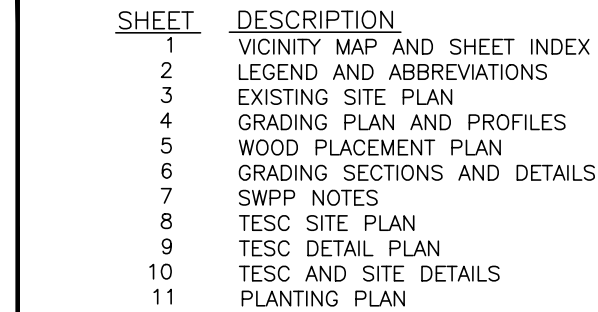




INDEX



(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)












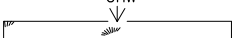











FIELD BOOK: 2015-3	12-2015	NUM.	REVISION	BY	DATE	APPROVED: WILLIS R. MANSFIELD, P.E.	6/2018	GRANT No. <u>RCO 14-1377P</u>		 King County Department of Natural Resources and Parks Water and Land Resources Division Rural and Regional Services Section Ecological Restoration and Engineering Services Unit <i>Christie True, Director</i>	MIDDLE BOISE CREEK VAN WIERINGEN RESTORATION - 2018 VICINITY MAP AND SHEET INDEX	SHEET 1 OF 11 SHEETS
SURVEYED: SWS B.PENDERGAST	12-2015					PROJECT SUPERVISOR: DIANE CONCANNON	6/2018					
SURVEY BASE MAP: SWS SURVEY	01-2016					PROJECT MANAGER: SARAH MCCARTHY	6/2018					
CHECKED: SWS B. PENDERGAST	01-2016					DESIGNED: CAROLYN BUTCHART, P.E.	6/2018					
						MASON BOWLES, P.W.S.	6/2018					
		NUM.	RECORD CHANGES APPROVED	BY	DATE	TODD HURLEY, L.E.G.	6/2018					
						CAD DESIGN: KEVIN WARD	6/2018					

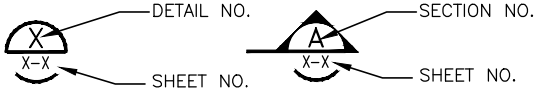
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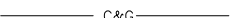



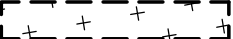

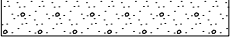
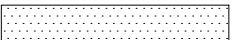

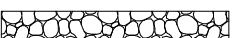

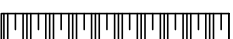

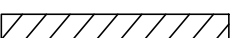



LEGEND

EXISTING

	EXISTING CONSERVATION EASEMENT & TEMPORARY CONSTRUCTION EASEMENT
	EXISTING STREAM EASEMENT (DRAINAGE DISTRICT No. 6)
	EXISTING 100 YEAR FLOODPLAIN BOUNDARY
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	EXISTING RIGHT OF WAY
	EXISTING PROPERTY LINE
	EXISTING EDGE OF PAVEMENT
	EXISTING FENCE
	EXISTING GROUND
	EXISTING ORDINARY HIGH WATER
	EXISTING WETLAND
	EXISTING SUBSTRATE
	SURVEYED EXISTING TREE
	EXISTING TREE FROM GPS
	TREE TO BE REMOVED
	EXISTING GUY WIRE ANCHOR
	EXISTING POWER POLE
	EXISTING SURVEY HUB AND TACK
	EXISTING SURVEY CONTROL POINT
	EXISTING SOIL TEST PIT (TAKEN AUGUST 4, 2016, LOCATED FROM GPS)
	EXISTING STAGE GAGE EXISTING
	MONITORING WELL



CONSTRUCTION

	PROJECT LIMITS
	CLEARING LIMITS
	KING COUNTY SURVEY LIMITS
	FINISHED GRADE CONTOUR MAJOR
	LIVESTOCK FENCE
	CHANNEL POOLS
	PERMANENT SPOIL LOCATION
	STREAMBED SEDIMENT BACKFILL (SSB)
	RELOCATED FARM ROAD
	TEMPORARY ACCESS ROAD GRAVEL
	TEMPORARY CONSTRUCTION ENTRANCE/ROAD QUARRY SPALLS
	TEMPORARY CREEK CROSSING
	TEMPORARY HOG FUEL
	TEMPORARY SEPARATION BERM
	TEMPORARY STAGING
	SLASH PILE
	PURCHASED LOGS
	SALVAGED LOGS



ABBREVIATIONS :

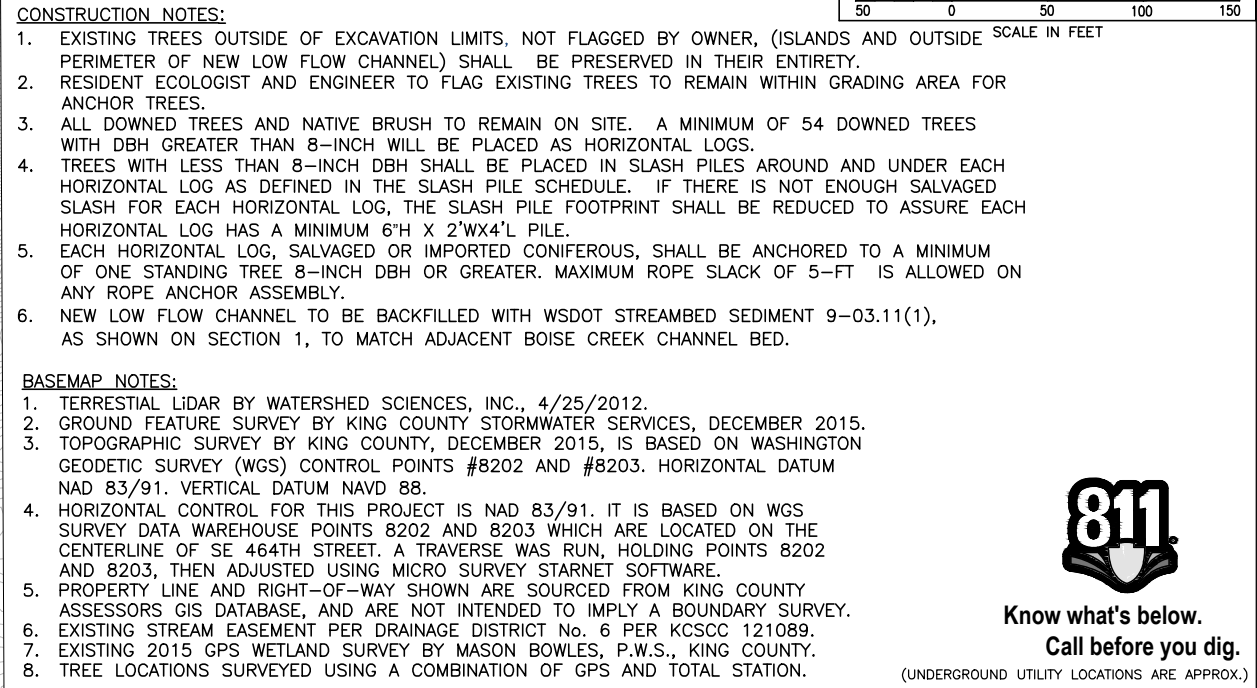
DIAM.	DIAMETER
EL., ELEV.	ELEVATION
EX.	EXISTING
FT	FOOT/FEET
HT	HUB AND TACK (SURVEY WORK POINT)
H:V	HORIZONTAL:VERTICAL
IN.	INCHES
LF	LINEAL FOOT/FEET
MW	MONITORING WELL
NTS	NOT TO SCALE
OHW	ORDINARY HIGH WATER
ROW	RIGHT-OF-WAY
SS	SIDE SLOPES
SSB	STREAM SEDIMENT BACKFILL
STA.	STATION
SWPP	STORMWATER POLLUTION PREVENTION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
TYP.	TYPICAL
WSE	WATER SURFACE ELEVATION
100 YR	100 YEAR WATER SURFACE ELEVATION
~	APPROXIMATELY





