

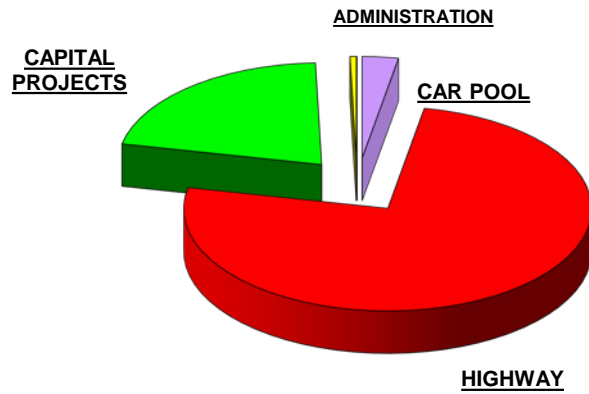
2021 ANNUAL REPORT



*County Forces Paving County Route 7A - Dresden

DEPARTMENT OF PUBLIC WORKS

**2021
EXPENDITURES OVERSEEN BY DPW**



**2021 EXPENDITURES
(OVERSEEN BY THE DPW)**

<u>ACCOUNT NAME</u>	<u>EXPENDITURES</u>	<u>% OF TOTAL</u>
CAR POOL	\$624,566.56	2.87%
HIGHWAY	\$16,393,734.32	75.40%
CAPITAL PROJECTS	\$4,617,761.56	21.24%
ADMINISTRATION	\$107,429.65	0.49%
TOTAL	\$21,743,492.09	100.00%

**2021 EXPENDITURES
ALL FUNDS**

<u>ACCOUNT NUMBER</u>	<u>ACCOUNT NAME</u>	<u>EXPENDITURE</u>	<u>% OF TOTAL</u>
A1490	DPW - ADMINISTRATION	\$107,429.65	
	<i>SUB-TOTAL</i>	\$107,429.65	0.49%
CM5135	POOL CAR BENEFITS (CM)	\$589,934.24 \$34,632.32	
	<i>SUB-TOTAL</i>	\$624,566.56	2.87%
D3310	TRAFFIC CONTROL	\$350,275.76	
D5010	ADMINISTRATION	\$148,661.29	
D5020	ENGINEERING	\$223,662.51	
D5110	MAINTENANCE OF HIGHWAYS & BRIDGES	\$4,003,801.36	
D5142	COUNTY SNOW & ICE CONTROL	\$1,242,091.04	
D5144	STATE SNOW & ICE CONTROL	\$469,070.01	
D5112	HIGHWAY PROJECTS	\$4,439,086.79	
D5120	BRIDGE PROJECTS	\$504,990.12	
DM5130	ROAD MACHINERY BENEFITS (D,DM)	\$3,044,602.36 \$1,967,493.08	
	<i>SUB-TOTAL DIV. OF HIGHWAYS</i>	\$16,393,734.32	75.40%
<u>CAPITAL CONSTRUCTION:</u>			
Project 78:	CR113 Bridge over the Battenkill (Clarks Mills)	\$31,423.64	
Project 81:	CR10 Bridge over Poultney River	\$23.57	
Project 125:	Capital Improvements: Fuel System Upgrades	\$1,619.73	
Project 126:	CR61 Bridge Over the Battenkill (Shushan)	\$37,062.04	
Project 127:	Church Street #2	\$2,969,424.26	
Project 128:	Minor Marchiselli Aid Projects: CR35/36 Pvmt.Pres.	\$1,578,208.32	
	<i>SUB-TOTAL CAPITAL CONSTRUCTION</i>	\$4,617,761.56	21.24%
TOTAL EXPENDITURES FOR 2021		\$21,743,492.09	100.00%

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

2021 DPW GENERAL FUND

	APPROPRIATIONS	EXPENDED	BALANCE
	<i>(AMENDED)</i>		
A1490			
DPW ADMINISTRATION			
PERSONAL SERVICES	\$99,425.00	\$99,425.75	(\$0.75)
EQUIPMENT	\$0.00	\$0.00	\$0.00
CONTRACTUAL SERVICES	\$16,450.00	\$8,003.90	\$8,446.10
	\$115,875.00	\$107,429.65	\$8,445.35

