

## ADDENDUM No. 3

### RFP No. 25-53

#### LIBERTY STREET CREEK RESTORATION

**Revised Due Date: January 13, 2026 at 11:00 A.M. (local time)**

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes nine (9) pages.**

**The Proposer is to acknowledge receipt of this Addendum No. 3 by signing and submitting Attachment B, including all attachments in its Proposal by so indicating in the proposal that the addendum has been received. Proposals submitted without acknowledgement of receipt of this addendum may be considered non-conforming.**

**The following forms provided within the RFP Document should be included in submitted proposal:**

- **Attachment B - General Declarations**
- **Attachment D - Prevailing Wage Declaration of Compliance**
- **Attachment E - Living Wage Declaration of Compliance**
- **Attachment G - Vendor Conflict of Interest Disclosure Form**
- **Attachment H - Non-Discrimination Declaration of Compliance**

**Proposals that fail to provide these completed forms listed above upon proposal opening may be rejected as non-responsive and may not be considered for award.**

#### **I. CORRECTIONS/ADDITIONS/DELETIONS**

Changes to the RFP documents which are outlined below are referenced to a page or Section in which they appear conspicuously. Offerors are to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

<b>Section/Page(s)</b>	<b>Change</b>
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Section I.G – Sealed Proposal Submission/Page 4 (Page Addendum1-1)\*:

Remove: **“All proposals are due and must be delivered to the City on or before January 8, 2026 by 2:00 p.m. (local time).”**

Replace with: **“All proposals are due and must be delivered to the City on or before January 13, 2026 by 11:00 a.m. (local time).”**

\*Applicable to all mentions of proposal due date.

Section III.E – Schedule of Pricing/Cost / Page 15 (Page Add1-15):

- Replaced Medium Tree (60 Ea.) and Large Tree (60 Ea.) with Pay Item 10001.71 Tree, B&B, 91 Ea. as specified on Plan Sheet 22
- Added Pay Item 10010.03 Plant, Gal., 291 Ea. as specified on Plan Sheet 22
- Revised Native Plant Plugs quantity from 910 Ea. to 1,110 Ea. per addition on Plan Sheet 7

Replaced Page 15 (Add1-15) with Page Add3-5 herein.

Addendum-3-1

## Detailed Specifications

DS-5 – Access Allowance:

Added under Material Description, “Property protection fence shall be 5-ft steel wire mesh.”

DS-31 – Native Plant Plugs:

Remove species in the table as stricken below. Add species as bolded below.

Species – Native plug plantings shall be of the following species:

<u>Botanical Name</u>	<u>Common Name</u>	<u>Spacing</u>	<u>Size</u>
<del>Carex bebbii</del>	<del>Bebb's Oval Sedge</del>	<del>24 in o.c.</del>	<del>Plug</del>
Carex cristatella	Crested Sedge	24 in o.c.	Plug
Carex muskingumensis	Palm Sedge	24 in o.c.	Plug
Carex scoparia	Lance-fruited Oval Sedge	24 in o.c.	Plug
Carex vulpinoidea	Fox Sedge	24 in o.c.	Plug
Chelone glabra	Turtlehead	24 in o.c.	Plug
Anemone canadensis	Canada Thimbleweed	24 in o.c.	Plug
Aster cordifolius	Heart-leaved Blue Wood Aster	24 in o.c.	Plug
<del>Caltha palustris</del>	<del>Marsh Marigold</del>	<del>24 in o.c.</del>	<del>Plug</del>
Iris virginica	Blue Flag Iris	24 in o.c.	Plug
Lobelia cardinalis	Cardinal Lobelia	24 in o.c.	Plug
Lobelia siphilitica	Great Blue Lobelia	24 in o.c.	Plug
Aquilegia canadensis	Wild Columbine	24 in o.c.	Plug
<del>Pontederia cordata</del>	<del>Pickereel Weed</del>	<del>24 in o.c.</del>	<del>Plug</del>
Echinacea purpurea	Purple Coneflower	24 in o.c.	Plug
Redbeckia hirta	Black-eyed Susan	24 in o.c.	Plug
<del>Sagittaria latifolia</del>	<del>Common Arrowhead</del>	<del>24 in o.c.</del>	<del>Plug</del>
Senecio aureus	Golden Ragwort	24 in o.c.	Plug
<b>Symphotrichum</b>			
<b>novae-angliae</b>	<b>New England Aster</b>	<b>24 in o.c.</b>	<b>Plug</b>
<b>Physostegia virginian</b>	<b>Obedient Plant</b>	<b>24 in o.c.</b>	<b>Plug</b>
<b>Verbena hastata</b>	<b>Blue Vervain</b>	<b>24 in o.c.</b>	<b>Plug</b>
<b>Carex bromoides</b>	<b>Common Brome Sedge</b>	<b>24 in o.c.</b>	<b>Plug</b>
<b>Carex emori</b>	<b>Emori's Sedge</b>	<b>24 in o.c.</b>	<b>Plug</b>
<b>Aesclepias incarnata</b>	<b>Swamp Milkweed</b>	<b>24 in o.c.</b>	<b>Plug</b>

DS-34 – Restoration:

Replace “Streambank Stabilization native seed mix” Section with the following “Streambank Stabilization native seed: Diverse Forested Wetland Establishment Mix” Section as follows:

Streambank Stabilization native seed mix: Diverse Forested Wetland Establishment Mix

Disturbed earth areas located between the bankfull bench limit and the top-of-bank limit, shall be restored with a streambank stabilization native seed mix. The streambank mix shall consist of the following species and applications rates:

<b>Grasses, Sedges &amp; Rushes</b>		<b>PLS Oz/acre</b>	<b>Seeds/sq ft</b>
<a href="#">Carex comosa</a>	Bristly Sedge	0.40	0.28
<a href="#">Carex crinita</a>	Fringed Sedge	1.00	0.53
<a href="#">Carex frankii</a>	Frank's Sedge	0.40	0.16
<a href="#">Carex stipata</a>	Awl-fruited Sedge	0.40	0.31
<a href="#">Carex vulpinoidea</a>	Fox Sedge	3.60	8.26
<a href="#">Elymus virginicus</a>	Virginia Wild Rye	32.00	3.09
<a href="#">Glyceria canadensis</a>	Canada Manna Grass	2.80	4.76
<a href="#">Glyceria striata</a>	Fowl Manna Grass	0.80	2.94
<a href="#">Juncus effusus</a>	Soft Rush	0.80	18.37
<a href="#">Leersia oryzoides</a>	Rice Cut Grass	4.00	3.12
<a href="#">Scirpus validus (S. tabernaemontani)</a>	Soft-stem Bulrush	3.20	2.28
<b>Total Grasses</b>		<b>49.40</b>	<b>44.10</b>
<b>Forbs</b>		<b>PLS Oz/acre</b>	<b>Seeds/sq ft</b>
<a href="#">Acorus americanus</a>	Sweet Flag	4.40	0.67
<a href="#">Angelica atropurpurea</a>	Angelica	1.20	0.15
<a href="#">Asclepias incarnata</a>	Swamp Milkweed	2.00	0.22
<a href="#">Bidens cernua</a>	Nodding Bur Marigold	1.60	0.77
<a href="#">Bidens frondosa</a>	Devil's Beggarticks	0.80	0.09
<a href="#">Eupatorium perfoliatum</a>	Boneset	0.40	1.47
<a href="#">Eutrochium maculatum</a>	Joe Pye Weed	0.40	0.87
<a href="#">Helenium autumnale</a>	Sneezeweed	1.60	4.78
<a href="#">Iris virginica</a>	Southern Blue Flag Iris	1.60	0.04
<a href="#">Lobelia cardinalis</a>	Cardinal Flower	0.40	3.67
<a href="#">Lobelia siphilitica</a>	Great Blue Lobelia	0.40	4.59
<a href="#">Mimulus ringens</a>	Monkey Flower	0.40	21.12
<a href="#">Penthorum sedoides</a>	Ditch Stonecrop	0.40	11.94
<a href="#">Polygonum pennsylvanicum</a>	Pennsylvania Smartweed	10.00	2.98
<a href="#">Rudbeckia laciniata</a>	Golden Glow	1.20	0.39
<a href="#">Sagittaria latifolia</a>	Common Arrowhead/Duck Potato	0.40	0.56
<a href="#">Solidago patula</a>	Swamp Goldenrod	0.40	0.66
<a href="#">Solidago riddellii</a>	Riddell's Goldenrod	0.80	1.71
<a href="#">Sparganium eurycarpum</a>	Common Bur Reed	6.40	0.07
<a href="#">Symphyotrichum puniceum</a>	Swamp Aster	0.40	0.73
<a href="#">Verbena hastata</a>	Blue Vervain	1.60	3.42
<a href="#">Zizia aurea</a>	Golden Alexander	1.20	0.30
<b>Total Forbs</b>		<b>38.00</b>	<b>61.20</b>
<b>Woodies</b>		<b>PLS Oz/acre</b>	<b>Seeds/sq ft</b>
<a href="#">Cephalanthus occidentalis</a>	Buttonbush	2.00	0.30
<b>Total Woodies</b>		<b>2.00</b>	<b>0.30</b>
<b>Temporary Grass Cover</b>		<b>Oz/acre</b>	<b>Seeds/sq ft</b>
<a href="#">Avena sativa</a>	Seed Oats	480.00	11.02
<b>Total Temp Grasses</b>		<b>480.00</b>	<b>11.02</b>

Source: Native Connections(Kalamazoo, MI), or Owner approved equal

**Section/Page(s)****Change****Plans**

Sheet 02 – Project Notes:

- Revised notes pertaining to Tree Removals, Tree Plantings and Maintenance Responsibilities.
- Revised quantities as indicated in the Schedule of Pricing change.

Sheet 07 –Plan View:

- Added quantity of Native Plant Plugs as indicated in the Schedule of Pricing change.
- Added note to see Detailed Specification, applicable to all Plan View Sheets (4-7)

Sheet 19 – Project Details:

- Added notes to see Detailed Specifications for seeding and stabilization, and for native plant plugs.

Sheet 22 – Project Details:

- Added Shrub Planting detail
- Added Plant Schedule for quantities.
- Added note to provide and include fencing as necessary to protect plantings.

