Kimley»Horn

June 7, 2022

Berlin Turnpike (Route 287) Corridor Study
Route 7 Bypass to Main Street
Town of Purcellville, Virginia

SCOPE OF SERVICES

INTRODUCTION

Kimley-Horn is pleased to submit this proposed task order for traffic engineering and operations services as requested by Town of Purcellville for the subject matter below. This work would be contracted to Kimley-Horn's Basic Ordering Agreement for Traffic and Transportation Engineering, Utility coordination, and Related Services Task Order Contract (RFP #PW-2018-04).

PROJECT UNDERSTANDING

Background
Berlin Turnpike (Route 287) is a 2-lane, undivided roadway in Loudoun County, Virginia. The road extends approximately 12.6 miles from Main Street (Business Route 7) in Purcellville to the Virginia/Maryland state line north of Lovettsville. North of the state line, the road becomes Maryland Route 17. Between Route 7 and Main Street, the road is classified as an urban minor arterial. The intersection of Berlin Turnpike and Main Street was converted to a two-lane roundabout in 2013.

A considerable number of developments and roadway improvements are proposed on or immediately adjacent to the study corridor. These include the following:

- The Purcellville Townwide Transportation Plan calls for Berlin Turnpike to be widened from a 2-lane undivided cross-section to a median-divided 4-lane cross-section.
- Patrick Henry College, located immediately east of Berlin Turnpike and with two access points along the corridor, is planning a campus expansion which includes five new dorms and one new office building. In association with the expansion, the northbound right turn lane into campus is planned to become a shared through-right lane, and an additional northbound through lane is planned to be constructed north of Eastgate Drive to the Route 7 interchange
- Interchange improvements are planned at the Route 287/Route 7 and further west the Route 7/Route 690 interchange through two separate Loudoun County projects

The Town has received numerous complaints related to safety and operational issues along the corridor, including:

- Excessive delays experienced by the residents of the Kingsbridge and Villages of Purcellville subdivisions served by Eastgate Drive attempting to turn left onto Berlin Turnpike
- Long queues on southbound Berlin Turnpike and eastbound on Hirst Road associated with school bus and passenger vehicle traffic destined for Harmony Middle School and Kenneth W. Culbert Elementary School east of the study corridor and north of Colonial Highway (Business Route 7)
- Failure of southbound right-turning drivers to yield to pedestrians at the shopping center entrance on Berlin Turnpike

Kimley-Horn understands that the Town desires consultant perform the corridor study and identify improvements to address the safety and traffic issues described above.

SCOPE OF SERVICES

Based on our project understanding, Kimley-Horn proposes the following scope of services:

Task 1 - Project Kick-Off and Project Management

A. Kimley-Horn will prepare for and attend an internal Kick-off Meeting with the Town to confirm the scope, discuss schedule, confirm stakeholder involvement, and public outreach
B. Kimley-Horn will prepare for and attend an external Kick-off Meeting with the Town, VDOT, the Sheriff's office, other stakeholders identified by the Town. The purpose of the kick-off meeting will be to confirm the study purpose, approach, and methodology. Following the meeting, Kimley-Horn will prepare and submit a summary to meeting attendees.
C. Kimley-Horn will prepare and submit monthly project invoice. This scope assumes an 18-month schedule.

Deliverables:

- Internal Kick-Off Meeting Summary
- External Kick-Off Meeting Summary
- Monthly Invoices

Task 2 - Data Collection

Kimley-Horn will collect the following transportation data for the study:

A. Kimley-Horn will review and summarize the 5 most recent years of crash data at the Route 287/Eastgate Drive/Patrick Henry Circle and Route 287/Purcellville Gateway

driveway intersections. The data source is assumed to be VDOT OpenRoads database.

