCTION MATERIAL, BUT DOES NOT INCLUDE THE WASTE OF THE PRIMARY PROCESSES OF MINING OR OTHER EXTRACTION PROCESSES, LOGGING, SAWMILLING FARMING OR MANUFACTURING. SANITARY SEWAGE AND SEPTAGE.
  CONTAMINATED SOILS ENCOUNTERED OR DISCOVERED DURING EARTHMOVING ACTIVITIES OR DURING THE CLEANUP OF A LEAK OR DISCHARGE OF A HAZARDOUS
- B. CONCRETE WASHOUT CONCRETE WASHOUT ONSITE IS PROHIBITED OUTSIDE DESIGNATED AREAS. WASHOUT ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO, THE WASHING OF TRUCKS, CHUTES, HOSES, MIXERS, HOPPERS, AND TOOLS. DESIGNATED WASHOUT AREAS SHALL BE LINED AND BERMED TO PREVENT DISCHARGES TO SURFACE AND GROUND WATER. II. HARDENED CONCRETE FROM THE CONCRETE WASHOUT SHALL BE REMOVED AND III. THE CONCRETE WASHOUT AREA SHALL BE CLEARLY DESIGNATED WITH A SIGN
- C. SANITARY SEWAGE/SEPTAGE DISPOSAL DISCHARGES OF RAW SANITARY SEWAGE OR SEPTAGE ONSITE ARE STRICTLY PROHIBITED. ADEQUATE FACILITIES WITH PROPER DISPOSAL SHALL BE PROVIDED AND MAINTAINED ONSITE OR ADJACENT TO THE SITE FOR ALL
- 4. SPILLS; DISCHARGES OF HAZARDOUS SUBSTANCES; FEDERALLY REPORTABLE RELEASES. A. SPILL KITS SHALL BE AVAILABLE ONSITE OR ADJACENT TO THE SITE FOR ANY MATERIALS THAT ARE LISTED IN 2. ABOVE AND USED OR APPLIED ONSITE, ALL SPILLS OF SUCH MATERIAL SHALL BE CONTAINED AND CLEANED UP IMMEDIATELY. CLEANED UP MATERIALS
- B. DISCHARGES OF HAZARDOUS SUBSTANCES (AS DEFINED IN N.J.A.C. 7:1E-1.6) IN CONSTRUCTION SITE WASTES ARE SUBJECT TO THE PROVISIONS OF THE SPILL COMPENSATION AND CONTROL ACT, N.J.S.A. 58:10—23.11 ET SEQ., AND OF DEPARTMENT RULES FOR DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES AT N.J.A.C. 7:1E. NO DISCHARGE OF HAZARDOUS SUBSTANCES RESULTING FROM AN ONSITE SPILL SHALL BE DEEMED TO BE "PURSUANT TO AND IN COMPLIANCE WITH [THIS] PERMIT" WITHIN THE MEANING OF THE SPILL COMPENSATION AND CONTROL ACT AT N.J.S.A.
- C. RELEASES IN EXCESS OF REPORTABLE QUANTITIES (RQ) ESTABLISHED UNDER 40 C.F.R 110, 117, AND 302 THAT OCCUR WITHIN A 24—HR PERIOD MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER (800 424-8802).

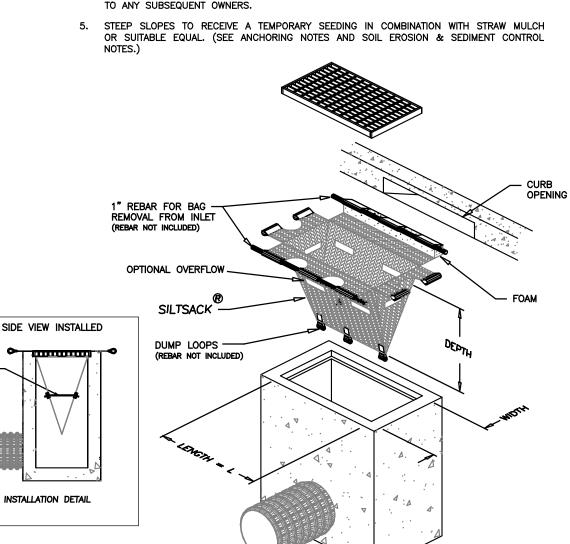
## **DUST CONTROL NOTE** DUST GENERATION SHALL BE CONTROLLED ON A CONSTANT BASIS BY WETTING THE

