



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Web Site: portal.ct.gov/esc

VIA ELECTRONIC MAIL

May 16, 2023

Kam El Assaad
Associate Project Manager
TotalEnergies Renewables USA
262 Washington St, 7th Floor
Boston, MA, 02108 USA
Kamel.el-assaad@totalenergies.com

RE: **PETITION NO. 1514** – Connecticut Green Bank and CEFIA Holdings, LLC declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.95-megawatt AC solar photovoltaic electric generating facility located at the Maloney & Webster Correctional Institutions at 900 Highland Avenue, Cheshire, Connecticut, and associated electrical interconnection.

Dear Kam El Assaad:

The Connecticut Siting Council (Council) is in receipt of your correspondence dated May 12, 2023, regarding compliance with Condition Nos. 2 and 4 of the Council's Declaratory Ruling issued on August 19, 2022 for the above-referenced facility. The correspondence includes a copy of the DEEP Stormwater Permit, in accordance with Condition No. 2, and the final structural design for the racking system, stamped by a Professional Engineer duly licensed in the State of Connecticut, in accordance with Condition No. 4.

Therefore, the Council acknowledges that Condition Nos. 2 and 4 have been satisfied. This acknowledgment applies only to the conditions satisfied by the May 12, 2023 correspondence.

Please be advised that deviations from the standards established by the Council in the Declaratory Ruling are enforceable under the provisions of Connecticut General Statutes §16-50u.

Thank you for your attention and cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Melanie A. Bachman".

Melanie A. Bachman
Executive Director

MB/RDM/laf

c: Service List, dated June 8, 2022

From: Kamel EL ASSAAD <kamel.el-assaad@totalenergies.com>
Sent: Friday, May 12, 2023 2:23 PM
To: CSC-DL Siting Council <Siting.Council@ct.gov>
Cc: Evan MAZZAGLIA <evan.mazzaglia@totalenergies.com>; Emily Basham <emily.basham@ctgreenbank.com>; Bachman, Melanie <Melanie.Bachman@ct.gov>
Subject: CTGB Maloney & Webster Petition #1514 - Pre-construction Update

Dear Siting Council,

I wanted to provide an update on the status of the CTGB Maloney & Webster Correctional Institution Solar Project (Petition no. 1514). We just received our building permit from the CT Office of Building Inspector (DAS) and are planning to mobilize in the next month.

I'm attaching the DEEP Stormwater permit approval letter as well as the final structural racking system design stamped by a CT licensed PE to fulfill conditions 2 and 4 of the Siting Council Staff Report (also attached).

Please let me know if you have any questions or concerns.

Many thanks,



Kam El Assaad
Associate Project Manager

Gas, Renewables & Power (GRP)
Distributed Generation

TotalEnergies Renewables USA
262 Washington St, 7th Floor
Boston, MA, 02108 USA
M.: +1 (646) 965-3583
Kamel.el-assaad@totalenergies.com
Corporate.totalenergies.us



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

NOTICE OF PERMIT AUTHORIZATION

Date: 12/13/22

ATTN: Edward Pustilnik, President

Mailing Address:

Alternative Power Generation Inc.
691 N. Church Rd.
Elmhurst, IL 60126-1427

Site Information:

Maloney & Webster Correctional Institution
900 Highland Avenue
Cheshire, CT 06410

RE: General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities
Permit No. GSN003859, issued to Alternative Power Generation Inc.
Application No. 2022008443

Dear Mr. Pustilnik:

The Department of Energy and Environmental Protection, Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance, has completed the review of the Maloney & Webster Correctional Institution (located at 900 Highland Avenue) registration for the **General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 12/31/2020 (general permit)**. The project is compliant with the requirements of the general permit and the discharge(s) associated with this project is (are) authorized to commence as of the date of this letter. Permit No. GSN003859 has been assigned to authorize the stormwater discharge(s) from this project.

Should you have any questions about this letter or any other question concerning the general permit, please feel free to contact Christopher Stone, P.E. at 860-424-3850 or chris.stone@ct.gov.

