

# SHOP DRAWING REVIEW FORM AND TRANSMITTAL

**DATE:** October 25, 2021

**TO:** Carl Hendrickson  
Project Manager  
Veolia Water  
825 West Water Street  
Taunton, MA 02780

**FROM:** Michael Andrus, P.E.  
Project Manager  
BETA Group, Inc.  
701 George Washington Hwy  
Lincoln, Rhode Island 02865

**RE:** City of Taunton, MA  
WWTF Phase 1 Improvements  
Contract S-2021-1

Shop Drawing No. 03200-01 REV 0 – Blower Building Rebar

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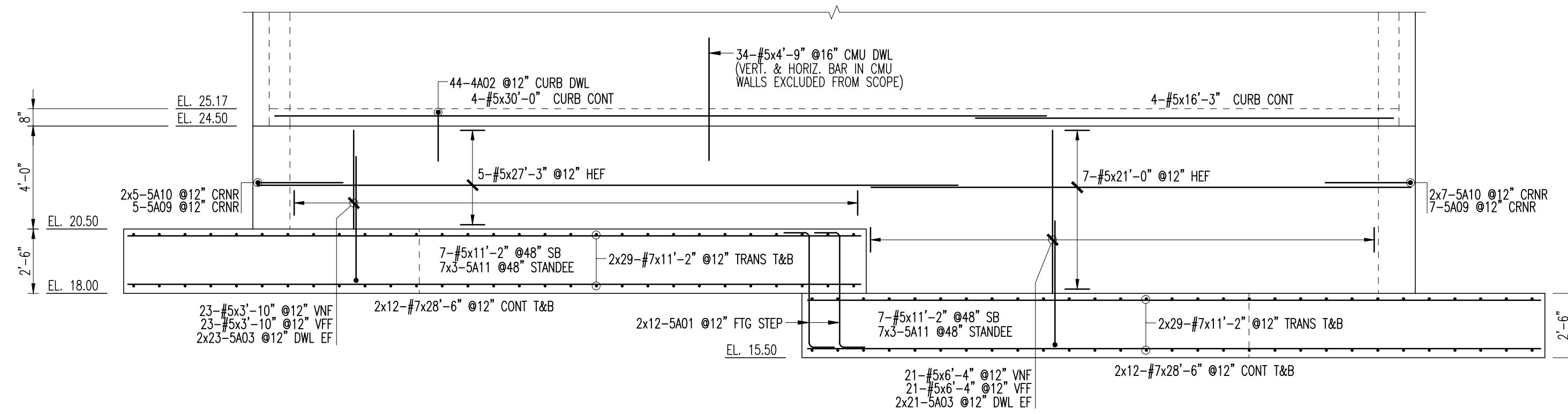
## **BETA COMMENTS:**

<u>Item</u>	<u>Action Code</u>	<u>Description/Comments</u>
1	2	<b>Duct Bank Rebar (Harris Rebar)</b> <ol style="list-style-type: none"><li>1. See Comments</li><li>2. Confirm that this product is in compliance with American Iron and Steel requirements.</li></ol>

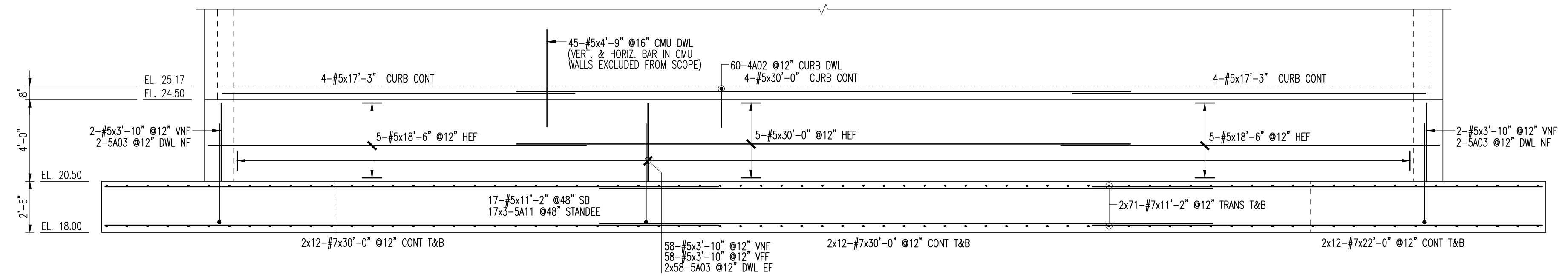
### Action Codes

- 1 - No Exception Taken
- 2 - Make Corrections Noted
- 3 - Amend and Resubmit
- 4 - Rejected, See Remarks
- 5 - Record File Only

