

**From:** [JBraico@aol.com](mailto:JBraico@aol.com)

**Date:** March 8, 2008 6:59:35 PM EST

**To:** [sblewis@bellatlantic.net](mailto:sblewis@bellatlantic.net)

**Subject: Re: Thanks...**

Sandy, While I couldn't agree more that the ACOE has followed a bad paradigm for over 100 years, they had their first wakeup call with the Mississippi floods of the early 90's. Yes, getting out of the flood plain, reconnecting the stream to its flood plain & restoring an adequate riparian buffer is absolutely critical.

The Rivermede geomorphic restoration project was conceived & developed by Clearwater Consulting (Rocky Powell) at the request of Trout Unlimited following an onsite meeting of the initiating principal players in 1998 where the ACOE disallowed all work except a full geomorphic restoration. The geomorphic components are drawn directly from the seminal works of the late Luna Leopold (Alda's son) & David Rosgen (Wildland Hydrology). The plan is for full geomorphic/ecosystem restoration: river, banks, fish, invertebrates, and a 100' multistory treed riparian buffer along both banks. In 2005, the ACOE became very interested in being directly involved in a high quality "green" river project -- hence their willingness to become the managing partner and provide a 65/35 cost share.

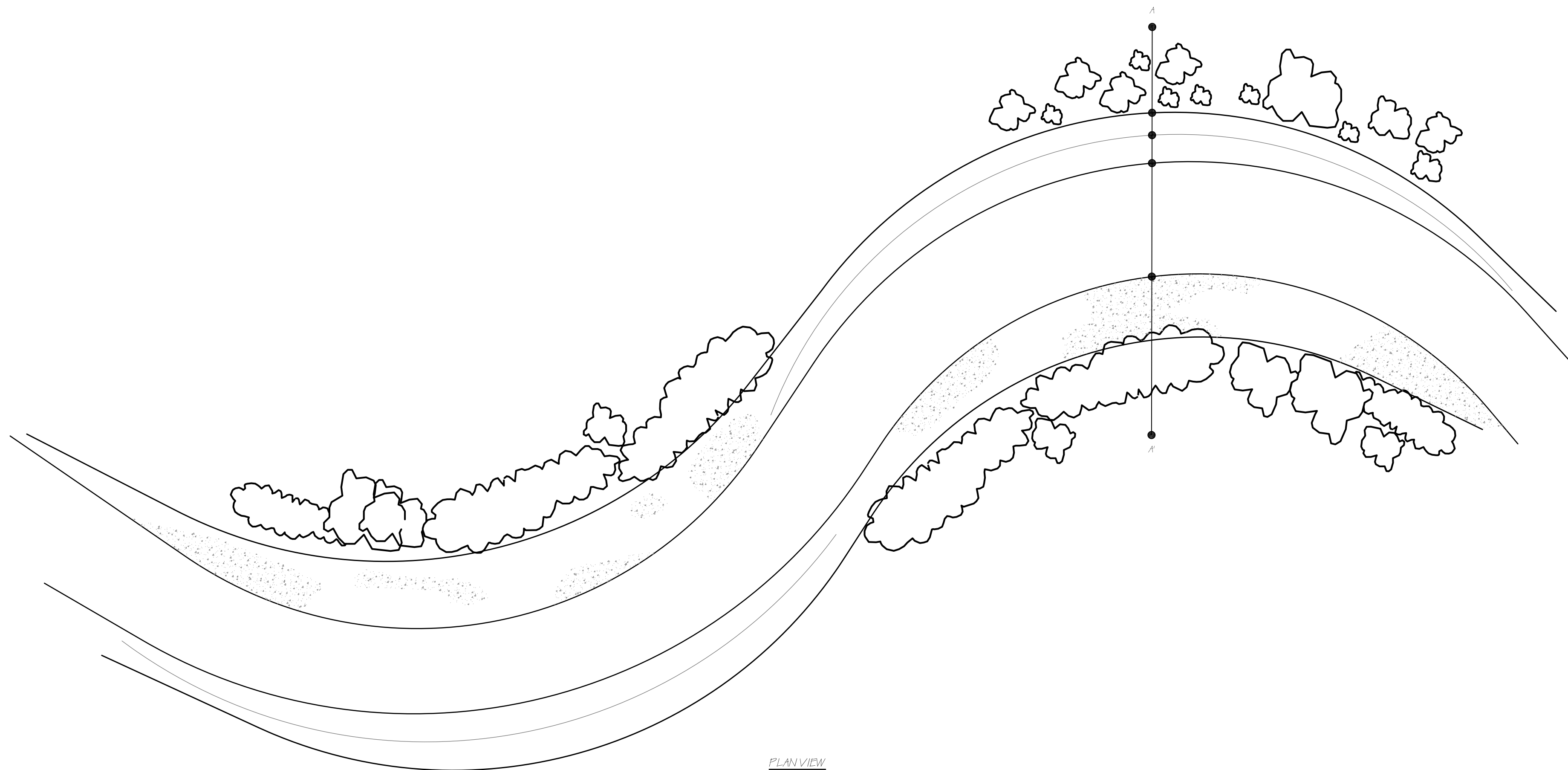
From TU's perspective, this project will be a showcase of large scale high quality geomorphic restoration in a very visible/ accessible location. It will provide recreational use for anglers, kayakers, & passive recreation; demonstrate the potentials of both the Ausable & of geomorphic work, and hopefully shift people away from destructive past practices done to "control" natural processes. In NYS over the past 12 years, projects of this nature have become increasingly recognized as valuable in reversing longstanding degradation of our streams caused by inappropriate land use & infrastructure. True, at \$1.03 million, or \$390/lineal foot, Rivermede is not an inexpensive repair; however, it could have been done in 2002 at 2/3 of this cost without the ACOE, but for our funding shortfall. It does promise to provide a self maintaining 1/2 mile of river in natural balance with the adjacent landscape.

