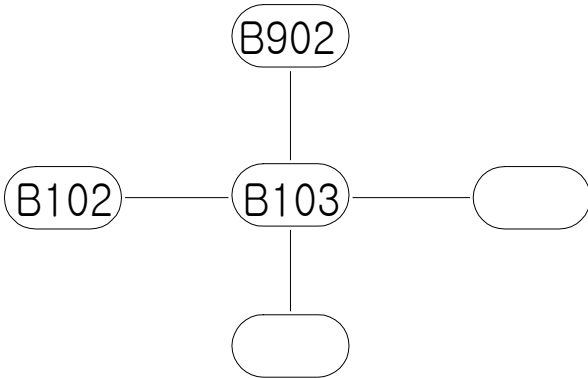


NOTES

1. BOTH SIDE ARE SYMMETRIC EXCEPT AS SHOWN.
2. ALL SECTIONS ARE SHOWN LOOKING FORWARD EXCEPT AS NOTED.
3. ALL ELEVATIONS ARE SHOWN LOOKING PORT SIDE EXCEPT AS NOTED.
4. WELD BEAD TO BE CHIPPED IN WAY OF NO SCALLOP OF A CROSS THE WELDING LINE.
5. WELDING LEG LENGTH IS (5.0). EXCEPT AS SHOWN.
6. NO MARKED STEEL TO BE GRADE "A". ="AH32". ="DH36" ="EH36"
 ="ZAH32" TO BE HIGHER TENSIL STEEL.
7. WHERE LONG'L DECK BEAMS PASS THROUGH SLOTTED FRAMES, BHDS,
 OR GIRDERS, THERE IS TO BE A PAIR OF MATCHED INTERMITTENT WELDS ON
 EACH SIDE OF SUCH INTERSECTION AND 150mm DBL CONT AT ENDS
8. WHERE LONG'L DECK BEAMS PASS THROUGH SLOTTED FRAMES, BHDS, OR GIRDERS,
 THERE IS TO BE A PAIR OF MATCHED INTERMITTENT WELDS ON EACH SIDE OF SUCH
 INTERSECTION AND 150mm DBL CONT AT ENDS.
9. WHERE LONG'L MEMBERS (EXCEPT FOR DECK BEAMS) PASS THROUGH SLOTTED
 FRAMES OR BHDS THERE IS TO A 150mm DOUBLE CONTINUOUS WELD AT SUCH
 INTERSECTION AND AT THEIR ENDS .
10. WHERE BEAMS, STIFF, FRAMES etc. (EXCEPT LONG'L MEMBERS) PASS THRU SLOTTED
 GIRDERS , SHELVES OR STRINGERS, THERE IS TO BE A PAIR OF MATCHED
 INTERMITTENT WELDS ON EACH SIDE OF SUCH INTERSECTIONS, AND THE BEAMS,
 STIFFENERS AND FRAMES ARE TO BE EFFICIENTLY ATTACHED TO THE GIRDERS,
 SHELVES AND STRINGERS.

ERECTION SEQUENCE

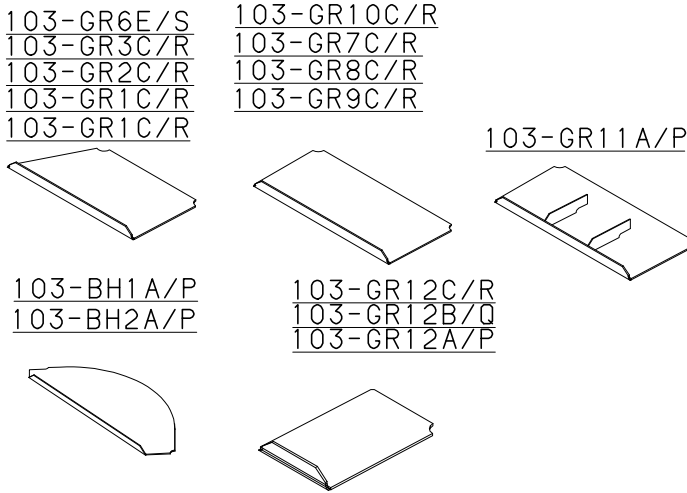
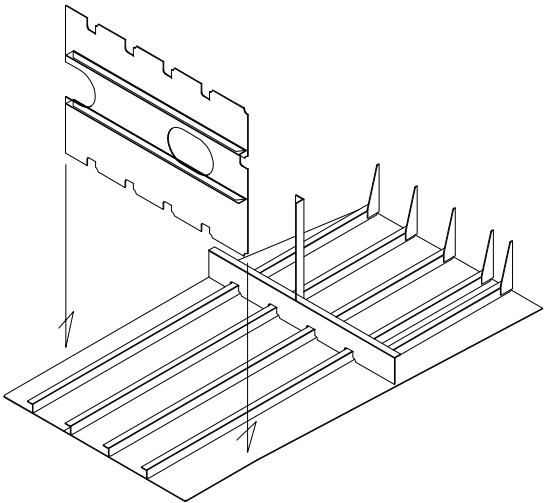
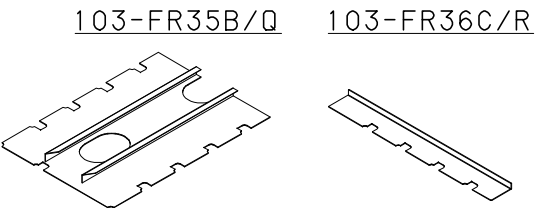


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|---|----------|---|-------|-------------------------|---|---------------|--|-------------------------------|--|
| BLOCK WEIGHT (TON) | | P | | C | | S | | TOTAL (30)SHEETS WITH A COVER | |
| SHIP NO. | | | | SHIP TYPE | | | | | |
| EN5430 | | | | ENABOL 5430 BHP TOWBOAT | | | | | |
| PRODUCTION DESIGN | | | TEL . | | BLOCK NAME | | | | |
| APPROVED | | | | | <div>B103 BLOCK</div> <div>(FR35-870 ~ FR40)</div> <div>2-2</div> | | | | |
| CHECKED | | | | | | | | | |
| CHECKED | Y.S SHIN | | | | | | | | |
| DRAWN | W.K LEE | | | | | | | | |
| GMB Inc | | | | SCALE | | DWG NO. | | | |
| | | | | (1 / 50) | | B103-01-TITLE | | | |
| | | | | DATE | | REV.NO. | | | |
| 586-1, Seonam-dong Nam-gu, Ulsan, Korea | | | | 2010.07.16 | | 4 | | | |

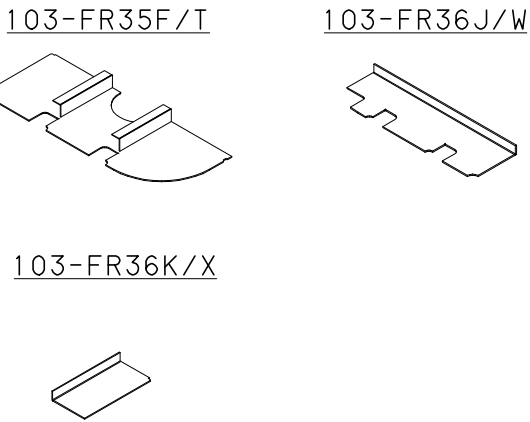
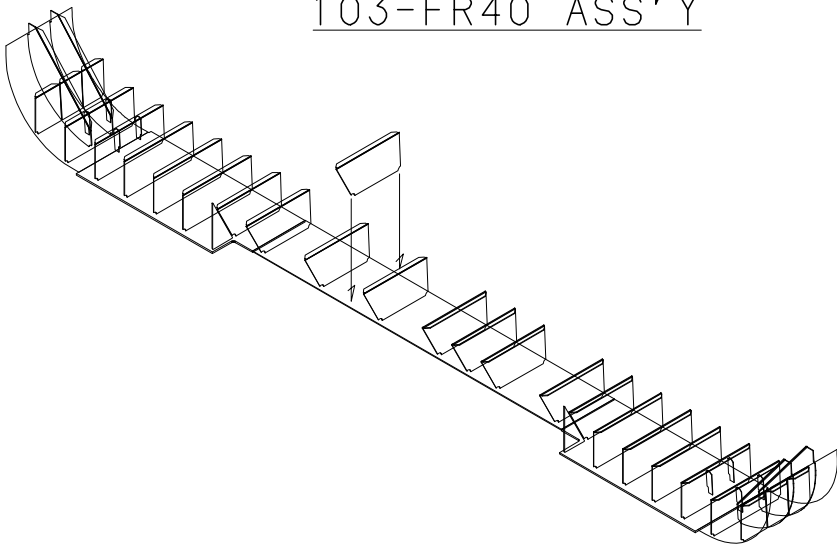
| DATE | REV NO | DESCRIPTION | SHOP | PAGE | APPROVAL | | |
|------------|--------|--|-----------|-------------------|----------|-------|------|
| | | | | | DRAW | CHECK | APPR |
| | 0 | ISSUED TO YARD | | | | | |
| | 1 | REV. WELD'G DET. | | | | | |
| | 2 | -1:ADD PIPE HOLE & DELETE ACC HOLE -2:REV. SYMBOL & TEXT, ADD SCALLOP -3: ADD ASS'Y DET. | | | | | |
| | 3 | ADD DRAIN PIPE HOLE | | | | | |
| | 4 | REV. DRAIN PIPE HOLE SIZE(Ø118=>Ø65) | | 12 | | | |
| | | | | | | | |
| NOTED | | | | | | | |
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| DIVISION | | 0, X | P.E BLOCK | BLOCK COMPOSITION | | BASE | |
| ERECTION | | | | | | NOMAL | |
| UNIT ERECT | | | | | | | |
| PRE ERECT | | | | | | | |
| ERECT | | | | | | | |

B103 BLOCK PROCESS

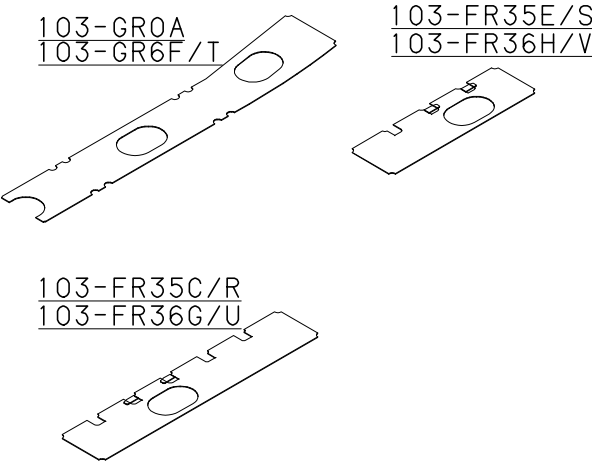
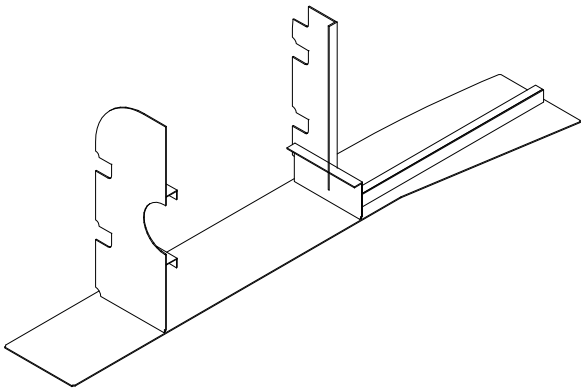
103-LB10A/P ASS'Y



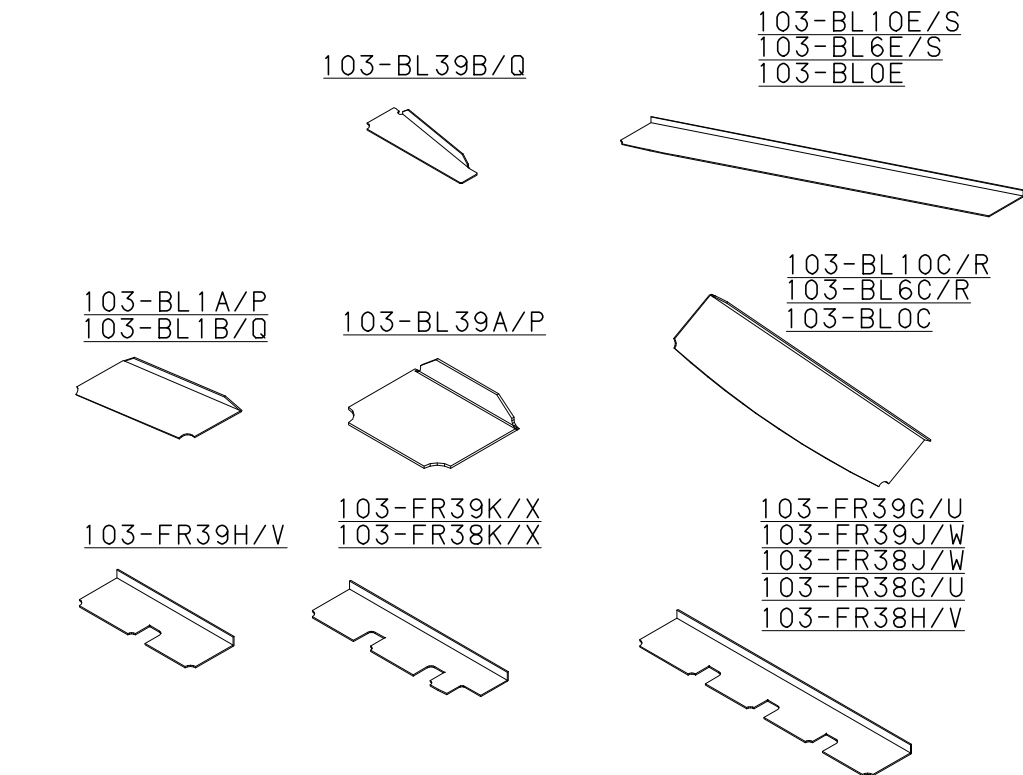
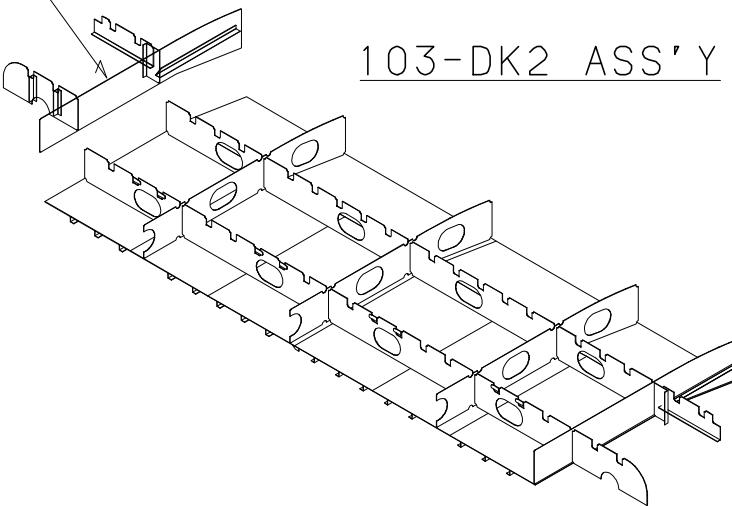
103-FR40 ASS'Y