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

2021 COUNTY ROAD FUND

	APPROPRIATIONS (AMENDED)	EXPENDED	BALANCE	ENCUMBERED <i>to 2022</i>
D3310 TRAFFIC				
PERSONAL SERVICES:				
<i>Regular & OT:</i>	\$99,636.00	\$95,604.45	\$4,031.55	
<i>COVID:</i>	\$0.00	\$1,469.44	(\$1,469.44)	
EQUIPMENT	\$0.00	\$0.00	\$0.00	
CONTRACTUAL SERVICES	\$237,337.26	\$218,216.47	\$19,120.79	\$ 1,026.74
WQIP GRANT (.2 & .4)	\$112,031.00	\$34,985.40	\$77,045.60	
	\$449,004.26	\$350,275.76	\$98,728.50	
D5010 ADMINISTRATION				
PERSONAL SERVICES:				
<i>Regular /OT/Buyout:</i>	\$137,344.00	\$139,489.61	(\$2,145.61)	
<i>COVID:</i>	\$0.00	\$114.30	(\$114.30)	
EQUIPMENT	\$0.00	\$0.00	\$0.00	
CONTRACTUAL SERVICES	\$12,512.00	\$9,057.38	\$3,454.62	
	\$149,856.00	\$148,661.29	\$1,194.71	
D5020 ENGINEERING				
PERSONAL SERVICES				
<i>Regular /OT/Buyout:</i>	\$237,615.00	\$207,954.78	\$29,660.22	
<i>COVID:</i>	\$0.00	\$195.35	(\$195.35)	
EQUIPMENT	\$1,500.00	\$0.00	\$1,500.00	\$ 246.80
CONTRACTUAL SERVICES	\$36,753.15	\$15,512.38	\$21,240.77	
	\$275,868.15	\$223,662.51	\$52,205.64	
D5110 MAINTENANCE HIGHWAYS & BRIDGES				
PERSONAL SERVICES				
<i>Regular/OT/Buyout:</i>	\$1,870,487.00	\$1,956,561.55	(\$86,074.55)	
<i>COVID:</i>	\$0.00	\$55,011.51	(\$55,011.51)	
EQUIPMENT	\$4,850.00	\$92.16	\$4,757.84	
CONTRACTUAL SERVICES	\$2,010,132.00	\$1,932,216.06	\$77,915.94	
NEIWPC GRANT	\$103,000.00	\$59,920.08	\$43,079.92	
	\$3,988,469.00	\$4,003,801.36	(\$15,332.36)	

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

2021 COUNTY ROAD FUND cont'd

	APPROPRIATIONS (AMENDED)	EXPENDED	BALANCE	ENCUMBERED TO 2022
D5142 COUNTY SNOW				
PERSONAL SERVICES	\$460,000.00	\$301,981.21	\$158,018.79	
EQUIPMENT	\$710,000.00	\$546,203.53	\$163,796.47	
CONTRACTUAL SERVICES	\$728,735.00	\$475,810.83	\$252,924.17	
INVENTORY/SALT USAGE ADJ.		(\$81,904.53)	\$81,904.53	
	\$1,898,735.00	\$1,242,091.04	\$656,643.96	
D5144 STATE SNOW				
PERSONAL SERVICES	\$160,000.00	\$80,641.79	\$79,358.21	
EQUIPMENT	\$210,000.00	\$158,607.19	\$51,392.81	
CONTRACTUAL SERVICES	\$552,000.00	\$229,821.03	\$322,178.97	
	\$922,000.00	\$469,070.01	\$452,929.99	
D5112 - CONSTRUCTION & CHIPS PROJECTS				
CR46 Preservation Projects:	\$4,511,281.00	\$4,414,297.14	\$96,983.86	
INVENTORY ADJUSTMENT:	\$135,569.00	\$18,241.15	\$117,327.85	
	\$0.00	\$6,548.50	(\$6,548.50)	
	\$4,646,850.00	\$4,439,086.79	\$207,763.21	
D5120 - BRIDGE PROJECTS				
Dr. Johnson & Cemetery Rd. Br.	\$655,000.00	\$503,408.40	\$151,591.60	
	\$87,156.00	\$1,581.72	\$85,574.28	
	\$742,156.00	\$504,990.12	\$237,165.88	
D9010-D9065 BENEFITS	\$1,581,150.00	\$1,719,586.24	(\$138,436.24)	
GRAND TOTAL-ROAD FUND	\$14,654,088.41	\$13,101,225.12	\$1,552,863.29	
COUNTY ROAD				
Cash Balance as of 12/31/21:	D200		\$1,790,055.48	

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

2021 COUNTY ROAD MACHINERY FUND

	APPROPRIATIONS (AMENDED)	EXPENDED	BALANCE	ENCUMBERED to 2022
DM5130 ROAD MACHINERY				
PERSONAL SERVICES				
<i>Regular & OT:</i>	\$452,635.00	\$412,229.71	\$40,405.29	
<i>COVID:</i>	\$0.00	\$17,923.44	(\$17,923.44)	
EQUIPMENT	\$2,204,359.00	\$1,132,902.39	\$1,071,456.61	\$ 1,078,876.00
CONTRACTUAL SERVICES	\$1,630,400.00	\$1,517,532.45	\$112,867.55	\$ 2,318.03
<i>(INVENTORY ADJUSTMENTS)</i>		(\$35,985.63)	\$35,985.63	
	\$4,287,394.00	\$3,044,602.36	\$1,242,791.64	
DM9010-DM9065				
BENEFITS	\$216,672.00	\$247,906.84	(\$31,234.84)	
CO. ROAD. MACH.				
Cash Balance as of 12/31/21: DM200			\$1,179,691.42	

(less \$10,000 rebate)

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

2021 POOL CAR FUND

	APPROPRIATIONS	EXPENDED	BALANCE	ENCUMBERED TO 2022
CM5135 POOL CAR				
PERSONAL SERVICES:				
<i>Regular & OT</i>	\$99,195.00	\$99,542.55	(\$347.55)	
<i>Covid (189 & 189H)</i>	\$0.00	\$287.58	(\$287.58)	
EQUIPMENT	\$431,878.72	\$75,583.78	\$356,294.94	\$261,350.68
CONTRACTUAL SERVICES	\$413,600.00	\$413,761.36	(\$161.36)	
<i>INVENTORY ADJUSTMENT</i>		\$758.97	(\$758.97)	
	\$944,673.72	\$589,934.24	\$354,739.48	
CM9010-CM9060				
BENEFITS	\$26,801.00	\$34,632.32	(\$7,831.32)	
POOL CAR FUND				
Cash Balance as of 12/31/21:	Cash 200		\$849,587.45	

