

2018
ANNUAL REPORT



Washington County
Department of Public Works



Department of Public Works

Highways • Engineering

**Deborah Donohue, P.E.
Superintendent**

March, 2019

The Honorable Board of Supervisors
Washington County Municipal Center
383 Broadway
Fort Edward, NY 12828

Members of the Board:

Presented within is the 2018 Department of Public Works Annual Report.

This report summarizes the operations of the Department and associated financial data for your reference.

Thank you for your continued support of the Department of Public Works.

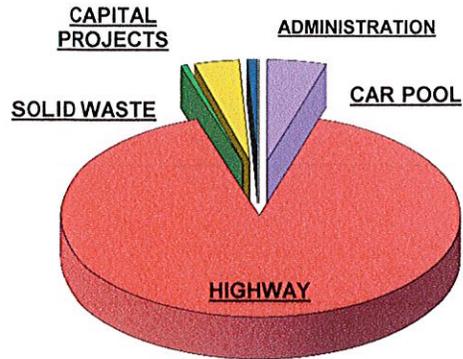
Respectfully submitted,

A handwritten signature in cursive script that reads "Deborah Donohue".

Deborah Donohue, P.E.
Superintendent

DD:lp

**2018
EXPENDITURES OVERSEEN BY DPW**



**2018 EXPENDITURES
(OVERSEEN BY THE DPW)**

| <u>ACCOUNT NAME</u> | <u>EXPENDITURES</u> | <u>% OF TOTAL</u> |
|---------------------|------------------------|-------------------|
| CAR POOL | \$842,116.59 | 4.79% |
| HIGHWAY | \$15,866,672.11 | 90.17% |
| SOLID WASTE | \$97,491.72 | 0.55% |
| CAPITAL PROJECTS | \$641,773.85 | 3.65% |
| ADMINISTRATION | \$148,900.15 | 0.85% |
| TOTAL | \$17,596,954.42 | 100.00% |

**2018 EXPENDITURES
ALL FUNDS**

| <u>ACCOUNT NUMBER</u> | <u>ACCOUNT NAME</u> | <u>EXPENDITURE</u> | <u>% OF TOTAL</u> |
|-----------------------|--|----------------------------------|-------------------|
| A1490 | DPW - ADMINISTRATION | \$148,900.15 | |
| | <i>SUB-TOTAL</i> | \$148,900.15 | 0.85% |
| CM5135 | POOL CAR BENEFITS (CM) | \$815,816.70 \$26,299.89 | |
| | <i>SUB-TOTAL</i> | \$842,116.59 | 4.79% |
| D3310 | TRAFFIC CONTROL | \$283,432.08 | |
| D5010 | ADMINISTRATION | \$133,173.87 | |
| D5020 | ENGINEERING | \$245,245.47 | |
| D5110 | MAINTENANCE OF HIGHWAYS & BRIDGES | \$3,285,290.35 | |
| D5142 | COUNTY SNOW & ICE CONTROL | \$1,840,306.79 | |
| D5144 | STATE SNOW & ICE CONTROL | \$668,488.87 | |
| D5149 | WORK FOR OTHER DEPARTMENTS | \$0.00 | |
| D5112 | HIGHWAY PROJECTS | \$3,822,927.20 | |
| D5120 | BRIDGE PROJECTS | \$957,138.17 | |
| DM5130 | ROAD MACHINERY BENEFITS (D,DM) | \$2,586,229.31 \$2,044,440.00 | |
| | <i>SUB-TOTAL DIV. OF HIGHWAYS</i> | \$15,866,672.11 | 90.17% |
| CLB8160 | DPW - SOLID WASTE MANAGEMENT BENEFITS (CLB) | \$22,845.45 \$74,646.27 | |
| | <i>SUB-TOTAL DIV. OF SOLID WASTE</i> | \$97,491.72 | 0.55% |
| CAPITAL CONSTRUCTION | PROJ. 78; PROJ. 81; PROJ. 118 | \$641,773.85 | |
| | <i>SUB-TOTAL CAPITAL CONSTRUCTION</i> | \$641,773.85 | 3.65% |
| | TOTAL EXPENDITURES FOR 2018 | \$17,596,954.42 | 100.00% |

*Figures may vary slightly from County Treasurer's final reconciliation.

2018 DPW GENERAL FUND

| | APPROPRIATIONS | EXPENDED | BALANCE |
|-----------------------------|---------------------|---------------------|--------------------|
| | (AMENDED) | | |
| A1490 | | | |
| DPW ADMINISTRATION | | | |
| PERSONAL SERVICES | \$190,000.00 | \$139,709.74 | \$50,290.26 |
| EQUIPMENT | \$0.00 | \$0.00 | \$0.00 |
| CONTRACTUAL SERVICES | \$14,400.00 | \$9,190.41 | \$5,209.59 |
| | \$204,400.00 | \$148,900.15 | \$55,499.85 |

***Figures may vary slightly from County Treasurer's final reconciliation*

2018 POOL CAR FUND

| | APPROPRIATIONS <i>(AMENDED)</i> | EXPENDED | BALANCE | ENCUMBERED TO 2019 |
|-------------------------------------|------------------------------------|---------------------|---------------------|-----------------------|
| CM5135 POOL CAR | | | | |
| PERSONAL SERVICES | \$88,500.00 | \$88,240.38 | \$259.62 | |
| EQUIPMENT | \$426,000.00 | \$301,640.74 | \$124,359.26 | \$98,061.96 |
| CONTRACTUAL SERVICES | \$392,150.00 | \$430,312.18 | (\$38,162.18) | |
| <i>INVENTORY ADJUSTMENT</i> | | <i>-\$4,376.60</i> | <i>\$4,376.60</i> | |
| | \$906,650.00 | \$815,816.70 | \$90,833.30 | |
| CM9010-CM9060 | | | | |
| BENEFITS | \$25,856.00 | \$26,299.89 | (\$443.89) | |
| POOL CAR FUND | | | | |
| Cash Balance as of 12/31/18: | Cash 200 | | \$675,877.96 | |

