



**AGENDA ITEM # 4**

**AGENDA ITEM EXECUTIVE SUMMARY  
Committee of the Whole Meeting  
January 27, 2020**

**Item Title:**            **Rodenburg Road Update and Funding Opportunity**

**Staff Contact:**        Karen Young, P.E. Director of Public Works  
                                 Kristin Mehl, P.E. Asst. Director of Public Works/Village Engineer

**COMMITTEE OF THE WHOLE ACTION**

**Confirm staff’s recommendation to proceed with the preparation of a Surface Transportation Program funding application for the Rodenburg Road project with the scope identified in the Phase I Engineering Report including the completion of the existing bike path gap.**

**Executive Summary:**

On October 9, 2017, the Village Board approved a Memorandum of Understanding with the Village of Schaumburg for the Phase I Engineering Services for the improvements to Rodenburg Road between Central Avenue and Irving Park Road. Both communities recognized this as an opportunity to partner on a project that will greatly impact both communities in hopes of minimizing the disruption to the public, streamlining resources, and making the project eligible for federal Surface Transportation (STP) funding by designating this section of roadway as Federal Aid Route (FAU).

**Phase I Engineering Key Outcomes**

The purpose of the Phase I Engineering was to identify the scope of the improvements needed and identify anticipated project costs. In May 2018, the Phase I Engineering was completed and the final Project Development Report (PDR) was approved by the Illinois Department of Transportation. The PDR identified the following scope of work within the Roselle portion of the project:

- **Pavement Improvements** - The PDR looked at the condition of the pavement including the use of pavement cores and the impacts of the existing and projected daily traffic volumes and truck traffic. Based on the information collected, the scope of work is divided into two segments.

***Central Avenue to North of Travis Parkway***

Due to poor pavement surface, but the presence of a stable base designed to accommodate truck traffic, this portion of the roadway was identified for resurfacing. This segment of roadway was widened and reconstructed in 1997.

### ***North of Travis Parkway to the Railroad Crossing***

Due to the poor condition of both the pavement surface and base, as well as the need to address issues with the roadway profile, this portion of the roadway was identified for reconstruction. The existing roadway section with shoulders will be improved to an enclosed drainage system and curb and gutter. The reconstructed pavement section will be designed to accommodate the daily traffic and truck traffic volumes projected for this area. This segment of roadway was resurfaced in 1997, however the date of original construction is not known.

- **Drainage Improvements** - There are wetlands on both the east and west sides of Rodenburg Road between Travis Parkway and the railroad crossing. There are two existing culvert crossings that allow the wetlands on the west to drain to the wetlands on the east. During heavy rain events, the existing roadway experiences overtopping at the two culvert crossings. The existing culverts are undersized and in poor condition. As part of the project, the roadway profile will be raised to accommodate large culvert crossings as well as to improve roadway safety.
- **Bike Path Gap** - The PDR includes the completion of the gap in the existing bike path north of Travis Parkway to the railroad tracks on the east side of Rodenburg Road. Immediately north of the railroad crossing, there is a bike path in Schaumburg. Roselle's 2016 Comprehensive Plan and the DuPage County 2017 Elgin O'Hare Regional Bicycle and Pedestrian Plan each identified the completion of the bike path in the area as a desired improvement.
- **Railroad Crossing and Quiet Zone** - The scope included in the PDR incorporates all work required to maintain the existing train horn Quiet Zone. As part of the project, the installation of a raised concrete median at the crossing approaches as well as additional gates across the new bike path will be required. Staff will work closely with Metra and the Federal Railroad Administration to make sure all work will be accordance with federal quiet zone requirements.

### **Options to Consider**

While the scope identified in the PDR represents the complete scope of work required for the area, staff evaluated four options for Village Board consideration. These options are shown in more detail on the attached table including an estimate of cost and an analysis of the advantages and disadvantages.

In summary, these options are as follows:

- **Option 1** – Scope of work presented in the PDR
- **Option 2** – Scope of work presented in the PDR without the bike path
- **Option 3** – Resurface from Central Avenue to Railroad Crossing
- **Option 4** – No work

### **Next Steps**

At this time, the DuPage Mayors and Managers Conference (DMMC) has opened the biannual call for STP funding applications. Applications are due on March 16, 2020. STP funds are available for construction, construction engineering, and wetland mitigation at 70%. The remaining 30% is the responsibility of the Village; final design and land

acquisition are 100% Village cost. Schaumburg will also be applying for STP funding for their portion of the project through their appropriate council.

The current call for projects is the first one that will be utilizing DMMC's new scoring methodology, so it is unknown how the majority of projects will score. However, the inclusion of the bike path portion of the project will increase the scoring for this project and the likelihood of receiving federal funding. Because of this, staff recommends proceeding with the preparation and submittal of a STP application for the scope of work presented in the PDR, including the bike path work.

If the project is successful in securing STP funding, the project schedule will be defined by the year in which DMMC programs the project. Based on the IDOT coordination and the required processing of agreements and other critical components of a federally funded project of this magnitude, it is not anticipated that construction would begin on this project until the 2022 or 2023.

