

# LANDSCAPE PLANTING SCHEDULE SYMBOL BOTANICAL NAME COMMON NAME SIZE QUANTITY Crataegus DouglasII Douglas Hawthorn 1 GAL 1 GAL. Populus Tremuloides Quaking Aspen 1 GAL. 1 GAL. Pseudotsuga Menzeisil

1 GAL. Thuja Plicata Western Red Cedar 1 GAL. Lonicera Involucrata Black Twinberry Mahonia Aquifolium Tall Oregon grape 1 GAL. 1 GAL. Rosa Pisocarpa Clustered Rose

1 GAL. Symphoricarpos Albus Snow Berry Evergreen Huckleberry 1 GAL.

WETLAND ENHANCEMENT

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1 GAL.

# N.E. 205TH ST. EXHIBIT 23 PAGE\_OF N.E. 195TH ST. Vicinity Map

Group, Surveyors & Plan

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Height

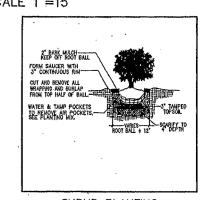
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WETLAND/BUFFER ENHANCEMENT BUFFER TYP.-

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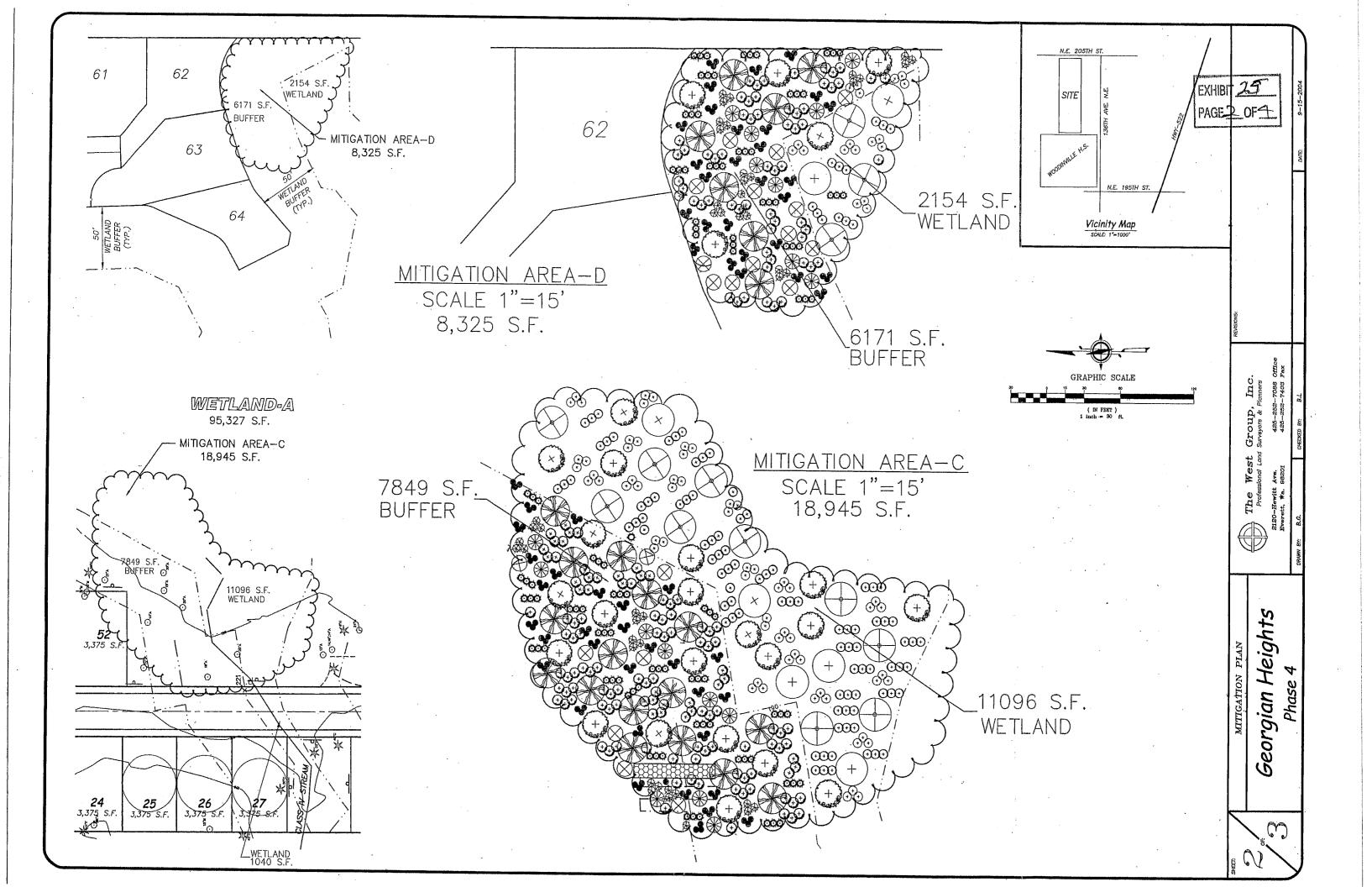
> MITIGATION AREA-B WETLAND AREA= 1741 S.F. BUFFER AREA= 4346 S.F. SCALE 1"=15'



MITIGATION AREA-A SCALE 1"=15' 4457 S.F.



