State Environmental Quality Review Act (SEQRA)
Final Generic Environmental Impact Statement

CITY OF UTICA – HARBOR POINT REDEVELOPMENT
Utica, New York

Appendix A

Written Comments

From: <Wimbush>, "John (DOS)" <John.Wimbush@dos.ny.gov>
Date: Wednesday, August 26, 2015 at 5:33 PM
To: Brian Thomas <bthomas@cityofutica.com>
Cc: Lisa Nagle <lnagle@elanpd.com>, Kenneth Smith <kenneth.smith@dos.ny.gov>
Subject: Utica C1000459 Draft Generic Environmental Impact Statement: Attribution

Brian,

Recently from Elan, I received documents relating to the City's SEQRA Draft Generic Environmental Impact Statement, for which, thank you.

As per the contract this report requires funding attribution to the Environmental Protection Fund with the following text: "This report was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund." The Department logo must also be included.

All material bearing the logo must now be pre-approved by the Department.
To accomplish this, please resend the document to me with the text attribution on the front cover page and the logo on each of the pages within the document that have images and or maps (P14 Figure 1-1, P15 Figure 1-2, P16 Figure 1-3, P17 Figure 1-4 etc.) that carry logos for "Utica", "Elan", "Paige", "O'Brien and Gere".

Thank you,
John

John Wimbush
Coastal Resource Specialist,
Office of Planning and Development
New York Department of State
99 Washington Ave, One Commerce Plaza, Suite 1010
Albany, NY 12231-0001
518-486-3108 | John.Wimbush@dos.ny.gov
www.dos.ny.gov

From: Mark Harf [mailto:mharf@aol.com]
Sent: Friday, September 11, 2015 7:00 PM
To: Brian Thomas
Subject: WKTV: Contact Brian Thomas

Dear Mr Thomas:

With respect to the link below from WKTV on the Utica Harbor:

http://www.wktv.com/news/Harbor_Point_Happenings.html

The city needs commercial development at the harbor not more parks.. Best use, if permitted environmentally, would be retail, (high tech) office, and residential to enhance the tax base. The description of an amphitheater, fields, and trails sounds like the once unique and beautiful Proctor and Conkling Parks which are already unaffordable and a bit neglected by the city, yet so deserving of restoration and preservation here and now.

Additionally, with Faxton Hospital soon to close, seems more can be done to enhance Murnane field as a premier minor league ball field, using the (former) Faxton hospital property for parking, overflow, and other fields.

We have beautiful and ample park space already in Utica. Get the Harbor Property on the tax rolls (retail, high tech office, and residential and maybe pubic trails for walking and biking); we don't need another baseball and soccer field there as a gift from planners who don't know the city very well, reflecting only on 1940s Blue Jays nostalgia.

Bring taxes in the city further down, so that it can sustain and build on Nano growth. More industry will not come and/or it will bypass Utica if city taxes remain high. The city must be equally as focused on reducing taxes and connecting to commerce if it wishes to attract related cluster industries. Companies don't locate where taxes are high and in Utica they remain high. Keep negotiating tough with public sector unions, streamline city costs, and do more to fill the tax base, especially with corporate enterprises. Thank you very much.

Mark Harf, 805 VanBuren St. Utica and NYC

Doug Joslin

1. Make sure any fill used is only TOP GRADE CLEAN TOPSOIL. NOT DIRTY FILL LIKE Being DUMPED IN PROCTOR PARK + GREENMAN ESTATES,

DOUG JOSLIN

2. LINKS TO EXISTING BIKE PATH. DANGEROUS To Go from END of Bike Path at DOT To Bike Path on RT. 5. IN North Utica

DOUG JOSLIN

3. we have mandatory Recycling. we have garbage Cans w/no Recycling Containers. SUSTAINABILITY Need To make Easy To Recycle.

RICHARD MAS - RESIDENT - N. UTICA

IS IT PASSIBLE TO GET MORE NYS. THRUWAY SIGNAGE ABOUT HARBOR POINT FOR DRIVERS TO SEE NEAR THE UTICA EXIT 31 SIGN?

Dockage - Kayaks, canoes, rowing shells rowboats.

Butch Waszkiewicz
retire@dreamscape.com
phone-cell-315-534-0367
residence-1612 Harrison Ave
Utica NY 13501

Lucille Vincent
477 Rosedale Ave. Utica, NY
733-4510

high end boutiques, Shops totally
different than what IS
currently here.

Shops with All hand made one
of a kind Items, things
made here by Artisans In

OUR AREA.
All Different kinds!

Eateries - totally new York City
style, Vegas Style, different than
what we currently have in Utica
but to include Utica greens,
hand tossed pizza, etc.

From: Frank Montecalvo [mailto:utica.frank@gmail.com]
Sent: Thursday, September 17, 2015 9:04 AM
To: Brian Thomas
Subject: Utica Harbor Point Plan

Utica Harbor: Living Up to Potential?

They began with the best of intentions. They took old sections of the city that were showing their age, took down what was there, and built new buildings. The idea was to breathe new life into old neighborhoods. . . . The buildings are now the legacy of our leaders of the 1960s and '70s. . . but did the results meet their goal?

Utica produced some notable buildings and public spaces during that era: New City Hall, Clock Tower, Plaza and Parking Garages; Hanna Park (with the now-defunct waterfall); Kennedy Plaza Apts.; State Office Building (with the now-defunct public plaza to the east which sat atop the now-defunct parking garage) and County Office Building. These visible signs of "progress" (and decay because they could not be maintained) were largely funded by taxpayer dollars.

In spite of the new buildings and public spaces, the hoped-for private investment -- and a renewed vibrancy -- never followed. Stores never occupied the storefronts built facing Columbia Street and the space is now occupied by a medical supply company with trailer trucks often stopping downtown traffic. The 6-story office tower intended to sit atop the garage next to City Hall never materialized. The large parcel of land surrounding the apartment tower attracted a couple of cheap metal buildings that were totally out of character with both old and new neighboring buildings -- but otherwise remained largely empty space (grass or parking lots) even to this day. The high rise apartment tower, which might have been designed to attract a well-heeled clientele owing to its views, contains "Section 8" housing. The "renewed" area was and is a far cry from the active, densely developed space that it replaced. What went wrong?

We now know that projects such as Utica's Urban Renewal project failed, at least in part, because they were inconsistent with and destroyed the "walkability" of the neighborhoods they were placed in, isolating people from amenities they want. Cities, such as Greenville, SC, learned this lesson and have recreated downtown vibrancy by making them pedestrian friendly. Successful private developers, even locally (eg. Landmarc, New Hartford Shopping Center), have learned the lesson, too, and are designing projects that are "walkable" in the sense that occupants will not have to walk far to find things they want.

Now compare the proposed Harbor Point Plan with Utica's failed '60s Urban Renewal area. Both plan(ned) a few key "trophy" buildings with uses pre-designated by local leaders (which may not be what "the market" would be interested in), in a low-density environment (which reduces "walkability"), with no requirement to "fit in" with each other or their surroundings, and with public "amenities" which require taxpayer maintenance.

Waterfront acreage should be the most valuable property in the city. Why is it being wasted

on ball fields, an "interpretive center," a farmers' market, trails, and an outdoor amphitheater which will (1) not generate any tax revenue, but also (2) burden the taxpayer with additional things to maintain, and (3) duplicate amenities the City already has? (We commented on the ball fields back in 2010.)

Nicky Doodles at Harbor Point, which offers first rate products in a first rate facility, **now seems overshadowed and oddly placed** with the hulking Fairfield rising next door. If both are being touted as part of the Harbor Point "project," why do their designs detract from rather than enhance each other? **Wouldn't a good master plan for the project avoid incongruities and protect the value of private investment, by imposing design requirements to ensure that buildings "work" together,** *e.g.*, as in a "form based code?"

Harbor Point not only has waterfront acreage, it has a "million dollar view" of Downtown. Can you find anything in the Harbor Point Plan that leverages this viewshed to the advantage of the development?

Does the plan erase the boundary between governmental function and private effort? The plan talks about all the possible things that could go into Harbor Point, and even locates specific activities in specific places, but is there a market for these things? Maybe we do not really need another ethnic restaurant, another farmer's market, or another place for people to go and sample locally crafted products. Are artists inspired to complete canvases someone else has started? Isn't that what happened with Urban Renewal? Shouldn't it be up to the developer to decide what goes into the project? And where?

The City's interest should be limited to providing the regulatory and infrastructure framework calculated necessary to ensure development of sufficient density to increase net revenue to the city. If this is not possible, perhaps Harbor Point's time has not yet arrived. Regardless . . .

The Harbor Point Plan does not seem to reflect the site's potential.

Frank Montecalvo
Past Chairman of the Infrastructure and Waterfront Development Subcommittee
Utica Master Plan Steering Committee
--
Frank Montecalvo
202 Comenale Crescent
New York Mills, NY 13417
315-570-3535

From: bobby@quahogsunited.com [mailto:bobby@quahogsunited.com]
Sent: Saturday, September 19, 2015 6:19 PM
To: Brian Thomas
Subject: Letter on the way to Mr. Gilroy

21 September 2015

Chairman Vincent J. Gilroy, Jr
Utica Harbor Point Development Corporation
1 Kennedy Plaza
Utica, NY 13502
Dear Chairman Gilroy:
Recently on BobbyO1967.com, I have been discussing bringing agriculture into the Utica Tourism plan. Some local elected officials have been reading the commentary and wondered aloud if Harbor Point could be an opportunity in the waiting. After some quick brainstorming, there is a line of thinking I would like you to consider.

As you are aware from previous communications, I have been critical of locating a baseball stadium at Harbor Point. My objections stem from two key issues.

First, we already have a County Baseball Stadium. There is nothing in the Harbor Point agreement which indicates that the County would take over the new stadium or cease operating the old one. Until this ³ownership and maintenance² conundrum is figured out, the stadium at Harbor Point does not make a lot of sense.

The other problem with a baseball stadium at Harbor Point is the direction of runoff which is away from where the hotels are located. That means on days after rainstorms, deep casual water will be a baseball stadium staple. That is a dangerous situation for any player.

Having lived on the coast most of my life, I am somewhat familiar with this set of circumstances. There are ways to remediate the area so the runoff does not become a problem. However, after doing so, there is no way that section of land will support the weight of a stadium.

There are two things it will support. There first is a marsh. I would love to engage in the ³green hacks² to make it a saltwater marsh since they are so much more interesting than their freshwater counterparts. If done correctly, you could set up a section of the marsh to freeze over and create both indoor and outdoor skating opportunities.

I have to say that while I have gotten used to fishing in fresh water, my body really has not adjusted to swimming in it yet. The marsh becomes an excuse to get soaked and explore. Tourists love to explore.

The other thing tourists love to do is walk around. Tourists hate cars and really want to park them at the beginning of the vacation and not touch them until the end of the vacation. While downtown Utica is on the upswing, it does not have that tourist friendly walk around vibe yet. You can make the same comment about Varick Street everyone is very well aware how I feel about that one.

Imagine if next to the marsh, there was a petting zoo. However, not just any kind of petting zoo is deserving of such a spot. In 2015, Utica can feature a literal farm to table petting zoo.

So the tourists stay at a local hotel. They make their way over to Harbor Point. The kids explore the marsh and then head to the petting zoo. While the kids are getting all handsy with sheep and the like, the adults are at the cheese making factory watching Ricotta get made. Say ³baaaaa² with me.

Now here is the cool part. The parents can buy some Ricotta cheese on the way out which had its origin in the sheep the kids became friends with. They can take the Ricotta cheese to certain restaurants willing to take part in the literal farm to table program. The restaurants then use the Ricotta cheese, obviously the amounts and pricing alternates are worked out ahead of time as part of a marketing initiative, on the entrees the family eat that evening. From playing to watching to buying to eating together as a family what families really want. Who will forget making that memory??

I very much like the word picture in completion. Before we get there, you and your team have to make a few decisions. As Uticans, we count on you to be brave enough to walk away from bad judgments as your process develops. The days of the ³Well, my cousin¹s plumber¹s girlfriend¹s librarian¹s bookie threw us a few bucks so we gotta keep it in² way of thinking have to come to an end if we are to advance as a community. You can repurpose the baseball stadium space to put us on the right path.

Thank you for your time and consideration.

Sincerely,

Robert T. Oliveira
763 Mary Street
Utica, NY
315-765-9378

From: Watts, Beth E. (DOT) [mailto:Beth.Watts@dot.ny.gov]
Sent: Friday, September 25, 2015 3:42 PM
To: Brian Thomas
Cc: Papaleo, Jim (DOT); Hoffmann, Brian (DOT); Sassaman, Guy
Subject: SEQR Harbor Point DGEIS

Brian,

As requested, the New York State Department of Transportation (NYSDOT) has reviewed the Draft Generic Environmental Impact Statement (DGEIS) and associated documents related to the proposed Harbor Point Development. Upon review of the materials provided, the NYSDOT has the following comments:

1. Page 18 (Figure 1-4,Preferred Master Plan) The plan appears to not provide driveway access to Wells Ave for Delmonico's restaurant. At least one access point should be provided.
2. Page 20 Component 7.e. (Washington Street connectivity to Bagg's Square and the Aud.) is not reflected in Figure 1-4. A pedestrian bridge is mentioned in Section 1.4.2.
3. Page 27, Table 1.1 The NYSDOT contact person for any applicable Highway Work Permit is Ken Andela, Regional Permit Coordinator.
4. Page 105, Existing Conditions and Intersection Characteristics The existing conditions should be revised to reflect the reduction of lanes between Wells Ave and the John St./Broad St. Ramp as this section of Genesee Street was reduced to two southbound lanes as a result of the Fairfield Hotel traffic mitigation plan.
5. Page 115, Future Conditions A signal warrant analysis should be completed for the Genesee Street & 790/Thruway Ramp intersection as part of this project given the Level of Service drops.
6. Page 116, Table 2.13 The future No-Build conditions should be shown. This would provide a clearer picture of traffic impacts due to development versus impacts due to background growth.
7. Page 124, Mitigation The Wells Ave signalized intersection proposal should be implemented only after the project has developed to a point when the intersecting approaches reach the warranting values. This should be defined in some detail in the DGEIS.

Thank you for the opportunity to comment.

Beth Watts, **PE, PTOE**
Planning & Program Management

NYSDOT - Region 2
207 Genesee Street, Utica, NY 13501
315.793.2451 | beth.watts@dot.ny.gov

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Permits, Region 6
207 Genesee Street, Utica, NY 13501-2885
P: (315)793-2554 F: (315) 793-2748
www.dec.ny.gov

October 16, 2015

Brian Thomas, Commissioner
City of Utica, Dept. of Urban & Economic Development
1 Kennedy Plaza
Utica, New York 13502

Project Name – City of Utica Harbor Point Redevelopment
DGEIS comments

Dear Mr. Thomas,

The Department of Environmental Conservation (DEC) has received the above referenced submittal. We have circulated the draft document to our Natural Resources and Environmental Quality Staff and submit the following comments:

Flood Plain

In addition to the mitigation measures detailed in the document:

- The project area regularly floods. An evacuation plan should be developed and implemented for all residential development areas.
- Critical structures and utilities should be located outside of the 0.02% (500-year) floodplain. If such development must occur within the 0.02% floodplain, it should be elevated or flood proofed to at least 0.02% flood elevation, preferably higher.
- New construction and substantial improvements to structures shall be constructed with methods, materials and utility equipment resistant to flood damage below the elevation equal to the base flood elevation plus 2 feet.

Hazardous Waste Remediation

The Harbor Point Site was remediated with a one-foot thick soil cover. Passive recreational fields require a one-foot thick soil cover. Active recreational fields require a two-foot thick soil cover, artificial turf or paving, due to anticipated increased soil contact. Therefore, the proposed ball fields and presumably the multi-use fields, which are an active recreational use, will require an enhancement to be acceptable.

The DGEIS should acknowledge that additional work (addition of cover) will be required in the areas of active recreation. Addition of a statement, such as "... artificial turf, or a two-foot thick cover of acceptable soil quality will be provided on the ball fields" would satisfy our concerns.

Details are provided in the attached guidance, DER-10 / Technical Guidance for Site Investigation and Remediation. Future review will be required to demonstrate that the proposed uses satisfy the Department's surface requirements identified in the guidance.

Natural Resources

- DEC has expressed interest in creating an additional access point to the Utica Marsh Wildlife Management Area (Marsh) by utilizing a portion of National Grid property near the South West corner of the ball fields. The basic concept would be to have public parking where people could use the Adirondack Scenic Railroad as a rail trail into the Marsh. DEC has discussed this concept with National Grid and Adirondack Rail staff multiple times. We have even met on-site to discuss challenges and issues to creating such access. Wildlife Biologist, Steven Heerkens, has also shared the idea with Utica Mayor, Robert Palmieri. Currently, the only access that exists for the Marsh is via the Canal Trail from North Genesee Street.
- A New York State Jurisdictional wetland exists post clean up. Creating a trail along with appropriate signage and kiosks at the edge of this area could provide a wonderful educational opportunity for wetlands information, historical information and the history of the cleanup itself.
- There does not appear to be a public boat launch. DEC has suggested this previously.
- Repairs to existing walls would be appropriate. If additional bank stabilization is required in the area no further hardening of the shoreline should occur. Instead, "Soft" methods of stabilization should be pursued including planting native, deep-rooting vegetation, as well as bioengineering. Proposed stabilization methods should always follow the natural contour of the shoreline.

Petroleum Bulk Storage

- If the Marina will include a fueling station Petroleum Bulk Storage permits/registrations will be required. This program is not presently included in Section 1.6 "Permits and Approvals" of the DGEIS.

Agency Permitting

During the build out of the area individual project permitting will be required at various points. Permits from the DEC potentially include but are not limited to:

- Air
- Hazardous Waste Remediation
- Article 15 Protection of Waters
- Article 24 Regulated Freshwater Wetlands
- SPDES Construction Storm Water
- Petroleum Bulk Storage Permits and/or Registration

Permits/ approvals will also likely be required from other Agencies such as the US Army Corps of Engineers, NYS Canal Corp, NYS DOT, as well as local permits such as a Local Flood Plain Development Permit.

Prior to bid/construction, DEC will need to review plans to confirm the regulatory requirements are met in all areas of past or present hazardous waste remediation projects, such as the addition of cover in the areas of active recreation.

For all DEC Permits/Authorizations please consider scheduling a pre-application meeting. To expedite any forthcoming permit application or technical review the DEC offers the following checklist of items to be considered when evaluating the need for additional permits:

General:

- ☑ A brief engineering report must be included in the submission
- ☑ At least two (2) complete sets of plans (including a site location map on the cover page)
- ☑ SEQRA determination: Full EAF signed by the designated lead agency (e.g., municipal authority)
- ☑ Subdivision plans signed and stamped by a New York State licensed P.E. or R. A.
- ☑ Plat plan signed and stamped by a New York State licensed Land Surveyor
- ☑ NYSDEC and/or Local authority wetlands determination shown on plans (if necessary)
- ☑ NYSDEC and/or Local authority wetlands disturbance permit (if necessary)
- ☑ All metes & bounds, easements and right-of-ways shown on plans
- ☑ Topographic features shown on plans (e.g., site contours, flood plains, water bodies, rock outcropping, etc.)

Public Sewage (if applicable):

- ☑ Sewer and storm water plans submitted to NYSDEC for review
- ☑ Letter from the sewer service provider stating their ability and willingness to service the subdivision
- ☑ Should this project include a connection to a combined sewer system (CSS), the lead agency will need to consider the potential impacts of this connection as it evaluates the environmental impacts of the project during the SEQR process.
  - ➢ During wet weather events (e.g., rainfall or snowmelt), the combined volumes of wastewater and stormwater runoff entering a CSS may exceed the system's capacity. Most CSS are designed to discharge excess capacity to surface waters such as streams or rivers. These discharges are known as combined sewer overflows (CSO).
  - ➢ Because CSO's contain untreated wastewater and stormwater, they contribute microbial pathogens and other pollutants to surface waters, which may impact the environment and human health.

SPDES General Permit for Construction Activity (GP-0-10-001)

- ☑ The developer is required to apply for coverage under the DEC's Stormwater program prior to starting construction.
- ☑ Submit Notice of Intent to Discharge (GP-0-10-001)
- ☑ Stormwater Pollution Prevention Plan is required.
- ☑ If you anticipate disturbing five or more acres of soil, you will need written authorization from the Regional Water Engineer.

Floodplain Development:
The developer must indicate whether any part of the project is located within a floodplain or regulated floodway.

- ☑ It appears your project may be a flood hazard area. Please contact your municipal flood plan administrator
- ☑ Federal Insurance rate map (FIRM) Required.
- ☑ Base Flood elevation Certificate Required
- ☑ Elevation Certificate is recommended

Petroleum/Chemical Bulk Storage (if applicable)

- ☑ A PBS Registration could be required. The applicant is not required to obtain registration prior to construction However, the registration must be in place prior to placement of product in tank.

Air Emissions (if applicable):

- ☑ Description of all combustion (heat) sources including size in MMBTU/hr., the fuel used and if they will be used for general heat, process heat, or both.
- ☑ Description of all process sources that have any air emission from the process, particularly, if there is a stack that exits the building. This includes sources that would possibly be considered exempt or trivial from permitting under 6 NYCRR Part 201-3. Please note:
  - Generators used for construction which are liquid or gaseous fuel powered with a maximum mechanical power rating of less than 400 brake horsepower or are gasoline powered and have a maximum mechanical power rating of less than 50 brake horsepower are exempt from permitting. This exemption may not apply when multiple generators are employed and the combined sources may exceed a major emission threshold.
  - If the generators used for construction are a Temporary Emission Source that is transient in nature and will only be operated at a facility for a single period of less than 90 consecutive days (commencing from the first day of operation), they are classified as exempt from permitting.
  - Generators used for emergency backup may only operate less than 500 hours per year to remain exempt from permitting.
  - All engines that operate generators must meet the EPA requirement of 40 CFR 63 Subpart ZZZZ.

Archeological and Cultural Impacts:

- ☑ The office of Parks, Recreation and Historical Preservation Cultural Resources (OPRHP) maps should be reviewed for any project that will be classified as Major under Uniform Procedures Regulations 6 NYCRR Part 621. Before any project within a mapped archeological or historic site may be called complete, consultation with OPRHP must take place.

Freshwater Wetlands and Article 15 Classified Water Courses:

- ☑ If there is either Federal or State regulated wetlands in the project area, they must be delineated and shown on the plat plan. DEC may provide delineation services for DEC regulated wetlands. Call the Utica DEC offices at (315) 793-2404 for assistance. For extremely large projects, the applicant may be required to hire a wetlands consultant for delineation services.
- ☑ All water courses must be depicted on the plat plan.
- ☑ Any impact to DEC regulated freshwater wetlands, the 100-foot adjacent area of any mapped wetland or regulated stream will require a Joint Application for Permit, Short or Long Environmental Assessment Form (depending on scope of impact), location map and construction detail drawings depicting impact.

NY Natural Heritage Program:

- ☑ The NY Natural Heritage Program element occurrence database indicates there are one or more Listed Species on or in close proximity to the project site (a "Hit"). A permit may be required by the DEC for any proposed action that could result in a "take", which includes, but is not limited to, direct mortality, adverse modification, degradation or destruction of occupied habitat of any Listed Species. It is recommended that a professional familiar with the identification of the species – ***see below*** – undertake a survey and determine if the proposed project contains habitats with would favor these species. In some circumstances, DEC staff may want to make a site visit for additional evaluation. A field survey would be needed to determine if the species is actually present. If populations of the endangered or threatened species are found to be in the project area, project modifications should be considered to avoid or minimize impact. The NYS Natural Heritage Program databases do not include Federally-listed or proposed endangered or threatened species. For this information, we suggest that you contact the U.S. Department of the Interior Fish & Wildlife Service by calling (607) 753-9334.

Sincerely,

Terry Tyoe
Environmental Analyst 2
NYSDEC - Utica

Attachment: DEC DER-10

cc: file

ecc: S. Heerkens, Wildlife, Utica
M. Walter, Habitat, Utica
R. Coriale, DOW, Utica
A. Ash, DOW, Utica
D. Erway, Fisheries, Utica
F. Munk, NR, Watertown
G. Townsend, EQ, Watertown
L. Ambeau, Permits, Watertown
J. Spellman, DER, Albany

DER-10 / Technical Guidance for Site Investigation and Remediation

New York State Department of Environmental Conservation

DEC Program Policy

Issuing Authority: Val Washington	**Title:** Deputy Commissioner, Office of Remediation and Materials Management
Date Issued: May 3, 2010	**Latest Date Revised:**

I. Summary: This guidance provides an overview of the site investigation and remediation process for the New York State Department of Environmental Conservation (DEC) remedial programs administered by the Division of Environmental Remediation (DER). These include the Inactive Hazardous Waste Disposal Site Remedial Program, known as the State Superfund Program (SSF); Brownfield Cleanup Program (BCP); Environmental Restoration Program (ERP); and Voluntary Cleanup Program (VCP); and certain petroleum releases.

II. Policy: DER administers the SSF, BCP, ERP, VCP and Bulk Storage Programs and provides response to releases of petroleum. This guidance assists the user in developing and implementing investigation and remediation projects involving contaminated sites under these programs administered by DER. It is a separate document of the requirements for a remedial program set forth in statute and regulation, as well as in guidance. It reflects DER's experience and knowledge in developing and managing the various programs for the past 25 years.

III. Purpose and Background: This guidance provides the scope of activities needed to satisfy minimum requirements for the life-cycle of the site-specific remedial program under the SSF, BCP, ERP, and VCP, and for certain petroleum releases. It facilitates consistent, accurate, efficient and timely completion of remedial projects. It also contains the minimum technical activities DEC will generally accept for projects where DER oversight, approval or acceptance is sought or mandated by law.

DER will, however, determine the acceptable minimum technical activities for a particular site upon consideration of all the facts and circumstances of such site under the authority of applicable laws and regulations. No provision of this guidance document should be construed to limit DER's authority to require additional investigation and/or remediation based upon site-specific conditions. Sections 1.1 and 1.2 present the scope and applicability of this guidance document in more detail.

No provisions of this guidance, however, should be construed to alter the requirements of the Navigation Law or Environmental Conservation Law, or any regulation or order or permit having the force of law. This guidance does not replace or supersede protocols established for emergency spill response actions, emergency drum removal actions, and other such events requiring immediate responses and follow-up. In such time-critical situations, existing guidance established pursuant to applicable emergency response laws, regulations and policy, and directives of the on-scene DEC Spill Responder or Project Manager must be followed.

requirements of subdivision 5.8(b)-(d) should be prepared for each non-emergency IRM undertaken, with the exception of those identified in paragraph (b)2 above. IRMs with no CCR will need to be documented in the FER prepared for the site.

4. Non-emergency IRMs should include the applicable citizen participation requirements for the program under which the IRM is undertaken.

(d) Accelerated remediation is encouraged as an IRM subject to DER approval. IRMs are advanced pursuant to section 1.11 and may be conducted concurrently with sampling to delineate the contamination and to confirm contaminant removal.

1.12 Use of a Site

(a) DER's preference is to achieve a permanent cleanup of a contaminated site, including application of the unrestricted soil SCGs and restoration of groundwater to its classified use, resulting in no future land use restrictions. However, it is realized that achieving this goal is not required by some programs, nor will it always be feasible or practical, in the remedial programs identified in subdivisions 1.2 (a) and (b). Accordingly, the use of a site, or portion of a site, can be either unrestricted use or restricted use as set forth in 6 NYCRR 375-1.8(g).

1. In developing a remedial program for a site the remedial party will:

i. first define the nature and extent of contamination through the RI; and

ii. consider use scenarios set forth in this section in developing a remedy consistent with the remedy selection provisions and limitations for the various remedial programs as set forth in Chapter 4.

2. Unrestricted use. A site designated for unrestricted use is a site subject to no imposed institutional or engineering controls, such as an environmental easement or deed restriction.

3. Restricted use. A site designated for restricted use is a site subject to imposed restrictions on its use, in the form of institutional or engineering controls, to manage exposure to remaining contamination at the site. DER recognizes four categories of restricted land use, from least restrictive to most restrictive as shown below:

i. residential;
ii. restricted residential;
iii. commercial; and
iv. industrial.

Least Restrictive Use
⇕
Most Restrictive Use

(b) Categories of restricted use. The four categories of restricted use detailed in this subdivision require, at a minimum, institutional controls (e.g., environmental easement, deed restriction) in accordance with section 5.6.

1. Residential. The residential use category allows a site to be used for any use(s) other than producing animal products for human consumption. Residential use is the land use category intended for single family housing and requires the fewest restrictions on the use of the site. The residential use

category:

i. does not allow for the use of a SMP or other institutional or engineering controls to manage any remaining soil contamination on the site, although engineering controls without an institutional control, may be used to address:

(1) on-site soil vapor intrusion; or
(2) off-site impacts to other media attributable to site soil; and

ii. allows only two restrictions on the use of the site:

(1) a groundwater use restriction; and/or
(2) a prohibition against producing animal products for human consumption; and

iii. will require an environmental easement or deed restriction, except when the remedial program achieves the residential use soil cleanup objectives (SCOs) set forth at 6 NYCRR 375-6.8 to a depth of fifteen feet below the developed ground surface or to bedrock, if shallower. This will only apply, where DER determines that the:

(1) protection of ecological resources SCOs are not applicable;
(2) groundwater beneath the site is not contaminated above standards, or if there is a groundwater concern, there is a municipal prohibition on the extraction of groundwater for potable purposes; and
(3) property will not be used for producing animal products for human consumption, either by:
(A) an existing restriction on such use; or
(B) by the site's location in an area which precludes such use.

