

Special Foundations: the origin

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Abstract

This article explores the origins of the restriction preventing the placing of special foundations on adjoining land without consent, which was introduced in Part VI of the London Building Acts (Amendment) Act 1939. It establishes why it was introduced, and concludes that under the Party Wall etc Act 1996 that superseded it, the restriction is redundant but commonly misapplied.

1 In the Beginning

The industrial revolution, and in particular the improving technology associated with the railways, led to the use of steel structural skeleton frames in large buildings in the late nineteenth and early twentieth centuries.

Owens College in Manchester was built in 1869 and is believed to have a steel frame, as are the National Liberal Club in London built in 1887, the Midland Hotel in Manchester in 1903, and the Guinness Market Street Store in Dublin in 1904. However, the Ritz in Piccadilly, built in 1906, is generally considered to be the first substantial steel framed building in London. Selfridges, built in 1909, was probably the first to have no continuous external masonry.¹

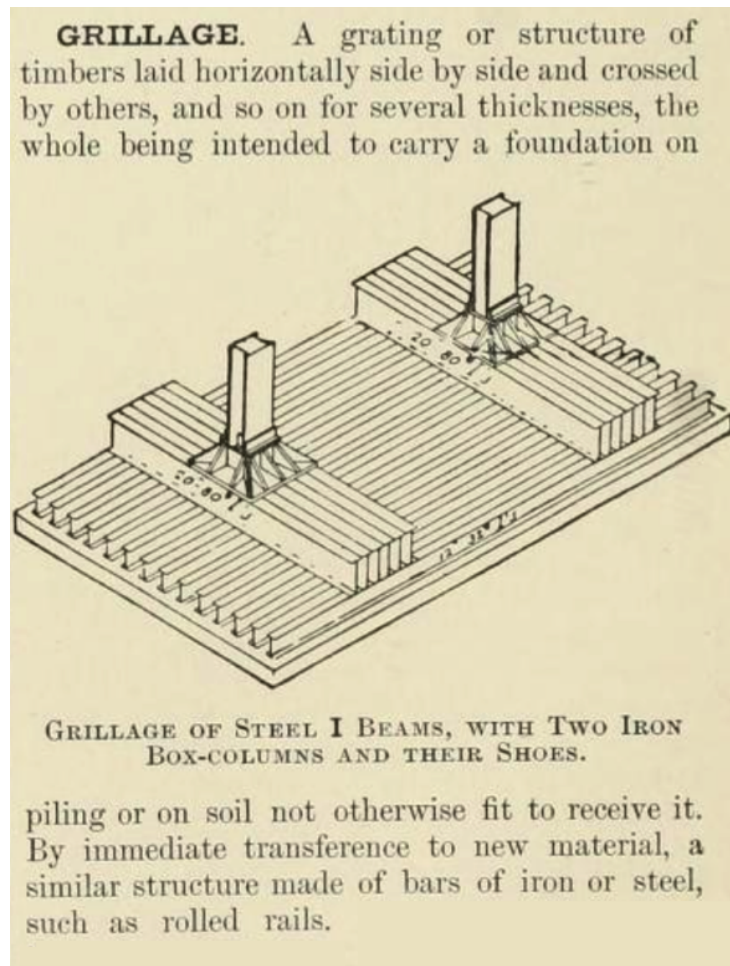
The loads in a framed building, as opposed to being distributed along footings and foundations for the full length of load bearing walls, are concentrated and transferred to the ground through columns.

Originally, the columns had to be founded on pads of sufficiently large area to distribute the load, so as to not exceed the safe bearing capacity of the ground, thus avoiding settlement. They had to project equally on all sides of the column they supported. Due to the loads involved, these pads were typically grillage foundations made of an assemblage of beams or rods, encased in concrete, later to be defined in the London Building Acts (Amendment) Act, 1939 (the 1939 Act) as special foundations.

If an external wall of a framed building were to be built close to the boundary or as a party wall, the pad foundations for its columns would need to project onto the

¹ These buildings preceded the LCC General Powers Act 1909 which for the first time included rules for the design of framed buildings in iron and steel and the power to make regulations for reinforced concrete. Those outside London were of course not subject to the London Acts.

adjacent land.² If the wall were to be built on the line of junction, there would be a statutory right to project the pads onto the adjacent land. The areas taken up by these foundations came to be of concern when development of adjacent land was found to be hindered by them.



A typical grillage foundation.³

2 The Advisory Committee on the Amendment of the London Building Act

The London Building Acts were local acts proposed and administered by the Metropolitan Board of Works (the MBW) until 1889, by the London County Council (the LCC) until 1965, and finally by the Greater London Council (the GLC) until its demise.

² This problem was originally often avoided by the use of external load bearing masonry with internal frames, or, as in the case of the Ritz by cantilevering.

³ A dictionary of architecture and building : biographical, historical, and descriptive, Sturgis, Russell, 1902, Macmillan, New York

The 1930 Act, as previous legislation, assumed foundations and walls to be continuous, restricting heights and requiring footings accordingly. The increasingly popular steel framed buildings had to be granted dispensations from the restrictions and requirements of the legislation on a case by case basis.

