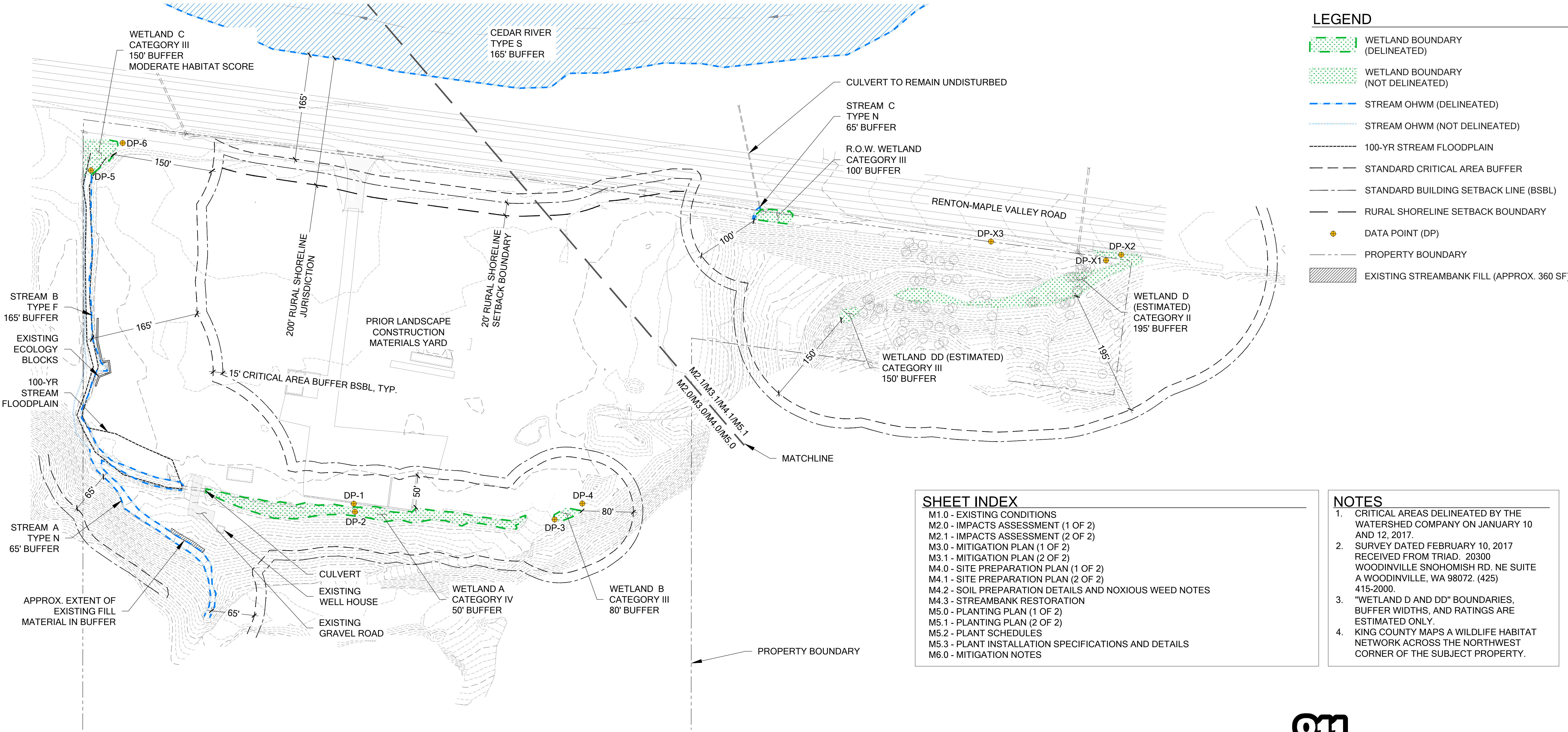
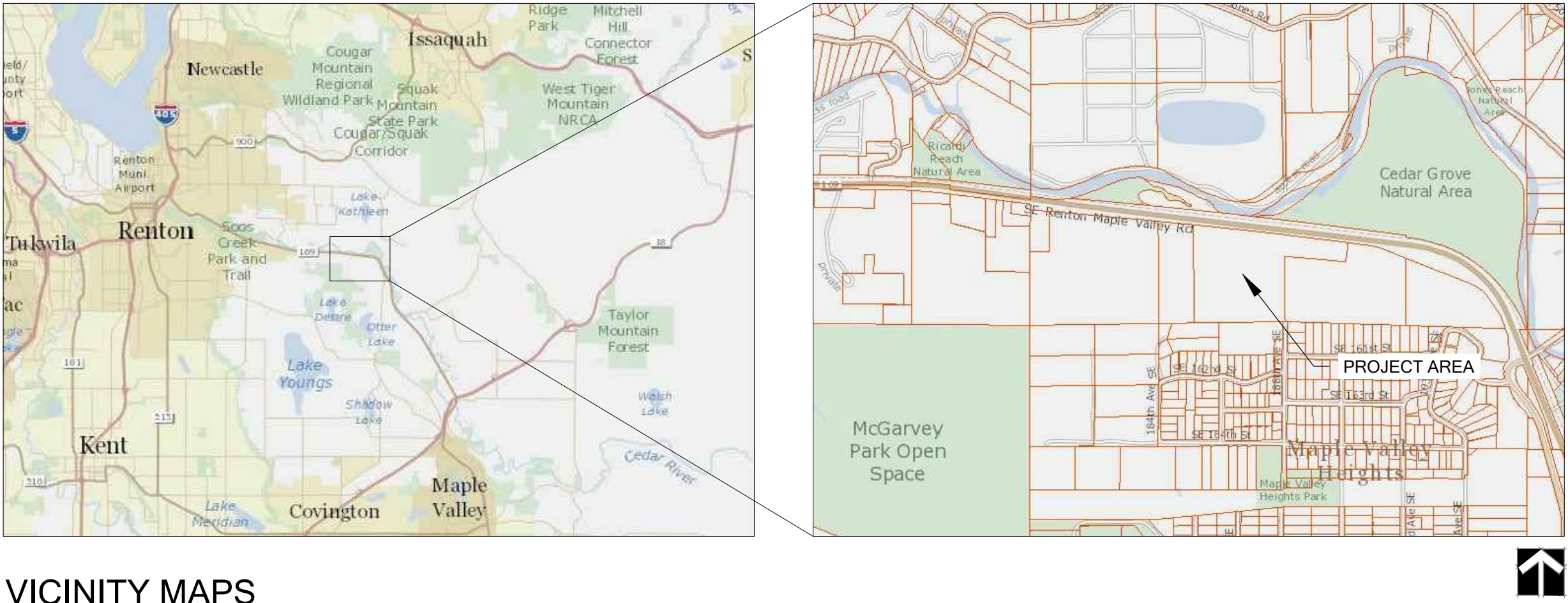


MAPLE VALLEY ASPHALT FACILITY



LEGEND

- WETLAND BOUNDARY (DELINEATED)
- WETLAND BOUNDARY (NOT DELINEATED)
- STREAM OHWM (DELINEATED)
- STREAM OHWM (NOT DELINEATED)
- 100-YR STREAM FLOODPLAIN
- STANDARD CRITICAL AREA BUFFER
- STANDARD BUILDING SETBACK LINE (BSBL)
- RURAL SHORELINE SETBACK BOUNDARY
- DATA POINT (DP)
- PROPERTY BOUNDARY
- EXISTING STREAMBANK FILL (APPROX. 360 SF)

SHEET INDEX

M1.0 - EXISTING CONDITIONS
M2.0 - IMPACTS ASSESSMENT (1 OF 2)
M2.1 - IMPACTS ASSESSMENT (2 OF 2)
M3.0 - MITIGATION PLAN (1 OF 2)
M3.1 - MITIGATION PLAN (2 OF 2)
M4.0 - SITE PREPARATION PLAN (1 OF 2)
M4.1 - SITE PREPARATION PLAN (2 OF 2)
M4.2 - SOIL PREPARATION DETAILS AND NOXIOUS WEED NOTES
M4.3 - STREAMBANK RESTORATION
M5.0 - PLANTING PLAN (1 OF 2)
M5.1 - PLANTING PLAN (2 OF 2)
M5.2 - PLANT SCHEDULES
M5.3 - PLANT INSTALLATION SPECIFICATIONS AND DETAILS
M6.0 - MITIGATION NOTES

- NOTES**
- CRITICAL AREAS DELINEATED BY THE WATERSHED COMPANY ON JANUARY 10 AND 12, 2017.
 - SURVEY DATED FEBRUARY 10, 2017 RECEIVED FROM TRIAD. 20300 WOODINVILLE SNOHOMISH RD. NE SUITE A WOODINVILLE, WA 98072. (425) 415-2000.
 - "WETLAND D AND DD" BOUNDARIES, BUFFER WIDTHS, AND RATINGS ARE ESTIMATED ONLY.
 - KING COUNTY MAPS A WILDLIFE HABITAT NETWORK ACROSS THE NORTHWEST CORNER OF THE SUBJECT PROPERTY.

EXISTING CONDITIONS
SCALE: 1" = 80' WHEN PRINTED AT 24" x 36"



THE WATERSHED COMPANY

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MITIGATION PLAN
KAREN DEAL, LAKESIDE INDUSTRIES
18825 RENTON MAPLE VALLEY RD SE
UNINCORPORATED KING COUNTY, WA 98058 (NEAR RENTON)

SUBMITTALS & REVISIONS		BY	DATE
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1	PERMIT SUBMITTAL		
2	REVISED PERMIT SUBMITTAL V2		

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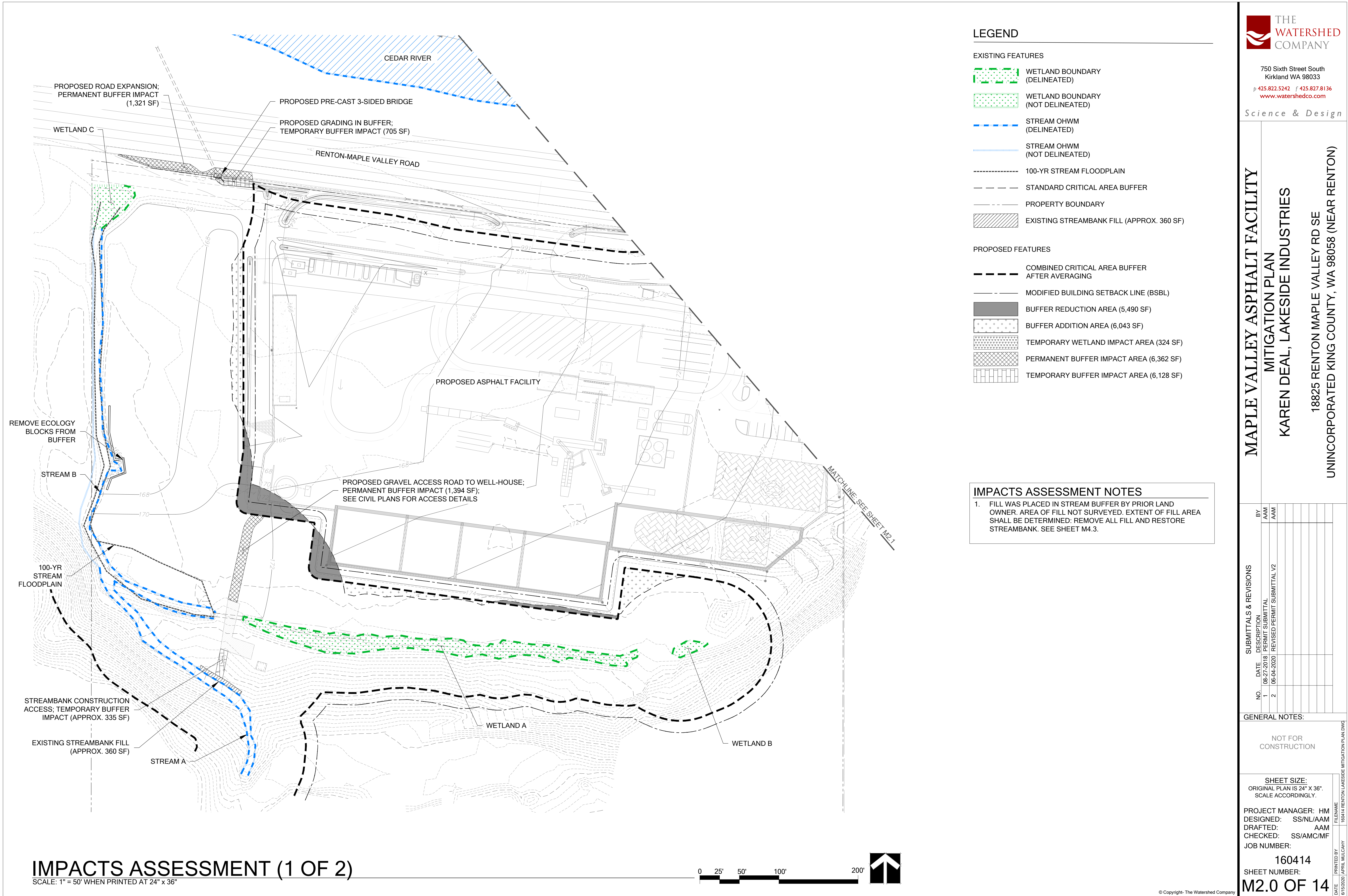
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SCALE ACCORDINGLY.

