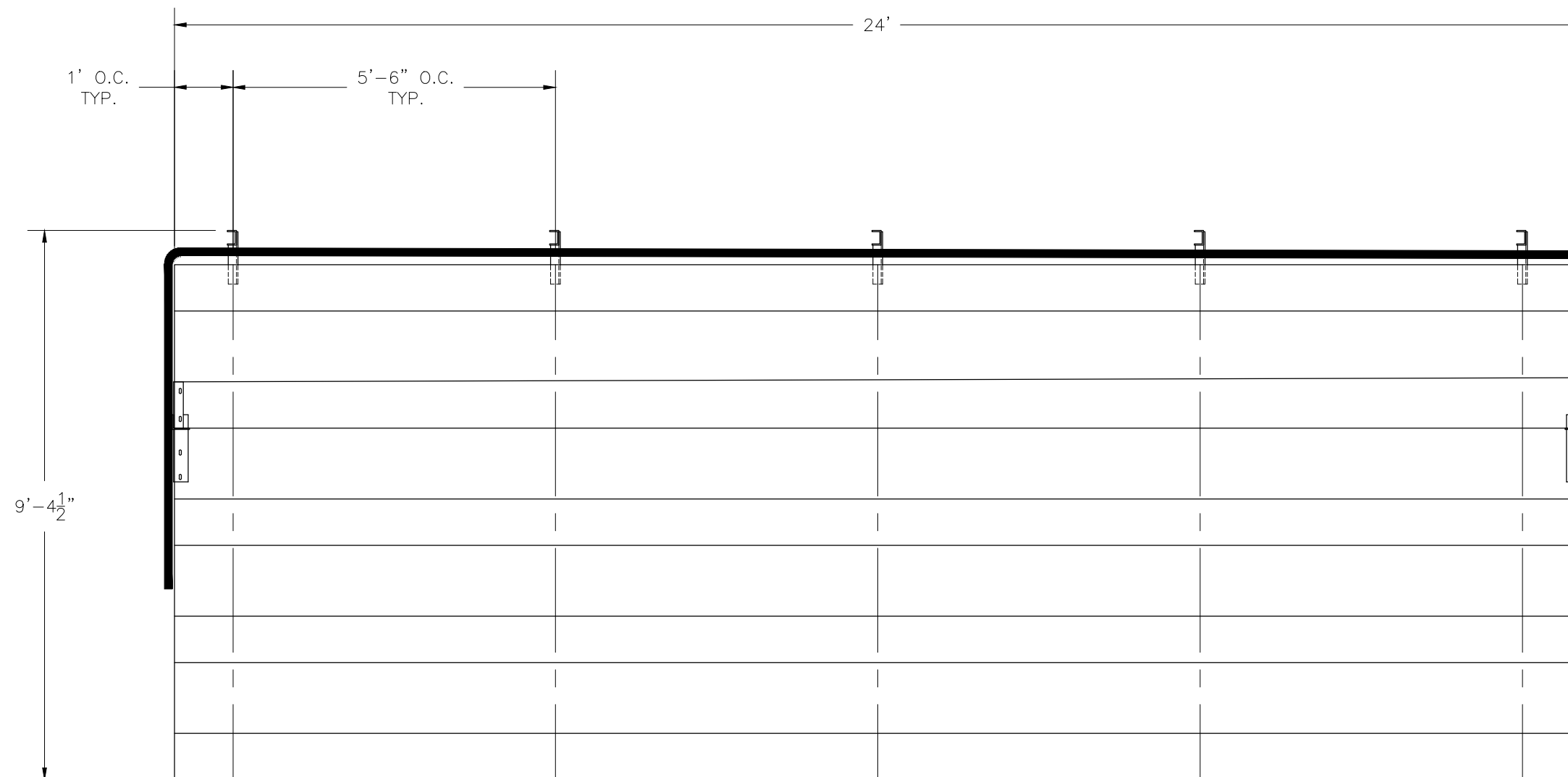


***NA-0524STD\_CL***

***NON ELEVATED ALUMINUM 5 ROW x 24'-0" BLEACHER***

**National Recreation Systems, Inc.**

CS.1	- COVER SHEET
TD.1	- BLEACHER SEATING PLAN
AP.1	- ANCHORING PLAN
FP.1	- FOUNDATION PLAN
BA.1	- BLEACHER ASSEMBLY
BR.1	- BRACE ASSEMBLY
PF.1	- PLANK & FRAMING PLAN
GR.1	- GUARDRAIL ASSEMBLY
DS.1	- DETAIL SHEET

