CITY OF VANCOUVER MUNICIPAL CODE TITLE 20 - SECTION 20.770.090 TREE PROTECTION DURING CONSTRUCTION

DURING CONSTRUCTION. PRIOR TO INITIATING TREE REMOVAL ON THE SITE, VEGETATED AREAS AND INDIVIDUAL TREES TO BE PRESERVED SHALL BE PROTECTED FROM POTENTIALLY DAMAGING ACTIVITIES PURSUANT TO THE FOLLOWING STANDARDS.

PLACING MATERIALS NEAR TREES. NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE PROTECTED AREA OF
ANY TREE DESIGNATED TO REMAIN, INCLUDING, BUT NOT LIMITED TO, PARKING EQUIPMENT, PLACING
SOLVENTS, STORING BUILDING MATERIAL AND SOIL DEPOSITS, DUMPING CONCRETE WASHOUT AND LOCATING
BURN HOLES.
 DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY OBJECT TO ANY TREE DESIGNATED FOR

PROTECTIVE BARRIER. BEFORE DEVELOPMENT, LAND CLEARING, FILLING OR ANY LAND ALTERATION FOR WHICH

A TREE REMOVAL PERMIT IS REQUIRED, THE APPLICANT:

1. SHALL ERECT AND MAINTAIN READILY VISIBLE PROTECTIVE TREE FENCING ALONG THE OUTER EDGE AND COMPLETELY SURROUNDING THE PROTECTED AREA OF ALL PROTECTED TREES OR GROUPS OF TREES.
FENCES SHALL BE CONSTRUCTED OF CHAIN LINK AND AT LEAST FOUR FEET HIGH, UNLESS OTHER TYPE OF

FENCING IS AUTHORIZED BY THE PLANNING OFFICIAL.

2. SHALL PROHIBIT EXCAVATION OR COMPACTION OF EARTH OR OTHER POTENTIALLY DAMAGING ACTIVITIES WITHIN THE BARRIERS.

ACTIVITIES WITHIN THE BARRIERS.

3. SHALL MAINTAIN THE PROTECTIVE BARRIERS IN PLACE UNTIL THE PLANNING OFFICIAL AUTHORIZES THEIR REMOVAL OR A FINAL CERTIFICATE OF OCCUPANCY IS ISSUED, WHICHEVER OCCURS FIRST.

SHALL ENSURE THAT ANY LANDSCAPING DONE IN THE PROTECTED ZONE SUBSEQUENT TO THE REMOVAL OF THE BARRIERS SHALL BE ACCOMPLISHED WITH LIGHT MACHINERY OR HAND LABOR.
 IN ADDITION TO THE ABOVE, THE PLANNING OFFICIAL MAY REQUIRE THE FOLLOWING:

 COVER WITH MULCH TO A DEPTH OF AT LEAST SIX (6) INCHES OR WITH PLYWOOD OR SIMILAR

MATERIAL THE AREAS ADJOINING THE CRITICAL ROOT ZONE OF A TREE IN ORDER TO PROTECT ROOTS FROM DAMAGE CAUSED BY HEAVY EQUIPMENT.

b. MINIMIZE ROOT DAMAGE BY EXCAVATING A TWO (2) FOOT DEEP TRENCH, AT EDGE OF CRITICAL ROOT ZONE, TO CLEANLY SEVER THE ROOTS OF TREES TO BE RETAINED.

ROOT ZONE, TO CLEANLY SEVER THE ROOTS OF TREES TO BE RETAINED.

c. HAVE CORRECTIVE PRUNING PERFORMED ON PROTECTED TREES IN ORDER TO AVOID DAMAGE FROM MACHINERY OR BUILDING ACTIVITY.

d. MAINTAIN TREES THROUGHOUT CONSTRUCTION PERIOD BY WATERING AND FERTILIZING.

DADE.