Sincerely,
Karen L. Allen, PE
Supervising Sanitary Engineer
Water Permitting and Enforcement Division
Bureau of Materials Management and Compliance Assurance

MODULE SPECIFICATION SHEETS

NEW

BHIH16G
520 W – 550 W
BIFACIAL MONO PERC
CSW-520 525 | 530 | 535 | 540 | 545 | 550 MW AG

MORE POWER
Module power up to 550 W
Module efficiency up to 21.4 %
Up to 12.5% lower LCOE
Up to 3.2% lower output cost

30 Year Power Warranty
30 Year Power Warranty on Materials and Performance Warranty*
*Year power degradation no more than 0.5%
Independent third party power degradation test more than 1000 hrs

IMPROVED LID/LIFE INTEGRATION
Comprehensive LID/LIFE integration technology with 500,000 laser dopings

Compatible with standard trackers
Comprehensive LID/LIFE integration technology with 500,000 laser dopings

Anti-radiation shielding
Comprehensive LID/LIFE integration technology with 500,000 laser dopings

INNOVATIVE
Micro inverter on each module

High power load up to 550 Pa
Wind load up to 2400 Pa*

CEC Solar Co. Ltd. is committed to providing high quality solar photovoltaic products, safe and reliable solar panel modules to our customers. The company was recognized as the No. 1 module supplier for quality and performance in the 2023 NREL Solar Customer Weight Survey. Over the past 20 years, it has successfully delivered over 150 GW of premium quality solar modules across the world.

CSI Solar Co. Ltd.
1100 Lufan Road, S60, Suzhou, Jiangsu, China, 215129, www.csisolar.com, support@csisolar.com

Electrical Data Table

Model	Power	Voltage	Current	Operating Conditions				Module Efficiency (%)
				Power	Voltage	Current	Power	
CSW-520 525	520W	110V	4.72	14.84	40.0	24.6	21.0	21.0
		120V	4.55	14.44	39.5	24.3	20.8	20.8
CSW-530 535	530W	110V	4.82	15.03	40.0	24.6	21.0	21.0
		120V	4.63	14.63	39.5	24.3	20.8	20.8

Temperature Characteristics

Characteristic	Value
Operating Temperature	-25°C ~ 85°C
Max. System Voltage	1500V (DC)
Max. System Power	1500V (DC)
Temperature Coefficient	-0.33% / °C

GENERAL NOTES

- GENERAL CONSTRUCTION:**
- All work shall conform to the requirements of the applicable construction code and the project specifications.
 - Contractor and subcontractors shall be licensed prior to commencement of construction.
 - Contractor shall submit for review all specifications.
 - Work shall be subject to change per requirements of the contract documents.
 - Contractor shall not be responsible for the means, methods, techniques or procedures of construction selected by contractor.
 - Contractor shall be responsible for all safety and health requirements, including all applicable codes and standards.
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- STRUCTURAL STEEL:**
- All structural steel shall be designed, fabricated and erected in accordance with the latest version of AISC Manual of Steel Construction, Part 5. All steel shall be conform to AISC specifications for structural steel.
 - Materials:
 - A. ROLLED SHAPES: ASTM A992, Fy = 50 ksi
 - B. PLATES: ASTM A572, Fy = 50 ksi
 - C. TUBULAR SHAPES: ASTM A500, Fy = 50 ksi
 - D. WELDS: E70XX, Fy = 70 ksi
 - E. BOLTS: A325, Fy = 70 ksi
 - F. ANCHOR BOLTS: A307, Fy = 48 ksi
 - Tenon bolts shall be installed in accordance with AISC specifications for tenon bolts.
 - Refer to the latest Terrestrial for a complete list of materials and specifications for structural steel.
 - All structural steel shall be erected in accordance with the latest version of AISC Manual of Steel Construction, Part 5.
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- MISCANEOUS FASTENERS:**
- All bolts shall be the type and grade indicated on drawings.
 - All hardware used for anchoring piles shall be 316L stainless steel unless noted otherwise.
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- FOUNDATIONS:**
- The foundation shall be based on a minimum of one allowable stress test per pile.
 - Concrete shall be placed in accordance with AISC specifications for concrete.
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terrasmart
4715 STEEGER DRIVE
CHICAGO, IL 60631
TEL: 773.462.2051
FAX: 773.224.2018

PROFESSIONAL SEAL
Professional Seal of the State of Illinois
Professional Engineer
No. 123456789
Date: 1/15/2024