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

**2021
MILES OF HIGHWAYS IN TOWNS***

TOWN	STATE MILEAGE	COUNTY MILEAGE OUTSIDE VILLAGE	COUNTY MILEAGE INSIDE VILLAGE	TOWN MILEAGE	VILLAGE** MILEAGE	TOTAL MILEAGE
ARGYLE	13.89	23.47		95.17	0.90	133.43
CAMBRIDGE	5.20	19.38	0.14	62.80	1.83	89.35
DRESDEN	10.39	9.04		34.22		53.65
EASTON	16.50	23.74	0.68	85.90	0.68	127.50
FORT ANN	20.78	14.49	0.54	73.45	1.85	111.11
FORT EDWARD	13.42	13.65	0.37	34.54	13.61	75.59
GRANVILLE	27.97	18.64	1.77	68.83	10.09	127.30
GREENWICH	18.06	15.90		76.50	7.09	117.55
HAMPTON	7.27	8.49		17.68		33.44
HARTFORD	20.65	10.34		49.37		80.36
HEBRON	8.99	21.26		68.18		98.43
JACKSON	16.56	11.86		56.54		84.96
KINGSBURY	21.65	19.16	2.28	52.76	22.12	117.97
PUTNAM	8.53	10.30		32.90		51.73
SALEM	10.27	20.01		71.58		101.86
WHITE CREEK	7.56	10.78	0.62	53.61	6.83	79.40
WHITEHALL	18.23	26.74	0.36	35.34	13.04	93.71
TOTAL	245.92	277.25	6.76	969.37	78.04	1577.34

STATE MILEAGE	245.92
COUNTY MILEAGE	284.01
TOWN MILEAGE	969.37
VILLAGE MILEAGE	78.04
TOTAL MILEAGE IN COUNTY	1577.34

* Figures based on reported mileages as of 12/31/2021, 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

WASHINGTON COUNTY DEPARTMENT OF PUBLIC WORKS 2021 COUNTY ROAD PROJECTS

- 1. County Route 6 – Asphalt Overlay** **Town of Dresden**
 Pike Brook Road to Long Pond Road, (1.11 mi); County Forces performed a True and Leveling (T & L) Hot Mix Asphalt (HMA) course followed by a 2" thick HMA top course x 24'± wide. Installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
1.11 miles **\$199,733.00**

- 2. County Route 7 – Full Depth Recycle** **Town of Dresden**
 New York State Route 22 to Pike Brook Road (1.72 mi); The Gorman Group, LLC performed Full Depth Recycle (FDR) operations and graded and compacted roadway. County Forces then placed 3" thick HMA base course and 2" thick HMA top course x 23'± wide. Installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
1.72 miles **\$536,424.59**

- 3. County Route 7A – Overlay** **Town of Whitehall, Village of Whitehall, Town of Dresden**
 New York State Route 22 to Dead end, All Legs, (0.41 mi), County Forces performed T&L with HMA process. 2" thick HMA (Hot Mixed Asphalt) top course x 21'± wide. Installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
0.41 miles **\$58,301.58**

- 4. County Route 11 – Asphalt Overlay** **Town of Whitehall**
 County Route 10 to Abair Road, (1.46 mi), County Forces performed T&L with HMA process. 2" thick HMA (Hot Mixed Asphalt) top course x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
1.46 miles **\$278,423.80**

- 5. County Route 12 – Cold Recycle** **Town of Granville**
 New York State Route 22 to County Route 12A (0.34 mi); Peckham Road Corporation performed Cold In Place Recycle (CIPR) operations. County Forces then placed 2" thick HMA top course x 22'± wide and installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
0.34 miles **\$65,697.03**

- 6. County Route 12A – Cold Recycle** **Town of Granville**
 New York State Route 22 to County Route 12 (0.27 mi); Peckham Road Corporation performed Cold In Place Recycle (CIPR) operations. County Forces then placed 2" thick HMA top course x 22'± wide and installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
0.27 miles **\$57,734.59**

- 7. County Route 25 – Full Depth Recycle** **Town of Granville**
 Granville Village Line to Vermont State Line (1.40 mi); The Gorman Group, LLC performed Full Depth Recycle (FDR) operations and graded and compacted roadway. County Forces then placed 3" thick HMA base course and 2" thick HMA top course x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
1.40 miles **\$585,361.51**
- 8. County Route 30 – Asphalt Overlay** **Town of Salem**
 Bridge C-62 to Cemetery Road, (0.60 mi), County Forces performed T&L with HMA process. 2" thick HMA (Hot Mixed Asphalt) top course x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
0.60 miles **\$78,791.59**
- 9. County Route 31 – Cold Recycle** **Town of Hebron**
 Crosier Road to Campbell Road (1.58 mi); Peckham Road Corporation performed Cold In Place Recycle (CIPR) operations. County Forces then placed 2" thick HMA top course x 22'± wide and installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
1.58 miles **\$322,039.43**
- 10. County Route 52 – Cold Recycle** **Town of Greenwich**
 Spraguetown Road to Edie Road (2.39 mi); The Gorman Group, LLC performed Cold In Place Recycle (CIPR) operations. County Forces then placed 2" thick HMA top course x 22'± wide and installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
2.39 miles **\$439,662.41**
- 11. County Route 59 – Cold Recycle** **Town of Cambridge**
 English Road to Reynolds Road (1.02 mi); Peckham Road Corporation performed Cold In Place Recycle (CIPR) operations. County Forces then placed 2" thick HMA top course x 22'± wide and installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
1.02 miles **\$235,416.00**
- 12. County Route 59 – Cold Recycle** **Town of Cambridge**
 Reynolds Road to New York State Route 372 (1.25 mi); Peckham Road Corporation performed Cold In Place Recycle (CIPR) operations. County Forces then placed 2" thick HMA top course x 22'± wide and installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
1.25 miles **\$285,746.12**
- 13. County Route 68 – Asphalt Overlay** **Town of White Creek**
 Meeting House Road to Vermont State Line (1.60 mi); County Forces performed T&L with HMA process. 2" thick HMA (Hot Mixed Asphalt) top course x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) 2' wide.
1.60 miles **\$303,875.19**