SHRUB PLANTING



#### WETLAND/BUFFER ENHANCEMENT

#### 1. PERMITS

Construction will be performed in accordance with the City of Woodinville standards, codes, permit conditions, and other applicable ordinances and policies. The applicant is responsible for obtaining any other related or required permits prior to the start of construction.

A copy of the approved plans, specifications, permits, and City of Woodinville approvals must be kept onsite until project completion.

A qualified wetland consultant shall be onsite, as necessary, to monitor construction and approve minor revisions to the plan. Contractor shall provide the wetland consultant ten days notice prior to start of construction activities.

Existing native trees, shrubs, and herbs within the Enhancement area shall be retained. Non-native invasive plants shall be cleared from Enhancement areas by hand or other non-mechanical means. Prior to clearing the clearing limits shall be marked with orange construction fencing. No clearing shall occur outside of these limits.

#### 3. MULCHING

Arbonist of wood chip mulch, 6\* deep shall be spread onto disturbed soil areas.

A temporary above-ground irrigation system shall be designed and installed by the Contractor upon completion of finish grading and prior to installation of plantings in the Enhancement greas.

The irrigation system shall provide for ½" of watering two times per week between June 15th and October 31st of the first year after planting. For the second year (and third year it necessary) after planting, the Contractor shall adjust the irrigation system to provide for ½" of watering once weekly between July 1st and October 1st. If planting occurs between May and October, then irrigation of the plantings shall be extended to three growing seasons.

The Contractor shall ensure that the irrigation system functions properly on a regular basis, ne contractor snow ensure unit the uniquien system rundoms properly on a register contractor shall inspect and test the system at a minimum twice per year, with written resent to the City, Westland Consultant and/or other regulatory agency overseeing this project sent to the City, Westland Consultant and/or other regulatory agency overseeing this project

Upon successful plant establishment and Welland Consultant approval, Contractor shall permanently cap and remove the irrigation system from within the Enhancement areas.

# 5, PLANTING SCHEDULE

Planting should occur between October 1st and March 31st.

Contractor shall locate, stoke, and verify planting areas and configurations prior to planting. Planting locations shown on planting plans are approximate and actual planting locations may vary from those shown due to final site conditions and locations of installed utility lines and/or required structures. Any variations from the planting plan shall be approved by the Wetland

The Wetland Consultant shall inspect planting locations and spacing after plant installation

#### 6. PLANT MATERIALS

The Wetland Consultant shall inspect plant material prior to planting. Any plant material not meeting the specifications shall be immediately removed from the site and replaced with plant material that meets the specifications. Plant material shall meet the requirements of State and Federal laws with respect to plant disease and infestation. Plant materials shall be nursery grown, well-rooted or normal growth and habit, and free from disease or infestation.

inspection certificates, required by Law, shall be submitted to the Wetland Consultant upon receipt by the Contractor. The Wetland Consultant shall approve of any substitution of plant materials prior to ordering substitutions.

Plant materials shall be grown in wastern Washington state, wastern Oregon state and/or western British Columbia, Canada. Said plant materials shall be healthy, bushy, and true to size, name and variety. If replacement of plant material is necessary due to plant material follure or construction damage (within 1 year of installation) the size, specie and quantity of plant materials shall be equal to the folled or damaged plant materials.

Trees shall have uniform branching, single straight trunks (unless required as multi-stemmed) and the central leader intact and undamaged. Container trees and shrubs shall be fully noted but not root bound. Plant material with damaged root zones or broken root balls shall be rejected. Conlifer trees shall be nursery grown, full and bushy, with uniform branching and a non-sheared form. Original central leader must be healthy and undamaged. Maximum gap between branching shall not exceed 9° and length of top leader shall not exceed 12°. Shrubs shall be a minimum heighte or 18° with 3 canes minimum, or as otherwise specified.