C. <u>GRADE</u>.

1. THE GRADE SHALL NOT BE ELEVATED OR REDUCED WITHIN THE CRITICAL ROOT ZONE OF TREES TO BE PRESERVED WITHOUT THE PLANNING OFFICIAL'S AUTHORIZATION. THE PLANNING OFFICIAL MAY ALLOW COVERAGE OF UP TO ONE HALF OF THE AREA OF THE TREE'S CRITICAL ROOT ZONE WITH LIGHT SOILS (NO CLAY) TO THE MINIMUM DEPTH NECESSARY TO CARRY OUT GRADING OR LANDSCAPING PLANS, IF IT WILL NOT IMPERIL THE SURVIVAL OF THE TREE. AERATION DEVICES MAY BE REQUIRED TO ENSURE THE TREE'S SURVIVAL.

2. IF THE GRADE ADJACENT TO A PRESERVED TREE IS RAISED SUCH THAT IT COULD SLOUGH OR ERODE INTO THE TREE'S CRITICAL ROOT ZONE, IT SHALL BE PERMANENTLY STABILIZED TO PREVENT SUFFOCATION OF THE ROOTS.

3. THE APPLICANT SHALL NOT INSTALL AN IMPERVIOUS SURFACE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE TO BE RETAINED WITHOUT THE AUTHORIZATION OF THE PLANNING OFFICIAL. THE PLANNING OFFICIAL MAY REQUIRE SPECIFIC CONSTRUCTION METHODS AND/OR USE OF AERATION DEVICES TO ENSURE THE TREE'S SURVIVAL AND TO MINIMIZE THE POTENTIAL FOR ROOT INDUCED DAMAGE TO THE IMPERVIOUS SURFACE.

4. TO THE GREATEST EXTENT PRACTICAL, UTILITY TRENCHES SHALL BE LOCATED OUTSIDE OF THE CRITICAL ROOT ZONE OF TREES TO BE RETAINED. THE PLANNING OFFICIAL MAY REQUIRE THAT UTILITIES BE TUNNELED UNDER THE ROOTS OF TREES TO BE RETAINED IF THE PLANNING OFFICIAL DETERMINES THAT TRENCHING WOULD SIGNIFICANTLY REDUCE THE CHANCES OF THE TREE'S SURVIVAL.

5. TREES AND OTHER VEGETATION TO BE RETAINED SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. CLEARING OPERATIONS SHALL BE CONDUCTED SO AS TO EXPOSE THE SMALLEST PRACTICAL AREA OF SOIL TO EROSION FOR THE LEAST POSSIBLE TIME. TO CONTROL EROSION, SHRUBS, GROUND COVER AND STUMPS SHALL BE MAINTAINED ON THE INDIVIDUAL LOTS, WHERE FEASIBLE. WHERE NOT FEASIBLE APPROPRIATE EROSION CONTROL PRACTICES SHALL BE IMPLEMENTED PURSUANT TO CHAPTER 20.720 VMC.

D. <u>DIRECTIONAL FELLING.</u> DIRECTIONAL FELLING OF TREES SHALL BE USED TO AVOID DAMAGE TO TREES DESIGNATED FOR RETENTION.

E. <u>ADDITIONAL REQUIREMENTS</u>. THE PLANNING OFFICIAL MAY REQUIRE ADDITIONAL TREE PROTECTION MEASURES WHICH ARE CONSISTENT WITH ACCEPTED URBAN FORESTRY PRACTICES.

(ORD. M-4179 § 85, 2016; ORD. M-3643 , 2004)

CITY OF VANCOUVER MUNICIPAL CODE TITLE 20 - SECTION 20.770.100 MAINTENANCE REQUIREMENTS

A. MAINTENANCE. TREES ARE TO BE MAINTAINED IN A VIGOROUS AND HEALTHY CONDITION, FREE FROM DISEASES, PESTS AND WEEDS. COMPETING VEGETATION SHALL BE CONTROLLED TO THE EXTENT NECESSARY TO ALLOW ESTABLISHMENT, SURVIVAL, AND GROWTH OF PLANTED TREES. TO ENSURE THAT COMPETING VEGETATION IS PROPERLY CONTROLLED, THE PLANNING OFFICIAL MAY REQUIRE THE USE OF MULCH, WEED CONTROL FABRIC, TREE SHELTERS, AND/OR OTHER MEASURES DEEMED NECESSARY. TREES WHICH BECOME DISEASED, SEVERELY DAMAGED OR WHICH DIE SHALL BE REMOVED BY THE OWNER AS SOON AS POSSIBLE BUT NO LATER THAN 60 DAYS AFTER NOTIFICATION BY THE CITY. ALL TREES REMOVED UNDER THIS SECTION SHALL BE REPLACED WITH A HEALTHY TREE OF THE SAME SIZE AND SPECIES AS REQUIRED BY THE APPROVED TREE PLAN FOR THE PROPERTY.