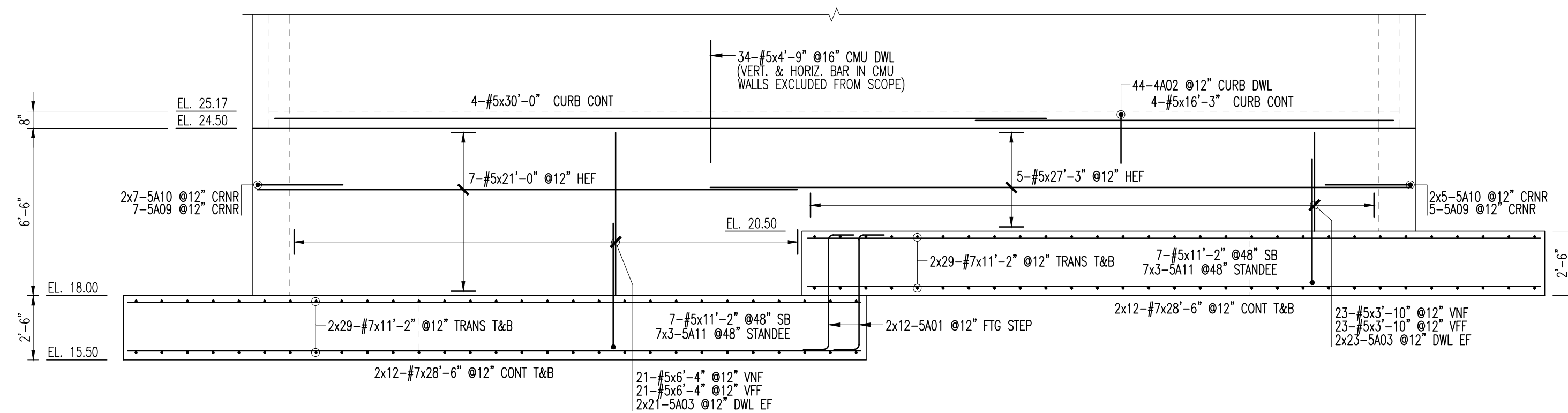
- a. Installation shall proceed only when Action Code is '1' or '2'.
- b. Submittals action coded '3' shall be resubmitted within time limit set in Contract.
- c. Review does not relieve Contractor from responsibility of compliance with the Contract Documents.



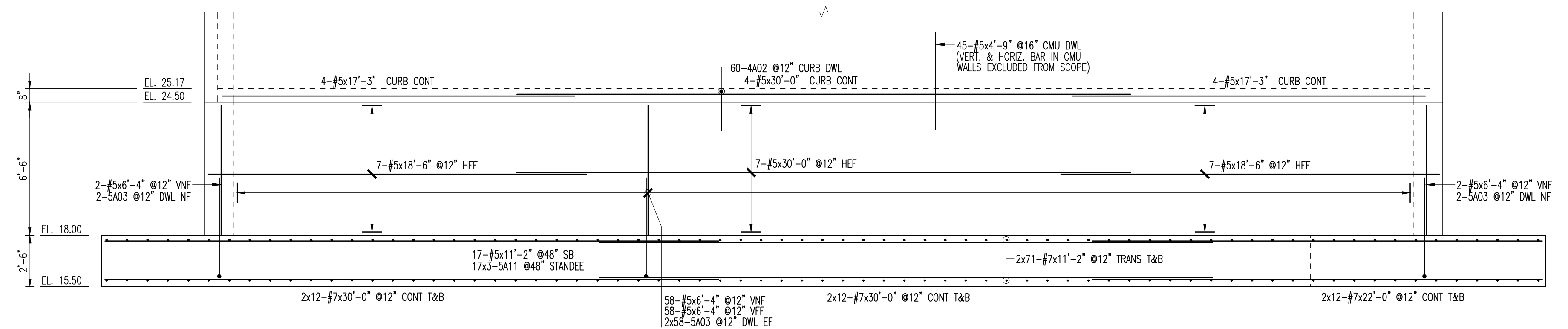
**FTG/WALL ELEVATION A**  
DRAWN FROM OUTSIDE OF BUILDING LOOKING IN



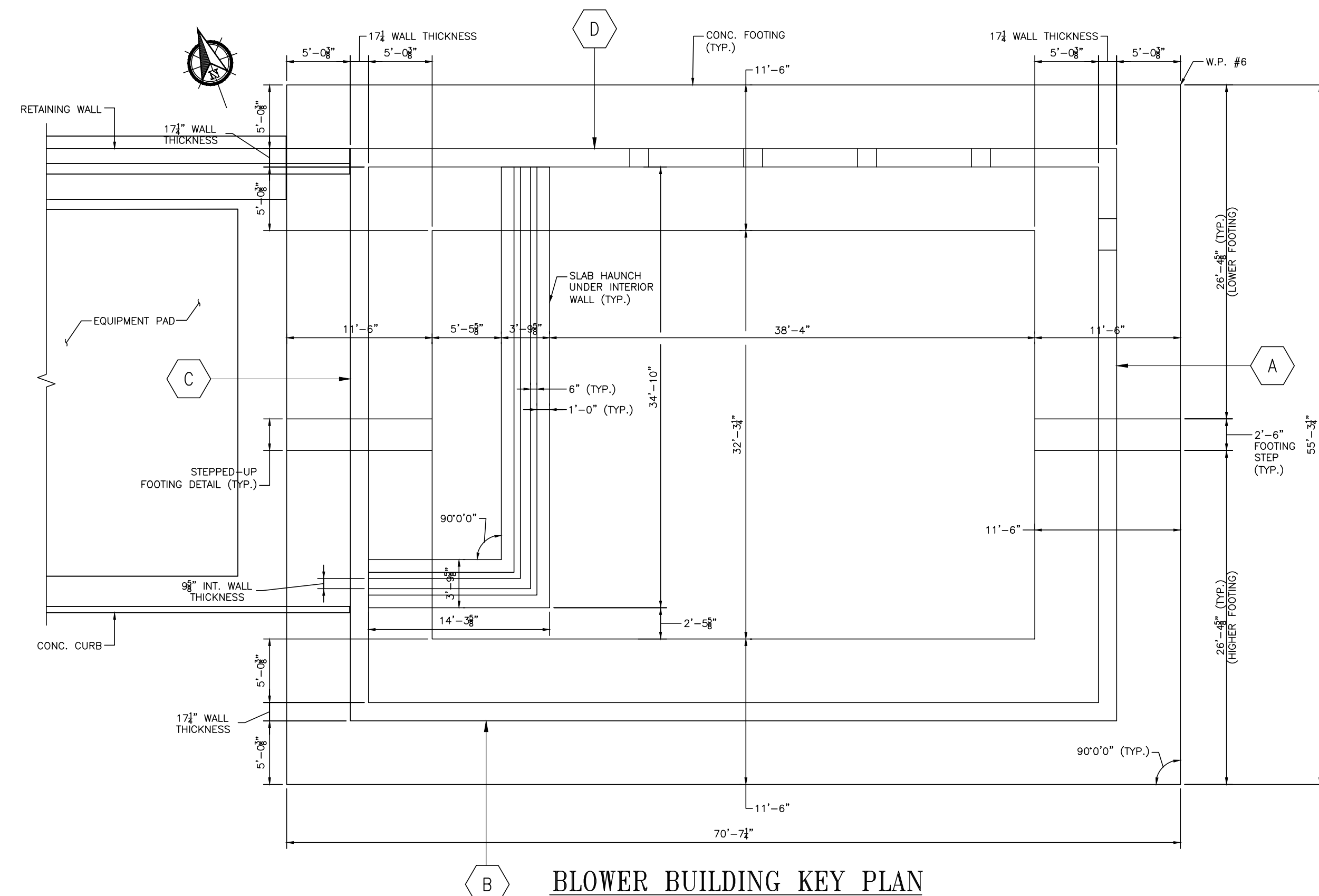
**FTG/WALL ELEVATION B**  
DRAWN FROM OUTSIDE OF BUILDING LOOKING IN



