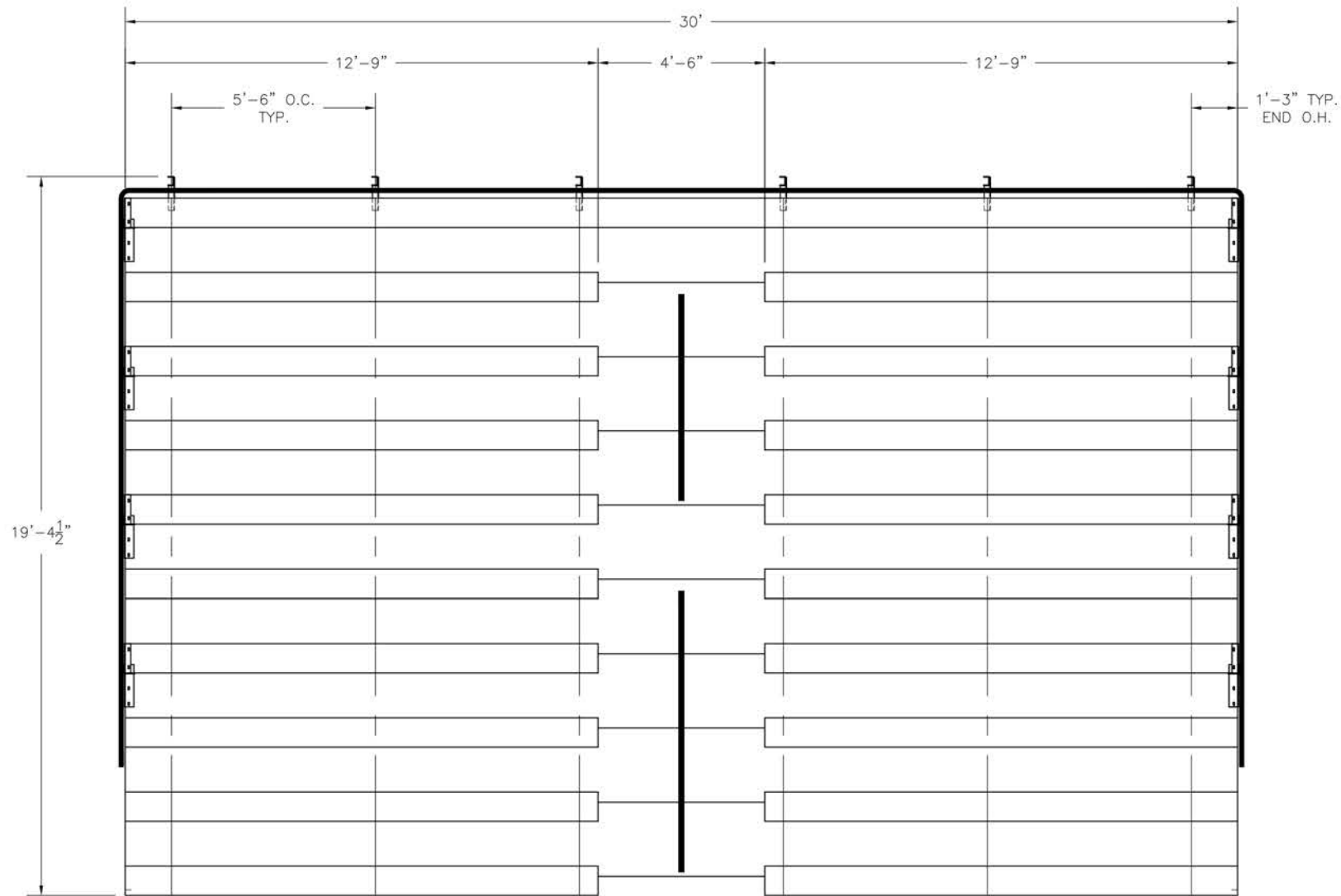


NON ELEVATED 10 ROW x 30'-0" BLEACHER

THE PARK AND FACILITIES CATALOG

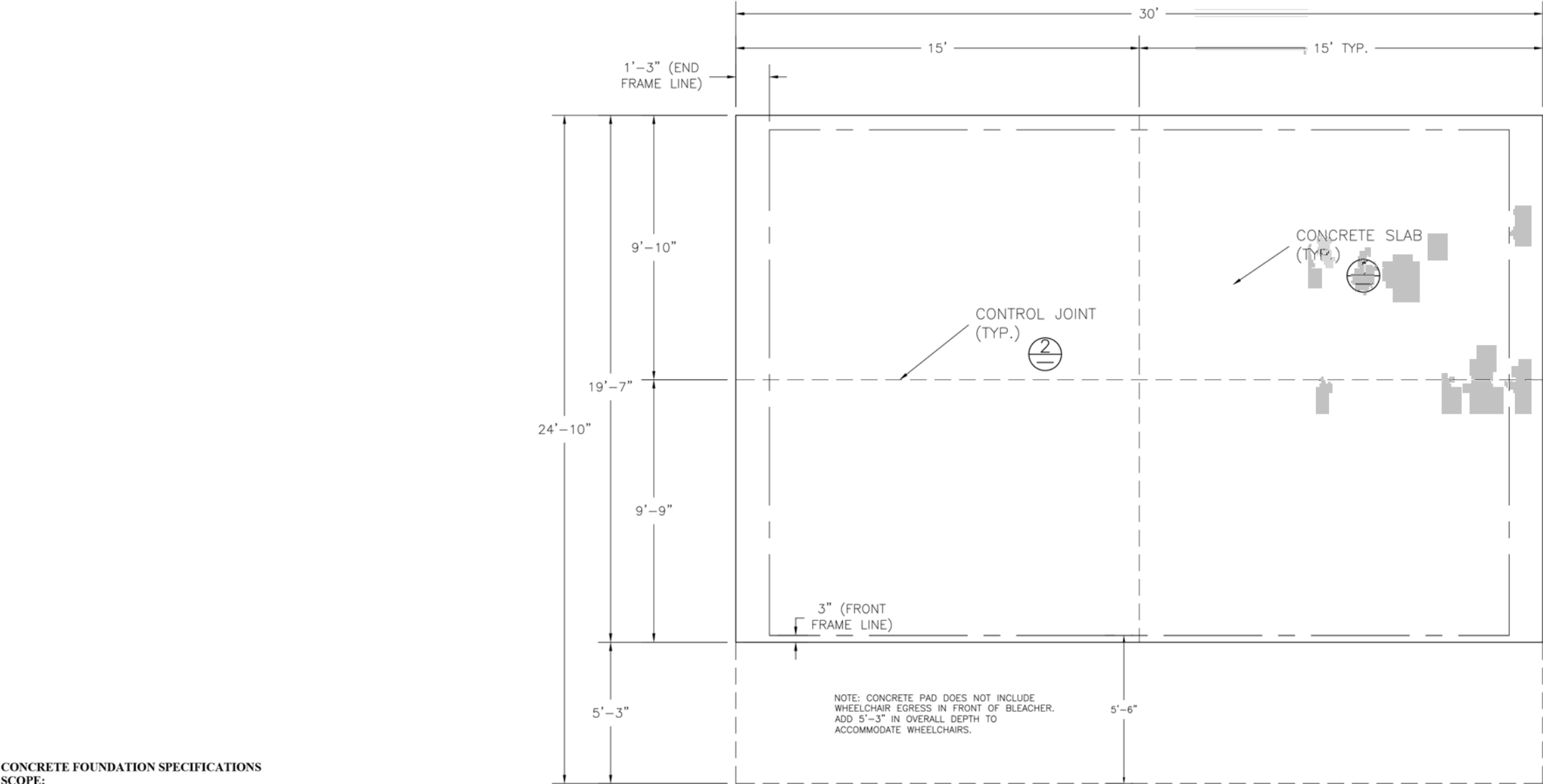
3350 NW Boca Raton Blvd. B2 Boca Raton Fl. 33431

CS.1	– COVER SHEET
TD.1	– BLEACHER SEATING PLAN
FP.1	– FOUNDATION PLAN
AP.1	– ANCHORING PLAN
BA.1	– BLEACHER ASSEMBLY
PF.1	– PLANK & FRAMING PLAN
VA.1	– VERTICAL AISLE ASSEMBLY
GR.1	– GUARDRAIL ASSEMBLY
DS.1	– DETAIL SHEET



SECTION LENGTH	GROSS SEATS	ACTUAL SEATS	NO. OF ROWS	NET SEATS
12.75	8.50	8.00	18	144
30	20.00	20.00	1	20
NET SEATS				164
WHEELCHAIR SPACES				0
TOTAL NET SEATING CAPACITY				164
(BASED ON 18" PER SEAT)				

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SCALE: N.T.S.	APPROVED BY:	DRAWN BY: HRG
DATE: 2/18/15		
TITLE: NON ELEVATED 10 ROW x 30'-0" BLEACHER SEATING PLAN		
