

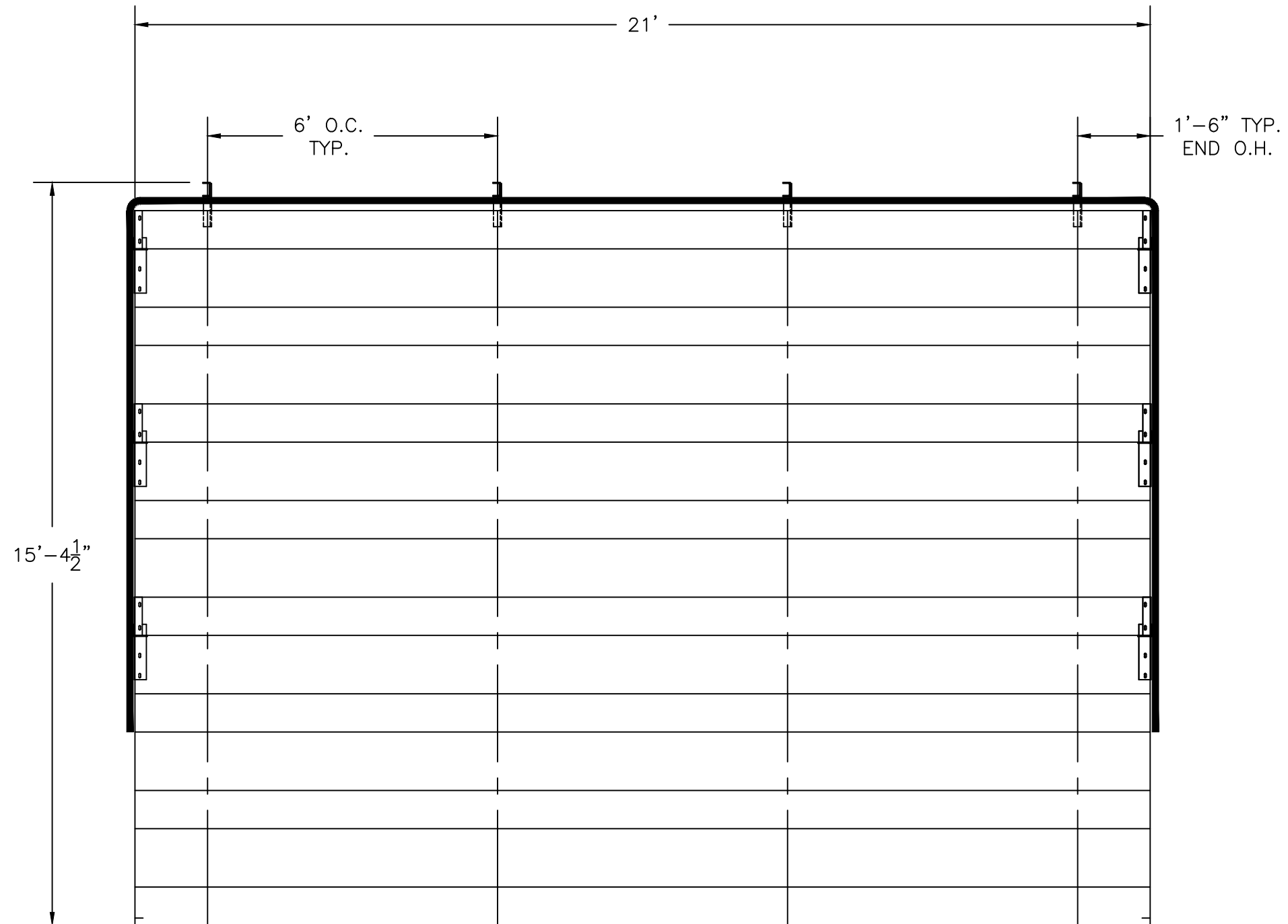
NA-0821STD/CL

NON ELEVATED 8 ROW x 21'-0" ALUMINUM BLEACHER

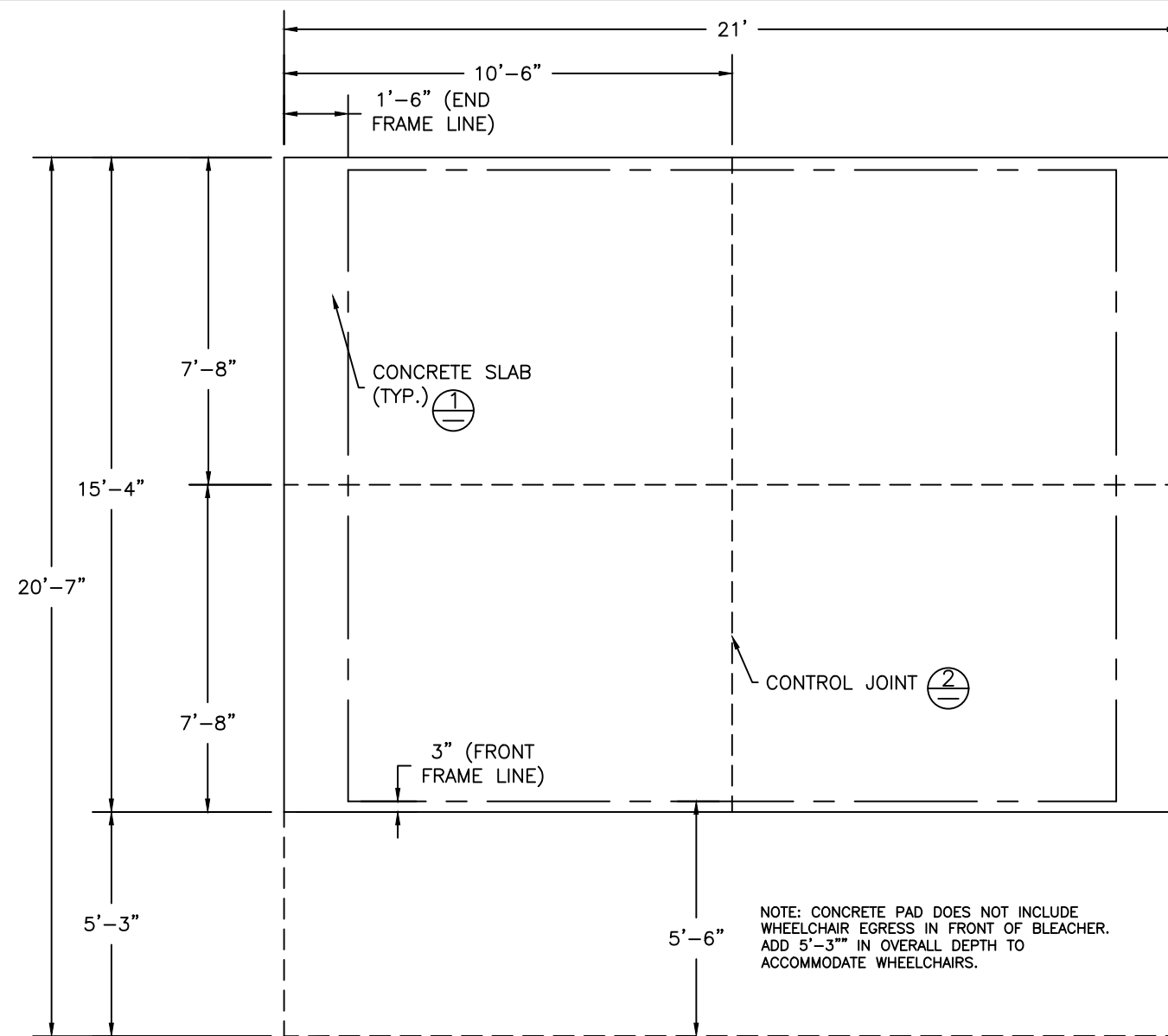
National Recreation Systems, Inc.

5120 INVESTMENT DRIVE - FORT WAYNE, IN 46808

CS.1	- COVER SHEET
TD.1	- BLEACHER SEATING PLAN
FP.1	- FOUNDATION PLAN
AP1	- ANCHORING PLAN
BA.1	- BLEACHER ASSEMBLY
PF.1	- PLANK LAYOUT
GR.1	- GUARDRAIL ASSEMBLY
DS.1	- DETAIL SHEET



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			5120 INVESTMENT DRIVE - FORT WAYNE, IN 46808	
SCALE:	N.T.S.	APPROVED BY:	CHUCK	
DATE:	03/10/2016	DRAWN BY:	JML	
TITLE:	NON ELEVATED 8 ROW x 21'-0" BLEACHER SEATING PLAN			
MODEL #:	NA-0821STD/CL	DRAWING NUMBER:	TD.1	



CONCRETE FOUNDATION SPECIFICATIONS

SCOPE:

Foundation construction is not part of National Recreation Systems, Inc.'s (NRS) scope of work unless noted otherwise in the contract documents. The owner shall review the foundation design with the local code authorities, and coordinate with NRS.

FOUNDATION DESIGN & ANCHORS:

- 1) The foundation designs are based on the following:
 - a. Minimum presumed soil bearing 1000 psf.
 - b. Bleacher frame dead and live load 700 lbs./ft.
 - c. Bleacher frame wind uplift load 250 lbs./ft.
- 2) Unless otherwise noted on the drawings the bleacher frames shall be attached to the concrete with 3/8" dia. x 3" wedge type expansion anchors. The anchors shall be embedded a minimum of 1 3/4" into the concrete.

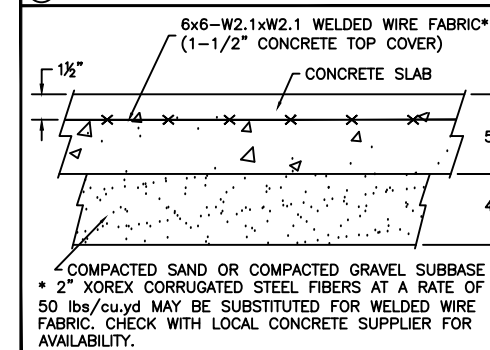
CONCRETE SPECIFICATIONS:

- 1) All concrete construction shall be in accordance with *ACI 318-08*.
- 2) All concrete shall have a minimum 28-day strength of $F_c=3000$ psi.
- 3) A 1/4" bituminous expansion joint material shall be placed between strip and slab foundations when adjacent to each other.
- 4) The depressions in the top of the foundations between high spots shall not exceed 5/16" below a 10-foot long straightedge. The 10-foot straightedge method used to measure foundation flatness shall be in accordance with Section of ACI 302.1R-04 "Guide for Concrete Floor and Slab Construction".

