Township Council
1-28-20

TOWNSHIP OF DENVILLE
MUNICIPAL COUNCIL
BUDGET WORKSHOP MEETING

JANUARY 28, 2020

The Meeting was called to order at 7:00 P.M. by Council President Murphy. The Salute to the Flag was recited, followed by an Invocation by Councilman Gabel. Municipal Clerk Tara Pettoni read the Notice of Compliance with the Open Public Meetings Act and noted that this is a non-smoking facility. The Clerk requested that all electronics be silenced.

ROLL CALL: Coté, Borowiec, Gabel, Buie, Fahrer, President Murphy
ABSENT: None
ALSO, IN ATTENDANCE: Thomas W. Andes, Mayor; Steven Ward, Business Administrator; Frank Perna, Police Chief; Jeffrey Tucker, Police Captain; Lisa Curran, Administrative Assistant; Ryan Gleason, Executive Director; Gene Fitzpatrick, Chairman; Kristin Pamperin, Treasurer and John Ruschke, PE.

OPEN PUBLIC PORTION
No one wished to be heard.

CLOSE PUBLIC PORTION

BUSINESS IMPROVEMENT DISTRICT (BID)
Chairman Fitzpatrick, Executive Director Gleason and Treasurer Pamperin referenced their PowerPoint presentation, which can be found at the end of these minutes. They discussed their 2020 goals, fundraising/marketing ideas and explained in detail the need for the Township to increase the supplementary funding by $10,000.

POLICE DEPARTMENT
Chief Perna and Captain Tucker presented the Council with a PowerPoint presentation, which can be found at the end of these minutes. Both the Chief and Captain explained that most of their capital requests are needed for both the safety of their Department as well as the safety and wellbeing of the residents. A lot of their equipment including but not limited to laptops/toughbooks, radios, vehicles, parking meter and visual message board are needed as they are outdated and or are not in working capacity.

ENGINEERING
John Ruschke also presented the Council with a PowerPoint. He thoroughly explained the process in determining which roads should be paved and the measures that are taken following his recommendation. Engineer Ruschke went on to discuss which streets would potentially be paved some including curbing and drainage in the 2020 calendar year.

MOTION TO ADJOURN:
MOVED BY MEMBER GABEL, SECONDED BY MEMBER COTÉ
AYES: JNANIMOUS

Meeting adjourned at 10:10 P.M.

Tara M. Pettoni, RMC
Municipal Clerk
A Message From the Director

Greetings!

2019 has been an exciting and productive year for the members of Downtown Denville! In addition to hosting the many events we have become known for throughout the year, we expanded our downtown marketing efforts, increased beautification to include cause-worthy flags and seasonal cecorations, and engaged with the Township on a variety of issues important to our members. In addition, we were very proud to be one of only 21 Townships in the State to qualify to join the re-instated Main Street New Jersey Program. As a result, Downtown Denville was able to apply for and receive a $25,000 Transformation Grant to improve the accessibility of the Upper Bloomfield Avenue Municipal Parking Lot.

These achievements would not be possible without the support and advocacy of our members, engaged Board of Directors, Township staff, Police Department, DPW, Beautification Committee, CERT, elected officials, and our amazing volunteers. Denville is a town defined by its incredibly generous and welcoming community, and our downtown would not be the same without the community’s staunch support.

I look forward continuing our efforts in 2020 to grow our events, invest in new and exciting beautification efforts, and drive commerce to our beloved downtown. The retail and business landscape all around the country is constantly changing, and it takes time and effort to help navigate new and shifting trends. However, with continued support and planning, I am confident Downtown Denville will only get stronger and more exciting in the years to come.

Sincerely,

Ryan Gleason
Ryan Gleason
Executive Director
Retail Trends We’re Tracking

“WHERE IS RETAIL HEADED?