PROJECT MANAGER: HM
DESIGNED: SS/NL/AAM
DRAFTED: AAM
CHECKED: SS/AMC/MF
JOB NUMBER:

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SHEET NUMBER:
M1.0 OF 14

DATE: 9/15/2020
PRINTED BY: JPHIL MULLOCH
FILENAME: 18825 RENTON MAPLE VALLEY RD SE MITIGATION PLAN.DWG



MAPLE VALLEY ASPHALT FACILITY

MITIGATION PLAN

KAREN DEAL, LAKESIDE INDUSTRIES

18825 RENTON MAPLE VALLEY RD SE
UNINCORPORATED KING COUNTY, WA 98058 (NEAR RENTON)

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NO	DATE	DESCRIPTION	
1	08-27-2018	PERMIT SUBMITTAL	AAM
2	05-04-2020	REVISED PERMIT SUBMITTAL V2	AAM

GENERAL NOTES:

NOT FOR
CONSTRUCTION

SHEET SIZE:
ORIGINAL PLAN IS 24" X 36".
SCALE ACCORDINGLY.

PROJECT MANAGER: HM
DESIGNED: SS/NL/AAM
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CHECKED: SS/AMC/MF
JOB NUMBER:
160414
SHEET NUMBER:
M2.1 OF 14



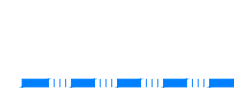

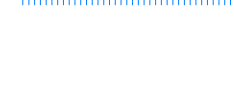


FILENAME
160414 RENTON LAKESIDE MITIGATION PLAN.DWG

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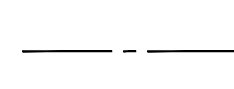


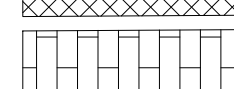

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8/15/2020

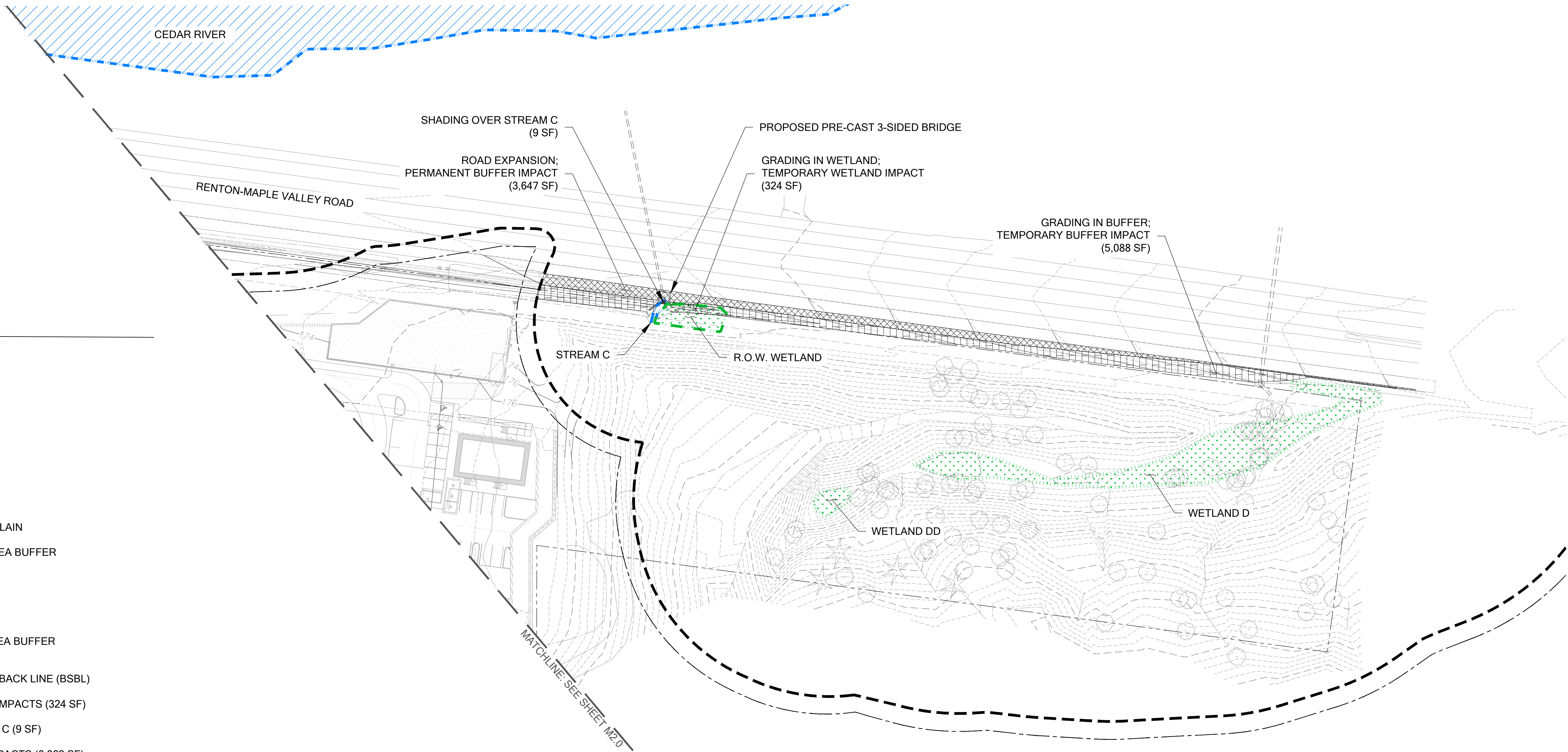
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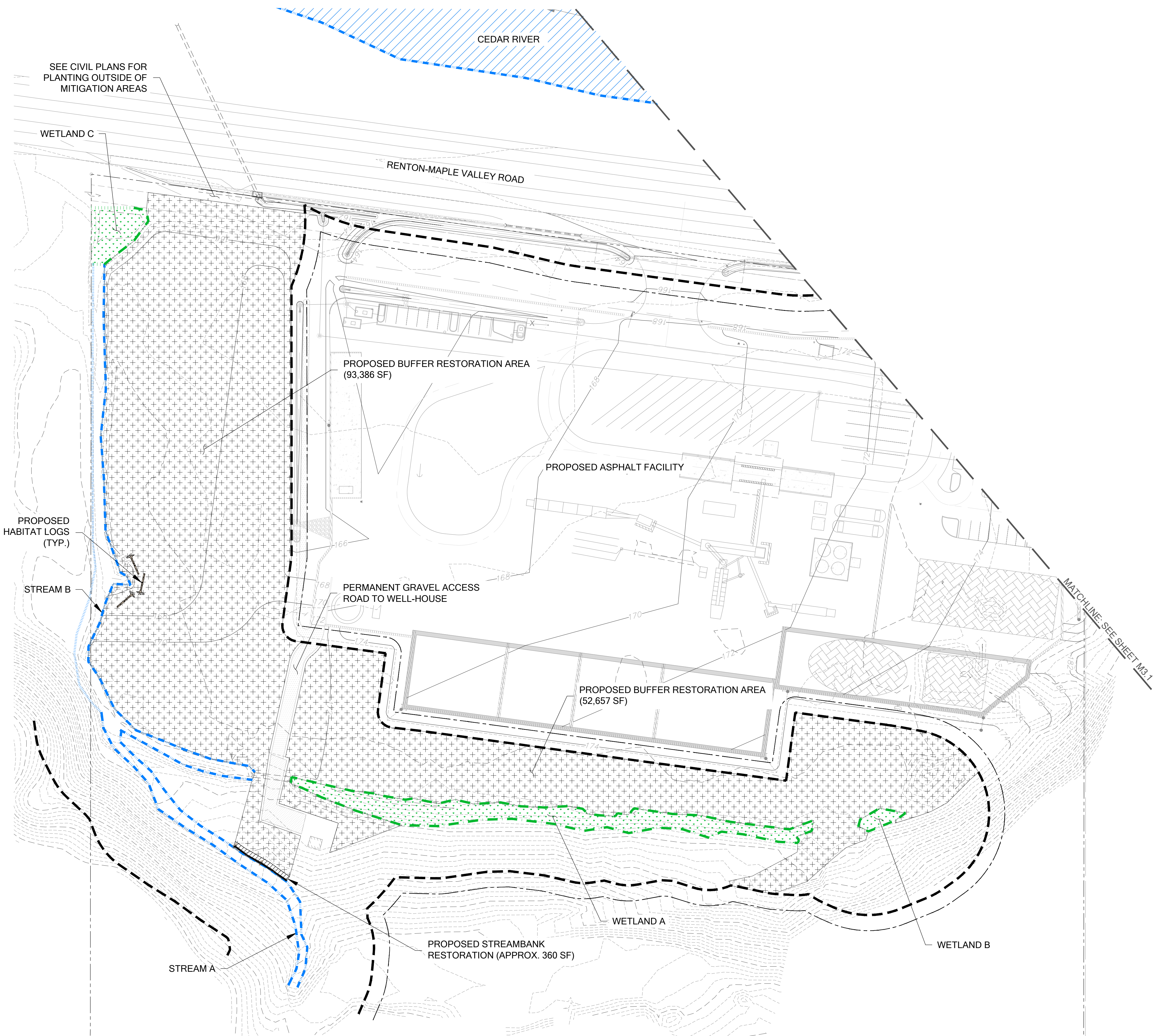
EXISTING FEATURES

-  WETLAND BOUNDARY (DELINEATED)
-  WETLAND BOUNDARY (NOT DELINEATED)
-  STREAM OHWM (DELINEATED)
-  STREAM OHWM (NOT DELINEATED)
-  100-YR STREAM FLOODPLAIN
-  STANDARD CRITICAL AREA BUFFER
-  PROPERTY BOUNDARY

PROPOSED FEATURES

-  COMBINED CRITICAL AREA BUFFER AFTER AVERAGING
-  MODIFIED BUILDING SETBACK LINE (BSBL)
-  TEMPORARY WETLAND IMPACTS (324 SF)
-  SHADING OVER STREAM C (9 SF)
-  PERMANENT BUFFER IMPACTS (6,362 SF)
-  TEMPORARY BUFFER IMPACTS (6,128 SF)





LEGEND

EXISTING FEATURES

- WETLAND BOUNDARY (DELINEATED)
- WETLAND BOUNDARY (NOT DELINEATED)
- STREAM OHWM (DELINEATED)
- STREAM OHWM (NOT DELINEATED)
- PROPERTY BOUNDARY

PROPOSED FEATURES

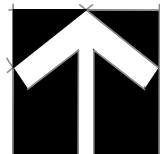
- COMBINED CRITICAL AREA BUFFER AFTER AVERAGING
- MODIFIED BUILDING SETBACK LINE (BSBL)
- BUFFER RESTORATION AREA (182,390 SF)
- STREAMBANK RESTORATION AREA (APPROX. 360 SF)
- HABITAT LOGS (QTY. 7)

MITIGATION NOTES

- BUFFER RESTORATION AREA SHALL CONSIST OF REMOVAL OF STRUCTURES, PAVING, AND RUBBLE WITHIN THE BUFFER, IMPROVEMENT OF EXISTING SOIL CONDITIONS, AND REVEGETATION WITH NATIVE PLANT SPECIES.
- STREAM BANK RESTORATION SHALL CONSIST OF REMOVING FILL AND RECONSTRUCTING STREAM BANK WITH BIOENGINEERING METHODS. SEE SHEET M4.3.

MITIGATION PLAN (1 OF 2)

SCALE: 1" = 50' WHEN PRINTED AT 24" x 36"



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GENERAL NOTES:

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SCALE ACCORDINGLY.

PROJECT MANAGER: HM
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M3.0 OF 14

MAPLE VALLEY ASPHALT FACILITY

MITIGATION PLAN

KAREN DEAL, LAKESIDE INDUSTRIES

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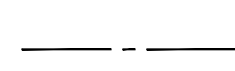
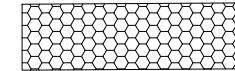

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FILENAME: 160414 RENTON LAKESIDE MITIGATION PLAN.DWG

LEGEND

EXISTING FEATURES

-  WETLAND BOUNDARY (DELINEATED)
-  WETLAND BOUNDARY (NOT DELINEATED)
-  STREAM OHWM (DELINEATED)
-  STREAM OHWM (NOT DELINEATED)
-  PROPERTY BOUNDARY

PROPOSED FEATURES

-  COMBINED CRITICAL AREA BUFFER AFTER AVERAGING
-  MODIFIED BUILDING SETBACK LINE (BSBL)
-  WETLAND RESTORATION AREA (660 SF)
-  BUFFER RESTORATION AREA (182,390 SF)

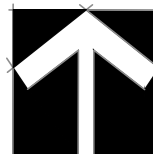
MITIGATION NOTES

1. BUFFER RESTORATION AREA SHALL CONSIST OF REMOVAL OF STRUCTURES, PAVING, AND RUBBLE WITHIN THE BUFFER, IMPROVEMENT OF EXISTING SOIL CONDITIONS, AND RE-VEGETATION WITH NATIVE PLANT SPECIES.