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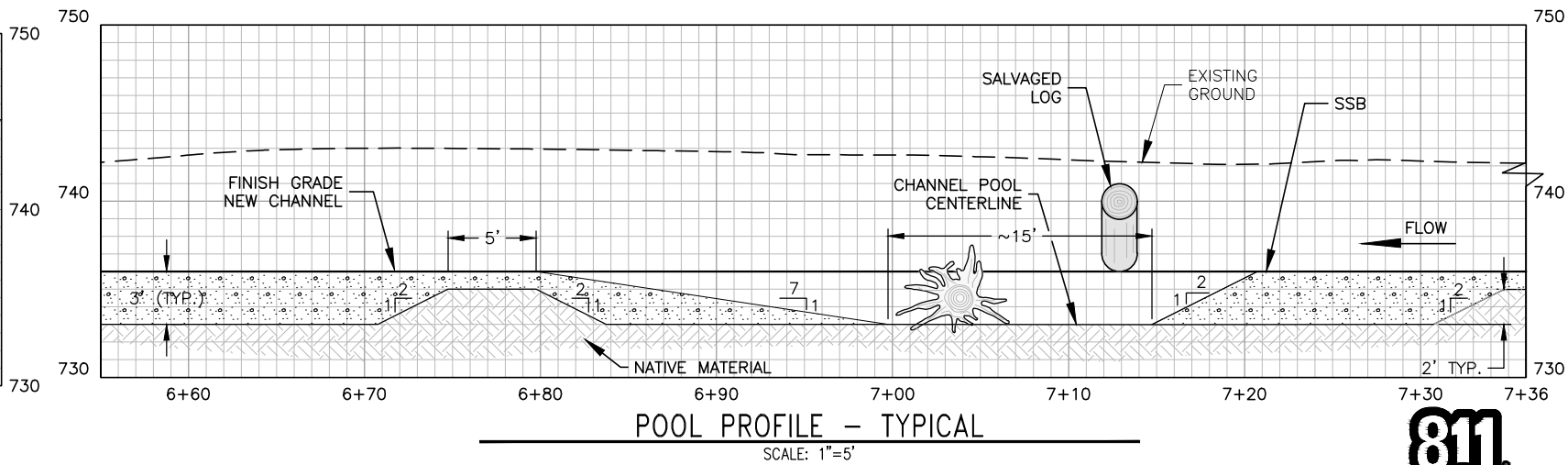
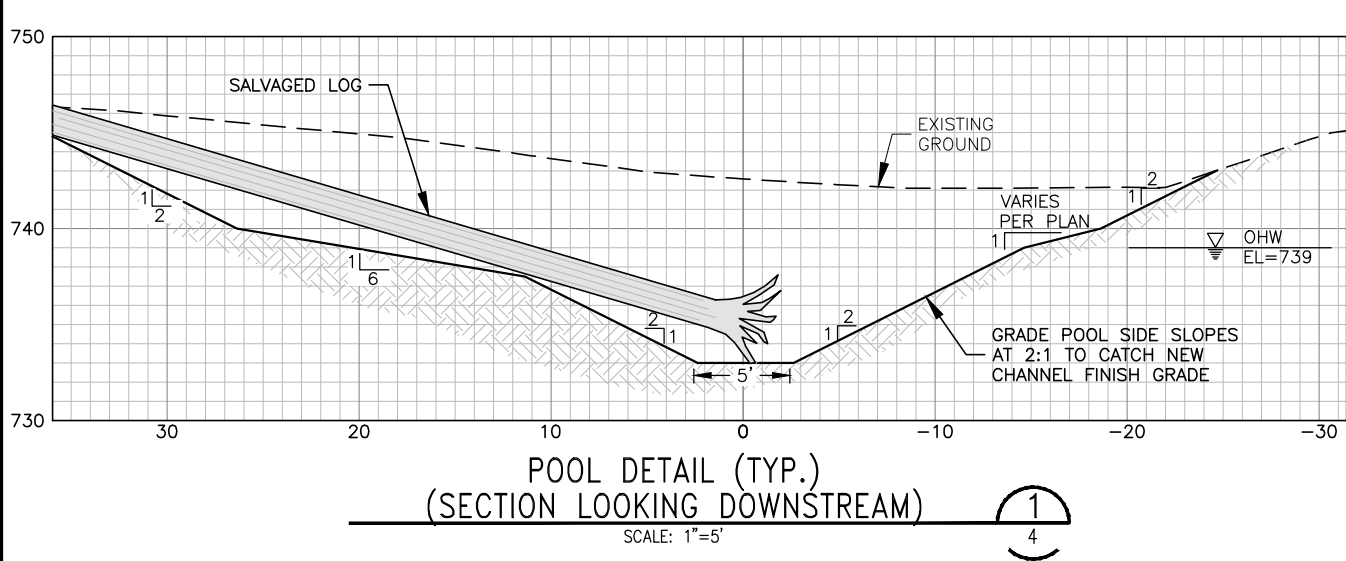
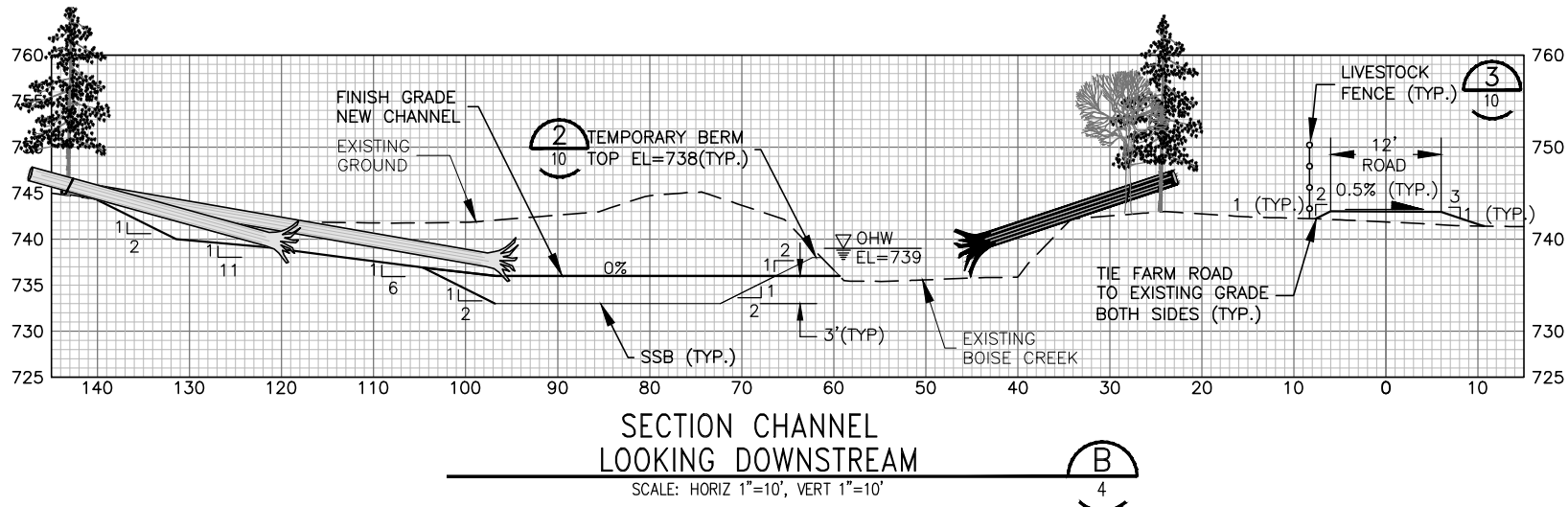
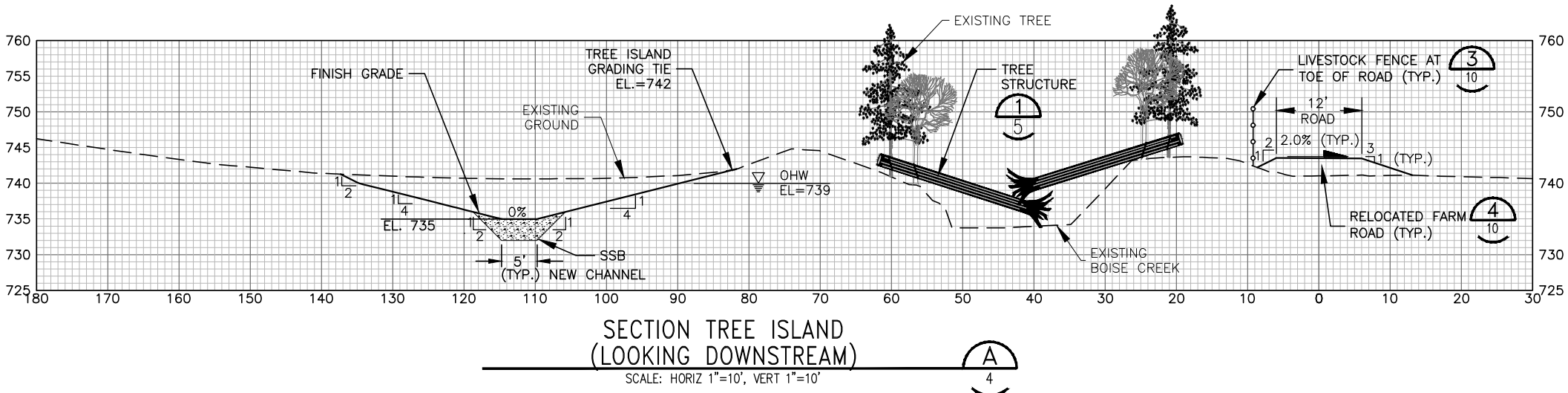
FIELD BOOK: 2015-3	12-2015	NUM.	REVISION	BY	DATE	APPROVED: WILLIS R. MANSFIELD, P.E. 6/2018 PROJECT SUPERVISOR: DIANE CONCANNON 6/2018 PROJECT MANAGER: SARAH McCARTHY 6/2018 DESIGNED: CAROLYN BUTCHART, P.E. 6/2018 MASON BOWLES, P.W.S. 6/2018 TODD HURLEY, L.E.G. 6/2018 CAD DESIGN: KEVIN WARD 6/2018	GRANT No. RCO 14-1377P PROJECT No. 1123570			MIDDLE BOISE CREEK VAN WIERINGEN RESTORATION - 2018 LEGEND AND ABBREVIATIONS	SHEET 2 OF 11 SHEETS 2015-07
	SURVEYED: SWS B.PENDERGAST										
	SURVEY BASE MAP: SWS SURVEY										
	CHECKED: SWS B. PENDERGAST										
		NUM.	RECORD CHANGES APPROVED	BY	DATE						