***Figures may vary slightly from County Treasurer's final reconciliation*

2018 COUNTY ROAD FUND

| | APPROPRIATIONS (AMENDED) | EXPENDED | BALANCE | ENCUMBERED to 2019 |
|---|-----------------------------|-----------------------|---------------------|-----------------------|
| D3310 TRAFFIC | | | | |
| PERSONAL SERVICES | \$54,650.00 | \$53,064.04 | \$1,585.96 | |
| EQUIPMENT | \$200.00 | \$172.80 | \$27.20 | |
| CONTRACTUAL SERVICES | \$255,300.00 | \$204,559.27 | \$50,740.73 | |
| WQIP GRANT | \$366,463.00 | \$25,635.97 | \$340,827.03 | |
| | \$676,613.00 | \$283,432.08 | \$393,180.92 | |
| D5010 ADMINISTRATION | | | | |
| PERSONAL SERVICES | \$123,500.00 | \$122,866.09 | \$633.91 | |
| EQUIPMENT | \$600.00 | \$149.99 | \$450.01 | |
| CONTRACTUAL SERVICES | \$16,212.00 | \$10,157.79 | \$6,054.21 | |
| | \$140,312.00 | \$133,173.87 | \$7,138.13 | |
| D5020 ENGINEERING | | | | |
| PERSONAL SERVICES | \$216,384.00 | \$213,524.90 | \$2,859.10 | |
| EQUIPMENT | \$10,000.00 | \$9,769.67 | \$230.33 | |
| CONTRACTUAL SERVICES | \$38,000.00 | \$21,950.90 | \$16,049.10 | |
| | \$264,384.00 | \$245,245.47 | \$19,138.53 | |
| D5110 MAINTENANCE HIGHWAYS & BRIDGES | | | | |
| PERSONAL SERVICES | \$1,777,834.00 | \$1,658,004.19 | \$119,829.81 | |
| EQUIPMENT | \$5,250.00 | \$1,139.99 | \$4,110.01 | |
| CONTRACTUAL SERVICES | \$1,758,150.00 | \$1,626,146.17 | \$132,003.83 | |
| | \$3,541,234.00 | \$3,285,290.35 | \$255,943.65 | |

***Figures may vary slightly from County Treasurer's final reconciliation*

2018 COUNTY ROAD FUND cont'd

| | APPROPRIATIONS (AMENDED) | EXPENDED | BALANCE | ENCUMBERED TO 2019 |
|--|-----------------------------|------------------------|-----------------------|-----------------------|
| D5142 COUNTY SNOW | | | | |
| PERSONAL SERVICES | \$510,000.00 | \$390,750.61 | \$119,249.39 | |
| CONTRACTUAL SERVICES | \$1,485,000.00 | \$1,465,122.20 | \$19,877.80 | |
| <i>INVENTORY/SALT USAGE ADJ.</i> | | <i>(\$15,566.02)</i> | <i>\$15,566.02</i> | |
| | \$1,995,000.00 | \$1,840,306.79 | \$154,693.21 | |
| D5144 STATE SNOW | | | | |
| PERSONAL SERVICES | \$160,000.00 | \$95,233.14 | \$64,766.86 | |
| CONTRACTUAL SERVICES | \$662,000.00 | \$573,255.73 | \$88,744.27 | |
| | \$822,000.00 | \$668,488.87 | \$153,511.13 | |
| D5149 WORK-OTHER DEPTS. | | | | |
| PERSONAL SERVICES | \$10,000.00 | \$0.00 | \$10,000.00 | |
| CONTRACTUAL SERVICES | \$2,000.00 | \$0.00 | \$2,000.00 | |
| | \$12,000.00 | \$0.00 | \$12,000.00 | |
| D5112 - CONSTRUCTION & CHIPS PROJECTS | \$3,775,009.00 | \$3,722,904.66 | \$52,104.34 | |
| CR75 & 40 Preservation: | \$830,091.00 | \$56,122.32 | \$773,968.68 | |
| <i>INVENTORY ADJUSTMENT:</i> | | <i>\$43,900.22</i> | <i>(\$43,900.22)</i> | |
| D5120 - BRIDGE PROJECTS | \$903,000.00 | \$957,138.17 | (\$54,138.17) | |
| | \$5,508,100.00 | \$4,780,065.37 | \$728,034.63 | |
| D9010-D9065 BENEFITS | \$1,957,841.00 | \$1,820,331.10 | \$137,509.90 | |
| GRAND TOTAL-ROAD FUND | \$14,917,484.00 | \$13,056,333.90 | \$1,861,150.10 | |
| COUNTY ROAD | | | | |
| Cash Balance as of 12/31/18: | D200 | | \$1,504,770.46 | |

***Figures may vary slightly from County Treasurer's final reconciliation*

2018 COUNTY ROAD MACHINERY FUND

| | APPROPRIATIONS (AMENDED) | EXPENDED | BALANCE | ENCUMBERED to 2019 |
|---|-----------------------------|-----------------------|-----------------------|-----------------------|
| DM5130 ROAD MACHINERY | | | | |
| PERSONAL SERVICES | \$464,800.00 | \$450,688.74 | \$14,111.26 | |
| EQUIPMENT | \$1,009,290.00 | \$428,959.88 | \$580,330.12 | \$ 427,367.18 |
| CONTRACTUAL SERVICES | \$2,189,492.00 | \$1,795,073.78 | \$394,418.22 | est. \$ 1,500.00 |
| <i>(INVENTORY ADJUSTMENTS)</i> | | <i>(\$88,493.09)</i> | <i>\$88,493.09</i> | |
| | \$3,663,582.00 | \$2,586,229.31 | \$1,077,352.69 | |
| DM9010-DM9065 | | | | |
| BENEFITS | \$222,219.00 | \$224,108.90 | (\$1,889.90) | |
| CO. ROAD. MACH. | | | | |
| Cash Balance as of 12/31/18: DM200 | | | \$945,644.24 | |