The seers look into their crystal balls and say, “The retail apocalypse is coming.” The retail analysts say it’s already here. If you look around, you’ve almost certainly observed it yourself. Recent store closures have been setting records and the trend is expected to accelerate as the retail industry restructures. The estimated 46 square feet of retail space per capita in the U.S. was already unsustainable and analysts believe the industry faces an unprecedented reckoning as demand for space plummets... Online sales as a percentage of all retail sales have been increasing every single quarter for more than 10 years, and there is no reason to think that trend will plateau... Since a decline in demand for commercial space is a foregone conclusion, traditional malls are working to adapt: “experiential!” “microcities!” “creactivel!” Downtowns will have to chart a different course, too. They already are. Businesses—and business districts—are selling experiences before products. The shift to local has become a movement. People come for connection more than transaction. Social consciousness—doing well by doing good—is driving entrepreneurship.”

From “The future of retail: CREATIVE APPROACHES TO PLACE-BASED ENTREPRENEURSHIP"
Downtown Denville: Where a Community Comes Together

- Our district is comprised of over 200 retailers, restaurants, professional service providers, and non-profit organizations that overflow with abundant creativity, forward thinking ideas, and small-town charm. We attract residents, shoppers, and business owners who come for our quaint, hometown style, but also a dynamic and savvy community focused on quality.
About Downtown Denville

• The mission of the Downtown Denville Business Improvement District (BID) is to drive commerce and expand economic opportunity in Downtown Denville by providing services, development, improvements, and community-oriented programming that appeals to shoppers, workers, residents, and visitors. The aim is to create a vibrant downtown that reflects our unique history, and where both businesses and residents can flourish.

• Our quaint town exemplifies what it means to be "Main Street America." Denville offers a unique array of shops, restaurants, and services for all to enjoy!

• The BID was founded by merchants and property owners in the wake of the devastation caused by Hurricane Irene. Downtown Denville started operating in 2016. The organization’s Board of Directors has 10 seats, comprising of ground and second floor business owners, property owners, residents, and township officials. The full Board meets regularly at meetings open to the public. Program, administrative, and executive committees meet and work as needed.
What We Do

The Downtown Denville BID works to keep our downtown growing and thriving, and make it even better to let the world know about the great shopping, dining, entertainment options available in Downtown Denville. We focus on vibrant streets, economic development, and quality of life. Our organization was founded on the National Main Street model and brings value to the district in fundamental ways:

1. **Enhance Economic Value – we**
   - Identify and recruit new businesses to Downtown Denville
   - Help existing businesses to make their ventures more successful
   - Work with municipal and county departments to improve Downtown Denville
   - Introduce new businesses to local best practices

2. **Create Marketing Value – we**
   - Encourage, create, and promote events that increases foot traffic and brings additional focus to the district
   - Brand and market the district, both on the street and through public relations, social media, and advertising

3. **Promote Civic Value – we**
   - Advocate for business friendly ordinances and practices in Township agencies
   - Serve as an “honest broker” between local businesses and government agencies

4. **Build Physical Value – we**
   - Encourage and contribute to public placemaking within Downtown Denville
   - Enhance and beautify Downtown Denville through a variety of streetscape improvement programs
2019 Highlights

Lunar New Year Celebration and Pet Parade
Presented by Hunan Taste

- Downtown Denville celebrated the Year of the Pig during the annual Lunar New Year Pet Parade.
- Donations collected for the Barnyard Sanctuary and Denville Animal Shelter.
- Live Ice Sculpting and traditional red envelopes promoting local stores.
- Pet Parade.
- Lion Dance Performance.
Love Your Local

- Love your Local was a concentrated social media marketing campaign aimed at support Downtown Denville’s local business community.
- Businesses Highlighted: 17
Spring Into Downtown Denville presented by Lakeland Bank

- The Traditional “Hop into Denville” event was rebranded as “Spring into Downtown Denville”
- Eggs distributed to stores: 10,000
- Donations collected for Denville SPARK and Celebrate the Children School.
Visual Improvement Efforts

- In addition to the wonderful spring/summer hanging flower baskets, Downtown Denville expanded its efforts in 2019 to include:
  - Traditional Chinese Lanterns for Lunar NY
  - Autism Awareness Month flags
  - Café tables for Clocktower Plaza
  - Pink Breast Cancer Awareness Month flags
  - Fall flower buckets and Clocktower Plaza display
  - Increased Holiday Season decorations and Clocktower Plaza display
  - Partnered more heavily with the Township’s Beautification Committee to streamline and invest in better decorations, plantings, and displays.
• Downtown Denville named one of 21 Municipalities to rejoin the reinstated Main Street New Jersey Program
• Applied for and received a $25,000 matching Main Street Transformation Grant to improve access to the Bloomfield Avenue Municipal Parking Lot
Art Walk

