

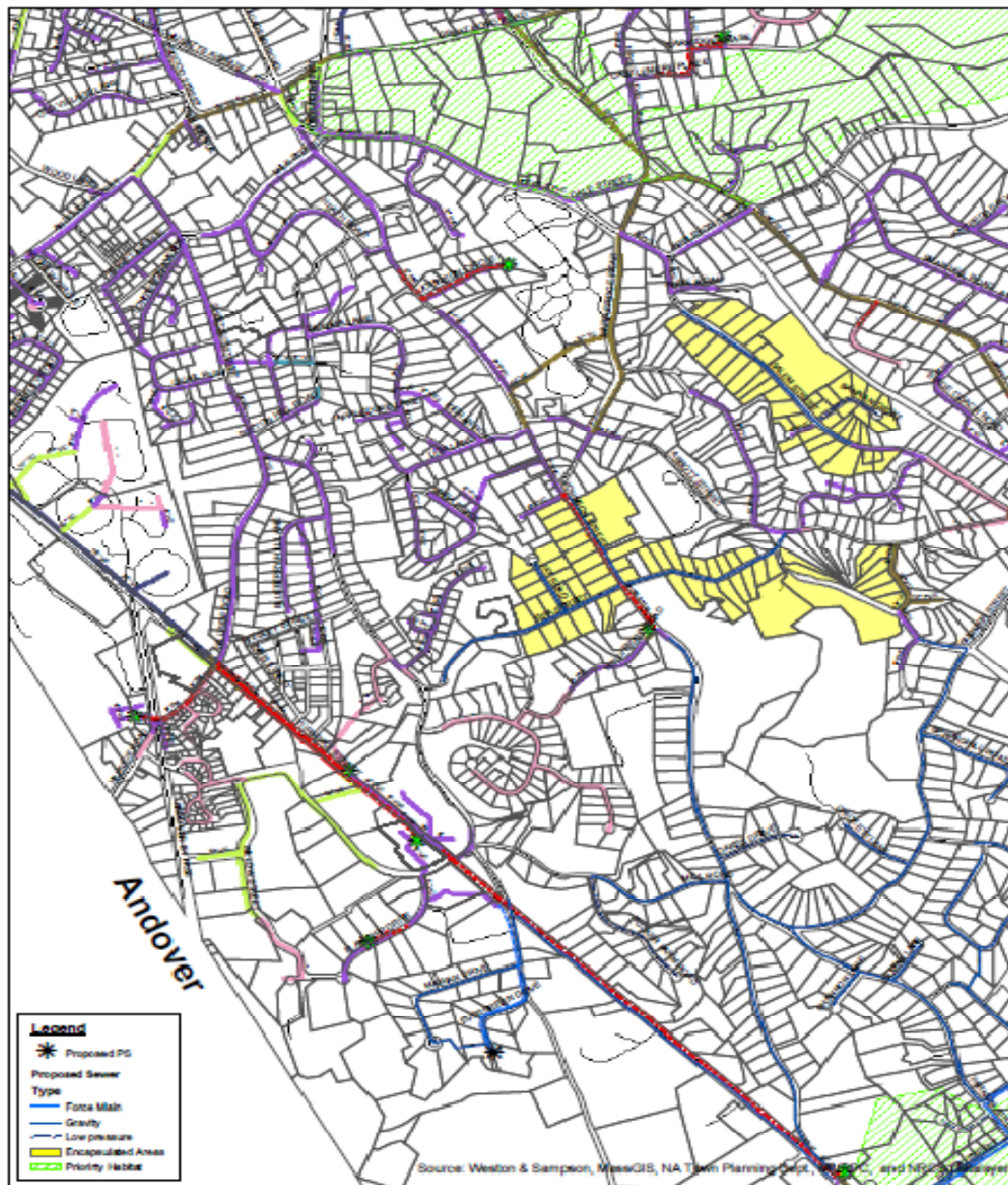
Priority Phases and Costs

Phase 1 – Encapsulated Areas	Projected Implementation Years
Bannon Drive; Jay Road; Johnson Street (Mark Road to Rea Street); Rea Street (Chestnut Street to Abbott Street); Salem Street (Annac Road to Nutmeg Lane); North Cross Road (existing dry sewer)	2009 -2011
Phase 2 – Osgood Street Corridor	
Bradford Street (Barker Street to Bradford Street); Clark Street; Holt Road; Osgood Street (Bradford Street to Barker Street)	2010 - 2013
Phase 3 – Farnum Street	
Brook Street; Carlton Lane; Chestnut Street (Marian Drive to Route 114); Cricket Lane; Evergreen Street; Farnum Street; Gilman Lane; Johnny Cakes Lane; Johnson Street (Holly Ridge Rd. to Route 114); Marion Drive; Mill Road; Oakes Drive; Raleigh Tavern Lane; Shannon Lane; Spring Hill Road; Summer Street (Molly Towne Road to Farnum Street); Tucker Farm Road	2013 - 2020
Phase 4 – Salem / Laconia	
Beaver Brook Lane; Crossbow Lane; Equestrian Drive; Forest Street (Pasture Lane to Sharpners Pond Lane); Granville Lane; Hawkins Lane; Ingalls Street (Forest Street to Crossbow Lane); Laconia Circle; Lacy Street (Forest Street to 5,000 ft East); Olympic Lane; Patton Lane; Pheasant Brook Lane; Salem Street (Boxford St. to Sharpners Pond Road); Turtle Lane	2020 - 2030
Phase 5 – Boston / Turnpike	
Boston Street (Town line to Turnpike Street); Gray Street; Old Cart Way; Paddock Lane; Penn Lane; Sullivan Street; Turnpike Street (Brook Street to Berry Street); Willow Ridge Road; Windkist Farm Road	2030 - 2040

The completion of the five sewer extensions will add approximately 134,000 linear feet of gravity sewer, 6,500 linear feet of low-pressure sewer, 5 pumping stations and 16,100 linear feet of force main. The following table lists the estimated cost for each recommended phase of sewer.