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:

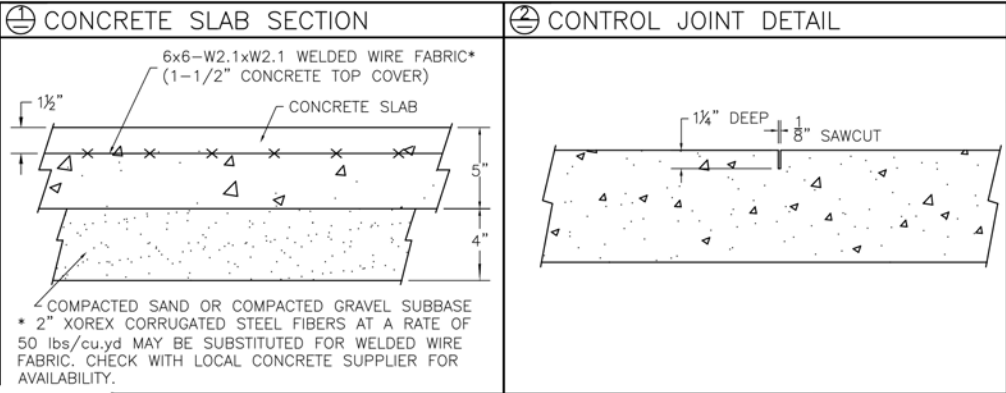
- The foundation designs are based on the following:
 - Minimum presumed soil bearing 1000 psf.
 - Bleacher frame dead and live load 700 lbs./ft.
 - Bleacher frame wind uplift load 250 lbs./ft.
- Unless otherwise noted on the drawings the bleacher frames shall be attached to the concrete with 3/8" dia.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

CONCRETE SPECIFICATIONS:

- All concrete construction shall be in accordance with *ACI 318-08*.
- All concrete shall have a minimum 28-day strength of $F_c=3000$ psi.
- A 1/4" bituminous expansion joint material shall be placed between strip and slab foundations when adjacent to each other.
- 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:

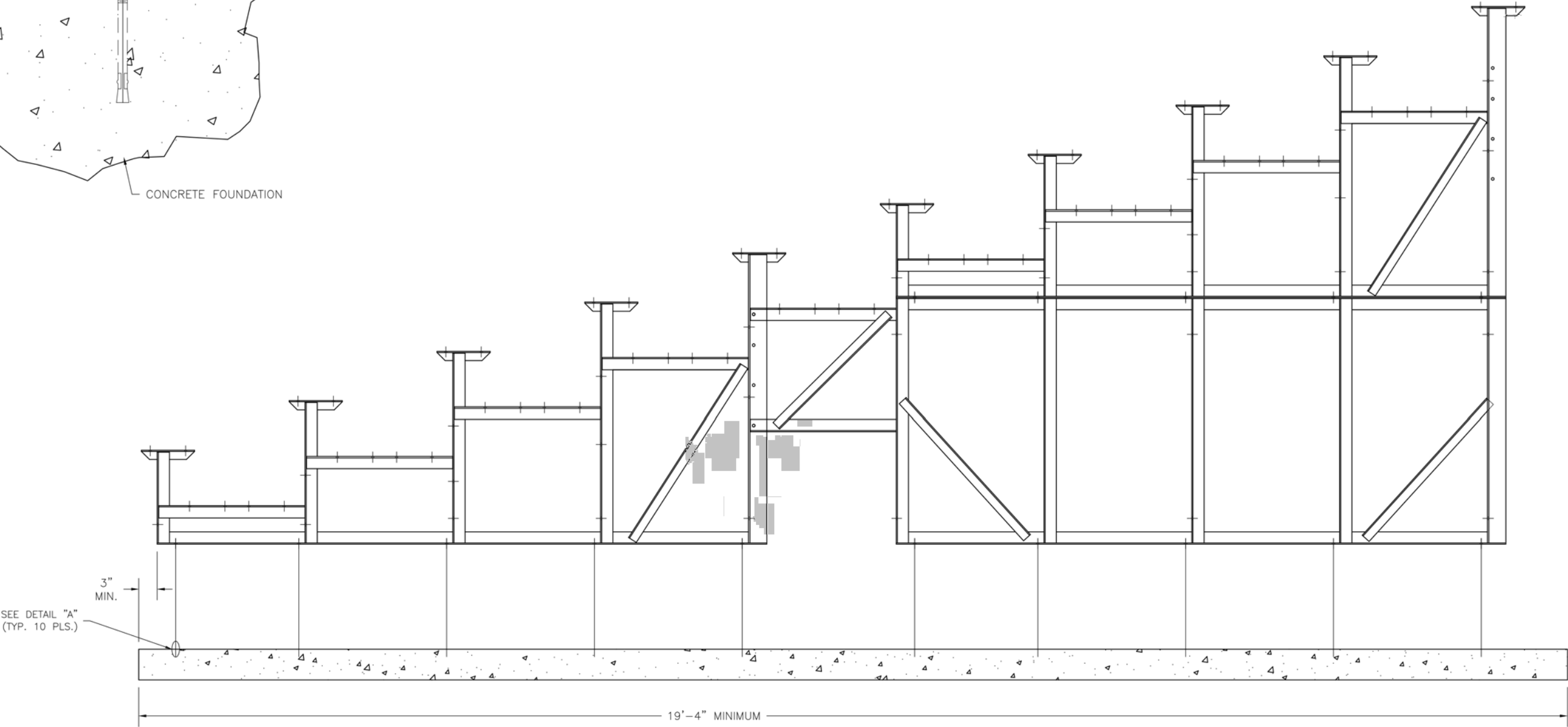
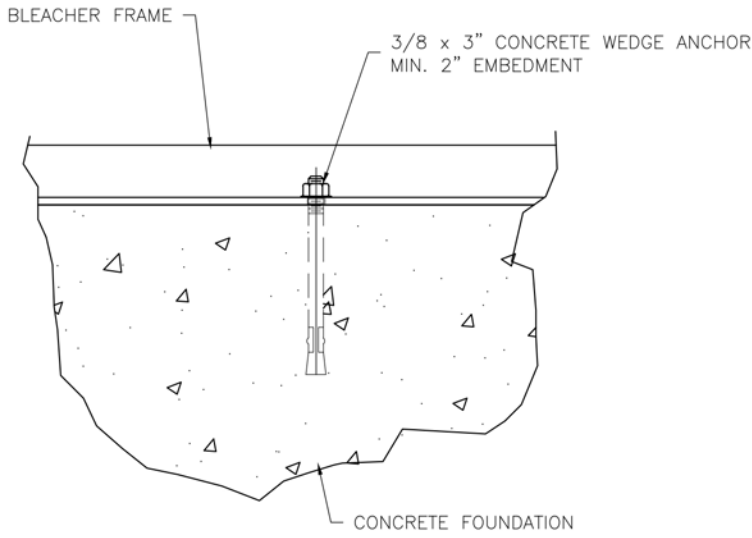
- Concrete slab shall have a minimum thickness of 5" (NRS, Inc. recommends, and some areas may require 6" thickness) and placed on 4" of compacted gravel or compacted sand sub-base.
- NRS, Inc. recommends that the concrete slab be reinforced with 6x6-W2.1xW2.1 welded wire fabric at 1 1/2" concrete cover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