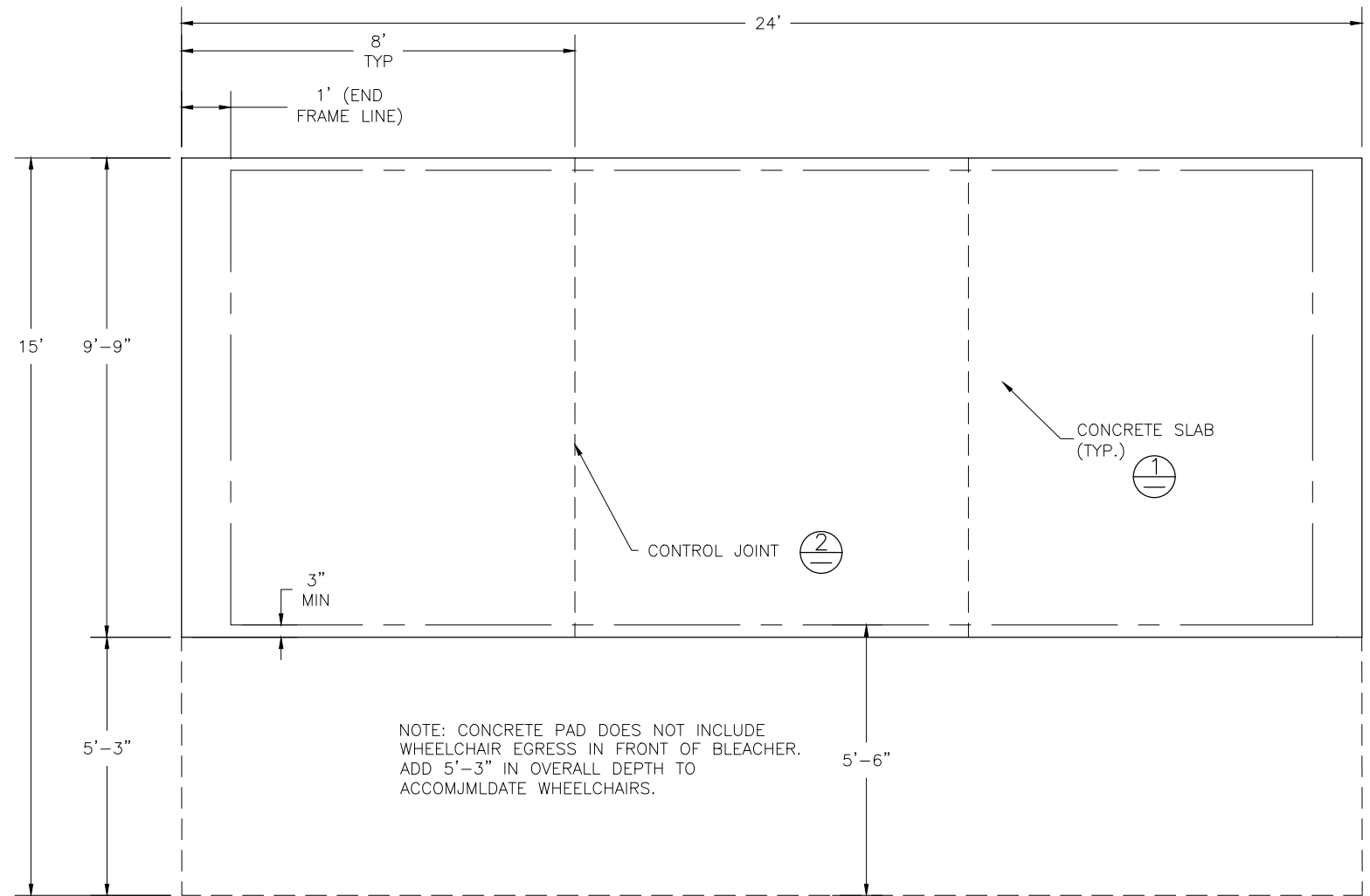


SECTION LENGTH	GROSS SEATS	ACTUAL SEATS	NO. OF ROWS	NET SEATS
24	16.00	16.00	5	80
			<b>NET SEATS</b>	<b>80</b>
			<b>WHEELCHAIR SPACES</b>	<b>0</b>
			<b>TOTAL NET SEATING CAPACITY</b>	<b>80</b>
			<b>(BASED ON 18" PER SEAT)</b>	

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**National Recreation Systems, Inc.**

SCALE: N.T.S.	APPROVED BY: CHUCK 4/15/2015	DRAWN BY: JML
DATE: 04/15/2015	TITLE: NON-ELEV. 5 ROW x 24' 0" BLEACHER SEATING PLAN	
BLEACHER JMLDEL #: NA-0524STD_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:**