2. Restricted residential. The restricted residential use category allows a site to be used for residential use but only when there is common ownership or control by a single owner/managing entity of the site. Restricted residential use is the land use category intended for apartments, condominium, co-operative or other multi-family/common property control residential development. The restricted residential use category:

i. requires, in addition to the restrictions in 1.ii above, at a minimum the following additional restrictions on the use of the site:

(1) a prohibition on vegetable gardens on the site, unless planted in gardens where the soil achieves the residential use soil cleanup objectives; and
(2) a prohibition of single-family housing;

ii. requires a SMP to manage remaining contamination and institutional/ engineering controls at the site;

iii. is the appropriate use category for the following site uses:

(1) day care or other child care facilities;
(2) elementary or secondary schools; or

(3) college or boarding school residential buildings; and

iv. allows for active recreational uses, which includes recreational activities with a reasonable potential for soil contact, such as:

note active recreational examples in this residential subsection

(1) designated picnic areas;
(2) playgrounds; or
(3) natural grass sports playing fields, including surrounding unpaved spectator areas.

3. Commercial. The commercial use category anticipates use by businesses with the primary purpose of buying, selling or trading of merchandise or services. The commercial use category:

i. restricts the use to commercial activities including the buying and/or selling of goods or services, or other uses identified in subparagraph iii below;

ii. requires a SMP to manage remaining soil contamination and institutional/ engineering controls at the site;

The Harbor Point Peninsula was remediated to commercial use

iii. is the appropriate use category for the following site uses:

(1) health care facilities, including hospitals, clinics etc.; or
(2) college academic and administrative facilities; and

iv. allows for passive recreational, which includes recreational uses with limited potential for soil contact, such as:

(1) artificial surface fields;
(2) outdoor tennis or basketball courts;
(3) other paved recreational facilities used for roller hockey, roller skating, shuffle board, etc.;
(4) outdoor pools;
(5) indoor sports or recreational facilities;
(6) golf courses; and
(7) paved (raised) bike or walking paths.

4. Industrial. The industrial use category anticipates use for the primary purpose of manufacturing, production, fabrication or assembly processes and ancillary services. The industrial use category:

i. allows the use of the site only for industrial purposes with access to the site limited to workers or occasional visitors;

ii. includes all of the restrictions set forth in subparagraph 2.i, above; and

iii. requires a SMP to manage remaining soil contamination and institutional/engineering controls at the site.

(c) Land-use exposure assessment. Site use categories are based on use-based exposure assessments to soil that will remain at a site and were developed pursuant to ECL 27-1415(6)(b). These exposure assessments were developed using a number of exposure scenarios which evaluated various receptors, all of which are presented and discussed in detail in the Technical Support Document as defined at 6 NYCRR 375-6.2(b). The use-based soil cleanup objectives (SCOs) for the protection of public health were developed based upon these scenarios. A summary of the receptors and pathways considered in these exposure scenarios, which are the basis of the protection of human health soil cleanup objectives for each of the unrestricted and restricted use categories set forth in subdivisions (a) and (b) above, are summarized in Table 1.12 below.

Table 1.12 Exposure Scenario Receptors and Pathways Used as the Basis for the Development of the Protection of Public Health SCOs

Use Category	Unrestricted	Residential	Restricted Residential	Commercial	Industrial
Exposed Person →	*Adult & Child*	*Adult & Child*	*Adult & Child*	*Adult & Child*	*Adult & Adolescent*
Route of Exposure ↓					
Incidental Soil Ingestion	✔	✔	✔	✔	✔
Inhalation of Soil	✔	✔	✔	✔	✔
Dermal Contact with Soil	✔	✔	✔	✔	✔
Homegrown Vegetable Consumption	✔	✔			
Producing animal products for human consumption	✔				
Groundwater Protection	✔	Consider per 375-6.5	Consider per 375-6.5	Consider per 375-6.5	Consider per 375-6.5
Ecological Resource Protection	✔	Consider per 375-6.6	Consider per 375-6.6	Consider per 375-6.6	Consider per 375-6.6

1. A check mark in the box indicates the person considered (e.g., child, adult) by category and route of exposure were included in the evaluation to determine the SCO for each use category. For example, the restricted residential exposure does not have the boxes for "Homegrown Vegetable Consumption" or "Raising of Livestock" checked, accordingly these activities are not allowed in the restricted categories.

2. When groundwater or ecological resources are impacted by soil contamination at a site, the SCOs for the protection of groundwater or ecological resources will apply, respectively per 6 NYCRR 375-6.5 or 6 NYCRR 375-6.6. Since the unrestricted use SCO already has accounted for both protection of groundwater and ecological resources, the box is checked and there is no need to consider their applicability.

1.13 Standards, Criteria and Guidance

(a) Applicability. The standards, criteria and guidance (SCGs) discussed in this section are intended to apply to the remedial program, unless good cause exists why conformity with particular SCGs should be dispensed with.

1. An index to potentially applicable New York State SCGs is provided on DEC's website identified in the table of contents, which lists some of the SCGs potentially applicable to site investigation and remediation activities conducted in New York State. This list is neither meant to be comprehensive nor to imply that all of the listed SCGs are appropriate for every investigation or remediation conducted.

2. The remedial party must also comply with other federal and local SCGs, if applicable to the site, which are also identified on the website SCG page.

(b) SCG description. SCGs as defined at paragraph 1.3(b) 71, are promulgated requirements and non-promulgated guidance which guide site activities during investigation and remediation.

1. Standards and criteria are set forth in Federal or New York State law. They are cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations which are generally applicable, consistently applied and officially promulgated under federal or State law that are either directly applicable or relevant and appropriate to a contaminant, remedial action, location, or other circumstance.

2. Guidance includes non-promulgated criteria which should be considered, for investigation and/or remediation.

1.14 Sustainability and Green Remediation

(a) Role of green remediation in remedial programs. Green remediation seeks to minimize ancillary environmental impacts such as green house gas emissions (GHGs) from remedial programs. Applying green remediation concepts, such as minimizing energy consumption, maximizing the reuse of land and the recycling of materials, and conserving natural resources helps to achieve that objective.

1. Green remediation concepts will be applied to the cleanup of contaminated properties such that the remedies are protective of public health and the environment, economically sound, and as sustainable as possible.

2. Green remediation is not intended to encourage, and does not justify, implementation of a "no action" or lesser remedy when a more comprehensive remedy is called for, appropriate, and feasible.

3. Consistent with existing laws and regulations, consideration of green remediation

From: <Klenkel>, "Laurie E (PARKS)" <Laurie.Klenkel@parks.ny.gov>
Date: Thursday, November 12, 2015 at 11:09 AM
To: Lisa Nagle <lnagle@elanpd.com>, "birchwoodarch@yahoo.com" <birchwoodarch@yahoo.com>
Cc: Steve Eckler <steve.eckler@obg.com>, Paul Romano <paul.romano@obg.com>
Subject: RE: 15PR06038 Utica Harbor Redevelopment Project

Hello Lisa—
Thanks so much for addressing our request for additional information. Unfortunately, we don't have the ability to access drop box. If you wouldn't mind, you could do one of 2 things:

1. Mail a CD to the address below, to my attention.
2. If the file is smaller than 30MB's you can uploaded it directly to our online data base, called CRIS. Here are the instructions to do so; you'll need this project number 15PR06038 and your email address.

Go to www.nysparks.com/shpo/online-tools/. Once on the CRIS site, log in as a guest and choose "submit" at the very top menu. Next choose "submit new information for an existing project." Here's where you enter the project number noted above and your e-mail address. For help: use the "Contact Us" and "Help" functions in the upper right hand corner of the screen. You can also email crishelp@parks.ny.gov for help. More Help: you may find more information about submitting projects electronically at the "Submitting a New Consultation Project" section of the CRIS online help system https://cris.parks.ny.gov/CRISHELP/topics/idh-topic120.htm or by viewing a 10-minute video walkthrough of the consultation submission process at https://youtu.be/6nP_Wvpr2mw.

Please let me know if you have any questions; I look forward to reviewing your project.

Very truly,
Laurie

Laurie Klenkel
Historic Sites Restoration Coordinator
Technical Preservation Services Bureau

New York State Parks, Recreation & Historic Preservation
Division for Historic Preservation
Peebles Island State Park
P.O. Box 189
Waterford, New York 12188-1089
PH 518.268.2170 | laurie.klenkel@parks.ny.gov
www.nysparks.com/shpo

From: Lisa Nagle [mailto:LNagle@elanpd.com]
Sent: Wednesday, November 11, 2015 9:40 AM
To: Birchwood Archaeological Svcs; Klenkel, Laurie E (PARKS)
Cc: Steve Eckler; Paul Romano
Subject: Re: 15PR06038 Utica Harbor Redevelopment Project

Hi Laurie,

We have completed a DGEIS and are in the final stages of preparing a FGEIS. Here is a link to the GEIS document which contains the information you requested from Dave. If you need further information please feel free to contact me.

If this link does not work just let me know and we can send you a CD. https://www.dropbox.com/sh/g8596p3xyvzt35m/AAC7ENxL9fHxPbGW8pMjZcewa?dl=0

Thank you.

Laurie Klenkel
Historic Sites Restoration Coordinator
Technical Preservation Services Bureau

New York State Parks, Recreation & Historic Preservation
Division for Historic Preservation
Peebles Island State Park
P.O. Box 189
Waterford, New York 12188-1089
PH 518.268.2170 | laurie.klenkel@parks.ny.gov
www.nysparks.com/shpo

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

November 30, 2015

Ms. Lisa Nagel, Principal
Elan Planning, Design & Landscape Architecture
18 Division Street, Studio 304
Saratoga Springs, NY 12866

Re: DEC
Utica Harbor Redevelopment
City of Utica, Oneida County
15PR06038

Dear Ms. Nagel:

Thank you for providing the additional information as requested by the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have received the electronic copy of the City of Utica's SEQRA Draft Environmental Impact Statement and are in the process of reviewing the materials in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources.

This new information provided negates our previous letter of November 9, 2015. We note on page 147 of the DEIS document, it is stated: "The UHLDC and the City of Utica are coordinating development activities with SHPO. These efforts are focused on the development of a LOR between the New York State and the City of Utica, which will guide Master Plan Activities within the APE to minimize and mitigate potential impacts to the Historic District."

We look forward to continuing to consult with you regarding the specifics of this project. When available we would appreciate additional correspondence be provided via our Cultural Resource Information System (CRIS) at www.nysparks.com/shpo/online-tools/. Once on the CRIS site, you can log in as a guest and choose "submit" at the very top menu. Next choose "submit new information for an existing project." You will need this project number and your e-mail address. If you have any questions, I can be reached at (518) 268-2180.

Sincerely,

Laurie E. Klenkel
Historic Site Restoration Coordinator
e-mail: Laurie.Klenkel@parks.ny.gov

via e-mail only

Steve Eckler

From: Klenkel, Laurie E (PARKS) <Laurie.Klenkel@parks.ny.gov>
Sent: Tuesday, December 01, 2015 9:35 AM
To: Birchwood Archaeological Svcs; Lisa Nagle
Cc: Steve Eckler; Paul Romano; Susan Rivers; Perazio, Philip (PARKS)
Subject: RE: 15PR06038 Utica Harbor Redevelopment Project
Attachments: 15PR06038_Utica Harbor Redevelopment__ADDTL COMMENTS_11-30-15.pdf; SAMPLE DRAFT LOR_from SHPO.pdf

Hello Everyone—
I just prepared this letter, attached, to update you on the technical review of the DEIS (CD sent November 12, 2015). But now that you've updated me with this email before sending this letter, I'll give you a briefing here:

On page 147 of the DEIS document, it is stated: "The UHLDC and the City of Utica are coordinating development activities with SHPO. These efforts are focused on the development of a LOR between the New York State and the City of Utica, which will guide Master Plan Activities within the APE to minimize and mitigate potential impacts to the Historic District."

And stated in Change Order 12.1.15: "Birchwood Archaeological Services will prepare a historic structure report for two structures located within the Utica Harbor a warehouse constructed in 1917 and a machine shop dating to 1933. This work has been conducted at the request of the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP)."

I am not aware that the preparation of a LOR has been initiated, or that SHPO has requested the preparation of an HSR for these resources. Please provide clarification on this if available, otherwise the next step should be the preparation of a LOR to mitigate project impacts. A sample LOR is attached for your reference.

Please note that our archeology staff has not reviewed this project yet and a determination of impact cannot be provided until after their review. Archeological comments will be sent in a separate letter.

I'm happy to help with the preparation of the LOR, or answer any questions you may have.

Very truly,
Laurie

Laurie Klenkel
Historic Sites Restoration Coordinator
Technical Preservation Services Bureau

New York State Parks, Recreation & Historic Preservation
Division for Historic Preservation
Peebles Island State Park
P.O. Box 189
Waterford, New York 12188-1089
PH 518.268.2170 | laurie.klenkel@parks.ny.gov
www.nysparks.com/shpo

From: Birchwood Archaeological Svcs [mailto:birchwoodarch@yahoo.com]
Sent: Tuesday, December 01, 2015 1:06 AM
To: Lisa Nagle; Klenkel, Laurie E (PARKS)

LETTER OF RESOLUTION
AMONG
NEW YORK STATE OFFICE OF PARKS, RECREATION & HISTORIC PRESERVATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AND
LUTHER FOREST TECHNOLOGY PARK
REGARDING THE REMOVAL OF X STRUCTURES
15PR00789

WHEREAS, the site changes proposed by the Luther Forest Technology Park ("Sponsor") will require a xxx permit by the New York State Department of Environmental Conservation (NYSDEC); and

WHEREAS, the NYSDEC has consulted with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP), in accordance with the Section 14.09 of the New York State Parks, Recreation, and Historic Preservation Act of 1980 and 9 NYCRR §428, and

WHEREAS, OPRHP has determined that the former Malta Rocket Test Station is eligible for inclusion in the State and National Registers of Historic Places, and

WHEREAS, the Sponsor is proposing to reuse a 2+ acre portion of the Tech Park campus for on-site construction worker training and parking, and

WHEREAS, this new use will require the removal of several buildings and structures which have been determined to contribute to the significance of the former Malta Rocket Test Station Historic District including following: No. 9 (Pump Assembly), No. 9 (Underground Shafts 1 & 2), No. 29 (Igniter Storage), No. 29A (Black Power Storage), No. 29B (Igniter Storage and No. 29C (Squib Storage), and

WHEREAS, OPRHP has consulted with representatives of the New York Department of Environmental Conservation (DEC) who are involved with the Project through a required permit in accordance with Section 14.09 implementing regulations of the New York State Parks, Recreation and Historic Preservation Law.

NOW, THEREFORE, the OPRHP, DEC and Sponsor agree that the Project shall be implemented in accordance with the following stipulations in order to take into account the impact of the undertaking on historic properties.

STIPULATIONS
The New York State Department of Environmental Conservation and the Sponsor will ensure that the following measures are carried out:

Structure Documentation Requirements (final product: 2 original, printed, hard copies)
The structures listed above are to have their current conditions documented using the following format:

Photographs
Photographs submitted as documentation should be clear, well-composed, and provide an accurate visual representation of the property and its significant features. Submit as many photographs as needed to depict the current condition and significant features of the property.

- Digital photographs should be taken using a ten (10) mega pixel or greater digital SLR camera.

- Images should be saved in Tag Image File format (TIFF) or RAW format images. This allows for the best image resolution. RGB color digital TIFFs are preferred.
- Selected images for documentation package should be printed as follows: 1-3, 8 by 10 inch views of the overall facility. Sufficient 5 by 7 inch additional images to fully document the present condition of all elevations the facility (several interior images representing open spaces as well as representative images of typical rooms).
- Several historic images (if available) depicting the facility should be reprinted at the 5 by 7 inch size and included in the documentation.
- Images should be printed on a high quality color printer on compatible high quality photographic paper stock (HP printer use HP Paper, Epson printer use Epson paper)
- Each photograph must be numbered and that number must correspond to the photograph number on a photo log or key. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.
- Write the label information within the white margin on the front of the photograph using an archival photo labeling pen. Label information can also be generated by computer and printed directly in the white margin (no adhesive labels).
- Do not print information on the actual image – use only the photo margin or back of the photograph for labeling.
- At a minimum, photographic labels must include the following information: Photograph number, Name of the Property, County, and State.
- Photos should be placed in archival quality photo sleeves. Two (2) sets of images should be produced.

Historic Narrative

A brief narrative history pertaining to development and construction of the Malta Test Rocket Test Station property should be provided. Historic period documentation, *if available*, should also be included.

Plans/Drawings

Copies of construction plans, *if available*, should be reproduced and included in the documentation package.

CD Copy

The final report (including images and a PDF version of the Historic Narrative) should be saved on digital media (CD, DVD, or USB thumb drive) and included with each of the two final bound documentation packages.

Report

Two original printed, hard copies of the report are requested: one copy of the report should be mailed to OPRHP, Division for Historic Preservation, P.O. Box 189, Waterford, NY, 12188 for forwarding to the State Archives and another copy of the report should be sent to an appropriate local repository such as a historical society or library. Completed reports are to be submitted no late than *six months* after demolition begins.

Signature Page Follows

EXECUTION AND IMPLEMENTATION of this Letter of Resolution evidences that DEC and the Sponsor have satisfied Section 14.09 responsibilities.

New York State Department of Environmental Conservation

_____ Date: _____
Charles E. Vandrei, Agency Preservation Officer

New York Office of Parks, Recreation and Historic Preservation

_____ Date: _____
Ruth L. Pierpont, Deputy Commissioner for Historic Preservation/Deputy SHPO

Luther Forest Technology Park

_____ Date: _____

Name:_____

Title: _____

State Environmental Quality Review Act (SEQRA)
Final Generic Environmental Impact Statement

CITY OF UTICA – HARBOR POINT REDEVELOPMENT
Utica, New York

Appendix B
Public Hearing Transcript

* * * * * * * * * * * * * * * * * *

UTICA HARBOR POINT

MASTER PLAN IMPLEMENTATION

DRAFT GEIS PRESENTATION

* * * * * * * * * * * * * * * * * *

Tuesday, September 15, 2015

* * * * * * * * * * * * * * * * * *

HELD AT: North Utica Community Center
50 Riverside Drive
Utica, New York

COMMENCING AT: 6:00 p.m.

REPORTED BY: Nora B. Lamica
Court Reporter/Notary Public

PRESENT:

Lisa Nagle, Principal
ELAN Planning, Design, Landscape Architecture, PLLC
18 Division Street, Suite 304
Saratoga Springs, New York 12866

Steven M. Eckler, Senior Managing Scientist
O'Brien & Gere
333 West Washington Street
PO Box 4873
Syracuse, New York 13221

Paul D. Romano, P.E., Project Manager
O'Brien & Gere
101 First Street, 4th Floor
Utica, New York 13501

Mayor Robert Palmieri
City of Utica
One Kennedy Plaza
Utica, New York 13502

Brian Thomas, Commissioner
City of Utica
Department of Urban and Economic Development
1 Kennedy Plaza
Utica, New York 13502

Vin Gilroy, Chairman
Utica Harbor Development LDC
258 Genesee Street
Utica, New York 13502

Allison Damiano-DeTraglia,
Vice President/Account Services
The Paige Group
258 Genesee Street, Suite 204
Utica, New York 13502

Catherine Manion,
Public and Media Relations Manager
The Paige Group
258 Genesee Street, Suite 204
Utica, New York 13502

Also Present:

Gene Allen
Mary Beth Allen
Ed Bucciero
Howard Bushinger
Barb Cremer
Frank Dragotto
RoseAnn Givertino
Emil Hrycan
Beth Irons
Doug Joslin
Della Krol
Chris Lawrence
Jack LoMedico
Joan Majinski
Jared Malenewski
Richard Mas
Mark Mojave
Emil Paparella
Paul Risley
Tom Sanno
Fred Sokolowski
Robert Steffensen
Samantha Testa
Tim Trent
Brett Truett
Daniel VanDyne
Lucille Vincent
Ron Vincent
Ed "Butch" Waszkiewicz

P R O C E E D I N G S

MR. GILROY: I'm Vin Gilroy. I'm the Chairman of the Harbor Development Corporation. We were here a few months ago, I think it was October, and gave a little presentation on some of our plans and some of the stuff we've been working on. If you saw the press this weekend, we got some great press - thank you very much - on the positive things that are going on down there and some of the ideas we have.

We have Lisa Nagle from Elan here, who is going to give you the specifics, because I don't know them as well as she does. And if we could let her get through her presentation, and then we'll open the floor up for questions and see where we go from here, all right? Thank you.

MS. NAGLE: Thanks, Vin. Good evening, everyone. How is everybody doing? I didn't know if we would get a crowd, it's so nice outside.

UNIDENTIFIED SPEAKER: We could go outside and sit.

MS. NAGLE: Oh, that would be great. It's a wonderful day after such a hot summer.

So my name is Lisa Nagle, and I'm with Elan Planning and Design, and I hail from Saratoga Springs. I've been working with the City of Utica on this project since 2013. I just want to introduce -- because I'm not doing this alone. It's a big project. I have a great team of folks over here helping work with us.

We have Brian Thomas from the City Community Economic Development Office. He's going to become critical later, because you could submit your comments on this document until September 28th to his office, and I'll go over that. So Brian becomes an important person if you want to submit comments.

We have Paul Romano and Steve Eckler from O'Brien & Gere. Paul is an engineer, and Steve and I will be tag-teaming, doing this planning related work.

And then we have -- over at the table we have The Paige Group. We have Allison Damiano-DeTraglia and Cat --

MS. MANION: Manion.

MS. NAGLE: I can never pronounce your last name, but The Paige Group is helping organize all

of this. I don't know if anybody saw the TV clips or the article from the O-D. We have the O-D here. We were trying to get the word out to get as many people here as we could, and it seemingly worked, so we're happy about that.

So what I'd like to do is go through a brief presentation. As Vin said, if you would permit me to walk through it, we're going to have plenty of time at the end for some discussion.

I'm going to talk about why we're here. For those of you who are not familiar with the project, I'm going to go over a little bit of the background so you can see what -- the project overview.

I'm going to talk about the SEQR process, so this is your first acronym - I promise I won't use that many acronyms - but it means the State Environmental Quality Review Act, SEQR, S-E-Q-R. This is a tool that New York State provides for the evaluation of larger projects, of which this is a large project. And I'm going to explain why we use this tool in this project in just a moment.

I'm going to tell you what we learned. I'm going to summarize it. And then we'll talk about

what the next steps are so you can see what's forthcoming.

We have a sign-in sheet, and we ask that everybody sign-in. The Paige Group is our publicist in getting information out. We did provide a brochure. Make sure everybody gets one. And in it, I'm going to be walking through these orange boxes when I get to those slides. It's going to be a summary of the document that we put together. It describes this process. So I'm basically going to summarize a lot of this brochure.

The most important thing about this brochure is in the lower left-hand corner, which is the website for the project. So all the material you're going to see today is on this website. We have, also, some historic photos and a historic article that was written by not only our engineer, but our resident historian, Paul Romano. Very interesting read if any of you wonder how the harbor got to Utica in the first place, some background on that, pictures of the plans that you're going to see. Everything is on that website. And we're also going to take comments on

that document at this website. I'll go over this again at the end, but I just wanted to make sure that you have a brochure.

So as we get started, what I'm going to be summarizing is what we call a Generic Environmental Impact Statement, which it's this. It's about 180 pages, and these are the appendices on all the special studies that we did. So I'm going to attempt to summarize a lot of information for you, and then take some comments at the end.

So what's the purpose of tonight's meeting? It's to review this document with you, which you'll be able to follow along in the presentation. There are index cards also at the table, so if you have questions or comments that you want to write down to return back to us, we'll do that. I'm going to give one caveat. We're going to try to answer questions as we can. The purpose of tonight's meeting is to really take comments. It is a public hearing. It's to receive questions and comments from you.

We have a stenographer with us, a court stenographer, who is going to be recording everything that everybody says.

We're going to go away, largely Steve and I, and answer all of those questions and comments. So you will get an answer, but you may not get it tonight, because it may be something we need to do some further research and confer about. So I don't want you to think I'm ignoring you. I just want to put that caveat out there. So we'll answer sort-of the easier questions, if you will. Even if we answer it, you're still going into the document of recorded questions and comments.

If you -- you have until September 28th to submit comments, so you can do that through the website or to Brian's office, or if you don't want to comment tonight, just simply write something down. You can take a card, an index card, and write your question and comments down and then return it back to Brian's office or drop it tonight to either Allison or Cat.

MR. ECKLER: I just want to add. For people that are filling out those cards, it would be very helpful if you put your name and your affiliation with an agency, or if you're just here as a member of the public. We would like to have that information.

MS. NAGLE: I just noticed we have two City Council representatives, who are also sitting on the Local Development Corporation Board with us, Sam and Ed. Thanks for coming. I just wanted to recognize them.

So let's talk about how this project got started. In 2008, then Governor Paterson created legislation that would transfer approximately about 33 acres to the City of Utica.

I'll just orient you to this map. Here is the Mohawk River. Here is the Erie Canal. So the Thruway interchange would be right about here, Aqua Vino is here. As we come down Genesee Street, now many of these buildings are gone so you can kind-of -- you can almost see the harbor, where before you couldn't because those buildings were still there. But there's a sort-of spatula-shaped harbor that was created, and the area shaded in the lighter yellow is the lands that are set to be transferred to the City of Utica.

The City of Utica setup, then, a Utica Harbor Local Development Corporation, which Vin Gilroy is the Chairman. Sam and Ed sit on the LDC, as well,

and they're the ones -- we're working with the LDC to do this project. So when the land is transferred, it actually goes to the Local Development Corporation.

This project idea came from all of you. Back in 2011 was the Utica master plan. A lot of public outreach. Some of you may have attended those meetings. And a lot of people said, "Hey, let's use our waterfront. It's underutilized. Can we use it for other things?"

And all of those -- and then there were other studies that went on, and in each and every study, the message was consistent, "We have an underutilized waterfront. Let's use it again for something special." So this project is intended to implement the public input that we received from these past planning efforts.

So in 2013, we began the implementation of those ideas. How do we create a waterfront? 33 acres are being transferred, but we're really studying about 160 acres. We continued to do additional public meetings. We had some here. We met with individuals in the community. We did a market study. We asked if something were built

here, what could it be? Is there retail? Is there commercial? Is there office? Is it recreational? We asked those questions, and we have a professional on our team that looked at those. We looked at working with the canal, because, of course, if that land is transferred -- hello, Mayor.

MAYOR PALMIERI: Good evening.

MS. NAGLE: We looked at the canal relocation, because, of course, when those lands are transferred, the canal is operating there today. So we're working with the canal to find a home for them, where they can be.

And then we came up with what we call alternative land use concepts, so we looked at a couple of ideas in terms of what could be built here at the harbor.

So over about a year-and-a-half period, we created some -- two options on the master plan. I'm going to orient you again. Same image. This is Genesee Street. The Thruway is up here, Mohawk River, Erie Canal. The harbor is coming in this way. And anything orange that you see are new buildings with associated parking, but the intent

of this is to really look at a vibrant, mixed use waterfront with bars and restaurants and shops, services for boaters and travelers. We have a marina in here. All that's sort-of over here, up here in this area, which we call the dredge spoils area. The Canal Corporation is currently putting dredge spoils in this area.

We looked at this area and we said, "Well, what can that be?" And we started to look at a mixture of uses with residential and commercial uses so that we can have some residential uses, primarily say apartments or living to really feed into Marcy Nano, so folks that are coming to work at the goings on over at Marcy or Utica Nano have a place to live.

Over on what we call the west side of the harbor, that's where National Grid is doing their cleanup, so we started to look then at the cleanup of that area, what we can do. We've been working with National Grid. National Grid sits on the Local Development Corporation Board. And we started to look at potential recreation, sort-of passive and active recreation on that side of the harbor. I'll go into more of this in detail.

So to sort-of simplify that busy looking drawing -- that drawing, by the way, is on the back of -- or is in the brochure.

As we look at this to simplify it. Anything red is really sort-of commercial or mixed use commercial. Blue would be more waterfront, so we have our marina in the water, promenades, walkways. If you've ever traveled and were able to go to a waterfront and enjoy just simply walking and sitting on a bench on a nice day such as today, that's what we're envisioning here. Anything green is more recreational-oriented with very passive -- more moving towards -- north towards the lock, because that area is in a flood plain. And perhaps we're even thinking about can we do some commercial uses that relate to the water. So if a use comes in and says, well, they would use the canal or use the harbor for commercial shipping, for example, we're looking at that potential.

So all this continued to sort-of be in our blender and our filter, and as we worked with the Local Development Corporation, we came up with a final plan. And this is in the Generic

Environmental Impact Statement. This is the preferred master plan, and it's really not that different. It's just not as pretty as the first plan. We're still looking at the same uses. We're still looking at a mixture of residential, commercial, entertainment, waterfront uses, restaurants, local crafts, local foods. There's a lot of local food movements going on. And really, we're looking at that as a complimentary use to many of the other things that are going on in Utica, mainly Bagg's Square east and west, and of course the Aud with the Comets and the popularity of that hockey team.

So one thing I wanted to mention, too, is connections. So we have Genesee Street, Mohawk River, harbor. As you come over Genesee Street onto -- down to downtown in the central business district, this is the John Street off-ramp. And the DOT is actually going to be working on that later this fall and widening the sidewalk. Right now it's only about a two-foot-wide sidewalk. It's a very narrow sidewalk, but we're envisioning this -- if we can improve that -- first we'll get the sidewalk in. If we can improve that, that

becomes a physical connection to Bagg's Square east and west, The Children's Museum, the train station, the farmer's market, the coffee shop, and the new bakery and all these things that are happening and continue to happen on Bagg's Square east and west. So we're very excited that all of these uses really compliment each other and really help the City of Utica.

So let me talk about the State Environmental Quality Review Act process. This is the more drier part of the meeting. That was the more exciting part. Sorry.

So we've been busy. We were here actually on October 24th, last year, and we did a scoping meeting, and some of you attended that meeting. And at that meeting, we said these are all the things we're going to study, and we studied all of those things, and I'm presenting the findings to you here today.

The lead agency for this is the City Common Council. So we met with them back in July, and they accepted the document. They accepted this body of work as what we say is complete and now we're here for a public hearing. So we're right

about down here.

