

ORDINANCE 1691

AN ORDINANCE OF THE CITY OF NORTH BEND, WASHINGTON, AMENDING NORTH BEND MUNICIPAL CODE CHAPTER 20.02.006, GEOGRAPHIC INFORMATION SYSTEM REQUIREMENTS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the City of North Bend (City) currently maintains a Geographic Information System (GIS) to inventory, map, and analyze the natural and human environments within the City Limits and the Urban Growth Area; and

WHEREAS, the City requires the developers of projects greater than the construction of a single-family home to provide the City with GIS data of the new built capital, enabling the City the ability to update its data as projects are completed; and

WHEREAS, the domain of GIS is rapidly evolving, necessitating flexibility and constant updates to protocols, standards, and associated requirements; and

WHEREAS, the last update to the City's GIS requirements was Ordinance 1181, enacted in 2003; and

WHEREAS, the City often receives incomplete and incompatible GIS data with respect to private development, infrastructure planning, infrastructure improvements and/or other City plans or projects; and

WHEREAS, all private and municipal project data should be received in a format that is favorable to efficient integration into the City GIS without extensive time and effort; and

WHEREAS, the City Council desires to reduce the burden on City staff to integrate project data into the City's GIS, while adding flexibility to accommodate future changes in requirements;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. NBMC Section 20.02.006 (GIS Requirements) Amended: North Bend Municipal Code Section 20.02.006 (GIS Requirements) is hereby amended to read as follows:

A. Geographic Information System (GIS) Requirements for Multifamily, Commercial and/or Industrial Development, Right-of-Way Construction

and/or Utility Improvements and Performing Plats and/or Short Subdivisions. Developers and or owners of multifamily, commercial and or industrial projects, developers required to construct right-of-way and or utility improvements and developers performing plats and or short subdivisions, shall submit to the city drawing files in ~~AutoCAD format (Version 2000)~~, the State Plane coordinate system as described below, in a version of AutoCAD and format suitable to the City Public Works Director on compact disc (CD), accompanied by original mylars (record drawings) which indicate the building footprint(s), property lines, rights-of-way, easements, utilities, utility services, grading and all impervious surfaces. All changes from the original approved plans shall be clearly marked on the record drawing to reflect as-built conditions. The AutoCAD drawing files shall also reflect as-built conditions and shall be supplied in the format listed below:

The AutoCAD files shall be structured so that the following drawing entities are developed using a single polyline or circle that closes on itself, to create a polygon. The entities shall be placed on a unique layer as listed.

	Entity	Layer
1.	Drainage Easements	DRNEASE
2.	Utility Easements	UTILEASE
3.	Parcels (property)	PROP
4.	Water Easements	WEASE
5.	Sewer Easements	SSEASE
6.	Pavement	ROAD
7.	Structures	BLDG
8.	Impervious Surfaces	IMPERV
9.	Road right- of-way (one polygon for each road)	ROW
10.	Paved surface area for each road (if a road has bike lanes the polygon representing the paved surface shall have the	ROAD

	Entity	Layer
	inside line of the bike lane for the boundary of road polygon)	
	Entity	Layer
11.	Bike lane polylines shall run the length of the road and shall represent the outer edge of the paved surface	BIKE
12.	Planting strips	PSTRIP
13.	Wells	WELL
14.	Reservoirs	RESERVOIR
15.	Wetlands	WETL

The following drawing entities shall be developed as polylines. Each entity shall be placed on the proper layer as listed.

	Entity	Layer
16.	Center line polylines shall run from intersection to intersection (one per road)	CL
17.	Cable T.V. (shall run from riser to riser)	TV
18.	Creeks and streams (beginning to discharge)	CREEK
19.	Ditch polylines shall run from culvert to culvert and shall represent the centerline of the ditch	DITCH

	Entity	Layer
20.	Gas line shall run from valve to valve (two-inch gas line would be located on layer G2, three-inch on G3, etc.)	G(size)
21.	Gas service stubs shall run from the tee to the end of the service	GSTUB
22.	Gravel shoulders shall be represented by a line running along the outer edge of the shoulder area (two per road if applicable)	SHLD
23.	Power lines shall run from transformer to riser or feeder line to riser	POW
24.	Telephone lines shall run from riser to riser or manhole to manhole	TEL
25.	Water lines shall run between valves and/or fittings (two-inch water lines would be located on layer WL2, three-inch on WL3, etc.)	WL(size)

The following drawing entities shall be developed as single points representing the location of the center of the item they represent. The city will allocate the proper symbols to these points once the drawing is translated into the city of ~~North Bend's~~ City's geographic information system (GIS). The points shall be placed on the proper layer as listed.

