

F. A. HESKETH & ASSOCIATES, INC.

3 Creamery Brook
East Granby, CT 06026
(860) 653-8000 (860) 844-8600(Fax)
email: ghesketh@fahesketh.com

MEMORANDUM

To: Frank Dellaripa, P.E. **Date:** March 3, 2020

From: Guy Hesketh, P.E.

Subject: St. Francis – Water Quality Basin Remediation
Flood Storage Calculations

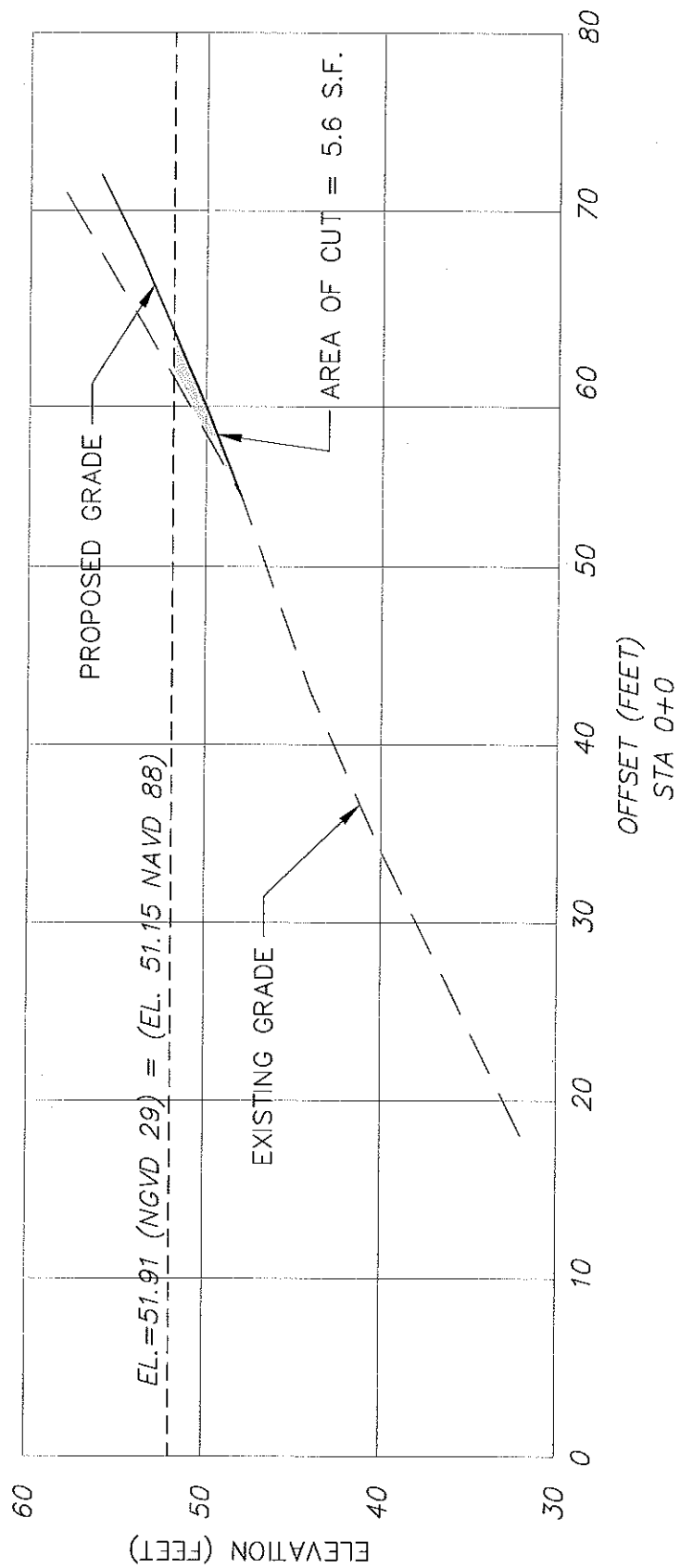