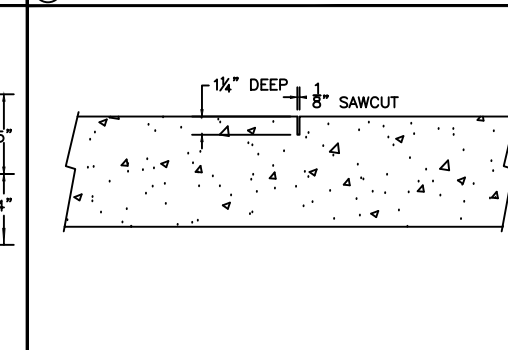
CONCRETE SLAB SPECIFICATIONS:

- 1) Concrete slab shall have a minimum thickness of 5" (NRS, Inc. recommends, and some areas may require 6" thickness) and placed on 4" of compacted gravel or compacted sand sub-base.
- 2) NRS, Inc. recommends that the concrete slab be reinforced with 6x6-W2.1xW2.1 welded wire fabric at 1 1/2" concrete cover from the top. In lieu of welded wire fabric, 2" XOREX by Ribbon Technology Corporation or equal corrugated steel fibers applied at a rate of 50-lbs./Cubic Yard may be used. Nylon or polypropylene fiber are not recommended.
- 3) Crack control joints shall be sawed into slab to form approximate square patterns. The maximum spacing for control joints shall not exceed 12'-6", unless shown otherwise on this drawing. The bleacher frames shall not be set on control joints. The designer shall contact NRS to coordinate joint spacing requirements with the specific bleacher design.
- 4) The slab may be sloped a maximum of 1/8 inch per foot for drainage. The maximum overall out of level slope for the slab perpendicular to the seats (front to rear) shall not exceed 2" and parallel to the seats (end to end) shall not exceed 4".