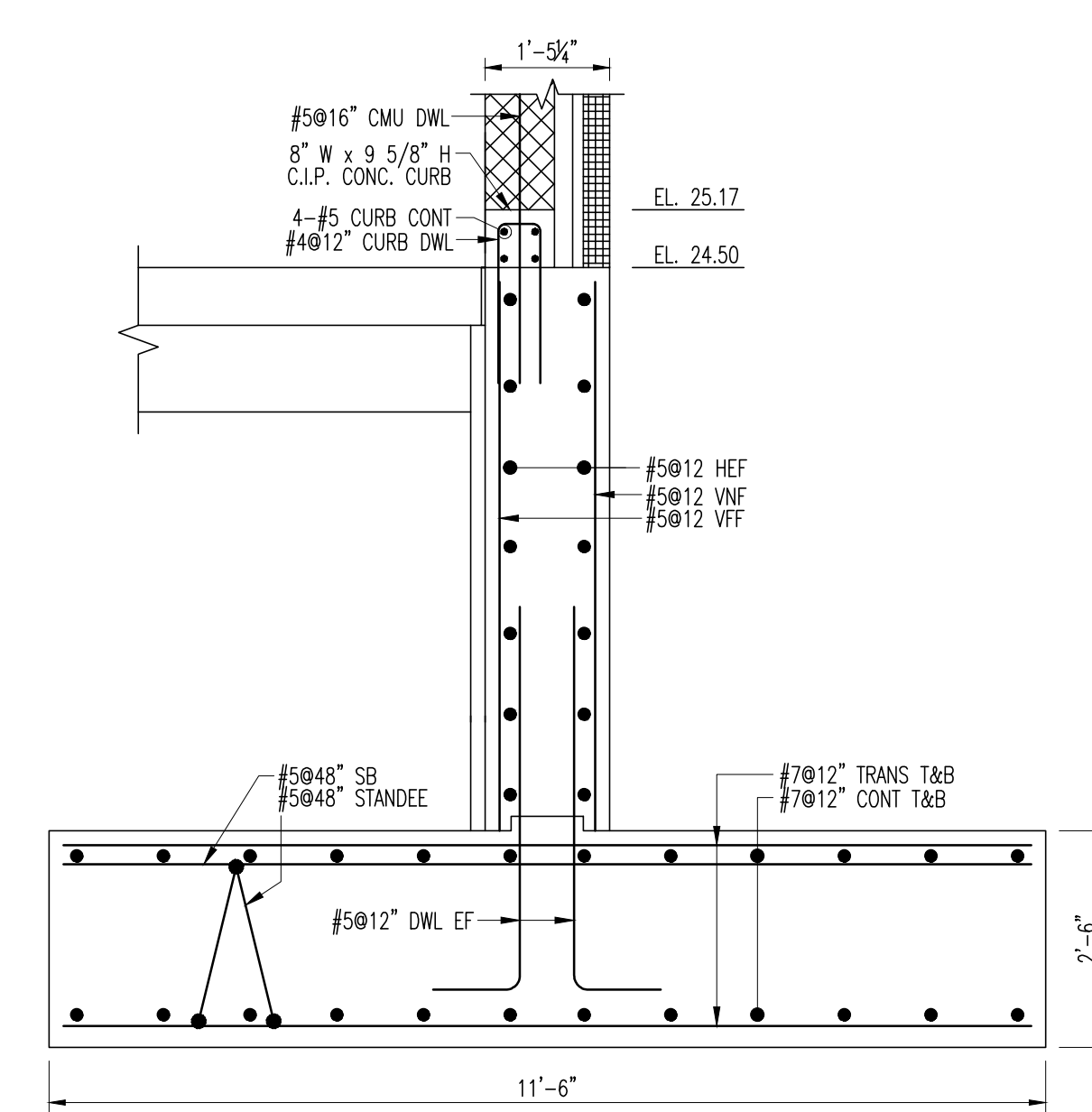
**FTG/WALL ELEVATION C**  
DRAWN FROM OUTSIDE OF BUILDING LOOKING IN