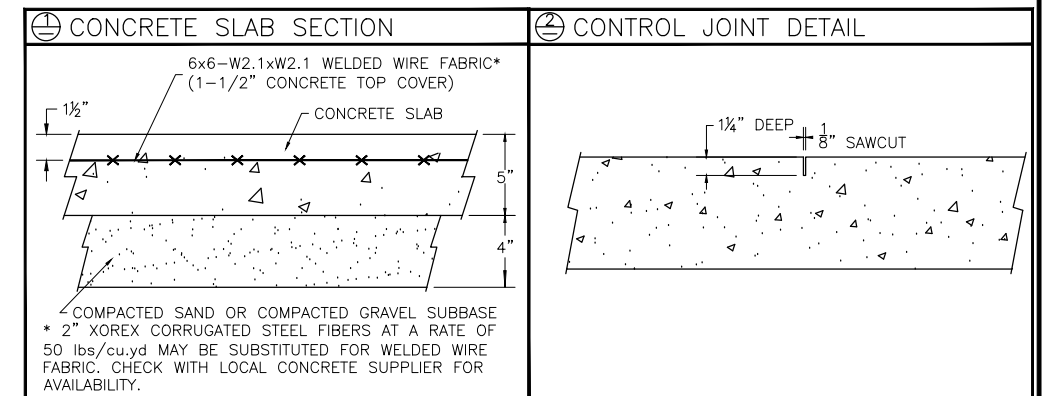
- 1) The foundation designs are based on the following:
  - a. Minimum presumed soil bearing 1000 psf.
  - b. Bleacher frame dead and live load 700 lbs./ft.
  - c. Bleacher frame wind uplift load 250 lbs./ft.
- 2) Unless otherwise noted on the drawings the bleacher frames shall be attached to the concrete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

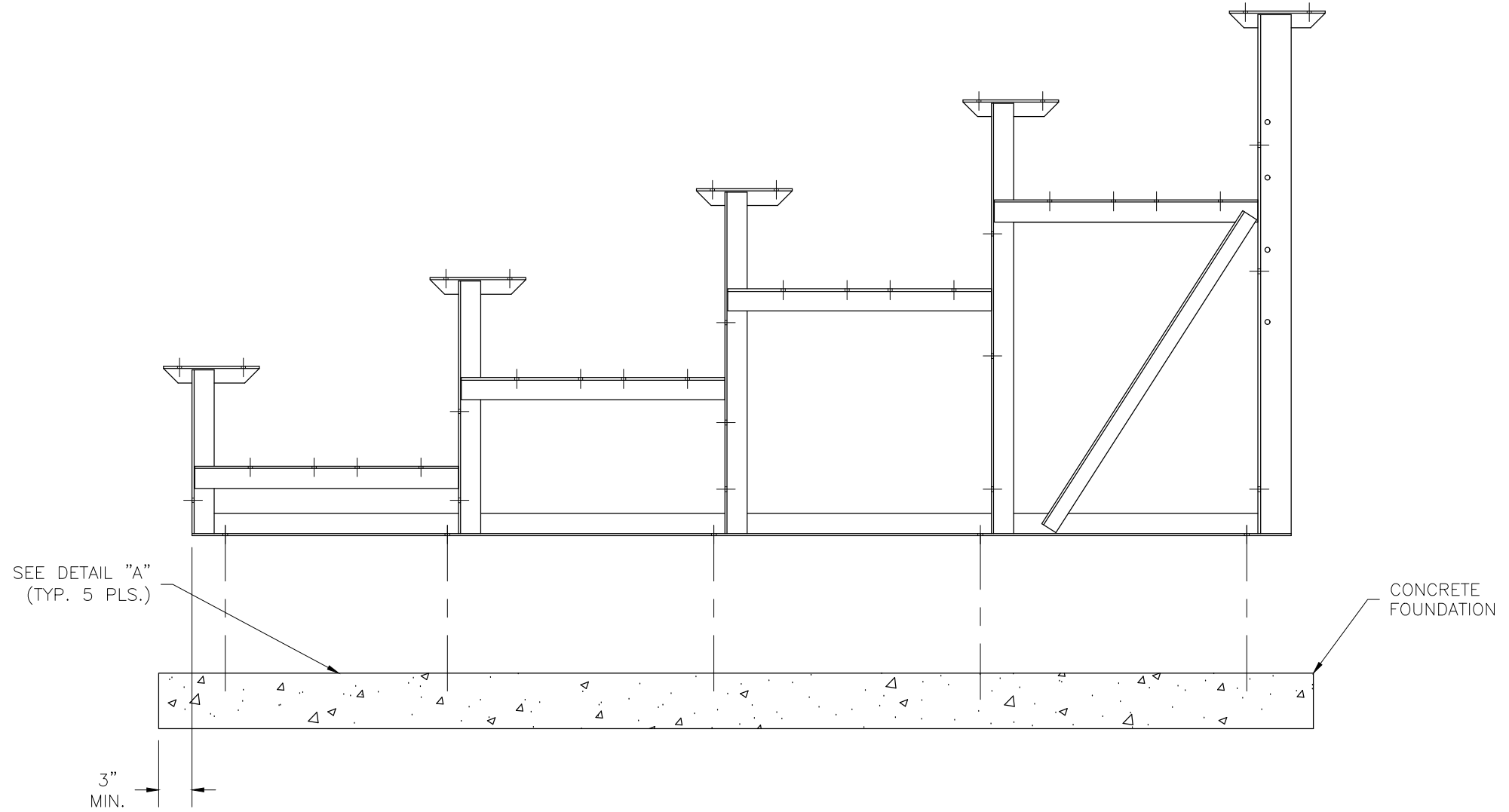
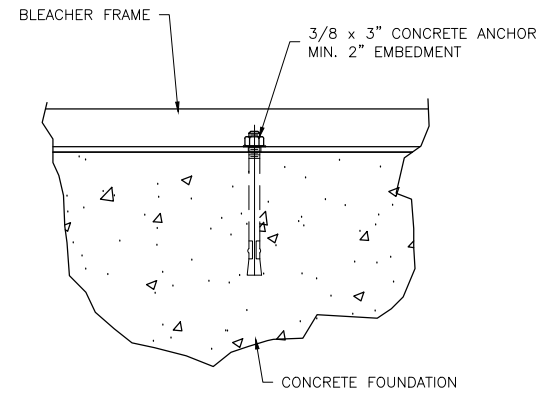
- 1) Concrete slab shall have a minimum thickness of 5" (NRS, Inc. recommends, and some areas may require 6" thickness) and placed on 4" of compacted gravel or compacted sand sub-base.
- 2) NRS, Inc. recommends that the concrete slab be reinforced with 6x6-W2.1xW2.1 welded wire fabric at 1 1/2" concrete 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".



