

# What Powers You

June 5<sup>th</sup>, 2023

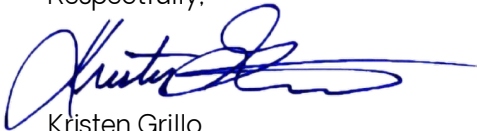
Melanie Bachman, Esq.  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

RE: **PETITION NO. 1497A** - Bloom Energy Corporation amended petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a customer-side 2-megawatt fuel cell facility and associated

Dear Ms. Bachman:

Please see the attached responses to interrogatories provided to Bloom Energy on May 16<sup>th</sup>, 2023.

Respectfully,



Kristen Grillo  
**Senior Permitting Specialist | East Coast Field Office**  
Customer Installations Group | North America  
(917) 803-4511  
[Kristen.Grillo@bloomenergy.com](mailto:Kristen.Grillo@bloomenergy.com)



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4353 North First Street, San Jose, CA 95134  
408 543 1500  
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Petition No. 1497A  
Bloom Energy Corporation  
Bridgeport Hospital  
267 Grant Street, Bridgeport

Interrogatories  
May 16, 2023

### Notice

1. Referring to Petition, p. 10, has the City of Bridgeport (City) and/or any abutting property owners provided comments to Bloom since the amended Petition filing? If yes, summarize the comments.

**Response: Since the amended Petition filing, Bloom has not received any comments from any of the abutting property owners.**

### Project Development

2. Referencing Amended Petition p. 3, the facility was selected as part of the LREC program under Connecticut General Statutes §16-244t. Was the facility selected as part of the Non-Residential Renewable Energy Solutions (NRES) Program, which is the successor to the LREC program as of June 30, 2021? If so, what are the differences in program administration and/or requirements for the facility?

**Response: The facility is still selected as part of the LREC program, with a contract length of 15 years. It is not a part of the NRES program.**

3. What was the result of the concept review meeting with City representatives held on April 27, 2023?

**Response: A representative of Bloom met with Lynn Haig, City Planner; Jackson Strong, Design Review Coordinator; and Nick Sampieri from the Zoning Office on April 27, 2023, presented information on the project and the Council's process, and responded to questions.**

The City representatives informed Bloom that the City has established urban design standards that lead to a focus on the pedestrian experience of the project, particularly with respect to the immediate sidewalk area at the corner of Central Avenue and Ford Place. The City asked whether the site layout could be turned 90° so that the long line of equipment would run along the property boundary between 1524-26 Central Ave and the 267 Grant Street parking lot (thus minimizing the immediate street-side visual impact); and/or whether plantings (shrubs) could be inserted between the equipment and the existing wrought iron fence on the south and west sides of the 1524-26 Central Ave parcel.



# What Powers You

**No correspondence or communication has followed the meeting. Bloom's response to comparable inquiries by the Council is found in these interrogatory responses.**

4. What is the estimated cost of the proposed amended project?

**Response: The estimated cost of the proposed amended project is \$2,030,115.**

## Proposed Site

5. Amended Petition Site Plan G1.1 shows the layout of the fuel cell and cabinet/meter pad arranged in a north-south orientation. Could rearrangement of the proposed facility in an east-west configuration provide a buffer to Central Avenue and Ford Place and preserve the two parking spaces? Explain.

**Response: The proposed installation was originally contemplated with an east-west configuration. However, in order to minimize the sound barrier requirements due to proximity to the adjacent eastern residential property, the site was re-oriented as currently shown to pull it away from that property line to the greatest extent practicable. Additionally, regardless of orientation, at least one parking spot will still need to be removed in order to provide service access to the site.**

## Public Safety

6. What is the height of the existing wrought iron fence referenced on Amended Petition pages 8-9? What is the height of the existing chain link fence adjacent to Central Avenue at the northwest end of the fuel cell and in the gas meter area? Would the wrought iron fence be extended in this area to "soften views" of the facility?

**Response: The height of the existing wrought iron fence is ~6.5' and the height of the existing chain link fence is ~5'. There is no plan to extend the wrought iron fence along the existing parking lot.**

7. Amended Petition Site Plan C1.1 Note 21 references "congested underground area. Contractor shall use extreme caution while crossing." Could the construction or operation of the proposed facility impact or interfere with any existing utilities or infrastructure within the project area? If so, identify any measures that would be employed to protect existing utilities or infrastructure from impact or interference.

**Response: The noted language is intended to ensure that there is no interference or damage to existing utilities or infrastructure during construction by alerting the contractor. We are updating note 21 on sheet C1.1 to require hand digging as necessary.**



# What Powers You

8. Amended Petition Site Plan C1.1 shows the location of the 14-foot sound barrier, as recommended in the Amended Petition Acoustical Analysis report.

a. What would the sound barrier be composed of and what veneer is proposed?

**Response: The sound barrier will be composed of a chain link fence with Acoustiblok Acoustifence black vertical curtains pinned to the fuel cell side of the fence.**

b. Provide a photograph of a similar sound barrier of the same proposed materials, if available.

**Response: Please see below example photos from the Acoustiblok website for reference.**



c. Provide construction detail of the proposed sound barrier.

**Response: Please see attached sheet C3.1, detail 4 for fence detail and sheet S1.0 for fence footing details. Because the sound barrier is a material that hangs on the fence, there is no construction detail associated with the sound barrier itself.**

d. The sound barrier includes an 8-foot wide gate to access the meter/cabinet pad; however, the Acoustical Analysis report recommended that the sound barrier be solid, with no gaps or openings. How will the gate affect the sound dampening characteristics of the barrier?

**Response: The gaps in the gate will be minimal and will have minimal impacts to the sound dampening characteristics of the barrier.**

e. Can the sound barrier be relocated to the east side of the meter/cabinet pad, while maintaining the exact 6.5 foot distance away from the face of the nearest fuel cells as recommended in the Amended Petition Acoustical Analysis report?



# What Powers You

**Response: The proposed location of the sound barrier complies with the recommendation in the acoustical analysis report. There are no fuel cells on the meter/cabinet pad, which supports only ancillary equipment that generates only negligible noise.**

- f. Would a facility orientation in an east-west configuration instead of a north-south configuration reduce operational facility noise at 25 Ford Place, potentially requiring no sound barrier or a barrier of reduced height?

**Response: Orientation in an east-west configuration would increase operational facility noise at 25 Ford Place. As noted above in response to Interrogatory No. 5, that orientation was contemplated originally, and the site was redesigned to minimize noise at the adjacent residential receptor.**

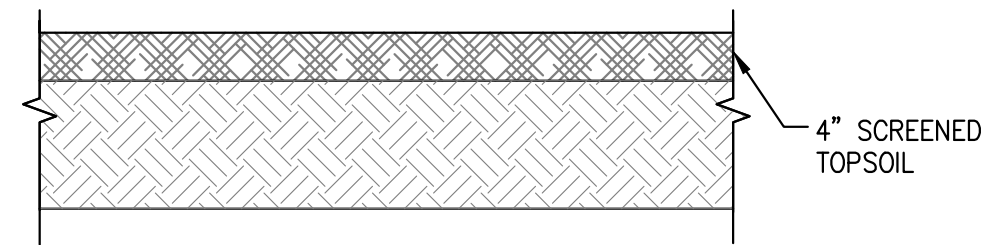
- g. What is the estimated cost of the sound barrier?

