MUNICIPALITY OF ANCHORAGE



Subject:

ASSEMBLY MEMORANDUM

No. AM -2023

Meeting Date: January 23, 2024

From: Assembly Members Cross, Sulte and Brawley

AO 2023-136(S): AN ORDINANCE OF THE ANCHORAGE MUNICIPAL ASSEMBLY AMENDING BUILDING CODES AT ANCHORAGE MUNICIPAL CODE CHAPTER 23.10, ANCHORAGE ADMINISTRATIVE CODE 2018 EDITION, TO ALLOW OPTIONAL INDEPENDENT PLAN REVIEW OF STRUCTURAL DESIGN FOR

COMMERCIAL BUILDING PERMITS.

This supplemental memorandum is provided with the (S) version of the ordinance pursuant to AMC 2.30.050E. The original AO 2023-136 excluded review of plans for "significant structures" from the option for an independent plan reviewing professional. The proposed (S) version includes a significant change by allowing an independent plan reviewer for significant structures only the person is able to demonstrate they have a proven record of experience and professional performance in the field of structural engineering, including with significant structure designs. If a professional engineer can show they have this proven work history, there is no reason to limit the scope of their work by excluding significant structures from this option for independent plan review.

The changes in the (S) version are on:

- Page 4, line 36: to delete the exclusion of significant structures.
- Page 4, line 48: to establish the minimum requirements for a person to qualify as a reviewer for plans for a significant structure.
- Page 5, line 28: to require the permit application submitted for a significant structure, if using an independent plan reviewer, to include the information necessary for the Building Official to determine the person is qualified.
- Page 7: In addition to the above, AO 2023-130(S) passed by the Assembly on January 16, 2024, amended AMC 23.10. Table 3-B, and its changes are included in 1.A.(3) as well as the history note at the end of the table.

 The minimum qualifications for a person to qualify as an independent reviewing professional for a significant structure relies on terms of art that are defined in the State of Alaska's regulations for a professional engineer registered structural engineer. Understanding these facilitates understanding and confidence in allowing this option for significant structures. The following terms are used in AMC subsection 23.10.104.9.B.2.b., new in the (S) version on p. 4 line 48, and defined in State of Alaska regulations for licensing of professional engineers at 12 AAC 36.990(a):

(18) "professional work" means the time the applicant has been occupied in architecture, engineering, land surveying, or landscape architecture work of higher grade and responsibility than that of subprofessional work;

7 8 9

33 34

35

36

21

22

23 24

25

45 46

47

48

- (30) "responsible control" means that amount of control over and detailed knowledge of the content of technical submissions during their preparation as is ordinarily exercised by registered engineers, land surveyors, and landscape architects applying the required professional standard of care;
- (42) "structural engineering" means the branch of professional engineering that embraces the studies and activities relating to the investigation, evaluation, analysis, design and construction of buildings, bridges, and other structures such as walls, columns, slabs, beams, trusses, or similar members requiring force-resisting and load bearing members and their connections, or similar members used singly or as a part of a larger structure, and the organizational and economic aspects of these studies and activities.
- (47) "progressive structural experience" means the experience gained by an applicant as a structural engineer while designing one or more significant structures under the responsible charge of a registered structural engineer;

This term "progressive structural experience" is relevant to qualifications because at least two years of this experience is required before a person may take the State of Alaska's structural engineering examination to become registered, in addition to already holding a professional engineering license in a branch of engineering other than structural, set forth in 12 AAC 36.063(k):

- (k) To be eligible for the structural engineering examination, an applicant must
- (1) be currently registered as a professional engineer in this state; and
- (2) have at least two years of progressive structural experience, in addition to the eight years of education and work experience or both that are equivalent to the requirements set out in the applicable table of education and work experience requirements for a professional engineering examination in this section.

Finally, the full definition of the types of structures is provided in 12 AAC 36.990(a)(44):

- (44) "significant structures" means
- (A) hazardous facilities; in this paragraph, "hazardous facilities" means structures, housing, supporting, or containing sufficient quantities of toxic or explosive substance to be of danger to the safety of the public if released;
- (B) special occupancy structures; in this paragraph, "special occupancy structures" means
- (i) buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300;
- (ii) buildings and other structures containing an elementary school, secondary school, or day care facility with an occupant load greater than 250;
- (iii) buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500;
- (iv) medical facilities with 50 or more resident, incapacitated patients;

12

13

18

24 25 26

27

28 29

30

31

23

32 33 34

35

36

37 38

39 40 41

42 43

44

45 46

- (v) jails and detention facilities; and
- (vi) all buildings or structures with an occupant load greater than 5,000;
- (C) essential facilities that have a ground area of more than 4,000 square feet and are more than 20 feet in mean roof height above average ground level; in this paragraph, "essential facilities" means
- (i) hospitals and other medical facilities having surgery and emergency treatment areas:
- (ii) fire and police stations;
- (iii) tanks or other structures containing, housing, or supporting water or fire suppression material or equipment required for the protection of essential or hazardous facilities or special occupancy structures;
- (iv) emergency vehicle shelters and garages;
- (v) structures and equipment in emergency preparedness centers;
- (vi) standby power-generating equipment for essential facilities;
- (vii) structures and equipment in government communication centers and other facilities requiring emergency response;
- (viii) aviation control towers, air traffic control centers, and emergency aircraft hangars; and
- (ix) buildings and other structures having critical national defense functions;
- (D) structures exceeding 100 feet in height above average ground level;
- (E) buildings that are customarily occupied by human beings and are four stories or 45 feet or more above average ground level; and
- (F) bridges having a total span of more than 200 feet and piers having a surface area greater than 10,000 square feet;

The stringent requirements to first become a professional structural engineer registered with the State, coupled with the minimum experience working with significant structure designs, including as the primary design professional in responsible charge for at least two significant structure building permits, should instill the confidence in such persons to perform as an independent reviewer. The Municipality and developers should be able to utilize these skills of a person possessing such high qualifications for significant structure projects, as well as other commercial construction.

We request your support for the (S) version of the ordinance.

Assembly Counsel's Office Prepared by: Respectfully submitted: Kevin Cross, Assembly Member

District 2 - Eagle River, Chugiak and Eklutna

Randy Sulte, Assembly Member

District 6 – South Anchorage, Girdwood & Turnagain Arm

Anna Brawley, Assembly Member District 3 – West Anchorage