<b>National Recreation Systems, Inc.</b>			
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TITLE: FOUNDATION PLAN			
BLEACHER JMLDEL #: NA-0524STD_CL			DRAWING NUMBER: FP.1

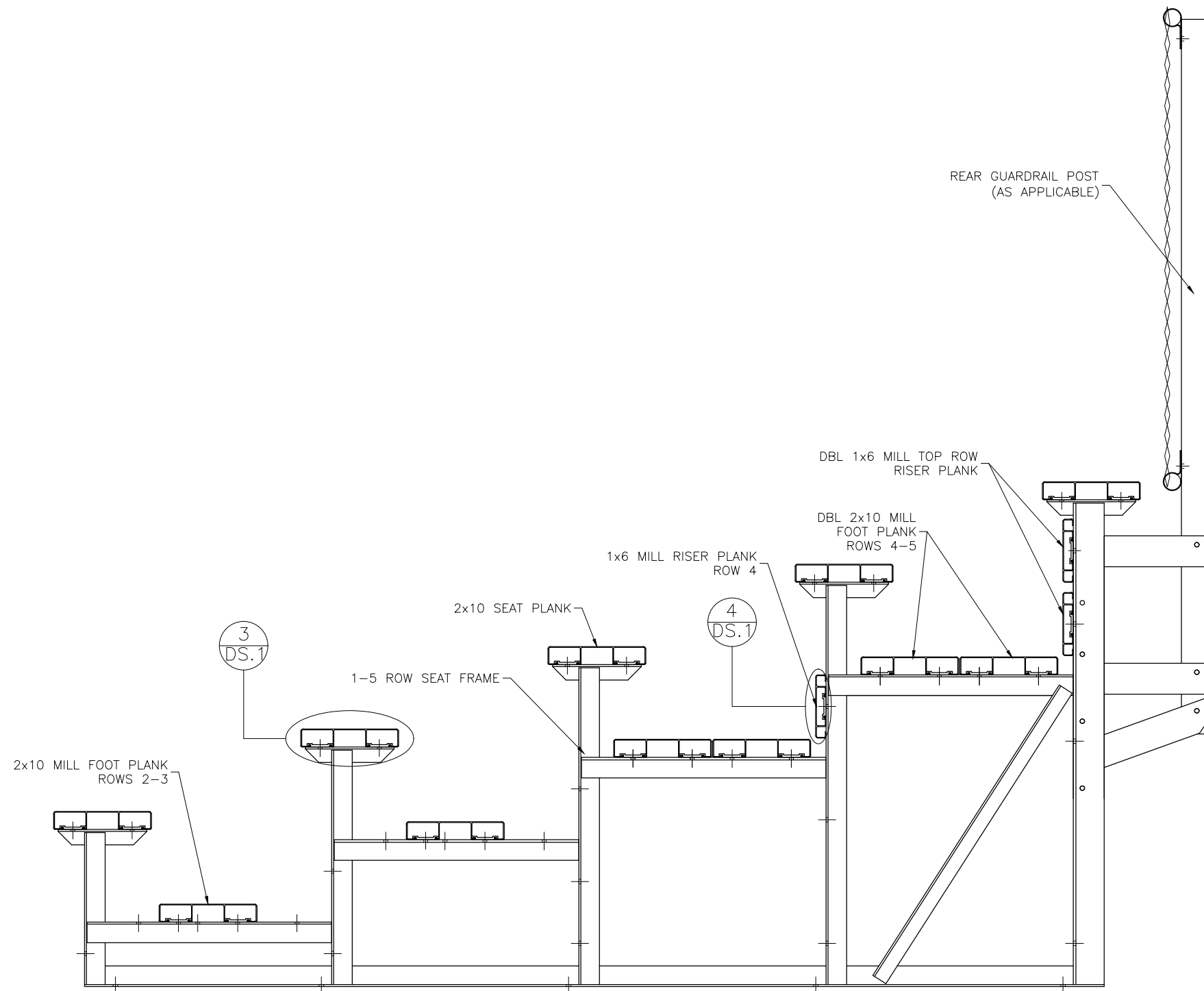
**DETAIL "A" - CONC. ANCHOR ATTACHMENT**

