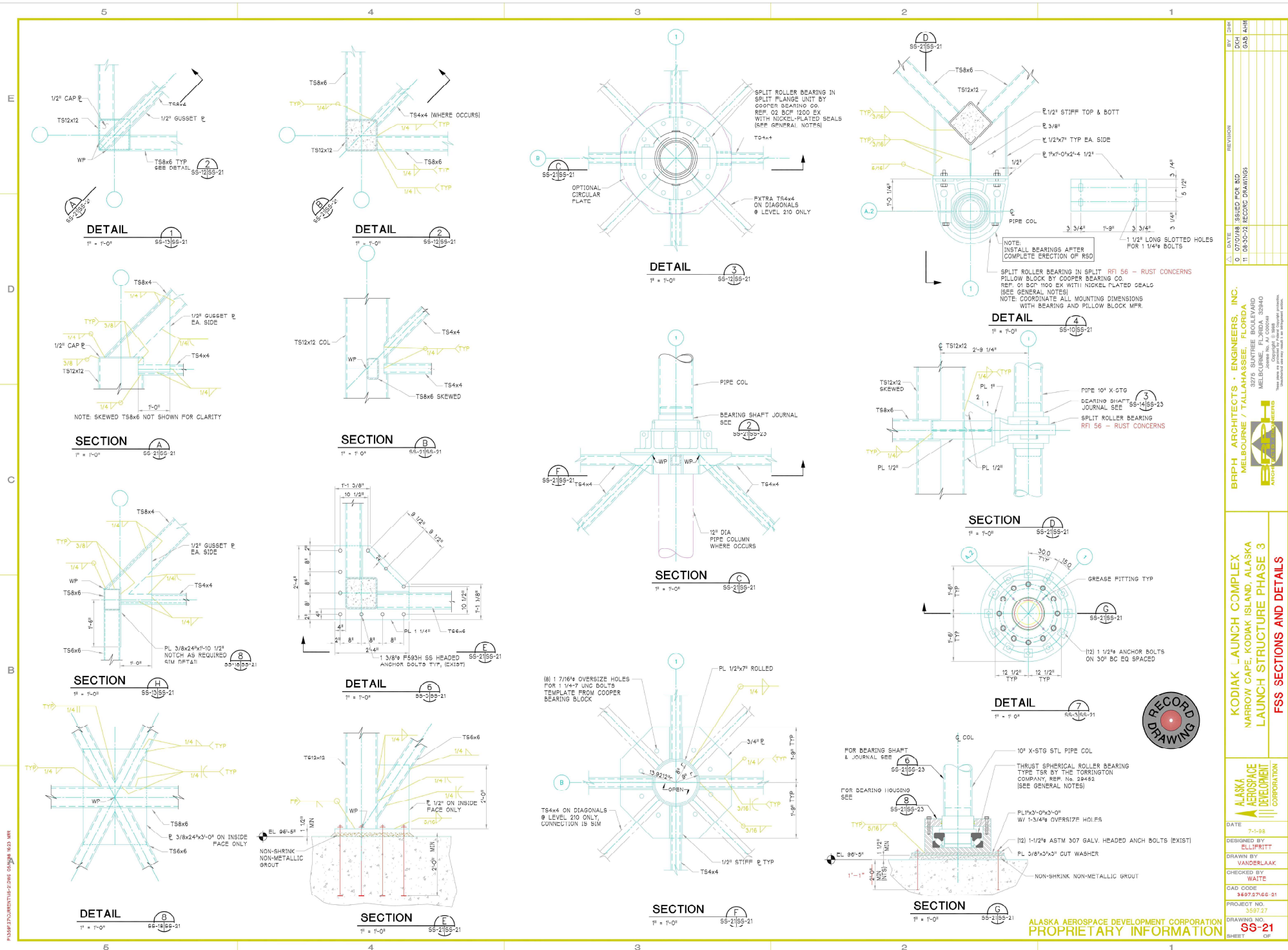
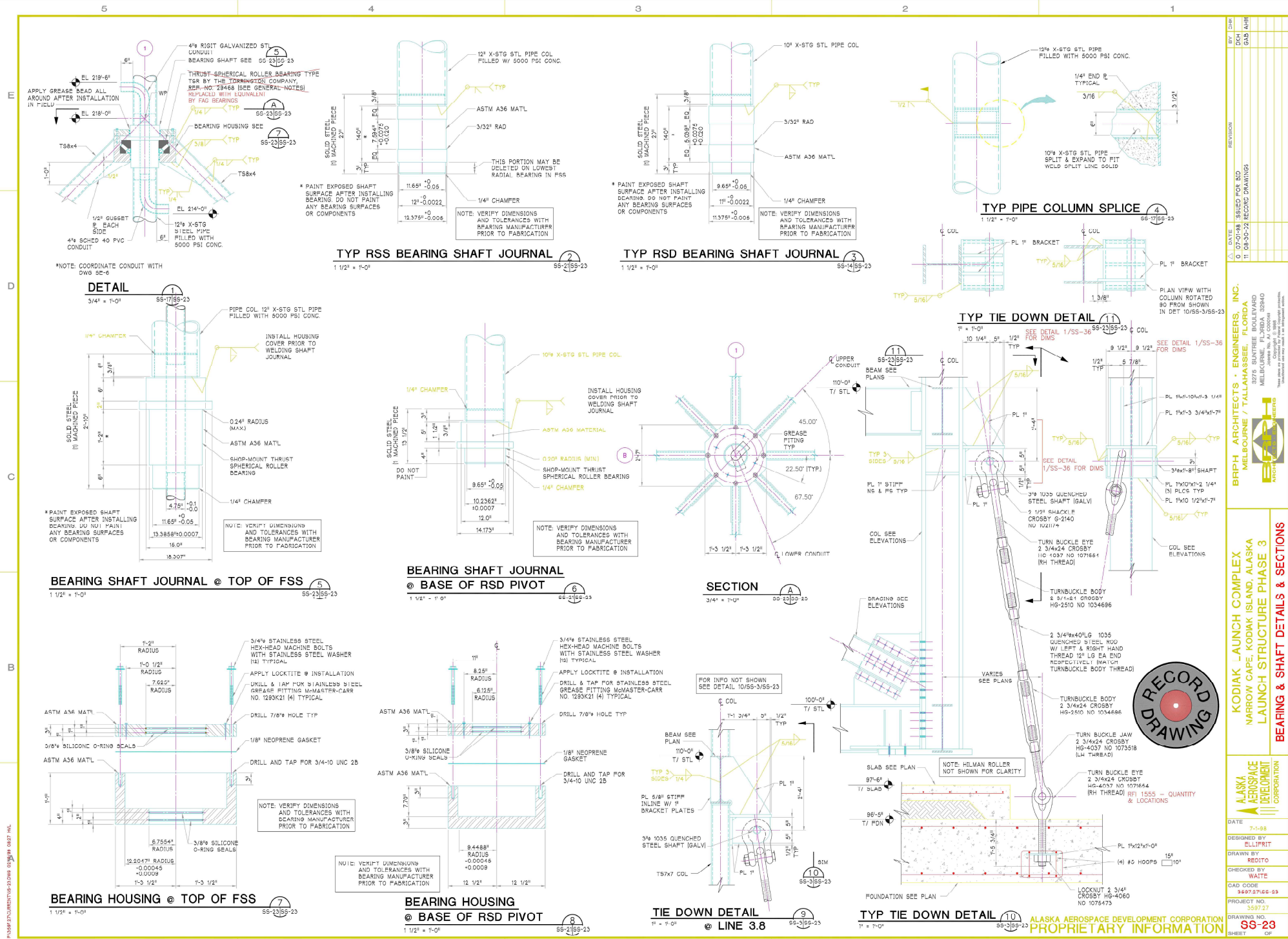