B. Kimley-Horn will use a subconsultant to collect the following data (see Figure 1):

   i. Bicycle, pedestrian, and vehicle turning movement counts from 6:00-9:00 AM and 4:00-7:00 PM on a weekday and 11:00 AM – 2:00 PM on a Saturday at the following intersections:
      a. Route 287/WB Route 7 on- and off-ramps
      b. Route 287/EB Route 7 on- and off-ramps
      c. Route 287/Hirst Rd
      d. Route 287/ Purcellville Gateway shopping center driveway
   ii. Bicycle, pedestrian, and vehicle turning movement counts on a weekday from 6:00 AM – 7:00 PM at the following intersection:
      a. Route 287/Eastgate Dr/Patrick Henry Circle
   iii. Bicycle, pedestrian, and vehicle turning movement counts on a Saturday from 7:00 AM – 7:00 PM at the following intersection:
      a. Route 287/Eastgate Dr/Patrick Henry Cir
   iv. 7-day speed/volume data counts along Berlin Turnpike, north of Eastgate Drive

Figure 1 - Traffic and Speed Data Collection Locations

C. Kimley-Horn will conduct a field visit to confirm existing conditions within the study area. Kimley-Horn will record existing conditions with notes and photos.

Additional field geometry and existing conditions to be recorded will consist of:

i. Confirmation of data collected from review of aerial imagery and/or Google Earth.
ii. Noting locations with restricted intersection sight distance
iii. Presence of lighting
iv. Presence of utilities with respect to potential conflicts with safety countermeasures (visual review, without field measurements or survey)

v. Pedestrian facilities

Two Kimley-Horn staff members will record field observations for one peak hour during each of the peak periods (AM, PM, and Saturday midday).

D. Kimley-Horn will review and summarize traffic studies completed by the County and previous traffic studies completed for developments within or in proximity to the study area. This scope assumes the Town will provide all studies for Kimley-Horn to review.

E. Kimley-Horn will request Synchro files and signal timings from VDOT for the traffic signals in the study area.

Deliverables:

- Crash Data in Raw and Summarized Excel Formats
- Summary of field observations and photos in a brief memorandum

Task 3 – Traffic Volume Development

A. Kimley-Horn will compile the vehicle movement counts collected in Task 2 of the project and balance the traffic volumes. This scope assumes that adjustments to traffic volumes for COVID-19 travel impacts will not be required.

B. Kimley-Horn will make use of trip generation, distribution, and assignment of the Patrick Henry College expansion. This scope assumes the Town will provide a copy of the study.

C. Kimley-Horn will review the most current run of the Loudoun County Travel Demand Model outputs to develop growth factors to modify the adjusted existing traffic volumes to result in year 2030 and year 2045 traffic volumes. This scope assumes the Saturday growth factor will be based on the weekday PM peak period. This scope further assumes that the Loudoun County year 2030 and 2045 models will be complete and the Town will have access to utilize them for this project. This scope also assumes that a travel demand model validation will not be required for the forecasting.

D. Kimley-Horn will develop AM, PM, and Saturday midday peak hour traffic volumes for two future horizon years:

a. Year 2030 – assumes the Patrick Henry College build out, completion of the Route 7/Route 690 interchange, and completion of the Route 7/Route 287 interchange improvements
b. Year 2045 – builds upon Year 2030 assumptions with future growth to 2045. This scenario will help the Town understand if the Route 287 widening will be needed by 2045.

The 2030 and 2045 traffic volumes will be developed by applying the growth factors from the travel demand model to the traffic counts.

E. Kimley-Horn will develop a memorandum summarizing the traffic development methodology and findings and submit to the Town and VDOT for review. Kimley-Horn will coordinate a meeting with the Town and VDOT to review and confirm the traffic development methodology, the existing traffic volumes, and the No-Build 2030 and No-Build 2045 traffic volumes. Following the meeting, Kimley-Horn will prepare and submit an email summarizing the action items, decision points, and concurrence on approach and methodology to meeting attendees.