**Response: The estimated cost of the sound barrier is \$152,185.**



**Attachment 1: Sound Barrier Site Plan Detail**





- ALL DISTURBED LANDSCAPE AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE PERMANENT LANDSCAPE RESTORATION AND RESEEDING SPECIFICATIONS ON THIS SHEET.

**PERMANENT LANDSCAPE RESTORATION AND RESEEDING SPECIFICATIONS (AFTER CONSTRUCTION)**

- SITE PREPARATION
  - BRING AREA TO BE SEED TO REQUIRED GRADE. A MINIMUM OF 4" OF TOPSOIL IS REQUIRE.
  - PREPARE SEED BY LOOSENING SOIL TO A DEPTH OF 4 INCHES.
  - REMOVE ALL STONES OVER 1 INCH IN DIAMETER, STICKS AND FOREIGN MATTER FROM THE SURFACE.
  - LIME TO PH OF 6.5.
  - FERTILIZER: USE 5-10-5 (NPK) OR EQUIVALENT. APPLY AT RATE OF 4 LBS/1000 SF.
  - INCORPORATE LIME AND FERTILIZER IN THE TOP 4 INCHES OF TOPSOIL.
  - SMOOTH AND FIRM THE SEED.
- SEE MIXTURE FOR USE ON LAWN AREA: PROVIDE FRESH, CLEAN, NEW-CROP SEED MIXED IN THE PROPORTIONS SPECIFIED FOR SPECIES AND VARIETY AND CONFORMING TO FEDERAL AND STATE STANDARDS. **LAWN SEED MIX:** (APPLY AT RATE OF 5 TO 6LBS PER 1000SF)

**SUN AND PARTIAL SHADE:**

AMOUNT BY: WEIGHT SPECIES OR VARIETY	MINIMUM% PURITY	GERMINATION
50% KENTUCKY BLUE GRASS*	95%	80%
20% PERENNIAL RYE	98%	90%
30% CREEPING RED FESCUE	97%	85%
100%		

\*MINIMUM 2 (EQUAL PROPORTIONS) VARIETIES AS LISTED IN CORNELL RECOMMENDATIONS FOR TURFGRASS.

**SUN AND PARTIAL SHADE:**

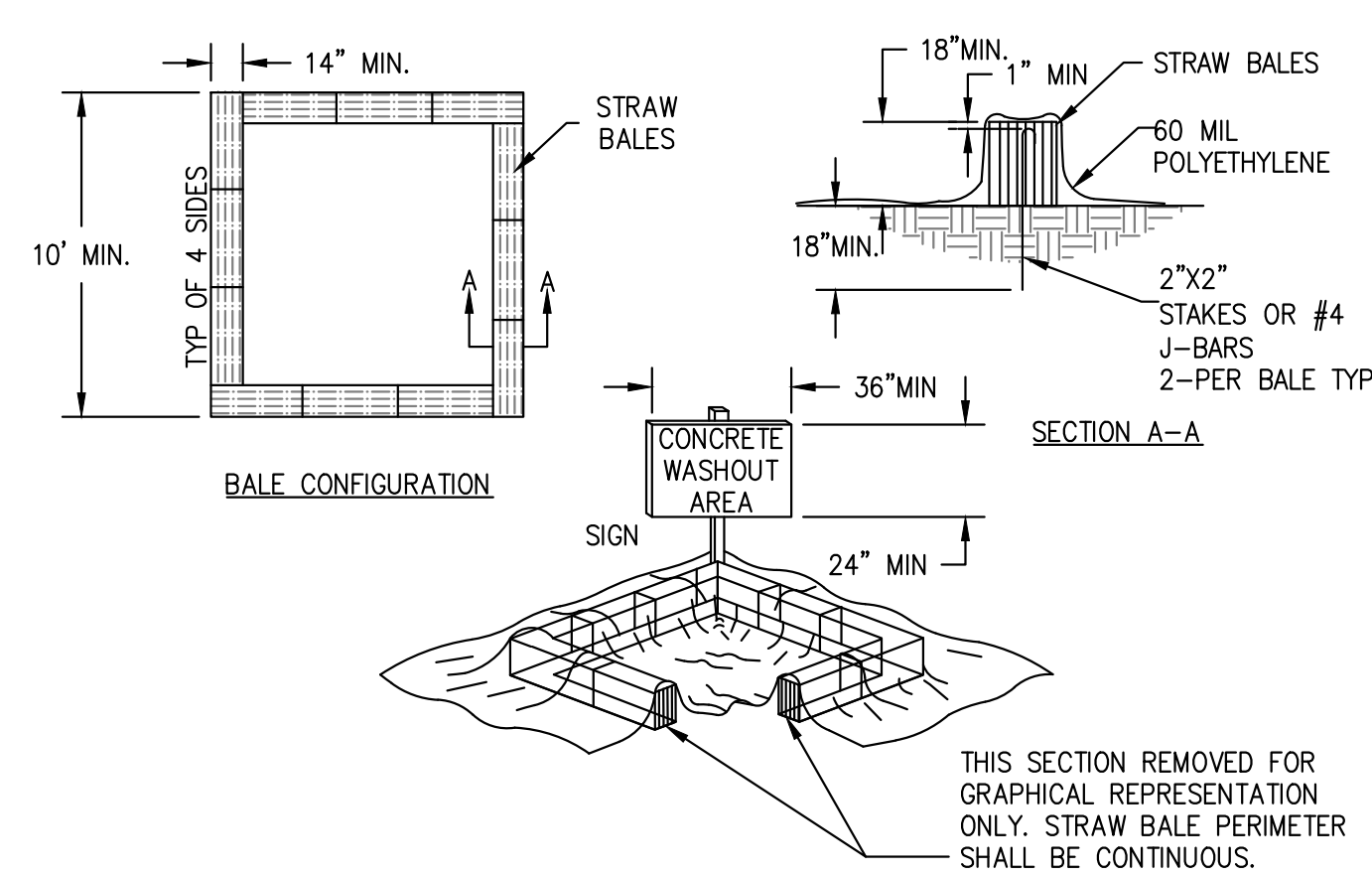
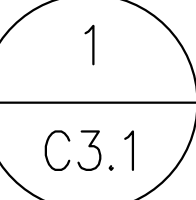
AMOUNT BY: WEIGHT SPECIES OR VARIETY	MINIMUM% PURITY	GERMINATION
50% KENTUCKY BLUE GRASS**	95%	80%
20% PERENNIAL RYE	98%	90%
35% CREEPING RED FESCUE	97%	85%
20% CREEPING RED FESCUE	97%	85%
100%		

\*\*SHADE TOLERANT VARIETY

- SEEDING
  - APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.
  - ALL SEEDED AREAS SHALL BE PROTECTED FROM EROSION BY ONE OF THE FOLLOWING METHODS:
    - A UNIFORM BLANKET OF STRAW APPLIED AT A RATE OF 2 TONS/ACRE MIN., TO BE APPLIED ONCE SEEDING IS COMPLETE.
    - WOOD FIBER CELLULOSE APPLIED WITH SEED MIX BY HYDROSEEDER AT RATE OF 2,000 LBS/ACRE.
  - ALL SEEDED SLOPES 3:1 OR GRATER SHALL BE PROTECTED FROM EROSION WITH JUTE MESH OR APPROVED EQUAL.
  - IRRIGATE TO FULLY SATURATE SOIL LAYER, BUT NOT TO DISLODGE PLANTING SOIL.
  - UNLESS OTHERWISE DIRECTED IN WRITING, SEED FROM MARCH 15TH TO JUNE 15TH AND FROM AUGUST 15TH TO OCTOBER 15TH.