FIELD BOOK: 2015-3	12-2015	NUM.	REVISION	BY	DATE	APPROVED: WILLIS R. MANSFIELD, P.E.	2/2018	GRANT No. RCO 14-1377P		 King County Department of Natural Resources and Parks Water and Land Resources Division Rural and Regional Services Section Ecological Restoration and Engineering Services Unit <i>Christie True, Director</i>	MIDDLE BOISE CREEK VAN WIERINGEN RESTORATION - 2018 EXISTING SITE PLAN	SHEET 3 OF 11 SHEETS
SURVEYED: SWS B.PENDERGAST	12-2015					PROJECT SUPERVISOR: DIANE CONCANNON	2/2018					
SURVEY BASE MAP: SWS SURVEY	01-2016					PROJECT MANAGER: SARAH MCCARTHY	2/2018	PROJECT No. 1123570				
CHECKED: SWS B. PENDERGAST	01-2016					DESIGNED: CAROLYN BUTCHART, P.E.	2/2018					
		NUM.	RECORD CHANGES APPROVED	BY	DATE	MASON BOWLES, P.W.S.	2/2018					
						TODD HURLEY, L.E.G.	2/2018					
						CAD DESIGN: TRAXINGER, L.	2/2018					

2015-07

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SURVEYED: SWS B.PENDERGAST	12-2015					PROJECT SUPERVISOR: DIANE CONCANNON	6/2018	PROJECT No. 1123570				
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						CAD DESIGN: KEVIN WARD	6/2018					

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STORMWATER POLLUTION PREVENTION PLAN NOTES (SWPPP)
IN COMPLIANCE WITH THE W.S.D.O.E. STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (SWMMWW) (2012)

ACKNOWLEDGEMENT:

THIS PROJECT EXCEEDS THE MINIMUM THRESHOLD REQUIREMENT UNDER THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (SWMMWW) FOR "REDEVELOPMENT" AND IS SUBJECT TO MEETING ALL THE MINIMUM REQUIREMENTS #1- #10 FOR NEW IMPERVIOUS SURFACES AND CONVERTED PERVIOUS SURFACES. ADDITIONALLY, FOR ROAD RELATED PROJECTS, RUNOFF FROM THE "REPLACED AND NEW IMPERVIOUS SURFACES" (INCLUDING SHOULDERS, CURBS AND SIDEWALKS) SHALL MEET ALL OF THE MINIMUM REQUIREMENTS IF THE NEW IMPERVIOUS SURFACES TOTAL 5,000 SQUARE FEET OR MORE AND TOTAL 50% OR MORE OF THE EXISTING IMPERVIOUS SURFACES WITHIN THE PROJECT LIMITS (DEFINED AS LENGTH AND WIDTH OF THE RIGHT-OF-WAY). THIS PROJECT HAS TRIGGERED THE NEED FOR A CONSTRUCTION STORMWATER GENERAL PERMIT (SEE CONTRACT DOCUMENTS) TO MINIMIZE HARM TO SURFACE WATERS FROM CONSTRUCTION ACTIVITIES.

MINIMUM REQUIREMENTS (1-10)

MINIMUM REQUIREMENT #1 - PREPARATION OF STORMWATER SITE PLANS
THIS PROJECT REQUIRES THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN BECAUSE IT MEETS THE THRESHOLD IN SECTION 2.4 OF VOLUME I OF THE SMMM. THE "REDEVELOPMENT" THRESHOLD REQUIREMENTS TRIGGERING COMPLIANCE WITH MINIMUM REQUIREMENTS #1-#10 INCLUDE:
THIS STORMWATER SITE PLAN WAS PREPARED IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 3 IN VOLUME II OF THE SMMM.

