

Road Plan Committee Meeting Notice

**The Road Plan Committee will hold a Meeting on Tuesday, December 6th, 2016
At the Public Safety Building Ross Room 7:00pm.**

First Order of Business: Call meeting to order

Second Order of Business: Approval of minutes ----- 5 minutes

Third Order of Business: Communications ----- 10 minutes
Phone conversation with Shawn Bennett (All States Paving, Inc.)

Fourth Order of Business: 2016 Road Plan Recommendations ----- 60 minutes
Two-year Plan
Gravel Assessment
Drainage
Widening of Stone Wharf Road
Presentation to Selectmen 12/14/2016

Fifth Order of Business: Set next meeting date ----- 5 minutes

Sixth Order of Business: Other Business ----- 10 minutes

Adjourn Meeting-----

ROAD PLAN

2016



CHEBEAGUE ISLAND
MAINE

1. Introduction

The road plan is updated annually by the town of Chebeague Island Road Committee (The Committee) with the aid of the Road Surface Management System (RSMS). RSMS is software created by the Maine Local Roads Center (MLRC) of the Maine Department of Transportation (MDOT). The goal of the plan is to methodically bring the quality of our road network up to a point where the entire network can be put into a regular, cost effective maintenance program. The Road Plan presents the findings of the Committee looking out 10 years and evaluating all island roads; approximately 10 miles of paved roads and 4 miles of gravel roads.

2. Elements of a Road Plan

a. Repair Strategies

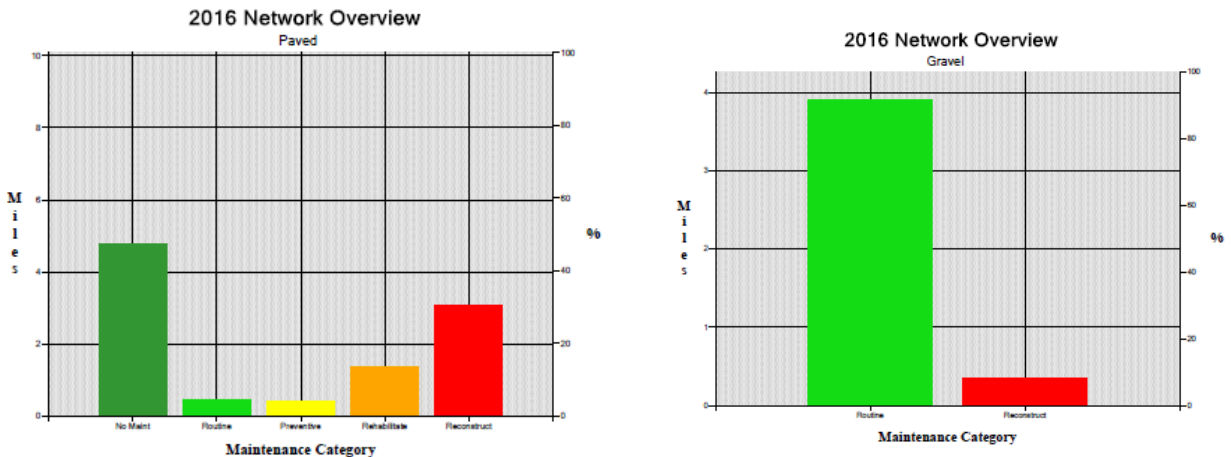
The Committee completed a road section condition survey on October 1, 2016 by driving the entire road network and completing survey forms. The results were entered into the RSMS which categorizes each section of surveyed road and provides possible repair/maintenance options for each type. A cost for each maintenance option is based on the length, width and RSMS category. The Committee determined the option to recommend and applied an ‘*island factor*’ of 30% to the RSMS cost where necessary.

For planning purposes, the Committee assumes all road work is done within the existing footprint of the road.

b. Road Status

RSMS places each paved road segment in one of the following categories: Routine, Preventative, Rehabilitate, Reconstruct. Gravel roads only use Routine and Reconstruct.

The charts below show the results of the 2016 survey. They are very close to the 2015 survey because the chip sealing was done to protect the new cold mix. We gained longer life from the Cold Mix but no immediate improvement in the overall road network.



c. Priorities

Each road section is also characterized in terms of the traffic load and the importance of the road section. In determining the recommendations for this document the guiding principles used by the Committee in setting overall priorities are:

- Public Safety
- Optimal return on dollar investment (timing and preparation)
- Proximity to public services (importance and use)

d. Budget

An important purpose of this report is to give the Selectmen and Capital Plan Committee a target funding level for the next annual Town Meeting.