And we're guided by state guidelines, so we do have a thirty-day public comment period, which is why we're leaving this open until September 28th for a public comment period. So you don't have to get all your comments in this evening. And I'll come back at the end to the final steps as we move along.

We're not doing this alone. There are a number of agencies that we have coordinated with since the beginning, and we continue to coordinate with. In our SEQR world, they're called involved agencies. It's really hard to take a dry topic and -- so they're called involved agencies, and those agencies include the Department of Environmental Conservation, the Department of State, who is a major funder of actually a lot of this work - we want to recognize that; the Department of Transportation, they're doing a lot of work, of course, as I mentioned, the John Street bridge; Empire State Development, another major funder of this effort through State grants to the City of Utica; SHPO, that's the State Historic Preservation Office. Many of you

probably know that the canal and the associated buildings last summer were listed onto the National Register of Historic Places, so we have a lot of coordination to do with them. And we're happy to do that, because those are very interesting buildings, but we will have a lot of coordination with them as we go forward. And then other county and the Water Authority.

So each of those agencies are actually getting this body of work, and they will present their own comments, as well. In fact, we already started coordinating with the Department of Transportation and DEC on some of these matters in this document.

So what is a Draft Generic Environmental Impact Statement? As I said, we were in here in October and we did a scoping meeting. We basically did a table of contents. We said we're going to study all of these things, which we did.

So what we're trying to do -- and these are sort-of SEQR terms. The goal is to evaluate potentially significant adverse impact to the environment. I'll summarize a little bit. That's the goal of the State Environmental Quality Review

Act. For any project that comes in, there is some level of review, some lower levels of review, some higher levels of review. This is the highest level of review that we're doing, because we want to make sure that the implementation of the plan that I just showed you doesn't adversely affect the environment, and that's really what the purpose was of preparing this.

We do consider some alternatives, from doing nothing to some phased building, for example, a phase out building as we move forward, and I'll talk about those.

So that's what it is. So why did we do it? Well, it's really integral for the LDC and the City of Utica to have this as we move forward. It's the first time where we've had a body of work where we can look at everything from transportation, to flood planes, to cultural and archeological resources, to storm water impacts, to all kinds of different things, which are inside of your brochure. And so it presents us a body of work so that the LDC and the City can make informed decisions as we go forward. Without all of this information, the LDC was sort-of operating

in the dark.

So with our engineers, with our planners, with our designers, we've all been doing a lot of work and a lot of research, which is why we've been a little bit quiet for the last year, because it took a lot of time to pull all this information together. And I'm pulling this information together.

The second bullet is really the most important, and this is what we call -- I'm going to give credit to Steve Eckler. He came up with this, "Advances the project to a build-ready state."

So if every project in New York State has some level of review through the SEQR process, that means that if a private developer were to come in at the end of the day and try to build what we've designed, they would have to do all of this themselves. So what we're doing is trying to jump start that process and evaluate some of the key components that any private person will have to do. So we're helping pre-permit, if you will, or bring this project to a build-ready state. And this is critical, because we're looking at -- I'll

cut to the chase. We're looking to have SEQR done by the end of this year, which means we'll be able to look to solicit private development interests in 2016. And then lastly, it does guide the fulfillment of the master plan and all the other previous planning studies the city has done.

So what have we learned? So this is the piece that's in your brochure. So I'll paraphrase some of this. I won't go into this in a lot of detail. Again, if you've had a chance just to read the GEIS before tonight and have questions/comments, we're going to receive those this evening. You can go back and read the body of work and see what other questions you might have. Some topics may be of interest to you versus others. Some people might not care about groundwater and some people might care more about cultural and archeological resources. That's okay. We all have our own interests.

So you can go back and research the document. Each of these topic areas is its own chapter in the GEIS, so you can read it. Each chapter is formatted the same. It's a little dry, but you can look at it and look at our research.

So we looked -- on this slide -- I'll go through a series of slides. We looked at zoning, and land use, and public policy, and I've already mentioned this. We just want to make sure that the master plan as it's being designed and presented is consistent with any previous planning efforts, and we've already talked about that.

Community services. This is the thing that we look at in terms of will there be an impact on police or fire, schools, hospitals, recreational resources, community services. And what we did learn is that it will increase the demand for services - of course, we're going to have more people and more buildings - but it wouldn't be beyond the capacity that the existing community service entities have. They'll be able to service this project. Remember what we're looking for. Is there any significant adverse impacts on the environment?

So geology, soils and topography. We're looking at -- we're looking at the soils in there. It is an area that's had a lot of fill over the years, so we looked at that, and we said, well, the impacts are primarily limited construction

phase. So when buildings go in, we have to consider how they're built in terms of their stability. For example, like The Holiday Inn when it was built has a special sort-of foundation under it. I'm oversimplifying, but in terms of being able to be on that soil.

And then the last bullet is an important piece. We looked at also importing fill. So I told you the area up here is their dredge spoils area. You can look at it in like Google or Google Earth. This is actually an open body of water, it looks like on the Google maps, and they put their dredge spoils in that. So we're just designing now filling that and closing it so we can cap it, and build this mixed use residential commercial area on it. So we evaluated that.

The next thing we looked at were natural resources, plants and animals. So we actually had -- went out where the wetlands were. We did some field studies, and looked at birds and plants and those types of things, and we did not find that the master plan would impact them.

We looked at groundwater and surface water resources, and -- let me see -- what do I want to

say about this? The -- I guess to summarize here, we'll look to storm water and how it's designed. So we don't want runoff of storm water impacting any further areas. We're actually going to look to what we call green infrastructure and try to implement some of that, which is more of like a -- sometimes porous pavement or porous sidewalks or rain gardens, things of this nature, that help hold the storm water.

And then wetlands. There are some wetlands over on the National Grid side that they actually disturbed and rebuilt, so we're going to avoid those wetlands.

And then flooding. We're not looking at any development that's in the floodway. The entire area is in a flood plain, and as many of you know, sometimes it floods over Genesee Street. The tip of the harbor up here is actually in the floodway. There's no development allowed in a floodway, and then the development within the flood plain will adhere to the city's flood regulations that they have on the books.

We looked at infrastructure and we determined that there's enough capacity to service the master

plan. We looked at traffic and transportation, so cars coming in and out of the project onto North Genesee Street. And really the only area that may need improvement would be Wells Avenue. And that goes into this mixed use residential/commercial area. So when this is built, we will look to see how we improve Wells Avenue, according to our traffic engineer who did an analysis. He said, "Okay. If you're going to build this, you're going to have to deal with Wells Avenue and get cars in and out."

Air quality. We'll -- we didn't see any impacts from air quality, and we always look to mitigate that during construction.

We looked at visual resources. Sometimes SEQR -- I told you, we're looking for significant adverse impacts to the environment, but there's also positive impacts. And there's nothing wrong within this document to note the positive impacts. So we said here this would be a positive impact to the city and the city skyline. It's very pretty if you've been into that area looking back at downtown and the Hotel Utica, and to the right with a new lit sign. It's a very beautiful part

of the city.

Hazardous materials. This area was one of the oldest industrial areas. It was the largest energy production area at the turn of the last century. So yes, there's hazardous materials. National Grid is in their cleanup phases. We'll continue to coordinate with the Canal Corporation and the DEC as we move forward.

Solid waste and construction. We recognize it will be a short-term construction contract impacts, as with any construction job.

Last slide. We didn't note any impacts from noise, odor and light. Again, another positive.

The socioeconomic impacts. We noted the positive impacts with job creation, an increase in the city's tax base, which is important for many cities in upstate New York. And then the cultural resources, and that was a big one that I started to talk about earlier, that we closed -- the Barge Canal is on the State's National Historic Register, and we'll continue to coordinate with the State Office of Historic Preservation on the use of those buildings.

Okay. So the next step is what we're going

to do, as I said, is we'll answer some questions, though sort-of the simpler questions, if you will. We're going to receive all your questions and comments tonight with our stenographer. We will then read them and prepare answers to all of them. That will go into what we call a Final Generic Environmental Impact Statement. So the comment period closes on September 28th, and we have a busy October to receive and answer all of your questions and comments, and we'll publish the Final Generic Environmental Impact Statement.

The Final Generic Environmental Impact Statement is actually the answer to your questions. That will be placed online on the website. So if anybody wants any of these extra brochures for friends or family, please feel free to take them, but again, if you want to keep this website handy.

Once the FGEIS is done, we prepare what is something called a Findings Statement, and the Findings Statement becomes the critical piece, because it says if you come in and build the master plan as we've designed it, and you're within sort-of -- the Findings Statement are

essentially the guidelines. So if you're within our guidelines, your environmental quality review, your obligation to satisfy SEQR is complete. Somebody may propose something different, or something bigger or something, they'll have to do a supplemental to this document. But largely, we prepare the Findings Statement, which are kind-of guidelines. I'm simplifying a little bit, but they're kind-of guidelines for the future development for anybody to come in and undertake any of these activities. That's what we call the build-ready state. As long as you're within our guidelines, you're done with this step. That's what we call the build-ready state, and that's what that says.

So UticaHarborPoint.org. That's the website. It's on here. And before we open it up to the floor, I'm just going to ask my colleagues if I forgot anything.

MR. ECKLER: You did great.

MS. NAGLE: The full document -- so this is the document, and these are the appendices, all of these. So the appendices have a traffic analysis. We did a cultural and archeological survey, a

visual survey if you're interested in that. It's actually a pretty interesting document, a lot of old photographs. That's an interesting one. What else is in here? Flood plain analysis, geo-technical report. So this has a lot of technical background, and this is the interpretation of that background. Anything else?

And Brian -- if you cannot access on the internet, Brian Thomas has a hard copy in his office, and we have CDs, too. If anybody wants a CD to take back, we can get you that. I just want to make sure I didn't forget anything.

So now we're going to do comments and questions.

COURT REPORTER: And if anyone has comments or questions, they need to identify themselves and spell their name so that I can record it accurately on the record.

MS. NAGLE: Okay. I'll repeat that. If you have any comments or questions, please identify yourself and spell your name for Nora, and it would help to say where you're from, or if you're representing a group. We were talking to Butch earlier about the Children's Museum, for

example, Howard about the historic calendar, things of that nature that's of interest to us, so we know how to reach out back to you. We'll go to Howard first.

MR. BUSHINGER: I have a question. Bushinger is the last name, Howard Bushinger. Do you want me to spell that?

COURT REPORTER: Please.

MR. BUSHINGER: B-U-S-H-I-N-G-E-R. I'm curious. The two large bodies of water, ponds let's call them adjacent to the harbor, what's the purpose of those? Do they have something to do with the decontamination?

MS. NAGLE: Those are just wetlands. They're wetlands that actually National Grid cleaned and then put the wetlands back in their state.

MR. BUSHINGER: Because they were not -- they didn't exist not too long ago, right?

MR. ROMANO: Yeah. It's a triangular area right next to the harbor, right, you're talking about to the west?

MR. BUSHINGER: Yeah. They're large.

MR. ROMANO: That's a temporary structure

where National Grid is putting sediment. That will be closed at some point in time. It's a temporary sediment base.

MR. BUSHINGER: It's temporary?

MS. NAGLE: It's actually right here.

MR. BUSHINGER: Question answered. Thank you.

MR. ROMANO: I was asked to clarify. Dredge spoils is really another term for sediment taken out of the harbor or river that they need for either navigation, or in the case of National Grid, for cleanup. So the spoils or sediments go into a dredge spoil area, a sediment basin.

MR. BUSHINGER: Thank you.

MR. LOMEDICO: Jack LoMedico. It's L-O-M-E-D-I-C-O. Just a quick question on the mitigation portion, being that it is a flood plain. Is there going to be like flood gates in there and ponds and things of that nature, so if it does -- if we do have a wet area where the water is going to go, or are they going to build it so many feet above the flood plain? What's the plan on that?

MS. NAGLE: Well, those are the next set of details. So that's one of the questions that we'll take and answer in the Final Generic Environment Impact Statement, unless you want a generic answer, but it could be --

MR. ROMANO: There's a lot of -- I mean, there's a lot of layers to that question. It's probably better off in the commentary.

MS. NAGLE: We'll provide a detailed answer to that, but you can --

MR. LOMEDICO: You're working on it, right?

MS. NAGLE: Yeah.

MR. ROMANO: I would say the flood plain part of it is different -- as part of building in a flood plain is one part of this. As far as controlling flooding is -- flooding is a little different aspect to it.

MR. LOMEDICO: My main concern is somebody is going to invest in the area, and they're going to put a building there. They certainly will want to have some conditions that they know -- there's got to be things in place where they're not going to be flooded out, which make sense.

MS. NAGLE: And the city also has detailed

flood plain regulations. They're administered through the planning and engineering office, and we'll comply with those.

MR. ROMANO: From a general standpoint, I mean, there are regulations that you have. You can't do anything that's going to raise --

COURT REPORTER: I can't hear you. You're going to need to speak -- I know you're answering him, but if I can't hear you, I can't record it.

MR. ROMANO: Because of the regulations the way they are, anybody that builds within a flood plain is virtually unheard of. Secondly, in order to -- you have to -- you have to prove as part of getting -- of obtaining the permit, that you're not raising a one-hundred-year flood elevation. You can't exacerbate a problem that already exists or move that problem --

COURT REPORTER: I can't hear you again.

MR. ROMANO: As part of the permitting process, you have to document that you're not going -- that your development is not going to raise the one-hundred-year flood elevation. Essentially, to put that in kind-of a layperson's term, that if you're building something in a flood

plain and a hundred-year flood comes, it's going to hit -- it could hit that building and then move those floodwaters into a new area. So you're actually raising the hundred-year flood somewhere else. So the permitting process is a means to document that you're not going to do that. You're going to either flood-proof, or you're going to potentially raise it above -- two feet above the flood elevation.

MR. LOMEDICO: So the plan is to make sure that it doesn't hit the high water mark on the hundred-year into the area; is that correct?

MS. NAGLE: Essentially. We'll answer this more completely in the FGEIS.

MR. LOMEDICO: And the Army Corp of Engineers has bought off on all this, correct?

MS. NAGLE: We will continue to coordinate with them.

MR. LOMEDICO: So they haven't bought off on it yet?

MS. NAGLE: Right, because we're still -- we're sort-of -- even though we've done a lot of work, we're really in the early stages, so engineering and design is about to happen. So

we've done our analysis of potential impact. When we do that, that's when we coordinate with the permitting agencies.

MR. LOMEDICO: Thank you very much.

MR. WASKIEWICZ: Butch Waszkiewicz, W-A-S-Z-K-I-E-W-I-C-Z. I know we have dockage there, but I want to make sure we have dockage for our fellow kayakers and canoeists and rowers, because that requires some special dockage different from a twenty-six-foot boat. So I just want to make sure that we do have the proper dockage for them in the harbor.

MS. NAGLE: Thank you.

MR. VINCENT: Ron Vincent, V-I-N-C-E-N-T, resident. With all the plans that are proposed for the entire project, what would be the most -- first step to be taken? What can we expect to see next as the first thing that's going to happen in this development?

MS. NAGLE: Well, that's also a multi-faceted approach -- answer in terms of what we get. The goal is to really start to talk to private development interests in 2016. So that, to me, is probably one of the more important,

exciting things.

MR. VINCENT: Well, it's like when a developer starts a development, the first thing they do is their infrastructure, lay the roads and get everything ready, and then all of a sudden you start seeing homes going up.

MS. NAGLE: Right. Right.

MR. VINCENT: And what I'm seeing here is, okay, we're going to have housing. We're going to have restaurants. We're going to have this. We're going to have ball fields. We just tore down the building on Genesee Street. And am I right in assuming that the next step would be maybe an entrance road?

MS. NAGLE: Right. Exactly. Yes.

MR. ROMANO: We can say the Wurz Avenue entrance is being planned right now into the harbor, and the public road network will be expanded throughout the area. As far as -- that's a multi-faceted question as far as phasing, what happens next. Some of it's dependant on what areas become available working with the Canal Corp, and what areas become available on the other side with National Grid property. So some of that

depends on some of those factors, so I think I'm going to have to explain in the answer some of these.

MAYOR PALMIERI: If I could just interject a little bit. I think that we're looking over a long term of the harbor. The harbor, I guess on the development side, the right side where we're talking about, the buildings and the restaurants, I think that's going to take a little longer than potentially the recreational side of the facility, that may be able to be accelerated a little bit more at this time.

So I think from a residential standpoint of looking at it, I think you might be able to see a little bit more happening there than on the right side, just because of the environmental, the impact, the study, our piece that goes out and the whole thing.

MS. NAGLE: The gentlemen next to you. I'm going to give everybody a chance to speak.

MR. HRYCAN: Hi. My name is Emil Hrycan, E-M-I-L, last name Hrycan, H-R-Y-C-A-N. I'm for this development, but I'm not for this development. I don't see it as -- I mean, some of

these buildings that you got going on in here are buildings we already have, like in North Utica, like a shopping center. We have a shopping center in North Utica.

The soccer fields and baseball fields. We have Murnane Field. We have Proctor Park.

Looking at the waterway. I don't see anywheres where somebody could pull in and launch a boat if they want to get into the river. People are going to be coming in through the lock system to here, to see this.

The building that's sitting there right now, the maintenance shop says 1933 on top of it. We're suppose to be historic Utica. That would be nice to leave that building there as a maintenance building for boats that come in that have a problem, and they look at the thing and it's built in 1933. Have pictures of the harbor and Utica just laying around the area in the buildings.

There's a short building, a wooden structure that's sitting there. That's been there since the early 1900s. If that can be lifted up and moved over somewhere's, and have that a little time capsule, a museum of some sort that, you know,

here's the history of Utica. Seeing houses being built down there, seeing businesses being built down there, I don't see that.

The amphitheater, maybe it will draw a crowd down there to have concerts. That would be beautiful to have like an amphitheater down there, but then you've got to take into consideration again the flooding. That floods down there. Water rises up there. It goes over the harbor walls, the marina walls, and it's got to be thought over better. It really has to be thought over better.

To preserve some of the buildings that are sitting there, it would be nice to keep them there. Add something else to it, but to jump to build all this, I think we're going on this too fast.

MS. NAGLE: We'll answer your question in detail, but we went through a lot of information in a very short period of time, and much of what you described is in the plan. So I guess I could say rest assured --

MR. HRYCAN: There's a lot more I would like to say, but I --

MS. NAGLE: There's a lot. We are saving the '33 building. We are saving the 1917 building. We are -- even though they're all sort-of colored the same, they're structures that are proposed to be either saved or moved.

So that's a little finer edge than what we're here to talk about with the SEQR process, but -- and we'll answer you more thoroughly in the FGEIS, but much of what you talked about is in the plan.

MR. HRYCAN: Is there a boat launch going to be there for people to use?

MS. NAGLE: Yeah. We're looking at all kinds of marina uses. This is still an image. We want a marina, whether it goes here, here, here. We don't know yet. This is just -- this is the plan. We're still back here, and we're about to move into more detail.

MR. HRYCAN: Thank you.

MS. NAGLE: Sure. Go ahead.

THE WITNESS: My name is Doug Joslin, D-O-U-G, J-O-S-L-I-N.

My first concern is the fill materials. I want to make sure that the fill materials is not junk that we get from demolishing old buildings,

that the fill materials is clean, hard fill, like top soil. I want to make sure that the top soil goes in there, that it's not a dump site like Proctor Park is right now.

I also want to look toward sustainability. We have all kind of trash receptacles, no recycling. Recycling is mandatory. I want this area to be eco-friendly and sustainable. I want there to be recycling, mandatory recycling. I want it to be easy for people to recycle, not to mix it with the garbage.

My other concern is the safety. As you were saying, the John Street ramp. You can't ride a bicycle on the sidewalk when there's somebody walking there. You have to get off the bike, get off the sidewalk, and let the people walk by. There has to be something so that it's safe for not only pedestrians, but for bicycling.

I see in the plans that you have plans for pedestrians and bicycling to Bagg's Square. We need a plan for bicycling in North Utica. Currently it's dangerous, because the bike path ends at the DOT, and then they have to fight the traffic on Genesee Street in order to get to the

bike path on Route 5, and there's no signage. They have no idea. I see the bicyclist looking at their maps and trying to figure out where to go and how to do it safely. I need you to incorporate the safety of the bicyclists into North Utica and through North Utica, because we have bicyclists that bicycle from Buffalo to Albany. We need good signage and we need safety. We need it to be safe for bicyclists.

MS. NAGLE: Thank you.

MR. JOSLIN: Thank you.

MS. NAGLE: Okay. Thank you very much. Those were great suggestions. Howard, go ahead.

MR. BUSHINGER: Howard Bushinger. There was a large building that was formally the Department of Public Works, I believe, a big brick building, took up maybe an acre or two there. I wonder if that piece of property that's on Wurz Ave. on the corner of North Genesee, is that being broken up, or is that being sold as a separate piece or --

MR. ROMANO: 105-109, that's been taken down recently by the city. That's being incorporated into the entranceway improvements

that are being planned right now on Wurz Ave. So that's part of the whole beautification underway to the harbor. It's a very slim parcel.

I'm sorry if I've gotten the wrong building. Are you talking about the old Department of Public Works that was recently removed, or no?

MR. BUSHINGER: Yeah, the big building that came down.

MS. NAGLE: Back here on Genesee?

MR. BUSHINGER: If somebody said, "I want to build something there", it will be available?

MR. ROMANO: Well, right now, the width of that parcel -- the road is being widened there for a turn lane, an extra turn lane, because of the studies and everything. And we need an area so you have a nice view of the future harbor, and you have some features there, landscaping features that capture the image of the master plan for the harbor and the mixed use development.

Right now, it's part of the landscaping plan and the master plan.

MR. BUSHINGER: There will be big changes there?

MR. ROMANO: Oh, absolutely.

MS. TESTA: Do you have an image of what the entrance will look like?

MS. NAGLE: I don't have it with me, but we did do that image, yes. I think it's on the website.

MS. TESTA: You can go on the website and check it out, and it actually gives you a better image of what the entrance is going to look like.

MS. NAGLE: Sam just -- for those of you that couldn't hear, we actually took -- it's the building that the city recently took down during Wurz Ave. improvements, road improvements. Where that building was is a very narrow -- it's actually a very small parcel, even though the building looked quite large. Once we got it down and looked at it, it's very small, very narrow.

So we've actually done sort-of a birds-eye view into the harbor, and that's on the website so you can see. It's one idea, actually another early idea, but what we're talking about is that that's a main gateway into the harbor.

So maybe there's sort-of a water feature here, something that draws your eye, some landscaping for bicycles and pedestrians, safe

access in through here. And that's part of the next phase that we're working on.

UNIDENTIFIED SPEAKER: To followup, I heard a rumor that that's for sale, that piece of property there. Is that --

MAYOR PALMIERI: Not to our knowledge. The parcel that went down, the one up by 109, you said that was for sale?

UNIDENTIFIED SPEAKER: It's on the computer. It's for sale, $900,000.

MR. THOMAS: You're talking about the privately-owned property that's just to the north of that?

MAYOR PALMIERI: To the north of that, that's not owned by the city.

UNIDENTIFIED SPEAKER: The DPW -- the old DPW building?

MR. THOMAS: It doesn't include that property. What you're talking about is the two parcels immediately north of where that building sat. Those are privately-owned and they are --

MAYOR PALMIERI: They're privately owned. It's not the City of Utica.

MS. NAGLE: Anybody else before we're back

to Ron?

MR. VINCENT: Ron Vincent, still a resident. I don't know if you people have ever been there, but it might behoove you. There's a little town called Victor, New York. Apparently I don't have to say anymore. If somebody was to go out there and just walk along that canal and see all the little businesses that are out there -- and they're little micro-businesses. I mean, they have a lumberyard that was about the size of this room. I mean, it was interesting. My wife and I were there for a couple of nights staying in a hotel. And to talk about the foot traffic and bicycling around that place, it was phenomenal. We ate at a restaurant that overlooked the canal.

MS. NAGLE: Is that Fairport or Victor?

UNIDENTIFIED SPEAKER: Fairport also has --

MS. NAGLE: Right. Those are great analogies, yeah.

MR. VINCENT: It was just beautiful. There were people driving, walking, riding bikes there.

MS. NAGLE: That's great. Thanks, Ron. Any other questions? Butch?

MR. WASZKIEWICZ: Butch Waszkiewicz,

W-A-S-Z-K-I-E-W-I-C-Z. There is currently a large canopy over there that's been used for the soil remediation. That could be enclosed as an indoor sports facility for year round use.

MS. NAGLE: That's exactly what we had planned on here. That's this. We nicknamed it the Parthanon.

MR. WASZKIEWICZ: Beautiful.

MS. NAGLE: That's what we started calling it. It's a nice building. It's not going anywhere. It's built really well.

MS. IRONS: Beth Irons, I-R-O-N-S, North Utica resident. I also manage the Oneida County Public Market at the train station, and I'm on the Board of Directors for the Bagg's Square Association.

I see on here that you have trails. Are those multi-use, like walking, bicycling, and that kind of thing?

MS. NAGLE: The intent will be to incorporate multi-use here, both. This gentleman's comment, good pedestrian access, bicycle access, even transit to get people in here.

MS. IRONS: I also have like a semi-retired hat of sitting on the Board of Directors for the Utica Marsh Council.

So with this plan, is there potential at some point in the future, and I would just leave that dangling out in the wind somewhere, to join with the trail system into the marsh?

MS. NAGLE: Yes. We -- it's just off of here, but we were looking at -- because we're just focusing on this, I didn't mention it, but there's the tourism line, the rail line.

MS. IRONS: Yeah, the Adirondack Scenic Railroad.

MS. NAGLE: So we were looking at potentially accessing in there and having a kayak or boat launch, perhaps, on the Mohawk River. That was something that we had been talking about.

MR. TRENT: My name is Tim Trent, T-R-E-N-T. My question is -- well, my comment first and then my followup question.

There are millions and millions and millions and millions and millions and millions of cars on the Thruway driving between -- cars and other vehicles driving between Albany and Buffalo.

Every one of those vehicles has people in them, and probably somewhere around $100 a piece. If you do the math, that's probably in the billions of dollars driving right through North Utica, a quarter of a mile away from this site, with an interchange right there. In addition to that, we have the railroad that runs the same span and other regional routes.

My question is: What is there about this project in particular that is designed or intended to pull those vehicles and those people with those dollars from outside our area into our area?

When we talk about economic development, that is passing us by. The kinds of things I'm imagining are something like the Water Safari in Old Forge that pulls tons of people up there all year, and they don't have the access to traffic that we do. Saratoga Performing Arts Center, Canandaigua Performing Arts Center in the Canandaigua Community College, something like the performing arts venues at the State Fair, the Chevy Court and whatever they call it, especially during the summertime. People would come from all over the state, via the Thruway, to attend events

that are that accessible to the Thruway.

The Waterloo Premium Outlets just this side of Rochester, I travel to Rochester once or twice a year. Every time I go to Rochester, I plan a four-hour visit to the Waterloo Premium Outlets, and I always leave some money there.

Those are the kinds of things I'm imagining and always imagined that would be worked into this design going back to the days of Henry Morehouse, Sid Overman (phonetic), Don Klein, when downtown was a reality. The businesspeople always asked the Downtown Utica Development Association, which may or may not exist any longer, I don't know -- always asked, "What are we going to do to get people off the Thruway to come to our community?" And this is a once in a lifetime, and I mean once in my lifetime anyway, opportunity to accomplish that objective.

So my question, to repeat, is: What has been designed into being built into this project to pull those people in those numbers?

MS. NAGLE: That's another one we'll answer in more detail in the FGEIS, but in the beginning of this document, there's a detailed breakdown of

all the different uses that we have in our -- this is sort-of the simplified version, but there's all of that. The answer is all of that.

So again, I'm trying to paraphrase a large document in a short presentation, but this whole blue area is all -- somebody mentioned Pittsford and Fairport and Victor. This is a large scale of that. Buffalo is doing their waterfront right now as a destination. Syracuse has it. In its entirety, this entire project is the destination. You can come by car, transit, bike, foot, boat, marina, amphitheaters.

We're looking at potentially larger scale recreational, softball, which we've met with -- there's a huge softball league in the city that draws from all around the region. Recreational entities in their entirety themselves -- I was just having this conversation with somebody yesterday -- generate the economic impact of tourism from both youth and adult leagues is huge, because people travel there. They come here.

We're looking at over here commercial and residential development, which will really serve either empty nesters, people looking to downsize

out of their house, or people coming to work at some of the new announcements over at Utica Nano, Marcy Nano facility.

So in its entirety, this -- the older building, the 1933 building, we're envisioning that as one of the -- we sort-of call it a food emporium. That's the best thing we can come up with right now, but it's really intended to be -- you're coming to try Saranac beer. You're coming to try all of the local offerings that are here.

And so you can imagine umbrellas and tables, and chairs and benches, and people just coming to sit and watch the world go by, and look at the water and watch the fish jump, or the eagles fly over or what have you, the resurgence of some nice wildlife in the whole of the Mohawk River.

So in its entirety, it's being designed -- what you just described is really the goal of the Utica Harbor Local Development Corporation, is to take this once in a lifetime opportunity and create a destination for people to come to the City of Utica and get off the Thruway and enjoy a whole host of offerings.

MR. TRENT: I'm imagining not just a

destination. I'm imagining an irresistible destination.

MS. NAGLE: That's good.

MR. TRENT: Something that people driving the Thruway cannot resist visiting, because it's that exciting.

MS. NAGLE: That's a good tag line. I like that.

MS. IRONS: Beth Irons, North Utica resident. I just want to clarify what Mr. Trent has mentioned.

I'm on the Board of Directors for the Oneida County Tourism, and Oneida County alone, right now, today, generates over one billion dollars in tourism economy for upstate New York every year. One billion dollars. So this, I think, does a great job building on what we're already doing right. We've got a chunk of the harbor right in our lap, right in our front door. We're not utilizing it to its potential. This makes an attempt to do that. Whether the final product looks like it does on the picture is kind-of irrelevant at this point. The idea is planting the seed and developing the plan and moving

forward in some direction with support.

