

VICINITY MAPS

LEGEND

- WETLAND BOUNDARY
- WETLAND BUFFER
- PROPERTY BOUNDARY
- WETLAND MITIGATION (2,300 SF)
- WETLAND BUFFER MITIGATION (3,950 SF)
- PLACED WOODY DEBRIS (QTY: 3)
- CRITICAL AREA SPLIT-RAIL FENCE WITH SIGN (440 LF, QTY: 1)

SHEET INDEX

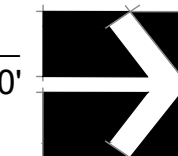
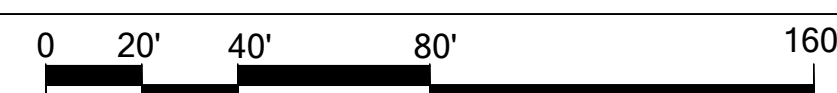
1. MITIGATION PLAN
2. PLANTING PLAN
3. SITE PREPARATION PLAN
4. PLANT INSTALLATION NOTES & DETAILS
4. MITIGATION NOTES

NOTES

1. PLEASE BE AWARE THAT CONSTRUCTION ACCESS, POLE TYPES, POLE HEIGHTS, AND POLE LOCATIONS ARE SUBJECT TO CHANGE PENDING FURTHER DESIGN, ENVIRONMENTAL REVIEW, PERMITTING AND IN-FIELD CONSTRUCTION NEEDS.
2. WETLANDS WERE DELINEATED BY THE WATERSHED COMPANY ON JANUARY 31, 2017 AND FEBRUARY 7, 2017.
3. SURVEY RECEIVED FROM APS SURVEY AND MAPPING, PERFORMED ON JANUARY 19, 2017 AND WETLAND LOCATES PERFORMED ON FEBRUARY 16, 2017.
4. THIS MITIGATION PLAN HAS BEEN DESIGNED TO APPROPRIATELY MITIGATE FOR PROJECT IMPACTS OCCURRING IN WETLANDS AND WETLAND AND STREAM BUFFERS IN THE COAL CREEK SUB-BASIN AND IS INTENDED TO REPRESENT THE FINAL MITIGATION PLAN REFERENCED IN THE SOUTH BELLEVUE CAR. SEE MITIGATION NOTES SHEET W5.

SOMERSET SUBSTATION

MITIGATION PLAN



SOMERSET SUBSTATION
ENERGIZE EASTSIDE MITIGATION PLAN
PREPARED FOR: PUGET SOUND ENERGY
PARCEL #2124059071, #2124059052
5200 SE COAL CREEK PKWY
BELLEVUE, WA 98006

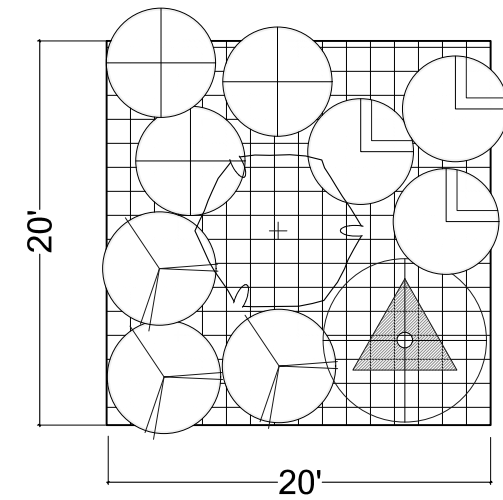
SUBMITTALS & REVISIONS	
NO.	DESCRIPTION
1	05/03/2018 MITIGATION PLAN

SHEET SIZE:
 ORIGINAL PLAN IS 22" x 34".
 SCALE ACCORDINGLY.

PROJECT MANAGER: JC
DESIGNED: AJ/LM
DRAFTED: AJ/LM
CHECKED: CM
JOB NUMBER:
 111103.11
SHEET NUMBER:
W1 OF 5

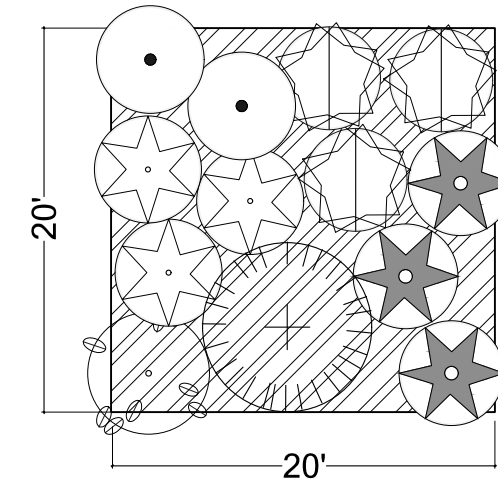
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WETLAND ENHANCEMENT PLANTING TYPICAL (WITH TREES)



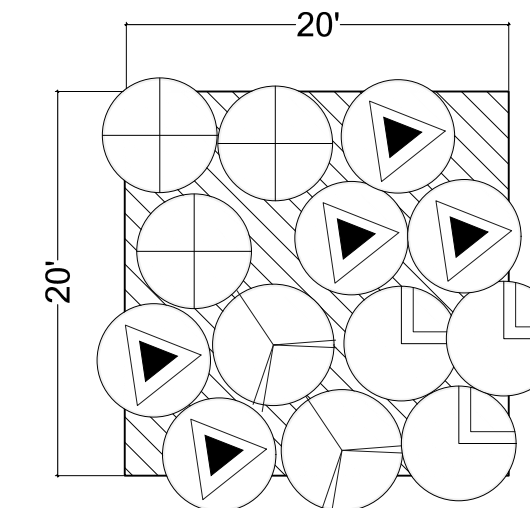
TREES (18)	QTY	SPACING	SIZE
FRAXINUS LATIFOLIA / OREGON ASH	6	9' O.C.	2 GAL.
THUJA PLICATA / WESTERN REDCEDAR	6		2 GAL.
PICEA SITCHENSIS / SITKA SPRUCE	6		2 GAL.
SHRUBS (48)		6' O.C.	1 GAL.
CORNUS SERICEA / RED-OSIER DOGWOOD	12		1 GAL.
ROSA NUTKANA / NOOTKA ROSE	12		1 GAL.
RUBUS SPECTABILIS / SALMONBERRY	12		1 GAL.
PHYSOCARPUS CAPITATUS / PACIFIC NINEBARK	12		1 GAL.
GROUNDCOVER (367)		24" O.C.	
<i>*ALL SPECIES TO BE SPACED TRIANGULARLY</i>			
ATHYRIUM FILIX-FEMINA / LADY FERN	92		1 GAL.
TOLMIEA MENZIESII / PIGGYBACK PLANT	92		1 GAL.
SCIRPUS MICROCARPUS / SMALL FRUITED BULRUSH	92		1 GAL.
CAREX OBNUPTA / SLOUGH SEDGE	92		1 GAL.
<i>(PLANT BY SPECIES IN ODD NUMBER GROUPS OF 9-15)</i>			

BUFFER ENHANCEMENT PLANTING TYPICAL (WITH TREES)