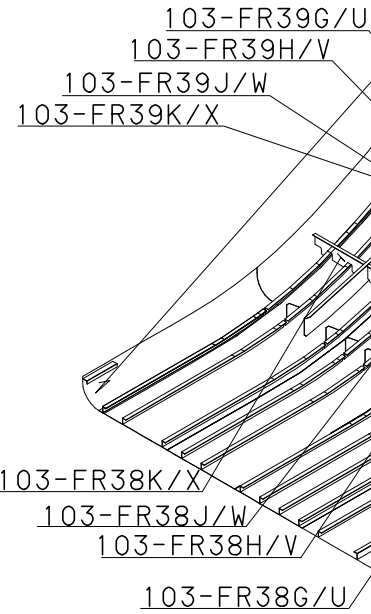
103-GR10E/S ASS'Y



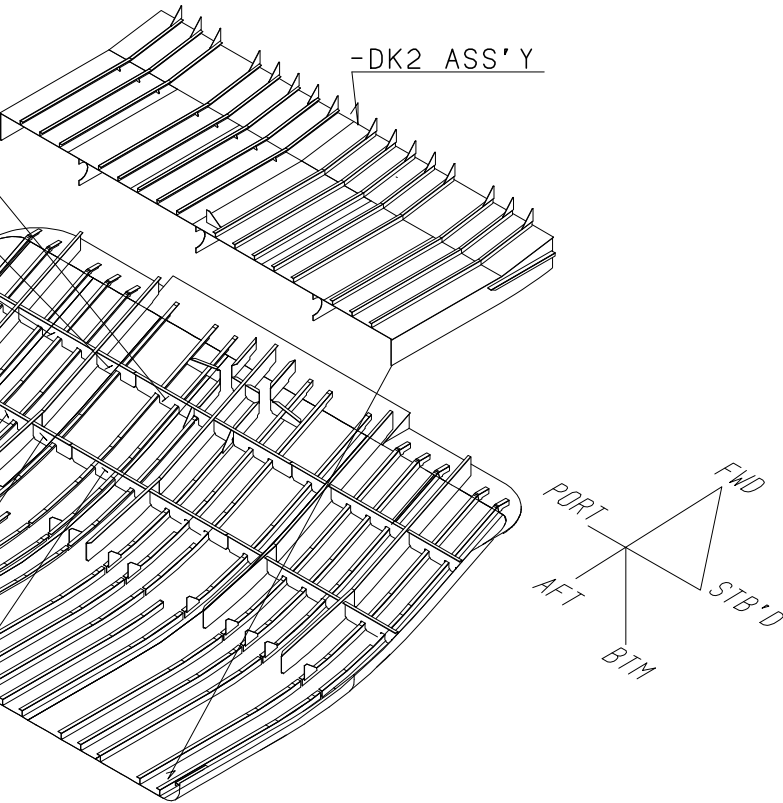
103-GR10E/S ASS'Y

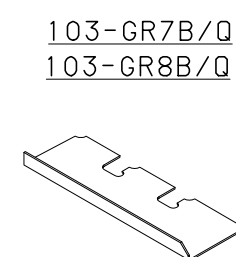
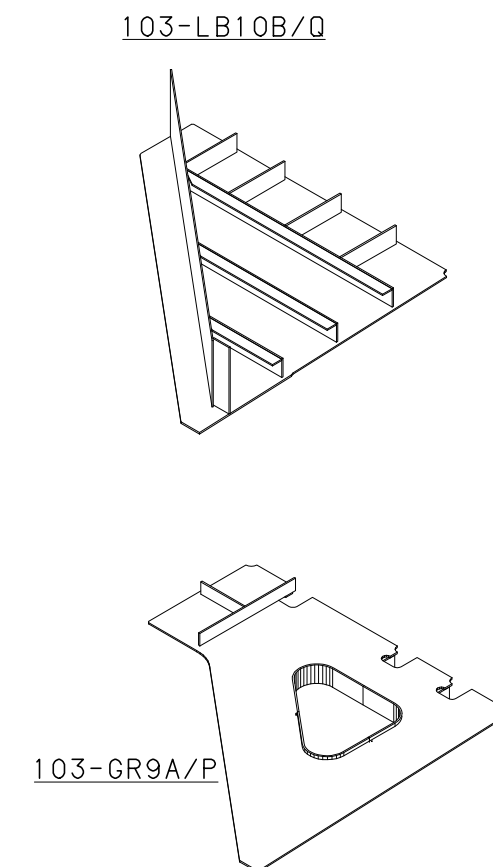


103-BS1A/P ASS'Y

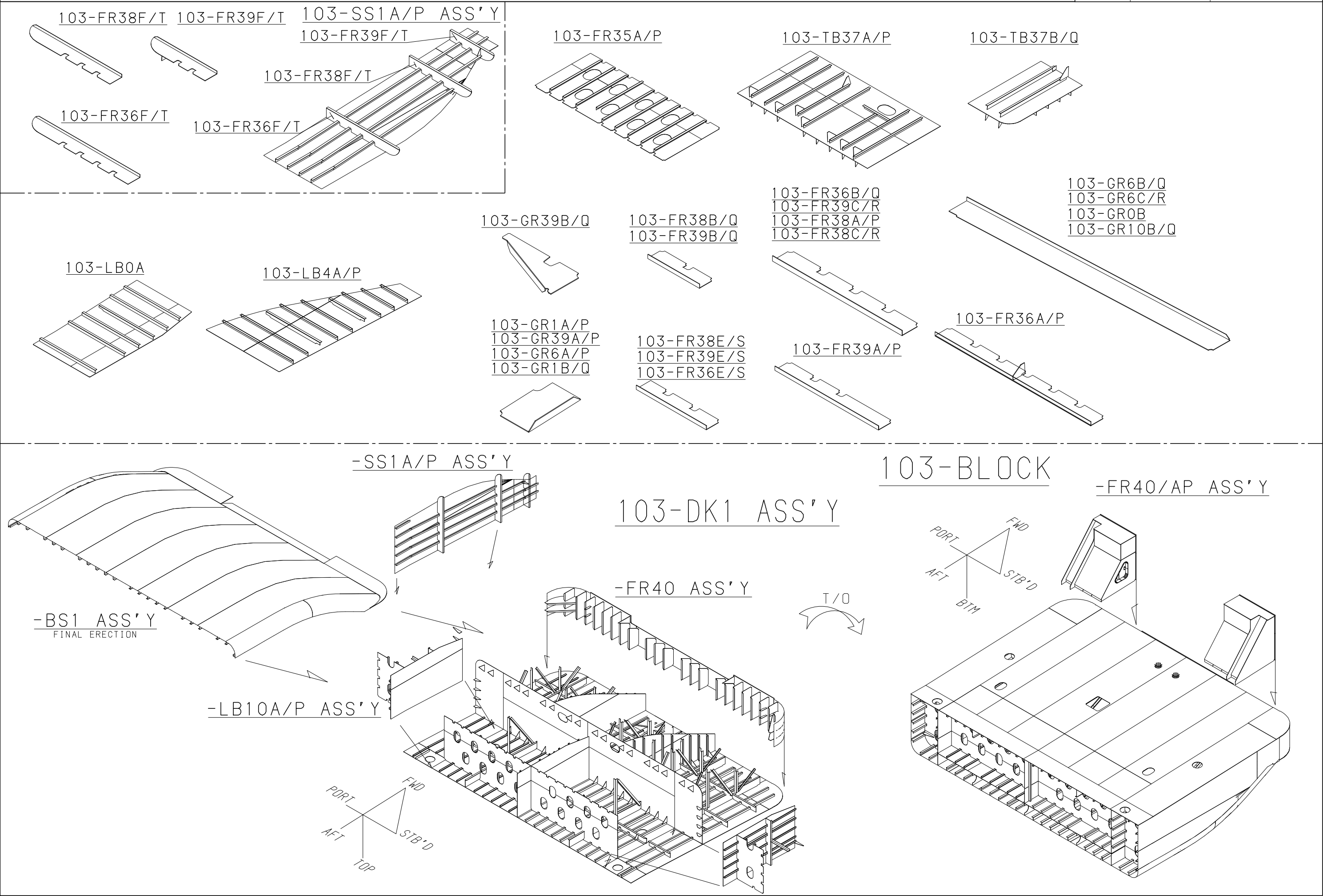


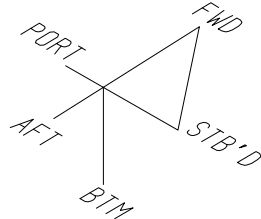
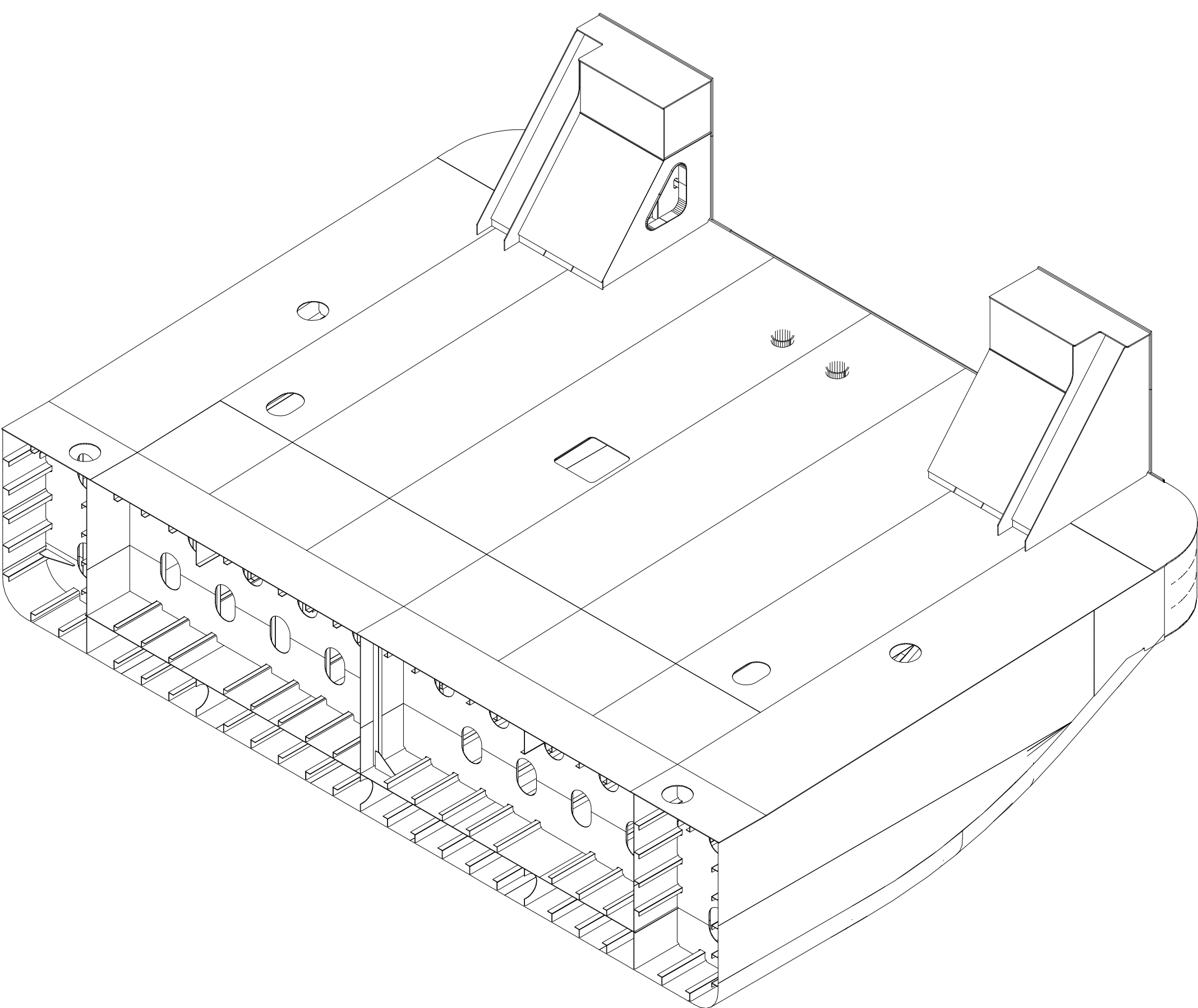
-DK2 ASS'Y



B103
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B103 BLOCK PROCESS

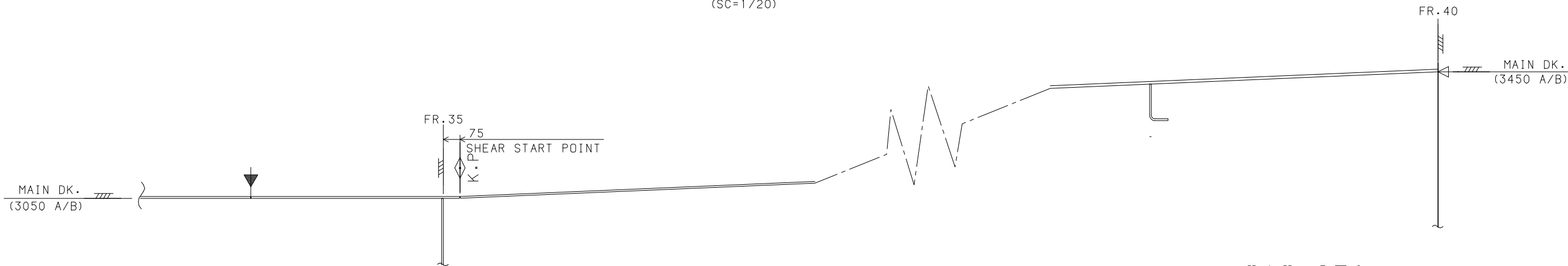




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| 103 BLK ANALYSIS 103-11-1 DK1/G(1) __PG.0 | | GMB | | BLOCK NO. | | B103 | |
| | | | | PAGE | | 5 / 29 | |
| -1 LB10A/M(1) __PG.0 | | | | | | | |
| -2 LB10P/M(1) __PG.0 | | | | | | | |
| -2 FR40/M(1) __PG.0 | | | | | | | |
| | | | | | | | |
| -2 SS1A/M(1) __PG.0 | | | | | | | |
| -2 SS1P/M(1) __PG.0 | | | | | | | |
| -2 BS1/M(1) __PG.0 | | | | | | | |
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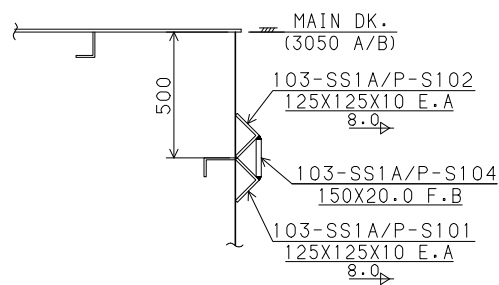
MAIN DECK SHEER DET.

