ORDINANCE NO. 515

AN ORDINANCE ADOPTING A STORM WATER MASTER PLAN, REPEALING THE 1981 STORMWATER MASTER PLAN AND AMENDING THE CITY'S COMPREHENSIVE PLAN TO INCLUDE THE NEWLY ADOPTED STORM WATER MASTER PLAN.

WHEREAS, storm water runs off both as surface water and into the ground as ground water; and

WHEREAS, when the natural ground is covered by impervious surface that area is not penetrable by storm water and, therefore, the amount of surface water flow is proportionately increased; and

WHEREAS, the City of Wilsonville (the City) has and will continue to experience physical growth and urban development which has and will increase the amount of surface storm water run-off by the increased amount of impervious surfaces together with the increased amount of activities that result in the discharge of substantive amounts of water such as irrigating lawns and gardens, washing structures, sidewalks and parking lots, and other similar activities; and

WHEREAS, both singularly and collectively, the increased amount of impervious surface and the increased amount of the aforementioned activities not only increases the volume of surface storm water run-off collected in and through the City's natural and constructed storm water facilities and system ("storm water system") but also provide a substantial contributing factor to the degradation of the quality of the surface water run-off and the increase of the rapidity of the flow; and

WHEREAS, if not properly managed, surface storm water flows within the urban and planning areas of the City can cause erosion, flooding and damage to persons, property, wildlife and habitat; such flows can carry concentrations of nutrients, heavy metals, oil and toxic materials and waste into receiving waters and ground water further placing persons, property, wildlife and habitat at risk; such flows can degrade the integrity

of City streets and transportation system and they can reduce citizen access to emergency services and, thus, pose hazards to person and property; and

WHEREAS, the proper disposal of storm water is an obligation that the occupants, users, and owners of property have, and within an urban environment this obligation of those who occupy, use, or own property with some exception, cannot be met individually to the degree necessary to meet the public's health, safety, welfare and interests, especially during times of large storm events; and

WHEREAS, given the variety of ways physical growth and urban development can impose storm water risks, hazards, damage or injury as outlined above, and the impracticality or the inability of individual occupiers, users and owners of property to fully meet the greater public necessity, storm water run-off must be managed with best management practices as a City-wide system and in a comprehensive manner that protects the public's health, safety, welfare and interests; and

WHEREAS, the federal regulations under the 1972 Federal Water Pollution Control Act 33 U.S.C. § 1251 et seq. (Clean Water Act) and its 1987 amendments mandate that "medium" jurisdictions obtain storm water discharge permits in order to prevent pollution from storm water and non-point sources (non-point sources are diffuse or unconfirmed sources of pollution where contaminants can enter into or be conveyed by the movement of water to public waters (ORS Chapter 468B; OAR 430-40-010(12)); and the 1987 federal amendments expanded the requirements of the National Pollution Discharge Elimination System (NPDES); and

WHEREAS, the City is a "medium" jurisdiction subject to federal, state and regional regulations regarding storm water run-off and the Oregon Department of Environmental Quality required Clackamas County cities, including Wilsonville, to join with Clackamas County to apply for such a permit collectively as a medium jurisdiction; and

WHEREAS, Wilsonville was approved as a storm water co-permittee with Clackamas County under NPDES permit number 101348; and

WHEREAS, National Marine Fisheries Service adopted administrative rules for protection and recovery of salmonid species listed as threatened, including two Willamette River species("NMFS rules"); and

WHEREAS, the NMFS rules implement federal law (16 U.S.C. § 1531-1543, 16 U.S.C. §1361 et seq.), including §4(d) of the Endangered Species Act, in 50 C.F.R. §223.203 et seq.; and

WHEREAS, the NMFS rules include the requirement in 50 C.F.R. §223.203(b)(12)(i)(B) that a municipal development ordinance or plan "adequately avoids stormwater discharge impacts to water quality and quantity or to the hydrograph of the watershed, including peak and base flows of perennial streams."; and

WHEREAS, 50 C.F.R. § 223. 203(b)(12)(i)(L) requires a municipal development ordinance or plan to provide annual reports regarding implementation and effectiveness of any ordinances, including information to demonstrate the success of stormwater management and other conservation measures; and a summary of any flood damage, maintenance problems, or other issues; and