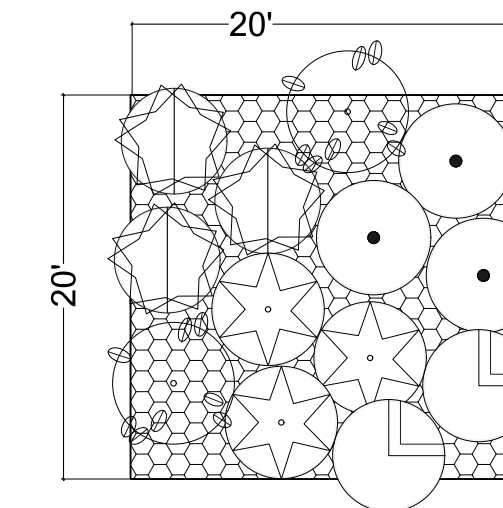
TREES (19)	QTY	SPACING	SIZE
THUJA PLUCATA / WESTERN REDCEDAR	6	9' O.C.	2 GAL.
ARBUTUS MENZIESII / PACIFIC MADRONE (PLANT NEXT TO EXISTING DOUGLAS-FIR)	7		2 GAL.
PRUNUS EMARGINATA / BITTER CHERRY			2 GAL.
SHRUBS (51)		6' O.C.	1 GAL.
SYMPHORICARPUS ALBUS / SNOWBERRY	10		1 GAL.
OEMLERIA CERASIFORMIS / OSOBERRY	10		1 GAL.
MAHONIA NERVOSA / LOW OREGON GRAPE	10		1 GAL.
MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	10		1 GAL.
ACER CIRCINATUM / VINE MAPLE	11		1 GAL.
GROUNDCOVER (392)		24" O.C.	
<i>*ALL SPECIES TO BE SPACED TRIANGULARLY</i>			
POLYSTICHUM MUNITUM / SWORD FERN	196		1 GAL.
BLECHNUM SPICANT / DEER FERN	196		1 GAL.
<i>(PLANT BY SPECIES IN ODD NUMBER GROUPS OF 9-15)</i>			

WETLAND ROW ENHANCEMENT PLANTING TYPICAL (NO TREES)

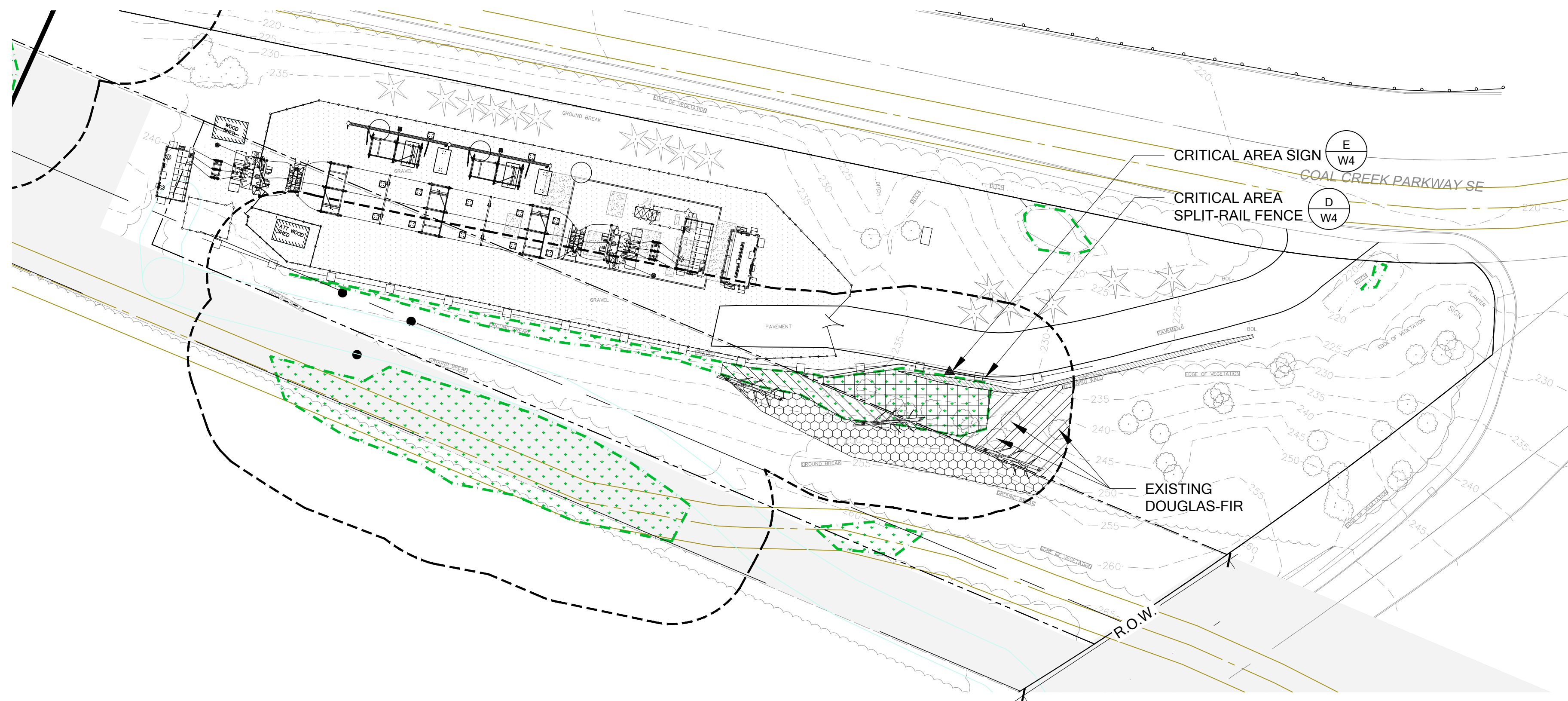


SHRUBS (12)	QTY	SPACING	SIZE
CORNUS SERICEA / RED-OSIER DOGWOOD	3	6' O.C.	1 GAL.
ROSA NUTKANA / NOOTKA ROSE	3		1 GAL.
RUBUS SPECTABILIS / SALMONBERRY	3		1 GAL.
PHYSOCARPUS CAPITATUS / PACIFIC NINEBARK	3		1 GAL.
GROUNDCOVER (102)		24" O.C.	
<i>*ALL SPECIES TO BE SPACED TRIANGULARLY</i>			
ATHYRIUM FILIX-FEMINA / LADY FERN (NO INUNDATION)	34		1 GAL.
TOLMIEA MENZIESII / PIGGYBACK PLANT (NO INUNDATION)	34		1 GAL.
SCIRPUS MICROCARPUS / SMALL FRUITED BULRUSH	34		1 GAL.
<i>(PLANT BY SPECIES IN ODD NUMBER GROUPS OF 9-15)</i>			

BUFFER ROW ENHANCEMENT PLANTING TYPICAL (NO TREES)



SHRUBS (75)	QTY	SPACING	SIZE
RUBUS SPECTABILIS / SALMONBERRY	15	6' O.C.	1 GAL.
SYMPHORICARPUS ALBUS / SNOWBERRY	15		1 GAL.
OEMLERIA CERASIFORMIS / OSOBERRY	15		1 GAL.
MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	15		1 GAL.
ACER CIRCINATUM / VINE MAPLE	15		1 GAL.
GROUNDCOVER (600)		24" O.C.	
<i>*ALL SPECIES TO BE SPACED TRIANGULARLY</i>			
POLYSTICHUM MUNITUM / SWORD FERN	300		1 GAL.
BLECHNUM SPICANT / DEER FERN	300		1 GAL.
<i>(PLANT BY SPECIES IN ODD NUMBER GROUPS OF 9-15)</i>			



