

Veterans Memorial M.S.

BLOCK 1068 LOT 15.01 QUALIFICATION CODE _____ ADDRESS (SITE) 105 Hendrickson Ave. PERMIT NO. 110-2043

CONSTRUCTION PERMIT APPLICATION

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII

016-002087

I. IDENTIFICATION

1. Proposed Work Site at: 105 Hendrickson Ave, Brick, NJ 08723

2. Name of Owner in Fee: Brick Township Board of Education
 Tel. (732) 285-3000 e-mail _____
 Address 101 Hendrickson Ave Brick NJ 08724

3. Ownership in Fee: Public ☒ Private _____
 4. Principal Contractor: Altec Building Systems Tel. (732) 903-6264
 Address 904 Atlantic Ave. e-mail info@altc
Pt. Pleasant, NJ 08742 buildingsystems.com
 License No. OR, If new home, Builder Reg. No. 13VH04948600 Exp. Date 3-31-17
 Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____
 Federal Emp. ID No. 223292289 FAX: (732) 903-6298
 5. Architect or Engineer: Stantec Contact David Faccas
 Address 1971 Rt. 34 Wall Twp, NJ 08119 e-mail _____
 Tel. (732) 449-0099 FAX: () _____
 6. Responsible Person in Charge once Work has Begun Bob Smith
 Tel. (732) 609-1187 FAX: (732) 903-6298

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	\$		
2. Electrical	\$		
3. Plumbing	\$		
4. Fire Protection	\$		
5. Elevator Devices	\$		
6. Subtotal	\$		
7. Less 20% for State Plan Review	\$		
8. Subtotal	\$		
9. State Permit Surcharge Fee	\$		
10. Subtotal	\$		
11. Cert. of Occupancy	\$		
12. Other	\$		
13. TOTAL	\$		

VI. BUILDING/SITE CHARACTERISTICS

		(office use only)
1. Number of Stories	<u>650 kw</u>	
2. Height of Structure		ft.
3. Area — Largest Floor		sq. ft.
4. New Building Area		sq. ft.
5. Volume of New Structure		cu. ft.
6. Max. Live Load		
7. Max. Occupancy Load		
8. If Industrialized Building: State Approved _____ HUD _____		
9. Total Land Area Disturbed		sq. ft.
10. Flood Hazard Zone		
11. Base Flood Elevation		ft.
12. Wetlands yes _____ no _____		

IIa. PROPOSED WORK

- ☐ Minor Work ☐ New Building ☐ Addition ☐ Demolition
- ☐ Repair ☐ Alteration ☐ Renovation ☐ Reconstruction
- ☐ Asbestos Abat. -Subch. 8 ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

IIb. SUBCODES

(Check all that apply)

- ☐ Building
- ☒ Electrical
- ☐ Plumbing
- ☐ Fire Protection
- ☐ Elevator

FOR OFFICE USE ONLY (Optional)

Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Rejection	Re-viewer
	<u>MFF</u>	<u>5/3/16</u>		<u>6/18/16</u>	<u>KCK</u>			
<u>\$52,500</u>				<u>6/14/16</u>	<u>PE</u>			

TOTAL COST

III. PLAN REVIEW (optional)

DO YOU WANT:

1. ☐ Partial Releases
2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/ Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers/Standpipes
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks
10. ☐ Swimming Pools, Spas and Hot Tubs
11. ☐ LPGas Tanks
12. ☐ Fire Alarm

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: _____
3. Change in Use Group, Indicate Present: _____
4. No. of dwelling units: Total Units Income-restricted
- Gained, Sale _____
- Gained, Rental _____
- Lost, Sale _____
- Lost, Rental _____

B. NON-RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: _____
3. Change in Use Group, Indicate Present: _____

C. MIXED USE -List secondary use(s): _____

- D. Construct. Classification: Present _____ Proposed _____

Rolled Plans

200/9 10/10/8

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(f)1.ix:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☒ Check if contractor.

Agent Name Altec Building Systems Corp.
Address 904 Atlantic Ave.
P.O. Pleasant, N.J. 08742
Telephone (732) 903-6298
Signature _____

III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimn. Initial	Final Date	Prelimn. Initial	Final Date	Prelimn. Initial	Final Date	Prelimn. Initial	Final Date	
☒ Zoning Officer	SC	07/20/16							2A-16-00945
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Department of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Department of Environmental Protection									
☐ Utility Dig No.									
☐									
☐									

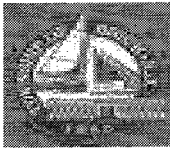
IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition	Name of Code & Edition	Other
Building _____	Energy _____	
Electrical _____	Barrier Free _____	
Plumbing _____	Flood Hazard _____	
Fire Protection _____	As Built Elevation Cert. _____	
Mechanical _____	Other _____	

X. CERTIFICATES ISSUED (office use only)

	DATE ISSUED	DATE EXPIRED	DATE REISSUED	DATE EXPIRED
☐ Temporary Certificate of Occupancy	No. _____	_____	_____	_____
☐ Temporary Certificate of Compliance	No. _____	_____	_____	_____
☐ Continued Certificate of Occupancy	No. _____	_____	_____	_____
☐ Certificate of Compliance	No. _____	_____	_____	_____
☐ Certificate of Occupancy	No. _____	_____	_____	_____
☐ Certificate of Approval	No. _____	_____	_____	_____
☐ Lead Abatement Clearance Certificate	No. _____	_____	_____	_____

[illegible]



Brick Township
401 Chambersbridge Rd
Brick, NJ 08723

Date Issued 4/13/2017
Control Number C-16-002087
Permit Number 16-2043
Permit Issue Date 6/21/2016
Certificate Number 16-2043

Certificate

Construction Code Division

(Certificate of Approval)

Identification

Work Site Location: 105 HENDRICKSON AVE Brick Township, NJ Block: 1068 Lot: 15.01 Qual: _____
Owner in Fee: BRICK TOWNSHIP BOARD OF EDUCATION
Owner Address: 101 HENDRICKSON AVE. BRICK NJ 08724
Telephone: _____
Contractor ALTEC BUILDING SYSTEMS CORP
Address 904 Atlantic Ave. Point Pleasant NJ 08742
Telephone: (732) 903-6264 Fax: _____
License Number or Builders Registration Number: 11073 Federal Emp. Number: 22-3292289

Home Warranty Number: _____

Type of Warranty Plan: ☐ State ☐ Private

Use Group: E Construction Classification: _____

Maximum Live Load: 0 Maximum Occupancy Load: 0

Description of Work/Use: SOLAR PANELS ...INSTALL 650.0 kw ROOF MOUNT PHOTOVOLTAIC SOLAR SYSTEM

Certificate Comments:

☐ Certificate of Occupancy

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

☒ Certificate of Approval

This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

☐ Certificate of Continued Occupancy

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ Temporary Certificate of Compliance

The following conditions must be met no later than or the owner will be subject to fine or order to vacate:
This certificate has an expiration date of:

Conditions to be met:

☐ Certificate of Clearance - Lead Abatement 5:17

This serves notice that based on written certification, lead abatement was performed as per NJAC5:17 to the following extent.

- ☐ Total removal of lead-based paint hazards in scope of work
☐ Partial or limited time period (years); see file

☐ Certificate of Clearance - Asbestos Abatement

This serves notice that based on written certification, asbestos abatement was performed to the following extent.

- ☐ Total removal of asbestos hazards in scope of work
☐ Partial or limited time period (years); see file

☐ Certificate of Compliance

This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

☐ Temporary Certificate of Occupancy

The following conditions must be met no later than: or the owner will be subject to fine or order to vacate:
This certificate has an expiration date of:

Conditions to be met:

David Newman Jr

Construction Official

Fee: \$0.00

Check Number: _____

Collected By: _____

DR# 337005473

MUNICIPALITY

BRICK



CUT-IN-CARD

LOCATION

101 HENDRICKSON AVE.

UTILITY CO

JCP&L

BRICK

BLK 1068

LOT 15.81

OWNER

BRICK T&P, BD. OF ED.

OCCUPANT

SAME

"Installation in the above premises has been inspected and is in accordance with N.E.C. and DCA requirements."

☒ FINAL ☐ TEMPORARY This approval void after ___ days

DESCRIPTION OF SERVICE

400 AMP / 30 / 4W / 120-208V

INSTALLED BY

ALTEC ELEC

LICENSE NO

11073

DATE

2/17/17

PERMIT #

16-2044

INSPECTOR

P. PALATHAN

☒ CALLED IN

2/17/17

BY

Lic. No.

9685

U.C.C. Form F-350B

1 WHITE-UTILITY

2 CANARY-OFFICE/FILE

3 PINK-OFFICE/CONTRACTOR

DO NOT DISPATCH

DR# 337005473

MUNICIPALITY

BRICK



CUT-IN-CARD

LOCATION

101 HENDRICKSON AVE.

UTILITY CO

JCP&L

BRICK

BLK

1068

LOT

15.01

OWNER

BRICK TWP. BO. OF ED.

OCCUPANT

SAME

"Installation in the above premises has been inspected and is in accordance with N.E.C. and DCA requirements."

☒ FINAL ☐ TEMPORARY This approval void after _____ days

DESCRIPTION OF SERVICE

400 AMP / 3 ϕ / 4W / 120-208V

INSTALLED BY

ALTEC ELEC

LICENSE NO

11073

DATE

2/17/17

PERMIT #

16-2044

INSPECTOR

P. MALLAHAN

☒ CALLED IN

2/17/17

Lic. No:

9685

HAND DEL.

U.C.C. Form F-350B

1 WHITE-UTILITY 2 CANARY-OFFICE/FILE 3 PINK-OFFICE/CONTRACTOR

Date/Time: Feb.17. 2017 1:10PM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
8411 Memory TX	918889149140	P. 2	OK	

Reason for error
E. 1) Hang up or line fail
E. 3) No answer
E. 5) Exceeded max. E-mail size

E. 2) Busy
E. 4) No facsimile connection
E. 6) Destination does not support IP-Fax

DO NOT DISPATCH

DR# 337005357

MUNICIPALITY BRICK  **CUT-IN-CARD**

LOCATION 500 MIDSTREAM RD UTILITY CO JCAL

BRICK BLK 902 LOT 8

OWNER BRICK TWP. RD OF ED OCCUPANT SAME

"Installation in the above premises has been inspected and is in accordance with N.E.C. and DCA requirements."

☒ FINAL ☐ TEMPORARY This approval void after _____ days

DESCRIPTION OF SERVICE 400 AMP/39/44/120-208V

INSTALLED BY ALTEC ELEC LICENSE NO 11073

DATE 2/17/17 PERMIT # 16-204 INSPECTOR P. CALAHAN

SIGNATURE IN 2/17/17 LIC. No. 9685

HAND DEC

U.C.C. Form F308 1 WIRE-UTILITY 2 CARRY-OFFICER 3 P.W.-OFFICER/CONTRACTOR

DR# 337005470

MUNICIPALITY BRICK

CUT-IN-CARD

LOCATION 103 HENDRICKSON AVE UTILITY CO JCP&LBRICKBLK 1068 LOT 15.01OWNER BT BOE OCCUPANT VETERANS MEMES.

