VERMONT

Vermont Department of Environmental Conservation *Agency of Natural Resources*
Watershed Management Division
St. Johnsbury Regional Office
1229 Portland Street, Suite 201
St. Johnsbury, VT 05819 [fax] 802-748-6687
www.watershedmanagement.vt.gov [cell] 802-279-1143

AUTHORIZATION TO CONDUCT STREAM ALTERATION ACTIVITIES

Pursuant to Section C.2.2 of the VT Stream Alteration General Permit (Reporting activities not requiring an application)

Project Number: **SA-3-116-2016**

Applicant Name: Ronald and Marilyn Corkins landowners; Trout Unlimited c/o Gary Ward – Project Sponsor

Mailing Address: 174 Clyde Street Newport Vermont 05855 Phone: 802.487.4672

Project Location: Clyde River adjacent 174 Clyde Street Email: rcorkins@comcast.net

The Secretary of the Vermont Agency of Natural Resources (VT ANR) has determined that:

1. This project authorizes - river work to enhance salmon fisheries habitat along the Clyde River in Newport.
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit - Section C.2.2.6.
3. The proposed activity will meet the terms and conditions of the General Permit provided:
   a) The project will be completed and approved as shown on the plan dated June 2016, prepared by Jim Richardson P.E., and approved by the Vermont Agency of Natural Resources.
   b) The project will not adversely affect the public safety by increasing flood hazards.
   c) The project will not significantly damage fish life or wildlife.
   d) The project will not significantly damage the rights of riparian owners.
   e) The project will not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.
   f) The project is conducted in a manner which minimizes or avoids any discharge of sediment or other pollutants to surface waters in violation of the VT Water Quality Standards.
   g) An on-site preconstruction meeting is required with the project engineer, the contractor and Patrick Ross prior to any project work.
   h) A final construction inspection is required for all culvert and bridge projects.
   i) In-stream working dates are from July 1st through October 1st; any in-stream work outside these dates will require authorization by the River Management Engineer.
   j) This authorization has been posted for the 3-day public comment period. This authorization constitutes final approval.
   k) **Additional Conditions for this project:** 1.) TU will do a project public notice prior to the restoration work. 2.) To the extent possible all project work will be done during the weekdays. 3.) The temporary access to the river will be delineated and any staging necessary will take place upland in a designated area. 4.) All restoration work will take place entirely within the river corridor.