We have softball tournaments that run in South Utica now that bring people -- we already have people coming off the Thruway. We have people coming off international planes to come to Utica for multiple reasons, and this just feeds off of that, I think. I think the whole thing should be commended. I think thinking outside the box is exactly what you needed to do, and this is a great attempt to do that.

MR. MOJAVE: Mark Mojave, also from the Bagg's Square Association, M-O-J-A-V-E. I encourage the -- and I'm just speaking for myself. I encourage the idea of an enhanced pedestrian/bicycle connection to everywhere, and in particular to the north, Bagg's Square.

And has any thought been given not to just a pedestrian or bicycle connection, but if one were to be established, how it might fit into -- I guess I'm encouraging steps to be taken now to anticipate the idea of a pedestrians connection, just, I think, as a property owner, merchant in Bagg's Square. If people were parking down at the harbor, which I'm not against it, but I don't

think that they're going to come all the way out and then over and then into Bagg's Square. They're not going to want to then have to walk all the way back to where their cars are parked. So I think that in terms of encouraging walking.

MS. NAGLE: Point well taken. So just a clarification. DOT is actually widening this sidewalk. It's planned in October, November of this year, to actually widen the sidewalk on the John Street bridge.

So we jokingly say this is Utica's high line. So we'll let the DOT get the sidewalk widened, and then we'll look and see if we can enhance it so it's a comfortable pedestrian experience, because you still have cars going by you and bikes and what have you. There is some discussion of how we could potentially make this connection on Washington Street over the railroad tracks, whether it's a pedestrian bridge or a gondola --

MAYOR PALMIERI: Or helicopters.

MS. NAGLE: -- or helicopters, drones that can carry people.

UNIDENTIFIED SPEAKER: Liability would be too high.

MS. NAGLE: But yeah, we're considering what that could potentially be. Obviously it's very costly. Anybody else before I go back to Ron?

MR. VINCENT: Just a suggestion. Ron Vincent. Just another suggestion.

Where you're talking about the sports fields and things over there. If I'm reading this right, on the other side of the tracks is all that open property, some of it owned by the city. Maybe that could eventually be turned into a parking area.

MAYOR PALMIERI: I hope not. Economic development. I would hope that we could utilize that greater for revenue.

MR. VINCENT: With an access bridge over to that point.

MAYOR PALMIERI: An access bridge, yes.

MR. VINCENT: And now you've killed a couple, three birds with one stone. You've got parking there, accessibility to the sports fields and the whole harbor, and the other half of the people can go over here to have a cup of coffee, eat some stuff.

And another thing. In that sports field, you ought to think about a bocce area. You could be in competition with Rome. Have the bocce tournaments in Utica.

MAYOR PALMIERI: I'm sure we can do that.

MS. IRONS: A harbor point trolley --

MS. NAGLE: A harbor point trolley.

MS. IRONS: -- and offer transportation.

UNIDENTIFIED SPEAKER: That's a good idea.

MR. JOSLIN: Doug Joslin, J-O-S-L-I-N. Have you abandoned the plans for the amphitheater? I don't see it on here.

MS. NAGLE: No.

MS. IRONS: It's right at the end of the harbor, isn't it?

MR. JOSLIN: I'm seeing sports fields, softball fields.

MS. NAGLE: No. It's -- I mentioned when we started in 2013 we did two alternatives. This is (A). I didn't show you (B), just in the interest of time.

Here the amphitheater is -- we're actually thinking of the water -- in the water where you could watch from here. And the other alternative

that we had had this sort-of raised where the triangle of water is where somebody else asked about earlier, and the amphitheater being in the water. So you're sitting here and looking out at the water. That's actually one of the preferred ideas of the Local Development Corporation. So it's not lost. It's just --

MR. JOSLIN: It's just not in here. Okay.

MS. NAGLE: But no, that's not lost.

MR. JOSLIN: How big would it be?

MS. NAGLE: We don't know yet. Again, it's an idea.

MR. JOSLIN: Because again, we'd like to see cultural venues, concerts, things like that, and an amphitheater would be perfect for that.

MS. NAGLE: It is very much in the plan.

MR. JOSLIN: Thank you.

MR. BUCCIERO: Ed Bucciero, B-U-C-C-I-E-R-O. One of the major points of developing this particular area, and the way we're going to develop it, is that we want it to be a four seasons type of development, not just a summer, where you can walk and bicycle and utilize this, and then eight months out of the year it

becomes a ghost town, because nobody wants to traverse the North Utica bridge, and/or there's no other mechanism to get to downtown or some of the other hotels that are downtown.

So connecting this harbor to downtown was a major point that the Mayor had made when we first discussed and had our first -- very first meeting. And I commend him for that, because again, if we can connect downtown, and we can connect the auditorium, and we can create a triangle of venues that people will come off the Thruway to participate in, this just being one of them.

And to go to Mark's thought and some of the other comments that were kind-of -- I don't know if anybody could hear them, but they were talking about a trolley, there were talking about a pedestrian bridge. One of the things we've got to make sure of is whatever the mode of transportation is that are going to get people from this development to downtown, it has to accommodate that we're a four seasons community. So we have to keep people in shelters when they're going to be making that transition from the harbor to downtown or to the auditorium.

So there are a number of thoughts, and every one of them is on the table, believe it or not. I'll make sure every one of them is on the table, and that's from a gondola to a trolley to a bridge to bus transportation to anything that we can -- and then we'll analyze each and every one of them from its productivity, its practicality, its financial feasibility, and making sure that we pick one or possibly two of those particular transportation modes so that we can accomplish the overall goal of making this a four-season venue, not just a summer venue.

I hear a lot of talk about what we're going to do during the summer. That's why we want to have residential. That's why we want to have light industrial. That's why we want to have retail. So we want to be able to utilize this area all year long.

So when the Comets are playing -- they play in the wintertime -- and they're going to be drawing people off the Thruway. This is a place that they're going to want to stay, eat, and enjoy. We're going to have outdoor venues for winter skating rinks, things of that nature.

So that this is going to be utilized continuously to bring commerce to the City of Utica and to this area.

So we are going to be considering each and every one of those transportation modes, and the best ones will win out. And we'll do our best to make sure of that.

MS. NAGLE: While there's a little bit of a lull, I'm just going to remind everybody that the public comment period is open until September 28th. You can provide your comments to Brian Thomas, Community Economic Development Office at City Hall. He also has a hard copy of this document there. The document is on the website, which is on this brochure. You can submit your comments through the website. There's index cards up here if you'd like to leave another comment, or if you've written comments and want to give them to Cat or Allison on your way out, that would be great.

After September 28th, we'll be responding to each and every question and comment, and we'll prepare what we call the Final Generic Environmental Impact Statement, and that will be

late October. And that will be online, as well.

So I want to remind everybody. If you don't have a question now, if you're sitting here contemplating some other thoughts but you want some more time to formulate them, you have it. The 28th is a week from next Monday, two weeks from yesterday.

MR. DRAGOTTO: Frank Dragotto, D-R-A-G-O-T-T-O. Lisa, is this working in conjunction with the MV-500 program project?

MAYOR PALMIERI: Yes.

MS. NAGLE: Yes.

MR. DRAGOTTO: I was in Johnstown about five weeks ago. I spoke with Alicia Dix and Laura Cohen. I also spoke with John Swan.

I have a bold, innovative concept that I think is going to work perfect for this area. I think it's going to help a lot of people. It's going to create jobs, economic development. It's going to revitalize possibly a building. I have spoken with a number of people on this, also Mr. Bob Albrecht, who is the chairperson for Keeping Mohawk Valley Beautiful. I actually had breakfast with him about a month ago. We

discussed this. He's interested in possibly doing something like this in Little Falls, but I think it would be great for the Utica area, because it's a bigger area.

To make a long story short, it is a theater. I know we're looking at an amphitheater here. This is a different theater. It's actually a movie theater. It offers first run movies, but it's also a training theater. It trains disabled people, disabled veterans, veterans, all kinds of people, and it's going to create a lot of jobs.

We haven't had a good movie theater in Utica in years. These old buildings are terrific buildings to revitalize. It would be great. I remember when we used to have the Olympic, the Avon, the Stanley used to show movies, the Rialto. There was so many different movie theaters, neat-looking movie theaters. People love these old buildings. I think this would be perfect for this area, and it's going to create jobs and economic development and everything that we really need and want here. I think this is perfect for this area.

I did bring some information. I've been

working on it for about six months now. I did bring some information. I'd like to leave some with Mayor Palmieri if I may, possibly Mr. Gilroy and whoever else may want to take a look. I did bring --

MS. NAGLE: That would be great. You could leave one with Allison and we'll get it to the team.

MR. DRAGOTTO: That would be terrific. And again, I think it's our ticket to winning the 500 million dollars. It's different. It's special. I think it's going to set us apart from everybody else who is in this competition. Thank you.

MS. NAGLE: Thank you. Questions or comments? We're here for about another -- well, we'll be here for as long as you like, but we'll be here until 8:00.

If there's no more questions or comments, we can just be here if you want to chat, but we encourage you to formally submit questions or comments by the venues that I had said. If there's no more questions, I thank everybody for coming.

MR. TRENT: I'll ask one more question. Tim Trent. Has there been any input solicited from other communities in the region, especially those along the waterway like Marcy, Whitesboro, Oriskany, Frankfort, Ilion, assuming that this would emerge eventually as a regional -- irresistible, regional destination?

The impressions, the concerns, interests, desires of people in communities around the region might inform the thinking and decisionmaking about what we do here.

Again, I'll just say, this is a once in a lifetime opportunity to create something that I'm not sure how many people can imagine at this point. And it would arise out of that kind of dialogue, perhaps.

MS. NAGLE: Thank you. Any other questions or comments?

Well, I don't know if Vin or the Mayor have any closing thoughts. I'll thank everybody for coming and providing your input. It's very valuable for us. It's been extremely interesting, some great ideas.

MR. STEFFENSEN: I have one comment. It's

not on this thing. It's a wonderful thing that the old bank building has been rebuilt into a restaurant and everything.

MS. NAGLE: The landmark building?

MR. STEFFENSEN: Yeah, apartments. Is there any thought -- anybody talked about apartments in the top of the Hotel Utica?

MS. NAGLE: I don't know the answer to that.

MR. STEFFENSEN: I think it would be a perfect thing.

MAYOR PALMIERI: The key is, at this point when we're talking about Hotel Utica, hopefully they are marketing that. The current owner, I don't think, honestly doesn't have the wherewithal, the financial, to do -- to not even pay the taxes at this point.

So I guess what we would be looking for, and to your point, there was somebody that looked at the facility to potentially put a hotel there, a flagship, but the cost was millions and millions of dollars more than they anticipated.

I'm -- on a consistent basis, I'm talking to some people, because the last thing we want to do

is to see that building become dark.

So to your point, I think lofts, suites, mixed use restaurant. I think Hotel Utica has ambiance like no other building that we have in the City of Utica. And thank God that things are happening, because there is interest in that building and it's not dormant the way it was before. But to your point, it's exactly what we envision.

MR. STEFFENSEN: Because that would give you enough income to start paying taxes if you had thirty apartments up there.

MAYOR PALMIERI: Again, that would be some of the professionals determining what they want to do with that. It would be looking for a brand, also, along with that, someone that has run a hotel. The building is structurally wonderful, but it's a little bit old and it needs some money. It needs a lot of money to bring it up to standards. But I think with everything that's happening in the city, I think you will see some good things happening, hopefully in the near future.

MR. STEFFENSEN: We don't have to wait for

the grandchildren to see it.

MS. NAGLE: Can you just -- even though that was about the Hotel Utica, could you identify yourself for Nora, your name?

MR. STEFFENSEN: Steffensen, S-T-E-F-F-E-N-S-E-N, Robert.

MS. NAGLE: Thank you very much.

MR. HRYCAN: Emil. When this does become a reality and work starts to come forward on this, where is the funding coming from? Who is going to be paying for this, the taxpayers, all us taxpayers, or is this going to be state money?

MS. NAGLE: Another complicated answer.

MR. HRYCAN: Having the harbor development --

MS. NAGLE: Much of it is -- we already have a significant amount of state grant dollars that is funding all of our work to date through the Empire State Development Corporation and the New York State Department of State Local Waterfront Revitalization Program. Both of those entities have provided funding to the City of Utica to fund this whole body of work that you've seen and continuing. Once you get in with some of

those state funding agencies, they become really nice partners that you can kind-of keep going back to.

We'll look to the MV-500 plan for funding. The idea is to have public -- some public dollars for some of the public infrastructure, so the streets and the sidewalks. Private dollars then undertake the development.

So it would be a public/private partnership in the end. Good question. Thanks.

We're here to answer any more questions. So thank you so much for coming. We appreciate all your input and appreciate your time on such a beautiful evening. Thank you.

(Whereupon, the Proceedings concluded at 7:21 p.m.)

C E R T I F I C A T I O N

I, NORA B. LAMICA, Shorthand Reporter and Notary Public within and for the State of New York, do hereby CERTIFY that the foregoing record taken by me at the time and place noted in the heading hereof is a true and accurate transcript of same, to the best of my ability and belief.

Nora B. Lamica

NORA B. LAMICA
Court Reporter/Notary Public

Dated: September 28, 2015

State Environmental Quality Review Act (SEQRA)
Final Generic Environmental Impact Statement

CITY OF UTICA – HARBOR POINT REDEVELOPMENT
Utica, New York

Appendix C
Traffic Impact Study Addendum

LOCHNER

Lochner Engineering, P.C.
181 Genesee Street
Suite 300
Utica, New York 13501

T 315.793.9500
F 315.793.9530

www.hwlochner.com

December 15, 2015

Beth Watts, PE, PTOE
Planning and Program Management
New York State Department of Transportation
Region 2 Office
207 Genesee Street
Utica, NY 13501

Re: Harbor Point Redevelopment Traffic Impact Analysis, Utica, New York
Response to Comments on Draft GEIS for Harbor Point Development
Lochner No. 10083

Dear Ms. Watts:

In response to the NYSDOT's comments dated September 25, 2015 on the Draft Generic Environmental Impact Statement (DGEIS) for the Harbor Point Development, additional studies have been undertaken. The traffic analyses were updated to reflect the reduction in southbound Genesee Street lanes between Wells Avenue and the John Street/Broad Street ramp. An analysis of the future No-Build scenario was also performed. As requested, a traffic signal warrant analysis for the Genesee Street/I-790/Thruway Ramp intersection was also performed. The following sections summarize the findings of each of these studies:

1. Signal Warrant Study

A signal warrant study has been performed for the Genesee Street intersection with the eastbound I-790/Thruway ramp. Traffic data was collected for the time period from November 30, 2015 to December 3, 2015. The data collected from this 72-hour automated count is included as Attachment A. Table 1 (Attachment A) summarizes the "average day" count information for each approach to this intersection.

An evaluation of the traffic signal warrants outlined in the Manual of Uniform Traffic Control Devices (MUTCD) and the NYSDOT supplement was performed and summarized below.

a. *Warrant No. 1 – Eight Hour Volumes:* This warrant is applicable where a large volume of intersecting traffic is the principal reason to consider a traffic signal. To meet this warrant, specific traffic volumes on the major street and the higher volume minor street approach must be met or exceeded for at least 8 hours of an average day. From Table 4C-2, Eight Hour Vehicular Volumes for this intersection exceed 600 vph (total of both Genesee Street approaches) and 200 vph on the ramp approach. As shown in Table 2 (Attachment B), these volumes are exceeded for 12 hours on an average day. As a result, Warrant 1 is met.

b. *Warrant No. 2 – Four Hour Vehicular Volumes:* This warrant is intended to be applied where the volume of the intersecting traffic is the principal reason to install a traffic signal. This warrant requires the volumes of any four hours to be plotted above the applicable curve in Figure 4C-1. As shown in Figure 4C-1 (Attachment B), twelve (12) hours plot above the applicable curve. Warrant 2 is met.

c. *Warrant No. 3 – Peak Hour:* This warrant is intended for use where for a minimum of one hour per day, the minor street suffers undue delay when entering the major street. As shown in

Figure 4C-3 (Attachment B), ten (10) hours plot above the applicable curve. Warrant 3 is also met.

d. *Warrant No. 4 – Pedestrian Volume:* There is no pedestrian crossing of Genesee Street at this location. The warrant is not applicable.

e. *Warrant No. 5 – School Crossing:* There is no school crossing at this intersection. The warrant is not applicable.

f. *Warrant No. 6 – Coordinated Signal System:* This intersection is not part of a coordinated signal system. The warrant is not applicable.

g. *Warrant No. 7 – Crash Experience:* This warrant is applicable where the severity and frequency of crashes are the primary reason for installing a signal. There were four accidents over a three-year period that might be corrected by the installation of a signal. This is less than the five or more per year of criteria B. This warrant is not met.

h. *Warrant No. 8 – Roadway Network:* This warrant could be justified to encourage concentration and organization of traffic flow on a roadway network. The entering volumes for this intersection exceed the minimum of 1,000 vph and currently exceed the thresholds for Warrants 1, 2, and 3. Genesee Street connects downtown Utica to the NYS Thruway (Route I-90) and could be considered a major route. This warrant can be considered as being met.

i. *Warrant No. 9 – Intersection Near a Grade Crossing:* This warrant is not applicable.

2. Conclusions and Recommendations – Traffic Signal Warrant Study

Signal Warrants 1, 2, 3, and 8 are met. Installation of a signal at the Genesee Street intersection with the eastbound I-790/Thruway ramp is warranted. The following "Traffic Analysis Update" section includes an analysis of traffic conditions of this intersection under signal control.

3. Traffic Analysis Update

The traffic analyses for the Genesee Street corridor from Lee Street to the intersection with the eastbound Route I-790/Thruway ramp has been updated to reflect the reduction in the number of southbound lanes between the John Street/Broad Street ramp and Wells Avenue. The lane reduction resulted from traffic mitigation measures implemented with the recent construction of the Fairfield Hotel.

An analysis was also performed for the future no-build condition. This analysis evaluated year 2020 conditions with background growth only and no site development. The results of these analyses are summarized in Table 2. As shown in the table, there is only a minimal decrease in levels of service between the existing and no-build condition.

For the future build condition, it was assumed that the Genesee Street/Wells Avenue intersection would become signalized. Level of services conditions at all intersections, except for the Genesee Street/Route I-790/Thruway ramp intersection will operate at Level C or better. The I-790/Thruway ramp left turn movement onto Genesee Street will operate at Level E during the future under the build out scenario. The right turn will operate at Level of Service C. The result of the traffic analyses are included in Attachment C.

A signal warrant analysis indicated that a traffic signal is warranted at the Genesee Street intersection with the ramps. An analysis of future conditions with build out under signal control would result in this intersection operating at the following overall levels of service:

Time of Day	Overall	Ramp Right Turn Approach
AM	B (18.9 sec)	A (6.6 sec)
Midday	A (5.8 sec)	B (14.1 sec)
PM	A (5.9 sec)	B (14.6 sec)

The results of the traffic analysis assuming signal control at this intersection are included in Attachment D.

4. Conclusions and Recommendations – Traffic Analysis

The analysis shows that Genesee Street will continue to operate at acceptable levels of service. The signalized intersections of Genesee Street/Wurz Avenue and Genesee Street/ Wells Avenue will operate at level of C or better under the build out scenario.

Under stop sign control, the eastbound I-790/Thruway ramp approach to Genesee Street will operate at Levels D and E under full build-out. Converting this intersection to signal control will result in an overall intersection level of service of B or better and the ramp approach operating at Level B or better.

Should you have any questions on these analyses or require additional information, please contact me at 315-292-6163 or via email at bmandryck@hwlochner.com.

Sincerely,

Brian P. Mandryck, PE
Senior Traffic Engineer

BPM/tmc

Table 2

Harbor Point – Level of Service Summary

Intersection/Approach	Control	Existing			Future (No Build)			Future (Build)		
		AM	Midday	PM	AM	Midday	PM	AM	Midday	PM
Genesee St / Wurz Ave	Signal	B (17.2*)	B (17.1)	B (17.5)	B (17.0)	B (17.3)	B (17.7)	C (22.7)	C (20.2)	B (16.5)
Genesee St / Lee St	Stop Sign									
EB Lee St Right Turn		B (12.8)	B (12.4)	B (12.6)	B (13.2)	B (12.8)	B (13.0)	B (12.2)	C (15.2)	B (14.3)
WB Lee St Right Turn		B (11.7)	B (14.0)	C (17.0)	B (11.9)	B (14.5)	C (17.9)	B (14.1)	C (17.8)	C (22.7)
NB Genesee St Left Turn		B (11.0)	B (10.3)	A-B (10.0)	B (11.4)	B (10.5)	B (10.2)	B (12.0)	B (12.2)	B (11.2)
Genesee St / Wells Ave / HESS Station	Stop Sign/Signal**							B (13.2)	B (18.9)	B (15.0)
EB Wells Ave		C (19.4)	D (31.3)	D (33.3)	C (20.8)	D (34.7)	E (37.6)	C (22.4)	C (32.8)	C (24.6)
WB HESS Drive		C (19.8)	D (25.9)	F (51.8)	C (21.1)	D (28.5)	F (62.1)	C (21.3)	C (22.8)	C (21.4)
NB Genesee St Left Turn		B (10.3)	A (9.7)	A (9.6)	B (10.6)	A-B (9.9)	A (9.8)	A (9.6)	B (12.3)	B (12.6)
SB Genesee St Left Turn		A (8.6)	A (9.7)	B (10.8)	A (8.7)	A-B (9.9)	B (11.1)	B (14.3)	C (20.7)	B (15.8)
Genesee St / Harbor Lock Rd	Stop Sign									
EB Harbor Lock Rd Right Turn		B (12.2)	B (11.1)	B (11.0)	B (12.5)	B (11.2)	B (11.2)	B (13.2)	B (12.7)	B (12.2)
WB Harbor Lock Rd Right Turn		B (10.1)	B (11.4)	B (12.9)	B (10.2)	B (11.6)	B (13.3)	B (10.5)	B (13.5)	B (14.7)
Genesee St / Thruway / I-790 Ramp	Stop Sign									
EB Ramp Left Turn		C (18.3)	C (20.1)	D (26.1)	C (19.3)	C (21.4)	D (29.0)	E (36.4)	D (34.2)	E (42.8)
EB Ramp Right Turn		C (22.0)	B (12.9)	B (13.8)	D (25.3)	B (13.5)	B (14.5)	C (21.5)	C (19.5)	C (19.6)

*Average delay in seconds.

**Future condition will be signal control.

ATTACHMENT A

Existing Traffic Volumes

LOCHNER

Table 1

Traffic Count Summary

Genesee Street and I790/TWY Ramp

START TIME	Genesee Street			I790/TWY Ramp Approach		
	NB	SB	Combined	I790	TWY	Combined
12:00 AM	85	62	147	20	35	55
1:00 AM	60	47	107	12	27	39
2:00 AM	46	32	78	19	26	45
3:00 AM	59	25	84	15	27	42
4:00 AM	91	42	133	16	33	49
5:00 AM	145	84	229	52	50	102
6:00 AM	315	232	547	117	95	212
7:00 AM	543	552	1095	251	168	419
8:00 AM	639	575	1214	255	202	457
9:00 AM	722	493	1215	177	166	343
10:00 AM	712	467	1179	148	144	292
11:00 AM	820	494	1314	142	145	287
12:00 PM	960	623	1583	174	131	305
1:00 PM	862	578	1440	167	128	295
2:00 PM	929	529	1458	165	128	293
3:00 PM	1048	555	1603	215	125	340
4:00 PM	1213	541	1754	221	173	394
5:00 PM	876	536	1412	217	175	392
6:00 PM	538	401	939	129	143	272
7:00 PM	449	309	758	87	90	177
8:00 PM	374	232	606	72	67	139
9:00 PM	337	182	519	54	53	107
10:00 PM	204	116	320	41	46	87
11:00 PM	128	82	210	39	35	74
TOTAL	12155	7789	19944	2805	2412	5217

Tri-State Traffic Data, Inc.
TSTData.com
(610) 466-1469

Location: Utica, NY
Road: I-90 Eb Exit Ramp to Sb Genesee St
Segment: 100' before merge with I-790 Ramp
Technician: HD

Site Code: Thruway ramp
Station ID: 000000000000

Latitude: 0° 0.0000 Undefined

Start Time	Mon 30-Nov-15	Tue 01-Dec-15	Wed 02-Dec-15	Thu 03-Dec-15	Fri 04-Dec-15	Average Day	Sat 05-Dec-15	Sun 06-Dec-15	Week Average
12:00 AM	*	31	36	38	*	35	*	*	35
01:00	*	25	33	22	*	27	*	*	27
02:00	*	20	31	26	*	26	*	*	26
03:00	*	34	21	25	*	27	*	*	27
04:00	*	29	36	34	*	33	*	*	33
05:00	*	51	53	46	*	50	*	*	50
06:00	*	85	82	119	*	95	*	*	95
07:00	*	176	167	160	*	168	*	*	168
08:00	183	179	204	244	*	202	*	*	202
09:00	165	196	162	141	*	166	*	*	166
10:00	143	161	155	116	*	144	*	*	144
11:00	133	142	153	153	*	145	*	*	145
12:00 PM	145	142	117	120	*	131	*	*	131
01:00	122	129	150	110	*	128	*	*	128
02:00	125	149	142	98	*	128	*	*	128
03:00	120	131	125	*	*	125	*	*	125
04:00	154	184	182	*	*	173	*	*	173
05:00	180	177	169	*	*	175	*	*	175
06:00	120	138	171	*	*	143	*	*	143
07:00	91	87	92	*	*	90	*	*	90
08:00	71	66	63	*	*	67	*	*	67
09:00	45	50	63	*	*	53	*	*	53
10:00	30	49	59	*	*	46	*	*	46
11:00	34	35	37	*	*	35	*	*	35
Day Total	1861	2466	2503	1452	0	2412	0	0	2412
% Avg. WkDay	77.2%	102.2%	103.8%	60.2%	0.0%				
% Avg. Week	77.2%	102.2%	103.8%	60.2%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	09:00	08:00	08:00	-	08:00	-	-	08:00
Vol.	183	196	204	244	-	202	-	-	202
PM Peak	17:00	16:00	16:00	12:00	-	17:00	-	-	17:00
Vol.	180	184	182	120	-	175	-	-	175

Grand Total	1861	2466	2503	1452	0	2412	0	0	2412
ADT		ADT 2,409		AADT 2,409					

Tri-State Traffic Data, Inc.
TSTData.com
(610) 466-1469

Location: Utica, NY
Road:I -790 Eb Exit Ramp
Segment: 234 Yards West of Genesee Street
Technician: HD

Site Code: 790/EB ramp
Station ID: 000000000000

Latitude: 0' 0.0000 Undefined

Start Time	Mon 30-Nov-15	Tue 01-Dec-15	Wed 02-Dec-15	Thu 03-Dec-15	Fri 04-Dec-15	Average Day	Sat 05-Dec-15	Sun 06-Dec-15	Week Average
12:00 AM	*	21	20	20	*	20	*	*	20
01:00	*	12	11	12	*	12	*	*	12
02:00	*	15	16	25	*	19	*	*	19
03:00	*	19	9	16	*	15	*	*	15
04:00	*	17	16	14	*	16	*	*	16
05:00	*	48	54	55	*	52	*	*	52
06:00	*	120	123	107	*	117	*	*	117
07:00	*	245	253	256	*	251	*	*	251
08:00	248	267	259	245	*	255	*	*	255
09:00	175	174	189	171	*	177	*	*	177
10:00	139	150	153	151	*	148	*	*	148
11:00	153	129	136	151	*	142	*	*	142
12:00 PM	168	164	165	200	*	174	*	*	174
01:00	155	173	169	171	*	167	*	*	167
02:00	164	160	172	165	*	165	*	*	165
03:00	221	218	206	*	*	215	*	*	215
04:00	201	235	227	*	*	221	*	*	221
05:00	214	218	220	*	*	217	*	*	217
06:00	116	119	151	*	*	129	*	*	129
07:00	81	83	98	*	*	87	*	*	87
08:00	78	75	64	*	*	72	*	*	72
09:00	54	51	56	*	*	54	*	*	54
10:00	34	43	47	*	*	41	*	*	41
11:00	38	37	42	*	*	39	*	*	39
Day Total	2239	2793	2856	1759	0	2805	0	0	2805
% Avg. WkDay	79.8%	99.6%	101.8%	62.7%	0.0%				
% Avg. Week	79.8%	99.6%	101.8%	62.7%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	07:00	-	08:00	-	-	08:00
Vol.	248	267	259	256	-	255	-	-	255
PM Peak	15:00	16:00	16:00	12:00	-	16:00	-	-	16:00
Vol.	221	235	227	200	-	221	-	-	221

Grand Total	2239	2793	2856	1759	0	2805	0	0	2805
ADT		ADT 2,790		AADT 2,790					

Location: Utica, NY
Road: Genesee St Sb
Segment: North of I-790 Eb Ramp
Technician: HB