Offerors are responsible for any conclusions that they may draw from the information contained in the Addendum.



**E. Schedule of Pricing/Cost - 20 Points****UNIT PRICE BID**

ITEM NO.	PAY ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL COST
01000.00	General Conditions, Max. \$75,000	1	Lsum	\$	\$
01002.00	Project Clean-Up and Restoration	1	Lsum	\$	\$
01003.00	Digital Audio Visual Coverage	1	Lsum	\$	\$
01004.71	DS_Access Allowance	1	Lsum	\$	\$
01021.00	Erosion Control, Inlet Protection, Fabric Drop	2	Ea	\$	\$
01022.00	Erosion Control, Silt Fence (As Needed)	500	Ft	\$	\$
01023.00	Erosion Control, Mud Mat	170	Syd	\$	\$
01024.71	DS_Erosion Control, Instream Sediment Trap	2	Ea	\$	\$
01030.00	Tree Protection Fence	2500	Ft	\$	\$
02000.01	Tree, Rem 6 In. - 12 In.	32	Ea	\$	\$
02000.02	Tree, Rem 13 In. - 19 In.	6	Ea	\$	\$
02000.03	Tree, Rem 20 In. - 29 In.	3	Ea	\$	\$
02000.04	Tree, Rem 30 In. - 39 In.	2	Ea	\$	\$
02000.05	Tree, Rem 40 In. and larger	1	Ea	\$	\$
02060.71	DS_Creek Cleanout	0.47	Sta	\$	\$
02070.71	DS_Wall Removal	60	Ft	\$	\$
03050.71	DS_Bank Stabilization, Toe Wood (Furnished by Owner)	150	Lft	\$	\$
03050.72	DS_Bank Stabilization, Toe Wood (Furnished by Contractor)	150	Lft	\$	\$
03080.71	DS_Earthwork (Incl. cutting, filling, grading, balancing, hauling, and disposal)	3.98	Sta	\$	\$
06041.71	DS_Riprap, Plain	14	Cyd	\$	\$
06044.71	DS_Instream Structure, Cross Vane	2	Ea	\$	\$
06044.72	DS_Instream Structure, Ledge Rock	65	Fft	\$	\$
06044.73	DS_Instream Structure, Constructed Riffle	7	Ea	\$	\$
06045.71	DS_Natural Stone	5	Cyd	\$	\$
10000.71	Tree, B&B	91	Ea	\$	\$
10010.03	Plant, Gal	291	Ea	\$	\$
10010.71	DS_Native Plant Plugs	1110	Ea	\$	\$
10040.00	Landscape Maintenance and Warranty, 1 Year	1	Lsum	\$	\$
10041.00	Landscape Maintenance and Warranty, 2nd Year	1	Lsum	\$	\$
10060.71	DS_Restoration, Side Slope Native Seed Mix (As Directed)	1100	Syd	\$	\$
10060.72	DS_Restoration, Bankfull Bench Seed Mix (As Directed)	300	Syd	\$	\$
10060.73	DS_Restoration, Native Upland Woodland Seed Mix (As Directed)	900	Syd	\$	\$

**BASE BID TOTAL****\$**

GENERAL NOTES:

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE 2025 PUBLIC SERVICES STANDARD SPECIFICATIONS UNLESS OTHERWISE SPECIFIED IN THE STANDARD SPECIFICATIONS, DETAILS OR SPECIAL PROVISIONS AND THE SPECIFICATIONS CONTAINED HEREIN.

COOPERATION BY THE CONTRACTOR: NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO MATERIAL SHORTAGES OR REASONABLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE PROPOSAL OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OF EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES FOR NOISE LEVELS, VIBRATIONS, OR ANY OTHER RESTRICTIONS WHILE PERFORMING ANY CONSTRUCTION OPERATIONS WITHIN THIS CONTRACT, COSTS TO BE INCLUDED IN THE RESPECTIVE ITEM OF WORK.

THE CONTRACTOR SHALL, BEFORE EACH DAYS WORK, DETERMINE AND EVALUATE THE LOCATION OF ALL UNDERGROUND FACILITIES IN THE AREA. IF LOCATION STAKES HAVE BEEN MOVED OR DO NOT APPEAR CORRECT, THE CONTRACTOR SHALL NOT EXCAVATE UNTIL ALL UTILITIES HAVE HAD AN OPPORTUNITY TO CHECK OR RESTAKE THEIR LOCATIONS. ANY DELAYS INCURRED, DUE TO THE CHECKING OR RESTAKING OF UTILITIES SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION.

THERE WILL BE NO ADJUSTMENT IN THE CONTRACT UNIT PRICE REGARDLESS OF THE PERCENTAGE OF INCREASE OR DECREASE ABOVE OR BELOW THE CONTRACT QUANTITY FOR ANY ITEM OF WORK.

IT IS THE INTENT THAT ALL GOVERNMENT CORNERS ON THIS PROJECT BE PRESERVED AND THAT, WHERE NECESSARY, MONUMENT BOXES BE PLACED OR ADJUSTED AT THE CONTRACTORS EXPENSE WHETHER SHOWN OR NOT.

THE LOCATION OF ALL PUBLIC UTILITIES SHOWN ON THESE PLANS ARE TAKEN FROM THE BEST AVAILABLE DATA. THE CITY OF ANN ARBOR & HUBBELL, ROTH AND CLARK, INC. WILL NOT BE HELD RESPONSIBLE FOR ANY OMISSION OR VARIATIONS FROM THE LOCATIONS SHOWN. PURSUANT TO ACT 53 OF THE PA OF 1974 AS A CONDITION OF THIS CONTRACT NOTICE SHALL BE GIVEN TO MISS DIG PRIOR TO UNDERGROUND WORK TO BE PERFORMED IN ACCORDANCE WITH THIS CONTRACT. PHONE (800)-482-7171 OR 647-7344.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE AHEAD AND ADJUST DEPTH OF UTILITIES ACCORDINGLY IN ORDER TO AVOID ANY POTENTIAL CONFLICTS. ANY DAMAGE INCURRED TO UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND WILL BE REPAIRED IMMEDIATELY AT NO COST TO THE OWNER.

STAGING AND ACCESS:

SEE PLAN SHEET 01 "ACCESS PLAN" FOR DESCRIPTION AND RECOMMENDATIONS FOR THE STAGING AND LAYDOWN AREAS ALONG WITH THE RECOMMENDED ACCESS ROUTE TO THE PROPOSED SITE.

CONSTRUCTION NOTES:

THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

THE LOCATION OF MATERIAL STOCKPILES AND ONSITE STAGING AREAS SHALL BE APPROVED BY THE CITY OF ANN ARBOR AND THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE SLOPE STAKE LINE, INCLUDING EXISTING FENCING, LAWN, TREES, SHRUBBING, PAVEMENT, ETC.

STREAM BANK DIRECTION:

ALL LEFT AND RIGHT STREAM BANKS / CROSS SECTIONS ARE REFERENCED LOOKING UPSTREAM PER PLAN.

PERMITS:

EGLE PERMIT No. .... PENDING

WCWRC DRAIN PERMIT No. .... PENDING

CITY OF ANN ARBOR SESC No. .... PENDING

NOTE:  
THE CONTRACTOR SHALL STRICTLY FOLLOW ALL PERMIT CONDITIONS SET FORTH.

CONSTRUCTION STAKING:

GRADING LIMITS, ELEVATIONS, AND LOCATIONS OF STRUCTURES AND BANK TREATMENTS SHALL BE STAKED BY THE ENGINEER. THE CONTRACTOR SHOULD PROVIDE 72 HOURS NOTICE OF STAKING NEEDS PRIOR TO WORK COMMENCING. THE CONTRACTOR SHALL MAINTAIN ALL STAKING THROUGH THE DURATION OF THE PROJECT.

LIMITS OF DISTURBANCE (LOD) SHOWN ON THE PLANS IS APPROXIMATE. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO THAT ALL WORK PERFORMED IS WITHIN THE PROJECT AREA.

UTILITIES:

ALL UTILITIES WITHIN THE ZONE OF INFLUENCE OF PROPOSED WORK ARE TO BE FIELD LOCATED AND HAND DUG INCLUDED IN THE UNIT BID PRICES FOR APPROPRIATE ITEMS.

ALL GAS FACILITIES SHALL BE PROTECTED AND SUPPORTED PER MICHCON OR CONSUMER ENERGY STANDARDS AS APPLICABLE.

PRIOR TO WORK ON FACILITIES BELONGING TO THE ABOVE AGENCIES, A MINIMUM OF 72 HOURS NOTICE MUST BE GIVEN IN ORDER TO INSURE PROPER INSPECTION BY THE RESPECTIVE AGENCIES.

CONCRETE, GRADE S3, SHALL BE USED TO ENCASE UTILITIES THAT ARE IN CLOSE PROXIMITY TO THE PROPOSED CONSTRUCTION ONLY AS DIRECTED BY THE ENGINEER.

ALL EXPLORATORY WORK REQUIRED FOR LOCATING EXISTING UTILITIES SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONSTRUCTION OF THE PROJECT.

THE EXISTING UTILITIES LISTED HEREIN AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED FROM SURVEYS AND FROM UTILITY RECORD MAPS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO SATISFY HIMSELF AS TO THEIR ACCURACY OR OF HIS RESPONSIBILITY IN CASE UTILITIES HAVE BEEN CONSTRUCTED, RELOCATED OR REMOVED. OWNERS OF PRIVATE UTILITIES WILL NOT BE REQUIRED TO MOVE ADDITIONAL POLES AND STRUCTURES THAT ARE NOT SPECIFICALLY INDICATED AS SUCH ON THE PLANS.

THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK, AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO INSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL DIAL 800-482-7171 A MINIMUM OF 3 WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS, PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE CONTRACTOR SHALL PROTECT ALL SIDE DRAIN STORM OUTLETS DURING CONSTRUCTION. ALL SIDE DRAIN OUTLETS MUST REMAIN UNOBSTRUCTED AND SHALL NOT BE COVERED WHEN PORTIONS OF THE EXISTING DRAIN ARE FILLED IN. IF DISTURBED, OUTLETS SHALL BE RESET AS NECESSARY TO PROVIDE POSITIVE FLOW TO THE CREEK.