"Installation in the above premises has been inspected and is
in accordance with N.E.C. and DCA requirements."

☒ FINAL ☐ TEMPORARY This approval void after _____ daysDESCRIPTION OF SERVICE 800 AMP/3 ϕ /4W/120-208VINSTALLED BY ALTEC ELEC LICENSE NO 11073DATE 3/18/17 PERMIT # 16-2042 INSPECTOR P. CALLAHAN☒ CALLED IN 3/18/17 Lic. No: 9685HAND DEL.

U.C.C. Form F-350B 1 WHITE-UTILITY 2 CANARY-OFFICE/FILE 3 PINK-OFFICE/CONTRACTOR

DR# 337005473

MUNICIPALITY BRICK

CUT-IN-CARD

LOCATION 105 HENDRICKSON AVE UTILITY CO JCP&LBRICKBLK 1068 LOT 15.01OWNER BT BOE OCCUPANT VETERAN MEM MS

"Installation in the above premises has been inspected and is
in accordance with N.E.C. and DCA requirements."

☒ FINAL ☐ TEMPORARY This approval void after _____ daysDESCRIPTION OF SERVICE 800 AMP/3 ϕ /4W/120-208VINSTALLED BY ALTEC ELEC LICENSE NO 11073DATE 3/18/17 PERMIT # 16-2043 INSPECTOR P. CALLAHAN☒ CALLED IN 3/18/17 Lic. No: 9685HAND DEL.

U.C.C. Form F-350B 1 WHITE-UTILITY 2 CANARY-OFFICE/FILE 3 PINK-OFFICE/CONTRACTOR

DO NOT DISPATCH

Brick Township
Building Department (732) 262-1030



DRUR # 337005470

MUNICIPALITY Brick Township

CUT-IN-CARD

LOCATION 103 HENDRICKSON AVE

UTILITY CO JCP&L

Brick Township, NJ

BLK 1068

LOT 15.01

OWNER BRICK TOWNSHIP BOARD OF
EDUCATION

OCCUPANT BRICK TOWNSHIP BOARD OF
EDUCATION

"Installation in the above premises has been inspected and
is in accordance with N.E.C. and DCA requirements."

☒ FINAL

☐ TEMPORARY

This approval void after ____ days

DESCRIPTION OF SERVICE 800 Amp 3 phase

INSTALLED BY ALTEC BUILDING SYSTEMS CORP LICENSE NO 11073

DATE 3/20/2017 PERMIT # 16-2042 INSPECTOR Patrick Callahan

☒ FAXED IN 3/20/2017

Lic. No: 9685

DO NOT DISPATCH

Brick Township
Building Department (732) 262-1030



DRUR # 337005473

MUNICIPALITY Brick Township

CUT-IN-CARD

LOCATION 105 HENDRICKSON AVE

UTILITY CO JCP&L

Brick Township, NJ

BLK 1068

LOT 15.01

OWNER BRICK TOWNSHIP BOARD OF
EDUCATION

OCCUPANT BRICK TOWNSHIP BOARD OF
EDUCATION

"Installation in the above premises has been inspected and
is in accordance with N.E.C. and DCA requirements."

☒ FINAL

☐ TEMPORARY

This approval void after ____ days

DESCRIPTION OF SERVICE 800 Amp 3 phase

INSTALLED BY ALTEC BUILDING SYSTEMS CORP LICENSE NO 11073

DATE 3/20/2017 PERMIT # 16-2043 INSPECTOR Patrick Callahan

☒ FAXED IN 3/20/2017

Lic. No: 9685

U.C.C. Form F350B equiv. 1 WHITE-UTILITY 2 CANARY-OFFICE/FILE 3 PINK-OFFICE/CONTRACTOR

Veterans Memorial M.S.

6/21/16

16-2043

Date Received
Control #

Date Issued
Permit #

**BUILDING SUBCODE
TECHNICAL SECTION**



A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1068 Lot 15101 Qualification Code _____

Work Site Location 105 Hendrickson Ave

Owner in Fee: Brick Township Board of Education

Tel. (732) 785-3000 e-mail _____

Address 101 Hendrickson Ave Brick NJ 08724

Contractor: Altered Building Systems Tel. (732) 903-6204

Address 904 Atlantic Ave e-mail info@alter.com

Contractor License No. or Builder Registration No. 13VH04948000 Exp. Date 3-31-17

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____

Federal Emp. ID No. 223292289 FAX: (732) 903-6298

JOB SUMMARY (Office Use Only)		INSPECTIONS		Dates (Month/Day)	
PLAN REVIEW	Date	Initial	Type:	Failure	Approval
☐ No Plans Required	<u>06/18/16</u>	<u>WEL</u>	Footing		
☒ All			Footing Bonding		
☐ Footings/Foundations			Foundation		
☐ Structural/Framework			Slab		
☐ Exterior			<u>Full system</u>		<u>3/13/17</u>
☐ Interior			Truss Sys./Bracing		
Joint Plan Review Required:			Barrier-Free		
☐ Elec. ☐ Plumb. ☐ Fire ☐ Elevator			Insulation		
SUBCODE APPROVAL for PERMIT			Finishes -Base Layer		
Date:	<u>06/18/16</u>		Finishes -Final		
Approved by:	<u>WEL</u>		Energy		
SUBCODE APPROVAL for CERTIFICATE			Mechanical		
☐ CO ☐ CCO ☐ CCO	<u>06/18/16</u>		TCO		
Date:	<u>06/18/16</u>		Other		
Approved by:	<u>WEL</u>		Final		<u>4-12-17</u>
			Barrier-Free		

B. BUILDING CHARACTERISTICS

Use Group	Present	Proposed	Constr. Class	Present	Proposed
No. of Stories			If Industrialized Building:		
Height of Structure	ft.		State Approved	HUD	
Area — Largest Floor	sq. ft.		Est. Cost of Bldg. Work:		
New Bldg. Area/All Floors	sq. ft.		1. New Bldg.	\$	
Volume of New Structure	cu. ft.		2. Rehabilitation	\$	<u>552,500</u>
Max. Live Load			3. Total (1+2)	\$	
Max. Occupancy Load					

U.C.C. F110 (rev. 11/09)

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

Sign here: Joese L. Lovish Jr.

Print name here: _____

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK
Rooftop Solar Installation
050 KW
COMMERCIAL

TYPE OF WORK:

☐ New Building	☐ Addition	☐ Rehabilitation	☐ Roofing	☐ Siding	☐ Fence	☐ Sign	☐ Pool	☐ Retaining Wall	☐ Asbestos Abatement	☐ Lead Haz. Abatement	☐ Radon Remediation	☐ Other	☐ Demolition
					Height (exceeds 6')	Sq. Ft.		Sq. Ft.	Subchapter 8	NJAC 5:17			

FEE (Office Use Only)

Administrative Surcharge	\$
Minimum Fee	\$
State Permit Surcharge Fee	\$
TOTAL FEE	\$

1 White = Inspector Copy
3 Pink = Office Copy
2 Canary = Office Copy
4 Gold = Applicant Copy

1068/15.01



Stantec Consulting Services Inc.

1971 State Route 34, 2nd Floor, Wall Township NJ 07719-9750

October 20, 2016
File: 192510588

Attention: Pat Callahan
401 Chambersbridge Road
Brick, NJ 08732

Dear Mr. Callahan,

Reference: New transformer for solar at the Education Enrichment Center (Permit # 16-2041)

Stantec has reviewed and approved the attached detail for the Education Enrichment Center located at 107 Hendrickson Rd. Brick, NJ 08732.

Regards,

STANTEC CONSULTING SERVICES INC.

A handwritten signature in black ink, appearing to read "David Faccas", written over a light gray rectangular background.

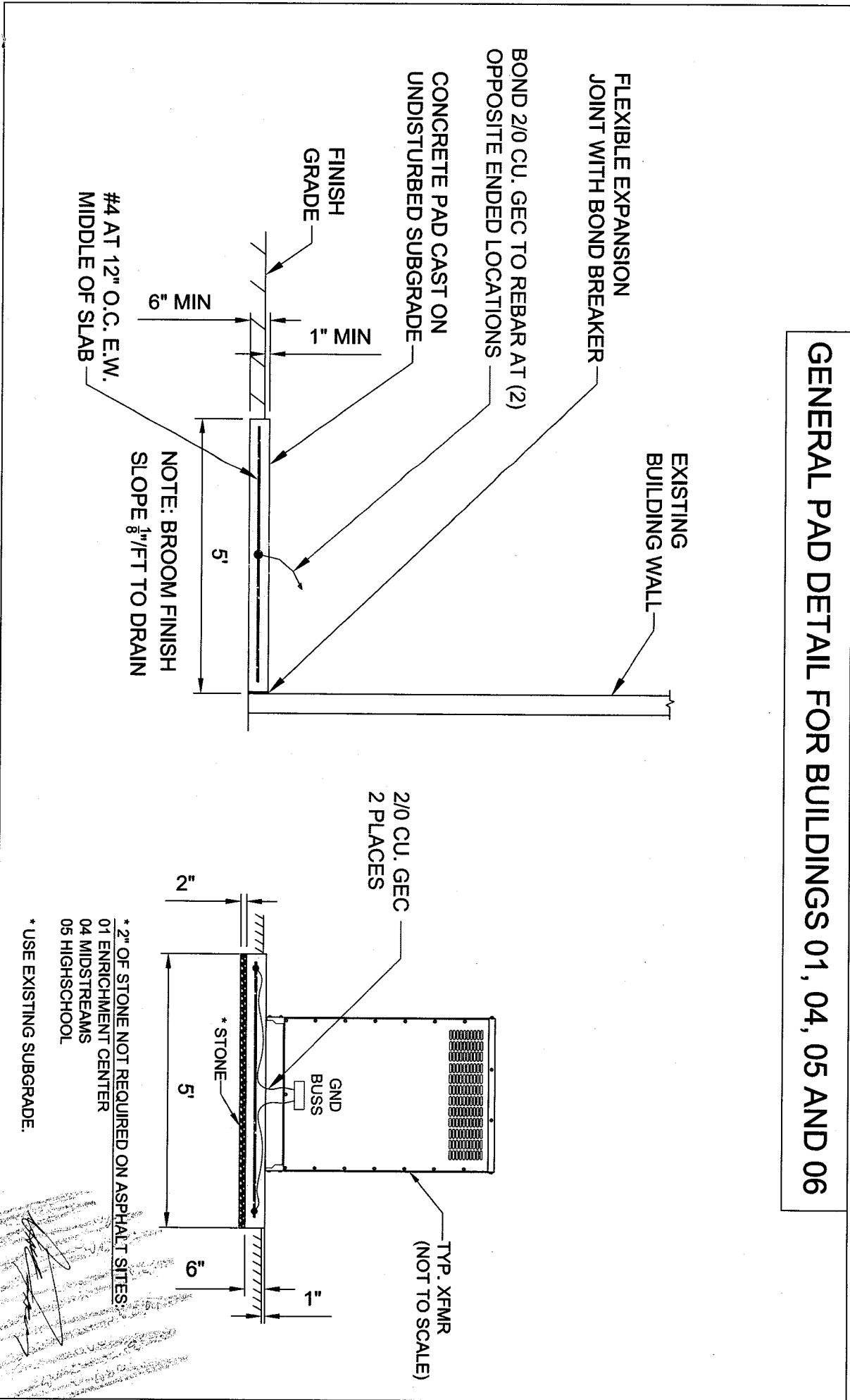
David Faccas
Associate
Phone: 732-449-0099 ext 8212
Fax:
dave.faccas@stantec.com

Attachment: as noted

C.

fk u:\192510588\record\submittal_archives\20161020_letter to inspector\20161020_letter to inspector_eec.docx

GENERAL PAD DETAIL FOR BUILDINGS 01, 04, 05 AND 06





Stantec Consulting Services Inc.
1971 State Route 34, 2nd Floor, Wall Township NJ 07719-9750

October 20, 2016
File: 192510588

Attention: Pat Callahan
401 Chambersbridge Road
Brick, NJ 08732

Dear Mr. Callahan,

Reference: New transformer for solar at the Education Enrichment Center

Stantec has reviewed and approved the attached detail for the Education Enrichment Center located at 107 Hendrickson Rd. Brick, NJ 08732.

