



**Washington State**  
**Department of Transportation**  
 Paula Hammond  
 Secretary of Transportation

**Transportation Building**

310 Maple Park Ave  
 P.O. Box 47300  
 Olympia, WA 98504-7300

360-705-7000  
 TTY: 1-800-833-6388  
[www.wsdot.wa.gov](http://www.wsdot.wa.gov)

March 25, 2009

Mr. Pat Chapman  
 Washington State Department of Fish and Wildlife  
 Habitat Program  
 600 N. Capitol Way  
 Olympia, WA 98501-1091

RE: SR 9 Nooksack Road Vicinity to Cherry Street All Weather Reconstruction (MP 93.00 to MP 97.18) (Bone Creek Culvert Replacement) Mitigation Site

WDFW HPA Permit **100355-4**

Dear Mr. Chapman:

The Washington State Department of Transportation completed monitoring of the site on July 7, 2008 to determine survival of planted species for compliance with the above listed HPA.

General Site Information		
<b>WDFW HPA Permit Number</b>	100355-4	
<b>LLID Number</b>	1222672489852	
<b>Restoration Location</b>	Along Bone Creek, near Sumas, Whatcom County	
<b>Construction Date</b>	2006-2007	
<b>Monitoring Period</b>	2007-2009	
<b>Year of Monitoring</b>	2 of 3	
<b>Type of Project Impact</b>	Stream	Stream Buffer
<b>Area of Project Impact</b>	0.033 acre	0.372 acre
<b>Type of Restoration</b>	Riparian Enhancement	
<b>Area of Restoration</b>	0.34 acre	

**Site development:**

Permit Requirement	2008 Results	Management Activities
80% or greater survival woody species along streambanks	99% survival overall	Ongoing weed control

Planted woody species survival along the streambanks is 99 percent. This exceeds the permit requirement for Year-2. Survival is high and even across species. Dominant species include *Rosa* species (roses) and *Symphoricarpos albus* (snowberry).

Invasive cover was low at this site. Though *Phalaris arundinacea* (reed canarygrass) and *Rubus armeniacus* (Himalayan blackberry) were found on-site, they were sparse and located mainly along the east or west edges. The presence of these species did not appear to be affecting planted species.

We welcome your questions or comments. Please contact me at 360/570-6640 or by e-mail at [busht@wsdot.wa.gov](mailto:busht@wsdot.wa.gov) for questions about these mitigation sites.

