# Zephyr Sailing Dinghy – Offsets Table

| | Plan – datum Centreline | | | | Elevation – datum WL2 | | |
|---|---|---|---|---|---|---|---|
| | S | WL2 | WL1 | LWL | S | K | B |
| C Outer Shell Offsets (averaged measurements from boats 188 and 255) | 583.2 | 557.3 | 504.1 | 369.4 | | | |
| C Mould Offsets (averaged measurements from boats 188 and 255) | 576.1 | 549.9 | 494.8 | 353.4 | | | |
| C Original Design Mould Offsets | 563.6 | 536.6 | 485.8 | 347.7 | 100.0 | 312.7 | 228.6 |
| E Outer Shell Offsets (averaged measurements from boats 188 and 255) | 690.8 | 690.8 | 668.3 | 533.3 | | | 269.1 |
| E Mould Offsets (averaged measurements from boats 188 and 255) | 683.8 | 683.8 | 660.5 | 514.6 | | | 262.0 |
| E Original Design Mould Offsets | 679.5 | 679.5 | 657.2 | 506.4 | 33.3 | 312.7 | 258.8 |
| I Outer Shell Offsets (averaged measurements from boats 188 and 255) | 517.4 | 515.2 | 437.5 | - | | | 156.8 |
| I Mould Offsets (averaged measurements from boats 188 and 255) | 510.4 | 508.1 | 425.3 | - | | | 149.7 |
| I Original Design Mould Offsets | 504.8 | 501.4 | 431.8 | 28.6 | 61.9 | 211.1 | 152.4 |

**Zephyr Sailing Dinghy – Offsets Table (Comparison of Townson built hulls as measured and calculated against original offset dimensions)**

(Note, all dimensions are for mould)

| | Plan – datum Centreline | | | | | | | | | | | | Elevation – datum WL2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | | | WL2 | | | WL1 | | | LWL | | | B | | |
| | Orig. | Twns. boat | Actl diff. | Orig. | Twns. boat | Actl diff. | Orig. | Twns. boat | Actl diff. | Orig. | Twns. boat | Actl diff. | Orig. | Twns. boat | Actl diff. |
| A | 188.9 | 192.8 | 3.9 | 152.4 | 156.4 | 4.0 | 123.8 | 126.6 | 2.8 | 60.3 | 62.2 | 1.9 | - | - | - |
| B | 377.8 | 386.9 | 9.1 | 339.7 | 349.0 | 9.3 | 287.3 | 293.9 | 6.6 | 185.7 | 190.1 | 4.4 | 79.4 | 81.1 | 1.7 |
| C | 563.6 | 580.5 | 16.1 | 536.6 | 553.9 | 17.3 | 485.8 | 498.1 | 12.3 | 347.7 | 356.0 | 8.3 | 228.6 | 231.7 | 3.1 |
| D | 650.9 | 664.9 | 13.8 | 644.5 | 658.9 | 14.4 | 606.4 | 617.4 | 11.0 | 457.2 | 467.1 | 9.9 | 258.8 | 262.7 | 3.9 |
| E | 679.7 | 690.9 | 11.2 | 679.5 | 690.9 | 11.4 | 657.2 | 666.9 | 9.7 | 506.4 | 517.9 | 11.5 | 258.8 | 263.4 | 4.6 |
| F | 658.8 | 670.0 | 11.2 | 658.8 | 670.0 | 11.2 | 642.9 | 647.9 | 5.0 | 469.9 | 477.4 | 7.5 | 244.4 | 246.9 | 2.5 |
| G | 592.1 | 602.7 | 10.6 | 589.0 | 600.2 | 11.2 | 555.6 | 555.3 | 0.3 | 324.7 | 328.2 | 3.5 | 213.5 | 213.9 | 0.4 |
| H | 542.9 | 552.9 | 10.0 | 539.8 | 550.9 | 11.1 | 489.0 | 486.7 | -2.3 | 157.2 | 158.5 | 1.3 | 177.8 | 177.0 | -0.8 |
| I | 504.8 | 514.5 | 9.7 | 501.4 | 512.5 | 11.1 | 431.8 | 428.0 | -3.8 | 28.6 | 28.6 | 0 | 152.4 | 151.0 | -1.4 |
| O-A | 228.6 | 228.6 | 0 | 212.7 | 212.7 | 0 | 200.0 | 200.0 | 0 | 146.1 | 146.1 | 0 | - | - | - |

Suggested recommendations for changes to be adopted for offset table dimensions.

With respect to dimensions used to create the hull profile for the new drawings the only indication is with reference to sheet '00-04 CARKIN AND SHEAR DIMENSIONS'.
Here it shows the offset spacings as per the original set of lines together with 'plan offsets' at position 's' (at gunwale).
Firstly it was noted that these dimensions were dimensioned to the outer skin and were generally only 2 to 3mm greater than the original offset dimensions (with a couple of exceptions which were possibly a result of smoothing). From the measuring exercise that we carried out I believe we proved that the offset dimensions were mould dimensions.

My concern is that if the original offset dimensions were used in this manner throughout the hull profile with respect to creating the solid model then we will end up with a design which is substantially narrower than the Townson boats and as narrow as the narrowest cedar-glass boats.

I have relooked at the stations that we measured with a more detailed comparison to the original offsets.
What we showed in the profiles that we created from the measuring exercise were three lines, the solid line representing the original drawing offsets, the dotted line is what we actually measured and the dot dash line is the correction for the actual skin relative to the mould (ie. it has been displaced by 7mm).
I have therefore recalculated what I believe to be the actual skin and corresponding mould dimensions for section 'C', 'E' and 'I'. I have used an averaged dimension from the measurements of boats 188 and 255 (a Townson and cedar-glass boat) as these were the only two boats that we took measurements for, for all these three sections.

I am suggesting that we use these dimensions for the new design as it will be a lot closer to what has already been built over the years. Boat 188 was marginally wider that the other Townson boats measured and was a little fuller below the waterline, were 255 was narrower at the gunwales but had an underwater profile similar to the original lines (I think Noel May had taken his dimensions for the cedar-glass mould directly from the original offsets).
This may be a good compromise in terms of sectional profiles, however the rocker profile should be followed as per the original offsets and the original deck shear line should be reinstated.

I have included a table where I have averaged the dimensions for boats 188 and 255 and calculated the 'Outer Shell' offsets and the corresponding mould offset dimensions accordingly. You will note that these dimensions vary from those that are on the table produced from the measuring exercise as they have been adjusted to line up with the vertical datum of the original offset table, ie. they have been calculated to correspond to moving the shell measured profile 7mm (skin thickness).

Could you have a look at this and compare with the profiles that we produced from the measuring exercise and I will give you a call in a day or two to discuss where we go from here.

**Measurement Comments**

Sectional Profiles:

Profiles were measured at station 'E' (7 boats), at station 'C' (6 boats) and station 'I' (2 boats).

From these measurements it was apparent that the original offset dimensions from the Townson line drawings were for the mould dimensions.

All Townson boats measured were very similar, the Cedar glass boats varied a little more, with some boats being slightly finer at the waterline.

Generally the Townson boats were approximately 20 to 30mm wider at the gunwale but underwater profile being a lot closer. The Cedar glass boats were closer to the original offset dimensions with respect to width.

The Cedar glass boats did not follow the same shear line at the gunwale, generally being a flatter profile with greater freeboard.

Keel Rocker.

Keel rocker profiles were measured for 10 boats.

The Cedar glass boats had a slightly flatter profile than the Townson and 300 series boats.

Generally all boats followed the original offset table profiles to the extent that we feel they should be used as the bases for the redrawing and updating of the Zephyr plans.

The original shear line at the gunwale should be reinstated with the drawing upgrade.

Current Building Jig.

This will need to be checked and detail added to ensure that the correct shear line detail can be maintained.

The keel rocker should be checked to see if the jig meets the current offset detail or whether or not the variation is due to distortions in the hull on removal from the mould. This should be corrected accordingly with modifications to the mould or procedures layed down to prevent any relaxation of the keel profile.

Generally the building fixture should be reviewed to ensure that all important features can be reliably repeated from hull to hull for the future.
Probably once the plan redrawing exercise is complete we should review building procedures in conjunction with a mould review.

## Zephyr – Keel Rocker Measuring

Eight boats have been measured in order to compare rocker profiles, two boats from Auckland and six boats from Christchurch.

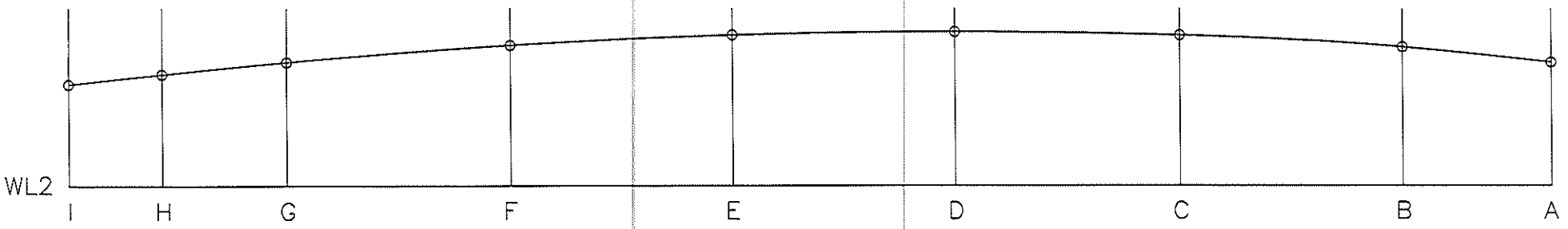
The Auckland boats were measured with a straight edge tangential with the keel line at 'D' and parallel to the plan datum 'WL2'. This was achieved by calculating the correct height at position 'I' for the straight edge so that the measurements at I and D were as per drawing.
The Christchurch boats were measured in a similar manner, however they used position 'D' and the top of the stem position based on a rocker template that was available to them.
The Christchurch boats dimensions were converted to the same datum's as the Auckland boats so that all measurements would be comparable with each other and directly to the drawing.

All profiles were sketched against the plan profile for direct comparison to standard and a chart of all keel rocker dimensions was produced to provide a comparison between each boat. A numerical value was also calculated and shown on the chart for the rocker depth overall and from position 'D' aft. That is for the overall rocker if you imagine a line drawn between positions 'I' and 'A' with the vertical depth calculated at position 'D'. For the aft rocker a line was taken between positions 'I' and 'D' with the vertical depth calculated at position 'F'.

**Zephyr Sailing Dinghy.**
**Offsets for Keel Rocker Profile. (all dimensions datumed from WL2)**

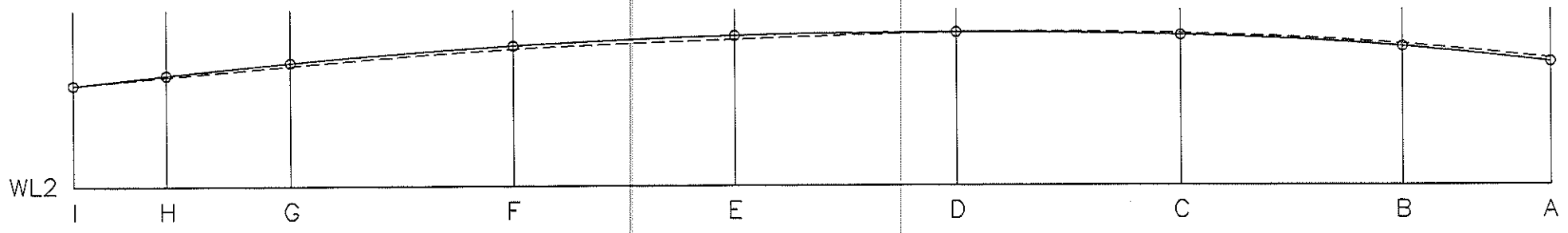
| | Station Positions | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | H | G | F | E | D | C | B | A | Rocker I to A at D | Rocker I to D at F |
| **STD** | **211.1** | **231.8** | **257.2** | **292.1** | **312.7** | **315.9** | **312.7** | **288.9** | **257.2** | **77.3** | **26.0** |
| **BOAT #** | | | | | | | | | | | |
| 87 | 211.1 | 227.9 | 251.0 | 286.0 | 304.9 | 315.9 | 316.9 | 293.9 | 264.2 | 73.1 | 22.9 |
| 153 | 211.1 | 228.4 | 250.8 | 285.5 | 305.2 | 315.9 | 310.6 | 285.3 | 253.8 | 79.3 | 22.4 |
| 170 | 211.1 | 227.9 | 249.0 | 284.0 | 306.9 | 315.9 | 313.9 | 293.9 | 265.2 | 72.5 | 20.9 |
| 188 | 211.1 | 230.6 | 255.1 | 290.5 | 311.5 | 315.9 | 310.7 | 288.9 | 258.8 | 76.4 | 27.4 |
| 255 | 211.1 | 226.1 | 245.5 | 278.8 | 304.1 | 315.9 | 316.6 | 301.4 | 279.7 | 63.8 | 15.7 |
| 256 | 211.1 | 226.0 | 247.3 | 280.5 | - | 315.9 | 314.1 | 295.4 | 268.8 | 70.3 | 17.4 |
| 304 | 211.1 | 227.3 | 249.5 | 283.0 | - | 315.9 | 309.4 | 286.8 | 255.1 | 78.5 | 19.9 |
| 322 | 211.1 | 229.5 | 254.0 | 288.7 | 307.9 | 315.9 | 312.9 | 288.8 | 251.5 | 76.7 | 25.6 |

