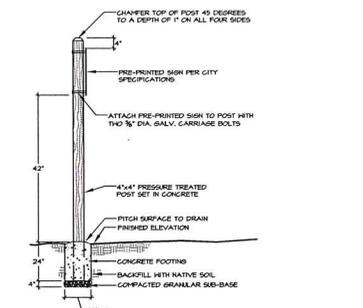
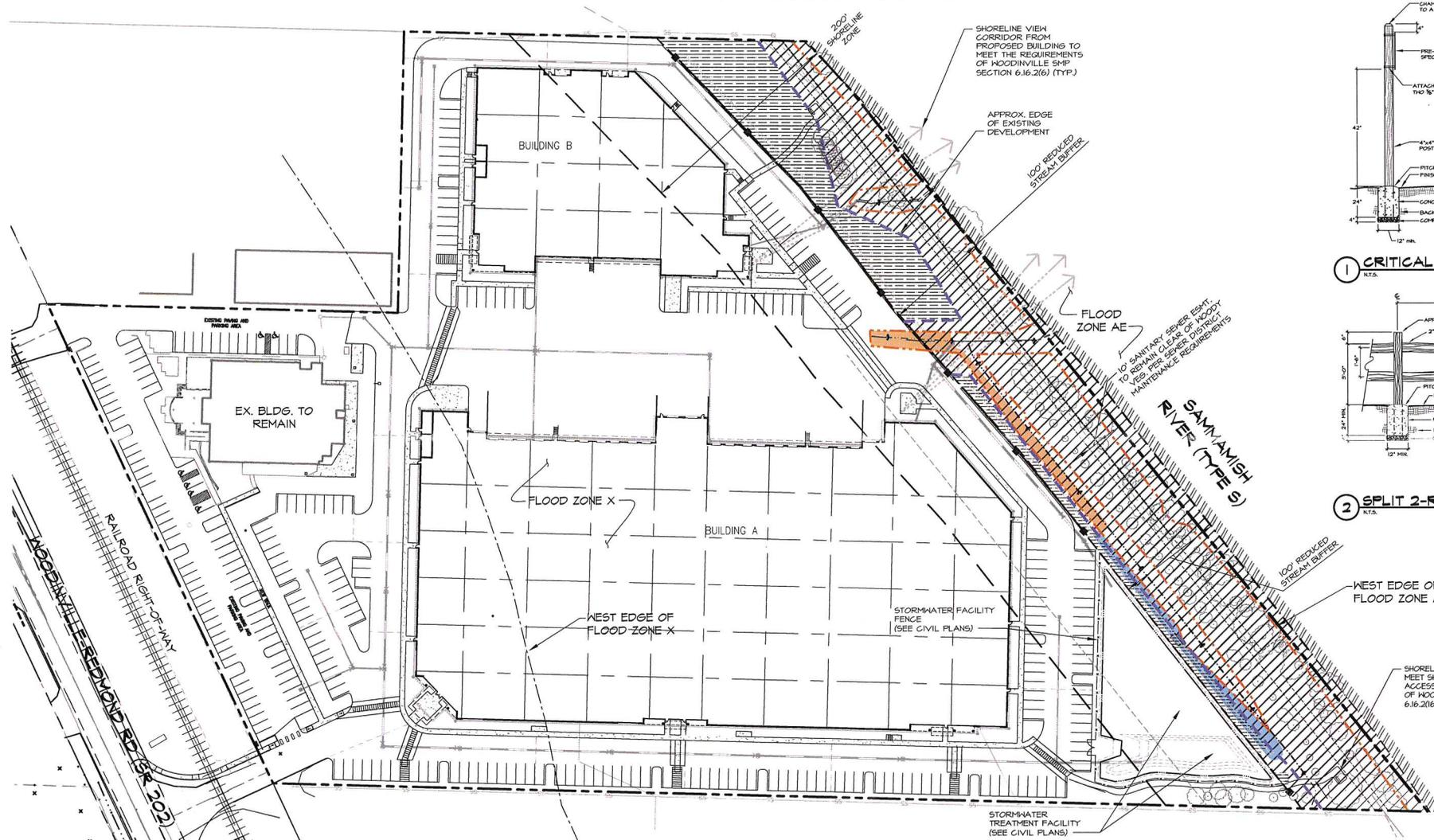
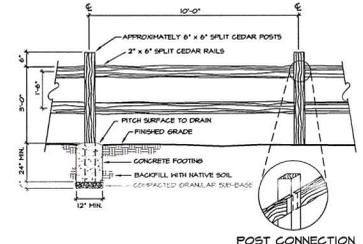