- Downtown Denville’s Second Annual Art Walk rebranded and moved to a daytime event
- Focus on Children and Families
- Sidewalk chalk for kids
- Art showcases at local stores
- Sidewalk chalk artist at Clocktower Plaza
- Printed maps and guides
Luna Theme Deals
Multiple Store Activities and Live Band Performances
Thatcher McGhee's Center Street Beer Tent Run by
Over 1,200 Visitors Downtown Beach Hut
McGhee's and California
Presented by Thatcher Sidewalk Sale Days Summer Block Party and
Denville Restaurant Week

- Over 15 participating eateries downtown
- Printed maps and guides
- Increased marketing and social media impressions.
Marketing and Advertising

- Increased social media followers and engagement
- Electronic Billboard Advertisements
- New Branding and Website Launch
- Sponsorship of general Denville Guide
- Event Video shoots for Pink Witches and Open House Events

Center Street

Denville
Pink Witches Night Out
Presented by St. Clare's Health

- Donations collected for the Cancer Hope Network
- "In Honor Of" Walls
- Pink Ribbon Cutting
- Over 1,000 visitors downtown
- Swag Bags SOLD OUT!
- "Day in Denville" Raffle Basket
Holiday Open House and Small Business Saturday Presented by St. Francis Residential Center

- Printed Holiday Shopping Guides
- Open Late Campaign
- Weekly Carolers Downtown
- Small Business Saturday Passport Contest
- Costumed Characters
- Pictures with Santa
- Storytime with Mrs. Clause
- Carriage Rides
- Inflatable Decorations
- Free Cookies and Hand Warmers
- Center Street Live!
Giving Back

- Over $7,000 in donations to local charities
- Barnyard Sanctuary
- Denville Animal Shelter
- The Valerie Fund
- Celebrate the Children School
- Denville SPARK
- Cancer Hope Network
Thank You To Our Presenting Event Sponsors
2019 Downtown Denville Organization

Board of Directors

Tom Dean - Chair
Beth Billmeier – Vice Chair
Kristin Pamperin – Treasurer
Alexis Schoerner - Secretary
Gene Fitzpatrick - Director
Jenn Fox - Director
Meg Olenowski - Director
Mayor Tom Andes – Ex Officio
Councilman John Murphy – Ex Officio
Steve Ward – Ex Officio
Denville Police Department
2020 Budget Presentation

Chief Frank Perna
Captain Jeffrey Tucker
Executive Assistant Lisa Curran
**Capital Budget Requests**

- Laptops in Cars/Toughbooks: $55,000
- Live Scan Palm & Fingerprint Scanner: $15,000
- Radios w/ Repeater System Enhancement: $25,000
- Police 4x4 (Captain): $45,000
- Traffic Enforcement 4x4 (33rd Officer): $65,000
- Portable Variable Message Sign Board: $20,000
- Capital Outlay; Traffic Signs and Supplies: $19,000
- Multi-Space Parking Meter (West Main Lot): $10,000
Laptops in Cars/Toughbooks

- In 2007 we began to purchase Toughbook laptop computers for the front line vehicles. In 2010 we were able to expand that to include our command post vehicle. Since that time, the computers have been purchased on a five year cycle. As of 2020, service contracts cannot be purchased for the in-car computers and they are unable to be upgraded to windows 10 to run our necessary programs. The in-car computer is an invaluable tool for our officers’ safety and efficiency.

- $55,000.00
Live Scan Palm & Fingerprint Scanner

- As part of the arrest process for all indictable crimes and some disorderly persons offenses, we are required to obtain the arrested subject’s fingerprints and submit them to both state and federal agencies. In 2006, the department invested in the Crossmatch LiveScan fingerprint system, which scans and digitally submits the fingerprints to these agencies. The equipment was subsequently updated in 2013 and the physical scanner used to capture the fingerprints has reached the end of its warranty period and is due for replacement (the computer hardware was replaced in 2018). This is a vital piece of required equipment which gets used on a regular basis.