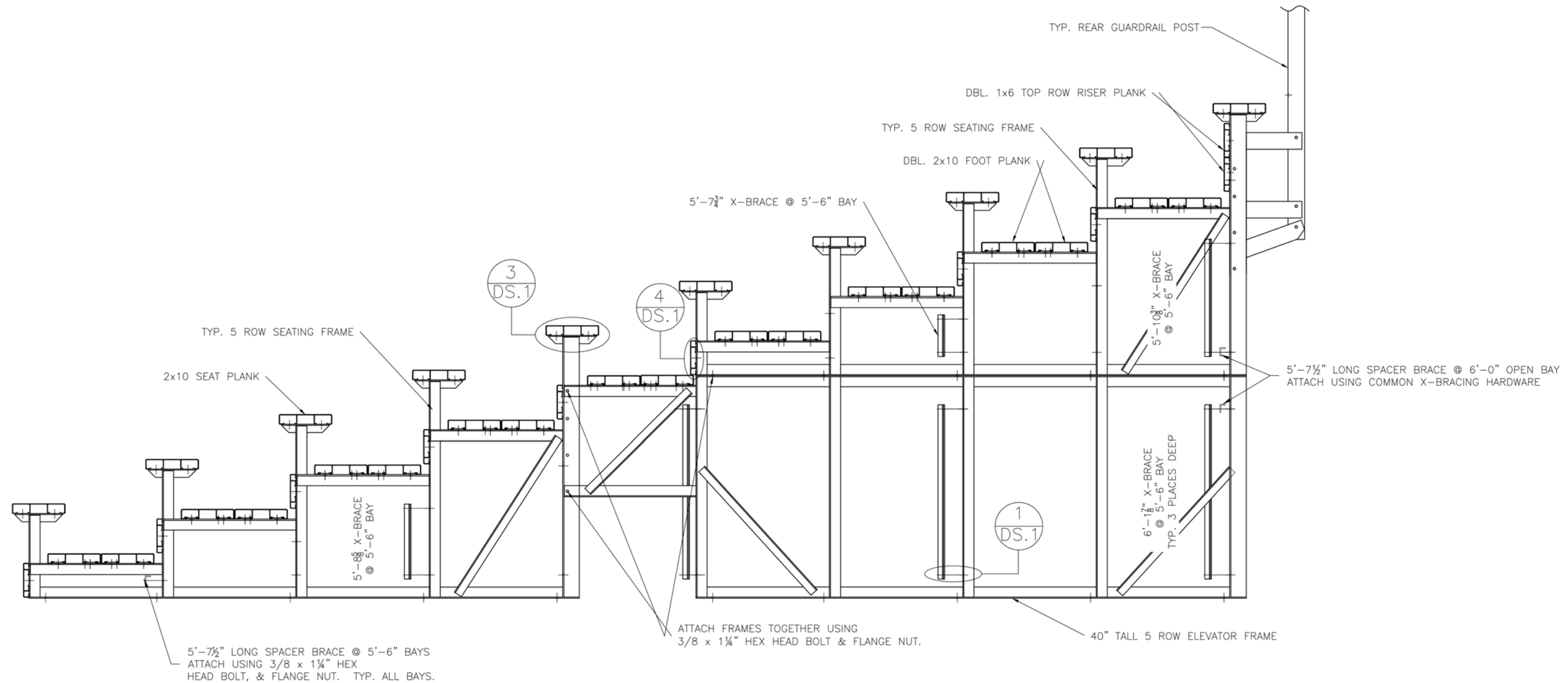
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SCALE: N.T.S.	APPROVED BY:	DRAWN BY: HRG
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		DRAWING NUMBER: FP.1

DETAIL "A" - CONC. ANCHOR ATTACHMENT



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TITLE: NON ELEVATED 10 ROW x 30'-0" ANCHORING PLAN		DRAWING NUMBER: AP.1