SURFACE AND/OR AP	PLICATION OF C	ALCIUM CHLORIE	DE
MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GAL/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) — SPRAY ON POLYACRYLAMIDE (PAM) — DRY SPREAD Apply according to manufacturer's instructions. May also be used as an additive to sediment basins to flocculate and precipiate suspended colloids. See Sediment Basin standard, p. 26—1			
ACIDULATED SOY BEAN SOAP STICK		COARSE SPRAY	
ADDITIONAL NOTES			

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. THE PROPERTY OWNERS SHALL ASSUME THIS RESPONSIBILITY AFTER CONSTRUCTION IS COMPLETED AND CERTIFICATES OF OCCUPANCY ARE ISSUED.

2. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED. AS DIRECTED BY THE DISTRICT INSPECTOR 3. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE ROADWAYS CLEAN AT ALL TIMES. ANY SEDIMENT SPILLED OR TRACKED ON THE ROADWAY WILL BE CLEANED UP IMMEDIATELY,

OR AT MINIMUM, BY THE END OF EACH WORK DAY. 4. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON INDIVIDUAL SITES SHALL APPLY TO ANY SUBSEQUENT OWNERS.



NLET PROTECTION

## STANDARD FOR STABILIZATION WITH

MULCH ONLY DEFINITION STABILIZING EXPOSED SOILS WITH NON-VEGETATIVE MATERIALS EXPOSED FOR PERIODS LONGER PURPOSE

TO PROTECT EXPOSED SOIL SURFACES FROM EROSION DAMAGE AND TO REDUCE OFFSITE WATER QUALITY ENHANCEMENT PROVIDES TEMPORARY MECHANICAL PROTECTION AGAINST WIND OR RAINFALL INDUCED SOIL EROSION UNTIL PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED. CONDITIONS WHERE PRACTICE APPLIES THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO EROSION, WHERE THE SEASON AND OTHER CONDITIONS MAY NOT BE SUITABLE FOR GROWING AN EROSION—RESISTANT COVER OR WHERE STABILIZATION IS NEEDED FOR A SHORT PERIOD UNTIL MORE SUITABLE PROTECTION CAN E

#### METHODS AND MATERIALS . SITE PREPARATION

- GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND
- INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42. II. PROTECTIVE MATERIALS
- UNROTTED SMALL—GRAIN STRAW, AT 2.0 TO 2.5 TONS PER ACRE, IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS HE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN
- B. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE
- (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON OR PLASTIC, MAY BE
- E. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH
- F. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 SQ FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE OR 3 (ASTM C-33) IS RECOMMENDED.

## II. MULCH ANCHORING MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES

- PEG AND TWINE DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS—CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS. MULCH NETTINGS — STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER HAY OF STRAW MULCH. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS
- USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG MULCH ANCHORING TOOL - A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNE PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. TOOL PENETRATION SHOULD BE ABOUT 3
- TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE DONE ON THE APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH.
- IN VALLEYS AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE USE OF ONE OF THE FOLLOWING: ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING,
- POWDER BASED. HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANE NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTO—TOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND EATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION. MISCIBLE WITH
- WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY E MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS

## STANDARD FOR STORM SEWER INLET PROTECTION

**DEFINITION**A TEMPORARY BARRIER AND SETTLING FACILITY INSTALLED AT A STORM SEWER INLET. PURPOSE

THE PURPOSE OF STORM SEWER INLET PROTECTION IS TO INTERCEPT AND RETAIN SEDIMENT THUS PREVENTING THE ENTRANCE OF SEDIMENT INTO THE STORM SEWER SYSTEM. WATER QUALITY ENHANCEMENT
THE PRIMARY BENEFIT TO WATER QUALITY IS REMOVAL OF SEDIMENT FROM STORMWATER RUNOFF PRIOR TO ENTERING THE STORM SEWER SYSTEM. AS AN ADDED BENEFIT, OTHER

#### FLOATABLE DEBRIS, SUCH AS VEGETATIVE MATTER AND LITTER MAY ALSO BE FILTERED OUT OF THE RUNOFF CONDITIONS WHERE PRACTICE APPLIES CONTRIBUTING DRAINAGE AREA IS 3 ACRES OR LESS.