SOMERSET SUBSTATION
PLANTING PLAN

BY: AJ

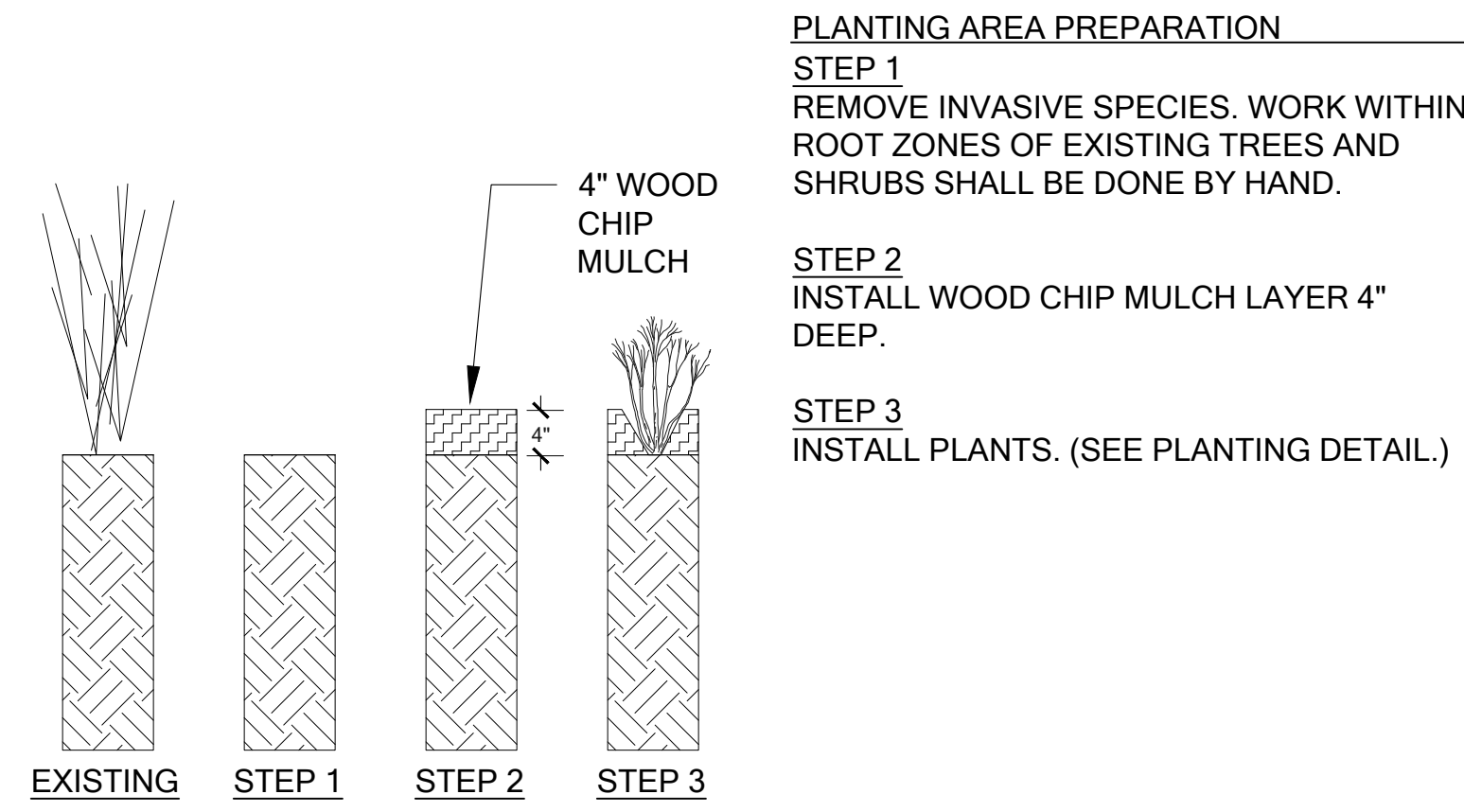
NO.	DATE	DESCRIPTION
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SCALE ACCORDINGLY.

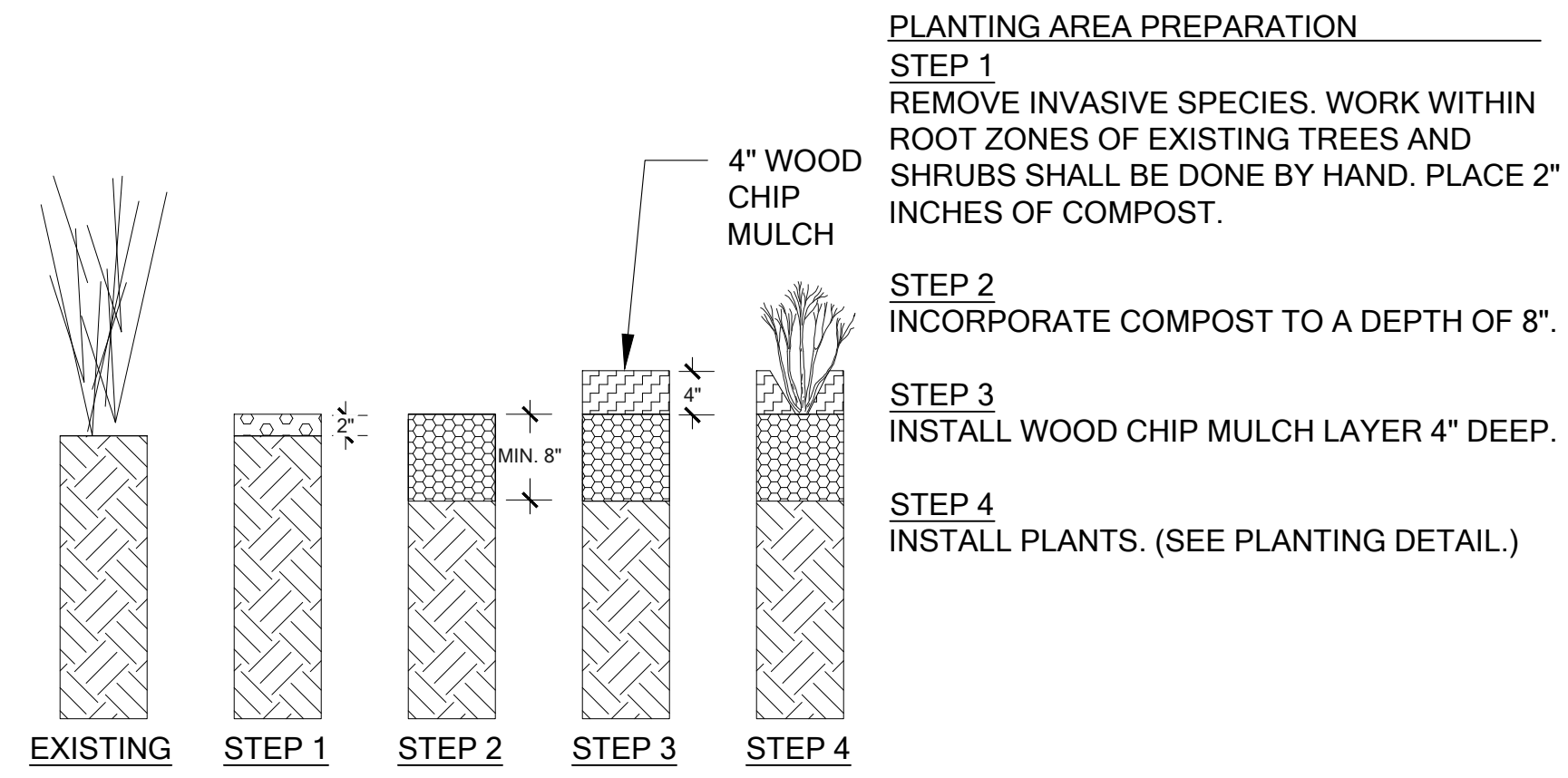
PROJECT MANAGER: JC
DESIGNED: J
DRAFTED: AJ/LM
CHECKED: CM
JOB NUMBER:

111103.11
SHEET NUMBER:

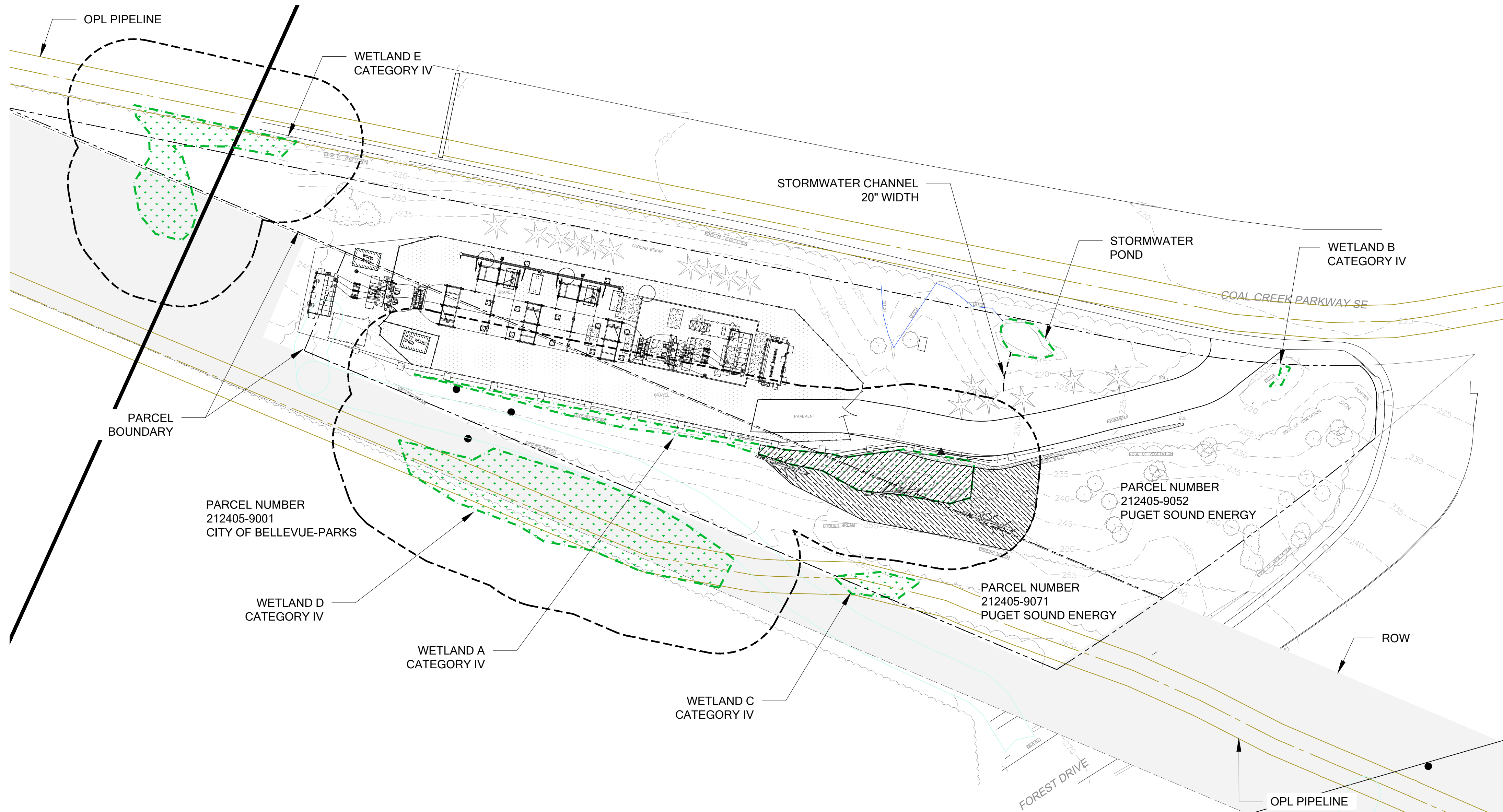
W2 OF 5



A SOIL PREPARATION AREA 1
SEQUENCE OF WORK - NOT TO SCALE



B SOIL PREPARATION AREA 2
SEQUENCE OF WORK - NOT TO SCALE



LEGEND

- WETLAND BOUNDARY
- WETLAND BUFFER
- PROPERTY BOUNDARY
- SOIL PREP 1 (2,300 SF)
- SOIL PREP 2 (3,950 SF)
- PLACED WOODY DEBRIS

SOMERSET SUBSTATION
ENERGIZE EASTSIDE MITIGATION PLAN
PREPARED FOR: PUGET SOUND ENERGY
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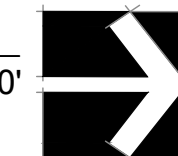
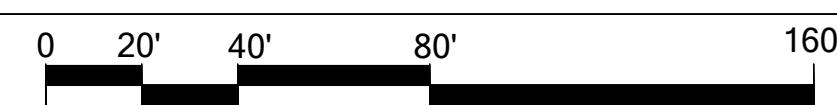
SHEET SIZE:
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PROJECT MANAGER: JC
DESIGNED: AJ/LM
CHECKED: CM

JOB NUMBER:
111103.11

SHEET NUMBER:
W3 OF 5

SOMERSET SUBSTATION
SITE PREPARATION PLAN



PLANT INSTALLATION SPECIFICATIONS

GENERAL NOTES

QUALITY ASSURANCE

- PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
- PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF). TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUN SCALD WILL BE REJECTED.
- NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST, UNIVERSITY OF WASHINGTON PRESS, 1973 AND/OR TO A FIELD GUIDE TO THE COMMON WETLAND PLANTS OF WESTERN WASHINGTON & NORTHWESTERN OREGON, ED. SARAH SPEAR COOKE, SEATTLE AUDUBON SOCIETY, 1997.

DEFINITIONS

- PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS; LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC.; SPRIGS, PLUGS, AND LINERS.
- CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
- SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE RESTORATION CONSULTANT.
- IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
- SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION

- PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE RESTORATION CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
- PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
- THE RESTORATION CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE RESTORATION CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENT OF PLANTS

- PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
- HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
- WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.)

SUBMITTALS

PROPOSED PLANT SOURCES

- WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES

- PLANT MATERIALS LIST - SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
- HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION

CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS

- TRANSPORTATION - DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
- SCHEDULING AND STORAGE - PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
- HANDLING - PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
- LABELS - PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY

PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

REPLACEMENT

- PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS AT THE CONSULTANT'S DISCRETION MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL

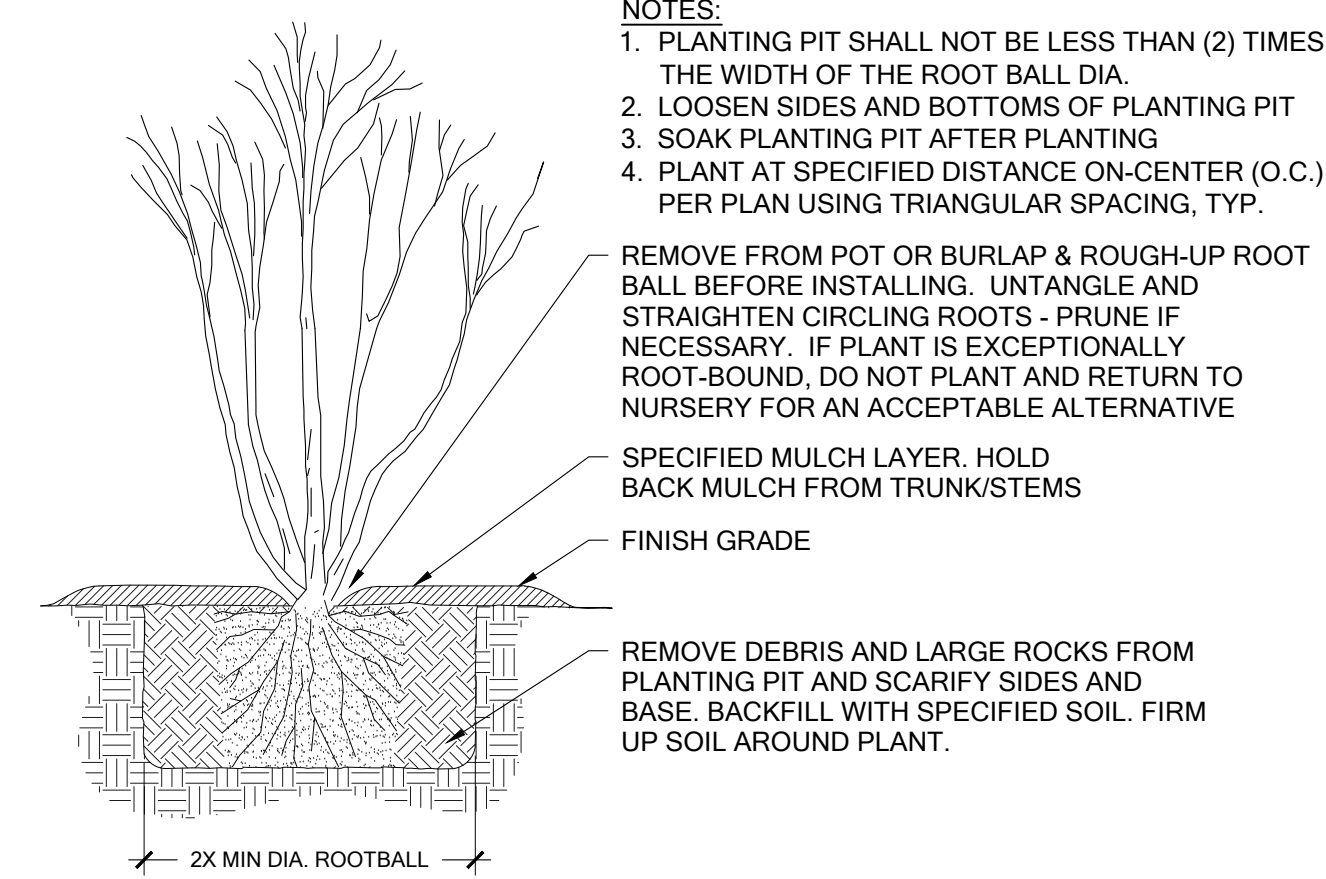
- PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
- PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

QUANTITIES

SEE PLANT LIST ON ACCOMPANYING PLANS AND PLANT SCHEDULES.

