

In the same city, localities having substantially a like character and situation should be zoned in the same manner. This principle should prevent preliminary, emergency, piecemeal or partial zoning.

Zoning should be sufficiently permanent to protect those who comply with the law, but at the same time should be susceptible of change by the municipal legislature under strict checks, so that it can be altered to harmonize with the city's growth.

Provision should be made that property owners may initiate changes or restrict the freedom of the municipal legislature to make specific changes, but the actual application of the zoning regulations to the land, and any changes therein should rest with the municipal legislature and not with the property owners.

Zoning regulations may properly be supplemented by restrictions in deeds based upon purely aesthetic reasons or for the purpose of creating a uniform residential development.

Outside of Zoning's Scope

Regulations applicable to all buildings of a class, regardless of location, such as relate to plumbing, strength of material, safety devices, or protection of employees against fire, should not be placed in a zoning law. They are properly part of a housing law, factory law or building law. Only those requirements which differ in different districts enter into a zoning law.

Zoning by the exercise of the police power of the state must relate to the health, safety, morals and general public convenience of the community. It follows, therefore, that police power zoning must be confined to police power reasons such as fire risk, lack of light and air, congested living quarters and disease-promoting conditions. The preventive regulations based on these reasons, which necessarily must be applied differently and in different measure in different districts, naturally group themselves into zoning according to use, according to height of buildings; and according to bulk, arrangement or area of lot covered by buildings. Zoning could properly go further and embrace building material requirements, commonly called fire limits, fireproof construction, uniform setbacks and doubtless other classes of regulations.

Use districts are residence, business, light industry and heavy industry. Use districts should be few. The more minute adaptation to local needs should be provided for in the area and height zoning, and by permitting special uses under conditions stated in the ordinance or under the administration of a board of building exceptions. Districts described as one-family, two-family, attached house or apartment house, have no intimate relation to the police power and are apt to invite criticism by the courts.

Pressure on Non-Conforming Structures

Where zoning regulations apply only to new buildings (as is the safer practice), non-conforming uses should be placed under a constantly pressing incentive to become conforming through time and changes.

(a) The structural alterations made in a non-conforming building should in no case exceed one-half its value, nor should the building be enlarged, unless its use is changed to a conforming use.

(b) In a residence district, no building or premises devoted to a use permitted in a business district should be changed into a use excluded from a business district.

(c) In a residence or business district, no building or premises devoted to a use permitted in a light industry district should be changed into a use excluded from a light industry district.

(d) In a residence, business or light industry district, no building devoted to a use excluded from a light industry district should be structurally altered if its use shall have been changed since the time of the passage of the ordinance to another use also excluded from a light industry district.

(e) In a residence, business or light industry district, no building devoted to a use excluded from a light industry district should have its use changed to another use which is also excluded from a light industry district if the building

has been structurally altered since the time of the passage of the ordinance.

In business and industry districts, towers without limit as to height should be allowed to occupy not over one-quarter of the lot area and they should be allowed on the street line all the way up. They should, however, stand away from side lines according to a suitable rule.

Height limitations should have a relation to street widths. A city, which has no buildings over 150 ft. in height, should allow none over that height.

Included in area limitations, there should be a limitation of families per acre extending from 140 families in the most thickly populated districts to 18 in parts of the suburbs. This regulation should also refer to the arrangement of the buildings and their adaptation for housekeeping units.

An administrative board should have power (a) to rectify on appeals the mistakes of building superintendents in passing on applications for permits; (b) to decide borderline and exceptional cases where specified in the ordinance; (c) to vary the literal requirement of the law where unnecessary hardship is caused and the intention of the law may be equally accomplished by an alternative method to be prescribed.

Not only should the powers of such a board be specified in the ordinance, but the state legislature should authorize the local legislature to create such a board and to delegate powers to it in the ordinance. It is prudent to have the ordinance prescribe a rule of conduct for such a board, as for instance that where unnecessary hardship is caused by the strict adherence to the ordinance, the board may vary the requirement in order to carry out the general purpose of the law in an equally safe or sanitary manner.

CONCRETING IN COLD WEATHER OFFERS STRONG ADVANTAGES TO OWNERS

By A. E. WELLS

President, Wells Bros. Construction Co. of Canada, Ltd.

ON the verge of winter, construction blocked in hundreds of cities; a shortage of many materials of construction and of labor; and yet withal, an acute shortage of homes, offices, stores and—in many cities—of office buildings, factories and warehouses,—what is the answer?

The answer lies in winter construction, in proceeding with work during December, January and February, which have been normally "closed" months. Winter work is not new. It has been practised for years, its safety adequately demonstrated, its economy proved. It should be more generally practised.

Any owner who, through prosecuting work during cold weather, can get occupancy of factory or warehouse, or can lease apartments, offices or store space on May 1st, stands to gain far more than the added costs of winter work.

Not only the owner, but builder, engineer and architect, gain. There is financial loss to the contractor who breaks up his trained organization, only to build it again in the spring. New men must take time to accustom themselves to working together and owners pay the bill in increased costs. Architects' and engineers' offices are frequently idle through much of the winter. Building superintendents have nothing to do and owners pay for unproductive overhead.

Perhaps the best way, then, to reduce the cost of building is to keep architects', engineers' and contractors' forces busy twelve months of the year.

Why Does Construction Stop?

Primarily the reason why building has been inactive in winter is that concrete does not harden so rapidly when its temperature hovers near freezing. But we heat our homes, offices and stores, and coal is a comparatively small operating cost. We are to-day able to enclose a structure, warm it with simple coke stoves, heat aggregates prior to mixing with Portland cement, and keep the concrete or mortar warm until hardening has occurred.