

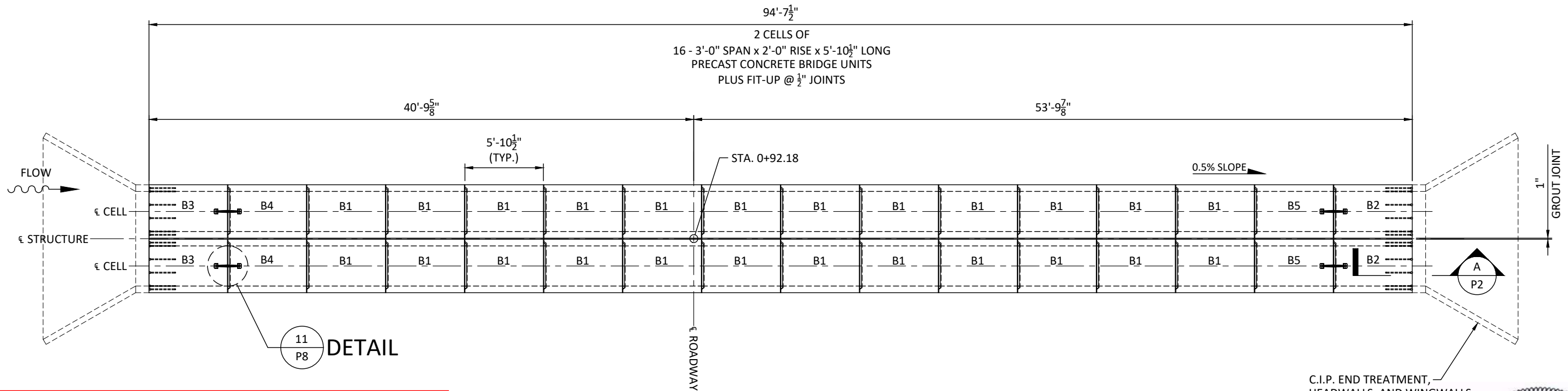
THE GLEN AT WIDEFIELD - POA ANNUA INTERSECTION

EL PASO COUNTY

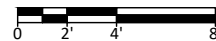
COLORADO

DESIGN NOTES

- THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS "LRFD BRIDGE DESIGN SPECIFICATIONS", 9TH EDITION AND INTERIM SPECIFICATIONS TO DATE. DESIGN LOADS ARE AS FOLLOWS:
BRIDGE UNITS: HL-93
DESIGN FILL HEIGHT: 0" MIN. TO 2'-0" MAX.
HEADWALLS: DESIGNED BY OTHERS
WINGWALLS: DESIGNED BY OTHERS
- CONFORMANCE TO THESE DRAWINGS, SPECIFICATIONS, AND EXISTING CONDITIONS, INCLUDING HYDRAULIC CAPACITY, SCOUR, GRADING AND SOIL CONDITIONS SHALL BE VERIFIED BY OTHERS.
- THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATED TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR THE CONTRACTOR TO PERFORM THE WORK. THE UNDERTAKING OF PERIODIC SITE VISITS BY THE ENGINEER SHALL NOT BE CONSTRUED AS SUPERVISION OF ACTUAL CONSTRUCTION NOR MAKE HIM RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF THE WORK BY THE CONTRACTOR, SUB-CONTRACTOR OR ANY PERSON ON THE SITE.



BRIDGE LAYOUT PLAN



- No Exception Taken
 - Rejected
 - Submit Specified Item
 - Make Corrections Noted
 - Revise and Resubmit
- We are verifying with the County that the note on the Poa Annuia profile (sheet 21) has been addressed.*

Checking is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for: dimensions which shall be confirmed and correlated at the job site; fabrication processes and techniques of construction; coordination of his work with that of all other trades; and the satisfactory performance of his work.

Kiowa Engineering Corporation
Date: July 19, 2022

By: *AUM*

DESCRIPTION	ENG

THE GLEN AT WIDEFIELD - POA ANNUA
INTERSECTION

LOCALE: EL PASO COUNTY

STATE: CO

PROVIDED BY:
Lindsay
COLORADO DIVISION
3330 E. LAS VEGAS ST.
COLORADO SPRINGS, CO 80906
719.392.9036

DESIGNED BY:
PRETEK GROUP
P.O. BOX 351
BELLBROOK, OH 45305
800.241.0925

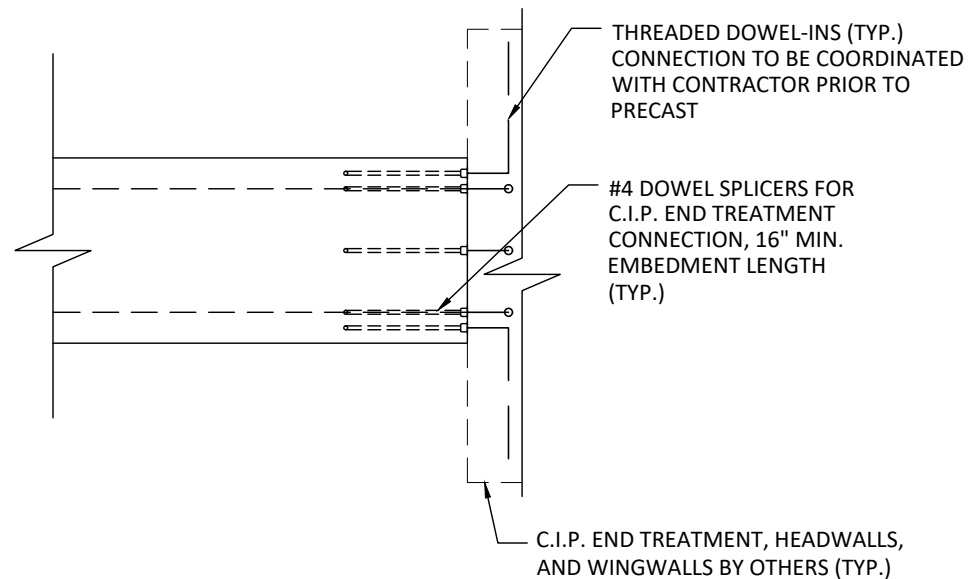
PROJECT NUMBER: 22-206
DATE: 7/14/2022
DESIGNED BY: HAA
DRAWN BY: JRW
CHECKED BY: TEN

C.I.P. END TREATMENT, HEADWALLS, AND WINGWALLS BY OTHERS (TYP.)

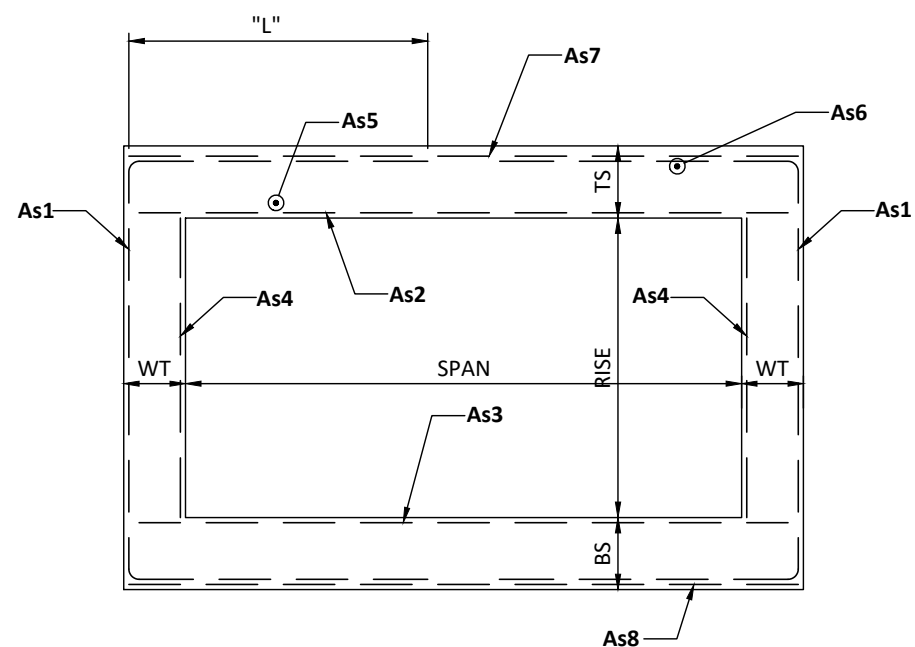
Jeffrey Joseph Von Handorf
JULY 18, 2022

FOR APPROVAL

P1



SECTION
TYP. END TREATMENT CONNECTION



BOX CULVERT REINFORCING SECTION

DESIGN DATA:

1. THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS "LRFD BRIDGE DESIGN SPECIFICATIONS", 9TH EDITION AND INTERIM SPECIFICATIONS TO DATE.
2. CORE STRENGTH OF CONCRETE SHALL BE 6,000 PSI MINIMUM AT 28 DAYS.
3. REINFORCING STEEL SHALL BE WELDED WIRE FABRIC WITH A MINIMUM YIELD STRENGTH OF 65,000 PSI.
4. DESIGN LOAD: HL-93
5. SKEW ANGLE: N/A
6. 2" COVER ON ALL SURFACES.
7. D.E.C. - 0'-0" TO 2'-0"

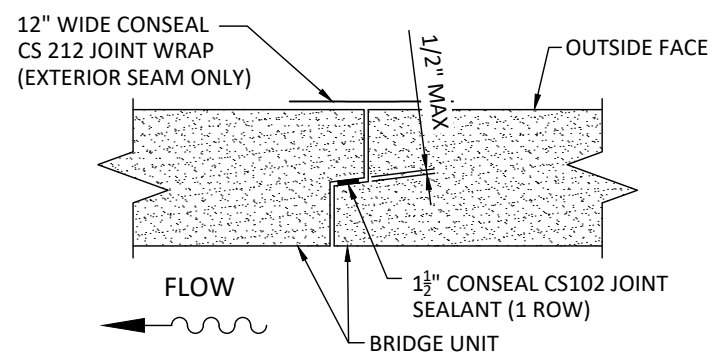
SECTION CHARACTERISTICS:

SPAN: 3'-0"
RISE: 2'-0"
WT: 6" (WALL THICKNESS)
TS: 6" (TOP SLAB)
BS: 6" (BOTTOM SLAB)

AREA OF STEEL REQUIRED: (IN²/FT)

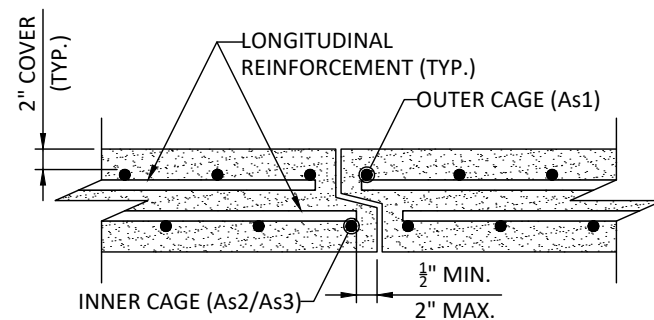
As1 = 0.45
As2 = 0.30
As3 = 0.24
As4 = 0.15
As5 = 0.15
As6 = 0.03 (MIN)*
As7 = 0.15
As8 = 0.15

L = 2'-7"



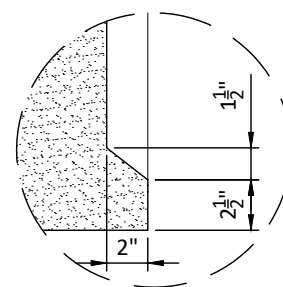
JOINT SEAL DETAIL

NOT TO SCALE

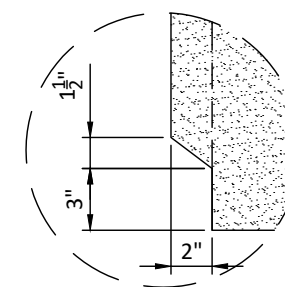


JOINT REINFORCING DETAIL

NOT TO SCALE



BELL DETAIL



SPIGOT DETAIL

***NOTE:**
CIRCUMFERENTIAL WIRES TO HAVE 2" MIN. SPACING, 4" MAX. LONGITUDINAL WIRES TO BE SPACED NO MORE THAN 8" AND BE SIZED AT LEAST 40% OF THE LARGER WIRE SIZE (W2.5 OR D2.5). STEEL AREAS SHOWN ARE MINIMUMS REQUIRED. ADJUST MAT WIDTH AS REQUIRED DUE TO NON-STANDARD SECTION LENGTHS AND/OR END UNITS WITH KEYWAY ON ONLY THE END.