(TYP.)
(SC=1/20)



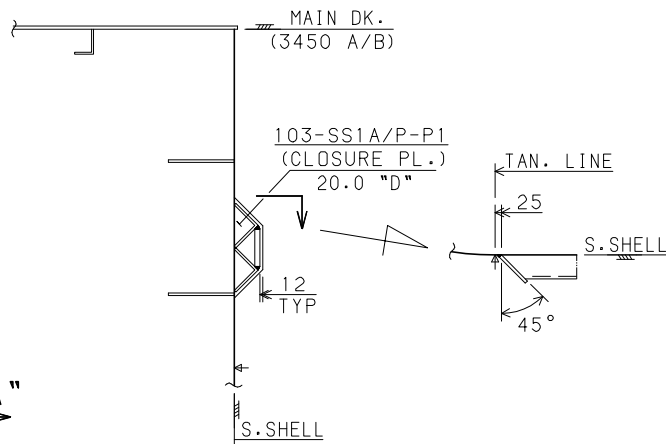
"B" SEC.

(SCALE: 1/30)



"A" SEC.

FR.2+345
(SCALE: 1/30)



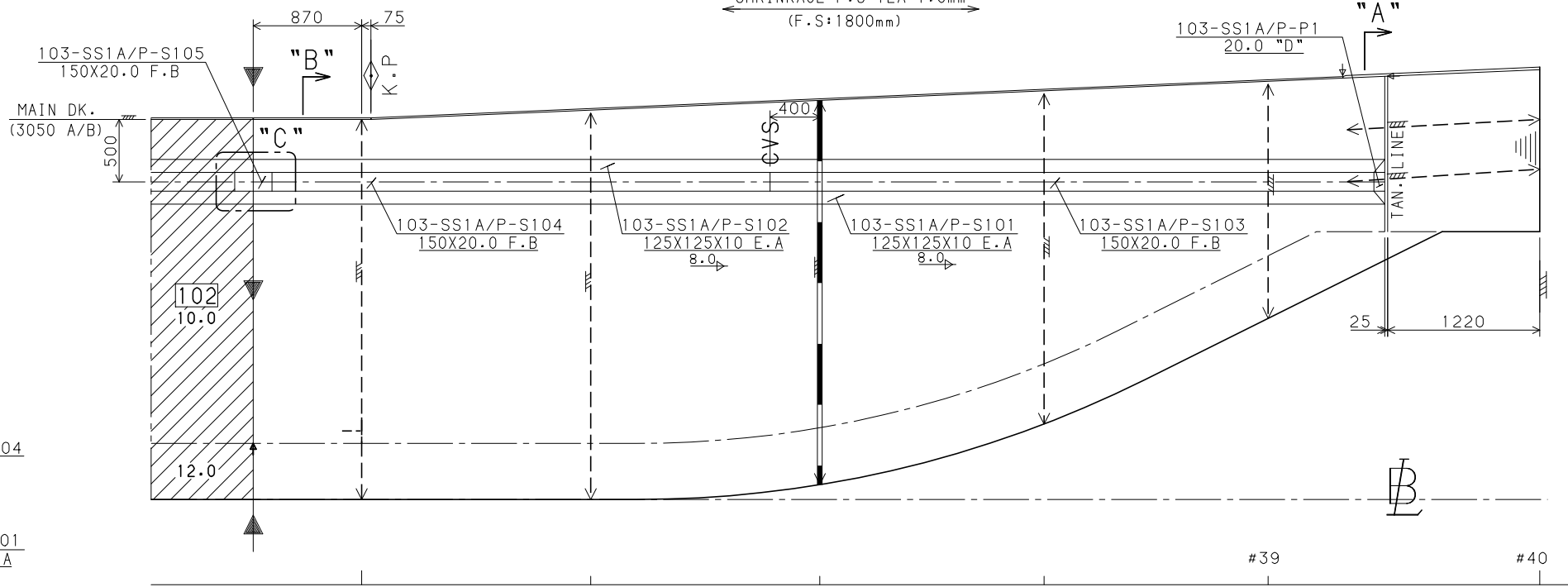
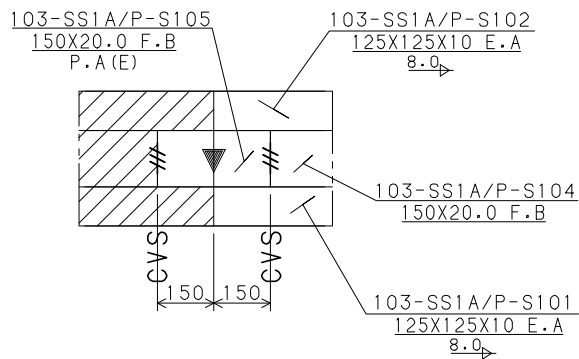
FENDER DET.

THE PORT IS SIM. TO STB'D (EX. AS SHOWN)

SHRINKAGE F.S 1EA:1.5mm
(F.S:1800mm)

"C" DET.

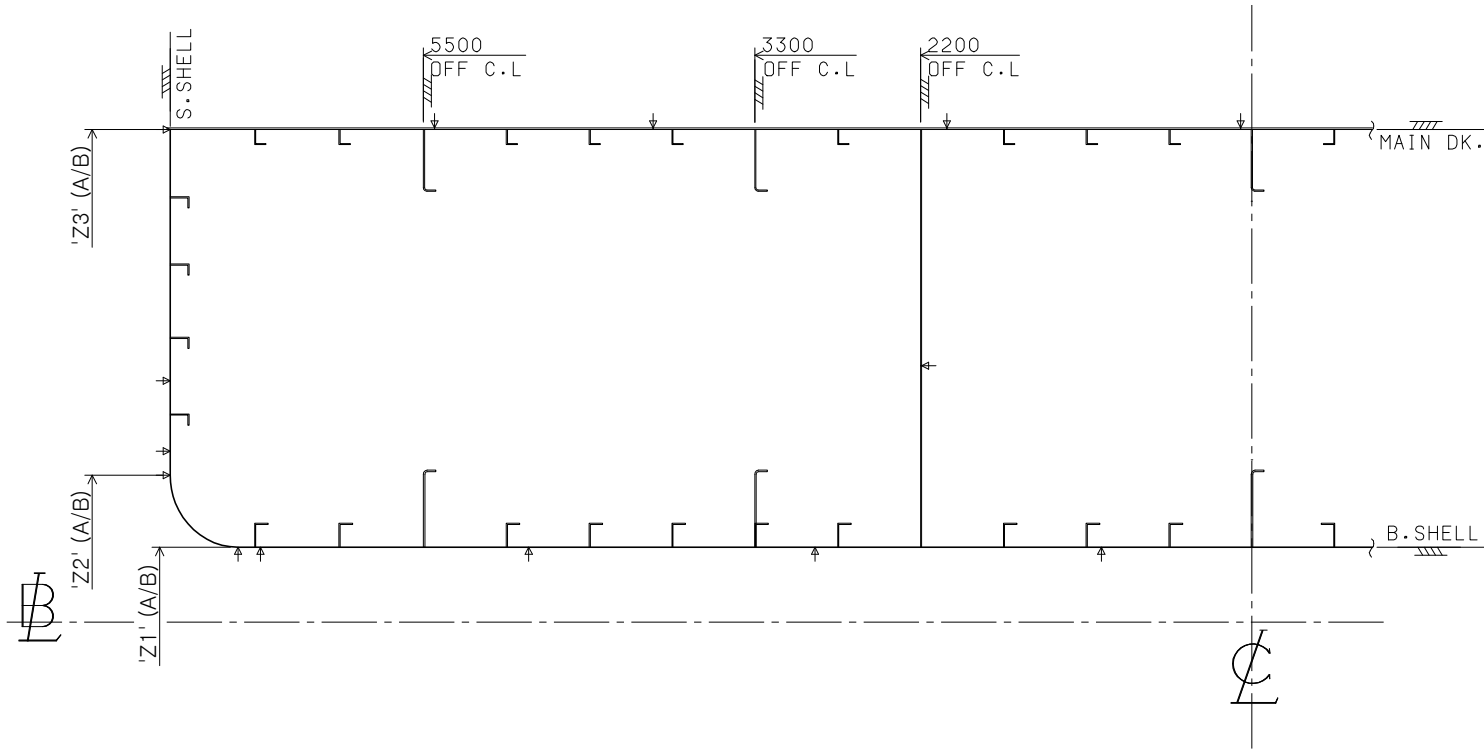
(SCALE: 1/20)



FR. TYP. SEC.

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

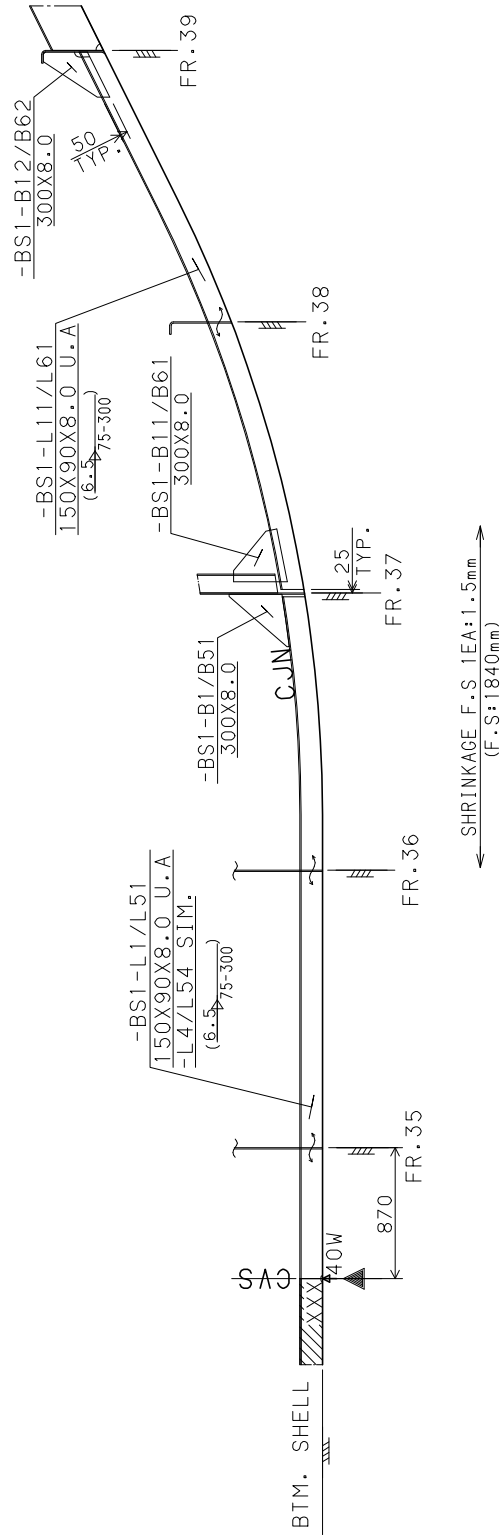
OFFSET TABLE



| FR.NO. | 'Z1' (A/B) | 'Z2' (A/B) | 'Z2' (A/B) |
|----------------------|------------|------------|------------|
| FR.35-870 (AFT BUTT) | 0.0 | 450.0 | 3050.0 |
| FR.35 | 0.0 | 450.0 | 3050.0 |
| FR.36 | 0.0 | 450.0 | 3125.2 |
| FR.37 | 119.3 | 575.5 | 3203.6 |
| FR.38 | 605.2 | 1088.9 | 3280.4 |
| FR.39 | 1454.3 | 1957.0 | 3357.1 |
| FR.40 | . | 2105.0 | 3450.0 |

NO.1 BOTTOM SHELL LONG ELEV.

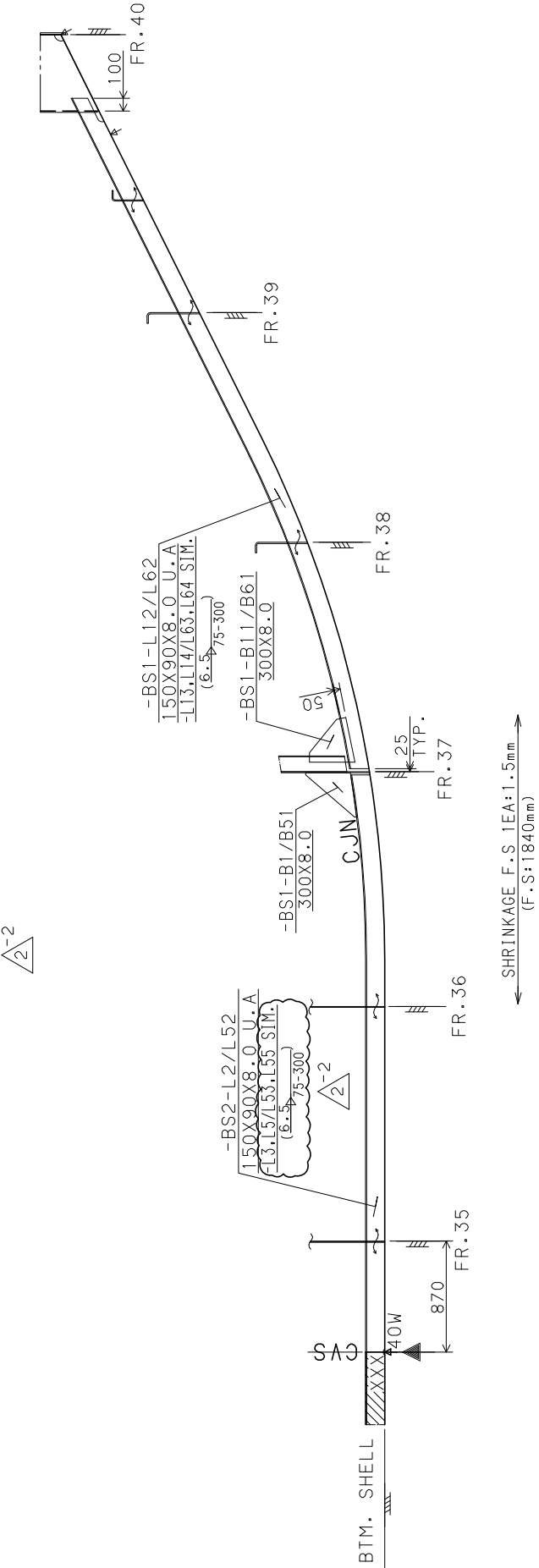
THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



NO.2 BOTTOM SHELL LONG ELEV.

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

(NO.3) LONG. ELEV. SIM.