# STANDARD



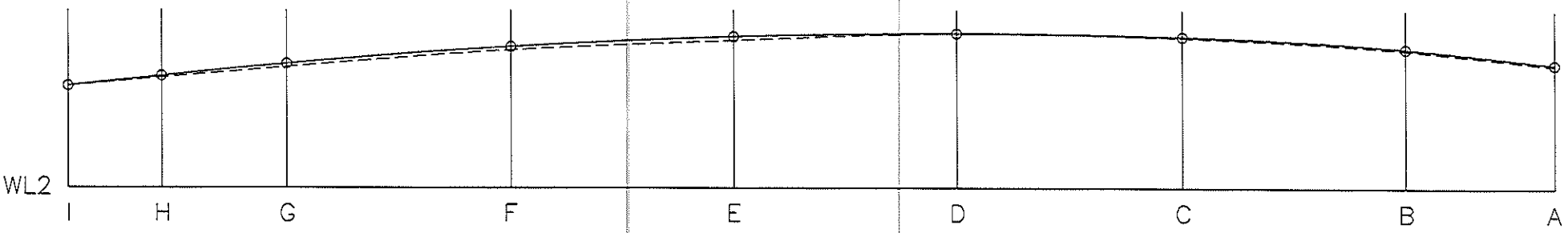

| OFFSETS FOR KEEL ROCKER PROFILE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No Actual dimension | | | | | | | | | |

# #87



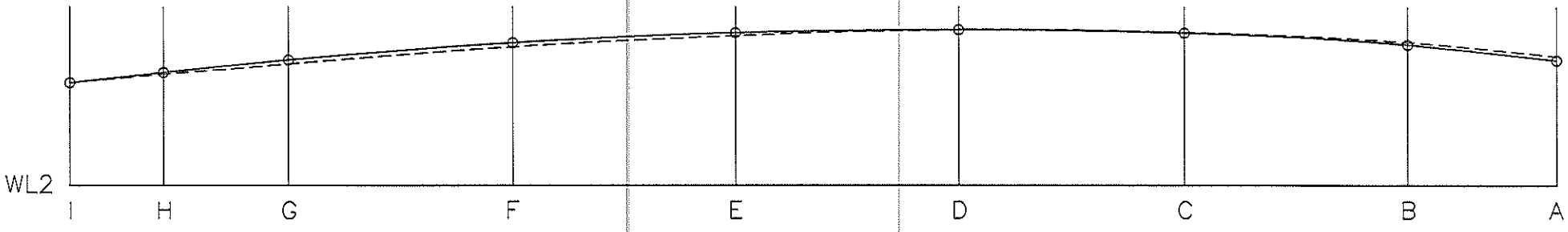

| OFFSETS FOR KEEL ROCKER PROFILE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No 87 Actual dimension | | | | | | | | | |

# 153



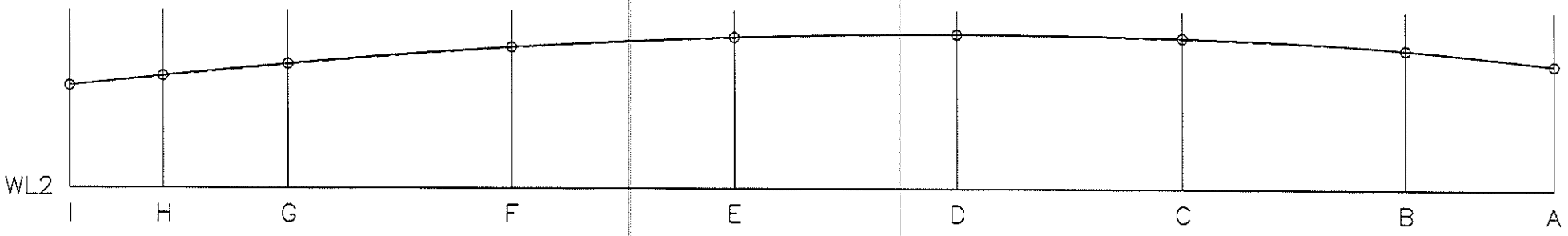

| OFFSETS FOR KEEL ROCKER PROFILE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No 153 Actual dimension | 211.1 | 228.4 | 250.8 | 285.5 | 305.2 | 315.9 | 310.6 | 285.3 | 253.8 |

# 170



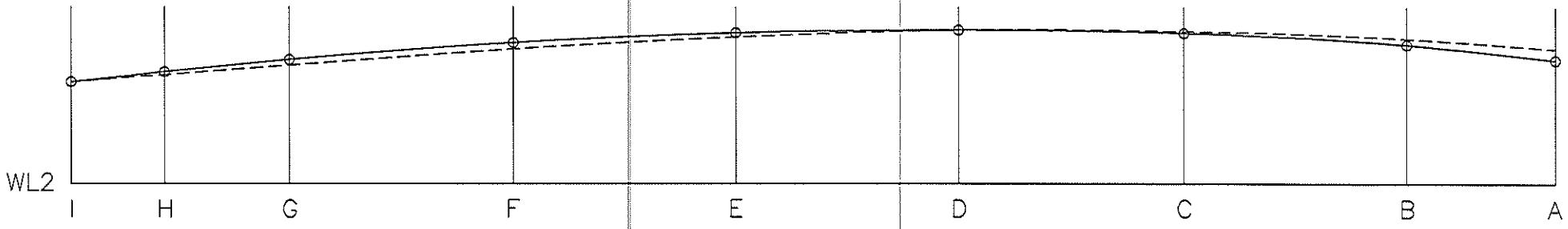

| OFFSETS FOR KEEL ROCKER PROFILE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No 170 Actual dimension | 211.1 | 227.9 | 249 | 284 | 305.9 | 315.9 | 313.9 | 293.9 | 265.2 |

# 188



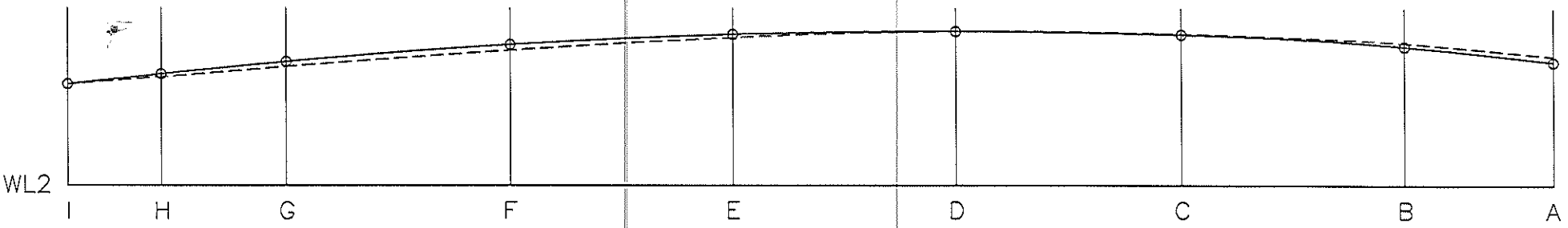

| OFFSETS FOR KEEL ROCKER PROFILE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No 188 Actual dimension | 211.1 | 230.6 | 255.1 | 290.5 | 311.5 | 315.9 | 310.7 | 288.9 | 258.8 |

# 255




| OFFSETS FOR KEEL ROCKER PROFILE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No 255 Actual dimension | 211.1 | 226.1 | 245.5 | 278.8 | 304.1 | 315.9 | 316.6 | 301.4 | 279.7 |

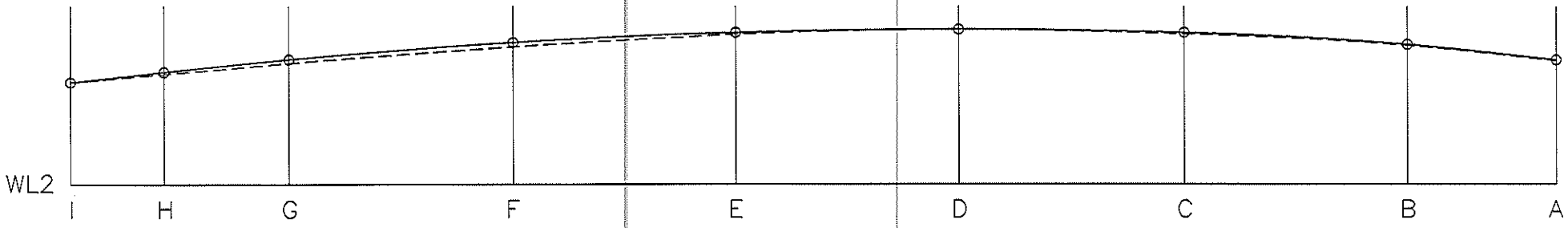
# 256




## OFFSETS FOR KEEL ROCKER PROFILE

| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No 256 Actual dimension | 211.1 | 226 | 247.3 | 280.5 | – | 315.9 | 314.1 | 295.4 | 268.8 |

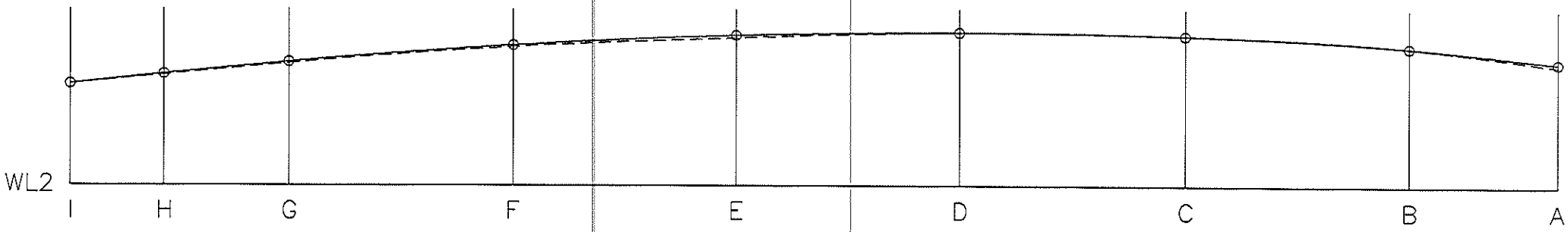
# 304




## OFFSETS FOR KEEL ROCKER PROFILE

| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No 304 Actual dimension | 211.1 | 227.3 | 249.5 | 283 | – | 315.9 | 309.4 | 286.8 | 255.1 |

322




## OFFSETS FOR KEEL ROCKER PROFILE

| | ALL DIMENSIONS DATUMED FROM WL2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | I | H | G | F | E | D | C | B | A |
| Specification | 211.1 | 231.8 | 257.2 | 292.1 | 312.7 | 315.9 | 312.7 | 288.9 | 257.2 |
| Boat No 322 Actual dimension | 211.1 | 229.5 | 254 | 288.7 | 307.9 | 315.9 | 312.9 | 288.8 | 251.5 |

Zephyr Plan – Line Drawings.

From the information on the original line drawings a new offset table was drawn up converting the original imperial dimensions to metric.

The table shows the original imperial dimensions as taken directly off the original line drawing. In establishing this table a number of anomalies were noticed as follows and have been altered in the metric dimensions as noted.
ie.

# Imperial dimensions from the original offset table that appeared to be incorrectly datumed from 'WL1' instead of from 'WL2'.

* Metric dimensions corrected to datum WL2.
*(Note. These dimensions relate to the shear line profile)*

## Imperial dimensions from original offset table appeared to be incorrect when profile was drawn to scale.
** Metric dimensions corrected by scaling from line drawing.

A further table was drawn up with metric dimensions only.

## Zephyr Sailing Dinghy – Offsets Table

| | Plan – datum Centreline | | | | | | | | Elevation – datum WL2 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | | WL2 | | WL1 | | LWL | | S | | K | | B | |
| | Metric | Imp. | Metric | Imp. | Metric | Imp. | Metric | Imp. | Metric | Imp. | Metric | Imp. | Metric | Imp. |
| A | 188.9 | 7-7/16 | 152.4 | 6 | 123.8 | 4-14/16 | 60.3 | 2-6/16 | 195.3 | 7-11/16 | 257.2 | 10-2/16 | - | - |
| B | 377.8 | 14-14/16 | 339.7 | 13-6/16 | 287.3 | 11-5/16 | 185.7 | 7-5/16 | 152.4 | 6 | 288.9 | 11-6/16 | 79.4 | 3-2/16 |
| C | 563.6 | 22-3/16 | 536.6 | 21-2/16 | 485.8 | 19-2/16 | 347.7 | 13-11/16 | 100* | 8-1/16# | 312.7 | 12-5/16 | 228.6 | 9 |
| D | 650.9 | 25-10/16 | 644.5 | 25-6/16 | 606.4 | 23-14/16 | 457.2 | 18 | 58.7* | 6-7/16# | 315.9 | 12-7/16 | 258.8 | 10-3/16 |
| E | 679.5 | 26-12/16 | 679.5 | 26-12/16 | 657.2 | 25-14/16 | 506.4 | 19-15/16 | 33.3* | 5-7/16# | 312.7 | 12-5/16 | 258.8 | 10-3/16 |
| F | 658.8 | 25-15/16 | 658.8 | 25-15/16 | 642.9 | 25-5/16 | 469.9 | 18-8/16 | 27.0* | 5-3/16# | 292.1 | 11-8/16 | 244.4 | 9-10/16 |
| G | 592.1 | 23-5/16 | 589.0 | 23-3/16 | 555.6 | 21-14/16 | 324.7** | 12## | 38.1* | 5-10/16# | 257.2 | 10-2/16 | 213.5** | 8-3/16## |
| H | 542.9 | 21-6/16 | 539.8 | 21-4/16 | 489.0 | 19-4/16 | 157.2 | 6-3/16 | 52.4* | 6-3/16# | 231.8 | 9-2/16 | 177.8 | 7 |
| I | 504.8 | 19-14/16 | 501.4 | 19-12/16 | 431.8 | 17 | 28.6 | 1-2/16 | 61.9* | 6-9/16# | 211.1 | 8-5/16 | 152.4 | 6 |
| O-A | 228.6 | 9 | 212.7 | 8-6/16 | 200.0 | 7-14/16 | 146.1 | 5-12/16 | 228.6 | 9 | - | - | - | - |

Note:

1) # Imperial dimensions from original off-set table which appeared to be incorrectly datumed from WL1.
2) * Metric dimensions corrected to datum WL2.
3) ## Imperial dimensions from original off-set table which appeared to be incorrect when profile was drawn to scale.
4)** Metric dimensions corrected (from imperial dimensions ##) by scaling from line drawing.