MITIGATION PLAN (2 OF 2)

SCALE: 1" = 50' WHEN PRINTED AT 24" x 36"





1. CONTRACTOR SHALL FLAG AND SURVEY WETLAND AND STREAM BOUNDARIES PRIOR TO STARTING WORK.
2. CONTRACTOR SHALL MARK CLEARING LIMITS.
3. TESC WILL BE INSTALLED AND INSPECTED PRIOR TO ANY GROUND DISTURBING ACTIVITIES, PER CIVIL PLANS.
4. RESTORATION AREAS MUST BE CLEARED OF INVASIVE WEEDS PRIOR TO RESTORATION PLANTING. DELINEATED AREAS OF INVASIVE WEEDS SHOWN ARE APPROXIMATE LOCATIONS OF THE LARGEST PATCHES ONLY. THE ENTIRE RESTORATION AREA SHALL BE SURVEYED FOR INVASIVE WEEDS AND THOSE WEEDS REMOVED. SEE NOXIOUS WEED REMOVAL AND CONTROL NOTES ON SHEET M4.2 FOR SPECIFICATIONS ON CONTROLLING INDIVIDUAL SPECIES.
5. ALL WORK IS WITHIN BUFFERS ONLY, UNLESS EXPLICITLY INDICATED OTHERWISE.
6. SEE SHEET M4.3 FOR STREAMBANK RESTORATION DETAILS AND WORK SEQUENCE.

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M4.0 OF 14

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DATE	PRINTED BY	FILENAME
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MAPLE VALLEY ASPHALT FACILITY
MITIGATION PLAN
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LEGEND

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- STREAM OHWM (DELINEATED)
- STREAM OHWM (NOT DELINEATED)
- PROPERTY BOUNDARY

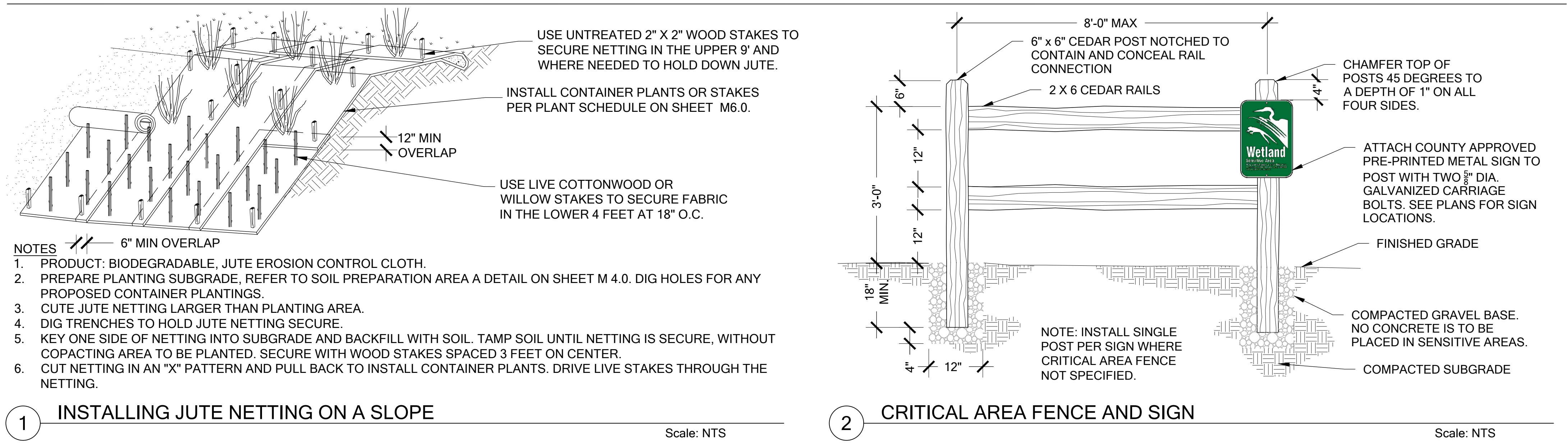
PROPOSED FEATURES

- COMBINED CRITICAL AREA BUFFER AFTER AVERAGING
- MODIFIED BUILDING SETBACK LINE (BSBL)
- APPROXIMATE CURRENT EXTENT OF INVASIVE WEEDS
- CRITICAL AREA SIGN (13 TOTAL)
- SOIL PREPARATION AREA A (44,518 SF)
- SOIL PREPARATION AREA C (3,431 SF)
- SOIL PREPARATION AREA D (394 SF)
- SOIL PREPARATION AREA E (265 SF)

SITE PREPARATION NOTES

- CONTRACTOR SHALL FLAG AND SURVEY WETLAND AND STREAM BOUNDARIES PRIOR TO STARTING WORK.
- CONTRACTOR SHALL MARK CLEARING LIMITS.
- TESC WILL BE INSTALLED AND INSPECTED PRIOR TO ANY GROUND DISTURBING ACTIVITIES, PER CIVIL PLANS.
- RESTORATION AREAS MUST BE CLEARED OF INVASIVE WEEDS PRIOR TO RESTORATION PLANTING. DELINEATED AREAS OF INVASIVE WEEDS SHOWN ARE APPROXIMATE LOCATIONS OF THE LARGEST PATCHES ONLY. THE ENTIRE RESTORATION AREA SHALL BE SURVEYED FOR INVASIVE WEEDS AND THOSE WEEDS REMOVED. SEE NOXIOUS WEED REMOVAL AND CONTROL NOTES ON SHEET M4.2 FOR SPECIFICATIONS ON CONTROLLING INDIVIDUAL SPECIES.
- ALL WORK IS WITHIN BUFFERS ONLY, UNLESS EXPLICITLY INDICATED OTHERWISE.

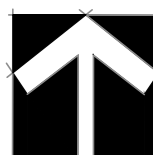
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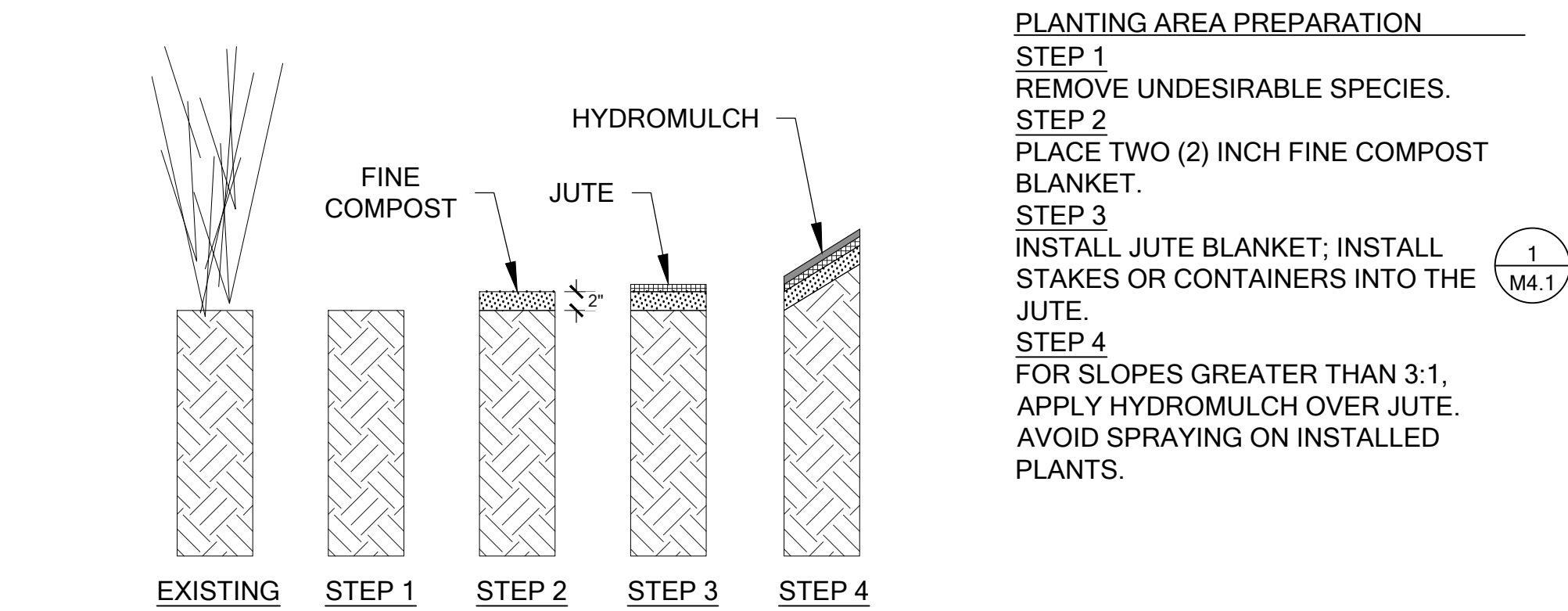
SITE PREPARATION PLAN (2 OF 2)

SCALE: 1" = 50' WHEN PRINTED AT 24" x 36"