***Figures may vary slightly from County Treasurer's final reconciliation*

2018 SOLID WASTE MGMT. FUND

| | APPROPRIATIONS | EXPENDED | BALANCE |
|------------------------------|--------------------|--------------------|-------------------|
| | <i>(AMENDED)</i> | | |
| CLB8160 | | | |
| DPW SOLID WASTE | | | |
| PERSONAL SERVICES | \$0.00 | \$0.00 | \$0.00 |
| EQUIPMENT | \$0.00 | \$0.00 | \$0.00 |
| CONTRACTUAL SERVICES | \$31,000.00 | \$22,845.45 | \$8,154.55 |
| | \$31,000.00 | \$22,845.45 | \$8,154.55 |
| CLB9010-CLB9060 | | | |
| BENEFITS | \$76,800.00 | \$74,646.27 | \$2,153.73 |
| SOLID WASTE MGMT. | | | |
| Cash Balance as of 12/31/18: | | FUND CLOSED | \$0.00 |

**Figures may vary slightly from County Treasurer's final reconciliation*

2018

HIGHWAY & BRIDGE

CONSTRUCTION & MAINTENANCE

The Highway Department is responsible for the maintenance of 286 miles of County highways and 123 County bridges. By contract, an additional 100 miles of State highways are maintained during the winter months for snow and ice control. The combination of County and State maintenance provides an overall balance that effectively and efficiently keeps the work force productive, but more importantly, the public safe.

In addition to normal highway and bridge maintenance, our crews also completed a variety of other duties.

Our sign shop is responsible for signing and marking our County highway system. During 2018, 286 miles of center lines were striped, along with over 400 miles of edge lines by contract. They also painted several miles for various Towns. In order to stay compliant with MUTCD (Manual on Traffic Control Standards), the sign crew fabricated signs in the sign shop. They also made numerous signs for various Towns and Villages. They were also responsible for signage and detouring for various road and bridge projects and closures. Due to vandalism, vehicle hits, and the elements, it is an ongoing task to keep up with the maintenance of over 6800 highway signs. They were also very helpful to numerous Towns in providing signs and placement of signs.

During the 2018 construction season, our bridge crews were able to get 4 bridges complete. Mother Nature didn't cooperate in the early fall. The high water levels made it difficult to complete the 4 we had planned.

Our Construction crews were busy in 2018 with our 2 Grad-alls, a wheeled excavator, and the rental of 2 track excavators, installing over 2300' of cross culverts. The replacement culverts were on our '18 projects, and we were also able to get some of our '19 projects started with a couple of large diameter culverts. They were also busy installing sediment basins on CR 32 and a few on CR 1 in the Lake George Water Shed to help with run off and sediment getting into the lake. We also assisted a few of the Towns with culverts.

Our blacktop crew was also very productive with paving our wear course on 11 miles of roads that we bindered in 2016 & 2017. There was also 4.25 miles of Full Depth Reclamation with a binder coarse of blacktop and wear coarse. Some of the full depth was done with grant money to keep the cost down. We also did a process called "mill and fill" in the Hamlet of

Shushan. The paving crew did a total of 23 miles. The shoulders were then backed up with gravel, top soil, and millings which we got from some of our milling projects. The driveways were also backed up with blacktop and item 4. In all, they were able to put down close to 50,000 tons of top. They were also asked to help out a school district to help alleviate some safety/traffic concerns and paved a new driveway for them.

When not in construction mode, the crews were busy maintaining the highways with roadside pickup, brush cutting, road sign straightening, guide rail installation, and other related work. The 3 road side mowers were out mowing from early May to November. Our 2 over the rail mowers were out most of the year mowing grass and brush in spring, summer, and fall. Throughout the year the crews patched potholes, cut trees and took care of any "request for service" that came into the front office. They also maintained the equipment they were responsible for.

**2018
MILES OF HIGHWAYS IN TOWNS***

| TOWN | STATE MILEAGE | COUNTY MILEAGE OUTSIDE VILLAGE | COUNTY MILEAGE INSIDE VILLAGE | TOWN MILEAGE | VILLAGE** MILEAGE | TOTAL MILEAGE |
|--------------|---------------|--------------------------------|-------------------------------|---------------|-------------------|----------------|
| ARGYLE | 14.13 | 23.47 | | 95.18 | 0.95 | 133.73 |
| CAMBRIDGE | 5.34 | 19.38 | 0.14 | 62.60 | 1.79 | 89.25 |
| DRESDEN | 10.51 | 9.04 | | 34.32 | | 53.87 |
| EASTON | 16.70 | 23.67 | 0.68 | 86.09 | 0.73 | 127.87 |
| FORT ANN | 18.14 | 14.49 | 0.54 | 73.55 | 1.82 | 108.54 |
| FORT EDWARD | 13.04 | 13.65 | 0.37 | 34.54 | 13.74 | 75.34 |
| GRANVILLE | 25.82 | 18.64 | 1.77 | 68.82 | 9.98 | 125.03 |
| GREENWICH | 17.13 | 15.95 | | 76.50 | 7.09 | 116.67 |
| HAMPTON | 7.40 | 8.51 | | 17.68 | | 33.59 |
| HARTFORD | 20.26 | 10.34 | | 49.34 | | 79.94 |
| HEBRON | 9.06 | 21.26 | | 68.18 | | 98.50 |
| JACKSON | 13.70 | 11.90 | | 56.92 | | 82.52 |
| KINGSBURY | 21.39 | 19.16 | 2.28 | 52.56 | 21.57 | 116.96 |
| PUTNAM | 8.36 | 10.30 | | 32.73 | | 51.39 |
| SALEM*** | 10.35 | 19.96 | | 71.58 | | 101.89 |
| WHITE CREEK | 9.74 | 10.78 | 0.62 | 53.58 | 8.49 | 83.21 |
| WHITEHALL | 13.08 | 26.74 | 0.36 | 35.30 | 13.35 | 88.83 |
| TOTAL | 234.15 | 277.24 | 6.76 | 969.47 | 79.51 | 1567.13 |

| | |
|--------------------------------|----------------|
| STATE MILEAGE | 234.15 |
| COUNTY MILEAGE | 284.00 |
| TOWN MILEAGE | 969.47 |
| VILLAGE MILEAGE | 79.51 |
| TOTAL MILEAGE IN COUNTY | 1567.13 |