Regards,

STANTEC CONSULTING SERVICES INC.



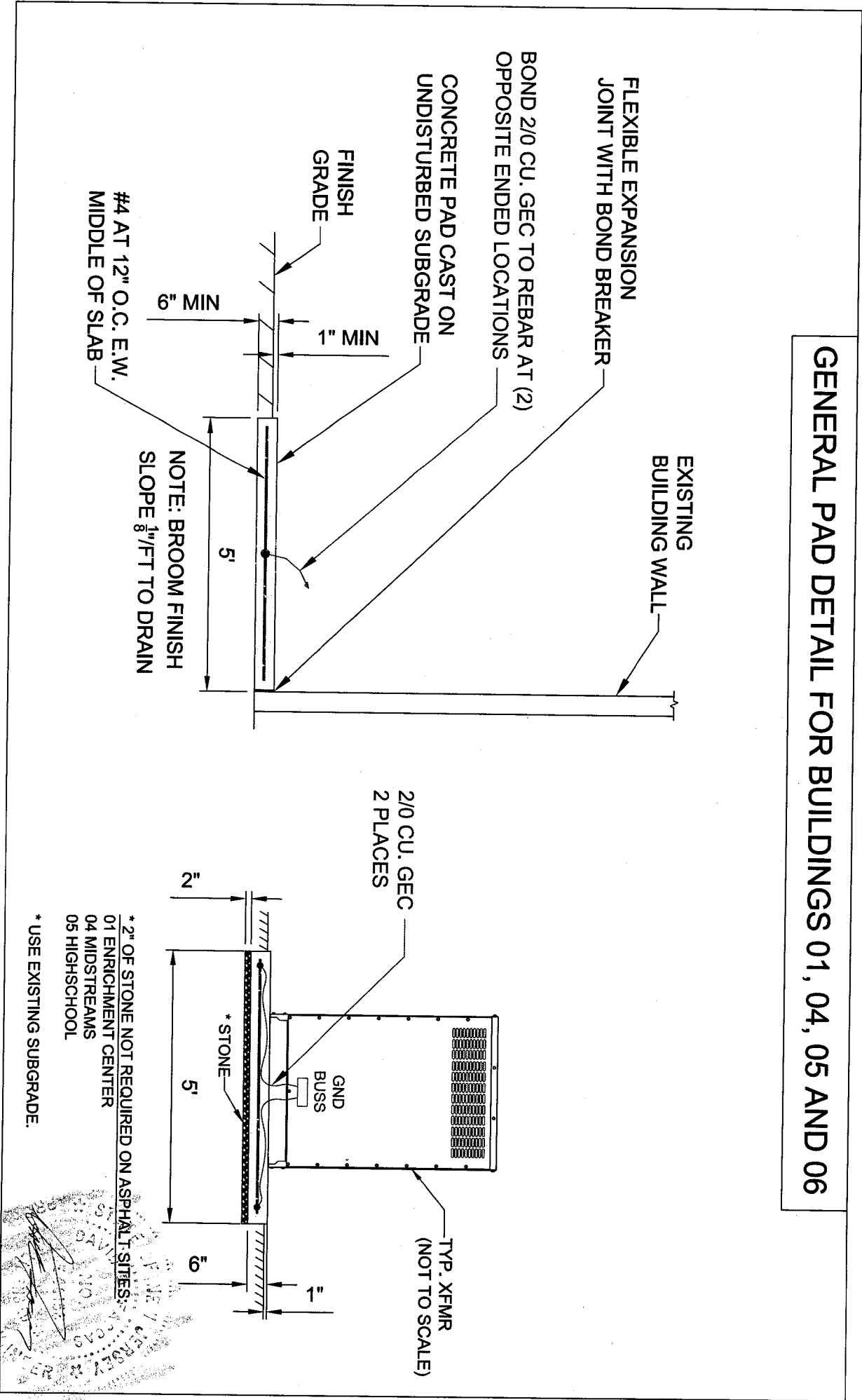
David Faccas
Associate
Phone: 732-449-0099 ext 8212
Fax:
dave.faccas@stantec.com

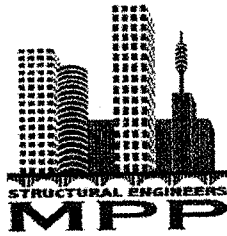
Attachment: as noted

C.

fk u:\192510588\record\submittal_archives\20161020_letter to inspector\20161020_letter to inspector_eec.docx

GENERAL PAD DETAIL FOR BUILDINGS 01, 04, 05 AND 06





February 22, 2016

Mr. Michael Ford
Project Manager
GeoPeak Energy
285 Davidson Ave
Somerset, NJ 08873

RE: Brick BOE – Roof Framing Assessment for Solar
Brick, NJ
MPP Project No: 14-0729

Dear Mr. Ford:

Pursuant to your request, MPP Engineers has performed a limited structural evaluation of the roof framing at several additional areas of the Brick Township High School to verify that the roof framing is adequate to support a proposed ballasted photovoltaic (PV) system. This work supplements our previous evaluation of other portions of the High School and other BOE buildings within the district. The new roof areas under evaluation encompass the six areas shown in the attached Figure 1. The new evaluation areas at the High School consist of several different framing systems constructed at different times.

Structural Data and Code Information

Our analysis was performed in accordance with the requirements of the 2015 International Building Code, NJ Edition. It is our understanding that the proposed solar system for flat roofs is anticipated to consist of standard solar modules mounted on an interlocking ballasted racking system to avoid roof penetrations. It is our understanding that the proposed PV arrays will be mounting using the Grid-Lite racking system that imposes a total loading of only about 3.5 to 4 pounds per square foot (PSF) on the existing roof structure.

The pertinent design data is listed below:

Ground Snow Load, Pg:	20 PSF (Brick, NJ)
Importance Factor, I:	1.1 (Occupancy Category III)
Exposure Factor, Ce:	1.0 (Fully Exposed)
Thermal Factor, Ct:	1.0 (Existing) & 1.1 (With Solar Panels)
Basic Wind Speed:	132 MPH Ultimate (Risk Category III)
Exposure:	B (Urban and Suburban Areas)
Minimum Flat Roof Snow Load:	22 PSF (20 PSF * 1.1 Importance Factor)

* Since the solar panels are mounted slightly above the roof line, it is appropriate to consider a thermal factor, Ct of 1.1, treating the panel surface as a cold, ventilated roof, rather than a warm roof.

Brick Township BOE Solar Evaluation Report

Estimated Roof Dead Loads - Dead load based on field observations of existing framing systems and our experience which include hung mechanical loads, roofing, insulation, ceiling, and self-weight of framing. The framing does not include the additional dead load of the proposed photovoltaic system, including the panels, rails, ballast and mounting hardware. The additional weight of the proposed ballasted solar panel system, including the panels, rails, mounting hardware, and the ballast, is estimated to be in the range of 3.5 to 4 pounds per square foot (PSF) and NOT included in the below estimated dead loads. All of the roof sections have built-up roofing with gravel.

Area 1: (Field Surveyed)

□ Wide Flange Beams spaced at approximately 8 feet on center supporting 1-1/2" metal roof deck. At the corridor areas, there appears to be a concrete topping over the metal deck. For these areas, we used a total dead loading of 65 PSF. At the classroom areas on either side of the corridor, it was evident that there was no concrete present. At these areas, we used a total dead load of 24 PSF for our calculations. It should be noted that this roof has several rooftop HVAC units. We suspect that this roof area may have been designed for a future second floor.

Area 2: (Field Surveyed)

□ This area also consists of wide flange beams spaced at approximately 8'-4" on center. The beams are supported by masonry bearing walls and have a cantilever with hung span framing arrangement. The total estimated existing dead loads at this area are 24 PSF.

Area 3: (Field Surveyed)

□ This roof area has the same framing system as Area 1 but the beam sizes were noticeably smaller despite having the same spacing and spans as those members in Area 1. The total estimated dead loads for this roof area are 24 PSF.

Area 4: (Field Surveyed)

□ This is the roof over the gymnasium. The framing consists of custom structural steel trusses spaced at 23' on center that clear span approximately 80 across the width of the gymnasium. The trusses support wide flange beams spaced at 8' on center spanning between the trusses and supported by masonry bearing walls at the end walls. The beams support metal roof deck. The estimated total dead loads at this section of the roof are 16 PSF plus the self weight of the framing.

Area 5: (Field Surveyed)

□ The roof framing over the auxiliary gym consists of 32" open web steel bar joists spaced at 6'-6" on center with a clear span of approximately 50 feet. The joists support a tectum roof deck system with bulb tees. We estimate that the total weight of the existing roof framing to be approximately 20 PSF at this roof area. It should be noted that the roof joists also support two

Area 6: (Field Surveyed)

□ The roof framing over the weight room consists of 22" deep K-Series open web steel joists supporting metal roof deck. We estimate that the total weight of the existing roof framing to be approximately 16 PSF at this roof area.

Existing Framing and Analysis (Ref Figure 1)

Area 1:

Existing Framing – The framing in this area appears to have been designed for a future second floor loading. Based on the member sizes, this roof appears to have more than enough capacity to support solar panels, even in those areas where existing rooftop mechanical equipment exists.

Analysis Results – Our analysis indicates that the existing roof framing in this area has a minimum reserve capacity of well above 10 PSF and would be more than adequate to support PV arrays. However, as previously mentioned, the ability to utilize much of this space will be hindered by the large number of rooftop HVAC units.

Area 2:

Existing Framing - The framing in this area consists of W14x30 wide flange beams spanning approximately 41 feet between bearing walls and cantilevering 7 feet beyond the wall to support W14x30 hung beams. The beams support conventional 1-1/2" metal roof deck.

Analysis Results – Our analysis indicates that the framing in this area is capable of supporting an additional 8 PSF.