The Committee uses both costs from the RSMS software and whenever possible contractor estimates to arrive at a budget recommendation.

The Public Services department performs culvert replacement, ditching, patching and grading as part of its operating budget and they are not included in the 2016 road plan recommendations. Public Services will also be involved in preparing roads for the work recommended in this document.

The Public Services department manages the regular maintenance of the gravel roads and informs the committee of its plans. Public Services has estimated gravel costs as delivered to the island for gravel roads. The materials will be included in capital recommendations but the labor and equipment to maintain the road has not been included or considered in this work.

e. Paved Road Inventory – Annual Surface Work Groups (ASW)

The Committee continues to work on the belief that the Town can raise funds in a single year to maintain or repair about one mile of paved road surface. Given the inventory of about 10 miles of paved road surface the Committee has developed 10 segments of approximately 1 mile each and labeled them ASW01 – ASW10. The numeric portion does not reflect a priority or expected order it is simply a label. This labeling is reflected in the RSMS naming conventions.

The table on the next page lists the road segments grouped by the RSMS status (based on the 2016 survey) and ordered by the ASW identifier.

The Committee estimates that typical paving projects would require approximately 400 cubic yards of gravel to backfill a mile of road shoulder after paving (using approximately 2 inches x 24 inches on both sides).

Town of Chebeague Island 2016 Road Plan

12/06/16

No Maint	From Road/Section	To Road/Section	Length (miles)	Import	Traffic	Drainage
ASW01 North Road 01	South Road (East)	Public Safety Bld	0.87	high	med-high	Good
ASW02 North Road 02	Public Safety Bld	School House	0.99	high	med-high	Good
ASW02 Transfer Station Road	North Road	Transfer Sta.	0.06	high	high	Good
ASW03 South Road	Chandler's Cove	.2 mi p school hse	1.00	high	medium	Good
ASW04 Littlefield Road	South Road	Island Commons	0.06	low	low	Good
ASW04 Roy Hill Road	South Road	Summa	0.03	low	medium	Good
ASW04 South Road	.2 mi p school hse	Crossman	0.50	medium	medium	Good
ASW06 John Small 01	South Road (West)	Below Crossman	0.77	med-high	med-high	Good
ASW08 Soule Road	South Road	Johnson's	0.06	low	low	Good
ASW09 Parking Lot School	7000 square feet		0.02	high	low-med	Good
ASW09 School House Rd	North Road	South Road	0.42	high	med-high	Good

4.78

Routine

ASW08 Bar Point Road	Division Point Rd	Cul du sac	0.16	low	low	Good
ASW08 Capps Road	South Road	Past C. Doughty	0.13	low	low	Good
ASW10 Stone Wharf Road	South Road	Stone Wharf	0.18	high	high	Good

0.47

Preventive

ASW01 Parking Public Safety Bldg	North Road	Public Safety Bld	0.08	high	low	Good
ASW06 John Small 02	Below Crossman	South Road (East)	0.18	med-high	med-high	Good
ASW10 Stone Wharf	Stone Wharf Road	Easterly Extent	0.13	high	high	Poor

0.39

Rehabilitate

ASW05 South Road	Roy Hill Rd	Inn	1.15	high	high	Good
ASW08 Old Cart Road	North Road	Cul du sac	0.20	low	low	Good

1.35

Reconstruct

ASW04 South Road	Crossman Rd	Roy Hill Rd	0.42	med-high	med-high	Good
ASW05 South Road	Inn	East Shore Rd	0.35	medium	low	Good
ASW07 Cottage Road	North Road	South Road	0.60	medium	low-med	Good
ASW07 North Road 03	School House	Cottage Road	0.57	low-med	low-med	Good
ASW08 Division Point Road	North	Division Point	0.36	low	low	Good
ASW09 Fenderson Road	South Road	J. Dought'y drive	0.19	low	low	Poor
ASW09 Firehouse Road	North Road	South Road	0.37	medium	medium	Poor
ASW10 Caso Bay Landing	Chandler's Cove	State Wharf	0.05	med-high	medium	Good
ASW10 Chandler Cove Road	South Road	Caso Bay Lndg Rd.	0.18	med-high	medium	Good

3.09

10.08

f. Gravel Road Inventory - Annual Gravel Work Groups (AGW)

Each road was given a label “AGW01 – AGW15”. The island’s gravel roads tend to be shorter than the paved roads and the work performed on them is generally less complex. Public Services can provide nearly all of the basic maintenance.