MINIMUM REQUIREMENT #2 - CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

ELEMENT REQUIREMENTS	BEST MANAGEMENT PRACTICES - (BMP's)
ELEMENT #1 "PRESERVE VEGETATION/ MARK CLEARING LIMITS"	(PRESERVE NATURAL VEGETATION;) - SURVEY AND STAKE ALL "CUT & FILL" SLOPES. INDIVIDUAL TREES TO BE PRESERVED WITHIN THE CONSTRUCTION AREA SHALL BE MARKED. LIMITS DEFINED BY USE OF HIGH VISIBILITY FENCE (DELINEATE CRITICAL AREAS AS APPLICABLE TO THE PROJECT).
ELEMENT #2 "ESTABLISH CONSTRUCTION ACCESS"	CONSTRUCTION VEHICLE ACCESS AND EXIT TO STAGING AREAS, STOCKPILING AND GRADED AREAS, SHALL BE IMPLEMENTED TO LIMITED TWO DEFINED ACCESS POINTS TO ACCOMMODATE LARGE EQUIPMENT MANEUVERING. ACCESS POINTS SHALL TYPICALLY BE STABILIZED AND MAINTAINED WITH QUARRY SPALLS OR CRUSHED ROCK TO MINIMIZE THE TRANSPORT OF SEDIMENT ONTO PAVED SURFACES. SEDIMENT SHALL BE REMOVED FROM ROADWAYS BY SHOVELING OR PICKUP SWEEPING AND DEPOSITED IN A SEDIMENT DISPOSAL AREA. CONSTRUCTION ACCESS RESTORATION SHALL BE EQUAL TO OR BETTER THAN ITS PRE-CONSTRUCTION STATE.
ELEMENT #3 "CONTROL FLOW RATES"	(CHECK DAMS; CATCH BASINS) - DOWNSTREAM PROPERTIES AND WATERWAYS SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOWS FROM CONSTRUCTION SITE STORMWATER RUNOFF. TEMPORARY STORMWATER FACILITIES SHALL BE BUILT AND OPERATIONAL AS PART OF THE FIRST STAGE OF GRADING OPERATIONS.
ELEMENT #4 "INSTALL SEDIMENT CONTROLS"	STRAW WATTLES (VEGETATED STRIP; SEEDING, MULCHING) - PRIOR TO THE RELEASE OF STORMWATER FROM DISTURBED AREAS, IT SHALL PASS THROUGH A BIOSWALE, SEDIMENT BAG OR OTHER APPROPRIATE SEDIMENT REMOVAL BMP.
ELEMENT #5 "STABILIZE SOILS"	(TEMPORARY & PERMANENT SEEDING; STRAW AND WOOD CHIP MULCHING); PLASTIC COVERING; TOPSOILING; COMPOST; SURFACE ROUGHENING; DUST CONTROL) - BETWEEN OCTOBER 1 AND APRIL 30, SOILS (INCLUDING STOCKPILES) SHALL NOT REMAIN EXPOSED MORE THAN 2 DAYS. FROM MAY 1 TO SEPTEMBER 30, NO SOILS SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN 7 DAYS. SELECTED SOIL STABILIZATION MEASURES SHALL BE IMPLEMENTED MAINTAINED AND APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, EXPOSURE & ORIENTATION, DURATION OF USE AND IMPACTS TO WATER QUALITY AND GROUND WATER.
ELEMENT #6 "PROTECT SLOPES"	(PERMANENT SEEDING; PRESERVE VEGETATION; MATTING & NETS; PLASTIC COVERING; STRAW WATTLES; BIOSWALE; SUBSURFACE DRAINS; CHECK DAMS) - PHASE GRADING TO MINIMIZE EXPOSED CUT & FILL SLOPES. USE AND MAINTAIN APPROPRIATE "COVER MEASURES" TO PROTECT SLOPES FROM EROSION AND AS A DUST CONTROL. DIVERT UPSLOPE DRAINAGE AT TOP OF SLOPES AWAY FROM GRADING OPERATIONS. SEGREGATE OFF-SITE STORMWATER FROM ON-SITE STORMWATER AND BYPASS AS NEEDED.



ELEMENT REQUIREMENTS	BEST MANAGEMENT PRACTICES - (BMP's)
ELEMENT #7 "PROTECT DRAIN INLETS"	(STORMDRAIN INLET PROTECTION, INTERCEPTOR BIOSWALE) - ALL OPERABLE INLETS SHALL BE PROTECTED AND MAINTAINED WITH A SEDIMENT FILTERING DEVICE. PRIOR TO RELEASE TO WATERS OF THE STATE. WHENEVER FEASIBLE ,DIVERT STORMWATER RUNOFF AWAY FROM INLETS TO SWALES, DITCHES, ETC.
ELEMENT #8 "STABILIZE CHANNELS AND OUTLETS"	(CHANNEL LINING; OUTLET PROTECTION; EROSION CONTROL BLANKETS, MATTING AND/OR PERMANENT SEEDING) - TEMPORARY ON SITE CONVEYANCE CHANNELS SHALL BE CONSTRUCTED, STABILIZED AND MAINTAINED TO PREVENT EROSION FROM THE EXPECTED 2 YEAR, 24-HOUR FREQUENCY STORM. STABILIZATION INCLUDING ARMORING MATERIAL ADEQUATE TO PREVENT EROSION OF OUTLETS, AND SLOPES SHALL BE PROVIDED AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.
ELEMENT #9 "CONTROL POLLUTANTS"	(CONCRETE HANDLING; SAWCUTTING AND SURFACE POLLUTION PREVENTION; FUGITIVE DUST CONTROL) - ALL POLLUTANTS INCLUDING FUELS, WASTE MATERIALS, DEMOLITION DEBRIS WHEEL WASH WATER, SHALL BE HANDLED AND DISPOSED OF IN A MANNER TO PREVENT STORMWATER CONTAMINATION. COVER, CONTAINMENT AND PROTECTION FROM VANDALISM SHALL BE PROVIDED FOR ALL EQUIPMENT, CHEMICALS, LIQUID, PETROLEUM AND INERT WASTES. ADEQUATE BMP'S SHALL BE IMPLEMENTED FOR PH MODIFYING SOURCES TO ENSURE STORMWATER DISCHARGES DO NOT CAUSE A VIOLATION OF THE WATER QUALITY STANDARD FOR PH. THESE SOURCES INCLUDE BULK CEMENT, KILN DUSTS, FLY ASH, NEW CONCRETE WASHING & CURING, CONCRETE GRINDING AND SAW CUTTING WASTE STREAMS, CONCRETE PUMPING AND MIXER WASHOUT, ETC.
ELEMENT #10 "CONTROL DE-WATERING"	(SEDIMENT BAG; BIOSWALE; SANITARY SEWER DISCHARGE W/ DISTRICT APPROVAL; TRANSPORT OFF SITE, VEGETATED FILTER STRIP; INFILTRATION) - FOUNDATION , VAULT, PILLING, TRENCH DE-WATERING AND WHEEL WASH WATER SHALL BE CONVEYED INTO A CONTROLLED TREATMENT SYSTEM PRIOR TO DISCHARGE. CLEAN, NON-TURBID DEWATERING WATER SUCH AS WELL-POINT SOURCE GROUND WATER, MAY BE DISCHARGED TO VEGETATED FILTER STRIPS OR TRIBUTARIES, PROVIDED THE DE-WATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF RECEIVING WATERS. ACCEPTABLE DISPOSAL OPTIONS INCLUDE INFILTRATION ,OFFSITE TRANSPORT, SANITARY SEWER DISCHARGE WITH DISTRICT APPROVAL, SEDIMENTATION BAG WITH OUTFALL TO VEGETATED DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DE-WATERING. ON SITE CHEMICAL TREATMENT OR OTHER SUITABLE TECHNOLOGIES AS D.O.E. APPROVED
ELEMENT #11 "MAINTAIN BMP'S"	TEMPORARY AND PERMANENT TESC AND POLLUTANT BMP'S SHALL BE INSTALLED PER THE PROJECT PLANS, SPECIFICATIONS AND CONTRACTING AGENCY DIRECTION. THEY SHALL BE "MAINTAINED & REPAIRED" AS NEEDED TO ENSURE THEIR CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. SEDIMENT CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER A RUNOFF PRODUCING STORM EVENT DURING THE DRY SEASON AND DAILY DURING THE WET SEASON. BMP'S SHALL ONLY BE REMOVED 30 DAYS AFTER THE FINAL SITE STABILIZATION IS ACHIEVED AS DIRECTED BY THE CONTRACTING AGENCY. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL RESULTING FROM THE REMOVAL OF BMP'S OR VEGETATION SHALL BE PERMANENTLY STABILIZED. A PROJECT RECORD OR LOG SHALL BE KEPT OF ALL BMP MEASURES IMPLEMENTED WITH DATES OF INSTALLATION, MAINTENANCE, STORM EVENTS, REQUIRED WATER QUALITY SAMPLING, REPAIR AND ACTION TAKEN TO PREVENT AND/OR CORRECT IMPACTS.
ELEMENT #12 "MANAGE THE PROJECT"	(PHASE CONSTRUCTION: SEASONAL WORK LIMITATIONS) - CONSTRUCTION SHALL BE PHASED WHERE FEASIBLE TO THE MAXIMUM EXTENT PRACTICABLE, THE TRANSPORT OF SEDIMENT FROM CLEARING & GRUBBING AND GRADING OPERATIONS. STABILIZATION AND MAINTENANCE SHALL BE AN INTEGRAL PART OF EACH CONSTRUCTION PHASE. THE CONTRACTING AGENCY MAY IMPOSE SEASONAL LIMITATIONS DURING THE WET SEASON (OCTOBER 1 - APRIL 30) ON CLEARING, GRUBBING AND GRADING OPERATIONS BASED ON SOILS, SLOPES, VEGETATIVE COVER, WEATHER, ETC. TO PREVENT THE TRANSPORT OF SEDIMENT FROM THE CONSTRUCTION SITE TO RECEIVING WATERS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL DESIGNATE THEIR CERTIFIED EROSION & SEDIMENT CONTROL PROFESSIONAL(S) WHOM SHALL BE ON-SITE OR, ON CALL AT ALL TIMES WITH AUTHORITY TO TAKE QUICK ACTION TO CORRECT AND/OR IMPLEMENT EFFECTIVE BMP'S. WHENEVER INSPECTION, MONITORING AND SAMPLING REVEALS THAT BMP'S IDENTIFIED IN THE SWPPP ARE INADEQUATE, DUE TO THE ACTUAL OR POTENTIAL DISCHARGE OF SIGNIFICANT AMOUNTS OF ANY POLLUTANT, THE SWPPP SHALL BE MODIFIED AS DIRECTED BY THE CONTRACTING AGENCY. THE SWPPP SHALL BE RETAINED ON-SITE AND MODIFIED AND DOCUMENTED WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE PROJECT DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE OF ANY BMP. STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) AS REQUIRED BY N.P.D.E.S. PERMIT.
ELEMENT #13 "PROTECT LOW IMPACT DEVELOPMENT BMP'S"	PROTECT INFILTRATION TRENCH LID FROM SEDIMENTATION WITH BMP'S AS SHOWN. RESTORE BMP'S TO PROPER FUNCTION IF THEY ACCUMULATE SEDIMENT. PREVENT COMPACTION OF SOILS THAT HAVE BEEN EXCAVATED TO FINAL GRADE, FROM CONSTRUCTION EQUIPMENT AND FOOT TRAFFIC, TO RETAIN THE INFILTRATION RATE OF THE SOILS. CONTROL EROSION AND PREVENT SEDIMENT AND OTHER POLLUTANTS FROM LEAVING THE SITE DURING THE CONSTRUCTION PHASE OF THE PROJECT. KEEP ALL HEAVY EQUIPMENT OFF OF LID FACILITY THAT HAS REACHED FINAL GRADE.