**FTG/WALL ELEVATION D**  
DRAWN FROM OUTSIDE OF BUILDING LOOKING IN



**BLOWER BUILDING KEY PLAN**



**TYP FTG/WALL SECTION**

Bar No.	Qty	Size	Total Length	Type	X	Y	Z	Y	Y	Y	Y	Y	Y	Y
402	288	#4	4'-4 1/2"	17			1'-11"	8'x	1'-11"					
5011	48	#4	6'-5 1/2"	20			1'-0"	4'-4 1/2"	1'-0"					
5003	48	#4	5'-8"	2	10'		4'-10"							
5009	24	#5	6'-8"	17			3'-4"	3'-4"						
5011	48	#4	4'-4 1/2"	17			1'-0"	3'-4"						
5011	186	#4	7'-7 1/2"	25			1'-0"	1'-10 1/2"	1'-4"			1'-10"		11'

**SHOP DRAWING REVIEW**

1 - Approved       2 - Approved as Noted  
 3 - Revise and Resubmit       4 - Rejected  
 5 - Record File Only - No Action Taken

(Above Check Designates Action Code - See Review Comments)  
**IMPORTANT NOTE FOR CONTRACTOR**

Review is only for general compliance with the design concept and information provided in Contract Documents. Corrections and comments made on the Shop Drawings during review do not relieve the Contractor from compliance with the requirements of the plans and specifications. Review and/or approval of a specific item shall not include review or approval of an assembly of which the item is a component. No approval or correction of a Shop Drawing shall be construed as an order for extra work. The Contractor is responsible for: all quantities and dimensions to be confirmed and correlated; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of all trades and subcontractors; and performing all Work in a safe and satisfactory manner.

**BETA GROUP, INC.** Checked By: **TW**  
 By: **BN** Date: **10/21/21**

**4,000 psi LAP CHART**

BAR SIZE	LAP CLASS	TOP BARS	OTHER BARS
#3	A	19"	15"
	B	24"	19"
#4	A	25"	19"
	B	32"	25"
#5	A	31"	24"
	B	40"	31"
#6	A	37"	29"
	B	48"	37"
#7	A	54"	42"
	B	70"	54"
#8	A	62"	48"
	B	80"	62"
#9	A	70"	54"
	B	91"	70"
#10	A	79"	61"
	B	102"	79"
#11	A	87"	67"
	B	113"	87"
#14	A	105"	81"
	B	139"	107"

ENG. AND ARCH. PLEASE VERIFY ALL CLOUDED AREAS

USE THIS DRAWING IN CONJUNCTION WITH ARCHITECTS AND ENGINEERS DRAWINGS

ALL MATERIAL ON THIS DRAWING SHALL BE ASTM A615 GRADE 60 U.N.O.

ALL REINFORCING IS TO BE PLACED IN ACCORDANCE WITH CONCRETE REINFORCING STEEL INSTITUTE (CRSI) MANUAL OF STANDARD PRACTICE.

Lap lengths shown are calculated per ACI 318-14, Sections 12.2.2 & 12.15.

Beams or Columns: Case 1: Concrete cover at least 1.0 db and c/c spacing at least 2.0 db.  
 Case 2: Concrete cover less than 1.0 db and c/c spacing less than 2.0 db.  
 All others: Case 1: Concrete cover at least 1.0 db and c/c spacing at least 3.0 db.  
 Case 2: Concrete cover less than 1.0 db and c/c spacing less than 3.0 db.  
 Top bars are horizontal bars with more than 12" (300mm) of concrete cast below the bars.