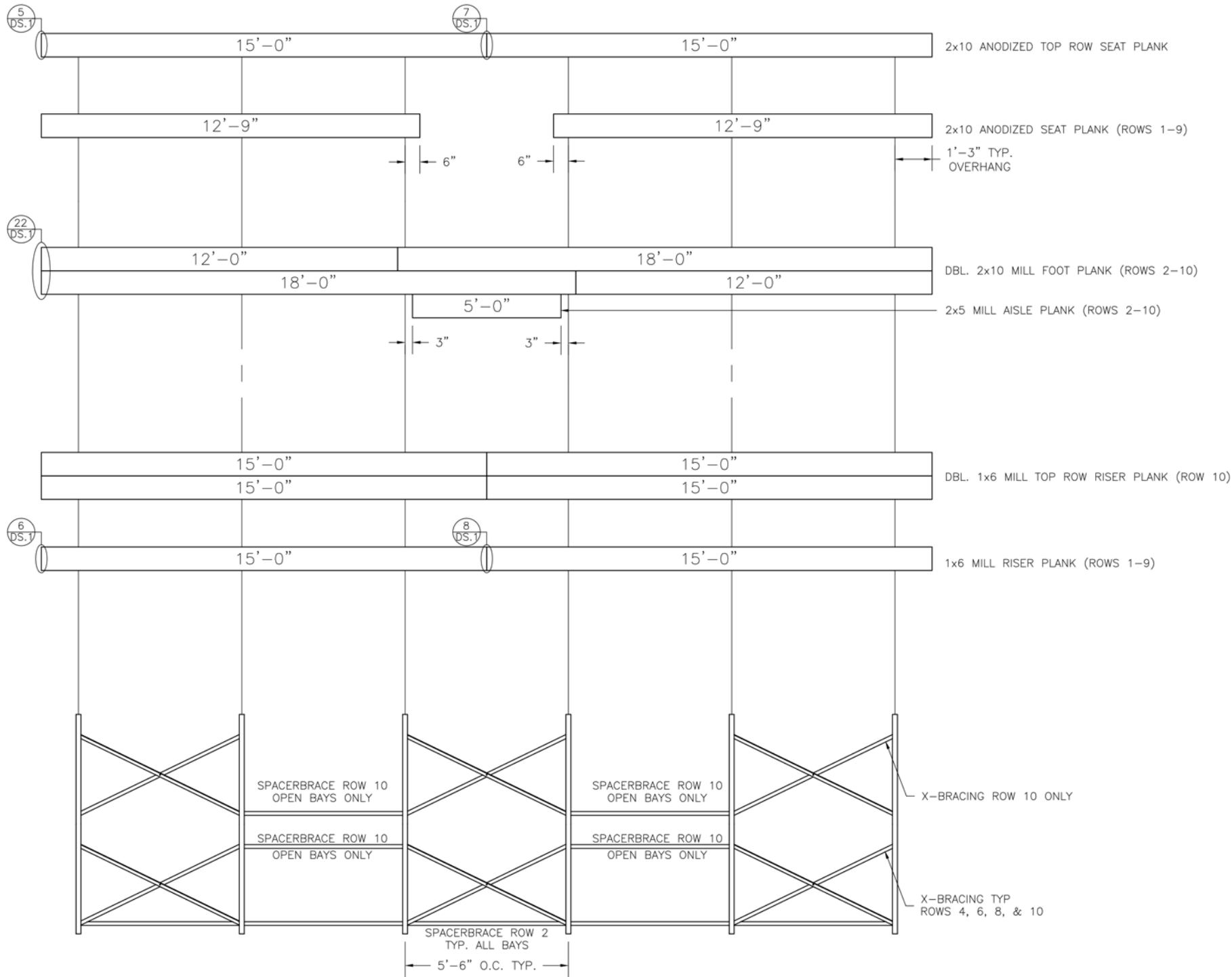


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SCALE: N.T.S.	APPROVED BY:	DRAWN BY: HRG
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TITLE: NON ELEVATED 10 ROW x 30'-0" BLEACHER ASSEMBLY		
DRAWING NUMBER: BA.1		