14. County Route 74 – Cold Recycle

Town of Cambridge, Town of Easton

North of Whiteside Road to County Route 74A (3.57 mi); Peckham Road Corporation performed Cold In Place Recycle (CIPR) operations. County Forces then placed 2" thick HMA top course x 22'± wide and installed screened gravel (topsoil & compost mix in front of residences) 2' wide.

3.57 miles

\$749,380.28

15. County Route 113 – Asphalt Overlay

Town of White Creek

County Route 54 to Rensselaer County Line (1.29 mi); County Forces performed T&L with HMA process. 2" thick HMA (Hot Mixed Asphalt) top course x 22'± wide. Installed screened gravel (topsoil & compost mix in front of residences) 2' wide.

1.29 miles

\$217,710.02

TOTAL COSTS OF 2021 ROAD PROJECTS

20.01 miles

\$4,414,297.14

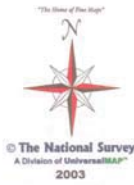
16. Crack Sealing Asphalt Pavements

The following County Routes were Crack Sealed by the Gorman Group, LLC based on priority lists provided by the County.

<u>Route</u>	<u>Cross Roads</u>	<u>Mileage</u>
County Route 9	County Route 10 to US 4	4.09
County Route 10	County Route 9 to Stalker Road	1.22
County Route 27	NYS Route 149 to NYS Route 22	1.35
County Route 28	County Route 31 to the Granville/Hebron Town Line	1.83
County Route 29	NYS Route 22 to the Vermont State Line	0.69
County Route 42	NYS Route 196 to NYS Route 197	2.85
County Route 61	NYS 22 to Newman Road	2.40
County Route 64	NYS 22 to Shunpike Road	0.85
	Salem/Jackson Town Line to County Route 61	0.98
	NYS 22 to Kent Way	4.01
County Route 64A	County Route 61 to County Route 64	0.21
County Route 67	NYS 372 to Chestnut Hill Road	2.06
County Route 68	Lincoln Hill Road to Pine View Lane	2.18
County Route 77	NYS 40 to Anthony Road	1.38

\$ 99,840.00 (from Maintenance Budget)