GROUND MOUNT FOR ALTERNATIVE POWER GENERATION

WORKING COORDINATION

- All working shall be completed by other prior to termination.
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RELEASE RECORD

No.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

PROJECT INFORMATION

TITLE & ADDRESS: MALONEY & WEBSTER
800 HIGHLAND AVE. CHESHIRE, CT 06410
TERRASMART PROJECT NO. 2230015
DRAWN BY: LGB/SBAND
REVIEWED BY: LGB/SBAND
DATE: 1/15/2024
SHEET NO. 22
SPECIFICATION SHEETS: SG002

RACK SYSTEM TOPOGRAPHIC RELATIONSHIP

LEVEL LINE
RACK SLOPE WIRES

REQUIREMENTS:
1. MINIMUM RACK SLOPE SHALL BE 1% GRADE.
2. ALL RACK SLOPES SHALL BE 1% GRADE.
3. TOP OF RACK SLOPE SHALL BE 1% GRADE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE RACK SLOPE.

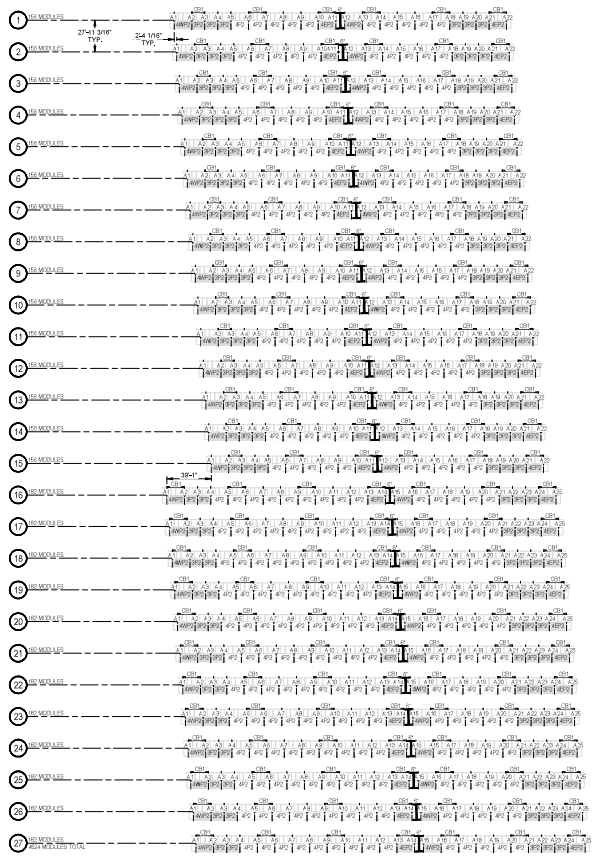
FOLLOW GRADE

PROFESSIONAL SEAL
 REGISTERED ELECTRICAL ENGINEER
 STATE OF CONNECTICUT
 License No. 10015

**GROUND MOUNT FOR
 ALTERNATIVE POWER
 GENERATION**

RELEASE RECORD
 1. 12/20/18 1.000000 1.000000
 2. 01/22/19 1.000000 1.000000
 3. 02/22/19 1.000000 1.000000
 4. 03/22/19 1.000000 1.000000
 5. 04/22/19 1.000000 1.000000
 6. 05/22/19 1.000000 1.000000
 7. 06/22/19 1.000000 1.000000
 8. 07/22/19 1.000000 1.000000
 9. 08/22/19 1.000000 1.000000
 10. 09/22/19 1.000000 1.000000
 11. 10/22/19 1.000000 1.000000
 12. 11/22/19 1.000000 1.000000

PROJECT INFORMATION
 TITLE & ADDRESS
MALONEY & WEBSTER
 500 HIGHLAND AVE
 CHESTER, CT 06410
 TERRASMART PROJECT No.
 220015
 DRAWN BY: JAS REVISOR: LGOSBAND
 SHEET TITLE: ARRAY: 1 COMPONENT LAYOUT
 SHEET NO: **SG101**



LEGEND

Symbol	Notes
	CABLE X-BRACE
	POST

CABLE X-BRACE SCHEDULE

SYMBOL	SETS	DETAIL	NOTES
	174	03-5020	WORKSHEET SET OR SCHED LIST TO VERIFY SETS ARE CORRECT.
	168		
	162		
	156		
	150		
	144		
	138		
	132		
	126		
	120		
	114		
	108		
	102		
	96		
	90		
	84		
	78		
	72		
	66		
	60		
	54		
	48		
	42		
	36		
	30		
	24		
	18		
	12		
	6		

NOTE: SETS ARE FOR 12' SPACING OF 2 STRANDS OF 3/4" GALV. PIPE. SETS ARE MORE IF OTHER SPACING IS USED.

