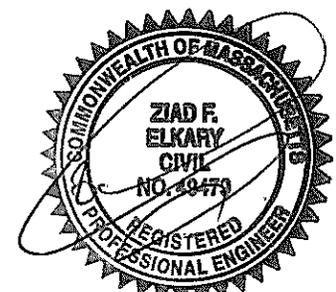

ATTACHMENT I
EARTH REMOVAL CALCULATIONS

Concord - Nagog Pond Water Treatment Plant
Site/Civil Cut and Fill Analysis

<u>Location</u>	<u>Description</u>	<u>Cut (cy)</u>	<u>Fill (cy)</u>	<u>Ledge Excavation (cy)</u>	<u>Assumptions</u>
WTP	Foundation	350	0	0	6' x 5' cut along building perimeter for continuous footing 6' x 5' cut along building perimeter for continuous footing 2' excavation for entire surface area, added 1' to each dimension 2' excavation for entire surface area, added 1' to each dimension 2' excavation for entire surface area, added 1' to each dimension 2' excavation for entire surface area, added 1' to each dimension 2' excavation for entire surface area, added 1' to each dimension 1' for overdig Assumes containment Assuming that there is no excavation required - utilizing the existing tank. Wall and slab removal covered under demolition
	Ozone Room	110	0	0	
	Generator Pad	25	0	0	
	LOX Pad	35	0	0	
	Concrete Transport Pad	25	0	0	
	AC Condenser Pad	2	0	0	
	Ventilation Air Condensing Pad	3	0	0	
	GAC Filters (3)	650	0	0	
	Chemical Rooms (108, 109, 110)	75	0	0	
	Misc. Equipment Pads (roll-off dumpster, sludge dewatering system, etc.	90	0	0	
	Area between column line 6 and A and C	75	0	0	
	KMnO4 room	25	0	0	
	All Other Equipment Pads	100	0	0	
	Deep Raw Water Well	90	0	130	
	Clearwell	0	0	0	
	Area between column line A and C and 6 (including equipment pads)	175	0	0	
	Drainage	0	0	20	
	Gravel Fill Against Building Foundation	0	300	0	
		Total Cut (cy)	Total Fill (cy)	Total Ledge Excavation	
	1830	300	150		
Parking Area	Extension of Parking Lot from Existing Fence to Proposed Fence	850	0	650	Will be filled with gravel and asphalt
	Gravel Area Around Building	310	0	0	
	Remainder of Proposed Parking Lot	675	0	0	
	Access Road	160	0	0	
	Total Cut (cy)	1995	0	Ledge Excavation (cy) 650	
PVs	Material for Grading Land	400	0	0	
	Total Cut (cy)	400	0	Ledge Excavation (cy) 0	
Intake	Dredging for Intake Pipe	425	0	0	4' wide excavation
	Total Cut (cy)	425	0	Ledge Excavation (cy) 0	
TOTAL CUT IN PROJECT (CY)		4650			
TOTAL FILL IN PROJECT (CY)		300			
TOTAL LEDGE EXCAVATION IN PROJECT (CY)			800		



11.17.2015