NW 1/4 SEC. 15, TWP. 26 N, R.6E. 5 E, W.M.



1 CRITICAL AREAS SIGN DETAIL  
N.T.A.



2 SPLIT 2-RAIL FENCE DETAIL  
N.T.A.

PROPOSED SITE PLAN, IMPACTS & MITIGATION OVERVIEW PLAN



**PLAN LEGEND**

- PROPERTY LINE
- - - REDUCED STREAM BUFFER
- - - 200' SHORELINE ZONE BOUNDARY
- - - STREAM ORDINARY HIGH WATER MARK (OHWM)
- - - EXISTING DITCH CENTERLINE
- - - FLOOD ZONE AE BOUNDARY
- ○ EXISTING CONIFEROUS/DECIDUOUS TREES TO REMAIN
- ○ EXISTING SHRUB VEGETATION TO REMAIN
- - - APPROX. EDGE OF EXISTING DEVELOPMENT

**IMPACT LEGEND**

- FLOOD STORAGE VOLUME REDUCTION WITHIN 100-YEAR FLOODPLAIN (ZONE AE) ± 3,740 CF

**MITIGATION LEGEND**

- BUFFER RE-ESTABLISHMENT ± 21,420 SF
- BUFFER ENHANCEMENT ± 74,300 SF
- TOTAL BUFFER ENHANCEMENT/RE-ESTABLISHMENT ± 95,720 SF
- FLOOD STORAGE VOLUME REPLACEMENT PER WMC 21.24.230(1) (EXISTING SHALE WILL BE RE-GRADED TO INCREASE FLOOD STORAGE VOLUME) ± 5,430 CF
- ◆ CRITICAL AREAS SIGNS PER WMC 21.24.160
- - - CRITICAL AREA FENCE (SPLIT RAIL OR SIMILAR)

**NON-COMPENSATORY MITIGATION LEGEND**

- STREAM BANK ENHANCEMENT 9,510 SF



- NOTES**
- SURVEY PROVIDED BY HARMSEN & ASSOCIATES, INC., P.O. BOX 516, MONROE, LA 70212, (504) 784-1011
  - SITE PLAN PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, INC., 18215 T2ND AVE S, KENT, WA 98032, (425) 291-6222
  - SOURCE DRAWINGS HAVE BEEN MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENHANCEMENT.
  - THIS PLAN IS AN ATTACHMENT TO THE CRITICAL AREAS SPECIAL STUDY REPORT PREPARED BY TALASAEA CONSULTANTS, DATED 15 JANUARY 2016.

**TALASAEA CONSULTANTS, INC.**  
Resource & Environmental Planning  
1800 River Street, Suite 100, Woodinville, WA 98097  
(206) 881-7000

STREAM BUFFER MITIGATION PLAN  
PROPOSED SITE PLAN, IMPACTS & MITIGATION OVERVIEW PLAN  
THE RESERVE AT WOODINVILLE  
WOODINVILLE, WASHINGTON

EXHIBIT 10  
PAGE 2 OF 6

By	ASB
Date	4-6-2016
Revisions	
CITY REVISIONS	
Date	4-15-2016
Scale	AS NOTED
Designed	ASB
Drawn	ASB
Checked	ASB
Approved	ASB
Project #	1349D
Sheet #	W11

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 11000 River Street, Suite 100, Woodinville, WA 98097  
 Project: 1349D