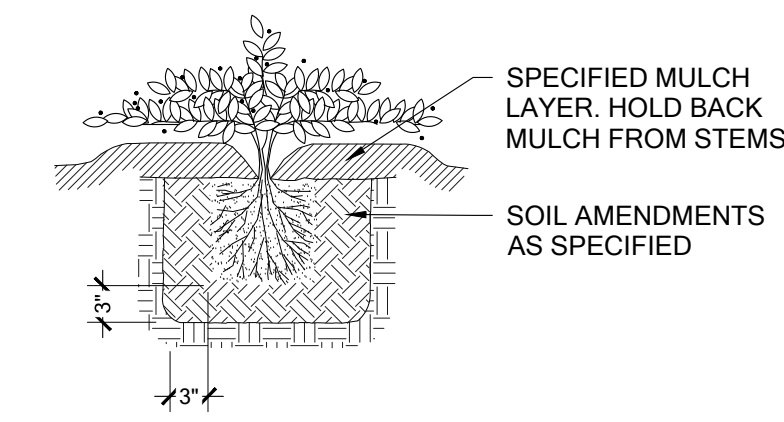
ROOT TREATMENT

- CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
- PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
- ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.

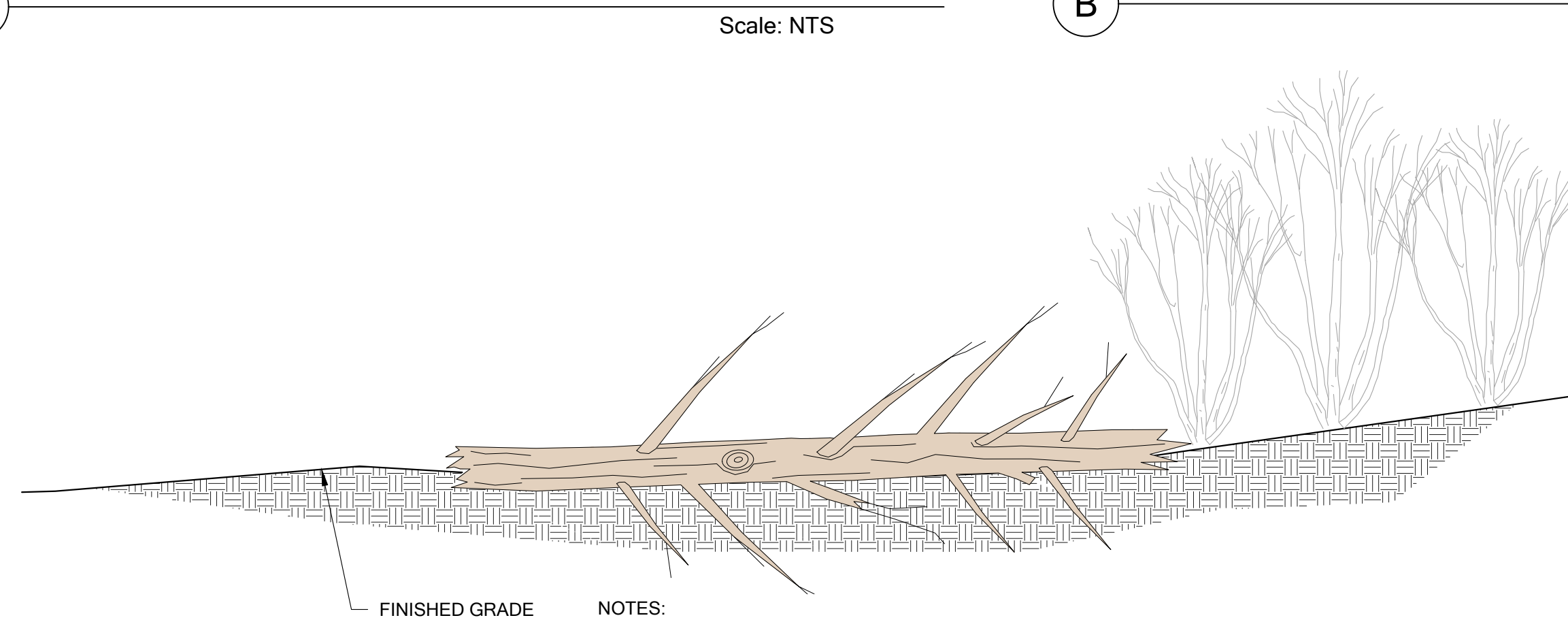


A TREE AND SHRUB PLANTING Scale: NTS

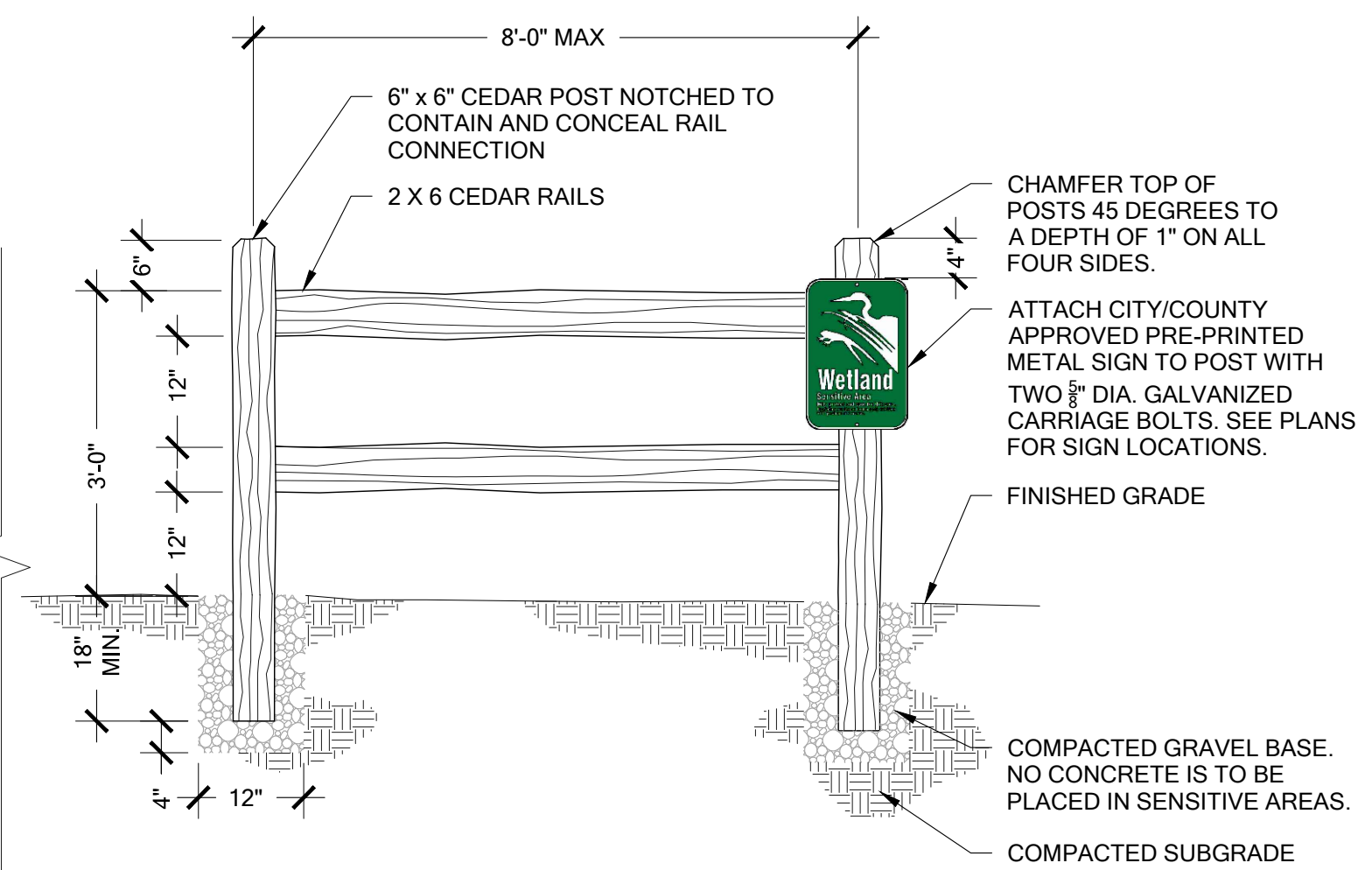
- NOTES:
- PLANT GROUNDCOVER AT SPECIFIED DISTANCE ON-CENTER (O.C.) USING TRIANGULAR SPACING, TYP.
 - LOOSEN SIDES AND BOTTOM OF PLANTING PIT AND REMOVE DEBRIS
 - LOOSEN ROOTBOUND PLANTS BEFORE INSTALLING
 - SOAK PIT BEFORE AND AFTER INSTALLING PLANT