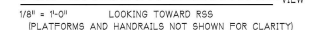
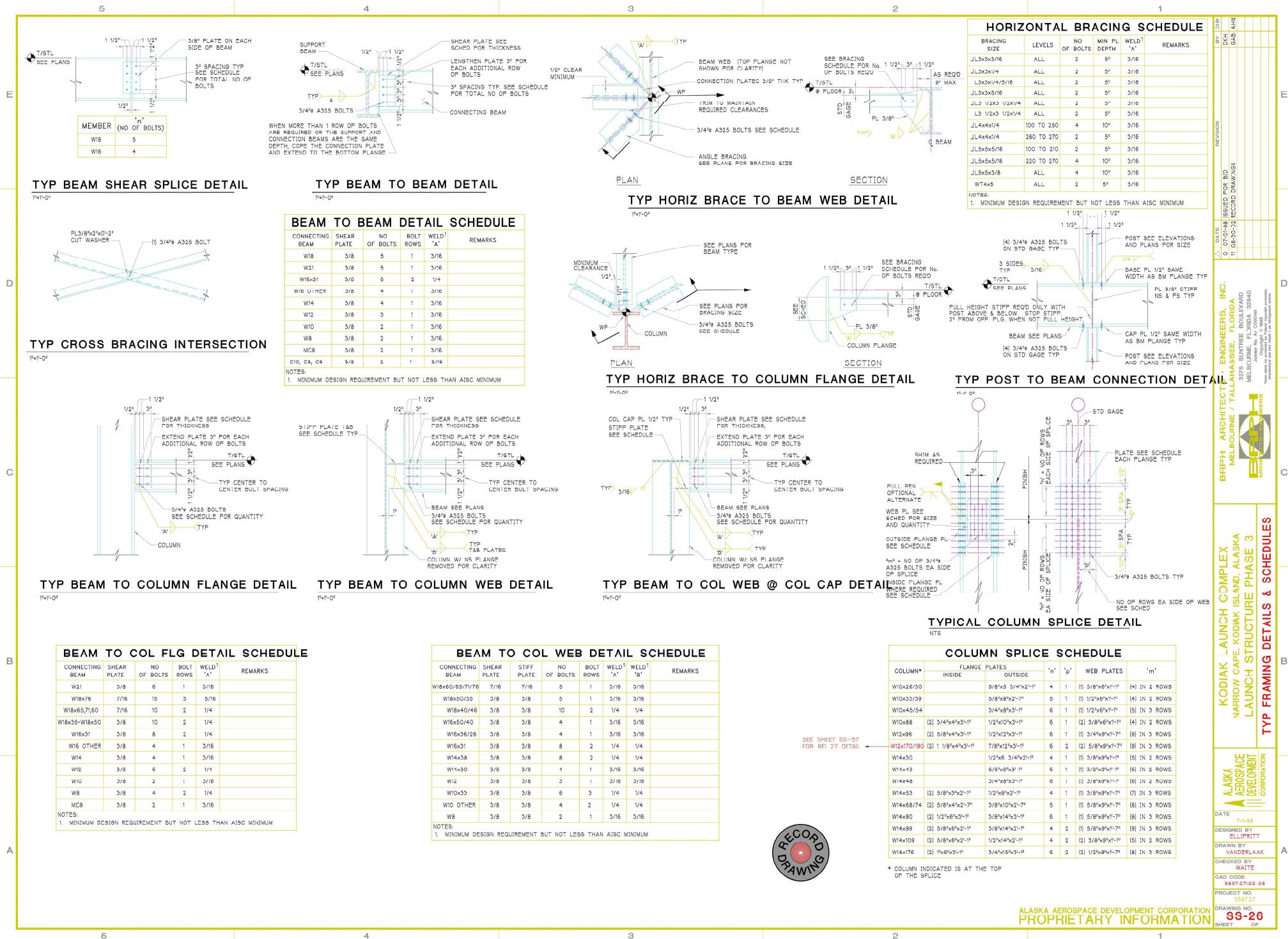