- $15,000.00
Radio System Enhancement

- As with any radio equipment covering such a large area consisting of hills, valleys and waterways, we continue to experience sporadic dead zones throughout the township where transmitting and/or receiving radio signals is troublesome, especially for our portable radios. In addition, larger buildings such as St. Clare’s Hospital, St. Francis Health Resort and The Oaks, also have issues with radio signals penetrating the building. This purchase would add a satellite receiver/transmitter to the radio tower on Hillcrest Drive to help eliminate/reduce any dead spots and increase the radio’s signal strength into those larger buildings. Over the next few years, we will look to add additional repeaters to create the most complete coverage possible of the township, thus improving radio communications and more importantly officer safety. There is also a need to replace failing mobile and portable radios.

- $25,000.00
Police 4X4 – Captain’s Vehicle

- In years past, the department was on a purchase cycle of 3 cars one year and 2 cars the next. Since 2009, we have only purchased two vehicles a year, except for 2016 when a third car was purchased for the Chief of Police. The cost of only purchasing two vehicles a year has allowed us to keep our front-line cars in great working order, but has not allowed us to filter other cars to key positions. The Chief’s vehicle to date has over 78,600 miles and the Captain’s vehicle is a 2011 with over 145,000 miles (2 Wheel Drive). In past years, we might have been able to move vehicles from other divisions, but again, we added a position in 2019 and five other positions (Class III’s) since 2018 (with 2 additional in scheduled to be added in 2020). On a daily basis, we search for vehicles to conduct the daily activities of this department. We would utilize the new vehicle as the Captain’s vehicle and in turn we would cycle the existing Captain’s vehicle to a Class III/Road Detail/School vehicle.

- $45,000.00
Traffic Enforcement Vehicle

- In 2019, we increased our manpower from 32 Sworn Police Officers to 33 Sworn Police Officers, creating a permanent Traffic Officer, but never considered the need for a vehicle. The Traffic Officer will mainly work a dayshift schedule and perform selective enforcement throughout the town to combat the many traffic complaints received. This vehicle would be equipped as a front-line car with all of the emergency equipment needed for that officer to perform his daily duties.
- $65,000.00
Police Department Vehicles

Wednesday, January 15th 2020 9:00 am.

Sunday, September 13th 2019 3:30 pm.

Monday, November 11th 2019 11:30 am.
Police Department Vehicles

- 7 vehicles in the department fleet have over 100,000 miles.
- Of those 7, 5 have over 120,000 miles.
- 3 additional vehicles have over 90,000 miles.
Portable Variable Message Board (VMB)

- Traffic complaints continue to be one of the most frequently received issues in the police department, and one that is very difficult for us to manage on a daily basis. In 2001, the department purchased our first portable speed display trailer and in 2010 we purchased a variable message sign board (VMB) to assist. Since that time, we have purchased smaller speed recording devices to complete traffic studies. At this time, we request to purchase a new VMB that would have a dual purpose. It would have the equipment to perform traffic studies and we would continue to utilize it as a means of communication with the public. Our current VMB at this time is out of warranty and is becoming costly to fix.

- $20,000.00
Traffic Signs

- For the past three years we have been requesting a line item in the Capital Budget for sign making supplies and equipment. When the sign employee was moved from DPW to the Police Department, there was never a transfer of funds for these supplies and no funds were placed in the operating budget. We are still catching up from several years of this area being unfunded.

- $19,000.00
Multi-Space Parking-Meter

- Our current multi-space parking meter in the West Main Parking lot is no longer under warranty and has reached an inoperable status, needing to be replaced. The meter allows us to continue to have an area within the center business district that has a paid parking time limit. The cost of the equipment would be recouped by the township over time from the revenue generated by the machine (approximately $300 to $600 per month). In addition, the newer machines allow customers to pay with credit or debit cards, a feature not available previously.

