

Village Center Study - Conceptual Sewer Collection System
Phase 1 - Route 9 Leg and Pretreatment of Existing Septic Field
Opinion of Probable Site Costs Prepared for Town of North Yarmouth
Prepared by Sevee & Maher Engineers, Inc. - February 27, 2015

Item	Units	Quantity	Cost/Unit	Total
Clearing/Grubbing (medium)	ACRE	0.2	\$ 8,000.00	\$ 1,600.00
Ledge excavation - Trench	CY	0	\$ 125.00	\$ -
Loaming and Seeding	SF	10,000	\$ 0.80	\$ 8,000.00
Bit. Paved Drive/Parking (3")	SF	12,000	\$ 2.00	\$ 24,000.00
Conc. Manhole (4' dia)	EA	9	\$ 3,500.00	\$ 31,500.00
Pump Station	EA	2	\$ 20,000.00	\$ 40,000.00
4" PVC Sewer Force Main	LF	1,500	\$ 28.00	\$ 42,000.00
12" PVC Gravity Sanitary Sewer Lines	LF	2,300	\$ 45.00	\$ 103,500.00
Common Borrow	CY	0	\$ 15.00	\$ -
Septic Field	SF	0	\$ 4.00	\$ -
Septic System Pre-Treatment Tanks	EA	1	\$ 50,000.00	\$ 50,000.00
Replace Existing Septic Tanks and D-Boxes	LS	3	\$ 5,000.00	\$ 15,000.00
Erosion Control	LS	1	\$ 8,000.00	\$ 8,000.00
Mobilization/Demobilization	LS	1	\$ 8,000.00	\$ 8,000.00

SUBTOTAL = **\$ 340,000.00 ***

Concept Adjustment / Contingency = 25% **\$ 90,000.00**

Estimated Survey/Engineering/Permitting Costs **\$ 80,000.00**
 Survey/Wetlands Investigation \$ 10,000.00
 Engineering Design \$ 30,000.00
 Permitting \$ 30,000.00
 Construction Oversight \$ 10,000.00

TOTAL = **\$ 510,000.00**

Assumptions For Pricing:

This estimate is based on preliminary discussions with Town representatives reflected on the figure "Village Center Study Conceptual Sewer Collection System North Yarmouth, Maine" prepared by Sevee & Maher Engineers, Inc., dated 2/26/2014 and as amended on February 12, 2015

Permit Costs reflect the permitting for the entire Community Septic System within the Phase 1

Septic system pretreatment and field based on pretreatment at existing septic field (185 3-bedroom houses).

Pretreatment cost (\$10/gallon/day) provided from preliminary discussion with vendor.

No ledge anticipated in area of sewer collection system based on existing maps.

Included paving for 80% of sewer pipe work along the roadways.

Estimate does not include any new or existing Monitoring Costs. To be determined with Maine DEP.

*This number has been rounded for estimating purposes

Village Center Study - Conceptual Sewer Collection System
Phase 1A - Construction of New Septic Fields
Opinion of Probable Site Costs Prepared for Town of North Yarmouth
Prepared by Sevee & Maher Engineers, Inc. - February 27, 2015

Item	Units	Quantity	Cost/Unit	Total
Clearing/Grubbing (medium)	ACRE		\$ 8,000.00	\$ -
Ledge excavation - Trench	CY		\$ 125.00	\$ -
Loaming and Seeding	SF	30,000	\$ 0.80	\$ 24,000.00
Bit. Paved Drive/Parking (3")	SF		\$ 2.00	\$ -
Conc. Manhole (4' dia)	EA		\$ 3,500.00	\$ -
Pump Station	EA		\$ 20,000.00	\$ -
4" PVC Sewer Force Main	LF		\$ 28.00	\$ -
12" PVC Gravity Sanitary Sewer Lines	LF		\$ 45.00	\$ -
Common Borrow	CY	1,000	\$ 15.00	\$ 15,000.00
Septic Field	SF	30,000	\$ 4.00	\$ 120,000.00
Septic System Pre-treatment Tanks	LS		\$ 50,000.00	\$ -
Erosion Control	LS		\$ 8,000.00	\$ -
Mobilization/Demobilization	LS		\$ 8,000.00	\$ -

SUBTOTAL = **\$ 160,000.00 ***

Concept Adjustment / Contingency = 25% \$ 40,000.00

Estimated Survey/Engineering/Permitting Costs	ASSUMED COVERED IN PHASE 1	\$	-
Survey		\$	-
Engineering Design		\$	-
Maine DEP Permitting		\$	-
Construction Oversight		\$	-

TOTAL = **\$ 200,000.00**

Assumptions For Pricing:

This estimate is based on preliminary discussions with Town representatives reflected on the figure "Village Center Study Conceptual Sewer Collection System North Yarmouth, Maine" prepared by Sevee & Maher Engineers, Inc., dated 2/26/2014 and as amended on February 12, 2015.