B. MULTIFAMILY RESIDENTIAL, COMMERCIAL, INDUSTRIAL DEVELOPMENTS, CONDITIONAL USE. FOR ALL TREES COVERED BY THE TREE PLAN, THE MAINTENANCE REQUIREMENT SHALL APPLY IN PERPETUITY TO DEVELOPMENTS THAT ARE MULTIFAMILY RESIDENTIAL DEVELOPMENTS IN EXCESS OF FOUR UNITS, COMMERCIAL AND INDUSTRIAL. THE APPLICANT SHALL EXECUTE A COVENANT IN A FORM AGREEABLE TO THE CITY WHICH SHALL REQUIRE THAT THE APPLICANT AND HIS SUCCESSORS COMPLY WITH THE MAINTENANCE REQUIREMENT IMPOSED BY THIS SECTION. THE COVENANT SHALL BE BINDING ON SUCCESSOR PROPERTY OWNERS AND OWNERS' ASSOCIATIONS. THE COVENANT SHALL BE RECORDED BY THE COUNTY AUDITOR. THE RECORDING FEE SHALL BE PAID BY THE APPLICANT.

MAINTENANCE AGREEMENT. EACH DEVELOPMENT TO WHICH THE MAINTENANCE REQUIREMENT FOR THIS CHAPTER APPLIES AND THAT CONTAIN A SPECIMEN TREE(S) SHALL ALSO BE SUBJECT TO A MAINTENANCE AGREEMENT. THE PLANNING OFFICIAL SHALL REQUIRE THE APPLICANT TO EXECUTE A MAINTENANCE AGREEMENT WITH THE CITY, IN A FORM ACCEPTABLE TO THE CITY ATTORNEY, WHICH SHALL INCLUDE THE PROVISIONS OF THE MAINTENANCE REQUIREMENT IN THIS CHAPTER, TO ENSURE THE SURVIVAL AND PROPER CARE OF ANY SPECIMEN TREES IDENTIFIED IN THE TREE PLAN.

D. REQUIRED PRUNING. PRUNING SHALL BE PERFORMED ON NEWLY PLANTED DECIDUOUS TREES PURSUANT TO THE FOLLOWING SCHEDULE AND STANDARDS.
 1. PRUNING OF DECIDUOUS TREES SHALL BE PERFORMED ON NEWLY PLANTED DECIDUOUS TREES PURSUANT TO THE FOLLOWING SCHEDULE AND STANDARDS.

a. YEAR 1. ONLY DEAD, BROKEN OR CROSSING BRANCHES SHALL BE PRUNED WHEN THE TREE IS PLANTED.
 b. YEAR 2. A CLASS I PRUNE, PURSUANT TO NATIONAL ARBORIST ASSOCIATION STANDARDS, SHALL BE PERFORMED DURING YEAR 2.
 c. YEAR 3. A CLASS I PRUNE PURSUANT TO NATIONAL ARRORIST ASSOCIATION STANDARDS. SHALL BE

c. YEAR 3. A CLASS I PRUNE, PURSUANT TO NATIONAL ARBORIST ASSOCIATION STANDARDS, SHALL BE PERFORMED DURING YEAR 3. THE PURPOSE OF THIS PRUNING IS TO ESTABLISH THE PROPER SCAFFOLD BRANCHING, CONTINUE TO RAISE THE CROWN FOR ROAD AND SIDEWALK CLEARANCE, AND TO REMOVE ANY DEAD, DYING OR CROSSING BRANCHES.