Area 3:

Existing Framing - The framing in this area consists of W12x22 steel beams spaced at 8' on center with a span of 30'-8" supporting conventional 1-1/2" metal roof deck.

Analysis Results – Our calculations indicate that this section of the roof has a reserve capacity of approximately 6 PSF.

Area 4:

Existing Framing – The framing for the gym roof has custom structural steel trusses with an out-to-out depth of 7'-4". The truss chord members consist of 8" T-Sections with double angle chord and web members that vary in size depending on the location. The web members are welded to the chord members. The W12 beams that frame into the trusses are bolted to the vertical angles at the panel point locations which occur every 8 feet on center. The typical beam size appears to be W12x14 members except at the cross bridging between trusses where the beams are larger. In addition, there are two HVAC units hung from the framing at each end of the gym. The beam sizes at these locations suggest that slightly larger W12x19 beams were used to accommodate the additional loading. The steel trusses span 80' clear and are supported by steel columns at each end. The trusses are spaced at 23' on center and support conventional 1-1/2", 16 Gauge metal roof deck.

Analysis Results – Our analysis indicates that the framing has a reserve capacity of 7 PSF based primarily on the capacity of the bottom chord members of the trusses.

Area 5:

Existing Framing – The auxiliary gym framing consists of 32" LH joists spaced at 6'-6" on center. Based on the size of the chord and web members, the joists appear to be 32LH08 members. We conservatively assumed that the joist members are 32LH06 members or perhaps even 32LJ08 members in performing our analyses. It should be noted that there are two mechanical units supported in between the 2nd and 3rd roof

Brick Township BOE Solar Evaluation Report

joists from each end of the gym. The joists at these locations appear to be the same size as the typical joists and have not been reinforced or strengthened to accommodate the additional loading.

Analysis Results – Based on our assumptions the standard joists have a reserve capacity of approximately 8 PSF. Given the unknowns regarding the weight of the existing HVAC units that are supported by the joists, we do not recommend that any solar panels be installed along the length of the joists within an 8 foot strip centered on the mechanical units.

Area 6:

Existing Framing - The framing at the weight room consists of 22K11 joists spaced at 4' on center with a span of 39'-0". The joists are supported by W21x44 and W21x62 beams having 27' +/- and 33' +/- spans, respectively.

Analysis Results – Our analysis indicates that the framing within this roof area conservatively has a reserve capacity of 10 PSF.

Conclusions

The attached Figure 1 shows the available reserve capacity for various areas of the roof along with some limitations with regard to the panels at the auxiliary gym and where low roof sections meet higher roof sections. Provided that the Grid-Lite racking system is used to support the PV arrays, all 6 of the new areas at the High School are generally adequate to support the proposed PV arrays.

Solar panels may not be supported within 5 feet of all existing rooftop mechanical equipment areas and within 14 feet at changes in roof elevations (e.g., between high and low roof areas). These areas typically result in shadow zones and may not be suitable for solar panels anyway.

We have also reviewed the proposed PV array layouts for the other Brick BOE facilities as follows:

1. Midstreams Elementary School
2. Veterans Memorial Elementary School
3. Veterans Memorial Middle School
4. Lake Riviera Middle School
5. Emma Haven Young Elementary School
6. Education Enrichment Center

In all of the zones where panels are proposed on these roofs, we have confirmed that the roof has a minimum reserve capacity of at least 4 PSF and would be capable of supporting the proposed PV arrays installed using the Grid-Lite racking system.

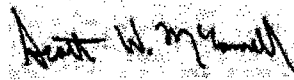
We trust that this evaluation will provide you with the information required to finalize the layout and design of the PV systems. If you have any questions regarding this matter, please feel free to contact my office at 609-489-5511.

Brick Township BOE Solar Evaluation Report

We appreciate the opportunity to assist you with this evaluation.

Sincerely,

MPP Engineers, LLC

A handwritten signature in black ink, appearing to read "Scott W. McConnell", is positioned above the printed name.

Scott W. McConnell
Principal
NJ PE Lic No. 40281

Encl.

Figure 1 – Brick Township High School Roof Reserve Capacity

Appendix A – Proposed PV Roof Layouts and Grid-Lite Racking Information

Scott W. McConnell
NJ Prof. Eng. Lic. No. 40281

CLIENT:
GeoPeak E

PROJECT NAME:

Brick BOE
Roof Assessment for Solar
Brick Twp High School
Brick, NJ

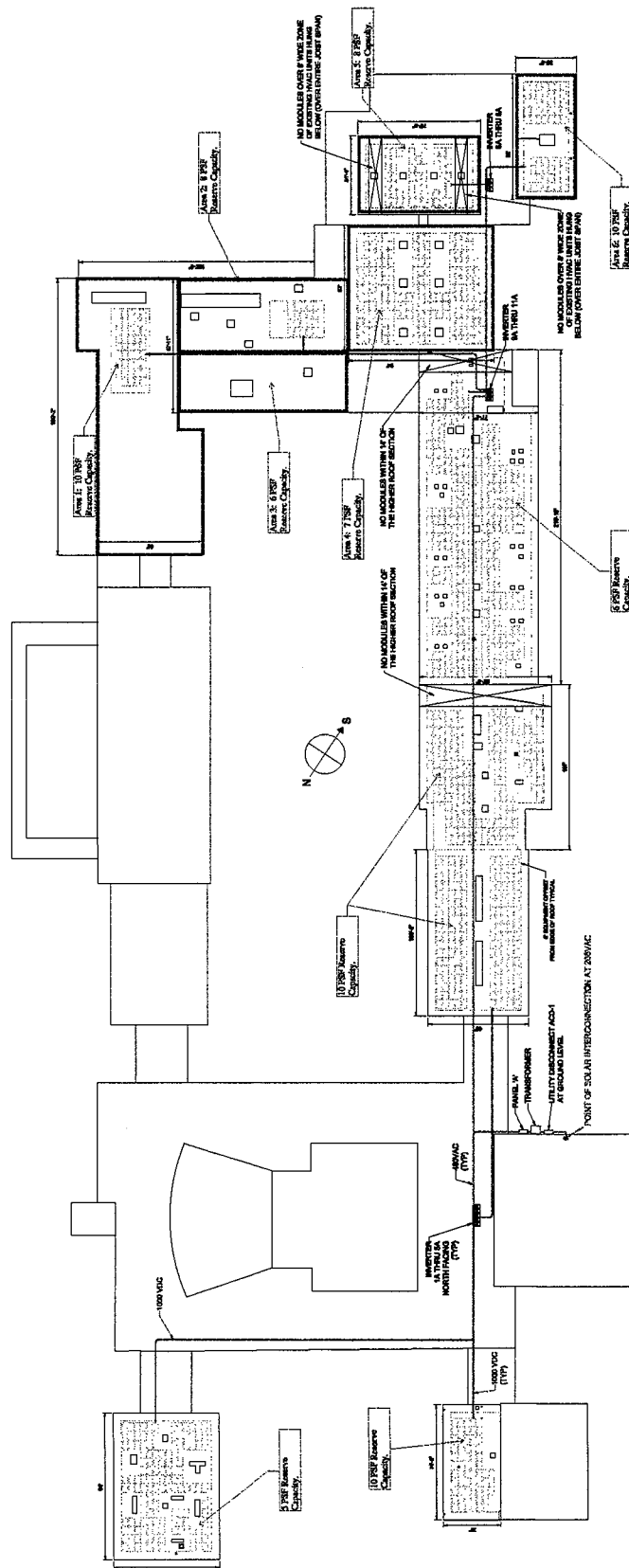
PLOT SCALE	DATE
NONE	2/22/16

DRAWN BY	DESIGNED BY
SWM	SWM

MPP PROJECT NO.
14-0729

SKETCH NO.:

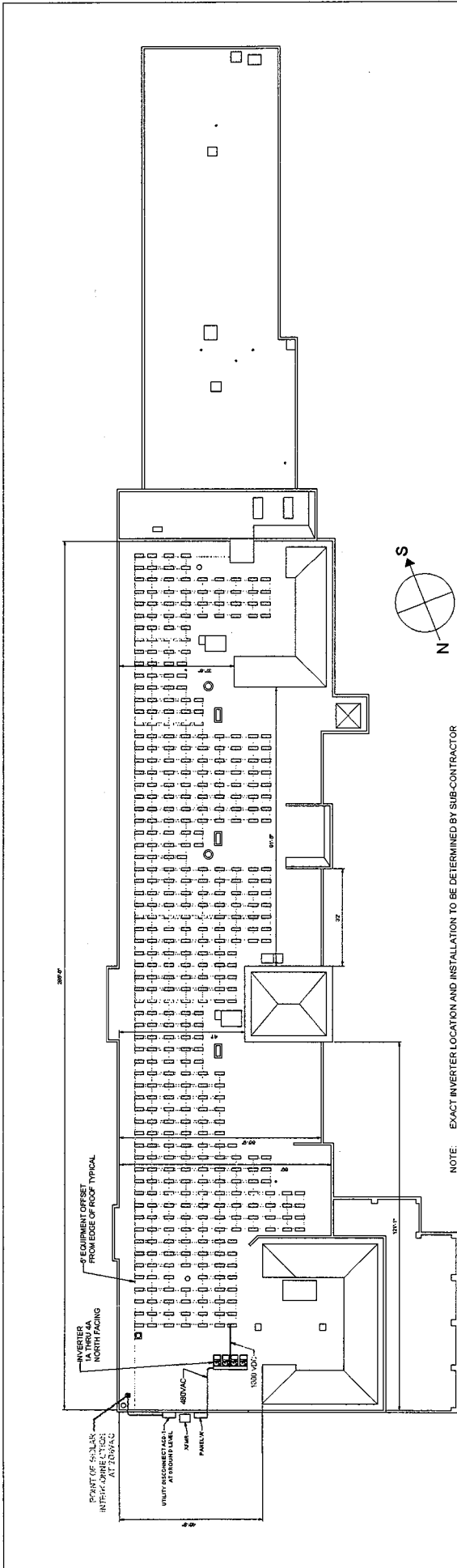
Figure 1





Appendix A

PV Array Layouts & Grid-Lite Racking System Information

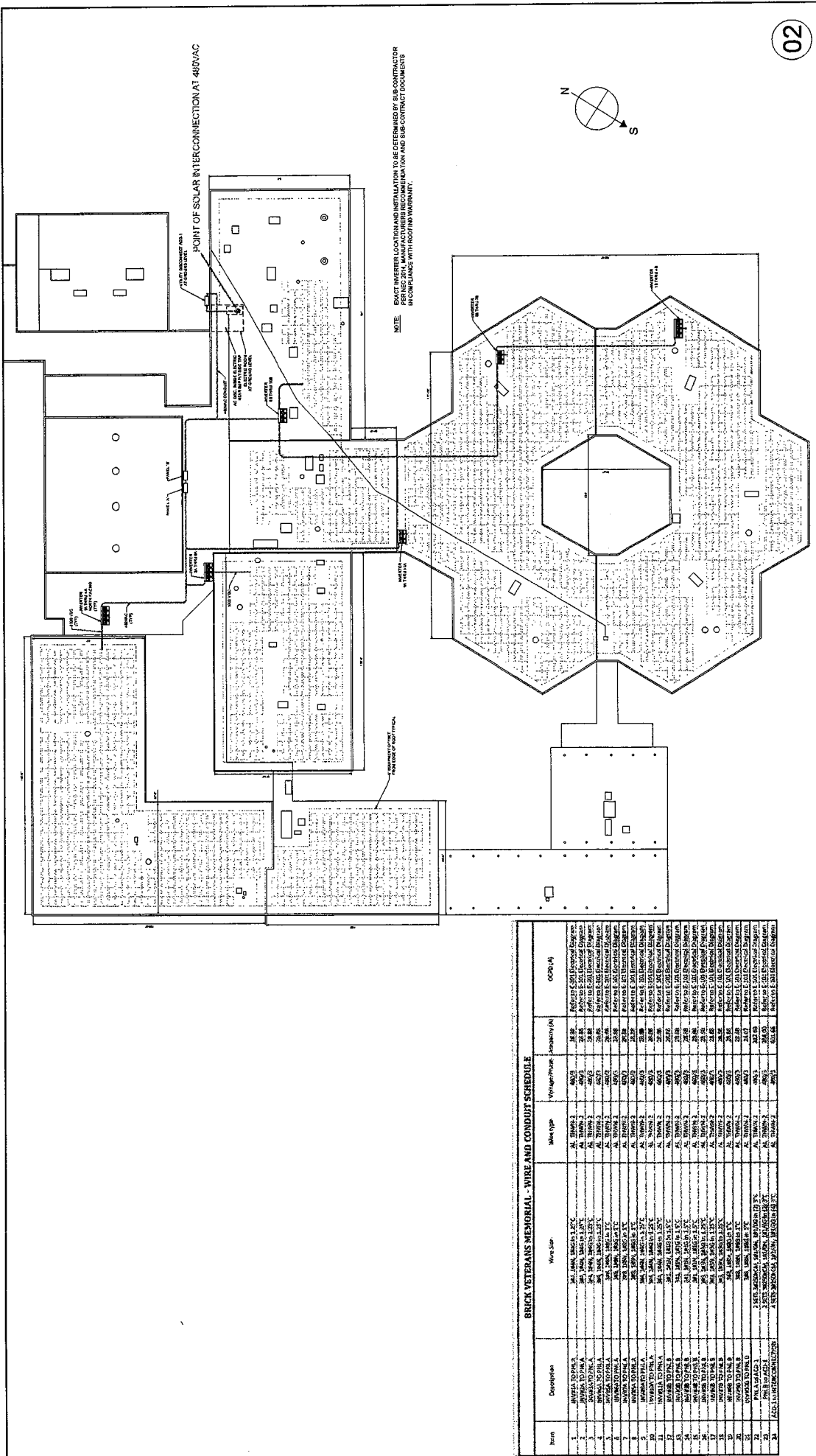


ENRICHMENT CENTER - WIRE AND CONDUIT SCHEDULE						
Item	Description	Wire Size	Wire type	Voltage/Phase	Ampacity (A)	OCOP (A)
1	INVERTER TO PNL A	3/4" 180V, 180V in 1°C	AL THWN-2	480/3	24.07	Refer to E-101 Electrical Diagram
2	INVERTER TO PNL A	3/4" 180V, 180V in 1°C	AL THWN-2	480/3	24.07	Refer to E-101 Electrical Diagram
3	INVERTER TO PNL A	3/4" 180V, 180V in 1°C	AL THWN-2	480/3	24.07	Refer to E-101 Electrical Diagram
4	INVERTER TO PNL A	3/4" 180V, 180V in 1°C	AL THWN-2	480/3	24.07	Refer to E-101 Electrical Diagram
5	PNL A TO XFER	3/4" 20, 144V, 144V in 2°C	AL THWN-2	480/3	96.27	Refer to E-101 Electrical Diagram
6	XFER TO ACD-1	3/4" 500V, 144V, 144V in 4°C	AL THWN-2	208/3	222.22	Refer to E-101 Electrical Diagram
7	ACD-1 TO INTERCONNECTION	3/4" 500V, 144V, 144V in 4°C	AL THWN-2	208/3	222.22	Refer to E-101 Electrical Diagram

1 SOLAR ROOF LAYOUT
SCALE: 1"=10'

01

Stantec 285 DAVIDSON AVENUE SOMERSET, NJ 08873 (888) 526-4478		GEOPEAK ENERGY® Smart Solutions. Clean Alternatives 285 DAVIDSON AVENUE SOMERSET, NJ 08873 (888) 526-4478		TOTAL MODULES: 388 (660W PV MODULES) TOTAL SYSTEM SIZE: 65.68 kW DC	
DRAWING NAME: PROJECT NAME: PHOTO/VTAIC CONSTRUCTION PLANS PHOTO/VTAIC CONSTRUCTION PLANS		DRAWING NO.: A-101		SHEET NO.: 4 OF 14	
PROPERTY LOCATION: EDUCATION ENRICHMENT CENTER 100-107 BRICK AVENUE BRICK, NJ 08725		DRAWING DATE: 10-26-15		SHEET DATE: 10-26-15	
DESIGNED BY: JMK		CHECKED BY: JMK		CLIENT APPROVAL BY: JMK	
SCALE: AS SHOWN		DATE: 10-26-15		REVISION NUMBER: 3	



02

BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE				
Item	Description	Wire Size	Wire Type	Quantity (ft)
1	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
2	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
3	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
4	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
5	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
6	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
7	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
8	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
9	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
10	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
11	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
12	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
13	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
14	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
15	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
16	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
17	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
18	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
19	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
20	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
21	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
22	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
23	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			
24	BRICK VETERANS MEMORIAL - WIRE AND CONDUIT SCHEDULE			

1 SOLAR ROOF LAYOUT

TOTAL MODULES: 2,500 (250W PV MODULES)
TOTAL SYSTEM SIZE: 625.00 KW DC

Stantec

GEOPEAK ENERGY®
Smart Solutions, Clean Alternatives

DESIGNED BY: JMK

DRAWN BY: JMK

CHECKED BY: JMK

CLIENT APPROVAL BY: JMK

DATE: 10-26-15

PROJECT NO.: 108873

REVISION NUMBER: 3

OWNER: SOLAR ROOF LAYOUT AND CONDUIT SCHEDULE

PROJECT NAME: BRICK TWP SCHOOL ROOF SYSTEM PHOTOVOLTAIC CONSTRUCTION PLANS

PROPERTY LOCATION: VETERANS MEMORIAL MIDDLE SCHOOL 100 BRICK AVENUE BRICK NJ 08702

DATE: 10-26-15

PROJECT NO.: 108873

REVISION NUMBER: 3

DESIGNED BY: JMK

DRAWN BY: JMK

CHECKED BY: JMK

CLIENT APPROVAL BY: JMK

DATE: 10-26-15

PROJECT NO.: 108873

REVISION NUMBER: 3

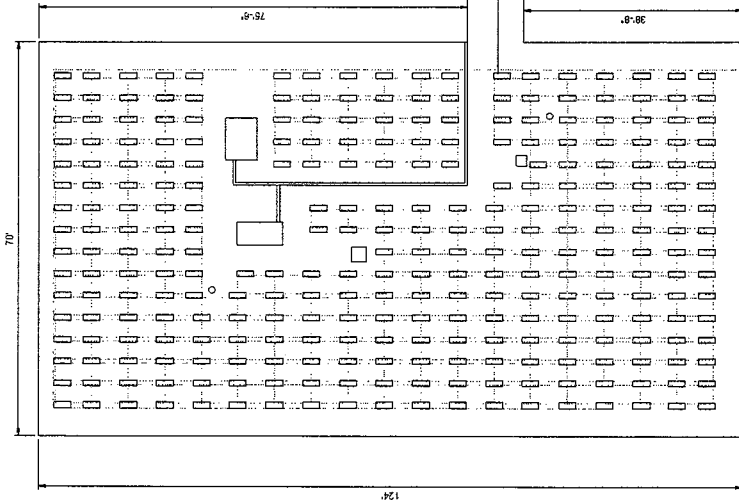
David D. Pagan, P.E.
Professional Engineer
NJ License No. 12000000000000000000

285 DAVIDSON AVENUE
SOMERSET, NJ 08873
(888) 526-4478

NO. 1 OF 14

Item	Description	Wire Size	Wire Type	Voltage/Phase	Amperage/ft	Notes/Remarks
1	INVERTER TO PV1-A	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
2	INVERTER TO PV1-B	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
3	INVERTER TO PV1-C	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
4	INVERTER TO PV1-D	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
5	INVERTER TO PV1-E	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
6	INVERTER TO PV1-F	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
7	INVERTER TO PV1-G	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
8	INVERTER TO PV1-H	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
9	INVERTER TO PV1-I	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
10	INVERTER TO PV1-J	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
11	INVERTER TO PV1-K	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
12	INVERTER TO PV1-L	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
13	INVERTER TO PV1-M	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
14	INVERTER TO PV1-N	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
15	INVERTER TO PV1-O	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
16	INVERTER TO PV1-P	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
17	INVERTER TO PV1-Q	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
18	INVERTER TO PV1-R	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
19	INVERTER TO PV1-S	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
20	INVERTER TO PV1-T	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
21	INVERTER TO PV1-U	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
22	INVERTER TO PV1-V	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
23	INVERTER TO PV1-W	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
24	INVERTER TO PV1-X	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
25	INVERTER TO PV1-Y	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
26	INVERTER TO PV1-Z	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
27	INVERTER TO PV1-AA	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
28	INVERTER TO PV1-AB	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
29	INVERTER TO PV1-AC	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
30	INVERTER TO PV1-AD	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
31	INVERTER TO PV1-AE	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
32	INVERTER TO PV1-AF	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
33	INVERTER TO PV1-AG	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
34	INVERTER TO PV1-AH	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
35	INVERTER TO PV1-AI	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
36	INVERTER TO PV1-AJ	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
37	INVERTER TO PV1-AK	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
38	INVERTER TO PV1-AL	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
39	INVERTER TO PV1-AM	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
40	INVERTER TO PV1-AN	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
41	INVERTER TO PV1-AO	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
42	INVERTER TO PV1-AP	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
43	INVERTER TO PV1-AQ	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
44	INVERTER TO PV1-AR	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
45	INVERTER TO PV1-AS	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
46	INVERTER TO PV1-AT	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
47	INVERTER TO PV1-AU	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
48	INVERTER TO PV1-AV	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
49	INVERTER TO PV1-AW	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
50	INVERTER TO PV1-AX	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
51	INVERTER TO PV1-AY	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
52	INVERTER TO PV1-AZ	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
53	INVERTER TO PV1-BA	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
54	INVERTER TO PV1-BB	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
55	INVERTER TO PV1-BB	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
56	INVERTER TO PV1-BB	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
57	INVERTER TO PV1-BB	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
58	INVERTER TO PV1-BB	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
59	INVERTER TO PV1-BB	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram
60	INVERTER TO PV1-BB	3/4" 100V 150V 1.5V	AL THHN-2	480V	25.0A	Refer to ESD Electrical Diagram