The RSMS program uses two categories for road status: Routine and Reconstruct. The table below shows the gravel roads grouped by the status and by priority (based on public services report).

Routine	<u>From Road/Section</u>	<u>To Road/Section</u>	<u>Length</u>	<u>Import</u>	<u>Traffic</u>	<u>Drainage</u>
AGW01 Bennets Cove Road-1	South Road	Shore	0.16	high	med-high	Good
AGW11 Roy Hill Road-1	North Road	South Road	0.65	low-med	medium	Good
AGW09 Littlefield Road-1	North Road	South Road	0.64	medium	medium	Good
AGW05 East Shore Drive-1	End of South Road	Cul du sac	0.26	low-med	low	Good
AGW08 Jenks Road-1	South Road	Shore	0.33	low-med	low	Good
AGW13 South Shore Drive-1	South Road	Cul du sac	0.23	low	low	Good
AGW06 Fenderson Road-1	End of paved secti	Cul du sac	0.20	low-med	low-med	Good
AGW12 Soule Road-1	End of paved secti	Shore	0.17	low-med	low	Good
AGW02 Capps Road-1	Capps end of pavin	Artist Point Road	0.14	low-med	low	Good
AGW10 Rose Point Road-1	John Small Road	Waldo Point Road	0.33	low-med	low	Good
AGW03 Charleston Road-1	John Small Road	Waldo Point Road	0.33	low	low	Good
AGW14 Waldo Point Road-1	Rose Point Road	Cul du sac	0.14	medium	low	Good
AGW04 Cordes Road-1	North Road	Cul du sac	0.33	low	low	Good

3.91

Reconstruct

AGW07 Indian Point Road-1	North Road	Cul du sac	0.27	medium	medium	Good
AGW15 Willow Street-1	South Road	Shore	0.08	low-med	low	Poor

0.35

Total Miles **4.26**

The Committee estimates that it takes approximately 1,000 cubic yards of gravel to add 1” of gravel to a 1 mile by 20’ gravel road section.

Chebeague Island Road Network

2017 Road Plan Status



1000 0 1000 2000 3000 4000 Feet



Legend

- ↑ Culverts
- Gravel Road Segments**
 - Unclassified
 - Reconstruct
 - Routine
- Paved Road Segments**
 - Unclassified
 - No Maintenance
 - Routine
 - Preventative
 - Rehabilitate
 - Reconstruct
 - 911 Roads

3. Summary of Recommendations from Public Services for gravel roads

The Public Services employees submitted a report to the Road Commissioner giving a detailed assessment of the gravel roads and guidance for labor, equipment and

1. Develop on-island gravel pits.
2. The current state of the gravel roads is good enough that the Town can perform all the required maintenance.
3. Fabricate a smaller (< 1”) screen to produce surface gravel from local materials.
4. Purchasing mainland gravel in bulk is the least expensive way to purchase it as well as truck and transport it to the island.
5. Use Calcium Chloride flake treatment on gravel roads for dust control once or twice per year depending on conditions.
6. Grade roads once or twice per year.
7. Continue to send Town employees to training offered by Maine Local Roads Center and continue to use them as a technical consulting resource.

4. Financial Status

Part of the RPC’s duties are to recommend financing options for the plan. To that end each year the RPC requests the current estimated balance of the undesignated fund balance and the balance of the paving reserve account (9050) from the treasurer.

On 10/07/2016 the treasurer estimated the fund balance at approximately \$380,000 which is only slightly higher than the minimum 8% of operations allowed by Selectmen’s policy. The paving reserve (9050) has a balance of approximately \$54,570.

5. Gravel Supply

Good quality gravel is important to building proper roadbeds. Many of the road segments that fall at the end of the priority list are in poor shape because the roadbeds are inadequate and will require additional gravel. The best example of this is Firehouse Road.

Based on estimates presented in sections 2e and 2f and the inventory dimensions the 10-year road plan would require approximately 47,000 cubic yards of gravel. Add another 20% to handle unanticipated use such as storm damage and maintenance of related infrastructure such as access to dry-hydrants and Stone Wharf Parking repairs we arrive at approximately 57,000 cubic yards of gravel to support this 10-year plan.

The Town has undertaken an engineering study to determine the potential gravel deposits available on Town owned property and what level of effort would be required to develop and use this as material to maintain our road system.