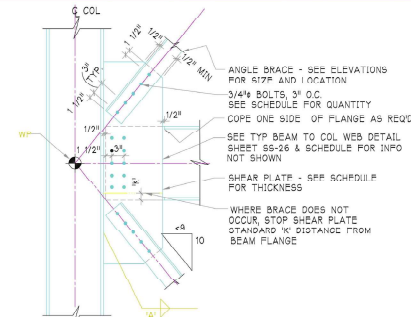





$$1\frac{1}{2}^{\circ} = 1.5^{\circ}$$


ALASKA AEROSPACE DEVELOPMENT CORPORATION
 PROPRIETARY INFORMATION



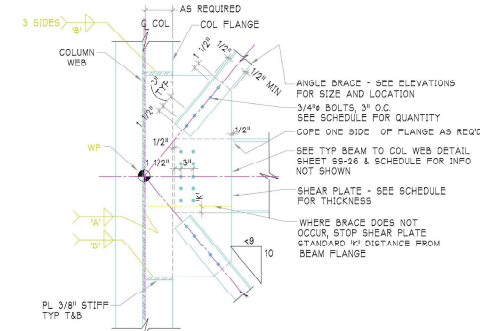


SCHEDULE				
BRACE MEMBER	BOLTS PER BRACE	WELD "A"	1	SHEAR PLATE THICKNESS
JL6x4x3/8 OR 1/2	7	1/4"		1/2"
JL5x5x3/8	6	1/4"		1/2"
JL5x3x3/8	5	1/4"		1/2"
JL5x3x3/10	5	1/4"		1/16"
JL4x4x3/8	4	1/4"		7/16"
JL4x4x5/16	4	1/4"		3/8"
JL4x4x1/4	3	1/4"		3/8"
JL3-1/2x3-1/2x1/4	3	1/4"		3/8"
L3x3x1/4	3	3/16"		3/8"

VERTICAL ANGLE BRACE TO COLUMN
FLANGE SLOPED GREATER THAN 10/9

NOTES:

1. MINIMUM DESIGN REQUIREMENT BUT NOT LESS THAN AISC MINIMUM
2. USE LARGER OF BEAM TO COLUMN FLANGE OR VERTICAL ANGLE BRACE TO COLUMN FLANGE SCHEDULED SHEAR PLATE THICKNESSES