Notive plant cuttings shall be grown and collected in the maritime Pacific Northwest. Cuttings shall be of one to two year old wood, ½" minimum diameter and be minimum 4 foot length with 4 lateral buds exposed above ground level after planting. The tops of each cutting shall be a minimum of 1" above a leaf bud; the bottom cut 2" below a bud. The basal ends of the a minimum of 1" above a leaf bud; the bottom cut 2" below a bud. The basal ends of the cuttings shall be cut a 45 degree angle and marked clearly so that the rooting end is planted in the soil. Cuttings must be kept covered and wet during storage and transport, and no cuttings shall be stored for more than three days from the date of cutting. Shall not be used if clanting accurs between December 1st and April 1st. For planting

und the stored for more than three days from the date of cutting.

Cuttings shall only be used if planting occurs between December 1st and April 1st. For planting of cuttings between April 1st and December 1st, rooted cuttings or saplings shall be used. Substitutions of plant species or sizes may be permitted based on plant availability, but only with approval from the Wetland Consultant.

#### 7. PLANT INSTALLATION

All plants and trees shall be pit planted or as otherwise shown on these Wetland/Buffer Enhancement drawings. Mulch shuld be cleared away from the planting hole by 1 ft. Planting holes should be twice as wide as deep as the rootball.

The Contractor shall install City—approved signage at 100° spacing along the buffer boundary. Signs shall be attached to a 4x4 wood post prior to installation. The post shall be anchored a minimum of 18" deep, with a minimum of 8 feet of the post above the ground level.

The Contractor shall ensure the removal and clean-up of construction materials and debris on the site following installation of plant materials and sign/post installation.

The Contractor warrants the replacement of plant materials with similar plant materials that prove either to be dislocated or unsuitable as to plant materials standards. Except for loss due to severe climatological conditions substantiated by 10-year recorded weather charts, installed plant materials are required to be guaranteed for one year against defects and unstallated property of the sevent for cases of neglect by Owner or abuse/damage by others. Plant materials replaced shall be guaranteed for one year against defects and unsatisfactory growth, except for cases of neglect by Owner or abuse/damage by others.

# 9. FINAL ACCEPTANCE

The Wetland Consultant shall approve planting locations and if necessary, a punch list shall be prepared and provided to the Contractor prior to final acceptance. Upon punch list approval, the Contractor shall provide as-built drawings to the Wetland Consultant. The date of final acceptance shall constitute the beginning of the One Year Warranty.

## · 10. MAINTENANCE STANDARDS

The Contractor shall maintain trees and shrubs as required to maintain healthy growth and habitat diversity for a period of one year following Final Acceptance; including but not limited to the following: (1) resetting plants to proper grade and upright position, (2) grass and invasive control, and (3) corrective drainage as required.

The Contractor shall be responsible for consistent and adequate water application throughout the growing season and shall winterize and restart the Irrigation system in spring time including any repairs necessary during the One Year Warranty period.

irrigation is required within the Wetland/Buffer restoration area for at least 2 growing seasons following plant material installation to ensure adequate establishment and then the Contractor shall remove the irrigation system. Final approval will not occur until the irrigation system is satisfactorily removed.

# 11. MONITORING AND PERFORMANCE STANDARDS

The goal of the Wetland/Buffer Enhancement is to milligate for the filling of 3613 s.f. of class 2 the goal of the Halland buffer wetlands and buffers is required by the City Wetland. Enhancement of wetlands and buffers is required by the City of Woodinville (WMC 21.24.340). In meeting this goal the following apply:

A. Increase the structural diversity of the plant community within the enhanced welland and its buffer by providing for a combination of notive and woody vegetation covering at least 15% of the enhancement area following the 1st year after planting, at least 25% of the enhanced area following the 2nd year after planting and at least 35% of the enhacement area following the 3rd, 4th and 5th years after planting.

8. Increase the plant species diversity within the enhanced wetland and its buffer by providing for a combination of at least six native plant species with at least 100% providing dafer the 1st year after planting, 85% survival after the 2nd year after planting and 85% survival after the 3rd year of planting.

C. Limit the amount of invasive and exotic species within the enhanced wetland and its buffer by providing for a 5-year monitoring program, maintaining below 20% exotic and invasive plant species in the enhancement area; except for the reed canary grass.

by providing for a o-year monitoring program, managing to the reed canary grass.

D. Construction limits will be staked and any existing native vegetation shall be saved as field-marked. A pro-construction meeting will be held at the site to review and discuss all aspects of the project with the selected Contractor.

E. A Wetland Consultant will supervise plan Implementation during construction to ensure that specifications of the enhancement plan are met.

F. The monitoring program will be conducted once during each grawing season, for a period of five years, with annual reports submitted to the City of Woodinville, the Contractor and the Owner.