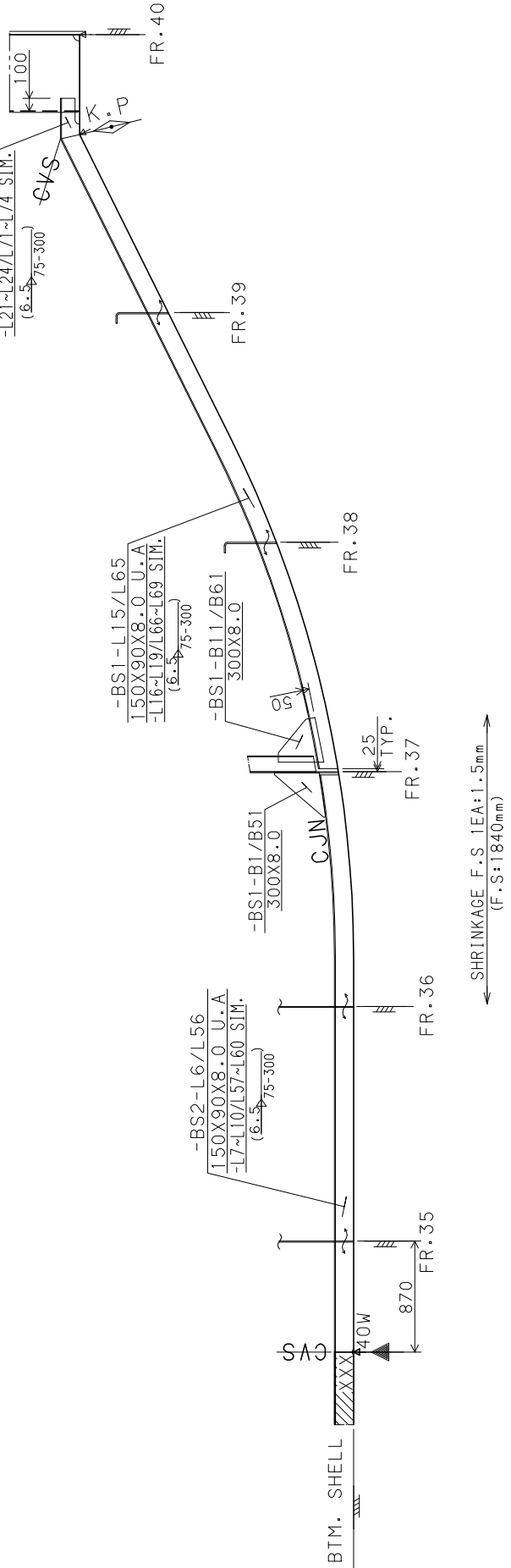


NO.7 BOTTOM SHELL LONG ELEV.

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

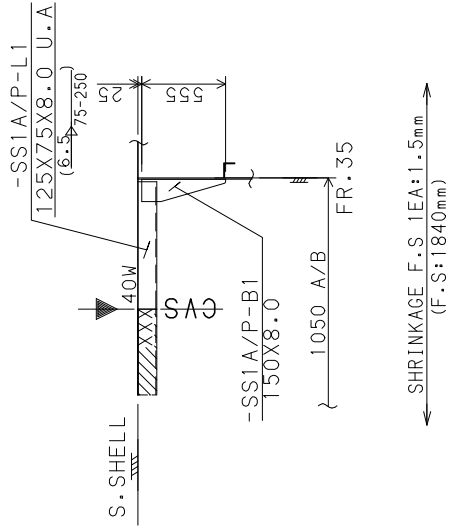
NO.8,9,11,12 LONG. ELEV. SIM.

NO.11,12 LONG. (6.5 75-250)



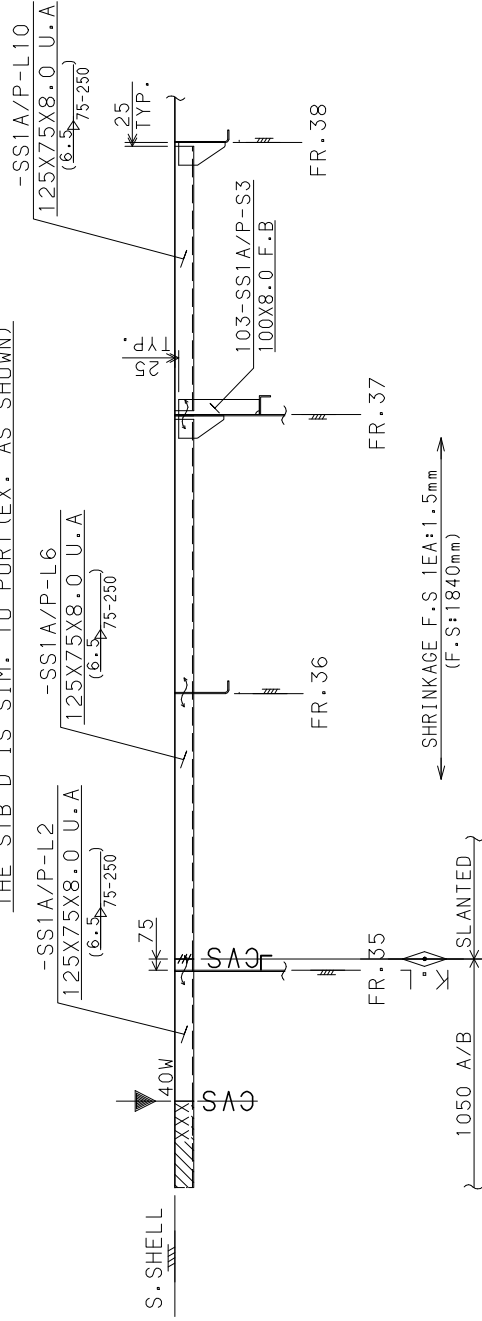
NO.14 SIDE SHELL LONG PLAN

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



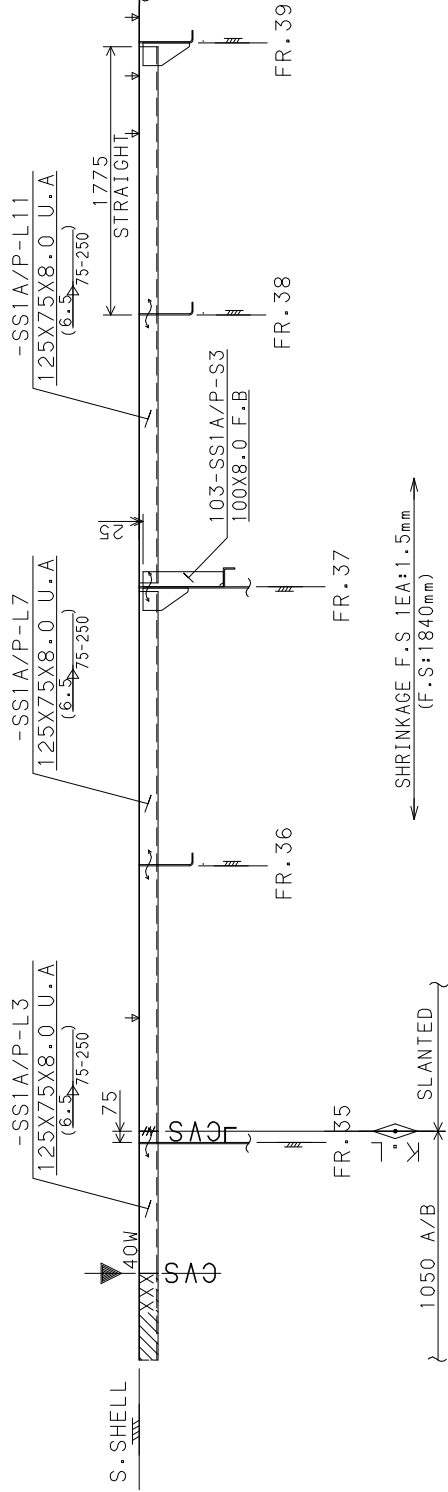
NO.15 SIDE SHELL LONG PLAN

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



NO.16 SIDE SHELL LONG PLAN

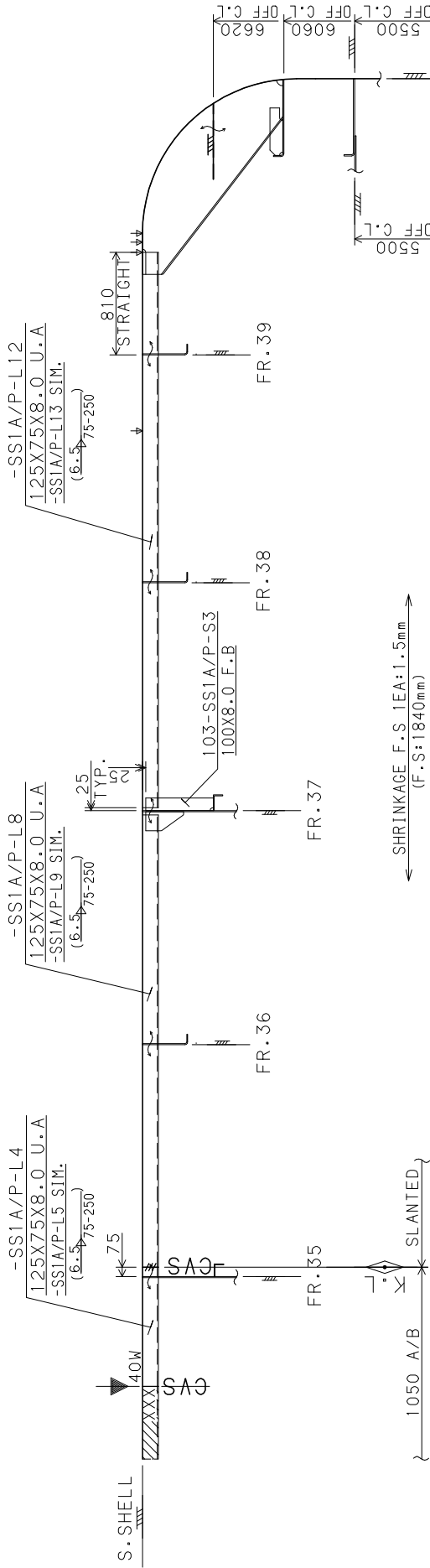
THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



NO.17 SIDE SHELL LONG PLAN

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

NO.18 LONG. ELEV. SIM.



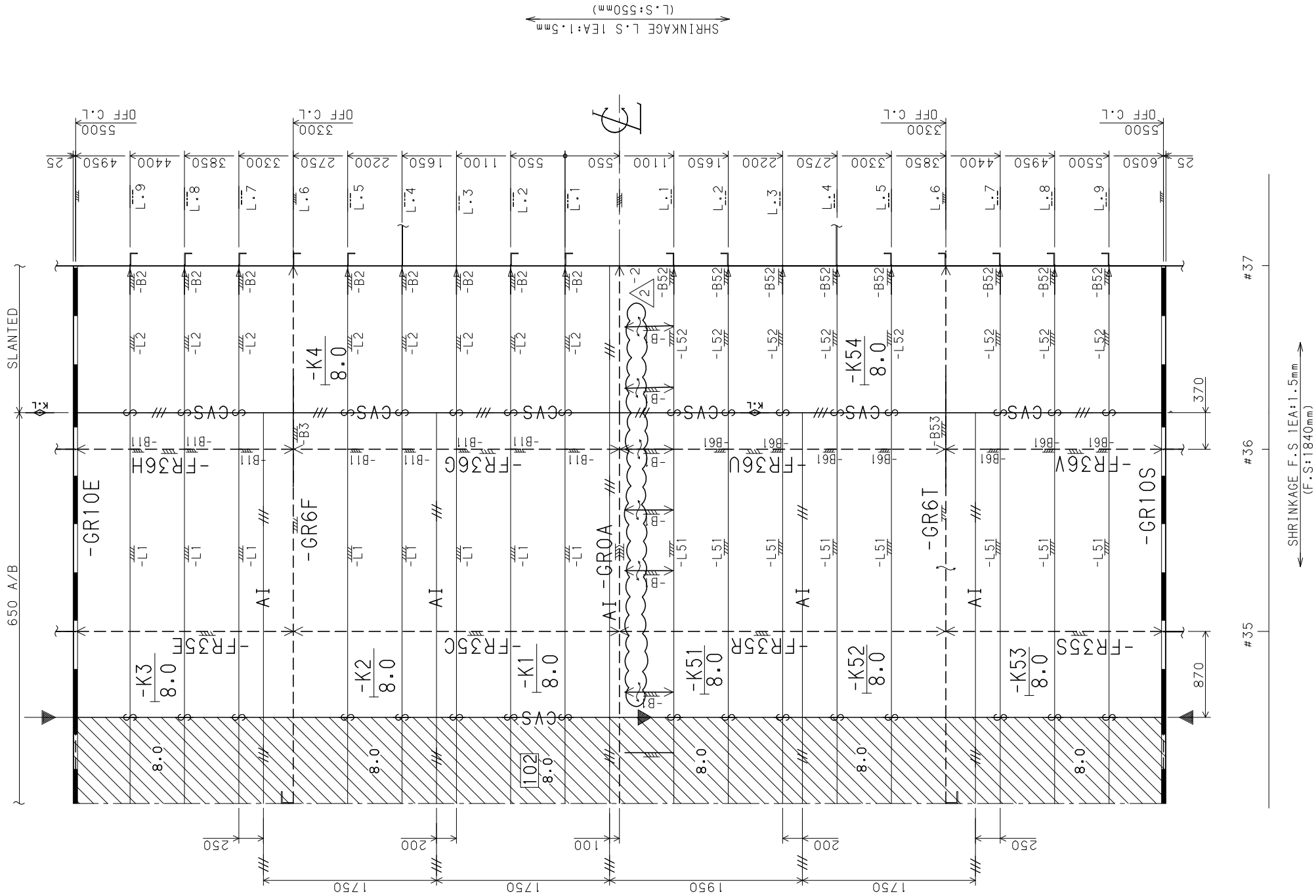
103-DK1

///MARK: YARD CONST.