SCHEDULE

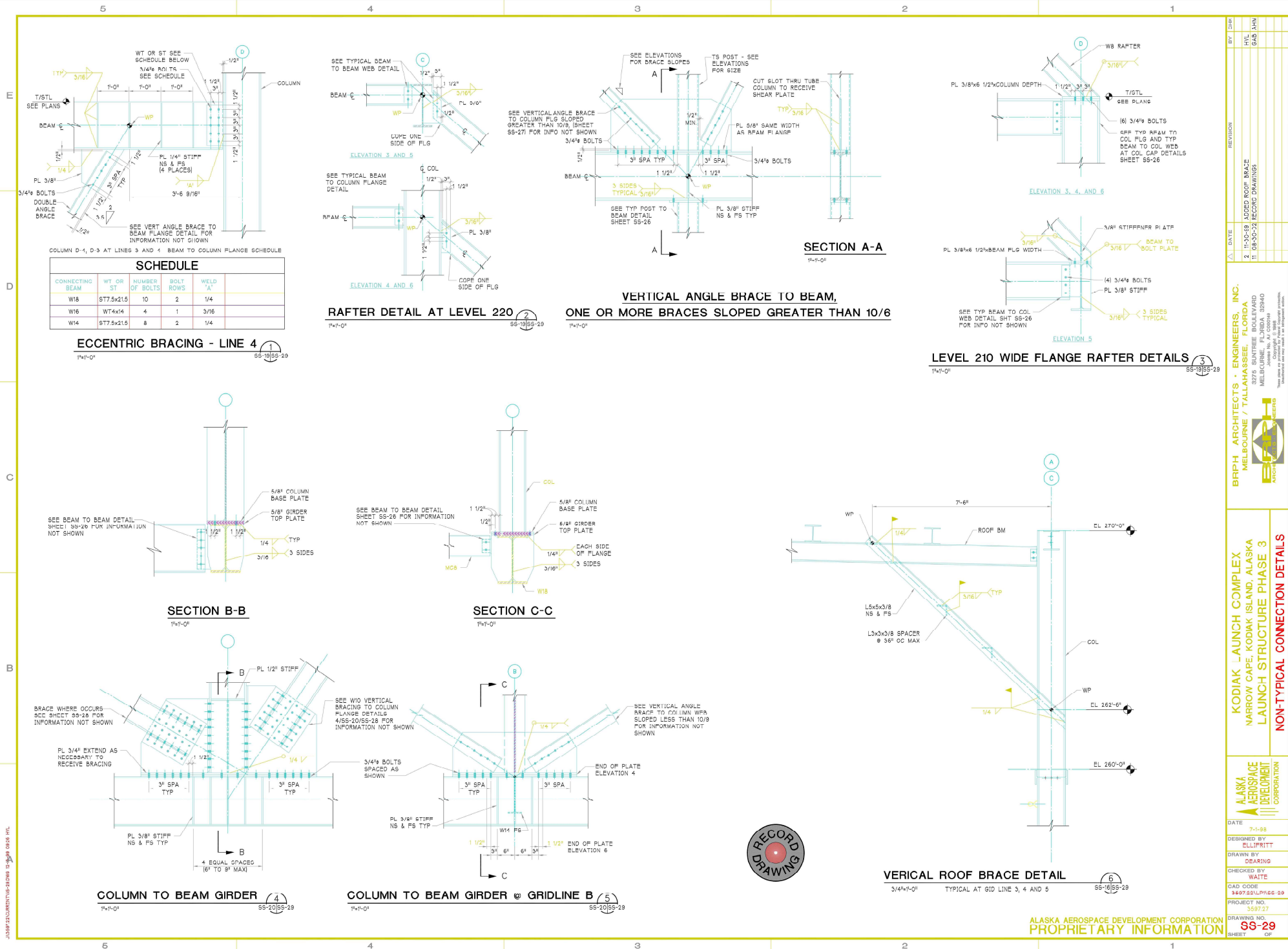
BRACE MEMBER	BOLTS PER BRACE	WELD 'A'	WELD 'B'	SHEAR PLATE THICKNESS
JL5x5x3/8	6	1/4"	3/8"	1/2"
JL5x5x5/16	5	1/4"	3/8"	7/16"
JL4x4x5/16	4	1/4"	3/8"	7/16"
JL4x4x1/4	3	1/4"	3/8"	3/8"
JL3x3x1/4	3	1/4"	3/8"	3/8"
JL3x3x3/16	2	1/4"	3/8"	3/8"
L3x3x3/16	2	1/4"	3/8"	3/8"

NOTES:

- MINIMUM DESIGN REQUIREMENT BUT NOT LESS THAN AISC MINIMUM.
- USE LARGER OF BEAM TO COLUMN WEBS OR VERTICAL ANGLE TO COLUMN WEBS, WHICHEVER IS THE THICKER.

VERTICAL ANGLE BRACE TO COLUMN
WEB SLOPED GREATER THAN 10/9

$$10^{-10} \text{ s}^{-1} - 10^{-11} \text{ s}^{-1}$$

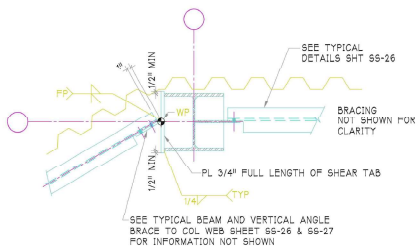



BRPH ARCHITECTS • ENGINEERS, INC.
MELBOURNE / TALLAHASSEE, FLORIDA
3275 SUTREE BOULEVARD
MELBOURNE, FLORIDA 32940
J. BRADY
Copyright © 1998
This drawing and any part hereof is the intellectual property of BRPH Architects • Engineers, Inc.

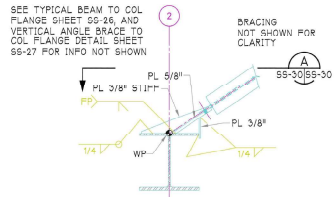
KODIAK LAUNCH COMPLEX
NARROW CAPE, KODIAK ISLAND, ALASKA
LAUNCH STRUCTURE PHASE 3
NON-TYPICAL CONNECTION DETAILS

ALASKA AEROSPACE DEVELOPMENT CORPORATION
DATE: 7-1-98
DESIGNED BY: ELIUPITT
DRAWN BY: DEARING
CHECKED BY: WAITE
CAD CODE: 349725/PHASE-09
PROJECT NO.: 358727
DRAWING NO.: 35-20/SS-29
SHEET 09

