

SEATTLE CITY COUNCIL

Legislative Summary

CB 119420

Record No.: C	B 119420
---------------	----------

Type: Ordinance (Ord)

Status: Passed

Version: 2

Ord. no: Ord 125781

In Control: City Clerk

File Created: 10/11/2018

Final Action: 03/08/2019

Title: AN ORDINANCE relating to The City of Seattle's datum point; updating the vertical and horizontal reference datum for City of Seattle departments and outside entities as a standard elevation reference plane; requiring certain measurements for preliminary plats to be based on the updated vertical and horizontal datum; amending Chapter 1.20 of the Seattle Municipal Code; and amending Sections 23.22.020, 23.75.100, 25.06.030, 25.06.070, and 25.06.090 of the Seattle

Municipal Code.

	<u>Date</u>
Notes:	Filed with City Clerk:
	Mayor's Signature:
Sponsors: Herbold	Vetoed by Mayor:
	Veto Overridden:
	Veto Sustained:

Attachments: Full Text: CB 119420 v2

Drafter: bob.hennessey@seattle.gov

Filing Requirements/Dept Action:

History of Legislative File			Legal Notice Published:		☐ No	□ No	
Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	Mayor	10/19/2018	Mayor's leg transmitted to Council	City Clerk			
	Action Text: Notes:	The Council Bill (CB) wa	s Mayor's leg tra	nsmitted to Council. to the City	Clerk		
1	City Clerk	10/23/2018	sent for review	Council President's Office			
	Action Text: Notes:	The Council Bill (CB) wa	s sent for review	to the Council President's Office	ce		

Legislative Summary Continued (CB 119420)

Notes:

1	Council Presiden Office	r's 11/16/2018	sent for review	Civil Rights, Utilities, Economic Development, and Arts Committee	
	Action Text:		s sent for review. to the C	ivil Rights, Utilities, Economic Development, and	
	Notes:	Arts Committee			
1	City Council	12/03/2018	referred	Civil Rights, Utilities, Economic Development, and Arts Committee	
1	Civil Rights, Utilit Economic Develor and Arts Commit Action Text: Notes:	pment,			
1	Civil Rights, Utilit Economic Develor and Arts Commit Action Text: Notes:	pment, ee	: 1 Chair Herbold	ss as amended the Council Bill (CB).	Pass
2	City Council	03/04/2019	nassed		Pass
£-	Action Text:		s passed by the following 8 Councilmember B Herbold, Councilm Councilmember M Sawant	vote, and the President signed the Bill: agshaw, Councilmember González , Councilmember nember Johnson, Councilmember Juarez, losqueda, Councilmember O'Brien, Councilmember	
2	City Clerk	03/07/2019	submitted for	Mayor	
	Action Text: Notes:	The Council Bill (CB) wa	Mayor's signature s submitted for Mayor's si	gnature. to the Mayor	
2	Mayor	03/08/2019	Signed		
2	Mayor	03/08/2019	returned	City Clerk	
2	City Clerk Action Text:	03/08/2019 The Ordinance (Ord) wa	attested by City Clerk s attested by City Clerk.		

1

2

CITY OF SEATTLE

ORDINANCE 125781

COUNCIL BILL 1194 20

4 5

6

7

8

9

3

AN ORDINANCE relating to The City of Seattle's datum point; updating the vertical and horizontal reference datum for City of Seattle departments and outside entities as a standard elevation reference plane; requiring certain measurements for preliminary plats to be based on the updated vertical and horizontal datum; amending Chapter 1.20 of the Seattle Municipal Code; and amending Sections 23.22.020, 23.75.100, 25.06.030, 25.06.070, and 25.06.090 of the Seattle Municipal Code.

10 11 12

13

WHEREAS, the local vertical datum, known as the City of Seattle Datum, was established in 1883 by Ordinance 383 and amended in 1891 by Ordinance 1836; and

14

WHEREAS, it is in the interest of The City of Seattle (City) to have a standard, regional, and

WHEREAS, it is in the interest of the public safety, health, and welfare that elements of the

15

consistent vertical and horizontal reference system; and

16

City's infrastructure share a common vertical and horizontal reference system; and

17 18

WHEREAS, chapter 58.20 RCW establishes the "Washington coordinate system of 1983," based

19

on the North American Datum of 1983, as determined by the National Geodetic Survey

20

of the United States Department of Commerce, as a system for expressing positions or

21

locations of points on the surface of the earth; and

22

WHEREAS, state, local, and regional entities adopted the Washington Coordinate System as a