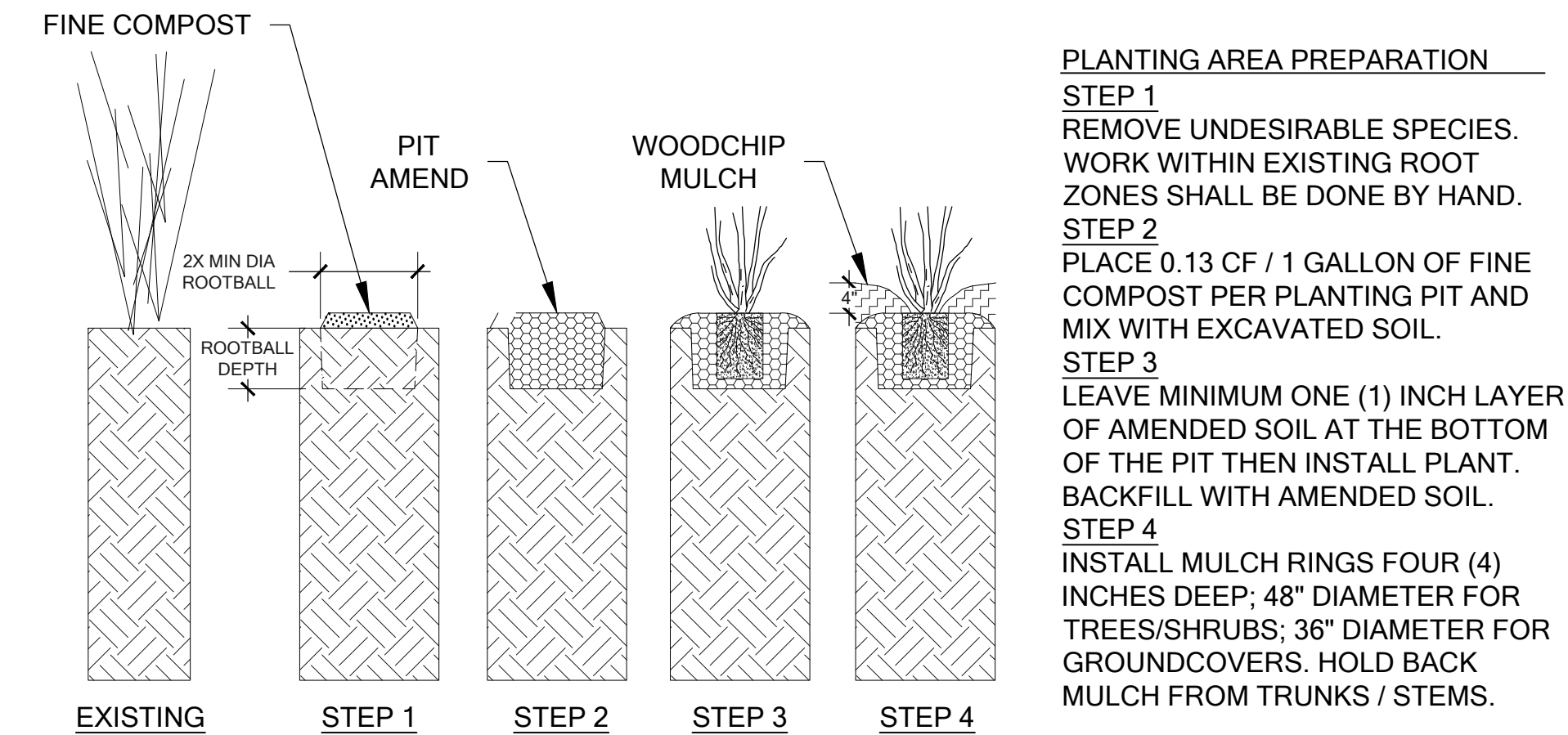
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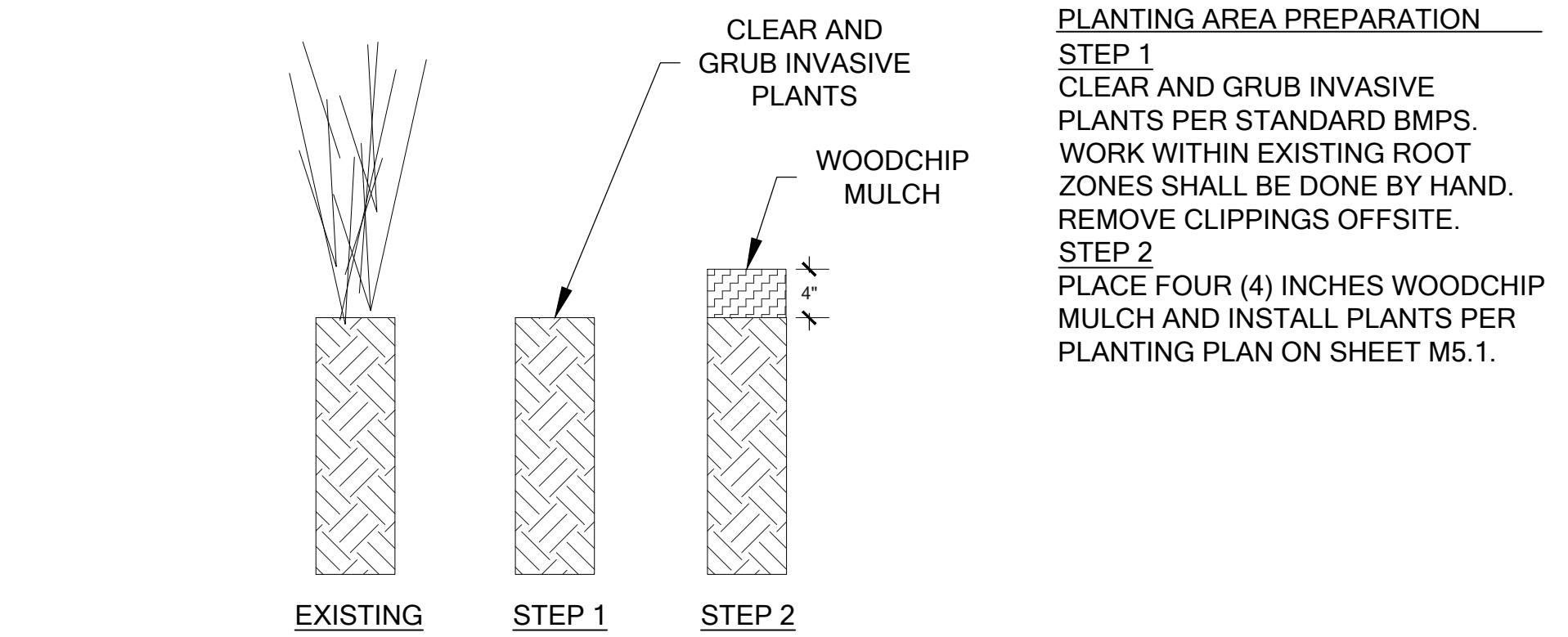
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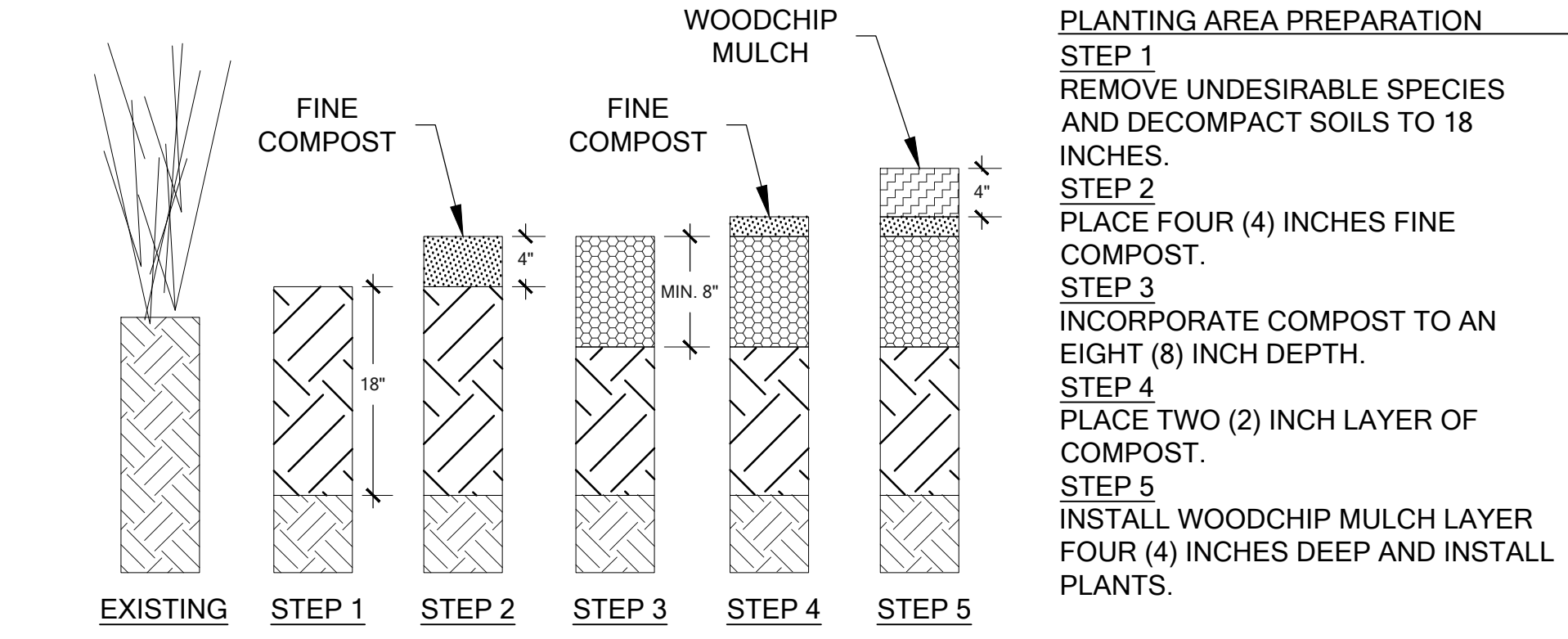
A SOIL PREPARATION AREA A: AMEND TOPSOIL & INSTALL JUTE
Scale: NTS



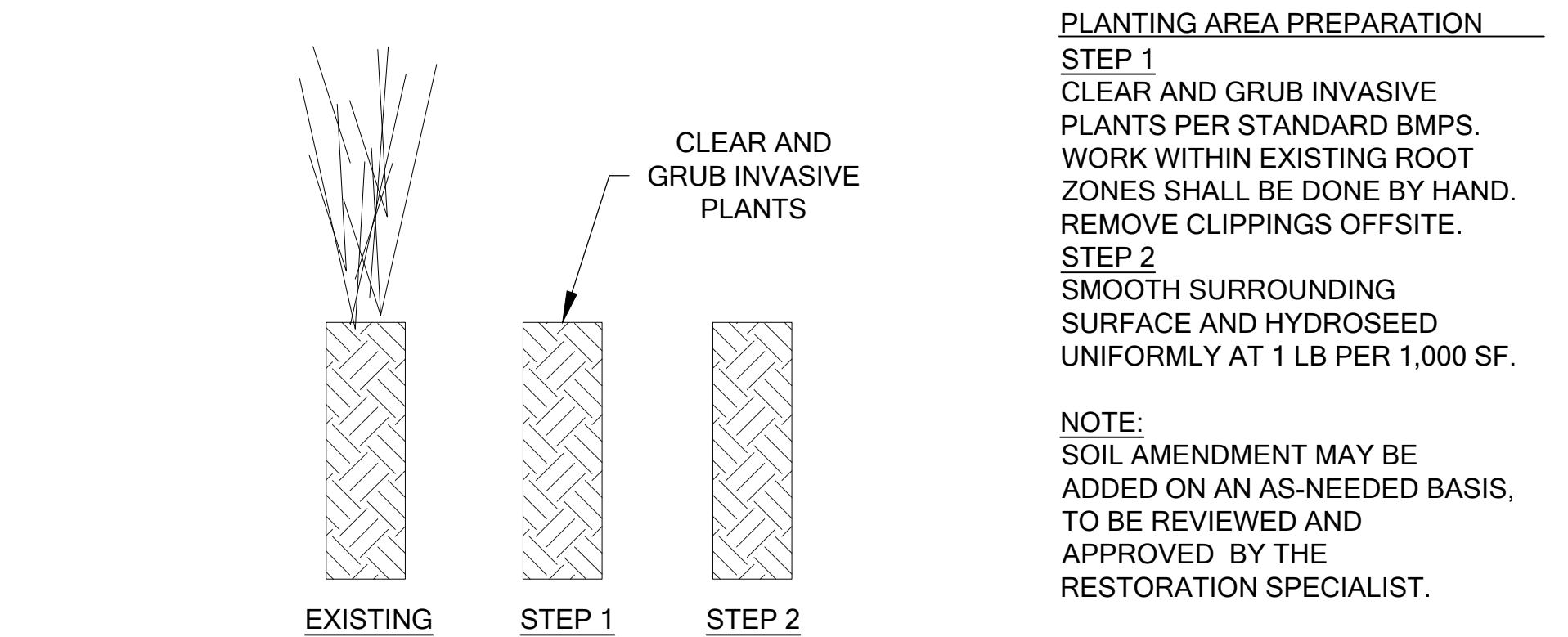
C SOIL PREPARATION AREA C: PIT AMEND EXISTING
Scale: NTS



E SOIL PREPARATION AREA E: WETLAND RESTORATION SHRUBS
Scale: NTS



B SOIL PREPARATION AREA B: DECOMPACT AND AMEND TOPSOIL
Scale: NTS



D SOIL PREPARATION AREA D: WETLAND RESTORATION SEEDS
Scale: NTS

NOXIOUS WEED REMOVAL & CONTROL NOTES

NOTE:
1. ALL INVASIVE PLANTS TO BE DISPOSED OF OFF-SITE. NO INVASIVE SPECIES SHALL BE CHIPPED FOR REUSE AS MULCH.
2. CONTROL SHALL INCLUDE, BUT NOT BE LIMITED TO:

REMOVE JAPANESE KNOTWEED:

1. REMOVAL MUST BE DONE ACCORDING TO KING COUNTY NOXIOUS WEED CONTROL PROGRAM BEST MANAGEMENT PRACTICES BY QUALIFIED INDIVIDUALS.
2. REFER TO KING COUNTY NOXIOUS WEED REGULATORY GUIDELINES FOR HERBICIDE USE IN WETLAND BUFFERS.
3. CANE INJECTION OF HERBICIDE IS PREFERRED, AS IT HAS THE HIGHEST SUCCESS RATE.
4. AFTER CANES HAVE DIED, THEY SHOULD BE DUG UP AND DISPOSED OFF-SITE AT A PROFESSIONAL FACILITY.
5. REVEGETATE PER PLANTING PLAN. COVER WITH WOODCHIP MULCH FOUR INCHES DEEP.
6. MONITOR SITE THROUGHOUT GROWING SEASON FOR EMERGING CANES AND GRUB OUT OR SPOT SPRAY ANY NEW PLANTS.

REMOVE REED CANARYGRASS:

1. DIG WITH HAND TOOLS ALL REED CANARYGRASS RHIZOMES FROM THE PLANTING AREA.
2. REED CANARYGRASS CAN RESPROUT FROM BELOW-GROUND PORTIONS, SO ALL RHIZOMES SHALL BE GRUBBED OUT. AROUND SIGNIFICANT VEGETATION TO REMAIN, REED CANARYGRASS SHALL BE GRUBBED OUT BY HAND TO MINIMIZE DISRUPTION TO ADJACENT ROOTS.
3. AFTER REED CANARYGRASS HAS BEEN REMOVED, AREA SHOULD BE MULCHED OR COVERED WITH JUTE AND PLANTED PER PLAN.
4. DISPOSE OF REMOVED MATERIAL OFF-SITE AT A PROFESSIONAL FACILITY.

REMOVE HIMALAYAN / EVERGREEN BLACKBERRY:

1. REMOVAL MUST BE DONE ACCORDING TO KING COUNTY NOXIOUS WEED CONTROL PROGRAM BEST MANAGEMENT PRACTICES BY QUALIFIED INDIVIDUALS.
2. REFER TO KING COUNTY NOXIOUS WEED REGULATORY GUIDELINES FOR HERBICIDE USE IN WETLAND BUFFERS.
3. FOR LARGE INFESTATIONS: APPLY APPROVED HERBICIDE. MOW AFTER PLANTS ARE DEAD AND BROWN.
4. FOR SMALL INFESTATIONS: CUT ABOVE-GROUND PORTION OF BLACKBERRY AND REMOVE OFF-SITE. ENSURE THAT NO NATIVE PLANTS ARE REMOVED. DIG UP OR PULL THE REMAINING ROOT BALL. ENSURE THAT NO NATIVE PLANT ROOTS ARE DAMAGED. REPLACE ANY DIVOTS CREATED WHEN REMOVING THE PLANT WITH APPROVED TOPSOIL.
5. CANES SHALL BE REMOVED FROM CANOPY OF TREES TO REMAIN TO THE EXTENT FEASIBLE AS DETERMINED BY THE RESTORATION SPECIALIST.
6. ALL CANES SHALL BE CUT BACK AND REMOVED WITHIN THE TEN (10) FEET ADJACENT TO THE PLANTING AREA, INCLUDING TREE CANOPY. CANES SHALL BE PULLED AND REMOVED OFF-SITE.
7. REVEGETATE PER PLANTING PLAN. COVER WITH WOODCHIP MULCH FOUR INCHES DEEP OR JUTE AS SPECIFIED IN THE SOIL PREPARATION PLAN.
8. MONITOR SITE FOR SEVERAL YEARS FOR EMERGING CANES GROWING FROM SEEDBANK OR RHIZOMES. GRUB OUT AND REMOVE ANY NEW PLANTS OR TREAT WITH APPROVED HERBICIDE. CONTINUE TO CUT BACK CANES TEN (10) FEET FROM THE PLANTING AREA.