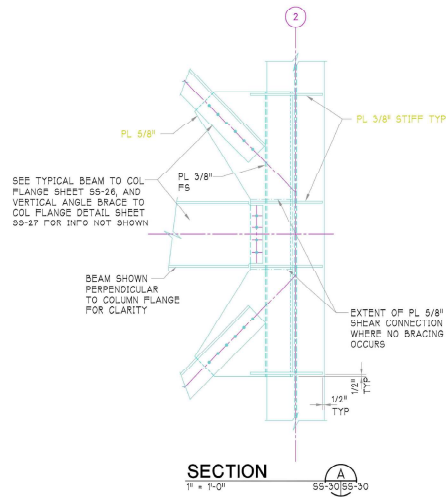
ALASKA AEROSPACE DEVELOPMENT CORPORATION
PROPRIETARY INFORMATION



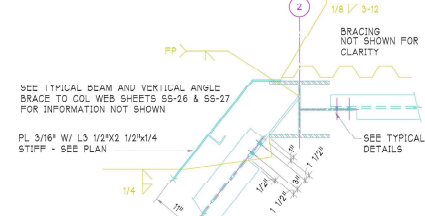
SHEAR PLATE AT ANGLE TO COLUMN WEB (1)
1\"/>



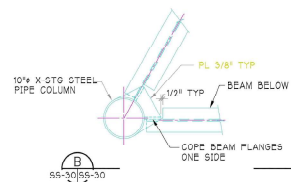
SHEAR PLATE AT ANGLE TO COLUMN FLANGE (2)
1\"/>



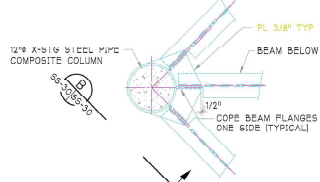
SECTION (A)
1\"/>



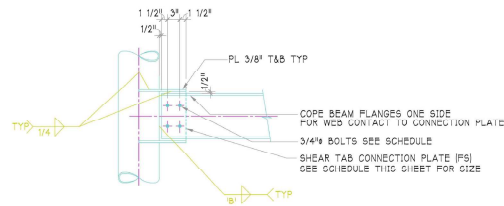
SHEAR PLATE AT ANGLE TO COLUMN WEB SECTION (3)
1\"/>



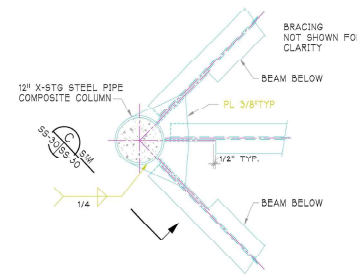
BEAM TO PIPE COLUMN PLAN @ A-2-1
1\"/>



BEAM TO PIPE COLUMN PLAN @ B-1
1\"/>



SECTION (B)
1\"/>



BEAM & VERTICAL BRACE TO COL PLAN @ B-1
1\"/>

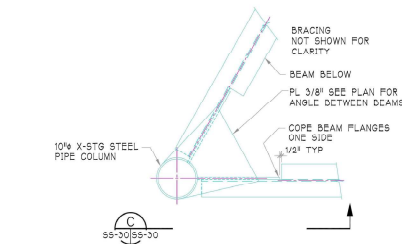
BEAM AND VERTICAL BRACE TO PIPE COLUMN SCHEDULE

MEMBER BRACE	BOLTS PER BRACE	SHEAR TAB CONNECTION PLATE THK	WELD 'A'
JL 6x6x3/8	7	1/2"	1/4"
JL 6x6x3/8	5	1/2"	1/4"
JL 6x6x5/8	8	7/16"	1/4"
JL 4x4x5/8	4	7/16"	1/4"
JL 4x4x5/16	4	3/8"	1/4"

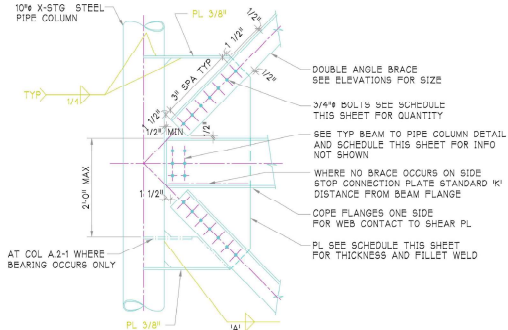
BEAM TO PIPE COLUMN SCHEDULE

MEMBER BEAM	BOLTS PER BEAM	NUMBER OF BOLT ROWS	*SHEAR TAB THK	WELD 'B'
W10x33	6	3	3/8"	1/4"
W10x22	4	2	3/8"	1/4"
W8x24	2	1	3/8"	1/4"
W12x30	6	2	3/8"	1/4"
W8x40	4	2	3/8"	1/4"

* NOTE: FOR BEAMS WITH VERTICAL BRACINGS USE THE LARGER OF THE BRACE OR BEAM SHEAR TABS AND WELDS.