As I indicated, the \$50,000 donation you provided directly to the Adirondack Chapter of TU for this project was and is an important part of our funding. It was held in reserve until required to enable the project to proceed. Around 2003 we spent \$2500 for a preliminary archaeological survey required by NYS. Fortunately we did not have to proceed with a full scale study, allowing us to apply the balance of the funds to new topographic, aerial surveys, design update, hydraulic and hydrologic modeling and engineering review required by our new partner the ACOE. These funds have been paid out by the Adirondack Chapter of TU during 2006-8, essentially consuming the balance. While this project had a targeted start date of 7/1/08, delays in completing the updates & the ACOE signing the formal PCA appear to have moved us past the window for sending it out to bid for '08. A conference call this month will clarify its status and update the timeline. Sandy, I honestly believe that in the end, you will be pleased to have been a very important contributor to such a major effort and Trout Unlimited thanks you for your support.

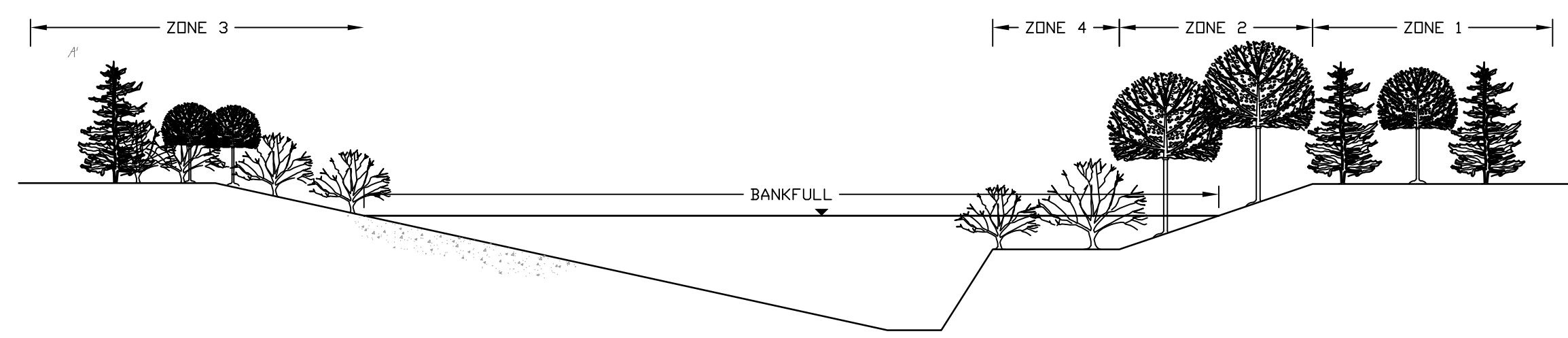
The attached item shows: existing, final & construction bypass channels (latter with arrows). The final channel is uniformly 90' wide at "bankfull elevation" & is recognizable by the presence of various structures: cross vanes, j hooks, root wads. The old & construction bypass channels will be filled to floodplain elevation, then incorporated in the riparian restoration. The lower end of the construction bypass channel will be reconstructed as a natural channel for a small stream entering on west (right) end of the project.

