CHAPTER 8: UTILITIES ELEMENT

I. REQUIRED ELEMENTS

GMA LAND USE PLANNING GOALS (RCW 36.70A.020)

The Washington State Growth Management Act (GMA) includes 14 goals, which were adopted to guide the development and adoption of comprehensive plans and development regulations. While all of these goals are important, the goals that are most directly related to the public facilities, services, utilities element state:

> *Public Facilities and Services. "To ensure that adequate public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards."*
>
> *Public Facilities. To include streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools.*

COUNTYWIDE PLANNING POLICIES

In 1991, GMA was amended requiring each county legislative body planning under the act to adopt countywide planning policies in cooperation with the cities in the county. This framework provides for consistency amongst the different governmental agencies' plans. The plans must address issues that uniformly affect the county as a whole including the siting of public facilities, transportation facilities, housing, economic development, and land use development.

The Lewis County Planned Growth Committee adopted updated planning policies in December 2006. The requirements of the countywide planning policies were considered

along with other factors to determine the direction of the Utility Element for the City of Centralia. The Countywide Planning Policies can be reviewed in Appendix C.

II. RELATIONSHIP TO OTHER PLANS

The following lists other plans and documents that relate to the development and implementation of the updated 2006 Comprehensive Plan. For more in-depth information on these subjects refer to the listed documents.

- **Lewis County Comprehensive Plan.** The Lewis County Comprehensive Plan was adopted in April, 2002.
- **Port of Centralia Comprehensive Plan.** The current Port Comprehensive Plan was adopted in November 1990 and revised in November 1994, September 1996, March 2003, and in September 2006.
- **City of Centralia Water Plan.** The Water Plan was adopted in December 2005
- **Surface/Storm Water Management Plan.** The Storm Water Management Plan should be adopted in winter of 2007 or spring of 2008.
- **General Sewer Plan and Wastewater Treatment Plant Facilities Plan.** The Plan was approved and adopted in the Spring of 2000.
- **City Light and the Yelm Project Comprehensive Plan.** The City Light Plan was approved in December 2002.
- **Airport Master Plan/Chehalis-Centralia.** The Airport Master Plan was approved Fall 2001.
- **Parks and Recreation Plan.** The Parks and Recreation Plan (Element)
- **Transportation Plan.** The Transportation Plan (Element)
- **Downtown Centralia Revitalization Plan, Phase I.** The Phase I Revitalization Plan was approved in June 2003.
- **Downtown Centralia Revitalization Plan, Phase II.** The Phase II Revitalization Plan was approved in October 12, 2004
- **Centralia School District Capital Facilities Plan.** The Capital Facilities Plan for the Centralia School District should be approved in the summer/fall of 2007.
- **Centralia College Master Plan.** The Centralia College Master Plan was approved on September 2002.
- **Solid Waste Management Plan.** The Plan was approved by the County Commissioners in April 2000.
- **Transit Development Plan.** The Transit Development Plan 2007-2012 was approved March 2007.

III. INTRODUCTION

One aspect of managing growth in the City of Centralia is ensuring that needed public facilities, infrastructure and services are available when growth occurs. The implementation

of a well thought-out plan for public facilities, utilities and services will help Centralia realize its vision. Implementation of the City's land use plan is contingent on the development of needed infrastructure in a timely and orderly fashion.

IV. CITY UTILITIES

The City of Centralia owns and manages a number of municipal utilities including water, sewer, storm water, and electrical. In addition to facilities owned and managed by Centralia, there are a number of publicly-owned facilities managed by other special districts, which provide for some of Centralia's needs like sanitation.

Non-city managed utilities within Centralia's city limits and UGA include: natural gas, cable-tv, internet and telephone (land-lines and wireless). These utilities provide valuable services to the residents and businesses of Centralia.

A. WATER

The City's water system is described in a report titled City of Centralia Water System Plan Update (2005), a comprehensive plan for the City of Centralia, Washington. The report describes the existing water supply and distribution system as well as proposed improvements necessary for serving customers within the City's municipal boundaries, designated Urban Growth Area (UGA) and water service area.

Description of System

The City of Centralia water utility is a Class A water system within the State of Washington, serving approximately 7,300 customers. The average day consumption is 2.44 MGD (2004) with the maximum day production of 4.40 MGD. The system is made up of approximately 124 miles of ductile iron, asbestos concrete, galvanized, or PVC water mains. The City's water source is groundwater from seven wells: Fords Prairie (3 wells) and Tennis Court (2 wells) are the main source of supply, K Street and Washington wells provide back up for the main wells. The City also has surface water rights on the North Fork Newaukum River and five (5) additional inactive wells.

In total, the City has water rights for 9,141 acre feet per year, with an instantaneous production rate of 10,033 gallons per minute (gpm). The City currently has just over 8.06 million gallons in water storage located in five reservoirs. Seven service zones are located throughout the City which relate to the various elevations and pressures.

Ground Water Wells

The City's water system currently relies entirely on groundwater for its potable water supply. The Newaukum River intake is not used due to its status as an unfiltered surface water source which can not presently meet the requirements of the Surface Water Treatment Rule (SWTR). However, the transmission line from the Newaukum source and associated property along the alignment is still maintained for potential future use.

The primary sources of supply for the City are the Tennis Court and Fords Prairie well fields (including Eshom Well). Seasonal peaking supply is provided by the K Street Well, and the Washington Well exists as an emergency backup supply. The remaining City wells are considered inactive due to a variety of water quality concerns.

Well Name/Location	Capacity (gpm)	Comments
Fords Prairie Wells		
Well No. 1	960	Primary Source
Well No. 2	1,270	Primary Source
Eshom Well	1,200	Primary Source
Tennis Court Wells		
Well No. 1	1,300	Primary Source
Well No. 2	605	Primary Source
K Street Well	750	Seasonal Source
Washington Well	1,000	Emergency Source
North Tower Well	400	Inactive (reserve)
Downing Well	700	Inactive (reserve)
Riverside Well	700	Inactive (reserve)
Borst Park Well		
Well No. 1	812	Inactive (reserve)
Well No. 2	1,200	Inactive (reserve)

Current Deficiencies/Excess Capacity

The City's water system is excellent in overall quality of service, regulatory compliance, and operational care. However, there are improvements necessary to address specific issues in several areas.

A significant long term issue facing the City is the provision of an adequate water supply, in terms of quantity and reliability. While the City's existing supplies are sufficient to meet present needs, it is projected that the City will have a source deficiency of approximately 1.5 MGD by 2025. Therefore, additional supply is needed to ensure that those long-term needs are met.