No.	Description	Date	By
0	SENT FOR APPROVAL	10/07/21	KML

Revisions and Issue Record

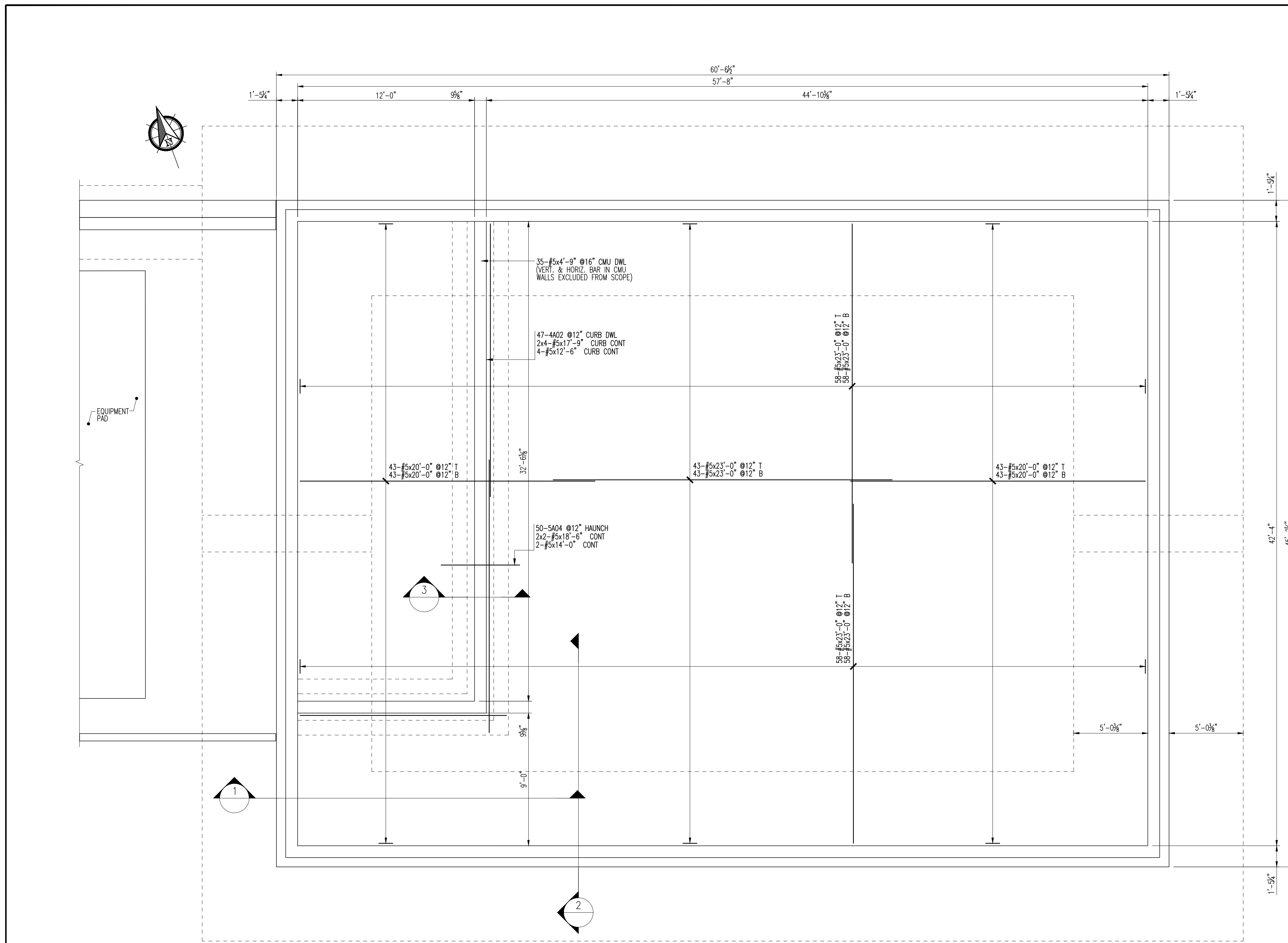
The full intent and purpose of this drawing is the placing of reinforcing steel bars ONLY. It is NOT to be used as a means of communication between the Architect, Engineer, Contractor or any other Sub-trades.

THIS DRAWING IS NOT TO BE SCALED.

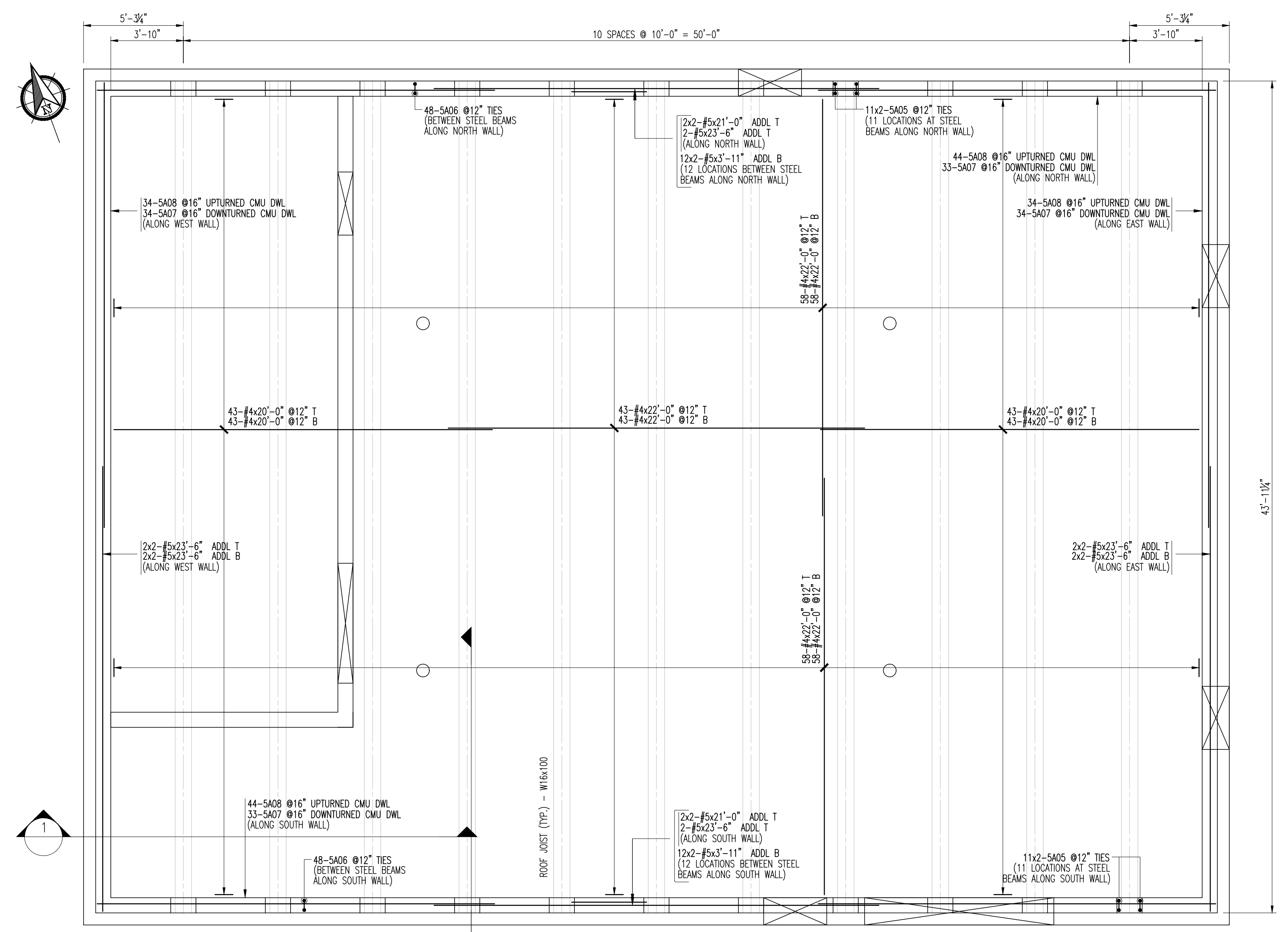
**HarrisRebar** DETAILED AT: FAWTUCKETT RHODE ISLAND  
 National Strength. Local Service.

