| | | | | | Proposed | | |
|--------------|---|--|-----------------------|---------------------|----------|-------------|-------------------------|
| Plan Sheet # | Location Description | Problem Statement | Neighborhood Location | Category | Ranking | Study Cost | Project Estimated Costs |
| | | Culverts in 6 locations in Echo Valley - headwalls and endwalls are deteriorating and need to be repaired before the culvert piping fails and the roads subside. | | | | | |
| 1 | Echo Valley Repair (6) Culverts | | Echo Valley | Twp. Capacity | 1 | | \$849,960.00 |
| 9 | Northwood Rd & Delmont Rd | Northwood Road does not have a good, consistent storm sewer or curbing system. There are 2 inlets to collect runoff from approximately 1600 lineal feet. Unmanaged storm water is causing damage at properties on both Northwood Road and on Delmont Road. | Larchmont | Twp. Capacity | 2 | | \$612,000.00 |
| 1 | Boot Road Erosion between Goshen & Fox Trail | Boot Road has no storm sewer system and very little curbing. The roadway is being undermined and eroding - especially on the western side. Water needs to be directed off the road and towards Crum Creek or Reeses Run. The edges of the road and adjacent properties need to be protected. The estimates provided are for the complete length of 1.2 miles of road from Rte 3 to Goshen Road and can be phased to address the worst areas and expand as funding becomes available. | Echo Valley | Road Erosion | 3 | | \$2,930,276.00 |
| 4 | Boot Road Erosion between Rt 3 & Fox Trail | Boot Road has no storm sewer system and very little curbing. The roadway is being undermined and eroding - especially on the western side. Water needs to be directed off the road and towards Crum Creek or Reeses Run. The edges of the road and adjecant properties need to be protected. The estimates provided are for the complete length of 1.2 miles of road from Rte 3 to Goshen Road and can be phased to address the worst areas and expand as funding becomes available. | Boot Road Area | Road Erosion | 3 | | \$ - |
| 4 | Florida Park | Florida Park has very few storm sewer mechanisms in place. Issues of ponding and flooding occur regularly - especially at the properties along the southern side of Fairview Avenue as they are down-hill. A proper collection system including curbing and inlets / piping should be investigated. The estimated fee is to investigate and prepare a conceptual design for providing curbing and storm sewers within the streets in the development whether public or private along with bringing the street widths up to a standard capable of accepting dedication and getting Liquid Fuels Funds, if the Board chooses, for all but dead end streets where a cul-de-sac cannot be constructed in the existing right of way. The deliverable will be a Sketch Plan and Estimate of Probable Construction. | Boot Road Area | Twp. Capacity/study | 4 | \$13,700.00 | |