Tri-State Traffic Data, Inc.
TSTData.com
(610) 466-1469

Site Code: 0Genesee St.
Station ID: 000000000000

Latitude: 0° 0.0000 Undefined

Start Time	Mon 30-Nov-15	Tue 01-Dec-15	Wed 02-Dec-15	Thu 03-Dec-15	Fri 04-Dec-15	Average Day	Sat 05-Dec-15	Sun 06-Dec-15	Week Average
12:00 AM	*	47	62	77	*	62	*	*	62
01:00	*	45	40	55	*	47	*	*	47
02:00	*	31	31	34	*	32	*	*	32
03:00	*	32	23	19	*	25	*	*	25
04:00	*	49	31	46	*	42	*	*	42
05:00	*	87	83	83	*	84	*	*	84
06:00	*	247	203	247	*	232	*	*	232
07:00	*	558	532	566	*	552	*	*	552
08:00	*	556	573	595	*	575	*	*	575
09:00	523	491	470	489	*	493	*	*	493
10:00	474	444	462	487	*	467	*	*	467
11:00	498	517	468	492	*	494	*	*	494
12:00 PM	587	627	699	579	*	623	*	*	623
01:00	568	595	562	589	*	578	*	*	578
02:00	547	512	508	549	*	529	*	*	529
03:00	582	530	552	*	*	555	*	*	555
04:00	555	534	535	*	*	541	*	*	541
05:00	534	525	550	*	*	536	*	*	536
06:00	369	363	471	*	*	401	*	*	401
07:00	340	291	295	*	*	309	*	*	309
08:00	230	252	215	*	*	232	*	*	232
09:00	159	177	211	*	*	182	*	*	182
10:00	110	103	134	*	*	116	*	*	116
11:00	81	85	80	*	*	82	*	*	82
Day Total	6157	7698	7790	4907	0	7789	0	0	7789
% Avg. WkDay	79.0%	98.8%	100.0%	63.0%	0.0%				
% Avg. Week	79.0%	98.8%	100.0%	63.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	09:00	07:00	08:00	08:00	-	08:00	-	-	08:00
Vol.	523	558	573	595	-	575	-	-	575
PM Peak	12:00	12:00	12:00	13:00	-	12:00	-	-	12:00
Vol.	587	627	699	589	-	623	-	-	623

Grand Total	6157	7698	7790	4907	0	7789	0	0	7789
ADT		ADT 7,740		AADT 7,740					

Tri-State Traffic Data, Inc.
TSTData.com
(610) 466-1469

Location: Utica, NY
Road: Genesee Street Nb
Segment: South of I-790 Eb Ramp
Technician: HD

Site Code: 0Genesee St.
Station ID: 000000000000

Latitude: 0' 0.0000 Undefined

Start Time	Mon 30-Nov-15	Tue 01-Dec-15	Wed 02-Dec-15	Thu 03-Dec-15	Fri 04-Dec-15		Average Day		Sat 05-Dec-15	Sun 06-Dec-15		Week Average		
12:00 AM	*	82	86	86	*		85		*	*		85		
01:00	*	62	52	65	*		60		*	*		60		
02:00	*	67	39	33	*		46		*	*		46		
03:00	*	60	64	53	*		59		*	*		59		
04:00	*	105	86	82	*		91		*	*		91		
05:00	*	145	136	155	*		145		*	*		145		
06:00	*	286	325	335	*		315		*	*		315		
07:00	*	548	520	560	*		543		*	*		543		
08:00	615	642	627	673	*		639		*	*		639		
09:00	711	721	715	741	*		722		*	*		722		
10:00	696	722	639	791	*		712		*	*		712		
11:00	819	815	849	796	*		820		*	*		820		
12:00 PM	945	969	942	986	*		960		*	*		960		
01:00	855	837	895	860	*		862		*	*		862		
02:00	929	896	867	1023	*		929		*	*		929		
03:00	1045	1052	1047	*	*		1048		*	*		1048		
04:00	1189	1219	1230	*	*		1213		*	*		1213		
05:00	909	865	853	*	*		876		*	*		876		
06:00	566	514	535	*	*		538		*	*		538		
07:00	471	447	429	*	*		449		*	*		449		
08:00	383	375	363	*	*		374		*	*		374		
09:00	225	270	515	*	*		337		*	*		337		
10:00	184	194	235	*	*		204		*	*		204		
11:00	107	133	145	*	*		128		*	*		128		
Day Total	10649	12026	12194	7239	0		12155		0	0		12155		
% Avg. WkDay	87.6%	98.9%	100.3%	59.6%	0.0%									
% Avg. Week	87.6%	98.9%	100.3%	59.6%	0.0%		100.0%		0.0%	0.0%				
AM Peak	11:00	11:00	11:00	11:00	-	-	11:00	-	-	-	-	11:00	-	-
Vol.	819	815	849	796	-	-	820	-	-	-	-	820	-	-
PM Peak	16:00	16:00	16:00	14:00	-	-	16:00	-	-	-	-	16:00	-	-
Vol.	1189	1219	1230	1023	-	-	1213	-	-	-	-	1213	-	-

Grand Total	10649	12026	12194	7239	0	12155	0	0	12155
ADT		ADT 12,036		AADT 12,036					

ATTACHMENT B

Warrant Analysis

LOCHNER

Table 2

Traffic Count Summary

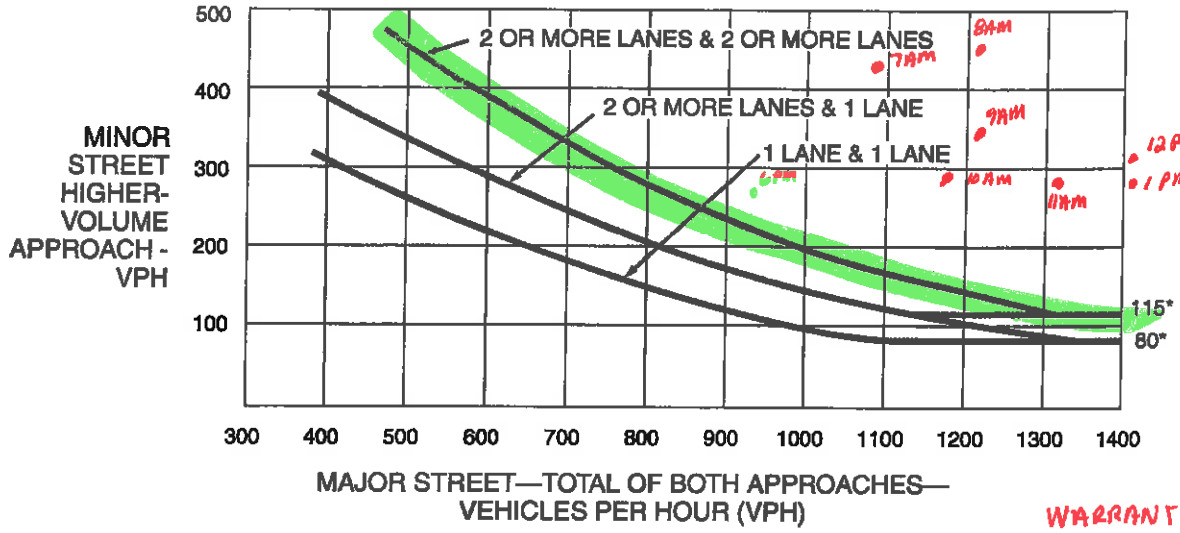
Genesee Street and I790/TWY Ramp

WARRANT No. 1 Eight Hour Volumes

START TIME	Genesee Street			I790/TWY Ramp			Warrant Met
	NB	SB	Combined	I790	TWY	Combined	
12:00 AM	85	62	147	20	35	55	
1:00 AM	60	47	107	12	27	39	
2:00 AM	46	32	78	19	26	45	
3:00 AM	59	25	84	15	27	42	
4:00 AM	91	42	133	16	33	49	
5:00 AM	145	84	229	52	50	102	
6:00 AM	315	232	547	117	95	212	
7:00 AM	543	552	1095	251	168	419	1
8:00 AM	639	575	1214	255	202	457	1
9:00 AM	722	493	1215	177	166	343	1
10:00 AM	712	467	1179	148	144	292	1
11:00 AM	820	494	1314	142	145	287	1
12:00 PM	960	623	1583	174	131	305	1
1:00 PM	862	578	1440	167	128	295	1
2:00 PM	929	529	1458	165	128	293	1
3:00 PM	1048	555	1603	215	125	340	1
4:00 PM	1213	541	1754	221	173	394	1
5:00 PM	876	536	1412	217	175	392	1
6:00 PM	538	401	939	129	143	272	1
7:00 PM	449	309	758	87	90	177	
8:00 PM	374	232	606	72	67	139	
9:00 PM	337	182	519	54	53	107	
10:00 PM	204	116	320	41	46	87	
11:00 PM	128	82	210	39	35	74	
TOTAL	12155	7789	19944	2805	2412	5217	12

Major roadway exceeds minimum of 600 vph

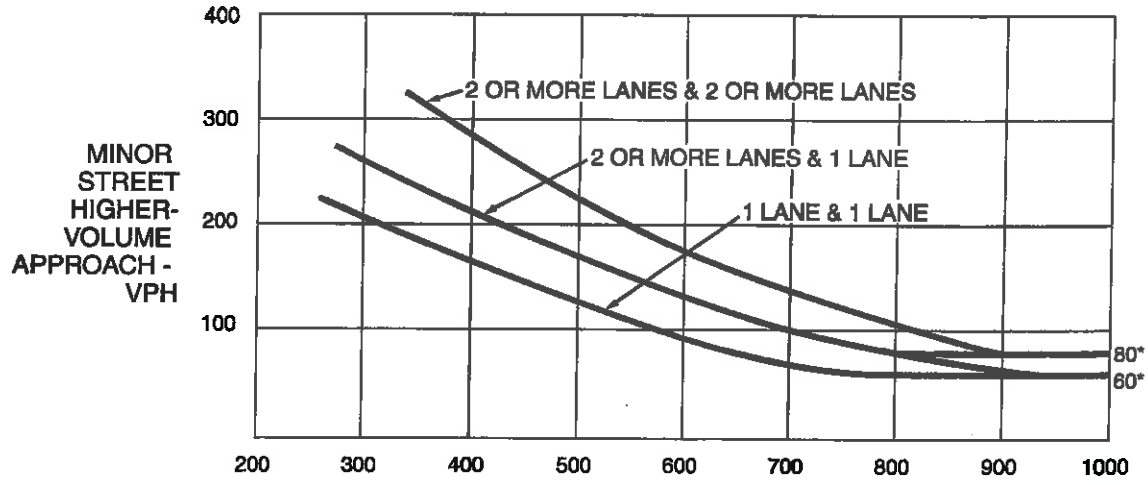
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

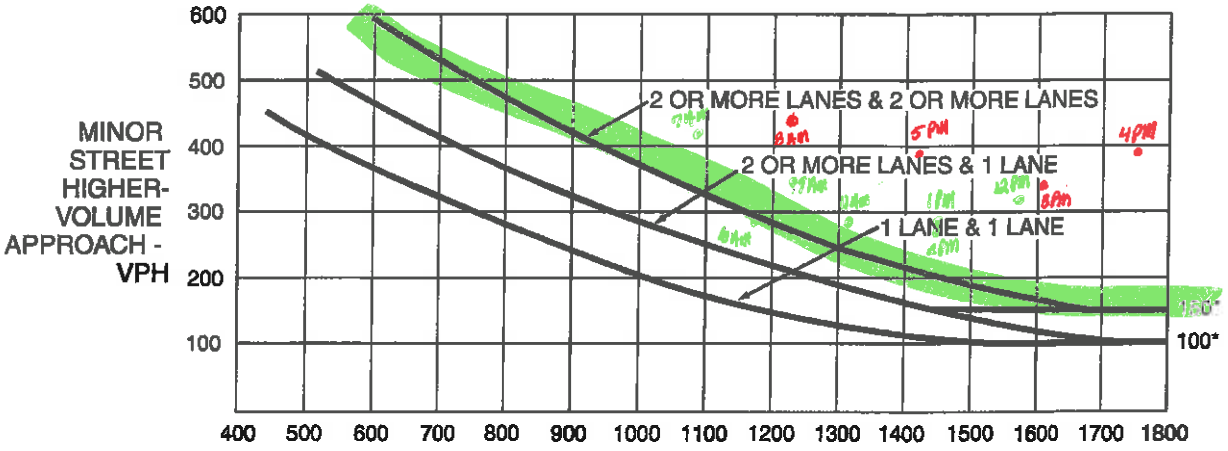
Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

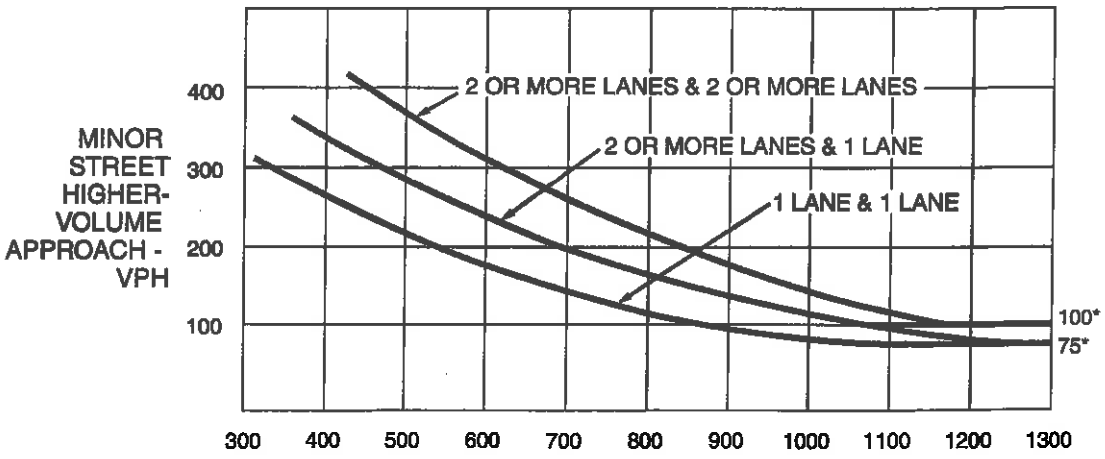
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

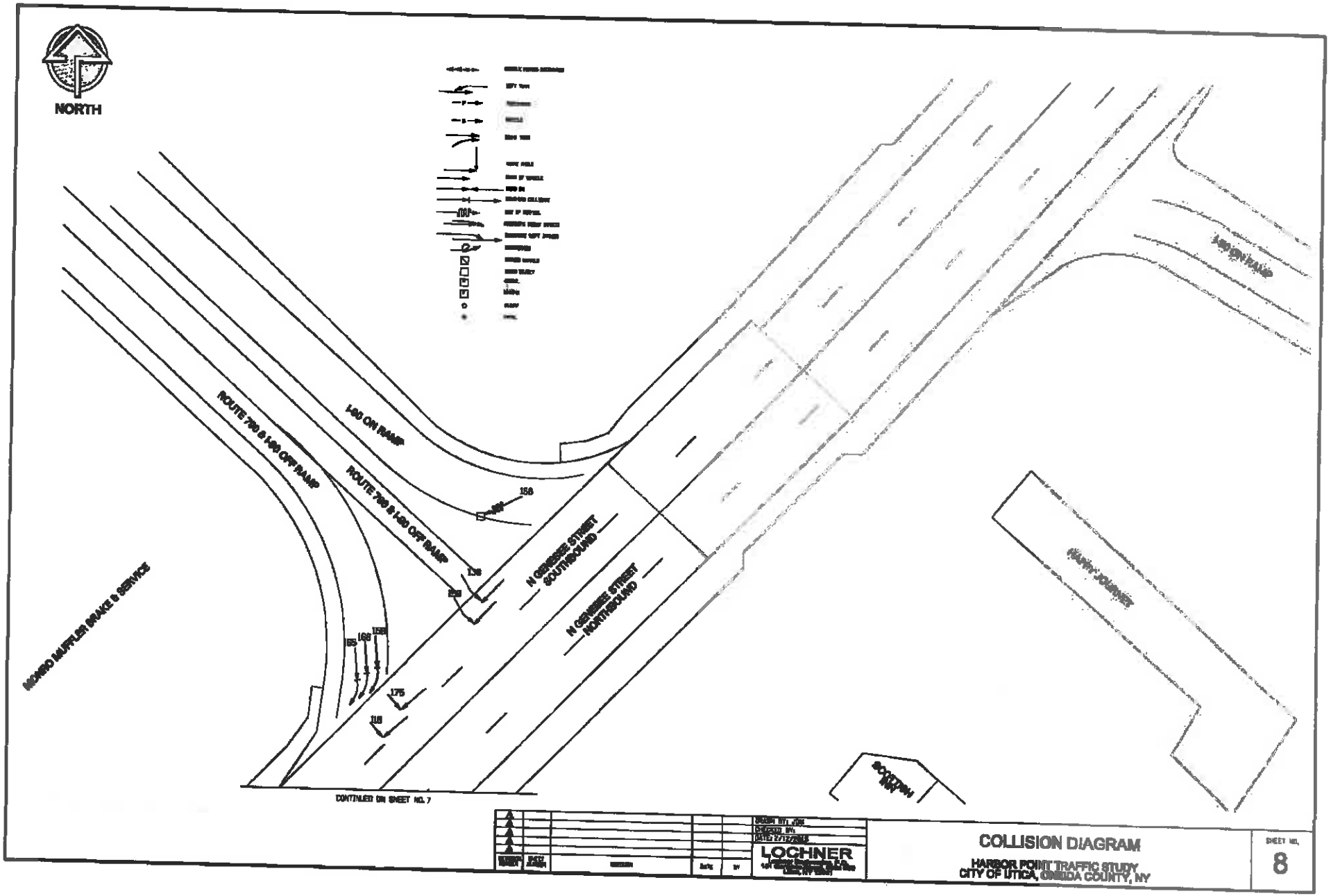
accidents involved the pedestrian being intoxicated. The majority of the accidents were associated with vehicles entering and exiting North Genesee Street.

I-90 Off-ramp at North Genesee Street

This is a three-legged intersection with the off-ramp of I-90 (Thruway) and Route I-790 sharing the same approach to Genesee Street. The ramp approach is stop sign controlled and includes separate right and left turn lanes.

The majority of accidents at this intersection are rear end accidents (3) caused by inattentive drivers looking at approaching Genesee Street traffic and rear-ending the vehicle in front of them that had not entered onto Genesee Street. Two of the right angle accidents involved vehicles making a left turn from the off-ramp onto northbound North Genesee Street. There are also two right-angle accidents involving vehicles turning right from the I-90 off-ramp onto southbound North Genesee Street. Intersection sight distance may have been a contributing factor to these accidents as turning vehicles had difficulty seeing the approach southbound vehicles. Guiderail and bridge rail associated with the structure carrying Genesee Street over Reall Creek impacts the sight distance to the left.

Improving intersection sight distance for vehicles entering Genesee Street could improve the conditions at this intersection.


NORTH
I-90 ON RAMP
ROUTE 700 & I-90 OFF RAMP
ROUTE 700 & I-90 OFF RAMP
N GENESEE STREET SOUTHBOUND
N GENESEE STREET NORTHBOUND
MOMBO MUFFLER BRAKE & SERVICE
CONTINUED ON SHEET NO. 7
LOCHNER
COLLISION DIAGRAM
HARBOR POINT TRAFFIC STUDY
CITY OF UTICA, ONEIDA COUNTY, NY
SHEET NO.
8

DESIGNED BY BDM DATE 11-24-15 PROJECT Harbor Point SHEET NO. ____ OF ____

CHECKED BY ____ DATE ____ SUBJECT Signal Warrant Study JOB NO. 10083

WARRANT 4, PEDESTRIAN VOLUME

- MINIMAL PEDESTRIAN TRAFFIC -
- WARRANT NOT APPLICABLE

WARRANT 5, SCHOOL CROSSING

- INTERSECTION IS NOT A SCHOOL CROSSING LOCATION
- WARRANT NOT APPLICABLE

WARRANT 6, COORDINATED SIGNAL SYSTEM

- SIGNALIZED INTERSECTION AT HERKIMER ROAD IS APPROXIMATELY 1240 FT FROM RAMP INTERSECTION > 1000 FT MIN WHERE WARRANT WOULD NOT APPLY
- INTERSECTION IS NOT PART OF OR WITHIN THE LIMITS OF A COORDINATED SYSTEM
- WARRANT IS NOT APPLICABLE

WARRANT 7, CRASH EXPERIENCE

- THERE WERE 4 ACCIDENTS OVER A THREE YEAR PERIOD THAT MIGHT BE CORRECTED BY INSTALLATION OF A SIGNAL THIS IS LESS THAN THE FIVE OR MORE PER YEAR OF CRITERIA B. - SEE ATTACHED FROM ACCIDENT STUDY
- WARRANT IS NOT MET

DESIGNED BY BDM DATE 11-24-15 PROJECT Harbor Point SHEET NO. ____ OF ____

CHECKED BY ____ DATE ____ SUBJECT Signal Warrant Study JOB NO. 10083

WARRANT 8, ROADWAY NETWORK

THE TOTAL ENTERING TRAFFIC GREATER THAN 1000 vph AND CURRENTLY MEETS WARRANTS 1, 2 AND 3.

GENESEE STREET CONNECTS DOWNTOWN UTICA TO THE NYS THRUWAY (I-90) AND COULD BE CONSIDERED A MAJOR ROUTE

THIS WARRANT CAN BE CONSIDERED AS BEING MET.

WARRANT 9, INTERSECTION NEAR A GRADE CROSSING

THIS WARRANT IS NOT APPLICABLE

ATTACHMENT C

Level of Service Analysis

Existing Conditions

LOCHNER

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/1/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	275	0	30	5	485	150	100	815	5
Future Volume (veh/h)	0	0	5	275	0	30	5	485	150	100	815	5
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	0	0	6	296	0	32	5	533	165	114	926	6
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.93	0.93	0.93	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	376	434	0	376	291	1211	542	409	1741	779
Arrive On Green	0.00	0.00	0.24	0.24	0.00	0.24	0.34	0.34	0.34	0.08	0.49	0.49
Sat Flow, veh/h	0	0	1583	1404	0	1583	598	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	0	0	6	296	0	32	5	533	165	114	926	6
Grp Sat Flow(s),veh/h/ln	0	0	1583	1404	0	1583	598	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	0.2	14.1	0.0	1.1	0.4	8.0	5.3	2.6	12.4	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.2	14.3	0.0	1.1	2.5	8.0	5.3	2.6	12.4	0.1
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	376	434	0	376	291	1211	542	409	1741	779
V/C Ratio(X)	0.00	0.00	0.02	0.68	0.00	0.09	0.02	0.44	0.30	0.28	0.53	0.01
Avail Cap(c_a), veh/h	0	0	390	446	0	390	346	1539	688	452	2154	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	20.1	25.5	0.0	20.5	16.5	17.5	16.7	12.1	12.1	8.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.6	0.0	0.1	0.0	0.4	0.4	0.1	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	6.0	0.0	0.5	0.1	4.0	2.4	1.3	6.3	0.1
LnGrp Delay(d),s/veh	0.0	0.0	20.1	30.2	0.0	20.6	16.6	17.9	17.1	12.2	13.2	9.0
LnGrp LOS			C	C		C	B	B	B	B	B	A
Approach Vol, veh/h		6			328			703			1046	
Approach Delay, s/veh		20.1			29.3			17.7			13.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.3	28.6		21.4		38.9		21.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	30.0		17.0		42.0		17.0
Max Q Clear Time (g_c+I1), s	4.6	10.0		16.3		14.4		2.2
Green Ext Time (p_c), s	0.0	13.6		0.1		17.0		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	5	0	525	5	0	915	25
Future Vol, veh/h	0	0	10	0	0	5	0	525	5	0	915	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	5	0	571	5	0	995	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1293	1584	511	1070	1595	288	1022	0	0	576	0	0
Stage 1	1008	1008	-	573	573	-	-	-	-	-	-	-
Stage 2	285	576	-	497	1022	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	120	107	508	175	106	709	675	-	-	993	-	-
Stage 1	258	316	-	472	502	-	-	-	-	-	-	-
Stage 2	698	500	-	523	312	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	119	107	508	171	106	709	675	-	-	993	-	-
Mov Cap-2 Maneuver	119	107	-	171	106	-	-	-	-	-	-	-
Stage 1	258	316	-	472	502	-	-	-	-	-	-	-
Stage 2	693	500	-	512	312	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.2	10.1	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	675	-	-	709	508	993	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.021	-	-	-
HCM Control Delay (s)	0	-	-	10.1	12.2	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	20	20	620	25	0	1035	60
Future Vol, veh/h	0	0	10	0	0	20	20	620	25	0	1035	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	22	22	674	27	0	1125	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1438	1842	563	1280	1842	337	1125	0	-	674	0	0
Stage 1	1125	1125	-	717	717	-	-	-	-	-	-	-
Stage 2	313	717	-	563	1125	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	115	74	470	146	74	562	617	-	0	561	-	-
Stage 1	214	278	-	321	432	-	-	-	0	-	-	-
Stage 2	638	432	-	484	278	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	108	71	470	139	71	562	617	-	-	561	-	-
Mov Cap-2 Maneuver	108	71	-	139	71	-	-	-	-	-	-	-
Stage 1	205	278	-	310	417	-	-	-	-	-	-	-
Stage 2	591	417	-	453	278	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.6	11.7	0.3	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	617	-	562	470	561	-	-
HCM Lane V/C Ratio	0.035	-	0.039	0.023	-	-	-
HCM Control Delay (s)	11	-	11.7	12.6	0	-	-
HCM Lane LOS	B	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	5	0	15	10	0	10	15	475	25	15	895	20
Future Vol, veh/h	5	0	15	10	0	10	15	475	25	15	895	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	190	-	-	20	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	16	11	0	11	16	516	27	16	973	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1307	1592	497	1081	1589	272	995	0	0	543	0	0
Stage 1	1016	1016	-	562	562	-	-	-	-	-	-	-
Stage 2	291	576	-	519	1027	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	117	106	519	172	107	726	691	-	-	1022	-	-
Stage 1	255	314	-	479	508	-	-	-	-	-	-	-
Stage 2	693	500	-	508	310	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	112	102	519	162	103	726	691	-	-	1022	-	-
Mov Cap-2 Maneuver	112	102	-	162	103	-	-	-	-	-	-	-
Stage 1	249	309	-	468	496	-	-	-	-	-	-	-
Stage 2	667	488	-	484	305	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	19.4	19.8	0.3	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	691	-	-	265	272	1022	-	-
HCM Lane V/C Ratio	0.024	-	-	0.082	0.08	0.016	-	-
HCM Control Delay (s)	10.3	-	-	19.8	19.4	8.6	-	-
HCM Lane LOS	B	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0	-	-

Intersection	
Int Delay, s/veh	6.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	25	455	0	530	485	70
Future Vol, veh/h	25	455	0	530	485	70
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	495	0	576	527	76

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	853	302	603	0	-	0
Stage 1	565	-	-	-	-	-
Stage 2	288	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	298	694	971	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	298	694	971	-	-	-
Mov Cap-2 Maneuver	298	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	735	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	21.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	971	-	298	694	-	-
HCM Lane V/C Ratio	-	-	0.091	0.713	-	-
HCM Control Delay (s)	0	-	18.3	22	-	-
HCM Lane LOS	A	-	C	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	6	-	-

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/1/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	5	5	280	0	65	5	735	220	90	675	5
Future Volume (veh/h)	5	5	5	280	0	65	5	735	220	90	675	5
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	5	5	5	329	0	76	6	845	253	94	703	5
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.85	0.85	0.85	0.87	0.87	0.87	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	165	132	451	0	390	389	1368	612	332	1881	842
Arrive On Green	0.25	0.25	0.25	0.25	0.00	0.25	0.39	0.39	0.39	0.07	0.53	0.53
Sat Flow, veh/h	401	668	534	1399	0	1583	738	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	15	0	0	329	0	76	6	845	253	94	703	5
Grp Sat Flow(s),veh/h/ln	1603	0	0	1399	0	1583	738	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	0.0	15.4	0.0	2.6	0.3	13.3	8.1	2.0	8.0	0.1
Cycle Q Clear(g_c), s	0.4	0.0	0.0	15.8	0.0	2.6	0.3	13.3	8.1	2.0	8.0	0.1
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	464	0	0	451	0	390	389	1368	612	332	1881	842
V/C Ratio(X)	0.03	0.00	0.00	0.73	0.00	0.19	0.02	0.62	0.41	0.28	0.37	0.01
Avail Cap(c_a), veh/h	464	0	0	451	0	390	425	1539	688	384	2154	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	0.0	25.5	0.0	20.6	13.1	17.1	15.5	11.6	9.4	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.4	0.0	0.3	0.0	0.8	0.6	0.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	6.9	0.0	1.2	0.1	6.6	3.6	1.0	4.1	0.0
LnGrp Delay(d),s/veh	19.8	0.0	0.0	31.9	0.0	20.9	13.1	17.9	16.1	11.8	10.0	7.6
LnGrp LOS	B			C		C	B	B	B	B	B	A
Approach Vol, veh/h		15			405			1104			802	
Approach Delay, s/veh		19.8			29.8			17.4			10.2	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	31.7		22.0		41.7		22.0
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	30.0		17.0		42.0		17.0
Max Q Clear Time (g_c+I1), s	4.0	15.3		17.8		10.0		2.4
Green Ext Time (p_c), s	0.0	11.4		0.0		20.3		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	15	0	0	15	0	755	25	0	700	15
Future Vol, veh/h	0	0	15	0	0	15	0	755	25	0	700	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	16	0	0	16	0	821	27	0	761	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1179	1617	389	1214	1611	424	777	0	0	848	0	0
Stage 1	769	769	-	834	834	-	-	-	-	-	-	-
Stage 2	410	848	-	380	777	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	146	103	610	137	103	579	835	-	-	785	-	-
Stage 1	360	409	-	329	381	-	-	-	-	-	-	-
Stage 2	589	376	-	614	405	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	142	103	610	133	103	579	835	-	-	785	-	-
Mov Cap-2 Maneuver	142	103	-	133	103	-	-	-	-	-	-	-
Stage 1	360	409	-	329	381	-	-	-	-	-	-	-
Stage 2	572	376	-	598	405	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	11.1	11.4	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	835	-	-	579	610	785	-	-
HCM Lane V/C Ratio	-	-	-	0.028	0.027	-	-	-
HCM Control Delay (s)	0	-	-	11.4	11.1	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	30	0	0	40	5	920	15	0	920	40
Future Vol, veh/h	0	0	30	0	0	40	5	920	15	0	920	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	33	0	0	43	5	1000	16	0	1000	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1411	2011	500	1511	2011	500	1000	0	-	1000	0	0
Stage 1	1000	1000	-	1011	1011	-	-	-	-	-	-	-
Stage 2	411	1011	-	500	1000	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	119	58	516	102	58	442	688	-	0	391	-	-
Stage 1	254	319	-	200	315	-	-	-	0	-	-	-
Stage 2	556	315	-	506	319	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	107	58	516	95	58	442	688	-	-	391	-	-
Mov Cap-2 Maneuver	107	58	-	95	58	-	-	-	-	-	-	-
Stage 1	252	319	-	199	313	-	-	-	-	-	-	-
Stage 2	498	313	-	473	319	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.4	11	0.1	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NETNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	688	- 442	516	391	-	-
HCM Lane V/C Ratio	0.008	- 0.098	0.063	-	-	-
HCM Control Delay (s)	10.3	- 14	12.4	0	-	-
HCM Lane LOS	B	- B	B	A	-	-
HCM 95th %tile Q(veh)	0	- 0.3	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	15	0	10	5	0	5	20	750	35	15	755	20
Future Vol, veh/h	15	0	10	5	0	5	20	750	35	15	755	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	190	-	-	20	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	11	5	0	5	22	815	38	16	821	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1315	1761	421	1321	1753	427	842	0	0	853	0	0
Stage 1	864	864	-	878	878	-	-	-	-	-	-	-
Stage 2	451	897	-	443	875	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	116	84	581	115	84	576	789	-	-	782	-	-
Stage 1	315	369	-	309	364	-	-	-	-	-	-	-
Stage 2	557	357	-	564	365	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	111	80	581	109	80	576	789	-	-	782	-	-
Mov Cap-2 Maneuver	111	80	-	109	80	-	-	-	-	-	-	-
Stage 1	306	361	-	300	354	-	-	-	-	-	-	-
Stage 2	536	347	-	542	358	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	31.3	25.9	0.2	0.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	789	-	-	183	164	782	-	-
HCM Lane V/C Ratio	0.028	-	-	0.059	0.166	0.021	-	-
HCM Control Delay (s)	9.7	-	-	25.9	31.3	9.7	-	-
HCM Lane LOS	A	-	-	D	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	20	250	0	770	465	40
Future Vol, veh/h	20	250	0	770	465	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	272	0	837	505	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	945	274	549	0	-	0
Stage 1	527	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	269	724	1017	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	260	724	1017	-	-	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	632	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1017	-	260	724	-	-
HCM Lane V/C Ratio	-	-	0.084	0.375	-	-
HCM Control Delay (s)	0	-	20.1	12.9	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	1.7	-	-