THE CONTRACTOR SHALL PROTECT ALL SANITARY MANHOLES DURING CONSTRUCTION. THERE ARE MULTIPLE SANITARY SEWER CROSSINGS NOTED ON THE PLAN SHEETS. THE CONTRACTOR SHALL PROTECT THE EXISTING SANITARY SEWER AT THESE LOCATIONS. PRIOR TO ANY WORK, THE CONTRACTOR SHALL FIELD VERIFY THE DEPTH AND LOCATION OF THE SANITARY SEWER AND IF NECESSARY HAND DIG AT THESE LOCATIONS.

HEAVY EQUIPMENT ACCESS AND OPERATION:


THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF CONSTRUCTION AND MINIMIZE THE AREA AND DURATION OF DISTURBANCE AT ALL TIMES. ALL OTHER TREE CLEARING NECESSARY TO CONSTRUCT THE PROJECT PER THE PLANS AND FOR SITE ACCESS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE, AND APPROVED BY THE CITY OF ANN ARBOR AND THE PROJECT ENGINEER.


THE CONTRACTOR SHALL USE REASONABLE MEASURES TO AVOID SOIL COMPACTION BY HEAVY EQUIPMENT.

CONTRACTOR SHALL USE EQUIPMENT SUITABLE FOR WORK IN THE CREEK. THE INSPECTOR RESERVES THE RIGHT TO EXCLUDE ANY EQUIPMENT HE DEEMS UNACCEPTABLE TO ENTER THE CREEK DUE TO LEAKING FLUIDS, ACCUMULATED SEDIMENT OR OTHER POTENTIAL HAZARDS TO WATER QUALITY. TEMPORARY RIP RAP OR OTHER MEANS AS NECESSARY SHALL BE USED TO PROTECT THE EDGE OF THE CREEK BANK WHEN ENTERING OR EXITING THE CREEK. THE ACCESS PATH WILL BE GRADED AND STABILIZED BY THE CONTRACTOR TO SUPPORT HIS OPERATIONS WHILE MINIMIZING DISRUPTION AND RESTORATION. THE CONTRACTOR SHALL PROVIDE ACCESS PLANS AND DETAILS FOR REVIEW AT THE PRECONSTRUCTION MEETING. ALL COSTS ASSOCIATED WITH THE CONTRACTOR'S CHOSEN MEANS OF ACCESS SHALL BE INCIDENTAL TO THE PROJECT AND INCLUDED IN OTHER LINE ITEMS AS NECESSARY. THE CONTRACTOR WILL NOT BE COMPENSATED FOR EXCESS CLEARING, GRADING, OR RESTORATION DUE TO THE CONTRACTOR'S OPERATIONS SELECTED.

TRACK HOES USED FOR VANE, BOULDER, AND TOE WOOD INSTALLATION SHALL BE EQUIPPED WITH A SWIVEL BUCKET AND HYDRAULIC THUMB.

TREE REMOVAL WORK:

TREES DESIGNATED FOR REMOVAL ARE SHOWN AS SUCH . TREES SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ROOT WADS, ETC. AND USED IN THE CONSTRUCTION OF THE TOE WOOD BANK STABILIZATION STRUCTURES AS DIRECTED BY THE PROJECT ENGINEER.

NOT ALL TREES TO BE REMOVED HAVE BEEN DESIGNATED AS SUCH  ON THE PLANS. THE CONTRACTOR SHALL VISIT THE SITE WITH THE OWNER AND THE PROJECT ENGINEER PRIOR TO ANY WORK COMMENCING TO DETERMINE WHICH ADDITIONAL TREES SHALL BE DESIGNATED FOR REMOVAL. PAID FOR UNDER THE MISCELLANEOUS AND AS NEEDED PAY ITEM "DS\_Access Allowance" - Lsum

REMOVAL OF SHRUBS, BRUSH AND TREES LESS THAN 6 INCH IN DIAMETER (DBH) AS SHOWN ON THE PLANS OR AS DIRECTED SHALL BE PAID FOR UNDER THE MISCELLANEOUS AND AS NEEDED QUANTITY "General Conditions, Max. \$ - Lsum".

ALL WOODY MATERIAL FOR THE TOE WOOD STRUCTURES MUST BE APPROVED BY THE PROJECT ENGINEER.

NO TREES SHALL BE REMOVED WITHOUT PRIOR CONSENT FROM THE OWNER AND THE PROJECT ENGINEER.

EARTH REMOVAL:

EXCAVATED MATERIAL TO CONSTRUCT THE NEW CREEK SHALL BE KEPT ON SITE AND USED AS FILL WHERE NEEDED.

ANY EXTRA MATERIALS REMAINING MAY BE TEMPORARILY STOCKPILED ON SITE. SEE "SPOILS" NOTE THIS SHEET.

SOIL EROSION, SILT FENCE:

SOIL EROSION SILT FENCE IS NOT DEPICTED ON THE PLANS AND IS CONSIDERED AN "AS NEEDED" QUANTITY. SOIL EROSION SILT FENCE SHALL BE PLACED AROUND ALL TEMPORARY SPOIL AREAS AND AROUND THE PROJECT LAYDOWN AND STAGING AREA TO PREVENT RUNOFF OF MATERIALS TO SURROUNDING AREAS. PAID FOR UNDER THE MISCELLANEOUS AND AS NEEDED PAY ITEM "DS\_Erosion Control, Silt Fence (As Needed) - Ft".

SPOILS :

SPOILS MAY BE TEMPORARILY STORED ON SITE. SPOILS INCLUDING DIRT AND TREES, ETC. SHALL BE USED WHERE NEEDED FOR BANK STABILIZATION, i.e. TOE WOOD STRUCTURES. ANY REMAINING STORED SPOILS SHALL HAVE EROSION CONTROL SILT FENCE AND / OR OTHER CONTAINMENT MEASURES PLACED AROUND THE SITE TO PREVENT RUNOFF. TEMPORARY SEEDING AND MULCHING OF STOCKPILED SPOIL AREAS MAY BE NECESSARY WHERE THEY ARE TO REMAIN FOR MORE THAN ONE MONTH. UPON COMPLETION OF WORK, ANY REMAINING SPOILS SHALL BE REMOVED OFFSITE TO A SUITABLE LANDFILL BY THE CONTRACTOR AND THE SPOILS AREA RESTORED WITH TOPSOIL, SEED AND MULCH PER THE CONTRACT SPECIFICATIONS.

CONSTRUCTION FENCING:

CONSTRUCTION / PROTECTION FENCING SHALL BE INSTALLED AT THE OWNER'S OR ENGINEER'S DIRECTION. FENCING SHALL BE PAID FOR UNDER THE MISCELLANEOUS AND AS NEEDED QUANTITY "DS\_Protection Fence - Ft".

RESTORATION:

RESTORATION OF THE SITE SHALL BE IN ACCORDANCE WITH THE FOLLOWING AND SHALL BE PAID FOR AS INDICATED BELOW:

ALL DISTURBED AREAS IN THE CREEK BANK SHALL BE RESTORED WITH SPECIFIED SEED MIX AS INDICATED ON THE PLANS AND IN THE SPECIFICATIONS.

REMOVE ALL CONSTRUCTION EQUIPMENT, EXCESS MATERIALS, DEBRIS, ETC., ESTABLISH FINE GRADE, AND RESTORE (PER PLANS AND SPECIFICATIONS). ALL COSTS FOR THE LABOR, EQUIPMENT AND MATERIALS SHALL BE CONSIDERED INCIDENTAL TO RESTORATION ITEMS.

REMOVE ANY HAUL ROADS OR ACCESS ROADS, MATERIAL STOCKPILES, AND CONSTRUCTION FENCING. THIS SHALL BE CONSIDERED INCIDENTAL TO PROJECT ITEM.

ALL PAVEMENT DAMAGED DURING CONTRACTOR OPERATIONS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR TO THE CITY OF ANN ARBOR SPECIFICATIONS.

WATER REQUIRED FOR SOD AND SEEDING SHALL BE INCLUDED IN THE CONTRACT COST FOR THESE ITEMS. WATER REQUIRED FOR COMPACTION SHALL BE INCLUDED IN THE COST OF CONSTRUCTION FOR THIS PROJECT. CONTRACTOR SHALL WATER THE PLANTINGS AND SEEDED AREAS DAILY FOR A MINIMUM OF 14 DAYS WITH AN ADDITIONAL FOUR (4) WATERING EVENTS IN THE FOLLOWING TWO WEEKS AFTER THE DAILY WATERING. WATERING SHALL NOT OCCUR ON SATURDAYS, SUNDAYS, OR IMMEDIATELY AFTER RAIN EVENTS. ALL EXCEPTIONS SHALL BE APPROVED BY THE PROJECT ENGINEER.

ALL AREAS DISTURBED BY THE CONTRACTOR AND / OR HIS SUBCONTRACTOR(S) BEYOND THE NORMAL CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE RESTORED AS SPECIFIED OR DIRECTED BY THE ENGINEER. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE ALLOWED FOR THIS ACTIVITY. THIS INCLUDES RESTORATION TO ALL MATERIAL STORAGE OR STAGING AREAS.

ALL DISTURBED AREAS TO BE RESTORED WITHIN SEVEN (7) DAYS OF COMPLETION.

CONTRACTOR TO CHECK ON SEED AND SOD GROWTH & SUPPLEMENT AS NEEDED. COSTS FOR RESEEDING AND RESODDING TO BE CONSIDERED INCIDENTAL TO RESTORATION ITEMS.

TREE PLANTINGS:

SEE SHEET 22 FOR PLANT SCHEDULE FOR ALL TREE AND SHRUB DESCRIPTIONS AND QUANTITIES.

TREE LOCATIONS SHALL BE DETERMINED BY THE OWNER AND / OR THE PROJECT ENGINEER. THE PROJECT ENGINEER SHALL STAKE THE LOCATION OF THE PROPOSED TREES.

CARE SHOULD BE TAKEN WHEN CHOOSING THE PROPOSED TREE LOCATIONS AS EXISTING STORM AND SANITARY SEWERS ARE IN THE PROJECT AREA. IT IS IMPERATIVE THAT THE PROPOSED TREE LOCATIONS AND THEIR ROOT SYSTEMS WILL NOT BE IN CONFLICT WITH SAID UTILITIES.