	Entity	Layer
26.	Survey monument	MON
27.	Set monument in case	SMON
28.	Found monument in case	FMON
29.	Set rebar for lot corner	LOTCOR
30.	Existing property corner	PROPCOR
31.	Point of tangency	PT
32.	Point of curvature	PC
33.	Electrical manhole	EM
34.	Electrical transformer	ET
35.	Electrical vault	EV
36.	Fire hydrant	HYD
37.	Gas valve	GV(size)
38.	Luminaire (street light)	LUM
39.	Street light pole	LTPOLE
40.	Pull box for street light	LTBOX
41.	Storm drainage catch basin	SDCB
42.	Storm drainage curb inlet	SDCI
43.	Sanitary sewer manhole	SSMAN
44.	Sign	SIGN
45.	Telephone manhole	TM
46.	Telephone riser	TR
47.	Cable TV riser	TVR
48.	Water valve	VALV(size)

	Entity	Layer
49.	Double check valve assembly	DCV
50.	Water meter	WM(size)
51.	Blowoff assembly	BLOWOFF
52.	Power pole	PPOLE
53.	Utility vault	UVAULT
54.	Air vacuum and release assembly	AIRVAC
55.	Back flow prevention assembly	BFP

The following drawing entities shall be developed as polylines. Start/end parameters are listed in the entity description. Each entity shall be placed on the proper layer as listed.

	Entity	Layer
56.	Sanitary sewer force mains shall start at lift stations and terminate at discharge point	FM(size)
57.	Sanitary sewer lines shall run between manholes as a single line. (eight-foot sewer lines shall be located on layer SS8)	SS(size)
58.	Sanitary side sewer stubs shall run between main line and end of stub	SSTUB(size)
59.	Storm drain lines shall run between catch basins as a single line.	SD(size)

	Entity	Layer
	(12-inch storm drain lines shall be located on layer SD12, eight-inch on SD8, etc.)	
60.	Water service lines shall run from valve to end appurtenance or cap	WS(size)

Any other unique features not listed above shall be given a descriptive layer name. A layer list shall be provided with the drawing files to indicate what additional layer names represent. All construction information and pertinent text information provided on the drawings shall be placed in a layer called REFTEXT. Associated leaders, dimension lines and arrows can also be placed in this layer.

Lines associated with node points (i.e., sewer lines and manholes, water lines and valves, etc.) shall be drawn with the end point of the line two drawing units away from the point it's associated with.

A complete set of project drawings and specifications shall be provided with the AutoCAD drawing files to provide data such as fire hydrant model number, pipe material type, valve end types, etc.

Lines that are intended to remain separate must be separated by a space greater than two drawing units. The AutoCAD drawing file shall be drawn with one drawing unit equals one foot and shall be supplied showing the complete project in one drawing file including any cross-referenced files. AutoCAD drawing files separated into different sheets will not be accepted. Drawing files shall be oriented with north at the top of the screen and shall be tied to the coordinate system utilized by the City's ~~geographic information system~~ GIS. See the spatial reference information guidance in subsection B below. AutoCAD deliverables will be considered incomplete and as a result postpone project closeout until spatial reference requirements are met. Labor hours spent by the City GIS Technician on project data integration will be charged to project accounts.