Project: WITF TAUNTON TAUNTON, MA  
 Drawing: BLOWER BUILDING - FOUNDATION PERIMETER FOOTINGS & WALLS  
 Customer: HART ENGINEERING  
 Engineer: BETA INC.  
 Refer to Release:  
 Date Drawn Chkd. JOB No. Dwg. No.  
 10/01/23 KML 54015329 BB-01





FLOOR SLAB (EL. 24.50)  
650 LINEAR FT OF 1' SBU



ROOF SLAB (EL. 42.04)  
650 LINEAR FT OF 1' SBU

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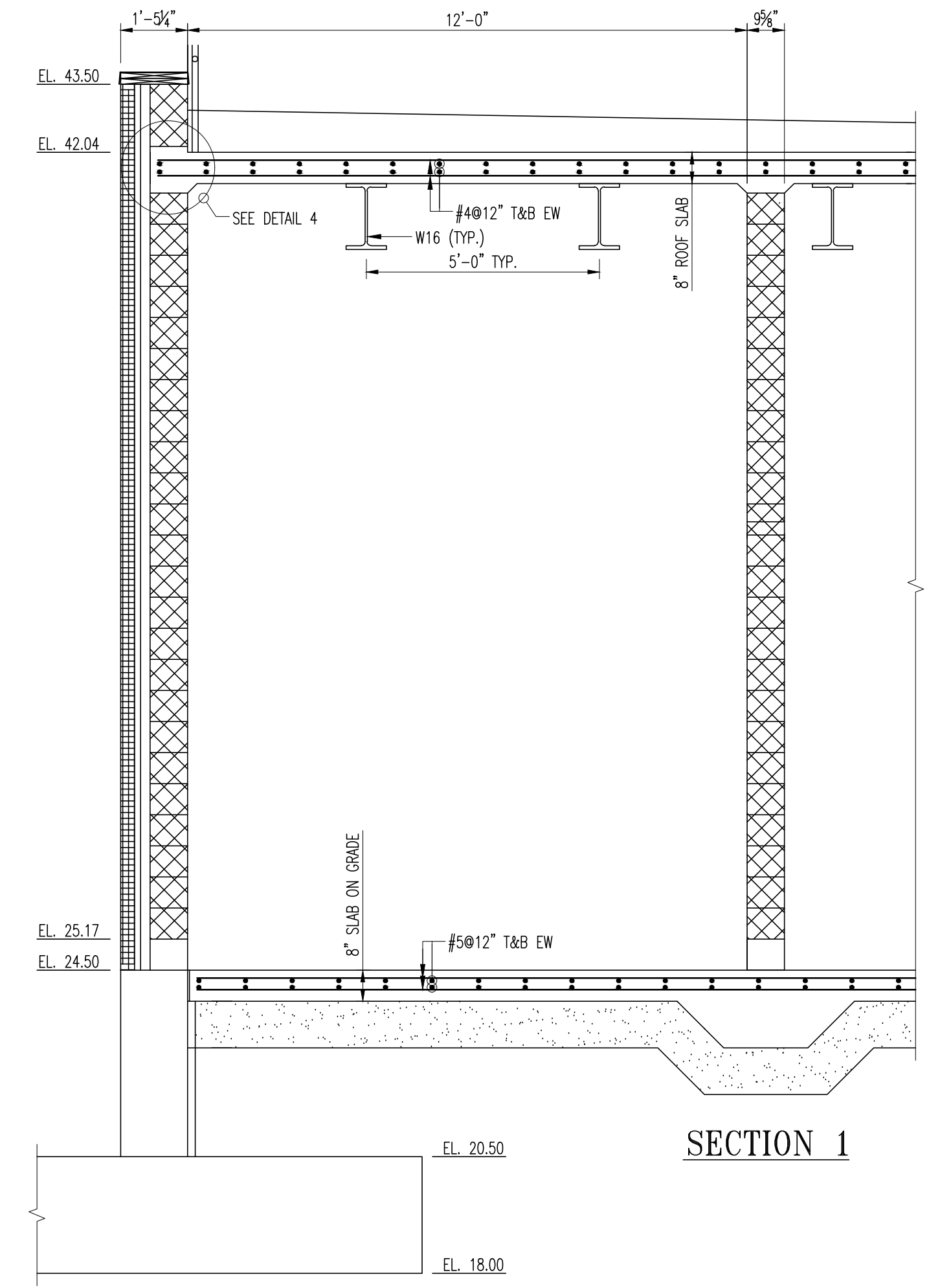
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**IMPORTANT NOTE FOR CONTRACTOR**