**LANDSCAPE RESTORATION**

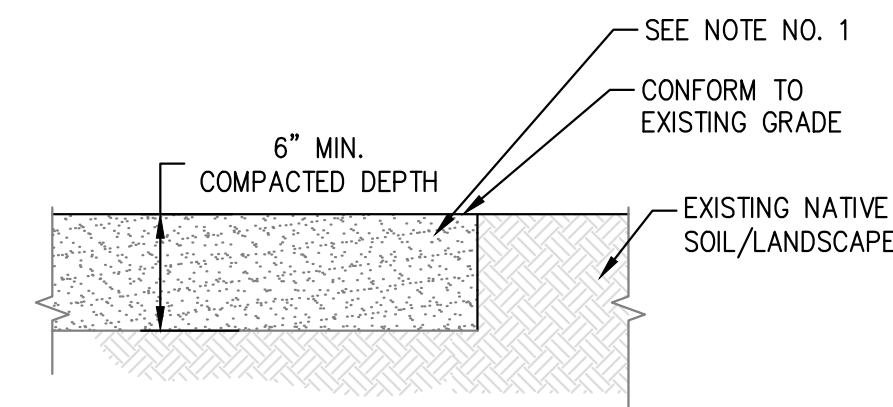
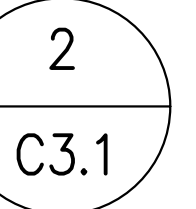
SCALE: NTS



- DETAIL NOTES:**
- FACE SIGN TOWARDS NEAREST STREET OR ACCESS POINT.
  - CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 50 FT. MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES AND IN A LOCATION THAT IS EASILY ACCESSIBLE BY CONCRETE TRUCKS.
  - CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
  - CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
  - WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL. THIS INCLUDES REPLACEMENT OF THE 60 MIL POLYETHYLENE SHEETING.
  - CONTRACTOR SHALL REMOVE ACCUMULATION OF SAND AND AGGREGATE AT LEAST WEEKLY AND DISPOSE OF PROPERLY.

**CONCRETE WASHOUT**

SCALE: NTS



- DETAIL NOTES:**
- COMPACTED AGGREGATE AREA SHALL BE COMPACTED TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED IN ACCORDANCE WITH ASTM D1557 TEST METHOD. CONTRACTOR SHALL PREPARE EXISTING ON SITE MATERIAL MEETING THE REQUIREMENTS OF THIS DETAIL AND COMPACT AS NOTED. CONTRACTOR SHALL PROVIDE AND INSTALL NEW 3/8" MAX, DENSELY-GRADED, COARSE AGGREGATE SURFACE MATERIAL COMPACTED AS NOTED ABOVE TO REACH FINISH GRADE. IN-PLACE COMPACTION TEST SHALL BE CONDUCTED THROUGHOUT A MINIMUM DEPTH OF 6" BELOW FINISH GRADE.

- IF GREATER THAN 6" OF DEPTH IS NEEDED TO MEET EXISTING GRADE, CONTRACTOR SHALL PROVIDE AND INSTALL GENERAL FILL MATERIAL, COMPACTED TO A MINIMUM OF 90% OF THE MAXIMUM DRY DENSITY, UNDER THE TOP 6" OF COMPACTED AGGREGATE MATERIAL. COMPACT EXISTING NATIVE SOIL BEFORE PLACING ADDITIONAL SURFACE LAYERS. ON-SITE MATERIAL CAN BE USED AS FILL PROVIDED DELETERIOUS, OBJECTIONABLE, OVERSIZED DEBRIS AND BOULDERS ARE SEGREGATED, MOISTURE CONTENTS ARE CONTROLLED WITHIN 2% OF THE OPTIMUM, AND THE SOILS ARE PLACED DURING FAVORABLE WEATHER CONDITIONS. ON-SITE SOILS PLACED AS FILL SHALL BE SEALED ON A DAILY BASIS USING A SMOOTH DRUM ROLLER.

- CONTRACTOR TO CONFIRM THAT NO MUD, ORGANIC SILT, ORGANIC CLAYS, PEAT OR OTHER UNDOCUMENTED OR UNPREPARED FILLS AS NOTED IN THE CURRENT IBC ARE PRESENT AT THE LOCATION OF THE SERVER INSTALLATION AND SURROUNDING SERVICE APRON AREAS.

- REMOVE LOOSE SOIL AND STANDING WATER FROM SERVER INSTALLATION AND SURROUNDING SERVICE APRON AREAS PRIOR TO PERFORMING GRADING AND COMPACTION OF AGGREGATE AREA.

- AREA SLOPE SHALL HAVE A MAXIMUM 5% SLOPE IN ANY DIRECTION.

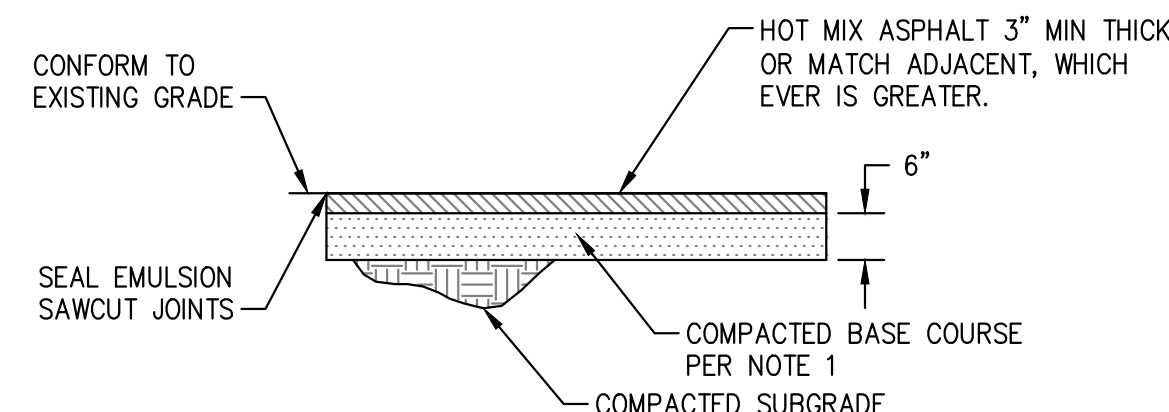
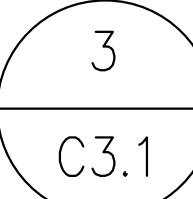
- CONTRACTOR SHALL STOP WORK IMMEDIATELY AND CONTACT THE ENGINEER OF RECORD IF ANY OF THE FOLLOWING CONDITIONS ARE PRESENT:
  - CONTAMINATED SOIL INDICATED BY ODOR, DARK SOIL, OR THE PRESENCE OF TAR LIKE SUBSTANCES;
  - INDICATIONS THAT THE WATER TABLE IS WITHIN 5' OF THE SOIL SURFACE.