PRUNING OF CONIFEROUS TREES SHALL BE PERFORMED ON NEWLY PLANTED CONIFER TREES ACCORDING TO
THE FOLLOWING SCHEDULE AND STANDARDS.
 a. YEAR 1. ONLY DEAD AND BROKEN BRANCHES AND/OR DOUBLE LEADERS SHALL BE PRUNED WHEN THE
TREE IS PLANTED.

b. YEAR 2. DEPENDING ON SPECIES, THE TREE SHALL BE PRUNED TO ENCOURAGE ONE CENTRAL LEADER. LOWER BRANCHES SHALL BE PRUNED AS NEEDED TO PROVIDE CLEARANCE.
c. YEAR 3. DEPENDING ON SPECIES, THE TREE SHALL BE PRUNED TO ENCOURAGE ONE CENTRAL LEADER.

E. <u>VIOLATION</u>. FAILURE TO REGULARLY MAINTAIN THE TREES AS REQUIRED IN THIS SECTION SHALL CONSTITUTE A VIOLATION OF THIS CHAPTER AND, IF APPLICABLE, THE PLAT COVENANT. (ORD. M-3286 § 1, 1997)

LOWER BRANCHES SHALL BE PRUNED AS NEEDED TO PROVIDE CLEARANCE.

(ORD. M-3840 § 33, 2007; ORD. M-3643, 2004)

bassetti | architects

71 Columbia Street, Suite 500 Seattle, Washington 98104 T (206) 340 9500 F (206) 340 9519

CIVIL ENGINEER
MacKay Sposito
1325 SE Tech Center Dr., Suite 140
Vancouver, WA 98683
T (360) 695 3411

STRUCTURAL ENGINEER
PCS Structural Solutions
One Main Place
101 SW Main Street, Suite 280
Portland, OR 97204

T (503) 232 3746

MECHANICAL ENGINEER
BCE Engineers
6021 12th St E, Suite 200
Fife, WA 98424

T (253) 922-0446

ELECTRICAL ENGINEER
BCE Engineers

6021 12th St E, Suite 200 Fife, WA 98424 T (253) 922-0446

ACOUSTIC Stantec 4100 194th St., SW, Ste. 400

Lynnwood, WA 98036

Portland, OR 97209

T (503) 226 2730

T (206) 667 0555

COST CONSULTANT
Rider Levett Bucknall (RLB)
Brewery Block 2
1120 NW Couch Street, Suite 730

ONE INCH

ackay Sposito

GY PUBLIC WORKS LAND DEVELOPMENT

TREE DENSITY CALCULATION (DISTURBED AREA)

	COUNT	TRE UNI
EXISTING TREES PRESERVED WITHIN DISTURBED AREA	8	11
REMOVED TREES	2	3
PROPOSED TREES	20	22
TOTAL TREE UNITS PROVIDED		30
	PRESERVED WITHIN DISTURBED AREA REMOVED TREES PROPOSED TREES TOTAL TREE UNITS	EXISTING TREES PRESERVED WITHIN DISTURBED AREA REMOVED TREES 2 PROPOSED TREES 20 TOTAL TREE UNITS

SEE SHEETS L201, L202, AND L203

SYMBOL LEGEND

LIMITS OF PROJECT

DISTURBANCE

EXISTING TREE (TO BE REMOVED)

EXISTING TREE

(TO BE PROTECTED)

TREE PROTECTION FENCE

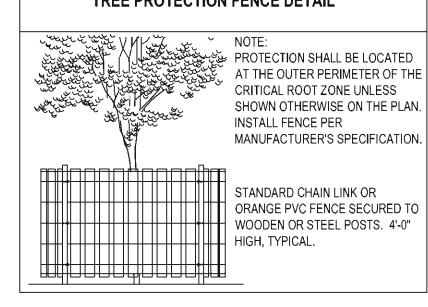
(4' CHAIN LINK OR ORANGE

SEE DETAIL ON THIS SHEET

FOR PROPOSED TREE PLANTING

TREE UNITS REQUIRED (.98 AC @ 30 UNITS PER AC)

TREE PROTECTION FENCE DETAIL



TREE PROTECTION TIME LINE AND NARRATIVE

TIME LINE: TREE PROTECTION AND EROSION CONTROL FENCING SHALL BE ESTABLISHED PRIOR TO EXCAVATION.