Jeffrey Joseph Von Handorf
JULY 18, 2022

FOR APPROVAL

DATE	DESCRIPTION	ENG
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2		
1		

THE GLEN AT WIDFIELD - POA ANNUA INTERSECTION

LOCALE: EL PASO COUNTY

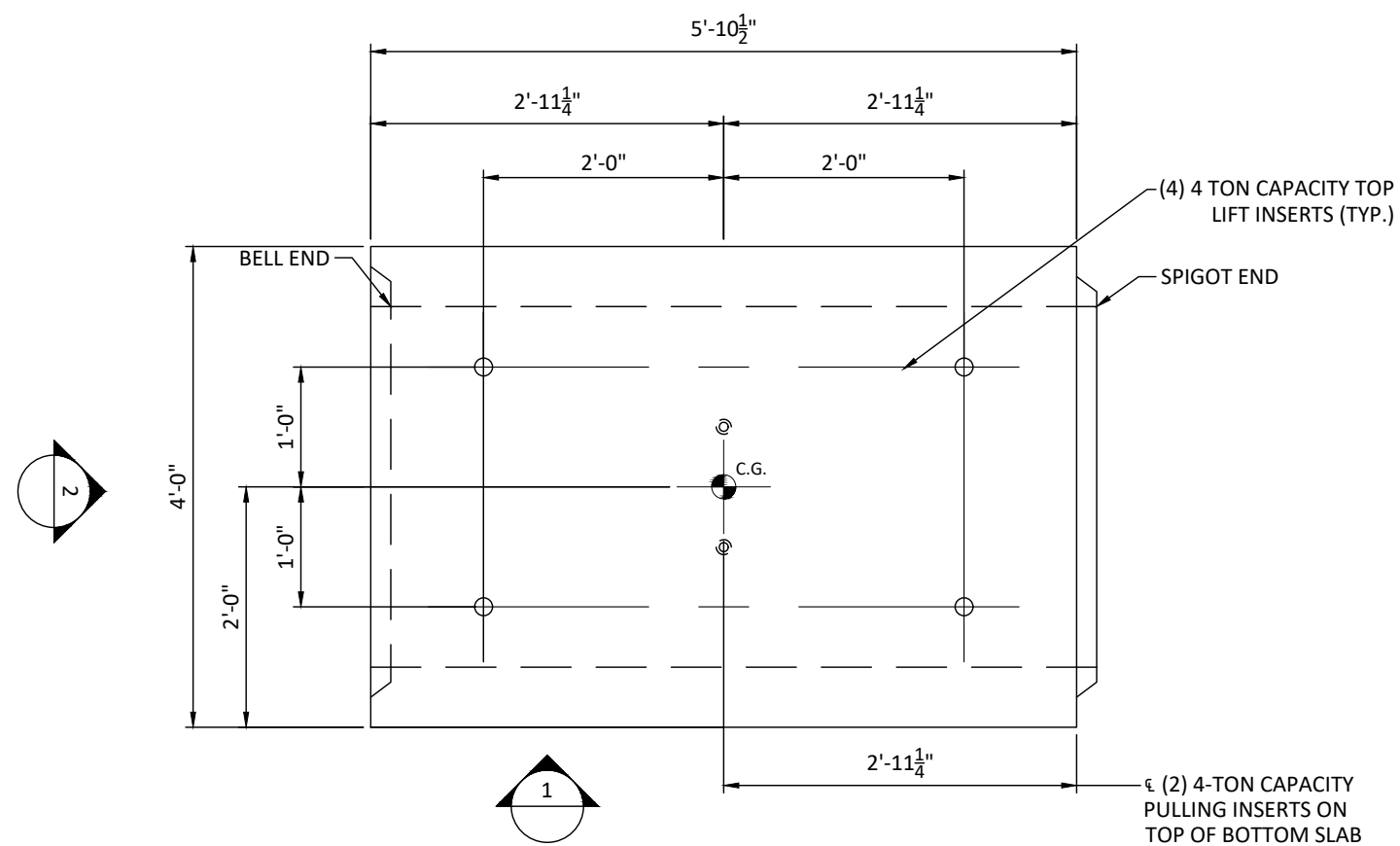
STATE: CO

PROVIDED BY:
Lindsay
COLORADO DIVISION
3330 E. LAS VEGAS ST.
COLORADO SPRINGS, CO 80906
719.392.9036

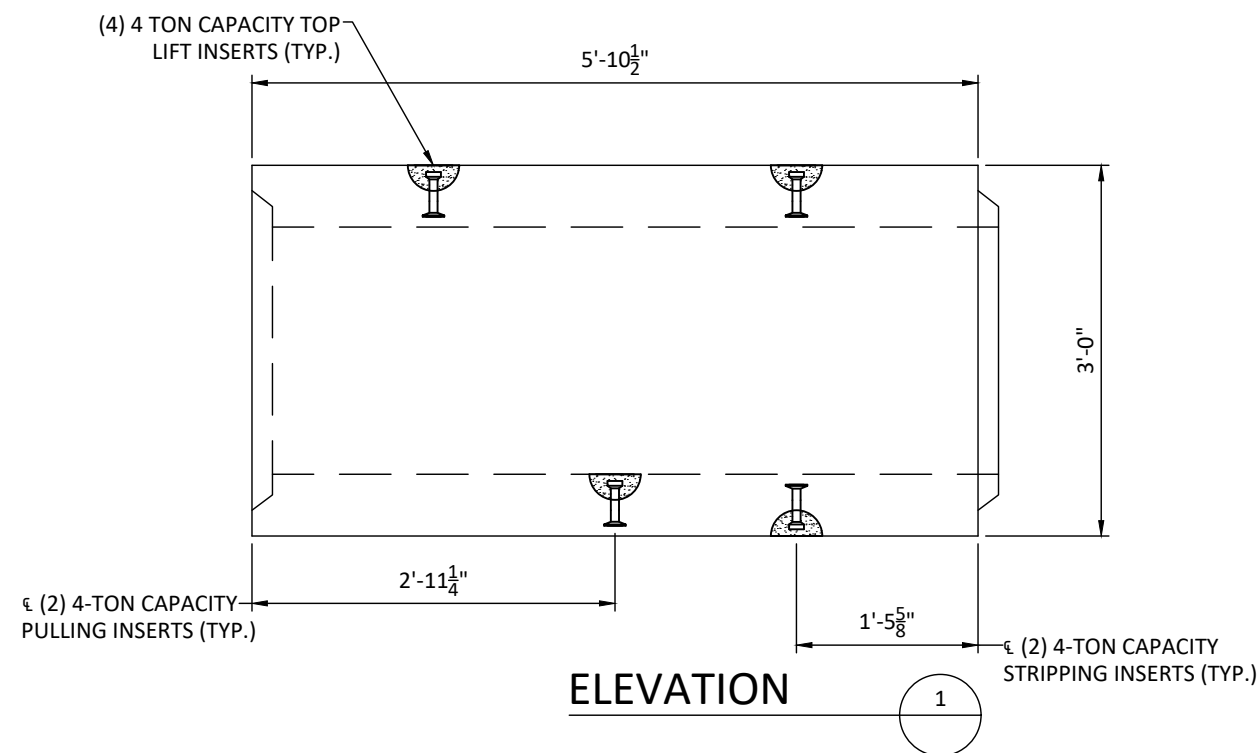
DESIGNED BY:
PRETEK GROUP
P.O. BOX 351
BELLBROOK, OH 45305
800.241.0925

PROJECT NUMBER: 22-206
DATE: 7/14/2022
DESIGNED BY: HAA
DRAWN BY: JRW
CHECKED BY: TEN

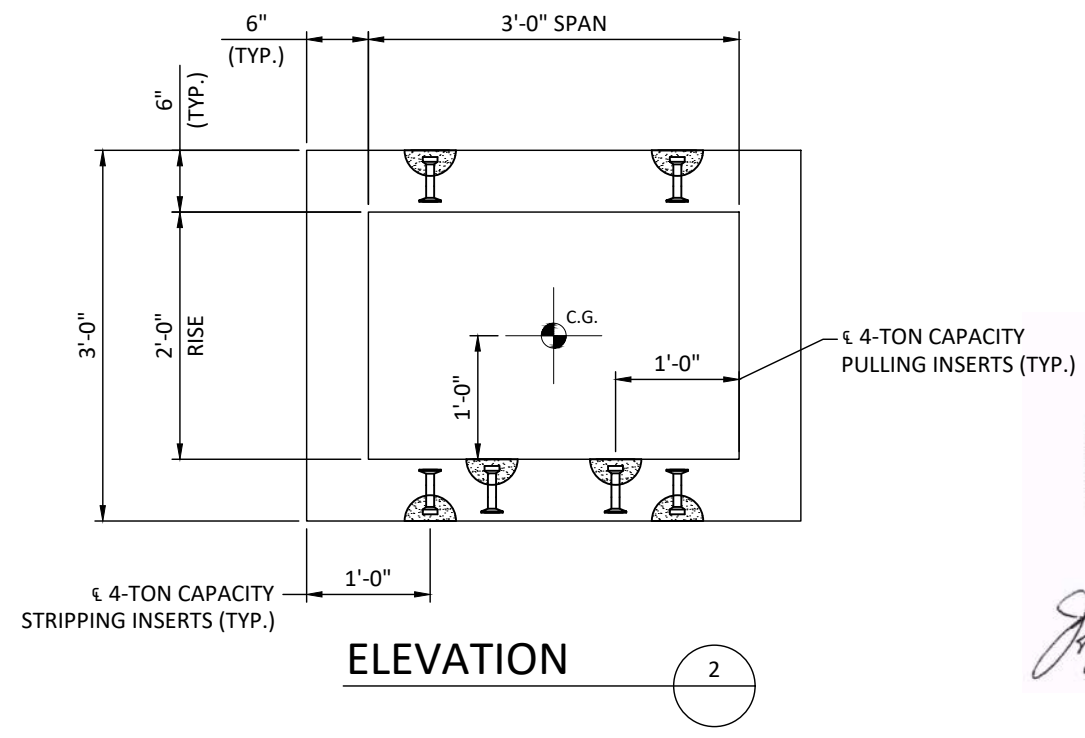
P2



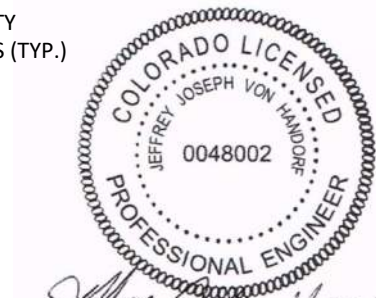
PLAN VIEW TYPE B1
 TOTAL WEIGHT = 2.6 TONS
 24 UNITS NEEDED



ELEVATION 1



ELEVATION 2



Jeffrey Joseph Von Handorf
 JULY 18, 2022

FOR APPROVAL

DATE	DESCRIPTION	ENG
7		
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2		
1		

THE GLEN AT WIDFIELD - POA ANNUA INTERSECTION

LOCALE: EL PASO COUNTY

STATE: CO

PROVIDED BY:

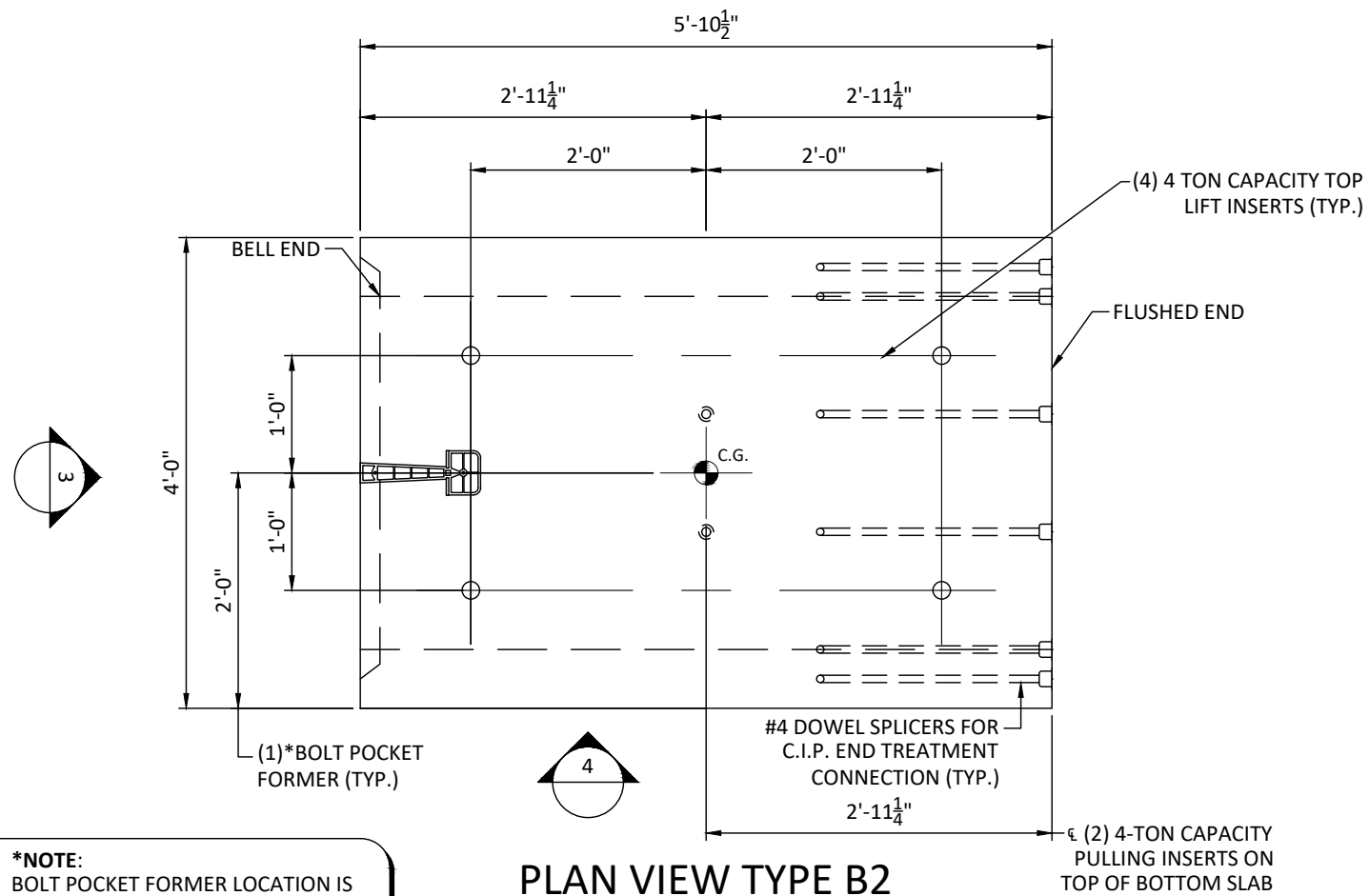
 COLORADO DIVISION
 3330 E. LAS VEGAS ST.
 COLORADO SPRINGS, CO 80906
 719.392.9036