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/1/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	190	0	185	5	1010	200	65	690	5
Future Volume (veh/h)	0	0	5	190	0	185	5	1010	200	65	690	5
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	0	0	5	238	0	231	5	1086	215	69	734	5
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	331	394	0	331	402	1472	659	284	1954	874
Arrive On Green	0.00	0.00	0.21	0.21	0.00	0.21	0.42	0.42	0.42	0.06	0.55	0.55
Sat Flow, veh/h	0	0	1583	1405	0	1583	717	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	0	0	5	238	0	231	5	1086	215	69	734	5
Grp Sat Flow(s),veh/h/ln	0	0	1583	1405	0	1583	717	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	0.2	11.2	0.0	9.3	0.3	17.8	6.3	1.4	8.1	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.2	11.3	0.0	9.3	0.3	17.8	6.3	1.4	8.1	0.1
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	331	394	0	331	402	1472	659	284	1954	874
V/C Ratio(X)	0.00	0.00	0.02	0.60	0.00	0.70	0.01	0.74	0.33	0.24	0.38	0.01
Avail Cap(c_a), veh/h	0	0	390	447	0	390	416	1539	688	351	2154	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	21.7	26.2	0.0	25.3	11.9	17.0	13.6	12.1	6.7	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.4	0.0	5.3	0.0	2.0	0.4	0.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	4.6	0.0	4.5	0.1	9.0	2.8	0.7	4.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	21.7	28.6	0.0	30.6	11.9	19.0	14.0	12.2	7.3	7.0
LnGrp LOS			C	C		C	B	B	B	B	A	A
Approach Vol, veh/h		5			469			1306			808	
Approach Delay, s/veh		21.7			29.6			18.1			9.5	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	9.4	33.7		19.4		43.1		19.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	30.0		17.0		42.0		17.0
Max Q Clear Time (g_c+I1), s	3.4	19.8		13.3		10.1		2.2
Green Ext Time (p_c), s	0.0	8.9		1.1		23.2		2.8

Intersection Summary	
HCM 2010 Ctrl Delay	17.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	10	0	1025	20	5	705	15
Future Vol, veh/h	0	0	10	0	0	10	0	1025	20	5	705	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	11	0	1114	22	5	766	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1342	1921	391	1519	1918	568	783	0	0	1136	0	0
Stage 1	785	785	-	1125	1125	-	-	-	-	-	-	-
Stage 2	557	1136	-	394	793	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	110	66	608	82	67	466	831	-	-	611	-	-
Stage 1	352	402	-	218	278	-	-	-	-	-	-	-
Stage 2	482	275	-	602	398	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	106	65	608	80	66	466	831	-	-	611	-	-
Mov Cap-2 Maneuver	106	65	-	80	66	-	-	-	-	-	-	-
Stage 1	352	396	-	218	278	-	-	-	-	-	-	-
Stage 2	471	275	-	582	392	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	11	12.9	0	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	831	-	-	466	608	611	-	-
HCM Lane V/C Ratio	-	-	-	0.023	0.018	0.009	-	-
HCM Control Delay (s)	0	-	-	12.9	11	10.9	0.1	-
HCM Lane LOS	A	-	-	B	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	60	0	0	60	5	1155	10	0	870	15
Future Vol, veh/h	0	0	60	0	0	60	5	1155	10	0	870	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	65	0	0	65	5	1255	11	0	946	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1459	2212	473	1739	2212	628	946	0	-	1255	0	0
Stage 1	946	946	-	1266	1266	-	-	-	-	-	-	-
Stage 2	513	1266	-	473	946	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	111	43	538	72	43	365	721	-	0	294	-	-
Stage 1	274	338	-	132	238	-	-	-	0	-	-	-
Stage 2	482	238	-	524	338	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	91	43	538	63	43	365	721	-	-	294	-	-
Mov Cap-2 Maneuver	91	43	-	63	43	-	-	-	-	-	-	-
Stage 1	272	338	-	131	236	-	-	-	-	-	-	-
Stage 2	393	236	-	460	338	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.6	17	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NEL	NETNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	721	- 365	538	294	-	-
HCM Lane V/C Ratio	0.008	- 0.179	0.121	-	-	-
HCM Control Delay (s)	10	- 17	12.6	0	-	-
HCM Lane LOS	B	- C	B	A	-	-
HCM 95th %tile Q(veh)	0	- 0.6	0.4	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	10	5	25	10	0	5	30	945	70	10	725	25
Future Vol, veh/h	10	5	25	10	0	5	30	945	70	10	725	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	190	-	-	20	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	5	27	11	0	5	33	1027	76	11	788	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1402	1991	408	1548	1967	552	815	0	0	1103	0	0
Stage 1	823	823	-	1130	1130	-	-	-	-	-	-	-
Stage 2	579	1168	-	418	837	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	100	60	593	78	62	477	808	-	-	629	-	-
Stage 1	334	386	-	217	277	-	-	-	-	-	-	-
Stage 2	468	266	-	583	380	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	95	57	593	66	58	477	808	-	-	629	-	-
Mov Cap-2 Maneuver	95	57	-	66	58	-	-	-	-	-	-	-
Stage 1	320	379	-	208	266	-	-	-	-	-	-	-
Stage 2	444	255	-	539	373	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	33.3	51.8	0.3	0.1
HCM LOS	D	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	808	-	-	93	170	629	-	-
HCM Lane V/C Ratio	0.04	-	-	0.175	0.256	0.017	-	-
HCM Control Delay (s)	9.6	-	-	51.8	33.3	10.8	-	-
HCM Lane LOS	A	-	-	F	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	1	0.1	-	-

Intersection	
Int Delay, s/veh	3

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	50	310	0	1035	415	60
Future Vol, veh/h	50	310	0	1035	415	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	337	0	1125	451	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1047	258	516	0	-	0
Stage 1	484	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	224	741	1046	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	224	741	1046	-	-	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	534	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	15.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1046	-	224	741	-	-
HCM Lane V/C Ratio	-	-	0.243	0.455	-	-
HCM Control Delay (s)	0	-	26.1	13.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	2.4	-	-

ATTACHMENT C

Level of Service Analysis

No-Build 2020 Conditions

LOCHNER

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/1/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	289	0	31	5	510	158	105	855	5
Future Volume (veh/h)	0	0	5	289	0	31	5	510	158	105	855	5
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	0	0	6	311	0	33	5	560	174	119	972	6
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.93	0.93	0.93	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	390	446	0	390	285	1249	559	409	1781	797
Arrive On Green	0.00	0.00	0.25	0.25	0.00	0.25	0.35	0.35	0.35	0.08	0.50	0.50
Sat Flow, veh/h	0	0	1583	1404	0	1583	573	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	0	0	6	311	0	33	5	560	174	119	972	6
Grp Sat Flow(s),veh/h/ln	0	0	1583	1404	0	1583	573	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	0.2	14.9	0.0	1.1	0.4	8.4	5.5	2.7	13.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.2	15.0	0.0	1.1	3.0	8.4	5.5	2.7	13.0	0.1
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	390	446	0	390	285	1249	559	409	1781	797
V/C Ratio(X)	0.00	0.00	0.02	0.70	0.00	0.08	0.02	0.45	0.31	0.29	0.55	0.01
Avail Cap(c_a), veh/h	0	0	390	446	0	390	332	1539	688	451	2154	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	19.7	25.4	0.0	20.0	16.3	17.2	16.2	11.7	11.7	8.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.2	0.0	0.1	0.0	0.4	0.4	0.1	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	6.3	0.0	0.5	0.1	4.1	2.5	1.3	6.5	0.1
LnGrp Delay(d),s/veh	0.0	0.0	19.7	30.5	0.0	20.1	16.4	17.5	16.7	11.9	12.9	8.6
LnGrp LOS			B	C		C	B	B	B	B	B	A
Approach Vol, veh/h		6			344			739			1097	
Approach Delay, s/veh		19.7			29.5			17.3			12.8	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.4	29.3		22.0		39.7		22.0
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	30.0		17.0		42.0		17.0
Max Q Clear Time (g_c+I1), s	4.7	10.4		17.0		15.0		2.2
Green Ext Time (p_c), s	0.0	13.9		0.0		17.6		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	5	0	551	5	0	960	26
Future Vol, veh/h	0	0	10	0	0	5	0	551	5	0	960	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	5	0	599	5	0	1043	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1357	1662	536	1124	1674	302	1072	0	0	604	0	0
Stage 1	1058	1058	-	602	602	-	-	-	-	-	-	-
Stage 2	299	604	-	522	1072	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	108	96	489	160	95	694	646	-	-	970	-	-
Stage 1	240	300	-	453	487	-	-	-	-	-	-	-
Stage 2	685	486	-	506	295	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	107	96	489	156	95	694	646	-	-	970	-	-
Mov Cap-2 Maneuver	107	96	-	156	95	-	-	-	-	-	-	-
Stage 1	240	300	-	453	487	-	-	-	-	-	-	-
Stage 2	680	486	-	495	295	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.5	10.2	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	646	-	-	694	489	970	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.022	-	-	-
HCM Control Delay (s)	0	-	-	10.2	12.5	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	21	21	651	26	0	1086	63
Future Vol, veh/h	0	0	10	0	0	21	21	651	26	0	1086	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	23	23	708	28	0	1180	68

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1509	1933	590	1343	1933	354	1180	0	-	708	0	0
Stage 1	1180	1180	-	753	753	-	-	-	-	-	-	-
Stage 2	329	753	-	590	1180	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	103	65	451	133	65	548	588	-	0	540	-	-
Stage 1	198	262	-	303	416	-	-	-	0	-	-	-
Stage 2	624	416	-	447	262	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	96	62	451	126	62	548	588	-	-	540	-	-
Mov Cap-2 Maneuver	96	62	-	126	62	-	-	-	-	-	-	-
Stage 1	190	262	-	297	400	-	-	-	-	-	-	-
Stage 2	575	400	-	436	262	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	13.2	11.9	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NETNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	588	- 548	451	540	-	-
HCM Lane V/C Ratio	0.039	- 0.042	0.024	-	-	-
HCM Control Delay (s)	11.4	- 11.9	13.2	0	-	-
HCM Lane LOS	B	- B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	- 0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	5	0	15	10	0	10	15	499	26	15	940	21
Future Vol, veh/h	5	0	15	10	0	10	15	499	26	15	940	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	190	-	-	20	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	16	11	0	11	16	542	28	16	1022	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1370	1669	522	1132	1666	285	1045	0	0	571	0	0
Stage 1	1066	1066	-	589	589	-	-	-	-	-	-	-
Stage 2	304	603	-	543	1077	-	-	-	-	-	-	-
Critical Hdwy	7 54	6 54	6.94	7.54	6.54	6.94	4.14	-	-	4 14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	105	95	499	158	96	712	661	-	-	998	-	-
Stage 1	237	297	-	461	494	-	-	-	-	-	-	-
Stage 2	681	487	-	492	293	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	100	91	499	148	92	712	661	-	-	998	-	-
Mov Cap-2 Maneuver	100	91	-	148	92	-	-	-	-	-	-	-
Stage 1	231	292	-	450	482	-	-	-	-	-	-	-
Stage 2	654	475	-	468	288	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	20.8	21.1	0.3	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	661	-	-	245	250	998	-	-
HCM Lane V/C Ratio	0.025	-	-	0.089	0.087	0.016	-	-
HCM Control Delay (s)	10.6	-	-	21.1	20.8	8.7	-	-
HCM Lane LOS	B	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	7.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	26	478	0	556	509	73
Future Vol, veh/h	26	478	0	556	509	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	520	0	604	553	79

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	895	316	633	0	-	0
Stage 1	593	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	280	680	946	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	724	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	280	680	946	-	-	-
Mov Cap-2 Maneuver	280	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	724	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	25	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	946	-	280	680	-	-
HCM Lane V/C Ratio	-	-	0.101	0.764	-	-
HCM Control Delay (s)	0	-	19.3	25.3	-	-
HCM Lane LOS	A	-	C	D	-	-
HCM 95th %tile Q(veh)	0	-	0.3	7.2	-	-

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/1/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	5	5	294	0	68	5	772	231	95	709	5
Future Volume (veh/h)	5	5	5	294	0	68	5	772	231	95	709	5
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	5	5	5	346	0	80	6	887	266	99	739	5
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.85	0.85	0.85	0.87	0.87	0.87	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	164	131	451	0	390	386	1397	625	329	1915	857
Arrive On Green	0.25	0.25	0.25	0.25	0.00	0.25	0.39	0.39	0.39	0.07	0.54	0.54
Sat Flow, veh/h	400	667	534	1399	0	1583	713	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	15	0	0	346	0	80	6	887	266	99	739	5
Grp Sat Flow(s),veh/h/ln	1601	0	0	1399	0	1583	713	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	0.0	16.5	0.0	2.8	0.4	14.0	8.4	2.0	8.4	0.1
Cycle Q Clear(g_c), s	0.4	0.0	0.0	16.9	0.0	2.8	0.4	14.0	8.4	2.0	8.4	0.1
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	464	0	0	451	0	390	386	1397	625	329	1915	857
V/C Ratio(X)	0.03	0.00	0.00	0.77	0.00	0.21	0.02	0.63	0.43	0.30	0.39	0.01
Avail Cap(c_a), veh/h	464	0	0	451	0	390	414	1539	688	378	2154	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	0.0	25.9	0.0	20.6	12.7	16.9	15.2	11.5	9.2	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.2	0.0	0.4	0.0	0.9	0.7	0.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	7.6	0.0	1.2	0.1	7.0	3.8	1.0	4.2	0.0
LnGrp Delay(d),s/veh	19.8	0.0	0.0	34.1	0.0	21.0	12.8	17.8	15.8	11.7	9.8	7.3
LnGrp LOS	B			C		C	B	B	B	B	A	A
Approach Vol, veh/h		15			426			1159			843	
Approach Delay, s/veh		19.8			31.7			17.3			10.0	
Approach LOS		B			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.1	32.2		22.0		42.3		22.0
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	30.0		17.0		42.0		17.0
Max Q Clear Time (g_c+I1), s	4.0	16.0		18.5		10.4		2.4
Green Ext Time (p_c), s	0.0	11.3		0.0		21.2		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	15	0	0	15	0	793	26	0	735	15
Future Vol, veh/h	0	0	15	0	0	15	0	793	26	0	735	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	16	0	0	16	0	862	28	0	799	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1238	1697	408	1275	1691	445	815	0	0	890	0	0
Stage 1	807	807	-	876	876	-	-	-	-	-	-	-
Stage 2	431	890	-	399	815	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	132	92	593	124	92	561	808	-	-	757	-	-
Stage 1	341	392	-	310	365	-	-	-	-	-	-	-
Stage 2	573	359	-	598	389	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	128	92	593	121	92	561	808	-	-	757	-	-
Mov Cap-2 Maneuver	128	92	-	121	92	-	-	-	-	-	-	-
Stage 1	341	392	-	310	365	-	-	-	-	-	-	-
Stage 2	556	359	-	582	389	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	11.2	11.6	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	808	-	- 561	593	757	-	-
HCM Lane V/C Ratio	-	-	- 0.029	0.027	-	-	-
HCM Control Delay (s)	0	-	- 11.6	11.2	0	-	-
HCM Lane LOS	A	-	- B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	- 0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	31	0	0	42	5	966	15	0	966	42
Future Vol, veh/h	0	0	31	0	0	42	5	966	15	0	966	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	34	0	0	46	5	1050	16	0	1050	46

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1481	2111	525	1586	2111	525	1050	0	-	1050	0	0
Stage 1	1050	1050	-	1061	1061	-	-	-	-	-	-	-
Stage 2	431	1061	-	525	1050	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	107	50	497	91	50	426	659	-	0	370	-	-
Stage 1	237	302	-	185	299	-	-	-	0	-	-	-
Stage 2	541	299	-	486	302	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	95	50	497	84	50	426	659	-	-	370	-	-
Mov Cap-2 Maneuver	95	50	-	84	50	-	-	-	-	-	-	-
Stage 1	235	302	-	184	297	-	-	-	-	-	-	-
Stage 2	479	297	-	455	302	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.8	14.5	0.1	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	659	-	426	497	370	-	-
HCM Lane V/C Ratio	0.008	-	0.107	0.068	-	-	-
HCM Control Delay (s)	10.5	-	14.5	12.8	0	-	-
HCM Lane LOS	B	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	15	0	10	5	0	5	21	788	37	15	793	21
Future Vol, veh/h	15	0	10	5	0	5	21	788	37	15	793	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	190	-	-	20	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	11	5	0	5	23	857	40	16	862	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1380	1848	442	1386	1839	448	885	0	0	897	0	0
Stage 1	906	906	-	922	922	-	-	-	-	-	-	-
Stage 2	474	942	-	464	917	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	104	74	563	102	75	558	760	-	-	753	-	-
Stage 1	297	353	-	291	347	-	-	-	-	-	-	-
Stage 2	540	340	-	548	349	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	70	563	96	71	558	760	-	-	753	-	-
Mov Cap-2 Maneuver	99	70	-	96	71	-	-	-	-	-	-	-
Stage 1	288	345	-	282	336	-	-	-	-	-	-	-
Stage 2	519	330	-	526	342	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	34.7	28.5	0.2	0.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	760	-	- 164	148	753	-	-
HCM Lane V/C Ratio	0.03	-	- 0.066	0.184	0.022	-	-
HCM Control Delay (s)	9.9	-	- 28.5	34.7	9.9	-	-
HCM Lane LOS	A	-	- D	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	- 0.2	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	21	263	0	809	488	42
Future Vol, veh/h	21	263	0	809	488	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	286	0	879	530	46

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	993	288	576	0	-	0
Stage 1	553	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	242	709	993	-	-	-
Stage 1	540	-	-	-	-	-
Stage 2	616	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	242	709	993	-	-	-
Mov Cap-2 Maneuver	242	-	-	-	-	-
Stage 1	540	-	-	-	-	-
Stage 2	616	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	14.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	993	-	242	709	-	-
HCM Lane V/C Ratio	-	-	0.094	0.403	-	-
HCM Control Delay (s)	0	-	21.4	13.5	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	2	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	200	0	194	5	1060	210	68	724	5
Future Volume (veh/h)	0	0	5	200	0	194	5	1060	210	68	724	5
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	0	0	5	250	0	242	5	1140	226	72	770	5
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	342	404	0	342	396	1491	667	278	1978	885
Arrive On Green	0.00	0.00	0.22	0.22	0.00	0.22	0.42	0.42	0.42	0.07	0.56	0.56
Sat Flow, veh/h	0	0	1583	1405	0	1583	693	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	0	0	5	250	0	242	5	1140	226	72	770	5
Grp Sat Flow(s),veh/h/ln	0	0	1583	1405	0	1583	693	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	0.2	11.7	0.0	9.8	0.3	19.0	6.6	1.4	8.5	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.2	11.9	0.0	9.8	0.3	19.0	6.6	1.4	8.5	0.1
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	342	404	0	342	396	1491	667	278	1978	885
V/C Ratio(X)	0.00	0.00	0.01	0.62	0.00	0.71	0.01	0.76	0.34	0.26	0.39	0.01
Avail Cap(c_a), veh/h	0	0	390	447	0	390	406	1539	688	342	2154	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	21.3	26.0	0.0	25.0	11.6	17.0	13.5	12.3	6.6	6.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	5.8	0.0	2.5	0.4	0.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	4.8	0.0	4.8	0.1	9.7	3.0	0.7	4.2	0.0
LnGrp Delay(d),s/veh	0.0	0.0	21.3	28.7	0.0	30.8	11.7	19.5	13.9	12.5	6.2	6.7
LnGrp LOS			C	C		C	B	B	B	B	A	A
Approach Vol, veh/h		5			492			1371			847	
Approach Delay, s/veh		21.3			29.8			18.5			9.4	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	9.5	34.1		19.9		43.6		19.9
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	30.0		17.0		42.0		17.0
Max Q Clear Time (g_c+I1), s	3.4	21.0		13.9		10.5		2.2
Green Ext Time (p_c), s	0.0	8.1		1.0		24.0		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	10	0	1076	21	5	740	15
Future Vol, veh/h	0	0	10	0	0	10	0	1076	21	5	740	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	11	0	1170	23	5	804	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1408	2015	410	1594	2013	596	821	0	0	1192	0	0
Stage 1	823	823	-	1181	1181	-	-	-	-	-	-	-
Stage 2	585	1192	-	413	832	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	99	58	591	72	58	447	804	-	-	581	-	-
Stage 1	334	386	-	202	262	-	-	-	-	-	-	-
Stage 2	464	259	-	587	382	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	95	57	591	70	57	447	804	-	-	581	-	-
Mov Cap-2 Maneuver	95	57	-	70	57	-	-	-	-	-	-	-
Stage 1	334	380	-	202	262	-	-	-	-	-	-	-
Stage 2	453	259	-	567	376	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	11.2	13.3	0	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	804	-	- 447	591	581	-	-
HCM Lane V/C Ratio	-	-	- 0.024	0.018	0.009	-	-
HCM Control Delay (s)	0	-	- 13.3	11.2	11.3	0.1	-
HCM Lane LOS	A	-	- B	B	B	A	-
HCM 95th %tile Q(veh)	0	-	- 0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	63	0	0	63	5	1212	10	0	914	15
Future Vol, veh/h	0	0	63	0	0	63	5	1212	10	0	914	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	68	0	0	68	5	1317	11	0	993	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1531	2321	497	1825	2321	659	993	0	-	1317	0	0
Stage 1	993	993	-	1328	1328	-	-	-	-	-	-	-
Stage 2	538	1328	-	497	993	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	99	37	519	62	37	348	692	-	0	274	-	-
Stage 1	257	322	-	119	223	-	-	-	0	-	-	-
Stage 2	465	223	-	307	322	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	79	37	519	54	37	348	692	-	-	274	-	-
Mov Cap-2 Maneuver	79	37	-	54	37	-	-	-	-	-	-	-
Stage 1	255	322	-	118	221	-	-	-	-	-	-	-
Stage 2	371	221	-	440	322	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	13	17.2	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NEL	NET	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	692	-	348	519	274	-	-
HCM Lane V/C Ratio	0.008	-	0.197	0.132	-	-	-
HCM Control Delay (s)	10.2	-	17.9	13	0	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.7	0.5	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	10	5	26	10	0	5	31	992	74	10	761	26
Future Vol, veh/h	10	5	26	10	0	5	31	992	74	10	761	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	190	-	-	20	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	5	28	11	0	5	34	1078	80	11	827	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1470	2089	428	1624	2063	579	855	0	0	1159	0	0
Stage 1	863	863	-	1186	1186	-	-	-	-	-	-	-
Stage 2	607	1226	-	438	877	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	89	52	575	68	54	458	781	-	-	599	-	-
Stage 1	316	370	-	200	260	-	-	-	-	-	-	-
Stage 2	450	249	-	567	364	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	84	49	575	56	51	458	781	-	-	599	-	-
Mov Cap-2 Maneuver	84	49	-	56	51	-	-	-	-	-	-	-
Stage 1	302	363	-	191	249	-	-	-	-	-	-	-
Stage 2	425	238	-	521	357	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	37.6	62.1	0.3	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	781	-	-	79	154	599	-	-
HCM Lane V/C Ratio	0.043	-	-	0.206	0.289	0.018	-	-
HCM Control Delay (s)	9.8	-	-	62.1	37.6	11.1	-	-
HCM Lane LOS	A	-	-	F	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	1.1	0.1	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	53	325	0	1087	436	63
Future Vol, veh/h	53	325	0	1087	436	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	353	0	1182	474	68

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1099	271	542	0	-	0
Stage 1	508	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	207	727	1023	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	207	727	1023	-	-	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	16.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	1023	-	207	727	-	-
HCM Lane V/C Ratio	-	-	0.278	0.486	-	-
HCM Control Delay (s)	0	-	29	14.5	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0	-	1.1	2.7	-	-

ATTACHMENT C

Level of Service Analysis

Build-Out 2020 Conditions

LOCHNER

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/1/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	27	0	49	289	0	31	34	537	158	105	913	53
Future Volume (veh/h)	27	0	49	289	0	31	34	537	158	105	913	53
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	0	54	311	0	33	37	590	174	119	1038	60
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.93	0.93	0.93	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	30	258	471	0	414	209	1001	448	337	1119	500
Arrive On Green	0.26	0.00	0.26	0.26	0.00	0.26	0.04	0.28	0.28	0.15	0.63	0.63
Sat Flow, veh/h	432	115	986	1345	0	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	84	0	0	311	0	33	37	590	174	119	1038	60
Grp Sat Flow(s),veh/h/ln	1533	0	0	1345	0	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	0.0	11.7	0.0	1.1	1.0	10.0	6.2	3.2	18.3	1.1
Cycle Q Clear(g_c), s	2.7	0.0	0.0	14.4	0.0	1.1	1.0	10.0	6.2	3.2	18.3	1.1
Prop In Lane	0.36		0.64	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	471	0	0	471	0	414	209	1001	448	337	1119	500
V/C Ratio(X)	0.18	0.00	0.00	0.66	0.00	0.08	0.18	0.59	0.39	0.35	0.93	0.12
Avail Cap(c_a), veh/h	657	0	0	638	0	611	283	1112	498	352	1119	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	20.1	0.0	0.0	24.1	0.0	19.5	18.2	21.5	20.2	19.8	12.2	9.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.3	0.0	0.1	0.1	0.7	0.6	0.2	12.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	5.9	0.0	0.5	0.5	5.0	2.8	1.5	10.2	0.5
LnGrp Delay(d),s/veh	20.4	0.0	0.0	26.3	0.0	19.6	18.3	22.3	20.8	19.9	24.2	9.4
LnGrp LOS	C			C		B	B	C	C	B	C	A
Approach Vol, veh/h		84			344			801			1217	
Approach Delay, s/veh		20.4			25.7			21.8			22.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	24.8		23.3	8.1	27.1		23.3
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	6.0	22.0		27.0	6.0	22.0		27.0
Max Q Clear Time (g_c+I1), s	5.2	12.0		16.4	3.0	20.3		4.7
Green Ext Time (p_c), s	0.0	7.8		1.9	0.0	1.6		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	5	0	612	5	0	1056	26
Future Vol, veh/h	0	0	10	0	0	5	0	612	5	0	1056	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	5	0	665	5	0	1148	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1495	1833	588	1242	1844	335	1176	0	0	671	0	0
Stage 1	1162	1162	-	668	668	-	-	-	-	-	-	-
Stage 2	333	671	-	574	1176	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	85	75	452	131	74	661	590	-	-	915	-	-
Stage 1	207	267	-	414	455	-	-	-	-	-	-	-
Stage 2	654	453	-	471	263	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	84	75	452	128	74	661	590	-	-	915	-	-
Mov Cap-2 Maneuver	84	75	-	128	74	-	-	-	-	-	-	-
Stage 1	207	267	-	414	455	-	-	-	-	-	-	-
Stage 2	649	453	-	460	263	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	13.2	10.5	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	590	-	-	661	452	915	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.024	-	-	-
HCM Control Delay (s)	0	-	-	10.5	13.2	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	21	0	0	27	25	701	30	0	1175	76
Future Vol, veh/h	0	0	21	0	0	27	25	701	30	0	1175	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	23	0	0	29	27	762	33	0	1277	83