Preliminary assessment of Town owned properties indicate a possible source of gravel on the town owned parcel (I07 Lot 37) opposite the public safety building. A permitted gravel pit may be practical if this lot can be combined with other parcels, the quantity is sufficient and the quality is suitable for roadwork.

6. Recommendations to the Board of Selectmen:

a. Capital Repair Projects for Calendar year 2017

i. Paving Projects

Road Section	From Road/Section	To Road/Section	Length (mile)	Treatment	Est. Cost
Preventive					
ASW06 John Small 02	Below Crossman	South Road	0.18	Heavy Cold Mix Shim	\$35,000
Rehabilitate					
ASW05 South Road	Roy Hill Rd	Inn	1.15	Crack Seal	\$24,000
Reconstruct					
ASW04 South Road	Crossman Rd	Roy Hill Rd	0.42	Heavy Cold Mix Shim	\$84,000
			1.75		\$143,000

The Committee recommends preparing Firehouse Road for 2017 by addressing the many drainage issues.

ii. Gravel

The committee recommends that the Board undertake the following steps to assess and potentially develop the town-owned parcel (I07 Lot 37):

- Dig test Pits (This could happen immediately)
- Soil Test to determine quality and possible processing requirements
- Refine quantity estimate
- Notify Planning Board and other Town authorities of the project
- Combine and Reconfigure lot (requires Town Meeting)
- State and Local Permitting process
- Site Development

b. Capital Repair Projects for Calendar year 2018

i. Paving Projects

Road Section	From Road/Section	To Road/Section	Length (mile)	Treatment	Est. Cost
Reconstruct					
ASW09 Firehouse Road	North Road	South Road	0.37	Heavy Cold Mix Shim	\$73,080

c. Financing

The Committee continues to recommend raising all funds required to implement this plan annually through taxes.

1. Plan to allocate approximately \$175,000 each year for the paving capital account (9050) to implement this plan. Specific annual recommendations may vary.
2. Continue to raise funds in the operating budget to perform the pre-paving work of replacing culverts and the post-paving work of dressing the road shoulder of all newly paved roadways.

3. Supplement revenue raised through taxes each year with a transfer from the undesignated fund balance to the extent it can be done under the current fund balance policy.

d. 2015-2016 Maintenance, Budget and Administrative Recommendations

1. Request Town Meeting to raise \$175,000 in fiscal year 2017-2018 for the paving capital account (9050) and authorize spending up to \$160,000 for work on the following Work Groups: ASW04, ASW05, ASW06 and ASW09 plus about a %10 contingency and the remainder to build the reserve,
2. Direct the Town Administrator to secure contracts and make any other preparations to accomplish the work described in this plan,
3. Maintain the RSMS software and purchase upgrades as needed,
4. Request Town Meeting transfer \$0 from the undesignated fund balance to the paving capital account (9050)

7. RSMS Road Network Maintenance Options

The table below is the result of this year’s road survey and analysis. This table was produced by importing the output of the RSMS options report. The Committee determined that for each section it would choose a repair option in the middle of the option list (ordered by cost).

The tables below give some local estimates for maintaining gravel roads. These unit costs were entered into the RSMS software for gravel roads.

RSMS UNIT COST FOR GRAVEL ROAD MAINTENANCE
Based on 2016 public services report

		CY	Plante	Dugas/CTC
Cost			\$ 2,016	\$ 796
Truck Capacity			36	18
\$/CU			\$ 56	\$ 44
Unit Length (ft)	5280			
Unit Width (ft)	20			
Unit Thickness (in)	2"	652	\$ 36,504	\$ 28,826
	4"	1,304	\$ 73,007	\$ 57,653
	6"	1,956	\$109,511	\$ 86,479
	8"	2,607	\$146,015	\$115,305
	10"	3,259	\$182,519	\$144,132
	12"	3,911	\$219,022	\$172,958

Approx Ave Labor Cost	\$25				
	Manhours	Cost	Equipment	Gravel	Estimated Unit Cost for RSMS
Add gravel (up to 4")	40	\$1,000	\$2,163	\$72,800	\$75,963
Routine grading	4	\$100		\$0	\$100
Dust control	16	\$400		\$1,554	\$1,954
Add 12" base 3" surface	120	\$3,000		\$218,400	\$221,400
Culvert (each)	4	\$100	\$275	\$380	\$755
Ditching	88	\$2,200			

Costed Repair Options

AGW01 Bennets Cove Road-1-1 [Gravel] From: South Road To: Shore (Length: 0.16mi., Width: 20.00ft.)

