

Ordinance No. 121291

Council Bill No. 114686

AN ORDINANCE amending Section 1.20.010 of the Seattle Municipal Code and Ordinances 383 and 1836 to adopt an updated vertical and horizontal reference datum for all City of Seattle departments and outside entities as a standard reference plane upon which elevations are based in the City of Seattle, or on properties and/or infrastructures owned, funded or maintained by the City of Seattle, or requiring City of Seattle permits or applicants, and amending subsection A of Section 23.22.020 of the Seattle Municipal Code to require that certain measurements for preliminary plats be based on the updated vertical and horizontal datum.

CF No. _____

Date Introduced:	SEP 8 - 2003	
Date 1st Referred:	SEP 8 - 2003	
	To: (committee) Water & Health Committee	
Date Re - Referred:	To: (committee)	
Date Fin - Referred:	To: (committee)	
Date of Final Passage:	Full Council Vote:	
9-29-03	9-0	
Date Presented to Mayor:	Date Approved:	
9-30-03	10-9-03	
Date Returned to City Clerk:	Date Published:	T.O. <input type="checkbox"/> F.T. <input checked="" type="checkbox"/>
10-10-03		
Date Vetoes by Mayor:	Date Veto Published:	
Date Passed Over Veto:	Veto Sustained:	

The City of Seattle
Council Bill/Ordinance

9/23/03 Water & Health

9-29-03 Pass

This file is complete and ready

Law Dept. Review

The City of Seattle - Legislative Department

Council Bill/Ordinance sponsored by: _____

Margaret P. Quinn
Councilmember

Committee Action:

9/23/03 ^(e)InterHealth: Pass as amended (4-0): MP, HW, RM, PS

9-29-03 Passed 9-0

This file is complete and ready for presentation to Full Council.

Committee: _____

(initial/date)

Law Dept. Review

OMP
Review

^(v)
City Clerk
Review

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*Passing into next dept
to Margaret
Full Council
M. P. Quinn
9/29/03*

ORDINANCE 121291

AN ORDINANCE amending Section 1.20.010 of the Seattle Municipal Code and Ordinances 383 and 1836 to adopt an updated vertical and horizontal reference datum for all City of Seattle departments and outside entities as a standard reference plane upon which elevations are based in the City of Seattle, or on properties and/or infrastructures owned, funded or maintained by the City of Seattle, or requiring City of Seattle permits or applicants, and amending subsection A of Section 23.22.020 of the Seattle Municipal Code to require that certain measurements for preliminary plats be based on the updated vertical and horizontal datum.

WHEREAS, the local vertical datum was established in 1883 by Ordinance No. 383, and amended in 1891 by Ordinance No. 1836, known as the City of Seattle Datum; and

WHEREAS, the current City of Seattle Datum was established by inconsistent and outdated methods and technologies and does not provide a consistent and reliable single vertical reference datum; and

WHEREAS, it is in the interest of the City of Seattle to have a standard, regional, and consistent vertical and horizontal reference system; and

WHEREAS, it is in the interests of the public safety, health and welfare that elements of the City of Seattle's infrastructure, utilities and transportation share a common vertical and horizontal reference system; and

WHEREAS, the United States National Geodetic Survey has established a national standard vertical reference system known as the North American Vertical Datum of 1988; and a national horizontal reference system known as the North American Datum of 1983, adjusted in 1991; and

WHEREAS, RCW 58.20 establishes the "Washington coordinate system of 1983," based on the North American Datum of 1983, as determined by the National Geodetic Survey of the United States Department of Commerce, as a system for expressing positions or locations of points on the surface of the earth; and

WHEREAS, state, local, and regional entities have adopted the Washington Coordinate System as a standard for expressing positions and locations of utilities, transportation elements, and other infrastructure in Geographic Information Systems, engineering records, mapping and land records; and

WHEREAS, published coordinates for the United States National Geodetic Survey geodetic



control monuments, that provide the physical constraints for establishing coordinate values in the Washington Coordinate System, represent the 1991 adjustment of the North American Datum of 1983, and the City of Seattle's primary control network monuments have been constrained to said monuments and adjusted to the North American Datum of 1983 (1991 adjustment) per WAC chapter 332-130-060; and