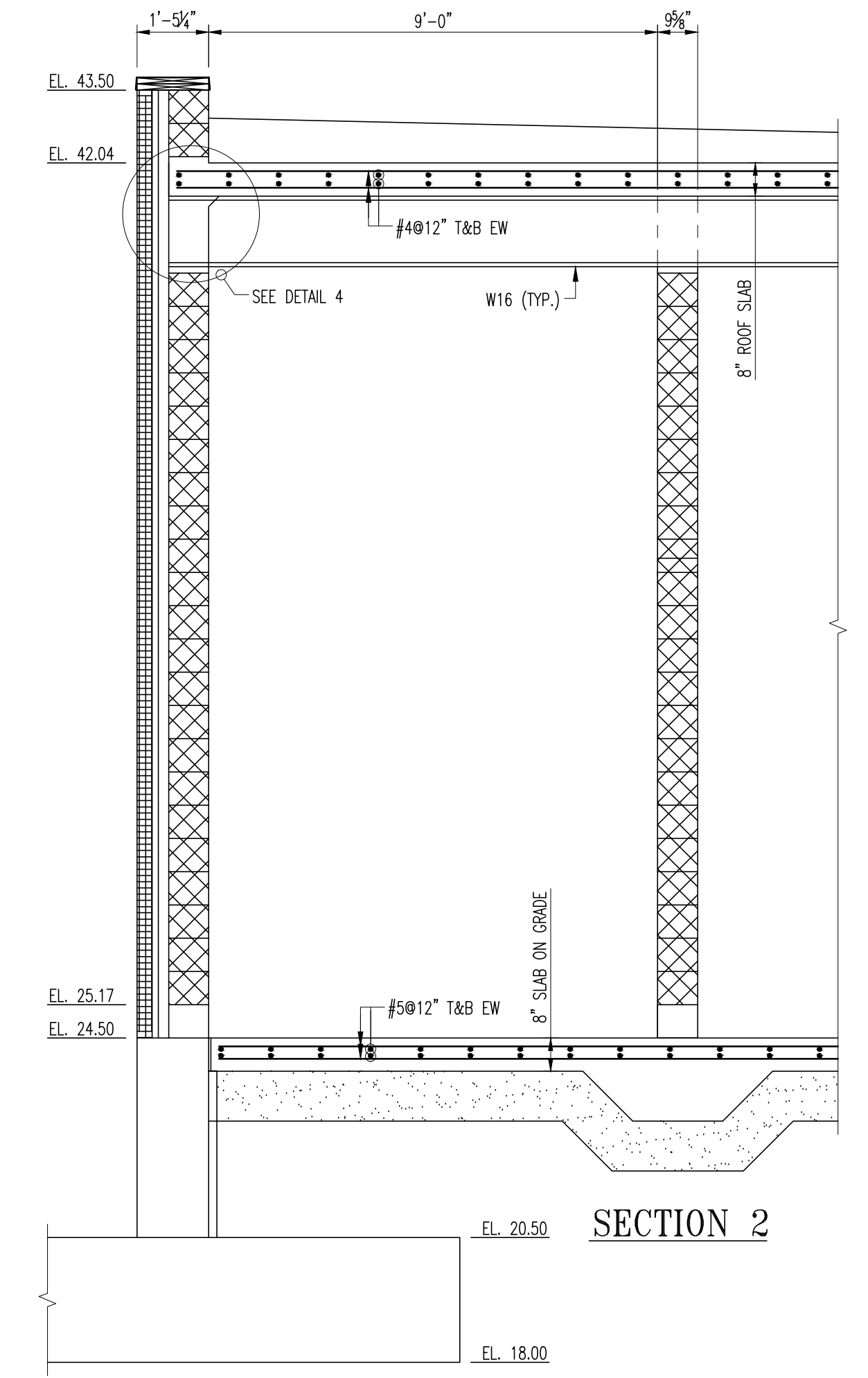
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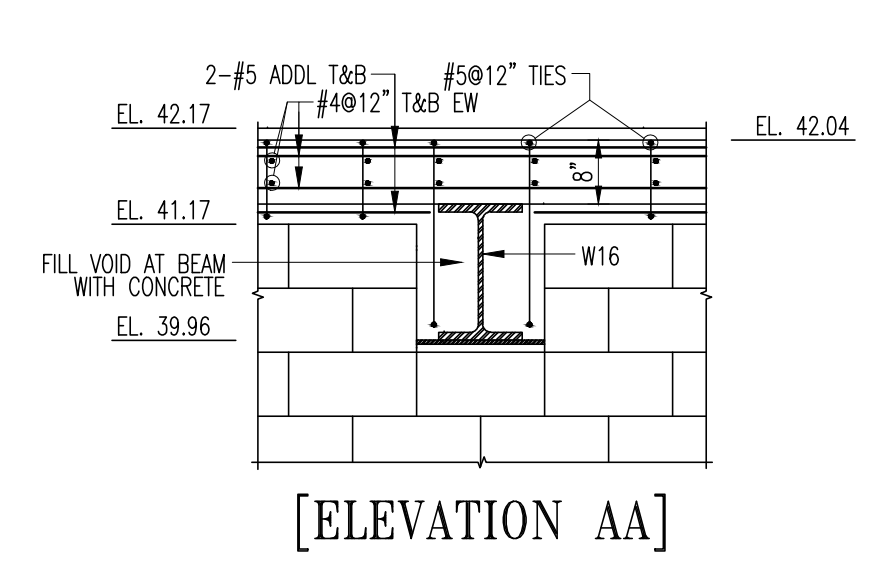
By: BN Date: 10/21/21