DESIGNED BY:

 P.O. BOX 351
 BELLBROOK, OH 45305
 800.241.0925

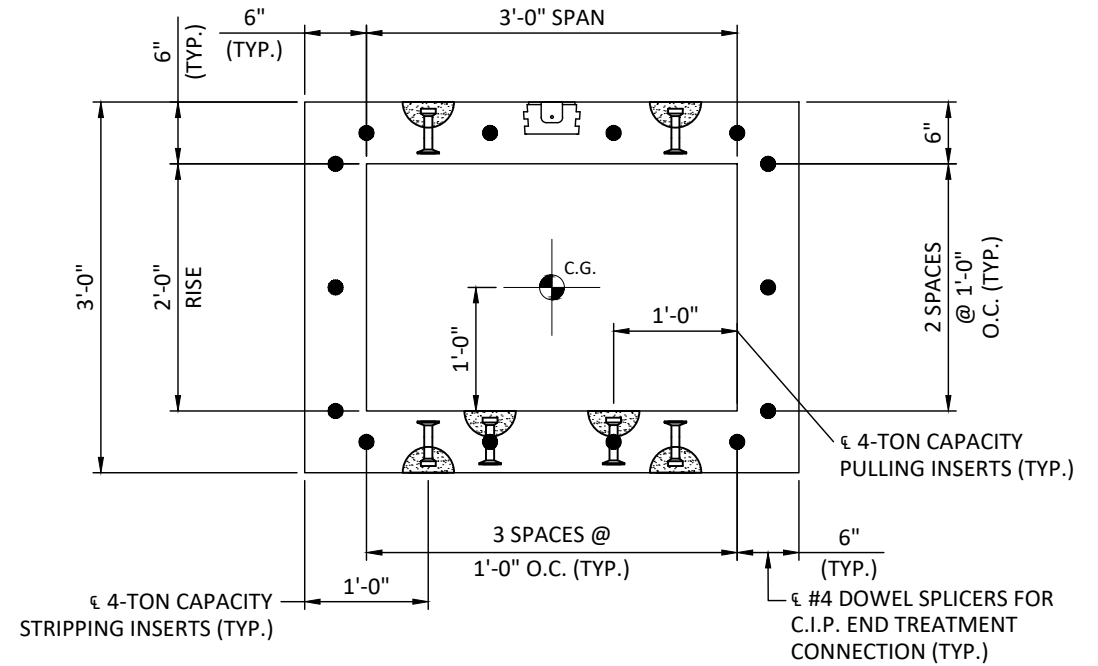
PROJECT NUMBER: 22-206
DATE: 7/14/2022
DESIGNED BY: HAA
DRAWN BY: JRW
CHECKED BY: TEN