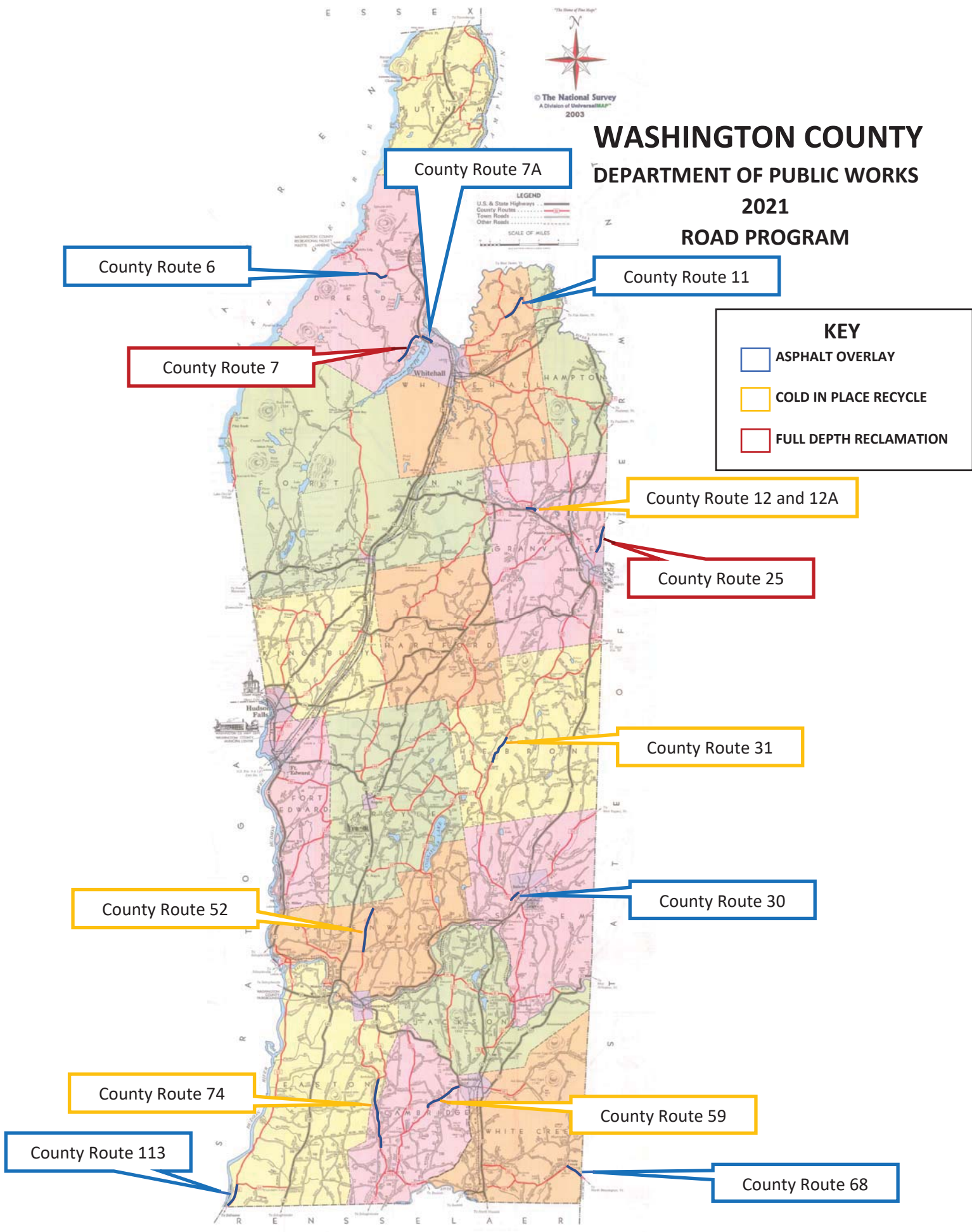
26.10 Total Miles



WASHINGTON COUNTY DEPARTMENT OF PUBLIC WORKS 2021 ROAD PROGRAM

KEY

- ASPHALT OVERLAY
- COLD IN PLACE RECYCLE
- FULL DEPTH RECLAMATION



County Route 7A

County Route 6

County Route 7

County Route 11

County Route 12 and 12A

County Route 25

County Route 31

County Route 30

County Route 52

County Route 74

County Route 59

County Route 113

County Route 68

WASHINGTON COUNTY DEPARTMENT OF PUBLIC WORKS 2021 COUNTY BRIDGE PROJECTS

1. **Bridge C-64 County Route 74 over Wampecack Creek – Town of Cambridge**

Washington County Bridge C-64 was constructed in 1936 and widened in 1969. It consisted of a combination of a laid stone abutment and concrete wing walls with steel girders and a concrete deck, spanning 11.2'. C-64 is located on County Route 74 between Center Cambridge Road and Darwin Road. An official detour was signed around the bridge utilizing county and state routes. A concrete deck was cast inside our Granville Substation during early spring. Once Bridge C-65 (See below) was substantially completed, county bridge crew removed most of C-64, and excavated for footings on the new structure. The new structure consists of 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 50'± long x 8.5'± high), support the precast deck, 30' wide x 15' long. Hot mix asphalt Base and Binder layers were abutted to the bridge, and then a hot mix asphalt top course was carried over the entire project. Following asphalt operations, NYSDOT approved steel bridge railing [3-rail curbless – 5 posts each side (10 total)] and box beam guide rail at approaches was installed. Medium stone bank protection installed at all four corners of structure. Reinforcing Steel was purchased in 2020, not included in the Total Cost for 2021.

Total Cost \$221,613.81

2. **Bridge C-65 County Route 74 over Wampecack Creek – Town of Cambridge**

Washington County Bridge C-65 was constructed in 1936 and widened in 1965. It consisted of a combination of a laid stone abutment and concrete wing walls with steel girders and a concrete deck, spanning 13.8'. C-65 is located on County Route 74 between Darwin Road and Vly Summit Road. An official detour was signed around the bridge utilizing county and state routes. A concrete deck was cast inside our Granville Substation during early spring. When spring weather permitted, county bridge crew removed most of C-65, and excavated for footings on the new structure. The new structure consists of 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 50'± long x 10'± high), support the precast deck, 30' wide x 15' long. Hot mix asphalt Base and Binder layers were abutted to the bridge, and then a hot mix asphalt top course was carried over the entire project. Following asphalt operations, NYSDOT approved steel bridge railing [3-rail curbless – 5 posts each side (10 total)] and box beam guide rail at approaches was installed. Medium stone bank protection installed at all four corners of structure. Reinforcing Steel was purchased in 2020, not included in the Total Cost for 2021.

Total Cost \$207,875.07

3. Bridge C-160 County Route 61 over Steele Brook – Town of Salem (INCOMPLETE)

Washington County Bridge C-160 is a 60" Diameter Corrugated Metal Pipe, installed in 1937. It is 39' Long with Concrete Headwalls and Wingwalls. Washington County DPW purchased the replacement culvert, a 142" x 91", 65' Long Corrugated Aluminum Pipe Arch. This culvert was not installed in 2021 due to supply delays and the late arrival of the culvert.

Total Cost \$31,483.40

4. Bridge C-164 County Route 45 over Moses Kill – Town of Argyle (INCOMPLETE)

Washington County Bridge C-164 is a 8'-6" Diameter Corrugated Metal Plate Pipe, installed in 1940. It is 27.8' Long with Stone Headwalls. Washington County DPW purchased the replacement culvert, a 9'-6", 51' Long Corrugated Aluminum Plate Pipe Arch. This culvert was not installed in 2021 due to supply delays and the late arrival of the culvert. DPW also purchased reinforcing steel in anticipation of installing new concrete headwalls, however the reinforcing steel was also delayed in delivery.