If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

Alyssa B. Schuren, ANR DEC Commissioner

Patrick Ross

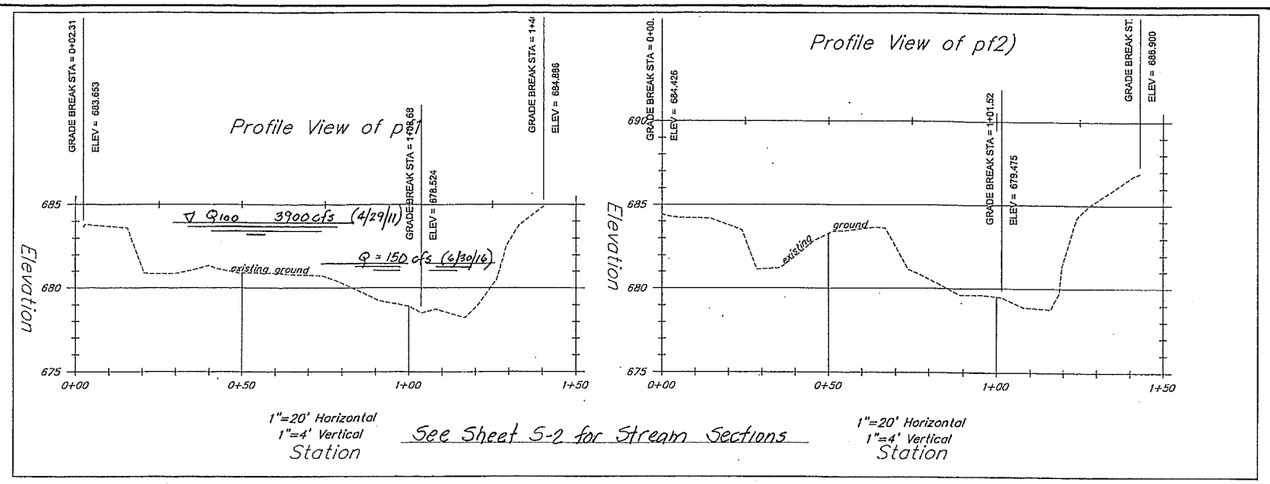
Dated: 7-19-2016

Patrick Ross, P.E., River Management Engineer

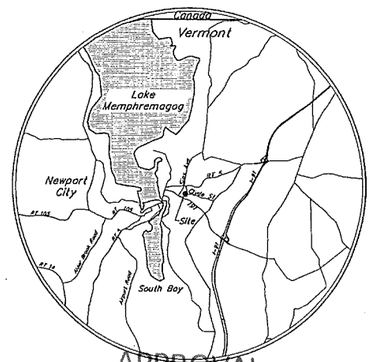
PROJECT PURPOSE AND SCOPE

The purpose for this project is to partially restore a short reach of the Clyde River that was severely impacted by the breach of the Citizens Utilities dam in April 1994. About 10 feet of bank was eroded away on both sides of the stream. The stream was widened by about 20' in this area and considerable deposition of sand and gravel occurred. Stone fill was immediately placed on the northerly bank and has stabilized well. No disturbance of this work is recommended or intended.

The scope of the project is to create a gravel bar, reinforced by stone fill ribs, by excavating the channel in a 120 foot long area and using this excavation to construct a reinforced gravel bar. This bar should help to effectively reduce the stream width back to somewhere near the pre-1994 conditions. It is hoped that this channel restoration will create holding water for adult salmon returning to the Clyde.



See Sheet S-2 for Stream Sections

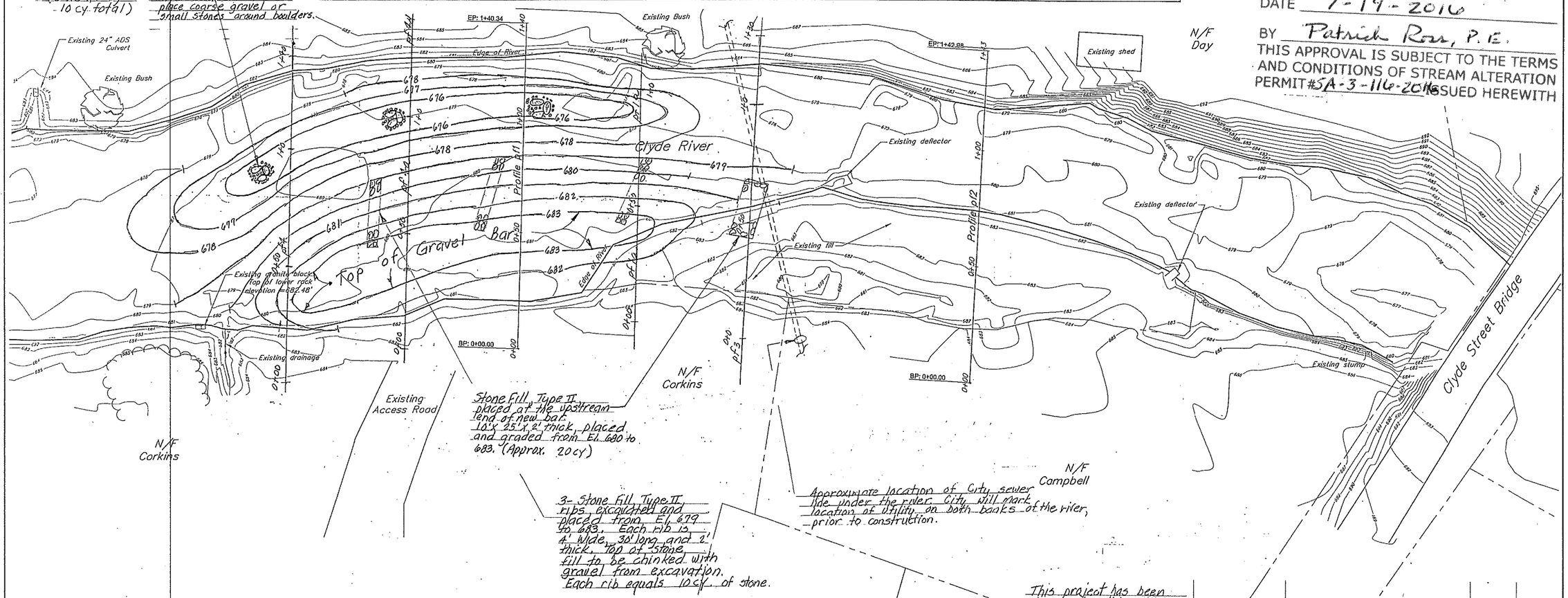


APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE 7-19-2016
BY Patrick Ross, P.E.
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT #SA-3-116-2016 ISSUED HEREWITH

N/F Day

3 sets of 3 boulders Placed as shown, each boulder must be 1 cy or larger. (3'x5'x2' ±) - 10 cy. total)

After boulders are set place coarse gravel or small stones around boulders.