Furthermore, in the past the City had a high level of source reliability by having the capability to use either surface or groundwater supplies. If the infrastructure supplying one source was in need of repair, water quality concerns were encountered or water was not available for any reason the other source could be used. To return to this level of reliability, and to meet projected long-term supply needs, the City has applied for a surface water source of supply on the Skookumchuck River, based in part on an existing agreement between the City and TransAlta.

In addition to this additional source of supply, there are other system elements that require upgrades to meet primarily future needs. The majority of anticipated growth is expected to occur outside of City Limits and within higher elevation pressure zones. As such, pump station upgrades and transmission main extensions are needed in areas such as Cooks Hill and Davis Hill to support future water demand growth. Proposed storage reservoirs on

Davis Hill (250,000 gallons) and Widgeon Hill (300,000 gallons) will serve to meet needs in these potentially high growth areas.

Portions of the water system require improvements to meet fire suppression capabilities. Distribution line upgrades have been identified in select areas to resolve fire flow deficiencies. Storage reservoirs have been identified for Zenkner Vally (175,000 gallons) and Seminary Hill (300,000 gallons) pressure zones, to improve fire flows and overall reliability in these higher zones.

Other piping improvements serve to increase looping and optimize flow conditions throughout the system. For additional details about capital improvements please refer to the Capital Facilities Element or the City of Centralia Water System Plan Update.

Finance

The City of Centralia's water utility financing is reviewed every year during the budget process. Formal rate studies are scheduled as needed. These studies review the water system, the system revenue requirements, projected expenses, and develop water rates using a cost of service analysis as the basic framework. Under this cost of service framework, users are charged their proportionate share of the costs of the utility, where each share is based on the respective use of the system. The rate structure of the City is predicated on the concept that each user or user class pays for the services received and neither subsidizes others nor receives a subsidy. This approach results in water rates that are adequate to meet the financial needs of the utility and are equitable. Revenue requirements are calculated based upon historical trends, anticipated system growth, expected levels of inflation, and planned capital improvements. More complete details on utility financing projections are included in the Capital Facilities and Financing Element (Chapter 9). The most recent water rate study was completed in December of 2005 by the City.

B. SEWER

The City's sewer or wastewater system is described in a report titled General Sewer Plan (2000) a comprehensive plan for the City of Centralia, Washington. The report describes the existing sewer collection, conveyance and treatment system as well as proposed improvements necessary for serving customers within the City's municipal boundaries and its designated Urban Growth Area (UGA).

Description of System

A look at the history of the sewer system in Centralia provides a perspective on how and why the system was developed, which helps to explain the current system configuration.

The sewer was built for the downtown area between 1906 and 1914, using clay pipe. The system was expanded between 1924 and 1970 to include areas west and north of downtown, as well as Fords Prairie using concrete pipe. Concrete pipe installed before 1965 used mortar joints between the pipe lengths. It was not until after 1965 that joints

with gaskets were widely used. Asbestos-cement and concrete pipe were used to expand the collection system between 1960 and 1975 west and south of the old wastewater treatment plant off of Mellen Street. PVC pipe has been used for subsequent expansions, such as Ford's Prairie and Waunch Prairie. Much of the system is in low-lying areas with highly permeable gravely soils. Because of the flatness of the terrain, outlying developments have had to employ pump stations to convey sewage to the main gravity collection system serving the old wastewater treatment plant at Mellen Street. As a result many pump stations serve only a single development and the City has numerous sewer pump stations to operate and maintain.

The City's new wastewater treatment plant is located northwest of the City's UGA boundary adjacent to the Chehalis River and provides primary and secondary treatment for the City. The wastewater processing units consist of a headworks, aeration basins, clarifiers, UV disinfection, and a plant effluent outfall. Solids processing includes grit removal, dewatering, lime stabilization, heat pasteurization and land application of the resulting Class A extraordinary quality biosolids on the City-owned farm property where hay and occasionally other crops are grown.

The City sewer service area is divided into 28 sewer drainage basins within the City limits and it's UGA. This is the area in which the City currently provides sewer service or is planning to provide service to customers. Outside this service area boundary, Lewis County is responsible for all sewer service, including onsite disposal systems such as septic tanks. In cases where local soil conditions make it difficult to treat sewage with septic systems and there are documented human health risks from failing septic systems, the City and County have worked together to extend sewer to those existing homes with failing septic systems.

Collection System

The City's sewer collection system contains over 65 miles of gravity pipelines ranging in diameter from 6-inches to 30-inches. A majority of the City's pipelines are: Polyvinyl (160,317 ft), Concrete (118,261 ft), Asbestos Cement (31,203 ft), Clay (30,177 ft) and Ductile Iron (4,442 ft).

Pump Stations

The sewer system includes 24 pump stations, located in 8 of the 28 sewer drainage basins. Many of the pump stations were installed to serve individual developments. The City is in the process of developing a philosophy that would ultimately strive to serve as many areas as possible by gravity but would allow pump stations or grinder pumps for individual developments in a case by case basis.

Current Deficiencies/Excess Capacity

The overall quality of service, regulatory compliance, and operational care provided for the City's sewer system is very good. However, there are improvements necessary to address specific issues in several areas. For additional details about capital improvements refer to the Capital Facilities Element of the General Sewer Plan.

Finance

The City of Centralia's wastewater water utility financing is reviewed every year during the budget process. If an adjustment to water rates appears necessary a formal rate study is scheduled. The most recent rate waste study was completed in November of 2003. These studies review the sewer system, the system revenue requirements, projected expenses, and develop sewer rates using a cost of service analysis as the basic framework. Under this cost of service framework, users are charged their proportionate share of the costs of the utility, where the shares are based on the respective uses of the system. The rate structure of the City is predicated on the concept that each user or user class pays for the services received and neither subsidizes others nor receives a subsidy. This approach results in sewer rates that are adequate to meet the financial needs of the utility and are equitable. Revenue requirements are calculated based upon historical trends, anticipated system growth, expected levels of inflation, and planned capital improvements. The rate study factors in revenue from sources other than sewer rates such as system development charges and interest income. More complete details on utility financing projections are included in the Capital Facilities and Financing Element (Chapter 9).

C. STORM WATER

The City's storm water system is described in a report titled Surface/Storm Water Management Comprehensive Plan for the City of Centralia, Washington (2007). This document describes the City's existing storm water system, existing operation/maintenance of the system, existing policies and staffing resources and proposed improvements necessary for complying with the Phase II Stormwater Permit for Western Washington within the City's municipal boundaries and its designated Urban Growth Area (UGA).

Description of System

Centralia's storm water infrastructure within the City and its urban growth area consists of the following system elements: 34 miles of curbs and gutters, 14 miles of gravel shoulders, 22 known culverts, 153,300 linear feet of storm water conveyance pipe and 1,533 catch basins (based on the assumption that there are three catch basins and 300 linear feet of storm water conveyance pipe per manhole), 71 drywells, 511 manholes, 16 retention/detention storm water facilities, 31 outlets and ¼ to ½ mile of open ditch.