Our File: 05173

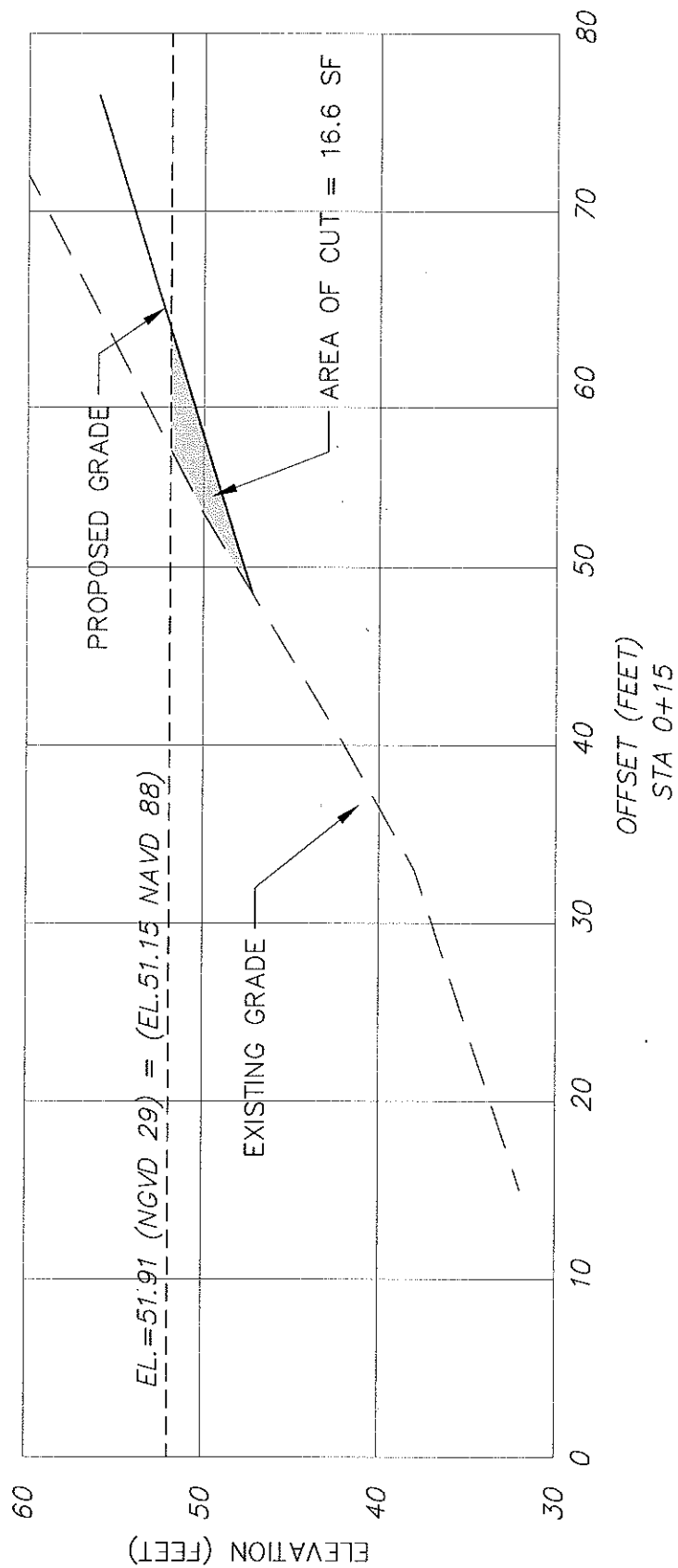
Frank,

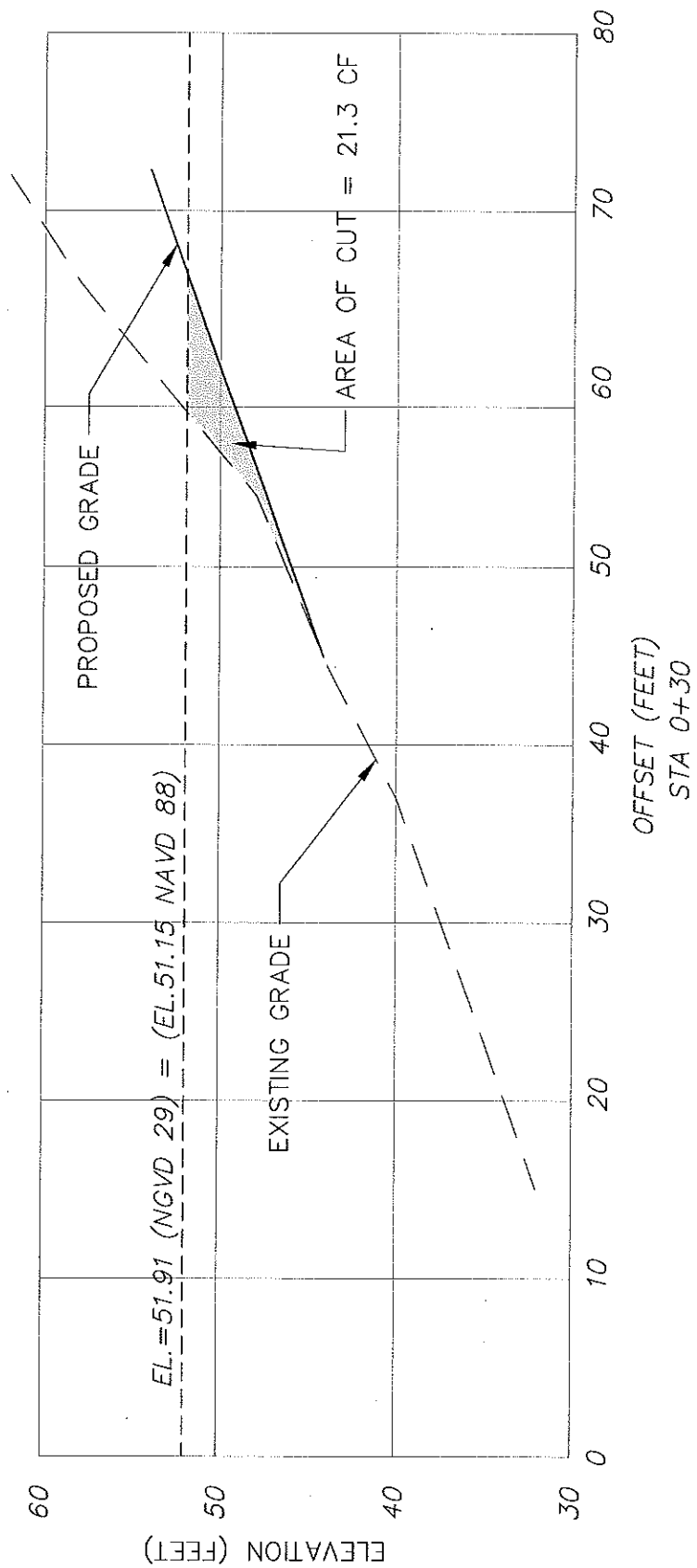
Please find attached a sketch, cross sections and calculations demonstrating that the proposed remediation work for the St. Frances project does not reduce the flood storage capacity of the flood plain to the Park River. The project will result in removal of material within the flood plain below elevation 51.15 NAVD 1988 (el. 51.91 VGND 1929). The calculations demonstrate that proposed work will result in an increase of 6,009 cubic feet of net storage in the flood plan below the elevation 51.15 NAVD 1988. There is no proposed fill, piers, nor stairwells below elevation 51.15 NAVD 1988.