**DETAIL "A" - CONCRETE ANCHOR ATTACHMENT**



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				SCALE: N.T.S.	APPROVED BY: CHUCK	DATE: 04/15/2015	4/15/2015
TITLE: ANCHORING			DRAWING NUMBER: AP.1				
BLEACHER JMLDEL #:		NA-0524STD_CL					



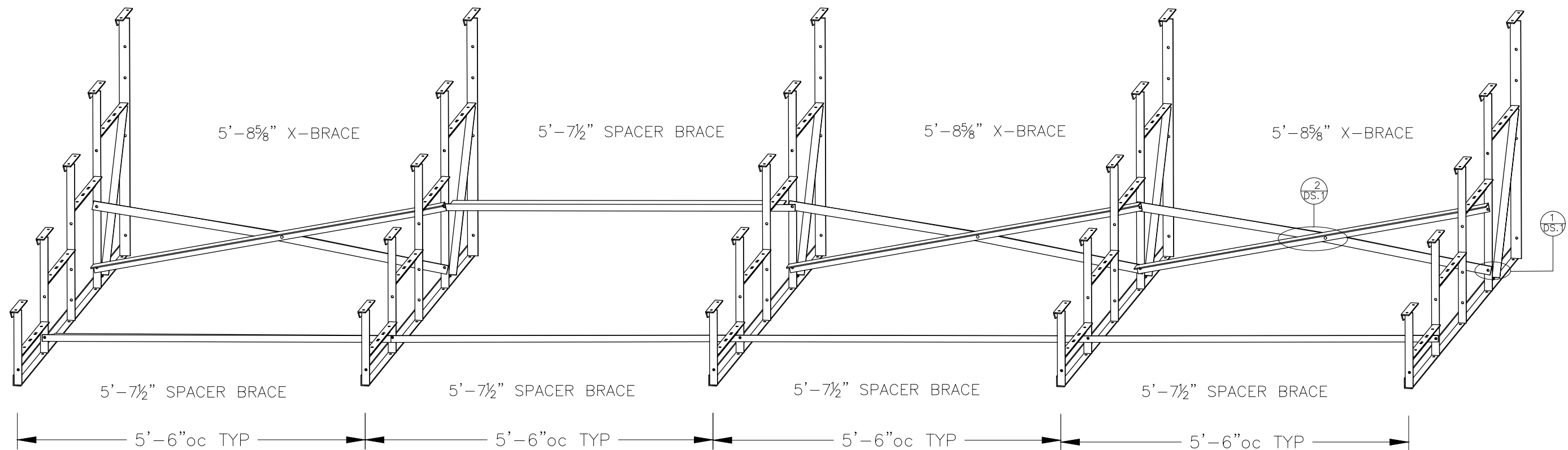


\*REFER TO BR.1 FOR BRACING LOCATION AND SIZE

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**National Recreation Systems, Inc.**

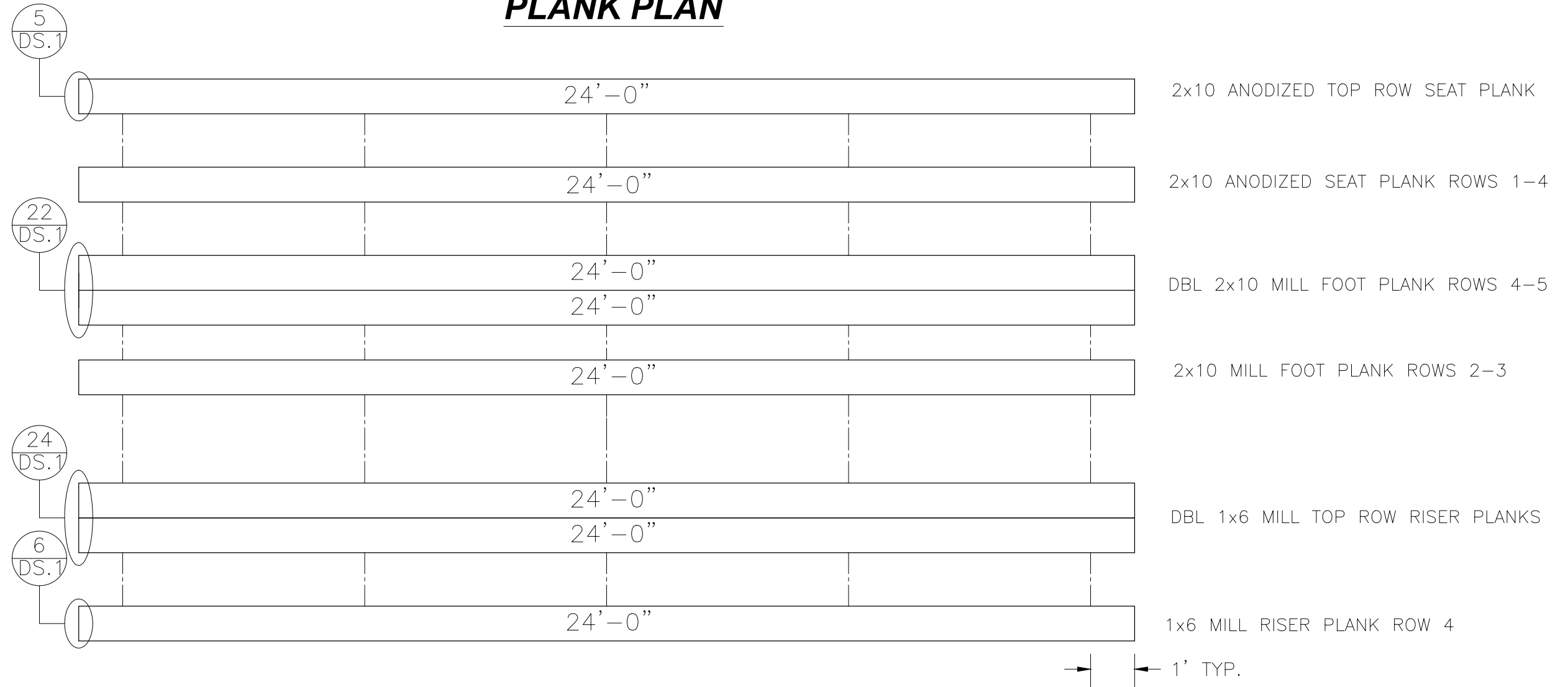
SCALE: N.T.S.	APPROVED BY: CHUCK 4/15/2015	DRAWN BY: JML
DATE: 04/15/2015		
TITLE: NON-ELEV. 5 ROW x 24' 0" BLEACHER ASSEMBLY		
BLEACHER JMLDEL #: NA-0524STD_CL	DRAWING NUMBER: BA.1	