PLANK PLAN

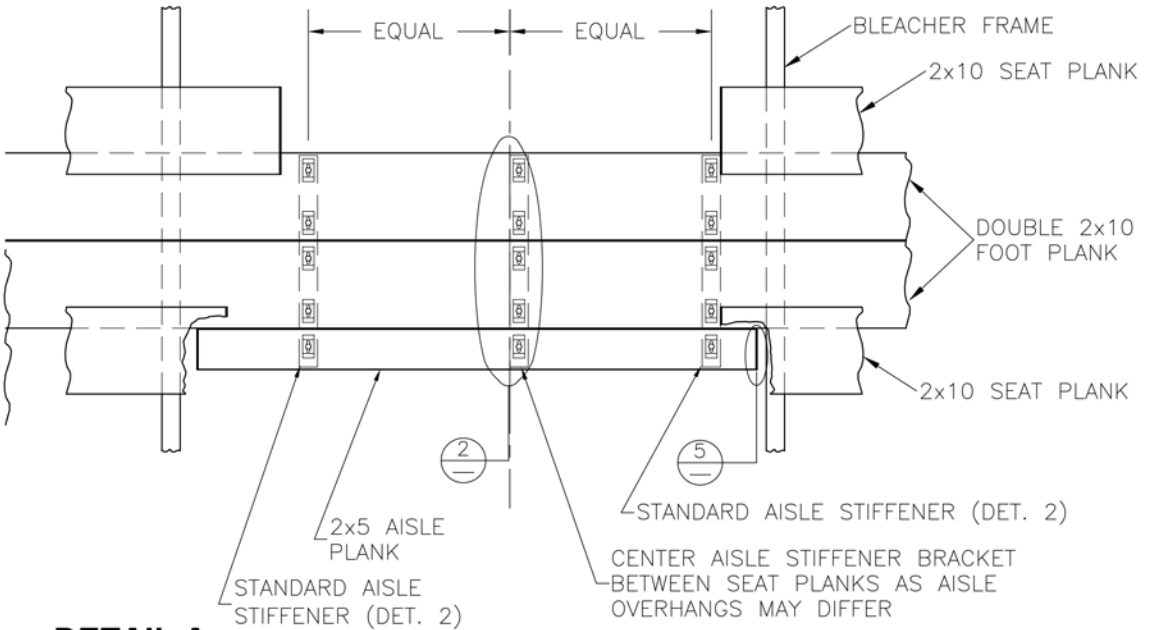


FRAMING PLAN

SEE PRINT # DS.1
FOR REFERENCED DETAILS

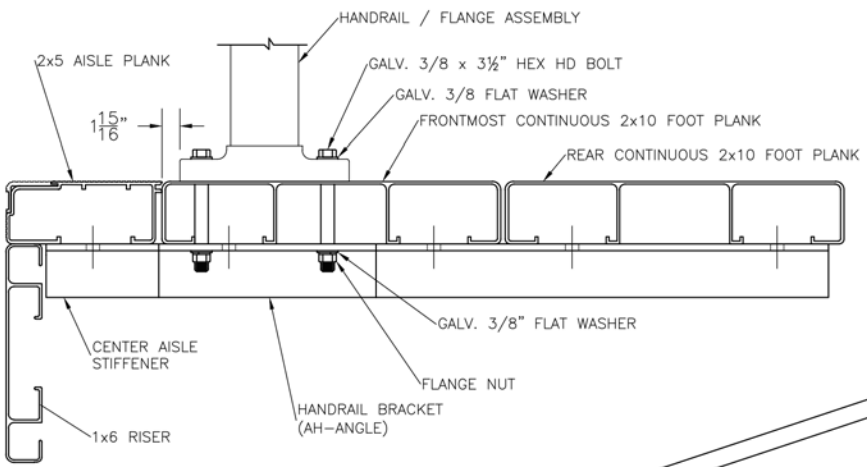
THE PARK AND FACILITIES CATALOG		
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SCALE: N.T.S.	APPROVED BY:	DRAWN BY: HRG
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TITLE: NON ELEVATED 10 ROW x 30'-0" PLANK & FRAMING PLAN		
DRAWING NUMBER:		PF.1

1 AISLE PLAN TYP. ALL ROWS



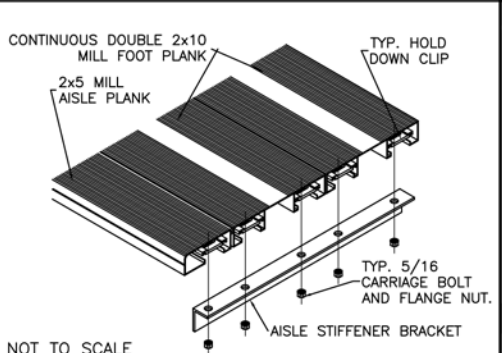
DETAIL A

FRONT HANDRAIL ASSEMBLY SHOWN
LOCATE OVER REAR FOOT PLANK FOR REAR ASSEMBLY

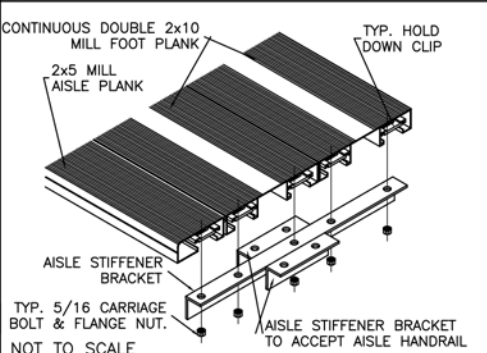


ALIGN EDGE OF FLANGE APPROX. 1/2" FROM THE LEADING EDGE OF THE FRONTMOST CONTINUOUS 2x10 FOOT PLANK (NOT THE 2x5 AISLE STEP PLANK). SLIGHTLY ADJUST FLANGE LOCATION, IF NECESSARY, SO THAT THE BOLT HOLE IS NOT DRILLED INTO A VERTICAL LEG OF THE PLANK. DRILL 7/16" HOLES (FOR 3/8" BOLT). ASSEMBLE AS SHOWN USING GALV. STEEL BOLTS, FLAT WASHERS & FLANGE NUTS.