## Zephyr Sailing Dinghy – Offsets Table

| | Plan – datum Centreline | | | | Elevation – datum WL2 | | |
|---|---|---|---|---|---|---|---|
| | S | WL2 | WL1 | LWL | S | K | B |
| A | 188.9 | 152.4 | 123.8 | 60.3 | 195.3 | 257.2 | - |
| B | 377.8 | 339.7 | 287.3 | 185.7 | 152.4 | 288.9 | 79.4 |
| C | 563.6 | 536.6 | 485.8 | 347.7 | 100.0 | 312.7 | 228.6 |
| D | 650.9 | 644.5 | 606.4 | 457.2 | 58.7 | 315.9 | 258.8 |
| E | 679.5 | 679.5 | 657.2 | 506.4 | 33.3 | 312.7 | 258.8 |
| F | 658.8 | 658.8 | 642.9 | 469.9 | 27.0 | 292.1 | 244.4 |
| G | 592.1 | 589.0 | 555.6 | 324.7 | 38.1 | 257.2 | 213.5 |
| H | 542.9 | 539.8 | 489.0 | 157.2 | 52.4 | 231.8 | 177.8 |
| I | 504.8 | 501.4 | 431.8 | 28.6 | 61.9 | 211.1 | 152.4 |
| O-A | 228.6 | 212.7 | 200.0 | 146.1 | 228.6 | - | - |

Notes re Measuring Procedure.

A sketch of section E measuring jig is included for the record. Jig C and D were manufactured in a similar manner.

- Sections C and E.

  Measuring jig is datumed at 'K' relative to the hull, ie. jig rests on the hull at Centreline on the keel line, therefore no deviation is recorded at this point hence actual reading always equals standard dimension.

  Dimension for 'LWL'. Specification offset dimension is 347.7 for 'C' and 506.4 for 'E' from Centreline at LWL (measured horizontally).
  Actual measurements were taken vertically at 347.7 and 506.4 respectively from Centreline to provide an easier means of measuring. The standard dimension at this point would be 209.6 for both 'C' and 'E' datumed vertically from 'WL2', therefore dimension recorded is vertical dimension from 'WL2'.
  (Note, boats # 188 and 255 were measured from the horizontal datum prior to jig being modified)

- Section I.

  Measuring jig is datumed at 'K' relative to the hull, ie. jig rests on the hull at Centreline, therefore no deviation is recorded at this point hence actual reading always equals standard dimension.

- With reference to individual sketches the following profiles are represented as follows:
  _____ Plotted as dimensioned from line drawing offsets.

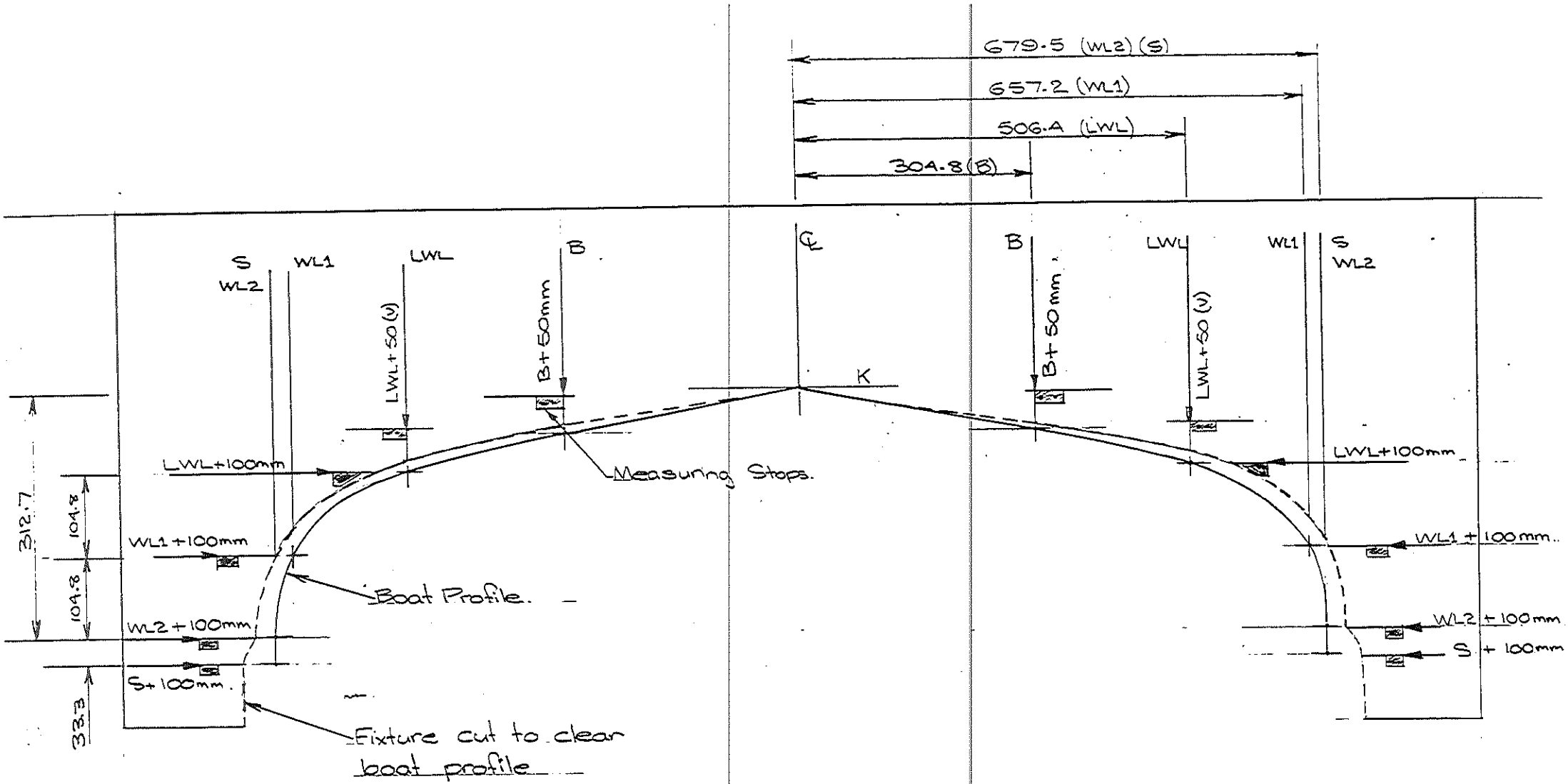
  _ _ _ _ _ Plotted from dimensions taken off measuring jigs.

  _ _____ _ This profile is the plot from dimensions taken off measuring jigs which has been displaced vertically by 7mm to represent actual outer skin profile.

- If boats are built to the specified offsets then we would expect to see the plotted dimension from measuring jig ( _ _ _ _ _ ) coincident with 'K' and to move increasingly outside the points at B, LWL, WL1, WL2, and end at 7mm horizontally from S.

- Therefore the 7mm vertically displaced plot ( _____ _ _____ ) should be parallel with the standard curve as dimensioned from line drawing offsets for a perfect boat.

- Dimension S datumed from the Centreline was not possible to measure accurately due to the gunwale beading, therefore for the sake of this exercise this dimension was derived by adding the same difference from specified dimension as measured at WL2, to S, to establish the actual point.

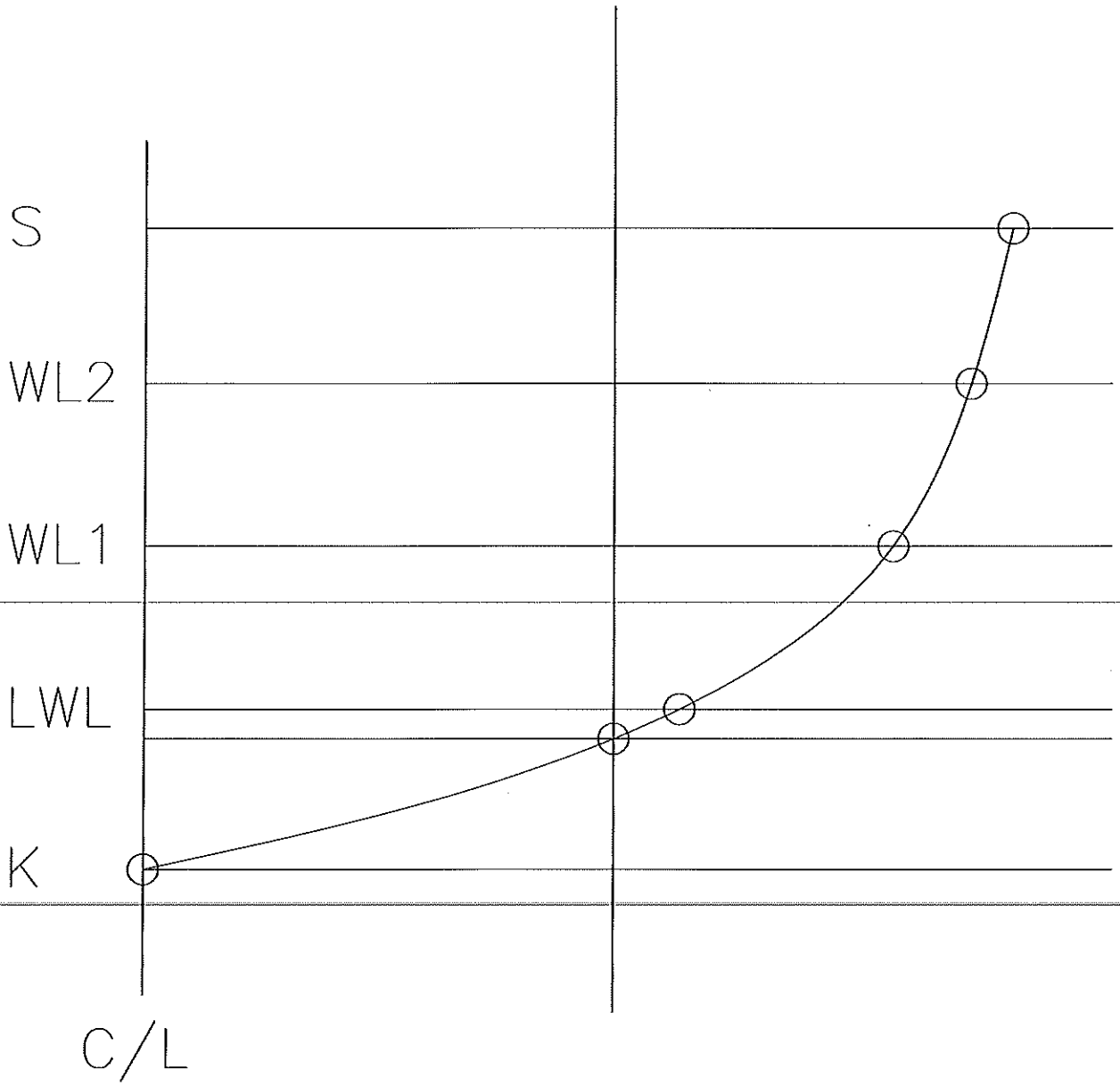



MEASURING FIXTURE FOR ELEVATION 'E'

| Elevation C – Offsets | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Plan – (datum Centreline) | | | | Elevation – (datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Standard Dimensions | 563.6 | 536.6 | 485.8 | 209.6(V) 347.7 | 100 | 312.7 | 228.6 |
| Actual dim. Boat No. | | | | | | | |
| 28 | 583.7 | 556.7 | 497.05 | 214.95 | 120.3 | 312.7 | 230.05 |
| 188 | 585.8 | 558.8 | 501.4 | 214.2 | 120.0 | 312.7 | 232.2 |
| 200 | 584.7 | 557.7 | 498.7 | 210.6 | 120.6 | 312.7 | 228.2 |
| | | | | 208.8 | | | |
| 235 | 573.9 | 546.9 | 489.9 | | 109.5 | 312.7 | 226.5 |
| 255 | 578.2 | 551.2 | 494.6 | 212.2 | 105.5 | 312.7 | 229.3 |
| 257 | 566.3 | 539.3 | 481.9 | 204.1 | 125 | 312.7 | 223.3 |
| | | | | | | | |
| 260 | - | - | - | - | - | - | - |