⊕ CONCRETE SLAB SECTION



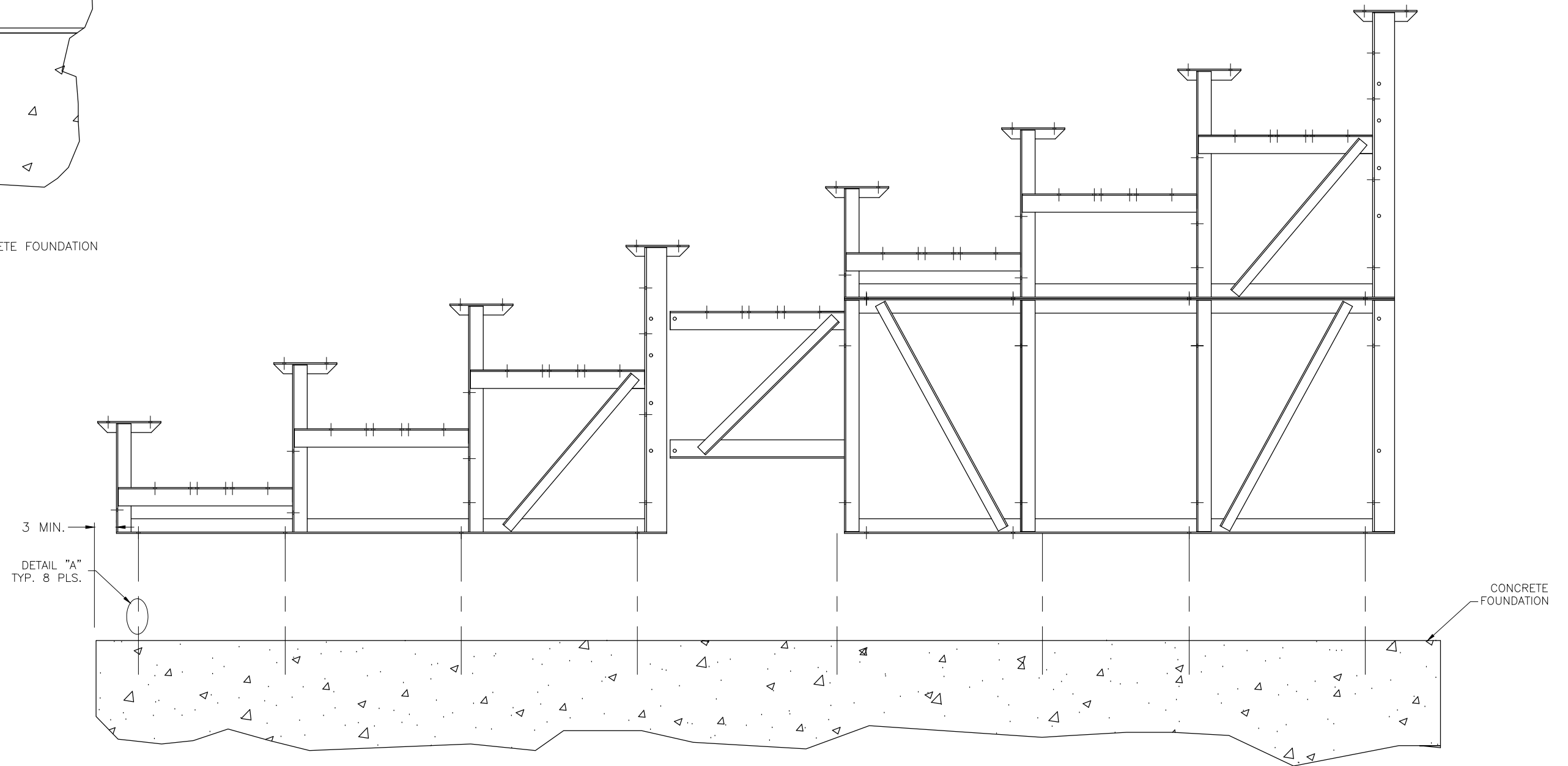
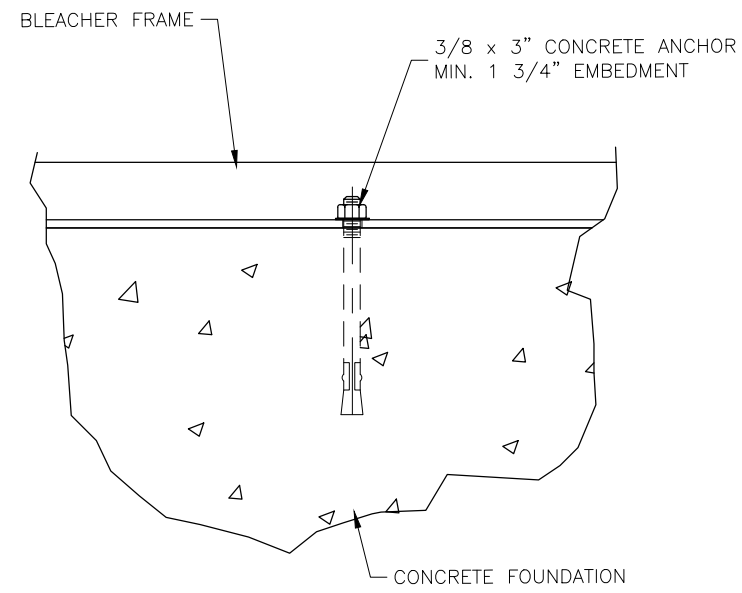
⊕ CONTROL JOINT DETAIL



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SCALE: N.T.S.	APPROVED BY: CHUCK	DRAWN BY: JML
DATE: 03/10/2016		
TITLE: NON ELEVATED 8 ROW x 21'-0" FOUNDATION PLAN		
MODEL #: NA-0821STD/CL	DRAWING NUMBER: FP.1	