| | 1 | | 1 | | | ı | |
|---|----------------------------------|---|---------------------------------|---------------------|---|-------------|----------------|
| 5 | Caley, Tyson, Horton& Lewis etc. | The stormwater collection system in this portion if the community is in need of upgrading and augmenting. Original Circa 1960 construction pre-dated stormwater management and storm sewer design standards and additional collection and conveyance systems are needed to address the damage from increasing storm intensities. Road widths are sufficient and all roads are Township owned but rolled gutter curbing has been partially filled with asphalt reducing the capacity. | Upper Saint Albans | Twp. Capacity | 5 | | \$2,659,130.00 |
| | | | | | | | |
| | | The stormwater collection system in this portion of the community is in need of upgrading and augmenting. The estimated fee is to study preparing conceptual design to install curbing and storm sewers within all streets in the development whether public or private along with bringing the street widths up to a standard capable of being accepted for dedication and getting Liquid Fuels Funds, if the Board chooses, for all but dead end streets where a cul-de-sac cannot be constructed in the existing right of way. Information was previously obtained through property owner surveys to establish an understanding of the issues experienced and estimates generated to provide 27' road widths and associated stormwater management. | | | | | |
| | | We will utilize the prior information to adjust the estimates. | | | | | |
| 4 | Newtown Heights | | Boot Road Area | Twp. Capacity | 6 | \$8,700.00 | |
| 8 | The Avenues | The stormwater collection system in this portion if the community is believed to be in need of upgrading and augmenting. The estimated fee is to study providing curbing and storm sewers within all streets in the development whether public or private along with bringing the street widths up to a standard capable of accepting dedication and getting Liquid Fuels Funds, if the Board chooses, for all but dead end streets where a cul-de-sac cannot be constructed in the existing right of way. The neighborhood has approximately 2.2 miles of public and private roads and complaints have varied from lack of curb causing road runoff to damage structures to uncontrolled runoff causing erosion within yards. The deliverable will be a Sketch Plan and Estimate of Probable Construction. | Lower Saint Albans/South 252 | Twp. Capacity/study | 7 | \$20,860.00 | |
| | | Corrugated metal pipes corroding and creating concern for the road stability in the cul-de-sac, full replacement is proposed. | | | | | |
| 9 | Radnor Dr cul de sac | | Larchmont | Twp. Capacity | 8 | | \$125,040.00 |
| 3 | Valley Forge Rd Bridge | There are two drainage issues in this area. The neighboring homeowners along Valley Forge Road have placed stone to block stormwater draining from the roadway, which causes ponding. Also, the small stone bridge over Julip Run (a triburary to Darby Creek) is deteriorating and will need eventual replacement. (currently road closed due to damage to downstream endwall) | Harrison Estates/Paper Mill | Road Erosion | 9 | | \$425,000.00 |

| | 1 | | | 1 | | | |
|---|---------------------------------------|---|--------------------|----------------|----|-------------|-----------------|
| 2 | Glendale Road | Stormwater is eroding the edges of Glendale Road near the intersection with Andover Road. This project is being considered as the next Phase of the current Low Volume Road Grant Program. | Wyola | Road Erosion | 10 | | \$186,450.00 |
| 5 | Saw Mill/Aspen & Rt 252 | There is no drainage system on Saw Mill Road between Route 252 and Sugar Maple Drive. The road also narrows at that location, creating significant ponding and neighboring property flooding issues. A widening and drainage system project should be looked at to resolve the issue. This particular location is also tied to the potential use of the Saw Mill Road and Aspen Road properties. A proposal was prepared for the coordination of the use of the properties and correction of the drainage and street width issues. This will also involve visioning for pedestrian access along Saw Mill Road and Traffic Signal modifications to provide safe pedestrian crossings for use of the Liseter Trail and access to the Meadow Preserve. | Upper Saint Albans | Twp. Capacity | 11 | \$36,900.00 | |
| | · | | | , | | | |
| | | Water believed to be discharging from storm sewers originating at Harvey Lane, Denford Drive, Richards Ridge and Clark Drive is causing erosion at Green Countrie Village | | | | | |
| 6 | Greene Countrie Villages | | Greene Countrie | Erosion | 12 | | \$294,000.00 |
| | Woodhill Rd Property is Draining onto | Silt and debris from Woodhill Road properties is consistantly collecting at the inlet on Bryn Mawr Avenue between Malin Road and Brookside Road and blocking it from draining the roadway. | | | | | |
| 9 | Bryn Mawr Ave | | Larchmont | Twp. Capacity | 13 | | \$233,120.00 |
| | | A spring from the property at the corner of Bishop Hollow Road and Hempstead Road seeps onto the roadway and ices in the winter. It generally stays in the gutter. A similar issue with a spring exists on Wyola Drive. | | | | | |
| 7 | Spring @ Bishop Hollow & Hempstead | | Springton Pointe | Twp. Capacity | 14 | | \$44,560.00 |
| | | The discharge of the existing storm sewer system discharges under Goshen Road to a intermittant watercourse. Washouts have occurred along the property frontage where the discharge occurs. | | | | | |
| 6 | Goshen Rd Washouts and Discharge | | Greene Countrie | Stream Erosion | 15 | | \$122,740.00 |
| | and and and and and | | Lower Saint | 22.222.00.0 | | | Ţ,· · · · · · · |
| 8 | Poplar Rd & Troop Farm Rd Erosion | | Albans/South 252 | Stream Erosion | | | |
| 1 | Stream Restoration | | Echo Valley | Stream Erosion | | | |
| | Saint Albans Cir & Rhoads Ave | | Lower Saint | | | | |
| 8 | Ponding | | Albans/South 252 | Twp. Capacity | | | |

