

Phase 1: Stone Toe Construction

Legend	
	Surveyed edge of water
	Existing contour
	Site access
	Phase 1 construction
	Phase 2 construction
	Silt fence
	Turbidity curtain
	Staging and stockpile area

Notes:

1. Total Station survey of shore and top of bank completed by Matrix Solutions Inc. on November 3, 5, 2015.
2. Bathymetric survey completed by Matrix Solutions Inc. on November 3, 4, 5, 2015.
3. Elevations displayed on figure are based on meters above sea level +100m.

Construction Phasing

General Notes:

1. The following erosion control and construction phasing methods are recommended based on the designer's knowledge of the site and of natural channel construction process and techniques. The contractor may wish or need to alter the methods based on site conditions identified at the time of construction. Alternative methods must be submitted in writing and approved by the geomorphologist prior to commencement of construction.

Phase 1- Stone Toe Bank Construction:

Work Includes:

1. Site access to be obtained from Back road and from existing road on the property.
2. Protection of existing vegetation to the extent possible within grading limits and within 30 meters of the channel.
3. Installation of temporary access roads as shown on the drawings or at alternative locations selected by the contractor.
4. Establishment of staging/stockpiling areas as shown on the drawings or at alternative locations selected by the contractor.
5. Installation of silt fence at all locations proposed in the drawing (i.e. around the staging area).
6. remove trees and shrubs and stockpile for bank work if necessary.
7. A site access road is to be constructed as shown down the existing bank down to the edge of water at the furthest upstream extent of the bank protection.
8. Turbidity curtain A is to be installed along bank in the channel as shown.
9. Once access to the bank has been established, stone is to be trucked in and placed in the channel as shown in the design. Stone is to be placed in the channel working from the access point in the center of the site to downstream as show while utilizing the stone as a road for trucking in new material. Upon completion of the downstream half of the site, construction of the stone bank is then to be completed from the center of the site to the upstream extent of the proposed work as shown.
10. The turbidity curtain is to be moved downstream as work progresses, in 4 phases as shown in the plan (A, B, C, D). No stone is to be placed in the channel unless the turbidity curtain is secure and protecting silt laden water from entering the main channel.
11. Turbidity curtain (s) are to be removed upon completion of in channel work.
12. Upon completion of the stone portion of the design, equipment may exit the bank area through the site access road.

Phase 2 - Coir Lift Bank Treatment Construction

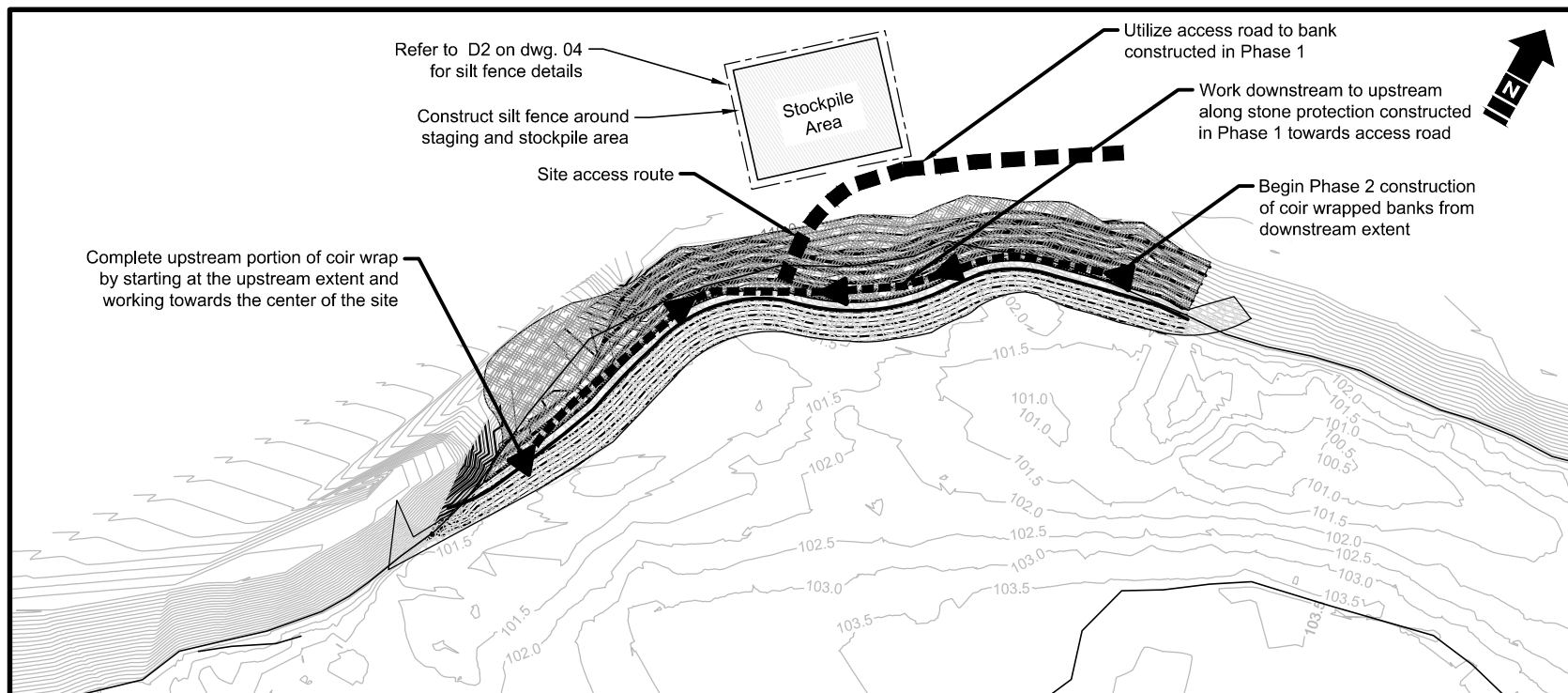
Work includes:

1. When appropriate site preparations and erosion and sediment control measures have been established, construction of bank treatments may commence.
2. Access the site through the existing site road down to the bank constructed in Phase 1.
3. Fill material is to be trucked in over the existing road on the stone bank and placed starting at the downstream extent of the project. Coir is to be placed as shown in drawings 01-04 and wrapped over and staked with fill material. Coir bank construction is to work towards the upstream to the center of the site, then from the furthest upstream extent of the work towards the center of the site. All final grading is to occur while working towards the site access route in the center of the channel.

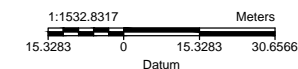
Phase 2A - Finishing

Work includes:

1. all access routes shall be reclaimed and seeded per the planting plan and the specifications.
2. all temporary stream crossings should be removed. all damage to vegetation or soils shall be repaired.
3. all erosion control measure to be removed after a period of time sufficient to allow the site to stabilize.



Phase 2: Coir Wrapped Bank Construction



REVISION					
No.	DATE	DESCRIPTION	BY	CHK.	DRN.
01	13 05 2016	Draft for client review	ESD	RJ	ESD

PARISH
 aquatic services

A Division of Matrix Solutions Inc.

Small Craft Harbours

Little Southwest Miramichi River
Bank Restoration Design

Erosion and Sediment Control and Construction Phasing

Date:	13 05 2016	Project:	22751	Technical:	E. Drost	Reviewer:	R. Jenkins	Drawn:	E. Drost
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