DETAIL "A" - CONCRETE ANCHOR ATTACHMENT



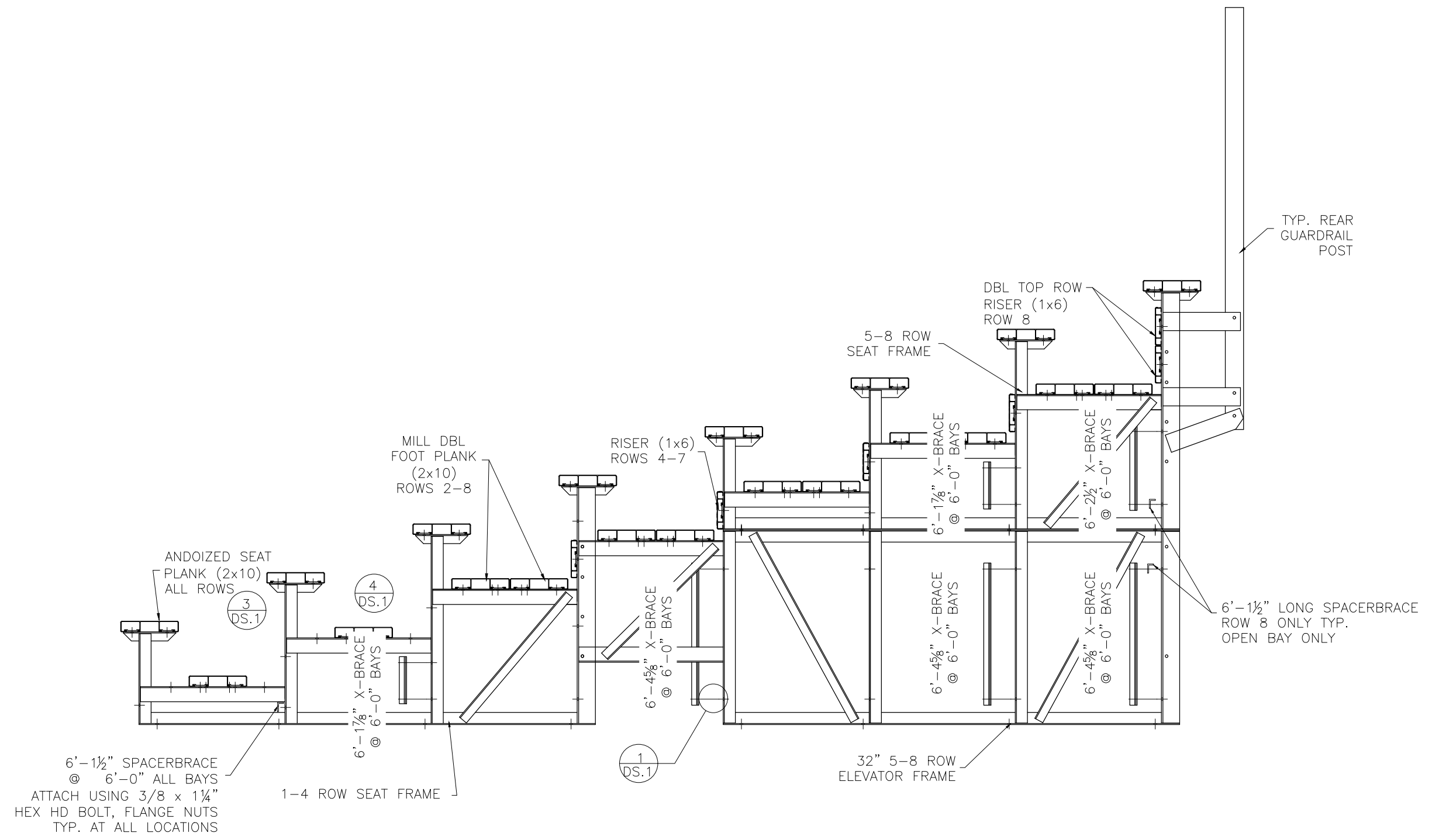
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SCALE: N.T.S.	APPROVED BY: CHUCK	DRAWN BY: JML
DATE: 03/10/2016		

TITLE: NON ELEVATED 8 ROW x 21'-0" ANCHORING PLAN

MODEL #: NA-0821STD/CL	DRAWING NUMBER: AP.1
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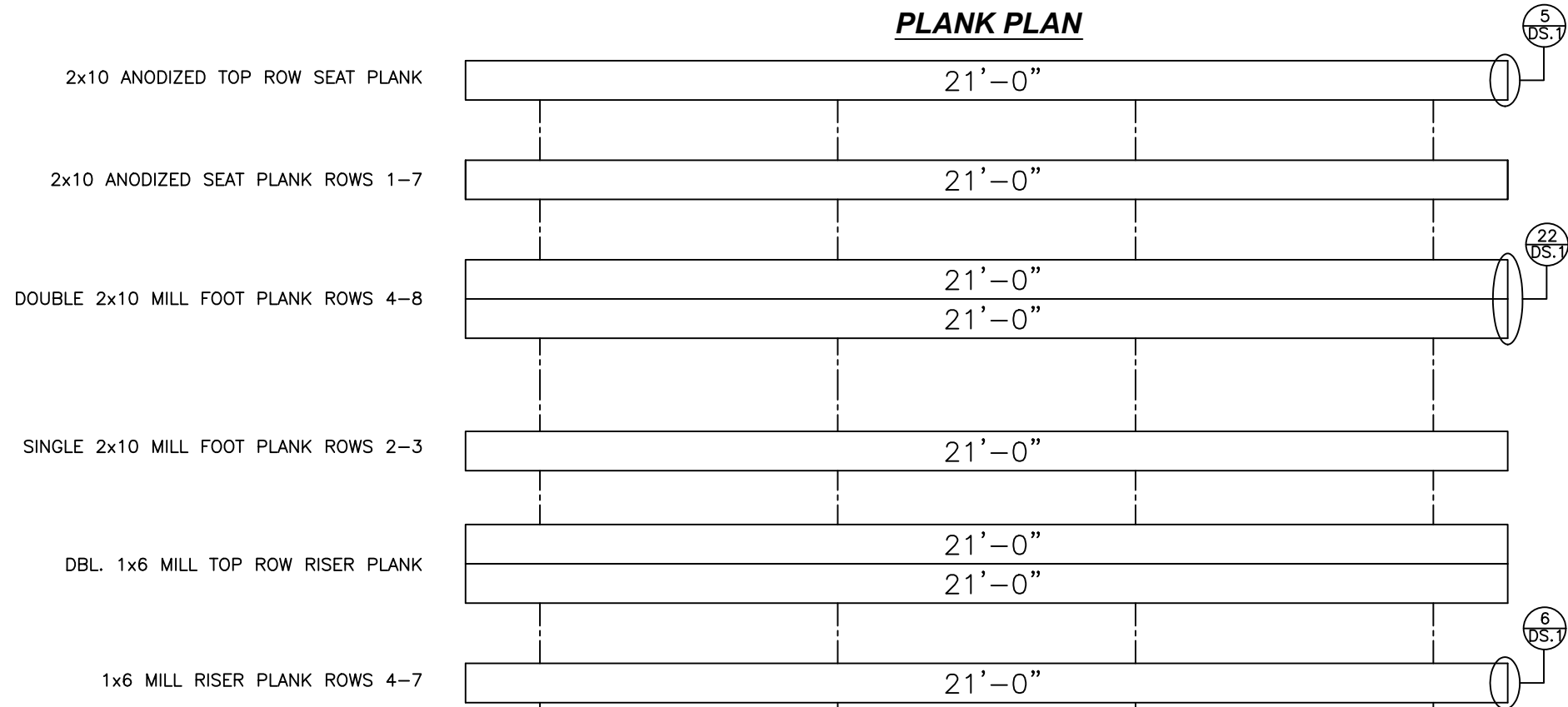