SEE DETAIL SHEETS FOR PLANTING DETAILS.

CONTRACTOR SHALL REFER TO THE PROJECT SPECIFICATIONS FOR SPECIAL LANDSCAPING REQUIREMENTS AND MAINTENANCE AND GUARANTEE STANDARDS FOR PROPOSED PLANTINGS.

MAINTENANCE RESPONSIBILITIES:

ONCE RESTORATION OF ALL DISTURBED AREAS HAS BEEN COMPLETED AND SEEDING HAS BEEN ESTABLISHED BY THE CONTRACTOR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL AREAS INSIDE AND OUTSIDE OF THE MAIN CHANNEL (LIBERTY CREEK) FOR THE REQUIRED TWO (2) YEAR MAINTENANCE PERIOD.

SEQUENCE OF CONSTRUCTION - SOIL EROSION AND SEDIMENTATION CONTROL:

1. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE SEDIMENT TRAP AND TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY PRIOR TO AND DURING THEIR CONSTRUCTION ACTIVITIES.
2. INSTALL ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES.
3. REMOVE VEGETATION AND DEBRIS AS DESCRIBED IN THE CREEK PER THE PLANS.
4. BEGIN CONSTRUCTION.
5. CONSTRUCT RESTORATION IMPROVEMENTS TO THE LIBERTY STREET CREEK.
6. COMPLETE CONSTRUCTION.
7. STABILIZE ALL DISTURBED AREAS WITH TURF REINFORCEMENT MATS AND NATIVE SEED MIX.
8. REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.
9. RESTORE CONSTRUCTION AREA AND STAGING / LAYDOWN AREA AND ALL SITE ACCESS POINTS WITH TOPSOIL, SEED AND MULCH.

SOIL EROSION AND SEDIMENTATION CONTROL - GENERAL NOTES:

1. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE WASHTENAW COUNTY WATER RESOURCES COMMISSIONER AND / OR THE CITY OF ANN ARBOR.
2. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
3. THE CONTRACTOR SHALL PERIODICALLY CHECK AND MAINTAIN THE PROPOSED SEDIMENT TRAPS AS NEEDED.
4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED WITHIN THE LIMITS OF CONSTRUCTION AND NOT ALLOWED TO COLLECT ON ANY OFF SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, PONDS AND WETLANDS.
5. THE CONTRACTOR SHALL APPLY TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AS DIRECTED ON THESE PLANS AND WHERE OTHERWISE REQUIRED.
6. THE CONTRACTOR SHALL TAKE ACTIONS AS NECESSARY TO PRESERVE NATURAL VEGETATION OUTSIDE THE LIMITS OF CONSTRUCTION.
7. STABILIZATION OF ALL DISTURBED AREAS SHALL BE ESTABLISHED USING THE APPROPRIATE VEGETATION WITHIN FIVE (5) WORKING DAYS OF THE COMPLETION OF FINAL GRADING.
8. THE CONTRACTOR SHALL SWEEP THE EXISTING STREETS SURROUNDING THE PROJECT SITE AS NEEDED.
9. SOIL EROSION AND SEDIMENTATION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR.
10. TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROLS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT. UPON FINAL RESTORATION THE CONTRACTOR SHALL REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.
11. ALL SOIL EROSION CONTROL MEASURES AS SHOWN ON THESE PLANS OR AS NEEDED TO COMPLETE THIS PROJECT SHALL BE PAID FOR AT THE UNIT PRICES INCLUDED IN THE PROPOSAL.












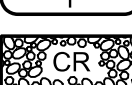

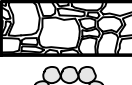
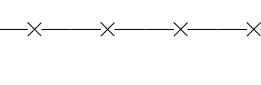
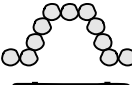


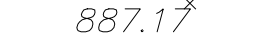

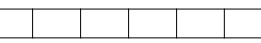




MISCELLANEOUS ITEMS OF WORK:

SEVERAL PAY ITEMS INCLUDED IN THE PROPOSAL ARE NOT SPECIFICALLY SHOWN ON THE PLANS. THESE ITEMS SHALL BE CONSTRUCTED AS DIRECTED BY THE PROJECT ENGINEER OR USED AS NEEDED. THEY ARE:

MISCELLANEOUS AND AS NEEDED QUANTITIES			
No.	DESCRIPTION	QTY	UNIT
1	General Conditions, Max. \$35,000	1	Lsum
2	DS_Access Allowance	1	Lsum
3	Digital Audio Visual Coverage	1	Lsum
4	DS_Fence, Protective (As Needed) *	2500	Ft
5	DS_Erosion Control, Silt Fence (As Needed) *	500	Ft
6	Project Clean-Up and Restoration	1	Lsum
7	Trees, B&B	91	Ea
8	Plant_Gel (Shrub)	291	Ea
9	DS_Restoration, Side Slope Native Seed Mix (As Directed)	1100	Syd
10	DS_Restoration, Bankfull Bench Native Seed Mix (As Directed)	300	Syd
11	DS_Restoration, Upland Woodland Native Seed Mix (As Directed)	900	Syd
12	Landscape Maintenance and Warranty, 1 Year	1	Lsum

\* THE AUTHORITY TO DETERMINE IF AN ITEM IS "AS NEEDED" IS THE OWNERS AND NOT THE CONTRACTORS. THE USE OF "AS NEEDED" ITEMS BY THE CONTRACTOR WITHOUT AUTHORIZATION FROM THE OWNER SHALL BE CONSIDERED PART OF THE CONTRACTOR'S MOBILIZATION RESPONSIBILITIES AND WILL NOT BE PAID FOR SEPARATELY.

LEGEND:

EXISTING:	PROPOSED:
CREEK 	CREEK 
TOP OF TERRACE 	TOP OF TERRACE 
TREE 	LIMITS OF DISTURBANCE 
SANITARY MANHOLE 	TREE, REMOVE 
SANITARY SEWER 	TOE WOOD 
STORM MANHOLE 	POOL 
STORM SEWER 	RIFFLE, CONSTRUCTED 
STORM END SECTION 	RIP RAP 
FENCE, WOOD 	CROSS VANE 
SANITARY EASEMENT 	LEDGE ROCK 
PROPERTY LINE 	STONE 
SPOT ELEVATION 	SITE ACCESS 
BLOCK WALL 	



Know what's below.  
Call before you dig.

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
P.O. BOX 8647  
ANN ARBOR MI 48106-8647  
www.a2gov.org







**NOTE:**  
SEE "DETAILED SPECIFICATION FOR NATIVE PLANT PLUGS" FOR  
PLUG DESCRIPTION AND LISTINGS.

10 Split Rail Fence  
18" Box Elder  
87" x 63" CMP Inv. = 876.76

NOTE:  
SEE SHEET 06 FOR PLAN CONTINUATION

GENERAL NOTES:

1. TOTAL DRAINAGE AREA FOR THIS PROJECT IS 124 Acres.
2. ALL SECTIONS ARE FACING UPSTREAM.
3. LEFT BANK AND RIGHT BANK ARE REFERENCED AS FACING UPSTREAM.

**TOE WOOD NOTES:**

1. TOE WOOD STRUCTURE ORIENTATION IS LEFT AND RIGHT BANK LOOKING UPSTREAM.
2. TOE WOOD LENGTHS ARE MEASURED ALONG THE OUTSIDE, OUTER BANK OF THE STRUCTURE.
3. TOE WOOD STATIONS ARE BASED OFF OF THE CREEK CENTERLINE.
4. TOE WOOD SHALL BE ALIGNED WITH THE FACE OF THE STREAMBANK
5. TOE WOOD SHALL BE EMBEDDED INTO THE BANK A MIN. OF 3 FEET BEYOND BENCH WHERE PROPOSED.
6. TOE WOOD WITH A BENCH SHALL HAVE PLANT PLUGS INSTALLED ON THE BENCH. TOE WOOD WITH NO BENCH WILL HAVE NO PLANT PLUGS INSTALLED.

TYPICAL LEDGE ROCK  
NO SCALE  
PAID FOR UNDER THE PAY ITEM  
"DS\_Instream Structure, Ledge Rock - Fft".

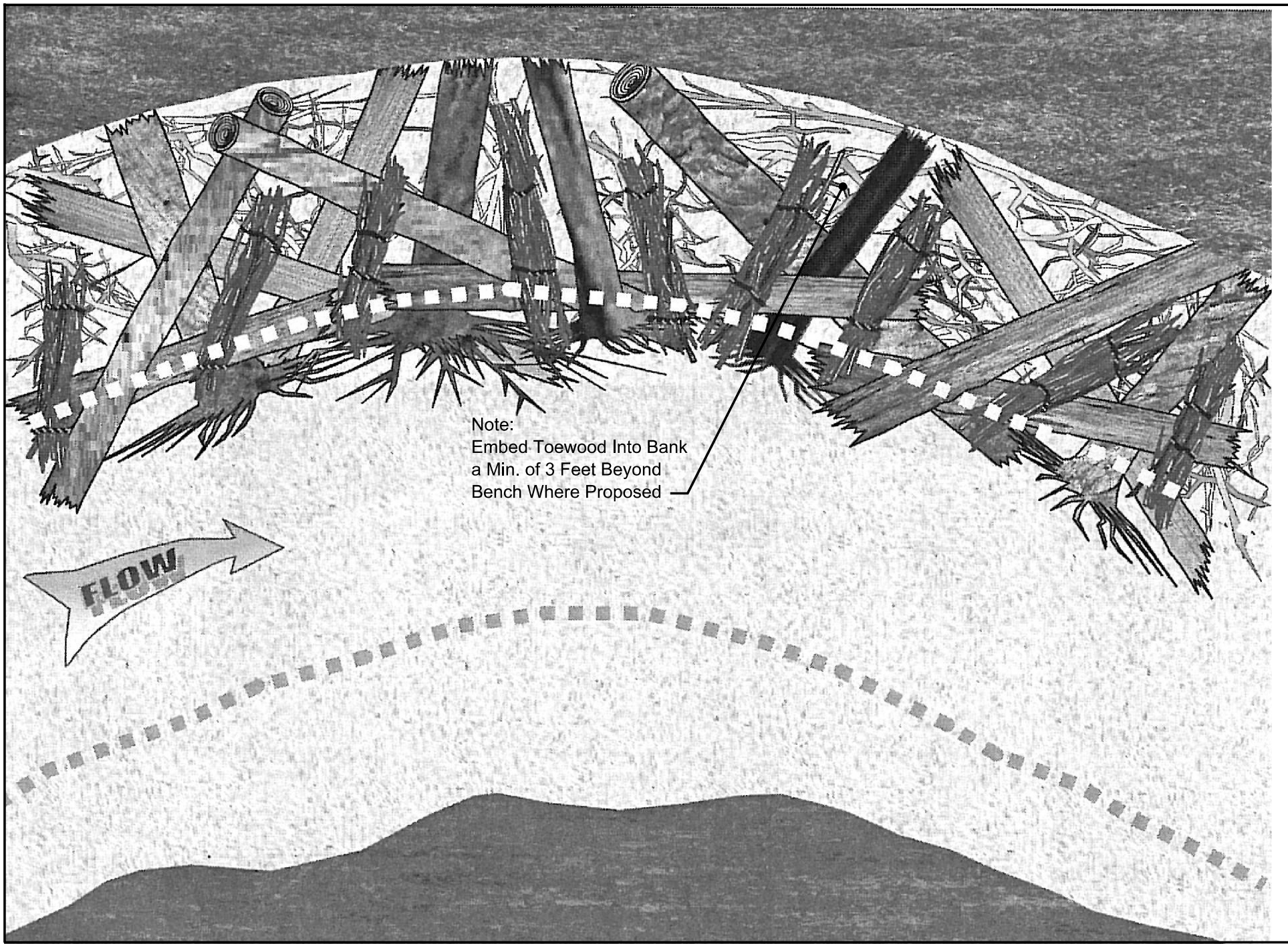
PAID FOR UNDER THE PAY ITEM  
"DS\_Instream Structure, Ledge Rock - Fft".