Current Deficiencies

Areas within the City of Centralia and its urban growth area regularly experience poor storm water drainage due to their location in a floodplain, their elevation in relationship to surrounding areas and their proximity to several rivers and streams that are often full to nearly the top of their banks during heavy rainfall events. These conditions limit the rate that stormwater runoff can flow out of peoples yards and along the streets to a low-lying area with the capacity to accept the water. These conditions are compounded by an old conveyance systems that is in some places undersized for the area it serves, is in need of repair, or because there is no provision for drainage other than surface runoff along the

edges of City streets. In addition, rivers and streams that run through or around Centralia have documented declines in water quality, and loss of aquatic habitat. Stormwater runoff can contribute to these concerns because of the pollutants it carries or the volumes and velocities of runoff.

For a complete list of surface water problem locations in the City of Centralia please refer to the Surface/Storm Water Management Comprehensive Plan for the City.

Finance

The City of Centralia's Stormwater utility financing is reviewed every year during the budget process. If an adjustment to water rates appears necessary a formal rate study is scheduled. The most recent Stormwater rate study was completed by the City Utilities Department in December 2004. This study reviewed the storm water system, the system revenue requirements, projected expenses, and developed an initial rate using the amount of impervious surface (and type of runoff controls) as the basic framework. Users are charged their proportionate share of the costs of the utility based on the respective runoff contributed to the system. The rate structure of the Stormwater Utility is predicated on the concept that each ratepayer benefits from City streets and management of the stormwater system that uses those streets. This approach results in rates that are adequate to meet the initial financial needs of this new utility in Centralia and are equitable. Revenue requirements are calculated based upon historical trends, anticipated system growth, expected levels of inflation, and planned capital improvements. The rate study factors in non-rate revenue such as system development charges and interest income. More complete details on utility financing projections are included in the Capital Facilities and Financing Element (Chapter 9).

D. ELECTRICAL

The City's electrical system is described in a report titled City Light and the Yelm Project Comprehensive Plan (2002) for the City of Centralia, Washington. The report describes the existing electrical supply and distribution system as well as proposed improvements necessary for serving the land in within the City's municipal boundaries and the designated Urban Growth Area (UGA).

Description of System

Centralia City Light is part of the City of Centralia Utilities Department. City Light provides electric power to customers within the City limits and to customers in adjacent areas of Cooks Hill, Seminary Hill and Salzer Valley. The City's electrical distribution system serves nearly 10,000 customers. Approximately 8,500 are residential customers with the remainder being commercial and industrial users.

Production Plant (Yelm Project)

The City's production plant is the Yelm Hydroelectric Project. It is a run-of-the-river project on the Nisqually River in Thurston County, Washington that was dedicated in 1930. The project uses a diversion dam with fish screens and fish ladder to convey up to

800 cfs of water into a 9.1 mile long earthen power canal. The power canal leads to a forebay, which has a trash rack and emergency bypass structure. The water then enters two penstocks that drop to a powerhouse located on the bank of the Nisqually River. The powerhouse contains two 3 MW vertical turbine/generators and a single 6 MW vertical turbine/generator. These units provide electricity that is stepped up to a 69 kV in the powerhouse switchyard. The Yelm project produces between 2.2 and 12 MW of power and an average generation of 75,000 MWh.

Transmission System

The City's transmission system is a 26.2 miles 69-kV transmission line from the Yelm Project to the City Light "B" Street Substation. Bonneville Power (BPA) also has a 69-kV transmission line going to the B Street Substation. While the power from the Yelm Project is important to the City, the City purchases more power from BPA than it produces from Yelm. The Yelm Project has historically supplied about 25 to 37 percent of the total energy required by the City. Therefore, the 69-kV BPA transmission system supplies most of the energy used by the City and its customers. BPA delivers electricity to the City system at the B Street, Fords Prairie, and Zimmerman substations. New substations that tie into the BPA system are under development on Cooks Hill and within the Port of Centralia's North Port development.

Distribution Lines

City customers are served by 250 miles of 12-kV distribution line. Approximately 230 miles are overhead and the remaining 20+ miles are underground. The (overhead) distribution system is composed of fifteen major feeders.

The City currently owns and maintains three major substations: (1) B Street Substation, (2) Fords Prairie Substation, and (3) the Zimmerman Substation. All three provide a distribution primary voltage of 12.47-kV. New substations are under development on Cooks Hill and within the Port of Centralia's North Port development.

Recommendations to the Electrical System

The overall quality of service, regulatory compliance, and operational care provided for the City's electrical system is excellent. However, there are improvements necessary to address specific issues in several areas.

Significant issues facing the City include pole maintenance. A very high percentage of the distribution poles are over 25-plus years old. The City should expect to replace between 110-220 poles per year. Additional recommended improvements include more tree trimming, enhancing the GIS system and building capacity to serve anticipated growth in demand. For additional details about capital improvements please refer to the Capital Facilities Element or the City Light and the Yelm Project Comprehensive Plan.

Finance

The City of Centralia's electrical utility financing is reviewed every year during the budget process. If an adjustment to electric rates appears necessary, a formal rate study is scheduled. The most recent electric rate study was completed in December of 2006 and resulted in bonding for 15.9 million dollars. Rate studies review the electrical generation and distribution system, system revenue requirements, projected expenses, and develop electric rates using a cost of service analysis as the basic framework. Under this cost of service framework, users are charged their proportionate share of the costs of the utility, where each share is based on the respective use of the system. The rate structure of the City is predicated on the concept that each user or user class pays for the services received and neither subsidizes others nor receives a subsidy. This approach results in electric rates that are adequate to meet the financial needs of the utility and are equitable. Revenue requirements are calculated based upon historical trends, anticipated system growth, expected levels of inflation, and planned capital improvements. More complete details on utility financing projections are included in the Capital Facilities and Financing Element (Chapter 9).

E. NON-CITY MANAGED UTILITIES

Natural gas, cable television, telephone, cellular telephone and high-speed internet are non-city managed private utilities. Although cities and counties do not regulate these utilities, the State Growth Management Act (Growth Management Act of 1990) requires all cities and counties to consider the location of existing and proposed utilities and potential utility corridors in land use planning. With adoption of GMA, current law now suggests that both the Washington Utilities and Transportation Commission (WUTC) and Centralia have principal jurisdiction over actions of electric, gas and telephone utilities within the corporate limits of Centralia.

The WUTC has the authority under long-standing state law to regulate the services a private utility can provide, to define the costs that a utility can recover and to ensure that the utility acts prudently and responsibly. The City of Centralia has the authority to regulate land use and, under GMA, to plan for adequate provision of utilities consistent with the goals and objectives of its Comprehensive Plan, taking into consideration the public service obligation of the private utility involved.