P3

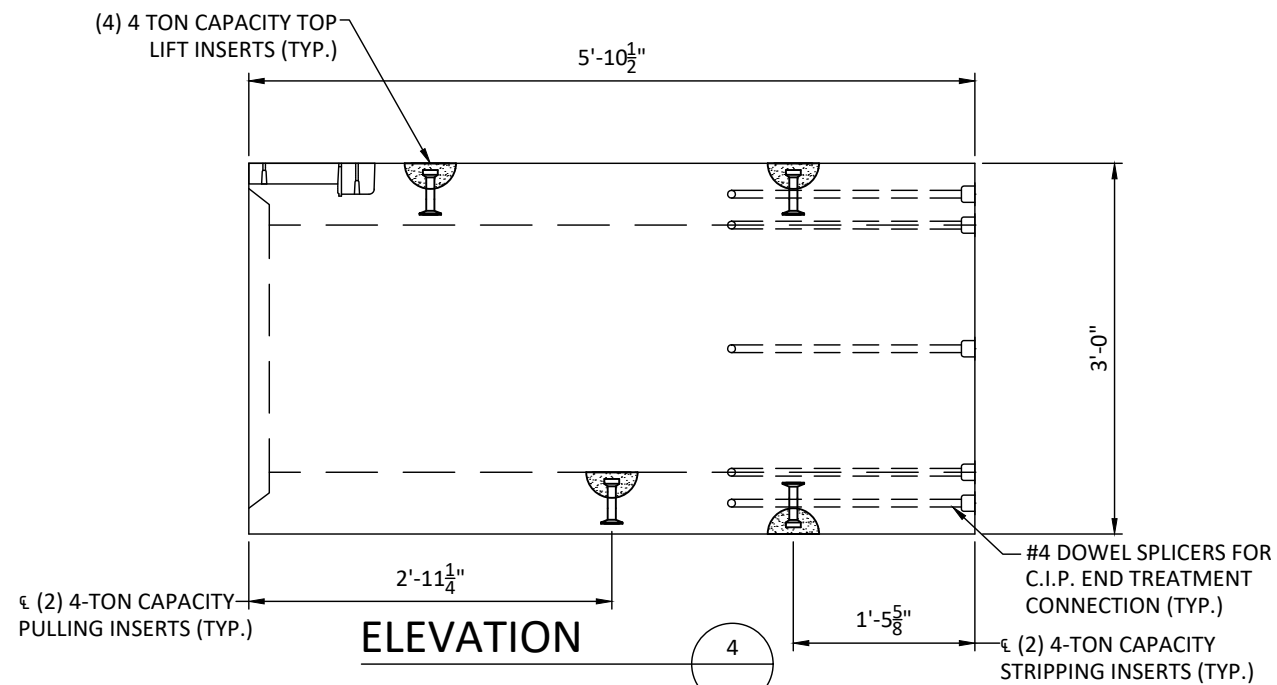


***NOTE:**
BOLT POCKET FORMER LOCATION IS
CRITICAL TOLERANCE = 1/4"

PLAN VIEW TYPE B2
TOTAL WEIGHT = 2.6 TONS
2 UNITS NEEDED



ELEVATION



ELEVATION



Jeffrey Joseph Von Handorf
JULY 18, 2022

FOR APPROVAL

DATE	DESCRIPTION	ENG
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THE GLEN AT WIDFIELD - POA ANNUA
INTERSECTION

LOCALE: EL PASO COUNTY

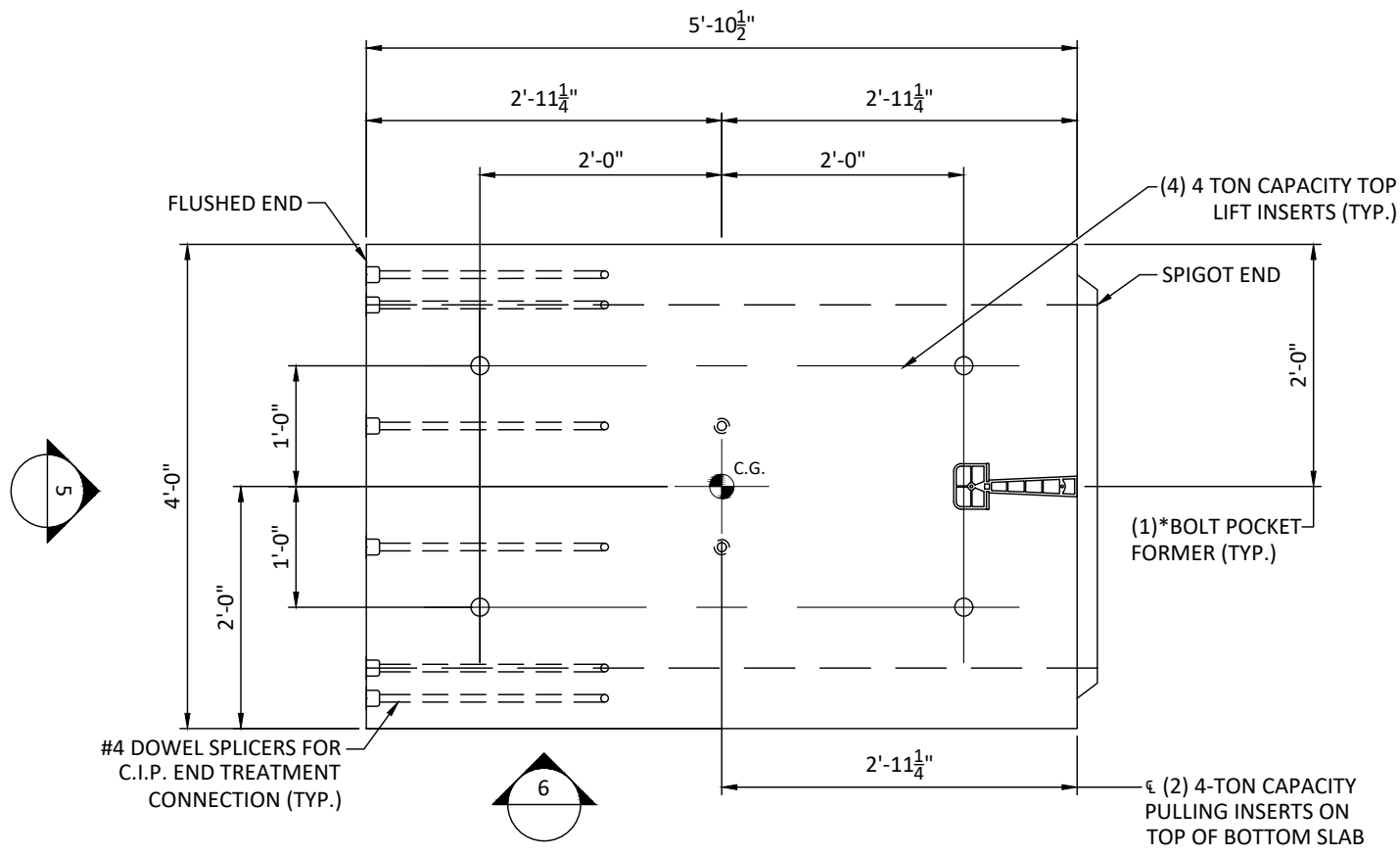
STATE: CO

PROVIDED BY:
Lindsay
COLORADO DIVISION
3330 E. LAS VEGAS ST.
COLORADO SPRINGS, CO 80906
719.392.9036

DESIGNED BY:
PRETEK GROUP
P.O. BOX 351
BELLBROOK, OH 45305
800.241.0925

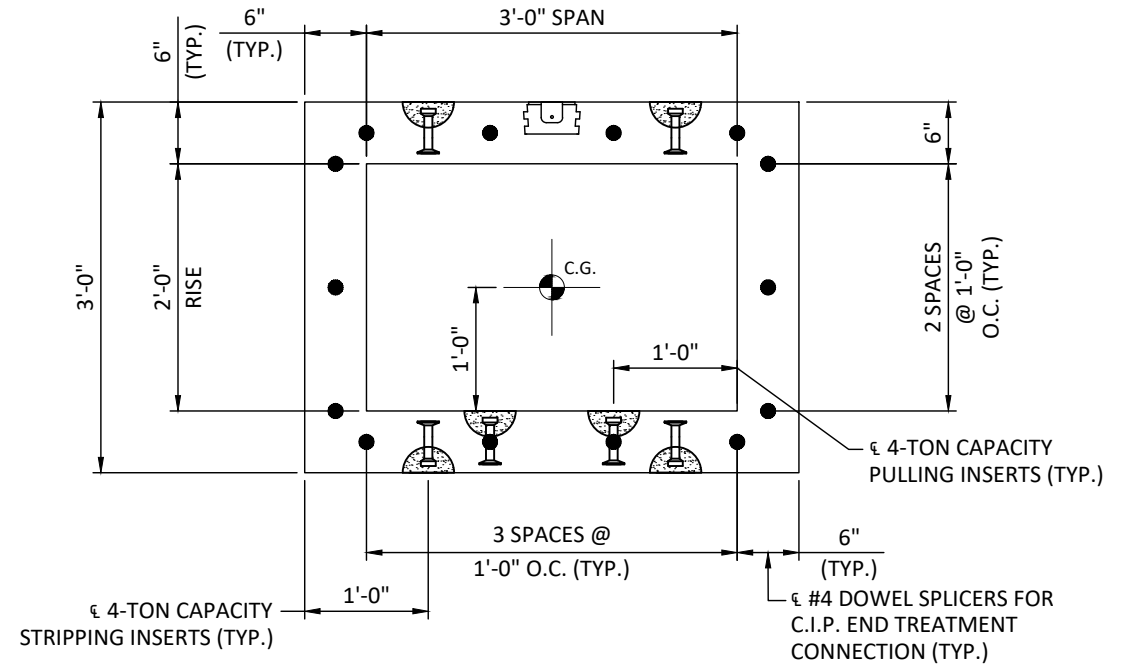
PROJECT NUMBER: 22-206
DATE: 7/14/2022
DESIGNED BY: HAA
DRAWN BY: JRW
CHECKED BY: TEN

P4

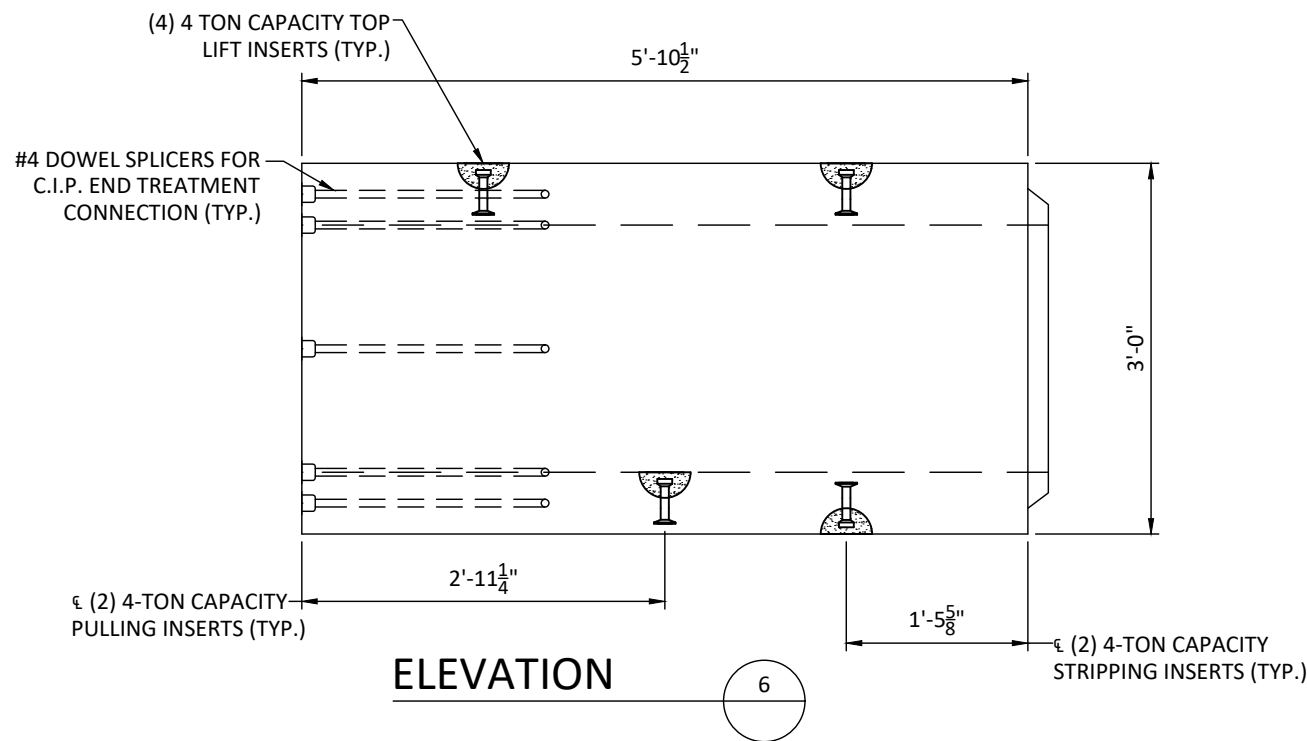


PLAN VIEW TYPE B3
 TOTAL WEIGHT = 2.6 TONS
 2 UNITS NEEDED

***NOTE:**
 BOLT POCKET FORMER LOCATION IS
 CRITICAL TOLERANCE = 1/4"



ELEVATION



ELEVATION

COLORADO LICENSED
 JEFFREY JOSEPH VON HANDBERG
 0048002
 PROFESSIONAL ENGINEER
Jeffrey Joseph Von Handberg
 JULY 18, 2022