WHEREAS, present surveying, engineering and Geographic Information Systems methods and technologies provide for and make practicable the establishment and adherence to a common horizontal reference system; and

WHEREAS, the Central Geographic Data Base of the City of Seattle Geographic Information System was developed in and maintained in the North American Datum of 1983 (1991 adjustment), and a long standing goal of the City of Seattle Geographic Information Systems is to include elements from engineering design projects and other sources of horizontally reference spatial features; NOW, THEREFORE,

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Section 1.20.010 of the Seattle Municipal Code and Ordinances 383 and 1836 are amended as follows:

1.20.010 Datum point established.

A. Original datum point. A base or datum point or line is established on the lower 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 feet below the top of the step, the point or datum line being in ~~((correspondance))~~ correspondence with the datum point or line heretofore fixed by Ordinance No. 383.

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



1 series of stable, monumented points and reference stations established and maintained by the
2 United States National Geodetic Survey.

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4 Section 2. To distinguish between the historical and new vertical datum when it is
5 necessary to refer to both, they shall be known respectively as the City of Seattle Datum and
6 NAVD88 respectively.

7
8 Section 3. Work which constitutes the "practice of engineering" or the "practice of land
9 surveying", RCW Chapter 18.43 [effective date - 1995 c 356], including but not limited to, land
10 survey maps, plans, records of surveys, plats, short plats, descriptions of real property, and
11 boundary line adjustments, which are performed by or for the City of Seattle, or on properties
12 and/or infrastructures owned, funded or maintained by the City of Seattle, shall reference the
13 NAVD88 datum when there is a vertical component of the work or whenever an elevation is
14 noted; and shall reference the NAD83 (1991) datum when there is any reference to a horizontal
15 datum (any reference to bearings, azimuths, or geographical or state plane coordinates).
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19 Section 4. All land survey maps and plans, records of surveys, plats, short plats,
20 boundary line adjustments, and legal descriptions submitted to the City for its approval, and all
21 plans, elevations, maps, drawings and legal descriptions submitted to obtain permits for
22 construction and development of private improvements, shall reference the NAVD88 datum
23 when there is a vertical component of the work or whenever an elevation is noted, and shall
24 reference the NAD83 (1991) datum when there is any reference to a horizontal datum (any
25 reference to bearings, azimuths, or geographical or state plane coordinates).
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Section 5. The City of Seattle Standard Specifications for Road, Bridge, and Municipal Construction, Standard Specification 1-05.5, shall be amended to require the NAVD88 datum as the vertical datum and the NAD83 (1991) as the horizontal datum for all work referenced in Section 3.

Section 6. Subsection A of Section 23.22.020 of the Seattle Municipal Code, Content of preliminary plat application, as last amended by Ordinance 119791 is further amended as follows:

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



1 15. Evidence of ownership or authorization from the property owner to make the
2 application;

3 16. A signed statement of financial responsibility by the applicant and owner
4 acknowledging financial responsibility for all applicable permit fees;

5 17. Drainage plan;

6 18. Landscape plan;

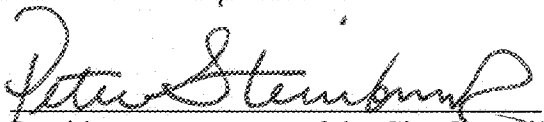
7 19. Identification of any adjacent property within three hundred (300) feet of the
8 proposed subdivision that is owned or controlled by the applicant; and

9 20. Specific location and description of all trees at least six (6) inches in diameter
10 measured four and one-half (4 1/2) feet above the ground, with species indicated.


11 * * * * *

12 Section 7. This ordinance shall take effect and be in force on January 1, 2004 if approved
13 by the Mayor, but if disapproved, it shall take effect as provided by Municipal Code Section
14 1.04.020D.