Total Cost \$36,141.12

5. Bridge C-228 County Route 45 over Moses Kill – Town of Argyle (INCOMPLETE)

Washington County Bridge C-228 is a 60" Diameter Corrugated Metal Plate Pipe, installed in 1967. It is 56' Long and begins at a makeshift drop inlet at Adirondack Plastics. Washington County DPW purchased a replacement catch basin manufactured by the Fort Miller Company for anticipated installation in 2022.

Total Cost \$6,295.00

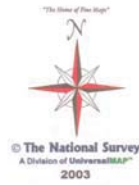
Total Cost of Projects (2021)

\$503,408.40

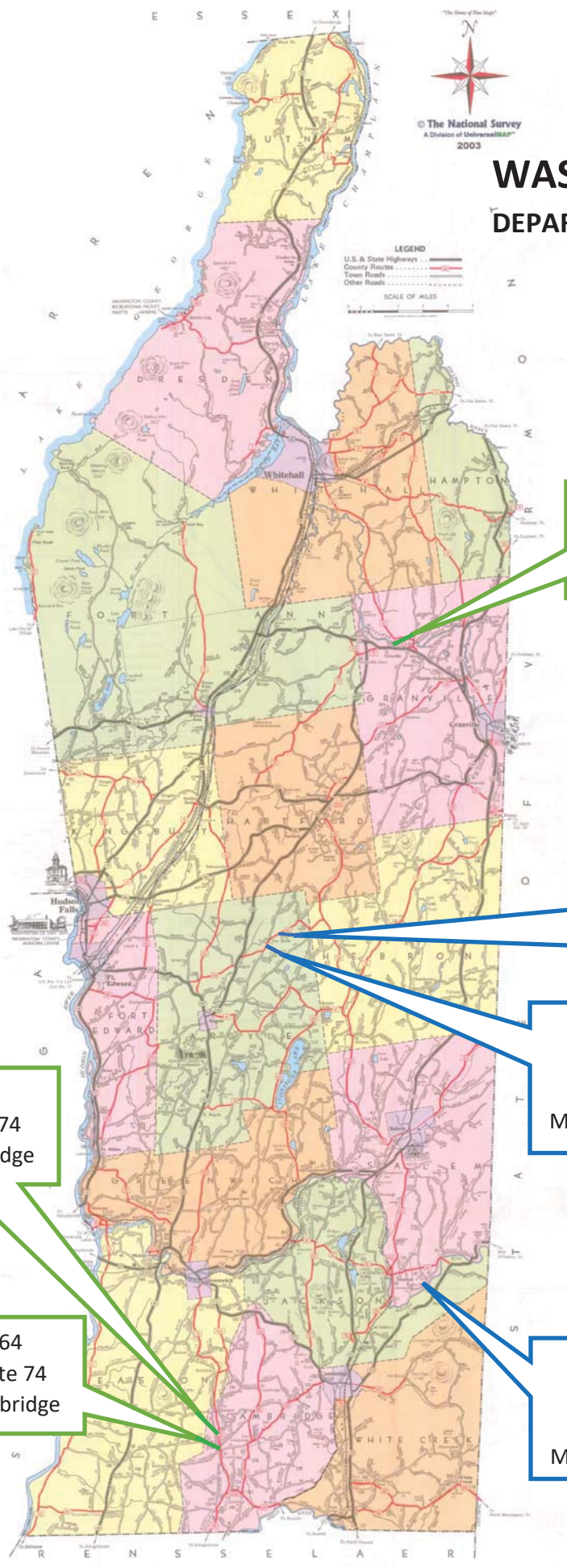
6. Bridge C-54 Lower Turnpike Road over Mettawee – Town of Granville

Washington County Bridge C-54 is a Pratt Truss with 13' Width and 169' Length. The bridge was erected in 1889 with several maintenance rehabilitations performed since. Washington County DPW purchased replacement wearing surface dimensional lumber and fasteners and replaced the wearing surface on the bridge.

Funding from Maintenance Budget - Total Cost \$10,015.39



WASHINGTON COUNTY DEPARTMENT OF PUBLIC WORKS 2021 BRIDGE PROGRAM



Bridge C-54
Lower Turnpike Road
Town of Granville

Bridge C-228
County Route 45
Town of Argyle
Materials Purchased

Bridge C-164
County Route 45
Town of Argyle
Materials Purchased

Bridge C-65
County Route 74
Town of Cambridge

Bridge C-64
County Route 74
Town of Cambridge

Bridge C-160
County Route 61
Town of Salem
Materials Purchased

2021

HIGHWAY & BRIDGE

CONSTRUCTION & MAINTENANCE

County Road is responsible for the maintenance of 286 miles of County highways and 123 County bridges. Through an agreement with NYSDOT & Warren County, an additional 100 miles of state highways are maintained during the winter months for snow and ice control. These partnerships highlight the efficiency of working together with State and Local agencies to better serve the public with safe use of the infrastructure.