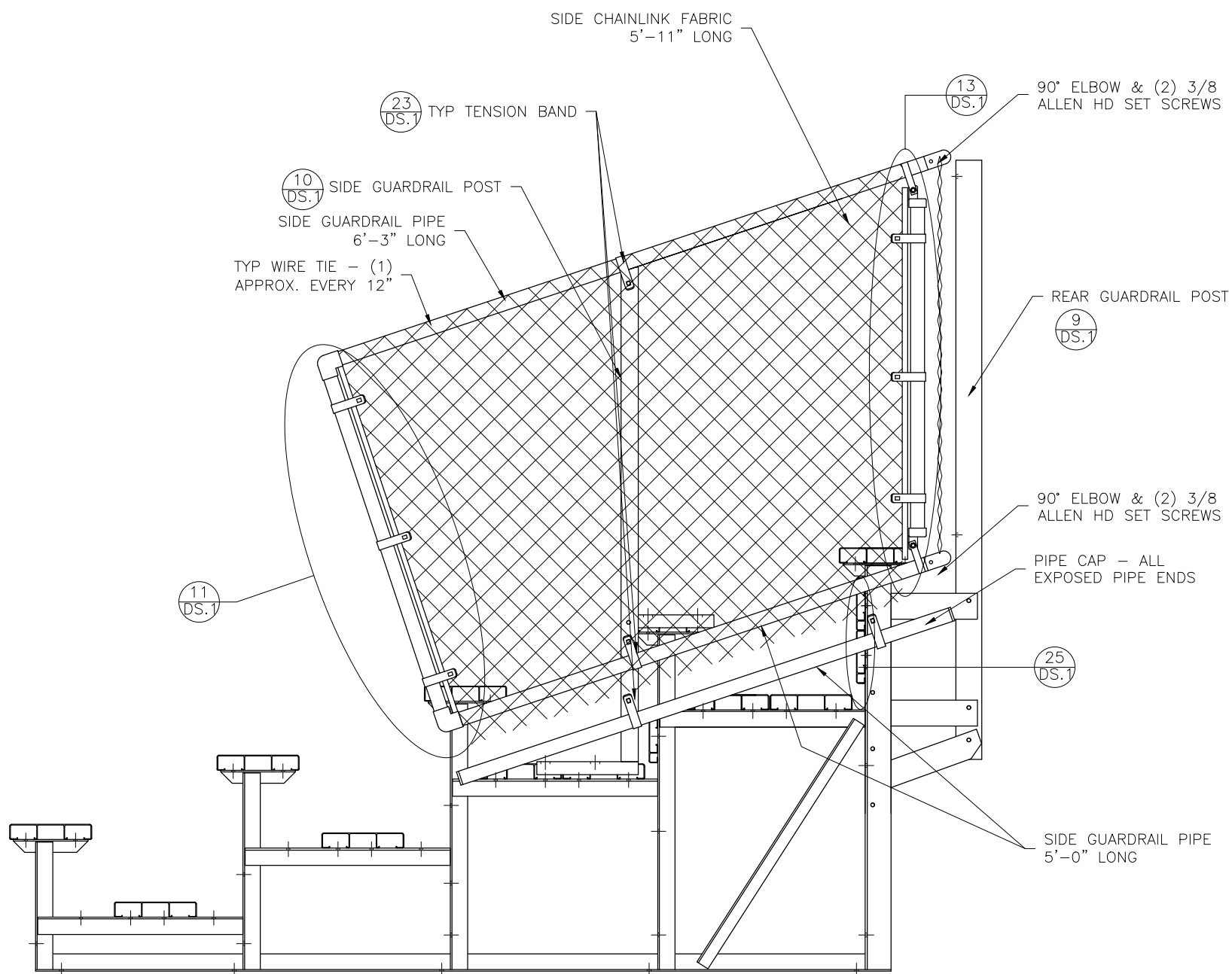
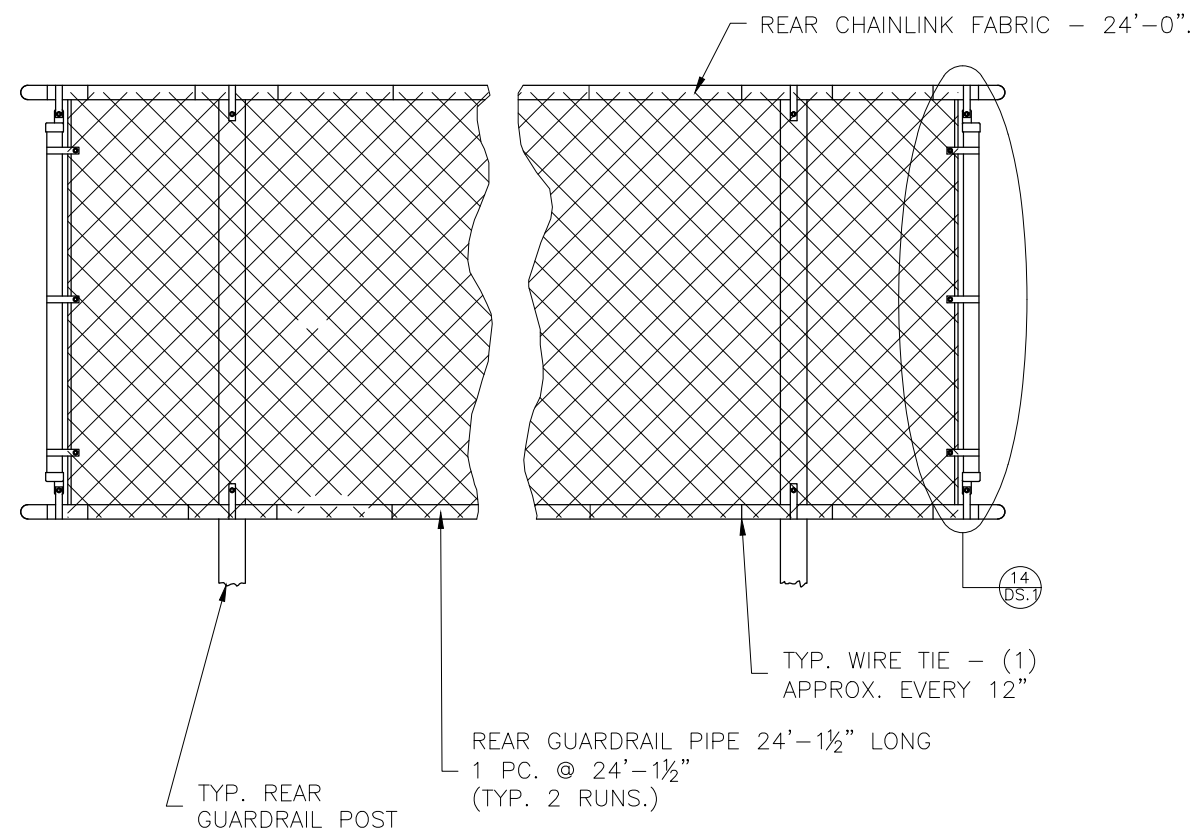
PRE-ASSEMBLE X-BRACE SETS. EACH SET CONSISTS OF ONE FLAT BAR AND ONE ANGLE. ONCE ASSEMBLED, THEY WILL BECOME AN "X". THEY BOLT TOGETHER WITH A 3/8" X 1 1/4" HEX HEAD BOLT AND FLANGE NUT THRU THE CENTER HOLE. (SEE DETAIL 2 ON DETAIL SHEET)

