

ATTACHMENT A - ENGINEER'S CONCEPTUAL COST ESTIMATE, CHATHAM					
TOWN : Chatham					
PROJECT: Surface Gravel Wetland					
ITEM #	Item Description / Notes	QTY.	UNIT	UNIT \$ PRICE	TOTAL \$ VALUE
Item 1 - Mobilization, Clearing and Erosion Controls		\$39,600			
1A	Mobilization, Demobilization and Travel	1	LS	\$28,000	\$28,000
1B	Clearing and Grubbing - Approximately 1/3 Acres	0.35	ACRE	\$16,000	\$5,600
1C	Erosion Controls - Place on Downhill Slope and Up Sides	300	FT	\$20	\$6,000
Item 2 - Excavation and Gravel Wetland Construction		\$94,180			
2A	Strip Topsoil for Reuse - Assume 6" Deep, 65% Usable	180	CY	\$16	\$2,880
2B	Site Excavation - Regrade Site and Dig Gravel Wetland	1700	CY	\$27	\$45,900
2C	Excavation Dewatering	1	LS	\$10,000	\$10,000
2D	Geotextile Fabric for Separation	700	SY	\$8	\$5,600
2E	Crushed Stone - 30" Layer in Gravel Wetland	400	TON	\$50	\$20,000
2F	Crushed Stone Maintenance Road - Create 6" Thick Road	70	TON	\$50	\$3,500
2G	Wetland Soils - Place 8" Layer on Top of Gravel Wetland	140	CY	\$45	\$6,300
Item 3 - Drainage Structures		\$17,060			
3A	Outlet Control Structure - RCP, 4' Diameter	1	EA	\$3,600	\$3,600
3B	Manhole - RCP, 4' Diameter	2	EA	\$3,600	\$7,200
3C	Frame and Cover - Assume 1 per Above	2	EA	\$750	\$1,500
3D	Leaching Chamber - 6' HDPE Riser, 8" Diameter in Gravel Wetland	8	EA	\$500	\$4,000
3E	Crushed Stone - Placed Below Drainage Structures	20	TON	\$38	\$760
Item 4 - Piping		\$35,790			
4A	Trench Excavation - Assume 100 LF, 4' Wide, Average 12 FT Deep	200	CY	\$50	\$10,000
4B	12" RCP Pipe - Inlet Pipe and Outlet Pipe	100	FT	\$70	\$7,000
4C	12" RCP Flared End - Placed at Inlet and Outlet Pipes	2	EA	\$1,200	\$2,400
4D	Gravel Borrow - Place 30" Layer in 100 LF Pipe Trench	40	CY	\$36	\$1,440
4E	Riprap - Place 12" Layer at Inlet Pipe and Overflow Spillway	70	TON	\$65	\$4,550
4F	6" Perforated Pipe Perimeter Drain - Install Around Gravel Wetland	260	FT	\$40	\$10,400
Item 5 - Trench Paving		\$6,380			
5A	Sawing Asphalt Pavement - Sawcut Existing Pavement	180	FT	\$2	\$360
5B	Hot Mix Asphalt - Repair Pipe Trench in Road	20	TON	\$265	\$5,300
5C	Rubberized Asphalt Sealer - Repair Pipe Trench through Road	180	FT	\$4	\$720
Item 6 - Site Restoration		\$20,000			
6A	Loam Borrow - Additional Loam Needed	100	CY	\$45	\$4,500
6B	Topsoil Rehandled and Spread - Spread New and Stacked Loam	280	CY	\$25	\$7,000
6C	Seeding - Basin Mix and Restoration Mix	1700	SY	\$5	\$8,500
Item 7 - Miscellaneous		\$2,500			
7A	Police Detail	1	LS	\$2,500	\$2,500

SUBTOTAL FROM ABOVE= \$215,510

15% CONTINGENCY= \$32,327

TOTAL= \$247,837

SAY \$248,000