For the past 4 seasons we have been concentrating on reducing the usage of salt during our winter operations. Through multiple grants from the Lake George Park Commission, DEC, the Lake Champlain Basin Program and Washington County Soil and Water and our County budget we now have storage tanks at all 8 highway barns, 4 brine spray trucks, road temperature sensors and prewet systems on nearly all trucks as well. We have partnered with Warren County on the use of a brine maker and have been awarded a grant to purchase our own brine maker. Since numerous Towns, Villages and schools have reached out with an interest in brine, we look forward to sharing the information we have gathered with them to be good stewards of the environment throughout Washington County.

This summer saw the introduction of the roadside vegetation management program. Two crew members were thoroughly trained and certified in this program that promotes clear ROW for safety and an attempt to control invasive species throughout our infrastructure. This is another program that we hope to partner with the Towns to further enhance the safety of our routes for both traveling and for the crews working in the ROW.

The County DPW Sign crew is responsible for signing and marking our County highway system. During 2021, 375 miles of center lines were striped, along with over 312 miles of fog lines by contract. They also painted 35 miles of center lines for various Towns. The sign crew fabricates signs in the Sign shop for municipalities within the County. We are currently doing a complete sign inventory along with refreshing the signage at the complex in Fort Edward.

During the 2021 construction season our bridge crew replaced two structures. They were located close to each other, so it worked well for traffic detouring. The Lower Turnpike bridge in North Granville was re-decked with new pressure treated wood and repairs to the curb and joints were made on the CR24 Middle Granville bridge. We also washed bridges and maintained the County's beautiful covered bridges.

Our Construction crews were busy in 2021 with our 2 Gradalls, a wheeled excavator and the rental of 2 track excavators installing over 5200' of cross culverts. The replacement culverts were on our 2021 and 2022 projects. They also backed up the shoulders on the blacktop projects.

Our blacktop crew was also very busy, getting a little over 20 miles of roads. We paved the parking lot at the complex on the Burgoyne Avenue Campus. Paving processes we used this year include Full Depth Reclamation with a base course of blacktop and wearing course, cold in place projects and T&L and Top. The shoulders were then backed up with gravel, topsoil, or crushed gravel.

When not in construction mode the crews were busy maintaining the highways with brush cutting, road sign straightening, installing and repairing guide rail, roadside cleanup and other related work. The 3 roadside 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 requests for service.

WASHINGTON COUNTY DEPARTMENT OF PUBLIC WORKS 2021 ENGINEERING

2021 proved to be a successful and adaptive year for our Engineering Department. Our department was impacted by several forces, internal and external. Material prices and availability had dramatic impacts on procuring supplies and materials and projecting future prices for projects. After over 33 years, our Senior Engineer hung up his hat for retirement, causing our department to work with reduced staffing for most of the year until an additional technician could be hired. Adapting to virtual meetings and conferences still proved to be challenging. However, success prevailed, enabling us to carry out our mission of providing the residents of the county valuable engineering services.

Administrative:

- 1. 2020 Annual Report** – summary of expenditures and construction/maintenance-related activities undertaken by the Washington County DPW in 2020.
- 2. Salt stockpiles** in bins at all 8 DPW substations at end of snow removal season – total 4048.77 tons (as of June 2021) – for documentation of County-incurred expenditures relative to State Snow and Ice Control for 2020-2021 winter season. The amount of salt that can be safely stored in all 8 bins is approximately 4,500 tons.
- 3. Washington County Safety Days** – Attended 1 day safety overview.
- 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 40 permits were issued in 2021. These included 14 for Utility work (electrical service & pole-related), 17 driveways/field accesses, 8 ROW Usage, and 1 Oversize Hauling.
- 5. Bridge NY Applications** – DPW Staff solicited firms to apply on our behalf for 3 Bridge Replacements and 5 Culvert Replacements for County Highways. Late in 2021 word was received that we were denied on all accounts. DPW Staff assisted in rating and awarding BridgeNY projects for other Regions of NYS.
- 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 25 such requests in 2021, 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 2021, we assisted in the preparation of the 2020-2021 Annual Report (for term from March 10, 2020 to March 9, 2021). 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 (284.01 miles) in 2021 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.**
- 10. 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 preparations – including culvert pipe, underdrain, crushed stone, concrete, blacktop, sign blanks, centerline/edgeline paint, structural steel, reinforcing steel, etc.

- 11. 76th Annual Statewide School For Highway Superintendents** – Staff attended this virtually over 4 days. A wide range of topics pertinent to local highways were discussed.
- 12. NYS County Highway Superintendents Conference** – This 2 day webinar event included roadway and bridge information, new developments in engineering, and project case studies.
- 13. Engineers Week Seminars** – Virtual 2 Day Seminar presented by the NY Capital District PE Society; a wide range of engineering topics were discussed.
- 14. Champlain Watershed Improvement Coalition North Country Stormwater Tradeshow and Conference** – Virtual 1 Day Seminar focusing on stormwater management, treatment, and reduction.
- 15. Lake Champlain Basin Program Grant** - design, implementation, and inspection for two projects (Town of Whitehall and Washington County Route 17).
- 15. LDSA** – Consultant Selection for current projects.
- 16. LDSA Project Management** –
 - a. Church Street Bridge, Granville; Bridge Replacement Project was put out to bid and awarded early in 2021. County coordinated the bidding, award, and selection of a Construction Firm. Bridge was closed and removed. A new structure was placed and opened to traffic with completion planned in 2022. DPW Staff was often on-site to inspect and verify work performed.
 - b. Shushan Bridge, Jackson/Salem; Right-of-Way was completed and Plans finalized for Superstructure replacement in 2022.
 - c. County Routes 35 and 36 - Pavement Preservation Project was designed, bid, awarded, and completed in 2021.
 - f. Batten-Dugan Bridge, County Route 61 Greenwich/Jackson – Project Kickoff was planned for 2022 for a full replacement project, funding was sought from BridgeNY and denied.
 - g. Burgoyne Avenue – County Route 37 – Pavement Preservation Project kickoff meeting was held for anticipated design in 2022.
- 17. MS4 Program Sewer Vacuum Trailer** – Trailer was procured in 2021 and stored at Washington County and used by Municipalities included on the grant.
- 18. Water Quality Improvement Program, Grant Applications** – Provided information and pictures for applications for a grant for culverts and roadside improvements for County and Town roadways throughout the county, totaling over 1 Million Dollars.