| 6 | Hansell Rd from Jeffery Ln | Greene Countrie | Twp. Capacity | |
|---|---------------------------------------|------------------------|-----------------------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 6 | Sawmill behind Clayton Pl | Greene Countrie | Twp. Capacity | |
| 5 | Roberts Rd from Ivy Ln | Upper Saint Albans | Twp. Capacity | |
| | | | | |
| 2 | Wetland on Andover Rd is flooding | Wyola | Flooding | |
| | Water coming from Aronimink into | Harrison Estates/Paper | | |
| 3 | Paper Mill & Dunminning | Mill Tv | wp. Capacity/Flooding | |
| | Flood Mitigation (2 Properties @ Echo | | | |
| 1 | Valley Ln) | Echo Valley | Flooding | |
| 5 | Earles Ln Runoff | Upper Saint Albans | Twp. Capacity | |
| | | Lower Saint | | |
| 8 | Brookside Rd Pipes | Albans/South 252 | Twp. Capacity | |
| | | Lower Saint | | |
| 8 | Clearbrook & Poplar Pipe Conditions | Albans/South 252 | Twp. Capacity | |
| | | Lower Saint | | |
| 8 | Mr. Hay's Property on Beechwood Rd | Albans/South 252 | Twp. Capacity | |

| Sheet | Description | Location | Category | Proposed Ranking |
|-------|--------------------------|------------------------------|---------------------------|------------------|
| 1 | 195 Hunt Valley Circle | Echo Valley | Stream Erosion | Not Ranked |
| 1 | 170 Hunt Valley Circle | Echo Valley | Stream Erosion | Not Ranked |
| 2 | 626 Newtown Street Road | Wyola | Stream Erosion | Not Ranked |
| 4 | 20 Phillips Lane | Boot Road Area | no sewer in cul-de-sac | Not Ranked |
| 4 | 41 Boot Road | Boot Road Area | Runoff from SAP | Not Ranked |
| 5 | 49 Sugar Maple | Upper Saint Albans | driveway culvert/neighbor | Not Ranked |
| 6 | 206/208 Hansell | Greene Countrie | Excessive overland flow | Not Ranked |
| 7 | 10 Cherry Lane | Springton Pointe | Erosion damage | Not Ranked |
| 7 | 404/410 Hempstead Circle | Springton Pointe | Adjacent property | Not Ranked |
| 8 | 800 Ellis Ave | Lower Saint Albans/South 252 | Stream Erosion | Not Ranked |
| 8 | 3538 Woodcrest | Lower Saint Albans/South 252 | Adjacent Property | Not Ranked |