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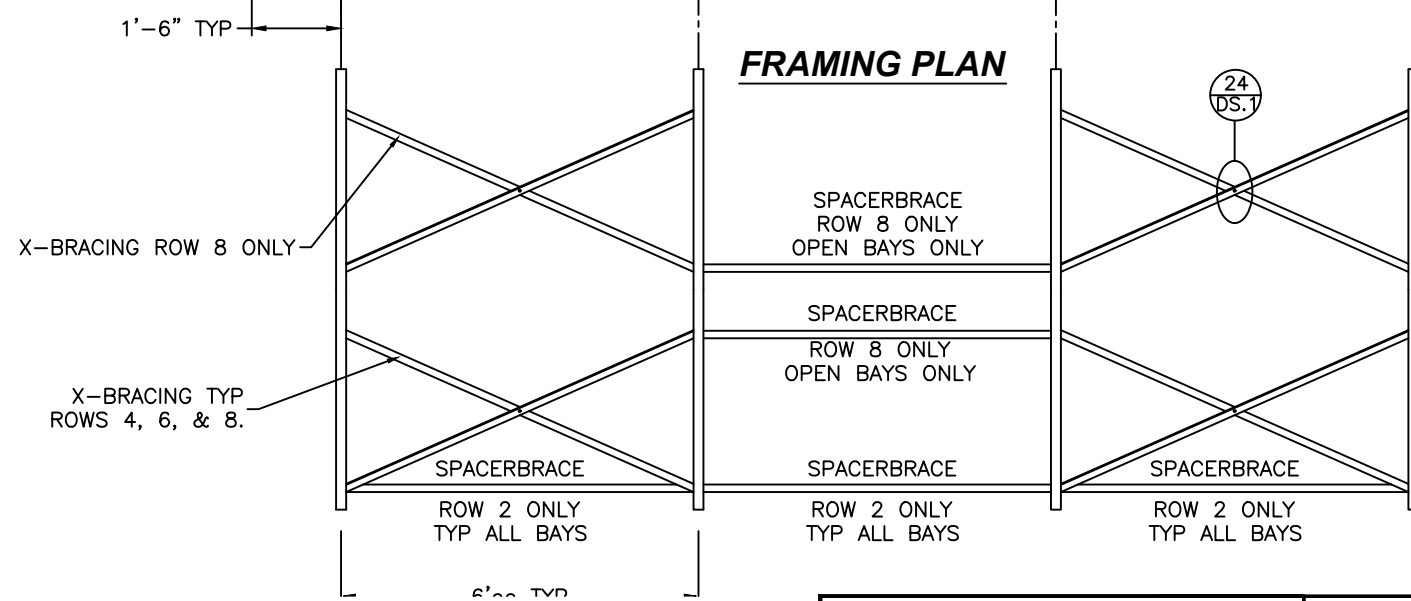
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SCALE: N.T.S.	APPROVED BY: CHUCK	DRAWN BY: JML
DATE: 03/10/2016		
TITLE: BLEACHER ASSEMBLY		
MODEL #: NA-0821STD/CL	DRAWING NUMBER: BA.1	