# STANDARD

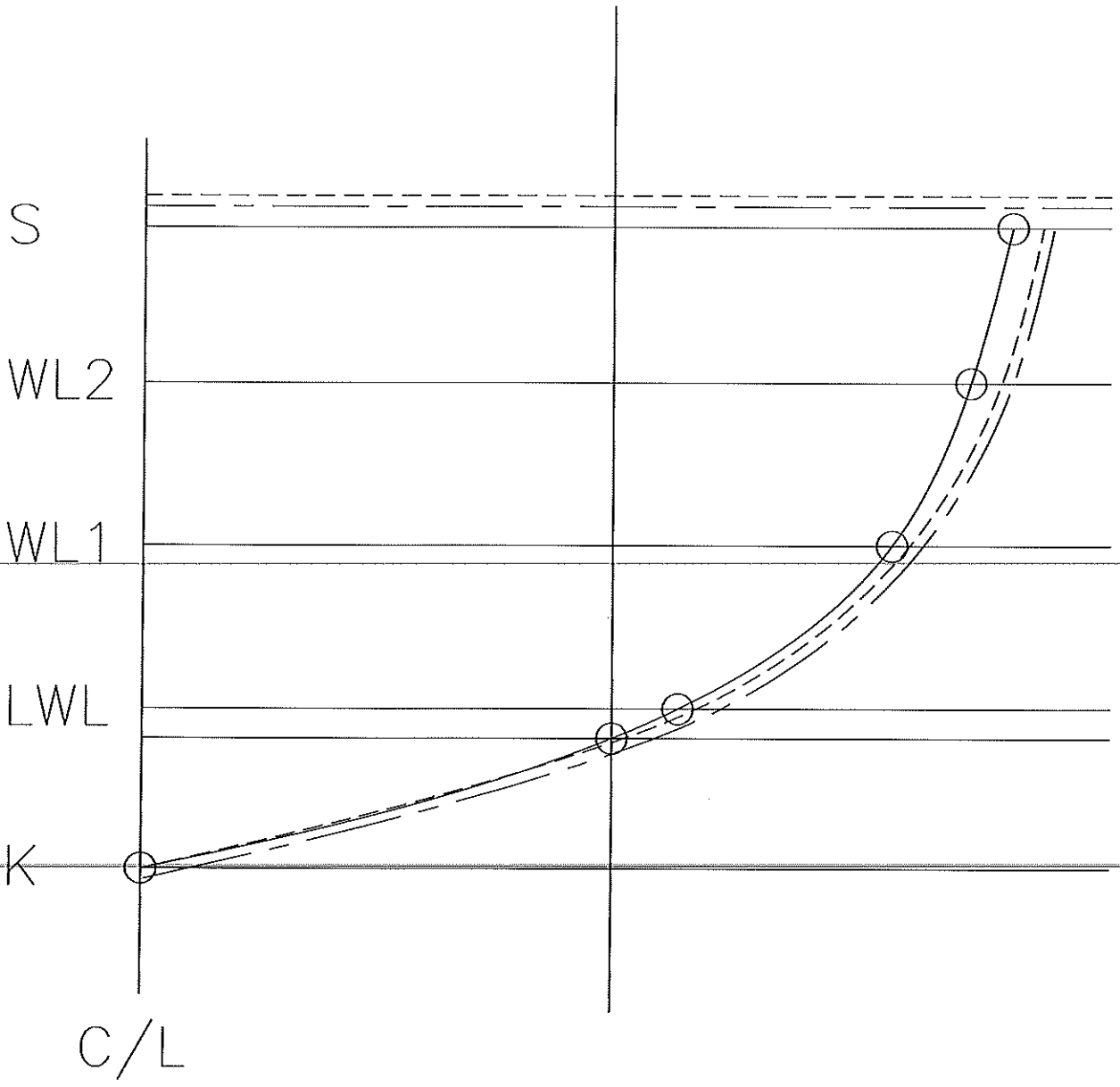
SECTION C




| OFFSETS FOR ELEVATION C | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 563.6 | 536.6 | 485.8 | 347.7<br>209.6(V) | 100 | 312.7 | 228.6 |
| Boat No<br>Actual dimension | | | | | | | |

# #28

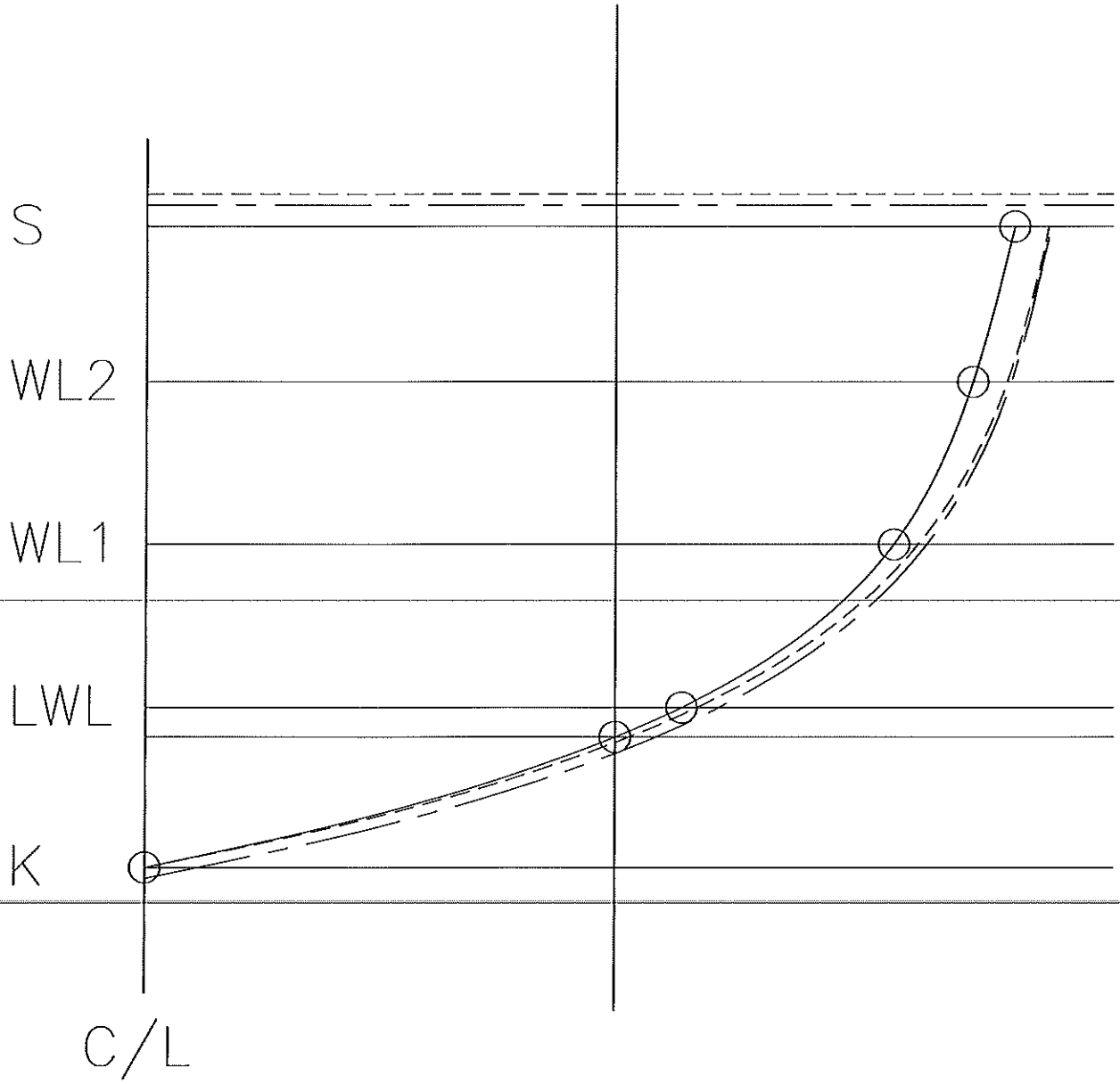
SECTION C B




| OFFSETS FOR ELEVATION C | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 563.6 | 536.6 | 485.8 | 347.7<br>209.6(V) | 100 | 312.7 | 228.6 |
| #28<br>Actual dimension | (583.7) | 556.7 | 497.05 | 347.7<br>214.9(V) | 120.3 | 312.7 | 230.1 |

# #188

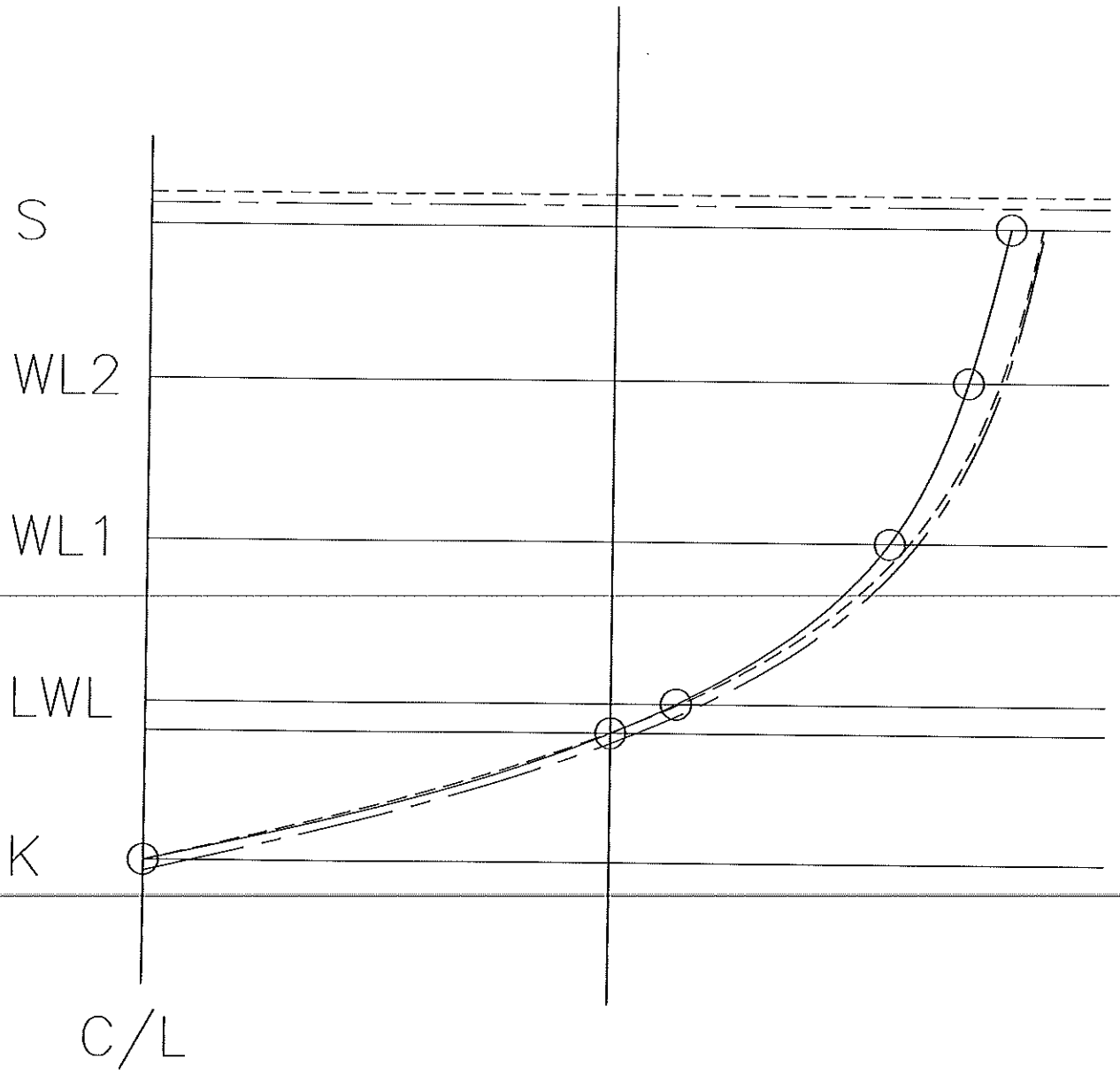
SECTION C B




| OFFSETS FOR ELEVATION C | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 563.6 | 536.6 | 485.8 | 347.7<br>209.6(V) | 100 | 312.7 | 228.6 |
| #188<br>Actual dimension | (585.8) | 558.8 | 501.4 | 347.7<br>214.2(V) | 120.0 | 312.7 | 232.2 |

# #200

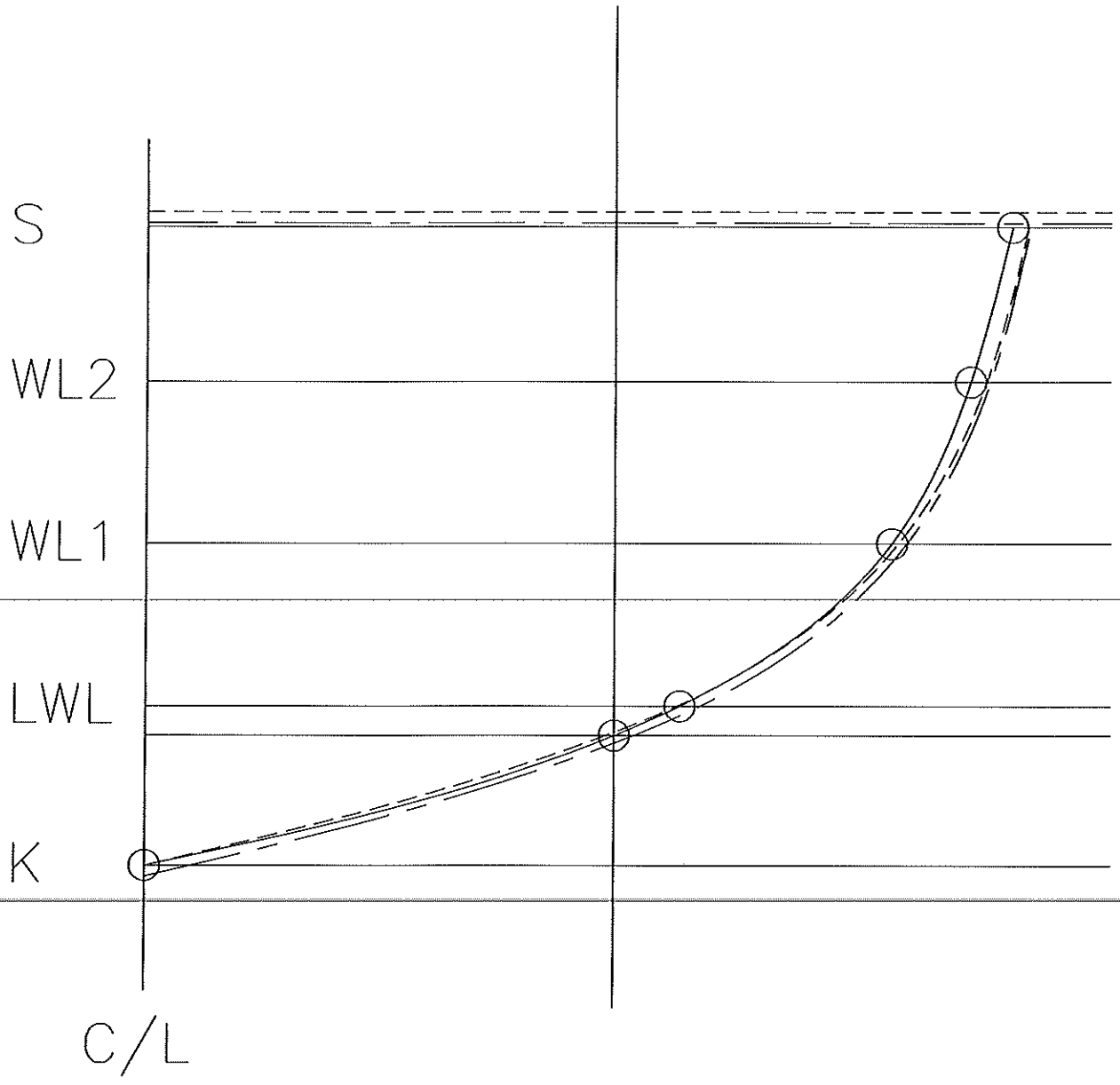
SECTION C




| OFFSETS FOR ELEVATION C | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 563.6 | 536.6 | 485.8 | 347.7<br>209.6(V) | 100 | 312.7 | 228.6 |
| #200<br>Actual dimension | (584.7) | 557.7 | 498.7 | 347.7<br>210.6(V) | 120.6 | 312.7 | 228.2 |