In 1931 the LCC *“decided that an advisory committee should be appointed to consider and report to the Council as to any necessary amendments of the London Building Act, 1930”*.⁴ The Advisory Committee on the Amendment of the London Building Act was duly set up and made its final report with recommendations in 1935. This was followed by a consultation process and the recommendations then formed the basis of the amendments introduced by the 1939 Act.

The Committee found, amongst other things, that *“problems ... have arisen as to the concentration of loads on columns and grillages as compared with loading distributed along the area of foundations of a party wall”*.⁵

The rules for the design of iron and steel framed buildings in the 1909 Act were repeated in the 1930 Act and hence were even more archaic by that time having been not even up to date in 1909. Waivers were available to permit the use of more up-to-date methods of design for framed buildings and these were formalised in the Bye-laws that were permitted by the 1935 Amendment Act (one of the first results of recommendations made by the Advisory Committee) the Bye-laws eventually coming into force in May 1938. The 1935 Amendment Act also formalised the procedure for obtaining waivers.

3 The Committee’s Proposals

The Committee’s proposals included that *“As regards grillage foundations, we recommend the inclusion among the rights of building owners of a power to place on the land of the adjoining owner, below the level of the lowest floor of his building, grillage foundations to support the columns of the building owner’s building, but we consider that the power should not be exercisable without the previous consent in writing of the adjoining owner and that compensation for any damage occasioned should be paid.”*

The Committee considered that whilst grillage foundations placed beneath the lowest part of adjoining owners’ buildings in order to support staunchions (sic) were a good thing, they should be subject to consent so as to avoid causing damage to the adjoining owner’s redevelopment interests.

⁴ Report of the Advisory Committee on the Amendment of the London Building Act, 1930, London County Council, London, 1935, Introduction

⁵ Report of the Advisory Committee, page 13

Under s113 of the 1930 Act, when erecting a new wall on the line of junction, the building owner had the right *“to place on the land of the adjoining owner below the level of the lowest floor the projecting footings of the external wall with concrete or other solid substructure thereunder”*.

The committee proposed⁶ that grillage foundations be restricted under that section to prevent them being placed on the land of the adjoining owner without his written consent (s113 is now s1 of the Party Wall etc Act, 1996 (the 1996 Act)).

The committee also proposed that, under s114, grillage foundations be permitted under a party wall for columns of the building owner. If the foundations were to project further than the footings or foundation concrete of an ordinary wall, they would be restricted as under s113 (S114 is now s2 of the 1996 Act). It is reasonable to conclude that, consistent with the enabling philosophy of the Act, the Committee only wanted to restrict the work so as not to interfere with an adjoining owner's right to develop.

Under s115, the adjoining owner was then to be given the right to require those foundations to be placed at a greater depth or made sufficiently strong to bear the weight to be carried by the columns of any building which he himself might intend to erect. S116 would require sufficient detail to be given with the notice to enable the adjoining owner to consider the effect of the grillage foundations and whether to require their modification.

4 The Consultation

With regard to the proposal to permit grillage foundations for the building owner's columns under a party wall projecting no more than would an ordinary footing and foundation, the comments received during consultation on the final report and minuted as recommendations and observations on 19 July 1938,⁷ included,

“We do not recommend the adoption of the recommendations of the Advisory Committee. We are advised that to permit a “building owner” to project steel grillages on to an adjoining site might have the result of seriously interfering with the redevelopment of that site at a later date. We, therefore, consider that an adjoining owner should have the power to veto such projections on to his site. We consider, therefore, that the section should be amended to provide that grillage foundations for columns of the building of the building owner should not, without the consent of the adjoining owner, be constructed under a party wall, on the land of the adjoining owner.”

⁶ Report of the Advisory Committee, page 33

⁷ Recommendations & Observations on Advisory Committee recommendations by the Planning & Building Regulations Committee in July 1938

5 Grillage and Special Foundations

In the 1939 Act, the term 'grillage foundations', used in both the Committee's report and the consultation paper, was replaced by the more general term 'special foundations'.

The proposal that special foundations be permitted under a party wall as a specific right at s114 of the 1930 Act (now s2 of the 1996 Act) was not included in the 1939 Act. However, somewhat anomalously, the restrictions consequential to that proposed right were included at s115 and s116, and are now s3(1)(b) and s4(i)(b)(ii) of the 1996 Act.

6 The 1939 Act

The 1939 Act, at s45(2), restricted the placing of special foundations on adjoining owners' land by removing the right to project such foundations without consent.

The right to project foundations and footings onto adjoining land under s45 followed the long-standing requirement that walls be constructed with equally projecting footings either side with foundations under, except where the line of junction was already built upon.⁸ That requirement continued essentially unaffected by the 1939 Act, although it no longer applies due to changes in construction methods.

S56(5) gave the adjoining owner the right to have any increased costs of his erection of any building or structure repaid by the building owner, following his having given consent to special foundations.