Stone Fill Type II placed at the upstream end of new bar. 10'x 25'x 2' thick, placed and graded from El. 680 to 683. (Approx. 20 cy)

3- Stone Fill Type II rips excavated and placed from El. 679 to 683. Each rib is 4' wide, 30' long and 2' thick. Top of stone fill to be chinked with gravel from excavation. Each rib equals 10 cy of stone.

Approximate location of City sewer line under the river. City will mark location of utility on both banks of the river, prior to construction.

This project has been designed within NFIP Standards, "No New Encroachments" have resulted from this restoration project.

0' 20' 40' 80' 120' 160' 200'

Graphic Scale 1" = 20'

Notes:

1. Project Horizontal Coordinates derived from GPS observation using reference frame NAD83 (2011) 2010.00 epoch. Project vertical datum based on NAVD 88 (Geoid 12A).

Date revised	Description	Checked	Date
Survey RAW/CWW			
Drawn RAW			
Checked			
Scale 1"=20'			
Date Aug. 28, 2014			
Project Clyde Street			

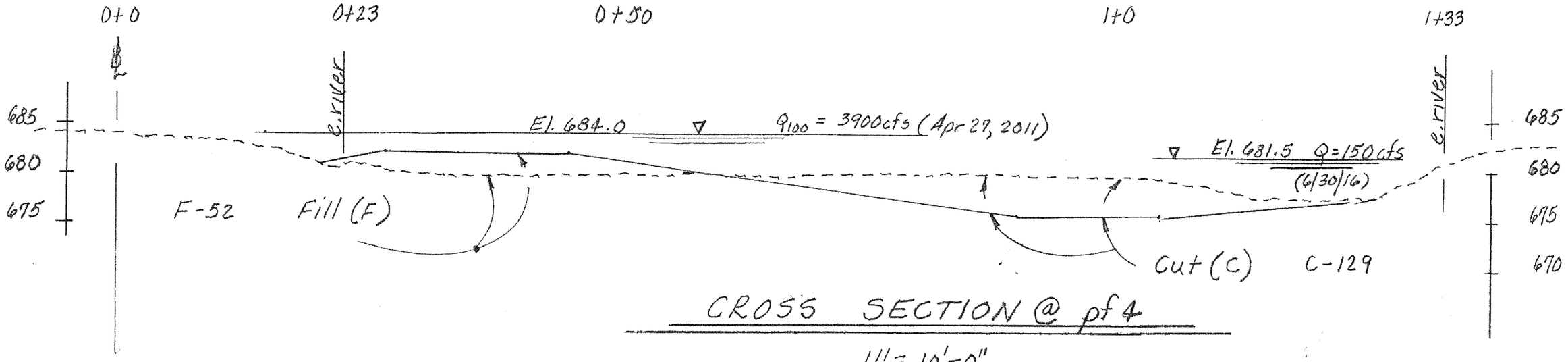
Existing Conditions Plan

Clyde River Restoration (Partial)

Newport, VT

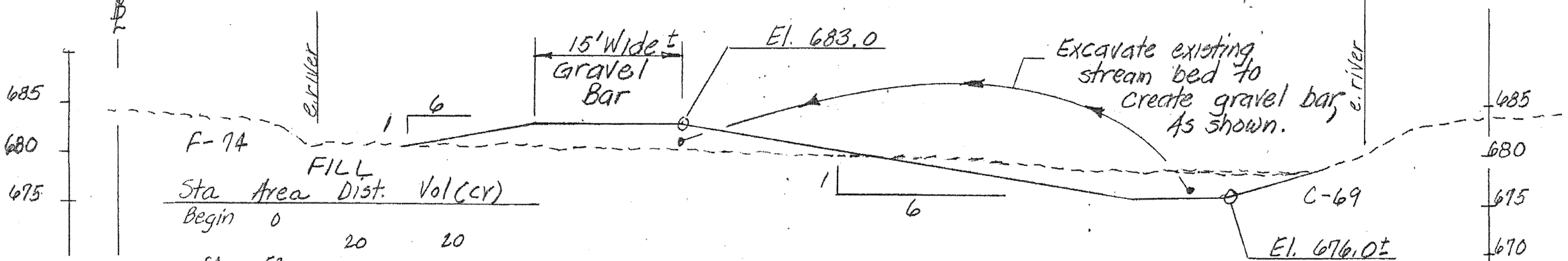
Designed by JARichardson, P.E. 6/16

S1



CROSS SECTION @ pf4

1" = 10'-0"