# #235

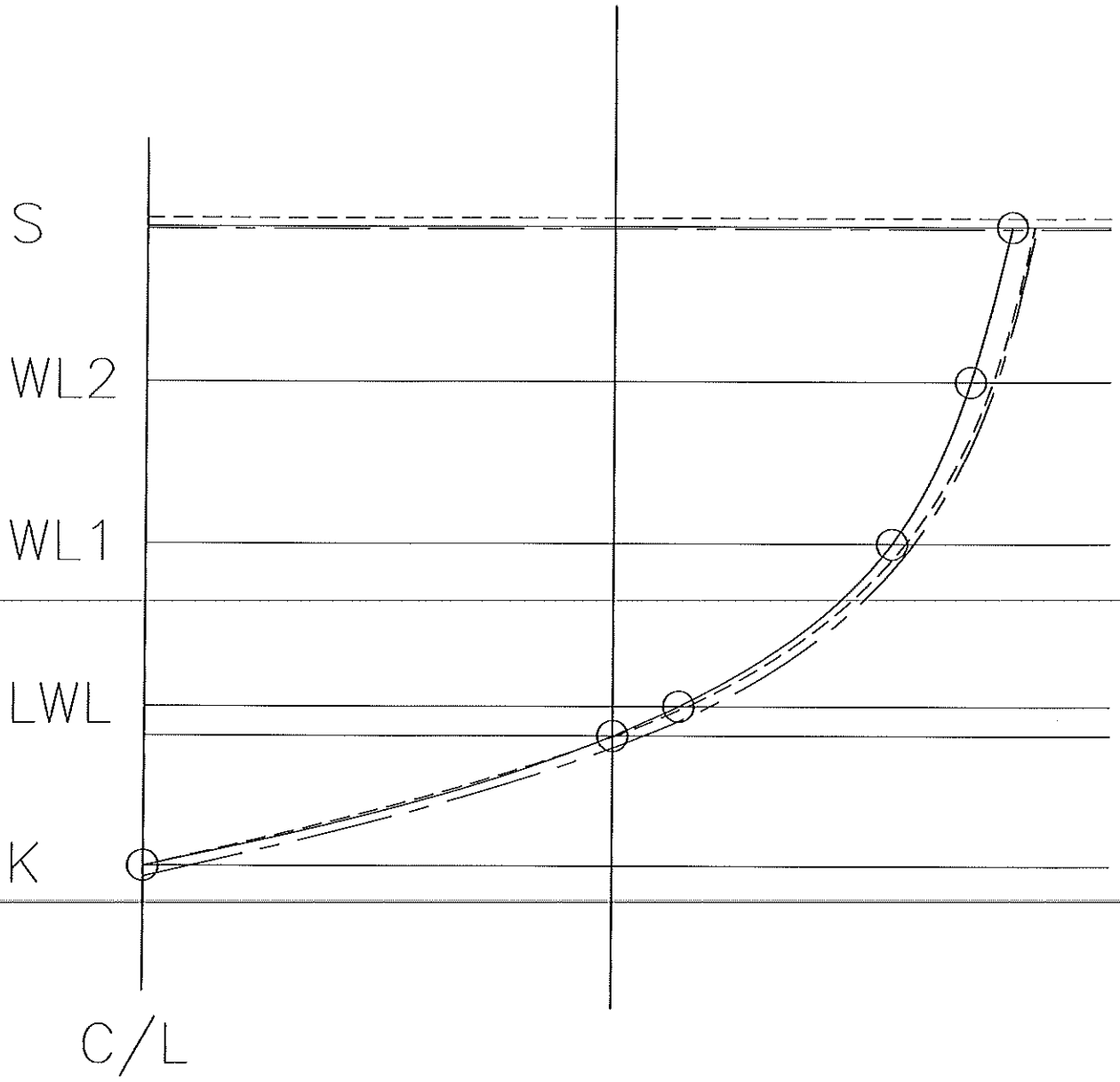
SECTION C B




| OFFSETS FOR ELEVATION C | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 563.6 | 536.6 | 485.8 | 347.7<br>209.6(V) | 100 | 312.7 | 228.6 |
| #235<br>Actual dimension | (573.9) | 546.9 | ~~589.9~~<br>489.9 | 347.7<br>208.8V) | 109.5 | 312.7 | 226.5 |

# #255

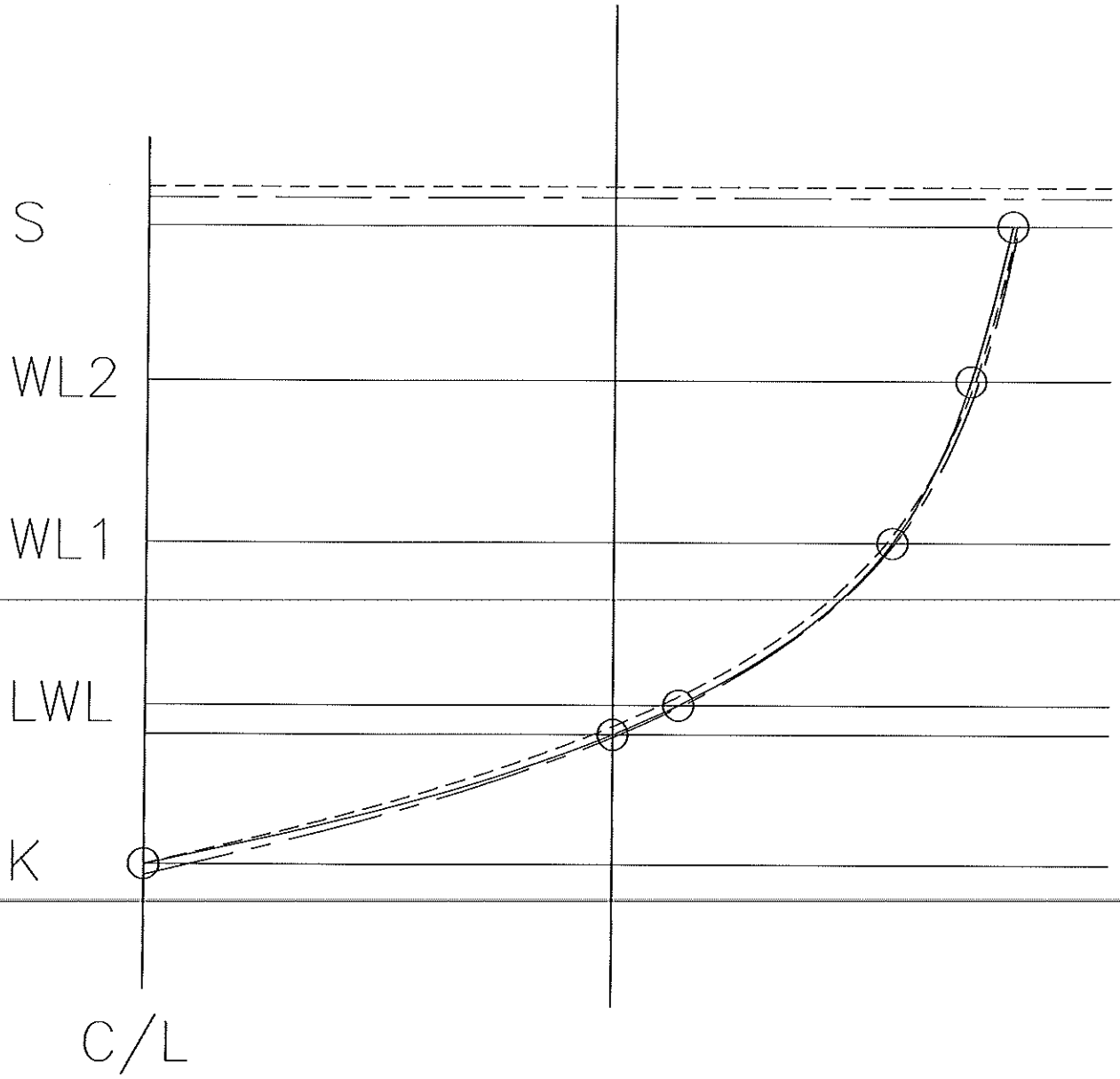
SECTION C B




| OFFSETS FOR ELEVATION C | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 563.6 | 536.6 | 485.8 | 347.7<br>209.6(V) | 100 | 312.7 | 228.6 |
| #255<br>Actual dimension | (578.2) | 551.2 | 494.6 | 347.7<br>212.2(V) | 105.5 | 312.7 | 229.3 |

# #257

SECTION C B

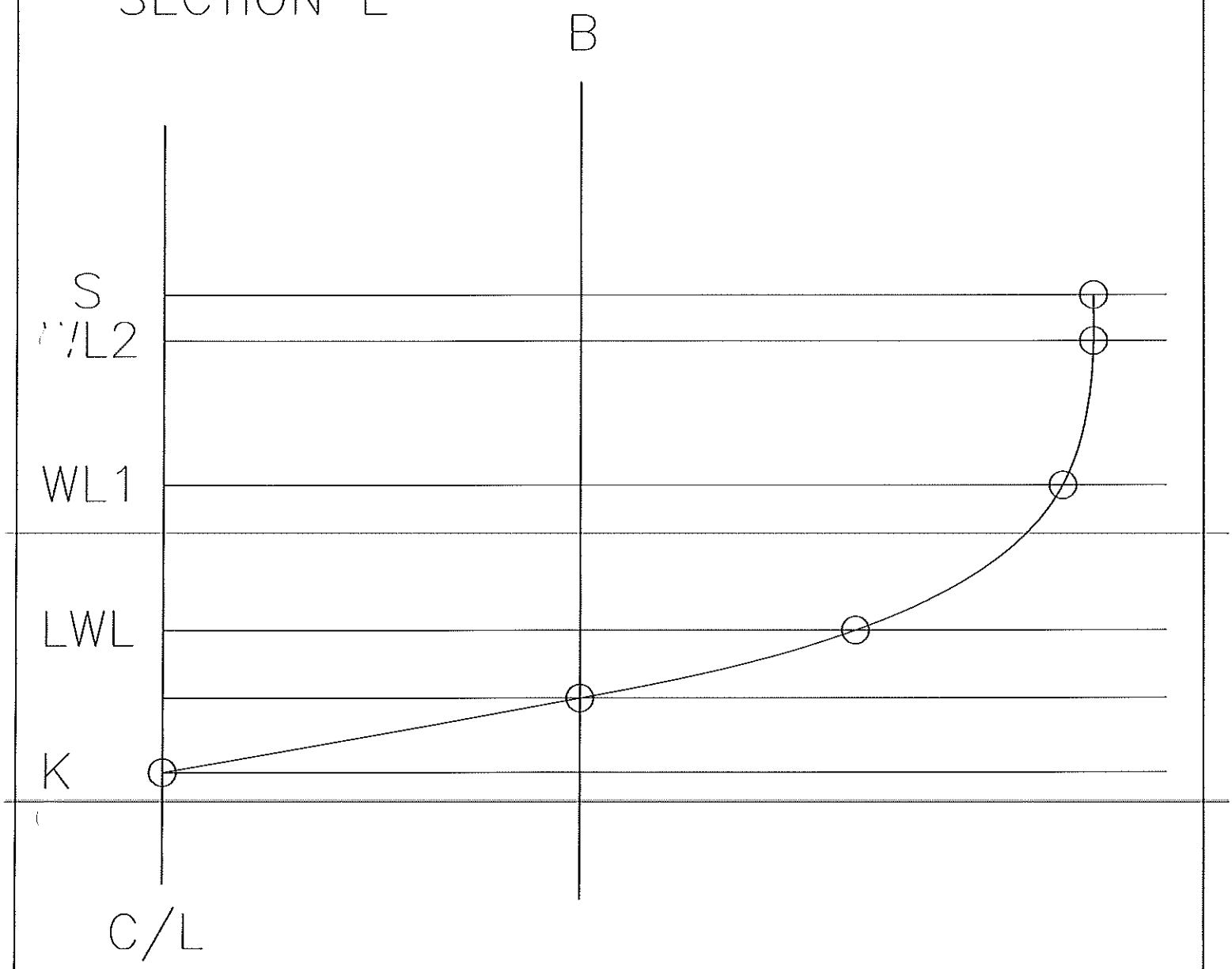



| OFFSETS FOR ELEVATION C | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 563.6 | 536.6 | 485.8 | 347.7<br>209.6(V) | 100 | 312.7 | 228.6 |
| #257<br>Actual dimension | (566.3) | 539.3 | 481.9 | 347.7<br>204.1(V) | 125 | 312.7 | 223.3 |

| **Elevation E – Offsets** | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Plan – (datum Centreline) | | | | Elevation – (datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 209.6(V)<br>506.4 | 33.3 | 312.7 | 258.8 |
| Actual dim.<br>Boat No. | | | | | | | |
| 28 | 696.3 | 696.3 | 670.0 | 215.9 | 42.3 | 312.7 | 264.6 |
| 188 | 697.7 | 697.7 | 671.0 | 519.1 | 39.5 | 312.7 | 263.5 |
| 200 | 697.7 | 697.7 | 668.2 | 213.9 | 49.6 | 312.7 | 262.5 |
| 235 | 692.9 | 692.9 | 664.6 | 214.7 | 43.3 | 312.7 | 263.2 |
| 255 | 683.8 | 683.8 | 658.7 | 513.0 | 52.1 | 312.7 | 260.4 |
| 257 | 682.9 | 682.9 | 652.9 | 203.1 | 73.3 | 312.7 | 259.2 |
| 260 | 687.9 | 687.9 | 658.6 | 497.6 | 67.5 | 312.7 | 259.6 |