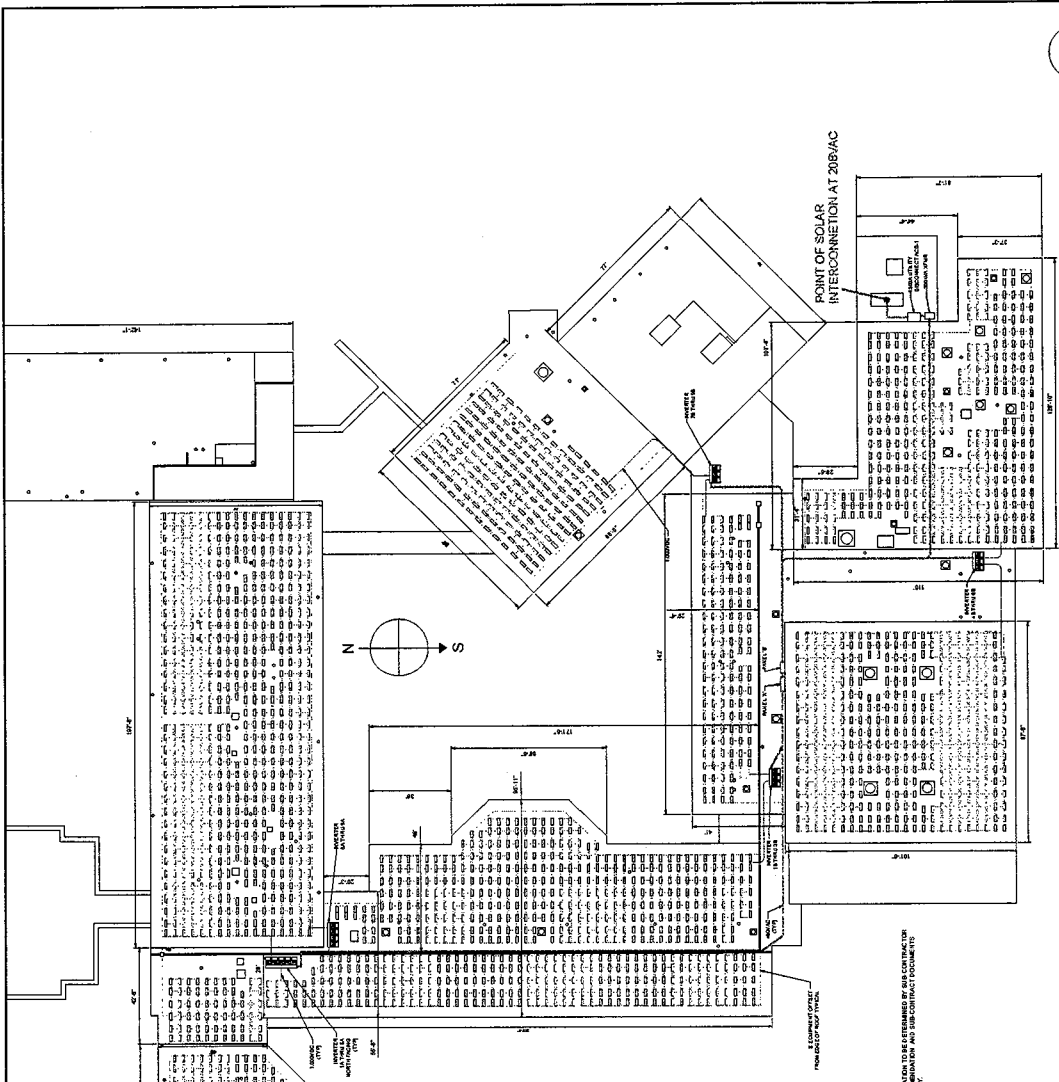
NOTE: EXACT INVERTER LOCATION AND INSTALLATION TO BE DETERMINED BY SUB-CONTRACTOR PER NEC 2014 MANUFACTURERS RECOMMENDATION AND SUB-CONTRACT DOCUMENTS IN COMPLIANCE WITH ROOFING WARRANTY.



1 SOLAR ROOF LAYOUT SCALE 1"=10'

TOTAL MODULES: 528 (101W PV MODULES)
TOTAL SYSTEM SIZE: 163.68 MW DC

GEOPEAK ENERGY Smart Solutions. Clean Alternatives 285 DAVIDSON AVENUE SOMERSET, NJ 08873 (888) 526-4478		Stantec DAVID D. PIERCE, P.E. Principal 1000 RIVER STREET SOMERSET, NJ 08873		SOLAR ROOF LAYOUT AND CONDUIT SCHEDULE PROJECT NAME: BRICK TWP SCHOOL ROOF SYSTEM PHOTOVOLTAIC CONSTRUCTION PLANS PROJECT NO.: A-101 PROPERTY LOCATION: MISTREMS ELEMENTARY SCHOOL, 800 MISTREMS ROAD, BRICK, NJ 08723 SHEET NO.: 4 OF 14	
3	02-25-15	PERMIT SET	JK	DF	DATE
2	10-30-15	ELECTRICAL INTERCONNECTION SUBMITTAL	JK	DF	DATE
1	08-25-15	INITIAL RELEASE	JK	DF	DATE
1	08-25-15	REVISED	BY	CHK	DATE
1	08-25-15	CLIENT APPROVAL	BY	CHK	DATE
1	08-25-15	PROJECT NO.	JK	DF	DATE
1	08-25-15	DATE	JK	DF	DATE



07

LAKE RIVIERA - WIRE AND CONDUIT SCHEDULE					
Item	Description	Wire Size	Wire Type	Voltage/Ph/Imp	Capacity (A)
1	INVA1A TO PNL A	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
2	INVA1A TO PNL B	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
3	INVA1A TO PNL C	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
4	INVA1A TO PNL D	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
5	INVA1A TO PNL E	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
6	INVA1A TO PNL F	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
7	INVA1A TO PNL G	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
8	INVA1A TO PNL H	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
9	INVA1A TO PNL I	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
10	INVA1A TO PNL J	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
11	INVA1A TO PNL K	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
12	INVA1A TO PNL L	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
13	INVA1A TO PNL M	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
14	INVA1A TO PNL N	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
15	INVA1A TO PNL O	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
16	INVA1A TO PNL P	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
17	INVA1A TO PNL Q	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
18	INVA1A TO PNL R	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
19	INVA1A TO PNL S	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
20	INVA1A TO PNL T	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
21	INVA1A TO PNL U	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68
22	INVA1A TO PNL V	300, 180V, 1805 in 1.5°C	AL THWN-2	480V/3	26.68

1 SOLAR ROOF LAYOUT

TOTAL MODULES: 2040 (280W PV MODULES)
TOTAL SYSTEM SIZE: 530.40 kW DC

GEOPEAK ENERGY®
Smart Solutions. Clean Alternatives
285 DAVIDSON AVENUE
SOMERSET, NJ 08873
(888) 526-4478

Stantec
DAVID D. FACCAL, P.E.
Principal
12.02.2017 10:28:30 AM

DESIGNED BY: JMK
DRAWN BY: JMK
CHECKED BY: JMK
CLIENT APPROVAL BY: JMK

DATE: 10-26-15
PROJECT NO.:
REVISION NUMBER: 3

PERMIT SET
ELECTRICAL INTERCONNECTION SUBMITTAL
INITIAL RELEASE
1 10-25-15
2 10-25-15
3 10-25-15

REVISIONS
BY: CHK
DATE:

PROJECT NAME: BRICK TMSR SCHOOL ROOF SYSTEM
PHOTOVOLTAIC CONSTRUCTION PLANS
A-101
SHEET NO. 4 OF 14

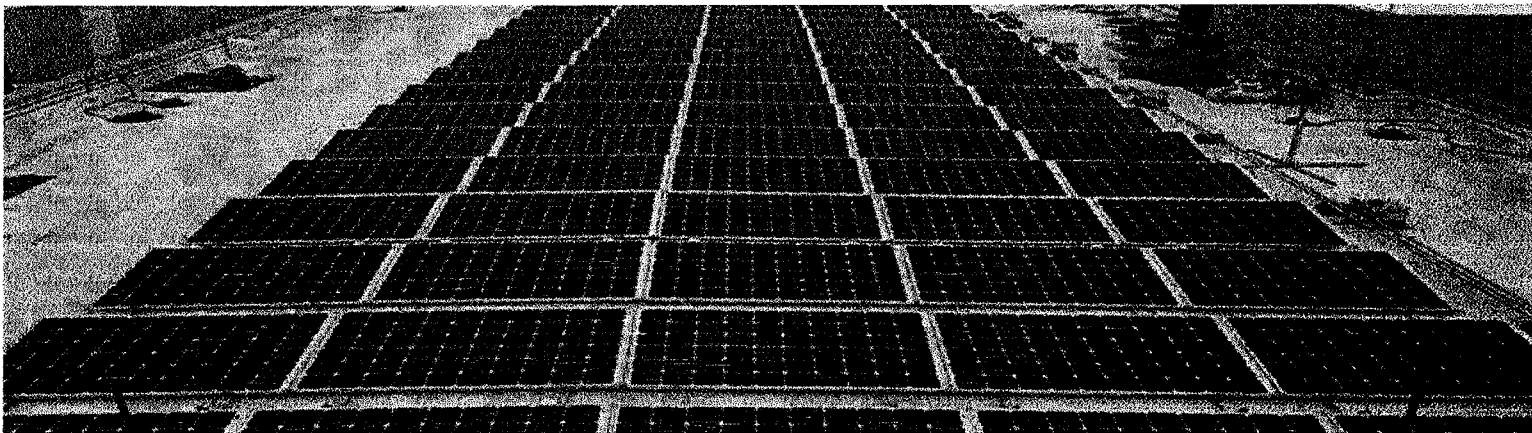
PROPERTY LOCATION: LAKE RIVIERA MIDDLE SCHOOL
1710 RIVIERA DRIVE
BRICK, NJ 08701

CONTRACT NO.:
SOLAR ROOF LAYOUT AND CONDUIT SCHEDULE

Grid-Lite™

- Interlocking grid design combined with next-gen wind deflector reduces ballast to minimal or zero
- Industry's best system to handle most severe seismic conditions
- Integrated wire management trays enable string wiring throughout entire array prior to panelizing
- Near zero ballast saves up to \$.02/watt
- Fast install with minimal components
- 5 and 10 degree tilts
- Durable G90 and stainless steel components
- ETL / UL 2703 tested, ETL/UL 1703/2703 Class A fire rated
- 20-year warranty - Made in USA
- Wind tunnel testing industry leader CPP and rated for 150mph wind speed





Features

- Interlocking grid design combined with Nextgen wind deflector reduces ballast to minimal or zero
- Fire proof, durable galvanized and stainless steel components
- Minimal ballast when required on edges quickly installs with additional rail
- Ultra high grade galvanized interlocking rails install quickly to build grid
- Industry's best system to handle most severe seismic conditions
- Typical roof loading 0 to 1 psf for ballast; 2.5-3.5 total load including ballast, panels and racking
- Less ballast and related labor reduce total installed cost
- Full layout and engineering analysis for every project
- Panel supports both 5 and 10° tilt
- Snap-on EPDM blocks available in place of slip sheets
- Unique design innovations protected under patent pending
- Made in the U.S.A.