**AGGREGATE SURFACE COURSE MATERIAL:**

- AGGREGATE SURFACE COURSE MATERIAL SHALL BE 3/8" MAX, DENSELY GRADED, COARSE AGGREGATE SURFACE MATERIAL.
- CLEAN AND NON-EXPANSIVE AGGREGATE COMPRISING OF RELATIVELY WELL GRADED SAND OR GRAVEL WITH 3/8" MAX IN SIZE, EXPANSION INDEX OF LESS THAN 20, 6% TO 15% OF MATERIAL FINER THAN #200 SIEVE, PLASTICITY 5-10, AND LESS THAN 2% ORGANIC MATTER BY WEIGHT.
- ON-SITE MATERIAL CAN BE USED AS FILL PROVIDED DELETERIOUS, OBJECTIONABLE, OVERSIZED DEBRIS AND BOULDERS ARE SEGREGATED, MOISTURE CONTENTS ARE CONTROLLED WITHIN 2% OF THE OPTIMUM.

**COMPACTED AGGREGATE DETAIL**

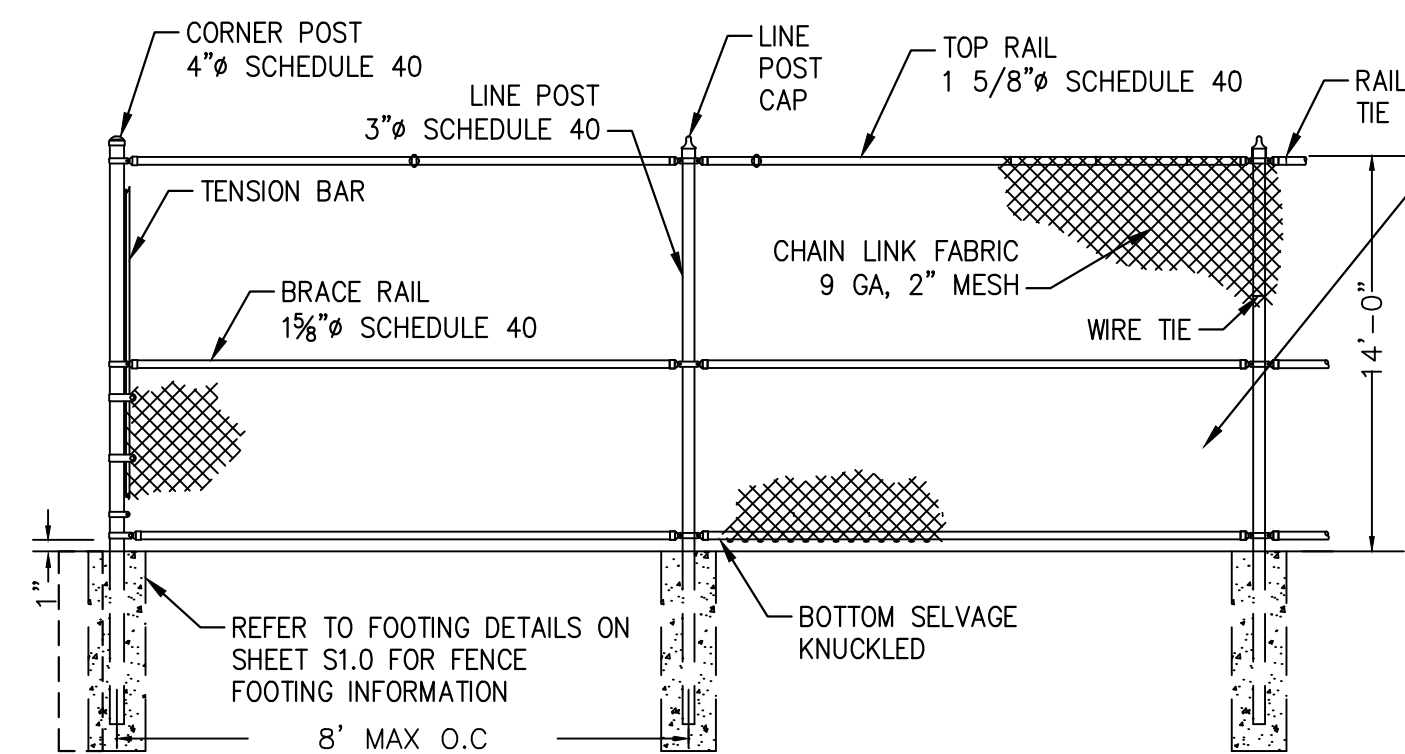
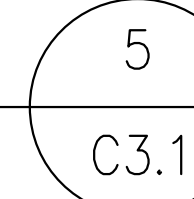
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- DETAIL NOTES:**
- BASE COURSE SHALL BE CAL TRANS CLASS 2 AGGREGATE BASE ROCK (3/4" MAX) OR EQUIVALENT, COMPACTED TO 95% RELATIVE COMPACTION.
  - MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH SPECIFICATION SET FORTH BY NATIONAL, STATE, AND LOCAL CODES AND AUTHORITIES.

**ASPHALT SERVICE AREA**

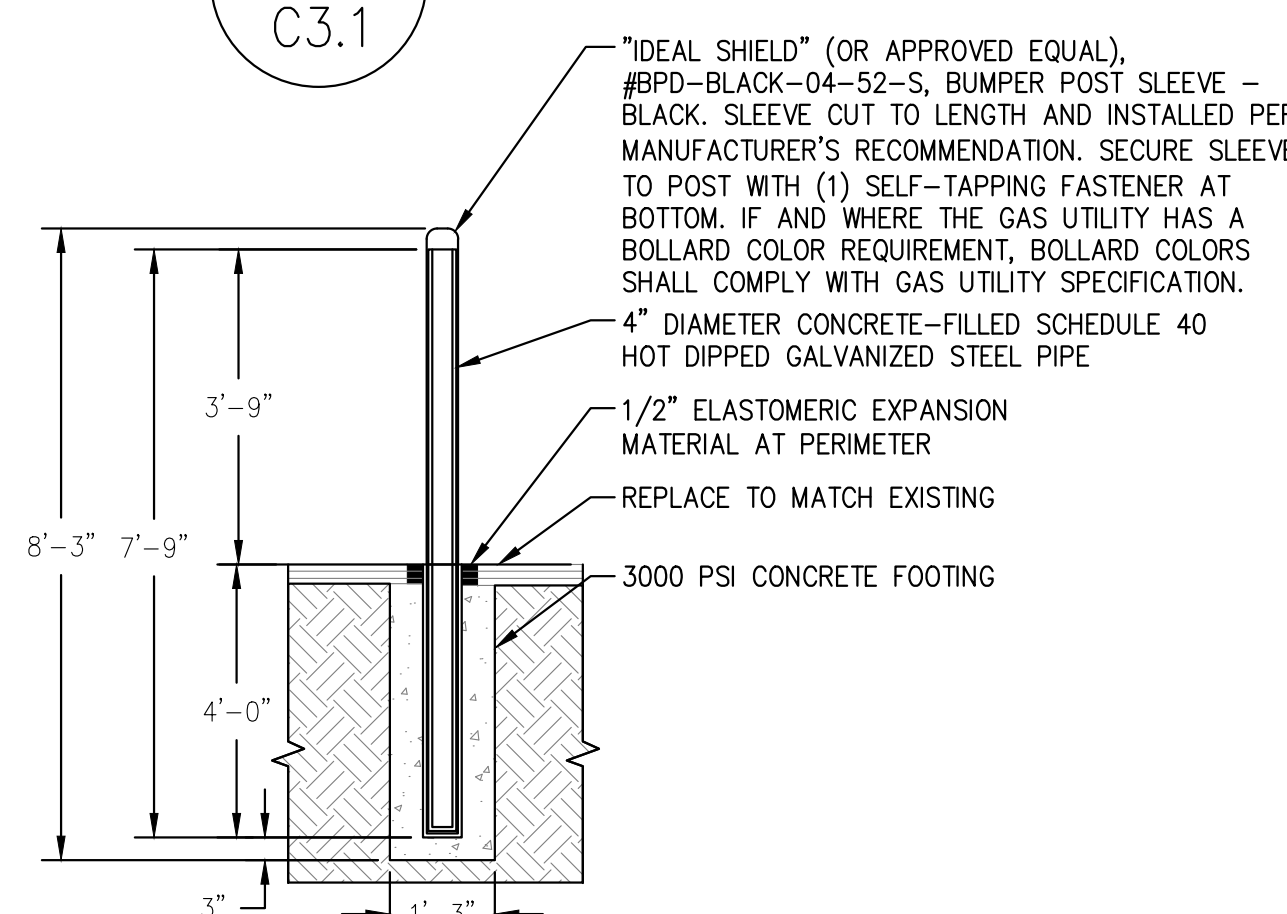
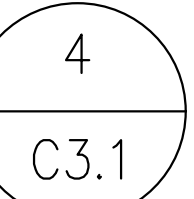
SCALE: NTS