Surface Status: Routine-9	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 8
Routine grading (S)	\$ 16
Dust control (S)	\$ 320
1" of Gravel trucked to Chebeague (L)	\$ 2,880
2" of Gravel trucked to Chebeague (L)	\$ 5,760
4" of Gravel trucked to Chebeague (L)	\$ 11,520
Add gravel (up to 4") (S)	\$ 12,160
Drainage Status: Good-9	<u>Estimated Cost</u>
Minor ditching (S)	\$ 176

AGW02 Capps Road-1-1 [Gravel] From: Capps end of pavin To: Artist Point Road (Length: 0.14mi., Width: 20.00ft.)

Surface Status: Routine-3	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 5
Routine grading (S)	\$ 10
Dust control (S)	\$ 196
1" of Gravel trucked to Chebeague (L)	\$ 1,764
2" of Gravel trucked to Chebeague (L)	\$ 3,528
4" of Gravel trucked to Chebeague (L)	\$ 7,056
Add gravel (up to 4") (S)	\$ 7,448
Drainage Status: Good-3	<u>Estimated Cost</u>
Minor ditching (S)	\$ 154

AGW03 Charleston Road-1-1 [Gravel] From: John Small Road To: Waldo Point Road (Length: 0.33mi., Width: 20.00ft.)

Surface Status: Routine-2	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 10
Routine grading (S)	\$ 20
Dust control (S)	\$ 396
1" of Gravel trucked to Chebeague (L)	\$ 3,564
2" of Gravel trucked to Chebeague (L)	\$ 7,128
4" of Gravel trucked to Chebeague (L)	\$ 14,256
Add gravel (up to 4") (S)	\$ 15,048
Drainage Status: Good-2	<u>Estimated Cost</u>
Minor ditching (S)	\$ 363

AGW04 Cordes Road-1-1 [Gravel] From: North Road To: Cul du sac (Length: 0.33mi., Width: 10.00ft.)

Surface Status: Routine-2	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 8
Routine grading (S)	\$ 17
Dust control (S)	\$ 330
1" of Gravel trucked to Chebeague (L)	\$ 2,970
2" of Gravel trucked to Chebeague (L)	\$ 5,940
4" of Gravel trucked to Chebeague (L)	\$ 11,880
Add gravel (up to 4") (S)	\$ 12,540
Drainage Status: Good-2	<u>Estimated Cost</u>
Minor ditching (S)	\$ 363

Costed Repair Options

AGW05 East Shore Drive-1-1 [Gravel] From: End of South Road To: Cul du sac (Length: 0.26mi., Width:

Surface Status: Routine-3	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 13
Routine grading (S)	\$ 26
Dust control (S)	\$ 520
1" of Gravel trucked to Chebeague (L)	\$ 4,680
2" of Gravel trucked to Chebeague (L)	\$ 9,360
4" of Gravel trucked to Chebeague (L)	\$ 18,720
Add gravel (up to 4") (S)	\$ 19,760
Drainage Status: Good-3	<u>Estimated Cost</u>
Minor ditching (S)	\$ 286

AGW06 Fenderson Road-1-1 [Gravel] From: End of paved secti To: Cul du sac (Length: 0.20mi., Width:

Surface Status: Routine-4	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 7
Routine grading (S)	\$ 14
Dust control (S)	\$ 280
1" of Gravel trucked to Chebeague (L)	\$ 2,520
2" of Gravel trucked to Chebeague (L)	\$ 5,040
4" of Gravel trucked to Chebeague (L)	\$ 10,080
Add gravel (up to 4") (S)	\$ 10,640
Drainage Status: Good-4	<u>Estimated Cost</u>
Minor ditching (S)	\$ 220

AGW07 Indian Point Road-1-1 [Gravel] From: North Road To: Cul du sac (Length: 0.27mi., Width: 20.00ft.)

Surface Status: Reconstruct-6	<u>Estimated Cost</u>
8" of Gravel trucked to Chebeague (L)	\$ 39,420
12" of Gravel trucked to Chebeague (L)	\$ 59,130
Add 12" gravel to base, 3" to surface (S)	\$ 59,400
Drainage Status: Good-6	<u>Estimated Cost</u>
Minor ditching (S)	\$ 297

AGW08 Jenks Road-1-1 [Gravel] From: South Road To: Shore (Length: 0.33mi., Width: 20.00ft.)