PLANK PLAN



FRAMING PLAN

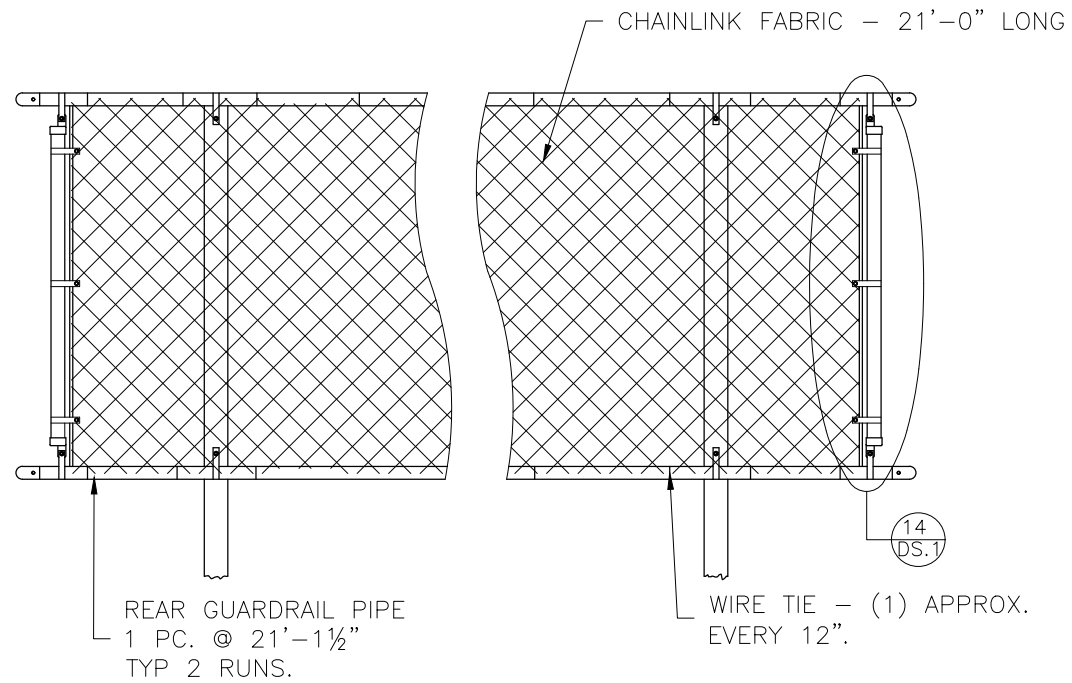


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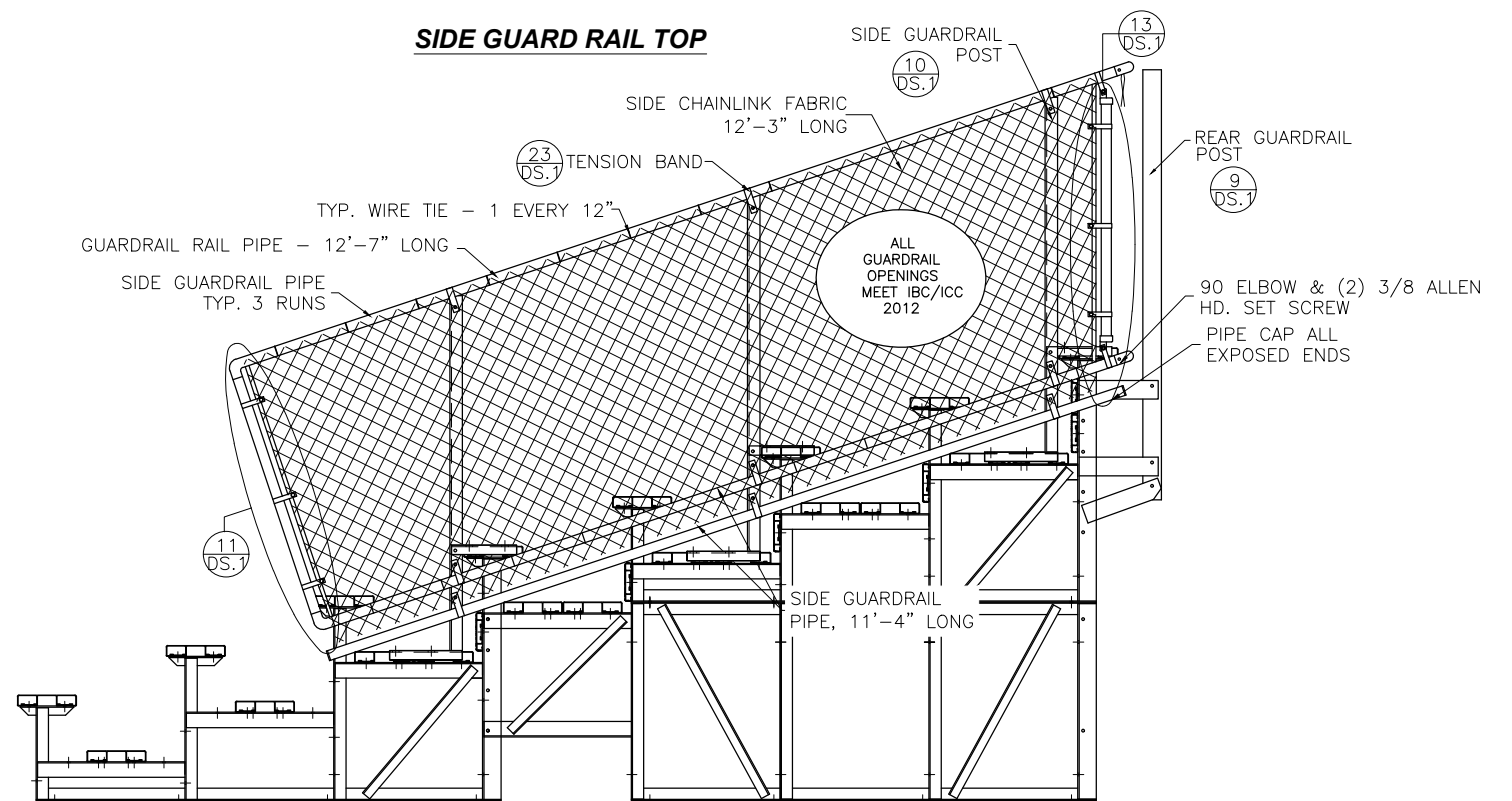
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5120 INVESTMENT DRIVE - FORT WAYNE, IN 46808		
SCALE: N.T.S.	APPROVED BY: CHUCK	DRAWN BY: JML
DATE: 03/10/2016	TITLE: PLANK LAYOUT	
MODEL #: NA-0821STD/CL	DRAWING NUMBER: PF. 1	