* Figures based on reported mileages as of 12/31/2017, and in many cases are reflective of adjustments to Local (County, Town, & Village mileages made by New York State Department of Transportation (NYSDoT) using Global Positioning System (GPS) technology

** Village mileage figures do not include State & County mileages inside villages

*** Town of Salem assumed jurisdiction of streets and roads (+5.07 miles) in former Village of Salem per Order of Dissolution, effective May 1, 2016

WASHINGTON COUNTY DEPARTMENT OF PUBLIC WORKS 2018 COUNTY ROAD PROJECTS

- 1. County Route 1** **Town of Putnam**
 Glenburnie Access to NYS Rte 22 Roadway FDR (Full Depth Reclamation) at a depth of 4"-8" with calcium added, from Warrick Rd to NYS Rte 22 (1.51 mi) with \$25,000 funding from Multi-Modal #4 Program in coordination with Assemblymember Dan Stec of Assembly District 4. Work performed by Peckham Road Corp. on this portion of roadway, re-graded, then repaved with 3" type 3 HMA (Hot Mixed Asphalt) binder course x 22'± wide by County forces. Remaining roadway section, 0.90 mi, County Forces performed T&L with HMA process. Installed screened gravel (topsoil & compost mix in front of residences) 3'- 4' wide. Work performed by County Forces.
\$465,562.12 (\$193,180/mi)
2.41 miles

- 2. County Route 11** **Town of Whitehall**
 Abair Rd intersection to Whitehall/Hampton townline roadway section, (0.83 mi), County Forces performed T&L with HMA process. Roadway section FDR (Full Depth Reclamation) at a depth of 4"-8" with calcium added, from Whl/Ham townline to Vermont State line (1.53 mi). Work performed by Peckham Road Corp. on this portion of roadway, re-graded, then repaved with 3" type 3 HMA (Hot Mixed Asphalt) binder course x 22'± wide by County forces. Installed screened gravel (topsoil & compost mix in front of residences) 3'- 4' wide. Work performed by County Forces
\$548,764.94 (\$232,528/mi)
2.36 miles

- 3. County Route 16 (Return to 2017 Roadway Projects)** **Town of Fort Ann**
 Two roadway sections, Catherine St to West Rd (s) 1.10 mi & Evans Ln to 1.3 mi south of West Rd (n) 1.3 miles, Return to install traveling surface top course over binder course. Roadway trued and leveled with paving of 2" type 6 HMA (Hot Mixed Asphalt) overlay x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3'- 4' wide. Work performed by County Forces.
\$254,787.93 (\$106,162/mi)
2.40 miles

- 4. County Route 16 (Return to 2016 Roadway Project)** **Town of Fort Ann**
 Roadway section, 1.3 mi south of West Rd (n) to Friedman's Pit Entrance (1.6 miles), Return to install traveling surface top course over binder course. Roadway trued and leveled with paving of 2" type 6 HMA (Hot Mixed Asphalt) overlay x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3'- 4' wide. Work performed by County Forces.
\$157,618.20 (\$98,511/mi)
1.60 miles

- 5. County Route 23 (Return to 2017 Roadway Project)** **Town of Granville**
 Roadway section, Guildler Hollow Rd to NYS Rte 22 (2.69 miles), Return to install traveling surface top course over binder course. Roadway trued and leveled with paving of 2" type 6 HMA (Hot Mixed Asphalt) overlay x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3' - 4' wide. Work performed by County Forces.
2.69 miles **\$312,331.29** (\$116,108/mi)
- 6. County Route 31** **Town of Hebron**
 Middle Rd to Big Burch Rd Roadway was T&L with HMA process by County Forces Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3' - 4' wide. **CHIP Project**
0.97 miles **\$134,922.37** (\$139,095/mi)
- 7. County Route 61 (Return to 2017 Roadway Project)** **Town of Jackson**
 Roadway section, County Route 62 to NYS Rte 22 (1.7 miles), Return to install traveling surface top course over binder course. Roadway trued and leveled with paving of 2" type 6 HMA (Hot Mixed Asphalt) overlay x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3' - 4' wide. Work performed by County Forces. **CHIP Project**
1.70 miles **\$180,972.30** (\$106,454/mi)
- 8. County Route 61** **Town of Jackson**
 NYS Rte 29 to County Route 62, (1.19 mi), Roadway section FDR (Full Depth Reclamation) at a depth of 4"-8" with calcium added. Work performed by Peckham Road Corp., re-graded, then repaved with 3" type 3 HMA (Hot Mixed Asphalt) binder course x 22'± wide by County forces. Installed screened gravel (topsoil & compost mix in front of residences) 3' - 4' wide.
1.19 miles **\$280,085.87** (\$235,366/mi)
- 9. County Route 61** **Town of Jackson**
 NYS Rte 22 to Sutherland, Rd Roadway was T&L with HMA process by County Forces Installed screened gravel and asphalt millings (topsoil & compost mix in front of residences) shoulders, 3' - 4' wide.
1.86 miles **\$267,250.97** (\$143,683/mi)
- 10. County Route 61, 64, & 64A (Shushan)** **Town of Salem**
 Cold Milling operation at a depth of 2" performed by Rifenburg Construction on these portions of roadways to maintain curb reveal and drainage infrastructure. County Forces performed T&L with HMA process. Installed screened gravel (topsoil & compost mix in front of residences) 3' - 4' wide. Work performed by County Forces.
1.12 miles **\$211,077.45** (\$188,462/mi)