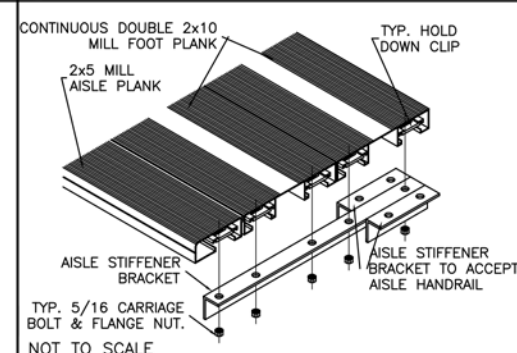
2 TYP. AISLE BKT DETAIL



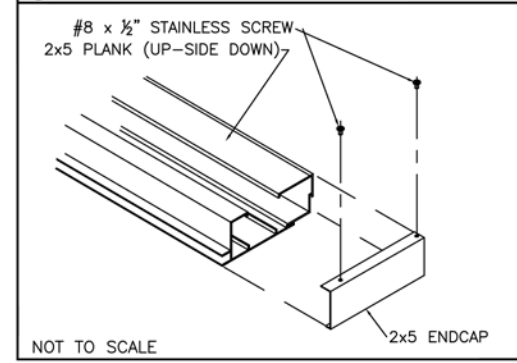
3 FRONT AISLE H.R. BRACKET DETAIL



4 REAR AISLE H.R. BRACKET DETAIL



5 TYP 2x5 ENDCAP ATTACHMENT



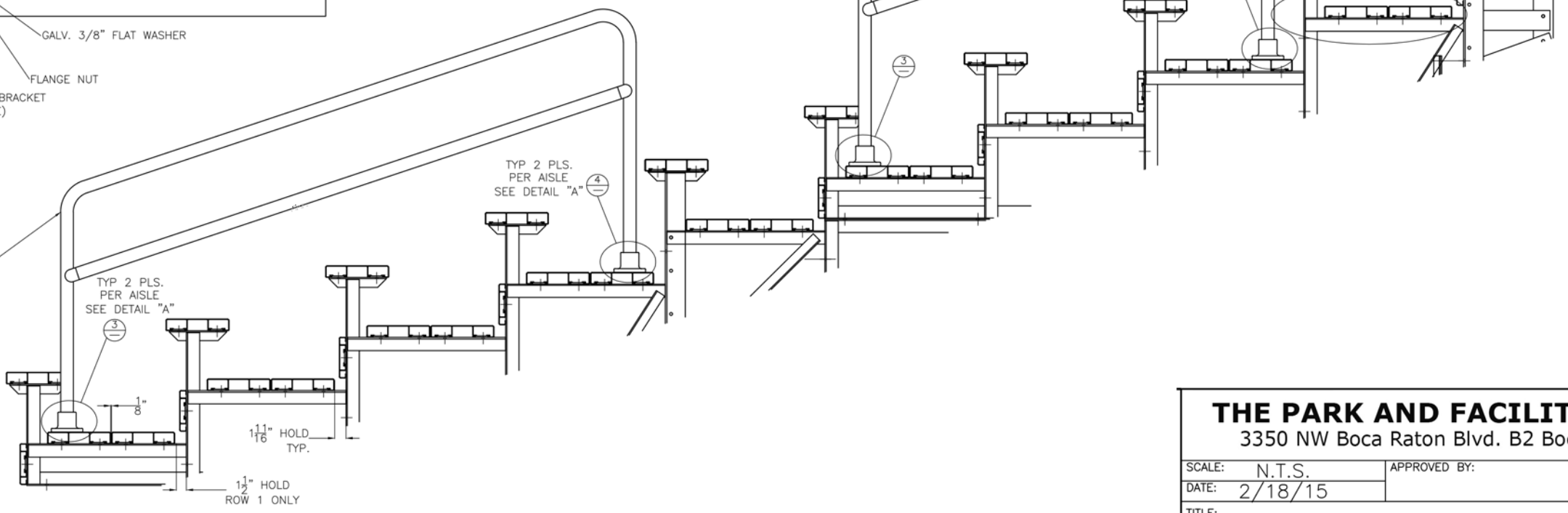
4 STEP AISLE HANDRAIL
TYP 1 PLS. PER AISLE
LOCATE OVER CENTER
AISLE STIFFENER

TYP 2 PLS.
PER AISLE
SEE DETAIL "A"

TYP 2 PLS.
PER AISLE
SEE DETAIL "A"

3 STEP AISLE HANDRAIL
TYP 1 PLS. PER AISLE
LOCATE OVER CENTER
AISLE STIFFENER

TYP. ALL ROWS



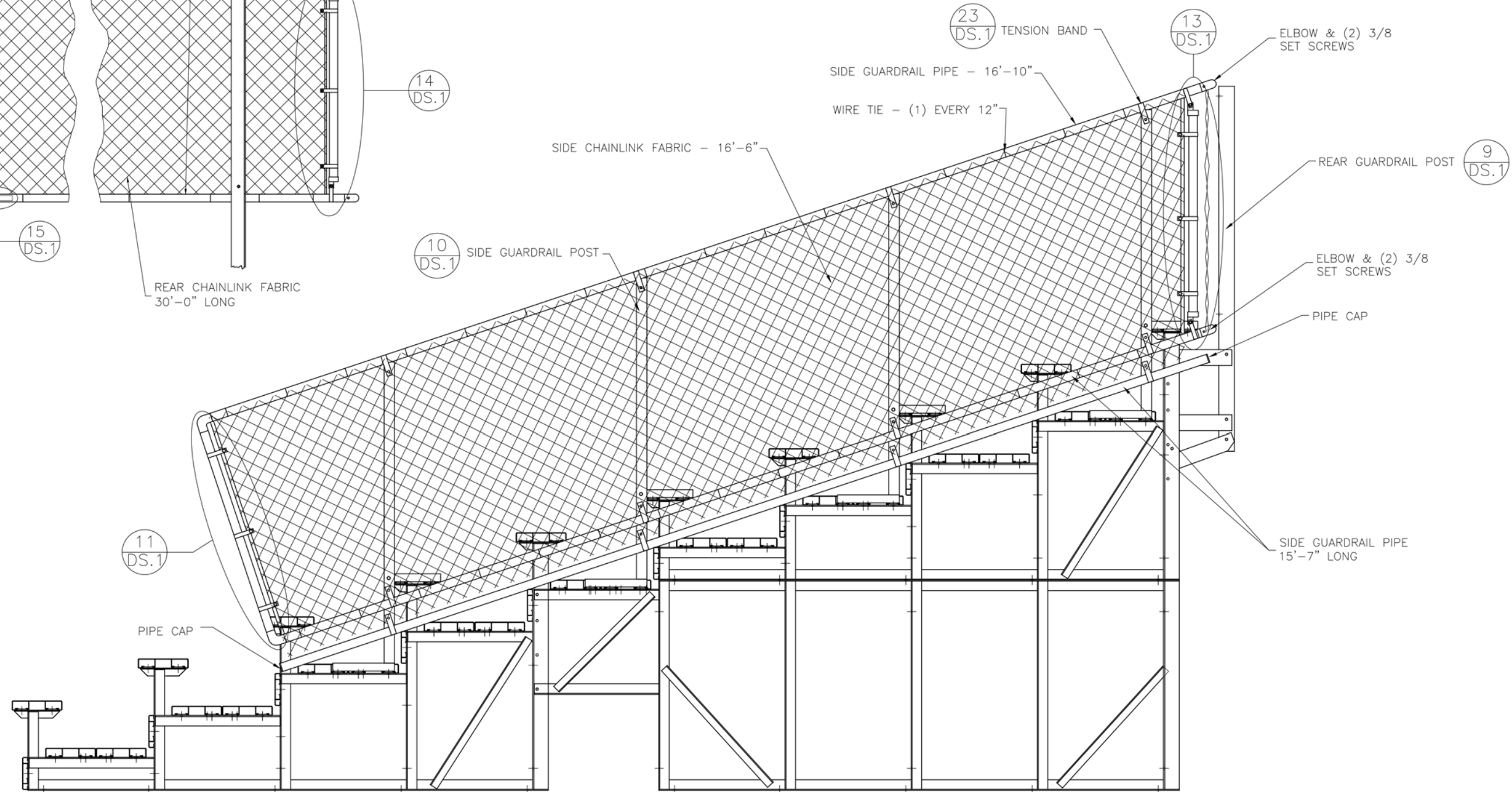
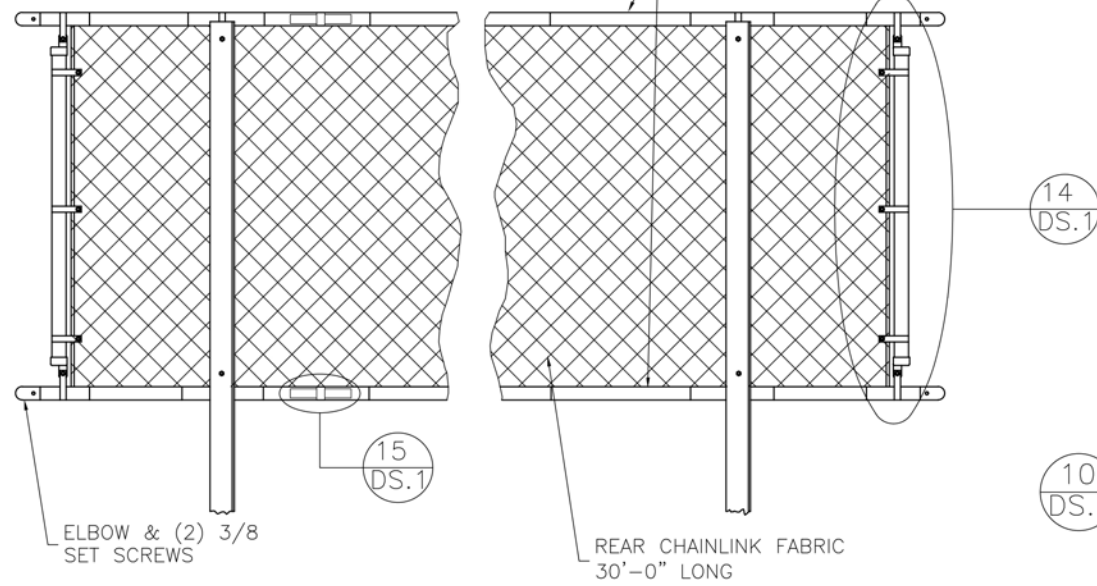
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TITLE: NON ELEVATED 10 ROW x 30'-0"ROW VERTICAL AISLE ASSEMBLY		
	DRAWING NUMBER:	VA.1