Deliverables:

- Traffic Volume Data (Turning Movement Counts, Pedestrian Counts, 7-day Vehicle Speed and Classification Data) in Summarized Formats
- Traffic volume development memorandum
- Traffic volume development meeting summary and response to comments memorandum

Task 4 - Existing Conditions Analysis

Kimley-Horn will summarize the existing conditions analysis based on Tasks 2, 3, and the following:

A. Kimley-Horn will conduct a crash analysis at the intersections of Route 287/Eastgate Drive/Patrick Henry Circle and Route 287/Purcellville Gateway driveway consisting of crash summaries by type, severity, day of week, time of day, and direction of travel. This scope assumes a crash analysis will not be required at the Route 287/Route 7 EB ramps, Route 287/Route 7 WB ramps, and Route 287/Hirst Road as those intersections will be modified through the County's interchange improvement project. Further, this scope assumes that a crash analysis will not be performed at the Route 287/Main Street roundabout since the Town has previously completed a crash analysis at this location.

B. Kimley-Horn will request AM, PM, and Saturday midday peak hour Synchro files for the signalized intersection from VDOT. Kimley-Horn will prepare for the Synchro files for use and analysis by making geometric and operational adjustments to reflect current conditions. Kimley-Horn will code unsignalized intersection into the Synchro 11 files and update the coding of signalized intersections based on the findings of the field review.

C. Kimley-Horn will use the adjusted Synchro 11 files to analyze weekday AM and PM, and Saturday midday peak hour traffic conditions. Kimley-Horn will summarize level of service, delay, and volume to capacity ratio for each study area intersection

movement, approach, and the overall intersection. Kimley-Horn will also summarize the 95th percentile queuing at the study intersections.

D. Kimley-Horn will conduct and summarize signal warrant analyses that consider all applicable Manual on Uniform Traffic Control Devices (MUTCD) warrants at the intersection of Route 287/Eastgate Drive/Patrick Henry Circle.

E. Kimley-Horn will summarize and map study area transit information (routes, stops, frequency, dwell times, infrastructure). Kimley-Horn will also summarize and map the location of typical LCPS routes and stops (as provided by Town or LCPS staff).

F. Kimley-Horn will summarize and map study area bike and pedestrian information as collected as part of Task 2 (desire lines, crossing locations, vulnerable pedestrian observation, sidewalks/paths, pedestrian signals, ADA ramps and infrastructure).

G. Kimley-Horn will compile the findings of Task 2 and Task 3 and prepare a draft existing conditions summary. Kimley-Horn will submit the draft summary for review and comment by Town and VDOT staff.

H. Following receipt of comments by Town staff, Kimley-Horn will meet with Town staff to review results and discuss comments. Following the meeting, Kimley-Horn will prepare a summary to meeting attendees.

I. Kimley-Horn will prepare a revised draft existing conditions summary (the final version will be part of the final report), updating as appropriate to reflect the reconciled comments and action items from the review meeting. Kimley-Horn will submit the final summary for review and comment by Town staff. Following resolution of one round of comments from Town staff, Kimley-Horn will revise the existing conditions summary for inclusion as the existing conditions chapter of the final report for this project.

Deliverables:

- Existing Conditions Synchro 11 Analysis Files
- Draft Existing Conditions Summary
- Draft Existing Conditions Summary Review Meeting Summary
- Revised Draft Existing Conditions Summary and response to comments

Task 5 –No-Build Conditions Analysis

Kimley-Horn will summarize the 2030 and 2045 No-Build conditions through the following tasks:

A. Kimley-Horn will make geometric and operational adjustments to the existing conditions Synchro files to reflect No-Build 2030 and 2045 conditions.

B. Kimley-Horn will use Synchro 11 to analyze AM, PM, and Saturday midday peak hour traffic for the No-Build 2030 and 2045 conditions. Kimley-Horn will summarize the same measures of effectiveness (MOEs) identified as part of Task 4.

C. Kimley-Horn will summarize any multimodal improvements planned and/or funded within the study area.

D. Kimley-Horn will conduct and summarize signal warrant analyses using No-Build 2030 and 2045 traffic volumes for the Route 287/Eastgate Drive/Patrick Henry Circle intersection.

E. Kimley-Horn will compile the findings of Task 5 and prepare a draft No-Build conditions summary. Kimley-Horn will submit the draft summary for review and comment by Town staff.