- NOTES:**
- CONTRACTOR SHALL INSTALL ACOUSTIBLOK AF8H-F8XL ACOUSTIFENCE VERTICAL CURTAINS TO CHAIN LINK FENCE USING 250LB STAINLESS STEEL CABLE TIES. SOUND FABRIC SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS AND ALONG THE ENERGY SERVER SIDE OF FENCE.
  - ALL FENCE MATERIALS SHALL BE GALVANIZED. REVIEW PRIOR TO FABRICATION.
  - FOR DOUBLE GATES USE SAME CONNECTION FOR EACH GATE.
  - CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND CALCULATIONS FOR FENCE POSTS, RAILINGS, GATE, AND HARDWARE TO EOR FOR REVIEW PRIOR TO FABRICATION.

**CHAIN LINK FENCE AND GATE DETAIL**

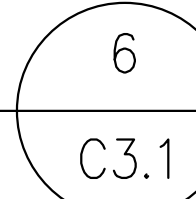
SCALE: NTS



- DETAIL NOTE:**
- CONCRETE FOUNDATIONS ARE MINIMUM REQUIREMENTS. LOCAL BUILDING CODES OR FROST LINE MAY REQUIRE GREATER DEPTH. CONTRACTOR SHALL VERIFY LOCAL FROST DEPTH WITH AHJ.

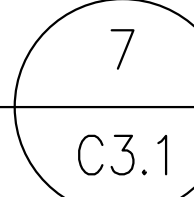
**BOLLARD - FIXED**

SCALE: NTS

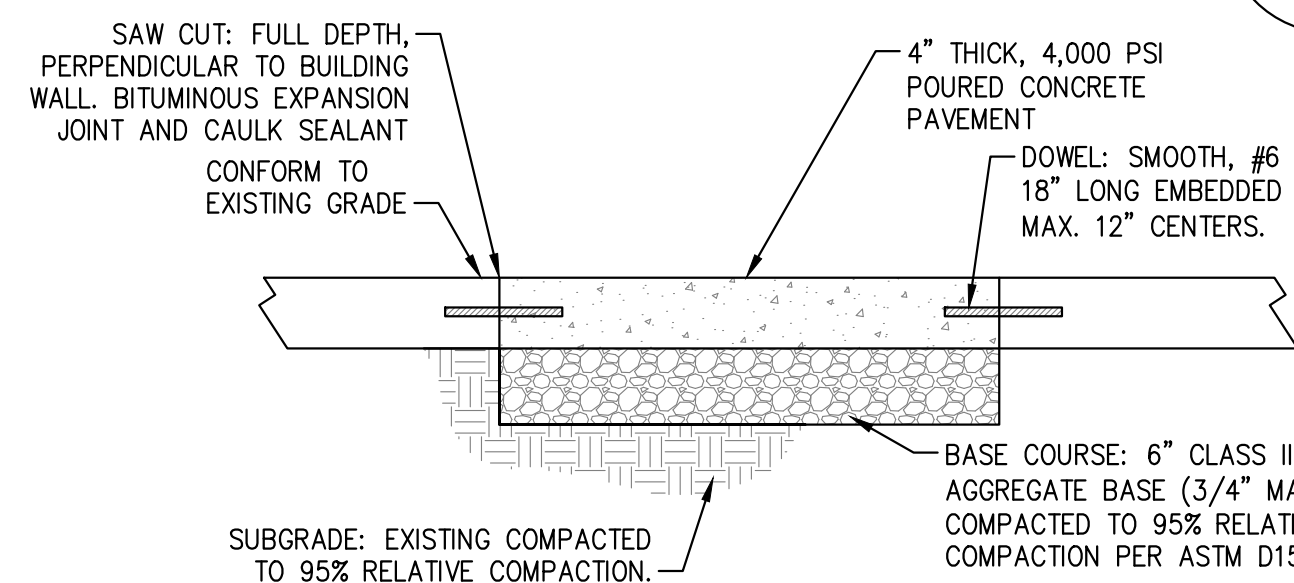


**STRIPING DETAIL**

SCALE: NTS



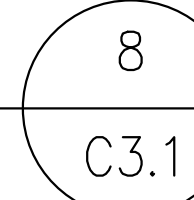
- PAVEMENT STRIPING NOTES:**
- PAVEMENT MARKING PAINT SHALL BE WATER BASE FAST DRYING 100% ACRYLIC TYPE WATER BASE TO MEET FEDERAL SPECIFICATION TTP-01952B. FOR COLD WEATHER APPLICATION PAINT PRODUCT SHALL BE IN ACCORDANCE WITH ASTM-D2369, D1394, D1475, D562 AND D711.
  - PROVIDE A NON-SLIP AGGREGATE ADDITIVE TO MARKING PAINT USED AT ADA ACCESS RAMPS.
  - APPLY 2 COATS WITHIN THE SAME DAY, UTILIZING STRAIGHT EDGES, YELLOW ON CONCRETE/WHITE ON ASPHALT EXCEPT WHEN MATCHING ADJACENT OR EXISTING COLOR WHEN THE PAVING IS AN EXPANSION OR SEGMENT OF A LARGER LOT.



- DETAIL NOTES:**
- MATCH EXISTING SURFACE LEVEL AND BROOMED FINISH.