Township Assistance in 2021 increased from 2020 due to restoration of assistance funding. The assistance that was provided can be seen in the following list:

- 1. Annual update of Town Highway Inventory for 2021** –Town highway superintendents met with engineering staff, using our Fort Edward Highway Substation 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 and certified copies of resolutions that define each Town highway system in effect since 1963. This 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. Additional structures less than 5’ span were added to inspections, in anticipation of meeting or exceeding said 5’ span when replaced.
- 3. Town of Dresden, Marina Road** – Culvert Inspection and recommendation for improvement
- 4. Town of Easton, Louse Hill Road** – Survey and CAD Drawings were completed to correct a stormwater runoff issue.
- 5. Town of Fort Ann, Facility** – DPW continues to work with Buildings and Grounds and the Town of Fort Ann on a facility replacement.
- 6. Town of Greenwich, Ferguson Road** - survey and design to place a temporary bridge over a defunct culvert.

- 7. Town of Hampton, T-7 South Road** – culvert sizing for replacement and embankment stabilization.
- 8. Town of Hartford, Material Screen** – Provided Town employees with design and material list to build a material screen, primarily for winter road treatment.
- 9. Town of Kingsbury – Fairview Lane** – Road condition survey and stormwater suggestions.
- 10. Town of Salem Sand and Gravel Mine** – Visual survey for expansion of mining pit on new property.
- 11. Town of Whitehall, T-7 Hollister Road Extension** – Provided plans, guidance and construction inspection for replacement of poor condition culvert pipe.
- 12. Town of Whitehall, School Entrance** – Survey, plans and guidance on culvert replacement on Buckley Road entrance to Whitehall Central School.

County Engineering Projects in 2021:

- 1. 2021 County Bridge Program** – for information relative to major bridge projects completed in 2021, see 2021 Bridge Program and map.
- 2. Survey** - 2022 Bridge Program Projects.
- 3. 2021 County Road Pavement Ratings** – field survey/inspection of 284 miles of roads using CAMP-RS software.
- 4. County Municipal Building** – Burgoyne Avenue Building Drawings and Site Layout for parking lot expansion.
- 5. Bridge C-64, CR74** – Project Management Construction Inspection and Quality Control for replacement of Existing Bridge over Wampecack Creek. Existing bridge was a concrete founded bridge with steel beams and a concrete deck and was replaced with a 15’ span concrete founded bridge with concrete deck.
- 6. Bridge C-65, CR74** – Project Management Construction Inspection and Quality Control for replacement of Existing Bridge over Wampecack Creek. Existing bridge was a concrete founded bridge with steel beams and a concrete deck and was replaced with a 15’ span concrete founded bridge with concrete deck.
- 7. Bridge C-73, CR74** – Received NYS Red Flag for Girder Deterioration, completed Survey for replacement and summoned guidance to continue usage of the bridge ahead of 2022 construction. Limit traffic to one lane with controlled yield sign.
- 8. County Route 25** – Project Management, Construction Inspection and Quality Control for Culvert Replacements prior to road reconstruction.
- 9. County Route 61, Shushan Village** – Survey and meet with landowners in regards to stormwater runoff issues.
- 10. County Route 7A** - Project Management, Construction Inspection and Quality Control for Roadway Resurfacing.
- 11. County Car Pool Maintenance Facility** - Project Management and Installation of new vehicle lift.
- 12. County Route 46, County Route 54** – Meet with soils engineer on road embankment failures.
- 13. County Highway Satellite, Easton** – Assisted Buildings and Grounds Department on Design Ideas, truck radius and measurements and survey documents for building replacement.
- 14. County Bridges** – Performed an assessment of all laminated wooden deck County Bridges to prepare a replacement schedule due to historically poor performance of wooden deck and Steel girder interface.
- 15. County Route 21 – Road Washout** – Assessed damage and provided guidance upon the aftermath of a beaver dam failure.
- 16. Lower Turnpike Bridge, C-54** – Provided guidance on replacement of wooden wearing surface for bridge.
- 17. County Route 45** – Provided plans and material estimates for several large pipes carrying Moses Kill under County Route 45, to be replaced in 2022.
- 18. County Route 17, Embankment Failure** – Provided plans, guidance and construction inspection for grant funded roadside improvement.
- 19. Bridge C-312, County Route 25** – Added Bridge to County System after replacement of single culvert by county forces to double culverts increasing span over 5’.
- 20. Bridge C-262, County Route 31** – Provided plans and guidance for replacement of 5’ Corrugated Metal Pipe with a 5’ High Density Polyethylene Pipe.