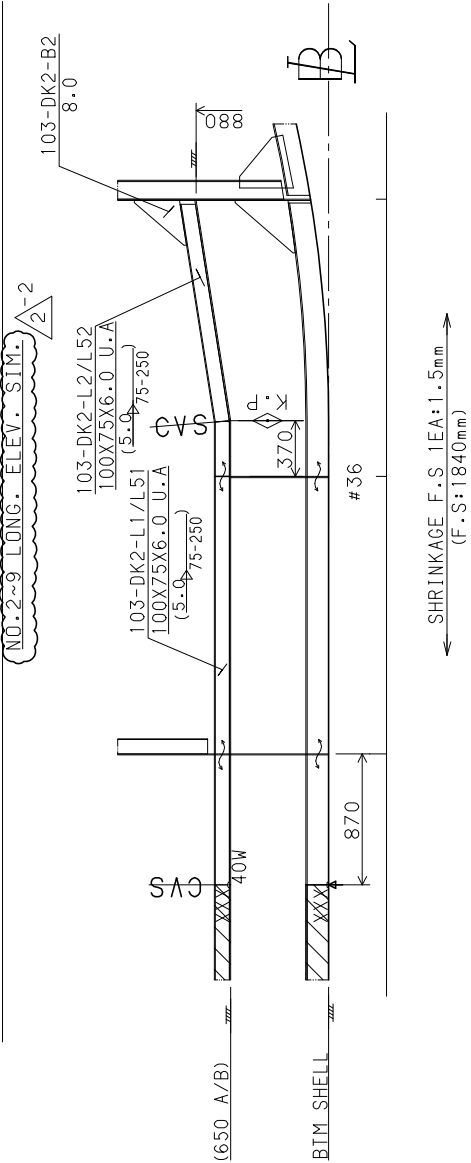


INNER BTM DK PLAN

103-DK2
(650 A/B)
-L1.L2.L51.L52.100X75X6 U.A



NO.1 LONG ELEV. (P&S)



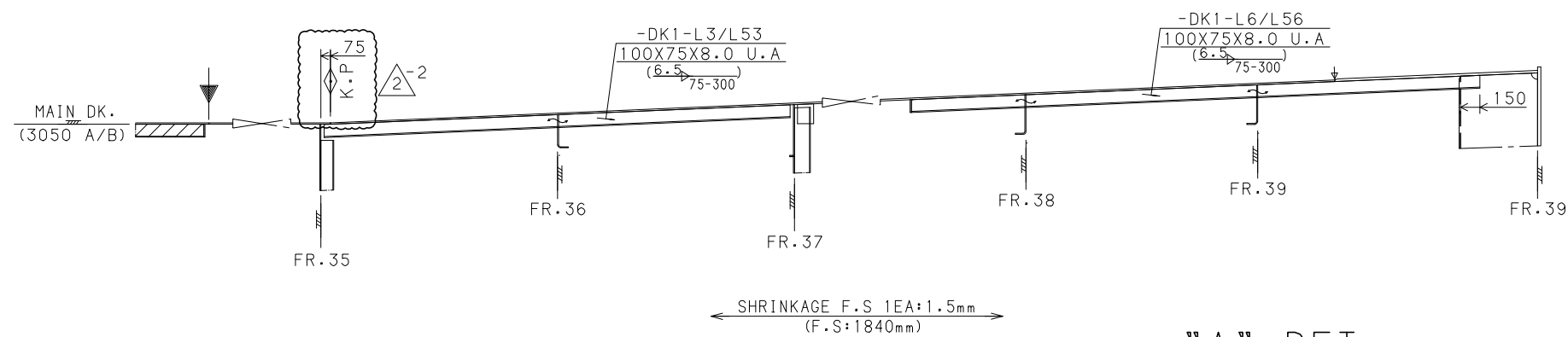
GMB

BLOCK NO.
PAGE

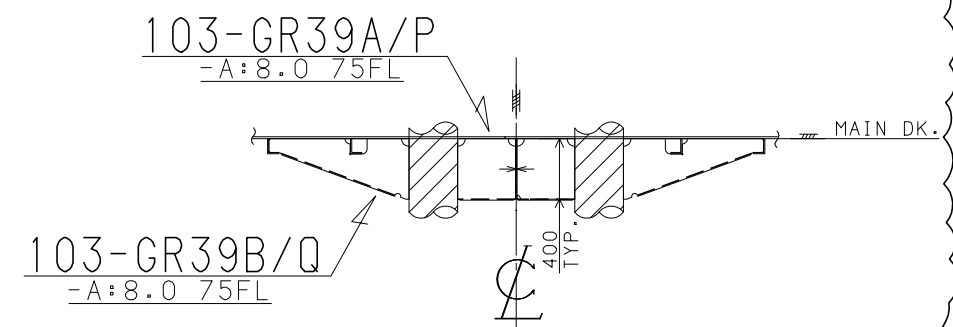
B103
13 / 29

6060 OFF C.L ELEV. (P/S)

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

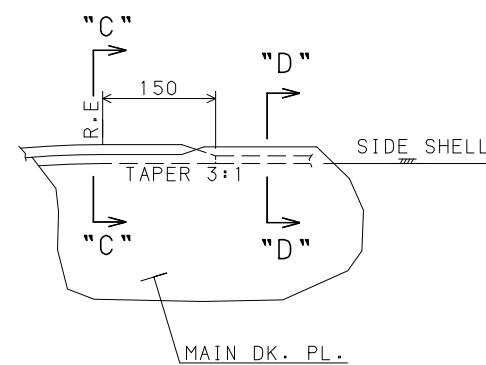


"H" SEC.



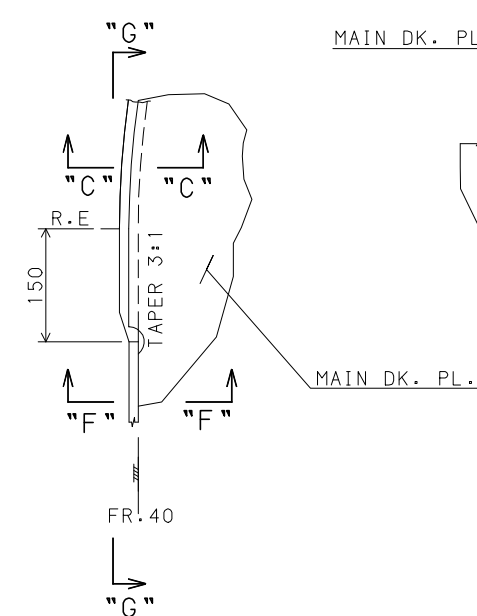
"A" DET.

(SCALE=1:10)



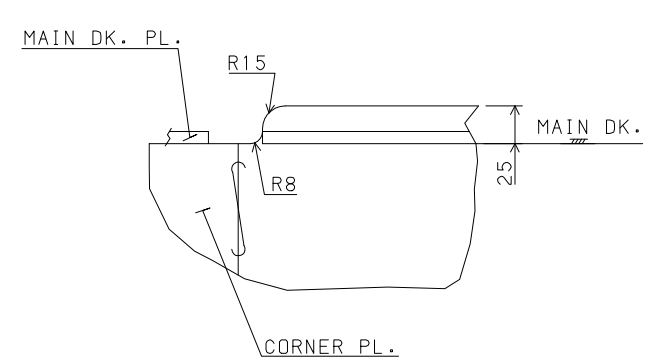
"B" DET.

(SCALE=1:10)



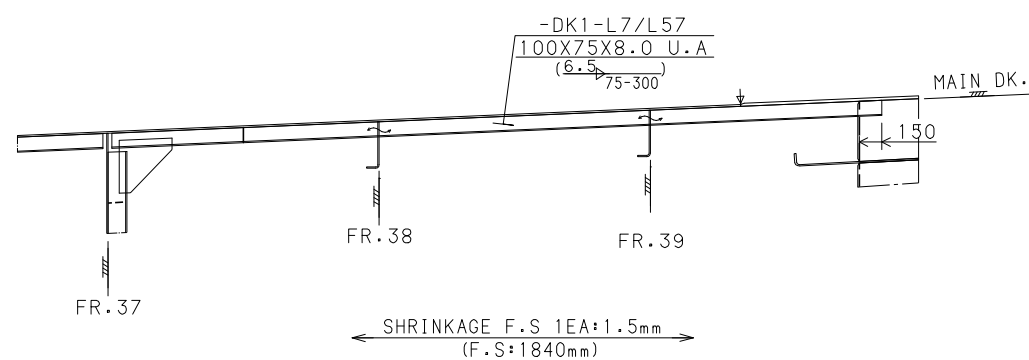
"G" SEC.

(SCALE=1:5)



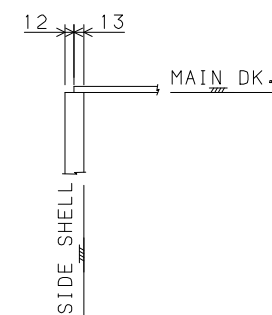
6620 OFF C.L ELEV. (P/S)

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



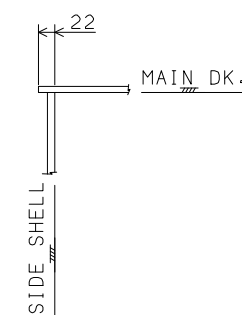
"C" SEC.

(SCALE=1:10)



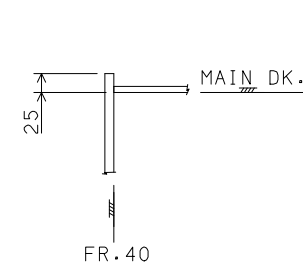
"D" SEC.

(SCALE=1:10)



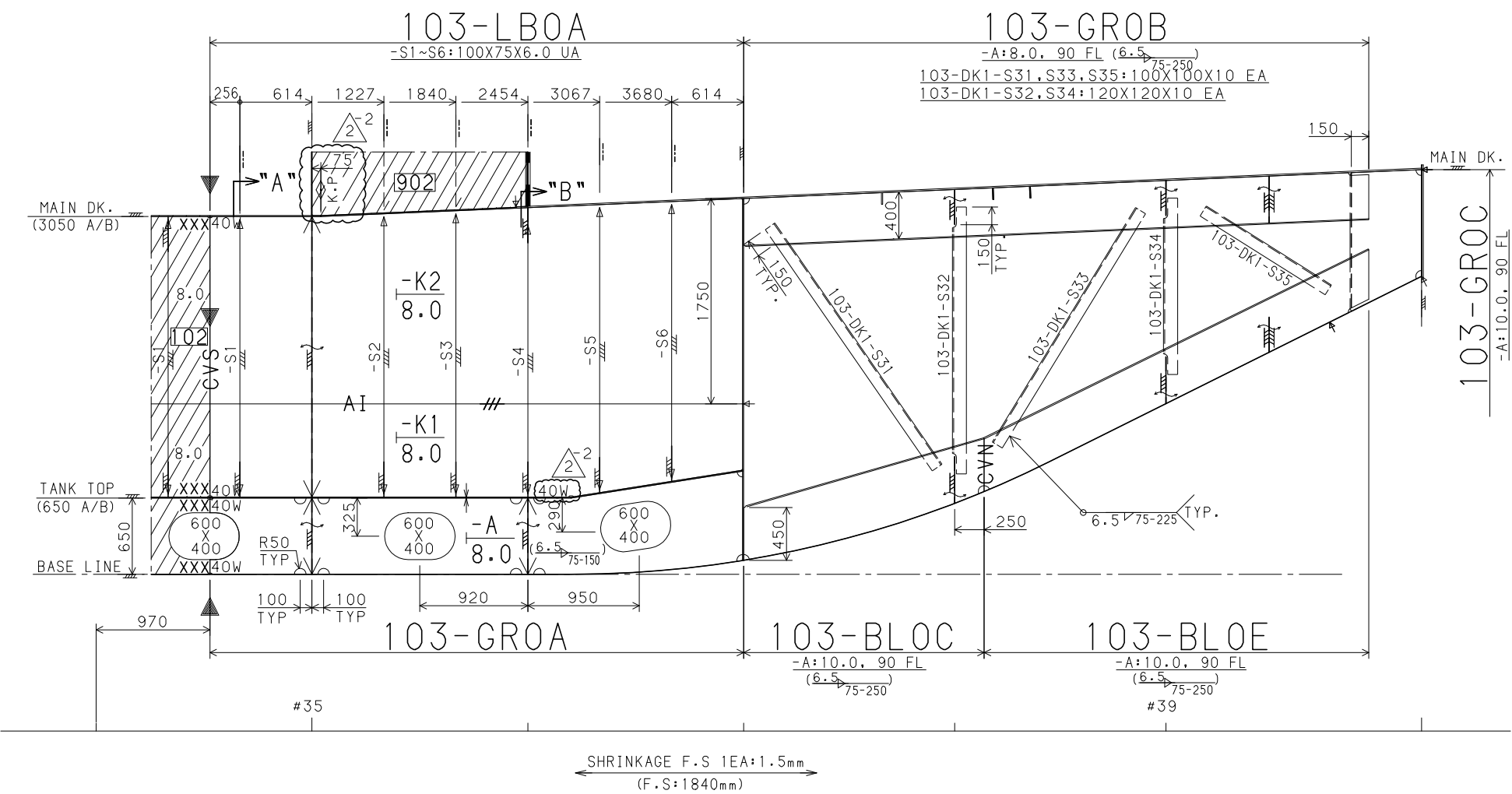
"F" ELEV.

(SCALE=1:10)

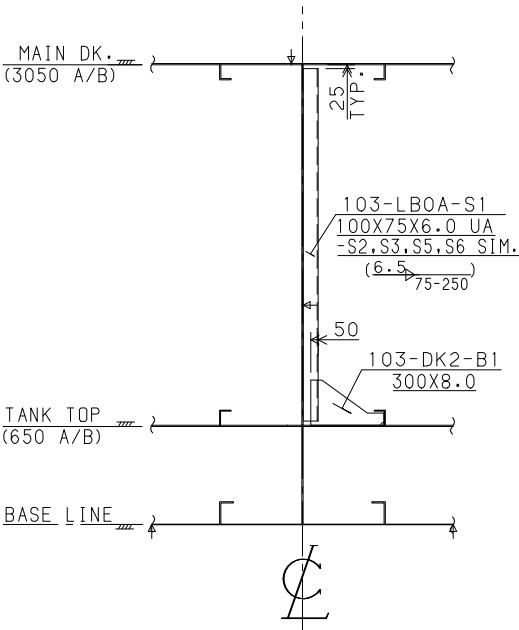


CENTER LINE ELEV.