Sincerely yours,  
John Braico, MD  
Adirondack Chapter TU Board Member & Rivermede Project Coordinator  
NYS Council Trout Unlimited Resource Management VP

In a message dated 3/7/2008 9:02:38 P.M. Eastern Standard Time, [sblewis@bellatlantic.net](mailto:sblewis@bellatlantic.net) writes:  
John, thanks for your call. Turns out what I said to Anita back when is right. Millions, not \$50,000... Army Corps stuff destroys and their legacy is endless cost... will be interested to see what you have, Sandy



PLAN VIEW



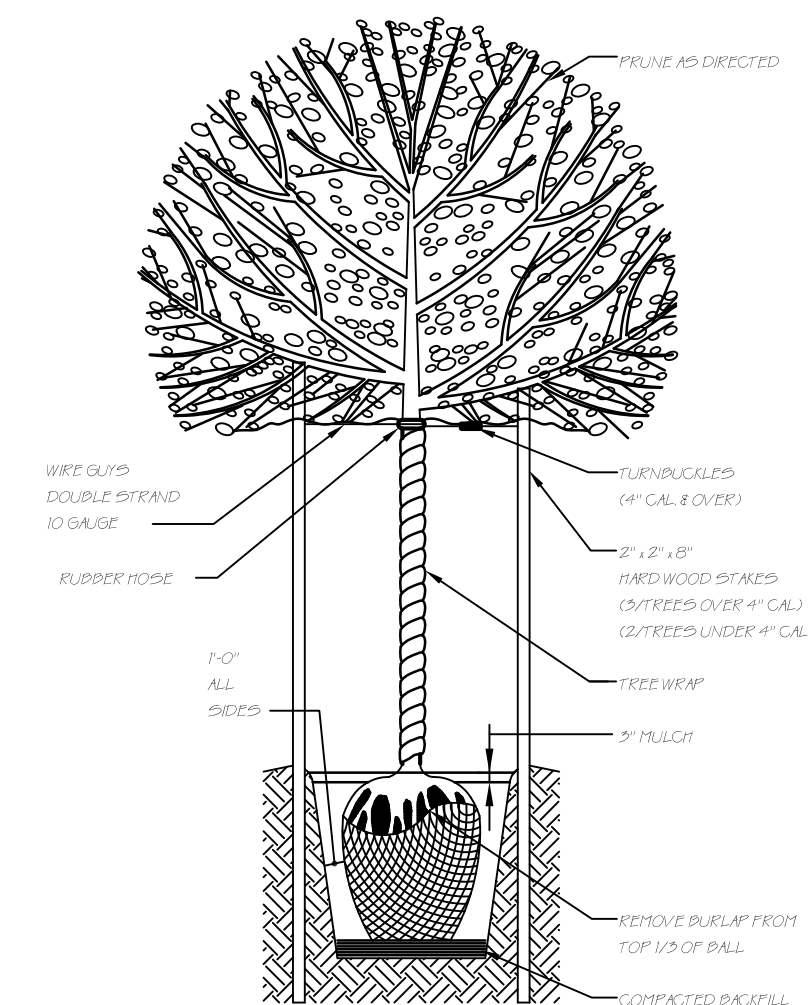
SECTION VIEW

NOTES:

SEE PLANT SCHEDULE FOR PLANT MATERIAL SPECIFIED FOR EACH ZONE.