Septic field based on full build out of new septic fields detailed in report mentioned above.

Pretreatment cost (\$10/gallon/day) provided from preliminary discussion with vendor.

No ledge anticipated in area of sewer collection system based on existing maps.

Included paving for 80% of sewer pipe work along the roadways.

Estimate does not include any new or existing Monitoring Costs. To be determined with Maine DEP.

*This number has been rounded for estimating purposes

Village Center Study - Conceptual Sewer Collection System
Phase 2 - Parsonage Road Leg
Opinion of Probable Site Costs Prepared for Town of North Yarmouth
Prepared by Sevee & Maher Engineers, Inc. - February 27, 2015

Item	Units	Quantity	Cost/Unit	Total
Clearing/Grubbing (medium)	ACRE	0.3	\$ 8,000.00	\$ 2,400.00
Ledge excavation - Trench	CY	0	\$ 125.00	\$ -
Loaming and Seeding	SF	0	\$ 0.80	\$ -
Bit. Paved Drive/Parking (3")	SF	8,000	\$ 2.00	\$ 16,000.00
Conc. Manhole (4' dia)	EA	5	\$ 3,500.00	\$ 17,500.00
Pump Station	EA	0	\$ 20,000.00	\$ -
4" PVC Sewer Force Main	LF	500	\$ 28.00	\$ 14,000.00
12" PVC Gravity Sanitary Sewer Lines	LF	1,700	\$ 45.00	\$ 76,500.00
Common Borrow	CY	0	\$ 15.00	\$ -
Septic Field	SF	0	\$ 4.00	\$ -
Septic System Pre-treatment Tanks	LS	0	\$ 200,000.00	\$ -
Erosion Control	LS	1	\$ 8,000.00	\$ 8,000.00
Mobilization/Demobilization	LS	1	\$ 8,000.00	\$ 8,000.00

SUBTOTAL = **\$ 150,000.00 ***

Concept Adjustment / Contingency = 25% **\$ 40,000.00**

Estimated Survey/Engineering/Permitting Costs **\$ 85,000.00**

Survey	\$ 5,000.00
Engineering Design	\$ 50,000.00
Maine DEP Permitting	\$ 20,000.00
Construction Oversight	\$ 10,000.00

TOTAL = **\$ 275,000.00**

Assumptions For Pricing:

This estimate is based on preliminary discussions with Town representatives reflected on the figure "Village Center Study Conceptual Sewer Collection System North Yarmouth, Maine" prepared by Sevee & Maher Engineers, Inc., dated 2/26/2014 and as amended on February 12, 2015.

Pretreatment cost (\$10/gallon/day) provided from preliminary discussion with vendor.

No ledge anticipated in area of sewer collection system based on existing maps.

Included paving for 80% of sewer pipe work along the roadways.

Estimate does not include any new or existing Monitoring Costs. To be determined with Maine DEP.

*This number has been rounded for estimating purposes

Village Center Study - Conceptual Sewer Collection System
Phase 2A - Pretreatment at New Septic Field
Opinion of Probable Site Costs Prepared for Town of North Yarmouth
Prepared by Sevee & Maher Engineers, Inc. - February 27, 2015

Item	Units	Quantity	Cost/Unit	Total
Clearing/Grubbing (medium)	ACRE	0.0	\$ 8,000.00	\$ -
Ledge excavation - Trench	CY	0	\$ 125.00	\$ -
Loaming and Seeding	SF	0	\$ 0.80	\$ -
Bit. Paved Drive/Parking (3")	SF	0	\$ 2.00	\$ -
Conc. Manhole (4' dia)	EA	0	\$ 3,500.00	\$ -
Pump Station	EA	0	\$ 20,000.00	\$ -
4" PVC Sewer Force Main	LF	0	\$ 28.00	\$ -
12" PVC Gravity Sanitary Sewer Lines	LF	0	\$ 45.00	\$ -
Common Borrow	CY	0	\$ 15.00	\$ -
Septic Field	SF	0	\$ 4.00	\$ -
Septic System Pre-treatment Tanks	LS	1	\$ 450,000.00	\$ 450,000.00
Erosion Control	LS	0	\$ 8,000.00	\$ -
Mobilization/Demobilization	LS	0	\$ 8,000.00	\$ -