NARRATIVE: IT IS RECOMMENDED THAT WHERE TREE FENCING AND EROSION CONTROL FENCE ARE REQUIRED AT THE SAME LOCATION, THE EROSION CONTROL FENCE SHALL SERVE AS THE TREE PROTECTION FENCE. SEE TREE PROTECTION FENCING DETAIL.

SURVEY: TREE LOCATIONS AND SIZES SHOWN ON THE PLANS ARE PROVIDED BY MEASUREMENTS DURING FIELD VISITS BY MacKay Sposito. CONTRACTOR TO VERIFY CONDITION PRIOR TO CONSTRUCTION AND ADJUST TREE PROTECTION MEASURES AS NEEDED. COORDINATE WITH MacKay Sposito AND CITY PRIOR TO CONSTRUCTION.

TYPE II TREE,

Vancouver School District

FRANKLIN

ELEMENTARY

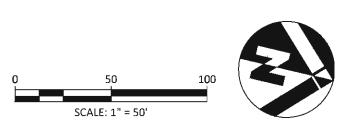
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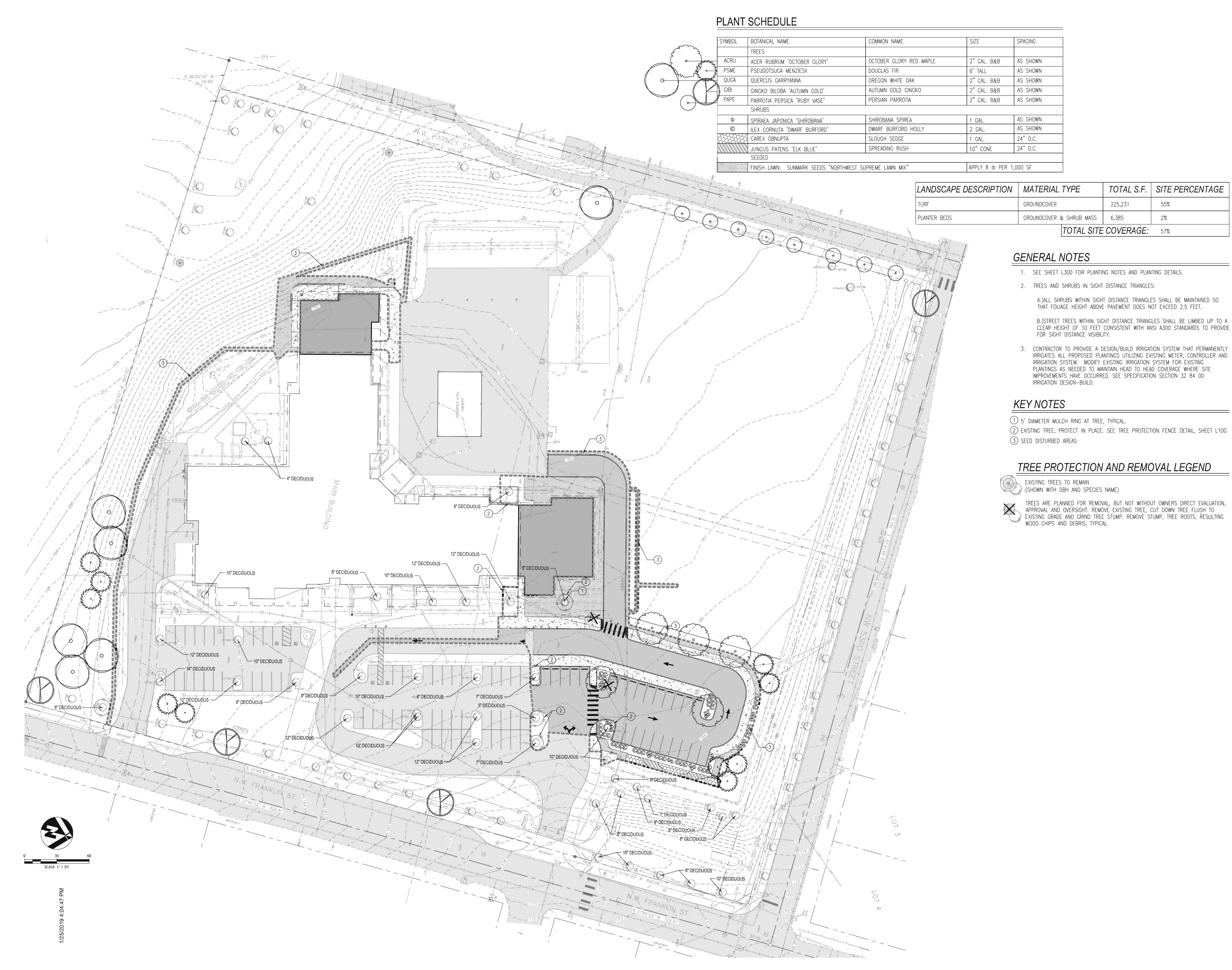
Vancouver, WA 98663