23

standard for expressing positions and locations of utilities, transportation elements, and

other infrastructure in Geographic Information Systems, engineering records, mapping

2425

and land records; and

26

WHEREAS, published coordinates for the National Geodetic Survey geodetic control

27

monuments, that provide the physical constraints for establishing coordinate values in the

28

Washington Coordinate System, represent the most current adjustment of the North

1 American Datum of 1983, and the City of Seattle's primary control network monuments 2 have been constrained to said monuments and adjusted to the North American Datum of 3 1983 most current per WAC 332-130-060; and 4 WHEREAS, present surveying, engineering, and Geographic Information Systems methods and 5 technologies provide for and make practicable the establishment and adherence to a 6 common horizontal reference system; and 7 WHEREAS, the Central Geographic Data Base of the City of Seattle Geographic Information 8 System was developed in and maintained in the North American Datum of 1983 (most 9 current adjustment), and a longstanding goal of the City of Seattle Geographic 10 Information Systems is to include elements from engineering design projects and other 11 sources of horizontally reference spatial features; and WHEREAS, the Washington State Department of Natural Resources, in advance of federal 12 13 changes to horizontal and vertical datum measurement standards in 2022, is pursuing 14 legislation to amend chapter 58.20 RCW to refer to the new standards and future standards, and Seattle has the same need to amend its code to refer to the new standards; 15 16 NOW, THEREFORE, 17 BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS: 18 Section 1. Chapter 1.20 of the Seattle Municipal Code, last amended by Ordinance 19 121291, is amended as follows: 20 **CHAPTER 1.20 DATUM POINT** 21 1.20.010 ((Datum point established.)) Historical datum point 22 ((A. Original)) Historical datum point. A base or datum point or line is established on the lower 23 step at the entrance to the Pioneer Block in The City of Seattle, at the southwest corner thereof,

the point or datum line being ((19.79)) 18.79 feet below the top of the step, the point or datum
line being in correspondence with the datum point or line heretofore fixed by Ordinance No. 383.

To distinguish between the historical and current vertical datum, when it is necessary to refer to
both, this historical datum point shall be known as the "City of Seattle Datum."

((B. New datum point. The North American Vertical Datum of 1988 (NAVD88) and the North American Datum of 1983 (1991 adjustment) [NAD83 (1991)] are adopted as the new official vertical and horizontal datums of the City of Seattle; said datums being defined by a series of stable, monumented points and reference stations established and maintained by the United States National Geodetic Survey.))

1.20.020 Current datums

The official geodetic datums to which geodetic coordinates, including, but not limited to, latitude, longitude, ellipsoid height, orthometric height, or dynamic height, are referenced within Seattle city limits shall be as defined for the National Spatial Reference System (or its successor).

Section 2. Work that constitutes the "practice of engineering" or the "practice of land surveying", chapter 18.43 RCW, including but not limited to, land survey maps, plans, records of surveys, plats, short plats, descriptions of real property, and boundary line adjustments, which are performed by or for The City of Seattle, or on properties and/or infrastructures owned, funded, or maintained by The City of Seattle, shall reference the current datums for Seattle whenever there is a reference to a horizontal datum (any reference to bearings, azimuths, or geographical or state plane coordinates) or a vertical component of the work, or an elevation is noted.

1 | 2 | lin | 3 | ele | 4 | and | 5 | wh | 6 | ged | 7 | no | 8 | 9 | Co

10

11

12

13

14

15

16

17

18

19

20

21

22

Section 3. All land survey maps and plans, records of surveys, plats, short plats, boundary line adjustments, and legal descriptions submitted to the City for its approval, and all plans, elevations, maps, drawings, and legal descriptions submitted to obtain permits for construction and development of private improvements, shall reference the current datums for Seattle whenever there is a reference to a horizontal datum (any reference to bearings, azimuths, or geographical or state plane coordinates) or a vertical component of the work, or an elevation is noted.

Section 4. The City of Seattle Standard Specifications for Road, Bridge, and Municipal Construction, Standard Specification 1-05.5, shall be revised to require the horizontal and vertical datums for Seattle current at the time this ordinance takes effect for all work referenced in Section 2 of this ordinance.