**Implications:**

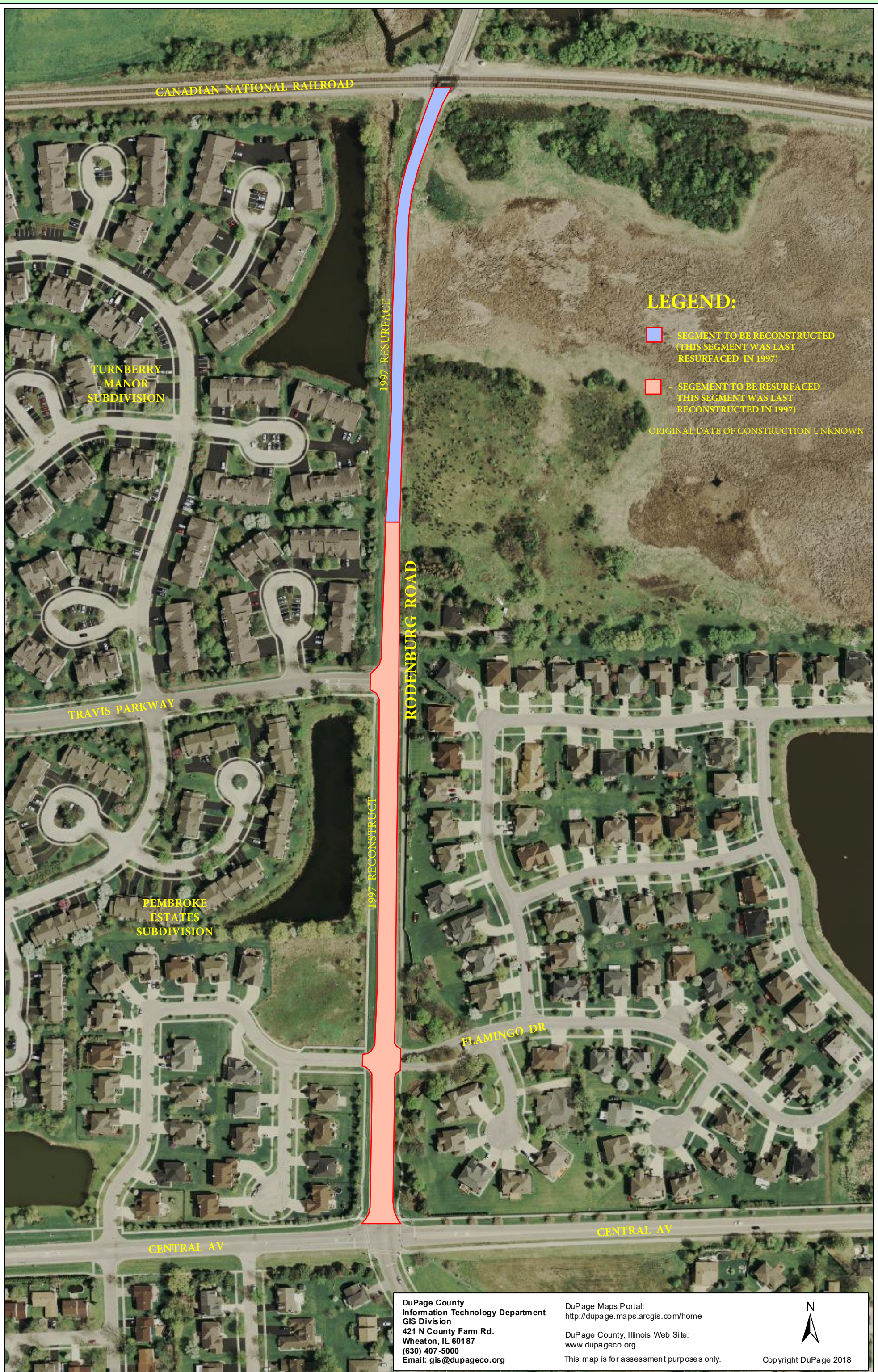
**Is this item budgeted?** Yes. The FY 2020 budget includes \$5,000 to retain the services of an engineering consultant to complete the Village's STP application. In addition, the 5-year Capital Improvement Program includes \$400,000 to fund the construction of improvements to Rodenburg Road. This expenditure reflects the Village's 30% share of costs should the Village be successful in securing federal funding through STP.

Additionally, current balances in the Village's Reserves, Motor Fuel Tax Fund, as well as increases in Motor Fuel Tax allocations from the State of Illinois along with the three years needed to bring the project to construction means that there are a variety of ways that this project can be funded without impacting the Annual Street Improvement Program or other established programs.



**Any other implications to be considered?** The Village Administrator will be prepared to discuss the impact of these proposed roadway and railroad crossing improvements on the existing train horn quiet zone at the meeting.

**Attachments:**

Location Map  
Options Analysis



**LEGEND:**

-  SEGMENT TO BE RECONSTRUCTED (THIS SEGMENT WAS LAST RESURFACED IN 1997)
  -  SEGMENT TO BE RESURFACED (THIS SEGMENT WAS LAST RECONSTRUCTED IN 1997)
- ORIGINAL DATE OF CONSTRUCTION UNKNOWN

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DuPage Maps Portal:  
<http://dupage.maps.arcgis.com/home>  
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[www.dupageco.org](http://www.dupageco.org)  
This map is for assessment purposes only.