FOR APPROVAL

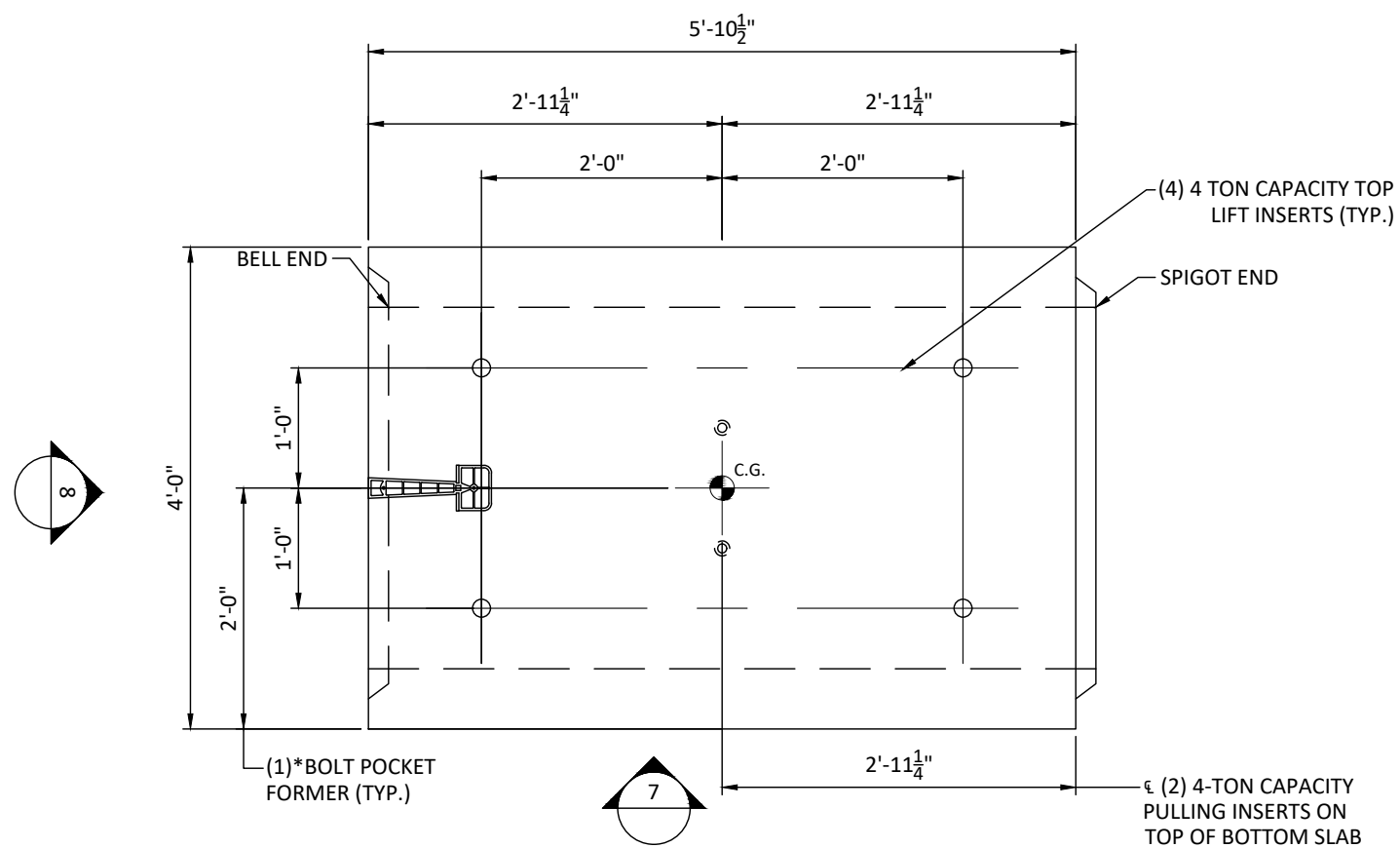
DATE	DESCRIPTION	ENG	PROVIDED BY:	DESIGNED BY:	PROJECT NUMBER:
7			 COLORADO DIVISION 3330 E. LAS VEGAS ST. COLORADO SPRINGS, CO 80906 719.392.9036	 P.O. BOX 351 BELLBROOK, OH 45305 800.241.0925	22-206
6					DATE: 7/14/2022
5					DESIGNED BY: HAA
4					DRAWN BY: JRW
3					CHECKED BY: TEN
2					
1					

THE GLEN AT WIDEFIELD - POA ANNUA INTERSECTION

LOCALE: EL PASO COUNTY

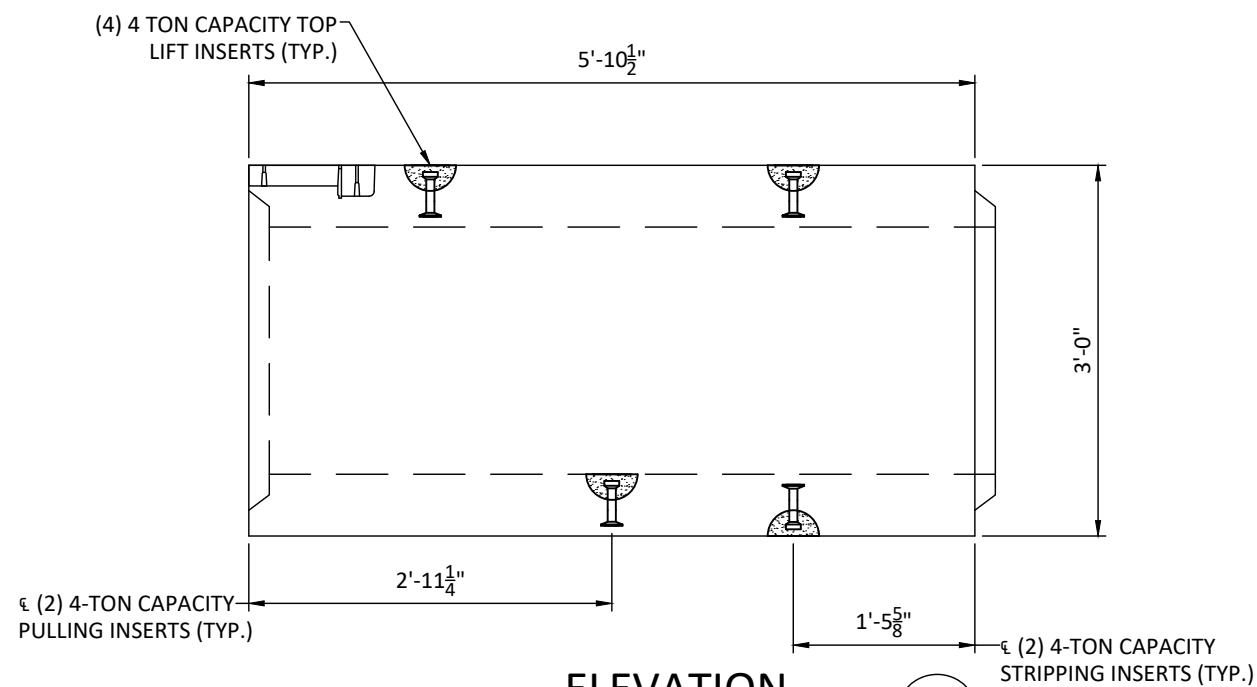
STATE: CO

P5

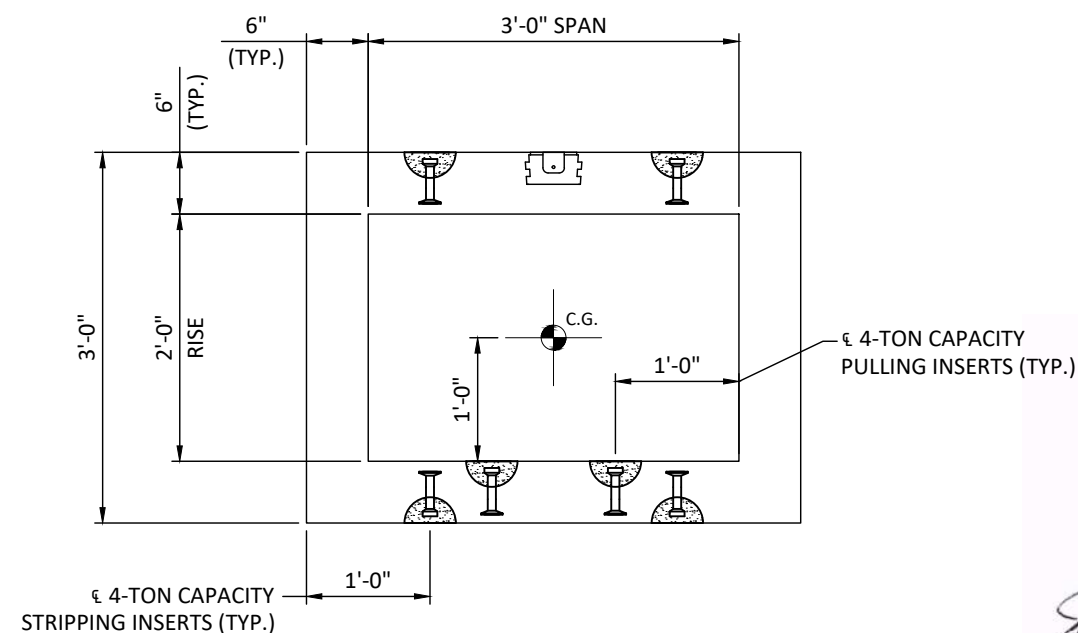


***NOTE:**
BOLT POCKET FORMER LOCATION IS
CRITICAL TOLERANCE = 1/4"

PLAN VIEW TYPE B4
TOTAL WEIGHT = 2.6 TONS
2 UNITS NEEDED



ELEVATION



ELEVATION



Jeffrey J. Von Handorf
JULY 18, 2022

FOR APPROVAL

DATE	DESCRIPTION	ENG
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**THE GLEN AT WIDFIELD - POA ANNUA
INTERSECTION**