REMOVE ENGLISH IVY:

1. PHYSICALLY REMOVE ALL ENGLISH IVY VINES AND ROOTS FROM THE PLANTING AREA.
2. IF GROWING ON TREE TRUNKS, CUT VINES TO HEIGHT OF 4 FEET OFF GROUND. DO NOT PULL DOWN FROM TREE CROWNS.
3. IVY CAN RESPROUT FROM BELOW-GROUND PORTIONS; ALL ROOTS SHALL BE GRUBBED OUT BY HAND TO MINIMIZE DISRUPTION TO ADJACENT ROOTS.
4. IVY SHALL BE CUT AROUND THE BASE OF EACH TREE TO PREVENT THE IVY FROM GIRDLING THE TREES. REMOVE STANDING VINES FROM THE LOWER 4 FEET OF EVERY TREE TRUNK THAT CONTAINS ANY IVY.
5. AFTER IVY HAS BEEN REMOVED, AREA SHOULD BE MULCHED AND PLANTED PER PLAN.
6. DISPOSE OF REMOVED MATERIAL PROPERLY OFF SITE.

REMOVE ENGLISH HOLLY:

1. FOR SMALL PLANTS, DIG OR PULL UP PLANT, TAKING CARE THAT ROOTS ARE REMOVED.
2. FOR LARGER PLANTS, CUT TREE AT BASE.
3. IMMEDIATELY AFTER CUTTING, APPLY HERBICIDE CONTAINING THE ACTIVE INGREDIENT GLYPHOSATE DIRECTLY ONTO THE CUT PORTION OF THE STUMP. APPLICATION OF HERBICIDE SHOULD BE DONE BY A WASHINGTON STATE CERTIFIED APPLICATOR AND SHOULD BE DONE FOLLOWING MANUFACTURERS RATES AND INSTRUCTIONS.
4. DISPOSE OF REMOVED MATERIAL PROPERLY OFF SITE.



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GENERAL NOTES:

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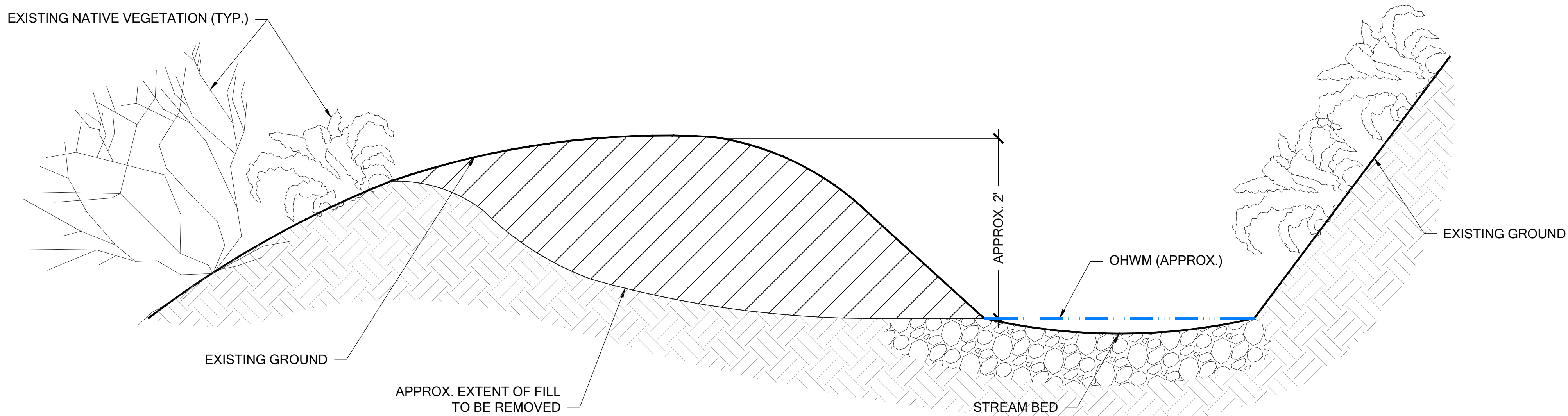
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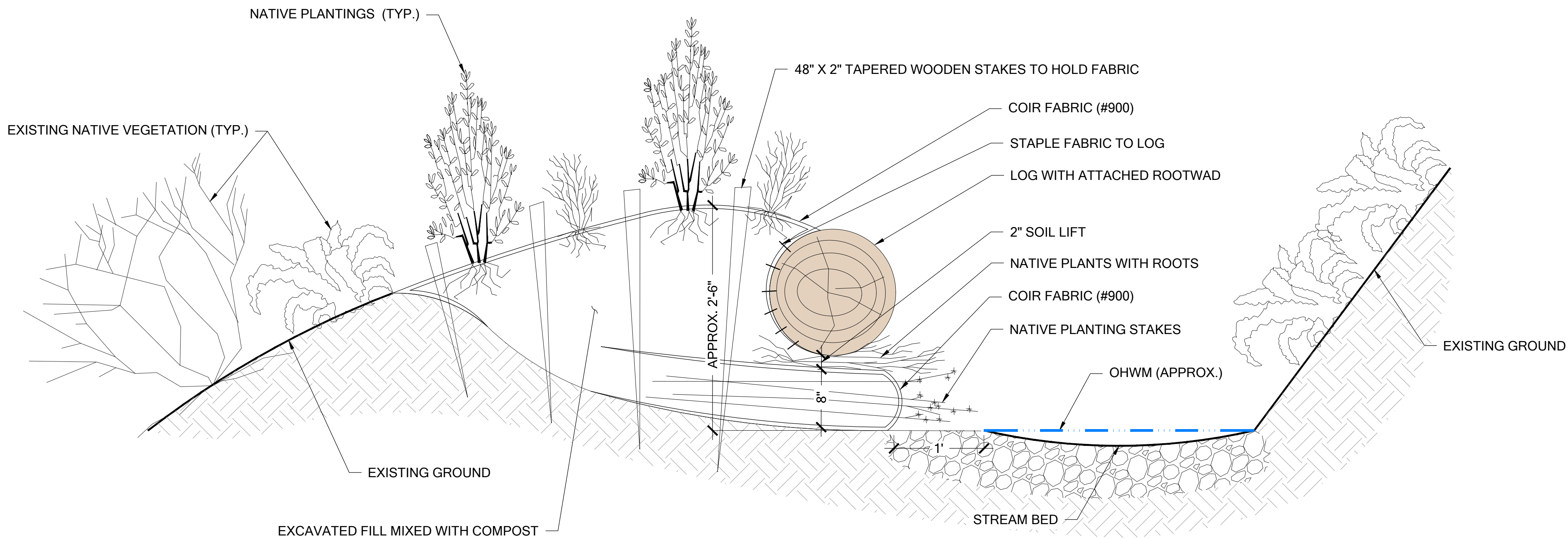
M4.2 OF 14

SOIL PREPARATION DETAILS AND NOXIOUS WEED NOTES



1 EXISTING CONDITIONS CROSS-SECTION (APPROX.)

Scale: NTS



2 PROPOSED RESTORATION CROSS-SECTION (APPROX.)

Scale: NTS

STREAMBANK RESTORATION NOTES

1. CONTRACTOR SHALL IDENTIFY EXTENTS OF PLACED FILL IN FIELD AND LOCATE TOP OF BANK PRIOR TO REMOVING MATERIAL.
2. SEE SHEET M3.0 FOR APPROXIMATE EXTENT OF FILL.
3. SEE SHEET M5.2 FOR PLANT SCHEDULE AND QUANTITIES.
4. CONTRACTOR SHALL FLAG AND SURVEY WETLAND AND STREAM BOUNDARIES PRIOR TO STARTING WORK.
5. CONTRACTOR SHALL MARK CLEARING LIMITS.
6. TESC WILL BE INSTALLED AND INSPECTED PRIOR TO ANY GROUND DISTURBING ACTIVITIES, PER CIVIL PLANS.

STREAMBANK CONSTRUCTION SEQUENCE

1. EXCAVATE BANK AS SHOWN.
2. PLACE COIR FABRIC UNDER AREA TO BE FILLED AND EXTEND INTO THE STREAM CHANNEL.
3. MIX EXCAVATED GRAVELLY/SANDY FILL MATERIAL WITH COMPOST AT A 2:1 RATIO (FILL:COMPOST).
4. PLACE 8 INCHES OF SOIL MIXTURE OVER FABRIC.
5. FOLD FABRIC BACK OVER SOIL MIXTURE AND INTO THE BANK TO FORM AN 8-INCH COIR LIFT.
6. DRIVE LIVE STAKING THROUGH COIR LIFT, EXTENDING INTO THE CHANNEL. USE 3 STAKES PER LINEAR FOOT.
7. PLACE 2 INCHES OF SOIL MIXTURE OVER COIR LIFT.
8. PLACE CONTAINERIZED ROOTED PLANT STOCK HORIZONTALLY, AS SHOWN. USE 1 PLANT PER LINEAR FOOT.
9. PLACE LOG AS SHOWN.
10. STAPLE FABRIC TO LOG AND DRAPE FABRIC OVER STREAM CHANNEL.
11. COMPLETE FILL WITH SOIL MIXTURE TO FORM STREAMBANK.
12. DRAW FABRIC BACK OVER PLACED BANK FILL AND STAKE TO SECURE.
13. PLANT THROUGH THE BANK FABRIC, CUTTING SMALL HOLES AS NEEDED.
14. SEE PLANT SCHEDULE ON SHEET M5.3.

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1	PERMIT SUBMITTAL	06-27-2018	AAM
2	REVISED PERMIT SUBMITTAL V2	06-04-2020	AAM

GENERAL NOTES:

NOT FOR
CONSTRUCTION

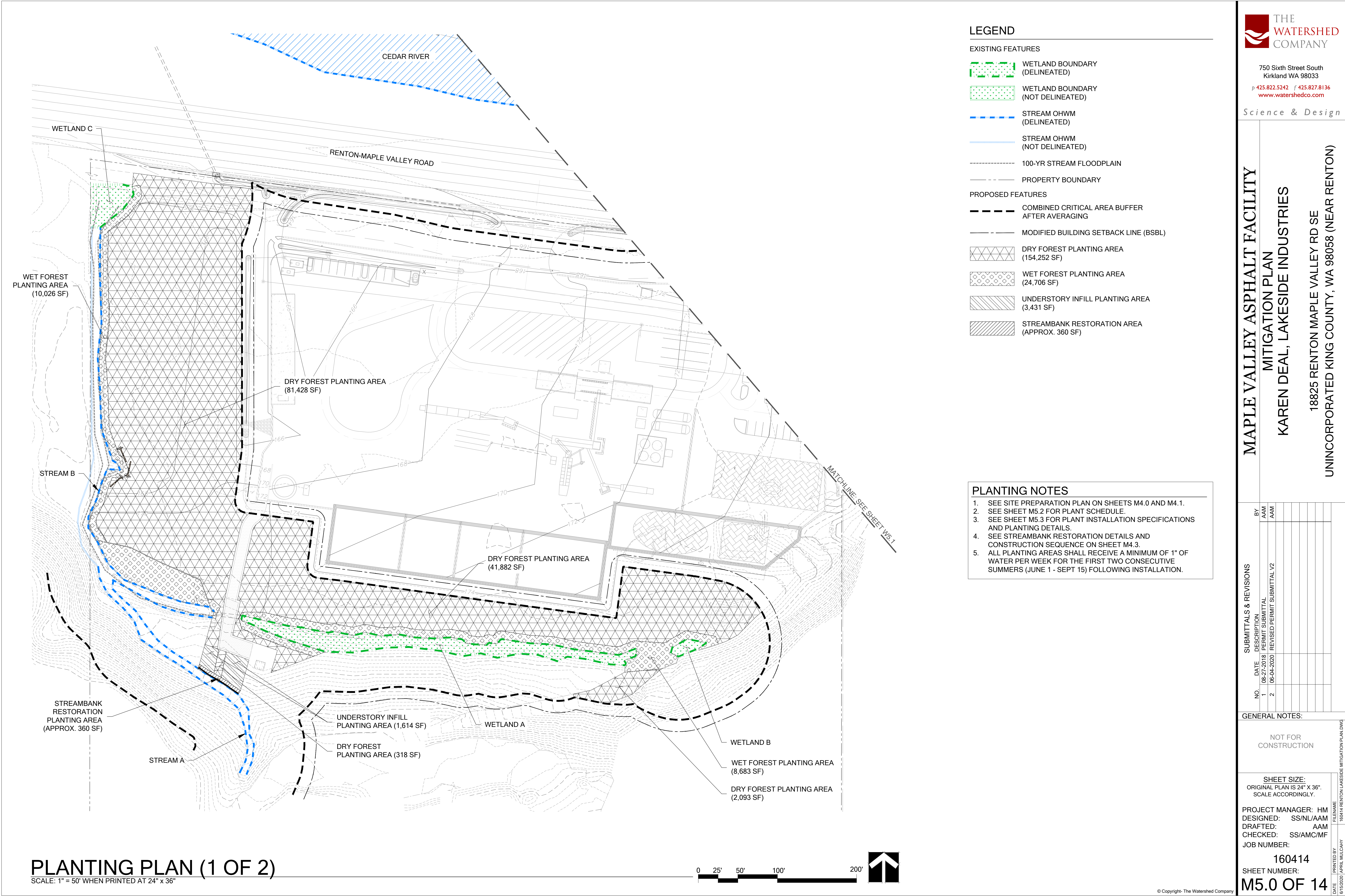
SHEET SIZE:
ORIGINAL PLAN IS 24" X 36".
SCALE ACCORDINGLY.