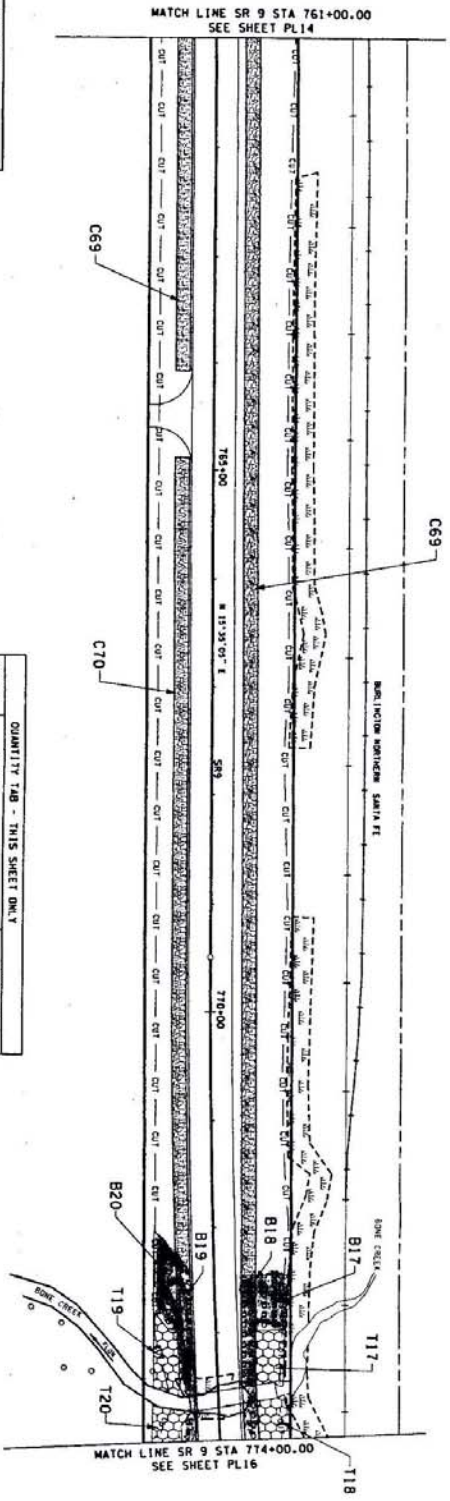
Sincerely,

Tony Bush  
Wetland Assessment and Monitoring Program

# T.40N. R.4E. W.M.

Original

- NOTES:
1. EROSION CONTROL, SEEDING, FERTILIZING AND MULCHING, 2-4 ACRES THIS SHEET ONLY.
  2. SEEDING SHALL OCCUR OVER ALL DISTURBED GROUND BEGINNING 2' BEYOND EDGE OF PAYMENT.
  3. APPLY AND INCORPORATE SOIL AMENDMENT TO ALL PLANTING AREAS PRIOR TO EROSION CONTROL, SEEDING, FERTILIZING AND MULCHING.
  4. a. STAKE PLANT LOCATIONS @ 10' O.C., TRIANGULAR SPACING.  
b. CLEAR 2' RADIOUS AROUND EACH PLANT LOCATION.  
c. PLANT WESTERN RED CEDAR, SCODLER'S WILLOW AND WESTERN CRAB APPLE IN CLUSTERS OF 5 TO 12 PLANTS.
  5. PLACE COMPOST AND BARK OR WOOD CHIP MULCH AROUND EACH PLANT OVER BARE SOIL. EROSION CONTROL CHASSES SHALL REMAIN BETWEEN MULCH RINGS.
  6. COVER ENTIRE PLANTING AREA WITH COMPOST AND BARK OR WOOD CHIP MULCH.



**LEGEND**

- BOUNDARY LINE
- TREE QUANTAL
- CONSTRUCTION CENTER LINE
- RIGHT OF WAY
- EXISTING FENCE
- EDGE OF PAVEMENT
- CUT LIMIT
- FILL LIMIT
- WETLAND BUFFER
- WETLAND PROJECT
- STAKE BUFFER

**COMPOST AMENDED FILTER STRIP - THIS SHEET ONLY**

COURSE COMPOST (CY)	QUANTITY
TOPSOIL TYPE A (CY)	668 668 670
COURSE COMPOST (CY)	341 32 222
	85 23 56

**QUANTITY TAB - THIS SHEET ONLY**

SYMBOL	ITEM	TI1	TI8	TI9	TI20
	PLANT SPACING 5' O.C.	7	5	7	4
	SCODLER'S WILLOW	8	6	9	5
	WESTERN CHABAPPLE	5	4	6	4
	WESTERN RED CEDAR	16	12	18	11
	HOPIA ROSE	16	12	18	11
	SNOWBERRY	13	10	14	9
	TIMBER ENERGY	13	10	14	9
	SOIL AMENDMENT (CY)	4	3	5	3
	FINE COMPOST (CY)	4	3	5	3
	BARK OR WOOD CHIP MULCH (CY)	13	10	14	9
	NOTES	3.6	3.6	3.6	3.6
	BIOTREATMENT SMALL SEEDING AND MULCHING (AC)	0.05	0.05	0.05	0.05
	TOPSOIL TYPE B (CY)	45	45	45	45
	COURSE COMPOST (CY)	11	11	11	11