Jurisdiction Stamp Area

VEGETATION
AND SOIL PLAN

L100







71 Columbia Street, Suite 500 Seattle, Washington 98104 T (206) 340 9500 F (206) 340 9519

CIVIL ENGINEER
MacKay Sposito
1325 SE Tech Center Dr., Suite 140
Vancouver, WA 98683
T (360) 695 3411

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Portland, OR 97204

T (503) 232 3746

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BCE Engineers
6021 12th St E, Suite 200
Fife, WA 98424

T (253) 922-0446

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BCE Engineers

6021 12th St E, Suite 200

Fife, WA 98424
T (253) 922-0446
ACOUSTIC

Stantec 4100 194th St., SW, Ste. 400 Lynnwood, WA 98036 T (206) 667 0555

COST CONSULTANT
Rider Levett Bucknall (RLB)
Brewery Block 2
1120 NW Couch Street, Suite 730
Portland, OR 97209
T (503) 226 2730

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Vancouver School District
FRANKLIN
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OB NO:
SSUE DATE: 08/1

Jurisdiction Stamp Area

Jurisdiction Stamp Area

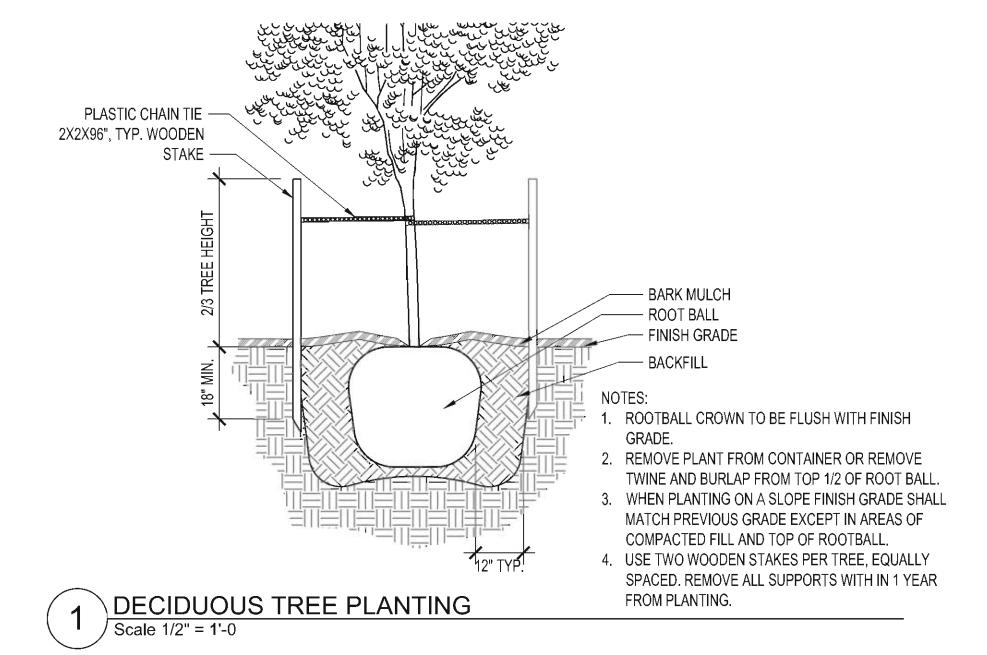
PLANTING PLAN VALUE

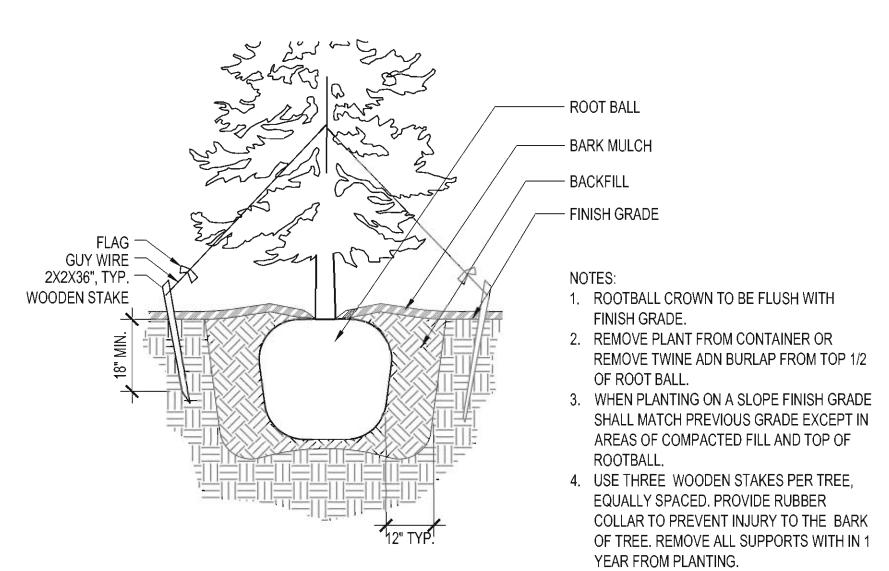
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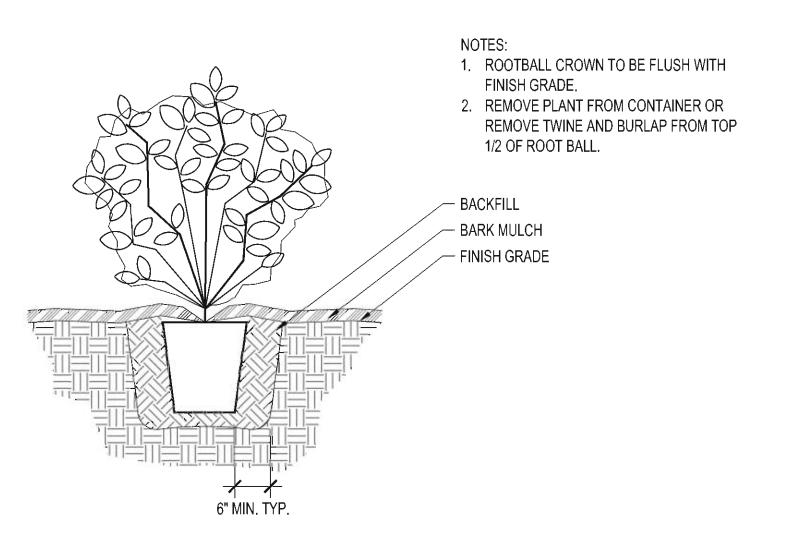
GENERAL NOTES