WHEREAS, ORS 197.175 requires cities to prepare, adopt and implement Comprehensive Plans consistent with statewide planning goals adopted by the Land Conservation and Development Commission, and ORS Chapter 665, Section 17, empowers the Metropolitan Service District (Metro) to recommend or require cities and counties to make necessary changes in any plan to ensure compliance with Metro's goals and objectives; and

WHEREAS, the City of Wilsonville Comprehensive Plan Implementation Measure 3.1.7.d states that "Major natural drainage ways shall be retained and improved as the backbone of the drainage system and designated as open space. The integrity of these drainage ways shall be maintained as development occurs. Where possible, on-site drainage systems will be designed to complement natural drainage ways and designated open space to create an attractive appearance and will be protected by conservation, utility, or inundation easements." This policy is a fundamental factor in the development of a Storm Water Master Plan; and;

WHEREAS, stream restoration is an important element of this plan; and

WHEREAS, the south tributary to Seely Ditch as scheduled for stream restoration in project CLC-12 is a constructed stream; and

WHEREAS, the Natural Resources Plan will allow for modification and relocation of constructed streams; and

WHEREAS, relocation of the south tributary to Coffee Lake Creek can be accomplished while improving water quality and providing a demonstration site for environmental responsibility; and

WHEREAS, the Storm Water Master Plan includes a number of very substantial detention ponds and wetlands enhancement to improve water quality and in some cases also quantity control; and

WHEREAS, accomplishment of these projects under the guidelines included in the Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq. and the stormwater permit for the City under NPDES Permit No. 101348, may be in conflict with the federal regulations for protection and recovery of salmonid species listed as threatened by the National Marine Fisheries Service; and

WHEREAS, extensive evaluation and planning will be required to resolve this conflict; and

WHEREAS, the projects that may be impacted in the resolution of this conflict include the following:

- Project CLC-2 Wetlands enhancement adjacent to south tributary to Coffee Lake Creek;
- Project CLC-3 Wetlands enhancement adjacent to middle tributary to Coffee Lake Creek;
- Project CLC-6 Water quality/spill control facility middle tributary to Basalt Creek;
- Project CLC-8 Regional detention/wetlands enhancement on south tributary to Basalt Creek; and
- Project CLC-9 Regional detention/wetlands enhancement on Basalt Creek upstream of Burlington Northern Railroad; and

WHEREAS, Project CLC-11 Regional detention/wetlands enlargement east of Parkway Avenue on south tributary to Coffee Lake Creek may be duplicating detention capacity which is available elsewhere in the system and with further detailed study, this facility may be substantially reduced to eliminate duplicate facilities.

WHEREAS, on June 18, 1998, Metro Council adopted the Stream and Floodplain Protection Plan (Ordinance 98-730), which is to be a major component of regional water quality strategy for the next twenty years; and

WHEREAS, the City currently has a Storm Water Management Master Plan adopted in April 1981, as a part of the Sewage Collection System Master Plan; and

WHEREAS, the City adopted Ordinance No. 433 in September, 1994, regarding storm drainage and storm water quality management and; imposing a surcharge fee for storm drainage services; and which identified City responsibilities regarding the management of public storm drainage facilities on City-owned property, City right-of-ways, and City easements; and required the City to manage storm water quality in accordance with the goals of the Clean Water Act and applicable State of Oregon NPDES programs; and

WHEREAS, the Storm Water Master Plan (attached as Exhibit A) updates the current plan and employs best management practices, adopts adequate design criteria, includes appropriate storm water improvements, maintenance, public awareness, and enforcement standards. and

WHEREAS, the Storm Water Master Plan recognizes factors that the previous plan did not include the following:

- Existing development with related urban storm water run-off impacts that were not mitigated at the time of development;
- New development for which cumulative impacts are not accounted for with on-site control facilities;
- NPDES requirements for best management practices to minimize storm water run-off quantity and quality impacts;
- Existing high storm flows in Boeckman Creek and Coffee Lake Creek;
- Metro Title 3 requirements and Endangered Species Act requirements which can be expected to rely on run-off control practices that reduce flows from existing/new development, preserve or enhance water quality, and preserve or enhance in-stream habitat quality;

- Changes to utility rates and SDCs that reflect the final Capital Improvements Projects budget and the obligations, impacts and benefits of occupancy, use, and ownership; and

WHEREAS, in developing the Storm Water Master Plan, the City has sought to carry out federal, state and regional mandates, provide for alternative improvement solutions to minimize private expense, avoid the creation of public nuisances, and maintain the public's health, safety, welfare and interests.