FILE NAME: SR9-2006-1372X-002 PLANTING PLAN

DATE: 9/25/15

DESIGNED BY: SLYERSON

ENTERED BY: A. FITTERS

CHECKED BY: D. FITTERS

PROJ. ENGR. C. DAMINGO

REGIONAL ADM. L. BENS

REVISION: DATE: 8/7

REG. NO. 10 WASH. 03A023

DESIGNER: SLYERSON

DATE: 8/7

PROJECT: SR 9

LOCATION NO. 118

DATE: 8/7

Washington State Department of Transportation

NOOKSACK RD VIC TO CHERRY ST

PLANTING PLAN

PROJ. NO. 118

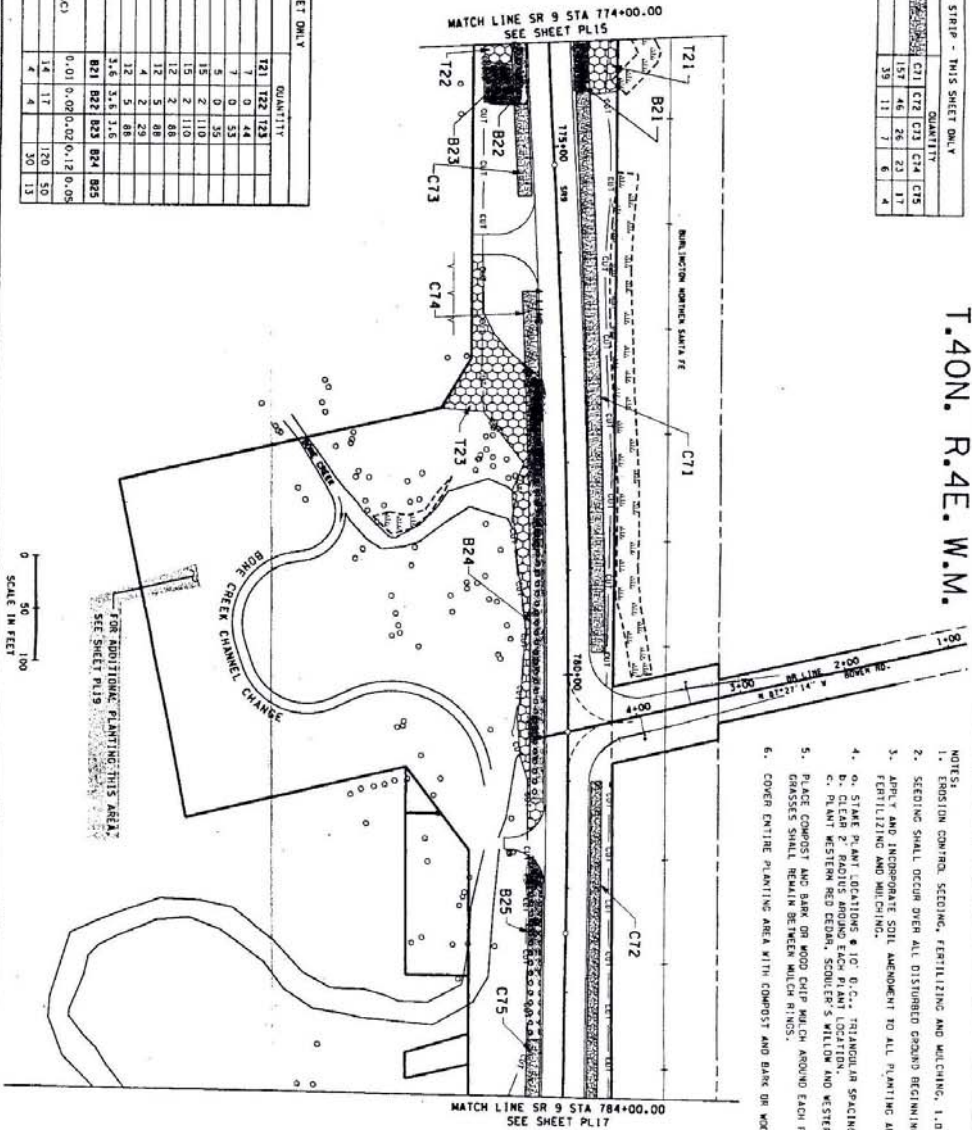
DATE: 8/7

SCALE: 1/4" = 1'

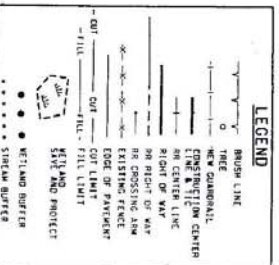
T.40N. R.4E. W.M.