- 1. PLANTING BEDS ARE TO BE SUFFICIENTLY CLEANED OF ALL CONSTRUCTION MATERIALS, INCLUDING IMPORTED ROCK, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE BEFORE BEGINNING ANY LANDSCAPE WORK.
- 2. LOCATE ALL PLANTING BEDS IN FIELD. FLAG PLANTING BEDS WITH WHITE FIELD-MARKING CHALK OR APPROVED EQUAL. ALL PLANTING BEDS TO BE ADJUSTED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLANT LOCATION.
- 3. THE OWNER'S REPRESENTATIVE WILL APPROVE INDIVIDUAL PLANT MATERIAL AND LOCATION OF PLANT MATERIAL PRIOR TO INSTALLATION.
- 4. ALL VEGETATION TO BE WELL ROOTED AND WELL BRANCHED.
- 5. ALL PLANT MATERIAL SHALL BE NURSERY GROWN & MEET ANSI STANDARDS. 6. QUANTITIES INDICATED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. INSTALL NUMBER OF PLANTS AS DRAWN. CONTRACTOR RESPONSIBLE FOR INSTALLING PLANTS IN QUANTITIES AND LOCATIONS SHOWN.
- 7. PROVIDE STANDARD, COMMERCIALLY PRODUCED, MEDIUM-COURSE, DARK BROWN, BARK MULCH. BARK SHALL BE GROUND FIR OR HEMLOCK BARK OF UNIFORM COLOR, FREE FROM WEEDS, SEED, SAWDUST, AND SPLINTERS AND SHALL NOT CONTAIN RESIN, TANNIN, OR OTHER COMPOUNDS DETRIMENTAL TO PLANT LIFE. ALL MATERIAL SHALL PASS A 1-INCH MESH SCREEN AND APPLIED AT DEPTHS INDICATED ON DRAWINGS AND SPECIFICATIONS.
- 8. PROVIDE SLOW-RELEASE FERTILIZER TABLETS [20-10-5 SLOW RELEASE PLANT TABLETS, 10 GRAM SIZE. AGRIFORM OR EQUAL] DURING BACKFILL AT THE FOLLOWING RATES: LOCATE PLANT TABLETS 1 INCH FROM ROOTS AND AT MID-DEPTH. SPACE EVENLY AROUND THE PLANT.
 - -1 GALLON SHRUB = 1 TABLET
 - -2 GALLON SHRUB = 2 TABLET -3 GALLON SHRUB = 2 TABLET
 - -5 GALLON SHRUB OR TREE = 3 TABLETS
- 9. PLACE MULCH 2" INCHES DEEP IN ALL PLANTING BEDS. RAKE SMOOTH. MULCH SHALL BE PULLED AWAY FROM CROWNS OF SHRUBS. MULCH SHALL BE FLUSH WITH ADJACENT CURBS AND PAVING. TAPER MULCH THICKNESS FROM FULL 2"-INCHES DEPTH TO 1"-INCH DEPTH OVER A 12-INCH HORIZONTAL RUN AT PAVING EDGES SO MULCH WILL BE FLUSH WITH ADJACENT CURBS AND PAVING.
- 10. DECIDUOUS TREES OVER 1-1/2 INCH CALIPER WHEN WITHIN FIVE FEET OF PAVEMENT SHALL BE WRAPPED PROMPTLY AFTER PLANTING TO PREVENT SUN SCALD, WRAPPING AS APPROVED BY AMERICAN ASSOCIATION OF NURSERYMEN. WRAP SPIRALLY FROM GROUND LINE TO THE HEIGHT OF THE FIRST BRANCH. WRAP IN NEAT AND SNUG MANNER AND SECURE WITH TAPE SIMILARLY COLORED TO TREE WRAP AT BOTTOM, TOP AND IN THE MIDDLE. WRAP BEFORE STAKING OR GUYING.





2 EVERGREEN TREE PLANTING



3 SHRUB AND GROUNDCOVER PLANTING
Scale 3/4" = 1'-0



71 Columbia Street, Suite 500 Seattle, Washington 98104 T (206) 340 9500 F (206) 340 9519

CIVIL ENGINEER MacKay Sposito 1325 SE Tech Center Dr., Suite 140 Vancouver, WA 98683

T (360) 695 3411 STRUCTURAL ENGINEER PCS Structural Solutions One Main Place 101 SW Main Street, Suite 280

Portland, OR 97204 T (503) 232 3746 MECHANICAL ENGINEER BCE Engineers

6021 12th St E, Suite 200 Fife, WA 98424 T (253) 922-0446

ELECTRICAL ENGINEER BCE Engineers 6021 12th St E, Suite 200

Fife, WA 98424 T (253) 922-0446 ACOUSTIC

4100 194th St., SW, Ste. 400 Lynnwood, WA 98036 T (206) 667 0555 COST CONSULTANT

Rider Levett Bucknall (RLB) Brewery Block 2 1120 NW Couch Street, Suite 730 Portland, OR 97209 T (503) 226 2730



Vancouver School District FRANKLIN **ELEMENTARY** SCHOOL

1698, 5206 NW Franklin St, Vancouver, WA 98663

Jurisdiction Stamp Area

PLANTING NOTES AND DETAILS

L300