- 2. A STORM SEWER OR THE OUTLET CHANNEL OF A STORM SEWER NEEDS PROTECTION FROM
- 3. TRAFFIC WILL NOT DESTROY OR CAUSE CONSTANT MAINTENANCE OF THE STORM SEWER 4. A TRAFFIC HAZARD WILL NOT BE CREATED.

## 5. A FLOODING PROBLEM WILL NOT BE CREATED

#### **DESIGN CRITERIA** THE FOLLOWING APPLIES TO ALL METHODS OF STORM SEWER INLET PROTECTION:

- MUST SLOW THE STORM WATER, PROVIDE THE COARSE SEDIMENT PARTICLES A CHANCE TO SETTLE, AND PROVIDE AN AREA TO RETAIN THE PARTICLES THAT HAVE SETTLED. 2. IN ALL CASES, INLET PROTECTION SHOULD NOT COMPLETELY CLOSE OFF THE INLET.
- PROVISION MUST BE MADE TO ALLOW STORMWATER TO OVERFLOW OR BYPASS FILTER. 3. THE PROTECTION DEVICE WILL BE DESIGNED TO CAPTURE OR FILTER RUNOFF FROM THE 1 YEAR, 24 HOUR STORM EVENT AND SHALL SAFELY CONVEY HIGHER FLOWS DIRECTLY INTO
- THE STORM SEWER SYSTEM. OTHER METHODS THAT ACCOMPLISH THE PURPOSE OF STORM SEWER INLET PROTECTION MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.

INSPECTIONS SHALL BE FREQUENT. MAINTENANCE, REPAIR, AND REPLACEMENT SHALL BE MADE PROMPTLY, AS NEEDED. THE BARRIER SHALL BE REMOVED WHEN THE AREA DRAINING TOWARD THE INLET HAS BEEN STABILIZED.

# - EXISTING GROUND 50' OR GREATER AS REQUIRE EXISTING GROUND

STABILIZED CONSTRUCTION ENTRANCE

## PERMANENT VEGETATIVE COVER FOR <u>SOIL STABILIZATION</u>

<u>DEFINITION</u>

ESTABLISHMENT OF PERMANENT VEGETATIVE COVER ON EXPOSED SOILS WHERE PERENNIAL VEGETATION IS NEEDED FOR LONG-TERM PROTECTION <u>PURPOSE</u> TO PERMANENTLY STABILIZE THE SOIL, ENSURING CONSERVA SOIL AND WATER, AND TO ENHANCE THE ENVIRONMEN WATER QUALITY ENHANCEMENT
SLOWS THE OVER-LAND MOVEMENT OF STORMWATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE. PROTECTING STREAMS OR OTHER STORMWATER CONVEYANCES.

#### CONDITIONS WHERE PRACTICE APPLIES ON EXPOSED SOILS TH TE ENVIRONMENTAL DAMAGE METHODS AND MATERIALS I. SITE PREPARATION

- GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH
- B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
- C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
- D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. II. SEEDBED PREPARATION
- UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILER ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY, FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET ( 10-10-10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise an INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RAT DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME
- WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DIS SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON
- HIGH ACID PRODUCING SOIL, SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

#### PLANTING RATE SEED MIXTURE LBS PER ACRE LBS PER 1,000 SF HARD FESCUE PERFUNIAL RYEGRASS KENTUCKY BLUEGRASS BLEND OPTIMAL SEEDING DATES: 8/15 - 10/15 ACCEPTABLE SEEDING DATES: 3/1 - 4/30 AND 5/1 - 8/14

- CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, SE DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH. BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL
- AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.
- HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT—FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION

III. SEEDING

#### MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

- STRAW OR HAY. UNNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

  APPLICATION — SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND—SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION. ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.
  - PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS—CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A
  - DEGRADABLE NETTING IN AREAS TO BE MOWED. CRIMPER (MULCH ANCHORING COULTER TOOL) — A TRACTOR—DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS
  - 4. LIQUID MULCH—BINDERS. MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.

    a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE. b. USE ONE OF THE FOLLOWING: (1) ORGANIC AND VEGETABLE BASED BINDERS — NATURALLY OCCURRING, POWDER—BASE HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED 1 MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIAL

(2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN

- DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER E SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED E MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS. B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NO BE MIXED IN THE TANK WITH SEED, USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN
- PELLETIZED MULCH COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO—POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND O BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED—SEED FREE MULCH 3 DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMEL IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE. APPLYING TH FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMEL IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

611 Industrial Way West

Eatontown, NJ 07724

Date

07/27/2021

NJ Certificate of Authorization No. 24GA28222900

Scale:(H)

OWNER

LOT 4 (FORMERLY 4, 4.01, 5, & 6.01)

ATLANTIC HEALTH SYSTEM, INC.