- $10,000.00
Proposed Road Maintenance Program

January 28, 2020

Township of Denville
Goal

Establish a sustainable maintenance program which will reduce capital costs and maximize the service life of Township roads.
• Total Length of Roads – 90+ miles
• Total Area – 1.3+ million s.y.
• Average Square Yards Paved Each Year - 46,000 s.y.
• Average Duration Between resurfacing – 28 years
• Square Yards to be Paved in 2020 - 53,394 s.y.
Levels of Maintenance

- Preventative Maintenance
- Target Structural Maintenance/Repairs
- Road Resurfacing
- Road Reconstruction
Identifying & Assessing
Asphalt Pavement Distresses

Pavement Condition Index (PCI)
Asphalt Pavement Rating Form

Condition Rating as a General Indicator of Type of Maintenance

Source:
A Pavement Rating System for Low-Volume Asphalt Roads, Asphalt Institute, Information Series No. 169
Fatigue Failure – Alligator Cracking

Cause:

- Excessive Deflection of the surface over unstable subgrade or lower course of pavement
- Unstable support is usually the result of saturated granular bases or subgrades
Shrinkage – Block Cracking

Cause:

- Volume change in the asphalt mix or in the base or subgrade
Settlement – Depression

Cause:
- Weight of the material
- Poor Compaction
- Traffic
Traffic/Frost Heave – Edge Cracking

Cause:
- Traffic Loading
- Frost Heave/Environmental Factors
Asphalt Over Concrete – Joint Reflection

Cause:

- Differential movement across the underlying crack or joint
Drop-Off/Shoulder

Cause:

- A road is resurfaced without adequately raising the height of the shoulder
Joint, Shrinkage, Reflective Crack

Cause:

- Volume change in the asphalt mix or in the base or subgrade

Figure 10a. Low-Severity Longitudinal and Transverse Cracking.

Figure 10b. Medium-Severity Longitudinal and Transverse Cracking.

Figure 10c. High-Severity Longitudinal and Transverse Cracking.
Patching and Utility Trenches
Potholes

Cause:

- Combination of weaknesses in the pavement resulting from such as too little asphalt, too thin an asphalt surface, too many fines, too few fines, or poor drainage and traffic.
Poor Quality Mix – Weathering and Raveling

Cause:

- Lack of compaction during construction
- Construction during wet or cold weather
- Dirty or disintegrating aggregate
- Too little asphalt in the mix
- Overheating of the asphalt mix
New Jersey Administrative Code

- TITLE 5. COMMUNITY AFFAIRS
- CHAPTER 21. RESIDENTIAL SITE IMPROVEMENT STANDARDS
- SUBCHAPTER 4. STREETS AND PARKING
### Table 4.7 Subgrade Categories

#### A. Based on Strength Test

<table>
<thead>
<tr>
<th>Subgrade Category</th>
<th>California Bearing Ratio (CRR)</th>
<th>Resilient Modules $M_{r}$ VAI IIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good to excellent</td>
<td>+10</td>
<td>Above 15,000</td>
</tr>
<tr>
<td>Medium</td>
<td>+5 to 9</td>
<td>7,500 to 13,500</td>
</tr>
<tr>
<td>Poor</td>
<td>2 to 4</td>
<td>3,000 to 6,000</td>
</tr>
</tbody>
</table>

#### B. Based on Soil Classification

| Subgrade Category | Material          | Unified System
c | AASHTO System
c |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Good or poor</td>
<td>Silts and clays</td>
<td>ML, CL, OL, MH, CH, OH</td>
</tr>
</tbody>
</table>

**Notes:**
- $a$Refers to categories of soil types and properties.

**Sources:**
- Revised CBR strength test and $M_{r}$ value information are from the Asphalt Handbook for County and Municipal Engineers, November 1991 (Second Edition), published by the New Jersey Society of Municipal Engineers.

Source:
- Residential Site Improvement Standards
Table 4.3

Figure 4.3
Pavement Sections for Residential Access and Neighborhood Streets
(ADT ≤ 1,500)(EAL ≤ 80,000)

All Asphalt

<table>
<thead>
<tr>
<th>Subgrade</th>
<th>1.5&quot;</th>
<th>6.5&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Subgrade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium Subgrade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good or Excellent Subgrade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Combination

<table>
<thead>
<tr>
<th>Subgrade</th>
<th>1.5&quot;</th>
<th>6.0&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Subgrade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium Subgrade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good or Excellent Subgrade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Residential Site Improvement Standards
Table 4.3