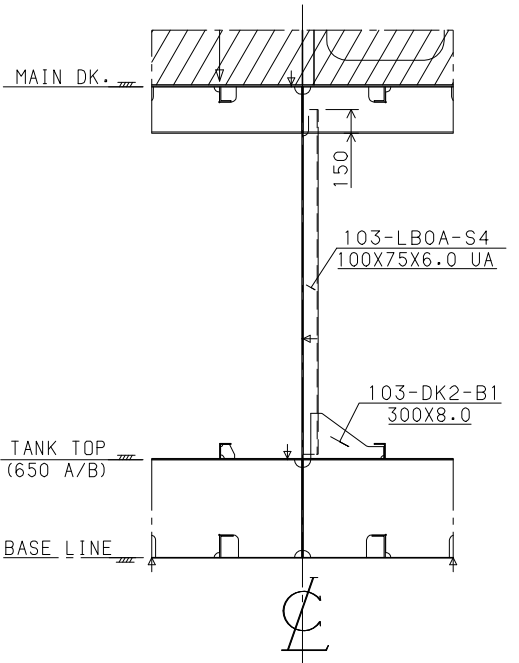
THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



"A" SEC.
(TYP)



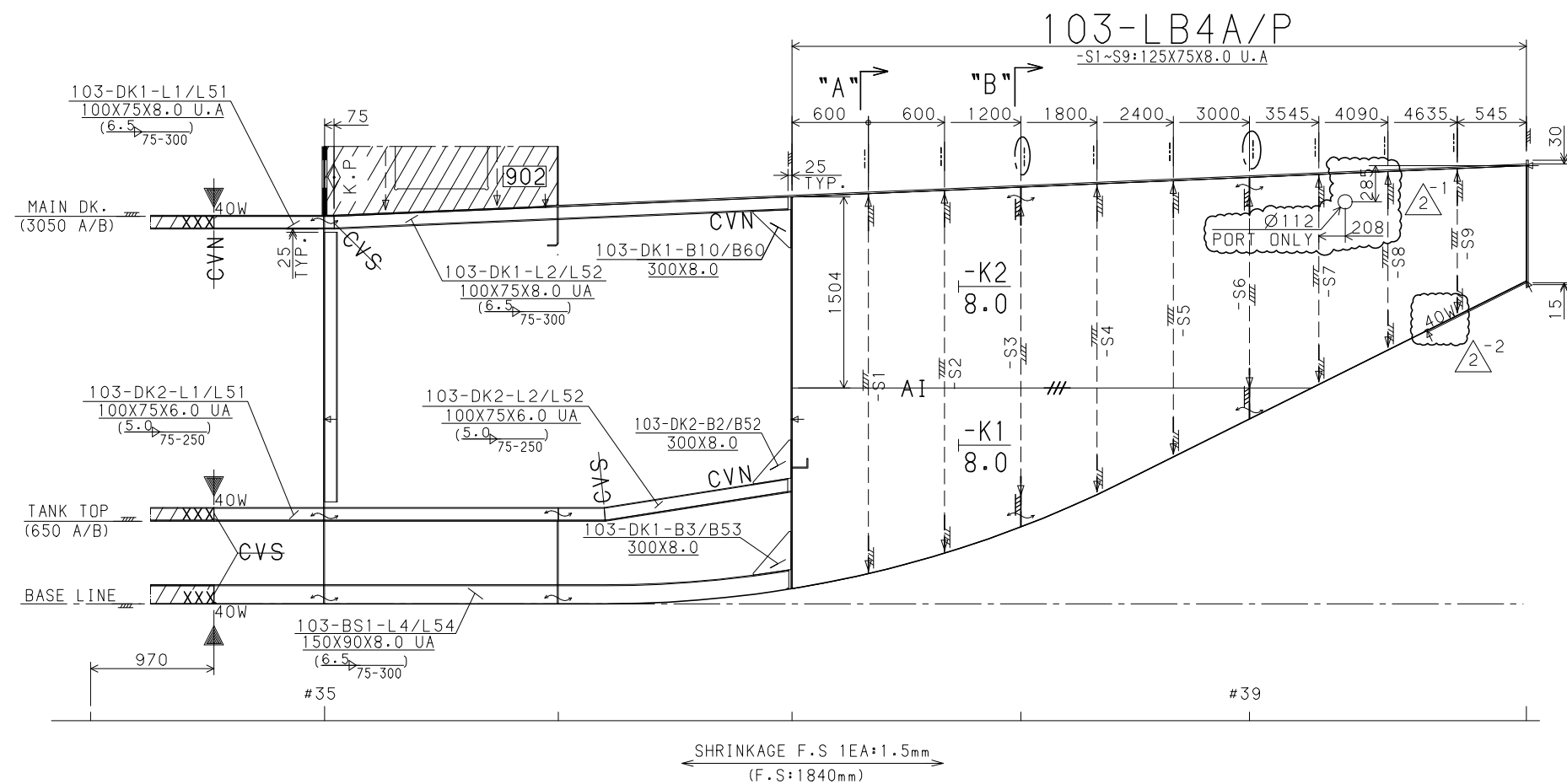
"B" SEC.



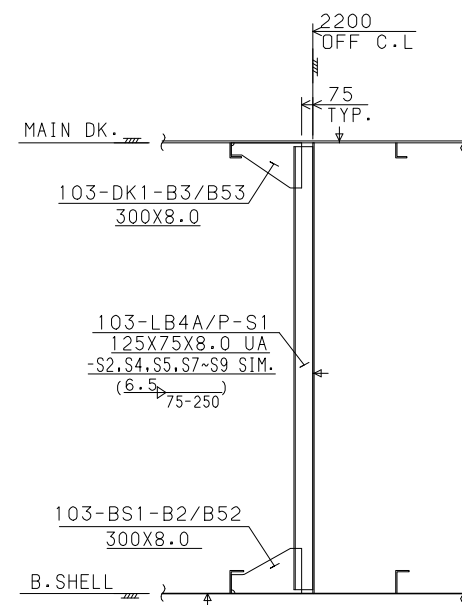
B103-31-C-ELEV

2200 OFF C.L. ELEV. (P/S)

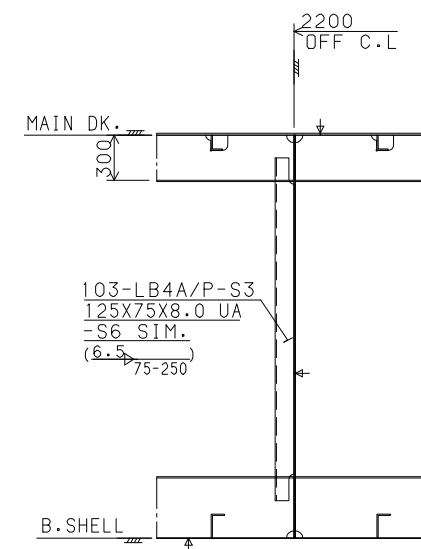
THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



"A" SEC.
(TYP)

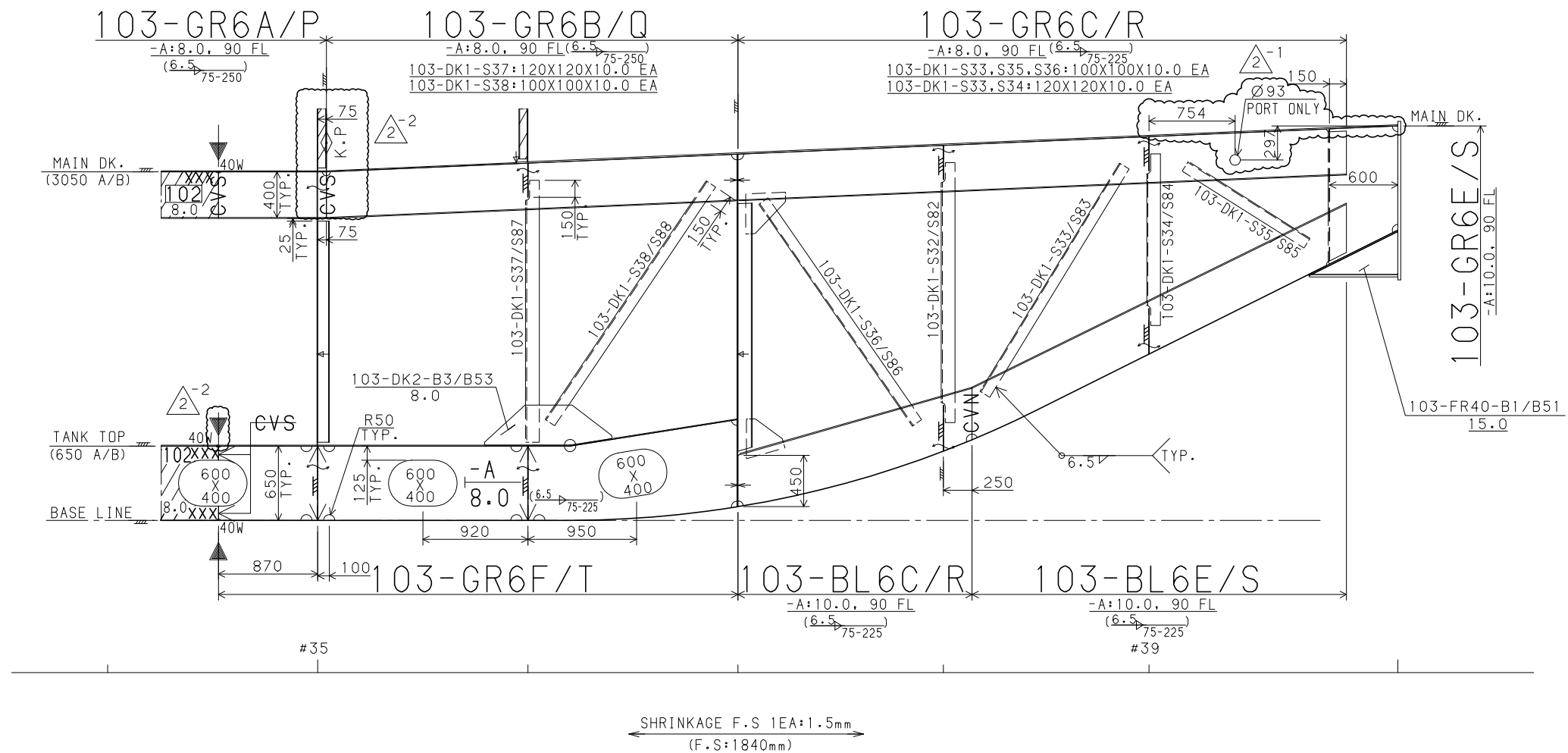


"B" SEC.
FR. 38



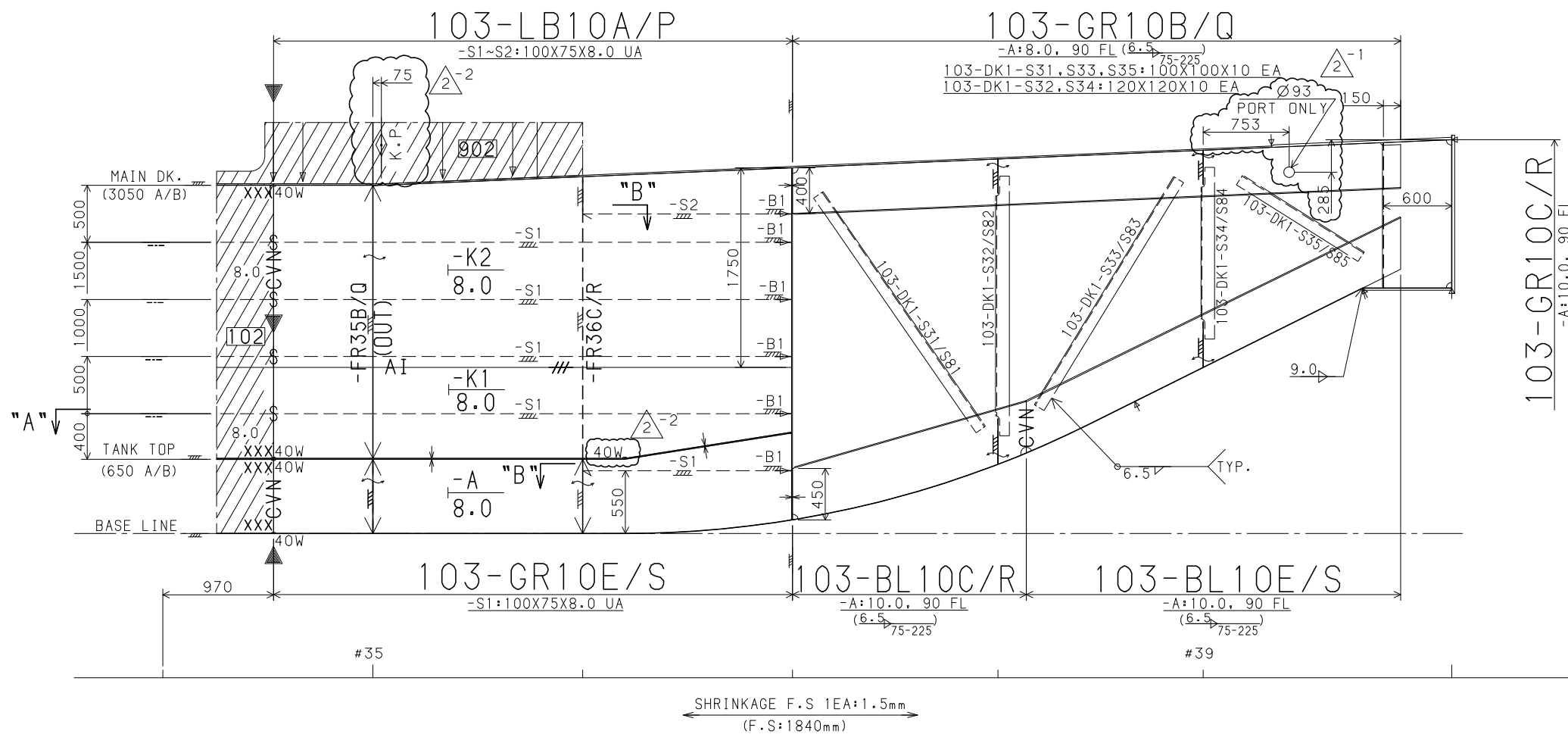
3300 OFF C.L. ELEV. (P/S)

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

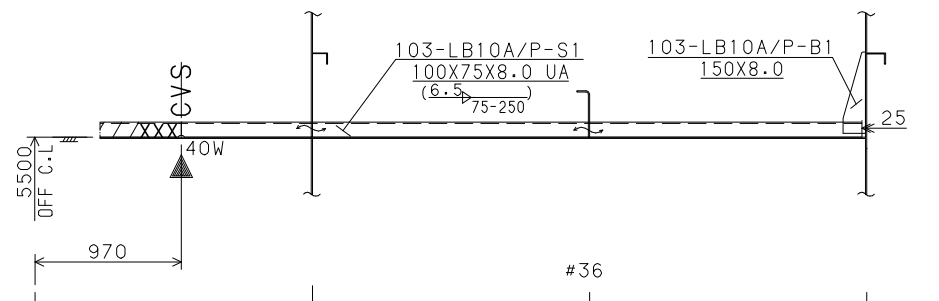


5500 OFF C.L. ELEV. (P/S)

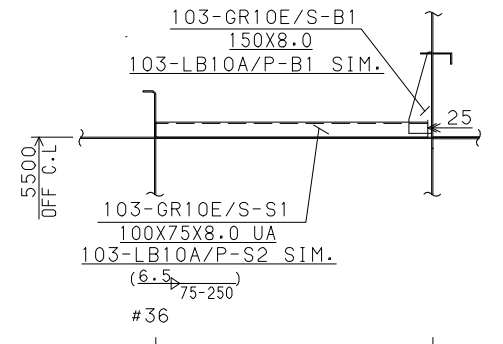
THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



"A" PLAN
(1050 A/B)
1550,2050,2550 A/B SIM.