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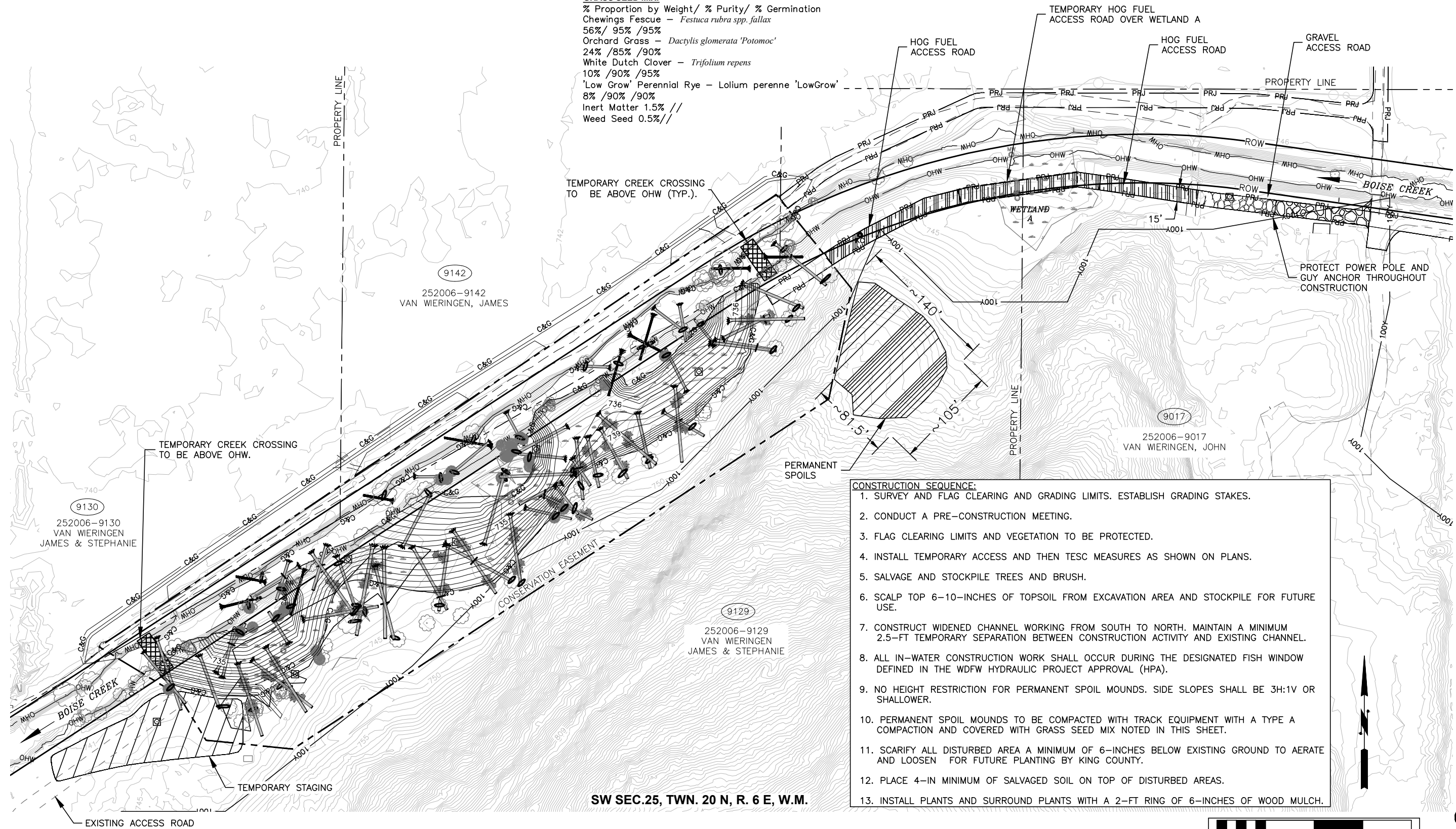
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SURVEYED: SWS B.PENDERGAST	12-2015					PROJECT SUPERVISOR: DIANE CONCANNON	6/2018	PROJECT No. 1123570				
SURVEY BASE MAP: SWS SURVEY	01-2016					PROJECT MANAGER: SARAH McCARTHY	6/2018					
CHECKED: SWS B. PENDERGAST	01-2016					DESIGNED: CAROLYN BUTCHART, P.E.	6/2018					
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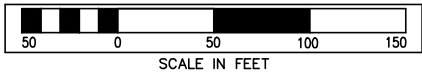
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GRASS SEED MIX:
% Proportion by Weight/ % Purity/ % Germination
Chewings Fescue - *Festuca rubra* spp. *fallax*
56%/ 95% /95%
Orchard Grass - *Dactylis glomerata* 'Potomoc'
24% /85% /90%
White Dutch Clover - *Trifolium repens*
10% /90% /95%
'Low Grow' Perennial Rye - *Lolium perenne* 'LowGrow'
8% /90% /90%
Inert Matter 1.5% //
Weed Seed 0.5%//