NOW, THEREFORE, THE CITY OF WILSONVILLE ORDAINS AS FOLLOWS:

1. The above-recited findings are incorporated by reference herein;

2. Purpose. The City finds and declares that, absent effective management, maintenance, operation, regulation and control, existing storm water drainage conditions in all drainage basins and sub-basins within the City constitute a potential hazard to the health, safety and general welfare of the City. The City Council further finds that natural and constructed storm water facilities and conveyances together constitute a storm water system and that effective regulation and control of storm water can be facilitated through the City's adoption of the Storm Water Master Plan;

3. The City's Comprehensive Plan is amended to include the Storm Water Master Plan as recommended by the Planning Commission and adopted by City Council with the following exceptions:

a. That if necessary to resolve conflicts, project CLC-12 may be modified to relocate the constructed south tributary to Seely Ditch provided that the water quality goals inherent in CLC-12 are met.

b. That project CLC-2, CLC-3, CLC-6, CLC-8, and CLC-9 are adopted in concept only pending further analysis necessary to comply with state and federal law.

c. That project CLC-11 is approved in concept only and that no acquisition of property, construction or limitation on development may be implemented until the analysis of the capacity and water quality of the south tributary to Seely Ditch is extensively reviewed.

4. The Council hereby repeals the Storm Water Management Master Plan adopted by Resolution No. 217 on May 3, 1982.

SUBMITTED to the Wilsonville City Council and read for the first time at a special meeting thereof on the 22nd day of February, 2001, commencing at the hour of 7 p.m. at the Wilsonville Community Development Annex, and scheduled for the second reading at a regular meeting of the Council on the 7th day of May, 2001, commencing at the hour of 7 p.m. at the Wilsonville Community Center. The effective date of this ordinance is June 7, 2001.

Sandra C. King
SANDRA C. KING, CMC, City Recorder

ENACTED by the City Council on the 7th day of May, 2001, by the following votes: YEAS: -5- NAYS: -0-

Sandra C. King
SANDRA C. KING, CMC, City Recorder

DATED and signed by the Mayor this 8th day of May, 2001.

Charlotte Lehan
CHARLOTTE LEHAN, Mayor

SUMMARY OF VOTES:

Mayor Lehan	Yes
Councilor Helser	Yes
Councilor Kirk	Yes
Councilor Barton	Yes
Councilor Holt	Yes

CHAPTER 10.
FINANCING ANALYSIS

10.1 STORMWATER FINANCIAL PLANNING

The City of Wilsonville expanded its authority as an Oregon municipality to include "storm drainage and water quality management" services and applied a fee for these services in September of 1994. From the beginning of the program, the City has endeavored to establish basic levels of service along with the funding mechanisms necessary to support the day to day operations and maintenance of the existing stormwater system. This focus also included the likely impacts of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting to which Wilsonville applied as a co-applicant with other Clackamas County jurisdictions. Having established this operational focus for the initial stormwater program, the City has broadened its allocation of resources to support comprehensive basin planning within the City's boundaries and urban reserve areas. This master planning has produced specific recommendations regarding structural and non-structural needs for the system. As this master plan and the public involvement process further shape program needs and priorities, a structure for evaluating the financial impacts of these program options has also been developed. Similar to the financial planning in place for the City's sanitary sewer and water utilities, the Stormwater financial model has documented a capital improvement schedule that links the timing of expenditures with the City's likely service charge and system development charge revenue profile. Initial model runs indicate that an initial systems development charge of $495 per equivalent residential unit (ERU) is required. The model further indicates a requirement for a stormwater utility rate of $3.58 per ERU per month.

10.2 POTENTIAL FUNDING SOURCES FOR STORMWATER CAPITAL IMPROVEMENT AND OPERATIONS

Within the state of Oregon, the options available to a municipality for funding storm sewer operations, maintenance and improvements are identical to those established for other municipal utility functions. The flexibility established for stormwater financing and upheld by the Oregon Supreme Court) allows the City access to a service charge for funding stormwater operations/capital improvements (Roseburg School District et al v. City of Roseburg). The key at this stage of Wilsonville's stormwater program development is to re-calibrate the use of rates as a primary revenue source, while assuring that all possible funding mechanisms have been considered in designing an overall financing strategy. While secondary financing techniques such as system development charges, plan review fees and grants/loans can serve to offset new facility or direct service costs, they cannot provide the revenue stream necessary to support a full-time, comprehensive stormwater management program. Wilsonville recognized this fact when, in 1994, it established its "surcharge" for storm drainage and water quality management under Ordinance No. 433. The financial model is intended to evaluate capital, maintenance and operations costs in relation to the full spectrum of available funding options, including impacts on the City's service charge. The funding options considered as part of the financial analysis include:

General Obligation Bonds - This form of debt enables Wilsonville to issue general obligation bonds for capital improvements and replacement based upon voter approval. General Obligation (G.O.) Bonds are debt instruments backed by the full faith and credit of the City which would be secured by an unconditional pledge of the City to levy assessments, charges or ad valorem taxes necessary to retire the bonds. G.O. bonds are the lowest-cost form of debt financing available to local governments and can be combined with other revenue sources such as specific fee, or special assessment charges to form a dual security through the City's revenue generating authority. These bonds are supported by the City as a whole, so the amount of general obligation debt issued including stormwater is limited to a fixed percentage of 3% of the real market value for taxable property within the City. Again, this cap is a statutory mandate.

While the City may have financially room under the cap there are many competing funding needs for general obligation bonds. Traditionally, funding needs which do not have revenue bond resources take precedence with the voters. Thus, it appears that the probability of obtaining voter approval for a stormwater utility general obligation bond would be unlikely. For this reason, this source is not considered to be a viable alternative.

State/Federal Grants and Loans - Historically, both local and county governments have experienced significant infrastructure funding support from state and federal government agencies in the form of block grants, direct grants in aid, interagency loans, and general revenue sharing. Federal deficit reduction pressures and virtual elimination of federal revenue sharing dollars are clear indicators that local government will be left to its own devices regarding infrastructure finance in general and stormwater funding in particular. Presently, the primary sources of assistance in the areas of stormwater are the federally funded grants provided by the Housing and Urban Development's Community Development Block Grant (CDBG) Program. However, access to this funding mechanism becomes much more difficult in relation to stormwater facilities within Wilsonville because a primary objective of the program is to fund projects which benefit low and moderate income areas and because numerous applicants compete for a very limited resource pool. This makes it a questionable funding source and one that cannot be credibly relied upon as a consistent element of this program's on-going revenue base. Recent experience also indicates that even when jurisdictions secure grants for their programs, the revenue only provides a small portion of the capital improvement cost.

Additionally, it is also important to assess likely trends regarding federal / state assistance in infrastructure financing. Where EPA's mandate for sanitary sewer improvements in the 1960's was accompanied by a very generous and available grant program, future trends indicate that grants will be replaced by loans through a public works revolving fund. Local governments can expect to access these revolving funds or public works trust funds on criteria that includes both the need for and ability to repay the borrowed monies, with interest. Therefore, the ability of infrastructure programs to control their own financial destinies will be a key element in evaluating whether many secondary funding sources, such as federal/state loans, will be available to the City's stormwater management program.

The availability of a public works loan from the state of Oregon as managed by the Oregon Economic Development Department needs to be checked prior to any borrowing. The interest rates would be competitive with revenue bonds and there may be lower issuance costs. These funds as stated in the preceding subparagraph are available on a competitive basis.

Revenue Bonds - This form of debt financing is also available to Wilsonville for drainage related capital improvements. Unlike G.O. bonds, revenue bonds are not backed by the City as a whole, but constitute a lien against the stormwater service charge revenues of the Stormwater Utility. Revenue bonds present a greater comparative risk to the investor than do G.O. bonds, since repayment of debt depends on an adequate revenue stream, legally defensible rate structure and sound fiscal management by the issuing jurisdiction. Due to this increased risk, revenue bonds generally command a higher interest rate than G.O. bonds. This type of debt also has very specific coverage requirements in the form of a reserve fund specifying an amount, usually expressed in terms of average or maximum debt service due in any future year. This debt service is required to be held as a cash reserve for annual debt service payment to the benefit of bondholders. For purposes of the debt financing model contained in this Master Plan, both coverage requirements and reserves have been factored into the calculations. Typically, voter approval is not required when issuing revenue bonds; however, state law does provide for a referendum process to be initiated by the voters.