- 11. County Route 62 (Return to 2017 Roadway Project)** **Town of Jackson**
 Roadway section, Kenyon Hill Rd to Co Rte 61 (0.7 miles), Return to install traveling surface top course over binder course. Roadway trued and leveled with paving of 2" type 6 HMA (Hot Mixed Asphalt) overlay x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3'- 4' wide. Work performed by County Forces. **CHIP Project**
0.70 miles **\$85,795.07** (\$122,564/mi)
- 12. County Route 64** **Town of Salem**
 0.4 miles north of Cross Rd to NYS Rte 22 Roadway was T&L with HMA process by County Forces Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3'- 4' wide.
1.51 miles **\$203,193.63** (\$134,565/mi)
- 13. County Route 68** **Town of White Creek**
 Lincoln Hill Rd to Pine View Way Roadway was T&L with HMA process by County Forces Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3'- 4' wide.
2.36 miles **\$477,962.10** (\$202,526)
- 14. County Route 113 (Return to 2017 Roadway Projects)** **Town of Easton**
 NYS Route 29 to Hogsback Rd (1.23 miles), Return to install traveling surface top course over binder course. Roadway trued and leveled with paving of 2" type 6 HMA (Hot Mixed Asphalt) overlay x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) shoulders, 3'- 4' wide. Work performed by County Forces.
1.23 miles **\$142,580.42** (\$115,919/mi)

TOTAL COSTS OF 2019 ROAD PROJECTS

24.10 mile **\$3,722,904.66** (\$154,477/mi)

County Road Project Repairs:

2017 PPST (Paver Placed Surface Treatments) road projects mutually agreed repair/fixes. Root causes of failures explained as:

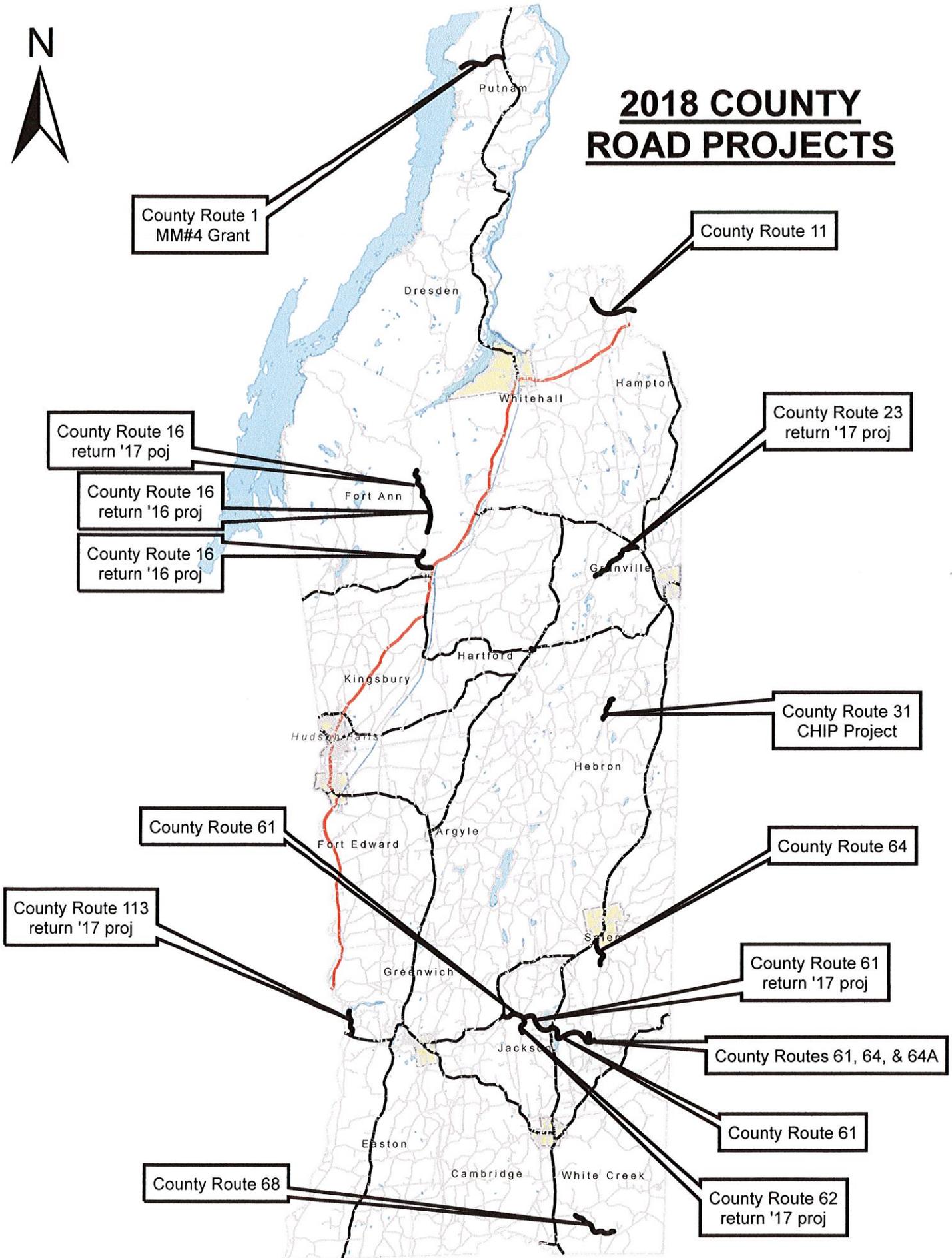
- Asphalt stripping of high friction aggregate causing loss of fines
- Loss of fines resulted in surfacing raveling

Work performed by The Gorman Group.

- CR 29 Granville (1.08 mi), CR 31 Hebron (1.02 mi), CR 59A Cambridge (0.79 mi) and CR64 Jackson (0.85 mi) received a “Fog Seal CSS1H w/ black beauty aggregate” application/process
- CR 31 Hebron (2.33 mi) received a “Paving with Micro paving Type 2. 25 lbs/sq. yd.” application/process.
- CR 27 Granville (1.35 mi) and CR47 Argyle (2.21 mi) received a “Paving with 6.3 Hot mix. 1” depth paving with tack coat. .15 gal/sq. yd.” application/process.