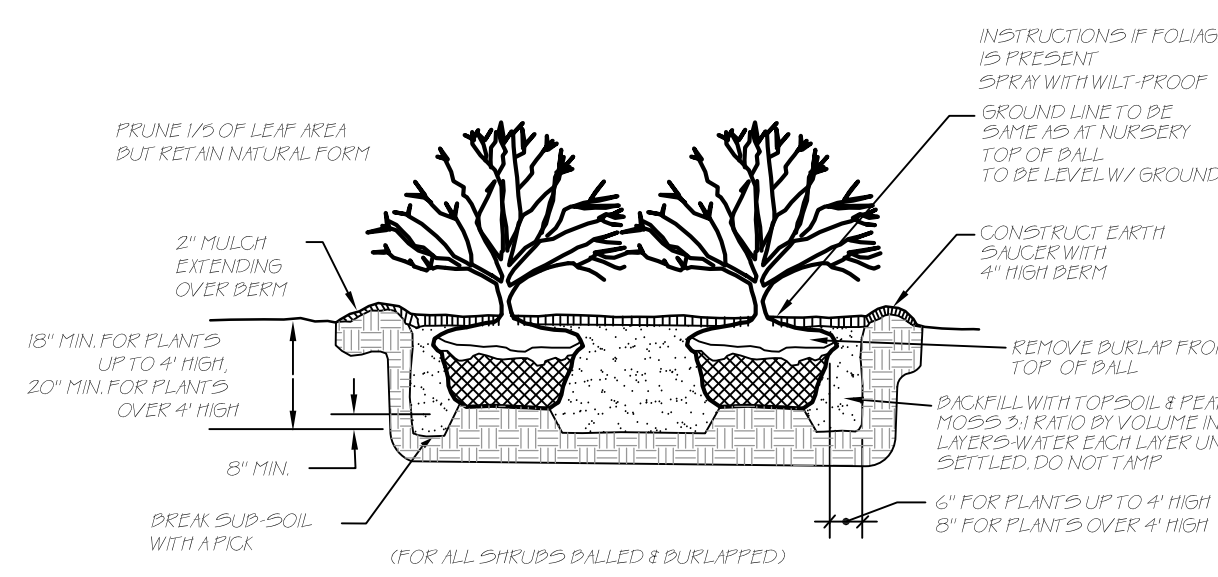
**TYPICAL PLANTING DETAIL**

N.T.S.



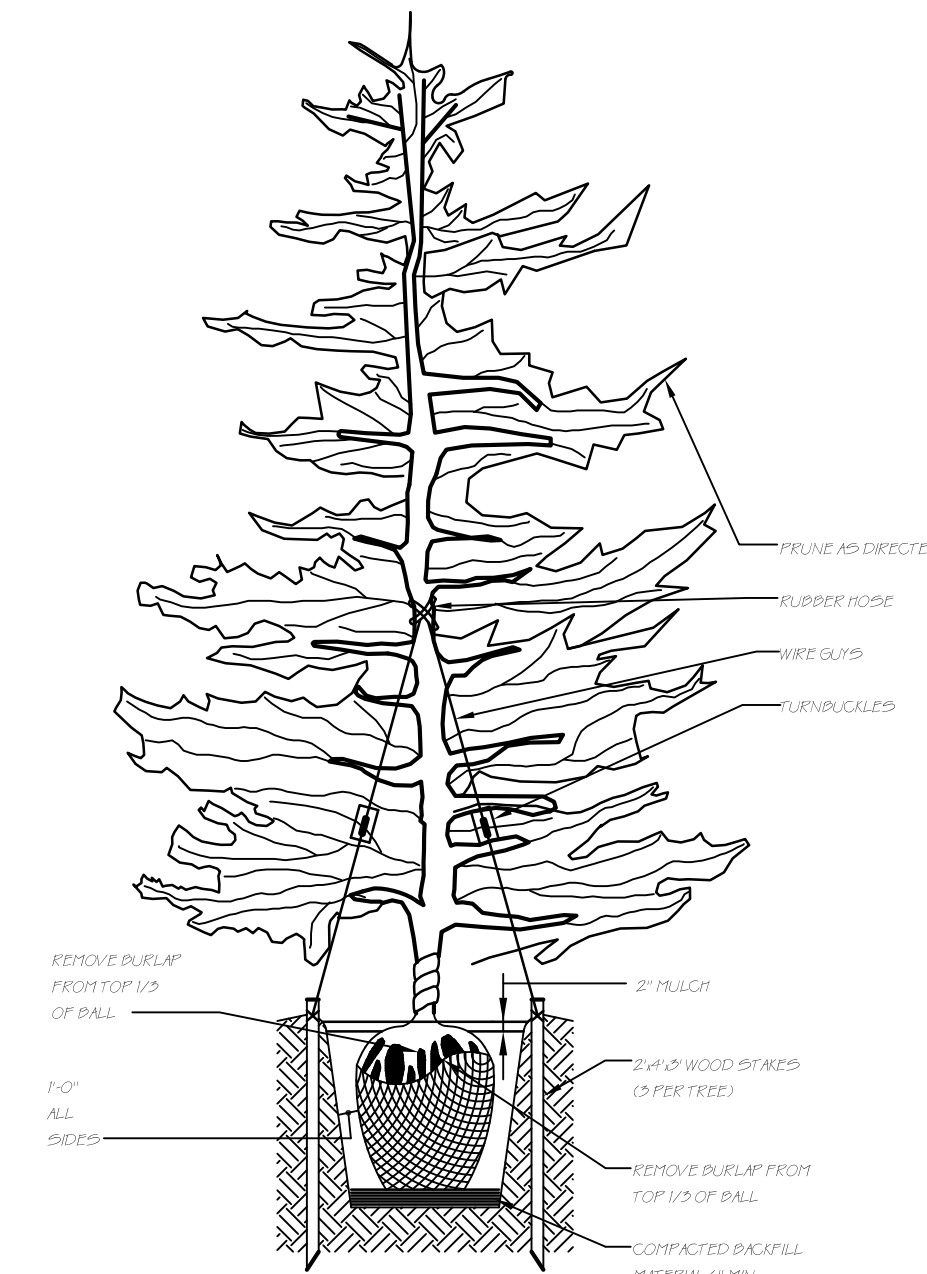
**TYPICAL DECIDUOUS TREE PLANTING DETAIL**