REAR GUARDRAIL

NOT TO SCALE



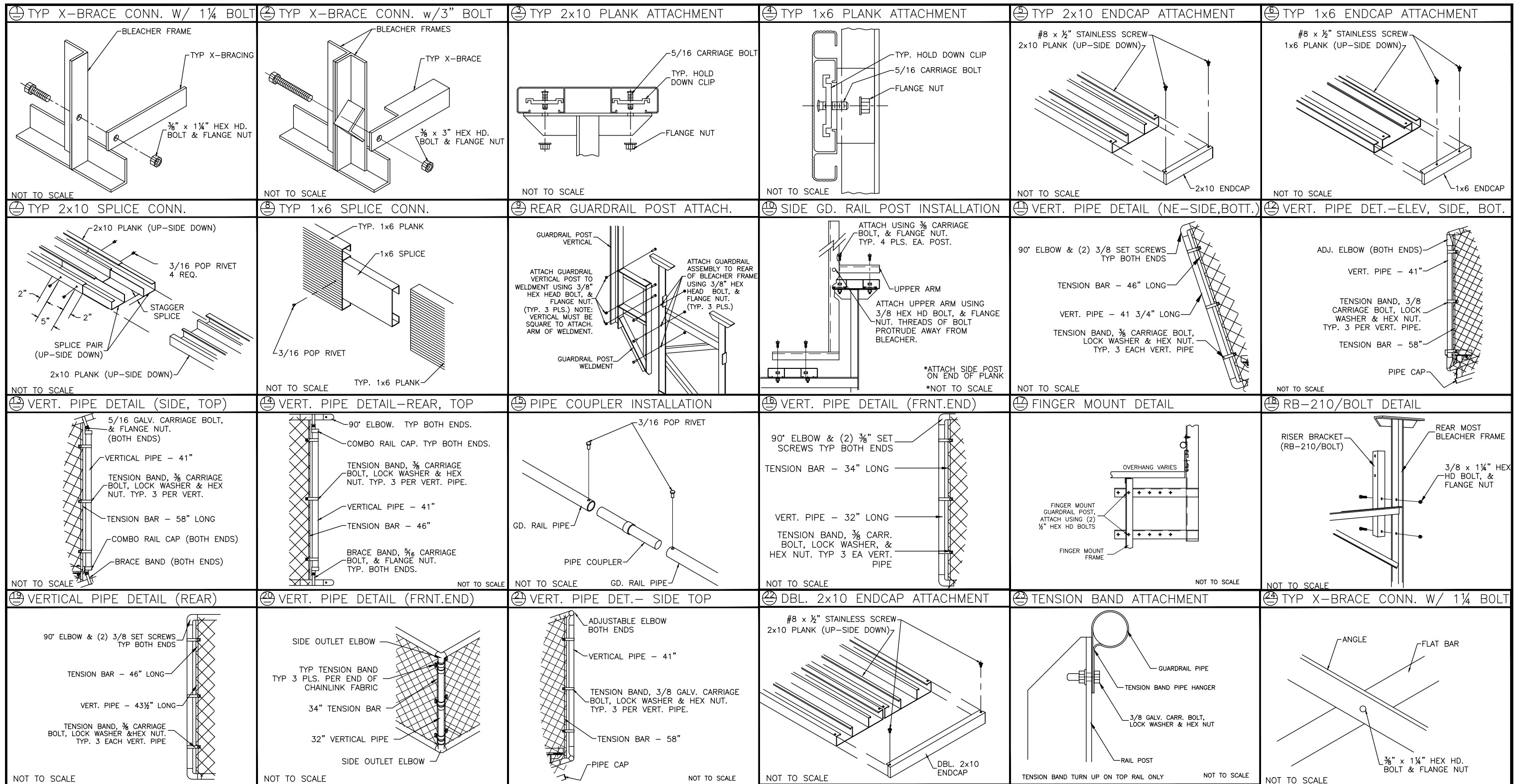
SIDE GUARD RAIL TOP



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SCALE: N.T.S.	APPROVED BY: CHUCK	DRAWN BY: JML
DATE: 03/10/2016		
TITLE: GURADRAIL ASSEMBLY		
MODEL #: NA-0821STD/CL	DRAWING NUMBER: GR.1	



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SCALE: N.T.S.	APPROVED BY:	DRAWN BY: JML
DATE: 03/10/2016		
TITLE: DETAIL SHEET		
MODEL #: NA-0821STD/CL	DRAWING NUMBER: DS. 1	