

# Transportation Industrial Access Study

## Holley Business Park

Village of Holley, Orleans County, New York

## Final Report



September 2007

Prepared for:

**GENESEE TRANSPORTATION COUNCIL**

Orleans County EDA



**Dewberry**

# TRANSPORTATION & INDUSTRIAL ACCESS STUDY – PHASE II GENESEE TRANSPORTATION COUNCIL

## ORLEANS COUNTY – HOLLEY BUSINESS PARK FINAL CONCEPT-LEVEL STRATEGY REPORT

### I. Introduction

The purpose of this report is to recommend infrastructure improvements that will foster future development at the site. The contents of this report will be used by Orleans County and the Village of Holley for preparing future grant applications to implement these improvements. The report also includes concept level cost estimates for implementing these improvements, identifies potential future funding sources and recommends key next steps.

Holley Business Park is located in an Empire Zone in eastern Orleans County in the Village of Holley (see *Figure 1*). The 95-acre site is zoned for Light Industrial use. The main access to the site is from the north via Route 31. There is a potential additional access point from the east via the intersection of Route 237 and Veterans Drive, but improvements are needed to upgrade this access point. There is potential rail service to the site as well via the Falls Road Railroad tracks which exist along the site's northeastern border. Existing tenants currently include Precision Packaging Products, Holley Cold Storage and Paul Marshall Produce. This industrial site has approximately 9 additional lots which could be developed.

### II. Project Needs

On December 7, 2006, Dewberry met with James Whipple, Director of Operations for the Orleans Economic Development Agency, and performed a site visit to identify concept level infrastructure improvements. Dewberry also met with the Mayor of Holley, John Kenney, the Deputy Mayor, Ross Gaylord and Village of Holley Trustees, Gail Sevor and John Heise to discuss these improvements as well. Several improvement tasks were identified for this site. The following is a brief summary of each improvement being considered along with its estimated cost. Each cost estimate includes planning and engineering fees.