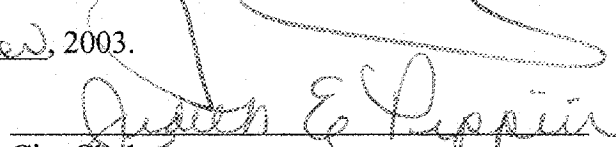
15 Passed by the City Council the 29th day of September 2003, and signed by me in open
16 session in authentication of its passage this 29th day of September 2003.

17 
18 President _____ of the City Council

19 Approved by me this 9 day of October, 2003.

20 
21 Gregory J. Nickels, Mayor

22 Filed by me this 10th day of October, 2003.

23 
24 City Clerk

25 (Seal)



City of Seattle

Gregory J. Nickels, Mayor

Office of the Mayor

August 11, 2003

Honorable Peter Steinbrueck
President
Seattle City Council
City Hall, 2nd Floor

Dear Council President Steinbrueck:

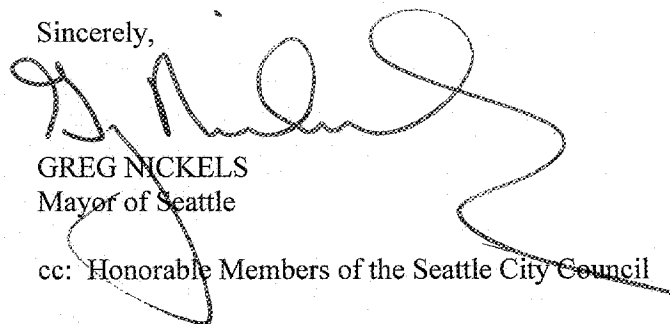
The attached ordinance adopts the North American Vertical Datum of 1988 and the North American Datum of 1983 (1991 Adjustment) as the official vertical and horizontal datums of the City of Seattle.

This legislation will establish a vertical and horizontal reference system for expressing the positions and locations of utilities, transportation elements and other infrastructure that is consistent with the standards used in the City's Geographical Information System, and with the standards used by neighboring municipalities, the State of Washington and federal agencies.

Placing all survey and engineering design work on the same datums will enable the City to more easily integrate design and survey information from multiple sources, including private consultants and outside agencies. Adopting the national standards will also simplify engineering, surveying and the development and maintenance of geographic information systems within the city, and will help to end the confusion that currently exists due to having multiple datums in use.

Thank you for your consideration of this legislation. Should you have questions, please contact Gary M. Gervelis, Seattle Public Utilities, Land Survey Manager at 206-684-5073.

Sincerely,



GREG NICKELS
Mayor of Seattle

cc: Honorable Members of the Seattle City Council



FISCAL NOTE FOR NON-CAPITAL PROJECTS

Department:	Contact Person/Phone:	DOF Analyst/Phone:
Seattle Public Utilities	Gary M. Gervelis / 206-684-5073	Cameron Keyes / 206-684-8048

Legislation Title:

AN ORDINANCE amending Section 1.20.010 of the Seattle Municipal Code and Ordinances 383 and 1836 to adopt an updated vertical and horizontal reference datum for all City of Seattle departments and outside entities as a standard reference plane upon which elevations are based in the City of Seattle, or on properties and/or infrastructures owned, funded or maintained by the City of Seattle, or requiring City of Seattle permits or applicants, and amending subsection A of Section 23.22.020 of the Seattle Municipal Code to require that certain measurements for preliminary plats be based on the updated vertical and horizontal datum.

• **Summary of the Legislation:**

This legislation adopts NAVD88 as the official Vertical Datum of the City of Seattle and NAD83 (1991) as the official Horizontal Datum of the City of Seattle.

• **Background:**

The official City of Seattle Vertical Datum was established in 1883. Since then, other agencies and private developers have used various vertical datums (including the City's datum) in and around the City. This has resulted in confusion and often expensive errors.

The United States National Geodetic Survey established NAVD88 and NAD83 (1991) as national vertical and horizontal datums. These datums are used by the City of Seattle's Geographic Information System, surrounding municipalities, utility districts, King County, the State of Washington and federal agencies.