Know what's below.

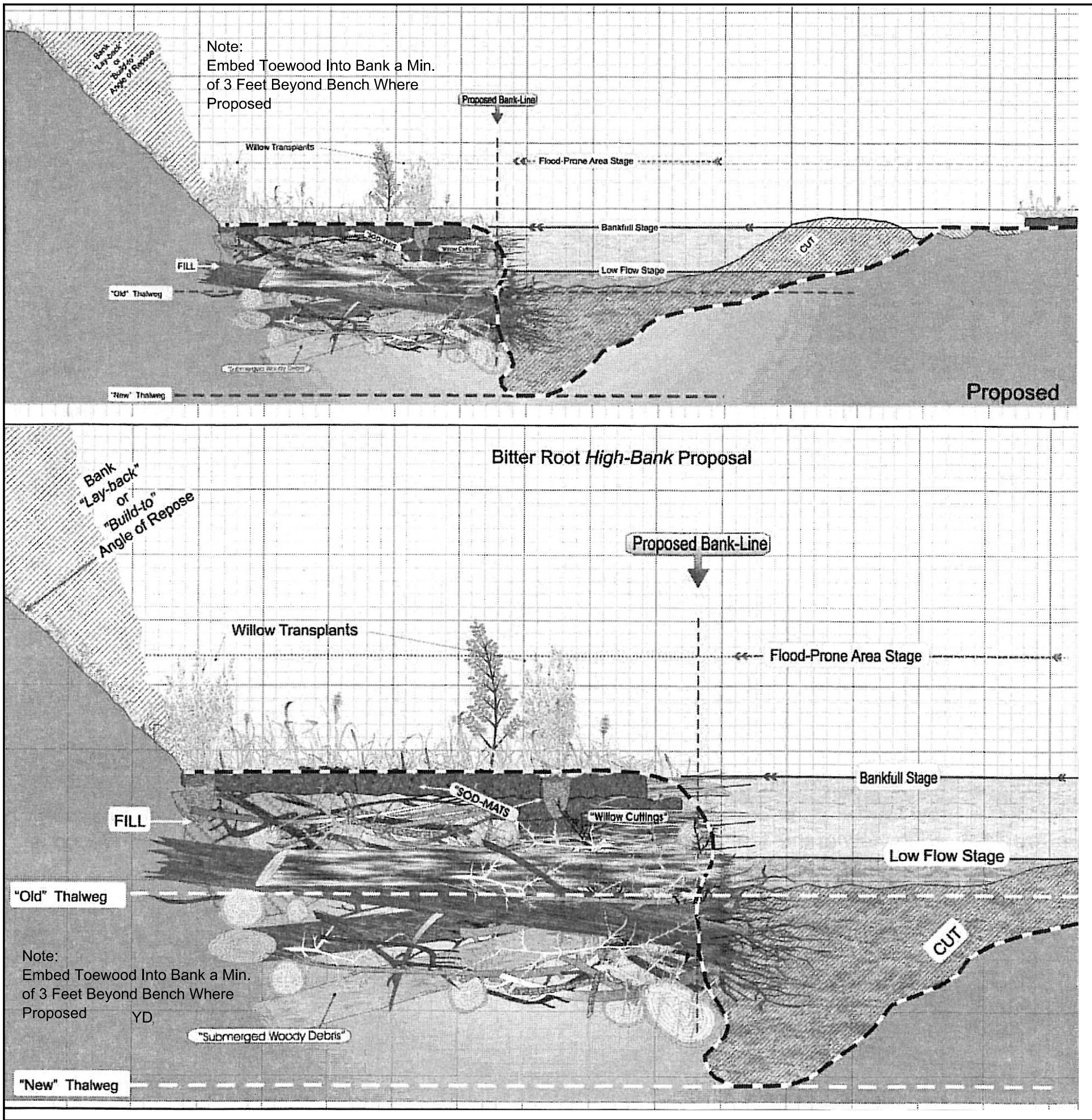
# PLAN VIEW

**CIT**  
SCALE  
1" = 5'  
DRAWING  
SHEET No.  
**07**





TOE WOOD PLAN  
NO SCALE



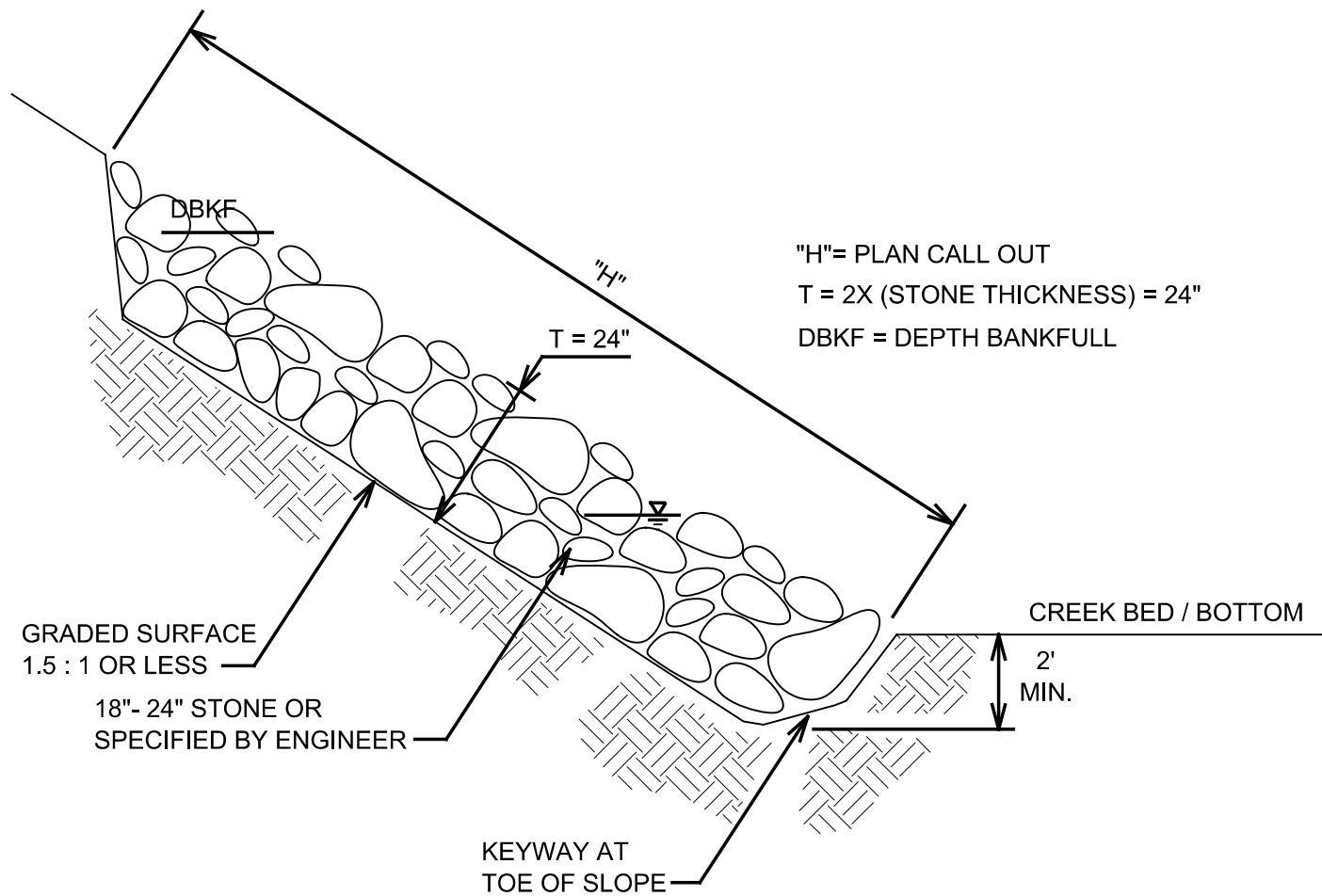
TOE WOOD SECTION  
NO SCALE

TOE WOOD GENERAL NOTES:

1. ALL WOODY MATERIAL REQUIRED TO CONSTRUCT THE TOE WOOD STRUCTURE SHALL BE TAKEN FROM EXISTING ON SITE MATERIALS THAT HAVE BEEN DESIGNATED FOR REMOVAL, i.e. TREES, LOGS, BRUSH, WOODY DEBRIS, ETC.
2. ADDITIONAL WOODY MATERIAL WILL NEED TO BE BROUGHT IN FROM OFFSITE TO CONSTRUCT THE TOE WOOD STRUCTURE.
3. ANY OUTSIDE MATERIALS MUST FIRST BE APPROVED BY THE OWNER AND / OR THE PROJECT ENGINEER.
4. EMBED THE TOE WOOD INTO THE BANK A MINIMUM OF 3 FEET BEYOND THE BENCH WHERE PROPOSED.
5. COARSE WOODY DEBRIS SHALL CONSIST OF LOGS, ROOTWADS AND LARGE BRANCHES.
6. TOE WOOD SHALL BE CONSTRUCTED WITH THE LARGEST MATERIAL PLACED FIRST WITH NO LOGS BEING PLACED PARALLEL TO THE FLOW OF THE RIVER. LOGS SHALL BE PLACED IN A CROSSING PATTERN SUCH THAT EACH LOG IS ANCHORED BY ANOTHER LOG.
7. SMALL/FINE WOODY DEBRIS SHALL CONSIST OF MEDIUM TO SMALL LIMBS, BRANCHES, BUSHES AND/OR LOGS.
8. SMALL/FINE WOODY DEBRIS SHALL BE PLACED ABOVE THE COARSE WOODY DEBRIS WITH THE LARGEST MATERIAL BEING PLACED FIRST AND THE SMALLEST MATERIAL PLACED LAST.
9. ALL WOODY DEBRIS SHALL BE COMPACTED WITH THE EXCAVATOR BUCKET IN ORDER TO REDUCE THE PRESENCE OF VOIDS IN THE SMALL/FINE WOODY DEBRIS LAYER.
10. AT THE UPSTREAM AND DOWNSTREAM LIMITS OF THE TOE WOOD STRUCTURE, TRANSITION THE WOODY DEBRIS BY BURYING THEM SECURELY INTO THE BANK.
11. THE SOIL BACKFILL AND TOPSOIL USED FOR LAYERING WITH THE LIVE BRANCHES SHALL BE FREE OF ANY LARGE ROOTS OR WOODY DEBRIS AND SHALL GENERALLY BE FREE FROM ANY GRAVEL OR COBBLE MATERIAL.
12. SOIL BACKFILL SHALL BE COMPACTED SUCH THAT FUTURE SETTLEMENT OF THE MATERIAL IS KEPT TO A MINIMUM, YET NOT SUCH THAT THE UNDERLAYING BRUSH IS NOT DISPLACED OR DAMAGED.
13. CONTINUE PLACING SOIL BACKFILL, LIVE BRANCHES AND SMALL/FINE WOODY DEBRIS AS NECESSARY UNTIL THE DESIRED HEIGHT IS REACHED.
14. SOD MATS MAY BE USED FOR THE FINAL LAYER OF THE TOE WOOD STRUCTURE.
15. ONCE THE TOE WOOD STRUCTURE IS IN PLACE TO THE DESIGNED BANKFULL ELEVATION, FILL AND GRADE FROM THE TOP FACE OF THE TOE WOOD STRUCTURE TO THE EXISTING GRADE AT THE PROPOSED SLOPE INDICATED ON THE CROSS SECTIONS.
16. INSTALL PLANT PLUGS AS DIRECTED ON TOP OF THE TOE WOOD STRUCTURE BENCH WHERE A BENCH IS PROPOSED.
17. INSTALL TURF REINFORCEMENT MAT AND NATIVE SEED MIX ALONG THE PROPOSED SLOPE.
18. INSTALL ADDITIONAL EROSION CONTROL BLANKET AS NEEDED ALONG THE TOP OF BANK.
19. RESTORE ALL DISTURBED AREAS WITH TOPSOIL AND LAWN SEED MIX.
20. TOE WOOD SHALL BE PAID FOR UNDER THE TWO PAY ITEMS:  
"DS\_Bank Stabilization, Toe Wood (Woody Material Furnished by Owner) - Lt"  
"DS\_Bank Stabilization, Toe Wood (Woody Material Furnished by Contractor) - Lt"
21. SEE PLAN AND PROFILE SHEETS FOR TOE WOOD QUANTITIES.

SEEDING AND STABILIZATION NOTES:

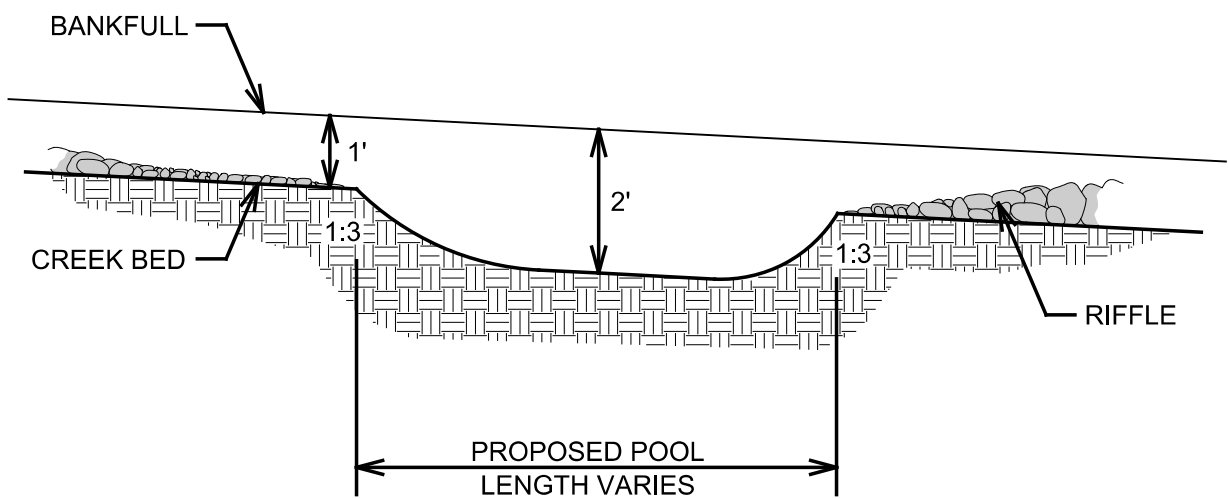
1. SEE "DETAILED SPECIFICATION FOR RESTORATION" FOR ALL SEED MIX LISTINGS, APPLICATION RATES AND METHODS OF STABILIZATION.
2. SEE "DETAILED SPECIFICATION FOR NATIVE PLANT PLUGS" FOR PLUG DESCRIPTION AND LISTINGS.



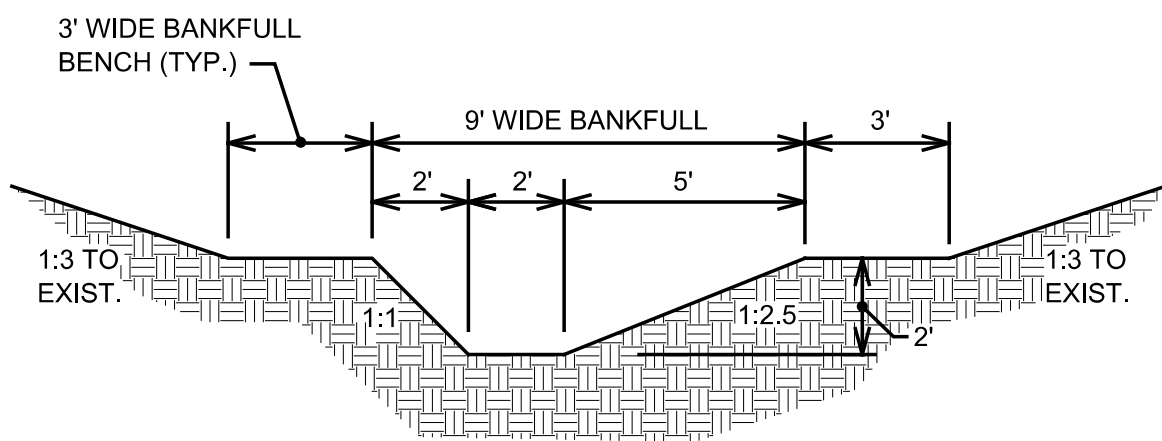
RIP RAP BANK STABILIZATION NOTES:

1. EXCAVATE A 2 FT. DEEP AND 1.5 FT. WIDE TRENCH ALONG THE TOE (BASE) OF THE CREEK BANK. INCLUDED IN UNIT PRICE. EXCESS MATERIAL TO BE USED ON SITE AS CALLED FOR OR DISPOSED OF OFF SITE.
2. PLACE A (MIN. 2 FT. HIGH, 2 - 2.5 FT. THICK) STONE REVETMENT ALONG THE BASE OF THE CREEK BANK.
3. USE 18" - 24" WASHED FIELD STONE FOR THE RIP RAP UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
4. FILL IN VOIDS WITH SMALLER STONES 4" - 12".
5. INSTALL TO HEIGHT CALLED FOR ON PLANS OR AS DIRECTED BY PROJECT ENGINEER. HEIGHT TO BE MEASURED ALONG SLOPE FROM CUT IN TRENCH.
6. PAID FOR UNDER THE PAY ITEM "DS\_Riprap, Plain - Cyd".

