



TOWN OF FRANKLIN - SITE OBSERVATION REPORT

Tri-County Solar, 147 Pond Street

Report No.:	4831 05 - 004	Date:	Wednesday, 6/17/15	Arrive:	10:00 AM
Observers:	Matt Crowley, PE	Weather:	Sunny, ~68°	Leave:	10:20 PM
Owner:	John Roy Tri-County Regional Vocational School 147 Pond Street Franklin, MA 02038	Contractor:	Pro-tech Energy Solutions 215 Executive Drive Moorestown NJ 08057 Ken Lacourse		908-552-5690

Items Observed: **Conformance Observation – Submitted in conjunction with Applicant’s request for acceptance of Form H – Certificate of Completion**

OBSERVATIONS

Observation Requested By: Dan Diamond

Met/walked site with: Ken Lacourse - Protech, Jim Mellors – Sun Edison

Current Activity on Site: No current activity

Observed Construction: BETA arrived at the request of the Applicant to perform a supplementary final site walk. BETA previously performed a final site walk on May 11, 2015 and documented outstanding work items in **Report No. 4831 05-003**. An As-built plan, revised to 5/20/15, was also provided to BETA by email and depicts all observed site features.

A limited amount of work has been performed on the site since the last inspection, most notably resetting the chain link fence along the southwest portion of the site to eliminate the 12” gap beneath. BETA observed that the fence was now installed in accordance with the approved plans and was no longer a safety concern.

BETA observed that grass had begun germination and vegetative cover ranged from good to poor throughout the site. The Contractor stated that some of the previously placed seed had been washed out and that new seed was recently placed in these areas. The Contractor also stated that additional seeding would be scheduled for the southwest stormwater detention area, where little vegetation was present. BETA inquired as to whether watering would take place if needed and the Contractor confirmed they had a mobile watering truck that could be used. Erosion controls were still in place and should be removed upon the establishment of vegetative cover.

BETA discussed revisions from the approved plans and outstanding work items detailed in the previous report with the Contractor. The Contractor stated that he received an email from Carey Ruetsch of Whitman, which stated that the depressed concrete curb called for in the approved plan set did not need to be installed. BETA received a copy of this email (attached) and notes that the existing Cape Cod berm in this area can be easily traversed to access the project site.

The Contractor also discussed the field change of the site information sign located on the entrance gate. He stated that the sign in the approved plan set referenced the Tri-County Regional School as the contact for the

Tri-County Solar, 147 Pond Street.
Site Observation Report No. 004
June 17, 2015

site and this was incorrect since they would not have access to the site. He further stated that this issue had been discussed and that the current sign mounted to the gate correctly referenced Sun Edison as the contact.

Based upon the site inspection and discussion above BETA notes the following revisions from the approved site plans:

- No loam placed on disturbed soils throughout site. Seeding applied directly to existing soils.
- Gravel access road materials modified (refer to Report 4831 05-003 for discussion). BETA notes the As-built plan set has been updated to depict the revised access road materials.
- Depressed curb not installed at interface of existing parking lot and gravel access road (see above discussion and attached email).
- Site information sign (located on entrance gate) revised from that detailed on approved plans (see above discussion).
- Electrical equipment placed upon individual concrete pads instead of single large concrete pad and located closer to access gate than depicted on approved plans. Bollards added to protect electrical equipment. BETA does not see these revisions as an issue.
- Rip rap installed along southwesterly drainage swale to minimize erosion potential. BETA does not see this revision as an issue.

Due to previously noted changes in grading that may affect the storage volumes of on-site swales, BETA has requested calculations demonstrating that As-built storage volumes are not less than those approved during the design process. The Contractor has stated that calculations will be provided at or prior to the Planning Board meeting.