POST SCHEDULE

SYMBOL	MARK	DESCRIPTION	LENGTH	HIGHS	DETAIL
	A	POST	114"	300	065030
	B	POST	114"	300	065030

NOTE: POSTS ARE TO BE CENTERLINE TO CENTERLINE OF POST WEB.

REFERENCE TO 04.100 FOR ADDITIONAL INFORMATION ON HEIGHTS FOR TRIMMED TOPPING.
 0.400' TO 0.450' FOR 4" DIA. POSTS, TO ALLOW FOR 0.100' DIA. SCHEDULE.

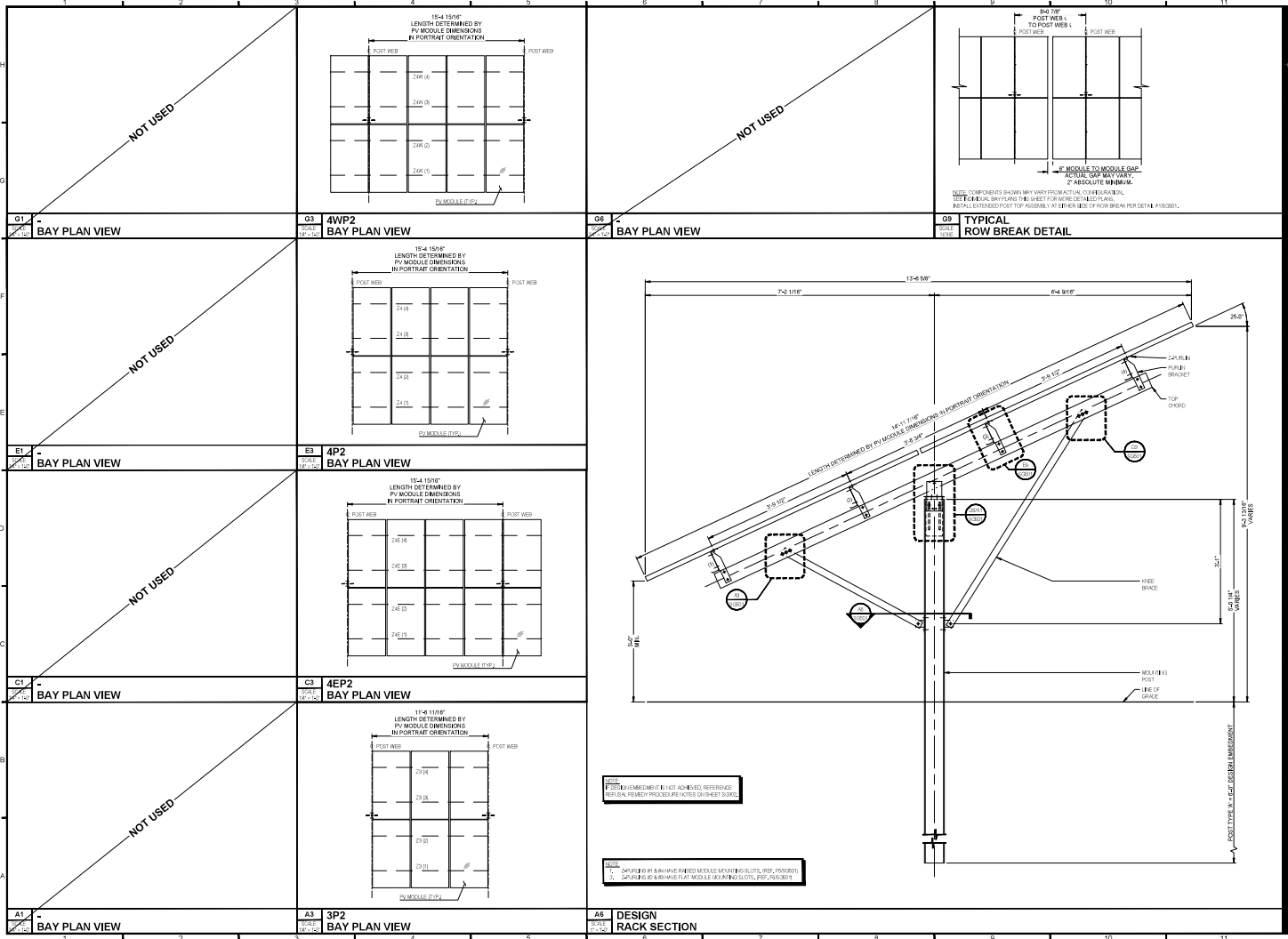
BAY SCHEDULE

BAYS		PURLINS		DETAIL
TYPE	QTY.	MARK	REAR	PSG.
1	30	300	4	085020
2	60	300	4	085020
3	90	300	4	085020
4	120	300	4	085020
5	150	300	4	085020

NOTE: BAYS ARE 12' ON CENTER UNLESS OTHERWISE NOTED.
 0.400' TO 0.450' FOR 4" DIA. POSTS, TO ALLOW FOR 0.100' DIA. SCHEDULE.
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**ARRAY: 1
 COMPONENT LAYOUT**





terrasmart®
8715 STEGER DRIVE
CHICAGO, IL 60637
630.342.2051
FAX: 630.342.0818

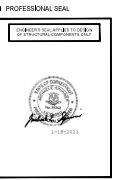