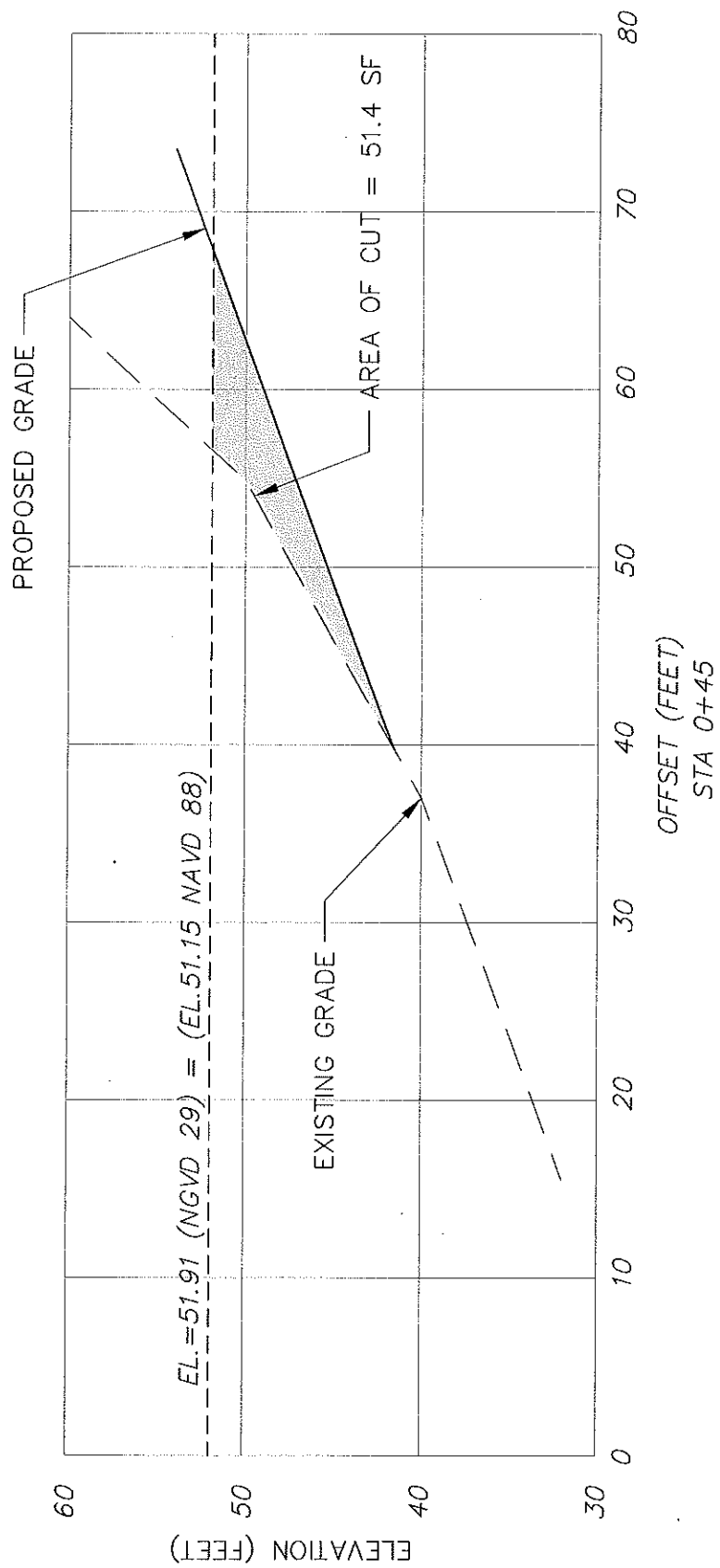
All materials deposited in the river as a result of the wall collapse and washout will be removed from the river and its channel and banks restored to the pre-collapse condition and removed from the site. Restoration of vegetation will be in accordance with the plans submitted.