Franchise agreements are common with utility companies and cities. The City has entered into a number of franchise agreements to provide services like solid waste, natural gas, telephone, and cable TV.

The following are some common concerns for all utilities:

1. Adequacy of Service: Centralia wants to ensure that private utilities provide adequate service for projected growth within the City and the UGA. It is the City's intention to facilitate the provision of private utility services by continuing to work cooperatively.

2. Environmentally Critical Areas: Both the City and private utility providers support the protection of environmentally critical areas while providing facilities necessary for high quality service. Activities that interfere with the functions and values of environmentally critical lands are strongly discouraged. Nonetheless, the need for access, repair, and maintenance to existing utility facilities located in or adjacent to critical areas is recognized. New facilities will be located outside critical areas whenever possible.
3. Community Character: Care in the design of utility facilities (Including telecommunication towers and antennas) particularly in siting, site treatment, visual screening, and noise attenuation is particularly important to preserve the visual character of neighborhoods.
4. Joint Utilization of Public Rights-of-Way and utility Corridors: Public rights-of-way (roads) serve two purposes: movement of traffic and as a location for utility infrastructure. Coordinating road improvements and road maintenance with improvements to cable TV, electrical power, telecommunication, and telephone systems may have a substantial benefit on economic development.

Natural Gas

Natural gas service within the City of Centralia is provided by the Puget Sound Energy (PSE). The Pacific Northwest (Washington, Oregon, and Idaho) receives its natural gas from a wide range of sources in North America. Sixty percent (60%) of the region's natural gas supply comes from British Columbia and Alberta, Canada to the north; 40% comes from domestic sources including the San Juan Basin in New Mexico/Texas in the south.

PSE is an investor-owned natural gas utility that supplies natural gas to more than 100 cities and towns in six western Washington counties: Lewis, Thurston, Pierce, King, Kittitas, and Snohomish. It is not an essential service, and, therefore natural gas service is not required. Extension of service is based upon request and the results of a market analysis to determine if revenues from an extension will offset the cost of construction.

Due to the relative cost savings over electrical heating costs, natural gas is becoming the fuel of choice for many residents and home builders: 99% of new single family homes in the Company's service area heat with natural gas where builders have that option. Single family residential development has supported this trend.

Natural gas is supplied to the Centralia/Chehalis area from the Northwest Pipeline Corporation through the Chehalis Gate Station. At the station, natural gas is reduced from 345 pounds per square inch (psi) to 280 psi by PSE. Capacity is about 560 thousand cubic feet per hour (cfh). High pressure supply lines (measuring 16", 12", 8", 6", and 4" in diameter) provide gas service to areas through pressure reducing stations called district regulators. These district regulators reduce pressures to typical distribution operating pressures of 25 to 60 psi. There are two district regulators in Centralia. Individual residential service lines are typically 5/8" in diameter and individual commercial and industrial service lines are from 1-1/4" to 2" in diameter.

Telecommunications

Telecommunications is not only important for the transmission of voice, but also provides the infrastructure for the transmission of electronic data such as faxes and electronic mail. This section focuses three types of telecommunication services: land-line telephone, cellular telephone, and cable TV/internet.

1. Land-line Telephone. The City of Centralia is served by Qwest Communications for telephone (line or wire) service. Qwest Communications delivers telecommunication service to the Centralia planning area as regulated by the Washington Utilities and Transportation Commission (WUTC).

2. Voice over Internet Protocol (VoIP). VoIP provides phone service using high-speed internet connections. This is a technology that is becoming increasingly popular and at this time both Qwest Communications and myphonecompany.com provide this service in Centralia.

3. Cellular. Cellular service is very important in the telecommunications world. It combines a portion of the radio frequency spectrum with switching technology, making it possible to provide mobile or portable telephone service to virtually any number of subscribers within a given area. When service is available transmission quality is comparable to that provided by conventional land-line telephones. The City of Centralia is served by a number of national wireless companies these include: Sprint, Nextel, Cingular (AT&T), U.S. Cellular, and T-mobile.

A cellular system consists of cells and cell sites, a switching station (mobile telephone switching office or MTSO), carrier and cellular phones. Because cellular phones operate in high frequencies (in the 800 to 900 megahertz [MHZ] range), transmission of the signal is greatly weakened and deflected by obstacles in its path. As a result, cellular transmitting and receiving antennae are always located on towers or poles or atop buildings where they have clear line of sight signal paths to mobile or portable phone users.

Capacity is a function of frequency of use, the number of cell sites in a geographic area, and the number of subscribers or customers. Companies consider the number of calls handled, number of customers, and cell site capacity to be proprietary information.

4. Cable TV. Cable TV service in the City of Centralia is provided by three companies: Comcast Cablevision (land-lines), DirectTV, and Dish Network. DirectTV and Dish Network are both by satellite dishes.

5. High Speed Internet. High speed internet connections are very important to economic development and for residential uses. High speed internet is provided by a number of companies including: Qwest, Comcast, HughesNet, and Earthlink. The City is also in the process of looking into high speed internet over the City's electric lines. This would provide every home in the City with the opportunity of high speed internet.

Solid Waste

The City has a franchise agreement with Lemay to provide garage pickup within the City limits to the designated disposal site.

V. UTILITY GOALS AND POLICIES

Goal U 1
To manage all utility growth through out the city and urban growth areas.

Policies

U 1.1 Consider impacts on future City development and land use patterns due to the timing and location of new facilities and existing facilities improvements.

U 1.2 Facilitate the development and maintenance of all utilities at the appropriate levels of service to accommodate the City of Centralia's projected growth.

U 1.3 Encourage the joint use of public facilities.

U 1.4 Recover costs related to the extension of services, as well as the costs of maintain and operate these systems.

U 1.5 Encourage extension of utilities to mitigate existing or potential environmental problems.

U 1.6 Require all utility design and construction to comply with the City's accepted Public Works Standards and/or adopted Development Guidelines.

U 1.7 Operate, maintain, repair, replace and improve the water, wastewater, stormwater and other utility systems' infrastructure and facilities, in a manner that provides protection to public health and the environment; protects the infrastructure, facilities and system; corrects deficiencies; increases system efficiencies; and is in compliance with federal, state and local regulations.

U 1.8 Review, at regular intervals, the city's utility plans and utility finances to ensure utility revenue and funding sources are sufficient to provide for the utility systems' operation, maintenance, repair, replacement and improvements.

Goal U 2
To use public right-of-ways within the City and the adopted Urban Growth Areas for utilities wherever possible (i.e., water, sewer, communications, electric, stormwater, natural gas, etc).

Policies

U 2.1 Maintain public rights-of-way for existing and/or planned utilities.