Installation

- Fast install with minimal components
- Integrated wire management trays enable string wiring throughout entire array for NE & EW runs prior to panelizing
- Pre-punched slots in wind deflectors enable fast east-west string wiring prior to panelizing
- Can be installed on any flat roof
- Flexibility for up to 5 degree roof slope variations
- 5 men install est. 195 panels, racks and ballast per day
- 15 men install .90 MW per week
- Bundles typically 3100lbs. maximum for easy offloading
- 2 trucks per MW typical

Grounding

- Racking system has integrated grounding utilizing ETL/UL teathed panel clips two corner of each array
- Grounding must be done by electrician at row end at corner array



Ultra high grade galvanized interlocking rails install quickly to build grid.



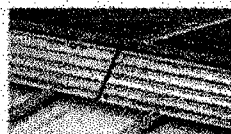
Interlocking grid design combined with Nextgen wind deflector reduces ballast to minimal or zero



Integrated wire management trays enable string wiring throughout entire array for NE & EW runs prior to panelizing



Panel supports for both 5 and 10° tilt. EPDM block available in place of slip sheets



Pre-punched slots in wind deflectors enable fast EW string wiring prior to panelizing



Fire proof, durable galvanized and stainless steel components

Test & Certification

- Wind tunnel testing in progress with industry leader CPP and rated for 150 mph wind speed
- Unique design innovations with patents pending
- Class A fire rating tested by ETL to UL 1703 & 2703: covers essentially all available modules (Fire guards optional at additional cost)
- ETL/UL 2703 listed
- 60 psf ground snow load rated
- Meets IBC and ASME standards for structural loading
- Warranty 20 years
- Minimum order size 300 KW

Calculations

- 100% code compliant designs for any locality
- Third-party structural PE stamped drawings and calculations
- Individual system structural calculations
- Individual system design calculations based on regional load values Design loads according to IBC 2009 or 2012
- Patent pending profile geometries with optimum material utilization

Distribution Load

- Typical roof loading 0 to 1 psf ballast; 2.5-3.5 total load including ballast, panels and racking
- Pan Row Spacing:
5 and 10° tilt option: 10.5/18.7 inches
- Shade Angles:
5 and 10° tilts: 18/19° shade angle

Material

- Rails, Panel Supports, Wind Deflectors, Fire Guards optional at additional cost: G90 galvanized steel
- Panel Clips: stainless steel
- Hardware - 1/4-20 x 2-1/2 inch bolts with serrated flange nuts, 5/16-inch x 1/2 inch machine screws, 3/8-inch x 1-3/4 bolts with serrated flange nuts: stainless steel or Magnacoal



tyz@gamechangeracking.com
www.gamechangeracking.com



QUALITY. VALUE. INNOVATION.



CONSTRUCTION PERMIT

Date Issued 6/21/2016
Control # C-16-002087
Permit # 16-2043

IDENTIFICATION Block: 1068 Lot: 15.01 Qualifier _____
Work Site Location: 105 HENDRICKSON AVE Brick Township, NJ Contractor ALTEC BUILDING SYSTEMS CORP
Address 904 Atlantic Ave. Point Pleasant NJ 08742
Owner in Fee BRICK TOWNSHIP BOARD OF EDUCATION Telephone: (732) 903-6264
101 HENDRICKSON AVE. BRICK NJ 08724 Lic. No. or Bldrs. Reg. No. 11073 11073 11073
Telephone: _____ Federal Employee. No. 22-3292289

Is hereby granted permission to perform the following work:

- ☒ BUILDING ☐ PLUMBING ☐ LEAD HAZARD ABATEMENT
☒ ELECTRICAL ☐ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT (Subchapter 8 only) ☐ OTHER

DESCRIPTION OF WORK:

SOLAR PANELS ...INSTALL 650.0 kw ROOF MOUNT PHOTOVOLTAIC SOLAR SYSTEM

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$1,105,000

D. Newman Jr./m
Construction Official

6/21/16
Date

U.C.C. F170
equiv (rev 1/04)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

PAYMENTS (Office Use Only)

Building	\$0
Electrical	\$0
Plumbing	\$0
Fire Protection	\$0
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$0
CO Fee	
Other	\$0
Total	\$0
Check No.	
Cash	\$0
Credit	\$0
Collected By	

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

☐ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and/or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

☒ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.

Veterans Memorial P.S.

RECEIVING CLERK 3-4-16 **ZONING PERMIT APPLICATION** PERMIT # _____
DATE REC'D _____ DATE ISSUED _____
BLOCK: 10608 LOT: 15.01 QUALIFIER: _____ SITE ADDRESS: 103 Hendrickson Ave, Brick, NJ

IDENTIFICATION:

1. NAME OF OWNER IN FEE: Brick Township Board of Education

COMPLETE ADDRESS: 101 Hendrickson Ave.

Brick, NJ 08724

PHONE # 732-785-3000 EMAIL: _____

2. NAME OF APPLICANT: Altec Building Systems Corp.

APPLICANT ADDRESS: 904 Atlantic Ave.

Pt. Pleasant, NJ 08742

PHONE # 732-903-6264 EMAIL: info@altecbuildingystems.com

3. RESPONSIBLE PERSON FOR WORK: Bob Smith

PHONE # 732-609-1187 FAX # 732-903-6298

4. SIGNATURE OF APPLICANT: _____

FOR OFFICE USE ONLY

FEE SUMMARY:

APPLICATION FEE: \$ 0-

OTHER: \$ _____

TOTAL: \$ 0-

REQUIRED BY APPLICANT

RESIDENTIAL: _____

COMMERCIAL: Commercial

EXISTING USE: _____

PROPOSED USE: _____

BOARD APPROVAL: _____ PB _____ ZB _____

RESOLUTION #: _____

APPROVAL DATE: _____

PROJECT DESCRIPTION: (PLEASE CHECK APPLICABLE WORK & DESCRIBE)

*NEW BUILDING: _____ *ADDITION _____ *ALTERATION ☒ *PORCH _____ *DECK _____

POOL: ABOVE GROUND _____ IN GROUND _____ FENCE: HEIGHT _____ TYPE _____ MATERIAL _____

HEIGHT: _____ (*IF APPLICABLE)

OTHER: Solar System

DESCRIPTION: 150 KW Roof Mount System

ZONING REVIEW:

DATE REVIEWED: 5-9-16 DATE DENIED: _____ DATE APPROVED: 5-9-16 INITIALS: am

(SEE BACK PAGE)

TOWNSHIP OF BRICK ZONING CHECKLIST

1) Four (4) copies of plot plan containing:

- All existing and proposed structures
- All dimensions of the lot and structures
- All setbacks from the structures to the property lines
- All adjacent streets and waterways

- If applicable, include a copy of the Zoning Board of Adjustment Resolution, the date that the map was signed, and/or the date that the subdivision map was filed with the Ocean County Clerk, along with the file map and number.

2) Two copies of the plans with dimensions and heights noted:

- Floor plans and elevations
- Signed site plans
- Property map
- Survey map

Choose which is applicable for submission

3) Plot plans and building plans must match for complete review

NOTE: NO PARTIAL, TAPED, FAXED, REDUCED OR ENLARGED COPIES CAN BE ACCEPTED

01/2010

RECEIVED
MAY 25 2016

MAY 25 2016

ZONING

262

DATE REVIEWED: 5/20/16 DATE DENIED: — DATE APPROVED: 5/20/16 INTLS: MS20

[illegible]

DATE: COMMENTS:

INITIALS:

SENT TO FCC

pas

[illegible]

LAND USE

245 Attachment 5

Township of Brick

SCHEDULE OF AREA, YARD AND BUILDING REQUIREMENTS

Township of Brick

Ocean County, New Jersey

[Amended 6-26-1979 by Ord. No. 354-2B-79; 4-22-1980 by Ord. No. 354-2H-80; 10-14-1980 by Ord. No. 354-2N-80; 9-23-1980 by Ord. No. 354-1B-80; 8-25-83 by Ord. No. 354-2SS-83; 11-5-1984 by Ord. No. 354-2AAA-84; 11-5-1984 by Ord. No. 354-2CCC-84; 6-24-1986 by Ord. No. 354-2WWW-86; 9-13-1988 by Ord. No. 354-2TTT-88; 9-27-1988 by Ord. No. 354-2XXX-88; 9-12-2000 by Ord. No. 354-2EE-00; 5-9-2000 by Ord. No. 354-2Z-00; 3-26-2002 by Ord. No. 354-2C-02; 11-26-2002 by Ord. No. 354-2L-02; 3-25-2003 by Ord. No. 354-2D-03; 6-13-2006 by Ord. No. 19-06]

Zone	Minimum Lot Size						Minimum Required Yard Depth										Maximum Lot Coverage by Building	Maximum Building Height			Minimum Floor/Building Area (square feet) 2 stories/1 story	Maximum Allowable Impervious Coverage
	Interior Lots			Corner Lots			Principal Building						Accessory Building		Stories	Eaves (feet)		Ridge (feet)				
	Area (square feet)	Width (feet)	Depth (feet)	Area (square feet)	Width (feet)	Depth (feet)	Front Yard (feet)	Side Yard, Each (feet)	Both Sides Combined (feet)	Rear Yard (feet)	Side Yard (feet)	Rear Yard (feet)										
													25	50					150	25		
R-R	40,000	150	150	40,000	150	150	50	25			50	25	25	25%	-	25		-				
RR-2																						
RR-3																						
R-20	20,000	100	125	25,000	100	125	40	15	-		40	10	10	25%	-	25	35	38.5				
R-15	15,000	100	115	17,250	100	115	35	12	-		35	10	10	25%	-	25	35	38.5				
R-10	10,000	90	100	10,500	100	100	30	6	20	20	5	5	30%	-	25	35	38.5	-				
R-7.5	7,500	75	90	9,000	75	90	25	6	15	15	5	5	30%	-	25	35	38.5	-				
R-5	5,000	50	75	6,000	50	75	20	5	12	15	5	5	35%	-	25	35	38.5	-				
O-P	15,000	100	150	15,000	100	150	50	10	-	50	20	50	35% ²	2	-	35	38.5	1,500				
B-1	10,000	100	90	12,500	100	125	30	10	-	20	10	20	30% ²	2	-	35	38.5	1,000				
B-2	20,000	125	125	20,000	125	125	50	10	-	50	10	50	30% ²	2	-	35	38.5	2,000				
B-3	2 acres	200	200	2 acres	200	200	75	30	-	50	20	50	25% ²	-	-	35	38.5	2,000				
B-4	5 acres	300	300	-	-	-	100	50(150) ¹	-	100(150) ¹	20	50	25%	3	-	35	38.5	30,000				
M-1	5 acres	300	300	5 acres	300	300	100	50	-	150	75	150	30% ²	-	-	35	38.5	5,000				
R-M	25 acres	350	200	-	-	-	50	50	-	30	30	30	20%	-	25	35	38.5	-				
O-P-T	40,000	150	150	40,000	150	150	50	20	-	50	20	50	25% ²	2	-	35	38.5	2,000				
H-S														-	-	-	-	70%				

See § 245-90.