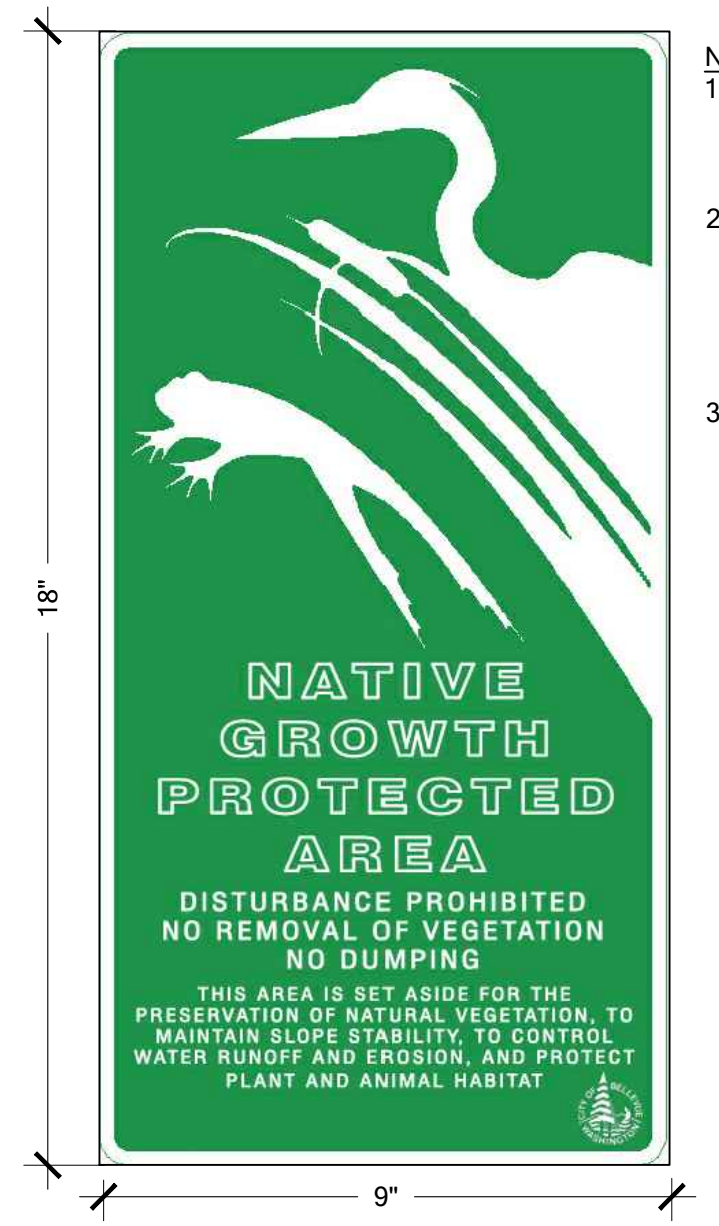
B GROUNDCOVER PLANTING Scale: NTS



C HABITAT LOG Scale: NTS



D SPLIT RAIL FENCING AND NGPA SIGN Scale: NTS



E NGPA SIGN Scale: NTS

SOMERSET SUBSTATION
ENERGIZE EASTSIDE MITIGATION PLAN
PREPARED FOR: PUGET SOUND ENERGY
PARCEL #2124059071, #2124059052
5200 SE COAL CREEK PKWY
BELLEVUE, WA 98006

NO.	DATE	DESCRIPTION	BY
1	05/03/2018	MITIGATION PLAN	AJ

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: JC
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DRAFTED: CM
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JOB NUMBER:
111103.11

SHEET NUMBER:
W4 OF 5

SOMERSET SUBSTATION

LANDSCAPE CONSTRUCTION DETAILS AND NOTES

MITIGATION NOTES

MITIGATION AND MONITORING NOTES

EXECUTIVE SUMMARY

PSE'S ENERGIZE EASTSIDE PROJECT (THE PROJECT) PROPOSES TO UPGRADE EXISTING TRANSMISSION LINES IN SOUTH BELLEVUE IN ORDER TO INCREASE TRANSMISSION SYSTEM CAPACITY TO 230KV POWER. PROJECT ELEMENTS, EXISTING CONDITIONS, MITIGATION SEQUENCING, AND PROJECT IMPACTS TO CRITICAL AREAS ARE DISCUSSED IN THE *CITY OF BELLEVUE CRITICAL AREAS REPORT: PUGET SOUND ENERGY-ENERGIZE EASTSIDE PROJECT SOUTH BELLEVUE SEGMENT* (SOUTH BELLEVUE CAR) PREPARED BY THE WATERSHED COMPANY, AUGUST 2017. THIS MITIGATION PLAN HAS BEEN DESIGNED TO APPROPRIATELY MITIGATE FOR PROJECT IMPACTS OCCURRING IN WETLANDS AND WETLAND AND STREAM BUFFERS IN THE COAL CREEK SUB-BASIN AND IS INTENDED TO REPRESENT THE FINAL MITIGATION PLAN REFERENCED IN THE SOUTH BELLEVUE CAR. A SEPARATE MITIGATION PLAN IS PROPOSED FOR PROJECT IMPACTS OCCURRING IN THE RICHARDS CREEK BASIN.

PROPOSED PROJECT ACTIVITIES IN THE COAL CREEK SUB-BASIN IMPACT WETLANDS AND BUFFERS IN ONE OF THREE WAYS: PERMANENT FILL RESULTING FROM TRANSMISSION POLE INSTALLATION/REPLACEMENT (PERMANENT), PERMANENT VEGETATION CONVERSION FROM A FORESTED VEGETATION TYPE DUE TO VEGETATION MANAGEMENT REQUIREMENTS (CONVERSION), AND TEMPORARY IMPACTS ASSOCIATED WITH CONSTRUCTION ACTIVITIES (TEMPORARY). PERMANENT AND CONVERSION BUFFER IMPACTS REQUIRE MITIGATION AS SUMMARIZED IN THE TABLE BELOW.

TABLE 2. COMPREHENSIVE TABLE OF ACTIVITIES AFFECTING CRITICAL AREAS IN SOUTH BELLEVUE- COAL CREEK BASIN¹.