651 WILLOW GROVE ST. HACKETTSTOWN, NJ 07840

PHONE (908) 852-3130

APPLICANT:

ABOVE GRID SOLAR CARPORT 2020 LLC

516 ROUTE 33 W, BUILDING 2, SUITE 101

MILLSTONE, NJ 08535

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IN THIS STATE.

IF SOIL MOISTURE IS DEFICIENT SUPPLY NEW SEEDING WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH APPLIED UP TO TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

SINCE SOIL ORGANIC MATTER CONTENT AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTION 2A - SEEDBED PREPARATION IN THIS STANDARD, NO FOLLOW-UP OF TOPDRESSING IS MANDATORY. AN EXCEPTIO MAY BE MADE WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 300 POUNDS PER ACRE OR 7 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED. VII. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION

THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATES IN TABLE 4-3 ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVER (OF THE SEEDED SPECIES) AND MOWED ONCE. NOTE THIS DESIGNATION OF MOWED ONCE DOES NOT GUARANTEE THE PERMANENCY OF THE TURF SHOULD OTHER MAINTENANCE FACTORS BE NEGLECTED OR OTHERWISE MISMANAGED.

**Engineering and Science, Inc.** 

Seffurtifor

JEFFREY C. SZABO, P.E

Drawn

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Designed

WWW.PARTNERESI.C

Checked

## TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

DEFINITION

ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER ON SOILS EXPOSED FOR PERIODS OF TWO TO 6 MONTHS WHICH ARE NOT BEING GRADED, NOT UNDER ACTIVE CONSTRUCTION OR NOT SCHEDULED FOR PERMANENT SEEDING WITHIN 60 DAYS.

PURPOSE

TO TEMPORARILY STABILIZE THE SOIL AND EDUCE DAMAGE FROM WIND AND WATER EROSION

UNTIL PERMANENT STABILIZATION IS ACCOMPLISHED.

WATER QUALITY ENHANCEMENT

PROVIDES TEMPORARY PROTECTION AGAINST THE IMPACTS OF WIND AND RAIN, SLOWS THE OVER LAND MOVEMENT OF STORMWATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE. PROTECTING STREAMS OR OTHER STORMWATER CONVEYANCES.

## CONDITIONS WHERE PRACTICE APPLIES HAVE THE POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL DAMAGE METHODS AND MATERIALS

- GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION. SEEDING, MULCH APPLICATION, AND MULCH ANCHORING ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING
- INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
- IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION
- APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10–20–10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE AT THE RATE OF 2 TONS/ACRE UNLESS SOIL TESTING INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO

GRASSES AND LEGUMES.

ANNUAL RYEGRASS

III. SEEDING

- WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED
- INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.
- D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS.

#### PLANTING RATE LBS PER ACRE LBS PER 1.000

- OPTIMAL SEEDING DATES: 3/15 6/1 AND 8/1 9/15OPTIMAL SEED DEPTH 0.5 INCHES CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE
- SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK O TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION IV MULCHING) HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR
- AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

INVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS,

#### MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE existence of vegetation sufficient to control soil erosion shall be deemed COMPLIANCE WITH THIS MULICHING REQUIREMENT

- STRAW OR HAY, UNNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1.000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF
- APPLICATION SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THA APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION. ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF TH FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS O
- SLOPES, AND COSTS.

  1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH
- PEG WITH TWO OR MORE ROUND TURNS.

  MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS

  TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE 3. CRIMPER (MULCH ANCHORING TOOL) — A TRACTOR—DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR
- CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
- OR STRAW MULCH.

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4. LIQUID MULCH-BINDERS. - MAY BE USED TO ANCHOR SALT HAY, HA

- BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE. 2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION O MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY MANUFACTURER AND REMAIN TACKY UNTIL
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NO.	DATE	REVISION	DRAWN	CHK'D	REL'D

## SOIL EROSION & SEDIMENT CONTROL NOTES AND DETAILS MAJOR SITE PLAN SOLAR CARPORTS FOR HACKETTSTOWN MEDICAL CENTER TOWN OF HACKETTSTOWN

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