RIP RAP BANK STABILIZATION  
NOT TO SCALE



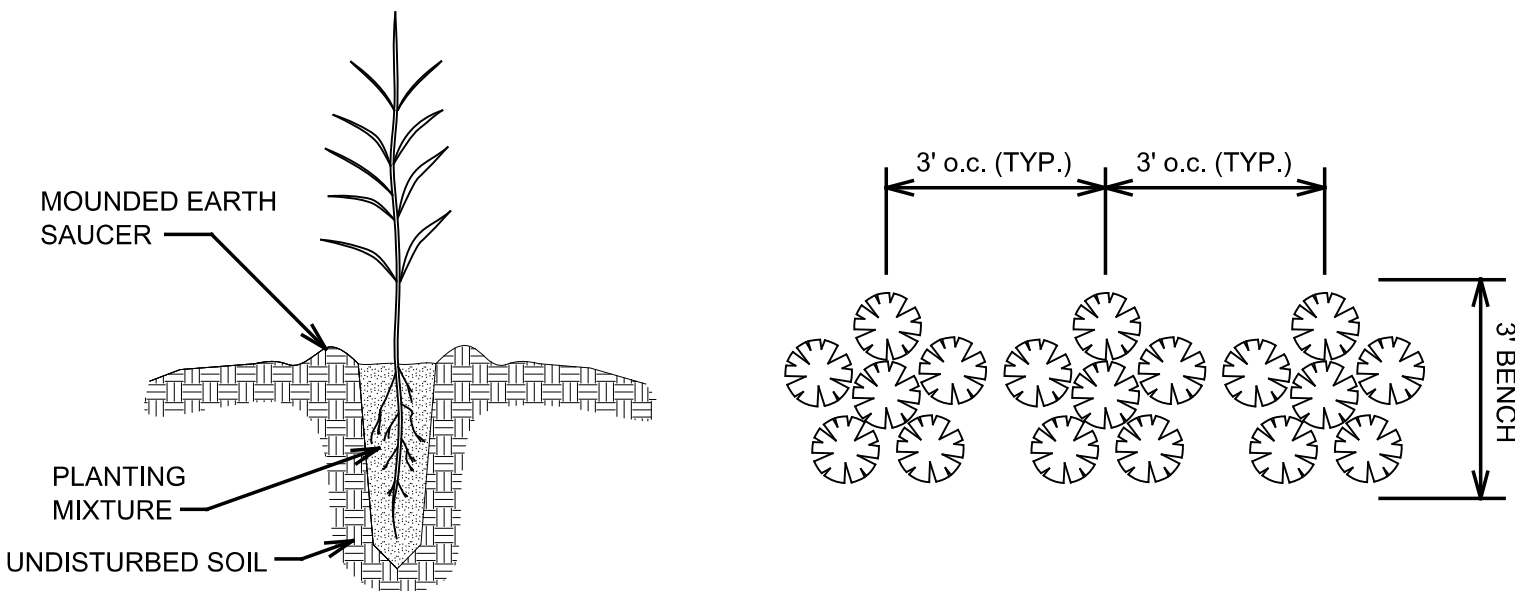
POOL PROFILE  
NO SCALE



POOL CROSS SECTION  
NO SCALE

NOTE:  
POOLS SHALL BE CONSTRUCTED AS INDICATED  
OR AS DIRECTED BY THE PROJECT ENGINEER.

POOL DETAILS  
NO SCALE



PLANT PLUG NOTES:

1. PLUGS TO BE PLANTED IN CLUSTERS 3 ft ON CENTER (o.c.) ALONG THE TOP OF ALL BANKFULL BENCHES INCLUDING TOE WOOD STRUCTURES THAT HAVE A BENCH.
2. NOT ALL TOE WOOD STRUCTURES WILL HAVE A BENCH FOR PLANTINGS.
3. PLANT PLUGS IN CLUSTERS OF 5 - 9 PLANTS OR AS DIRECTED BY THE PROJECT ENGINEER.
4. PLANT PLUG CLUSTERS SHALL CONSIST OF ONE SPECIES PER CLUSTER.
5. PAID FOR UNDER THE PAY ITEM "DS\_Native Plant Plugs - Ea".
6. SEE THE "DETAILED SPECIFICATION FOR NATIVE PLANT PLUGS" FOR PLUG LISTINGS.

PLANT PLUG  
NO SCALE

PLANT PLUG  
PLANTING PATTERN  
NO SCALE



Know what's below.  
Call before you dig.

ADDENDUM No.	J.A.R.	F.B.
01-06-2026	J.A.R.	F.B.
12-19-2025	J.A.R.	F.B.
12-17-2025	J.A.R.	F.B.
11-07-2025	J.A.R.	F.B.
05-16-2025	J.A.R.	F.B.

DATE	DRAWN	CHECKED

REV.	DESCRIPTION

ADDENDUM No.	J.A.R.	F.B.
01-06-2026	J.A.R.	F.B.
12-19-2025	J.A.R.	F.B.
12-17-2025	J.A.R.	F.B.
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05-16-2025	J.A.R.	F.B.

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11-07-2025	J.A.R.	F.B.
05-16-2025	J.A.R.	F.B.

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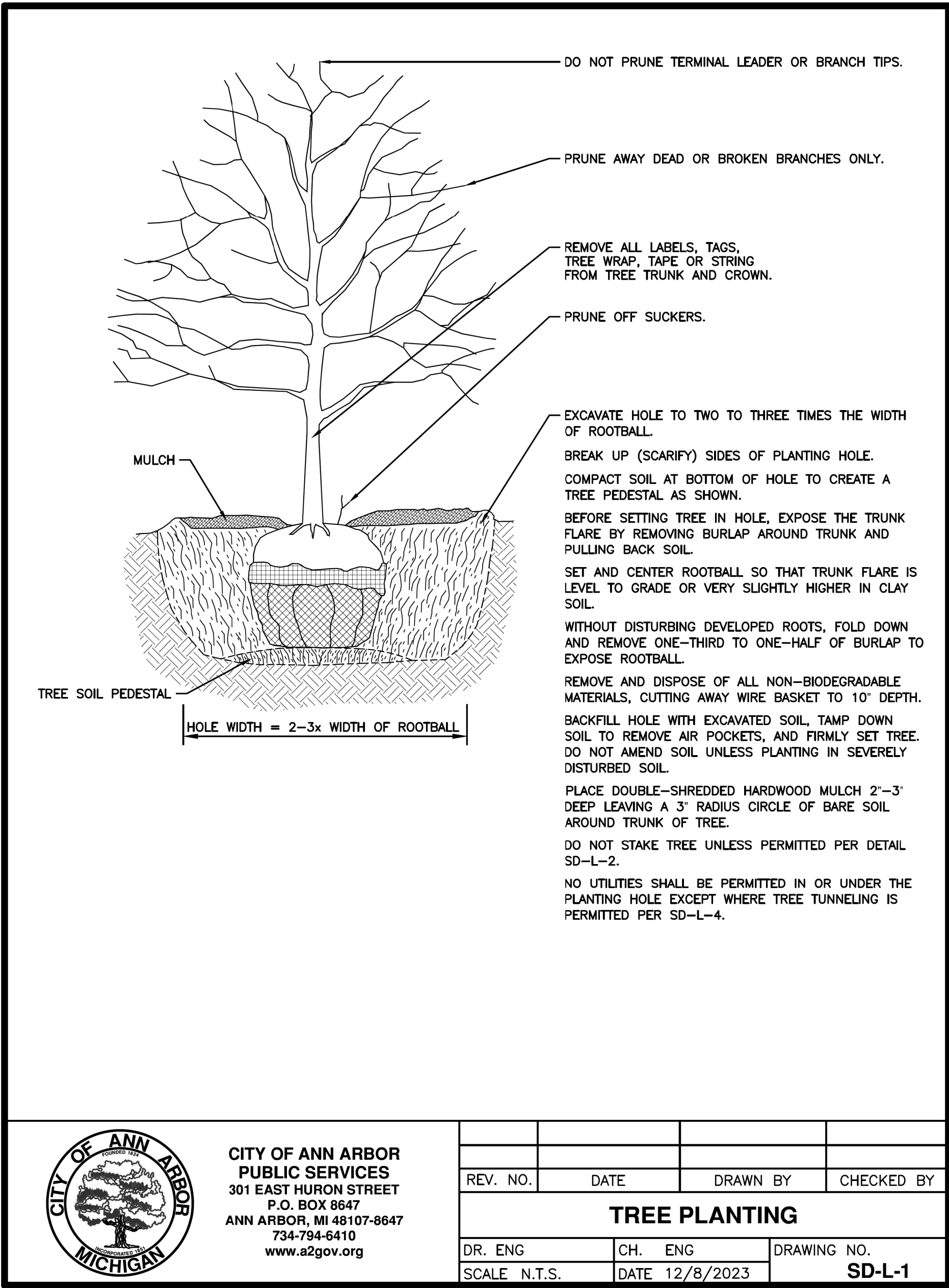
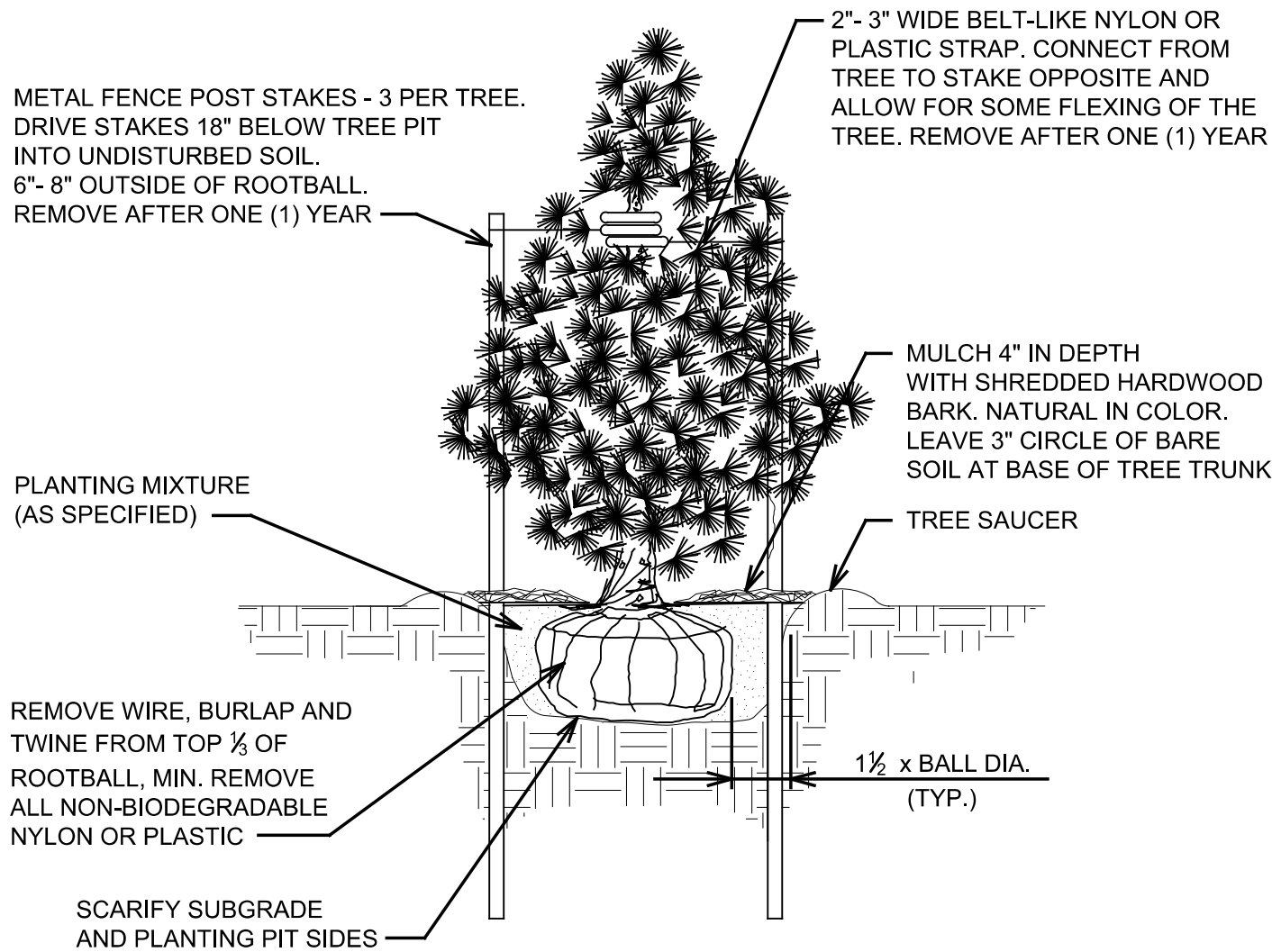
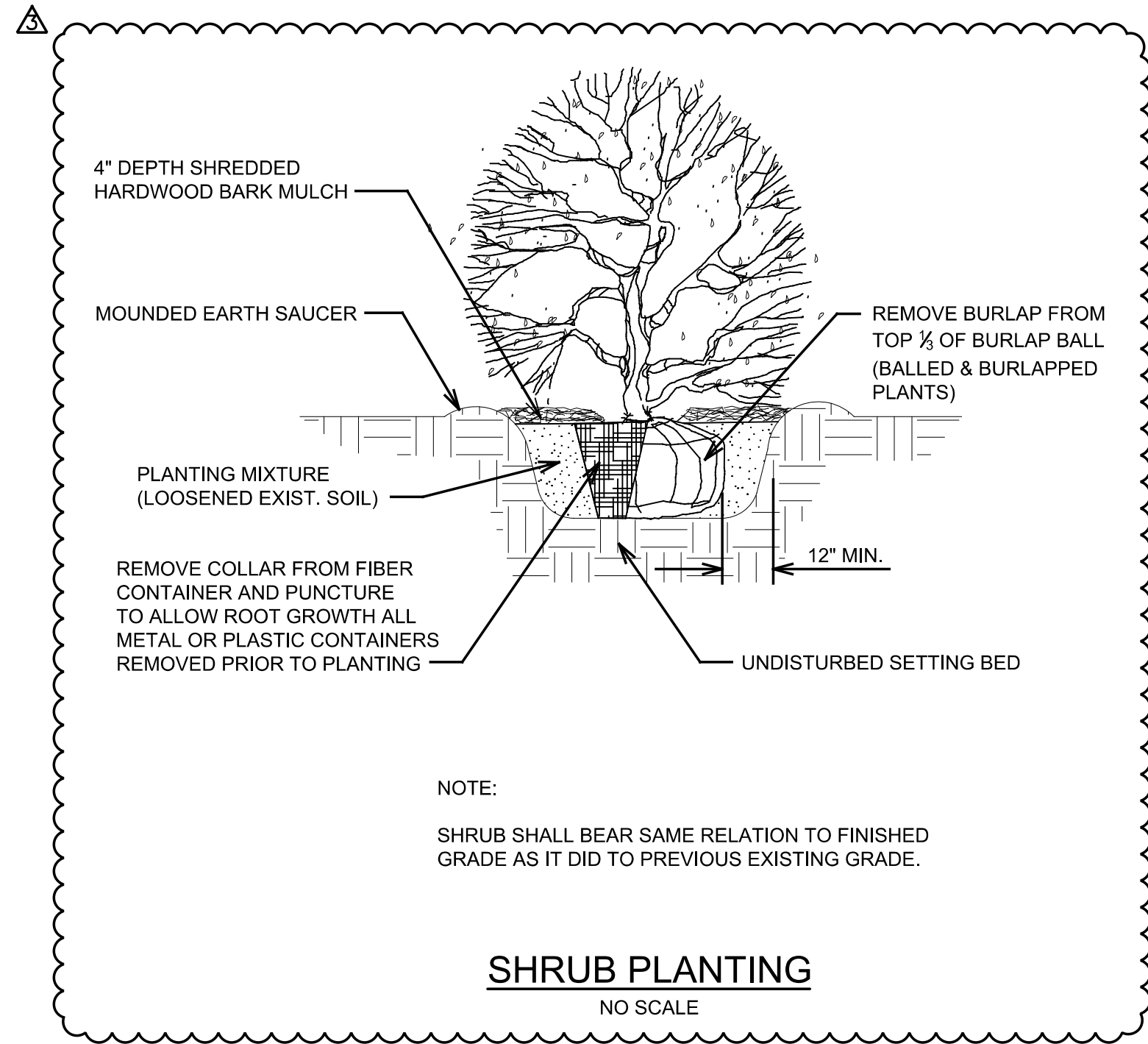
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12-17-2025	J.A.R.	F.B.
11-07-2025	J.A.R.	F.B.
05-16-2025	J.A.R.	F.B.