BEAM AND VERTICAL BRACE TO COLUMN PLAN @ A-2-1
1\"/>



SECTION (C)
1\"/>

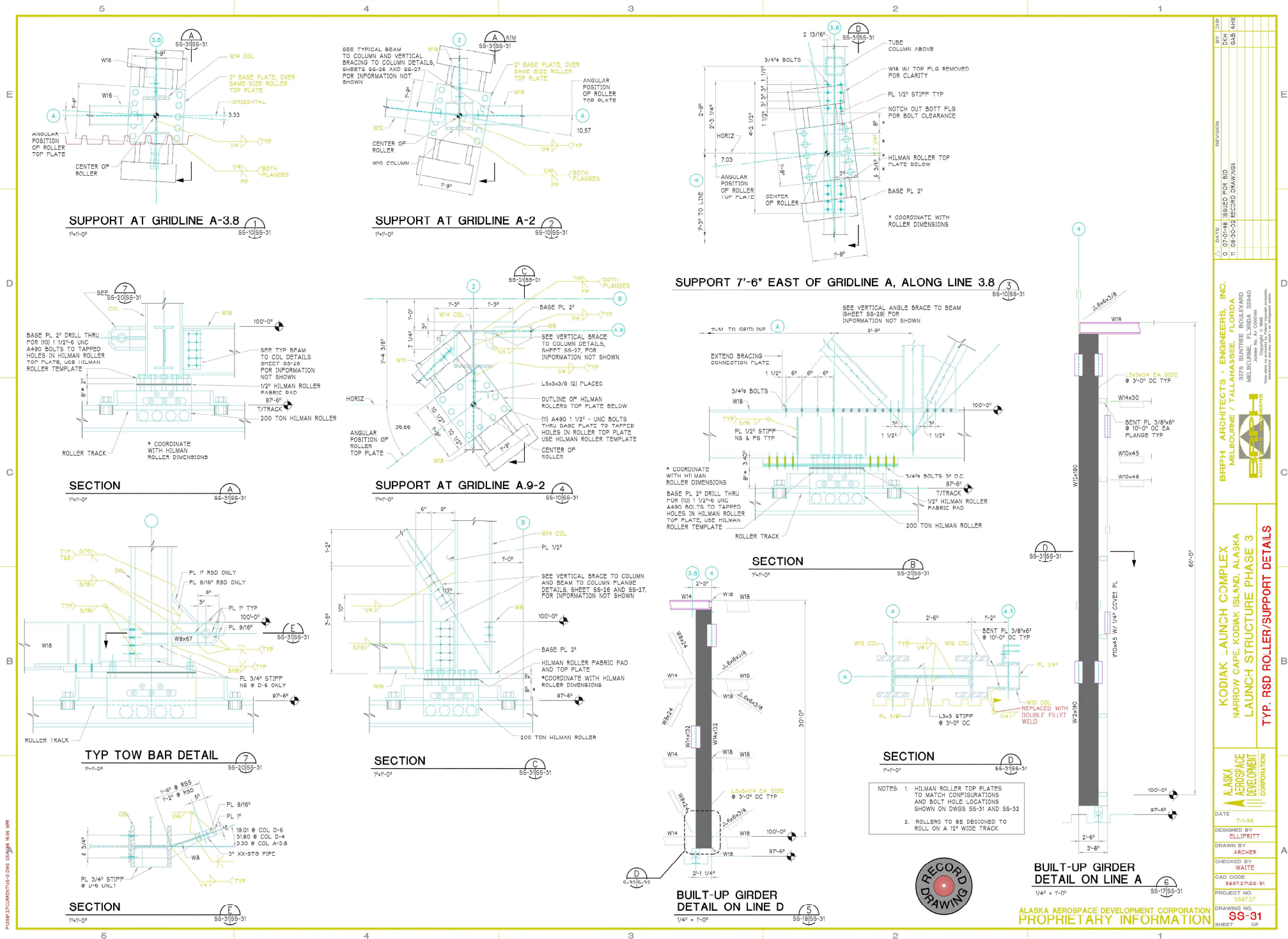


BRPH ARCHITECTS + ENGINEERS, INC.
MELBOURNE / TALLAHASSEE, FLORIDA
3275 SUTREE BOULEVARD
MELBOURNE, FLORIDA 32940
Copyright © 2004
This drawing and any part hereof is the intellectual property of BRPH Architects + Engineers, Inc.

KODIAK LAUNCH COMPLEX
NARROW CAPE, KODIAK ISLAND, ALASKA
LAUNCH STRUCTURE PHASE 3
TYPICAL AND MISCELLANEOUS DETAILS

ALASKA AEROSPACE DEVELOPMENT CORPORATION
DATE: 7-1-98
DESIGNED BY: ELUPHRETT
DRAWN BY: MEDINA
CHECKED BY: WAITE
CAD CODE: 36073765-30
PROJECT NO: 358727
DRAWING NO:
SHEET 30 OF 30

ALASKA AEROSPACE DEVELOPMENT CORPORATION
PROPRIETARY INFORMATION



PAPER DOCUMENTED TO 30% SCALE 10.0.00

BRPH ARCHITECTS • ENGINEERS, INC.
3275 SUTREE BOULEVARD
MELBOURNE, FLORIDA 32940
Copyright © 1998
This drawing and any part hereof are the intellectual property of BRPH Architects • Engineers, Inc.

