Starke County Highway Department Monthly Report May 2015 SUMMARY

ROADWAY

Road Improvement program - We began our asphalt production last month. We use about 577 tons to pave one centerline mile of roadway. We have made over 3,000 tons of asphalt thus far (see asphalt production chart below). May should be our biggest month for asphalt production. We plan on making somewhere between 8,000 and 10,000 tons. It takes about a month for the pug (AE-150) asphalt to cure before we can use it. During phase one in June we plan on paving about 16.7 miles of roadway (see phase one paving chart below). Phase two is planned for August. We are hoping to be able to pave an additional 13 miles at that time, as funding allows. We have been "berming" roadways throughout the county in preparation for our paving. This helps with drainage and allows us to pave more evenly.

Chip sealing and crack sealing will also be a part of our summer road improvement program. We are crack sealing Toto Road between US35 and SR39 beginning around May 20th. We will crack seal about ten miles of roadway this year. Although we will be chip sealing it won't be as extensive as the last few years. This is because we are shifting our focus to paving while using chip seal only on roadways were it will have lasting effect and not as a "band-aid". This includes chip sealing over roads that were pug paved a few years ago and chip sealing some of our more rural roads. We did recently purchase a distributor truck that will allow us to chip seal without being dependent upon borrowed or rented equipment. It will also give us more flexibility in the scheduling of our chip seals.

We now have a texting/email distribution list that we use to notify relevant agencies and groups of roads that will be closed for paving, maintenance, and bridge replacements. These groups includes the Sherriff's Department, all local fire departments, EMS/EMA, elected officials, local media, schools, and others.

Asphalt Production - April

LOADS	DATE	TIME	GALLONS	OIL COST	MATERIAL COST	TOTAL COST	TONS PRODUCED	Vendor	TYPE
1	1- Apr- 15	7:00AM	5844.31	\$10,490.53	\$3,165.36	\$13,655.89	395.67	Bit-Mat	AE- 200/11
2	1- Apr- 15	10:45am	6699.4	\$12,015.42	\$3,628.64	\$15,644.06	453.58	Bit-Mat	AE- 200/11
3	15- Apr- 15	7:28AM	5655	\$9,952.80	\$3,003.11	\$12,955.91	382.87	Asphalt Materials	AE- 150-11
4	15- Apr- 15	8:39AM	5781	\$10,174.56	\$3,070.02	\$13,244.58	391.4	Asphalt Materials	AE- 150-11
5	30- Apr- 15	7:35AM	5861.08	\$10,520.64	\$3,174.45	\$13,695.09	396.82	Bit-Mat	AE- 200/11
6	30- Apr- 15	9:59AM	5765.27	\$10,348.66	\$3,122.55	\$13,471.21	390.34	Bit-Mat	AE- 200/11
7	1- May- 15	8:00AM	5809.76	\$10,370.42	\$3,128.99	\$13,499.41	393.35	Bit-Mat	AE- 150-11
8	1- May- 15	9:20AM	5812.2	\$10,374.78	\$3,130.30	\$13,505.08	393.51	Bit-Mat	AE- 150-11
TOTAL			47220.02	COA 247 01	COF 400 40	¢100 671 33	2107 54		

TOTAL 47228.02 \$84,247.81 \$25,423.42 \$109,671.23 3197.54

PHASE ONE PAVING

ROAD	FROM	то	MILES
800S	300E	US35	2
200E	450S	Toto road	1.5
350\$	200E	150E	0.5
450\$	100E	Range Road	1
500S	US35	100E	3
600N	500E	Hamlet limits	0.9
Range Road	SR8	150\$	2.5
Campbell Drive	500W	North Judson Limits	0.5
San Pierre Road	1075W	US421	1.5
Circle Ave.	SR23	South ST.	0.5
South St.	Circle Ave.	1200E	0.5
775N	700E	825E	0.8
600E	800S	SR10	1.5

Cost of one centerline mile of patch/wedge asphalt - \$19,219.23 Cost of one centerline mile of pug asphalt - \$19,001.85

We believe we have reached our peak efficiency when it comes to producing asphalt. Two years ago it cost us over \$30,000 a mile to produce pug asphalt. Through training, experience and lower oil prices we are now under 20K. We also have the equipment and trained personnel in place to pave as many as 50 miles a year. The only factor limiting our paving totals is the amount of oil we can purchase. Our paving budget is about \$400,000 per year. We have been able to exceed this amount each of the last two years thanks to cost savings in other areas (construction inspection, producing our own material, reduction of dust control costs, using competition to get better quotes in all areas, etc...). However, we are running out of areas to save money. We are currently are operating at a level where we can maintain the current condition of our roadways. We will not be able to significantly improve the roadways without more funding to purchase oil. Although it appears that State and Federal funding for roadways is becoming harder to come by there are other avenues that local agencies can pursue for additional funding (LOHUT, heavy hauling fees, etc....). It is very likely that in the near future the State will require local agencies to bear more of the burden before becoming eligible for State and even Federal funding.