System Development Charges - ORS 223.297 for system development charges (SDC) is designed to provide a logical and clear framework for establishing fees which recover from new development the City's costs in providing existing and future system capacity. It is also designed to establish the basis for the fee calculation, which the City must follow in order to comply with the statute. However, the fundamental objective for the fee structure is the imposition on new development of a proportionate share of those costs associated with providing or expanding stormwater infrastructure to meet the capacity needs created by that specific new development. The City's SDC structure (and existing service charge design) has been evaluated during earlier stages of this master planning process (see Appendix F-1) and recommendations made regarding improvements regarding consistency and clarity of how the fee is calculated. The City's approach in structuring its stormwater SDC is sound, however, and the improvements provided here are not intended to address any significant problems regarding methodology.

SDCs cannot be applied retroactively and are a one-time charge at the time of development approval. The other important consideration under Oregon statute is that only infrastructure funded through stormwater or other city fees/charges would be eligible for inclusion in the SDC. The other key issue is whether the existing system has any capacity remaining and available to new development. Engineering analysis has concluded that the City's stormwater water conveyance system, particularly the piped system modeled as part of this analysis, does have capacity available for new connections to the system. This available capacity becomes the basis for the reimbursement element of the SDC provided that the capacity was constructed with City funds.

The improvement portion of the SDC has also been calculated as part of this analysis and is based on that portion of future facility cost appropriately allocated to new development

requirements. Therefore, only those costs directly related to growth have been allocated to the improvement portion of the SDC.

Stormwater Management Utility Charges - As conventional funding sources for stormwater management become more difficult to access and as federal (Environmental Protection Agency - National Pollutant Discharge Elimination System) and state storm water quality requirements become mandatory, the utility approach toward funding is becoming generally accepted. There are numerous combinations and variations for stormwater water service charges. The City has employed an equivalent residential unit (ERU) approach that is based on estimated impervious surface. An ERU is currently defined as 2,000 square feet of impervious surface. This is based on average single family residential lot size in the City along with land use limitations on the percent of impervious coverage. Because most single family residences have very similar impervious surface footprints, all single family homes are considered to be one ERU. All other properties are charged based on their measured impervious surface divided by the base ERU square footage to determine the number of ERUs applied to that property. For the financial analysis provided in this master plan, given the trend to build larger homes on smaller lots additional evaluation was conducted by the City to establish the average square footage of impervious coverage on single family residential lots based upon actual measurements. The average impervious surface coverage for single family residential lots was determined to be 2,750 square feet.

The change in size of the equivalent residential unit from 2,000 square feet to 2,750 square feet will result in a reduction of 27% in the number of equivalent residential units for multi-family, commercial and industrial properties. This is caused by the fact that for each of those properties the impervious square footage is divided by the square footage per equivalent residential units to determine the applicable equivalent residential units for the property. Since the impervious square footage will be divided by a larger number, the equivalent residential units will go down. The net result was that in comparing the income from multi-family, commercial and industrial properties to the income from residential properties, this income will drop by 27%.

Because the stormwater revenue is the primary source within the City and the funding mechanism affords the most flexibility, the financial analysis focuses on constructing service charge or rate sensitivity analyses in the form of the stormwater rate model. The model is comprised of a series of spreadsheets, which reflect the City's decisions on capital improvements, construction timing, maintenance levels and program priorities. The "bottom line" will be the relative impact of these program strategies on the City's service charge and secondary funding mechanisms.

10.3 STORMWATER RATE AND SYSTEMS DEVELOPMENT CHARGES MODELING

The current stormwater utility rate is $2.06 per Equivalent Residential Unit (EUR) per month. In order to support the master plan initially the rate should be increased to $3.58 per ERU. Over time rates would increase to $5.92 by the year 2006. The proposed rates are subject to further refinement and public process. The city council will then adopt the revised rates by resolution.

.The city's current stormwater system development charge is $87.00 per ERU. The current stormwater system has primarily been installed by developers at the time of development or by use of the stormwater systems development charges which had been collected from the development community. The amount that the city has paid would result in a negligible reimbursement component of the stormwater systems development charge so the reimbursement component will not be included.

The stormwater capital improvements plan has projects with a present construction cost of $19,310,000. With regards to calculation of systems development charges, projects totaling $7,091,000 are known requirements, of which the full improvement component needs to be included in the systems development charges. Additional projects in the overall capital improvements plan are subject to modification to reconcile the conflicts between use of detention facilities to remove pollutants and the requirements to keep streams flowing to allow fish to migrate upstream. This group of projects with a total cost of $6,500,000 is included in the systems development charge calculations at 80% of estimated cost. Finally, the stormwater improvements for the Dammasch Urban Village and for the north Wilsonville area (near Coffee Creek Correctional Facility) were excluded from the systems development charge calculations since these projects will be separate and distinct from the normal projections . As such, the equivalent residential units for the Dammasch and north Wilsonville areas have also been excluded from the calculations.