F. Following receipt of comments by Town staff, Kimley-Horn will prepare a revised draft No-Build conditions summary, updating as appropriate to reflect the reconciled comments and action items from the review meeting. Kimley-Horn will submit the final summary for review and comment by Town staff. Following resolution of one round of comments from Town staff, Kimley-Horn will revise the No-Build summary for inclusion as the No-Build conditions chapter of the final report for this project.

Deliverables:

- No-Build 2030 and 2045 Synchro 11 analysis files
- Draft No-Build Conditions Summary
- Revised Draft No-Build Conditions Summary and response to comments memo

Task 6 - Identify Improvements and Safety Countermeasures

A. Kimley-Horn will develop preliminary recommendations to address identified operational and safety issues along the corridor. For budgeting purposes, Kimley-Horn assumes one short-term and one long-term sketch at the Route 287/Eastgate Drive/Patrick Henry Circle and Route 287/Purcellville Gateway driveway intersections. This scope excludes the development of Route 287 widening concept. The process to identify and describe improvements and safety countermeasures will consist of the following:

   i. Kimley-Horn will use the most current version of the Virginia Junction Screening Tool (VJuST) tool to evaluate the performance of alternate

intersection configurations at intersections that have identified operational or safety issues for year 2030 and 2045 traffic volumes. Kimley-Horn will summarize the findings and provide a review of the applicability/feasibility of alternate configurations at intersections given constraints (geometry, right-of-way, compatibility with adjacent intersections or land uses).

ii. Kimley-Horn will evaluate the performance and feasibility of other safety countermeasures to address the specific issues identified at each intersection or at specific locations along the corridor. Potential countermeasures to be considered may consist of intersection/signal modifications, installing Pole Mounted Speed Displays (PMSD), relocating stop bars, upgrading or modifying crosswalks, reconfiguring lane use, improving sight distance, installing missing bike/pedestrian paths, or upgrading bus stops.

This scope assumes that widening Route 287 to 4 lanes (consistent with the Townwide Transportation Plan) will be considered for analysis purposes in 2045 but not considered in the opinion of probable cost or concept drawings.

iii. Kimley-Horn will evaluate the operational performance of all applicable operational improvements using Synchro 11 or SIDRA (using the same MOEs from Task 4) for 2030 and 2045 traffic volumes. It is noted that certain countermeasures cannot be modeled in Synchro/SIDRA or have impacts that are not well represented by Synchro/SIDRA MOEs. Synchro/SIDRA modeling limitations and analysis anomalies will be noted and described as appropriate.

Kimley-Horn will prepare a narrative and tabular summary comparing the measure of effectiveness for each intersection under existing, No-Build 2030 conditions, No-Build 2045, Build 2030, and Build 2045 traffic volumes.

iv. Kimley-Horn will perform and summarize the results of signal warrant analyses at the intersection of Route 287/Eastgate Drive/Patrick Henry Circle. The signal warrant analyses will be performed under both 2030 No-Build volume conditions and 2045 No-Build volume conditions.

v. Kimley-Horn will summarize changes qualitatively for intersection and corridor multimodal performance for bicycle, pedestrian, and transit modes.

vi. Kimley-Horn will prepare a preliminary opinion of probable cost (OPC) for each improvement or safety countermeasure. The OPC will be planning level, and present low and high costs rounded to the nearest $1,000 or $10,000 or $50,000 depending on the scale of the project.

Kimley-Horn will make use of the VDOT Project Cost Estimating System (PCES), VDOT Statewide planning level cost spreadsheet, VDOT NOVA District cost averages, and relevant and recent bid or cost documents provided by the Town to develop construction costs for project components.

Cost for preliminary engineering, right-of-way/utilities, and project contingencies will be developed as percentages of the overall construction cost. Right-of-way and easement impacts will be approximated based on GIS data provided by the Town.