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1636	2093	639	1455	2093	381	1277	0	-	762	0	0
Stage 1	1277	1277	-	816	816	-	-	-	-	-	-	-
Stage 2	359	816	-	639	1277	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	84	52	419	112	52	527	540	-	0	509	-	-
Stage 1	172	236	-	274	389	-	-	-	0	-	-	-
Stage 2	598	389	-	418	236	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	76	49	419	102	49	527	540	-	-	509	-	-
Mov Cap-2 Maneuver	76	49	-	102	49	-	-	-	-	-	-	-
Stage 1	163	236	-	260	370	-	-	-	-	-	-	-
Stage 2	536	370	-	395	236	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	14.1	12.2	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	540	-	527	419	509	-	-
HCM Lane V/C Ratio	0.05	-	0.056	0.054	-	-	-
HCM Control Delay (s)	12	-	12.2	14.1	0	-	-
HCM Lane LOS	B	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	0.2	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	33	0	60	10	0	10	36	532	26	15	1001	56
Future Volume (veh/h)	33	0	60	10	0	10	36	532	26	15	1001	56
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	36	0	65	11	0	11	39	578	28	16	1088	61
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	0	362	222	24	169	305	1862	90	494	1795	101
Arrive On Green	0.23	0.00	0.23	0.23	0.00	0.23	0.03	0.54	0.54	0.02	0.53	0.53
Sat Flow, veh/h	1414	0	1583	633	107	740	1774	3437	166	1774	3408	191
Grp Volume(v), veh/h	36	0	65	22	0	0	39	297	309	16	565	584
Grp Sat Flow(s),veh/h/ln	1414	0	1583	1479	0	0	1774	1770	1833	1774	1770	1829
Q Serve(g_s), s	0.5	0.0	2.3	0.0	0.0	0.0	0.7	6.5	6.5	0.3	15.5	15.5
Cycle Q Clear(g_c), s	1.2	0.0	2.3	0.7	0.0	0.0	0.7	6.5	6.5	0.3	15.5	15.5
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.09	1.00		0.10
Lane Grp Cap(c), veh/h	426	0	362	415	0	0	305	959	993	494	932	963
V/C Ratio(X)	0.08	0.00	0.18	0.05	0.00	0.00	0.13	0.31	0.31	0.03	0.61	0.61
Avail Cap(c_a), veh/h	426	0	362	415	0	0	353	959	993	568	932	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	0.0	21.7	21.1	0.0	0.0	8.9	8.8	8.8	7.6	11.5	11.5
Incr Delay (d2), s/veh	0.4	0.0	1.1	0.2	0.0	0.0	0.2	0.8	0.8	0.0	2.9	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.1	0.4	0.0	0.0	0.4	3.3	3.5	0.1	8.3	8.5
LnGrp Delay(d),s/veh	21.7	0.0	22.8	21.3	0.0	0.0	9.1	9.6	9.6	7.6	14.4	14.3
LnGrp LOS	C		C	C			A	A	A	A	B	B
Approach Vol, veh/h		101			22			645			1165	
Approach Delay, s/veh		22.4			21.3			9.6			14.3	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	41.9		21.0	6.1	42.9		21.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	35.0		16.0	4.0	35.0		16.0
Max Q Clear Time (g_c+I1), s	2.7	17.5		4.3	2.3	8.5		2.7
Green Ext Time (p_c), s	0.0	10.4		0.3	0.0	13.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	10.9

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	26	524	0	617	559	73
Future Vol, veh/h	26	524	0	617	559	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	570	0	671	608	79

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	982	343	687	0	-	0
Stage 1	647	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	246	653	903	-	-	-
Stage 1	483	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	246	653	903	-	-	-
Mov Cap-2 Maneuver	246	-	-	-	-	-
Stage 1	483	-	-	-	-	-
Stage 2	697	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	35.7	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	903	-	246	653	-	-
HCM Lane V/C Ratio	-	-	0.115	0.872	-	-
HCM Control Delay (s)	0	-	21.5	36.4	-	-
HCM Lane LOS	A	-	C	E	-	-
HCM 95th %tile Q(veh)	0	-	0.4	10.3	-	-

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/1/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	93	5	83	294	0	68	92	962	231	95	900	83
Future Volume (veh/h)	93	5	83	294	0	68	92	962	231	95	900	83
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	95	5	85	346	0	80	106	1106	266	99	938	86
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.85	0.85	0.85	0.87	0.87	0.87	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	36	201	496	0	488	339	1256	562	257	1251	560
Arrive On Green	0.31	0.31	0.31	0.31	0.00	0.31	0.07	0.36	0.36	0.15	0.71	0.71
Sat Flow, veh/h	650	116	651	1301	0	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	185	0	0	346	0	80	106	1106	266	99	938	86
Grp Sat Flow(s),veh/h/ln	1417	0	0	1301	0	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	4.9	0.0	0.0	10.6	0.0	2.6	2.5	20.5	9.1	2.3	11.6	1.3
Cycle Q Clear(g_c), s	7.5	0.0	0.0	18.1	0.0	2.6	2.5	20.5	9.1	2.3	11.6	1.3
Prop In Lane	0.51		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	514	0	0	496	0	488	339	1256	562	257	1251	560
V/C Ratio(X)	0.36	0.00	0.00	0.70	0.00	0.16	0.31	0.88	0.47	0.39	0.75	0.15
Avail Cap(c_a), veh/h	564	0	0	541	0	543	358	1264	565	279	1264	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.64	0.64	0.64
Uniform Delay (d), s/veh	19.3	0.0	0.0	23.1	0.0	17.6	13.4	21.2	17.5	14.7	8.3	6.8
Incr Delay (d2), s/veh	0.6	0.0	0.0	4.1	0.0	0.2	0.2	7.4	0.6	0.2	2.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.0	6.9	0.0	1.2	1.3	11.3	4.1	1.1	5.7	0.6
LnGrp Delay(d),s/veh	20.0	0.0	0.0	27.2	0.0	17.8	13.5	28.6	18.1	14.9	11.0	7.2
LnGrp LOS	B			C		B	B	C	B	B	B	A
Approach Vol, veh/h		185			426			1478			1123	
Approach Delay, s/veh		20.0			25.4			25.6			11.1	
Approach LOS		B			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	29.9		26.6	10.2	29.7		26.6
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	6.0	25.0		24.0	6.0	25.0		24.0
Max Q Clear Time (g_c+I1), s	4.3	22.5		20.1	4.5	13.6		9.6
Green Ext Time (p_c), s	0.0	2.3		1.5	0.0	9.9		3.6

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	15	0	0	15	0	1094	26	0	983	15
Future Vol, veh/h	0	0	15	0	0	15	0	1094	26	0	983	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	16	0	0	16	0	1189	28	0	1068	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1672	2294	542	1737	2288	609	1085	0	0	1217	0	0
Stage 1	1077	1077	-	1203	1203	-	-	-	-	-	-	-
Stage 2	595	1217	-	534	1085	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	63	39	485	56	39	438	639	-	-	569	-	-
Stage 1	234	293	-	196	256	-	-	-	-	-	-	-
Stage 2	458	252	-	498	291	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	61	39	485	54	39	438	639	-	-	569	-	-
Mov Cap-2 Maneuver	61	39	-	54	39	-	-	-	-	-	-	-
Stage 1	234	293	-	196	256	-	-	-	-	-	-	-
Stage 2	441	252	-	481	291	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.7	13.5	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	639	-	-	438	485	569	-	-
HCM Lane V/C Ratio	-	-	-	0.037	0.034	-	-	-
HCM Control Delay (s)	0	-	-	13.5	12.7	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	213	0	185	5	0	5	195	892	37	15	887	175
Future Volume (veh/h)	213	0	185	5	0	5	195	892	37	15	887	175
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	232	0	201	5	0	5	212	970	40	16	964	190
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	340	0	385	80	24	28	350	1828	75	321	1345	265
Arrive On Green	0.24	0.00	0.24	0.24	0.00	0.24	0.09	0.53	0.53	0.02	0.46	0.46
Sat Flow, veh/h	976	0	1583	13	100	114	1774	3464	143	1774	2949	581
Grp Volume(v), veh/h	232	0	201	10	0	0	212	495	515	16	578	576
Grp Sat Flow(s),veh/h/ln	976	0	1583	228	0	0	1774	1770	1838	1774	1770	1760
Q Serve(g_s), s	0.0	0.0	7.7	0.1	0.0	0.0	4.1	12.9	12.9	0.3	18.5	18.5
Cycle Q Clear(g_c), s	16.7	0.0	7.7	16.8	0.0	0.0	4.1	12.9	12.9	0.3	18.5	18.5
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.08	1.00		0.33
Lane Grp Cap(c), veh/h	340	0	385	132	0	0	350	934	969	321	807	803
V/C Ratio(X)	0.68	0.00	0.52	0.08	0.00	0.00	0.61	0.53	0.53	0.05	0.72	0.72
Avail Cap(c_a), veh/h	340	0	385	132	0	0	398	934	969	395	807	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.55	0.55	0.55	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	23.0	21.7	0.0	0.0	12.6	10.8	10.8	10.3	15.4	15.4
Incr Delay (d2), s/veh	10.6	0.0	5.0	1.1	0.0	0.0	1.2	1.2	1.2	0.1	5.4	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	3.9	0.2	0.0	0.0	2.1	6.5	6.7	0.2	10.2	10.2
Unsig. Delay(d),s/veh	37.0	0.0	28.0	22.8	0.0	0.0	13.7	12.0	12.0	10.4	20.8	20.9
LnGrp LOS	D		C	C			B	B	B	B	C	C
Approach Vol, veh/h		433			10			1222			1170	
Approach Delay, s/veh		32.8			22.8			12.3			20.7	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.1	36.9		22.0	6.1	41.9		22.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	8.0	30.0		17.0	4.0	34.0		17.0
Max Q Clear Time (g_c+I1), s	6.1	20.5		18.7	2.3	14.9		18.8
Green Ext Time (p_c), s	0.1	7.6		0.0	0.0	13.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	46	0	0	58	13	1227	24	0	1219	58
Future Vol, veh/h	0	0	46	0	0	58	13	1227	24	0	1219	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	50	0	0	63	14	1334	26	0	1325	63

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1887	2687	663	2025	2687	667	1325	0	-	1334	0	0
Stage 1	1325	1325	-	1362	1362	-	-	-	-	-	-	-
Stage 2	562	1362	-	663	1325	-	-	-	-	-	-	-
Critical Hdwy	6 99	6.54	6.94	6.99	6.54	7 14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	57	21	404	45	21	344	517	-	0	269	-	-
Stage 1	161	223	-	113	214	-	-	-	0	-	-	-
Stage 2	450	214	-	405	223	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	46	20	404	39	20	344	517	-	-	269	-	-
Mov Cap-2 Maneuver	46	20	-	39	20	-	-	-	-	-	-	-
Stage 1	157	223	-	110	208	-	-	-	-	-	-	-
Stage 2	358	208	-	355	223	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	15.2	17.8	0 1	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	517	-	344	404	269	-	-
HCM Lane V/C Ratio	0.027	-	0.183	0.124	-	-	-
HCM Control Delay (s)	12.2	-	17.8	15.2	0	-	-
HCM Lane LOS	B	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0 1	-	0.7	0.4	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	21	350	0	1110	649	42
Future Vol, veh/h	21	350	0	1110	649	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	380	0	1207	705	46

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1331	376	751	0	-	0
Stage 1	728	-	-	-	-	-
Stage 2	603	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	146	622	854	-	-	-
Stage 1	439	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	146	622	854	-	-	-
Mov Cap-2 Maneuver	146	-	-	-	-	-
Stage 1	439	-	-	-	-	-
Stage 2	509	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	20.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	854	-	146	622	-	-
HCM Lane V/C Ratio	-	-	0.156	0.612	-	-
HCM Control Delay (s)	0	-	34.2	19.5	-	-
HCM Lane LOS	A	-	D	C	-	-
HCM 95th %tile Q(veh)	0	-	0.5	4.2	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	58	0	44	200	0	194	98	1192	210	68	837	67
Future Volume (veh/h)	58	0	44	200	0	194	98	1192	210	68	837	67
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	62	0	47	250	0	242	105	1282	226	72	890	71
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	21	78	393	0	392	439	1540	689	257	1505	673
Arrive On Green	0.25	0.00	0.25	0.25	0.00	0.25	0.07	0.44	0.44	0.13	0.85	0.85
Sat Flow, veh/h	331	86	316	1353	0	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	109	0	0	250	0	242	105	1282	226	72	890	71
Grp Sat Flow(s),veh/h/ln	734	0	0	1353	0	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	3.5	0.0	0.0	1.8	0.0	9.5	2.2	22.5	6.6	1.5	5.3	0.5
Cycle Q Clear(g_c), s	13.0	0.0	0.0	14.8	0.0	9.5	2.2	22.5	6.6	1.5	5.3	0.5
Prop In Lane	0.57		0.43	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	0	0	393	0	392	439	1540	689	257	1505	673
v/C Ratio(X)	0.42	0.00	0.00	0.64	0.00	0.62	0.24	0.83	0.33	0.28	0.59	0.11
Avail Cap(c_a), veh/h	275	0	0	406	0	407	458	1567	701	294	1567	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	25.6	0.0	0.0	25.5	0.0	25.4	9.6	17.5	13.0	12.7	3.4	3.1
Incr Delay (d2), s/veh	1.5	0.0	0.0	3.7	0.0	3.2	0.1	3.9	0.3	0.2	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	5.1	0.0	4.5	1.1	11.7	2.9	0.7	2.5	0.2
LnGrp Delay(d),s/veh	27.1	0.0	0.0	29.2	0.0	28.6	9.7	21.5	13.3	12.9	4.7	3.3
LnGrp LOS	C			C		C	A	C	B	B	A	A
Approach Vol, veh/h		109			492			1613			1033	
Approach Delay, s/veh		27.1			27.9			19.5			5.2	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	35.5		22.3	10.2	34.8		22.3
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	6.0	31.0		18.0	6.0	31.0		18.0
Max Q Clear Time (g_c+I1), s	3.5	24.5		16.8	4.2	7.3		15.0
Green Ext Time (p_c), s	0.0	6.0		0.5	0.0	19.1		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	10	0	1268	21	5	913	15
Future Vol, veh/h	0	0	10	0	0	10	0	1268	21	5	913	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	11	0	1378	23	5	992	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1700	2412	504	1897	2410	701	1009	0	0	1401	0	0
Stage 1	1011	1011	-	1390	1390	-	-	-	-	-	-	-
Stage 2	689	1401	-	507	1020	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	60	32	513	42	32	381	683	-	-	484	-	-
Stage 1	257	315	-	150	208	-	-	-	-	-	-	-
Stage 2	402	205	-	516	312	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	31	513	40	31	381	683	-	-	484	-	-
Mov Cap-2 Maneuver	57	31	-	40	31	-	-	-	-	-	-	-
Stage 1	257	307	-	150	208	-	-	-	-	-	-	-
Stage 2	391	205	-	493	305	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.2	14.7	0	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	683	-	- 381	513	484	-	-
HCM Lane V/C Ratio	-	-	- 0.029	0.021	0.011	-	-
HCM Control Delay (s)	0	-	- 14.7	12.2	12.5	0.1	-
HCM Lane LOS	A	-	- B	B	B	A	-
HCM 95th %tile Q(veh)	0	-	- 0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	78	0	0	85	33	1415	38	0	1028	53
Future Vol, veh/h	0	0	78	0	0	85	33	1415	38	0	1028	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	85	0	0	92	36	1538	41	0	1117	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1804	2727	559	2169	2727	769	1117	0	-	1538	0	0
Stage 1	1117	1117	-	1610	1610	-	-	-	-	-	-	-
Stage 2	687	1610	-	559	1117	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	65	20	472	36	20	295	621	-	0	213	-	-
Stage 1	216	281	-	75	162	-	-	-	0	-	-	-
Stage 2	377	162	-	486	281	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	43	19	472	28	19	295	621	-	-	213	-	-
Mov Cap-2 Maneuver	43	19	-	28	19	-	-	-	-	-	-	-
Stage 1	203	281	-	71	153	-	-	-	-	-	-	-
Stage 2	244	153	-	382	281	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	14.3	22.7	0.5	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NEL	NET	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	621	-	295	472	213	-	-
HCM Lane V/C Ratio	0.058	-	0.313	0.18	-	-	-
HCM Control Delay (s)	11.2	-	22.7	14.3	0	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	1.3	0.6	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	122	5	101	10	0	5	141	1072	74	10	861	99
Future Volume (veh/h)	122	5	101	10	0	5	141	1072	74	10	861	99
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	133	5	110	11	0	5	153	1165	80	11	936	108
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	425	14	362	232	16	73	372	1836	126	258	1566	181
Arrive On Green	0.23	0.23	0.23	0.23	0.00	0.23	0.07	0.55	0.55	0.01	0.49	0.49
Sat Flow, veh/h	1415	62	1583	636	69	320	1774	3361	231	1774	3198	369
Grp Volume(v), veh/h	138	0	110	16	0	0	153	613	632	11	518	526
Grp Sat Flow(s),veh/h/ln	1477	0	1583	1025	0	0	1774	1770	1822	1774	1770	1798
Q Serve(g_s), s	0.0	0.0	4.0	0.0	0.0	0.0	2.8	16.8	16.9	0.2	14.8	14.8
Cycle Q Clear(g_c), s	5.1	0.0	4.0	5.1	0.0	0.0	2.8	16.8	16.9	0.2	14.8	14.8
Prop In Lane	0.96		1.00	0.69		0.31	1.00		0.13	1.00		0.21
Lane Grp Cap(c), veh/h	439	0	362	321	0	0	372	966	995	258	867	880
V/C Ratio(X)	0.31	0.00	0.30	0.05	0.00	0.00	0.41	0.63	0.64	0.04	0.60	0.60
Avail Cap(c_a), veh/h	439	0	362	321	0	0	481	966	995	340	867	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	22.4	21.1	0.0	0.0	9.5	11.0	11.0	10.0	12.9	12.9
Incr Delay (d2), s/veh	1.9	0.0	2.2	0.3	0.0	0.0	0.4	1.9	1.9	0.1	3.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	2.0	0.3	0.0	0.0	1.4	8.7	9.0	0.1	7.9	8.0
LnGrp Delay(d),s/veh	24.7	0.0	24.5	21.4	0.0	0.0	10.0	13.0	12.9	10.1	15.9	15.9
LnGrp LOS	C		C	C			A	B	B	B	B	B
Approach Vol, veh/h		248			16			1398			1055	
Approach Delay, s/veh		24.6			21.4			12.6			15.8	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	39.3		21.0	5.8	43.2		21.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	9.0	30.0		16.0	4.0	35.0		16.0
Max Q Clear Time (g_c+I1), s	4.8	16.8		7.1	2.2	18.9		7.1
Green Ext Time (p_c), s	0.1	10.5		0.8	0.0	12.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.4

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	53	400	0	1272	534	63
Future Vol, veh/h	53	400	0	1272	534	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	435	0	1383	580	68

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1306	324	649	0	-	0
Stage 1	615	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	151	672	933	-	-	-
Stage 1	502	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	151	672	933	-	-	-
Mov Cap-2 Maneuver	151	-	-	-	-	-
Stage 1	502	-	-	-	-	-
Stage 2	459	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	22.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	933	-	151	672	-	-
HCM Lane V/C Ratio	-	-	0.382	0.647	-	-
HCM Control Delay (s)	0	-	42.8	19.6	-	-
HCM Lane LOS	A	-	E	C	-	-
HCM 95th %tile Q(veh)	0	-	1.6	4.7	-	-

ATTACHMENT D

Level of Service Analysis

Signalized Genesee Street/I-790/Thruway Ramp

LOCHNER

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	27	0	49	289	0	31	34	537	158	105	913	53
Future Volume (veh/h)	27	0	49	289	0	31	34	537	158	105	913	53
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	0	54	311	0	33	37	590	174	119	1038	60
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.93	0.93	0.93	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	30	258	471	0	414	209	1001	448	337	1119	500
Arrive On Green	0.26	0.00	0.26	0.26	0.00	0.26	0.04	0.28	0.28	0.15	0.63	0.63
Sat Flow, veh/h	432	115	986	1345	0	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	84	0	0	311	0	33	37	590	174	119	1038	60
Grp Sat Flow(s),veh/h/ln	1533	0	0	1345	0	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	0.0	11.7	0.0	1.1	1.0	10.0	6.2	3.2	18.3	1.1
Cycle Q Clear(g_c), s	2.7	0.0	0.0	14.4	0.0	1.1	1.0	10.0	6.2	3.2	18.3	1.1
Prop In Lane	0.36		0.64	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	471	0	0	471	0	414	209	1001	448	337	1119	500
V/C Ratio(X)	0.18	0.00	0.00	0.66	0.00	0.08	0.18	0.59	0.39	0.35	0.93	0.12
Avail Cap(c_a), veh/h	657	0	0	638	0	611	283	1112	498	352	1119	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	20.1	0.0	0.0	24.1	0.0	19.5	18.2	21.6	20.2	14.8	12.2	9.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.3	0.0	0.1	0.1	0.7	0.6	0.2	12.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	5.9	0.0	0.5	0.5	5.0	2.8	1.5	10.2	0.5
LnGrp Delay(d),s/veh	20.4	0.0	0.0	26.3	0.0	19.6	18.3	22.3	20.8	15.0	24.2	9.4
LnGrp LOS	C			C		B	B	C	C	B	C	A
Approach Vol, veh/h		84			344			801			1217	
Approach Delay, s/veh		20.4			25.7			21.8			22.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	24.8		23.3	8.1	27.1		23.3
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	6.0	22.0		27.0	6.0	22.0		27.0
Max Q Clear Time (g_c+I1), s	5.2	12.0		16.4	3.0	20.3		4.7
Green Ext Time (p_c), s	0.0	7.8		1.9	0.0	1.6		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	5	0	612	5	0	1056	26
Future Vol, veh/h	0	0	10	0	0	5	0	612	5	0	1056	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	5	0	665	5	0	1148	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1495	1833	588	1242	1844	335	1176	0	0	671	0	0
Stage 1	1162	1162	-	668	668	-	-	-	-	-	-	-
Stage 2	333	671	-	574	1176	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	85	75	452	131	74	661	590	-	-	915	-	-
Stage 1	207	267	-	414	455	-	-	-	-	-	-	-
Stage 2	654	453	-	471	263	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	84	75	452	128	74	661	590	-	-	915	-	-
Mov Cap-2 Maneuver	84	75	-	128	74	-	-	-	-	-	-	-
Stage 1	207	267	-	414	455	-	-	-	-	-	-	-
Stage 2	649	453	-	460	263	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	13.2	10.5	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	590	-	-	661	452	915	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.024	-	-	-
HCM Control Delay (s)	0	-	-	10.5	13.2	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	21	0	0	27	25	701	30	0	1175	76
Future Vol, veh/h	0	0	21	0	0	27	25	701	30	0	1175	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	23	0	0	29	27	762	33	0	1277	83

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1636	2093	639	1455	2093	381	1277	0	-	762	0	0
Stage 1	1277	1277	-	816	816	-	-	-	-	-	-	-
Stage 2	359	816	-	639	1277	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	84	52	419	112	52	527	540	-	0	509	-	-
Stage 1	172	236	-	274	389	-	-	-	0	-	-	-
Stage 2	598	389	-	418	236	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	76	49	419	102	49	527	540	-	-	509	-	-
Mov Cap-2 Maneuver	76	49	-	102	49	-	-	-	-	-	-	-
Stage 1	163	236	-	260	376	-	-	-	-	-	-	-
Stage 2	536	370	-	395	236	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	14.1	12.2	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NETNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	540	- 527	419	509	-	-
HCM Lane V/C Ratio	0.05	- 0.056	0.054	-	-	-
HCM Control Delay (s)	12	- 12.2	14.1	0	-	-
HCM Lane LOS	B	- B	B	A	-	-
HCM 95th %tile Q(veh)	0.2	- 0.2	0.2	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	33	0	60	10	0	10	36	532	26	15	1001	56
Future Volume (veh/h)	33	0	60	10	0	10	36	532	26	15	1001	56
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	36	0	65	11	0	11	39	578	28	16	1088	61
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	0	362	222	24	169	413	1862	90	494	1795	101
Arrive On Green	0.23	0.00	0.23	0.23	0.00	0.23	0.03	0.54	0.54	0.03	1.00	1.00
Sat Flow, veh/h	1414	0	1583	633	107	740	1774	3437	166	1774	3408	191
Grp Volume(v), veh/h	36	0	65	22	0	0	39	297	309	16	565	584
Grp Sat Flow(s),veh/h/ln	1414	0	1583	1479	0	0	1774	1770	1833	1774	1770	1829
Q Serve(g_s), s	0.5	0.0	2.3	0.0	0.0	0.0	0.7	6.5	6.5	0.3	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	2.3	0.7	0.0	0.0	0.7	6.5	6.5	0.3	0.0	0.0
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.09	1.00		0.10
Lane Grp Cap(c), veh/h	426	0	362	415	0	0	413	959	993	494	932	963
V/C Ratio(X)	0.08	0.00	0.18	0.05	0.00	0.00	0.09	0.31	0.31	0.03	0.61	0.61
Avail Cap(c_a), veh/h	426	0	362	415	0	0	461	959	993	568	932	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	0.0	21.7	21.1	0.0	0.0	7.0	8.8	8.8	7.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.1	0.2	0.0	0.0	0.1	0.8	0.8	0.0	2.9	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.1	0.4	0.0	0.0	0.3	3.3	3.5	0.1	0.8	0.8
LnGrp Delay(d),s/veh	21.7	0.0	22.8	21.3	0.0	0.0	7.1	9.6	9.6	7.5	2.9	2.8
LnGrp LOS	C		C	C			A	A	A	A	A	A
Approach Vol, veh/h		101			22			645			1165	
Approach Delay, s/veh		22.4			21.3			9.4			2.9	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	41.9		21.0	6.1	42.9		21.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	35.0		16.0	4.0	35.0		16.0
Max Q Clear Time (g_c+I1), s	2.7	2.0		4.3	2.3	8.5		2.7
Green Ext Time (p_c), s	0.0	14.7		0.3	0.0	13.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	26	524	0	617	559	73
Future Volume (veh/h)	26	524	0	617	559	73
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1900
Adj Flow Rate, veh/h	28	0	0	671	608	79
Adj No. of Lanes	1	1	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	1014	905	0	1112	990	128
Arrive On Green	0.57	0.00	0.00	0.63	0.31	0.31
Sat Flow, veh/h	1774	1583	0	3725	3245	409
Grp Volume(v), veh/h	28	0	0	671	341	346
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1770	1770	1791
Q Serve(g_s), s	0.5	0.0	0.0	7.9	11.5	11.5
Cycle Q Clear(g_c), s	0.5	0.0	0.0	7.9	11.5	11.5
Prop In Lane	1.00	1.00	0.00			0.23
Lane Grp Cap(c), veh/h	1014	905	0	1112	556	563
V/C Ratio(X)	0.03	0.00	0.00	0.60	0.61	0.62
Avail Cap(c_a), veh/h	1014	905	0	1112	556	563
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.5	0.0	0.0	10.4	20.4	20.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.4	5.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	4.1	6.4	6.4
LnGrp Delay(d),s/veh	6.6	0.0	0.0	12.8	25.4	25.4
LnGrp LOS	A			B	C	C
Approach Vol, veh/h	28			671	687	
Approach Delay, s/veh	6.6			12.8	25.4	
Approach LOS	A			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				26.0		44.0		26.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				22.0		40.0		22.0
Max Q Clear Time (g_c+I1), s				9.9		2.5		13.5
Green Ext Time (p_c), s				6.6		0.1		5.1

Intersection Summary		
HCM 2010 Ctrl Delay		18.9
HCM 2010 LOS		B

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/11/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	93	5	83	294	0	68	92	962	231	95	900	83
Future Volume (veh/h)	93	5	83	294	0	68	92	962	231	95	900	83
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	95	5	85	346	0	80	106	1106	266	99	938	86
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.85	0.85	0.85	0.87	0.87	0.87	0.96	0.96	0.96
Percent Heavy Veh. %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	36	201	496	0	488	339	1256	562	257	1251	560
Arrive On Green	0.31	0.31	0.31	0.31	0.00	0.31	0.07	0.36	0.36	0.15	0.71	0.71
Sat Flow, veh/h	650	116	651	1301	0	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	185	0	0	346	0	80	106	1106	266	99	938	86
Grp Sat Flow(s),veh/h/ln	1417	0	0	1301	0	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	4.9	0.0	0.0	10.6	0.0	2.6	2.5	20.5	9.1	2.3	11.6	1.3
Cycle Q Clear(g_c), s	7.5	0.0	0.0	18.1	0.0	2.6	2.5	20.5	9.1	2.3	11.6	1.3
Prop In Lane	0.51		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	514	0	0	496	0	488	339	1256	562	257	1251	560
V/C Ratio(X)	0.36	0.00	0.00	0.70	0.00	0.16	0.31	0.88	0.47	0.39	0.75	0.15
Avail Cap(c_a), veh/h	564	0	0	541	0	543	358	1264	565	279	1264	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.64	0.64	0.64
Uniform Delay (d), s/veh	19.3	0.0	0.0	23.1	0.0	17.6	13.4	21.2	17.5	14.7	8.3	6.8
Incr Delay (d2), s/veh	0.6	0.0	0.0	4.1	0.0	0.2	0.2	7.4	0.6	0.2	2.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.0	6.9	0.0	1.2	1.3	11.3	4.1	1.1	5.7	0.6
LnGrp Delay(d),s/veh	20.0	0.0	0.0	27.2	0.0	17.9	13.5	28.6	18.1	14.9	11.0	7.2
LnGrp LOS	B			C		B	B	C	B	B	B	A
Approach Vol, veh/h		185			426			1478			1123	
Approach Delay, s/veh		20.0			25.4			25.6			11.1	
Approach LOS		B			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	29.9		26.6	10.2	29.7		26.6
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	6.0	25.0		24.0	6.0	25.0		24.0
Max Q Clear Time (g_c+I1), s	4.3	22.5		20.1	4.5	13.6		9.5
Green Ext Time (p_c), s	0.0	2.3		1.5	0.0	9.9		3.6