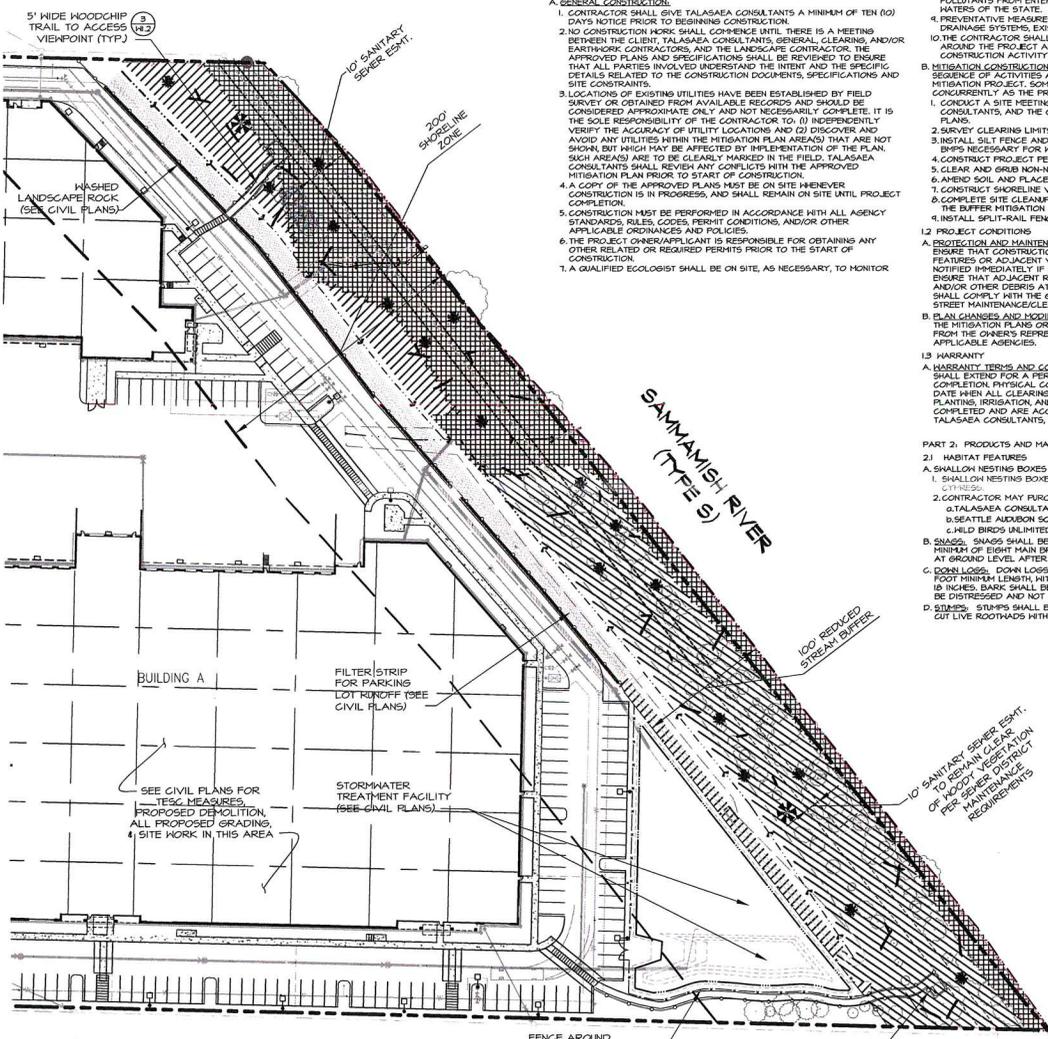
**NOTES FOR CLEARING, GRUBBING, AND HABITAT FEATURE INSTALLATION**