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### Rodenburg Road - Central to Railroad Crossing

		Option 1 Phase I Work with Bike Path	Option 2 Phase I Work without Bike Path	Option 3 Resurface (All)	Option 4 No Work
Project Components	Resurfacing	Yes; Central to north of Travis	Yes; Central to north of Travis	Yes; Central to Railroad Crossing	No
	Reconstruction	Yes; north of Travis to Railroad Crossing	Yes; north of Travis to Railroad Crossing	No	No
	Bike Path Extension	Yes	No	No	No
	Wetlands Mitigation	Yes	Yes	No	No
	Land Acquisition Required	Yes	No	No	No
	Railroad Roadway Crossing Work	Yes	Yes	No	No
	Railroad Pedestrian Crossing Work	Yes	No	No	No
	Improved Roadway Safety	Yes	Yes	No	No
	Address Drainage Concerns (Roadway Overtopping, Culvert Sizing & Condition)	Yes	Yes	No	No
Project Costs	Grant Application (Non-Eligible)	1,400	1,400	-	-
	Phase II Engineering (Non-Eligible)	120,000	113,000	-	-
	Land Acquisition (Non-Eligible)	12,000	-	-	-
	Wetland Mitigation (Eligible)	280,000	230,000	-	-
	Construction (Eligible)	1,360,000	1,017,000	300,000	-
	Construction Engineering (Eligible)	115,000	106,000	-	-
	Total Project Cost	1,888,400	1,467,400	300,000	-
	Potential Grant Funding (70% of Wetland Mitigation, Construction & Construction Engineering)	1,228,500	947,100	-	-
	<b>Total Village Project Cost</b>	<b>659,900</b>	<b>520,300</b>	<b>300,000</b>	<b>-</b>
Analysis	Benefits	<ul style="list-style-type: none"> <li>+ Addresses riding surface conditions as well as pavement base</li> <li>+ Addresses drainage concerns including overtopping of the roadway, culvert condition or culvert sizing.</li> <li>+ Improved safety at the railroad crossings for the roadway and pedestrian.</li> <li>+ Completes the bike path gap identified in the Village and County's long term plans</li> <li>+ Eligible for federal grant funding</li> <li>+ Village anticipates receiving approximately \$100,000 from developer towards the construction of the bike path.</li> </ul>	<ul style="list-style-type: none"> <li>+ Addresses riding surface conditions as well as pavement base</li> <li>+ Addresses drainage concerns including overtopping of the roadway, culvert condition or culvert sizing.</li> <li>+ Improved safety at the railroad crossings for the roadway and pedestrian.</li> <li>+ Eligible for federal grant funding</li> </ul>	<ul style="list-style-type: none"> <li>+ Improved riding surface</li> <li>+ Low cost</li> <li>+ Not dependent on the availability of federal grant funding. Work can be scheduled as determined by the Village's budget</li> </ul>	<ul style="list-style-type: none"> <li>+ No immediate cost to the Village</li> </ul>
	Disadvantages	<ul style="list-style-type: none"> <li>- Overall higher project costs</li> <li>- Wetland impacts</li> <li>- Land acquisition needed (potential to eliminate the need through negotiations with the developer).</li> <li>- Grant funding is not guaranteed</li> <li>- Project schedule is tied to availability of grant funding</li> </ul>	<ul style="list-style-type: none"> <li>- Overall higher project costs</li> <li>- Wetland impacts</li> <li>- Grant funding is not guaranteed</li> <li>- Does not complete the bike path gap</li> <li>- Project schedule is tied to availability of grant funding</li> </ul>	<ul style="list-style-type: none"> <li>- Does not address issues with the pavement base north of Travis. This pavement condition will continue to deteriorate overtime, resulting in the need for more extensive and costly repairs.</li> <li>- Does not address drainage concerns including overtopping of the roadway, culvert condition or culvert sizing.</li> <li>- Does not improve safety at the railroad crossing.</li> <li>- Does not complete the bike path gap identified in the Village's and County's long term plans.</li> <li>- Not eligible for federal grant funding.</li> </ul>	<ul style="list-style-type: none"> <li>- Will require continued patching maintenance costs.</li> <li>- Does not address existing poor pavement conditions. Pavement condition will continue to deteriorate overtime, resulting in the need for more extensive and costly repairs.</li> <li>- Does not address drainage concerns including overtopping of the roadway, culvert condition or culvert sizing.</li> <li>- Does not improve safety at the railroad crossing.</li> <li>- Does not complete the bike path gap identified in the Village's and County's long term plans.</li> </ul>

Note: Should the Village determine to reconstruction the portion of the roadway from north of Travis Parkway to the Railroad Crossing without the use of federal grant funding, but instead utilize MFT funds, the scope of work required would still require profile changes to address the drainage concerns, roadway overtopping, culve condition and culvert sizing. The estimate cost of this work would be \$1.2 million including design engineering, wetland mitigation, construction and construction engineering.