Kimley-Horn will summarize the process, assumptions, and sources involved in developing a cost for each improvement or safety countermeasure and prepare a tabular summary of all planning level costs.

vii. Kimley-Horn will develop a recommendation for the prioritization of the improvements based on the above evaluations, implementation considerations, and costs.

viii. Kimley-Horn will prepare narrative summaries for each recommendation and simple sketches to support the narrative. The sketches will consist of graphics (simple CADD) overlaid on an aerial showing adjustments to lane markings, curbs, medians, signage, roadway symbols, and callouts with additional symbology or reference pictures to describe improvements that are too complicated to depict at the simple sketch level.

B. Kimley-Horn will meet with Town staff to review preliminary recommendations, to present the additional findings of Task 6, and to solicit feedback and comments. Following the meeting, Kimley-Horn will prepare and submit an email summarizing the action items, decision points, and requested revisions to meeting attendees.

C. Kimley-Horn will prepare for and attend a stakeholder meeting with the Town, VDOT, Patrick Henry College staff, the Sheriff's office, and other stakeholders as identified by the Town. The purpose of the meeting will be to present the revised recommendations and to solicit feedback and comments. Following the meeting, Kimley-Horn will prepare and submit a meeting summary.

Deliverables:

- Preliminary Recommendations summary (narrative, sketches, results matrices, costs, and prioritization)
- Preliminary Recommendations meeting summary
- Revised Recommendations summary (narrative, sketches, results matrices, costs, and prioritization) and response to comments memo
- Revised Recommendations meeting summary and response to comments

- Stakeholder Recommendations meeting summary

Task 7 – Town Council/Public Outreach

Kimley-Horn will assist the Town in preparing for one public meeting and attending one Town Council meeting. These meetings would allow the team to collect feedback and concerns regarding the corridor issues, to hear the public's vision and goals for the corridor mobility and safety, and to confirm the team's understanding of existing and no-build conditions. The feedback gained from these meetings will be used to better identify and target specific recommendations, improvements, and safety countermeasures as part of Task 6. This scope assumes the Town staff will perform all meeting logistics and advertising. The work to be completed under this task consists of the following:

A. Kimley-Horn will prepare for and attend up to one briefing with the Town Council. Kimley-Horn will present the existing conditions findings as summarized in Task 4, No-Build Conditions summarized in Task 5, and/or preliminary recommendations in Task 6. Kimley-Horn will solicit feedback from the Town Council and revise the presentation material as appropriate. This scope assumes Kimley-Horn will prepare a PowerPoint presentation for the meeting.

B. Kimley-Horn will prepare for and attend up to one public information meeting. As appropriate, Kimley-Horn will support either a virtual or in person meeting based on the status of the public health emergency and guidance from the Town at the time the meeting is to be scheduled. This scope assumes virtual public meeting and use a simple online survey/feedback input tool (such as Survey Monkey or something comparable to be administered by the Town). This scope assumes Kimley-Horn will prepare a PowerPoint presentation for the meeting.

C. For each public and Town Council meeting, Kimley-Horn will provide a summary of the comments, concerns, and feedback received. The summary will a high-level commentary on the feasibility and impact of community-recommended solutions. This scope assumes summarizing up to 150 comments.

Deliverables from this task

- PowerPoint Presentation and electronic graphics for meetings (2)
- Online Public Information Survey (for the public meeting)
- Town Council/Public Information Meeting Summary (2)

Task 8 - Finalize Recommendations and Reporting

A. Kimley-Horn will revise the recommendations (narrative, sketches, tabular summaries, and costs) based on the Town Council, stakeholder, and public input.

B. Kimley-Horn will compile the summaries and findings of Task 2 to Task 7 into an overall project report. Kimley-Horn will submit the draft version of this report for review and comment by Town and VDOT staff.

C. Kimley-Horn will prepare a draft final report, updating as appropriate to reflect the reconciled comments and action items from the review meeting. Kimley-Horn will submit the draft final report for review and comment by Town and VDOT staff.

D. Following receipt of comments by Town and VDOT staff (if any), Kimley-Horn will prepare a final report, updating to reflect any final comments and submit the complete report package (including analysis files and appendices).