SUBTOTAL = **\$ 450,000.00**

Concept Adjustment / Contingency = 25% **\$ 120,000.00**

Estimated Survey/Engineering/Permitting Costs	ASSUMED COVERD IN PHASE 2	\$	-
Survey		\$	-
Engineering Design		\$	-
Maine DEP Permitting		\$	-
Construction Oversight		\$	-

TOTAL = **\$ 570,000.00**

Assumptions For Pricing:

This estimate is based on preliminary discussions with Town representatives reflected on the figure "Village Center Study Conceptual Sewer Collection System North Yarmouth, Maine" prepared by Sevee & Maher Engineers, Inc., dated 2/26/2014 and as amended on February 12, 2015.

Septic system pretreatment based on estimated 50,000 gallons/day flow (185 3-bedroom houses).

Pretreatment cost (\$10/gallon/day) provided from preliminary discussion with vendor.

No ledge anticipated in area of sewer collection system based on existing maps.

Included paving for 80% of sewer pipe work along the roadways.

Estimate does not include any new or existing Monitoring Costs. To be determined with Maine DEP.

*This number has been rounded for estimating purposes

Village Center Study - Conceptual Sewer Collection System
Phase 3 - Route 115 Leg
Opinion of Probable Site Costs Prepared for Town of North Yarmouth
Prepared by Sevee & Maher Engineers, Inc. - February 17, 2015

Item	Units	Quantity	Cost/Unit	Total
Clearing/Grubbing (medium)	ACRE	0.3	\$ 8,000.00	\$ 2,400.00
Ledge excavation - Trench	CY	0	\$ 125.00	\$ -
Loaming and Seeding	SF	10,000	\$ 0.80	\$ 8,000.00
Bit. Paved Drive/Parking (3")	SF	10,000	\$ 2.00	\$ 20,000.00
Conc. Manhole (4' dia)	EA	6	\$ 3,500.00	\$ 21,000.00
Pump Station	EA	0	\$ 20,000.00	\$ -
4" PVC Sewer Force Main	LF	0	\$ 28.00	\$ -
12" PVC Gravity Sanitary Sewer Lines	LF	2,000	\$ 45.00	\$ 90,000.00
Common Borrow	CY	0	\$ 15.00	\$ -
Septic Field	SF	0	\$ 4.00	\$ -
Septic System Pre-treatment Tanks	LS	0	\$ 250,000.00	\$ -
Erosion Control	LS	1	\$ 8,000.00	\$ 8,000.00
Mobilization/Demobilization	LS	1	\$ 8,000.00	\$ 8,000.00

SUBTOTAL = **\$ 160,000.00**

Concept Adjustment / Contingency = 25% **\$ 40,000.00**

Estimated Survey/Engineering/Permitting Costs **\$ 85,000.00**

Survey	\$ 5,000.00
Engineering Design	\$ 50,000.00
Maine DEP Permitting	\$ 20,000.00
Construction Oversight	\$ 10,000.00

TOTAL = **\$ 285,000.00**

Assumptions For Pricing:

This estimate is based on preliminary discussions with Town representatives reflected on the figure "Village Center Study Conceptual Sewer Collection System North Yarmouth, Maine" prepared by Sevee & Maher Engineers, Inc., dated 2/26/2014 and as amended on February 12, 2015.

Pretreatment cost (\$10/gallon/day) provided from preliminary discussion with vendor.

No ledge anticipated in area of sewer collection system based on existing maps.

Included paving for 80% of sewer pipe work along the roadways.

Estimate does not include any new or existing Monitoring Costs. To be determined with Maine DEP.

*This number has been rounded for estimating purposes

Village Center Study - Conceptual Sewer Collection System

The following provides an overview of # of homes per phase.

- Phase 1 (Route 9 Leg and Pretreatment) 34-three bedroom home capacity (Ph. 1 & 2 from SME report)
- Phase 1A (ALL new septic fields) 59-three bedroom homes (**93 total**) (Ph. 3 from SME report)
- Phase 2 (Parsonage Road Leg) No Increase in Capacity
- Phase 2A (Pretreatment at New Field) Double capacity (**185 total-three bedroom homes**)
- Phase 3 (Route 115 Leg) No increase in Capacity