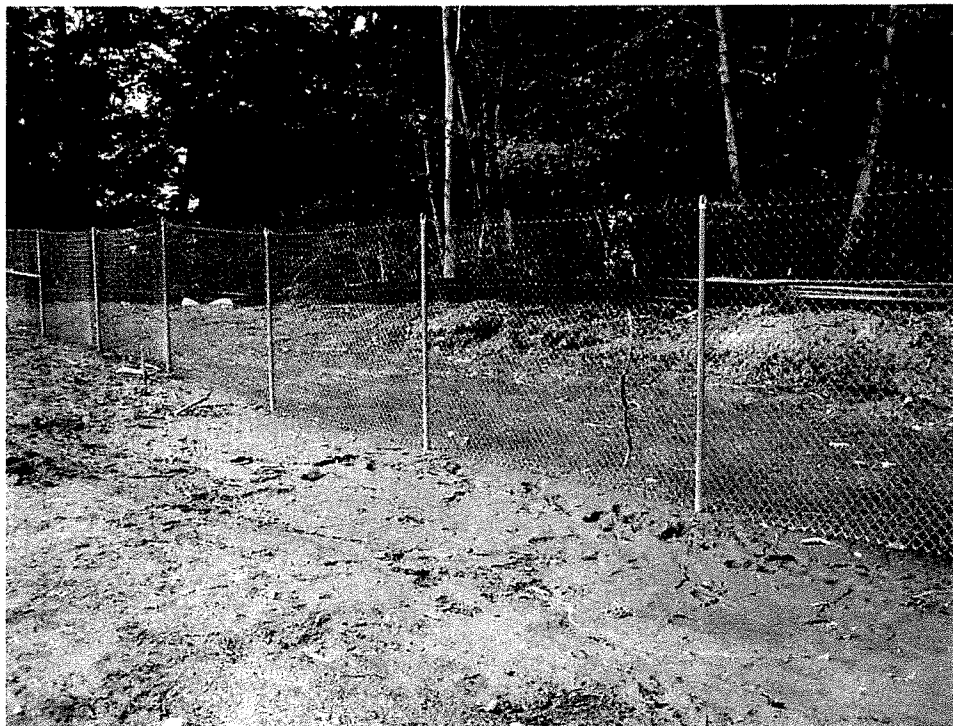
Photos Attached:

Tri-County Solar, 147 Pond Street.
Site Observation Report No. 004
June 17, 2015

SITE PHOTOS



Typical vegetative cover at west of site



Reset security fence eliminating gap beneath



Typical vegetative cover at racking system swales



Lack of vegetation in stormwater detention area (southwest corner of site)



TOWN OF FRANKLIN

DEPARTMENT OF PUBLIC WORKS

257 Fisher Street
Franklin, MA 02038

June 24, 2015

Mr. Anthony Padula, Chairman
Members of the Franklin Planning Board
355 East Central Street
Franklin, MA 02038

Form H - 147 Pond Street, Tri-County Regional Vocational School

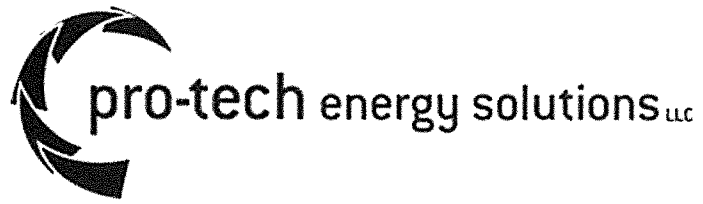
We have the following comments regarding the applicant's request for Acceptance of Certification of Completion.

1. The As-Built Plans that we received include a note referring to As-Built Survey Plans for grading and equipment locations prepared by Bertin Engineering. We did not receive a copy of this plan.
2. BETA's inspection report indicated that they are still waiting for calculations verifying adequate storage has been constructed. This should be submitted prior to final acceptance.
3. BETA's inspection report also indicated that no loam was placed and that the grass has not yet been fully established. I'm concerned about erosion and siltation of the drainage channels if adequate ground cover is not established. While I don't see an issue with the solar panels put into operation while the turf is established, I recommend final acceptance not be accepted until adequate ground cover is in place.

Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Michael Maglio, P.E.
Town Engineer



Matthew J. Crowley, PE

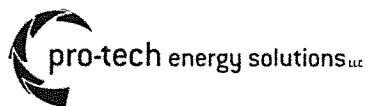
June 29, 2015

BETA Group, Inc.

Per your request, the total recharges volume purposed by SLB Group LLC. Dated March 3, 2014 is 20,377 ft3.

The existing design by Bertin Engineering shows a recharge volume of 22,547 c.f.

Kenneth A Lacourse





**BERTIN
ENGINEERING**

39 ELM STREET
SOUTHBRIDGE, MA 01550
P 508.765.0195
F 508.765.0193
www.bertinengineering.com

August 21, 2015

Protech Energy Solutions

RE: Drainage
Tri-County Regional Vocation Technical High School
147 Pond Street
Franklin, MA 02038

To Whom It May Concern:

Bertin Engineering did a calculation to determine the "as built" swale recharge volume provided on the site with comparison to the original design plan's swale recharge volume. When originally designed, according to the drainage report, dated March 3, 2014 by Strong Civil Design and SLB Group, LLC, the total recharge volume provided was 39,404 cubic feet. As built, the site has a total of 20,417 cubic feet of storage, this includes the swales at the end of each row of panels as well as the detention basins throughout the site.

Respectfully Submitted,

Jason Dubois, P.E.
Project Manager

GLEN ROCK, NJ • ABU DHABI, UAE

CIVIL • SURVEYING • TRAFFIC • STRUCTURAL • ENVIRONMENTAL • MECHANICAL • LANDSCAPE