- CONSTRUCTION SEQUENCE:**
1. SURVEY AND FLAG CLEARING AND GRADING LIMITS. ESTABLISH GRADING STAKES.
 2. CONDUCT A PRE-CONSTRUCTION MEETING.
 3. FLAG CLEARING LIMITS AND VEGETATION TO BE PROTECTED.
 4. INSTALL TEMPORARY ACCESS AND THEN TESC MEASURES AS SHOWN ON PLANS.
 5. SALVAGE AND STOCKPILE TREES AND BRUSH.
 6. SCALP TOP 6-10-INCHES OF TOPSOIL FROM EXCAVATION AREA AND STOCKPILE FOR FUTURE USE.
 7. CONSTRUCT WIDENED CHANNEL WORKING FROM SOUTH TO NORTH. MAINTAIN A MINIMUM 2.5-FT TEMPORARY SEPARATION BETWEEN CONSTRUCTION ACTIVITY AND EXISTING CHANNEL.
 8. ALL IN-WATER CONSTRUCTION WORK SHALL OCCUR DURING THE DESIGNATED FISH WINDOW DEFINED IN THE WDFW HYDRAULIC PROJECT APPROVAL (HPA).
 9. NO HEIGHT RESTRICTION FOR PERMANENT SPOIL MOUNDS. SIDE SLOPES SHALL BE 3H:1V OR SHALLOWER.
 10. PERMANENT SPOIL MOUNDS TO BE COMPACTED WITH TRACK EQUIPMENT WITH A TYPE A COMPACTION AND COVERED WITH GRASS SEED MIX NOTED IN THIS SHEET.
 11. SCARIFY ALL DISTURBED AREA A MINIMUM OF 6-INCHES BELOW EXISTING GROUND TO AERATE AND LOOSEN FOR FUTURE PLANTING BY KING COUNTY.
 12. PLACE 4-IN MINIMUM OF SALVAGED SOIL ON TOP OF DISTURBED AREAS.
 13. INSTALL PLANTS AND SURROUND PLANTS WITH A 2-FT RING OF 6-INCHES OF WOOD MULCH.



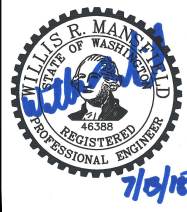
Know what's below.
Call before you dig.

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

NUM.	REVISION	BY	DATE
1	FIELD BOOK: 2015-3		12-2015
2	SURVEYED: SWS B.PENDERGAST		12-2015
3	SURVEY BASE MAP: SWS SURVEY		01-2016
4	CHECKED: SWS B. PENDERGAST		01-2016
NUM.	RECORD CHANGES APPROVED	BY	DATE

APPROVED: WILLIS R. MANSFIELD, P.E.	6/2018
PROJECT SUPERVISOR: DIANE CONCANNON	6/2018
PROJECT MANAGER: SARAH MCCARTHY	6/2018
DESIGNED: CAROLYN BUTCHART, P.E.	6/2018
MASON BOWLES, P.W.S.	6/2018
TODD HURLEY, L.E.G.	6/2018
CAD DESIGN: KEVIN WARD	6/2018

GRANT No. RCO 14-1377P
PROJECT No. 1123570



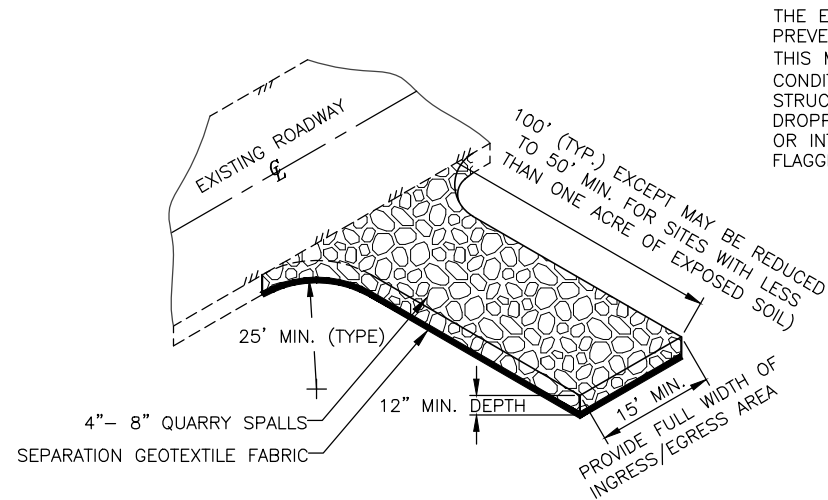
King County
Department of Natural Resources and Parks
Water and Land Resources Division
Rural and Regional Services Section
Ecological Restoration
and Engineering Services Unit
Christie True, Director

**MIDDLE BOISE CREEK
VAN WIERINGEN RESTORATION - 2018**

TESC DETAIL PLAN

SHEET
9
OF
11
SHEETS
2015-07

I:\2015-07_MBoise_VanWier\DWG\15-07_SHT8-10_TESC.dwg, 7/5/2018 2:28:18 PM, kward
Filename: D:\KCDNRP_SWSS_CSU_x_TB.dwt | Layout: Model | Last Edited: 2012/APRIL/13 11:20
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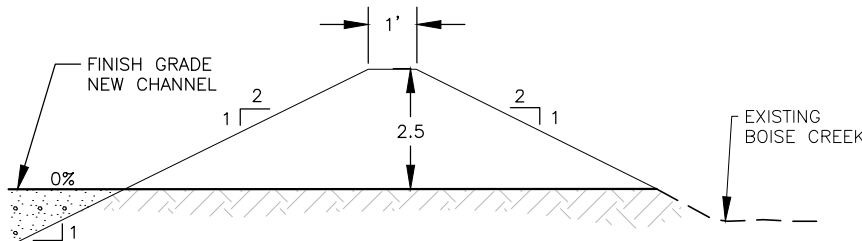


THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2" STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN-OUT OF ANY STRUCTURES USE TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. PROVIDE FLAGGING FOR CONSTRUCTION VEHICLES ENTERING AND LEAVING SITE.

NOTE: A 30' WIDE ROAD MAY BE REQUIRED WHERE A TRUCK WASHER IS LOCATED.