Project Cost Estimate Summary

Phase	Area	Project Cost
I	Encapsulated Areas	\$4,830,000
II	Osgood Street Corridor	\$10,430,000
III	Farnum Street	\$25,600,000
IV	Salem/Laconia	\$20,410,000
V	Boston Turnpike	\$15,800,000
Total Project Cost for Sewer Extensions		\$77,070,000
Downstream Improvements		\$13,000,000
Total Project Cost		\$90,070,000



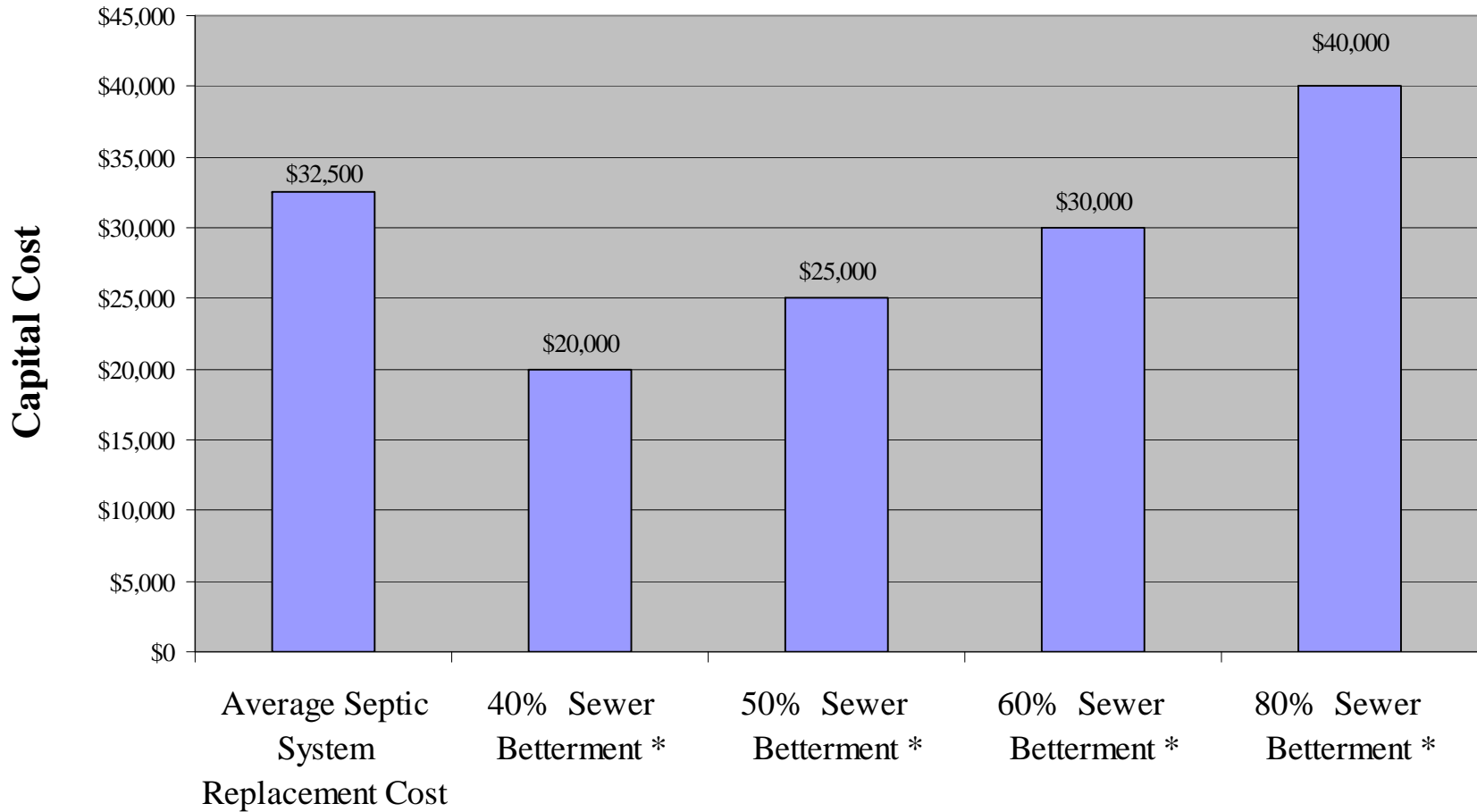
0 2,000 Feet
1 inch = 1,000 feet



Figure 5-1 Phase 1

**Encapsulated Areas
PROPOSED SEWER PHASING
Town of North Andover, Massachusetts**

Capital Cost Comparison of Septic System Replacement to Sewer Betterment in the Encapsulated Areas



*Connection to sewer in private property is the responsibility of the owner. The average cost is \$100 per linear foot.

** Actual Capital Costs may vary. Betterment was calculated based on parcel quantities and not sewer connections. Betterment was calculated assuming 9,900 LF of sewer extension at a total cost of \$4,830,000 (2008).