G. Vegetation sampling points shall be established within the enhancement area for cycledian sampling points shall be established or representation of the plant communities. These sampling points shall be conducted by a year with records kept of all plant species found. All monitoring shall be conducted by a year with records kept of all plant species found. All monitoring shall be conducted by a qualified consultant and vegetation will be recorded with a focus on relative percent over of the dominant species within the vegetative strata. Photo-points shall be established for the monitoring program annual reports. Review of the photos taken each established for the monitoring program annual reports. Review of the photos taken each the Reddly observable wildlife species will be identified and recorded in the restoration area. It. An assessment of the water quality/hydrology within the enhancement area shall be completed for the monitoring program annual report. General observations will be made completed for the monitoring program annual report. General observations will be taken serious concerns. In such case of serious concerns, water quality samples will be taken serious concerns. In such case of serious concerns, water quality samples will be taken and evelwed for oil sheen, obnormal water color and odor, stressed or dead vegetation and turbloity.

Mulche shall be

and turnicity. J. Mulch shall be added (3-4") in depth where needed at the beginning of monitoring year 2.

## 12. MAINTENANCE PLAN

Maintenance shall be conducted on a routine, year round basis according to the schedule below. Additional maintenance needs will be identified and addressed following the

Maintenance Item Weed control Irrigation 1st year	JAN 1	FEB 1	MAR 1	APR	MAY 1	JUN 1 4	JUL 1 8	AUG 1 8	SEP 1 B	0CT 1 4	NOV 1	DEC 1
Irrigation 1st year Irrigation 2nd year General Maintenance ***1-8 denotes numb	1 per of	1 times	1 task	1 sholl	1 be per	2 1 formed	4 1 per	4 1 month.	1	1	1	1

Weed control shall include removal and control of non-native and invosive plants, performed by hand grubbing whenever possible. Undesirable and weedy exotic plant species shall be maintained at levels below 20% total cover at all times during the 5-year manitoring period.

3'x 3'Areas or less with reed canarygrass shall be hand-grubbed. Areas larger than 3' x 3' shall be weed-whacked and stoked with cuttings. Scouler Willow (Salix scouleriana) and black cottonwood twinberry (Lonicera involucrate) cuttings shall be used in the wetter areas and black cottonwood twinberry (Lonicera involucrate) cuttings shall be used in direr areas. During April 1 through November 30, (Populus trichocarpa) cuttings shall be used in place of cuttings. Cuttings shall be installed at 1' OC spacing over and extending 2' in each direction, unless otherwise specified. Cuttings shall be 2-year old wood, 4' length, ½" diameter, with all side branches removed and installed to a minimum depth of 12".

13. IRRIGATION

The Contractor shall ensure proper functioning of the temporary above—ground irrigation eystem from June 1 through October 31. During the 1st year after installation, irrigation should be applied at rate of ½" water twice per week. During the 2nd year after installation, irrigation should be applied at rate of ½" water once per week. During the 2nd year after installation, irrigation should be applied at rate of ½" water once per week. It water twice per week. Watering rates shall be maintained at ½" water twice per week.

The Contractor shall ensure adequate coverage and function of the entire system, including but not limited to repairs, resetting of heads and adjustments, and winterization by October 31 to prevent winter freeze damage.

## 14. GENERAL MAINTENANCE

The Contractor shall remove all trash and other debris on a regular basis. Contractor shall leave all dead plant material and other organic debris (leaf matter, fallen branches, etc) except pest-

Ine Contractor shall regularly maintain the trees including but not limited to resetting plants Weed control should be performed by hand removal, installation of weed barrier cioth with mulch rings, or selective weed—whacking. If weed—whacking is performed, great care shall to proper grades and upright positions, and weedling around bases, be taken to prevent damage to desired notive species either planted or recajonized. Woody plants shall be pruned at the direction of the Wetland Consultant or to remove pest infestations (i.e tent caterpillar). infested vegetation.
The Contractor shall regularly maintain the trees including but not limited to resetting plants.

The Contractor shall replant areas after reason for failure has been identified (i.e. moisture problems, poor planting, bad stock, disease, shade/sun, etc). The Contractor shall replace problems that he same species or an approved substitute species that meets the good of the dead plants with the same species or an approved substitute species that meets the good of the enhancement plan. The Contractor shall notify the Wetland Consultant or species, quantity, size and replacement material prior to installation. The Wetland Consultant shall review staked locations prior to installation. Replaced plant material shall meet the same specifications as originally installed material. The Contractor will complete one-year warranty replacement. The Contractor shall correct any erosion and drainage problems and will notify the Wetland Consultant, the City of Woodinville and the Owner.

## 15. MAINTENANCE BOND

At the discretion of the City of Woodinville, a performance bond or other financial guarantee will be posted with the City of Woodinville for the cost of implementing and monitoring the enhancement plan. At the discretion of the City of Woodinville, the performance bond may be released in partial amounts in proportion to work successfully completed over the 5-year monitoring period as the Owner demonstrates performance for implementing the conditions of the enhancement plan.