N.T.S.



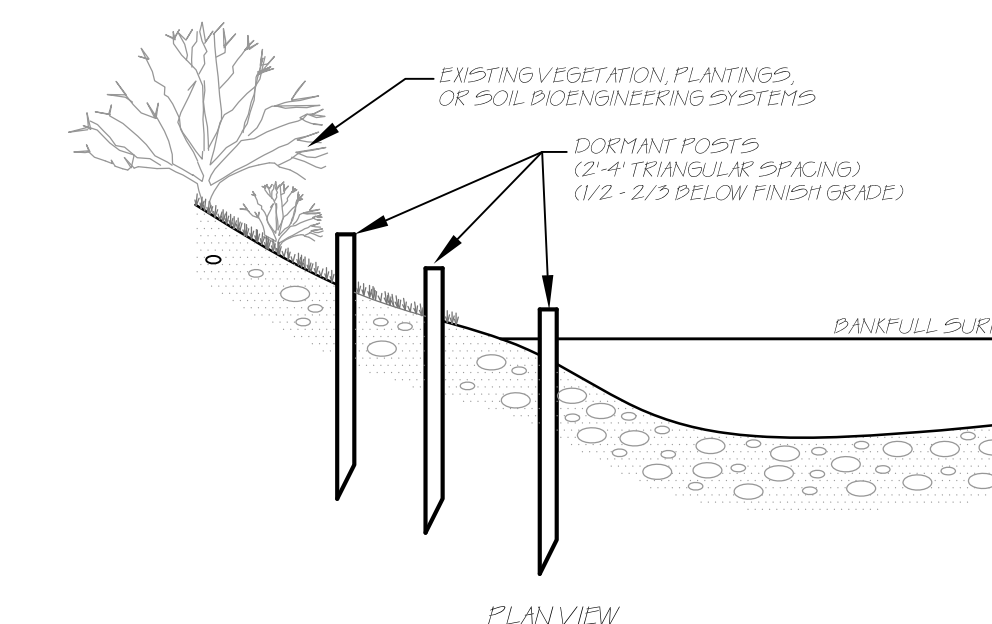
**TYPICAL SHRUB PLANTING DETAIL**

N.T.S.