Although the net figure is subject to revision and to public process, the recommended systems development charge is $495 per equivalent residential unit. Table 10-1 is a summary of the calculations for the systems development charge improvement fee. Table 10-2 provides a detailed list of the projects included in each category.

10.4 SUMMARY

This financing analysis for Wilsonville represents a rate impact assessment of proposed operating and capital conditions targeted at providing an enhanced level of service with emphasis on much needed conveyance/storage facilities, continued regulatory compliance, maintenance, public information and water quality programming. Labor costs focus on allocations of professional engineering, maintenance and administrative support resources. Options for funding the CIP portion of the City's Master Plan include both the "pay as you go method' and issuance of 20-year revenue bonds. It should also be emphasized that this analytical tool and training in its use are part of the financial work products provided to the City through this Master Plan.

The conclusions of the financing analysis can be summarized as follows:

1. It is clear from the analysis of the financial options that the two primary sources of funds for construction of the stormwater facilities will be stormwater systems development charges and stormwater utility fees. It is also clear that any borrowing will be most likely in the form of revenue bonds and that the payment of the debt service on these revenue

bonds would come from stormwater utility fees and stormwater systems development charges.

2. The revenue bonding scenario contained in this analysis does reflect the total cost of borrowing the money necessary to undertake the projects listed in the CIP including, but not limited to, legal costs, interest, coverage, reserves, and principal payments. The anticipated SDC receipts are used to buy down the amount of debt service funded through rates. While revenue requirements through rates are reduced on a year to year basis via bonding, the cumulative cost of this borrowing significantly increases through the planning period.

3. The City's current stormwater management utility charge rate cannot support the CIP contained in the Master Plan. Initially, the rate should be increased to $3.58 per ERU to enable implementation of the service levels proposed in the Master Plan. This additional rate revenue, when combined with the secondary funding through SDCs set at $495 per ERU, will enable more of a planned rather than reactive approach toward stormwater management in the City.

4. Prior to final adoption, stormwater systems development charges and rates are subject to public process.

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7. Basing the credit against the surcharge on a "permanent reduction of the run-off coefficient" would be difficult to quantify in terms of the actual reduction of the fee. Another approach is taking the calculated reduction of total run-off from the site as opposed to dealing only with the coefficient.

Resolution 1129 - Imposing a Surcharge Fee for Storm Drainage Services

The issues of concern within the ordinance are also contained within the resolution. The following highlights areas of specific concern.

1. Under the "Purpose" section of the resolution 2 very different approaches toward drainage ratemaking are contained in the same sentence. The concept of "benefit" is a term used in assessing (taxing) properties under a local improvement district approach. The term "use" is more aligned with a fee-for-service/utility approach toward funding. In fact, most utilities use impervious surface as the best indicator for use by relating it to "contribution of run-off to the drainage system".

2. In Article III Section 2 there is an apparent reduction in the fee in proportion to the "amount of storm water being discharged directly from the property into the Willamette". While direct discharge has historically been a basis for fee reduction, the onset of NPDES regulations and the responsibility of Wilsonville for discharge points into the receiving waters would indicate that this reduction may not consider permit requirements and costs.

3. In Article IV Section 4 the resolution looks at overall parcel data and run-off coefficients to estimate total impervious area. These are estimates as opposed to actual measurements and how these averages are applied to individual non single family customers under the City's surcharge structure is still unclear. (see comment 6 in previous section).

4. In Article V Section 2, the drainage fee appears to double for water services (and therefore for drainage services) outside the City limits. While the extension of water service has inherent costs for non-City residents which should be allocated to them, is there actual drainage system or services extended or available to these non-City residents? This was not addressed in the resolution.

are directly dealt with through non-use provisions, credit calculation and tying drainage billing to water. There are a number of secondary issues within the ordinance that the City should consider. These are as follows:

1. The "surcharge" approach indicates that the drainage fee is attached to some other City function or activity, yet that surcharge linkage is never actually stated. It appears that the use of the term surcharge is a protection against the "charge against property" test established under Measure 5. The use of the term surcharge seems to run counter to the City's intention to have it relate to an individual system user's benefit from or contribution to the storm water system.