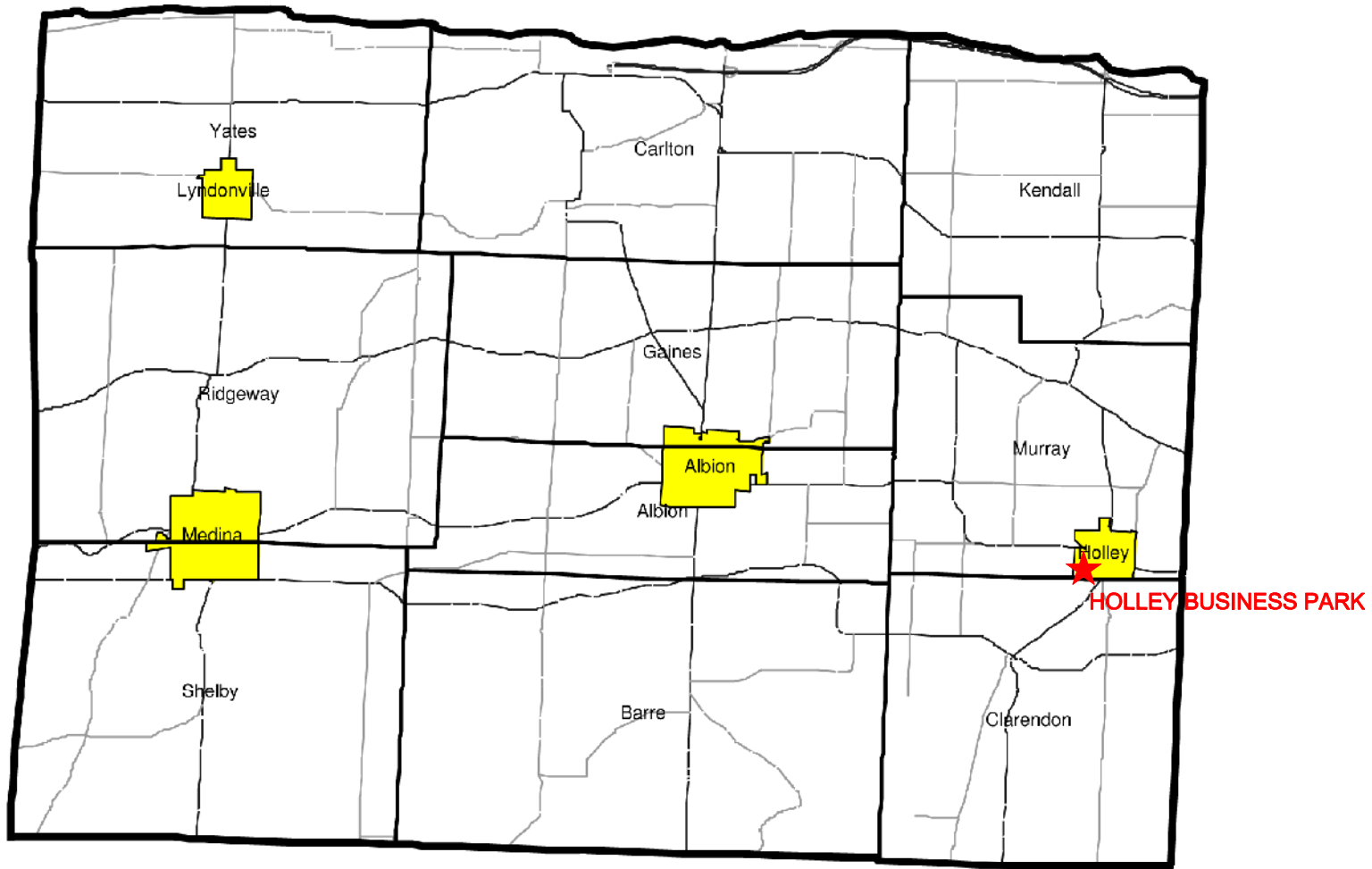
#### *Task 1 – Improve Veterans Drive*

Veterans Drive is currently a narrow local road that is in poor condition and is not designed for truck traffic. Veterans Drive also contains a small box culvert (approximately 8 feet high by 10 feet wide) that is narrow and that may not be designed for HS-20 (heavy truck traffic) loading. In addition, the sight distance is poor at the Veterans Drive/Route 237 intersection and requires vertical realignment of Route 237 and possibly a stop light to permit truck traffic to safely turn in and out of the business park.

The Village desires to improve Veterans Drive to create a legitimate easterly entrance point into the Business Park that is capable of accommodating truck traffic (see *Figure 1*). Currently this access point can accommodate passenger vehicles and light truck traffic but heavy truck traffic is prohibited from