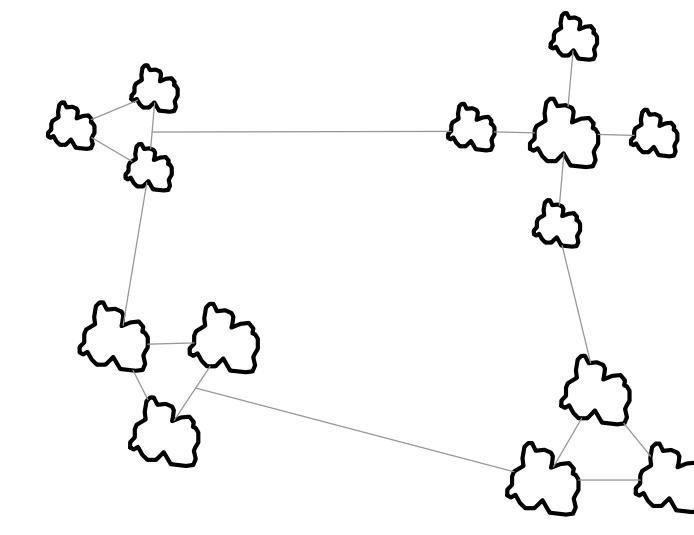
**TYPICAL EVERGREEN TREE PLANTING DETAIL**

N.T.S.



**LIVE STAKE/POST DETAIL**

N.T.S.



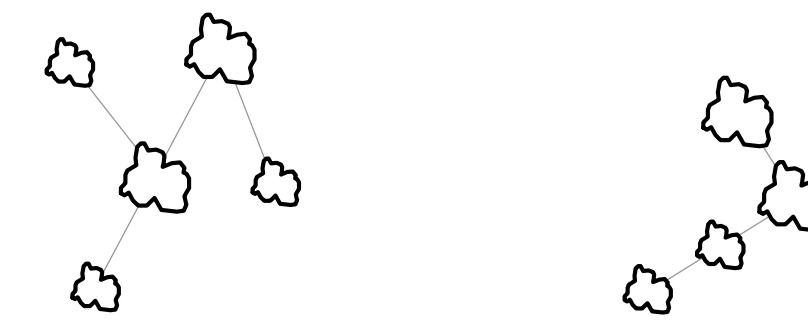
PLAN VIEW

NOTES:

MINIMUM DISTANCE FOR: CLUSTERS - 9'-10'

**PLANTING CLUSTER DETAIL**

N.T.S.



PLAN VIEW

NOTES:

MINIMUM DISTANCE FOR: TREES - 10'-20'

**PLANTING RANDOM SPACE DETAIL**

N.T.S.

**PLANTING PLAN**

**EAST BRANCH AUSABLE RIVER**

**ZONE 1 - RIPARIAN AREAS PLANT SCHEDULE**

NRCS AND TROUT UNLIMITED WILL INSTALL LIVE MATERIAL OBTAINED FROM NURSERY STOCK ON THE STREAMBANKS AND ADJACENT RIPARIAN AREA AFTER CONSTRUCTION HAS BEEN COMPLETED. THE LIVE MATERIAL WILL INCLUDE:

QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
<b>TREES</b>				
50	Pinus strobus	WHITE PINE	18"-24"	BAKE ROOT
50	Pinus resinosa	RED PINE	10"-12"	BAKE ROOT
50	Pinus strobus	RED PINE	6"-8"	BAKE ROOT
50	Quercus rubens	NORTHERN RED OAK	6"-12"	BAKE ROOT
50	Acer saccharinum	SUGAR MAPLE	18"-24"	BAKE ROOT

<b>UNDERSTORY TREES/SHRUBS</b>				
50	Betula populifolia	SWAMP BIRCH	24"-30"	BAKE ROOT
50	Viburnum lentago	NANAN BERRY	12"-18"	BAKE ROOT
50	Viburnum acerifolium	MAPLELEAF VIBURNUM	18"-24"	BAKE ROOT
50	Acer pensilvanicum	SPICED MAPLE	18"-24"	BAKE ROOT
50	Prunus virginiana	CHOCHEBERRY	12"-18"	BAKE ROOT

**ZONE 2 - STREAMBANK PLANT SCHEDULE**

QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
<b>TREES</b>				
24	Acer rubrum	RED MAPLE	3'-4'	CONTAINER
24	Acer saccharinum	SUGAR MAPLE	2'-3'	CONTAINER
24	Prunus nigra	BLACK CHERRY	18"-24"	CONTAINER
24	Betula papyrifera	PAPER BIRCH	18"-24"	CONTAINER