**CONCRETE SIDEWALK**

SCALE: NTS



**DRAFT  
FOR CSC  
REVIEW  
ONLY**

**CUSTOMER SITE**

YALE NEW HAVEN  
HEALTH SYSTEM  
267 GRANT STREET  
BRIDGEPORT, CT 06610

**Yale  
NewHaven  
Health**

**RELEASE HISTORY**

REV	ISSUE PURPOSE	DATE
-	INITIAL RELEASE	05/15/2023

DESIGNED BY SASHA SCARLAT	REVIEWED BY KATE TAYLOR
DRAWN BY LAKSHMI SRINIVAS	APPROVED BY CARSON P. TURNER

**SHEET TITLE**

SITE DETAILS  
SHEET 1

**DRAWING NUMBER**

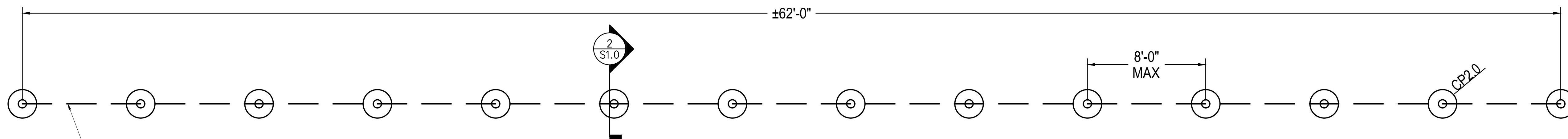
C3.1

**BLOOM ENERGY DOCUMENT NUMBER**

DOC-1014143

**THIS DRAWING IS 24" X 36" AT FULL SIZE**

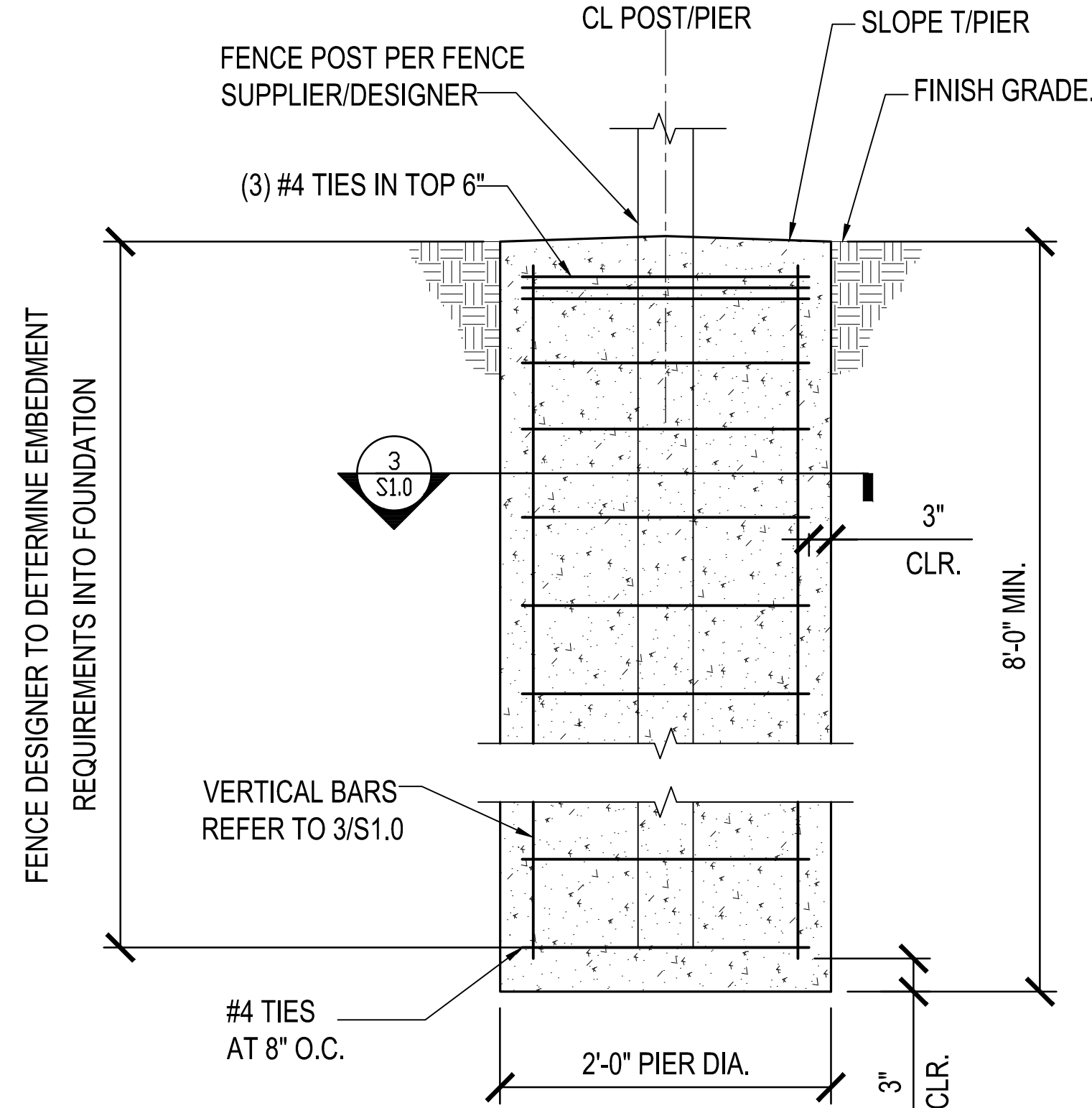




NEW 14' CHAIN LINK FENCE MOUNTED WITH ACOUSTIFENCE MATERIAL TO BE DESIGNED AND SUPPLIED BY FENCE MANUFACTURER. SEE DETAIL 7/C3.1 FOR ADDITIONAL INFORMATION.