~~Spatial Reference Information:~~

~~Horizontal_Coordinate_System_Definition:~~

~~Planar:~~

~~Grid_Coordinate_System:~~

~~Grid_Coordinate_System_Name: State~~

Spatial Reference Information:

Plane Coordinate System: 1983

State Plane Coordinate System:

SPCS Zone Identifier: 5601

Lambert Conformal Conic:

Standard Parallel: 48.7333

Longitude of Central Meridian:
-120.8333

Latitude of Projection Origin: 47.0

False Easting: 500,000

False Northing: 0

Planar Coordinate Information:

Planar Coordinate Encoding Method:
coordinate pair

Coordinate Representation:

Abeissa Resolution: not determined

Ordinate Resolution: not determined

Planar Distance Units: survey feet

Geodetic Model:

Horizontal Datum Name: North American
Datum of 1983

Ellipsoid Name: Geodetic Reference
System 80

Semi-major Axis: 6378137

Denominator of Flattening Ratio: 294.98

B. Spatial Reference Requirements. The spatial reference of all datasets shall be the same as the standard projection for King County GIS data at the time of data delivery, a specified version of State Plane Washington, Feet. The specific projection can be obtained on the King County GIS Center website Data Standards page, or by contacting the City.

The owner's registered land surveyor or engineer shall certify the accuracy of the record drawings and shall affix his seal and signature to the original mylars.

~~BC. Other City of North Bend Plans and Projects. All supporting documentation for other eCity of North Bend plans and projects not defined in subsection A of this section shall be a deliverable in a compatible format with the City's city of North Bend's geographic information system GIS. The approved GIS formats are Esri ArcInfo Coverage Files ArcGIS File Geodatabase, Personal Geodatabase, and~~

~~Are View Shapefiles; and AutoCAD drawing files are accepted if spatially referenced as described in subsection B. The approved format for tabular files is Microsoft Access database tables, Microsoft Excel files, and/or Database IV CSV files. All supporting documentation including metadata shall be submitted with the above files. AutoCAD drawing files shall be drawn with one drawing unit equals one foot and shall be supplied showing the complete project in one drawing file including any cross-referenced files.~~

~~ED. Noncompliance. Owners that do not comply with all or any part of the requirement described herein shall pay the cost for the ~~city~~ City (or the ~~city's~~ City's consultant) to perform the work required to bring the owner's drawings into conformance with the requirements herein. Costs for said work shall be billed on time and materials, based on the rate established in the ~~city fee~~ City's Taxes, Rates, and Fees schedule posted on the City website. Projects will not be closed out until all associated data is integrated into the City's GIS.~~

~~DE. Exemptions.~~

- ~~1. Building permits for construction and or remodeling of a "dwelling, single-family" as defined in NBMC 18.06.030 are specifically exempt from this section.~~
- ~~2. Mechanical permits are specifically exempt from this section.~~
- ~~3. Plumbing permits are specifically exempt from this section.~~
- ~~4. Building permits for single-family residential accessory uses, as defined and described by NBMC 18.06.030, 18.10.030 (1.51 and 1.52), and 18.10.050 (1.51), including but not limited to carports and garages (detached), fences, decks, patios, swimming pools, sports courts, hot tubs, storage buildings, and accessory dwelling units (ADUs) are specifically exempt from this section.~~

~~E. Hardship Clause. In the event of unusual or unreasonable hardship which maybe caused by the imposition of this GIS submittal requirement, a written appeal may be made to the director of the community services department for an exemption from the GIS submittal requirements; provided, any applicant for a hardship exemption must demonstrate why it is a hardship based on evidence that complying with the GIS submittal requirement incurs a disproportionate cost in relationship to the total project value or is physically impossible.~~

F. Administrative Amendment to Submittal Standards. It is anticipated that the technical standards for submittals as outlined in the GIS plan submittal requirements will need to change periodically to be compatible with changes in computer software and hardware. To permit timely update of the GIS plan submittal requirements the community services director is

authorized to adopt revised requirements by administrative rule. The rules adopting new GIS plan submittal requirements shall be numbered sequentially, dated and signed by the ~~community services director~~ Public Works Director, and made available to the public. A copy of the revised GIS plan submittal requirements shall be forwarded to the mayor and council for their information.

Section 2. Severability: Should any section, paragraph, sentence, clause or phrase of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

Section 3. Effective Date: This ordinance shall take effect and be in full force five (5) days after the date of signing.

ADOPTED BY THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS 18TH DAY OF JUNE, 2019.

CITY OF NORTH BEND:

APPROVED AS TO FORM:

Kenneth G. Hearing, Mayor

Eileen M. Keiffer, City Attorney

Published: June 28, 2019
Effective: July 3, 2019

ATTEST/AUTHENTICATED:

Susie Oppedal, City Clerk