2018 COUNTY ROAD PROJECTS



**WASHINGTON COUNTY DEPARTMENT OF PUBLIC WORKS
2018 COUNTY BRIDGE PROJECTS**

1. Cambridge Bridge C103 County Route 74 (spans Wampecack Creek) 19.5' span

Demolished and removed the former 11.1' span, concrete deck, steel stringers, concrete abutments and wingwalls, originally built in 1936. No adjacent detour provided for the traveling public, but a detour using several local and County roads was signed accordingly. Structure designed on a 27°± skew with U-wall wings on the NW & SE corners. Constructed a new reinforced concrete footings (both 2' thick x 8' wide) set on #2 crushed stone bedding (12" minimum thickness). Constructed reinforced concrete abutments & wingwalls (both 2' thick x 60'-9"± long x 9.75'± high). Installed six (6) ASTM A992 grade 50 W14x109 x 25'-10½" long structural steel with bolted ASTM A992 grade 50 C9x20 diaphragms. Northern Stud Welding furnished and installed shear stud connectors on the top flange of each beam. A new reinforced, cast in place NYSDOT Class H 9½" thick concrete deck, 27' wide x 25'-6" long. Constructed two (2) 27' x 21.75'± x 12" thick reinforced, cast in place NYSDOT Class H concrete approach slabs to lessen impact of traffic loads to structure. Installed NYSDOT approved steel bridge railing [3-rail curbless – 6 posts each side (12 total) at 7'-8¾"± c.c. and box beam guide rail at approaches. Medium stone bank protection installed at all four corners of structure.

Total Cost \$311,542.13

2. Cambridge Bridge C105 County Route 74 (spans Wampecack Creek) 19.5' span

Demolished and removed the former 11.1' span, concrete deck, steel stringers, concrete abutments and wingwalls, originally built in 1936. No adjacent detour provided for the traveling public, but a detour using several local and County roads was signed accordingly. Structure designed on a 27°± skew with U-wall wings on the NW & SE corners. Constructed a new reinforced concrete footings (both 2' thick x 8' wide) set on #2 crushed stone bedding (12" minimum thickness). Constructed reinforced concrete abutments & wingwalls (both 2' thick x 60'-9"± long x 9.75'± high). Installed six (6) ASTM A992 grade 50 W14x109 x 25'-10½" long structural steel with bolted ASTM A992 grade 50 C9x20 diaphragms. Northern Stud Welding furnished and installed shear stud connectors on the top flange of each beam. A new reinforced, cast in place NYSDOT Class H 9½" thick concrete deck, 27' wide x 25'-6" long. Constructed two (2) 27' x 21.75'± x 12" thick reinforced, cast in place NYSDOT Class H concrete approach slabs to lessen impact of traffic loads to structure. Installed NYSDOT approved steel bridge railing [3-rail curbless – 6 posts each side (12 total) at 7'-8¾"± c.c. and box beam guide rail at approaches. Medium stone bank protection installed at all four corners of structure.

Total Cost \$297,325.22

3. Easton Bridge C108 County Route 74A (spans Fly Creek) 19.5'span

Demolished and removed the former 13' x 5' Structural Steel Plate Arch on concrete footings, originally built in 1963. No adjacent detour provided for the traveling public, but a detour using several local and County roads was signed accordingly. Constructed a new reinforced concrete footings (both 2' thick x 8' wide) set on #2 crushed stone bedding (12" minimum thickness). Constructed reinforced concrete abutments & wingwalls (both 2' thick x 46' - 8"± long x 9.75'± high). Installed six (6) ASTM A992 grade 50 W14x109 x 25'-10½" long structural steel with bolted ASTM A992 grade 50 C9x20 diaphragms. Northern Stud Welding furnished and installed shear stud connectors on the top flange of each beam. A new reinforced, cast in place NYSDOT Class E 9½" thick concrete deck, 28' wide x 22'-9" long. Constructed two (2) 25' x 15'± x 12" thick reinforced, cast in place NYSDOT Class E concrete approach slabs to lessen impact of traffic loads to structure. Installed NYSDOT approved steel bridge railing [3-rail curbless – 4 posts each side (8 total) at 6'-9¾"± c.c. and box beam guide rail at approaches. Medium stone bank protection installed at all four corners of structure.