U 2.2 Require effective and timely coordination of all public and private utility trenching activities.

U 2.3 Encourage utility providers that work in public rights-of-way to coordinate and install facilities in the common utility trenches.

Water

Goal U 3
To assure that culinary water facilities are developed, maintained, and operated in a resourceful manner.

Policies

U 3.1 Provide a water service for domestic use, fire flow protection, and emergencies.

U 3.2 Provide a water supply that meets all federal drinking water quality standards.

U 3.3 Size water system improvements to accommodate for at least a 25-year life cycle as per the uses shown in the comprehensive land use plan.

U 3.4 Protect the underground aquifer by following city, state, and federal requirements for wellhead protection.

U 3.5 Implement and maintain a water conservation program that encourages and promotes customer conservation and discourages (or penalizes) water waste.

U 3.6 Require all developers and/or benefiting property owners to be responsible for funding the planning, installation, and possible upgrade of water system.

U 3.7 Develop specific policies and regulations to safeguard the City's water resources, including wellhead protection, limiting impervious surfaces and regulating hazardous uses in the critical aquifer recharge areas.

Sewer

Goal U 4
To encourage home owners to connect to the City's sewer system.

Policies

U 4.1 Allow existing single family homes with septic systems to continue to utilize septic systems, providing there are no health or environmental problems and there is no city sewer line in the vicinity.

U 4.2 Require all developers and/or benefiting property owners to be responsible for funding the planning, installation, and possible upgrade of sewer system.

Water & Sewer

Goal U 5
To plan and develop water and sewer systems to complement the land use plan.

Policies

U 5.1 Size sewer system improvements to accommodate for at least a 25-year life cycle as per the uses shown in the comprehensive land use plan.

Stormwater

Goal U 6

To provide storm water management to protect, preserve and enhance, where possible, the water quality of streams, lakes, and wetlands and protect life and property from hazardous conditions.

Policies

U 6.1 Require developments to meet the Phase II stormwater permits to limit erosion, siltation, and protect environmental sensitive areas.

U 6.2 Control quantity and velocity of surface water runoff during and after development to pre-development levels.

U 6.3 Require mitigating measures for development activities that impact drainage and flood control facilities.

U 6.4 Provide an educational program that will inform the public of the importance of controlling storm water quantity and reducing stormwater pollution as a means to preserve and enhance the water quality of streams, lakes, and wetlands and protect life and property.

U 6.5 Continue to implement and when needed update the storm water plan.

U 6.6 Coordinate when necessary with adjacent jurisdictions on drainage basins to protect groundwater sources and provide stormwater facilities.

U 6.7 Require developers to construct storm drainage improvements directly serving the development, including any necessary off-site improvements.

U 6.8 Require that storm drainage improvements needed to serve new development are built prior to or simultaneous with such development.

U 6.9 Ensure that stormwater facilities required of new development are designed and built for low-cost, long-term maintenance.

U 6.10 Require developers to consider aesthetics as well as functional requirements in designing surface water facilities.

U 6.11 Encourage developers to include multiple-use surface water facilities in their developments. Consider recreational, habitat, educational, cultural, open space, and aesthetic opportunities.

U 6.12 Meet all federal and state guidelines that demonstrate compliance with U.S. EPA National Pollution Discharge Elimination System (NDES)(Section 402) Phase II permits requirements and utilize the State Department of Ecology's Stormwater Manual for Western Washington.

U 6.13 Coordinate with other local, regional, and State and Federal agencies to evaluate successful stormwater management techniques.

U 6.14 Require all utility design and construction to comply with stormwater control standards acceptable to the City.

U 6.15 Require all developers and/or benefiting property owners to be responsible for funding the planning, installation, and possible upgrade of stormwater system.

Flood Control

Goal U 7
To minimize the damage to life and property from flood disaster.

Policies

U 7.1 Support the establishment of flood control projects when beneficial to the City residents through the use of creative projects that may include levees and storm drainage facilities.

Electrical Utility

Goal U 8
To provide electrical utility service to city residents, the Centralia UGA, and adjacent areas.

Policies

U 8.1 Assure that transmission of electrical power is done safely, and with disruption of service.
U 8.2 Encourage conservation of electricity.
U 8.3 Where appropriate, all electrical distribution lines be placed underground.
U 8.4 Coordinate closely, the under grounding of electrical distribution lines with other possible underground work to minimize disruption of street surfaces.
U 8.5 Require all developers and/or benefiting property owners to be responsible for funding the planning, installation, and possible upgrade of electrical system.

Solid Waste

Goal U 9
To provide a solid waste collection service.

Policies

U 9.1 Manage the franchise agreement for waste collection service.
U 9.2 Manage the Centralia landfill site Superfund program in a cost-effective mode.
U 9.3 Require that solid waste be deposited at approved disposal sites.
U 9.4 Consider the long-term cost-effectiveness of alternative disposal techniques and recycling.

Hazardous Waste

Goal U 10
To minimize the risk of dangers of hazardous wastes, including hazardous household waste substances.

Policies

U 10.1 Cooperate with other private and public agencies in the region to manage and control hazardous wastes and moderate risk wastes, including hazardous household substances.

Non-City Managed Utilities

Goal U 11

To work with providers of telephone, cellular phone, and cable television service and the regulatory agencies to assure appropriate levels of service.

Policies

U 11.1 Promote the development of a telecommunications and data transfer systems for all users (commercial, industrial, residential, etc.).

U 11.2 Assure that all users are obtaining an appropriate level of service at reasonable rates.

U 11.3 Assure that the transmission of electronic communication signals is done with a minimum of adverse aesthetic impacts to the community.

U 11.4 Limit the amount of disturbance to city infrastructure by encouraging co-location to telecommunications conduit in the public right-of-way.

U 11.5 Underground all telecommunication and power lines whenever possible.

U 11.6 Require all utility equipment support facilities to be aesthetically compatible with the area in which they are placed by using landscaping screening and/or architecturally compatible details and integration.

U 11.7 Encourage the placement of personal wireless communication facilities in a manner that minimizes the adverse impacts on adjacent land uses.

U 11.8 Recognize that personal wireless communication facilities will be deployed in all areas of the city to provide coverage and capacity consistent with the changing use of wireless technology. Minimize the impacts, particularly the visual impacts of, personal wireless communication towers by using creative design and co-locations.