Deliverables:

- Draft Report
- Draft Final Report
- Final Report, appendices, and analysis files, and response to comments

Additional Services

Kimley-Horn will perform the following additional services as needed and as authorized under a separate task order amendment. A potential task that may be needed, but are not limited to the following:

Additional Service – Signal Justification Report
If traffic signal warrants are met for the intersection of Route 287/Eastgate Drive/Patrick Henry Circle and the Town desires to pursue a traffic signal as a corridor improvement or safety countermeasure, Kimley-Horn would prepare a Signal Justification report(s) per VDOT Traffic Engineering Instructional & Informational Memorandum (IIM) 387.1.

Schedule

Completion of this task will depend on availability of data, the availability of the Town staff for coordination and review, the availability of VDOT for coordination and review, the amount of effort required by Kimley-Horn to conduct the field work and prepare report documents, and the ability to schedule and hold (optional) public information meetings. We anticipate eighteen (18) months from notice to proceed for duration for services described in this proposal.

Fee

Kimley-Horn will provide the above-outlined primary tasks on an hourly basis not to exceed budget of $149,995.35. A breakdown of the estimated person-hours and fee is shown on the next page based on the scope of services and approved rates for Kimley-Horn's Basic

Ordering Agreement for Traffic and Transportation Engineering, Utility coordination, and Related Services Task Order Contract (RFP #PW-2018-04).

Closure

The work described with this work order documentation will be completed and invoiced in accordance with the terms and conditions of Kimley-Horn's Basic Ordering Agreement for Traffic and Transportation Engineering, Utility coordination, and Related Services Task Order Contract (RFP #PW-2018-04). Partial payments for tasks will be based on the percent complete. We appreciate the opportunity to provide these services to you. Please contact Kimley Horn Project Manager, Geoff Giffin at geoff.giffin@kimley-horn.com, 703 674-1355 with questions.

Town of Purcellville - Berlin Turnpike (Route 287) Corridor Study, Route 7 Bypass to Main Street