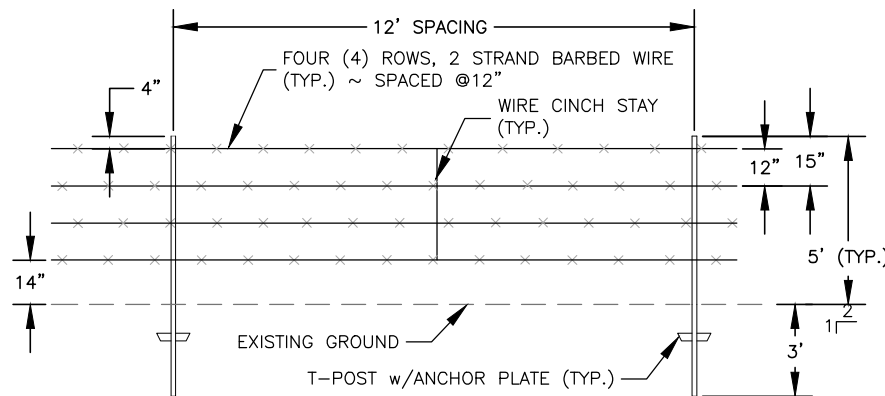
TEMPORARY CONSTRUCTION ENTRANCE
NTS

1
8



TEMPORARY BERM DETAIL
NTS

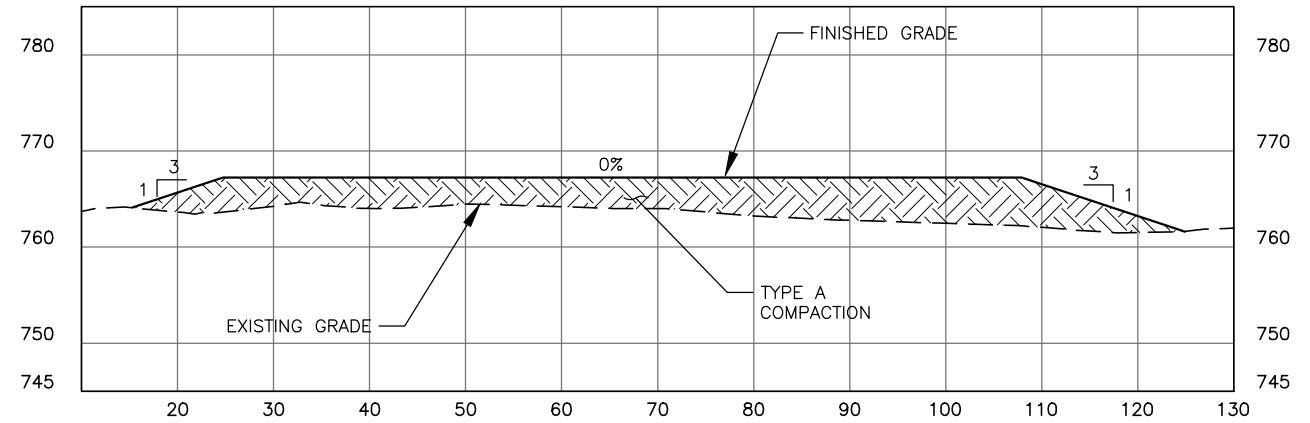
2
4-6



LIVESTOCK FENCE DETAIL
NTS

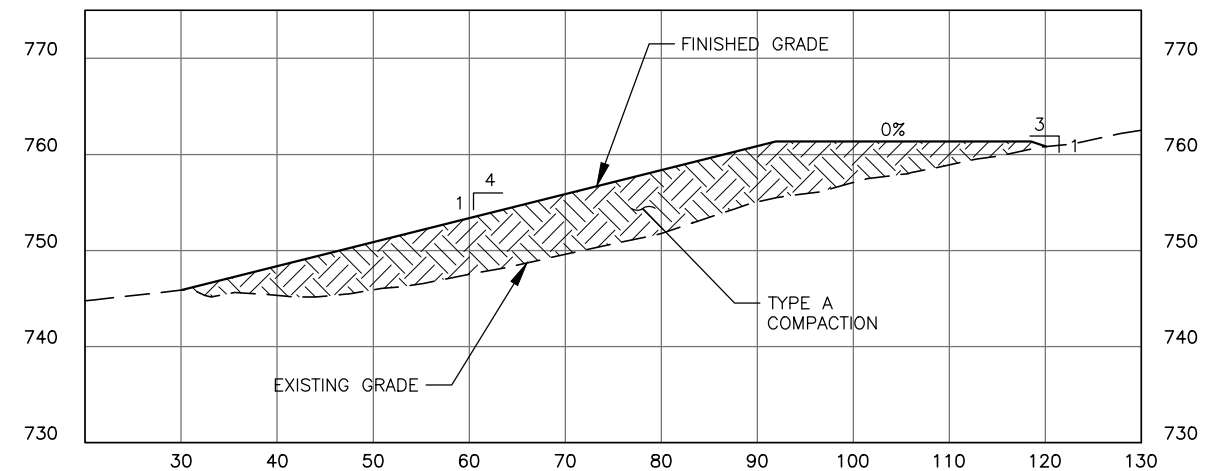
3
4-6

NOTE: FOUR (4) ROWS OF TWO (2) PRONG BARBED WIRE AND WILL BE BASED ON NRCS SPEC R1-382(A)



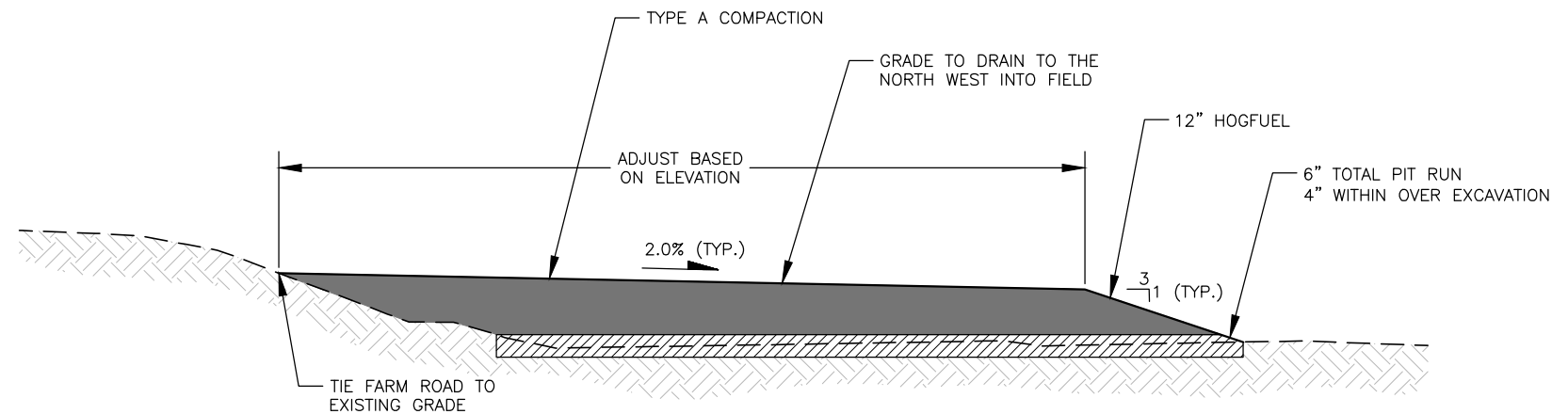
SPOILS PILE CROSS SECTION
SCALE: HORIZ 1"=10', VERT 1"=10'

A
8



SPOILS PILE CROSS SECTION
SCALE: HORIZ 1"=10', VERT 1"=10'

B
8



RELOCATED FARM ROAD DETAIL
SCALE: 1" = 2'