Pavement Sections for Residential Access and Neighborhood Streets (ADT < 1,500)(EAL < 80,000)

<table>
<thead>
<tr>
<th>Subgrade</th>
<th>Asphalt Concrete Surface</th>
<th>Asphalt Concrete Base</th>
<th>Medium Subgrade</th>
<th>Combination</th>
<th>Good or Excellent Subgrade</th>
<th>Medium Subgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Subgrade</td>
<td>1.5&quot;</td>
<td>6.5&quot;</td>
<td></td>
<td>1.5&quot;</td>
<td>4.5&quot;</td>
<td>6.0&quot;</td>
</tr>
<tr>
<td>Medium Subgrade</td>
<td>1.5&quot;</td>
<td>6.5&quot;</td>
<td></td>
<td>1.5&quot;</td>
<td>4.5&quot;</td>
<td>6.0&quot;</td>
</tr>
<tr>
<td>Good Subgrade</td>
<td>1.5&quot;</td>
<td>6.5&quot;</td>
<td></td>
<td>1.5&quot;</td>
<td>4.5&quot;</td>
<td>6.0&quot;</td>
</tr>
</tbody>
</table>

Source: Residential Site Improvement Standards

May 1, 2020
## Township Road Specifications vs NJ Residential Site Improvements Standards

<table>
<thead>
<tr>
<th></th>
<th>RSIS (Minimum)</th>
<th>Road Opening Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bituminous Surface Course</td>
<td>2&quot;</td>
<td>1 1/2&quot;</td>
</tr>
<tr>
<td>Bituminous Base Course</td>
<td>4&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>Dense Graded Aggregate</td>
<td>6&quot;</td>
<td>4&quot;</td>
</tr>
</tbody>
</table>
NJDOT Testing Requirements

- Composition
- Air Voids
- Thickness
- Ride Quality (International Toughness Index)
Key Factors to Rate of Deterioration for New Roads

- Soil Conditions
- Traffic Conditions
- Pavement Profile (Gravel, Base and Surface)
- Quality of Pavement Material
- Climate
- Moisture/Drainage
- Others
Figure 4-4. Determination of long-term rate of deterioration for asphalt concrete (AC) overlay over AC pavements.

Source:
<table>
<thead>
<tr>
<th>Distress Type</th>
<th>M&amp;R</th>
<th>Condition</th>
<th>Cost</th>
<th>Depth</th>
<th>Patch Type</th>
<th>Patch</th>
<th>Surface</th>
<th>Base</th>
<th>Aggregate</th>
<th>Cost</th>
<th>Status</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polished Aggregate</td>
<td>A</td>
<td></td>
<td>A</td>
<td></td>
<td>A</td>
<td>L,M</td>
<td>L,M</td>
<td></td>
<td>A,H</td>
<td>L,H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railroad Crossing</td>
<td>L</td>
<td>M,H</td>
<td>L,M</td>
<td></td>
<td>L,M</td>
<td>L,M</td>
<td>L,M</td>
<td></td>
<td>A,H</td>
<td>L,H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slipage Cracking</td>
<td>L</td>
<td>L,M</td>
<td>M</td>
<td></td>
<td>M</td>
<td>L,M</td>
<td>L,M</td>
<td></td>
<td>A,H</td>
<td>L,H</td>
<td></td>
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</tr>
<tr>
<td>*Swell</td>
<td>L</td>
<td>M,H</td>
<td>L,M</td>
<td></td>
<td>L,M</td>
<td>L,M</td>
<td>L,M</td>
<td></td>
<td>A,H</td>
<td>L,H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weathering &amp; Raveling</td>
<td>L</td>
<td>H</td>
<td>L</td>
<td></td>
<td>L</td>
<td>L,M</td>
<td>L,M</td>
<td></td>
<td>A,H</td>
<td>L,H</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: L = Low severity; M = Medium severity; H = High severity; A = Has only one severity level.
Storm Drain Repairs & Inlet Retrofitting

- Minimum Standard- Retrofitting of existing storm drain inlets to meet the standard contained in Attachment C of the permit is required when such inlets are owned or operated by the Tier A Municipality and are in direct contact with repaving, repairing (excluding repair of individual potholes), reconstruction, resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen), or alterations of facilities owned or operated by the Tier A Municipality.
Resurfacing
Crack Sealing
Recommendations