	360	Project Manager	Architect/ Engineer I	Architect/ Engineer II	Architect/ Engineer III	Technician I	Technician II	Administrative	Total Hours	Fee Estimate
		$239.74	$189.58	$156.69	$127.07	$137.15	$113.75	$97.54		
Task 1 - Project Kick-off and Project Management	*Prepare for and attend internal kick-off meeting*	*2*	*2*	*4*	*4*				12	$1,993.68
	Prepare for and attend external kick-off meeting	*2*	*2*	*4*	*4*				12	$1,993.68
	Project Coordination and monthly invoices (18 months)	*18*						*27*	45	$6,948.90
	Subtotal	***22***	***4***	***8***	***8***	***0***	***0***	***27***	**69**	**$10,936.26**
Task 2 - Data Collection	*Review and summarize crash data*	*2*	*2*	*4*	*16*				24	$3,518.52
	Coordinate Peggy Malone data collection and review data	*2*			*4*				6	$987.76
	Conduct field visit, record observations, and prepare summary	*2*	*2*		*10*		*10*		24	$3,266.84
	Review previous traffic studies and request Synchro files	*1*		*2*	*4*				7	$1,061.40
	Subtotal	***7***	***4***	***6***	***34***	***0***	***10***	***0***	**61**	**$8,834.52**
Task 3 - Traffic Volume Development	*Compile TMC data and balance traffic volumes*	*1*		*2*	*8*				11	$1,569.68
	Review County TDM and develop 2030 and 2045 growth factors	*2*		*4*	*20*		*8*		34	$4,557.64
	Develop No-Build 2030 traffic volumes	*2*		*2*	*8*		*12*		24	$3,174.42
	Develop No-Build 2045 traffic volumes	*2*		*2*	*8*		*12*		24	$3,174.42
	Prepare memorandum and meet with Town and VDOT	*2*		*6*	*12*		*4*		24	$3,399.46
	Subtotal	***9***	***0***	***16***	***56***	***0***	***36***	***0***	**117**	**$15,875.62**
Task 4 - Existing Conditions Analysis	*Conduct crash analysis and mapping*	*1*	*1*	*2*	*8*		*4*		16	$2,214.26
	Develop existing Synchro/SIDRA models		*3*	*4*	*4*		*8*		19	$2,613.78
	Conduct Synchro/SIDRA analysis	*1*	*1*	*4*	*4*		*4*		14	$2,019.36
	Conduct and summarize signal warrant analysis	*1*		*2*	*6*		*8*		17	$2,225.54
	Summarize and map transit and LCPS bus data		*1*		*6*		*6*		13	$1,634.50
	Summarize multimodal information	*1*	*1*	*2*	*4*		*8*		16	$2,160.98
	Prepare draft existing conditions summary	*4*	*12*	*16*	*30*		*12*	*2*	76	$11,113.14
	Meet with Town and VDOT	*4*	*4*	*4*	*4*				16	$2,852.32
	Prepare revised draft existing conditions summary	*2*	*4*	*4*	*8*		*10*		28	$4,018.62
	Subtotal	***14***	***27***	***38***	***74***	***0***	***60***	***2***	**215**	**$30,852.50**
Task 5 - No-Build Conditions Analysis	*Conduct and summarize signal warrant analysis*	*1*		*2*	*4*		*8*		15	$1,971.40
	Update Synchro/SIDRA files			*2*	*4*		*6*		12	$1,504.16
	Synchro analysis No-Build 2030 and 2045 conditions	*1*		*2*	*4*		*6*		13	$1,743.90
	Prepare draft No-Build conditions summary	*2*	*8*	*16*	*20*		*20*	*2*	68	$9,514.64
	Prepare revised draft No-Build conditions summary	*1*	*2*	*4*	*6*		*8*		21	$2,918.08
	Subtotal	***5***	***10***	***26***	***38***	***0***	***48***	***2***	**129**	**$17,652.18**
Task 6 - Identify Improvements and Countermeasures	*VJuST analysis*			*1*	*2*		*6*		9	$1,093.33
	Identify countermeasures	*4*	*8*	*8*	*12*		*4*		36	$5,708.96
	Analysis of improvements	*1*		*2*	*2*		*8*		13	$1,717.26
	Prepare OPCs	*1*	*2*		*8*				11	$1,635.46
	Narrative summaries and graphics	*2*	*8*	*8*	*20*		*16*		54	$7,611.04
	Meet with Town (preliminary recommendations)	*2*	*2*	*2*	*6*				12	$1,934.44
	Meet with stakeholders	*4*	*4*	*4*	*4*				16	$2,852.32
	Subtotal	***14***	***24***	***25***	***54***	***0***	***34***	***0***	**151**	**$22,552.81**
Task 7 - Town Council/Public Outreach	*Prepare Town Council meeting materials*	*2*	*4*	*4*	*4*		*8*		22	$3,282.84
	Prepare for and attend Town Council meeting	*5*	*5*						10	$2,146.60
	Develop public meeting support materials	*2*	*4*	*4*	*4*		*8*		22	$3,282.84
	Prepare for and attend public meetings	*5*	*5*		*8*				18	$3,163.16
	Subtotal	***14***	***18***	***8***	***16***	***0***	***16***	***0***	**72**	**$11,875.44**
Task 8 - Finalize Recommendations and Reporting	*Revise recommendaitons and prepare draft report*	*4*	*10*	*10*	*10*		*40*	*2*	76	$10,437.44
	Prepare revised report based on comments	*2*	*4*	*16*	*20*		*2*		44	$6,513.74
	Meet with Town and VDOT	*4*	*4*	*4*	*4*				16	$2,852.32
	Prepare final report	*1*	*4*	*4*	*8*				17	$2,641.38
	Subtotal	***11***	***22***	***34***	***42***	***0***	***42***	***2***	**153**	**$22,444.88**
	Total Hours:	96	109	161	322	0	246	33	967	$141,024.21
	Total Cost:	$23,015.04	$20,664.22	$25,227.09	$40,916.54	$0.00	$27,982.50	$3,218.82		

Total Hours to Complete:			967
Expenses (field visits and project meetings)			$500.00
Expense (Peggy Malone data collection)			$8,471.14
Total Fee:			**$149,995.35**