PROFESSIONAL SEAL
STATE OF ILLINOIS
PEACE
EXPIRES

GROUND MOUNT FOR ALTERNATIVE POWER GENERATION

RELEASE RECORD	
NO.	DATE
1.	
2.	
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11.	
12.	
13.	
14.	
15.	

PROJECT INFORMATION	
TITLE & ADDRESS: MALONEY & WEBSTER	
800 HIGHLAND AVE CHESHIRE, CT 06410	
TERRASMART PROJECT No. 2230015	
DRAWN BY:	REVIEWED BY:
JAS	LGBOSHAND
SHEET TITLE: RACK SECTION & BAY PLAN VIEWS	
SHEET No. SG301	

1524.41.dwg (05/12/2022 10:55:22 AM) User: JAS Date: 05/12/2022 10:55:22 AM



GROUND MOUNT FOR ALTERNATIVE POWER GENERATION

■ RELEASE RECORD

NO.	DATE	DESCRIPTION

■ PROJECT INFORMATION

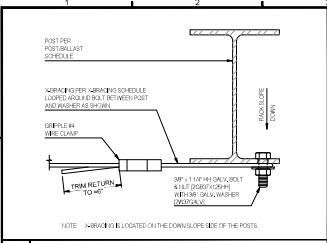
TITLE / ADDRESS:
 MALONEY & WEBSTER

TERMSMART PROJECT NO.:
 2200015

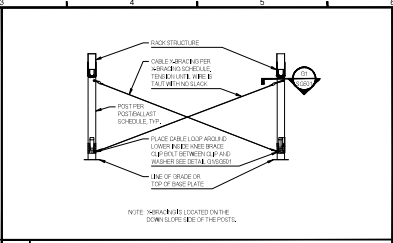
DRAWN BY: JAB **REVIEWED BY:** LGB/SBAND