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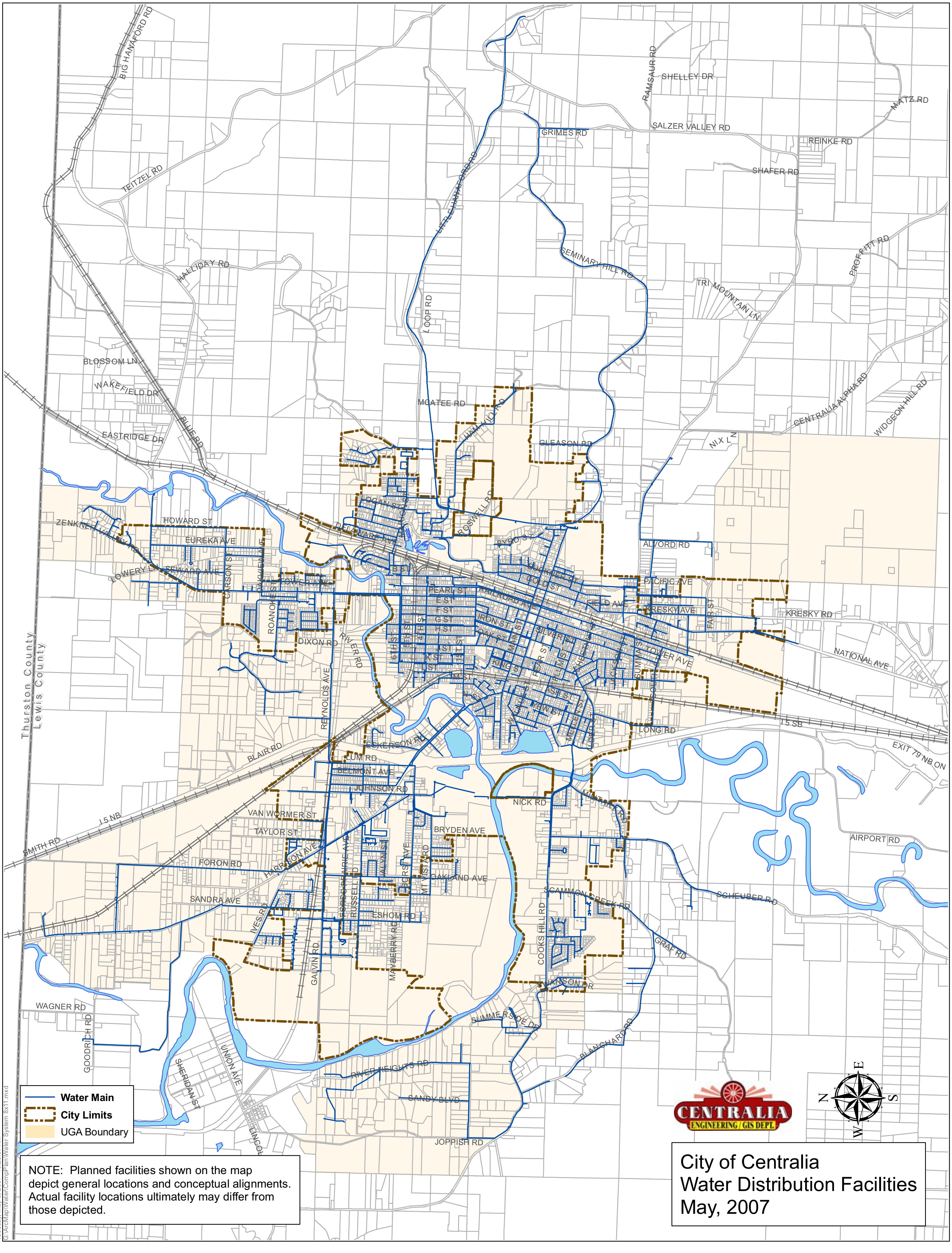
Water Main
City Limits
UGA Boundary
BIG HANAFORD RD
RAMSAUR RD
SHELLEY DR
MATZ RD
GRIMES RD
SALZER VALLEY RD
REINKE RD
SHAFER RD
TEITZEL RD
LITTLE HANAFORD RD
SEMINARY HILL RD
HALLIDAY RD
PROFFITT RD
TRI MOUNTAIN LN
LOOP RD
BLOSSOM LN
WAKEFIELD DR
BLIER RD
EASTRIDGE DR
MCATEE RD
CENTRALIA ALPHA RD
WIDGEON HILL RD
NIX LN
GLEASON RD
HOWARD ST
ZENKNER VALLEY RD
EUREKA AVE
ROSWELL RD
LOGAN ST
DELAWARE AVE
BYRD ST
ALVORD RD
LOWERY LN
SEWARD AVE
CARSON ST
OAKVIEW AVE
TOWER AVE
PACIFIC AVE
PEARL ST
E ST
F ST
G ST
H ST
I ST
K ST
L ST
M ST
RAILROAD AVE
FIELD AVE
KRESKY AVE
KRESKY RD
FAIR ST
ROANOKE ST
DIXON RD
RIVER RD
IRON ST
GOLD ST
SILVER ST
KING ST
LOCUST ST
PEARL ST
6TH ST
3RD ST
4TH ST
1ST ST
NATIONAL AVE
REYNOLDS AVE
MAIN ST
LONG RD
I 5 SB
EXIT 79 NB ON
ECKERSON RD
BLAIR RD
LUM RD
BELMONT AVE
JOHNSON RD
NICK RD
VAN WORMER ST
TAYLOR ST
BRYDEN AVE
AIRPORT RD
I 5 NB
SMITH RD
FORON RD
HARRISON AVE
OAKLAND AVE
MT VISTA RD
SANDRA AVE
SCAMMON CREEK RD
SCHEUBER RD
IVES RD
RUSSELL RD
ESHOM RD
COOKS HILL RD
GRAF RD
GALVIN RD
MAYBERRY RD
HANSON DR
WAGNER RD
GOODRICH RD
SUMMERSIDE DR
BLANCHARD RD
UNION AVE
SHERIDAN ST
RIVER HEIGHTS RD
SANDY BLVD
LINCOLN
JOPPISH RD
Thurston County
Lewis County
CENTRALIA
ENGINEERING / GIS DEPT.
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City of Centralia
Water Distribution Facilities
May, 2007

NOTE: Planned facilities shown on the map depict general locations and conceptual alignments. Actual facility locations ultimately may differ from those depicted.