- PART I. GENERAL**
- A. GENERAL CONSTRUCTION:**
- CONTRACTOR SHALL GIVE TALASAEA CONSULTANTS A MINIMUM OF TEN (10) DAYS NOTICE PRIOR TO BEGINNING CONSTRUCTION.
  - NO CONSTRUCTION WORK SHALL COMMENCE UNTIL THERE IS A MEETING BETWEEN THE CLIENT, TALASAEA CONSULTANTS, GENERAL CLEARING AND/OR EARTHWORK CONTRACTORS, AND THE LANDSCAPE CONTRACTOR. THE APPROVED PLANS AND SPECIFICATIONS SHALL BE REVISED TO ENSURE THAT ALL PARTIES INVOLVED UNDERSTAND THE INTENT AND THE SPECIFIC DETAILS RELATED TO THE CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONSTRAINTS.
  - LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO, (1) INDEPENDENTLY VERIFY THE ACCURACY OF UTILITY LOCATIONS AND (2) DISCOVER AND AVOID ANY UTILITIES WITHIN THE MITIGATION PLAN AREAS THAT ARE NOT SHOWN, BUT WHICH MAY BE AFFECTED BY IMPLEMENTATION OF THE PLAN. SUCH AREAS ARE TO BE CLEARLY MARKED IN THE FIELD. TALASAEA CONSULTANTS SHALL REVIEW ANY CONFLICTS WITH THE APPROVED MITIGATION PLAN PRIOR TO START OF CONSTRUCTION.
  - A COPY OF THE APPROVED PLANS MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS, AND SHALL REMAIN ON SITE UNTIL PROJECT COMPLETION.
  - CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH ALL AGENCY STANDARDS, RULES, CODES, PERMIT CONDITIONS, AND/OR OTHER APPLICABLE ORDINANCES AND POLICIES.
  - THE PROJECT OWNER/APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER RELATED OR REQUIRED PERMITS PRIOR TO THE START OF CONSTRUCTION.
  - A QUALIFIED ECOLOGIST SHALL BE ON SITE, AS NECESSARY, TO MONITOR

- B. MITIGATION CONSTRUCTION:** THE FOLLOWING PROVIDES THE GENERAL SEQUENCE OF ACTIVITIES ANTICIPATED TO BE NECESSARY TO COMPLETE THIS MITIGATION PROJECT. SOME OF THESE ACTIVITIES MAY BE CONDUCTED CONCURRENTLY AS THE PROJECT PROGRESSES.
- CONDUCT A SITE MEETING BETWEEN THE CONTRACTOR, TALASAEA CONSULTANTS, AND THE OWNER'S REPRESENTATIVE TO REVIEW THE PROJECT PLANS.
  - SURVEY CLEARING LIMITS.
  - INSTALL SILT FENCE AND ANY OTHER EROSION AND SEDIMENTATION CONTROL BMP'S NECESSARY FOR WORK IN THE MITIGATION AREAS.
  - CONSTRUCT PROJECT PER CIVIL PLANS.
  - CLEAR AND GRUB NON-NATIVE/INVASIVE VEGETATION FROM BUFFER.
  - AMEND SOIL AND PLACE LARGE WOODY MATERIAL.
  - CONSTRUCT SHORELINE VIEWPOINTS AND ACCESS PATHS WITHIN BUFFER.
  - COMPLETE SITE CLEANUP AND INSTALL PLANT MATERIAL AS INDICATED ON THE BUFFER MITIGATION PLANTING PLAN.
  - INSTALL SPLIT-RAIL FENCE AND CRITICAL AREA SIGNS.
- 12. PROJECT CONDITIONS**
- A. PROTECTION AND MAINTENANCE OF OFF-SITE AREAS:** CONTRACTOR SHALL ENSURE THAT CONSTRUCTION RELATED ACTIVITIES DO NOT DAMAGE OFF-SITE FEATURES OR ADJACENT VEGETATION. TALASAEA CONSULTANTS SHALL BE NOTIFIED IMMEDIATELY OF ANY ACCIDENTAL DAMAGE TO OFF-SITE AREAS. CONTRACTOR SHALL ENSURE THAT ADJACENT AREAS ARE MAINTAINED AND KEPT CLEAR OF SOIL AND/OR OTHER DEBRIS AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH THE GOVERNING JURISDICTIONS' GOVERNING RESIDUAL STREET MAINTENANCE/CLEANING DURING CONSTRUCTION.
- B. PLAN CHANGES AND MODIFICATIONS:** CONTRACTOR SHALL NOTIFY TALASAEA CONSULTANTS OF ANY CHANGES OR MODIFICATIONS TO THE MITIGATION PLANS OR SPECIFICATIONS THAT REQUIRE PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE, TALASAEA CONSULTANTS, AND APPLICABLE AGENCIES WITHOUT PRIOR APPROVAL.
- 13. WARRANTY**
- A. WARRANTY TERMS AND CONDITIONS:** A CONTRACTOR-PROVIDED WARRANTY SHALL EXTEND FOR A PERIOD OF ONE YEAR FROM THE DATE OF PHYSICAL COMPLETION. PHYSICAL COMPLETION FOR THE WORK OF THIS SECTION IS THE DATE WHEN ALL CLEARING/GRUBBING/HABITAT FEATURE INSTALLATION, PLANTING, IRRIGATION, AND RELATED PHASES OF SUCH WORK HAVE BEEN COMPLETED AND ARE ACCEPTED BY THE OWNER'S REPRESENTATIVE, TALASAEA CONSULTANTS, AND APPLICABLE AGENCIES.