Veterans Drive looking west



**Dewberry**

Dewberry-Goodkind, Inc.  
Rochester, New York

DATE  
MAY 2007

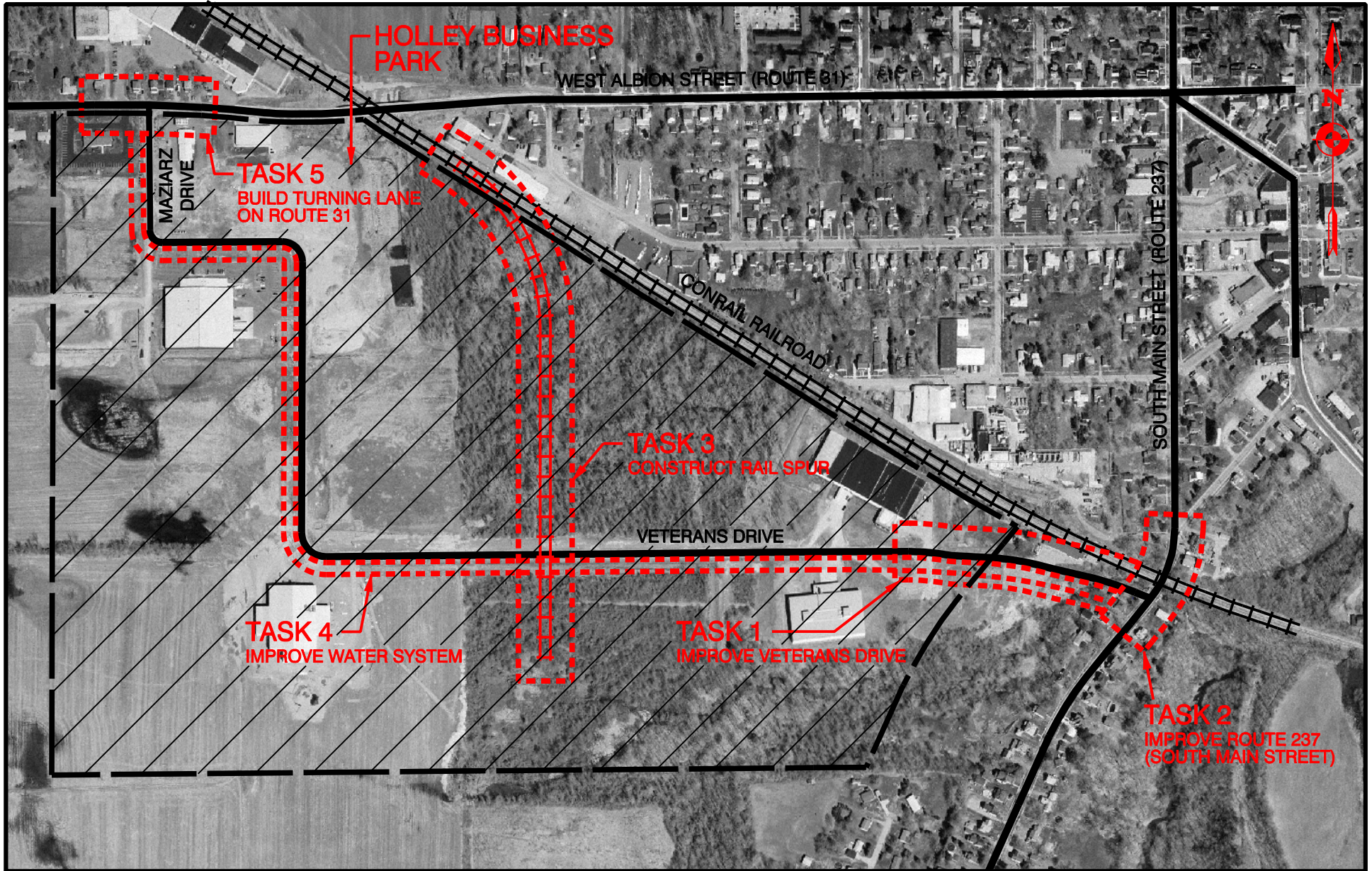
PROJ. NO.  
4602

SCALE  
NONE

PROJECT  
GENESEE TRANSPORTATION COUNCIL  
TRANSPORTATION INDUSTRIAL ACCESS STUDY - PHASE II

TITLE  
HOLLEY BUSINESS PARK  
VILLAGE OF HOLLEY  
ORLEANS COUNTY, NY

SHEET NO.  
FIGURE 1



Dewberry-Goodkind, Inc.  
Rochester, New York

DATE  
APRIL 2007

PROJ. NO.  
4602

SCALE  
NONE

PROJECT  
GENESEE TRANSPORTATION COUNCIL  
TRANSPORTATION INDUSTRIAL ACCESS STUDY - PHASE II

TITLE  
HOLLEY BUSINESS PARK  
VILLAGE OF HOLLEY  
ORLEANS COUNTY, NY

SHEET NO.  
FIGURE 2

using Veterans Drive due to poor sight distances, limited bridge clearance, narrow road width and a Village owned stone and concrete culvert that has questionable load capacity. This improvement will enhance access to the park from Route 237 (for southerly and easterly approaches) allowing trucks to avoid driving through the center of the Village to access the main entrance on Route 31.

This task proposes to reconstruct approximately 900 feet of Veterans Drive. The reconstructed roadway would provide approximately 30 feet of pavement (shoulders and lane width) that would be designed for heavy truck traffic.

The existing storm, sewer and water systems would be replaced as a result of the widening. The existing box culvert along Veterans Drive, approximately 150 feet west of Route 237, would also be replaced with a precast concrete box culvert capable of supporting heavy truck traffic. A new traffic signal would be installed at the Veterans Drive/Route 237 intersection and the vertical sight distance just south of the intersection along Route 237 would be improved as well. The estimated cost for this task is approximately \$791,000.



Box Culvert along Veterans Drive

***Task 2 – Improve Route 237 (South Main Street)***

This task proposes the reconstruction of approximately 700 feet of Route 237 in the vicinity of the railroad bridge and south of the Veterans Drive intersection

The Village desires to provide truck access from points north and south along Route 237 to the business park via Veterans Drive. An existing railroad bridge is located along Route 237 approximately 65 feet north of Veterans Drive. The posted vertical clearance of the bridge is 11’-11”. According to current New York State Department of Transportation design standards, a minimum vertical clearance of 14’-1” is required. Providing the standard clearance would allow free movement of truck traffic from Route 237 north of the Village to the new business park entrance.