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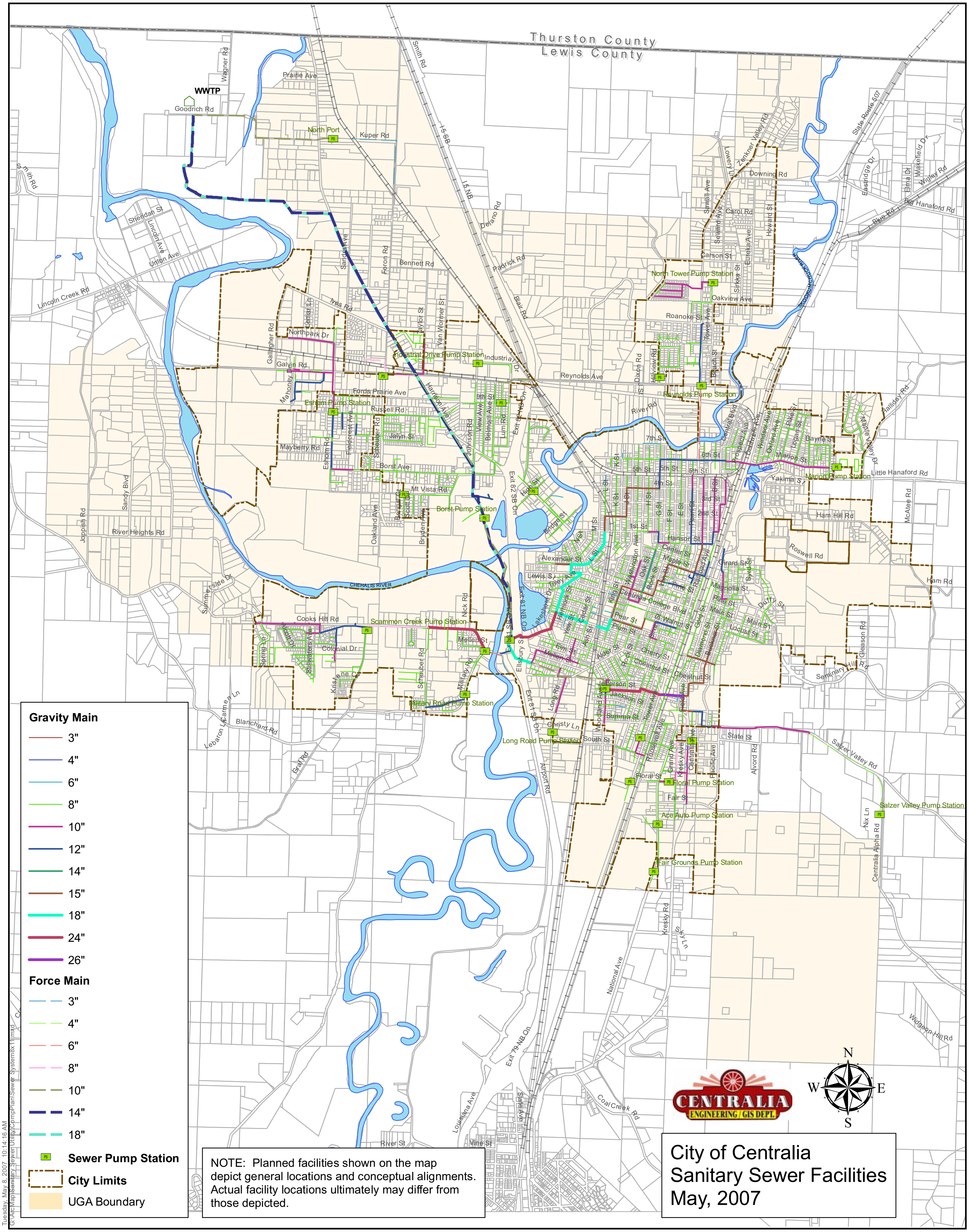
Thurston County
Lewis County
WWTP
Goodrich Rd
North Port
Kuper Rd
Prairie Ave
Smith Rd
Sheridan St
Lincoln Ave
Union Ave
Lincoln Creek Rd
Bennett Rd
Padrick Rd
Delano Rd
Downing Rd
Carol Rd
Carson St
Oakview Ave
North Tower Pump Station
Roanoke St
Reynolds Ave
Reynolds Pump Station
Industrial Drive Pump Station
Northpark Dr
Galvin Rd
Fords Prairie Ave
Eshom Pump Station
Russell Rd
Jalyn St
Mayberry Rd
Borst Ave
Mt Vista Rd
Borst Pump Station
Marion Pump Station
Little Hanaford Rd
Big Hanaford Rd
Ham Hill Rd
Roswell Rd
River Heights Rd
CHEHALIS RIVER
Cooks Hill Rd
Scammon Creek Pump Station
Colonial Dr
Military Road Pump Station
Long Road Pump Station
Blanchard Rd
Floral Pump Station
Ace Auto Pump Station
Fair Grounds Pump Station
Salzer Valley Pump Station
Salzer Valley Rd
Seminary Hill Rd
Coal Creek Rd
Widgeon Hill Rd
Gravity Main
3"
4"
6"
8"
10"
12"
14"
15"
18"
24"
26"
Force Main
3"
4"
6"
8"
10"
14"
18"
Sewer Pump Station
City Limits
UGA Boundary
NOTE: Planned facilities shown on the map depict general locations and conceptual alignments. Actual facility locations ultimately may differ from those depicted.
CENTRALIA ENGINEERING / GIS DEPT.
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City of Centralia