- PART II. PRODUCTS AND MATERIALS**
- A. SHALLOW NESTING BOXES**
- SHALLOW NESTING BOXES SHALL BE CONSTRUCTED OF CEDAR OR FIR TREES.
  - CONTRACTOR MAY PURCHASE SHALLOW NESTING BOXES AT:
    - TALASAEA CONSULTANTS, (425) 281-1950 OR,
    - SEATTLE ANDSON SOCIETY, (206) 528-4493 OR,
    - WILD BIRDS UNLIMITED, (206) 573-4001
  - SNAGS SHALL BE CEDAR OR FIR SPECIES, 24-36 FEET LONG, WITH A MINIMUM OF EIGHT MAIN BRANCHES, AND A MINIMUM DIAMETER OF 20 INCHES AT GROUND LEVEL, AFTER INSTALLATION.
  - DOWN LOGS: DOWN LOGS SHALL BE CEDAR OR FIR SPECIES, HAVE A 20 FOOT MINIMUM LENGTH, WITH OR WITHOUT ROOTS, AND A MINIMUM DIAMETER OF 18 INCHES. BARK SHALL BE KEPT INTACT. ENDS THAT HAVE BEEN CUT SHALL BE DISTRESSED AND NOT BLUNT.
  - STUMPS: STUMPS SHALL BE EITHER PART-DECAYED, RELOCATED STUMPS, OR CUT LIVE ROOTS WITH A MINIMUM OF THREE FEET OF TRUNK 20 INCHES IN DIAMETER. MINIMUM ENDS THAT HAVE BEEN CUT SHALL BE DISTRESSED AND NOT BLUNT.
- B. SLAG EROSION CONTROL MEASURES:**
- CONTRACTOR SHALL INSTALL SILT FENCES WHERE SHOWN ON THE MITIGATION PLANS PRIOR TO ANY MITIGATION CONSTRUCTION ACTIVITY. CONTRACTOR SHALL MAINTAIN EROSION CONTROL FACILITIES UNTIL COMPLETION OF CONSTRUCTION. TALASAEA CONSULTANTS SHALL VERIFY AND APPROVE LOCATIONS OF EROSION CONTROL MEASURES PRIOR TO COMMENCING MITIGATION CONSTRUCTION.
  - CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES FOR THE DURATION OF THE PROJECT. THESE MEASURES SHALL REMAIN IN PLACE UNTIL APPROVAL IS GIVEN BY TALASAEA CONSULTANTS FOR REMOVAL OR LOCATION ADJUSTMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL EROSION CONTROL MEASURES ADJACENT TO SENSITIVE AREAS WHEN AUTHORIZED BY TALASAEA CONSULTANTS.
  - AS CONSTRUCTION PROGRESSES AND SEASONAL CONDITIONS DICTATE, EROSION CONTROL FACILITIES SHALL BE MAINTAINED AND/OR ALTERED AS REQUIRED BY TALASAEA CONSULTANTS TO ENSURE CONTINUED EROSION/SEDIMENTATION CONTROL.