PREP TITLE: DETAILS

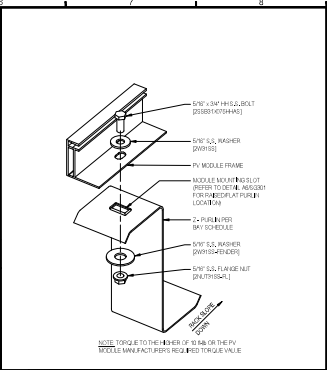
SHEET NO.: **SG501**



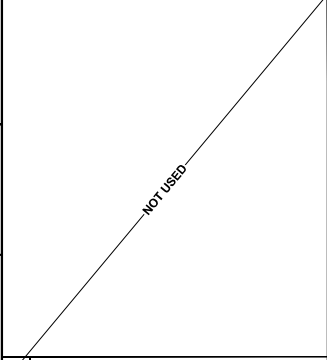
G1 X-BRACE TO POST CONNECTION DETAIL



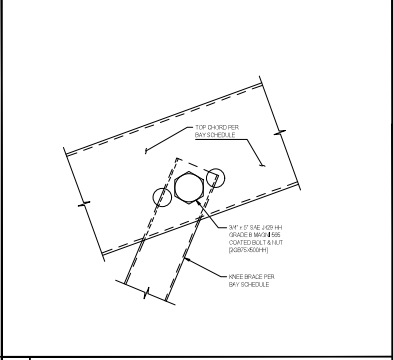
G3 X-BRACING ELEVATION



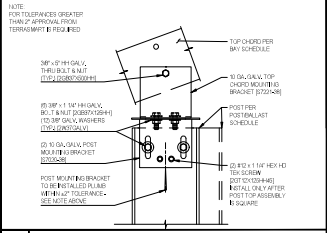
F6 PV MODULE TO PURLIN CONNECTION DETAIL



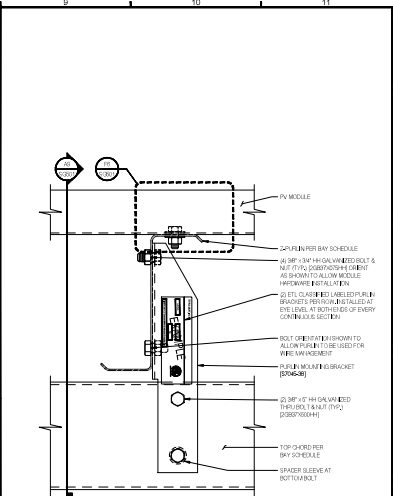
G2 WEEB PV MODULE BONDING WASHER DETAIL



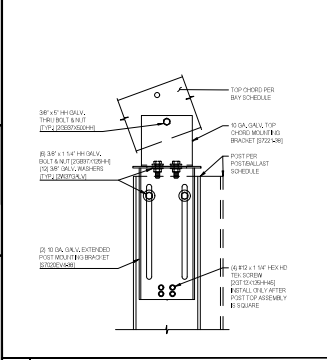
D3 UPPER KNEE BRACE TO TOP CHORD CONNECTION DETAIL



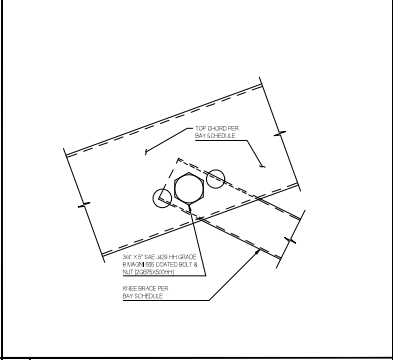
D6 TOP CHORD TO POST CONNECTION DETAIL



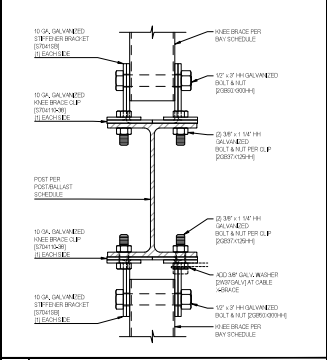
E9 TRANSVERSE PURLIN CONNECTION DETAIL



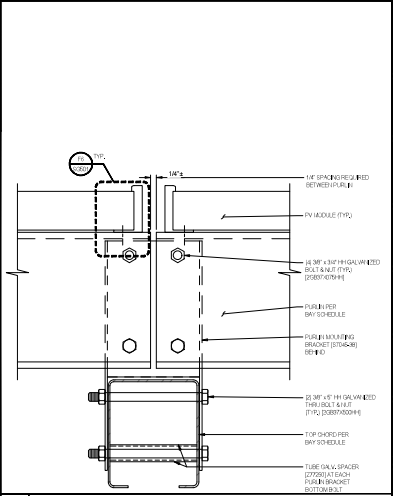
A1 TOP CHORD TO POST CONNECTION DETAIL (EXTENDED)



A3 LOWER KNEE BRACE TO TOP CHORD CONNECTION DETAIL



A6 KNEE BRACE TO POST CONNECTION DETAIL



A8 LONGITUDINAL PURLIN CONNECTION DETAIL