COMPOST AMENDED FILTER STRIP - THIS SHEET ONLY	
QUANTITY	
C21	C22 C23 C24 C25
157	46 26 23 17
39	11 7 6 4

QUANTITY TAB - THIS SHEET ONLY		
SYMBOL	ITEM	QUANTITY
	PLANT SPACING 5' O.C.	121 122 123
	SCUDLER'S WILLOW	7 0 44
	WESTERN CRABAPPLE	7 0 53
	WESTERN RED CEDAR	5 0 35
	INDIANA ROSE	15 2 110
	SNOWBERRY	12 2 88
	THIMBLEBERRY	4 2 29
	SOIL AMENDMENT (C7)	12 2 29
	FINC COMPOST (C7)	12 2 29
	BARK OR WOOD CHIP MULCH (C7)	316 316 316
	WATER	821 822 823 824 825
	PLANT SPACING 5' O.C.	0.01 0.09 0.02 0.12 0.05
	BIODIFFUSION SHALE	
	(SEEDING, MULCH AND MULCHING (M.C.))	
	TOPSOIL TYPE B (C7)	14 17 20 50
	COARSE COMPOST (C7)	4 4 50 13



- NOTES:
1. EROSION CONTROL, SEEDING, FERTILIZING AND MULCHING, 1.25 ACRES THIS SHEET ONLY.
  2. SEEDING SHALL OCCUR DREN ALL DISTURBED GROUND BEGINNING 2' BEYOND EDGE OF PAVEMENT.
  3. APPLY AND INCORPORATE SOIL AMENDMENT TO ALL PLANTING AREAS PRIOR TO EROSION CONTROL, SEEDING, FERTILIZING AND MULCHING.
  4. a. STATE PLANT LOCATIONS & 10' O.C. TRIANGULAR SPACING.  
b. CLEAR 2' PLOTS AROUND EACH PLANT LOCATION.  
c. PLANT WESTERN RED CEDAR, SCUDLER'S WILLOW AND WESTERN CRAB APPLE IN CLUSTERS OF 5 TO 12 PLANTS.
  5. PLACE COMPOST AND BARK OR WOOD CHIP MULCH AROUND EACH PLANT OVER BARE SOIL. EROSION CONTROL GRASSES SHALL REMAIN BETWEEN MULCH RINGS.
  6. COVER ENTIRE PLANTING AREA WITH COMPOST AND BARK OR WOOD CHIP MULCH.



FILE NAME	SR 9, WOODCHIP MULCH, FERTILIZING, PLANTING	DATE	1/27/08
DATE	5/10/08 3:10 AM	BY	PL16
DESIGNED BY	A. SAMICH	CHECKED BY	D. PETERS
ENTERED BY	A. STYERS	PROJ. ENGR.	C. DANITTO
CHECKED BY	D. PETERS	REGIONAL MGR.	L. ERNO
PROJ. ENGR.	C. DANITTO	APPROVED FOR CONSTRUCTION	DATE
REGIONAL MGR.	L. ERNO	REVISION	
SCALE	1" = 40'	DATE	1/27/08
SCALE	1" = 40'	BY	PL16
SCALE	1" = 40'	DATE	1/27/08
SCALE	1" = 40'	BY	PL16

SR 9  
NOOKSACK RD VIC TO CHERRY ST  
PLANTING PLAN

PROJ. NO. PL16  
DATE 1/27/08  
SCALE 1" = 40'