# STANDARD

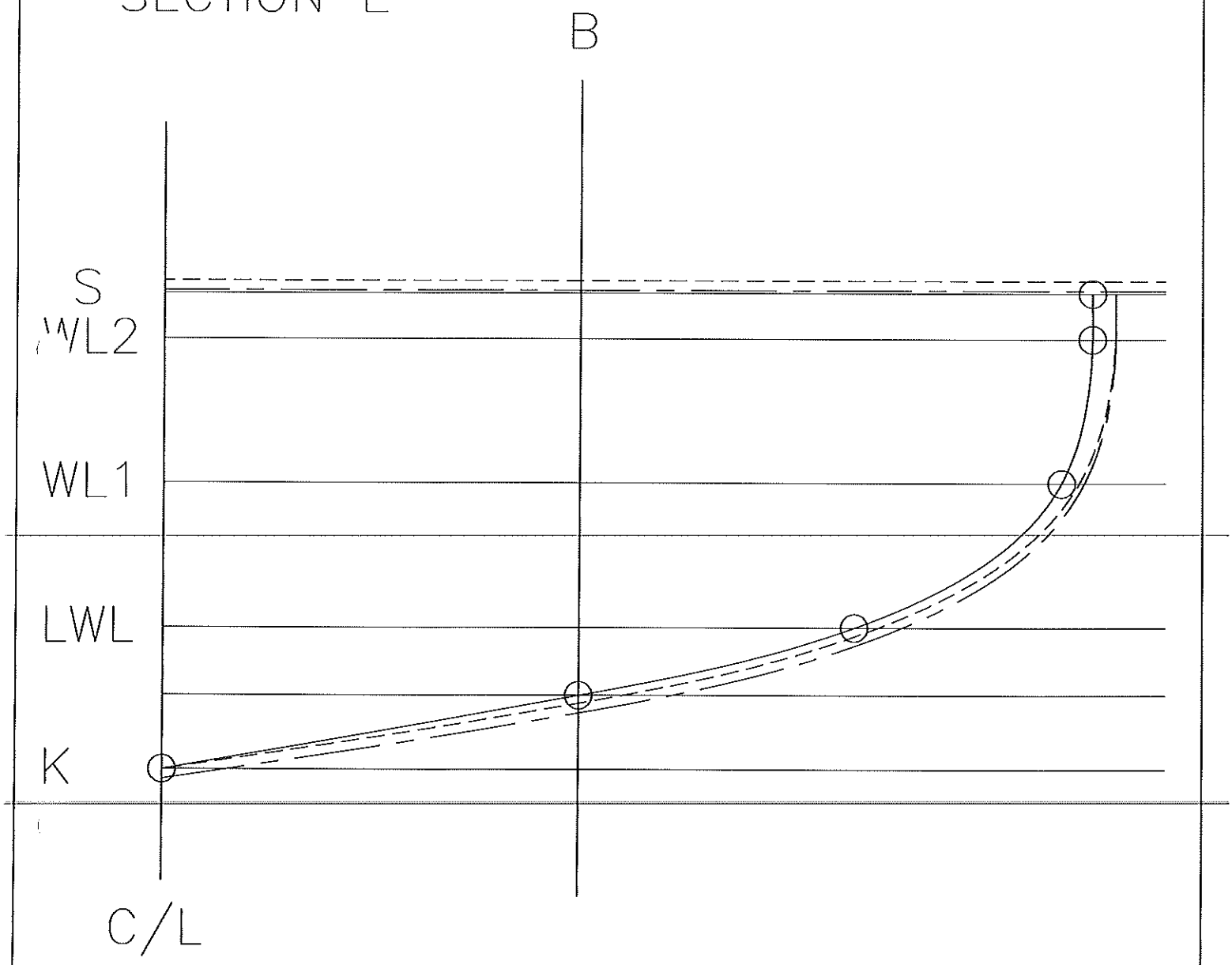
## SECTION E




| OFFSETS FOR ELEVATION E | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 506.4<br>209.6(V) | 33.3 | 312.7 | 258.8 |
| Boat No<br>Actual dimension | | | | | | | |

# #28

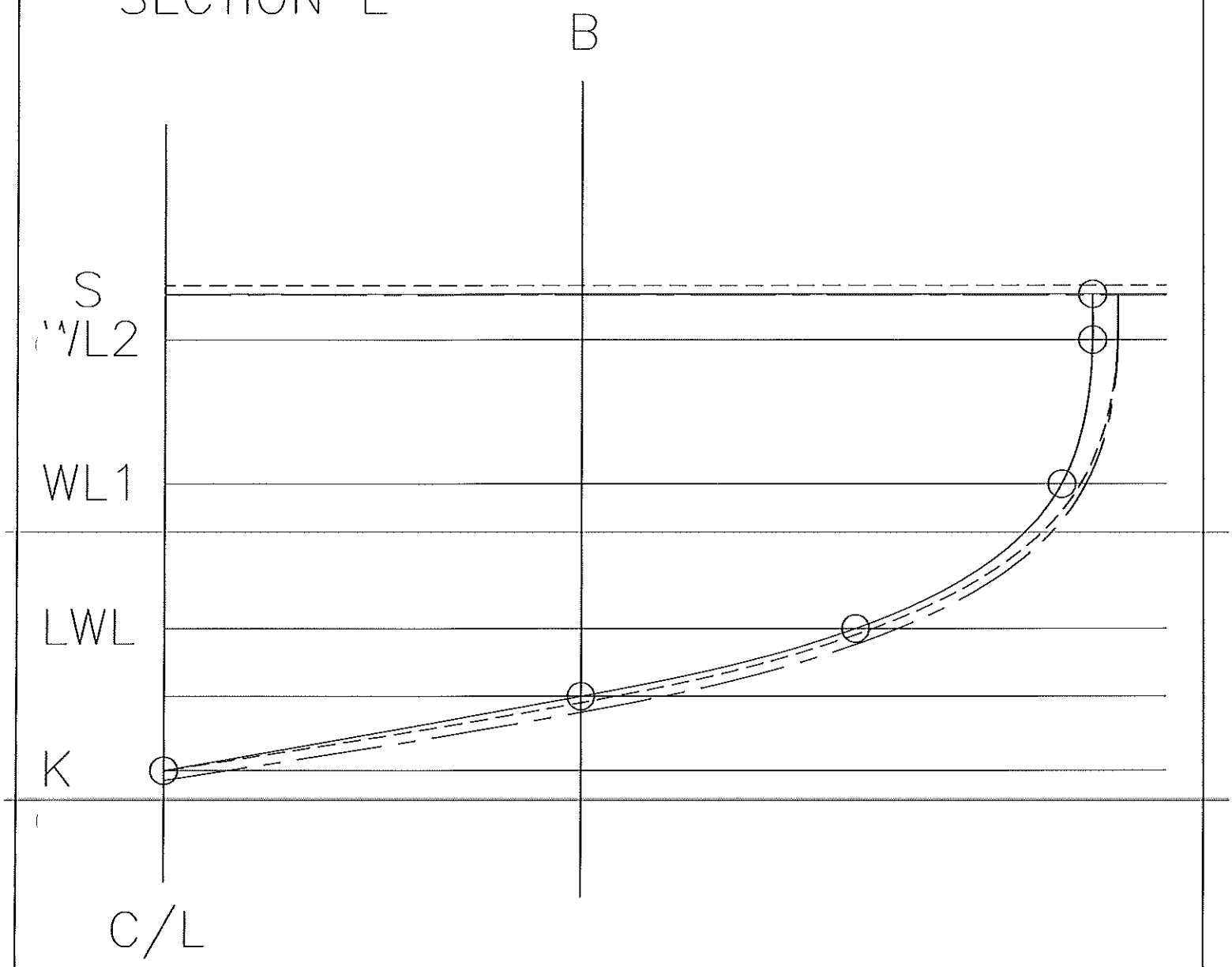
## SECTION E




| OFFSETS FOR ELEVATION E | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 506.4<br>209.6(V) | 33.3 | 312.7 | 258.8 |
| #28<br>Actual dimension | (696.3) | 696.3 | 670.0 | 506.4<br>215.9(V) | 42.3 | 312.7 | 264.6 |

# #188

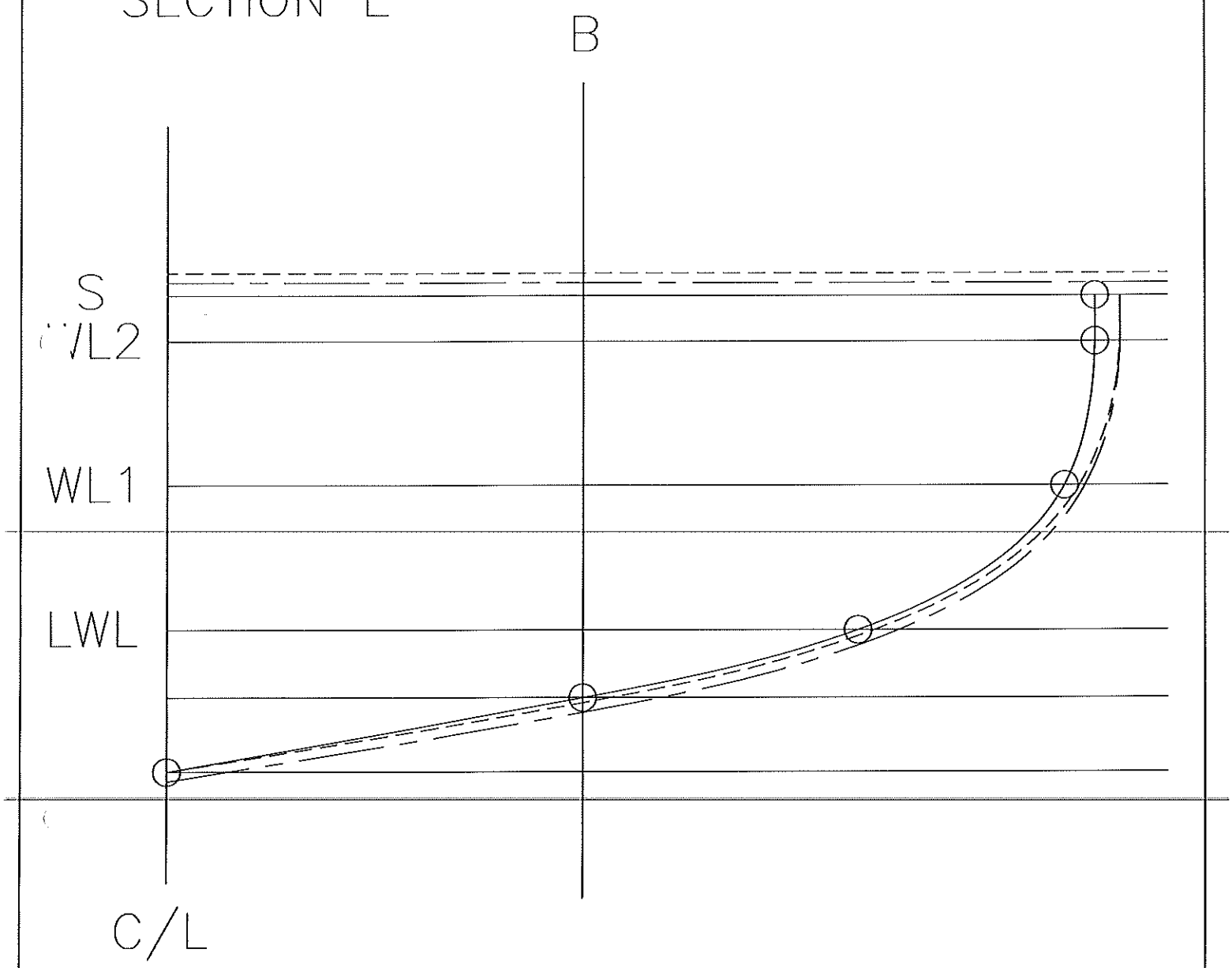
## SECTION E




| OFFSETS FOR ELEVATION 'E | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 506.4<br>209.6(V) | 33.3 | 312.7 | 258.8 |
| #188<br>Actuol dimension | (697.7) | 697.7 | 671.0 | 519.1 | 39.5 | 312.7 | 263.5 |