Sanitary Sewer Facilities
May, 2007
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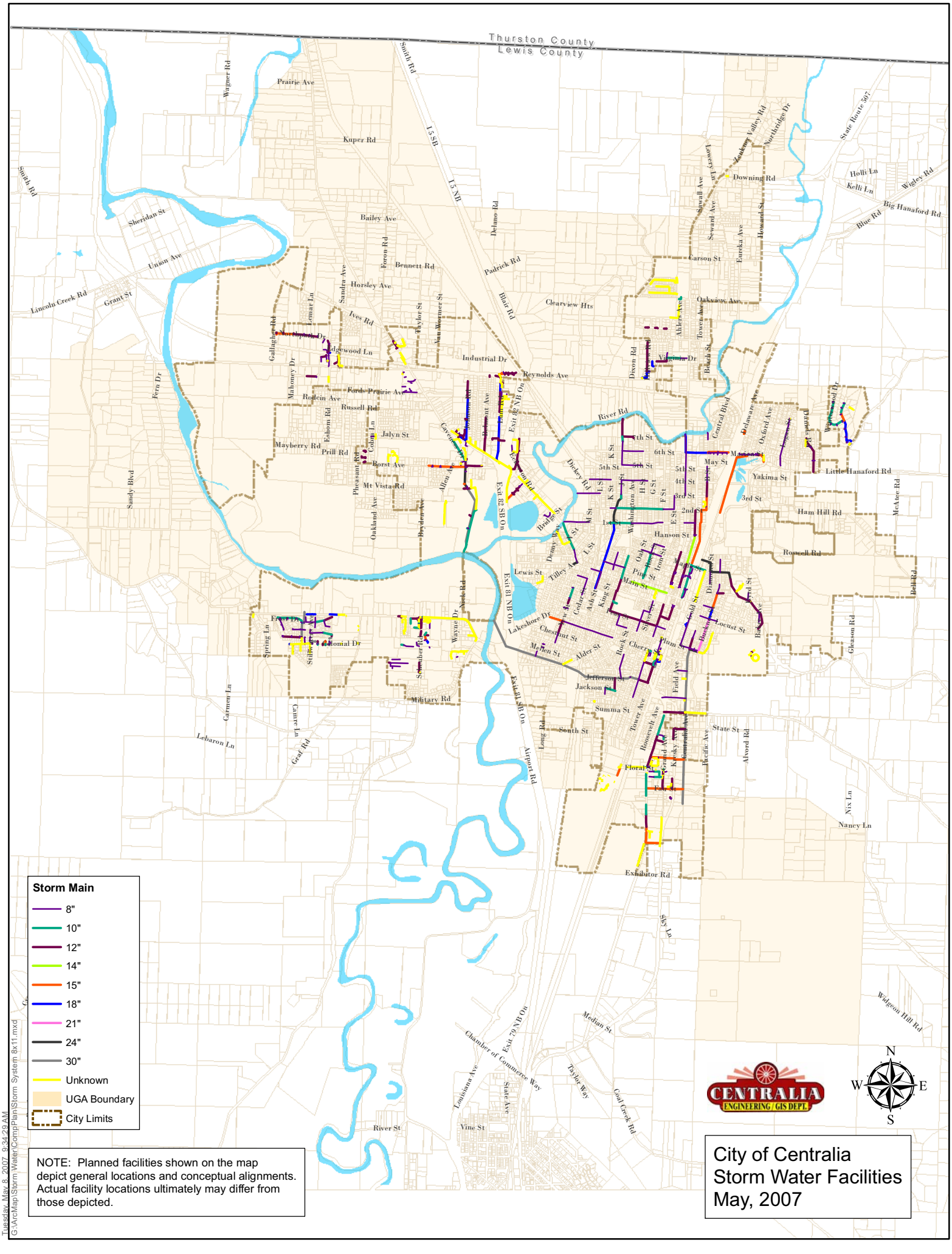
Thurston County
Lewis County
Storm Main
8"
10"
12"
14"
15"
18"
21"
24"
30"
Unknown
UGA Boundary
City Limits
NOTE: Planned facilities shown on the map depict general locations and conceptual alignments. Actual facility locations ultimately may differ from those depicted.
CENTRALIA
ENGINEERING / GIS DEPT.
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City of Centralia
Storm Water Facilities
May, 2007
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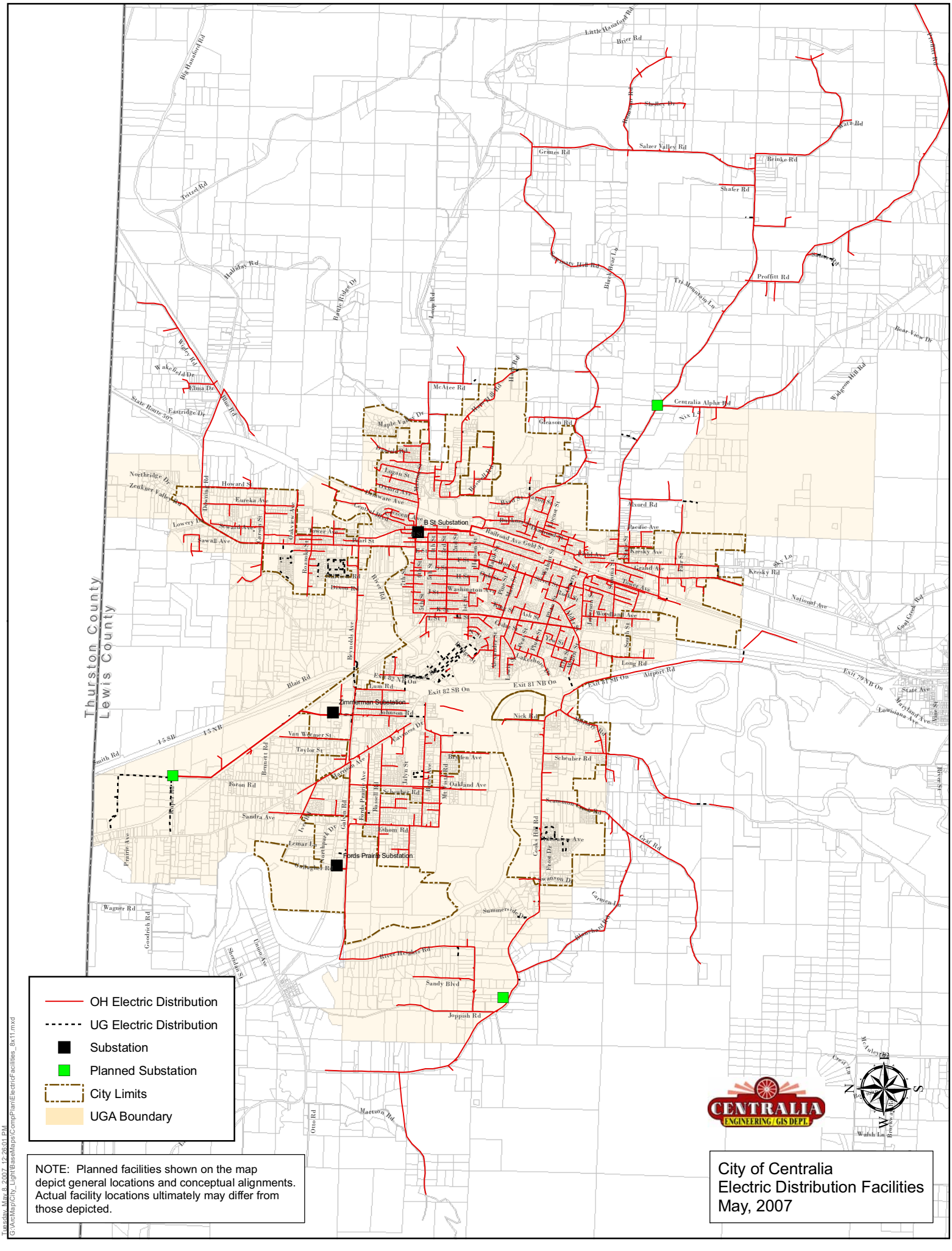
Thurston County
Lewis County
B St Substation
Zimmerman Substation
Fords Prairie Substation
Centralia Alpha Rd
Nix Ln
Exit 82 NB On
Exit 82 SB On
Exit 81 NB On
Exit 81 SB On
Exit 79 NB On
I-5 SB
I-5 NB
OH Electric Distribution
UG Electric Distribution
Substation
Planned Substation
City Limits
UGA Boundary
NOTE: Planned facilities shown on the map depict general locations and conceptual alignments. Actual facility locations ultimately may differ from those depicted.
CENTRALIA
ENGINEERING / GIS DEPT.
City of Centralia
Electric Distribution Facilities
May, 2007
Tuesday, May 8, 2007 12:26:01 PM
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