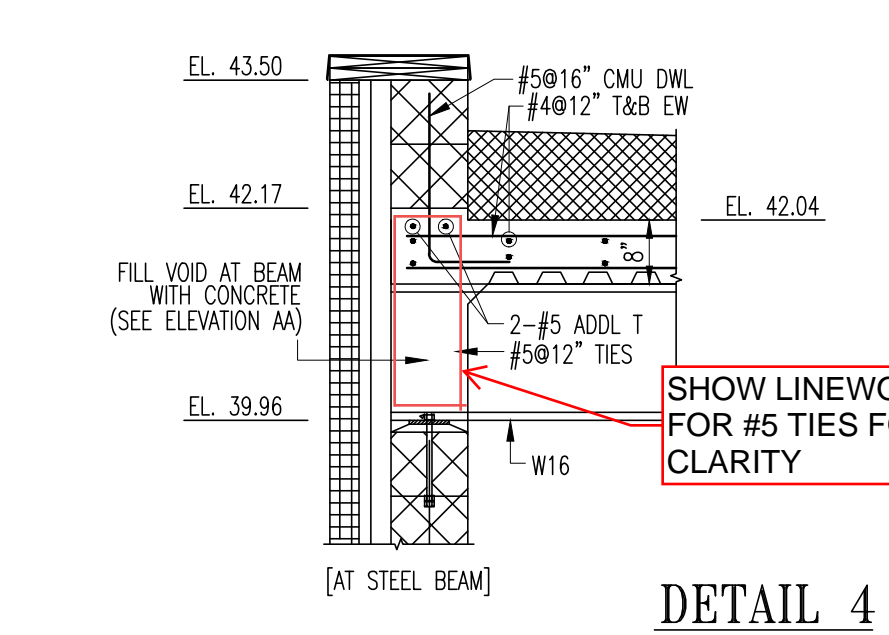
SECTION 1



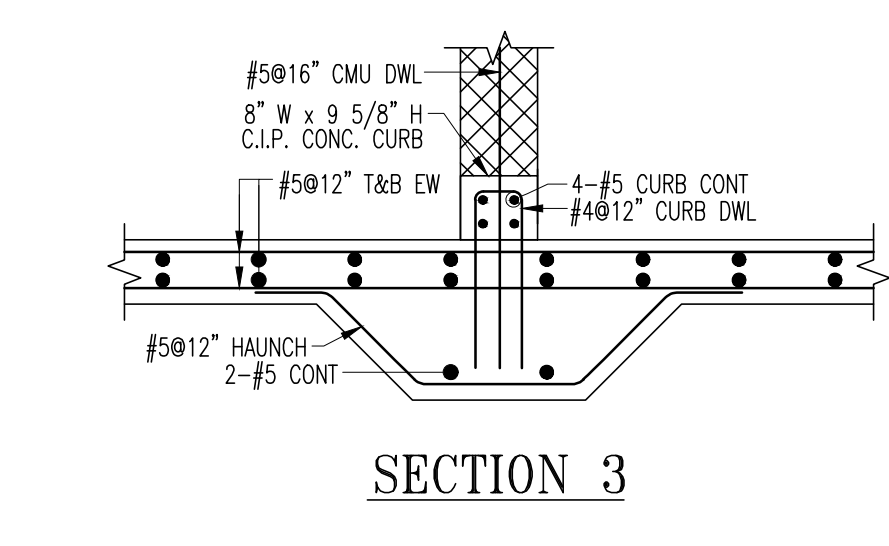
SECTION 2



[ELEVATION AA]



DETAIL 4



SECTION 3

Bar List

Bar No.	Qty	Size	Total Length	Type	X'	Y'	Z'	W'	V'	U'	T'	S'	R'	Q'	P'	O'	N'	M'	L'	K'	J'	I'	H'	G'	F'	E'	D'	C'	B'	A'		
402	47	#1	4'-4.5"	13																												
504	50	#6	6'-2"	3																												
505	44	#6	5'-11.5"	11	5.5'	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	6.5'	1'-11.5"	
506	96	#6	3'-4"	11	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'	3.5'	6.5'
507	154	#6	5'-11"	2	10'	2'-3"	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'	9'	6.5'
508	154	#6	2'-7"	2	10'	1'-9"																										

**5,000 psi LAP CHART**

BAR SIZE	LAP CLASS	TOP BARS	OTHER BARS
#3	A	17"	25"
	B	22"	33"
#4	A	22"	33"
	B	29"	43"
#5	A	28"	42"
	B	36"	54"
#6	A	33"	50"
	B	43"	65"
#7	A	49"	73"
	B	63"	94"
#8	A	55"	83"
	B	72"	108"
#9	A	63"	94"
	B	81"	122"
#10	A	70"	105"
	B	91"	137"
#11	A	78"	117"
	B	101"	152"
#14	A	94"	140"
	B	125"	187"

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No. Description Date By

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**HarrisRebar** DETAILED AT:  
 FAWTUCKET  
 RHODE ISLAND

Project: WITF TAUNTON  
 TAUNTON, MA

Drawing: BLOWER BUILDING  
 FLOOR AND ROOF SLABS

Customer: HART ENGINEERING  
 Engineer: BETA INC.

Refer to Release:

Date	Drawn	Chkd.	JOB No.	Dwg. No.
10/01/23	KML		54015329	BB-02

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