| Sheet | Description | | Location | Category | Proposed Ranking |
|-------|---|---|-------------------------------|-------------------------|-------------------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 9 | STATE ISSUE: Bryn Mawr Ave Crossing | | Larchmont | State Stream Erosion | S1 |
| | | St Davids Road ponds badly on both sides just north-east of Mill View | | | |
| | | Lane. In addition to freezing, as this is just after a steep hill | | | |
| | | (westbound), vehicles often go around the ponding and are in | | | |
| | | conflict with traffic going in the other direction who have little time | | | |
| 3 | STATE ISSUE: Flooding @ St. Davids and Mill View | to react as they just came over the crest of the hill. | Harrison Estates/Paper Mill | Flooding State | 52 |
| | | | | | |
| | | Ponding at West Chester Pike and Boot Road | | | |
| | | Politiling at West Chester Pike and Boot Road | | | |
| 4 | STATE ISSUE: Boot Road and West Chester Pike | | Boot Road Area | Flooding state | \$3 |
| - | STATE 1550E, BOOK ROOM AND WEST CHESTER FIRE | St Davids Road ponds badly on northern edge in front of 602 | DOUL NOOU ALCO | Flooding state | 33 |
| | | Andover. Ponding fills the area, and once full it overflows into the | | | |
| | | property, affecting 602, 608 and 614 Andover. A berm would only | | | |
| | | hold more water on the road. The water is unable to drain to the inlet at Andover approximately 150' away. Trapped water needs to | | | |
| 2 | STATE ISSUE: Corner of Andover & St. Davids floods | be able to get to that inlet. | Wyola | State Capacity | S4 |
| | | | , | , , | |
| | | | | | |
| | | | | | |
| | | | | | |
| 9 | STATE ISSUE: Bryn Mawr Ave Colvert | | Larchmont | State Capacity | S 5 |
| | | | | | |
| | | Water ponds at inlet on western side of Route 252 by Liseter (on | | | |
| | | Aronimink property). Inlet there has previously been clogged on the | | | |
| | | Lister side preventing drainage. | | | |
| 2 | STATE ISSUE: Ponding on 252 by Liseter, needs grading | | Wyola | State Capacity/Cleaning | S6 |
| | | | | | |
| | | | | | |
| | | | | | |
| _ | | | | | |
| 5 | STATE ISSUE: Goshen Rd Erosion | | Upper Saint Albans | State Road Erosion | \$7 |
| | | | | | |
| | | | | | |
| | | | | | |
| 8 | STATE ISSUE: Culvert under Rt 252 | | Lower Saint Albans/South 252 | State Capacity | \$8 |
| | STATE ISSUE, Culvert under nt 232 | | LOWER SAIRL MIDARS/SOULTI 252 | State Capacity | 30 |
| | | | | | |
| | | | | | |
| | | | | | |
| 8 | STATE ISSUE: Outdated storm sewers on Bryn Mawr Ave | | Lower Saint Albans/South 252 | State Capacity | S9 |

| Plan Sheet # | Location Description | Study Cost | Project Estimated Costs |
|--------------|---------------------------|--------------|-------------------------|
| | Echo Valley Repair (6) | | |
| 1 | Culverts | | \$849,960.00 |
| | Northwood Rd & Delmont | | |
| 9 | Rd | | \$612,000.00 |
| | | | |
| | Boot Road Erosion between | | |
| 1 | Goshen & Fox Trail | | \$2,930,276.00 |
| | Boot Road Erosion between | | |
| 4 | Rt 3 & Fox Trail | | \$ - |
| 4 | Florida Park | \$13,700.00 | |
| | Caley, Tyson, Horton& | | |
| 5 | Lewis etc. | | \$2,659,130.00 |
| 4 | Newtown Heights | \$8,700.00 | |
| 8 | The Avenues | \$20,860.00 | |
| 9 | Radnor Dr cul de sac | | \$125,040.00 |
| 3 | Valley Forge Rd Bridge | | \$425,000.00 |
| 2 | Glendale Road | | \$186,450.00 |
| 5 | Saw Mill/Aspen & Rt 252 | \$36,900.00 | |
| 6 | Greene Countrie Villages | | \$294,000.00 |
| | Woodhill Rd Property is | | |
| | Draining onto Bryn Mawr | | |
| 9 | Ave | | \$233,120.00 |
| | Spring @ Bishop Hollow & | | |
| 7 | Hempstead | | \$44,560.00 |
| | Goshen Rd Washouts and | | |
| 6 | Discharge | | \$122,740.00 |
| | Total Known Cost | \$ 80,160.00 | \$ 8,482,276.00 |

^{*} included in Boot Road Between Goshen and Fox

^{**} TBD after the Study