Section 5. Subsection 23.22.020.A of the Seattle Municipal Code, which section was last amended by Ordinance 123963, is amended as follows:

23.22.020 Content of preliminary plat application

A. Every preliminary plat application shall consist of one (((1))) or more maps together with written data including the following:

- 1. The name of the proposed subdivision;
- 2. North arrow and scale; the location of existing property lines; streets, building, if any; watercourses and all general features;
 - 3. The legal description of the land contained within the subdivision;
- 4. The names and addresses of all persons, firms, and corporations holding interest in the lands, including easement rights and interest;

1	5. The proposed names, locations, widths, dimensions, and bearings of proposed
2	streets, alleys, easements, parks, lots, building lines, if any, and all other information necessary
3	to interpret the plat, including the location of existing utility and access easements ((which)) that
4	are to remain, all horizontal references (any reference to bearings, azimuths, or geographical or
5	state plane coordinates) shall reference the ((North American Datum of 1983 (1991 adjustment))
6	horizontal datum for Seattle under Section 1.20.020;
7	6. The location of streets in adjoining plats and the approximate locations of
8	adjoining utilities and proposed extensions into the plat;
9	7. The names of adjoining plats;
10	8. The name, address, ((and)) telephone number, and seal of the registered land
11	surveyor who made the survey or under whose supervision it was made;
12	9. The date of the survey;
13	10. All existing monuments and markers located by the survey;
14	11. The zoning classification applicable to the land within the subdivision;
15	12. The conditions of or the limitations on dedications, if any, including slope
16	rights;
17	13. Contour intervals as required, based upon the ((North American Vertical
18	Datum of 1988)) vertical datum for Seattle under Section 1.20.020;
19	14. Property information including, but not limited to, address, legal description,
20	and Assessor's Parcel number;
21	15. Evidence of ownership or authorization from the property owner to make the
22	application;

an elevation above ((a fixed sea level measurement, the North American Vertical Datum of 1988

(NAVD-88))) the vertical datum for Seattle under Section 1.20.020.

22

23

2

D. If a structure is within more than one of the areas designated on Exhibit A for 23.75.100, the height limits apply separately to the portions of the structure in each area.

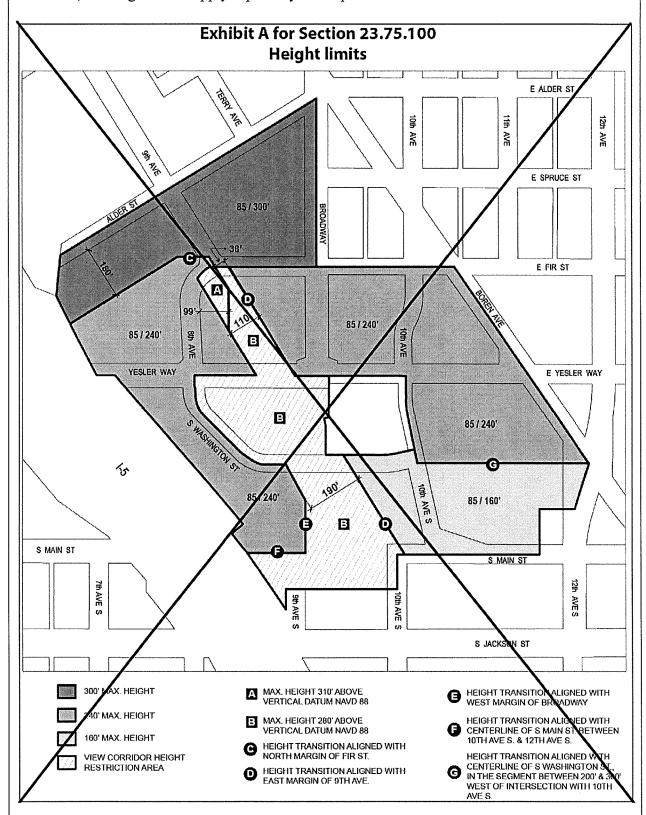
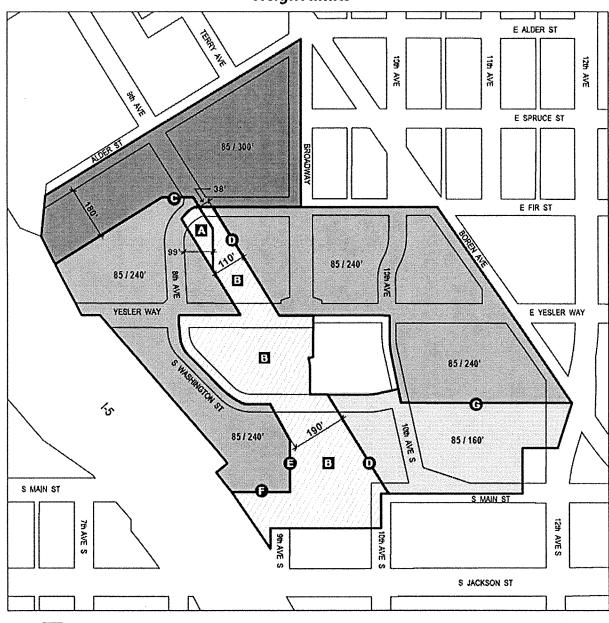