# #200

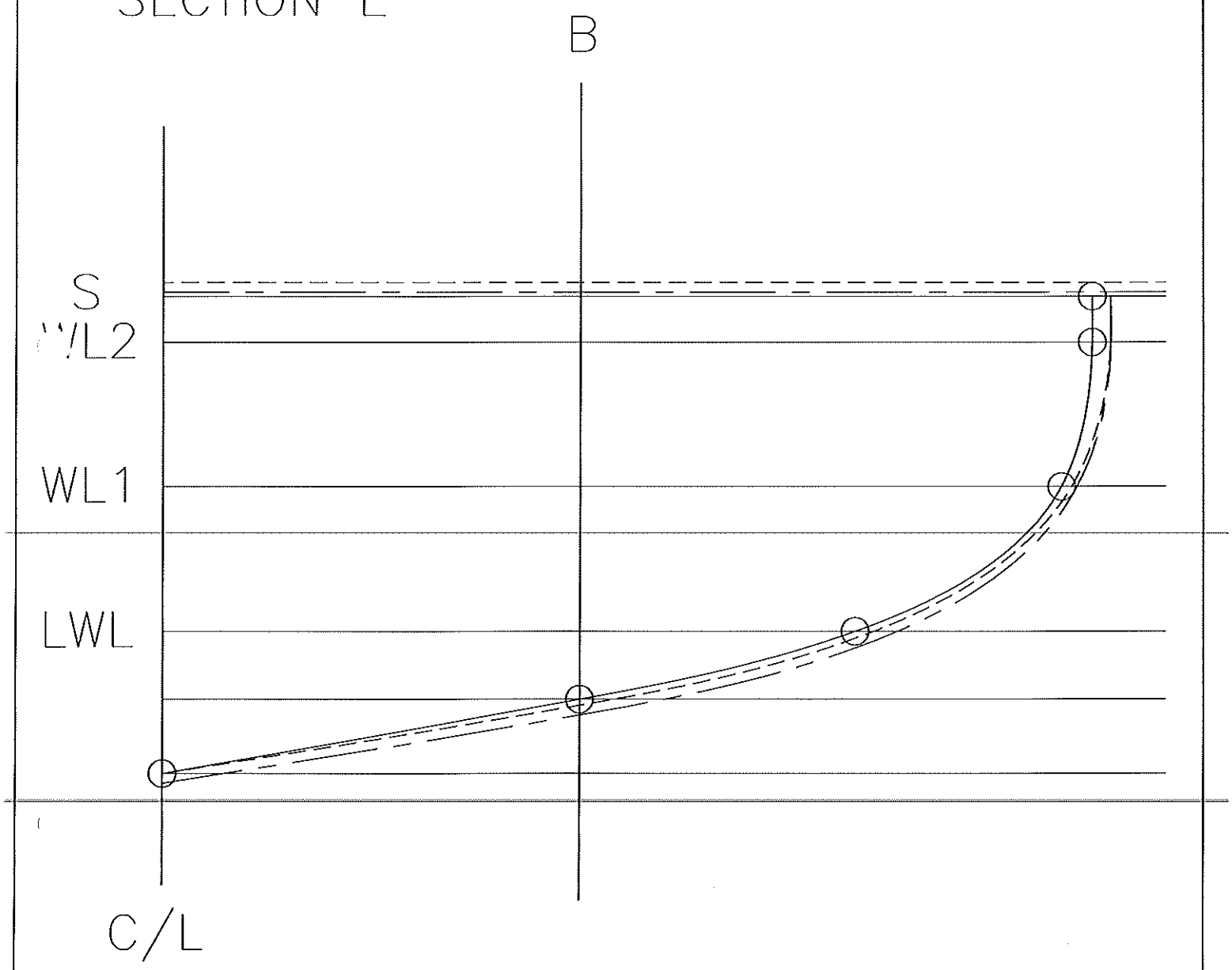
## SECTION E




| OFFSETS FOR ELEVATION E | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 506.4<br>209.6(V) | 33.3 | 312.7 | 258.8 |
| #200<br>Actual dimension | (697.7) | 697.7 | 668.2 | 506.4<br>213.9(V) | 49.6 | 312.7 | 262.5 |

# #235

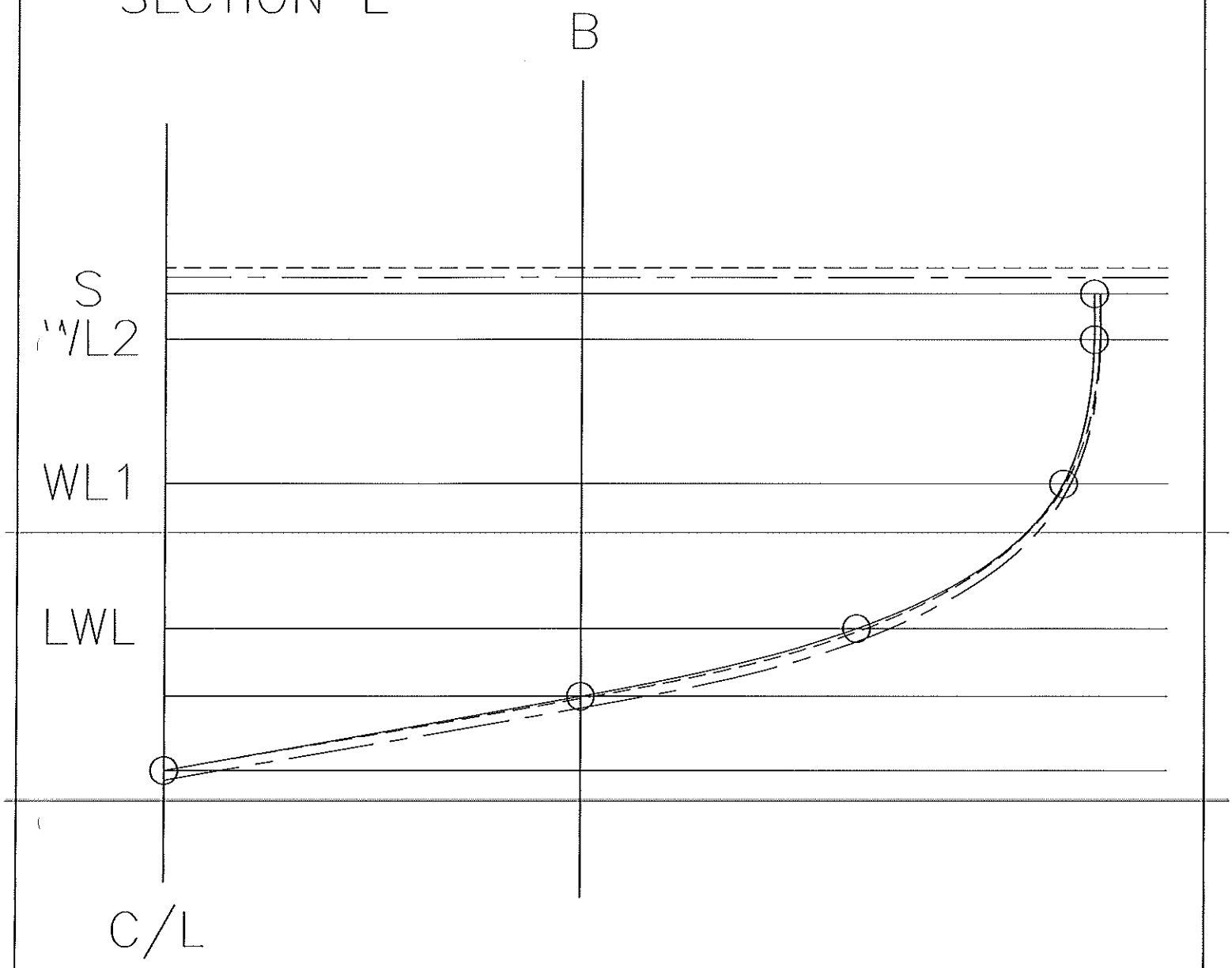
## SECTION E




| OFFSETS FOR ELEVATION E | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 506.4<br>209.6(V) | 33.3 | 312.7 | 258.8 |
| #235<br>Actual dimension | (692.9) | 692.9 | 664.6 | 506.4<br>214.7(V) | 43.3 | 312.7 | 263.2 |

# #255

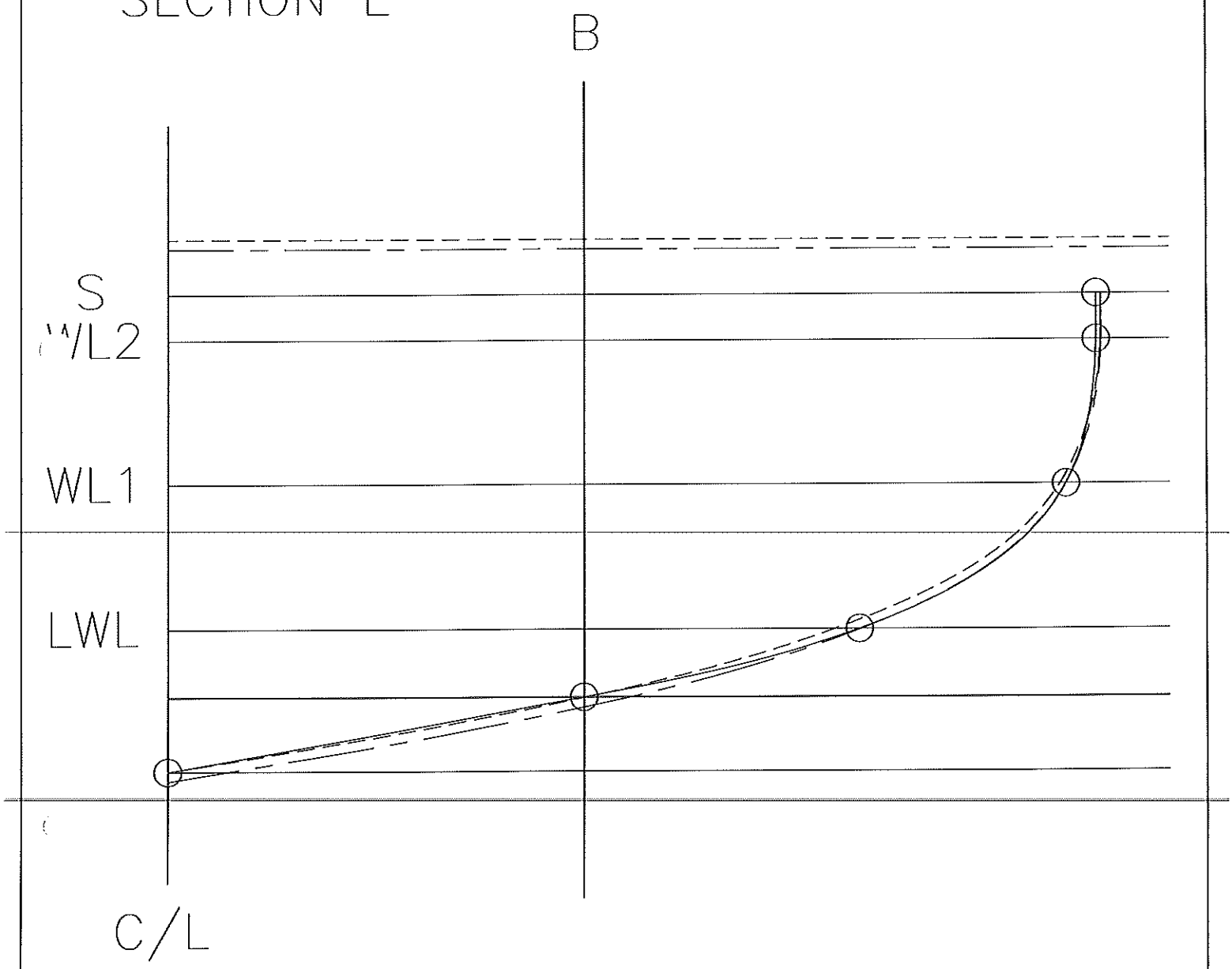
## SECTION E




| OFFSETS FOR ELEVATION E | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 506.4<br>209.6(V) | 33.3 | 312.7 | 258.8 |
| #255<br>Actual dimension | (683.8) | 683.8 | 658.7 | 513 | 52.1 | 312.7 | 260.4 |

# #257

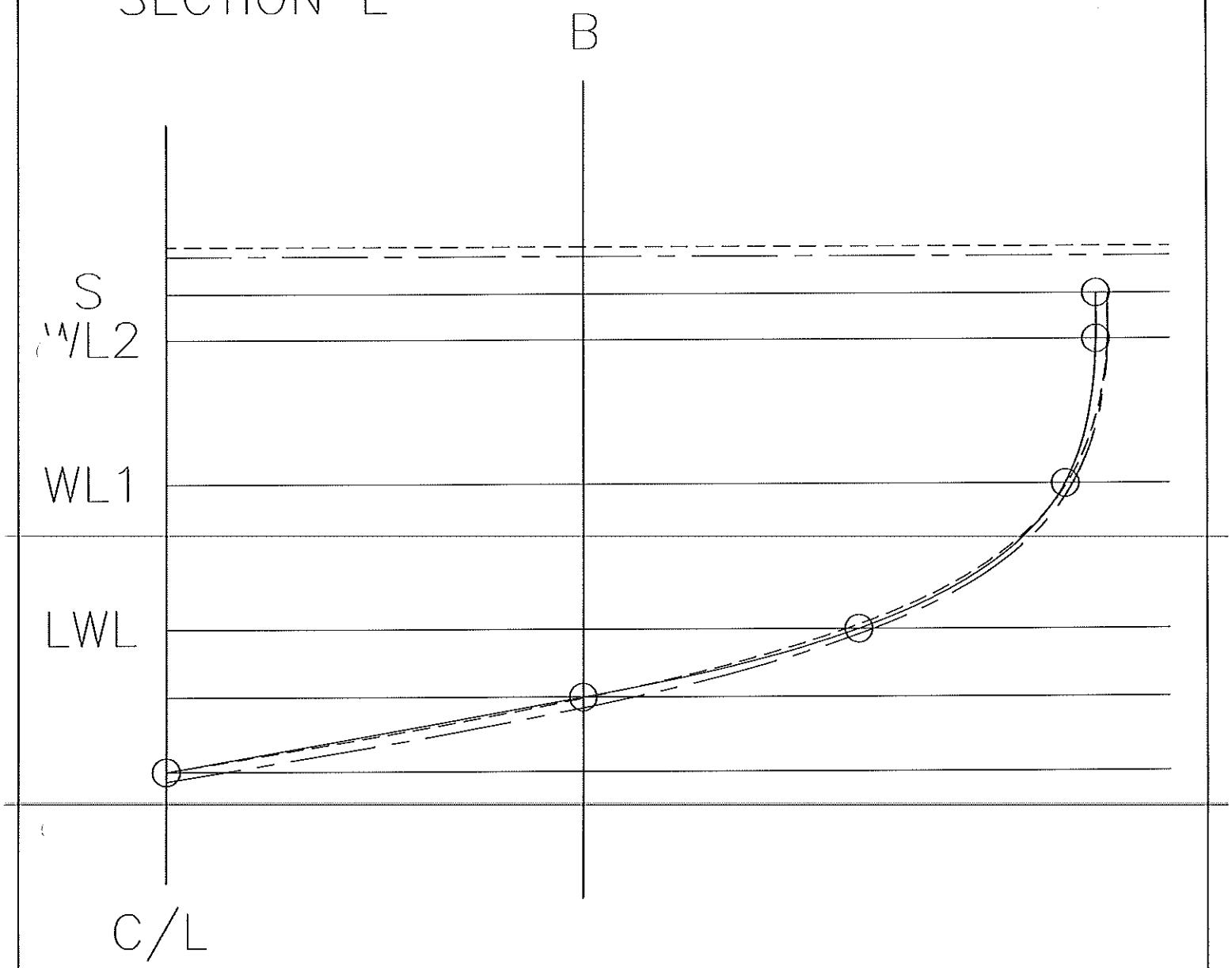
## SECTION E




| OFFSETS FOR ELEVATION E | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 506.4<br>209.6(V) | 33.3 | 312.7 | 258.8 |
| #257<br>Actual dimension | (682.9) | 682.9 | 652.9 | 513<br>203.1(V) | 73.3 | 312.7 | 259.2 |