<b>UNDERSTORY TREES/SHRUBS</b>				
24	Sambucus canadensis	ELDERBERRY	18"-24"	CONTAINER
24	Cornus sericea	RED OSIER DOGWOOD	18"-24"	CONTAINER
24	Viburnum lentago	NANAN BERRY	18"-24"	CONTAINER

**ZONE 3 - UPPER POINT BAR/LOWER FLOODPRONE AREA PLANT SCHEDULE**

QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
<b>TREES</b>				
48	Acer rubrum	RED MAPLE	3'-4'	CONTAINER
48	Alnus incana	SPECIATED ALDER	2'-3'	CONTAINER
48	Salix nigra	WATERWILLOW	18"-24"	CONTAINER
48	Salix discolor	FLUSH WILLOW	18"-24"	CONTAINER
48	Salix lucida	SHANNINGWILLOW	18"-24"	CONTAINER

**ZONE 4 - TOE BENCH PLANT SCHEDULE**

TRANSPLANTED TREES/SHRUBS

THE CONTRACTOR WILL HARVEST AND TRANSPLANT LIVE MATERIAL FROM A DONOR AREA ON SITE AND FROM VISITED GRAVEL BAR/TOE BENCH WILL BE EFFECTED BY THE CONSTRUCTION OF THE NEW CHANNEL. THE TREE AND SHRUB SPECIES TO BE TRANSPLANTED INCLUDE:

Salix spp.	WILLOW
Salix nigra	SPECIATED ALDER
Cornus sericea	RED OSIER DOGWOOD
Cornus spicata	SWEET GUM
Viburnum lentago	NANAN BERRY
Viburnum acerifolium	MAPLELEAF VIBURNUM
Acer rubrum	RED MAPLE
Viburnum cassinoides	WILD RASPBERRY
Spiraea tomentosa	SPirea

THE DETAIL COVERING THE HARVESTING AND TRANSPLANTING OF LIVE MATERIAL IN THIS PLANTING ZONE IS DESCRIBED IN THE SPECIAL PROVISIONS COVERING THESE ITEMS.

**LIVE STAKES/POSTS**

NRCS AND TROUT UNLIMITED WILL INSTALL ADDITIONAL LIVE MATERIAL ON THIS LOWER FEATURE AND THE STREAMBANKS AFTER CONSTRUCTION HAS BEEN COMPLETED. THE LIVE MATERIAL WILL INCLUDE:

Salix nigra	BLACK WILLOW
Salix purpurea	PURPLE OSIER (SPRING) WILLOW

**ZONE 14 - GROUND COVER**

THE CONTRACTOR WILL APPLY PERMANENT STABILIZATION BY APPLYING A SEED MIXTURE OF NATIVE OR NATURALIZED GRASSES AND LEGRUMES. THE SEED MIXTURE AND APPLICATION RATES OF NATIVE OR NATURALIZED GRASSES AND LEGRUMES THAT WILL BE USED FOR PERMANENT STABILIZATION IN EACH PLANTING ZONE IS DESCRIBED IN THE SPECIAL PROVISIONS COVERING THESE ITEMS.

**RESTORATION OF  
EAST BRANCH AUSABLE RIVER  
AT RIVERMEADE FARM**

KEENE VALLEY, NEW YORK

**PLANTING PLAN**

SHEET 14 OF 14

**CLEAR CREEKS CONSULTING**  
1317 Knapp Road, Jarrsville, Maryland 21084  
(410) 692-2164

**Integrated River Solutions, Inc.**  
9 RIVER ROAD, ULSTER PARK, NY 12487  
(845) 389-2751  
RIVERSOLUTIONS@AOL.COM

FINAL DRAFT  
FOR REVIEW ONLY

REV. NO.	DESCRIPTION	DATE	REVISION BY
1	GENERAL REVISIONS	09/08/07	CLEAR CREEKS CONSULTING LLC - R. POWELL
2	TOPOGRAPHIC SURVEY UPDATED	11/05/07	INTEGRATED RIVER SOLUTIONS, INC - D. DEKOSKIE
3	GENERAL REVISIONS	12/16/07	INTEGRATED RIVER SOLUTIONS, INC - D. DEKOSKIE
4	GENERAL REVISIONS	2/04/08	INTEGRATED RIVER SOLUTIONS, INC - D. DEKOSKIE