Sta	Area	Dist.	Vol (cy)
Begin	0		
		20	20
pf4	52		
		50	138
pf4a	97		
		50	158
pf1	72		
		50	110
pf1a	44		
		20	16
End	0		
			442 cy

CROSS SECTION @ pf1

1" = 10'-0"

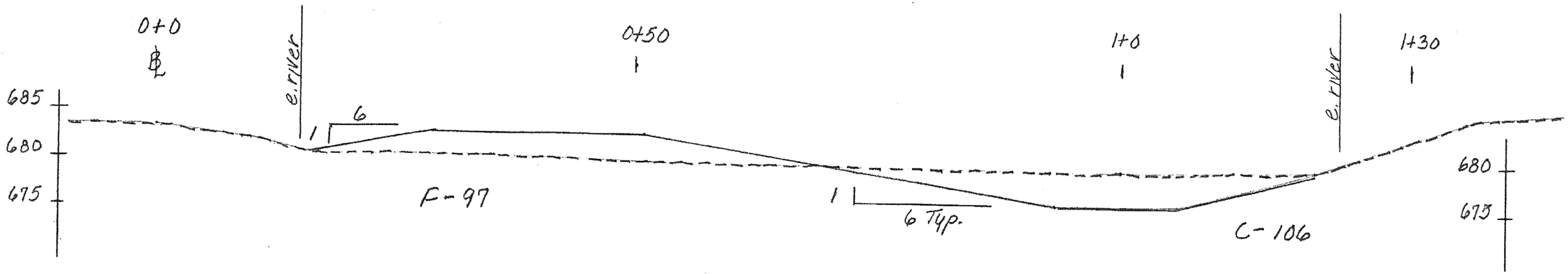
See Cut on Sht S3

Sheet S2

CLYDE RIVER RESTORATION (PARTIAL)

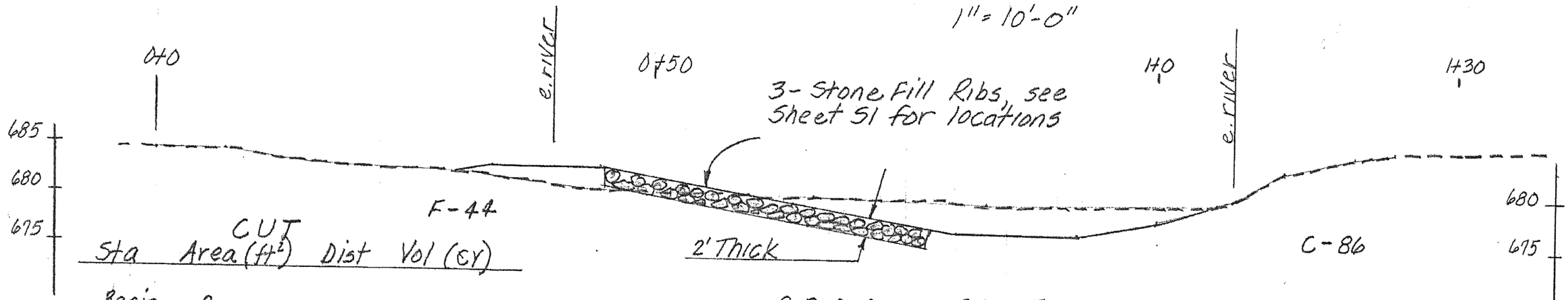
June 2016

Designed by: JARichardson, P.E.



CROSS SECTION @ pf4a

1" = 10'-0"



CROSS SECTION @ pf1a

1" = 10'-0"

CUT

Sta	Area (ft^2)	Dist	Vol (CY)
Begin	0		
		30	72
pf4	129		
		50	218
pf4a	106		
		50	162
pf1	69		
		50	143
pf1a	86		
		30	48
End	0		
			643 CY

See Fill on Snt S2

Note:
Appox. 200 CY of Excavation Must be trucked off-site to maintain a volumetric balance.

Sheet S3

CLYDE RIVER RESTORATION (PARTIAL)

June 2016

Designed by : JARichardson, P.E.