Low Vertical Clearance at RR bridge



Poor Sight Distance looking south along Route 237 at Veterans Drive

The section of Route 237 just south of Veterans Drive contains a sharp crest vertical curve that creates poor sight distance at the intersection of Route 237 and Veterans Drive. Lowering the profile of Route 237 just south of Veterans Drive will increase the sight distance and improve the safety at this intersection.

The profile of the reconstructed roadway would be lowered approximately 2 feet to provide the standard clearance under the bridge and also lowered just south of the Veterans Drive intersection. The reconstructed roadway would be the same width as

the existing road, approximately 30 feet. However, due to the profile changes, new pavement, curbs and sections of short retaining walls along the curb lines (at the bridge) or behind the sidewalk (away from the bridge) would be required. The existing storm sewer, sanitary sewer and water main would be replaced due to depth of cover issues. An existing culvert located approximately 30 feet south of the bridge would also be replaced as a result of the profile change. The estimated cost for this task is approximately \$1,000,000.

***Task 3 – Construct Rail Spur***

The Village desires to construct a new rail spur from the existing Falls Road Railroad tracks into the Business Park. The existing tracks are located along the northeastern border of the site. The new rail spur would provide access to rail freight and could result in attracting new tenants to the park.

This task proposes the construction of approximately 2,000 feet of rail spur. The proposed rail spur would require construction of subballast, ballast, track and ties. In addition, a turn-out with one switch at the existing tracks and a road crossing at Veterans Drive are also proposed. This work could be phased so that a portion of the spur north of Veterans Drive is built and then if required the section that extends the spur and crosses Veterans Drive could be built. The estimated cost for this task is approximately \$594,000.

***Task 4 – Improve Water System***

The Village desires to improve the pressure of the water system to the park. The existing water pressure is insufficient for fire suppression requirements for industrial applications. This limits the type of business that the park can attract. The Town of Murray has a newer and higher pressure water system. The Village would like to connect to Murray’s system along Route 237 and extend a new water line along Veterans Drive into the park. Typical transportation-related funding sources may consider this work to be ineligible. The Village should confirm the eligibility of this work with the regulations associated with the funding source.

This task proposes the construction of approximately 5,500 feet of 12” DIP water main. Approximately 2,600 feet of 6” diameter water services (enough to supply 13 parcels along the business park) and 11 new fire hydrants are also proposed. The estimated cost for this task is approximately \$1,438,000.

***Task 5 – Construct Turning Lane on Route 31***

As the Holley Business Park grows and attracts new development, the traffic volume turning into the Business Park’s main entrance may require the addition of turning lanes along Route 31. A dedicated left turn lane could be added in the westbound direction, and a dedicated right turn lane could be added in the eastbound direction. The new turning lanes would provide safer and more efficient movement at the main access and avoid traffic congestion along Route 31 in the vicinity of the park entrance.



Rte 31 at the Holley Industrial Park

This task involves widening approximately 980 feet of Route 31 (480 feet on either side of the intersection between Maziarz Drive and Route 31). In the

westbound direction, Route 31 would be widened by approximately 11 feet to provide a left turning lane into the business park. In the eastbound direction, Route 31 would be widened by approximately 22 feet to provide a right turning lane and a center median across from the apposing left turning lane. The existing storm system would be replaced as a result of the widening. It is assumed that the sewer and water systems would not be affected by the proposed widening. A new traffic signal would be installed at the intersection to further enhance turning movements. The estimated cost for this task is approximately \$591,000.

The following table summarizes the costs of each of the above tasks:

<b>Task Number</b>	<b>Description</b>	<b>Estimated Cost</b>
1	Improve Veterans Drive	\$791,000
2	Improve Route 237 (South Main Street)	\$1,000,000
3	Construct Rail Spur	\$594,000
4	Improve Water System	\$1,438,000
5	Build Turning Lane on Route 31	\$591,000
	<b>Total</b>	<b>\$4,414,000</b>

### **III. Possible Funding Options**

The online Catalog of Federal Domestic Assistance (CFDA) gives you access to a database of all Federal programs available to State and local governments. Contact the office that administers the program and find out how to apply. Visit the following website: <http://12.46.245.173/cfda/cfda.html>

Below is a summary of the applicable programs that can be found on the CFDA website:

#### **11.300 GRANTS FOR PUBLIC WORKS AND ECONOMIC DEVELOPMENT FACILITIES**

##### **OBJECTIVES**

To enhance regional competitiveness and promote long-term economic development in regions experiencing substantial economic distress. EDA provides Public Works investments to help distressed communities and regions revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term private sector jobs and investment. Current priorities include proposals that help support existing industry clusters, develop emerging new clusters, or attract new economic drivers.