PROJECT MANAGER: HM
DESIGNED: SS/NL/AAM
DRAFTED: AAM
CHECKED: SS/AMC/MF
JOB NUMBER:

160414
SHEET NUMBER:

M4.3 OF 14

STREAMBANK RESTORATION



MAPLE VALLEY ASPHALT FACILITY

MITIGATION PLAN
KAREN DEAL, LAKESIDE INDUSTRIES

18825 RENTON MAPLE VALLEY RD SE
UNINCORPORATED KING COUNTY, WA 98058 (NEAR RENTON)

SUBMITTALS & REVISIONS			BY
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M5.1 OF 14

DATE: 05/15/2020
FILENAME: 160414-RENTON-LAKESIDE-MITIGATION-PLAN.DWG
PRINTED BY: APRIL MULLOCH

LEGEND

EXISTING FEATURES

- WETLAND BOUNDARY (DELINEATED)
- WETLAND BOUNDARY (NOT DELINEATED)
- STREAM OHWM (DELINEATED)
- STREAM OHWM (NOT DELINEATED)
- PROPERTY BOUNDARY

PROPOSED FEATURES

- COMBINED CRITICAL AREA BUFFER AFTER AVERAGING
- MODIFIED BUILDING SETBACK LINE (BSBL)
- DRY FOREST PLANTING AREA (154,252 SF)
- WET FOREST PLANTING AREA (24,706 SF)
- UNDERSTORY INFILL PLANTING AREA (3,431 SF)
- EMERGENT WETLAND RESTORATION AREA (394 SF)
- SCRUB-SHRUB WETLAND ENHANCEMENT AREA (265 SF)

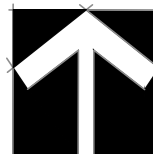
PLANTING NOTES

- SEE SITE PREPARATION PLAN ON SHEETS M4.0 AND M4.1.
- SEE SHEET M5.2 FOR PLANT SCHEDULE.
- SEE SHEET M5.3 FOR PLANT INSTALLATION SPECIFICATIONS AND PLANTING DETAILS.
- ALL PLANTING AREAS SHALL RECEIVE A MINIMUM OF 1" OF WATER PER WEEK FOR THE FIRST TWO CONSECUTIVE SUMMERS (JUNE 1 - SEPT 15) FOLLOWING INSTALLATION.

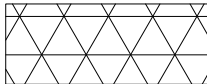
PLANTING PLAN (2 OF 2)

SCALE: 1" = 50' WHEN PRINTED AT 24" x 36"

0 25' 50' 100' 200'



PLANT SCHEDULES



DRY FOREST (154,252 SF)

TREES	QTY	SPACING	SIZE
ABIES GRANDIS / GRAND FIR	510	9 FT O.C.	2 GAL.
ACER MACROPHYLLUM / BIGLEAF MAPLE	510	9 FT O.C.	2 GAL.
PINUS CONTORTA / SHORE PINE	510	9 FT O.C.	2 GAL.
PRUNUS EMARGINATA / BITTER CHERRY	230	9 FT O.C.	2 GAL.
PSEUDOTSUGA MENZIESII / DOUGLAS FIR	510	9 FT O.C.	2 GAL.
SHRUBS			
AMELANCHIER ALNIFOLIA / WESTERN SERVICEBERRY	330	6 FT O.C.	1 GAL.
CORYLUS CORNUTA / BEAKED HAZELNUT	330	6 FT O.C.	1 GAL.
HOLODISCUS DISCOLOR / OCEANSPRAY	330	6 FT O.C.	1 GAL.
MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	330	6 FT O.C.	1 GAL.
FRANGULA PURSHIANA / CASCARA	330	6 FT O.C.	1 GAL.
ROSA NUTKANA / NOOTKA ROSE	330	6 FT O.C.	1 GAL.
RUBUS PARVIFLORUS / THIMBLEBERRY	330	6 FT O.C.	1 GAL.
SYMPHORICARPOS ALBUS / SNOWBERRY	330	6 FT O.C.	1 GAL.
GROUNDCOVERS			
ACHILLEA MILLEFOLIUM / YARROW	2,750	4 FT O.C.	4" CONT.
CHAMAENERION ANGUSTIFOLIUM / FIREWEED	2,750	4 FT O.C.	4" CONT.
FRAGARIA CHILOENSIS / BEACH STRAWBERRY	2,750	4 FT O.C.	4" CONT.
LUPINUS POLYPHYLLUS / BIG-LEAF LUPINE	2,750	4 FT O.C.	4" CONT.

NOTES

- ALL SHRUBS SHOULD BE CLUMPED IN GROUPS OF 5 TO 10 INDIVIDUALS PER SPECIES.
- PLACE GROUNDCOVERS IN CLUSTERS OF 30 TO 40 PLANTS, 4 FT O.C. THROUGHOUT PLANTING AREA.

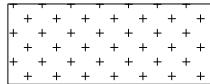


STREAMBANK RESTORATION (~ 360 SF)

TREES	QTY	SPACING	SIZE
ACER MACROPHYLLUM / BIGLEAF MAPLE	3	9 FT O.C.	2 GAL.
ALNUS RUBRA / RED ALDER	3	9 FT O.C.	2 GAL.
SHRUBS			
CORNUS SERICEA / RED-OSIER DOGWOOD	60	1 FT O.C.	1 GAL.
PHYSOCARPUS CAPITATUS / PACIFIC NINEBARK	6	6 FT O.C.	1 GAL.
SYMPHORICARPOS ALBUS / SNOWBERRY	6	6 FT O.C.	1 GAL.
GROUNDCOVERS			
FRAGARIA VESCA / WOODS STRAWBERRY	13	4 FT O.C.	4" CONT.
POLYSTICHUM MUNITUM / SWORD FERN	13	4 FT O.C.	4" CONT.
LIVE STAKES			
SALIX SITCHENSIS / SITKA WILLOW	180	3 PER LF	3' MIN.

NOTES

- SEE STREAMBANK RESTORATION DETAIL AND CONSTRUCTION SEQUENCE ON SHEET M4.3.
- PLANT ALL CONTAINERIZED CORNUS SERICEA HORIZONTALLY UNDER THE INSTALLED LOG, SPACED 1 PER LINEAR FOOT PER STREAMBANK RESTORATION DETAIL.
- LIVE STAKES SHALL BE INSTALLED HORIZONTALLY IN THE LOWEST SOIL LIFT PER STREAMBANK RESTORATION DETAIL.
- SHRUBS SHOULD BE PLANTED IN GROUPS OF 3 PER SPECIES.
- ALL GROUNDCOVERS SHOULD BE CLUMPED IN GROUPS OF 5 TO 7 INDIVIDUALS PER SPECIES.

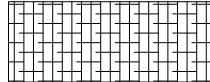


WET FOREST (24,706 SF)

TREES	QTY	SPACING	SIZE
ACER MACROPHYLLUM / BIGLEAF MAPLE	60	9 FT O.C.	2 GAL.
ALNUS RUBRA / RED ALDER	60	9 FT O.C.	2 GAL.
PICEA SITCHENSIS / SITKA SPRUCE	60	9 FT O.C.	2 GAL.
PINUS CONTORTA / SHORE PINE	60	9 FT O.C.	2 GAL.
THUJA PLICATA / WESTERN RED CEDAR	60	9 FT O.C.	2 GAL.
SHRUBS			
CORNUS SERICEA / RED-OSIER DOGWOOD	100	6 FT O.C.	1 GAL.
LONICERA INVOLUCRATA / TWINBERRY	100	6 FT O.C.	1 GAL.
PHYSOCARPUS CAPITATUS / PACIFIC NINEBARK	100	6 FT O.C.	1 GAL.
ROSA NUTKANA / NOOTKA ROSE	100	6 FT O.C.	1 GAL.
SALIX SCOULERIANA / SCOULER'S WILLOW	100	6 FT O.C.	1 GAL.
SYMPHORICARPOS ALBUS / SNOWBERRY	100	6 FT O.C.	1 GAL.
GROUNDCOVERS			
FRAGARIA CHILOENSIS / BEACH STRAWBERRY	800	4 FT O.C.	4" CONT.
LUPINUS POLYPHYLLUS / BIG-LEAF LUPINE	800	4 FT O.C.	4" CONT.
LIVE STAKES			
SALIX SCOULERIANA / SCOULER'S WILLOW	1,200	18" O.C.	3' MIN.
SALIX SITCHENSIS / SITKA WILLOW	1,200	18" O.C.	3' MIN.

NOTES

- THE NEAREST 3 FEET TO THE BOUNDARY OF STREAM B AND WETLANDS A, B,C, AND D SHOULD BE PLANTED WITH LIVE STAKES USING TRIANGULAR SPACING.
- THE REMAINDER OF THE PLANTING AREA SHOULD BE PLANTED WITH CONTAINERIZED PLANT STOCK.
- ALL SHRUBS AND GROUNDCOVERS SHOULD BE CLUMPED IN GROUPS OF 5 TO 7 INDIVIDUALS PER SPECIES.



EMERGENT WETLAND RESTORATION (394 SF)

SEED MIX	%
ELYMUS GLAUCUS / BLUE WILDRYE	25
BROMUS CARINATUS / CALIFORNIA BROME	25
AGROSTIS EXARATA / SPIKE BENTGRASS	25
DESCHAMPSIA CESPITOSA / TUFTED HAIRGRASS	25

NOTES

- USE SIMILAR OR EQUAL TO "PT 408 NATIVE WETLAND MIX" AVAILABLE IN OREGON THROUGH PT LAWN SEED. APPLY AT 1 LB PER 1,000 SF.
- APPLY USING SHORT-TERM HYDRAULICALLY APPLIED TEMPORARY MULCH.

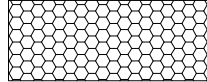


UNDERSTORY INFILL (3,431 SF)

TREES	QTY	SPACING	SIZE
PSEUDOTSUGA MENZIESII / DOUGLAS-FIR	30	9 FT O.C.	2 GAL.
SHRUBS			
ACER CIRCINATUM / VINE MAPLE	20	6 FT O.C.	1 GAL.
CORYLUS CORNUTA / WESTERN HAZEL	20	6 FT O.C.	1 GAL.
OEMLERIA CERASIFORMIS / INDIAN PLUM	20	6 FT O.C.	1 GAL.
SAMBUCUS RACEMOSA / RED ELDERBERRY	20	6 FT O.C.	1 GAL.
GROUNDCOVERS			
DICENTRA FORMOSA / BLEEDING HEART	125	4 FT O.C.	4" CONT.
TELLIMA GRANDIFLORA / FRINGECUP	125	4 FT O.C.	4" CONT.

NOTES

- PLANT TREES, SHRUBS, AND GROUNDCOVERS TO FILL IN GAPS IN THE NATIVE UNDERSTORY CREATED BY ACCESS TO THE KNOTWEED REMOVAL AND REPLANTING AREA.
- ALL SHRUBS AND GROUNDCOVERS SHOULD BE CLUMPED IN GROUPS OF 5 TO 7 INDIVIDUALS PER SPECIES.



SCRUB-SHRUB WETLAND ENHANCEMENT (265 SF)

SHRUBS	QTY	SPACING	SIZE
CORNUS SERICEA / RED-OSIER DOGWOOD	3	6 FT O.C.	1 GAL.
LONICERA INVOLUCRATA / TWINBERRY	3	6 FT O.C.	1 GAL.
ROSA NUTKANA / NOOTKA ROSE	3	6 FT O.C.	1 GAL.
GROUNDCOVERS			
ATHYRIUM FELIX-FEMINA / LADY FERN	10	4 FT O.C.	4" CONT.
CAREX OBNUPTA / SLOUGH SEDGE	10	4 FT O.C.	4" CONT.
LIVE STAKES			
SALIX SITCHENSIS / SITKA WILLOW	34	3 FT O.C.	3' MIN.

NOTES

- SHRUBS SHOULD BE CLUMPED IN GROUPS OF 3 PER SPECIES.
- GROUNDCOVERS SHOULD BE CLUMPED IN GROUPS OF 5 TO 7 INDIVIDUALS PER SPECIES.



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PLANT INSTALLATION SPECIFICATIONS

GENERAL NOTES

QUALITY ASSURANCE

- 1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL..
- 2. 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).
- 3. TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUN SCALD WILL BE REJECTED.
- 4. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST, UNIVERSITY OF WASHINGTON PRESS, 2018 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

- 1. 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.
- 2. CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS

- 1. 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.
- 2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE RESTORATION CONSULTANT.
- 3. 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.
- 4. 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

- 1. 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.
- 2. 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.
- 3. 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.