Surface Status: Routine-3	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 17
Routine grading (S)	\$ 33
Dust control (S)	\$ 660
1" of Gravel trucked to Chebeague (L)	\$ 5,940
2" of Gravel trucked to Chebeague (L)	\$ 11,880
4" of Gravel trucked to Chebeague (L)	\$ 23,760
Add gravel (up to 4") (S)	\$ 25,080
Drainage Status: Good-3	<u>Estimated Cost</u>
Minor ditching (S)	\$ 363

Costed Repair Options

AGW09 Littlefield Road-1-1 [Gravel] From: North Road To: South Road (Length: 0.64mi., Width: 15.00ft.)

Surface Status: Routine-6	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 24
Routine grading (S)	\$ 48
Dust control (S)	\$ 960
1" of Gravel trucked to Chebeague (L)	\$ 8,640
2" of Gravel trucked to Chebeague (L)	\$ 17,280
4" of Gravel trucked to Chebeague (L)	\$ 34,560
Add gravel (up to 4") (S)	\$ 36,480
Drainage Status: Good-6	<u>Estimated Cost</u>
Minor ditching (S)	\$ 704

AGW10 Rose Point Road-1-1 [Gravel] From: John Small Road To: Waldo Point Road (Length: 0.33mi.,

Surface Status: Routine-3	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 15
Routine grading (S)	\$ 30
Dust control (S)	\$ 594
1" of Gravel trucked to Chebeague (L)	\$ 5,346
2" of Gravel trucked to Chebeague (L)	\$ 10,692
4" of Gravel trucked to Chebeague (L)	\$ 21,384
Add gravel (up to 4") (S)	\$ 22,572
Drainage Status: Good-3	<u>Estimated Cost</u>
Minor ditching (S)	\$ 363

AGW11 Roy Hill Road-1-1 [Gravel] From: North Road To: South Road (Length: 0.65mi., Width: 20.00ft.)

Surface Status: Routine-5	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 33
Routine grading (S)	\$ 65
Dust control (S)	\$ 1,300
1" of Gravel trucked to Chebeague (L)	\$ 11,700
2" of Gravel trucked to Chebeague (L)	\$ 23,400
4" of Gravel trucked to Chebeague (L)	\$ 46,800
Add gravel (up to 4") (S)	\$ 49,400
Drainage Status: Good-5	<u>Estimated Cost</u>
Minor ditching (S)	\$ 715

AGW12 Soule Road-1-1 [Gravel] From: End of paved secti To: Shore (Length: 0.17mi., Width: 19.00ft.)

Surface Status: Routine-3	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 8
Routine grading (S)	\$ 16
Dust control (S)	\$ 323
1" of Gravel trucked to Chebeague (L)	\$ 2,907
2" of Gravel trucked to Chebeague (L)	\$ 5,814
4" of Gravel trucked to Chebeague (L)	\$ 11,628
Add gravel (up to 4") (S)	\$ 12,274
Drainage Status: Good-3	<u>Estimated Cost</u>
Minor ditching (S)	\$ 187

Costed Repair Options

AGW13 South Shore Drive-1-1 [Gravel] From: South Road To: Cul du sac (Length: 0.23mi., Width: 18.00ft.)

Surface Status: Routine-2	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 10
Routine grading (S)	\$ 21
Dust control (S)	\$ 414
1" of Gravel trucked to Chebeague (L)	\$ 3,726
2" of Gravel trucked to Chebeague (L)	\$ 7,452
4" of Gravel trucked to Chebeague (L)	\$ 14,904
Add gravel (up to 4") (S)	\$ 15,732
Drainage Status: Good-2	<u>Estimated Cost</u>
Minor ditching (S)	\$ 253

AGW14 Waldo Point Road-1-1 [Gravel] From: Rose Point Road To: Cul du sac (Length: 0.14mi., Width: 18.00ft.)

Surface Status: Routine-4	<u>Estimated Cost</u>
Spot grading/blading (S)	\$ 6
Routine grading (S)	\$ 13
Dust control (S)	\$ 252
1" of Gravel trucked to Chebeague (L)	\$ 2,268
2" of Gravel trucked to Chebeague (L)	\$ 4,536
4" of Gravel trucked to Chebeague (L)	\$ 9,072
Add gravel (up to 4") (S)	\$ 9,576
Drainage Status: Good-4	<u>Estimated Cost</u>
Minor ditching (S)	\$ 154

AGW15 Willow Street-1-1 [Gravel] From: South Road To: Shore (Length: 0.08mi., Width: 18.00ft.)