- 4. WHERE POSSIBLE, NATURAL GROUND COVER VEGETATION SHALL BE MAINTAINED FOR EROSION CONTROL.**
- 4. INVASIVE/NON-NATIVE VEGETATION REMOVAL FROM MITIGATION AREAS:**
- CONTRACTOR SHALL GRUB OUT ALL NON-NATIVE AND INVASIVE VEGETATION WITHIN BUFFER MITIGATION AREAS AS SHOWN ON THE MITIGATION PLANS, WITH THE EXCEPTION OF FLAGGED EXISTING VEGETATION TO REMAIN. IN AREAS OF EXISTING VEGETATION, CONTRACTOR SHALL REMOVE INVASIVE SPECIES INCLUDING, BUT ARE NOT LIMITED TO, SCOTS BROOM, ENGLISH IVY, HIMALAYAN AND EVERGREEN BLACKBERRY, PURPLE LOOSESTRIFE, BIRDWEED (MORNING GLORY), JAPANESE KNOTWEED, CANADA THISTLE, AND GREENING NIGHTSHADE. INVASIVE/NON-NATIVE VEGETATION SHALL BE REMOVED BY HAND WITH MINIMAL DISTURBANCE TO THE EXISTING NATIVE VEGETATION TO REMAIN. ALL ROOTS SHALL BE REMOVED TO THE MAXIMUM EXTENT FEASIBLE.
  - REED CANARYGRASS CONTROL: REED CANARYGRASS SHALL BE MOWED CLOSE TO GROUND AND TREATED WITH AN HERBICIDE APPROVED FOR USE IN AQUATIC AREAS (E.G., RED, OR EQUAL). HERBICIDE TREATMENT SHALL BE APPLIED THREE (3) TIMES PRIOR TO PLANTING.
  - ALL GRUBBED VEGETATION SHALL BE EXPORTED FROM THE SITE AND DISPOSED OF IN AN APPROVED MANNER FOLLOWING ALL APPLICABLE LOCAL/STATE/FEDERAL REGULATIONS.
  - TALASAEA CONSULTANTS SHALL DESIGNATE ANY ADDITIONAL PLANT SPECIES TO BE REMOVED DURING MITIGATION CONSTRUCTION.
- 5. INSTALL SNAGS**
- INSTALL SNAGS UPON COMPLETION OF CLEARING/GRUBBING AT LOCATIONS DEPICTED ON MITIGATION PLANS. SNAGS SHALL BE ANCHORED INTO SUBGRADE A MINIMUM OF 25 PERCENT OF THE TOTAL LENGTH AS DEPICTED IN THE PLAN DETAIL. TALASAEA CONSULTANTS SHALL APPROVE SNAG LOCATIONS PRIOR TO INSTALLATION.
- 6. TOPSOIL**
- IN ALL CLEARED AND GRUBBED BUFFER MITIGATION AREAS, EXISTING SOIL SHALL BE AMENDED (OR TOPSOIL IMPORTED) TO PROVIDE A 4-INCH MINIMUM DEPTH OF TOPSOIL. NOTE: PRIOR TO PLACING TOPSOIL, SUBGRADE SHALL BE DECOMPACTED OR GRASSED TO A MINIMUM DEPTH OF 2" IN AREAS WHERE EXISTING PAVING AND/OR BUILDINGS WERE REMOVED.
- 7. HABITAT FEATURES:** PLACE HABITAT FEATURES UPON COMPLETION OF TOPSOIL AND/OR SOIL AMENDMENT PLACEMENT AS DEPICTED ON THE MITIGATION PLANS AND DETAILS. TALASAEA CONSULTANTS SHALL APPROVE LOCATIONS PRIOR TO PLANTING.
- SHALLOW NESTING BOXES: ATTACH ONE NESTING BOX TO EACH INSTALLED SNAG. A MINIMUM OF 15 FEET OFF THE GROUND ON THE SOUTHWEST SIDE OF THE SNAG.
  - DOWN LOGS: TO CUT/BREAK DOWN LOGS, FIRST SCORE THE LOG AT THE SCORED LOCATION TO CREATE A NATURAL LOOK TO THE BREAK. THIS BROKEN END TO DISPERSE SAW DUST. HABITAT FEATURES THAT HAVE BEEN CUT SHALL HAVE NO BLUNT ENDS.
  - SILT FENCE: STUMPS SHALL BE SET UPRIGHT.
- 8. INSTALL SHORELINE VIEWPOINTS & ACCESS PATHS:**
- CONSTRUCT HOODCHIP SHORELINE VIEWPOINTS AND ASSOCIATED ACCESS PATHS IN STREAM BUFFER WHERE SHOWN ON PLANS PER PLAN DETAIL.
  - MULCH CLEAR/GRUBBED BUFFER AREAS: TALASAEA CONSULTANTS SHALL BE PROVIDED A MULCH SAMPLE PRIOR TO IT BEING DELIVERED TO THE SITE. NO BUFFER AREAS SHALL BE SET ASIDE.
- 9. INSPECTIONS:** PRIOR TO FINAL INSTALLATION, TALASAEA CONSULTANTS SHALL APPROVE ALL CLEARING/GRUBBING WORK AND HABITAT FEATURE PLACEMENT. IF ITEMS ARE TO BE CORRECTED, A FRANCH LIST SHALL BE PREPARED BY TALASAEA CONSULTANTS AND SUBMITTED TO THE CONTRACTOR FOR COMPLETION. AFTER FRANCH LIST ITEMS HAVE BEEN COMPLETED, TALASAEA CONSULTANTS SHALL REVIEW THE PROJECT FOR FINAL ACCEPTANCE OF FRANCH LIST ITEMS, AND PLANTING MAY THEN PROCEED.
- 10. SOIL STABILIZATION:** IF THERE IS A DELAY IN CONSTRUCTION FOR ANY REASON, CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF EROSION CONTROL MEASURES, DRAINAGE, AND TEMPORARY IRRIGATION DURING CONSTRUCTION DELAY PERIOD, UNLESS OTHERWISE STATED IN WRITING.