#### **11.303, Economic Development Technical Assistance; 11.307, Economic Adjustment Assistance;**

##### **EXAMPLES OF FUNDED PROJECTS**

(1) Infrastructure for industrial park development; (2) port development and expansion; (3) infrastructure necessary for economic development (e.g. water/sewer facilities); (4) renovation and recycling of old industrial buildings; (5) construction of vocational/technical facilities and skill centers; (6) construction of incubator facilities; (7) redevelopment of brownfields; and (8) eco-industrial development.

Visit the following web site for more information: <http://www.eda.gov/>

### **THE NYS INDUSTRIAL ACCESS PROGRAM**

The New York State Industrial Access Program has been designed to complement economic development projects throughout the State where transportation access poses a problem or may offer a unique opportunity to the viability of a project. It is important to emphasize that before a formal application is prepared, a potential applicant should initiate discussion with the Regional Program Coordinator of the New York State Department of Transportation to obtain up-to-date advice and information that are likely to facilitate the remainder of the process.

Visit the following web site for more information:  
<https://www.nysdot.gov/portal/page/portal/site-index>

Municipalities, governmental agencies, and others who are considering submitting an application for the use of Industrial Access Funds should be aware of the following features of the Program. (The law creating the Program and the State's rules and regulations governing the administration of the Program are contained in the Appendix.)

Municipalities, industrial development agencies, or other governmental agencies involved in promotion economic development are eligible Industrial Access Program applicants. In the case of a private corporation, a State agency, municipality, or industrial development agency must sponsor the project and file an application with the NYSDOT Regional Director on behalf of the non-governmental entity.

Awards are made on a 60% grant, 40% interest free loan basis, up to a maximum of \$1 million. As specified by law, the loan portion must be paid back within 5 years after the acceptance of the project by the department. Repayment terms are negotiable.

Eligible work includes design, acquisition of property, public access road/rail construction or reconstruction, curbing, sidewalks, traffic control and safety devices, drainage systems, landscaping and similar work that may facilitate industrial access.

### **THE STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM**

The Statewide Transportation Improvement Program (STIP) is a list of every project in New York State for which Federal funding is proposed to be used and that is scheduled to begin during the designated three Federal fiscal year time frame. The STIP was last updated during the summer and fall of 2005 with formal approval occurring on December 5, 2005. As it must be updated every two years and include a minimum three-year listing of Federal-aid projects, it will very likely be updated again during 2007. The new federal Transportation Act called "Safe Accountable Flexible Efficient Transportation Equity Act: a Legacy for Users – SAFETEA-LU, includes provisions allowing States to adopt a longer cycle for updates. Implications of this change are being evaluated and the next scheduled STIP update may change as a result. The currently approved STIP covers the period between October 1, 2005 and September 30, 2008.



Prior to being incorporated into the STIP, projects requesting federal funds must be incorporated into the regions' TIP. The TIP is administered cooperatively by GTC and NYSDOT. The draft 2007-2012 TIP has already been developed and will be adopted by the GTC Board in June 2007. Project solicitation for the next TIP (2009-2014) will take place in September 2008 for adoption in June 2009.

In addition to the STIP, which administers federal funds only, NYSDOT has its own statewide program for state-funded projects which may also be a viable funding option.

Visit the following web site for more information:

<https://www.nysdot.gov/portal/page/portal/programs/stip>

### **NYSDEC POLLUTION PREVENTION FINANCIAL ASSISTANCE**

Although pollution prevention is usually a good economic decision, start-up costs can sometimes form a barrier to getting a good project underway. Several State and Federal agencies have programs that can help businesses; municipalities and other organizations finance pollution prevention projects. Descriptions of some of these programs are given below. Please contact the agencies directly to apply for assistance.