Surface Status: Reconstruct-3	<u>Estimated Cost</u>
8" of Gravel trucked to Chebeague (L)	\$ 10,512
12" of Gravel trucked to Chebeague (L)	\$ 15,768
Add 12" gravel to base, 3" to surface (S)	\$ 15,840
Drainage Status: Poor-3	<u>Estimated Cost</u>
Culverts (S)	\$ 60
Ditching (S)	\$ 176

ASW01 Parking Public Safety Bldg-1 [Paved] From: North Road To: Public Safety Bld (Length: 0.08mi., Width: 18.00ft.)

Surface Status: Preventive-6	<u>Estimated Cost</u>
Sand seal (S)	\$ 1,968
Chip seal (latex modified) (S)	\$ 3,075
Thin (3/4 - 1") overlay (S)	\$ 4,920
Shim with 1" overlay (S)	\$ 7,995
Thick (> 1") overlay (S)	\$ 8,856
Overlay w/ 2" cold mix, top w/ 1" HMA (S)	\$ 14,391
Mill and Fill 1.25" (S)	\$ 15,375

ASW04 South Road-3 [Paved] From: Crossman Rd To: Roy Hill Rd (Length: 0.42mi., Width: 20.00ft.)

Surface Status: Reconstruct-8	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 8,400
18" new 9.5mm gravel, 2" binder, 1" surface (S)	\$ 94,500
24" new gravel, 2" binder, 2" surface (S)	\$ 126,000

Costed Repair Options

ASW05 South Road-4 [Paved] From: Roy Hill Rd To: Inn (Length: 1.15mi., Width: 20.00ft.)

Surface Status: Rehabilitate-10	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 23,000
Shim w/ 2" overlay (S)	\$ 149,500
Reclaim incl 6-8" base, 2" binder, 1.5" surface (S)	\$ 230,000
PM RAP reclamation (S)	\$ 281,750
Reclaim incl 6-8" base, stabilized, 2" binder, 1.5" surface	\$ 281,750

ASW05 South Road-5 [Paved] From: Inn To: East Shore Rd (Length: 0.35mi., Width: 20.00ft.)

Surface Status: Reconstruct-4	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 7,000
18" new 9.5mm gravel, 2" binder, 1" surface (S)	\$ 78,750
24" new gravel, 2" binder, 2" surface (S)	\$ 105,000

ASW06 John Small 02-2 [Paved] From: Below Crossman To: South Road (East) (Length: 0.18mi., Width: 20.00ft.)

Surface Status: Preventive-8	<u>Estimated Cost</u>
Sand seal (S)	\$ 2,736
Chip seal (latex modified) (S)	\$ 4,275
Thin (3/4 - 1") overlay (S)	\$ 6,840
Shim with 1" overlay (S)	\$ 11,115
Thick (> 1") overlay (S)	\$ 12,312
Overlay w/ 2" cold mix, top w/ 1" HMA (S)	\$ 20,007
Mill and Fill 1.25" (S)	\$ 21,375

ASW07 Cottage Road-1 [Paved] From: North Road To: South Road (Length: 0.60mi., Width: 18.00ft.)

Surface Status: Reconstruct-5	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 10,800
18" new 9.5mm gravel, 2" binder, 1" surface (S)	\$ 121,500
24" new gravel, 2" binder, 2" surface (S)	\$ 162,000

ASW07 North Road 03-3 [Paved] From: School House To: Cottage Road (Length: 0.57mi., Width: 21.00ft.)

Surface Status: Reconstruct-4	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 11,970
18" new 9.5mm gravel, 2" binder, 1" surface (S)	\$ 134,663
24" new gravel, 2" binder, 2" surface (S)	\$ 179,550

ASW08 Bar Point Road-1 [Paved] From: Division Point Rd To: Cul du sac (Length: 0.16mi., Width: 20.00ft.)

Surface Status: Routine-2	<u>Estimated Cost</u>
Patching (S)	\$ 160
Crack seal (S)	\$ 1,600
ChipSeal (2015 All States quote) (L)	\$ 6,720
Chip Seal double application (2015 All States quote) (L)	\$ 9,600

ASW08 Capps Road-1 [Paved] From: South Road To: Past C. Doughty (Length: 0.13mi., Width: 18.00ft.)