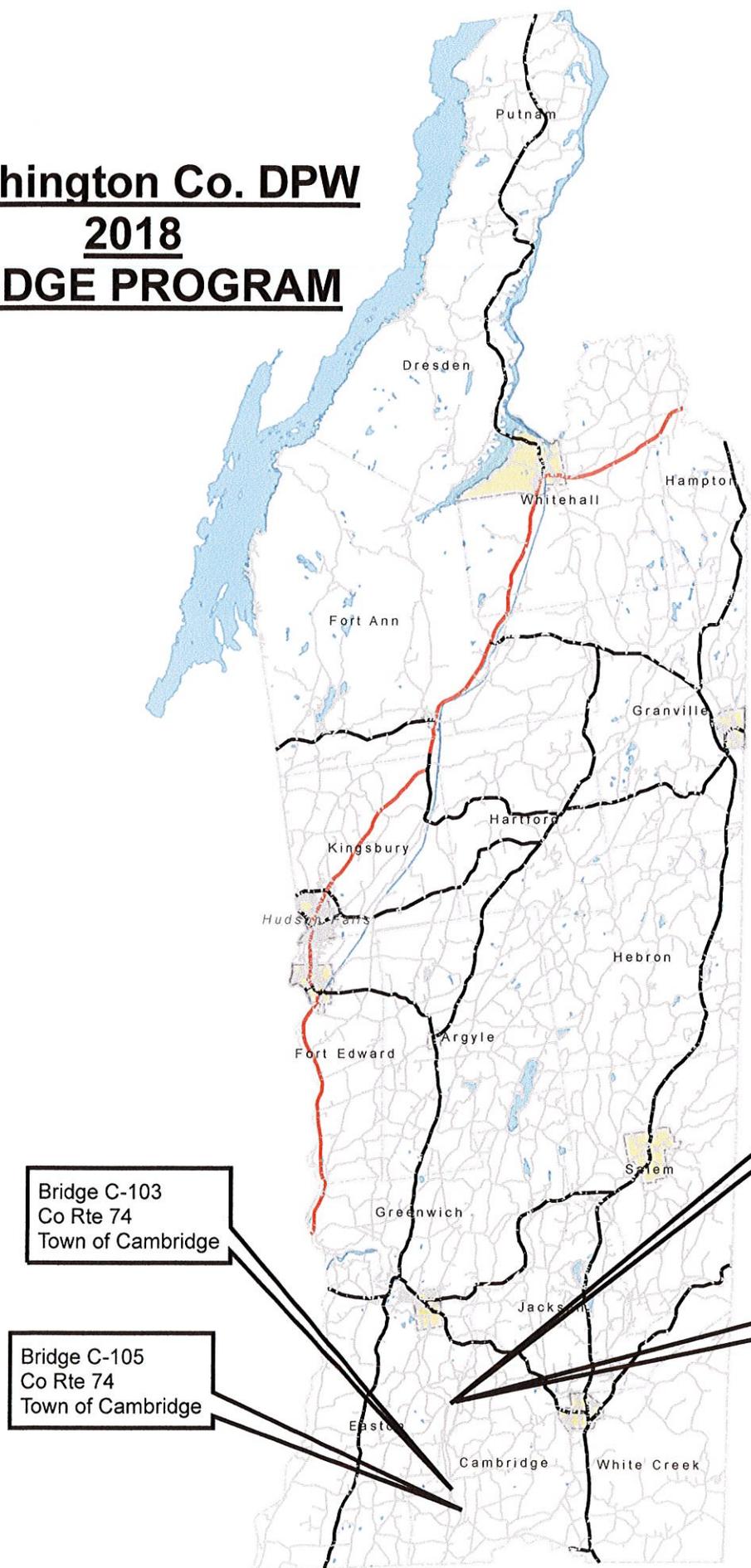
Total Cost \$175,796.98
(\$9,476 charged to D5110)

4. Easton Bridge C109 County Route 74A (spans Fly Swamp Outlet) 19.5'span

Demolished and removed the former 12' span, concrete deck, steel stringers, concrete abutments and wingwalls, originally built in 1940. No adjacent detour provided for the traveling public, but a detour using several local and County roads was signed accordingly. Structure designed on a 15°± skew. Constructed a new reinforced concrete footings (both 2' thick x 8' wide) set on #2 crushed stone bedding (12" minimum thickness). Constructed reinforced concrete abutments & wingwalls (both 2' thick x 48' - 10"± long x 8'± high). Installed six (6) ASTM A992 grade 50 W14x109 x 23'-3½" long structural steel with bolted ASTM A992 grade 50 C9x20 diaphragms. Northern Stud Welding furnished and installed shear stud connectors on the top flange of each beam. A new reinforced, cast in place NYSDOT Class E 9½" thick concrete deck, 30' wide x 23'-6± long. Constructed two (2) 25' x 18'-5"± x 12" thick reinforced, cast in place NYSDOT Class E concrete approach slabs to lessen impact of traffic loads to structure. Installed NYSDOT approved steel bridge railing [3-rail curbless – 4 posts each side (8 total) at 7' - 1"± c.c. and box beam guide rail at approaches. Medium stone bank protection installed at all four corners of structure.

Total Cost \$219,685.38
(\$37,940.61 charged to D5110)

Washington Co. DPW
2018
BRIDGE PROGRAM



Bridge C-103
Co Rte 74
Town of Cambridge

Bridge C-105
Co Rte 74
Town of Cambridge

Bridge C-109
County Route 74A
Town of Easton

Bridge C-108
County Route 74A
Town of Easton

WASHINGTON COUNTY DEPARTMENT OF PUBLIC WORKS 2018 ENGINEERING

During 2018, the Engineering section was involved in various activities related to the improvement of highway and bridge infrastructure throughout Washington County.

Administrative:

1) 2017 Annual Report – summary of expenditures and construction/maintenance-related activities undertaken by the Washington County DPW in 2017.

2) Salt stockpiles in bins at all 8 DPW substations at end of snow removal season – total 2,214.75 tons (as of May 2018) – for documentation of County-incurred expenditures relative to State Snow and Ice Control for 2017-2018 winter season. The amount of salt that can be safely stored in all 8 bins is approximately 4,500 tons.

3) Underground Facilities Protective Organization (UFPO) requests – In 2017, most handled by each district foreman.

4) Issued work permits (under Section 136 of Highway Law) to individuals, businesses, organizations, and other municipalities to perform work on or near County roads inside right-of-way (R-O-W) limits. A total of 46 permits were issued in 2018. These included 27 for Utility work (electrical service & pole-related), 2 fundraisers, 16 driveways/field accesses, 1 ROW Usage, 2 Special Hauling Permits.

5) “Adopt-a-Highway” requests – Two request from organizations and clubs to perform periodic clean-up activities along County highways in Argyle & Fort Ann in 2018.

6) Assistance to general public with requests for copies of Town, County, and State (the latter prior to 1946) purchased R-O-W and/or abandonment maps. Our office handled approximately 20 such requests in 2018, the majority from private land surveyors and consulting engineers; and also handled numerous highway-related R-o-W and/or abandonment inquiries from the general public and Office of Real Property (Tax Mapping). Addressed miscellaneous inquiries from the public, other municipalities, and organizations as well.