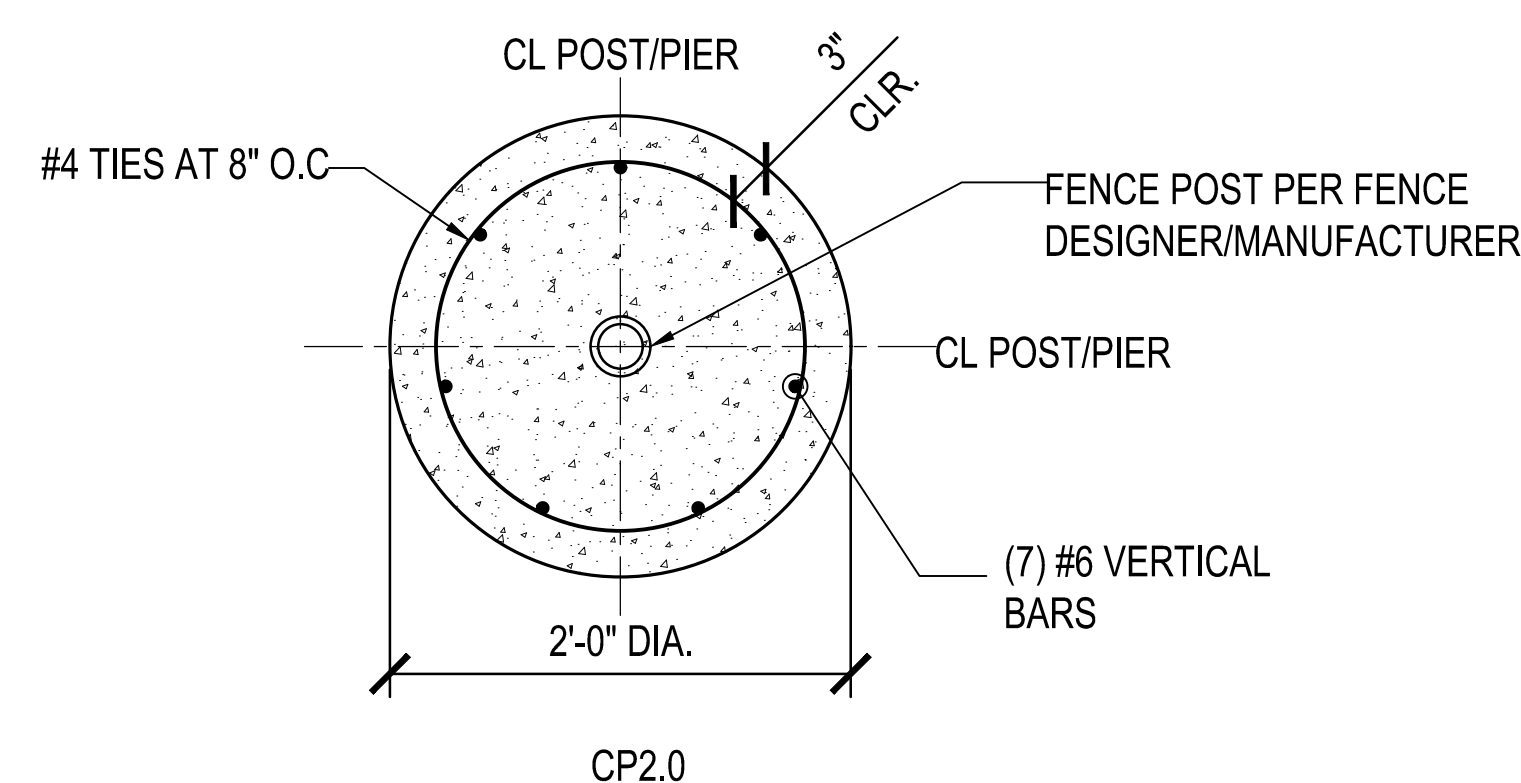
### 1 FENCE FOUNDATION PLAN

- N.T.S.
- PLAN NOTES:
- REFER TO CIVIL DRAWINGS FOR LOCATION AND DIMENSIONS NOT OTHERWISE NOTED
  - DRAWINGS SHALL NOT BE SCALED. ALL DIMENSIONS AND FIT SHALL BE DETERMINED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK, INCLUDING LOCATING FOUNDATIONS TO ENSURE WORK DOES NOT IMPACT THE EXISTING SIDEWALKS AND UNDERGROUND UTILITIES.
  - EXISTING CONDITIONS SHOWN ARE BASED ON SITE OBSERVATIONS AND ASSUMPTIONS. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS.
  - CPx.x DENOTES DRILLED CONCRETE PIER FOUNDATION FOR FENCE POST. SEE TYPICAL DRILLED PIER DETAILS THIS SHEET.



### 2 TYPICAL DRILLED PIER DETAIL

N.T.S.



### 3 TYPICAL DRILLED PIER SECTION

N.T.S.

### GENERAL PROVISIONS:

TYPICAL DETAILS AND GENERAL NOTES APPLY TO ALL PARTS OF THE WORK EXCEPT WHERE SPECIFICALLY DETAILED OR OTHERWISE NOTED

THE CONTRACTOR SHALL CAREFULLY REVIEW THE DRAWINGS TO IDENTIFY THE SCOPE OF WORK REQUIRED, VISIT THE SITE TO RELATE THE SCOPE OF WORK TO EXISTING CONDITIONS, AND DETERMINE THE EXTENT OF WHICH THOSE CONDITIONS AND PHYSICAL SURROUNDINGS WILL IMPACT THE WORK.

THE CONTRACTOR SHALL ASSUME THE MOST STRINGENT REQUIREMENTS APPLY IN CASE OF CONFLICT AMONG SPECIFICATIONS, STANDARDS, CODES AND DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY TO RESOLVE THE CONFLICT.

ANY DEVIATION, MODIFICATION, OR SUBSTITUTION FROM THE BID SET OF STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW/APPROVAL PRIOR TO ITS USE OR INCLUSION ON THE SHOP DRAWINGS. WITHOUT SUCH PRIOR APPROVAL, DEVIATIONS, MODIFICATIONS, OR SUBSTITUTIONS WILL BE REJECTED. COSTS FOR DEMOLITION AND REWORK OF SUCH ITEMS WILL BE BORNE BY THE CONTRACTOR.

THE MEANS, METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE PERFORMED WITHOUT DAMAGE TO ADJACENT EXISTING WORK.

THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW THE STRUCTURAL CONTRACT DOCUMENTS AND SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY CONFLICTS BETWEEN THOSE DOCUMENTS AND ANY SAFETY REGULATIONS. SUCH REVIEW AND NOTIFICATION SHALL OCCUR PRIOR TO PRODUCTION OF SHOP DRAWINGS.

THE CONTRACTOR SHALL PROTECT ALL WORK, MATERIALS, AND EQUIPMENT FROM DAMAGE AND SHALL PROVIDE PROPER STORAGE FACILITIES FOR MATERIALS AND EQUIPMENT DURING CONSTRUCTION.

SITE VISITS PERFORMED BY THE ARCHITECT/ENGINEER DO NOT INCLUDE INSPECTIONS OF MEANS AND METHODS OF CONSTRUCTION PERFORMED BY THE CONTRACTOR.

### SHOP DRAWINGS:

REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

REPRODUCTION OF THE STRUCTURAL DRAWINGS FOR USE IN PREPARATION OF SHOP DRAWINGS IS STRICTLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE ENGINEER OF RECORD. SHOP DRAWINGS SUBMITTED WITH REPRODUCED STRUCTURAL DRAWINGS AND/OR DETAILS WITHOUT CONSENT WILL BE REJECTED.

SUBMIT SHOP DRAWINGS 15 BUSINESS DAYS (MINIMUM) PRIOR TO DATE THAT RETURNED SHOP DRAWINGS ARE REQUIRED.

SHOP DRAWINGS SHALL BEAR THE CONTRACTORS STAMP OF APPROVAL, WHICH SHALL CONSTITUTE CERTIFICATION THAT ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, AND MATERIALS SPECIFIED IN THE CONTRACT DOCUMENTS HAVE BEEN VERIFIED AND EACH DRAWING HAS BEEN CHECKED FOR COMPLETENESS, COORDINATION, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.

WHERE A DELEGATED DESIGN IS INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR EACH ITEM, COMPONENT, AND CONNECTION NOT SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS. SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BE SIGNED AND SEALED BY THE CONTRACTORS LICENSED ENGINEER (IN THE PROJECTS JURISDICTION). DRAWINGS AND CALCULATIONS SHALL SHOW LOCATIONS AND MAGNITUDES OF LOADS IMPOSED ON THE STRUCTURE.