1. The NYS Environmental Facilities Corporation (EFC) has grant money and loans available through the following programs.
  - The **Drinking Water State Revolving Fund and the Clean Water State Revolving Fund Programs** provide interest-free short term loans and low-interest rate long term loans for water quality projects in New York State. The Drinking Water SRF offers financing to communities and non-profit organizations for drinking water infrastructure improvement projects, such as the installation or upgrade of treatment plants, storage facilities and distribution mains. The Clean Water SRF provides financing to municipalities for water pollution control projects such as the construction and upgrade of wastewater treatment plants, sewers and non-point source projects like salt storage facilities. More information about these programs is available at EFC's website (see Other Links of Interest below) or at 1-800-882-9721.
2. The **Rural Utilities Service Water and Wastewater Disposal Loan and Grant Program** is offered by the US Department of Agriculture and provides loans and grant funds for drinking water and wastewater projects that serve small, low-income rural communities. Communities where residents face conditions that could result in significant health risks will receive priority for available funding. To find out more about this program, visit the USDA website at [www.usda.gov/rus/water](http://www.usda.gov/rus/water) or contact the USDA Rural Development State Office at 315-477-6400.

## **Earmarks and Sponsored Funding**

The Village of Holley may want to contact their local and state legislators to request sponsorship of an earmark funding source for some or all of these improvements. This type of funding approval can often provide quick and direct turn around for acquiring public works funding and would give the Village a higher priority over other projects which are in line for more conventional funding sources.

### **IV. Next Steps**

A Preliminary Engineering Study should be performed to further study the various tasks in greater detail and recommend a preferred alternative for each task. This study should include the following design tasks:

1. Survey and mapping of the areas to be improved
2. Traffic and accident analysis
3. Subsurface investigations to determine the soil conditions and presence of rock.
4. Existing railroad bridge and culvert inspection and evaluation
5. Preliminary design alternative development and evaluation
6. Preliminary cost estimates
7. Environmental screenings
8. Public Informational Meetings
9. Preparation of a Design Report that recommends a preferred alternative for each task.

Once a preferred alternative has been determined, Final Design of the various tasks can be implemented and construction drawings can be developed for bidding purposes.

Dewberry recommends following a NYSDOT scope of work for public improvement projects as outlined in the NYSDOT Local Procedures Manual. Visit the following web site for more information: <https://www.nysdot.gov/portal/page/portal/main/publications>

**TASK 1 - REBUILD VETERANS DRIVE  
CONSTRUCTION COST ESTIMATE**

Village of Holley  
Orleans County

Assume no new storm or sanitary  
installations along Veterans Drive

**Sewer Share (Storm and Sanitary)**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Trench Excavation	CY	0	\$15.00	\$0
Rock Excavation	CY	0	\$95.00	\$0
Stone Bedding	CY	0	\$30.00	\$0
Select Granular Backfill	CY	0	\$17.00	\$0
12" Drainage pipe - PVC	FT	0	\$40.00	\$0
8" Lateral Pipe -Drainage	FT	0	\$35.00	\$0
Connection to Existing Laterals - Drainage	EA	0	\$250.00	\$0
Connection to Existing Sewer	EA	0	\$1,500.00	\$0
Catch Basins	EA	0	\$1,400.00	\$0
12" Sewer Main - RCP	FT	0	\$50.00	\$0
6" Lateral Pipe -Sewer	FT	0	\$40.00	\$0
Connection to Existing Laterals - Sewer	EA	0	\$200.00	\$0
New Manholes Frames & Covers -Sewer	EA	0	\$2,500.00	\$0

**Subtotal:** \$0

Supplemental Construction	LS	1	15%	\$0
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office; Mobilization & Demobilization	LS	1	10%	\$0
<b>Total:</b>				\$0

**Say:** \$0

**Highway**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Excavation & Disposal (Sidewalk)	CY	0	\$10.00	\$0
Excavation & Disposal (Topsoil)	CY	111	\$10.00	\$1,110
Excavation & Disposal (Box-Out)	CY	1,000	\$15.00	\$15,000
Rock Excavation	CY	1,000	\$95.00	\$95,000
Pavement Top Course	Ton	335	\$55.00	\$18,425
Pavement Binder	Ton	335	\$50.00	\$16,750
Pavement Base	Ton	1,340	\$50.00	\$67,000
Pavement Subbase	CY	1,000	\$25.00	\$25,000
Concrete Curb	FT	1,800	\$20.00	\$36,000
Sidewalk Subbase	CY	0	\$30.00	\$0
Concrete Sidewalk	CY	0	\$275.00	\$0
Box Beam Guiderail	FT	200	\$22.50	\$4,500
Topsoil (Tree Lawns & Along ROW)	CY	111	\$35.00	\$3,885
Seeding (Tree Lawns & Along ROW)	SF	9,000	\$0.10	\$900
Culvert Replacement	LS	1	\$96,000.00	\$96,000
Asphalt Driveways	SF	2,800	\$4.00	\$11,200
Traffic Signal	LS	1	\$100,000.00	\$100,000