7) Phase II of Municipal Separate Storm Sewer Systems (MS4) program – in 2018, we assisted in the preparation of the 2016-2017 Annual Report (for term from March 10, 2017 to March 9, 2018). We continued to be involved with the inspections of catch basins and quantifying amounts of sediment removed from each at the County Municipal and Law Enforcement complex in Fort Edward (County maintenance crew from Fort Edward substation inspected and cleaned these) and along County Routes 32, 35, & 75. Our office performed annual inspection and took outfall photographs for the two outfall watersheds along County Route 37 (Burgoyne Avenue) at McIntyre Street & Fuller Pond and the two outfall watersheds behind the Law Enforcement Center.

8) County Highway Inventory – certification of County highway mileage (284.00 miles) in 2018 along with updated highway related information as required by NYSDOT for Consolidated Highway Improvement Program (CHIP) aid.

9) DPW-related Freedom of Information Law (FOIL) requests. County Routes 77 & 113

10) Plan of Action for Fracture Critical Bridges – Updated - as result of I-5 bridge collapse in Washington State, being mentioned at the Federal level. Candidates include bridges C2, C20, C29, C54, CL78, C80, C132, C149, C150, & CL157.

11) Assistance with miscellaneous administrative functions – such as: a) adjustments to snow plowing routes; b) billing procedures for materials c) snow and ice removal/maintenance contracts with Towns; and

d) material bid openings – including culvert pipe, underdrain, crushed stone, concrete, blacktop, sign blanks, centerline/edgeline paint, structural steel, reinforcing steel, etc.

13) *Annual Safety Day @* Washington County Fairgrounds, Town of Easton

14) *13th Annual North Country Regional Stormwater Tradeshow & Conference* – attended @ Highland Golf Course, Queensbury, NY

15) *24th Statewide Conference on Local Bridges* – attended @ Liverpool, NY – Engineering the Federal Aid Process.

16) *Engineers Week Seminars* - attended @ Albany, NY

17) *Champlain Watershed Grant Application* – project selection & backup material

18) *LDSA* – Consultant Selection

19) *LDSA Project Review* – Church Street Bridge, Granville; Shushan Bridge, Jackson/Salem; Dr Johnson & Cemetery Rd Bridges- Bridge Preservation; County Rte 46 – Pavement Preservation

20) *WQIP* – Water Quality Improvement Program grant from NYSDEC. Various projects on county and town roads throughout Washington County.

Township Assistance in 2018 included the following:

1) *annual update of Town Highway Inventory for 2018* – enrollment dates were between October and November, 2018, when Town highway superintendents came to DPW Engineering office to update highway-related information and sign mileage certifications. Inventory updates and mileage certifications were processed and sent along with County inventory and mileage certification to Region 1 headquarters in Albany, NY. In addition, our office maintains a 40+ year old Town road history data base and continually updates addendums in back of certified copies of resolutions that define each Town highway system in effect since 1963. Serves as basis for local highway aid, particularly Consolidated Highway Improvement Plan (CHIP). Emergency Services and Real Property offices are kept informed of the road changes we receive from the towns.

2) *Inspection of Town Bridges* – continuing inspection and baseline surveys of town bridges/culverts ranging from 5' span to 20' span

3) *Town of Salem* – Gravel Pit survey & test hole locations in preparation for Mining Permit renewal

4) *Town of Jackson, Johnson Road* – field survey, design options of drainage issues.

5) *Town of Jackson, Skellie Rd & CR61 Intersection* – *sight distance* survey, design

6) *Town of Hartford, Lily Pond Rd* – construction inspection for dam/cross culvert replacement

7) *Town of Easton, Ives Hill Rd & Beadle Rd Intersection* – stop sign placement recommendation

8) *Town of White Creek, Niles Rd & Meeting House Rd* – traffic counts

9) *Town of White Creek, Old State Rd, Turnpike* – traffic counts

10) *Town of Kingsbury, Kingsbury Gravel Pit* – Mining Permit Renewal

11) *Town of Salem, Railroad St* – survey of drainage issue

12) *Town of Whitehall – Stormwater Design Grant* – survey & design

13) *Town of Granville – Mary J Tanner School – access road off Lee Rd* – survey & design

County Engineering Projects in 2018:

- 1) **2018 County Bridge Program** – for information relative to major bridge projects completed in 2018, see 2018 Bridge Program and map
- 2) **Br C103 Co Rte 74 over Wampecack Creek, Town of Cambridge** – construction inspection & quality control on installation, backfilling and road reconstruction.
- 3) **Br C105 Co Rte 74 over Wampecack Creek, Town of Cambridge** – construction inspection & quality control on installation, backfilling and road reconstruction.
- 4) **Br C108 Co Rte 74A over Fly Creek, Town of Easton** – design, construction inspection & quality control on installation, backfilling and road reconstruction.
- 5) **Br C109 Co Rte 74A over Fly Swamp Outlet, Town of Easton** – design, construction inspection & quality control on installation, backfilling and road reconstruction.
- 6) **Br C121 CR54 , Town of Easton** – design.
- 7) **Br C152 CR68 , Town of White Creek** – design.
- 8) **Survey, - 2019 Bridge Program Projects**
- 9) **Fort Ann Highway Salt Screens** – construction inspection
- 10) **2018 County Road Pavement Ratings** – field survey/inspection of 284 miles of roads using CAMP-RS software
- 11) **County Municipal Building** – room, floorplan updates
- 12) **AGFTC Roadway Traffic Count Grant** – gathered and submitted info and verified accuracy of counts for 2018 (*1st year of 3 year program*)
- 13) **Tripoli Gravel Pit**– survey, mapping & Mining Permit
- 14) **Co Rte 32 Fort Ann** – Stormwater remediation, construction inspection & reporting
- 15) **Coring PPST Projects** – coordinating & construction inspection
- 16) **Br C149 Jackson/Salem** – NYSDOT Red Flag – placement of deteriorated floor beams.
- 17) **Br C177 White Creek** – NYSDOT Red Flag – design & layout of lane closure