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SCALE: N.T.S.	APPROVED BY: CHUCK	DRAWN BY: JML			
DATE: 04/15/2015	4/15/2015				
TITLE: NON-ELEV. 5 ROW x 24' 0" BRACE ASSEMBLY					
BLEACHER JMLDEL #: NA-0524STD_CL		DRAWING NUMBER: BR.1			

# PLANK PLAN



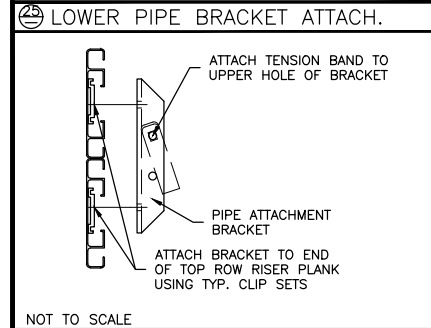
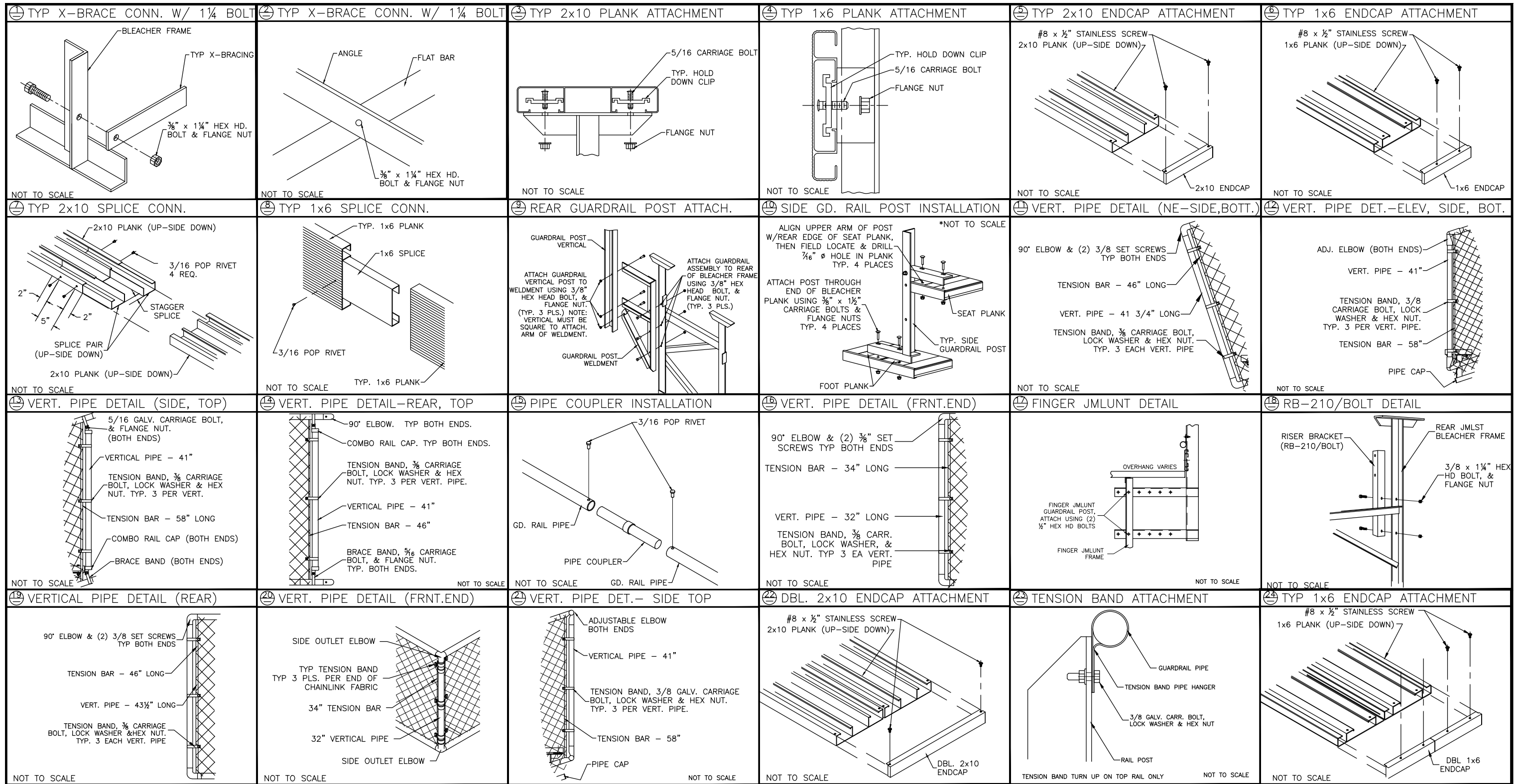
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SCALE: N.T.S.	APPROVED BY:	DRAWN BY:			
DATE: 04/15/2015	CHUCK 4/15/2015	JML			
TITLE:			NON-ELEV. 5 ROW x 24' 0" PLANK & FRAMING PLAN		
BLEACHER JMLDEL #:			DRAWING NUMBER:		PF.1
NA-0524STD_CL					



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### National Recreation Systems, Inc.

SCALE: N.T.S.	APPROVED BY: CHUCK 4/15/2015	DRAWN BY: JML
DATE: 04/15/2015		
TITLE: NON-ELEV. 5 ROW x 24' 0" GUARD RAIL ASSEMBLY		
BLEACHER JMLDEL #:	NA-0524STD_CL	DRAWING NUMBER: GR.1



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**National Recreation Systems, Inc.**

SCALE: N.T.S.	APPROVED BY: CHUCK 4/15/2016	DRAWN BY: JML
DATE: 5/23/16	TITLE: DETAIL SHEETS	
BLEACHER JMLDEL #:	NA-0524STD_CL	DRAWING NUMBER: DS.1