Exhibit A for Section 23.75.100 Height limits



- 300' MAX, HEIGHT
- 240' MAX. HEIGHT
- 160' MAX. HEIGHT
- VIEW CORRIDOR HEIGHT RESTRICTION AREA
- MAX. HEIGHT 310' ABOVE VERTICAL DATUM
- MAX. HEIGHT 280' ABOVE VERTICAL DATUM
- HEIGHT TRANSITION ALIGNED WITH NORTH MARGIN OF FIR ST.
- HEIGHT TRANSITION ALIGNED WITH EAST MARGIN OF 9TH AVE.
- HEIGHT TRANSITION ALIGNED WITH WEST MARGIN OF BROADWAY
- HEIGHT TRANSITION ALIGNED WITH CENTERLINE OF S MAIN ST. BETWEEN 10TH AVE S. & 12TH AVE S.
- HEIGHT TRANSITION ALIGNED WITH CENTERLINE OF S WASHINGTON ST., IN THE SEGMENT BETWEEN 200' & 300' WEST OF INTERSECTION WITH 10TH AVE S.

D2

Section 7. Subsection 25.06.030.C of the Seattle Municipal Code, which section was last amended by Ordinance 124919, is amended as follows:

25.06.030 Definitions

* * *

C. "Base flood level" and "base flood elevation" both mean the level or elevation above mean sea level, as calculated by reference to the ((National Geodetic Vertical Datum (NGVD))) vertical datum for Seattle under Section 1.20.020, of floodwaters in a particular area during flood having a one (((1))) percent chance of occurring in any given year.

Section 8. Section 25.06.070 of the Seattle Municipal Code, enacted by Ordinance 114395, is amended as follows:

25.06.070 Application for floodplain development approval or license((-))

Application for a floodplain development license or for floodplain development approval shall be made on forms furnished by the Administrators. The application shall include, but shall not be limited to, the following information:

A. Elevation prepared by a licensed surveyor or a registered professional civil engineer in relation to mean sea level, as calculated based on the ((National Geodetic Vertical Datum (NGVD))) vertical datum for Seattle under Section 1.20.020, of the lowest floor (including basement) of all structures;

B. Elevation prepared by a licensed surveyor or a registered professional civil engineer in relation to mean sea level, as calculated based on the ((National Geodetic Vertical Datum (NGVD))) vertical datum for Seattle under Section 1.20.020, to which any structure has been or will be floodproofed;

	Christopher Royak/Brandon Isleib/Bria. Jodnight SPU Datum Point ORD D2
1	C. Certification by a registered professional civil engineer that the floodproofing methods
2	for any nonresidential structure meet the floodproofing criteria in Section 25.06.110; and
3	D. Description of the extent to which any watercourse will be altered or relocated as a
4	result of the proposed development.
5	Section 9. Section 25.06.090 of the Seattle Municipal Code, last amended by Ordinance
6	121115, is amended as follows:
7	25.06.090 Functions of the Administrators((+))
8	Functions of the Administrators under this ((ehapter)) Chapter 25.06 shall include the following:
9	* * *
10	D. Where base flood elevation data is provided through the Flood Insurance Study or
11	required and obtained through subsection <u>25.06.090.</u> C above, obtain and record the actual (as-
12	built) elevation (in relation to mean sea level as calculated based on the ((National Geodetic
13	Vertical Datum))) vertical datum for Seattle under Section 1.20.020) of the lowest floor,
14	including basement, of all new or substantially improved structures, and indicate whether or not
15	the structure contains a basement;
16	***

	Christopher Royak/Brandon Isleib/Bria. odnight SPU Datum Point ORD D2
1	Section 10. This ordinance shall take effect and be in force 30 days after its approval by
2	the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it
3	shall take effect as provided by Seattle Municipal Code Section 1.04.020.
4	Passed by the City Council the 4th day of March , 2019,
5	and signed by me in open session in authentication of its passage this 4th day of
6	<u>March</u> , 2019.
7	Dem
8	President Pro Tem of the City Council
9	Approved by me this day of, 2019.
10	Jenny A Dut
11	Jenny A. Durkan, Mayor
12	Filed by me this 8th day of MARCH, 2019.
13	mai h. Simmons
14	Monica Martinez Simmons, City Clerk
15	(Seal)