4
6

NOTE: MATERIAL USE FOR PIT RUN MUST NOT EXCEED 2" AND MUST BE COMPACTABLE

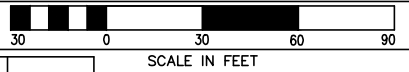
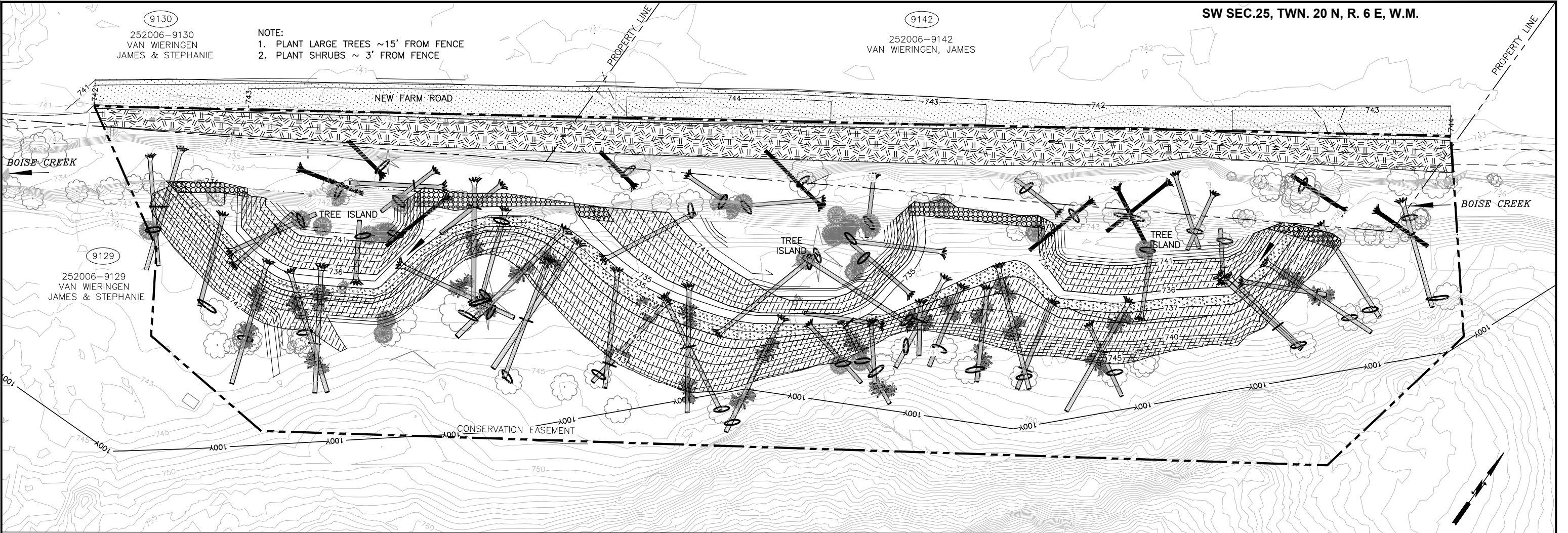


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(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

FIELD BOOK: 2015-3	12-2015	NUM.	REVISION	BY	DATE	APPROVED: WILLIS R. MANSFIELD, P.E.	6/2018	GRANT No. RCO 14-1377P			MIDDLE BOISE CREEK VAN WIERINGEN RESTORATION - 2018 TESC AND SITE DETAILS	SHEET 10 OF 11 SHEETS 2015-07
SURVEYED: SWS B.PENDERGAST	12-2015					PROJECT SUPERVISOR: DIANE CONCANNON	6/2018	PROJECT No. 1123570				
SURVEY BASE MAP: SWS SURVEY	01-2016					PROJECT MANAGER: SARAH McCARTHY	6/2018					
CHECKED: SWS B. PENDERGAST	01-2016					DESIGNED: CAROLYN BUTCHART, P.E.	6/2018					
						MASON BOWLES, P.W.S.	6/2018					
		NUM.	RECORD CHANGES APPROVED	BY	DATE	TODD HURLEY, L.E.G.	6/2018					
						CAD DESIGN: KEVIN WARD	6/2018					

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Location: I:\0-ACAD MASTER\Templates



Left Bank Planting Schedule								
Symbol	Scientific Name	Common Name	FIS	Stock	Spacing ft OC	Quantity	Area	Elevation
						1690	20531	736-745
	<i>Thuja plicata</i>	Western red cedar	FAC	1 GAL	15' O.C.	45		
	<i>Picea sitchensis</i>	Sitka spruce	FAC	1 GAL	15' O.C.	45		
	<i>Rubus spectabilis</i>	Salmonberry	FAC	1 GAL	4' O.C.	400		
	<i>Acer circinatum</i>	Vine maple	FAC	1 GAL	4' O.C.	200		
	<i>Polystichum munitum</i>	Sword fern	FAC	4" POT	4' O.C.	400		
	<i>Physocarpus capitatus</i>	Pacific ninebark	FACW	1 GAL	4' O.C.	100		
	<i>Lonicera involucrata</i>	Black twinberry	FAC	1 GAL	4' O.C.	250		
	<i>Cornus sericea</i>	Red osier dogwood	FAC	1 GAL	4' O.C.	250		
Emergents								
	<i>Carex obnupta</i>	Slough Sedge	OBL	10" plugs	clumps of 4 @ 2' O.C	450		
	<i>Scirpus microcarpus</i>	Small-fruited bullrush	OBL	10" plugs	clumps of 4 @ 2' O.C	450		
	<i>Juncus tenuis</i>	Slender rush	FACW	10" plugs	clumps of 4 @ 2' O.C	450		
	<i>Carex stipata</i>	Sawbeak sedge	FACW	10" plugs	clumps of 4 @ 2' O.C	450		

Right Bank Planting Schedule								
Symbol		Common Name	FIS	Stock	Spacing ft OC	Quantity	Area	Elevation
	Upland Forest							
	<i>Pseudotsuga menziesii</i>	Douglas fir	FACU	1 GAL	15' O.C.	20		
	<i>Western red cedar</i>	<i>Thuja plicata</i>	FAC	1 GAL	15' O.C.	20		
	<i>Holodiscus discolor</i>	Oceanspray	FACU	1 GAL	4' O.C.	130		
	<i>Mahonia aquifolium</i>	Tall Oregon grape	FACU	1 GAL	4' O.C.	130		
	<i>Symphocarpus alba</i>	Snowberry	FACU	1 GAL	4' O.C.	130		
	<i>Sambucus racemosa</i>	Red elderberry	FACU	1 GAL	4' O.C.	130		
South Side Islands Planting Scheudle								
	Upland Forest							
	<i>Populus trichocarpa</i>	Black cottonwood	FAC	1 GAL	15' O.C.	25		
	<i>Tsuga heterophylla</i>	Western hemlock	FACU	1 GAL	15' O.C.	25		
	<i>Picea sitchensis</i>	Sitka spruce	FAC	1 GAL	15' O.C.	25		
	<i>Acer circinatum</i>	Vine maple	FAC	1 GAL	4' O.C.	100		
	<i>Polystichum munitum</i>	Sword fern	FAC	1 GAL	4' O.C.	200		
	<i>Lonicera involucrata</i>	Black twinberry	FAC	1 GAL	4' O.C.	100		
	<i>Physocarpus capitatus</i>	Pacific ninebark	FACW	2 GAL	4' O.C.	100		
	<i>Rubus spectabilis</i>	Salmonberry	FAC	1 GAL	4' O.C.	300		
	<i>Rhamnus purshiana</i>	Cascara buckthorn	FACU	1 GAL	4' O.C.	150		

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

FIELD BOOK: 2015-3	12-2015	NUM.	REVISION	BY	DATE	APPROVED: WILLIS R. MANSFIELD, P.E.	2/2018	FUNDING SOURCE No. RCO 14-1377P
	12-2015					PROJECT MANAGER: SARAH MCCARTHY	2/2018	
	01-2016					PLANTING DESIGN: MASON BOWLES, P.W.S.	2/2018	PROJECT No. 1123570
	01-2016							CONTRACT No.
		NUM.	RECORD CHANGES APPROVED	BY	DATE	CAD DESIGN: TRAXINGER, L.	2/2018	



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**MIDDLE BOISE CREEK
VAN WIERINGEN RESTORATION - 2018**

PLANTING PLAN

SHEET
11
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