### DELEGATED DESIGN:

CONTRACTOR IS RESPONSIBLE FOR DESIGN OF THE FOLLOWING ITEMS INCLUDING DESIGN OF THE CONNECTIONS OF EACH ITEM TO THE SUPPORTING FOUNDATIONS:

- CHAIN LINK FENCE POST/FRAMING
- ACOUSTIFENCE NOISE REDUCING FENCE

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH ITEM LISTED ABOVE. REFER TO THE 'SHOP DRAWING' SECTION UNDER THE GENERAL NOTES FOR ADDITIONAL INFORMATION.

INFORMATION SHOWN IN THE CONTRACT DOCUMENTS (E.G., DEPTHS, GAUGES, SPACING, PLYS, ETC.) ARE CONSIDERED MINIMUMS AND ARE SCHEMATIC IN NATURE. INCREASED GAUGE/PLYS AND/OR DECREASED SPACINGS MAY BE REQUIRED AND SHALL BE COMPLETED AT NO CHARGE TO THE OWNER.

### FOUNDATIONS:

FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS DESCRIBED IN THE GEOTECHNICAL ENGINEERS REPORT BY WHITESTONE ASSOCIATES, INC. PROJ. #: GM2320285.000, DATED MAY 8, 2023. A COPY OF THE GEOTECHNICAL ENGINEERS REPORT IS AVAILABLE AND SHALL BE INCORPORATED AS PART OF THE DOCUMENTS FOR CONSTRUCTION.

EXISTING FILL MATERIAL WAS OBSERVED FROM A DEPTH OF 4 TO 6 FEET BELOW GRADE AND GLACIAL TILL APPROXIMATELY 6 FEET BELOW GRADE PER THE GEOTECH REPORT. CONTRACTOR SHALL REFER TO GEOTECH REPORT FOR ADDITIONAL INFORMATION.

NET ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF

CONCRETE PIER FOUNDATION DESIGN PARAMETERS:

EXISTING FILL  
 DEPTH: 4 TO 6 FEET BELOW GRADE  
 SOIL FRICTION ANGLE: 30 DEGREES  
 SOIL DENSITY: 125 PCF

GLACIAL TILL  
 DEPTH: APPROX. 6 FEET  
 SOIL FRICTION ANGLE: 34 DEGREES  
 SOIL DENSITY: 135 PCF

THE CONTRACTOR SHALL PREDETERMINE UTILITY LOCATIONS PRIOR TO EXCAVATION AND SHALL EXERCISE GREAT CARE DURING EXCAVATION.

A SOILS TESTING LABORATORY SHALL BE RETAINED BY THE OWNER TO PROVIDE CONSTRUCTION REVIEW TO ENSURE CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS DURING THE EXCAVATIONS, BACKFILL AND FOUNDATION PHASES OF THE PROJECT. CONTACT DESIGN ENGINEER IMMEDIATELY IF SOILS ENCOUNTERED DO NOT MEET ASSUMED DESIGN SPECIFICATIONS.

ALL FOUNDATIONS ARE TO REST ON FIRM, UNDISTURBED SOIL OR COMPACTED FILL FREE FROM ORGANIC MATTER. IF POOR SOILS ARE ENCOUNTERED AT FOUNDATION DEPTHS SHOWN, NOTIFY OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH CONSTRUCTION.

INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES, WHICH WILL RESULT IN DETERIORATION OF BEARING FORMATIONS, SHALL BE PREVENTED. FOOTINGS SHALL BE PLACED IMMEDIATELY FOLLOWING FOOTING EXCAVATIONS AND BEARING SURFACE INSPECTION.

**CONCRETE:**

ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301, 'STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE' AND ACI 302, 305 AND 306 UNLESS NOTED OTHERWISE.

ALL DETAILING, FABRICATION AND PLACING OF CONCRETE SHALL CONFORM TO ACI 318, 'BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE' AND THE LATEST ACI 'MANUAL OF STANDARD PRACTICE FOR DETAIL REINFORCED CONCRETE STRUCTURES' UNLESS NOTED OTHERWISE.

ALL CONCRETE SHALL DEVELOP A 4000PSI MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS.

ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6% (± 1%) AIR ENTRAINMENT.

REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.

NO TACK WELDING OF REINFORCING IN THE FIELD IS PERMITTED.

### STRUCTURAL STEEL:

STRUCTURAL STEEL WORK SHALL BE IN ACCORDANCE WITH THE A.I.S.C., 'SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS' (FIFTEENTH EDITION) AND THE 'CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES' EXCEPT SECTION 4.2 OF THE CODE WHICH SHALL NOT BE APPLICABLE TO THIS PROJECT.

WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS D1.1).

ALL STEEL SHALL BE HOT-DIP GALVANIZED OR PAINTED WITH ZINC BASED RUST INHIBITING PAINT.

**DESIGN LOADS:** 2022 CONNECTICUT BUILDING CODE

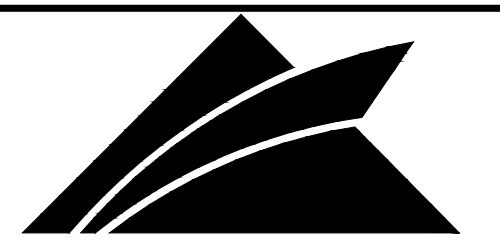
DEAD LOAD:  
 FENCE + MATERIAL WT. = 5 PSF

LIVE LOAD: 15 PSF

WIND LOAD:  
 ULT. WIND SPEED = 119 MPH  
 EXPOSURE CATEGORY = B  
 RISK CATEGORY = II  
 ULT. DESIGN PRESSURE = 25 PSF (CASE A & B)  
 ULT. DESIGN PRESSURE = 35.5 PSF (CASE C)

SEISMIC LOAD:  
 SITE CLASS = C  
 RISK CATEGORY = II  
 MAPPED SPECTRAL RESPONSE ACCEL:  
 S<sub>s</sub> = 0.209  
 S<sub>1</sub> = 0.054  
 SPECTRAL RESPONSE COEFF.:  
 SHORT PERIOD (S<sub>s</sub>) = 0.181  
 1 SEC PERIOD (S<sub>1</sub>) = 0.054  
 SITE DESIGN CATEGORY = B

NOTES ON THIS SHEET ARE APPLICABLE TO THE SOUND WALL FOUNDATION PLAN ONLY. GENERAL NOTES ON OTHER PLAN SHEETS SHALL NOT REPLACE NOTES ON THIS SHEET.



GPD Engineering and Architecture  
 Professional Corporation

**DRAFT  
 FOR CSC  
 REVIEW  
 ONLY**

CUSTOMER SITE

**YALE NEW HAVEN  
 HEALTH SYSTEM  
 267 GRANT STREET  
 BRIDGEPORT, CT 06610**



RELEASE HISTORY		
REV	ISSUE PURPOSE	DATE
-	INITIAL RELEASE	05/15/2023

DESIGNED BY <b>STEPHEN COOK</b>	REVIEWED BY <b>ROB WILSON</b>
DRAWN BY <b>TABBY ANDERSON</b>	APPROVED BY <b>JOHN KABAK</b>

**SHEET TITLE**  
**SOUND WALL FOUNDATION  
 NOTES, PLAN, & DETAILS**

**DRAWING NUMBER**  
 S1.0

**BLOOM ENERGY DOCUMENT NUMBER**  
 DOC - 1014143

**THIS DRAWING IS 24" X 36" AT FULL SIZE**  
 SITE ID: YNH004.0 SHEET 10 OF 17