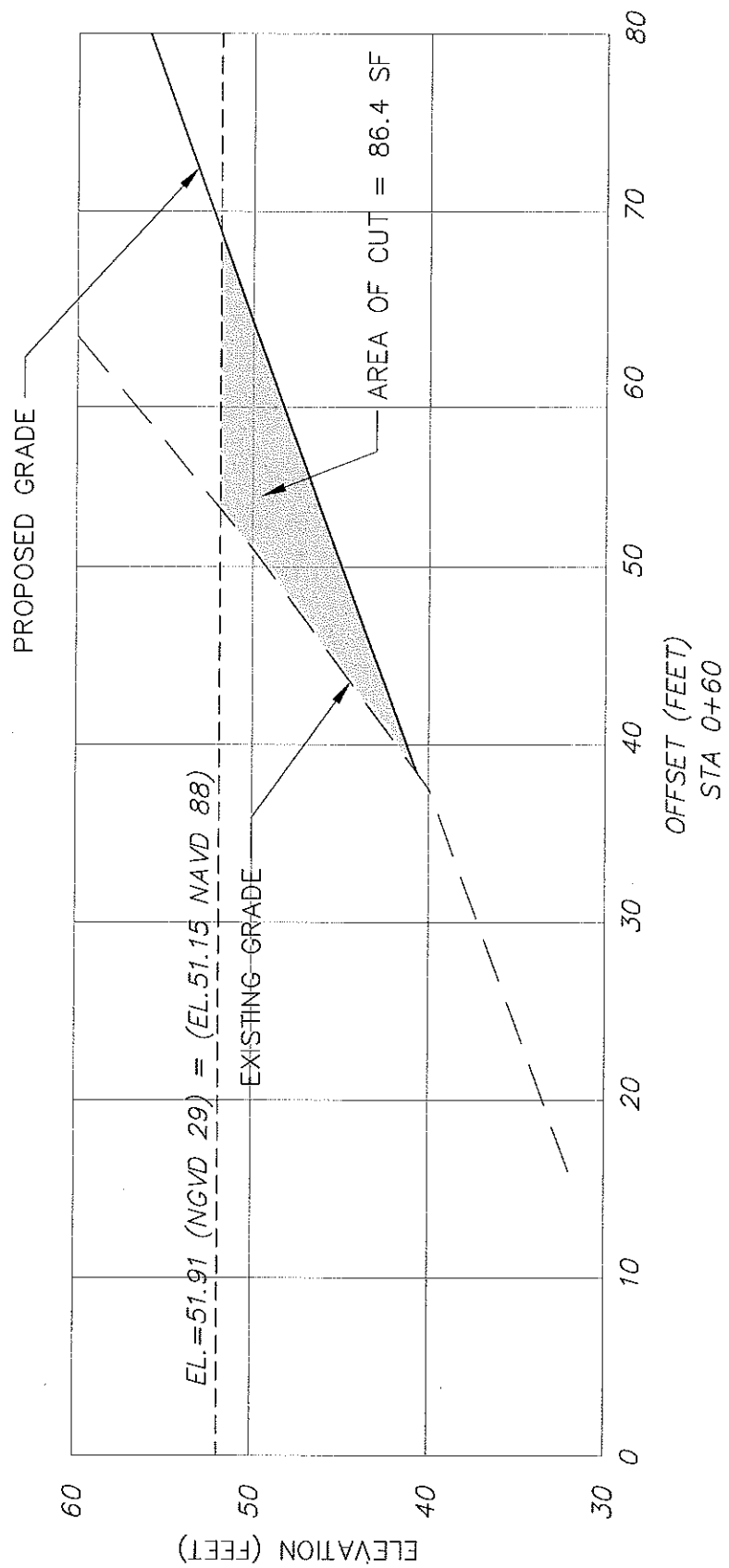
I believe that this information fulfills requirements under Section III. D. 7. and 8. and Section III. E. 1. through 4 of your Rules and Regulations. We look forward to discussing with the Commission on March 11. If you have any questions, please do not hesitate to contact me at 860-653-8000.