**Subtotal:** \$490,770

Supplemental Construction	LS	1	15%	\$73,616
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office; Mobilization & Demobilization	LS	1	10%	\$49,077
<b>Total:</b>				\$613,463

**Say:** \$613,000

**SUB TOTAL:** \$613,000

**ENGINEERING AND INSPECTION:** \$153,000

**ROW and EASEMENTS** \$25,000

**GRAND TOTAL:** \$791,000

**TASK 2 - REBUILD ROUTE 237  
CONSTRUCTION ESTIMATE**

Village of Holley  
Orleans County

**Sewer Share (Storm and Sanitary)**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Trench Excavation	CY	622	\$15.00	\$9,330
Rock Excavation	CY	311	\$95.00	\$29,545
Stone Bedding	CY	78	\$30.00	\$2,340
Select Granular Backfill	CY	622	\$17.00	\$10,574
8" Lateral Pipe -Drainage	FT	120	\$40.00	\$4,800
Connection to Existing Laterals - Drainage	EA	4	\$250.00	\$1,000
Connection to Existing Sewer-Drainage	EA	2	\$1,500.00	\$3,000
Catch Basins	EA	9	\$1,400.00	\$12,600
12" Sewer Main - RCP	FT	700	\$50.00	\$35,000
6" Lateral Pipe -Sewer	FT	360	\$40.00	\$14,400
Connection to Existing Laterals - Sewer	EA	9	\$200.00	\$1,800
New Manholes Frames & Covers -Sewer	EA	2	\$2,500.00	\$5,000

**Subtotal:** \$129,389

Supplemental Construction	LS	1	15%	\$19,408
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office; Mobilization & Demobilization	LS	1	10%	\$12,939

**Total:** \$161,736

**Say:** \$162,000

**Highway**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Excavation & Disposal (Sidewalk)	CY	238	\$13.00	\$3,094
Excavation & Disposal (Topsoil)	CY	86	\$13.00	\$1,118
Excavation & Disposal (Box-Out)	CY	778	\$13.00	\$10,114
Excavation & Disposal (Profile change)	CY	778	\$13.00	\$10,114
Rock Excavation (Profile change)	CY	778	\$95.00	\$73,910
Pavement Top Course	Ton	260	\$55.00	\$14,300
Pavement Binder	Ton	260	\$50.00	\$13,000
Pavement Base	Ton	1,040	\$50.00	\$52,000
Pavement Subbase	CY	778	\$25.00	\$19,450
Concrete Curb	FT	1,400	\$20.00	\$28,000
Retaining Wall	SF	1,000	\$30.00	\$30,000
Sidewalk Subbase	CY	65	\$25.00	\$1,625
Concrete Sidewalk	CY	54	\$350.00	\$18,900
Topsoil (Tree Lawns & Along ROW)	CY	86	\$35.00	\$3,010
Seeding (Tree Lawns & Along ROW)	SF	7,000	\$0.10	\$700
Culvert Replacement	LS	1	\$96,000.00	\$96,000
Asphalt Driveways	SF	1,350	\$4.00	\$5,400

**Subtotal:** \$380,735

Supplemental Construction	LS	1	15%	\$57,110
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office; Mobilization & Demobilization	LS	1	10%	\$38,074

**Total:** \$475,919

**Say:** \$476,000

**Water**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Trench Excavation	CY	233	\$15.00	\$3,495
Rock Excavation	CY	233	\$95.00	\$22,135
Sand	CY	77	\$18.00	\$1,386
Select Granular Backfill	CY	388	\$17.00	\$6,596
12" DIP water main, cement lined	FT	700	\$85.00	\$59,500
1/2" water service main (including excavation and backfill)	FT	450	\$35.00	\$15,750
Fire hydrant	EA	2	\$2,500.00	\$5,000

**Subtotal:** \$113,862

Supplemental Construction	LS	1	15%	\$17,079
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office; Mobilization & Demobilization	LS	1	10%	\$11,386