**Plant Schedule - Liberty Street Creek Restoration**

Park Trees				
Key	Qty	Botanical Name	Common Name	Spacing
	5	<i>Acer saccharum</i>	Sugar Maple	2-2 1/2" cal.
	6	<i>Amelanchier arborea</i> 'Trazam'	Downy Serviceberry 'Trazam'	15' o.c., groups of 2-3
	6	<i>Amelanchier laevis</i> 'Cumulus'	Allegheny Serviceberry 'Cumulus'	15' o.c., groups of 2-3
	6	<i>Amelanchier x gradiflora</i> 'Autumn Brilliance'	Autumn Brilliance Serviceberry	15' o.c., groups of 2-3
	6	<i>Amelanchier x gradiflora</i> 'Robin Hill'	Robin Hill Serviceberry	15' o.c., groups of 2-3
	5	<i>Ostrya virginiana</i>	Ironwood	2" cal.
	13	<i>Platanus x acerifolia</i>	London Plane Tree	30' o.c.
	5	<i>Liriodendron tulipifera</i>	Tulip Tree	2" cal.

Side Slope Restoration Trees				
Key	Qty	Botanical Name	Common Name	Spacing
	2	<i>Asimina triloba</i>	Paw Paw	20' o.c.
	2	<i>Betula alleghaniensis</i>	Yellow Birch	20' o.c.
	2	<i>Betula nigra</i>	River Birch	20' o.c.
	2	<i>Carpinus caroliniana</i>	Musclewood	20' o.c.
	2	<i>Carya ovata</i>	Shagbark Hickory	20' o.c.
	2	<i>Celtis occidentalis</i>	Hackberry	20' o.c.
	2	<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	20' o.c.
	2	<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	20' o.c.
	2	<i>Platanus occidentalis</i>	American Sycamore	20' o.c.
	2	<i>Quercus bicolor</i>	Swamp White Oak	20' o.c.
	2	<i>Staphylea trifolia</i>	American Bladdernut	20' o.c.
	2	<i>Tilia americana</i>	Basswood	20' o.c.

Upland Restoration Trees				
Key	Qty	Botanical Name	Common Name	Spacing
	1	<i>Carpinus caroliniana</i>	Musclewood	20' o.c.
	2	<i>Cercis canadensis</i>	Red Bud	6-7' multistem
	1	<i>Celtis occidentalis</i>	Hackberry	20' o.c.
	2	<i>Cornus florida</i>	Flowering Dogwood	20' o.c.
	1	<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	20' o.c.
	2	<i>Ostrya virginiana</i>	Ironwood	20' o.c.
	2	<i>Quercus alba</i>	White Oak	20' o.c.
	2	<i>Quercus macrocarpa</i>	Bur Oak	20' o.c.
	2	<i>Quercus rubra</i>	Red Oak	20' o.c.

Bankfull Bench Restoration Shrubs				
Key	Qty	Botanical Name	Common Name	Spacing
	9	<i>Aesculus parviflora</i>	Bottlebrush Buckeye	10' o.c., groups of 3
	9	<i>Cephalanthus occidentalis</i>	Buttonbush	10' o.c., groups of 3
	12	<i>Cornus sericea</i>	Red Dogwood	5' o.c., groups of 3
	12	<i>Lindera benzoin</i>	Spicebush	5' o.c., groups of 3
	9	<i>Physocarpus opulifolius</i>	Ninebark	10' o.c., groups of 3
	12	<i>Sambucus canadensis</i>	Elderberry	5' o.c., groups of 3

Side Slope Restoration Shrubs				
Key	Qty	Botanical Name	Common Name	Spacing
	42	<i>Cornus sericea</i>	Red Dogwood	5' o.c., groups of 3
	42	<i>Physocarpus opulifolius</i>	Ninebark	10' o.c., groups of 3
	42	<i>Rubus odoratus</i>	Purple Flowering Raspberry	5' o.c., groups of 3
	42	<i>Sambucus canadensis</i>	Elderberry	5' o.c., groups of 3

Upland Restoration Shrubs				
Key	Qty	Botanical Name	Common Name	Spacing
	15	<i>Cornus foemina</i>	Gray Dogwood	5' o.c., groups of 3
	15	<i>Corylus americana</i>	American Filbert	5' o.c., groups of 3
	15	<i>Hamamelis virginiana</i>	Witch-hazel	10' o.c., groups of 3
	15	<i>Viburnum prunifolium</i>	Black-haw Viburnum	10' o.c., groups of 3



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01-06-2026	J.A.R.	F.B.
12-19-2025	J.A.R.	F.B.
12-17-2025	J.A.R.	F.B.
11-07-2025	J.A.R.	F.B.
05-16-2025	J.A.R.	F.B.

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