REAR GUARDRAIL (REAR VIEW)

REAR GUARDRAIL PIPE 30'-1½" LONG
1 PC. @ 15'-1½" & 1 PC. @ 14'-11"
(TYP. 2 RUNS)



SEE PRINT # DS.1
FOR REFERENCED DETAILS

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SCALE: N.T.S.	APPROVED BY:	DRAWN BY: HRG
DATE: 2/18/15		
TITLE: NON ELEVATED 10 ROW x 30'-0" GUARD RAIL ASSEMBLY		
	DRAWING NUMBER:	GR.1

1 TYP X-BRACE CONN. W/ 1¼ BOLT NOT TO SCALE	2 TYP X-BRACE CONN. w/3" BOLT NOT TO SCALE	3 TYP 2x10 PLANK ATTACHMENT NOT TO SCALE	4 TYP 1x6 PLANK ATTACHMENT NOT TO SCALE	5 TYP 2x10 ENDCAP ATTACHMENT NOT TO SCALE	6 TYP 1x6 ENDCAP ATTACHMENT NOT TO SCALE
7 TYP 2x10 SPLICE CONN. NOT TO SCALE	8 TYP 1x6 SPLICE CONN. NOT TO SCALE	9 REAR GUARDRAIL POST ATTACH.	10 SIDE GD. RAIL POST INSTALLATION *NOT TO SCALE	11 VERT. PIPE DETAIL (NE-SIDE,BOTT.) NOT TO SCALE	12 VERT. PIPE DET.-ELEV, SIDE, BOT. NOT TO SCALE
13 VERT. PIPE DETAIL (SIDE, TOP) NOT TO SCALE	14 VERT. PIPE DETAIL-REAR, TOP NOT TO SCALE	15 PIPE COUPLER INSTALLATION NOT TO SCALE	16 VERT. PIPE DETAIL (FRNT.END) NOT TO SCALE	17 FINGER MOUNT DETAIL NOT TO SCALE	18 RB-210/BOLT DETAIL NOT TO SCALE
19 VERTICAL PIPE DETAIL (REAR) NOT TO SCALE	20 VERT. PIPE DETAIL (FRNT.END) NOT TO SCALE	21 VERT. PIPE DET.- SIDE TOP NOT TO SCALE	22 DBL. 2x10 ENDCAP ATTACHMENT NOT TO SCALE	23 TENSION BAND ATTACHMENT TENSION BAND TURN UP ON TOP RAIL ONLY NOT TO SCALE	24 TYP X-BRACE CONN. W/ 1¼ BOLT NOT TO SCALE

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TITLE: DETAIL SHEETS		
	DRAWING NUMBER:	DS.1