**Total:** \$142,328

**Say:** \$142,000

**TOTAL:** \$780,000

**ENGINEERING AND INSPECTION:** \$195,000

**ROW and EASEMENTS** \$25,000

**GRAND TOTAL:** \$1,000,000

**TASK 3 - CONSTRUCT RAIL SPUR  
CONSTRUCTION ESTIMATE**

Village of Holley  
Orleans County

**Railroad Spur**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Ballast, Ties and Rail	FT	2,000	\$150.00	\$300,000
Roadway Crossing	LS	1	\$50,000.00	\$50,000
Turnout and Switch	LS	1	\$30,000.00	\$30,000

**Subtotal:** \$380,000

Supplemental Construction	LS	1	15%	\$57,000
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office; Mobilization & Demobilization	LS	1	10%	\$38,000
<b>Total:</b>				\$475,000

**Say:** \$475,000

**TOTAL:** \$475,000

**ENGINEERING AND INSPECTION:** \$119,000

**GRAND TOTAL:** \$594,000

**TASK 4 - CONSTRUCT WATER SYSTEM  
CONSTRUCTION ESTIMATE**

Village of Holley  
Orleans County

**New Water Main**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Trench Excavation	CY	1,833	\$15.00	\$27,495
Rock Excavation	CY	1,833	\$95.00	\$174,135
Sand	CY	611	\$18.00	\$10,998
Select Granular Backfill	CY	3,055	\$17.00	\$51,935
12" DIP water main, cement lined	FT	5,500	\$85.00	\$467,500
6" water service main (including excavation and backfill)	FT	2,600	\$55.00	\$143,000
Fire hydrant	EA	11	\$2,500.00	\$27,500
Topsoil	CY	408	\$35.00	\$14,280
Establish Turf	SF	33,000	\$0.10	\$3,300

**Subtotal:** \$920,143

Supplemental Construction	LS	1	15%	\$138,021
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office;	LS	1	10%	\$92,014
Mobilization & Demobilization				

**Total:** \$1,150,179

**Say:** \$1,150,000

**TOTAL:** \$1,150,000

**ENGINEERING AND INSPECTION:** \$288,000

**GRAND TOTAL:** \$1,438,000

**TASK 5 - CONSTRUCT ROUTE 31 TURNING LANE  
CONSTRUCTION COST ESTIMATE**

Village of Holley  
Orleans County

**Sewer Share (Storm and Sanitary)**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Trench Excavation	CY	254	\$12.00	\$3,048
Rock Excavation	CY	254	\$95.00	\$24,130
Stone Bedding	CY	64	\$30.00	\$1,920
Select Granular Backfill	CY	444	\$17.00	\$7,548
18" Drainage pipe	FT	980	\$65.00	\$63,700
8" Lateral Pipe -Drainage	FT	180	\$40.00	\$7,200
Connection to Existing Laterals - Drainage	EA	2	\$250.00	\$500
Catch Basins	EA	12	\$1,400.00	\$16,800

**Subtotal:** \$124,846

Supplemental Construction	LS	1	15%	\$18,727
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office; Mobilization & Demobilization	LS	1	10%	\$12,485

**Total:** \$156,058

**Say:** \$156,000

**Highway**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
Excavation & Disposal (Topsoil)	CY	133	\$10.00	\$1,330
Excavation & Disposal (Box-Out)	CY	444	\$15.00	\$6,660
Rock Excavation	CY	444	\$95.00	\$42,180
Pavement Top Course	Ton	149	\$55.00	\$8,195
Pavement Binder	Ton	149	\$50.00	\$7,450
Pavement Base	Ton	596	\$50.00	\$29,800
Pavement Subbase	CY	444	\$25.00	\$11,100
Topsoil (Tree Lawns & Along ROW)	CY	133	\$35.00	\$4,655
Seeding (Tree Lawns & Along ROW)	SF	10,780	\$0.10	\$1,078
Asphalt Driveways	SF	3,960	\$4.00	\$15,840
Traffic Signal	LS	1	\$100,000.00	\$100,000

**Subtotal:** \$228,288

Supplemental Construction	LS	1	15%	\$34,243
Maintenance & Protection of Traffic; Survey & Stake-out; Field Office; Mobilization & Demobilization	LS	1	10%	\$22,829

**Total:** \$285,360

**Say:** \$285,000

**TOTAL:** \$441,000

**ENGINEERING AND INSPECTION:** \$110,000

**ROW and EASEMENTS** \$40,000

**GRAND TOTAL:** \$591,000



**Dewberry**

[www.dewberry.com](http://www.dewberry.com)