KODIAK LAUNCH COMPLEX
NARROW CAPE, KODIAK ISLAND, ALASKA
LAUNCH STRUCTURE PHASE 3

ALASKA
AEROSPACE
DEVELOPMENT
CORPORATION

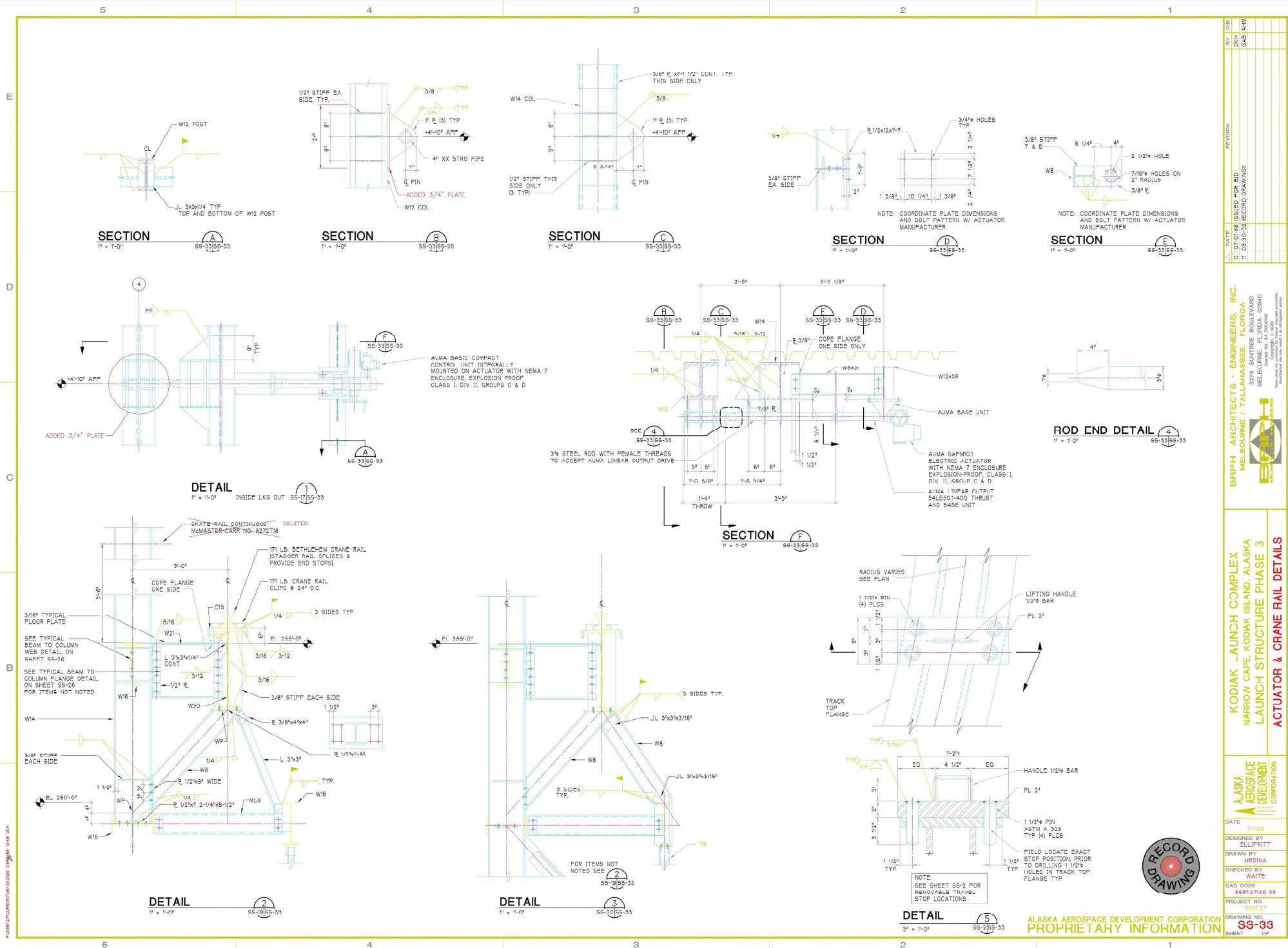
DATE 7-1-98
DESIGNED BY ELI PRITTT
DRAWN BY ARCHER
CHECKED BY WAITE
CAD CODE 3497.5766-31
PROJECT NO. 3587.27
DRAWING NO. SS-17/SS-31
SHEET 39-31 OF

TYP. RSD ROLLER/SUPPORT DETAILS

BUILT-UP GIRDER
DETAIL ON LINE A
1/4" = 1'-0"
SS-17/SS-31

ALASKA AEROSPACE DEVELOPMENT CORPORATION
PROPRIETARY INFORMATION





BRPH ARCHITECTS • ENGINEERS, INC.
MELBOURNE / TALLAHASSEE, FLORIDA
3275 SUNTREE BOULEVARD
MELBOURNE, FLORIDA 32940
Copyright © 1998
This drawing and any part hereof is the intellectual property of BRPH Architects • Engineers, Inc.