LOCALE: EL PASO COUNTY

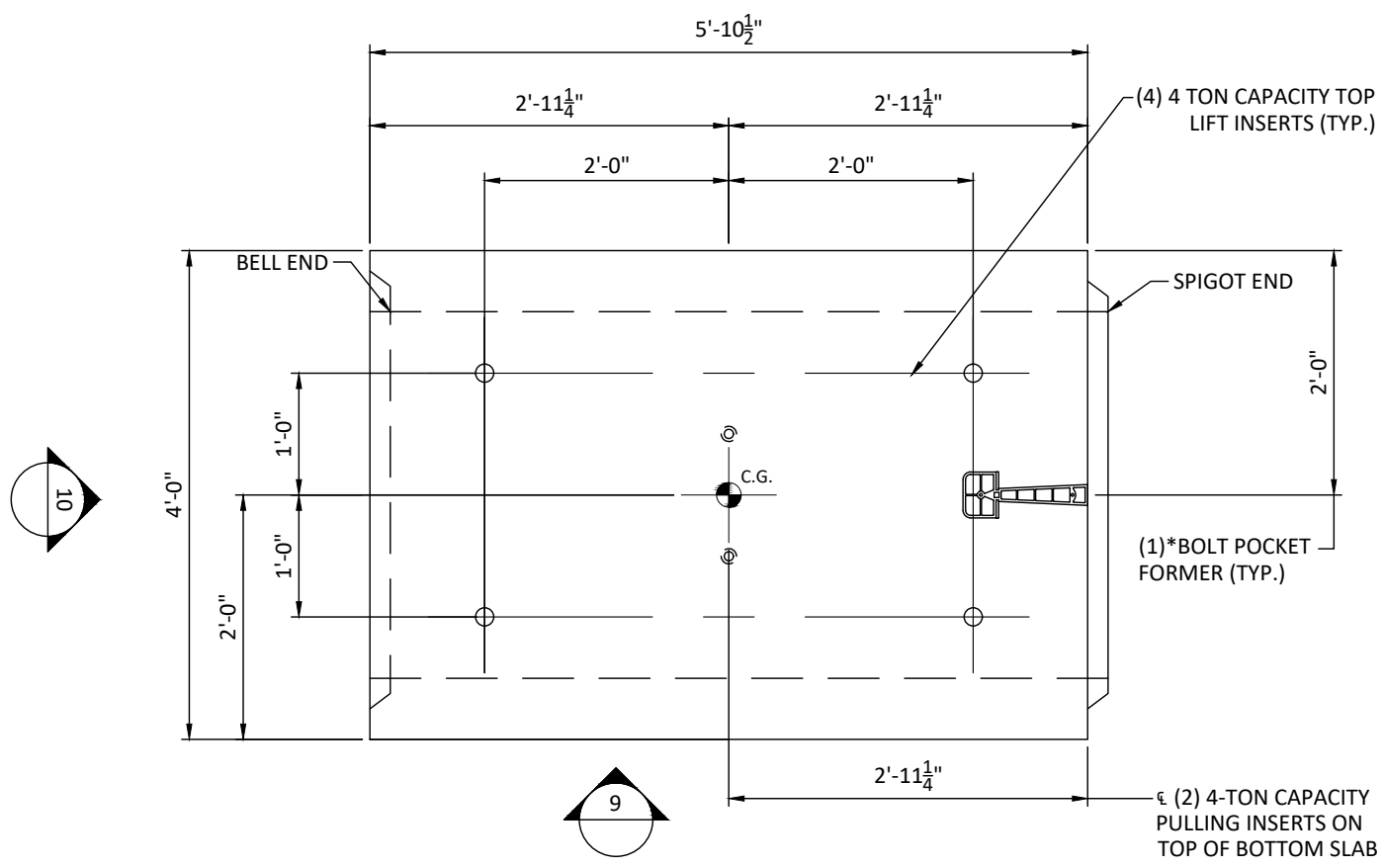
STATE: CO

PROVIDED BY:
Lindsay
COLORADO DIVISION
3330 E. LAS VEGAS ST.
COLORADO SPRINGS, CO 80906
719.392.9036

DESIGNED BY:
PRETEK GROUP
P.O. BOX 351
BELLBROOK, OH 45305
800.241.0925

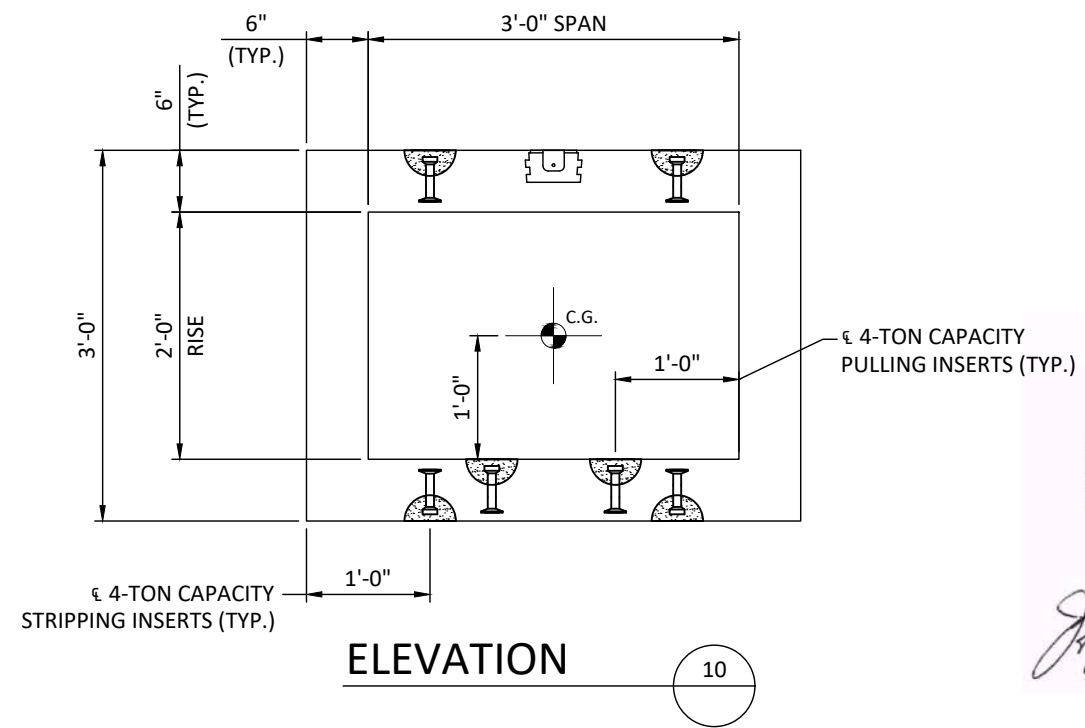
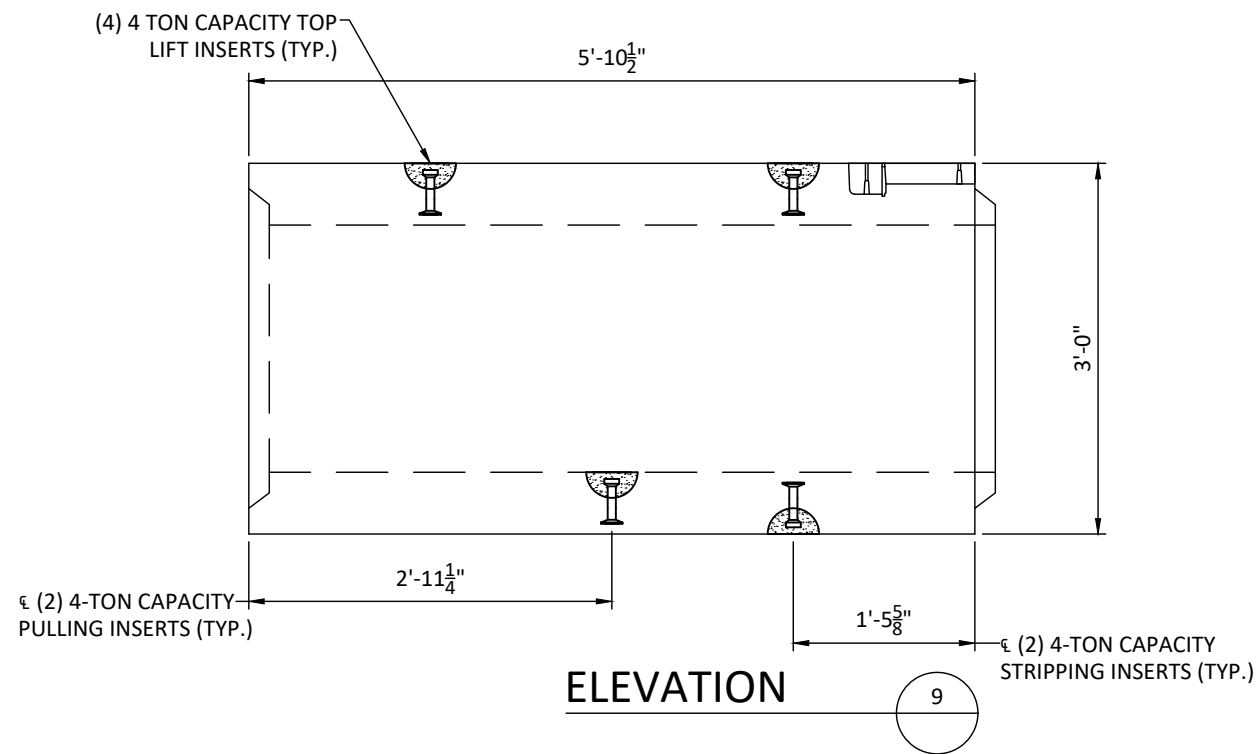
PROJECT NUMBER: 22-206
DATE: 7/14/2022
DESIGNED BY: HAA
DRAWN BY: JRW
CHECKED BY: TEN

