

E-4



TOWN AND VILLAGE OF HARRISON ENGINEERING DEPARTMENT



Alfred F. Sulla, Jr. Municipal Building
1 Heineman Place
Harrison, New York 10528

Michael J. Amodeo, P.E.
Town/Village Engineer

Frank Balbi, P.E.
Assistant Engineer

April 10, 2012

Supervisor Ron Belmont and
Members of the Town Board
Town of Harrison
1 Heineman Place
Harrison, New York 10528

Re: Grant Street Extension
Henningson, Durham and Richardson

Dear Supervisor Belmont and Members of the Town Board:

Town Board authorization is requested for the Purchasing Department to issue a purchase order to Henningson Durham and Richardson in an amount not to exceed \$8,760.00, for work related to the opening of the Grant Street Extension.

The work tasks associated with this work include

- 1. Classified Manual Turning Movement Counts
- 2. Evaluation of Existing Traffic Operations
- 3. Evaluation of Future Traffic Operations
- 4. Site Distance Analysis
- 5. Technical Memorandum detailing existing conditions and proposed scenarios

A copy of the proposal is attached for your information.

Funding for this work is available in the Engineering Department Operating Budget, 001-1440-100- J407.

Respectfully submitted,

Michael J. Amodeo, P.E.
Town/Village Engineer

MJA/fmb

Attachment

Cc: Purchasing Department



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April 2, 2012

Mr. Michael J. Amodeo PE,
Town/Village Engineer Town of Harrison/Village of Harrison
1 Heineman Place Harrison, New York 10528

Re: Scope of Services for the Grant Street Extension Traffic Study, Town of Harrison, New York

Dear Mr. Amodeo:

HDR is pleased to provide this Scope of Work for traffic impact study for the reopening of the Grant Street Extension in Harrison, New York. Our Scope of Work is based upon our field visit and discussion at your office held in February 2012. The following scope of services and fee of \$8,760 outlines the tasks involved to evaluate traffic operations of the reopening of the Grant Street Extension to all traffic.

Task 1 – Classified Manual Turning Movement Counts

Classified Manual turning movement counts (MTMC) shall be collected for one representative weekday (Tuesday, Wednesday or Thursday) for the following peak periods:

Weekday Morning peak period:	7:00 AM - 9:00 AM
Weekday Evening peak period:	4:30 PM - 6:30 PM

Full manual turning movement counts classified into passenger car, trucks and buses, shall be conducted at the following location:

- Lake Street and Veterans Memorial Boulevard

Unless otherwise noted, all manual turning movement counts shall determine vehicle classifications to include:

- Passenger car (include 4-tire vans and pick-up trucks);
- Light and Heavy Trucks

Task 2 – Existing Traffic Operations

Data Reduction

The raw traffic data collected shall be converted into a usable format for the existing traffic operations analyses described below. The traffic volumes obtained in Task 1 shall be compared to the previous counts conducted in 2006 as part of the "Traffic Impact and Access Study for the Passidomo Park" conducted by Frederick P. Clarks Associates in 2006. If the traffic volumes are within 5% of the 2006 volumes, the 2006 traffic study volumes shall be utilized. Otherwise, the previous baseline traffic volumes (without the park volumes) shall be adjusted to match existing baseline conditions and shall be utilized for the base existing traffic analysis.

Development of Baseline Synchro Model

The existing traffic operations analysis shall utilize the methods of the 2000 Highway Capacity Manual (HCM) as reported by Synchro 7 software to ascertain the Level-of-Service (LOS) for the intersections. An existing traffic operations analysis shall be conducted for one weekday peak hour for each analysis period (Weekend Peak AM, PM Peak Hours). The Synchro model shall include vehicle operations as input parameters. The classified traffic volume component of the Synchro analysis shall utilize the balanced or adjusted flow diagrams calculated in Task 2. The results of this analysis shall be presented in summary tables that shall report V/C, delay and LOS by movement.

Task 3 - Future Traffic Operations

Based upon a review of the local roadway network, the following future options shall be analyzed:

Option #1

- Reopen the Grant Street Extension;
- Grant Street Extension remains a southbound roadway only;
- Prohibit left and right turns at the Veterans Memorial Boulevard and Lake Street intersection; and,
- Eliminate the existing exiting movement at Casarella Way opposite the Grant Street Extension.

Option #2

- Reopen the Grant Street Extension;
- Grant Street Extension is converted to a northbound roadway only;

- Eliminate the eastbound Lake Street between the Park Driveway and Veterans Memorial Boulevard; and,
- Eliminate the existing exiting movement at Casarella Way opposite the Grant Street Extension.

The following intersections shall be analyzed as part of the analysis:

1. Lake Street and Veterans Memorial Boulevard
2. Lake Street and Grant Street/Grant Street Extension
3. Veterans Memorial Boulevard and Grant Street Extension/Casarella Way

It is assumed that all diverted traffic HDR shall modify and optimize the baseline Synchro traffic model developed in Task 2 to ascertain any impact (if any) and the associated two options.

Task 4 – Sight Distance Analysis

A sight distance analysis shall be performed at the intersection of Grant Street/ Grant Street Ext./Lake Street.

Task 5 – Technical Memorandum

A Technical Memorandum shall be prepared to describe traffic operations for the 2012 Existing Conditions and proposed operations scenario.

We look forward to working with you on this project. Please contact me at (914) 993-2032 if you have any questions concerning this proposal.

Sincerely,



Luigi Casinelli, P.E. PTOE
Traffic Section Manager

Approved by:

Mr. Michael J. Amodeo PE, Town/Village Engineer

w/attachment
cc: M.Pucci/ C.Quiroz/E.Pelaez – HDR File/Chronology

Traffic Impact Study - Grant Street Extension - Fee								
JOB TITLE	Rate	Task 1	Task 2	Task 3	Task 4	Task 5	Total Hours	Amount
		Turning Movement Counts	Existing Traffic Operations	Future Traffic Operations	Sight Distance Analysis	Memorandum		
PM	\$157.92	4	2	4	2	4	16	\$2,527
S.Engineer	\$124.08	0	2	12	6	6	26	\$3,226
Engineer	\$95.88	8	4	4	6	6	28	\$2,685
TOTAL HOURS PER TASK		12	8	20	14	16	70	\$8,437
Printing, Reproductions, Other								\$8,437
Site Visit								\$325
Video Data Processing								\$175
HDR Subtotal								\$325
Grand Total								\$8,762