



GLOUCESTERSHIRE COUNTY COUNCIL
COUNTY SURVEYOR'S DEPARTMENT

SHIRE HALL,
BEARLAND,
GLOUCESTER

R. A. DOWNS
B.Sc., M.I.C.E., M.I.Mun.E.
COUNTY SURVEYOR

TELEPHONE 21444

Your Ref.:

Our Ref.: SCB/MAS

When telephoning please ask for
Mr. ...Brown..... Extn. N436...

3rd July, 1967

Dear Sir,

Severn Bridge Clearances

I refer to your letter of the 18th May and Mr. S.C. Brown's telephone conversation with you on the above matter on Friday last.

At the time the original design for the Severn Bridge was projected, the agreed statutory clearances above high water level (22.13-ft. A.O.D.) were 120-ft. at mid-span and 110-ft. at the towers, so that the levels of the superstructure were not to be below 142.13-ft. A.O.D. and 132.13-ft. A.O.D. at those respective points.

As the intention was to use deep lattice stiffening girders built under the carriageway decking, as on the Forth Road Bridge, the centre line of road levels were fixed at 170.0-ft. A.O.D. at mid-span and 155.70-ft. A.O.D. at the towers, but subsequently when a shallow orthotropic section was adopted to provide the necessary stiffness and carry the carriageway, the original carriageway profile levels were retained. The depth of the box decking is only 10-ft. and the underside of the gantry is less than 8-ft. below it, so that the clearances obtained under the gantry are 152.0-ft. A.O.D. when at mid-span and 137.70-ft. A.O.D. when at the towers.

Since rather more than the agreed statutory clearances are provided under the gantry, there will be no need for any system of warning lights to be provided indicating its position.

Yours faithfully,

County Surveyor.

152' = 46.33m

137.7' = 41.97m

46.3 + 6.5 = 52.83
41.97 + 6.5 = 48.47

R.F. Hatton, Esq.,
Hon. Engineer.