2. Defining impervious surface to mean run-off factors of .40 or greater is an approach I have never seen before. The logic behind run-off factors or coefficients is to assign some value to land use classifications or broad categories of property for purposes of estimating cumulative run-off. It appears that the City would be better served not using that coefficient reference in its definition under Article 1 Section 1.F.

3. The term "retention systems" in the ordinance is defined in terms of a "de"tention system.

4. The 2,000 square foot impervious area for a single family residence is low based on comparative data. The source of this information appears to be the City's own design standards and is based on a <u>median</u> 8,000 square foot lot with 25% coverage. Again, this median lot data may tend to understate the actual impervious footprint of a single family residence in Wilsonville.

5. Article V Section 2.3 appears to apply the standard ERU value to each living unit of a multi-family building such as an apartment. This does tend to overstate the surcharge to that location when compared to actual measurement of the impervious surface footprint. Depending on the number of stories and impervious surface for parking etc, this can amount to a significant overstatement of impervious area.

6. The ordinance does not specifically state how <u>non</u> single family residential/duplex properties are dealt with in the surcharge structure. Are these properties actually measured for impervious surface or are these based on some form of average or estimates?

1. **The resolution establishes only the "public improvement charge" and does not include any reference to the reimbursement portion of the SDC fee. The reason for this is very understandable as existing storm drainage systems within Wilsonville are either at or over capacity given existing development. However, establishing the reimbursement portion of the fee within the resolution should be done because the Master Plan will be designing facilities/new capacity that includes full build out scenarios. This will bring available capacity on line and establish the logic supporting a storm drainage reimbursement SDC.**

2. **It would be worthwhile for the City to stipulate in the resolution that the "public improvement charge" would exclude costs related to bringing existing-deficient storm drainage systems up to the City's design standards. This is an on-going area of contention in storm drainage SDC's as the developer's perception is that he/she is not only paying for their impact but making up for historical lack of investment in the system. This can be addressed in the resolution and the storm drainage SDC calculation methodology.**

3. **The resolution clearly states that the construction costs be adjusted each year based on ENR construction cost index. It is unclear whether this June 1991 resolution has been revised to reflect this escalation factors.**

4. **Finally, the 2,000 square feet of impervious surface basis used by Wilsonville as depicting the typical single family residence should be supported by the actual calculation process used to derive this figure. My experience has been that the typical range of impervious surface coverage for a single family residence is in the range of 2,500 to 3,200 square feet.**

Ordinance 433 - Imposing a Surcharge Fee for Storm Drainage Services

The City's storm drainage ordinance effectively conveys the functions, responsibilities (public and private), costs, fund structure and rate calculation used for the program. As in the case of SDC's, the overall strategy is to establish the surcharge through ordinance and the system/structure of rates through resolution. This is the optimal format for implementing this type of fee. It is also recognized within the ordinance that the controllable and avoidable issues raised in Ballot Measure 5 and the Roseburg Supreme Court decision re storm water utility rates

APPENDIX F-1

SHAUN PIGOTT ASSOCIATES
UTILITY AND INFRASTRUCTURE FINANCE
1045 NW BOND ST, SUITE 5 • BEND, OREGON 97701
TEL: (541) 383-1960 FAX: (541) 317-1672

To: Eldon Johansen, Community Development Director
Jamie Porter, Engineering Associate
Through: Brad Moore, KCM, Inc.
From: Shaun Pigott
Date: March 31, 1998

Re: IDEAS REGARDING THE CITY OF WILSONVILLE'S SYSTEM DEVELOPMENT CHARGE ORDINANCE AND RESOLUTION FOR STORM DRAINAGE; ORDINANCE AND RESOLUTION FOR STORM DRAINAGE SERVICE SURCHARGE FEE

Wilsonville's ordinances and resolutions affecting drainage SDC's and "surcharges" clearly have worked very well for the City since their implementation. As part of the Master Plan, I was asked to take a critical look at these codes and offer any suggestions for their improvement and/or clarification. The following comments are offered, therefore, as possible enhancements to ordinances and resolutions which obviously work very effectively for Wilsonville's drainage program.

Ordinance 386 - An Ordinance Regarding System Development Charges

The City employs an umbrella ordinance establishing SDC's for all areas of infrastructure and effectively mirrors the language (with the exception of Article VII Section 4 re deferred payment provisions) of ORS 223. Specific calculation methodologies for each area of infrastructure are then established through resolution. Based on my experience, this is the optimal approach as it allows consistency of SDC administration and the flexibility for the City to make adjustments as needs/conditions change. Overall, there are no changes that I would suggest making to this language.