7 The introduction of the 1996 Act

Until the 1996 Act, works notifiable under party wall legislation had developed in three distinct areas, referred to in the 1996 Act as 'new building on the line of junction' (s1), 'repair etc of a party wall' (s2), and 'adjacent excavation and construction' (s6).

⁸ 1894 Act, Schedule 1, 9

Unless with the consent of the Council every wall other than a wall carried on a bressummer shall have footings:

The projection of the bottom of the footing of every wall on each side of the wall shall be at least equal to one-half of the thickness of the wall at its base, unless an adjoining wall interferes, in which case the projection may be omitted where that wall adjoins, and the diminution of the footing of every wall shall be formed in regular offsets, and the height from the bottom of such footing to the base of the wall shall be at the least equal to two-thirds of the thickness of the wall at its base.

Each area had its own set of requirements as to the giving of notice, the consequential rights and obligations, and whether written consent or an award was necessary.

Building a new wall on the line of junction but wholly on the land of the building owner brought the right to place footings and foundations on the land of the adjoining owner. This was due to the requirement mentioned above to project footings. It was only here that the right to place projecting footings and foundations, and hence the restriction on not placing special foundations without consent, on land of an adjoining owner occurred.

Excavation work on the land of the building owner but to a specified greater depth than, and within specified distances of, foundations of an adjoining owner's building or structure brought the right to underpin or otherwise safeguard those foundations, again on the land of the adjoining owner. This was in order to protect existing buildings regardless of whether they had acquired any right of support from the building owner's land.

Carrying out any work that would fundamentally affect the rights of the adjoining owner, such as erecting a new party wall, or placing special foundations on his land, required his written consent.

Carrying out work to a party structure, a shared resource, was subject to consent or award.

The right to do work on adjoining land was subject to payment of compensation, whereas the rights to do work to a party structure were subject only to making good.

In the 1996 Act, when the provisions of Part VI of the 1939 Act were extended to cover England and Wales, there was an attempt at rationalisation. The specific compensation requirements were extracted from their separate areas and applied to the three areas of notifiable works mentioned above. The restriction on special foundations on the land of the adjoining owner was extended similarly.

The conditions relating to party structures were applied to excavation works, thereby making excavation and construction on one's own land within specified distances etc subject to consent or award, whereas previously it had only been the consequent right of underpinning or safeguarding foundations on adjoining land that had been subject to control, and then only in the event of actual dispute.

8 The Present Difficulty

The present difficulty with the special foundations restrictions of the 1996 Act is not the restriction of grillage foundations adversely affecting the redevelopment of

adjoining land but the perception that that can be extended to the underpinning of party walls in basement construction.

The generalisation of the restriction on the placing of special foundations on the land of the adjoining owner has led to the belief that the restriction will also apply to underpinning a party wall in reinforced concrete. I have explained elsewhere how underpinning a party wall does not in itself constitute a foundation, but the perception often remains that underpinning will always constitute a foundation, which if reinforced will be a special foundation.

The consequence of the application of the restriction on special foundations on the land of the adjoining owner to underpinning work is unnecessary cost and delay to the building owner at no benefit to the adjoining owner.

Surveyors appointed for both parties, engineers, and often also lawyers, spend additional time discussing and negotiating the design, construction method of, and consent for, reinforced concrete underpinning of party walls. This is almost always at the sole cost of the building owner.

The adjoining owner has nothing to gain from this. It is in his interest for the underpinning to be reinforced so it will be better able to support his land and building. It is also in his interest that the underpinning takes up as little space as practicable should he later want to make use of the underpinning for his own basement. The compensation available if he were to grant consent to special foundations on his land under the Act is no greater than would flow from any work carried out under the Act. Also, there is always the risk that he may not recover all his costs from the building owner, and he may even end up having to pay some of the building owner's costs.

9 Conclusion

Since the 1939 Act, the use of special foundations as originally envisaged has ceased. Since the middle of the twentieth century, all large framed structures for high rise buildings are founded on systems of piles and ground beams, which although special foundations in themselves, can always be contained within the footprint of the building. Low rise buildings are typically founded on mass concrete trench fill foundations which, due to their depth, can usually be constructed eccentrically. In neither case is there any necessity to project onto the land of the adjoining owner.

It is clear that the special foundation restrictions were included in the 1939 Act to restrict the placing of enormous grillage pad foundations on adjoining land. They were then simply continued into the 1996 Act.

Special foundations did not become an issue again until nearly twenty years later with the advent of basement construction, now so popular in central London.

The modification of the right in the 1996 Act, s1(6), *“to place below the level of the land of the adjoining owner such projecting footings and foundations as are necessary for the construction of the wall”* effectively prevented any foundations, special or otherwise, ever being placed on adjoining land as the necessity could not be justified.

The original concern that the adjoining owner’s future redevelopment rights be protected when a building owner exercised his right to place foundations on the adjoining land, contrary to its initial purpose, has often been misappropriated so as to hinder development even where the proposals would have no adverse effect on the adjoining land.

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⁹ (First published in the Solicitors Journal 7 July 2015 and amended 14 July 2015 following comments by Lawrance Hurst)