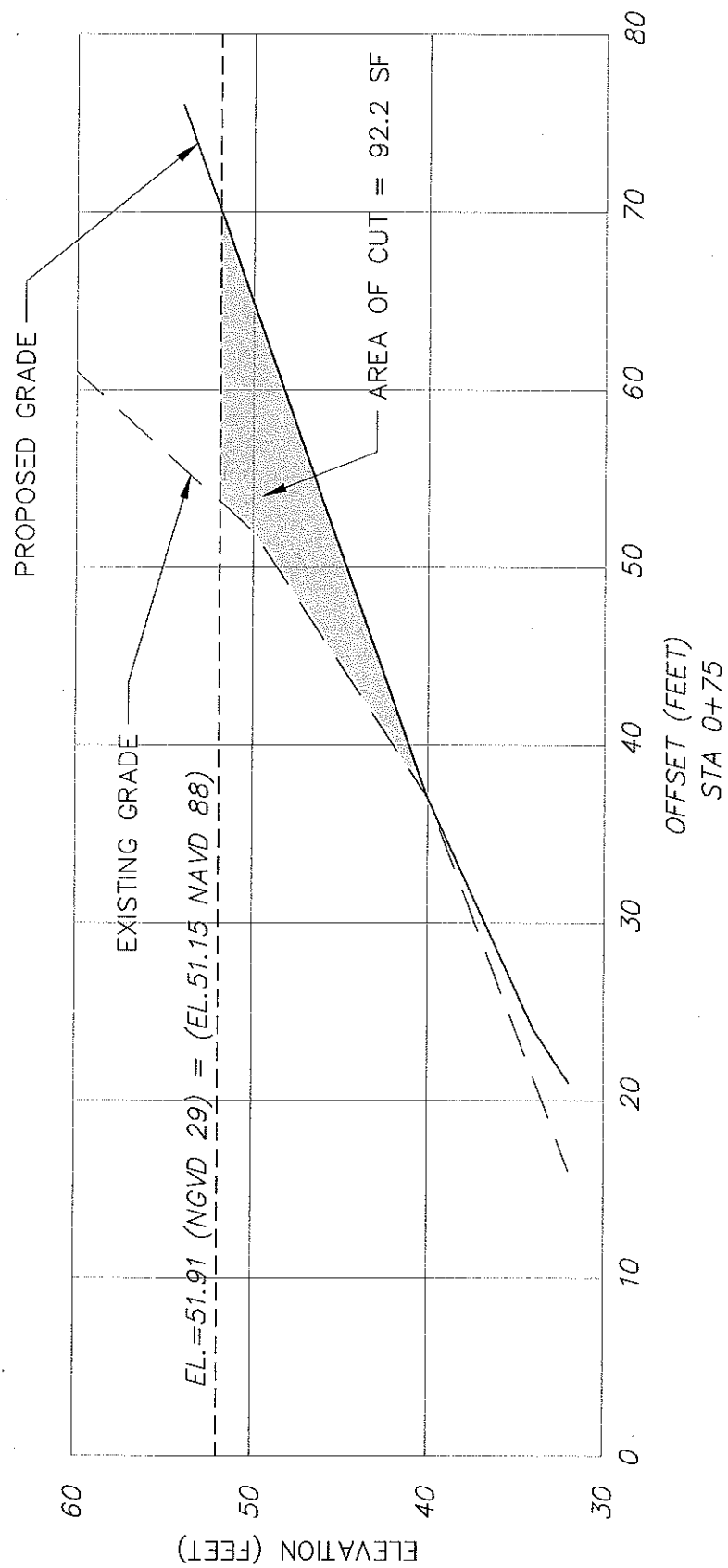


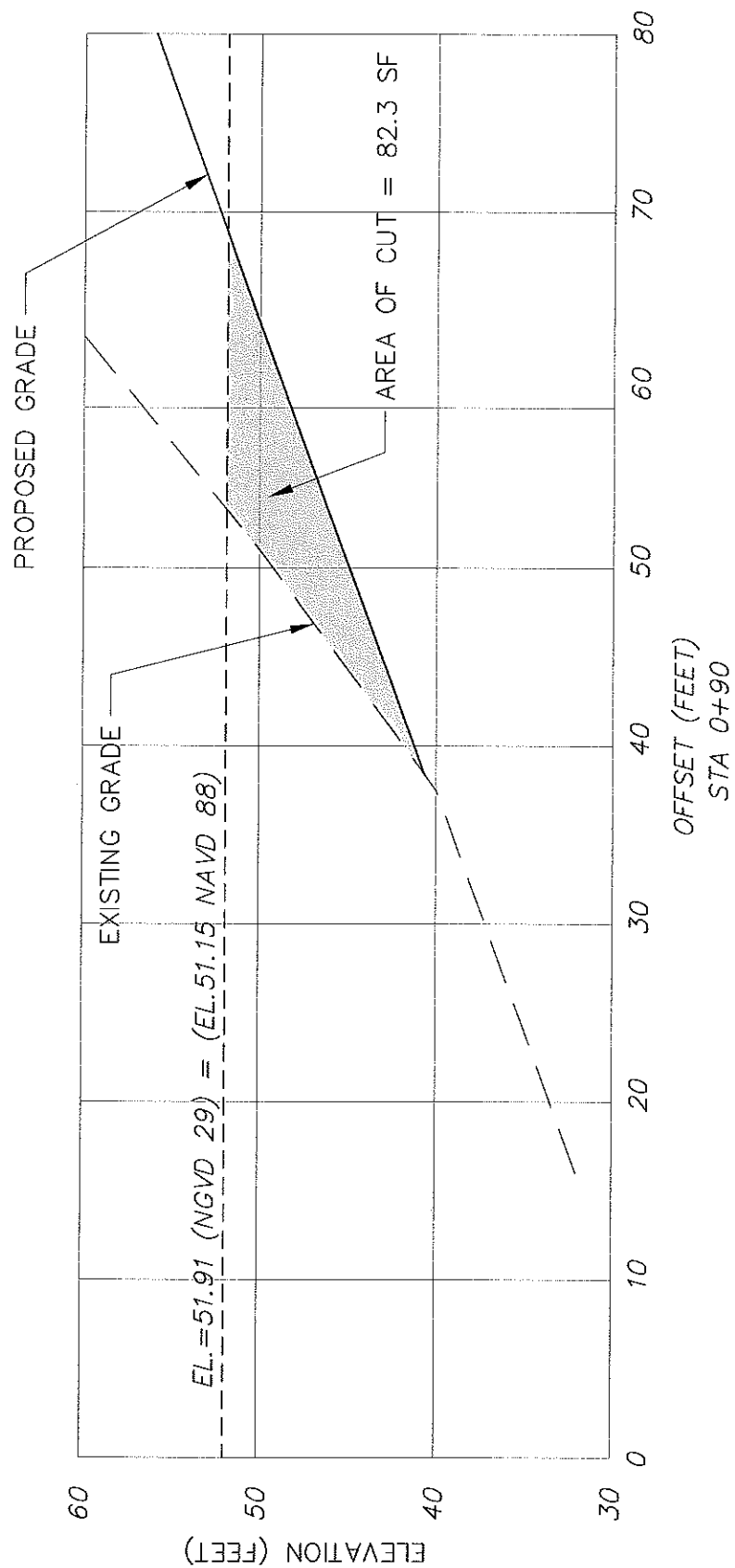


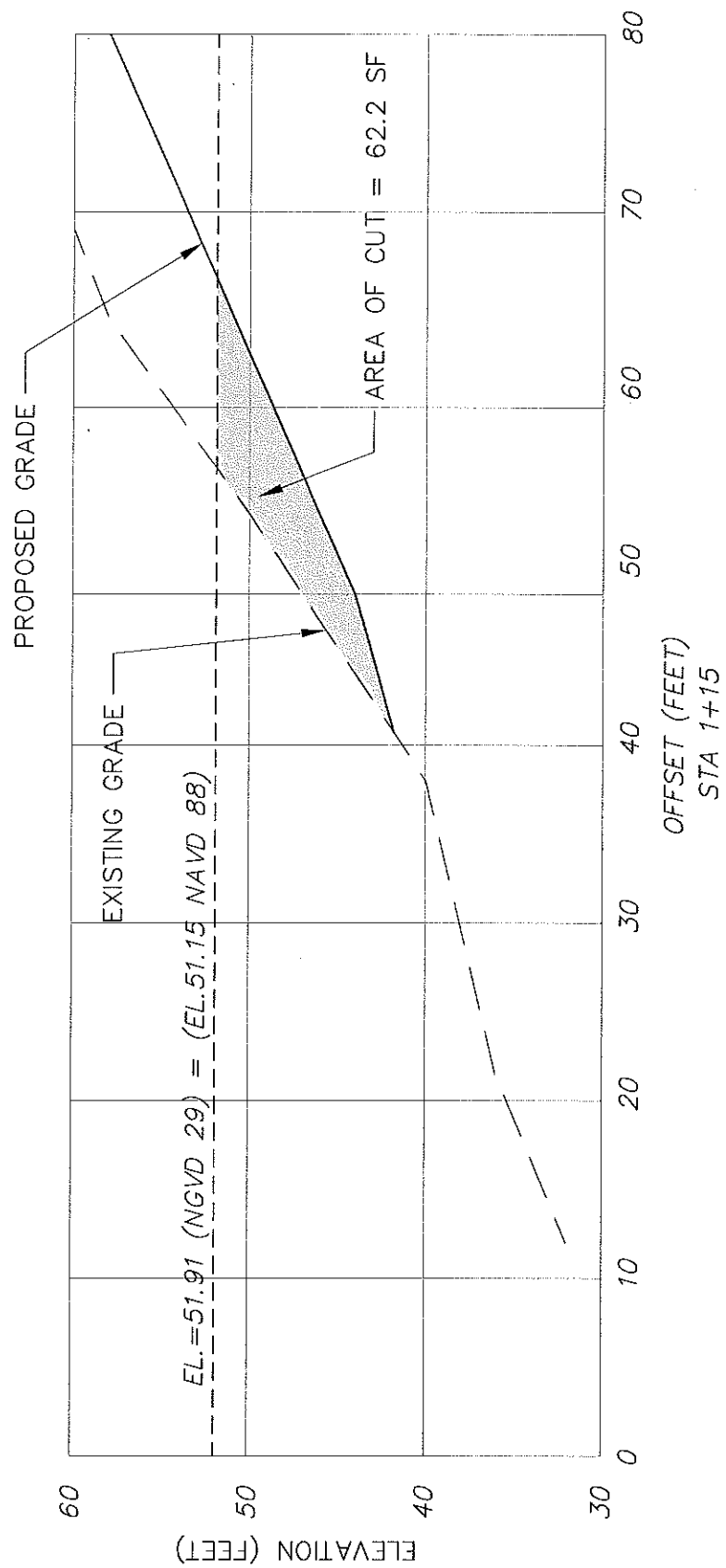












St Francis Orthopedic Surgery Center
Cut and Fill Calculations

Stormwater Quaility Basin Remediation

Station	End Area (SF)	Ave End Area (SF)	Length (FT)	Vol (Cu Ft)	Cumulative Volume (Cu Ft)
-0+5	0				
		2.8	5	14	14
0+0	5.6				
		11.1	15	167	181
0+15	16.6				
		19.0	15	284	465
0+30	21.3				
		36.4	15	545	1010
0+45	51.4				
		68.9	15	1034	2044
0+60	86.4				
		89.3	15	1340	3383
0+75	92.2				
		87.3	15	1309	4692
0+90	82.3				
		72.3	15	1084	5776
1+15	62.2				
		31.1	7.5	233	6009
1+22.5	0				