IMPACTS					
Critical Area Name	Category	Type of Activity	Quantity (SF)	Mitigation Ratio	Mitigation Required (SF)
Wetland MB01	III	Conversion	1,146	2:1	2,292
Combined Buffers	na	Permanent	35	1:1	35
Combined Buffers	na	Conversion	7,734	0.5:1	3,867

RESTORATION

Critical Area Name ²	Category	Type of Activity	Quantity (SF)
Somerset Wetland A	IV	Enhancement	2,300
Somerset Buffers	NA	Enhancement	3,950

IMPACT & RESTORATION SUMMARY

Critical Area Type	Type of Activity	Quantity (SF)	Total Mitigation Required (SF)	Mitigation Proposed	
				Type	Qty (SF)
Wetland	Conversion	1,146	2,292	Enhancement	2,300
	Permanent	0			
Buffer	Conversion	7,734	3,902	Enhancement	3,950
	Permanent	35			

- Only activities resulting in a long-term change are included. Temporary impacts will be restored in place and are not shown in this table.
- Critical Areas as identified in the Somerset Substation wetland delineation (The Watershed Company, February 2017) and delineation report, documented separately from the Energize Eastside delineation study.

MITIGATION FOR IMPACTS, PRESENTED IN THE TABLE ABOVE, IS PLANNED ON THE SOMERSET SUBSTATION PARCEL. AS DISCUSSED IN THE SOUTH BELLEVUE CAR, THIS LOCATION WAS SELECTED FOR MITIGATION ACTIVITIES BASED UPON THE LOCATION OF PROJECT IMPACTS, OPPORTUNITY PRESENT, PROPERTY OWNERSHIP, AND PROXIMITY TO OTHER REGULATED CRITICAL AREAS.

THIS FINAL MITIGATION PLAN PROPOSES TO COMPENSATE FOR PROJECT IMPACTS THROUGH WETLAND ENHANCEMENT AND BUFFER ENHANCEMENT AND IS INTENDED TO INCREASE NATIVE PLANT COVER, DECREASE INVASIVE SPECIES PREVALENCE, IMPROVE NATIVE SPECIES DIVERSITY, AND PROVIDE FOOD AND OTHER HABITAT RESOURCES FOR WILDLIFE IN THE COAL CREEK BASIN. THE MINIMUM MITIGATION AREA REQUIRED, AS PRESENTED IN THE SOUTH BELLEVUE CAR, IS 2,292 SF OF WETLAND ENHANCEMENT AND 3,902 SF OF BUFFER ENHANCEMENT. THE PROPOSED MITIGATION AREA DEPICTED HEREIN HAS BEEN DESIGNED TO ENSURE WETLAND AND BUFFER FUNCTIONS ARE MAINTAINED OR IMPROVED OVERALL.

THE PLAN INCLUDES A COMPREHENSIVE FIVE-YEAR MAINTENANCE AND MONITORING PLAN, DETAILED BELOW. THESE SPECIFICATIONS AND STANDARDS WILL ENSURE THAT ENHANCEMENT PLANTINGS WILL BE MAINTAINED, MONITORED, AND SUCCESSFULLY ESTABLISHED WITHIN THE FIRST FIVE YEARS FOLLOWING IMPLEMENTATION.

GOALS

- REHABILITATE APPROXIMATELY 2,292 SF OF WETLAND AREA ON THE SOMERSET SUBSTATION PARCEL.
- ENHANCE APPROXIMATELY 3,902 SF OF BUFFER AREA ON THE SOMERSET SUBSTATION PARCEL.
- CREATE A DENSE, NATIVE, TREE AND SHRUB COMMUNITY THROUGHOUT RESTORED AREAS OF THE SITE WHICH ARE COMPATIBLE WITH THE EXISTING POWERLINE INFRASTRUCTURE AND PLANNED FUTURE DEVELOPMENT OF THE SITE.

PERFORMANCE STANDARDS

THE FOLLOWING PERFORMANCE STANDARDS WILL BE USED TO GAUGE THE SUCCESS OF THE PROJECT OVER TIME. IF ALL PERFORMANCE STANDARDS HAVE BEEN SATISFIED BY THE END OF YEAR FIVE, THE PROJECT SHALL BE CONSIDERED COMPLETE.

- SURVIVAL STANDARDS:
 - 100% SURVIVAL OF INSTALLED PLANTINGS IN ALL AREAS AT THE END OF YEAR 1. THIS STANDARD MAY BE MET THROUGH ESTABLISHMENT OF INSTALLED PLANTS OR BY REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.
 - 80% SURVIVAL OF INSTALLED PLANTINGS IN ALL AREAS AT THE END OF YEAR 2. THIS STANDARD MAY BE MET THROUGH ESTABLISHMENT OF INSTALLED PLANTS OR BY REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.
 - SURVIVAL BEYOND YEAR 2 IS DIFFICULT TO TRACK. THEREFORE, A DIVERSITY STANDARD SHALL BE IMPLEMENTED.
 - ESTABLISHMENT OF AT LEAST TWO NATIVE TREE SPECIES, FOUR NATIVE SHRUB SPECIES AND TWO NATIVE EMERGENT SPECIES IN PLANTING AREAS.
- NATIVE VEGETATION COVER STANDARDS:
 - ACHIEVE 60% AERIAL COVER OF NATIVE WOODY VEGETATION BY THE END OF YEAR 3. NATIVE VOLUNTEERS MAY COUNT TOWARDS THIS STANDARD.
 - ACHIEVE 80% AERIAL COVER OF NATIVE WOODY VEGETATION BY THE END OF YEAR 5. NATIVE VOLUNTEERS MAY COUNT TOWARDS THIS STANDARD.
- INVASIVE SPECIES COVER STANDARD:
 - NO MORE THAN 10% AERIAL COVER OF NON-NATIVE, INVASIVE SPECIES IN ANY PLANTING AREA IN ANY MONITORING YEAR.

MAINTENANCE

THE SITE SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING INSTRUCTIONS FOR FIVE YEARS FOLLOWING SUCCESSFUL COMPLETION OF THE CONSTRUCTION.

- REPLACE EACH PLANT FOUND DEAD IN YEAR ONE.
- FOLLOW THE RECOMMENDATIONS NOTED IN THE PREVIOUS MONITORING SITE VISIT'S REPORT.
- GENERAL WEEDING FOR ALL PLANTED AREAS:
 - AT LEAST TWICE ANNUALLY, REMOVE COMPETING GRASSES AND WEEDS FROM AROUND THE BASE OF EACH INSTALLED PLANT TO A RADIUS OF 12 INCHES. WEEDING SHOULD OCCUR AT LEAST ONCE IN THE SPRING AND ONCE IN THE SUMMER. THOROUGH WEEDING WILL RESULT IN LOWER PLANT MORTALITY AND ASSOCIATED PLANT REPLACEMENT COSTS.
 - MORE FREQUENT WEEDING MAY BE NECESSARY DEPENDING ON WEED CONDITIONS THAT DEVELOP AFTER PLANT INSTALLATION.
 - NOXIOUS WEEDS MUST BE REMOVED FROM THE ENTIRE MITIGATION AREA, AT LEAST TWICE ANNUALLY.
 - DO NOT USE STRING TRIMMERS IN THE VICINITY OF INSTALLED PLANTS, AS THEY MAY DAMAGE OR KILL THE PLANTS.
- MAINTAIN A FOUR-INCH-THICK LAYER OF WOOD CHIP MULCH ACROSS ALL PLANTING AREAS. MULCH SHOULD BE PULLED BACK TWO INCHES FROM THE PLANT STEMS.
- DURING AT LEAST THE FIRST TWO GROWING SEASONS, MAKE SURE THAT THE ENTIRE PLANTING AREA RECEIVES A MINIMUM OF ONE INCH OF WATER PER WEEK FROM JUNE 1ST THROUGH SEPTEMBER 30TH.
- REMOVE TRASH AND DEBRIS FROM THE PLANTING AREAS.

MONITORING METHODS

THE MONITORING PROGRAM IS DESIGNED TO TRACK THE SUCCESS OF THE MITIGATION PLAN OVER TIME BY MEASURING THE DEGREE TO WHICH THE PLAN IS MEETING THE PERFORMANCE STANDARDS LISTED ABOVE. PRIOR TO THE COMMENCEMENT OF THE MONITORING PHASE, AN AS-BUILT PLAN DOCUMENTING THE SUCCESSFUL INSTALLATION OF THE PROJECT WILL BE SUBMITTED TO THE CITY OF BELLEVUE AND OTHER PERMITTING AGENCIES AS REQUESTED. IF NECESSARY, THE AS-BUILT REPORT MAY INCLUDE A MARK-UP OF THE ORIGINAL PLAN THAT NOTES ANY SIGNIFICANT CHANGES OR SUBSTITUTIONS THAT OCCURRED. DURING THE AS-BUILT INSPECTION, THE RESTORATION SPECIALIST WILL ESTABLISH AT LEAST FOUR PERMANENT PHOTO-POINTS, BASELINE PLANT INSTALLATION QUANTITIES, AND TRANSECTS AS DETAILED BELOW.