**CLEARING AND GRUBBING PLAN**

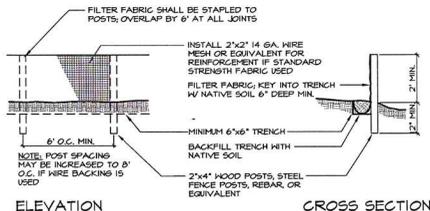


**PLAN LEGEND**

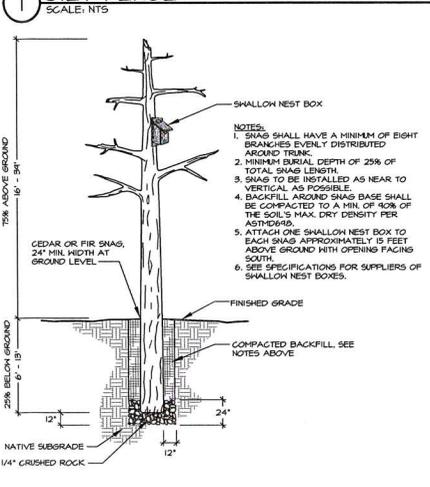
- PROPERTY LINE
- 200' SHORELINE ZONE BOUNDARY
- STREAM ORDINARY HIGH WATER MARK (OHWM)
- FLOOD AE ZONE BOUNDARY
- POST-CONSTRUCTION DITCH CENTERLINE
- PROPOSED SPLIT-RAIL FENCE (2)
- EXISTING CONTOUR
- PROPOSED 1' CONTOUR (SEE CIVIL PLANS)
- EXISTING CONIFEROUS/DECIDUOUS TREES TO REMAIN
- APPROXIMATE LOCATION OF EXISTING NATIVE SHRUB VEGETATION TO REMAIN