P6



***NOTE:**
BOLT POCKET FORMER LOCATION IS
CRITICAL TOLERANCE = 1/4"

PLAN VIEW TYPE B5
TOTAL WEIGHT = 2.6 TONS
2 UNITS NEEDED



Jeffrey Joseph Von Handorf
JULY 18, 2022

FOR APPROVAL

DATE	DESCRIPTION	ENG
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THE GLEN AT WIDFIELD - POA ANNUA INTERSECTION

LOCALE: EL PASO COUNTY

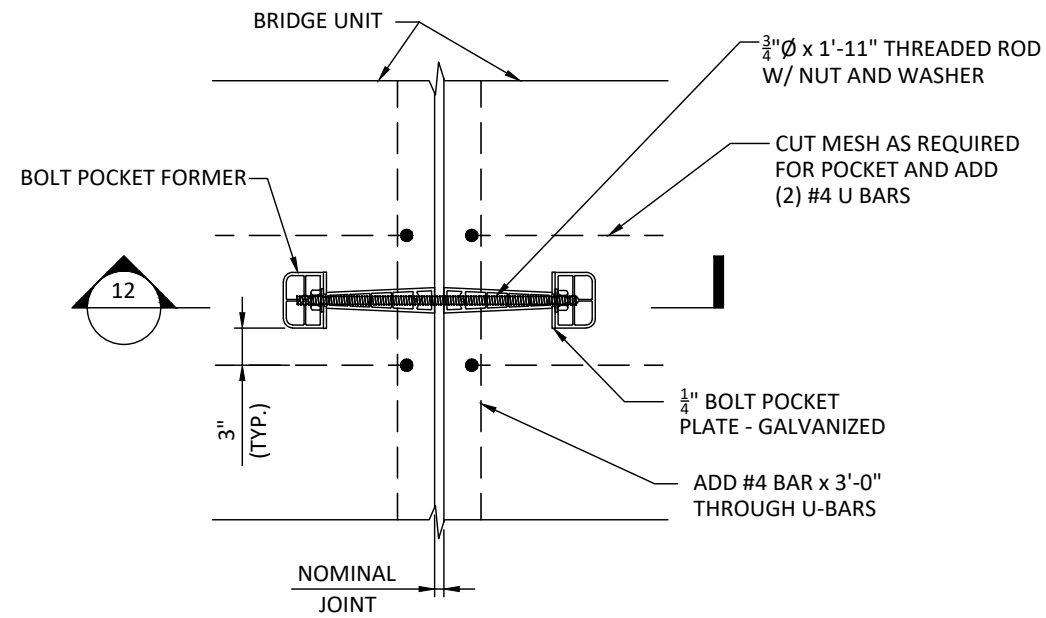
STATE: CO

PROVIDED BY:
Lindsay
COLORADO DIVISION
3330 E. LAS VEGAS ST.
COLORADO SPRINGS, CO 80906
719.392.9036

DESIGNED BY:
PRETEK GROUP
P.O. BOX 351
BELLBROOK, OH 45305
800.241.0925

PROJECT NUMBER: 22-206
DATE: 7/14/2022
DESIGNED BY: HAA
DRAWN BY: JRW
CHECKED BY: TEN

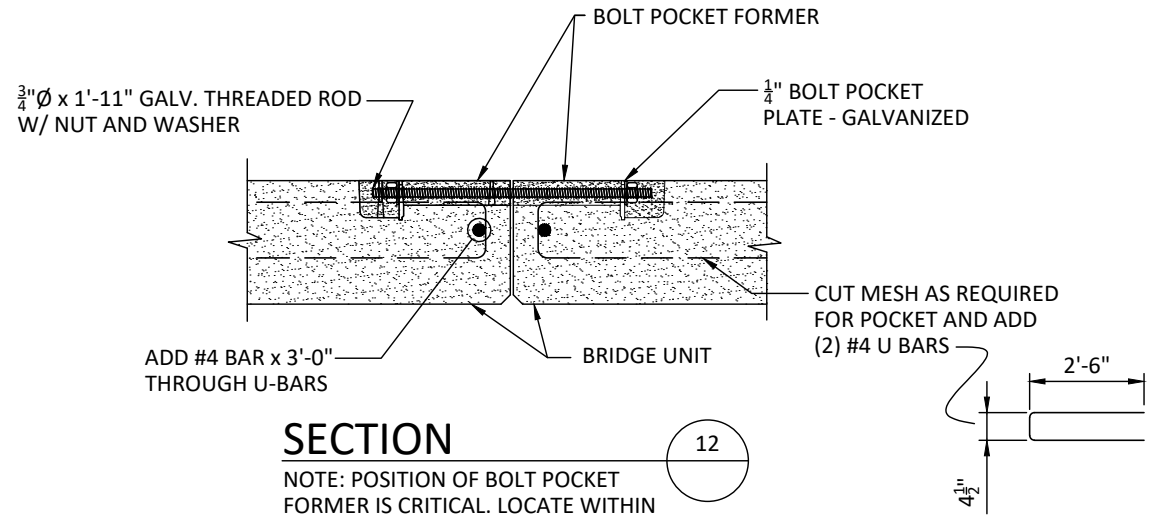
P7



DETAIL
NOT TO SCALE

11
P1

NOTE:
BOLT FORMER ASSEMBLY AVAILABLE FROM PENNSYLVANIA INSERT CORP. PART NUMBERS:
URETHANE BOLT POCKET FORMER: 4023
THREADED INSERTS: 1200
STEEL PLATES: 4024



SECTION

NOTE: POSITION OF BOLT POCKET FORMER IS CRITICAL. LOCATE WITHIN 1/4" OF ϵ SHOWN ON ADJACENT BRIDGE UNITS.

12

COLORADO LICENSED
JEFFREY JOSEPH VON HANDBERG
0048002
PROFESSIONAL ENGINEER

Jeffrey J. Von Handberg
JULY 18, 2022

FOR APPROVAL

DATE	DESCRIPTION	ENG	THE GLEN AT WIDFIELD - POA ANNUA INTERSECTION		PROVIDED BY:	DESIGNED BY:	PROJECT NUMBER: 22-206
7			LOCALE: EL PASO COUNTY STATE: CO		 COLORADO DIVISION 3330 E. LAS VEGAS ST. COLORADO SPRINGS, CO 80906 719.392.9036	 P.O. BOX 351 BELLBROOK, OH 45305 800.241.0925	DATE: 7/14/2022
6		DESIGNED BY: HAA					
5		DRAWN BY: JRW					
4		CHECKED BY: TEN					
3							
2							
1							

P8