# #260

## SECTION E



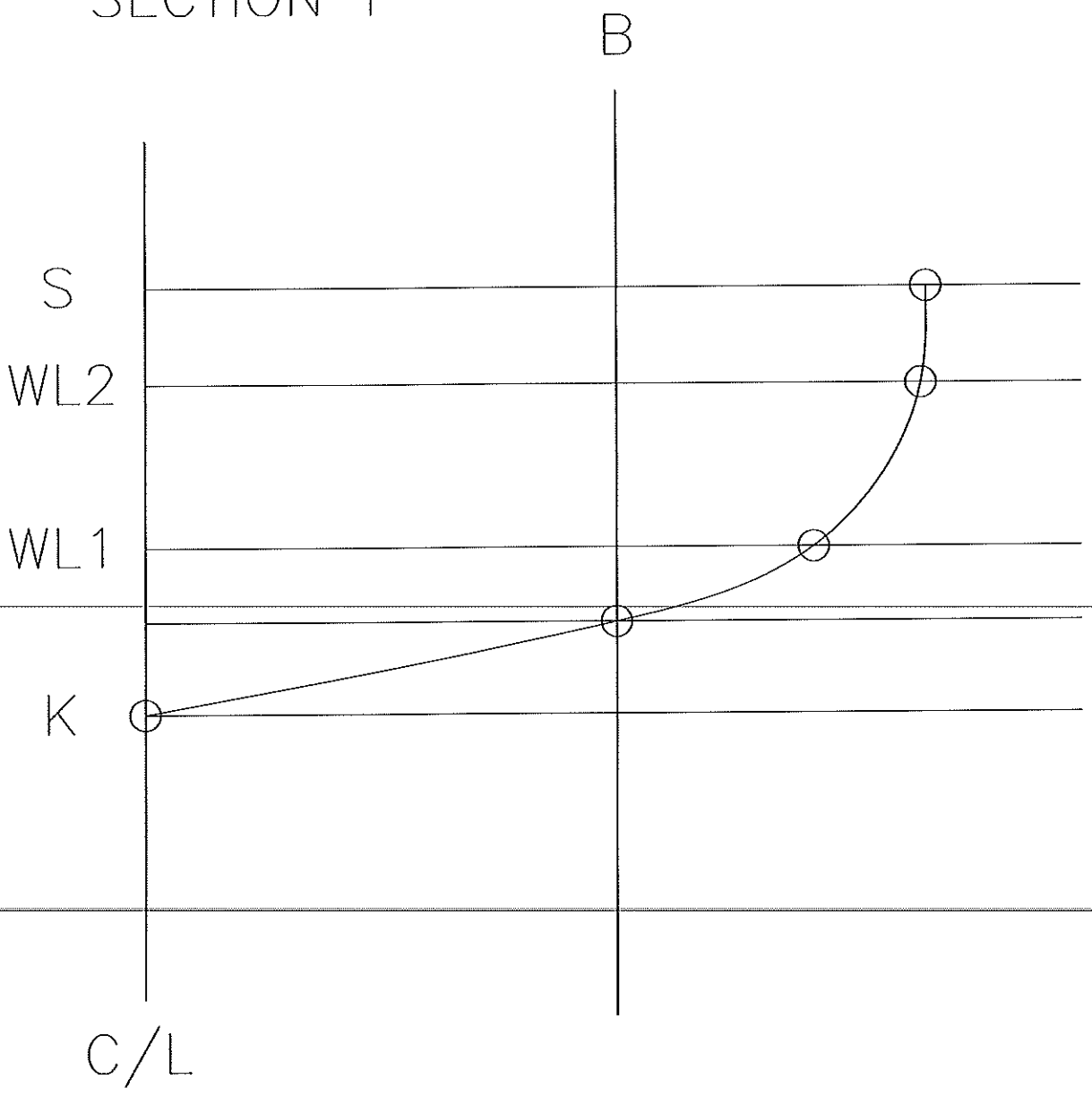

| OFFSETS FOR ELEVATION E | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 679.5 | 679.5 | 657.2 | 506.4<br>209.6(V) | 33.3 | 312.7 | 258.8 |
| #260<br>Actual dimension | (687.9) | 687.9 | 658.6 | 497.6 | 67.5 | 312.7 | 259.6 |

**Elevation I – Offsets**

| | Plan – (datum Centreline) | | | | Elevation – (datum WL2) | | |
|---|---|---|---|---|---|---|---|
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 504.8 | 501.4 | 431.8 | 28.6 | 61.9 | 211.1 | 152.4 |
| Actual dim. Boat No. | | | | | | | |
| 188 | 521.5 | 518.1 | 430.0 | - | 71.6 | 211.1 | 151.2 |
| 255 | 513.2 | 509.8 | 425.0 | - | 83.5 | 211.1 | 148.2 |
| 260 | | | | | | | |

# STANDARD

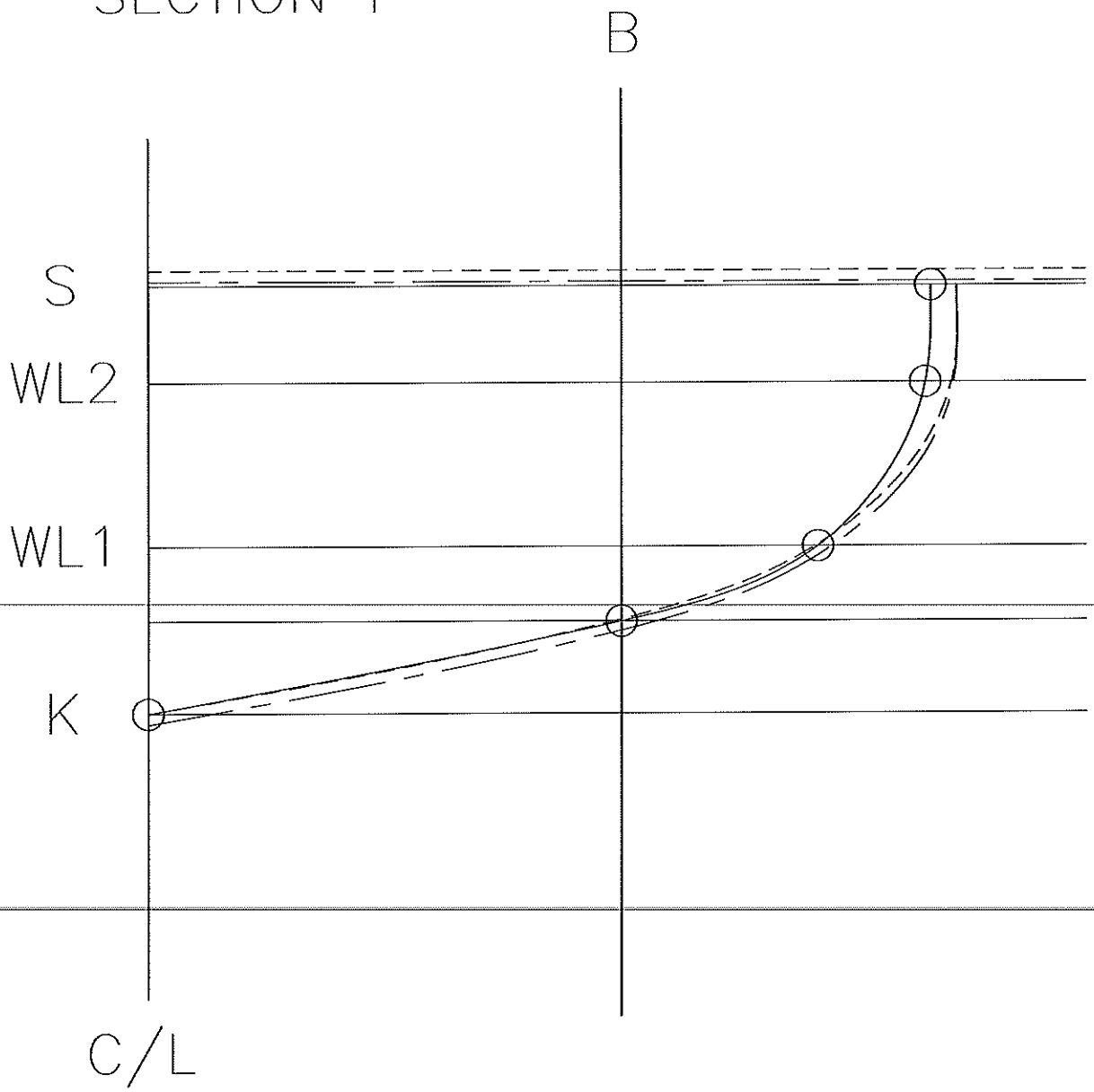
## SECTION I




| OFFSETS FOR ELEVATION I | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 504.8 | 501.4 | 431.8 | 28.6 | 61.9 | 211.1 | 152.4 |
| Boat No Actual dimension | | | | | | | |

# #188

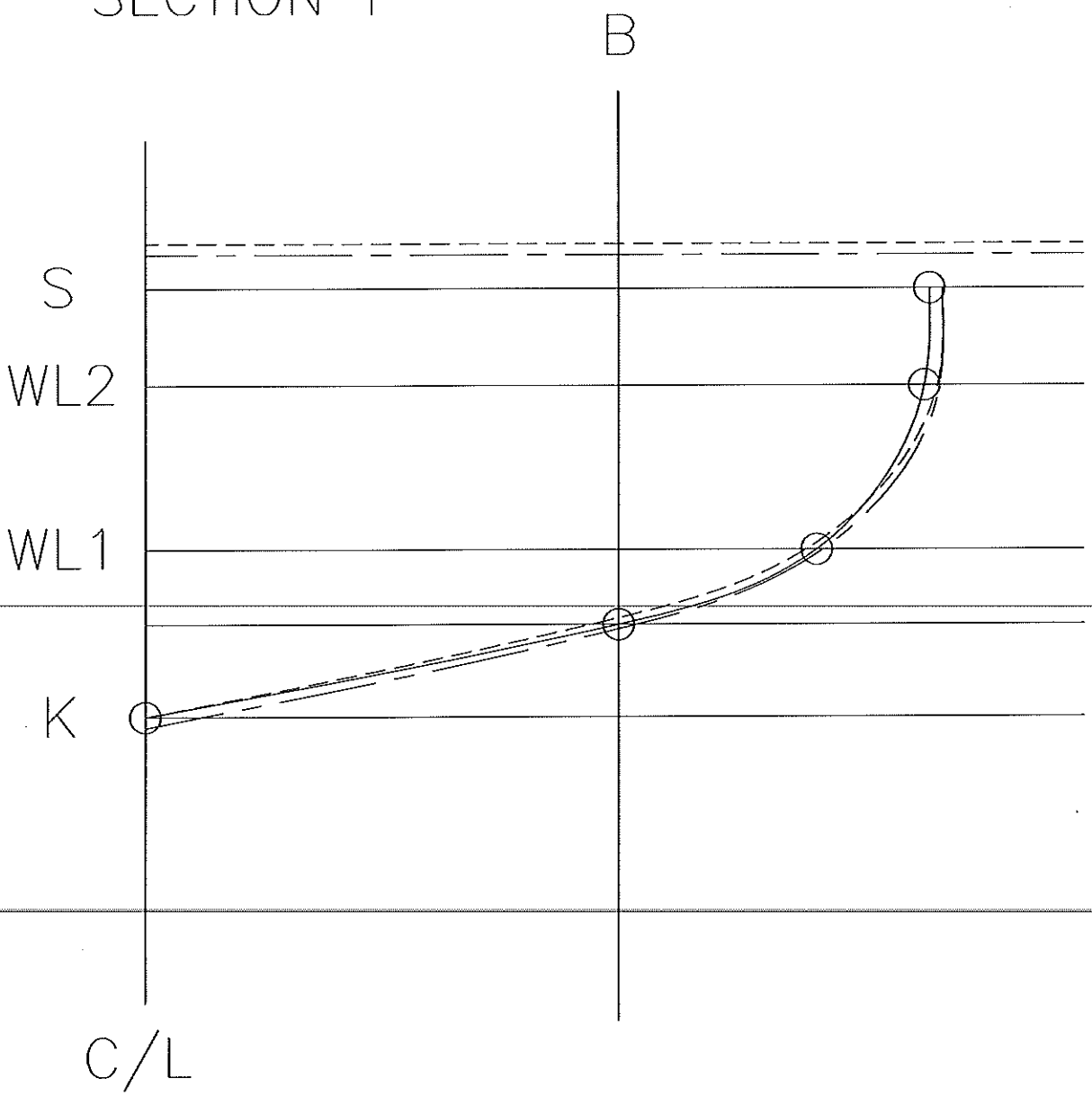
## SECTION I




| OFFSETS FOR ELEVATION I | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 504.8 | 501.4 | 431.8 | 28.6 | 61.9 | 211.1 | 152.4 |
| #188 Actual dimension | (521.5) | 518.1 | 430.0 | – | 71.6 | 211.1 | 151.2 |

# #255

## SECTION I




| OFFSETS FOR ELEVATION I | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PLAN –(datum centerline) | | | | ELEVATION–(datum WL2) | | |
| | S | WL2 | WL1 | LWL | S | K | B |
| Specification | 504.8 | 501.4 | 431.8 | 28.6 | 61.9 | 211.1 | 152.4 |
| #255 Actual dimension | (513.2) | 509.8 | 425.0 | – | 83.5 | 211.1 | 148.2 |