Adopting the national standard will simplify engineering, surveying, land development, construction, and the development and maintenance of geographic information systems within the City.

X This legislation does not have any financial implications.

From: Judy Barbour
To: Sanchez, Emilia
Date: 9/26/2003 2:50:37 PM
Subject: Re: C.B. 114686

It's OK. Council wanted to delay the effective date so that the Dept could do some outreach about this ordinance, so the standard effective date language didn't apply. By setting the effective date more than 45 days out, the scenarios in subsections A, B, and C of Section 1.04.020 could never apply, so only the veto over-ride scenario in subsection D might be applicable.

>>> Emilia Sanchez 09/26/03 02:14PM >>>

Judy:

Judith asked me to contact you on this piece of legislation re

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It turns out that it was amended in committee and we wanted to make sure that you were fine with it. This will be on Monday's Agenda.

The amendment is in the effective date closing. Instead of referring it to the SMC Sec.10.04.02, it NOW refers to 1.04.02D.

If you need any further information, please do not hesitate to contact me. Thank you for your time and I hope to hear from you soon.

Emilia
3-3863



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control monuments, that provide the physical constraints for establishing coordinate values in the Washington Coordinate System, represent the 1991 adjustment of the North American Datum of 1983, and the City of Seattle's primary control network monuments have been constrained to said monuments and adjusted to the North American Datum of 1983 (1991 adjustment) per WAC chapter 332-130-060; and

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

1 15. Evidence of ownership or authorization from the property owner to make the
2 application;

3 16. A signed statement of financial responsibility by the applicant and owner
4 acknowledging financial responsibility for all applicable permit fees;

5 17. Drainage plan;

6 18. Landscape plan;

7 19. Identification of any adjacent property within three hundred (300) feet of the
8 proposed subdivision that is owned or controlled by the applicant; and

9 20. Specific location and description of all trees at least six (6) inches in diameter
10 measured four and one-half (4 1/2) feet above the ground, with species indicated.

11 * * * * *

12 Section 7. This ordinance shall take effect and be in force thirty (30) days from and after
13 its approval by the Mayor, but if not approved and returned by the Mayor within ten (10) days
14 after presentation, it shall take effect as provided by Municipal Code Section 1.04.020.

15 Passed by the City Council the ____ day of ____, 2003, and signed by me in open
16 session in authentication of its passage this ____ day of ____, 2003.

17 _____
18 President ____ of the City Council

19 Approved by me this ____ day of ____, 2003.

20 _____
21 Gregory J. Nickels, Mayor

22 Filed by me this ____ day of ____, 2003.

23 _____
24 City Clerk

25 (Seal)

STATE OF WASHINGTON – KING COUNTY

--SS.

164057
City of Seattle, Clerk's Office

No. ORDINANCE IN FULL

Affidavit of Publication

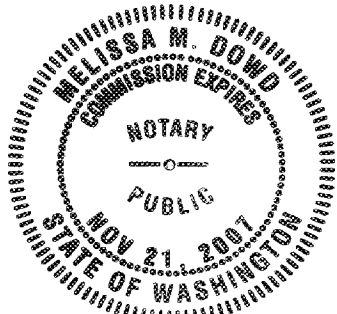
The undersigned, on oath states that he is an authorized representative of The Daily Journal of Commerce, a daily newspaper, which newspaper is a legal newspaper of general circulation and it is now and has been for more than six months prior to the date of publication hereinafter referred to, published in the English language continuously as a daily newspaper in Seattle, King County, Washington, and it is now and during all of said time was printed in an office maintained at the aforesaid place of publication of this newspaper. The Daily Journal of Commerce was on the 12th day of June, 1941, approved as a legal newspaper by the Superior Court of King County.

The notice in the exact form annexed, was published in regular issues of The Daily Journal of Commerce, which was regularly distributed to its subscribers during the below stated period. The annexed notice, a

CT:121291 ORD IN FULL

was published on

10/13/2003



Affidavit of Publication

Jennifer Huges

Subscribed and sworn to before me on

10/13/2003

Melissa Dowd

Notary public for the State of Washington,
residing in Seattle