See § 245-103.

See § 245-261.

NOTES:

1. If adjacent to residential zone or use.
2. The maximum lot coverage shall refer only to that percentage of an affected lot which is suitable for building.
3. For rear yard setback requirements for accessory buildings on waterfront property, see § 245-100.

Attachment 5.1

FOR REFERENCE ONLY



Brick Township
401 Chambers Bridge Rd.

Brick, NJ 08723
(732) 262-1336

Date Issued:

Application Number: ZA-16-00743

Application Date: 05/09/2016

Project Number: _____

Permit Number: _____

Fee: \$0.00

Zoning Permit

Worksite **101 - 107 HENDRICKSON AVE**
Location: **Brick Township, NJ 08724**

Block: **1068**

Lot: **15.01**

Qualifier: _____

Zone: **O-P-T**

Owner: **BRICK TOWNSHIP BOARD OF EDUCATION**
Address: **101 HENDRICKSON AVE.**
BRICK, NJ 08724

Applicant: **Altec Buildings Solutions**
Address: **904 Atlantic Ave.**
Point Pleasant, NJ 08742

Application Approved Date: 05/09/2016

This Certifies that an application for the issuance of a Zoning Permit has been examined.

Use is: Brick Board of Education Facility (Veterans Memorial Middle School)

Nonconforming Use is: _____

Work Description:

Solar Energy System - Installation of a 650 KW solar panel system, mounted on the roof of the building.

Additional Zoning permit is required for additional work.

Upon review it was determined that the Zoning Permit:

- ☒ Permitted by Ordinance
- ☐ Permitted by Variance approved on: _____
- ☐ Valid Nonconforming Use is established by
 - ☐ Zoning Board of Adjustment
 - ☐ Zoning Officer

05/09/2016

Date

Christopher J. Romano
Christopher J. Romano, Assistant Zoning Officer

Sean Kinney
Sean Kinney, Zoning Officer

5/25/16
Date

7



ELECTRICAL SUBCODE TECHNICAL SECTION

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1008 Lot 15.01 Qualification Code _____

Work Site Location 105 Hendrickson Ave

Owner in Fee: Brick Township Board of Education

Tel. (732) 285-3000 e-mail _____

Address 101 Hendrickson Ave Brick NJ 08724

Contractor: Altec Electrical Corp. zip code 702 (903-6264)

Address 904 Atlantic Avenue e-mail jlawroski@altecbuildingsystems.com

Pt. Pleasant, NJ 08742

Contractor License No. 11073 Exp. Date 3/31/18

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): 13VH04948600

Federal Emp. ID No. 22-3292289 FAX: (732) 903-6298

B. ELECTRICAL CHARACTERISTICS

Use Group _____ Present _____ Proposed _____

[] Pole/Pad # _____ [] Temporary [] Other

Building Occupied as School Utility Co. JCP&L

Est. Cost of Elec. Work \$ 552,500

JOB SUMMARY (Office Use Only)		INSPECTIONS		Dates (Month/Day)	
PLAN REVIEW	Type:	Failure	Approval	Initial	
[] No Plans Required	Rough				
[] Partial - Underslab Utilities Approved	Barrier-Free				
Date: _____	Trench				
[] Electric Plans Approved	Temp. Serv.				
Date: <u>6/14/16</u>	Constr. Serv.				
Joint Plan Review Required:	TCO				
[] Bldg. [] Plumb. [] Fire. [] Elev.	Other				
SUBCODE APPROVAL FOR PERMIT	Service				
Date: <u>6/14/16</u>	Final				
Approved by: <u>[Signature]</u>	Barrier-Free				
SUBCODE APPROVAL FOR CERTIFICATE	Temp. Cut-In-Card Date Issued				
[] CO [] CCO [] CA	Final Cut-In-Card Date Issued				
Date: _____	Annual Pool Inspection				
Approved by: _____	Date of Grounding and Bonding				
	Certification				

Veterans Memorial MS



C. CERTIFICATION IN LIEU OF OATH
I hereby certify that I am the (agent of owner of record and am authorized to make this application and perform the work listed on this application.

Applicant sign/Contractor sign and seal here:

Print name here: James E. Lawroski Jr.

[] Licensed Elec. Contractor [] Certified Landscape Irrigation Contr'r [] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK: INSTALL SOLAR SYSTEM 650 KW

QTY. SIZE

ITEMS

Lighting Fixtures

Receptacles

Switches

Detectors

Light Poles

Motors—Fract. HP

Emergency & Exit Lights

Communications Points

Alarm Devices/F.A.C. Panel

TOTAL NUMBERS

Pool Permit/with UW Lights

Storable Pool/Spa/Hot Tub

KW Elec. Range/Receptacle

KW Oven/Surface Unit

KW Elec. Water Heater

KW Elec. Dryer/Receptacle

KW Dishwasher

HP Garbage Disposal

KW Central A/C Unit

HP/KW Space Heater/Air Handler

KW Baseboard Heat

HP Meter 444 HP Revenue

KW Transformer/Generator

AMP Service Disconnect

AMP Subpanels

AMP Meter Control Center Inverters

KW Elec. Sign/Outline Light

6/21/16
16-2043

Date Received
Control #

Date Issued
Permit #

Administrative Surcharge \$

Minimum Fee \$

State Permit Surcharge Fee \$

TOTAL FEE \$

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OR PLUMBER'S
LICENSE

State Of New Jersey
New Jersey Office of the Attorney General
Division of Consumer Affairs

THIS IS TO CERTIFY THAT THE
Division of Consumer Affairs

HAS REGISTERED

Altec Electric Corp./ Altec Building Systems Corp.
James E. Lawrosko Jr./Debra Lawroski
904 Atlantic Avenue
Point Pleasant Beach NJ 08742

FOR PRACTICE IN NEW JERSEY AS A(N): Home Improvement Contractor

03/03/2016 TO 03/31/2017
VALID

13VH04948600
LICENSE/REGISTRATION/CERTIFICATION #

Signature of Licensee/Registrant/Certificate Holder

ACTING DIRECTOR

New Jersey Office of the Attorney General
Division of Consumer Affairs

THIS IS TO CERTIFY THAT THE
Division of Consumer Affairs
HAS REGISTERED

Altec Electric Corp./ Altec Building Systems Corp.
Home Improvement Contractor

NOT AN ELECTRICIAN'S OR PLUMBER'S LICENSE
03/03/2016 TO 03/31/2017

SIGNATURE

13VH04948600

License/Registration/Certificate #

ACTING DIRECTOR

PLEASE DETACH HERE
IF YOUR LICENSE/REGISTRATION/
CERTIFICATE ID CARD IS LOST
PLEASE NOTIFY:
Division of Consumer Affairs
P.O. Box 46016
Newark, NJ 07101

PLEASE DETACH HERE

Veterans Memorial M.S.

ENGINEERING PERMIT APPLICATION

RECEIVING CLERK: _____
PERMIT #: _____

BLOCK: 1068

LOT: 15.01 ADDRESS: 103 Hendrickson Ave, Brick, NJ 08723

IDENTIFICATION:

1. WORK SITE ADDRESS: 103 Hendrickson Ave, Brick, NJ 08723

2. NAME OF OWNER IN FEE: Brick Township Board of Education

ADDRESS: 101 Hendrickson Ave, Brick, NJ 08724 PHONE #: 732 903-6264 FAX #: ()

3. PRINCIPAL CONTRACTOR: Alter Building Systems Corp.

ADDRESS: 904 Atlantic Ave, Pt. Pleasant, NJ 08742 PHONE #: 732 903-6264 FAX #: 732 903-6298

4. ARCHITECT OR ENGINEER: Stanley

ADDRESS: 1971 Rt. 24 Wall, NJ 07719 PHONE: # 732 449-0099

5. RESPONSIBLE PERSON FOR WORK: Bob Smith

ADDRESS: 904 Atlantic Avenue, Pt. Pleasant, NJ 08742
PHONE #: 732 609-1187 FAX #: 732 903-6298 E-MAIL: bsmith@alterbuilding.com

PROJECT DESCRIPTION: ☐ GRADING/CLEARING ☐ ROAD OPENING
☐ SOIL REMOVAL/FILL ☐ RETAINING WALL ☐ POOL
☐ BULKHEAD/DOCK ☐ DWELLING ☐ TREE REMOVAL
☐ OTHER _____

LENGTH: _____ WIDTH: _____ HEIGHT: _____

ENGINEERING REVIEW:

FEE SUMMARY:

APPLICATION FEE: \$ _____
REVIEW FEE: \$ _____
INSPECTION FEE: \$ _____
OTHER: \$ _____
BOND(S): \$ _____
TOTAL: \$ _____

SPECIAL CONDITIONS:

OCEAN COUNTY SOILS: _____

DRAINAGE EASEMENTS: _____

UTILITY EASEMENTS: _____

CONSERVATION EASEMENTS: _____

FEMA REQUIREMENTS: _____

D.E.P. PERMITS: _____

BOARD APPROVAL: ☐ PB ☐ ZB

APPLICATION NUMBER: _____

APPROVED DATE: _____

DATE RECEIVED: _____

DATE REJECTED: _____

DATE APPROVED: _____

INITIALS: _____

TOWNSHIP OF BRICK

OCEAN COUNTY, NEW JERSEY
401 CHAMBERS BRIDGE ROAD, BRICK, N.J. 08723

John G. Ducey, Mayor

Township Council:

Paul Mummolo - President
Heather deJong - Vice
President
Jim Fozman
Susan Lydecker
Bob Moore
Marianna Pontoriero
Andrea Zapcic



Division of Engineering

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Date: 5/3/16

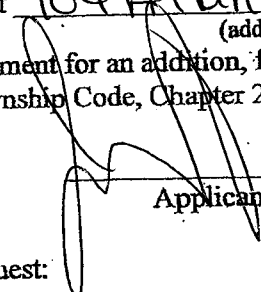
**ENGINEERING
PLOT PLAN EXEMPT FORM
(ONLY IF NOT IN A FLOOD ZONE)**

Block: 1008 Lot: 15.01

Property Address: 103 Hendrickson Ave.

I, James E. Lawroski, Jr. of 904 Atlantic Ave, Pt. Pleasant
(name) (address)

request to be exempt from the plot plan requirement for an addition, fence, shed, deck,
pool, retaining wall, etc. as outlined in the Township Code, Chapter 245, Section 245-29.


Applicant's Signature

The following shall be submitted with this request:

1. Submit surveys locating existing dwelling and proposed addition. Dimensions of the addition should be included.
2. **Proof that the property is not located in a Flood Hazard Area.**

Note: Prior to approval a site inspection by the Engineering Department will be performed to verify that the proposed addition will not create a drainage problem.

FOR OFFICE USE ONLY

Approved on: _____ Signed: _____

Rejected on: _____ Signed: _____

Comments: _____