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	15	0	0	15	0	1094	26	0	983	15
Future Vol, veh/h	0	0	15	0	0	15	0	1094	26	0	983	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	16	0	0	16	0	1189	28	0	1068	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1672	2294	542	1737	2288	609	1085	0	0	1217	0	0
Stage 1	1077	1077	-	1203	1203	-	-	-	-	-	-	-
Stage 2	595	1217	-	534	1085	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	63	39	485	56	39	438	639	-	-	569	-	-
Stage 1	234	293	-	196	256	-	-	-	-	-	-	-
Stage 2	458	252	-	498	291	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	61	39	485	54	39	438	639	-	-	569	-	-
Mov Cap-2 Maneuver	61	39	-	54	39	-	-	-	-	-	-	-
Stage 1	234	293	-	196	256	-	-	-	-	-	-	-
Stage 2	441	252	-	481	291	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.7	13.5	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	639	-	- 438	485	569	-	-
HCM Lane V/C Ratio	-	-	- 0.037	0.034	-	-	-
HCM Control Delay (s)	0	-	- 13.5	12.7	0	-	-
HCM Lane LOS	A	-	- B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	- 0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	46	0	0	58	13	1227	24	0	1219	58
Future Vol, veh/h	0	0	46	0	0	58	13	1227	24	0	1219	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	50	0	0	63	14	1334	26	0	1325	63

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1887	2687	663	2025	2687	667	1325	0	-	1334	0	0
Stage 1	1325	1325	-	1362	1362	-	-	-	-	-	-	-
Stage 2	562	1362	-	663	1325	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	57	21	404	45	21	344	517	-	0	269	-	-
Stage 1	161	223	-	113	214	-	-	-	0	-	-	-
Stage 2	450	214	-	405	223	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	46	20	404	39	20	344	517	-	-	269	-	-
Mov Cap-2 Maneuver	46	20	-	39	20	-	-	-	-	-	-	-
Stage 1	157	223	-	110	208	-	-	-	-	-	-	-
Stage 2	358	208	-	355	223	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	15.2	17.8	0.1	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	517	-	344	404	269	-	-
HCM Lane V/C Ratio	0.027	-	0.183	0.124	-	-	-
HCM Control Delay (s)	12.2	-	17.8	15.2	0	-	-
HCM Lane LOS	B	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	0.4	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	213	0	185	5	0	5	195	892	37	15	887	175
Future Volume (veh/h)	213	0	185	5	0	5	195	892	37	15	887	175
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	232	0	201	5	0	5	212	970	40	16	964	190
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	340	0	385	80	24	28	438	1828	75	321	1345	265
Arrive On Green	0.24	0.00	0.24	0.24	0.00	0.24	0.09	0.53	0.53	0.03	0.91	0.91
Sat Flow, veh/h	976	0	1583	13	100	114	1774	3464	143	1774	2949	581
Grp Volume(v), veh/h	232	0	201	10	0	0	212	495	515	16	578	576
Grp Sat Flow(s),veh/h/ln	976	0	1583	228	0	0	1774	1770	1838	1774	1770	1760
Q Serve(g_s), s	0.0	0.0	7.7	0.1	0.0	0.0	4.1	12.9	12.9	0.3	5.8	5.8
Cycle Q Clear(g_c), s	16.7	0.0	7.7	16.8	0.0	0.0	4.1	12.9	12.9	0.3	5.8	5.8
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.08	1.00		0.33
Lane Grp Cap(c), veh/h	340	0	385	132	0	0	438	934	969	321	807	803
V/C Ratio(X)	0.68	0.00	0.52	0.08	0.00	0.00	0.48	0.53	0.53	0.05	0.72	0.72
Avail Cap(c_a), veh/h	340	0	385	132	0	0	486	934	969	395	807	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.55	0.55	0.55	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	23.0	21.7	0.0	0.0	8.1	10.8	10.8	10.2	1.9	1.9
Incr Delay (d2), s/veh	10.6	0.0	5.0	1.1	0.0	0.0	0.5	1.2	1.2	0.1	5.4	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	3.9	0.2	0.0	0.0	1.9	6.5	6.7	0.2	3.5	3.5
LnGrp Delay(d),s/veh	37.0	0.0	28.0	22.8	0.0	0.0	8.5	12.0	12.0	10.2	7.3	7.4
LnGrp LOS	D		C	C			A	B	B	B	A	A
Approach Vol, veh/h		433			10			1222			1170	
Approach Delay, s/veh		32.8			22.8			11.4			7.4	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.1	36.9		22.0	6.1	41.9		22.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	8.0	30.0		17.0	4.0	34.0		17.0
Max Q Clear Time (g_c+I1), s	6.1	7.8		18.7	2.3	14.9		18.8
Green Ext Time (p_c), s	0.1	15.0		0.0	0.0	13.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	21	350	0	1110	649	42
Future Volume (veh/h)	21	350	0	1110	649	42
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1900
Adj Flow Rate, veh/h	23	0	0	1207	705	46
Adj No. of Lanes	1	1	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	659	588	0	1820	1735	113
Arrive On Green	0.37	0.00	0.00	1.00	0.51	0.51
Sat Flow, veh/h	1774	1583	0	3725	3467	220
Grp Volume(v), veh/h	23	0	0	1207	370	381
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1770	1770	1824
Q Serve(g_s), s	0.6	0.0	0.0	0.0	9.0	9.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.0	9.0	9.0
Prop In Lane	1.00	1.00	0.00			0.12
Lane Grp Cap(c), veh/h	659	588	0	1820	910	938
V/C Ratio(X)	0.03	0.00	0.00	0.66	0.41	0.41
Avail Cap(c_a), veh/h	659	588	0	1820	910	938
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	0.0	0.0	10.4	10.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.9	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.5	4.7	4.8
LnGrp Delay(d),s/veh	14.1	0.0	0.0	1.9	11.8	11.7
LnGrp LOS	B			A	B	B
Approach Vol, veh/h	23			1207	751	
Approach Delay, s/veh	14.1			1.9	11.8	
Approach LOS	B			A	B	

er	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				40.0		30.0		40.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				36.0		26.0		36.0
Max Q Clear Time (g_c+I1), s				2.0		2.6		11.0
Green Ext Time (p_c), s				18.3		0.0		15.3

ction Summary		
HCM 2010 Ctrl Delay		5.8
HCM 2010 LOS		A

HCM 2010 Signalized Intersection Summary
2: Genesee St & Wurz Ave

12/11/2015

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	58	0	44	200	0	194	98	1192	210	68	837	67
Future Volume (veh/h)	58	0	44	200	0	194	98	1192	210	68	837	67
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	62	0	47	250	0	242	105	1282	226	72	890	71
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	21	78	393	0	392	439	1540	689	257	1505	673
Arrive On Green	0.25	0.00	0.25	0.25	0.00	0.25	0.07	0.44	0.44	0.13	0.85	0.85
Sat Flow, veh/h	331	86	316	1353	0	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	109	0	0	250	0	242	105	1282	226	72	890	71
Grp Sat Flow(s),veh/h/ln	734	0	0	1353	0	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	3.5	0.0	0.0	1.8	0.0	9.5	2.2	22.5	6.6	1.5	5.3	0.5
Cycle Q Clear(g_c), s	13.0	0.0	0.0	14.8	0.0	9.5	2.2	22.5	6.6	1.5	5.3	0.5
Prop In Lane	0.57		0.43	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	0	0	393	0	392	439	1540	689	257	1505	673
V/C Ratio(X)	0.42	0.00	0.00	0.64	0.00	0.62	0.24	0.83	0.33	0.28	0.59	0.11
Avail Cap(c_a), veh/h	275	0	0	406	0	407	458	1567	701	294	1567	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	25.6	0.0	0.0	25.5	0.0	23.4	9.6	17.5	13.0	12.7	3.4	3.1
Incr Delay (d2), s/veh	1.5	0.0	0.0	3.7	0.0	3.2	0.1	3.9	0.3	0.2	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	5.1	0.0	4.5	1.1	11.7	2.9	0.7	2.5	0.2
LnGrp Delay(d),s/veh	27.1	0.0	0.0	29.2	0.0	26.6	9.7	21.5	13.3	12.9	4.7	3.3
LnGrp LOS	C			C		C	A	C	B	B	A	A
Approach Vol, veh/h		109			492			1613			1033	
Approach Delay, s/veh		27.1			27.9			19.5			5.2	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	35.5		22.3	10.2	34.8		22.3
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	6.0	31.0		18.0	6.0	31.0		18.0
Max Q Clear Time (g_c+I1), s	3.5	24.5		16.8	4.2	7.3		15.0
Green Ext Time (p_c), s	0.0	6.0		0.5	0.0	19.1		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	10	0	0	10	0	1268	21	5	913	15
Future Vol, veh/h	0	0	10	0	0	10	0	1268	21	5	913	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	0	0	11	0	1378	23	5	992	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1700	2412	504	1897	2410	701	1009	0	0	1401	0	0
Stage 1	1011	1011	-	1390	1390	-	-	-	-	-	-	-
Stage 2	689	1401	-	507	1020	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	60	32	513	42	32	381	683	-	-	484	-	-
Stage 1	257	315	-	150	208	-	-	-	-	-	-	-
Stage 2	402	205	-	516	312	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	31	513	40	31	381	683	-	-	484	-	-
Mov Cap-2 Maneuver	57	31	-	40	31	-	-	-	-	-	-	-
Stage 1	257	307	-	150	208	-	-	-	-	-	-	-
Stage 2	391	205	-	493	305	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	12.2	14.7	0	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	683	-	-	381	513	484	-	-
HCM Lane V/C Ratio	-	-	-	0.029	0.021	0.011	-	-
HCM Control Delay (s)	0	-	-	14.7	12.2	12.5	0.1	-
HCM Lane LOS	A	-	-	B	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Vol, veh/h	0	0	78	0	0	85	33	1415	38	0	1028	53
Future Vol, veh/h	0	0	78	0	0	85	33	1415	38	0	1028	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	160	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	85	0	0	92	36	1538	41	0	1117	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1804	2727	559	2169	2727	769	1117	0	-	1538	0	0
Stage 1	1117	1117	-	1610	1610	-	-	-	-	-	-	-
Stage 2	687	1610	-	559	1117	-	-	-	-	-	-	-
Critical Hdwy	6.99	6.54	6.94	6.99	6.54	7.14	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.67	4.02	3.32	3.67	4.02	3.92	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	65	20	472	36	20	295	621	-	0	213	-	-
Stage 1	216	281	-	75	162	-	-	-	0	-	-	-
Stage 2	377	162	-	466	281	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	43	19	472	28	19	295	621	-	-	213	-	-
Mov Cap-2 Maneuver	43	19	-	28	19	-	-	-	-	-	-	-
Stage 1	203	281	-	71	153	-	-	-	-	-	-	-
Stage 2	244	153	-	382	281	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	14.3	22.7	0.3	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NEL	NET	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	621	-	295	472	213	-	-
HCM Lane V/C Ratio	0.058	-	0.313	0.18	-	-	-
HCM Control Delay (s)	11.2	-	22.7	14.3	0	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	1.3	0.6	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	122	5	101	10	0	5	141	1072	74	10	861	99
Future Volume (veh/h)	122	5	101	10	0	5	141	1072	74	10	861	99
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	133	5	110	11	0	5	153	1165	80	11	936	108
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	425	14	362	232	16	73	478	1836	126	258	1566	181
Arrive On Green	0.23	0.23	0.23	0.23	0.00	0.23	0.07	0.55	0.55	0.02	0.98	0.98
Sat Flow, veh/h	1415	62	1583	636	69	320	1774	3361	231	1774	3198	369
Grp Volume(v), veh/h	138	0	110	16	0	0	153	613	632	11	518	526
Grp Sat Flow(s),veh/h/ln	1477	0	1583	1025	0	0	1774	1770	1822	1774	1770	1798
Q Serve(g_s), s	0.0	0.0	4.0	0.0	0.0	0.0	2.8	16.8	16.9	0.2	1.0	1.0
Cycle Q Clear(g_c), s	5.1	0.0	4.0	5.1	0.0	0.0	2.8	16.8	16.9	0.2	1.0	1.0
Prop In Lane	0.96		1.00	0.69		0.31	1.00		0.13	1.00		0.21
Lane Grp Cap(c), veh/h	439	0	362	321	0	0	478	966	995	258	867	880
V/C Ratio(X)	0.31	0.00	0.30	0.05	0.00	0.00	0.32	0.63	0.64	0.04	0.60	0.60
Avail Cap(c_a), veh/h	439	0	362	321	0	0	587	966	995	340	867	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	22.4	21.1	0.0	0.0	7.1	11.0	11.0	9.9	0.4	0.4
Incr Delay (d2), s/veh	1.9	0.0	2.2	0.3	0.0	0.0	0.2	1.9	1.9	0.1	3.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	2.0	0.3	0.0	0.0	1.4	8.7	9.0	0.1	1.0	1.0
LnGrp Delay(d),s/veh	24.7	0.0	24.5	21.4	0.0	0.0	7.3	13.0	12.9	10.0	3.4	3.4
LnGrp LOS	C		C	C			A	B	B	A	A	A
Approach Vol, veh/h		248			16			1398			1055	
Approach Delay, s/veh		24.6			21.4			12.3			3.5	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	39.3		21.0	5.8	43.2		21.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	9.0	30.0		16.0	4.0	35.0		16.0
Max Q Clear Time (g_c+I1), s	4.8	3.0		7.1	2.2	18.9		7.1
Green Ext Time (p_c), s	0.1	18.2		0.8	0.0	12.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	53	400	0	1272	534	63
Future Volume (veh/h)	53	400	0	1272	534	63
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1900
Adj Flow Rate, veh/h	58	0	0	1383	580	68
Adj No. of Lanes	1	1	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	659	588	0	1820	1642	192
Arrive On Green	0.37	0.00	0.00	1.00	0.51	0.51
Sat Flow, veh/h	1774	1583	0	3725	3286	374
Grp Volume(v), veh/h	58	0	0	1383	321	327
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1770	1770	1797
Q Serve(g_s), s	1.5	0.0	0.0	0.0	7.5	7.6
Cycle Q Clear(g_c), s	1.5	0.0	0.0	0.0	7.5	7.6
Prop In Lane	1.00	1.00	0.00			0.21
Lane Grp Cap(c), veh/h	659	588	0	1820	910	924
V/C Ratio(X)	0.09	0.00	0.00	0.76	0.35	0.35
Avail Cap(c_a), veh/h	659	588	0	1820	910	924
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	0.0	10.1	10.1
Incr Delay (d2), s/veh	0.3	0.0	0.0	3.0	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.8	3.9	4.0
LnGrp Delay(d),s/veh	14.6	0.0	0.0	3.0	11.2	11.2
LnGrp LOS	B			A	B	B
Approach Vol, veh/h	58			1383	648	
Approach Delay, s/veh	14.6			3.0	11.2	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				40.0		30.0		40.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				36.0		26.0		36.0
Max Q Clear Time (g_c+I1), s				2.0		3.5		9.6
Green Ext Time (p_c), s				19.6		0.1		16.8

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	SEL	SER	NEL	NET	SWT	SWR
Traffic Vol, veh/h	0	0	0	1199	923	0
Future Vol, veh/h	0	0	0	1199	923	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	1303	1003	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1655	502	1003	0	-	0
Stage 1	1003	-	-	-	-	-
Stage 2	652	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	89	515	686	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	480	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	89	515	686	-	-	-
Mov Cap-2 Maneuver	89	-	-	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	480	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	686	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-

State Environmental Quality Review Act (SEQRA)
Final Generic Environmental Impact Statement

CITY OF UTICA – HARBOR POINT REDEVELOPMENT
Utica, New York

Appendix D
Notice of Completion of the DGEIS &
Notice of Hearing

14-12-9 (3/99)-9c

SEQR

State Environmental Quality Review
Notice of Completion of Draft
and
Notice of SEQR Hearing

Lead Agency: City of Utica Common Council **Project Number**

Address: 1 Kennedy Plaza, Utica, New York, 13502 **Date** August 11, 2015

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law. (and local law # if any)

A Draft Environmental Impact Statement has been completed and accepted for the proposed action described below. Comments are requested and will be accepted by the contact person until Sept. 28, 2015 A public hearing on the Draft EIS will be held on 9/15/2015 @ 6:00 p.m. (date and time) at North Utica Senior Center, 50 Riverside Dr., Uti (place).

Name of Action:

Utica Harbor Point Master Plan Implementation

Description of Action:

The total project size encompasses approximately 148 acres on the Erie Canal and Mohawk River. The implementation of the Utica Harbor Point Master Plan consists of:
- Relocation of NYS Canal Corporation Operations (including closure of Dredge Spoils Area-1 (DSA-1))
- Infrastructure and Road Improvements
- Replacement of Harbor Walls
- Public/Private Buildout of the Harbor Point Redevelopment Plan

Location: (Include street address and the name of the municipality/county. A location map of appropriate scale is also recommended.)

City of Utica, NY Harbor. See attached location map.

Potential Environmental Impacts:

The Lead Agency has compared the potential impacts that may be reasonably expected to result from the Proposed Project against the criteria contained in Section 617.7 (c) of the SEQR regulations and have identified the potential for such impacts as:

Zoning, Land Use, Public Policy & Community
• The project is consistent with the City's previously prepared community plans.
• Special permits are necessary for proposed recreational uses

Community Services
• The project will increase demand for services, but will result in expanded and enhanced passive and active recreational opportunities.

Geology, Soils & Topography
• Impacts are primarily limited to construction phases and can be mitigated through implementation of standard construction safeguards.
• Importation of fill material will be necessary to infill the NYS Canal Corporation's Dredged Spoil Containment Area.

Groundwater & Surface Water Resources
• Mitigation will be required to minimize sedimentation impacts during reconstruction of the harbor walls.
• Stormwater management facilities will be required to mitigate runoff due to an increase in impervious surfaces.

Traffic & Transportation
• Proposed road and access improvements will mitigate anticipated increases in traffic to and from the project area.

Air Quality
• Short-term dust impacts during construction will be mitigated through implementation of dust control measures.

A copy of the Draft / Final EIS may be obtained from:

Contact Person: Brian Thomas, Commissioner, Office of Urban and Economic Development

Address: 1 Kennedy Plaza, Utica, NY 13502

Telephone Number: 315-792-0181

A copy of this notice must be sent to:

Department of Environmental Conservation, 625 Broadway Albany, New York 12233-1750

Chief Executive Officer, Town/City/Village of Utica Harbor, Utica New York

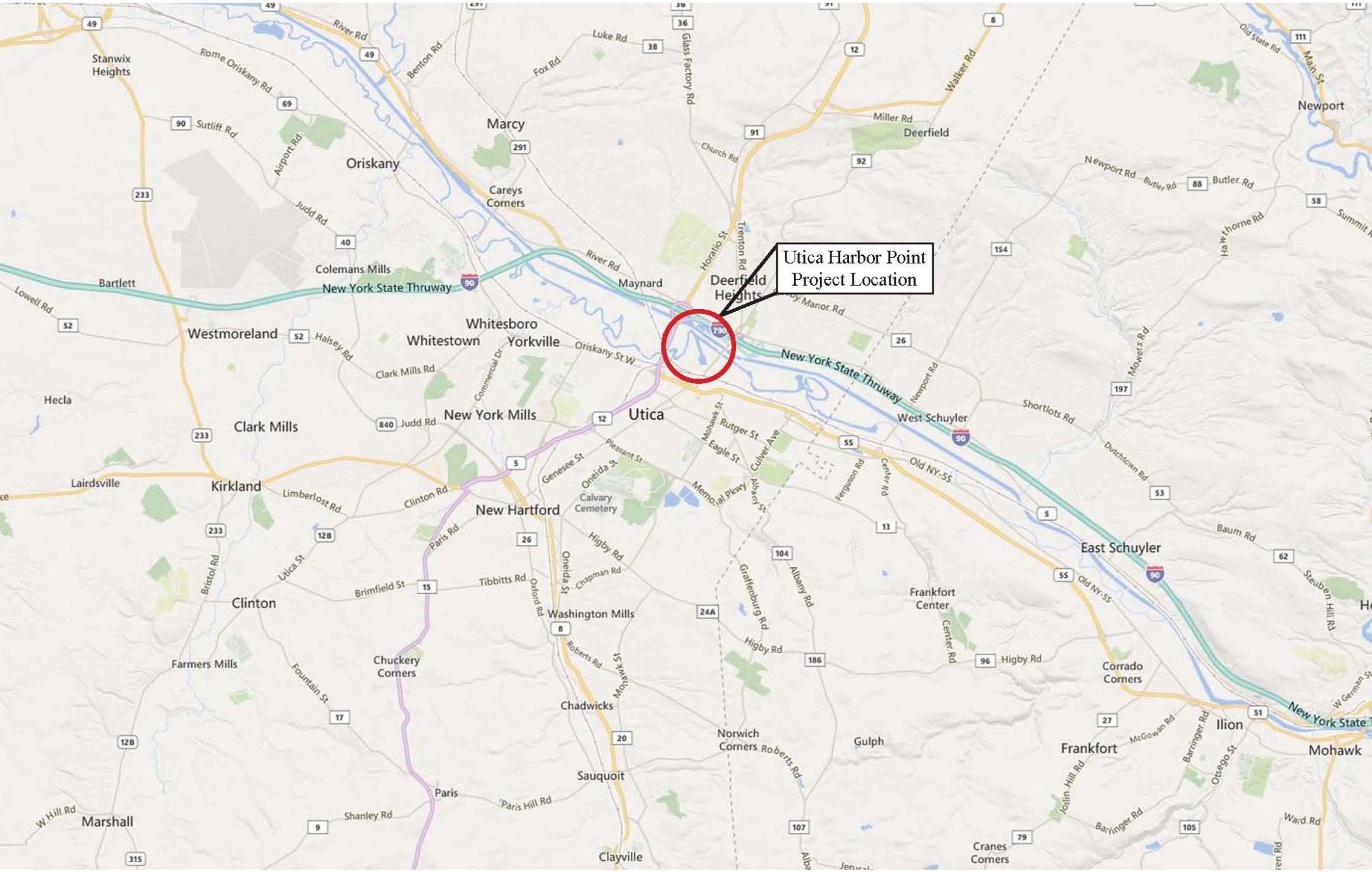
Any person who has requested a copy of the Draft / Final EIS

Any other involved agencies

Environmental Notice Bulletin 625Broadway Albany, NY 12233-1750

Copies of the Draft EIS must be distributed according to 6NYCRR 617.12(b).

Reset


Utica Harbor Point
Project Location
Stanwix Heights
Rome Oriskany Rd
Sutliff Rd
Airport Rd
Oriskany
Judd Rd
Colemans Mills
Bartlett
Lowell Rd
New York State Thruway
Westmoreland
Halsey Rd
Clark Mills Rd
Hecla
Clark Mills
Lairdsville
Kirkland
Limberlost Rd
Clinton Rd
Bristol Rd
Utica St
Clinton
Brimfield St
Tibbitts Rd
Farmers Mills
Fountain St
Chuckery Corners
Paris Rd
Paris
Paris Hill Rd
Shanley Rd
W Hill Rd
Marshall
Marcy
Careys Corners
River Rd
Benton Rd
Fox Rd
Luke Rd
Glass Factory Rd
Church Rd
Maynard
Whitesboro
Whitestown
Yorkville
Oriskany St W
Commercial Dr
New York Mills
Judd Rd
Utica
Genesee St
Pleasant St
Oneida St
Calvary Cemetery
New Hartford
Higby Rd
Chapman Rd
Oneida St
Oxford Rd
Washington Mills
Roberts Rd
Mohawk St
Chadwicks
Sauquoit
Clayville
Norwich Corners
Roberts Rd
Gulph
Graffenburg Rd
Albany Rd
Frankfort Center
Center Rd
Higby Rd
Horatio St
Trenton Rd
Deerfield Heights
Miller Rd
Deerfield
Walker Rd
Newport
Old State Rd
Main St
Newport Rd
Butler Rd
Hawthorne Rd
Summit
Monets Rd
Shortlots Rd
Dutchtown Rd
Newport Rd
New York State Thruway
West Schuyler
Mohawk St
Rutger St
Eagle St
Culver Ave
Ferguson Rd
Center Rd
Old NY-5S
Memorial Pkwy
Albany St
East Schuyler
Baum Rd
Steuben Hill Rd
Old NY-5S
Corrado Corners
Higby Rd
Frankfort
McGowan Rd
Joslin Hill Rd
Barringer Rd
Ilion
Otsego St
New York State
Mohawk
Ward Rd
Cranes Corners
Barringer Rd

CITY OF UTICA

Notice of Completion of a Draft Generic Environmental Impact Statement ("DGEIS"), and Notice of DGEIS Public Hearing Tuesday, September 15, 2015 at the North Utica Senior Center

PROJECT TITLE: City of Utica Harbor Point Master Plan Implementation

LEAD AGENCY: City of Utica Common Council
1 Kennedy Plaza
Utica, NY 13502

INVOLVED AGENCIES:

Mohawk Valley Water Authority
Mr. Richard Goodney, P.E.
1 Kennedy Plaza
Utica, NY 13502

New York State Canal Corporation
Mr. Joseph Moloughney, P.E.
NYS Canal Corporation
Exit 23 and Rt. 9W
Albany, NY 12201

Oneida County Department of Health
Phyllis Ellis, Director
185 Genesee Street
Utica, NY 13501

New York State Department of Environmental Conservation
Mr. Larry Ambeau
Regional Permit Administrator
NYSDEC, Region 6
317 Washington St.
Watertown, NY 13601

New York State Department of Transportation Region 2
Mr. Brian Hoffmann, P.E.
Regional Design Engineer
Utica State Office Building
207 Genesee Street
Utica, NY 13501

New York State Division for Historic Preservation
New York State Office of Parks, Recreation & Historic Preservation
Ms. Ruth Pierpont, Deputy Commissioner
Peebles Island State Park
P.O. Box 189
Waterford, NY 12188-0189

New York State Empire State Development Corporation
Jane Thelen
625 Broadway
Albany, New York 12207

Oneida County Department of Planning
Mr. John R. Kent, Jr., Commissioner
321 Main Street
Utica, NY 13501

Oneida County Soil & Water Conservation District
Attn: Mr. Kevin L. Lewis, Exec. Director
121 Second Street
Oriskany, New York 13424

Oneida County Department of Water Quality & Water Pollution Control
Attn: Mr. Steven P. Devan, P.E. – Commissioner
Post Office Box 442
Utica, New York 13503-0442

The ENB SEQRA Notice Publication Form - *Please check all that apply*

Reset Form

Deadline: Notices must be received by **6 p.m. Wednesday** to appear in the following Wednesday's ENB

____ Negative Declaration - Type I

____ Conditioned Negative Declaration

____ Draft Negative Declaration

____ Positive Declaration
____ with Public Scoping Session

__✔__ Draft EIS
__✔__ with Public Hearing
__✔__ Generic
____ Supplemental

_____ Final EIS
____ Generic
____ Supplemental

DEC Region # 6 County: Oneida COunty Lead Agency: City of Utica Common Council

Project Title: City of Utica Implementation of City of Utica Harbor Point Master Plan

Brief Project Description: The action involves . . .

The total project size encompasses approximately 148 acres on the Erie Canal and Mohawk River. The implementation of the Utica Harbor Point Master Plan consists of:

- Relocation of NYS Canal Corporation Operations (including closure of Dredge Spoils Area-1 (DSA-1))
- Infrastructure and Road Improvements
- Replacement of Harbor Walls
- Public/Private Buildout of the Harbor Point Redevelopment Plan

Project Location (include street address/municipality): Utica

Contact Person: Brian Thomas, Commissioner, Urban and Economic Development

Address: 1 Kennedy Plaza City: Utica State: NY Zip: 13502

Phone: 315-792-0181 Fax: _____ E-mail: BTHomas@CityofUtica.c

For Draft Negative Declaration / Draft EIS: Public Comment Period ends: _____ / _____ / _____

For Public Hearing or Scoping Session: Date: 9 / 25 / 15 Time: 6 : pm am/pm

Location: North Utica Senior Center, 50 Riverside Dr.

A hard copy of the DEIS/FEIS is available at the following locations:

Office of Urban and Economic Development, 1 Kennedy Plaza, Utica NY 13502

The online version of the DEIS/FEIS is available at the following publically accessible web site:

www.UticaHArborPoint.com

For Conditioned Negative Declaration: In summary, conditions include:

CITY OF UTICA
NOTICE OF INTENT TO DECLARE LEAD AGENCY

INVOLVED AGENCY: New York State Department of Environmental Conservation
Mr. Larry Ambeau
Regional Permit Administrator
NYSDEC, Region 6
317 Washington St.
Watertown, NY 13601

PROJECT TITLE: Implementation of City of Utica Harbor Point Master Plan

MAILING DATE: August 14, 2014

This notification is for the purpose of designating a lead agency for the environmental review of the above titled project in accordance with the requirements of Article 8 of the New York State Environmental Conservation Law and the regulations promulgated thereunder.

PLEASE TAKE NOTICE that the Utica Common Council intends to declare Lead Agency, on behalf of the City of Utica, for environmental review of the Implementation the Utica Harbor Point Master Plan. The City has received funding through New York State Department of State to implement components of their Harbor Point Master Plan.

By resolution, the Utica Common Council has preliminarily classified the Proposed Action as a Type 1 Action. Part I of an Environmental Assessment Form (EAF) is enclosed with this notice.

A Lead Agency must be agreed to within 30 days of this notice. If no objection is received from an Involved Agency during that time period, the Utica Common Council will become the Lead Agency on behalf of the City of Utica. Objections to the designation of the Utica Common Council as the Lead Agency must be received in writing by September 13, 2014 at the following address:

Department of Urban & Economic Development
Attn: Mr. Brian Thomas, Acting Commissioner
Utica City Hall
1 Kennedy Plaza
Utica, New York 13502

Copies with attachments sent to:

NYS Canal Corp
NYS DOS
NYS DOT
NYS ESD
NYS SHPO
Mohawk Valley Water Authority
Oneida County DOH
Oneida County Planning
Oneida County SWCD
Oneida County WQWPC