SPRING ROADWAY MAINTENANCE — The drivers have been patching their areas. We have also been wedging isolated areas of pavement "blowouts" that don't require an entire mile to be paved. Thankfully we have not had to close roads due to condition like many other Indiana counties have been forced to do as a result of the frost thaw's effect on the roadways..

We have also doing other various maintenance activities such as brush control, trash pickup, and drainage control. We will have a brush cutting crew out almost daily clearing the right of ways, We also have a brush chopper that makes two circuits of the County during the spring and summer months.

What many people do not realize is that the County does have an "adopt-a-highway" program where various groups can obtain vest, trash bags, and traffic control for the Highway Department. Our Department also will pick up the filled trash bags for the organizations. The Koontz Lake property owners association does a spring cleanup under this program each year. The Bass Lake property owners have shown interest in a cleanup around their lake as well.

During the next two months we will also be correcting some draining problems around the County that effect our roadways. There are a few areas south and west of North Judson that need attention. We will also be working on 700S correcting flooding issues in North Bend Township. We will work on other areas as needed.

<u>MOWING</u> – One of our mowers has been on the road working since April 27. Our other four tractor mowers will be cutting the right of ways beginning May 11th. Last year we mowed more than 8000 lane miles of County roadways. We plan on completing at least five complete circuits of the County this summer (7500 lane miles). The primary purpose of our mowing operations is to clear sight distance on County roadways and at intersections. As such we will be mowing five feet of right of way on the roadways and at least fifteen feet back at intersections. We will work with local farmers to limit the amount of crops we have to mow without compromising public safety.

BRIDGE

LOCAL BRIDGE REPLACEMENTS:

Bridge 70 (CR50E over Smith Ditch, .1 m south of CR500S) is now 95% complete. It should be reopened in the next week or so.

Bridge 79(CR450S over Smith Ditch, .2 m west of Range Road) LaPorte Construction has just started construction of this bridge. 450S will be closed for part of the summer from Range Road to 100W.

Bridge #1 on CR700N over the Robbins ditch, .3 miles W of CR500E is currently being designed. Construction should begin this summer

Bridge #71 CR100E over Smith Ditch, .5 m S of CR500S — is currently being designed. Construction should begin this summer

BRIDGE INSPECTIONS – Our biennial bridge inspections are being performed by USI Consultants . They should be done with their first round of inspections by June 1st.

<u>CULVERT INVENTORY/REPLACEMENTS</u> – We have replaced 7 of our 585 pipes/culverts so far this Spring. We plan on replacing about 10 to 15 more by the end of the summer.

OTHER

<u>SAFETY AND TRAINING</u> – We have continued our weekly safety and training meetings. We also sent some of our drivers to a traffic control workshop in anticipation of this summer road improvement operations. On Wednesday mort of our employees will attend a chain saw and bucket truck safety training in Michigan City. This training is being offered by LTAP and is free of charge. At the recent snow conference the operations foreman received is winter maintenance supervisor certification and the Superintendent became recertified.

EQUIPMENT ACQUISITION – In addition to the distributor truck mentioned above we have also purchased equipment that will allow us to create a new sprayer truck using a chassis from one of our older trucks with a damaged dump bed. This "new" truck will serve three purposes. We will use it as a brine sprayer in the winter, a water tanker during paving operations, and as a dust control sprayer in the Spring and summer. The cost of repurposing this truck is \$6,000. We will be saving at least \$20,000 in dust control cost s alone. Basically the truck will have paid for itself by July.

THIRD MECHANIC POSITION Our new mechanic will begin work on June 1st.

<u>Winter operations</u> — Although winter is over preparations for next winter have begun. We have completed our salt bid with the State and are preparing brine making and distribution operations. The cost of this new program is minimal and should quickly pay for itself in reduced salt use. We are also scheduling our winter operations training at this time.