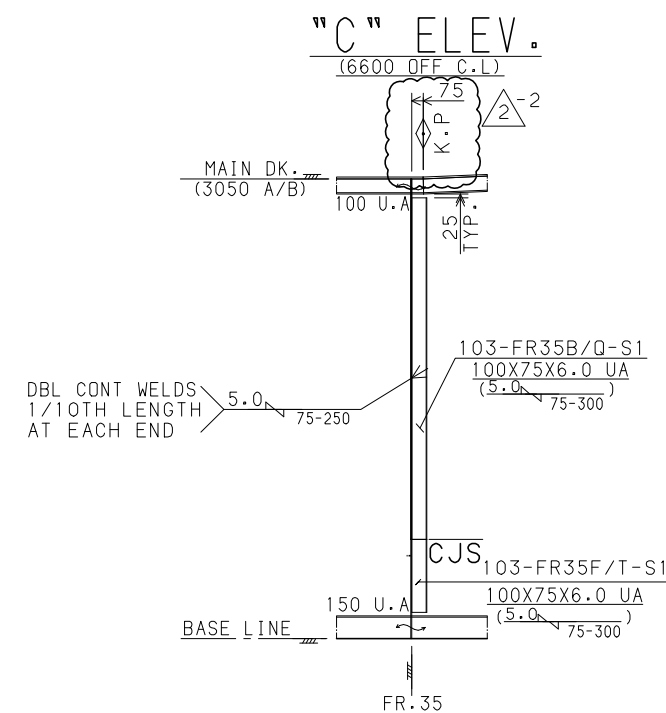
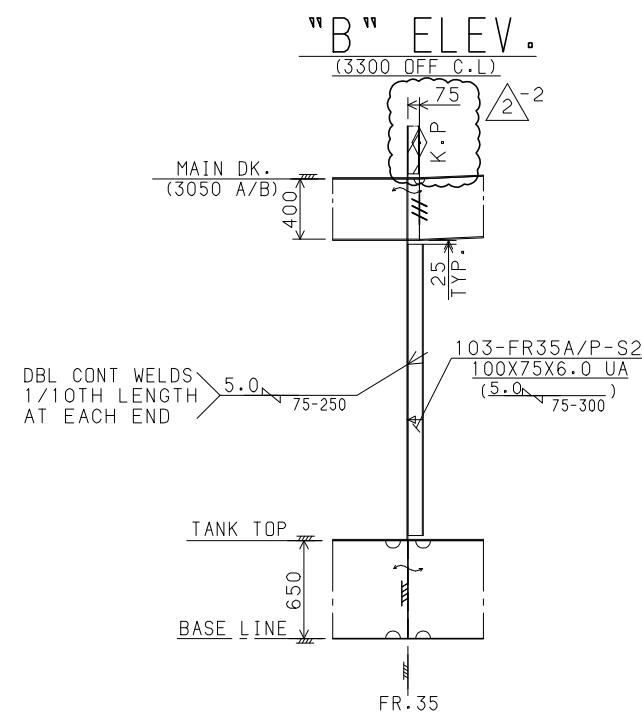
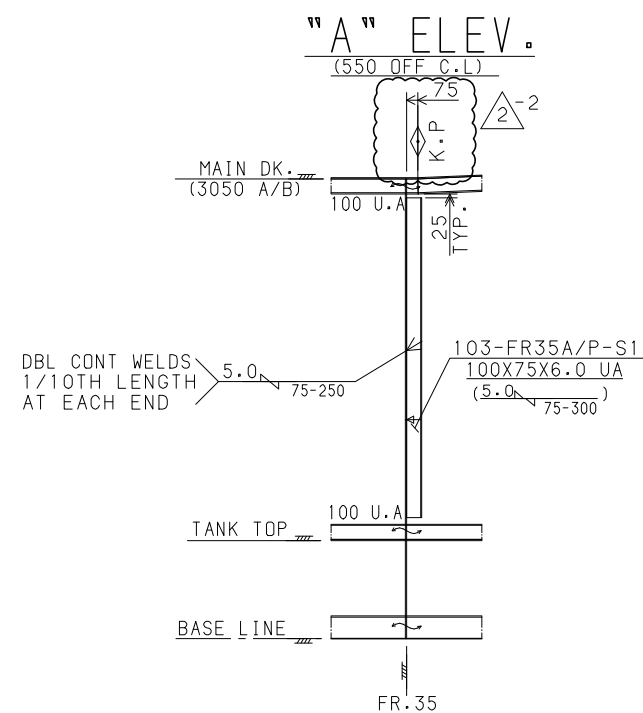
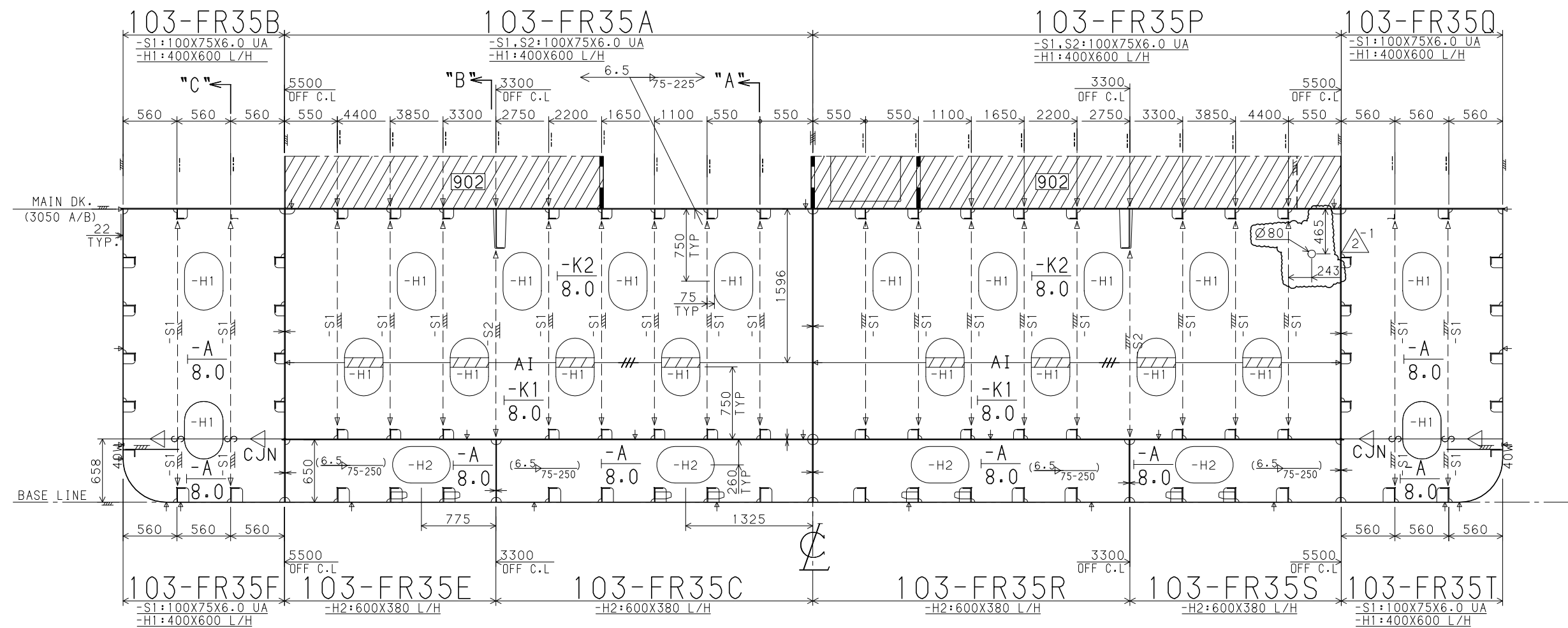


"B" PLAN
(550 A/B)



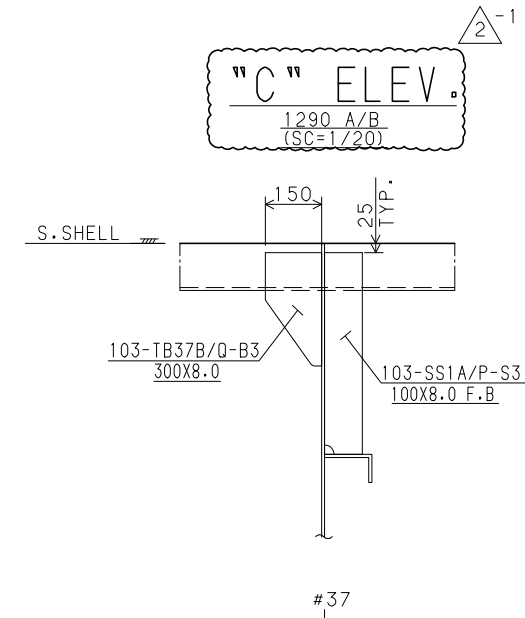
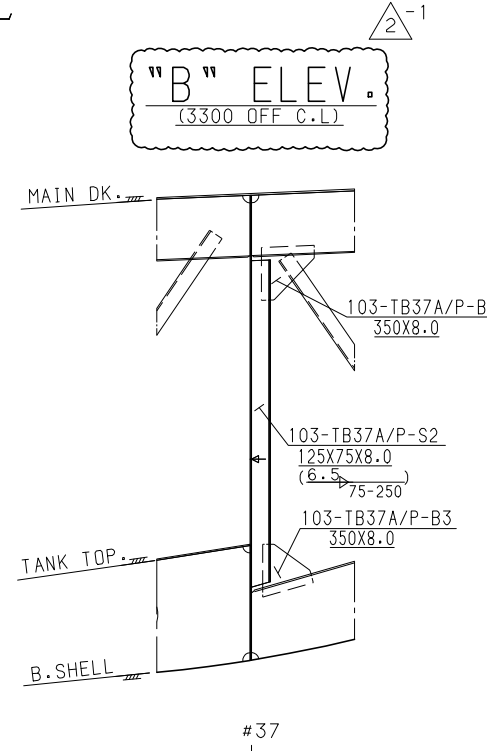
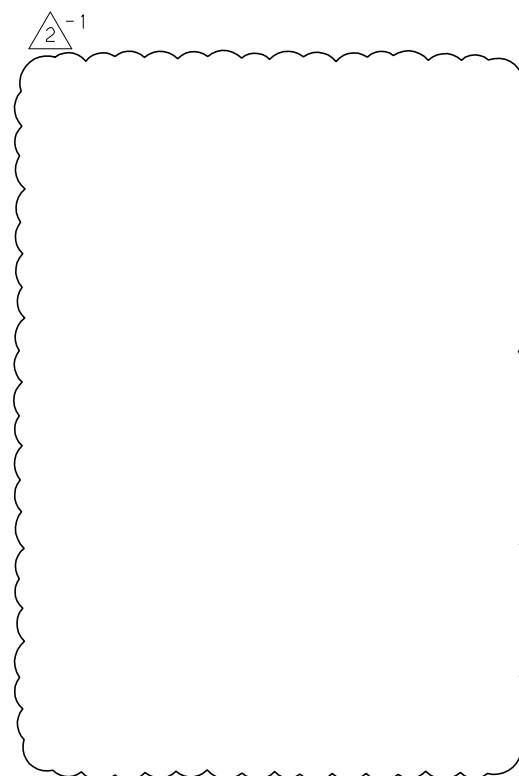
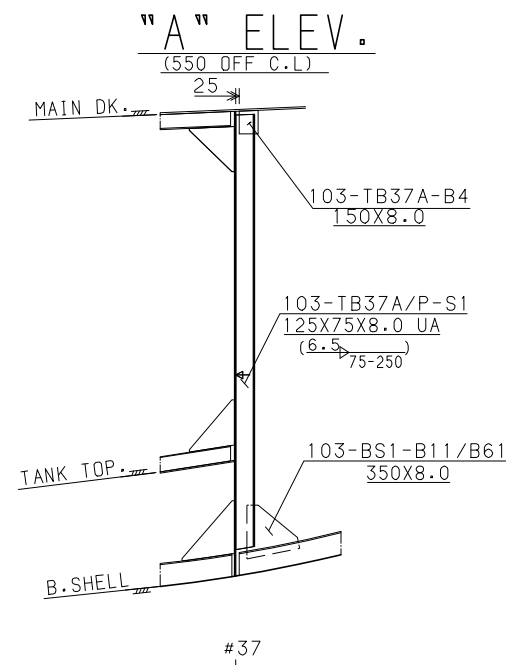
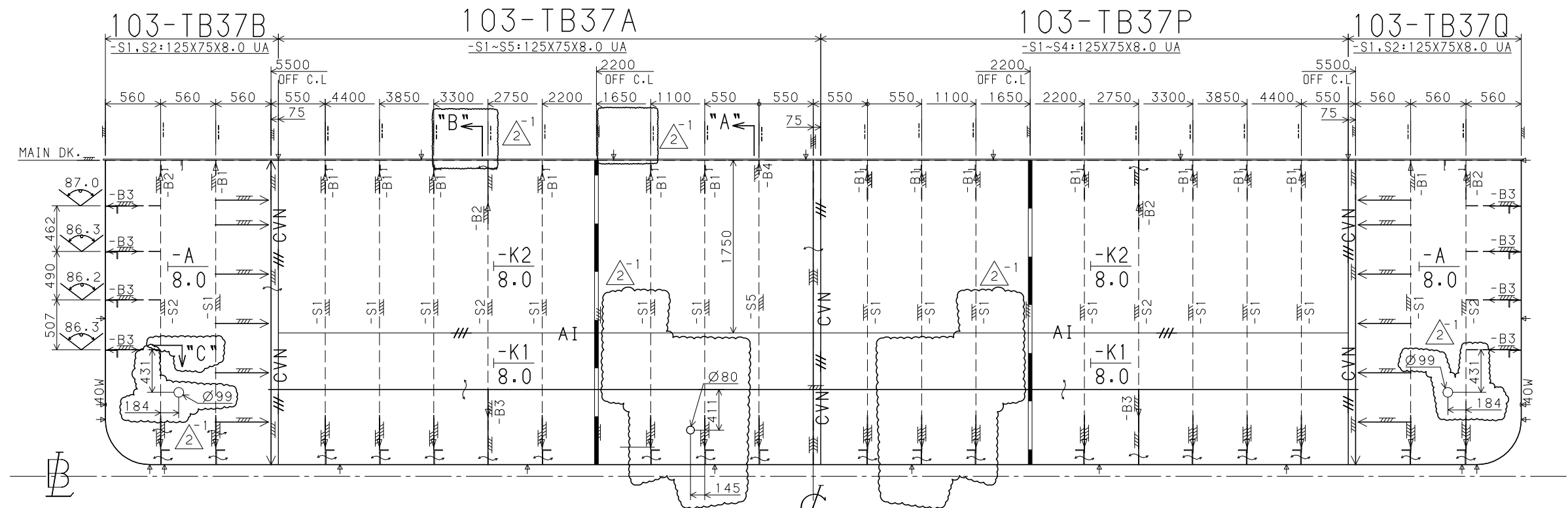
FR. 35 SEC.

