

Village of Hanover Park BMP'S



March 1 2017

Village Statistics

- Located in Cook and DuPage Counties.
- 38,500 Residents
- 100 center lane miles of roadways.
- 193 Cul-de-Sacs
- 2 Fire stations
- 3 commuter parking lots
- 1 sewage treatment plant with 3 lift stations
- 4 well houses
- 5 miles of bike path / sidewalks

P.W. Department Statistics

- Average 20 call outs per season.
- Average 6 plowings per season.
- 1800 tons of salt per year.
- 25,000 gal. of salt brine per year.
- 10,000 gal. of Geo- Melt.
- 34 full time employees.

Equipment

- 2 anti icing spray trucks.
- 2 tandem axle trucks w/ on board liquid.
- 8 single axle trucks w/ on board liquid.
- 18 pick up trucks w/ plows.
- Front end loader, w/ plow.
- 1 skid steer w/ plow, blower, and broom.
- Toro Polar Track w/ plow, blower and Broom.

History

Started Chloride reduction program 2003

First anti icing operations started 2002

Pre wetting started late 1980's

Changed plowing / salting policies

Improved salt storage

Improved weather forecasting

Monitored pavement temperatures

Improved salt spreader calibration

Anti Icing Operations

- Started in 2002 with 1- 500 gal. system.
- Added second system in 2005.
- Apply Approx. 25,000 gal. per season.
- Apply once per week Nov.- March, weather permitting.
- Application rate of 30 gallons per lane mils
- Apply to all stop intersections, hills, curves, and school zones.
- Order equipment to be delivered with new purchases

Safety Stripes









**HANOVER
PARK**

WARNING
COMBUSTIBLE HAZARD
See the operator's manual for information on safe handling and use of this equipment.

SAFETY INSTRUCTIONS
1. Read and understand all safety instructions before operating this equipment.
2. Do not drink or use alcohol while operating this equipment.
3. Do not operate this equipment if you are tired or under the influence of any drugs.
4. Make all vehicle and parking area inspections before operating this equipment.

ATTENTION
See the operator's manual for information on safe handling and use of this equipment.

BALL VALVE CONFIGURATION

DRIVER SUCTION	PASSENGER SUCTION
DRIVER FILL	PASSENGER FILL

CAUTION
FALL HAZARD!
Do not climb, swing, or fall from the truck. Always use proper fall protection techniques.

DIESEL FUEL

NOT A STEP

HYD FLUID





STRAIGHT
100

Weather Service

- Continental Weather Service.
- Since 1996.
- AM fax forecast.
- PM fax forecast.
- 24 hour toll free phone contact.

CURRENT TEMPERATURE: 72
TEMPERATURE FORECAST: MAX {88} 3 PM MON MIN {62} at 6 AM MON

Temp above 32 at Temp below 32 at

HEAT INDEX:

WIND CHILLS:

CLOUD COVER: MOSTLY SUNNY REST OF TODAY/INCREASING CLOUDS
TMR.

PRECIPITATION TYPE/ PROBABILITY:

PRECIPITATION AMOUNT:

PRECIPITATION TIMES:

WIND DIRECTION AND SPEED: SE - S 7-17

WEATHER HAZARDS/WATCHES/WARNINGS:

REMARKS: HIGH PRESSURE MOVING ACROSS THE GREAT LAKES WILL GIVE
US MOSTLY SUNNY SKIES AND PLEASANT WEATHER THIS AFTERNOON AND MILD
CONDITIONS TNT. WARMER TEMPS ONCE AGAIN MONDAY WITH HIGH'S IN THE
UPPER 80'S. CHANCE OF SHOWERS ON TUESDAY WITH COOLER TEMPS.

SEVEN DAY OUTLOOK:

DAY	PRECIP	AMOUNT	MAX	MIN	SKY	COMMENTS
MON	RW/T PM	.15-.75		88	64	M/C
TUE	RW/T	.50		80	66	M/C
WED	RW'S/30%	.20		75	58	M/C
THU	NONE				74	50 P/S
FRI	NONE				72	52 P/C
SAT	NONE		80	54	M/S	
SUN	RW 40%	.25	82	54	V/C	

WEATHER CODES: R=RAIN, RW=RAIN SHOWER, L-DRIZZLE, T=THUNDERSTORM, S=SNOW
SW=SNOW SHOWER, SW- FLURRIES, ZR/ZL FREEING RAIN/DRIZZLE, LIGHT PRECIP - HEAVY PRECIPITATION +



Salt/Brine Spreader Calibration

Truck # 112

Date 12-6-16

Maximum Salt Output – Spreader Control set at 10 156 lbs. per minute
468 lbs. per mile @ 20 MPH

(450 lbs. per mile max.) (@ 20mph, 3 min = 1 mile = 150 lbs. per min for 450 pmi)

Controller Make / Model Force 5100

Force 5100 Controller

Setting # 1	<u>250</u>
Setting # 2	<u>350</u>
Setting # 3	<u>450</u>

Liquid De-icer Output – Spreader Control at Max 1.75 gal per minute

Pump drive - Electric Hydraulic

23.2 gal per ton @ 20 mph

@ 450 lb. per mile – 13.3 minutes per ton – Gal per Min. x 13.3 = Gal per ton

(20 gal. per ton at all spread rates & speed is goal)

(450 lbs of salt per mile at max rate. Lower rates available if possible.)

Results

Reduction of 30-40% of material
applied

Anyone doing this?



Questions ???



Contact Information

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