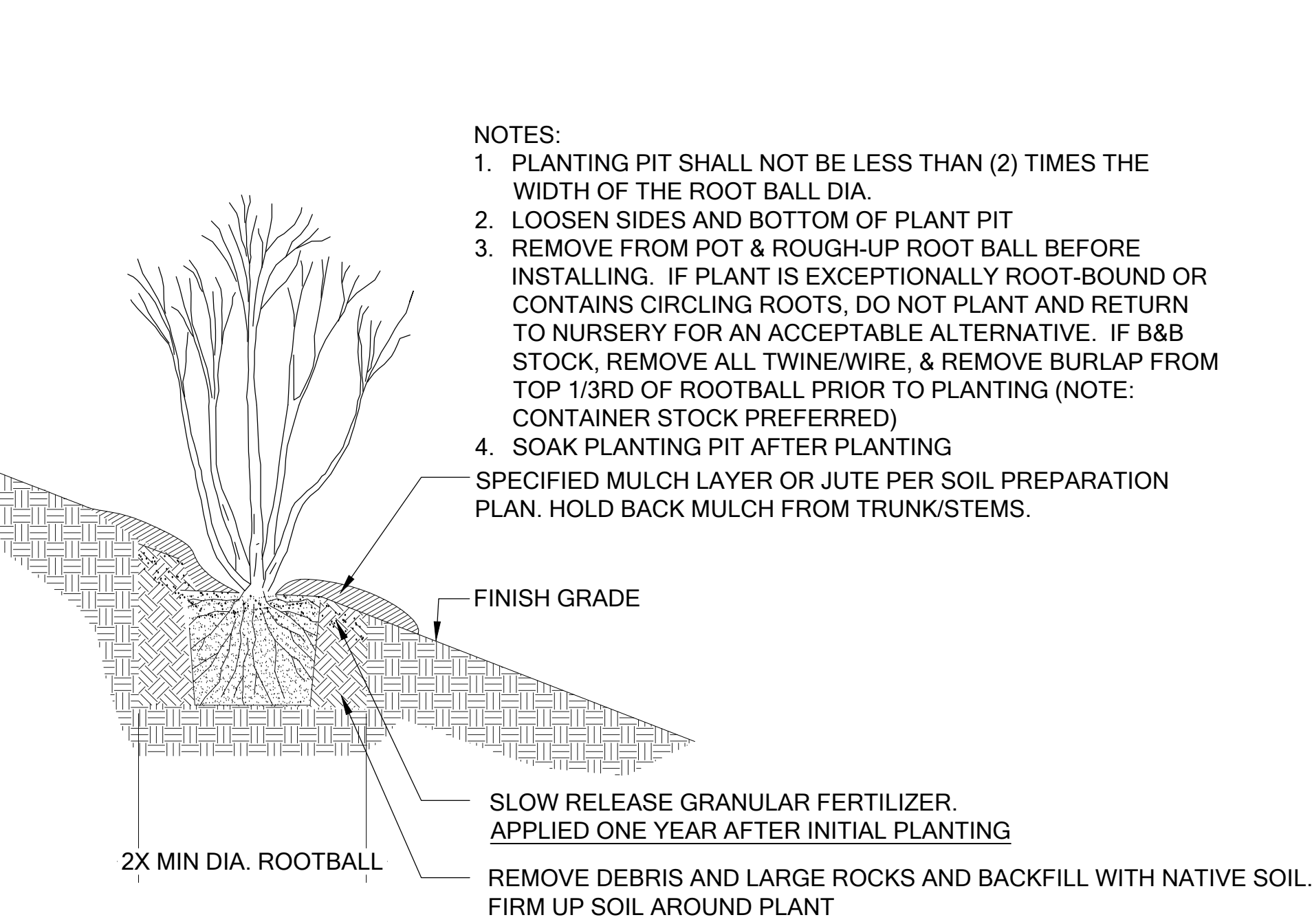
MEASUREMENT OF PLANTS

- 1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
- 2. 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.
- 3. 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

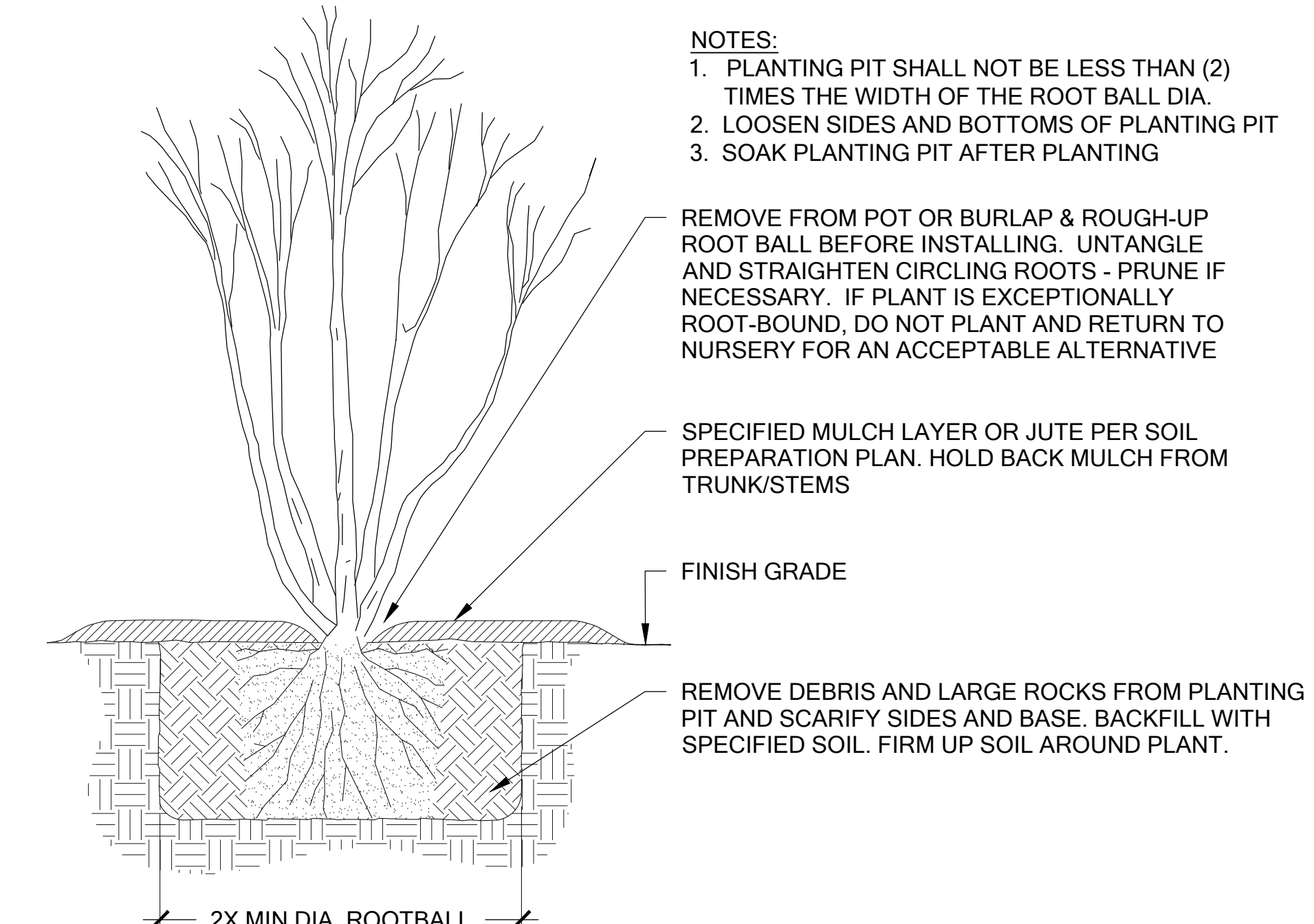
PROPOSED PLANT SOURCES

- 1. 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.



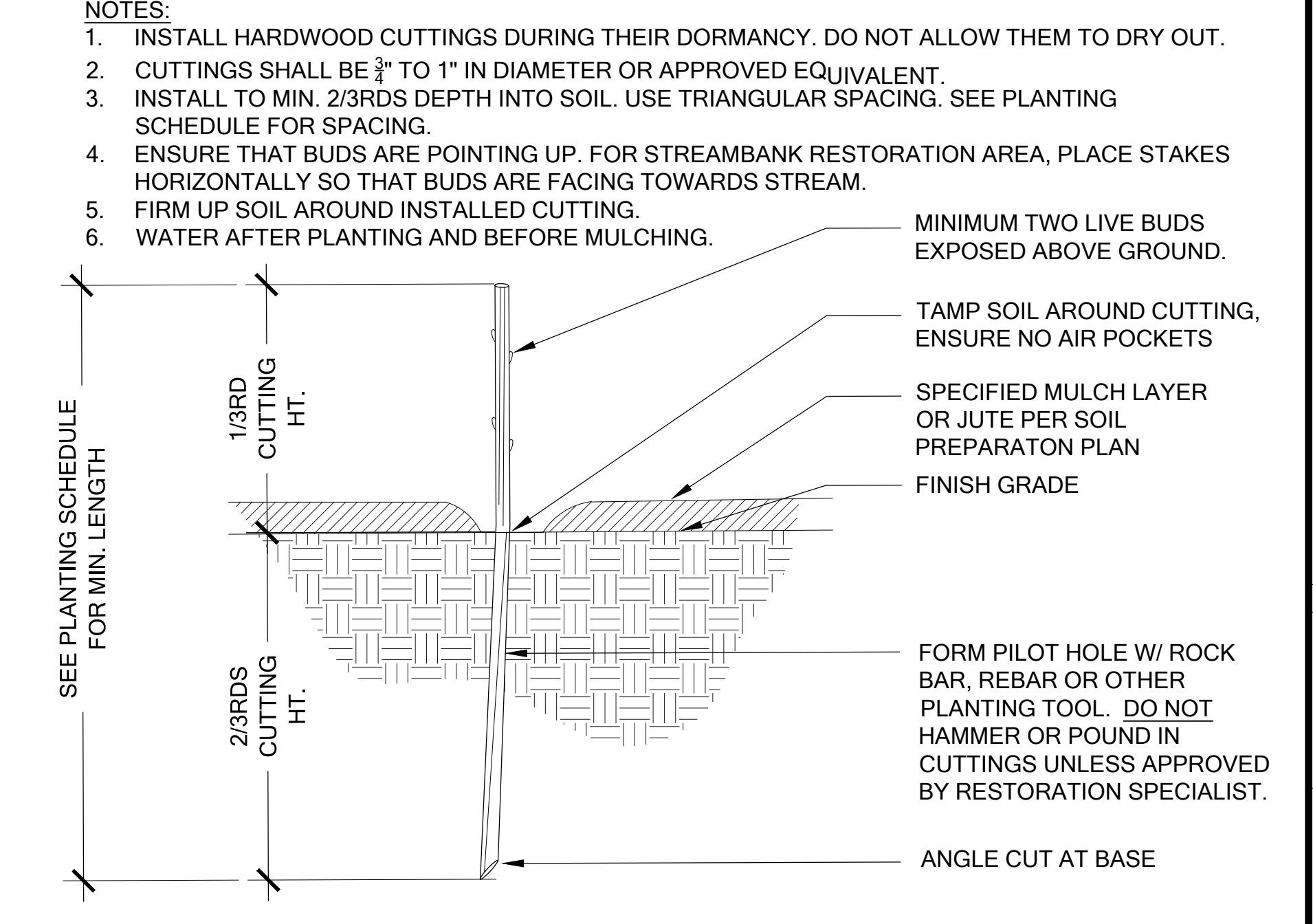
1 CONTAINER PLANTING ON A SLOPE

Scale: NTS



2 CONTAINER PLANTING

Scale: NTS



3 LIVE STAKE PLANTING

Scale: NTS

PLANT INSTALLATION SPECIFICATIONS AND DETAILS

PRODUCT CERTIFICATES

- 1. 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.
- 2. 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

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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

- 1. 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.
- 2. PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL

- 1. 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.
- 2. 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

- 1. 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.
- 2. PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
- 3. ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.



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M5.3 OF 14

MITIGATION NOTES

PROJECT SUMMARY

THE PROPOSED SITE DEVELOPMENT WILL OCCUPY A SMALLER FOOTPRINT THAN THE PRIOR USE AND ASSOCIATED SITE CLEARING. PROPOSED BUFFER ENCROACHMENT WILL BE MITIGATED THROUGH BUFFER AVERAGING AND ENHANCEMENT TO RESTORE PREVIOUSLY CLEARED AND DEGRADED BUFFER AREAS. OTHER SITE IMPROVEMENTS INCLUDE DECOMMISSIONING AN EXISTING STORMWATER OUTFALL TO STREAM B AND RESTORING THAT STREAMBANK, RESTORING THE STREAMBANK OF STREAM A ABOVE THE EXISTING WELL HOUSE, AND IMPROVEMENTS IN THE SR-169 RIGHT-OF-WAY.

SPECIFICALLY, AS PART OF A PROPOSED REDEVELOPMENT PLAN, 324 SQUARE FEET OF WETLAND WILL HAVE TEMPORARY IMPACTS FROM GRADING ALONG THE ROADSIDE; 9 SQUARE FEET OF STREAM C WILL RECEIVE SHADING FROM THE INSTALLATION OF A PRE-CAST 3-SIDED BRIDGE; 6,362 SQUARE FEET OF WETLAND AND STREAM BUFFER WILL HAVE PERMANENT IMPACTS FROM HIGHWAY EXPANSION AND THE INSTALLATION OF AN ACCESS DRIVE TO THE EXISTING WELL HOUSE; 6,128 SQUARE FEET OF WETLAND AND STREAM BUFFER WILL HAVE TEMPORARY IMPACTS FROM GRADING ALONG THE HIGHWAY AND TEMPORARY ACCESS TO THE RESTORATION AREA ALONG STREAM B; AND PREVIOUSLY PLACED FILL ALONG STREAM B WILL BE REMOVED AND THE STREAMBANK WILL BE REBUILT USING BIOENGINEERING METHODS.