**CLEARING & GRUBBING LEGEND**

- SILT FENCE/LIMIT OF BUFFER MITIGATION FENCE - SEE DETAIL (1)
- SNAG W/ SHALLOW NEST BOX - SEE DETAIL (2)
- LARGE WOODY DEBRIS (down logs)
- HABITAT STUMP
- IN AREAS OF EXISTING VEGETATION GRUB OUT ANY INVASIVE SPECIES, BY HAND, WHERE POSSIBLE.
- EXISTING HIMALAYAN/EVERGREEN BLACKBERRY & REED CANARYGRASS TO BE CLEARED & GRUBBED BY MACHINE, WHERE POSSIBLE.
- DECOMPACT EXISTING SOILS TO A DEPTH OF 12 INCHES IN AREAS WHERE ASPH/PAVING WAS REMOVED PRIOR TO ADDING TOPSOIL OR SOIL AMENDMENTS.



**1 SILT FENCE**



**2 SNAG WITH NEST BOX DETAIL**

**MITIGATION CONSTRUCTION SEQUENCE**

- THE FOLLOWING PROVIDES THE GENERAL SEQUENCE OF ACTIVITIES ANTICIPATED TO BE NECESSARY TO COMPLETE THIS MITIGATION PROJECT. SOME OF THESE ACTIVITIES MAY BE CONDUCTED CONCURRENTLY AS THE PROJECT PROGRESSES.
- CONDUCT A SITE MEETING BETWEEN THE CONTRACTOR, TALASAEA CONSULTANTS, AND THE OWNER'S REPRESENTATIVE TO REVIEW THE PROJECT PLANS.
  - SURVEY CLEARING LIMITS.
  - INSTALL SILT FENCE AND ANY OTHER EROSION AND SEDIMENTATION CONTROL BMP'S NECESSARY FOR WORK IN THE MITIGATION AREAS.
  - CONSTRUCT PROJECT PER CIVIL PLANS.
  - CLEAR AND GRUB NON-NATIVE/INVASIVE VEGETATION FROM BUFFER.
  - AMEND SOIL AND PLACE LARGE WOODY MATERIAL.
  - CONSTRUCT SHORELINE VIEWPOINTS AND ACCESS PATHS.
  - COMPLETE SITE CLEANUP AND INSTALL PLANT MATERIAL AS INDICATED ON THE BUFFER MITIGATION PLANTING PLAN.
  - INSTALL SPLIT-RAIL FENCE AND CRITICAL AREA SIGNS.

**NOTES**

- SURVEY PROVIDED BY HARMSEN & ASSOCIATES, INC., P.O. BOX 516, MONROE, WA 98272, (360) 744-1811
- SITE PLAN PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, INC., 10215 12ND AVE S, KENT, WA 98032, (425) 251-6222
- SOURCE DRAINAGES HAVE BEEN MODIFIED BY TALASAEA CONSULTANTS FOR VISUAL ENHANCEMENT.
- THIS PLAN IS AN ATTACHMENT TO THE CRITICAL AREAS SPECIAL STUDY REPORT PREPARED BY TALASAEA CONSULTANTS, DATED 15 JANUARY 2016.

**TALASAEA CONSULTANTS, INC.**  
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16800 River Street, Suite 200, Everett, WA 98201  
(425) 835-7000

EXHIBIT 10  
PAGE 3 OF 6

**STREAM BUFFER MITIGATION PLAN CLEARING & GRUBBING PLAN DETAILS & NOTES THE RESERVE AT WOODVILLE WASHINGTON**

By	ASB
Date	4-6-2016
Revisions	
CITY REVISIONS	
Date	1-15-2016
Scale	AS NOTED
Designed	ASB
Drawn	ASB
Checked	ASB
Approved	ASB
Project	#1249D
Sheet #	KL.2



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