Surface Status: Routine-2	<u>Estimated Cost</u>
Patching (S)	\$ 117
Crack seal (S)	\$ 1,170
ChipSeal (2015 All States quote) (L)	\$ 4,914
Chip Seal double application (2015 All States quote) (L)	\$ 7,020

Costed Repair Options

ASW08 Division Point Road-1 [Paved] From: North To: Division Point (Length: 0.36mi., Width: 20.00ft.)

Surface Status: Reconstruct-2	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 7,200
18" new 9.5mm gravel, 2" binder, 1"surface (S)	\$ 81,000
24" new gravel, 2" binder, 2" surface (S)	\$ 108,000

ASW08 Old Cart Road-1 [Paved] From: North Road To: Cul du sac (Length: 0.20mi., Width: 21.00ft.)

Surface Status: Rehabilitate-2	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 4,200
Shim w/ 2" overlay (S)	\$ 27,300
Reclaim incl 6-8" base, 2" binder, 1.5" surface (S)	\$ 42,000
Reclaim incl 6-8" base, stabilized, 2" binder, 1.5" surface	\$ 51,450
PM RAP reclamation (S)	\$ 51,450

ASW09 Fenderson Road-1 [Paved] From: South Road To: J. Dought'y drive (Length: 0.19mi., Width:

Surface Status: Reconstruct-2	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 2,660
18" new 9.5mm gravel, 2" binder, 1"surface (S)	\$ 29,925
24" new gravel, 2" binder, 2" surface (S)	\$ 39,900

Drainage Status: Poor-2	<u>Estimated Cost</u>
Grade shoulders (S)	\$ 190
Replace/New culverts (S)	\$ 190
Ditching (S)	\$ 950

ASW09 Firehouse Road-1 [Paved] From: North Road To: South Road (Length: 0.37mi., Width: 19.00ft.)

Surface Status: Reconstruct-6	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 7,030
18" new 9.5mm gravel, 2" binder, 1"surface (S)	\$ 79,088
24" new gravel, 2" binder, 2" surface (S)	\$ 105,450

Drainage Status: Poor-6	<u>Estimated Cost</u>
Grade shoulders (S)	\$ 370
Replace/New culverts (S)	\$ 370
Ditching (S)	\$ 1,850

ASW10 Caso Bay Landing-1 [Paved] From: Chandler's Cove Rd To: State Wharf (Length: 0.05mi., Width:

Surface Status: Reconstruct-7	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 950
18" new 9.5mm gravel, 2" binder, 1"surface (S)	\$ 10,688
24" new gravel, 2" binder, 2" surface (S)	\$ 14,250

ASW10 Chandler Cove Road-1 [Paved] From: South Road To: Caso Bay Lndg Rd. (Length: 0.18mi., Width:

Surface Status: Reconstruct-7	<u>Estimated Cost</u>
Reclaim pavement, revert to gravel (S)	\$ 3,420
18" new 9.5mm gravel, 2" binder, 1"surface (S)	\$ 38,475
24" new gravel, 2" binder, 2" surface (S)	\$ 51,300

Costed Repair Options

ASW10 Stone Wharf Road-1 [Paved] From: South Road To: Stone Wharf (Length: 0.18mi., Width: 22.00ft.)

Surface Status: Routine-10

	<u>Estimated Cost</u>
Patching (S)	\$ 198
Crack seal (S)	\$ 1,980
ChipSeal (2015 All States quote) (L)	\$ 8,316
Chip Seal double application (2015 All States quote) (L)	\$ 11,880

ASW10 Stone Wharf-1 [Paved] From: Stone Wharf Road To: Easterly Extent (Length: 0.13mi., Width:

Surface Status: Preventive-10

	<u>Estimated Cost</u>
Sand seal (S)	\$ 3,144
Chip seal (latex modified) (S)	\$ 4,913
Thin (3/4 - 1") overlay (S)	\$ 7,860
Shim with 1" overlay (S)	\$ 12,773
Thick (> 1") overlay (S)	\$ 14,148
Overlay w/ 2" cold mix, top w/ 1" HMA (S)	\$ 22,991
Mill and Fill 1.25" (S)	\$ 24,563

Drainage Status: Poor-10

	<u>Estimated Cost</u>
Grade shoulders (S)	\$ 131
Replace/New culverts (S)	\$ 131
Ditching (S)	\$ 655