- Extensive crack sealing.
  - Target roads resurfaced 5 to 10 years
  - Target new roads constructed 10 to 15 years
- Catch basin repairs
- Isolated full-depth pavement repairs at manholes, extensive cracking, etc.
- Complete storm drain inlet retrofitting
- Road Resurfacing on select roadways
- Micro Paving on Select Roadways
Contractor vs Township DPW
DPW Scheduled Work

- Potholes
- Crack Sealing
- Full Depth Repairs
- Catch Basin Repairs
- Road Preparation for Resurfacing
- Drainage Improvements
- Miscellaneous
Road Preparation Prior to Resurfacing

1. Repair drainage structures
2. Full-depth pavement repairs
3. Catch basin retrofitting
4. Evaluate drainage patterns
5. ADA compliance at crosswalks
6. Evaluate the need for milling road surface (curb reveal, transitions, joints, flood plain, etc)
7. Leveling course/establish crown
Road Preparation Prior to Micro-Paving

1. Repair drainage structures
2. Full depth pavement repairs
3. Catch basin retrofitting
4. Crack Sealing
5. ADA compliance at crosswalks
# 2020 Proposed Road Resurfacing List

## A. GRANT APPLICATIONS (AWARDED – 11/21/2019)

<table>
<thead>
<tr>
<th>Road Name</th>
<th>Rating</th>
<th>Traffic Volume</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franklin Avenue - NJ Transit Trestle to Triangle</td>
<td>72</td>
<td>High</td>
<td>$115,000</td>
</tr>
</tbody>
</table>

**Subtotal A: $115,000**

## B. ROADS ON MULTI-YEAR SCHEDULES

<table>
<thead>
<tr>
<th>Road Name</th>
<th>Rating</th>
<th>Traffic Volume</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks Road (Part 3 of 3)</td>
<td>72</td>
<td>High</td>
<td>$79,500</td>
</tr>
<tr>
<td>Shongum Road (Part 2 of 2)</td>
<td>75</td>
<td>High</td>
<td>$55,000</td>
</tr>
<tr>
<td>Mt. Pleasant Turnpike (Part 2 of 3)</td>
<td>76</td>
<td>High</td>
<td>$92,000</td>
</tr>
<tr>
<td>Old Mill Drive (Part 1 of 2)</td>
<td>79</td>
<td>Medium</td>
<td>$98,500</td>
</tr>
</tbody>
</table>

**Subtotal B: $325,000**

## C. NEW ROADS FOR CONSIDERATION

<table>
<thead>
<tr>
<th>Road Name</th>
<th>Rating</th>
<th>Traffic Volume</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware Trail</td>
<td>72</td>
<td>Low</td>
<td>$34,500</td>
</tr>
<tr>
<td>Evergreen Road</td>
<td>74</td>
<td>Low</td>
<td>$14,500</td>
</tr>
<tr>
<td>Pine Lane</td>
<td>74</td>
<td>Low</td>
<td>$14,500</td>
</tr>
<tr>
<td>Highland Trail</td>
<td>77</td>
<td>Low</td>
<td>$90,000</td>
</tr>
<tr>
<td>South Shore Road</td>
<td>78</td>
<td>Medium</td>
<td>$27,500</td>
</tr>
<tr>
<td>Chadwick Court</td>
<td>78</td>
<td>Low</td>
<td>$22,000</td>
</tr>
<tr>
<td>Brentwood Lane</td>
<td>78</td>
<td>Low</td>
<td>$24,000</td>
</tr>
<tr>
<td>Holly Drive</td>
<td>78</td>
<td>Low</td>
<td>$41,000</td>
</tr>
<tr>
<td>Westerly Street</td>
<td>78</td>
<td>Low</td>
<td>$14,000</td>
</tr>
<tr>
<td>Magnolia (partial*)</td>
<td>78</td>
<td>Low</td>
<td>$53,000</td>
</tr>
</tbody>
</table>

(*House #51 to cul du sac)

**Subtotal C: $335,000**
Questions?