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



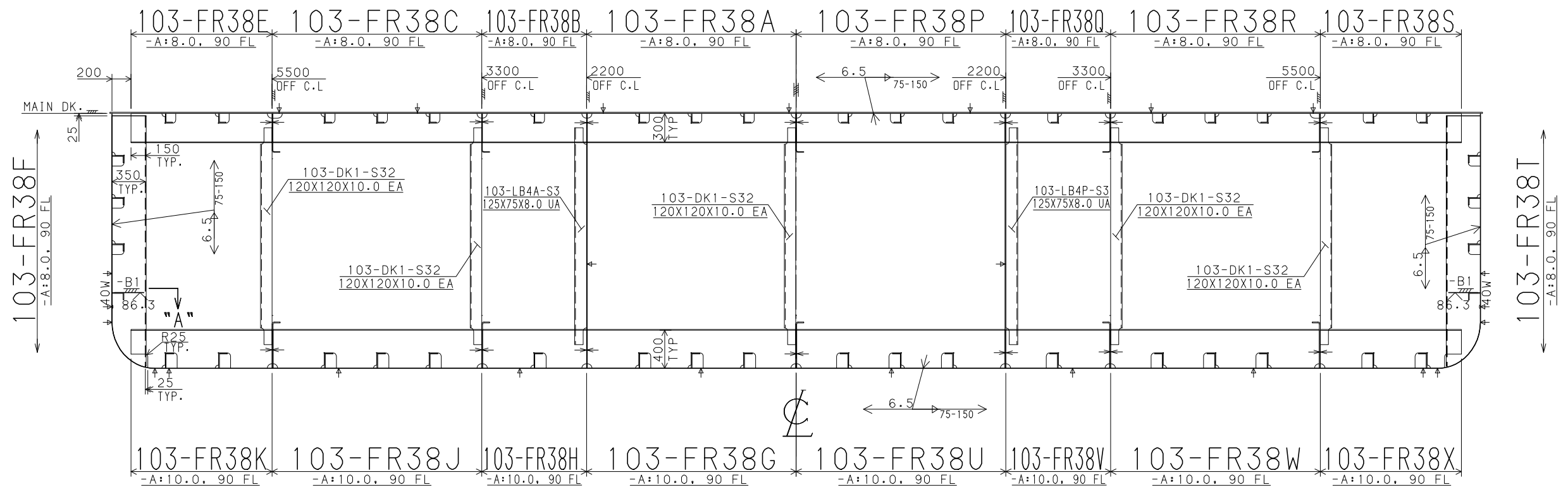
FR. 37 SEC.

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

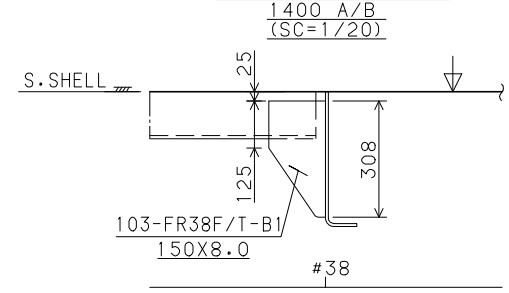


FR. 38 SEC.

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

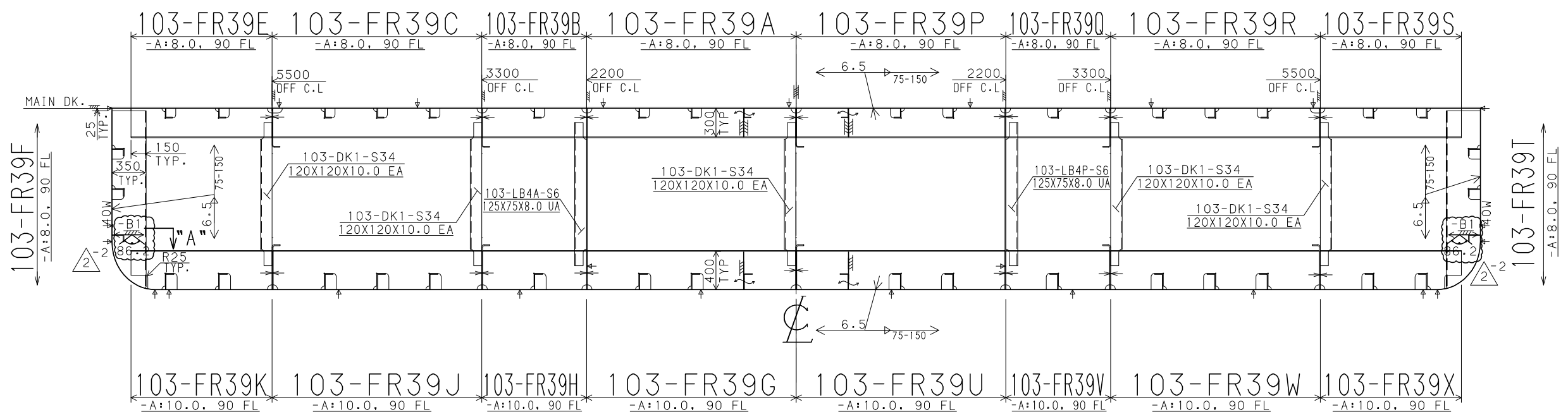


"A" PLAN.



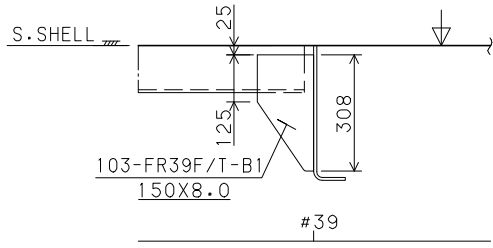
FR. 39 SEC.

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)



"A" PLAN

2030 A/B
(SC=1/20)

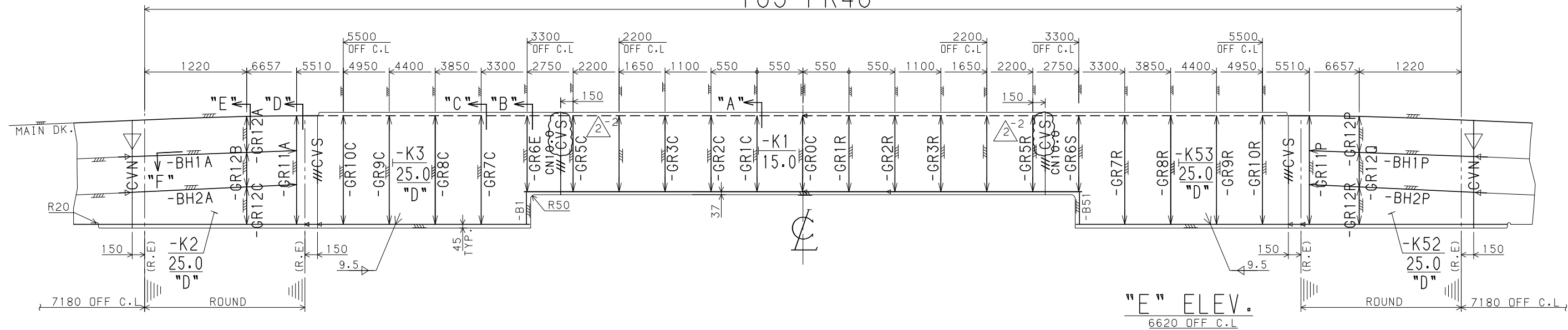


B103-45-FR39-SEC

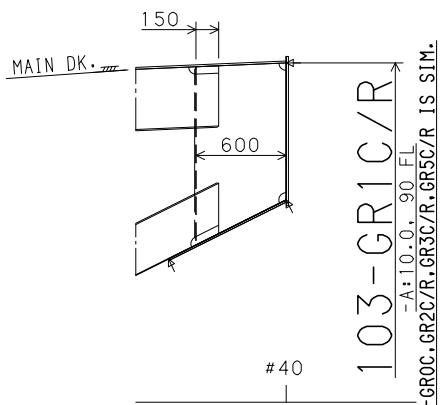
FR. 40 SEC.

THE STB'D IS SIM. TO PORT (EX. AS SHOWN)

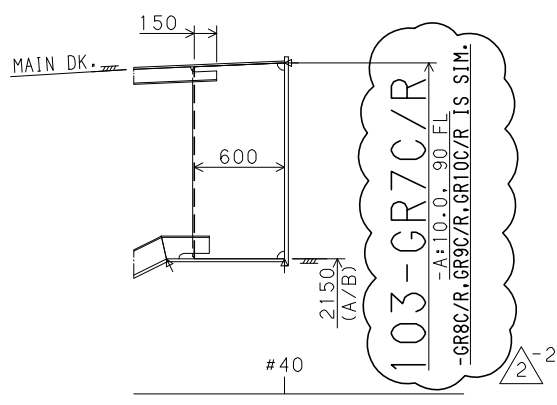
103-FR40



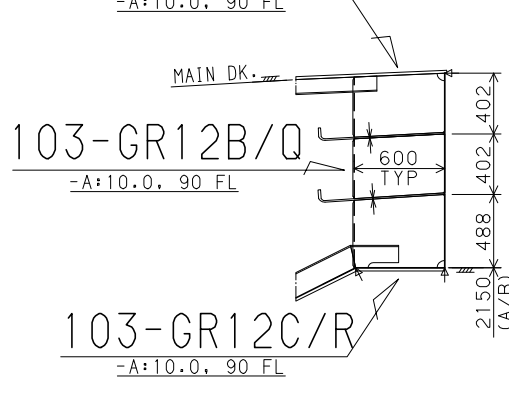
"A" ELEV.



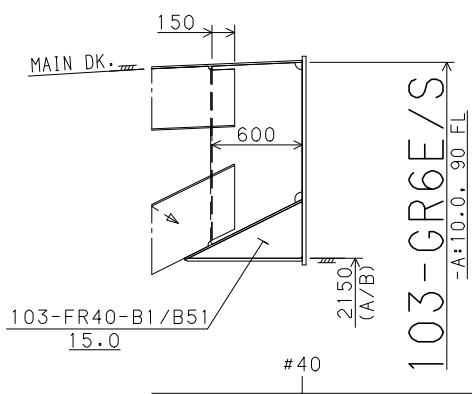
"C" ELEV.



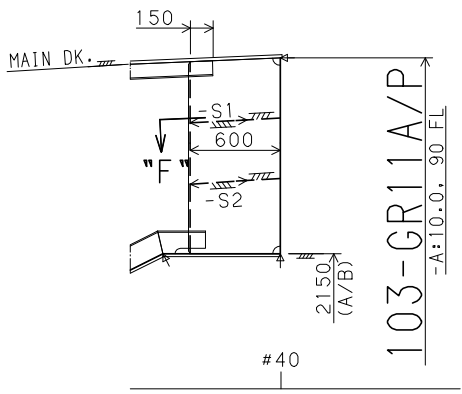
"E" ELEV.



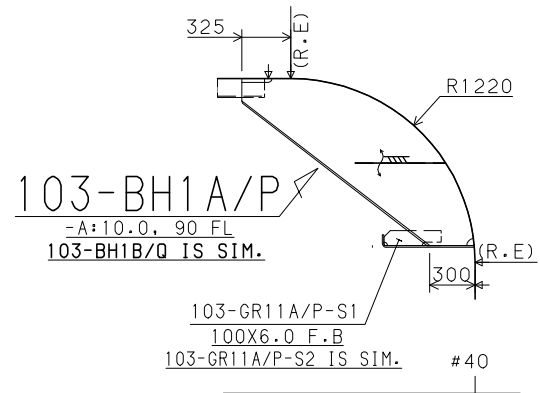
"B" ELEV.

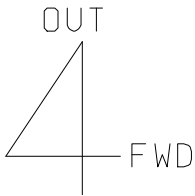


"D" ELEV.



"F" PLAN





THICKNESS: 12.0

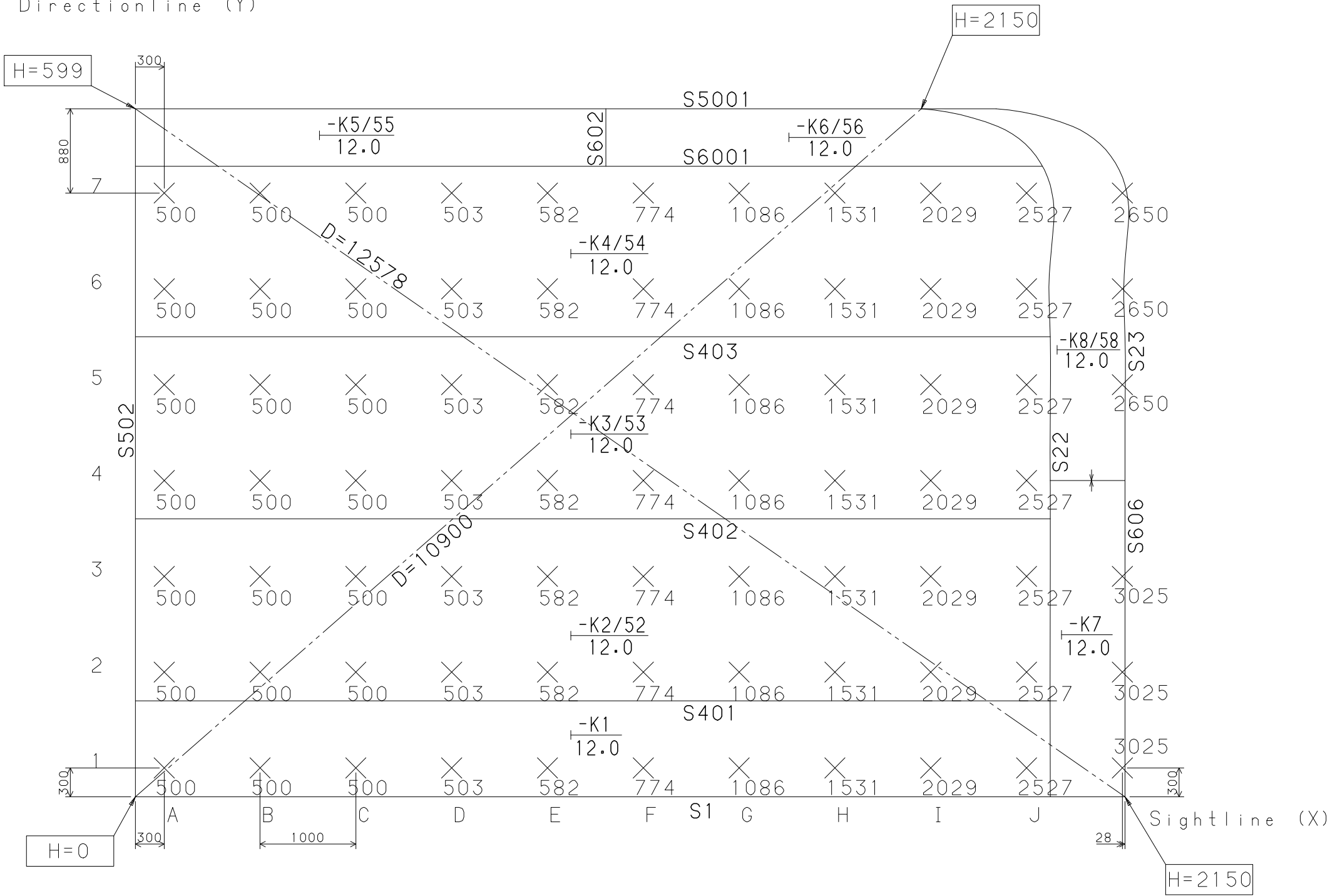
B103-BS1 ASS'Y

(PIN JIG DIST : 1000 mm)

TRANSVERSE ANGLE

FRAME ANGLE

Directionline (Y)



B103-99-JIG

KR3-JIG

B 1 0 3 - B S 1