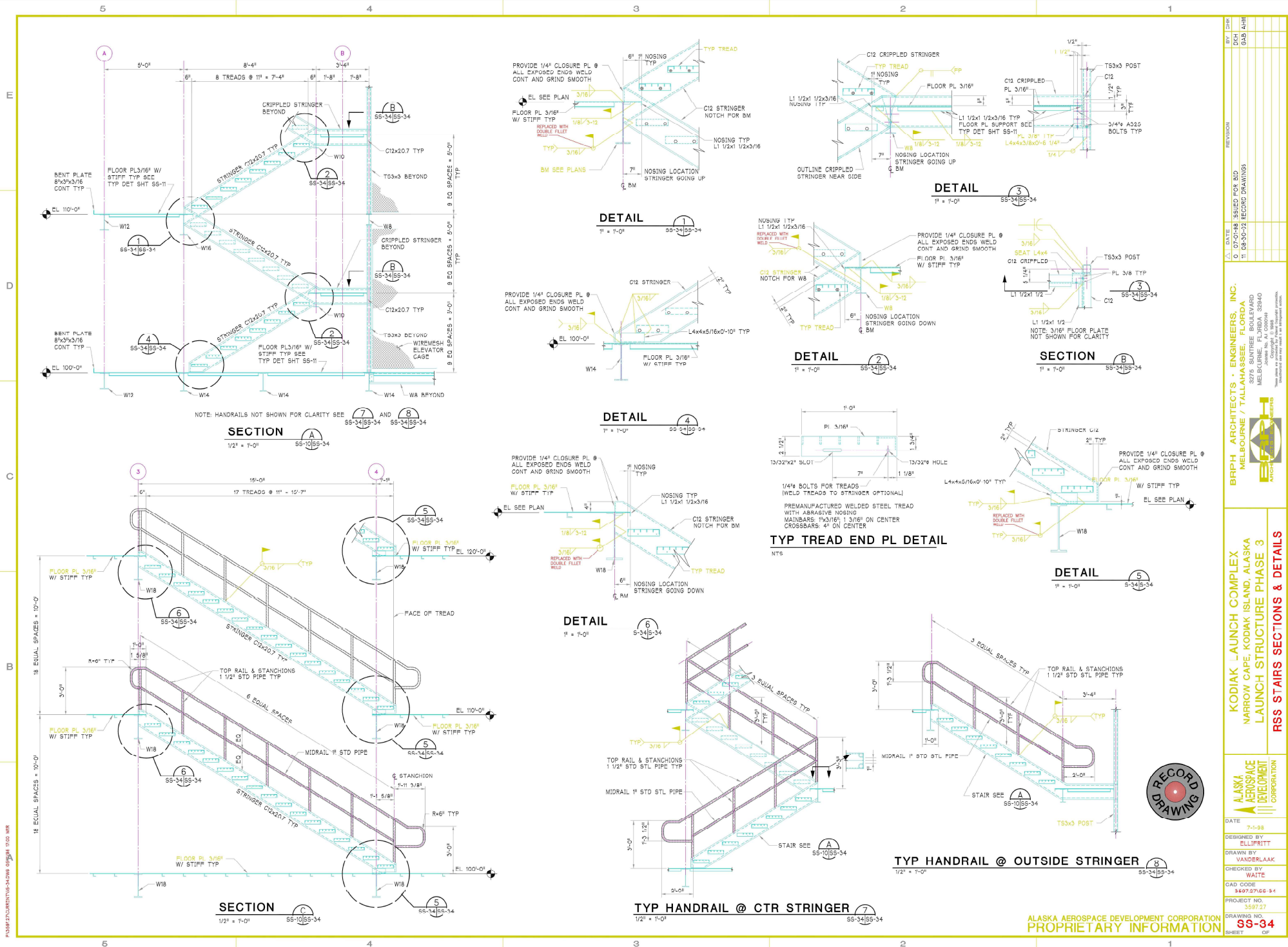
KODIAK LAUNCH COMPLEX
NARROW CAPE, KODIAK ISLAND, ALASKA
LAUNCH STRUCTURE PHASE 3
ACTUATOR & CRANE RAIL DETAILS

ALASKA
AEROSPACE
DEVELOPMENT
CORPORATION

DATE: 7-1-98
DESIGNED BY: ELI PRITTT
DRAWN BY: MEDINA
CHECKED BY: WASTE
CAD CODE: 3607.5165-33
PROJECT NO.: 3587.27
DRAWING NO.: 55-33
SHEET: 01



ALASKA AEROSPACE DEVELOPMENT CORPORATION
PROPRIETARY INFORMATION



BRPH ARCHITECTS • ENGINEERS, INC.
MELBOURNE / TALLAHASSEE, FLORIDA
3278 SUTREE BOULEVARD
MELBOURNE, FLORIDA 32940
Copyright © 1998
Unauthorized use or reproduction is prohibited.

KODIAK LAUNCH COMPLEX
NARROW CAPE, KODIAK ISLAND, ALASKA
LAUNCH STRUCTURE PHASE 3
RSS STAIRS SECTIONS & DETAILS

ALASKA AEROSPACE DEVELOPMENT CORPORATION
DATE: 7-1-98
DESIGNED BY: BLUPRITT
DRAWN BY: VANDERLAAR
CHECKED BY: WAITE
CAD CODE: 360757/SS-34
PROJECT NO: 3587/27
DRAWING NO: SS-34/SS-34
SHEET: SS-34

ALASKA AEROSPACE DEVELOPMENT CORPORATION
PROPRIETARY INFORMATION