TRANSECTS:

DURING THE AS-BUILT INSPECTION, THE RESTORATION SPECIALIST SHALL INSTALL A SUFFICIENT NUMBER OF REPRESENTATIVELY LOCATED 100-FOOT TRANSECTS IN THE RESTORATION PLANTING AREAS TO ADEQUATELY MEASURE THE VEGETATION PERFORMANCE STANDARDS BELOW. PERCENT COVER DATA SHALL BE RECORDED ALONG ESTABLISHED TRANSECTS USING THE LINE INTERCEPT METHOD.

YEARLY MONITORING:

THE SITE WILL BE MONITORED TWICE ANNUALLY FOR FIVE YEARS BEGINNING WITH APPROVAL OF THE AS-BUILT REPORT. DURING EACH YEAR THERE SHALL BE A SPRING VISIT AND A SUMMER OR EARLY FALL VISIT. THE SPRING MONITORING VISIT WILL ADDRESS MAINTENANCE NEEDS SUCH AS PLANT REPLACEMENT AND WEEDING.

FOLLOWING THE SPRING VISIT, THE RESTORATION SPECIALIST WILL NOTIFY THE RESPONSIBLE PARTY AND/OR MAINTENANCE CREWS OF NECESSARY MAINTENANCE. THE SECOND ANNUAL VISIT WILL OCCUR JULY 1ST TO SEPTEMBER 15TH AND WILL RECORD QUANTITATIVE ASSESSMENT OF THE SITE'S PROGRESS. A REPORT DETAILING THE FINDINGS OF SUMMER MONITORING WILL BE SUBMITTED ANNUALLY TO THE CITY, AND WILL CONTAIN THE FOLLOWING:

- GENERAL SUMMARY OF SITE CONDITIONS.
- COUNTS OF LIVE PLANTINGS BY SPECIES (YEARS ONE AND TWO ONLY)
- PERCENT COVER OF NATIVE WOODY SPECIES, DETERMINED USING THE LINE INTERCEPT METHOD ALONG ESTABLISHED TRANSECTS.
- PERCENT COVER OF INVASIVE SPECIES USING THE LINE INTERCEPT METHOD ALONG ESTABLISHED TRANSECTS.
- NOTES ON INVASIVE WEEDS OUTSIDE OF ESTABLISHED TRANSECTS.
- PHOTOGRAPHS FROM FIXED PHOTO-POINTS ESTABLISHED DURING THE AS-BUILT INSPECTION.
- ANY EVIDENCE OF WILDLIFE USAGE IN THE MITIGATION AREA.
- REPORT ON CONDITION OF PLACED LARGE WOODY DEBRIS.
- INTRUSIONS INTO THE PLANTING AREAS, VANDALISM OR OTHER ACTIONS THAT IMPAIR THE INTENDED FUNCTIONS OF THE MITIGATION AREAS.
- RECOMMENDATIONS FOR MAINTENANCE OR REPAIRS.

CONTINGENCIES

UNFORESEEN PROJECT CONDITIONS MAY REQUIRE CHANGES IN VEGETATION LAYOUT, DENSITY/SPACING, AND SPECIES SUBSTITUTIONS. WEED CONDITIONS MAY REQUIRE ALTERATION OF INSTALLED VEGETATION TYPES, MULCH PLACEMENT, WEED REMOVAL AND USE OF HERBICIDES. MINOR HAND WORK TO IMPROVE OR RETARD DRAINAGE MAY BE NEEDED TO SUPPORT WETLAND HYDROLOGY. SUCH WORK WILL BE COORDINATED DIRECTLY WITH THE CITY OF BELLEVUE.

UNPREDICTABLE EVENTS SUCH AS OBSTRUCTIONS OR HIGH-FLOWS FROM LARGE STORMS MAY NECESSITATE EROSION AND HABITAT FEATURE REPAIRS. SMALL REPAIRS BY HAND WILL BE COORDINATED WITH THE CITY OF BELLEVUE. LARGER REPAIRS THAT REQUIRE EXTENSIVE MANIPULATION OR THE USE OF HEAVY MACHINERY WILL BE COORDINATED IN CONSULTATION WITH JURISDICTIONAL AGENCIES.

SITE PROTECTION

THE MITIGATION AREA WILL BE PROTECTED BY RECORDING A NOTICE ON TITLE WITH KING COUNTY. FENCING AND SIGNS WILL BE INSTALLED ALONG THE EDGE OF THE MITIGATION AREA.

MATERIALS

- WOOD CHIP MULCH: "ARBORIST CHIPS" (CHIPPED WOODY MATERIAL) BARK OR WOOD CHIP MULCH SHALL BE DERIVED FROM DOUGLAS FIR, PINE, OR HEMLOCK SPECIES. IT SHALL NOT CONTAIN RESIN, TANNIN, OR OTHER COMPOUNDS IN QUANTITIES THAT WOULD BE DETRIMENTAL TO PLANT LIFE. SAWDUST SHALL NOT BE USED AS MULCH.

BARK OR WOOD CHIPS WHEN TESTED SHALL BE ACCORDING TO WSDOT TEST METHOD T 123 PRIOR TO PLACEMENT AND SHALL MEET THE FOLLOWING LOOSE VOLUME GRADATION:

SIEVE SIZE	PERCENT PASSING	
	MINIMUM	MAXIMUM
2"	95	100
NO. 4	0	30

APPROX. QUANTITY REQUIRED: 60 CUBIC YARDS.

- COMPOST: CEDAR GROVE COMPOST OR EQUIVALENT "COMPOSTED MATERIAL" PER WASHINGTON ADMIN. CODE 173-350-220. QUANTITY REQUIRED: 35 CUBIC YARDS
- FERTILIZER: SLOW-RELEASE, PHOSPHOROUS-FREE GRANULAR FERTILIZER. MOST COMMERCIAL NURSERIES CARRY THIS PRODUCT. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR USE. KEEP FERTILIZER IN WEATHER-TIGHT CONTAINER WHILE ON-SITE. FERTILIZER IS ONLY TO BE APPLIED IN YEARS TWO AND THREE, NOT IN YEAR ONE.
- FERTILIZER (FOR NEAR AQUATIC ENVIRONMENTS): SLOW-RELEASE, PHOSPHOROUS-FREE GRANULAR FERTILIZER. LABEL MUST INDICATE THAT PRODUCT IS SAFE FOR AQUATIC ENVIRONMENTS. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR USE. KEEP FERTILIZER IN WEATHER-TIGHT CONTAINER WHILE ON-SITE. FERTILIZER IS ONLY TO BE APPLIED IN YEARS TWO AND THREE, NOT IN YEAR ONE.
- RESTORATION SPECIALIST: QUALIFIED PROFESSIONAL ABLE TO EVALUATE AND MONITOR THE CONSTRUCTION OF ENVIRONMENTAL RESTORATION PROJECTS.



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Science & Design

SOMERSET SUBSTATION
ENERGIZE EASTSIDE MITIGATION PLAN
PREPARED FOR: PUGET SOUND ENERGY
PARCEL #2124059071, #2124059052
5200 SE COAL CREEK PKWY
BELLEVUE, WA 98006

NO.	DATE	DESCRIPTION	SUBMITTALS & REVISIONS	
			BY	DATE
1	05/03/2018	MITIGATION PLAN	AJ	

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: JC
DESIGNED: JC
DRAFTED: AJ/LM
CHECKED: CM

JOB NUMBER:
111103.11

SHEET NUMBER:
W5 OF 5

SOMERSET STATION

MITIGATION NOTES