Resolution 843 - System Development Charge for Storm Drainage Facilities

Once again, the City's resolution addresses all the requirements of ORS 223. However, there are four points of possible improvement that the City may wish to consider. These points are discussed on the following page:

Table 10-2
Stormwater Capital Improvements Project Costs

Project	Total Cost	Allocated to present customers	Allocated to future customers
Include in SDC calculations at full improvement cost			
CLC-1 Wetland enhancement NW of Burlington Northern RR/ WV Road Crossing	$281,000	$251,214	$29,786
CLC-5 Regional detention/wetland enhancement between Boones Ferry Road & 95th Avenue across I-5 from Wiedeman Road	$450,000	$278,550	$171,450
CLC-10 Regional detention/wetland enhancement at Dammasch Basin Outfall/ Arrowhead Creek	$1,046,000	$610,864	$435,136
CLC-12 Stream restoration on South Tributary to Coffee Lake Creek	$459,000	$298,350	$160,650
CLC-13 Conveyance improvements on Channel west of Commerce Circle	$114,000	$71,364	$42,636
BC-1 Erosion control on Boeckman Creek	$52,000	$33,384	$18,616
BC-2 Stream restoration/wetland enhancement in existing channel on north side of Memorial Park	$238,000	$159,460	$78,540
BC-4 Detention pond modification on Boeckman Creek north of Boeckman Road-completed	$0	$0	$0
BC-6 Regional detention/wetland enhancement in a linear channel on south side of Wiedeman Road ROW or BC-7 on west side of Sysco property	$1,465,000	$779,380	$685,620
BC-8 Conveyance improvements on Elligsen Road outfall from Urban Reserve Area 35	$457,000	$350,519	$106,481
Boones Ferry Road line replacements south of WV Road	$369,000	$185,958	$183,042
Kolbe Lane culvert replacement	$72,000	$63,230	$8,770
Barber Street Line Replacements	$222,000	$174,508	$47,492
(Boones Ferry Road line replacements north of Wilsonville Road)	$523,000	$445,583	$77,417
95th Ave/Hillman Court Line Replacements	$197,000	$158,807	$38,193
Ridder Road and I-5 Crossing Improvements	$777,000	$708,153	$68,847
Boeckman Road Line Replacements	$369,000	$264,481	$104,519
	$7,091,000	**$4,833,805**	**$2,257,195**
Include in SDC calculations at reduced costs because projects are subject to modification			
CLC-2 Wetland enhancement adjacent to south tributary to Coffee Lake Creek	$1,416,000	$920,400	$495,600
CLC-3 Wetland enhancement adjacent to Middle Tributary to Coffee Lake Creek	$1,313,000	$816,686	$496,314
CLC-6 Water Quality/spill control facility Middle Tributary to Basalt Creek	$450,000	$364,050	$85,950
CLC-8 Regional detention/wetland enhancement on south tributary to Basalt Creek	$1,157,000	$838,825	$318,175
CLC-9 Regional detention/wetland enhancement on Basalt Creek upstream of Burlington Northern RR	$572,000	$426,140	$145,860
CLC-11 Regional detention/ Wetland enlargement east of Parkway Avenue on south tributary to Coffee Lake Creek	$1,592,000	$275,416	$1,316,584
	$6,500,000	**$3,641,517**	**$2,858,483**
Exclude from SDC calculations			
Dammasch stormwater improvements	$3,263,000	$0	$3,263,000
North Wilsonville stormwater improvements	$2,456,000	$0	$2,456,000
	$5,719,000	**$0**	**$5,719,000**
Total	**$19,310,000**	**$8,475,322**	**$10,834,678**

Table 10-1
Stormwater SDC Calculations

Project	Total Cost	Allocated to present customers	Allocated to future customers	Include in Improvement SDC
Include in SDC calculations at full Improvement Cost	$7,091,000	$4,833,805	$2,257,195	**$2,257,195**
Include in SDC calculations at reduced costs because projects are subject to modification	$6,500,000	$3,641,517	$2,858,483	**$2,286,786**
Exclude from SDC calculations	$5,719,000	$0	$5,719,000	**$0**
Total	$19,310,000	$8,475,322	$10,834,678	**$4,543,981**
ERU's				**9,189**
SDC per ERU				**$495**