TO OFFSET PROPOSED IMPACTS, WETLAND IMPACTS WILL BE RESTORED IN PLACE AND WETLAND ENHANCEMENT WILL OCCUR AT A GREATER THAN 1:1 RATIO FOR A TOTAL OF 660 SQUARE FEET; THE STREAMBANKS OF STREAM C WILL BE ENHANCED THROUGH THE REMOVAL OF REED CANARYGRASS AND PLANTING NATIVE VEGETATION; 182,390 SQUARE FEET OF STREAM BUFFER AND WETLAND BUFFER WILL BE ENHANCED THROUGH REMOVAL OF INVASIVE VEGETATION AND PLANTING OF NATIVE VEGETATION AT A RATIO OF 14.6:1. MONITORING AND MAINTENANCE OF PLANTED VEGETATION WILL BE PERFORMED UNTIL ESTABLISHMENT. STREAM BUFFER AND WETLAND BUFFER AREAS ALSO ENCOMPASS A WILDLIFE HABITAT NETWORK AREA TO BE ENHANCED.

- GOALS AND OBJECTIVES**
- GOAL:** RESTORE HABITAT AND WATER QUALITY FUNCTIONS THAT MAY HAVE BEEN DEGRADED AS A RESULT OF IMPACTS RESULTING FROM THE LONG-TERM INDUSTRIAL USE OF THE SUBJECT PARCEL.
- OBJECTIVES:**
- RESTORE SOILS REMOVED OR COMPACTED THROUGHOUT THE BUFFER AREA.
 - ESTABLISH DENSE AND DIVERSE NATIVE TREE, SHRUB, AND GROUNDCOVER VEGETATION THROUGHOUT ON-SITE STREAM AND WETLAND BUFFERS.
 - REMOVE AND CONTROL INVASIVE WEEDS FROM RESTORATION AREAS.
 - REMOVE PLACED FILL IN STREAM A BUFFER AND REBUILD STREAMBANK TO WITHSTAND SEASONAL FLOWS.
 - RESTORE AND ENHANCE THE R.O.W. WETLAND TO COMPENSATE FOR TEMPORARY WETLAND IMPACTS.

- PERFORMANCE STANDARDS**
- THE PERFORMANCE STANDARDS (PS) LISTED BELOW WILL BE USED TO JUDGE THE SUCCESS OF THE PLAN OVER TIME. IF THE STANDARDS ARE MET AT THE END OF THE THREE-YEAR MONITORING PERIOD, THE RESTORATION SITE WILL BE CONSIDERED SUCCESSFUL AND THE PROJECT WILL HAVE MET ALL CRITICAL AREA PERMITTING OBLIGATIONS.
- PS 1. SOILS:
- SOILS IN THE BUFFERS WILL BE DECOMPACTED PRIOR TO PLANTING, EXCEPT FOR THE INFILL PLANTING AREAS.
 - SOILS IN THE BUFFERS WILL BE AMENDED WITH COMPOST PRIOR TO PLANTING.
- PS 2. SURVIVAL/DIVERSITY:
- 100% SURVIVAL OF ALL WOODY PLANTINGS AT THE END OF YEAR ONE. THIS STANDARD MAY BE MET THROUGH ESTABLISHMENT OF INSTALLED PLANTS OR BY REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.SURVIVAL BEYOND YEAR ONE IS DIFFICULT TO TRACK. THEREFORE, A DIVERSITY STANDARD IS PROPOSED IN PLACE OF SURVIVAL (BELOW).
- PS 3. NATIVE WOODY VEGETATION COVER:
- ACHIEVE AT LEAST 30% COVER OF NATIVE WOODY SPECIES BY THE END OF YEAR 2. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THIS STANDARD.
 - ACHIEVE AT LEAST 60% COVER OF NATIVE WOODY SPECIES BY THE END OF YEAR 3. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THIS STANDARD.
- PS 4. DIVERSITY:
- ESTABLISH AT LEAST 2 NATIVE TREE SPECIES, 4 NATIVE SHRUB SPECIES, AND 2 NATIVE GROUNDCOVER SPECIES BY THE END OF YEAR 3.
- PS 5. INVASIVE SPECIES STANDARDS:
- NO MORE THAN 10% COVER OF INVASIVE SPECIES EXCEPT REED CANARYGRASS MONOCULTURES IN ANY OF THE PLANTING AREAS, IN ANY MONITORING YEAR. MORE THAN 5% COVER OF INVASIVE WEEDS IN ANY YEAR WILL TRIGGER MAINTENANCE WEEDING. WITHIN REED CANARYGRASS MONOCULTURES DRIPLINES OF INSTALLED PLANTS MUST BE KEPT RELATIVELY CLEAR OF REED CANARYGRASS.
 - KNOTWEED MUST BE ERRADICATED FROM THE MITIGATION AREA. ANY OCCURANCE OF KNOTWEED WILL TRIGGER MAINTENANCE.

AS-BUILT PLAN

AN AS-BUILT PLAN WILL BE PREPARED WITHIN 30 DAYS OF SUBSTANTIALLY COMPLETE CONSTRUCTION OF THE RESTORATION AREA. THE AS-BUILT PLAN WILL DOCUMENT SUBSTANTIAL CONFORMANCE WITH THESE PLANS AND ALSO WILL DISCLOSE ANY SUBSTITUTIONS OR OTHER NON-CRITICAL DEPARTURES. THE AS-BUILT PLAN WILL ESTABLISH BASELINE PLANT INSTALLATION QUANTITIES (BASED ON SAMPLE COUNTS OR INVOICES), AND PHOTO POINTS THAT WILL BE USED THROUGHOUT THE MONITORING PERIOD TO MEASURE THE PERFORMANCE STANDARDS OVER TIME. THE AS-BUILT DOCUMENTATION SHOULD INCLUDE A MARKUP OF THE ORIGINAL PLAN NOTING ANY DEPARTURES, PLUS THE LOCATION OF PHOTO POINTS.

MONITORING PLAN

A THREE-YEAR MONITORING PLAN IS PROPOSED TO ENSURE SUCCESS OF ALL REQUIRED PLANTING. MAINTENANCE AND CORRECTIVE ACTIONS WILL BE CONDUCTED AS NECESSARY BASED ON MONITORING RESULTS OVER TIME.

MONITORING METHODS

THIS MONITORING PROGRAM IS DESIGNED TO TRACK THE SUCCESS OF THE RESTORATION SITE OVER TIME BY MEASURING THE DEGREE TO WHICH THE PERFORMANCE STANDARDS LISTED ABOVE ARE BEING MET. MONITORING SHALL OCCUR TWICE ANNUALLY FOR THREE YEARS. A SPRING MONITORING VISIT SHALL RECORD NECESSARY REPLANTING, WEEDING, INVASIVE CONTROL, AND OTHER MAINTENANCE NEEDS. THE RESTORATION SPECIALIST WILL NOTIFY THE OWNER AND/OR MAINTENANCE CREWS OF NECESSARY EARLY SEASON MAINTENANCE. THE SECOND VISIT SHALL OCCUR IN LATE SUMMER OR FALL AND CONTAIN THE BULK OF THE MONITORING WORK. THE ANNUAL MONITORING REPORT WILL RELATE THE FOLLOWING INFORMATION:

- GENERAL SUMMARY OF THE SPRING VISIT.
- FIRST-YEAR COUNTS OF SURVIVING AND DEAD/DYING WOODY PLANTS.
- ESTIMATES OF NATIVE WOODY SPECIES COVER IN RESTORATION AREAS USING THE COVER CLASS METHOD.
- ESTIMATES OF INVASIVE SPECIES COVER IN RESTORATION AREAS USING THE COVER CLASS METHOD.
- COUNTS OF ESTABLISHED NATIVE SPECIES TO DETERMINE SITE DIVERSITY.
- NOTES AND/OR SKETCHES OF INVASIVE WEEDS OR BARE AREAS.
- PHOTOGRAPHIC DOCUMENTATION FROM ESTABLISHED REFERENCE POINTS.
- INTRUSIONS INTO THE PLANTING AREAS, VANDALISM, TRASH, AND OTHER ACTIONS DETRIMENTAL TO THE OVERALL HEALTH OF THE RESTORATION AREA.
- RECOMMENDATIONS FOR MAINTENANCE IN THE RESTORATION AREA.

- MAINTENANCE**
- THIS SITE WILL BE MAINTAINED FOR THREE YEARS FOLLOWING COMPLETION OF THE CONSTRUCTION.
- REPLACE EACH PLANT FOUND DEAD IN THE SUMMER MONITORING VISITS DURING FROST-FREE PERIODS ONLY IN THE UPCOMING FALL DORMANT SEASON (OCTOBER 15 TO MARCH 1) FOR THE FIRST MONITORING YEAR. REPLACE PLANTS AS DIRECTED IN SUBSEQUENT MONITORING REPORTS TO ACHIEVE COVER STANDARDS.
 - FOLLOW THE RECOMMENDATIONS NOTED IN THE SPRING MONITORING SITE VISIT.
 - GENERAL WEEDING FOR ALL PLANTED AREAS:
 - AT LEAST TWICE YEARLY, REMOVE ALL COMPETING GRASS AND WEEDS, INCLUDING ROOTS, FROM BENEATH EACH INSTALLED PLANT AND ANY DESIRABLE VOLUNTEER VEGETATION TO A DISTANCE OF 18 INCHES FROM THE MAIN PLANT STEM. WEEDING SHOULD OCCUR AT LEAST TWICE DURING THE SPRING AND SUMMER. FREQUENT WEEDING WILL RESULT IN LOWER MORTALITY AND LOWER PLANT REPLACEMENT COSTS.
 - MORE FREQUENT WEEDING MAY BE NECESSARY DEPENDING ON WEED CONDITIONS THAT DEVELOP AFTER PLAN INSTALLATION.
 - DO NOT WEED THE AREA NEAR THE PLANT BASES WITH STRING TRIMMER (WEED WHACKER/WEED EATER). NATIVE PLANTS ARE EASILY DAMAGED OR KILLED, AND WEEDS EASILY RECOVER AFTER TRIMMING.
 - APPLY SLOW RELEASE GRANULAR, AQUATIC SAFE FERTILIZER TO EACH INSTALLED PLANT ANNUALLY IN THE SPRING (BY JUNE 1) OF YEARS 2 THROUGH 3.
 - MULCH THE WEEDED AREAS BENEATH EACH PLANT WITH WOODCHIPS AS NECESSARY TO MAINTAIN A 4-INCH-THICK MULCH LAYER AND KEEP DOWN WEEDS WHERE WOODCHIPS ARE SPECIFIED IN THE SOIL PREPARATION PLAN.
 - ALL PLANTING AREAS SHALL RECEIVE A MINIMUM OF 1" OF WATER PER WEEK FOR THE FIRST TWO CONSECUTIVE SUMMERS (JUNE 1 - SEPT 15) FOLLOWING INSTALLATION.
 - PERIODICALLY INSPECT THE CHANNEL OF STREAM A ADJACENT TO THE STREAMBANK RESTORATION AREA FOR ACCUMULATION OF SEDIMENT, TREE DEBRIS, OR OTHER DETRITUS THAT COULD BLOCK THE FLOW OF WATER AND CAUSE A BREACH DURING HIGH FLOWS. DEBRIS SHOULD BE REMOVED FROM THE CHANNEL TO MAINTAIN FLOW TO THE CONFLUENCE WITH STREAM B.

CONTINGENCY PLANS AND ADAPTIVE MANAGEMENT

THESE PLANS HAVE BEEN PREPARED TO ENSURE SUCCESS TO THE MAXIMUM PRACTICABLE EXTENT. QUALITY AND CONSISTENCY OF INSTALLATION, MAINTENANCE, WEATHER PATTERN EXTREMES, WILDLIFE DAMAGE, VANDALISM AND OTHER FACTORS CAN SINGLY OR IN COMBINATION CHANGE CONDITIONS AT MITIGATION SITES AND AFFECT EVENTUAL SUCCESS OF THESE PLANS. THEREFORE, ADAPTIVE MANAGEMENT SHOULD BE EMPLOYED TO EVALUATE PROBLEMS AS THEY ARISE AND DEVELOP FLEXIBLE AND PRACTICAL SOLUTIONS. EXAMPLES CAN INCLUDE BUT ARE NOT LIMITED TO PLANT SUBSTITUTION, CHANGES IN TARGET VEGETATION CLASSES, SOIL AMENDMENT, AND RE-GRADING. AS A LAST RESORT, MODIFICATION OF PERFORMANCE STANDARDS CAN BE NECESSARY. ANY ACTIONS INVOLVING MAJOR DEPARTURES FROM THE ORIGINAL PLAN OR GOALS AND PERFORMANCE STANDARDS SHOULD BE DISCUSSED AND AGREED TO WITH REGULATORY AGENCIES AHEAD OF IMPLEMENTATION.

MAPLE VALLEY ASPHALT FACILITY

MITIGATION PLAN

KAREN DEAL, LAKESIDE INDUSTRIES

18825 RENTON MAPLE VALLEY RD SE

UNINCORPORATED KING COUNTY, WA 98058 (NEAR RENTON)

SUBMITTALS & REVISIONS		NO.	DATE	DESCRIPTION	BY
		1	06-27-2018	PERMIT SUBMITTAL	AAM
		2	06-04-2020	REVISED PERMIT SUBMITTAL V2	AAM

GENERAL NOTES:

NOT FOR CONSTRUCTION

SHEET SIZE:
ORIGINAL PLAN IS 24" X 36".
SCALE ACCORDINGLY.

PROJECT MANAGER: HM
DESIGNED: SS/NL/AAM
DRAFTED: AAM
CHECKED: SS/AMC/MF
JOB NUMBER:
160414
SHEET NUMBER:
M6.0 OF 14

FILENAME
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MITIGATION NOTES