DIVNEY • TUNG • SCHWALBE
Intelligent Land Use

OVERLOOK TERRACE
119 OREGON ROAD

TOWN OF CORTLANDT
WESTCHESTER COUNTY, NEW YORK

EXPANDED ENVIRONMENTAL ASSESSMENT FORM

Prepared for Submission To:

TOWN OF CORTLANDT

JUNE 2021

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Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Overlook Terrace		
Project Location (describe, and attach a general location map): 119 Oregon Road, Cortlandt, NY 10567		
Brief Description of Proposed Action (include purpose or need): The proposed redevelopment of the project site includes the removal of an existing banquet and catering facility and the construction of a new 3-story, 135 unit age-restricted active adult residential building with associated site improvements. The project will contain approximately 96 one-bedroom units and 39 two-bedroom units together with 145 on-site surface parking spaces. Off-site improvements include the reconfiguration of the western portion of Donnelly Place adjacent to the project site.		
Name of Applicant/Sponsor: NRP Properties LLC	Telephone: 646-330-7903 E-Mail: jgertman@nrpgroup.com	
Address: 1228 Euclid Avenue 4th Floor		
City/PO: Cleveland	State: OH	Zip Code: 44115
Project Contact (if not same as sponsor; give name and title/role): Jonathan Gertman, NRP Properties LLC	Telephone: 646-330-7903 E-Mail: jgertman@nrpgroup.com	
Address: One Union Square West, Suite 803		
City/PO: New York	State: NY	Zip Code: 10003
Property Owner (if not same as sponsor): Terrace Management, Inc	Telephone: E-Mail:	
Address: PO Box 142		
City/PO: Cortlandt Manor	State: NY	Zip Code: 10567

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity		If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees	☑Yes☐No	Town Board - Zoning Text Amendment	
b. City, Town or Village Planning Board or Commission	☑Yes☐No	Site Development Plan Approval, Special Permit, Tree Removal Permit, Steep Slope Permit	
c. City, Town or Village Zoning Board of Appeals	☐Yes☐No		
d. Other local agencies	☐Yes☐No		
e. County agencies	☑Yes☐No	Westchester County Department of Health - Sewer and Water Permits	
f. Regional agencies	☐Yes☐No		
g. State agencies	☑Yes☐No	NYSDEC SPDES Permit for Stormwater Discharge; NYSHCR Funding	
h. Federal agencies	☐Yes☐No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☑Yes☐No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes☑No

If Yes, identify the plan(s):

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
CC - Community Commercial zoning district

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☑ No

c. Is a zoning change requested as part of the proposed action? ☑ Yes ☐ No
If Yes,
i. What is the proposed new zoning for the site? Zoning Text Amendment proposed to CC District to allow for age restricted active adult apartments.

C.4. Existing community services.

a. In what school district is the project site located? Lakeland Central School District

b. What police or other public protection forces serve the project site?
Westchester County Police, New York State Police

c. Which fire protection and emergency medical services serve the project site?
Mohegan Fire District / Cortlandt A.L.S #3 Ambulance Services and Advanced Life Support

d. What parks serve the project site?
Sprout Brook Park; Hudson Highlands Gateway Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Residential

b. a. Total acreage of the site of the proposed action? 8.737 acres
b. Total acreage to be physically disturbed? +/- 7.9 acres*
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 8.737 acres

* Not including +/- 0.25 acres of off-site improvements to reconfigure paved areas and install grass on Donnelly Place.

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % ____________ Units: ____________

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? ________
iv. Minimum and maximum proposed lot sizes? Minimum ________ Maximum ________

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 24 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: ____________

f. Does the project include new residential uses? ☑Yes ☐No
If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				135 dwelling units
At completion of all phases				135 dwelling units

g. Does the proposed action include new non-residential construction (including expansions)? ☐Yes ☑No
If Yes,
i. Total number of structures ___________
ii. Dimensions (in feet) of largest proposed structure: ________height; ________width; and _______ length
iii. Approximate extent of building space to be heated or cooled: ______________________ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☑Yes ☐No
If Yes,
i. Purpose of the impoundment: Stormwater Management Facility Detention Basin
ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☑Other specify: Stormwater Runoff
iii. If other than water, identify the type of impounded/contained liquids and their source.
iv. Approximate size of the proposed impoundment. Volume: TBD million gallons; surface area: TBD acres
v. Dimensions of the proposed dam or impounding structure: ________ height; _______ length
vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):
Excavation of onsite soils to create stormwater basin.

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☑Yes ☐No
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
If Yes:
i . What is the purpose of the excavation or dredging? Cut site and export excess material from property.
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
- Volume (specify tons or cubic yards): TBD
- Over what duration of time? TBD

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.
Existing fill material generally consists of course and fine sand, silt, and gravel. All excavated material proposed to be removed from the site will be transported and legally disposed of offsite in accordance with all local/state/federal regulations.
iv. Will there be onsite dewatering or processing of excavated materials? ☑Yes ☐No
If yes, describe. Construction dewatering is anticipated to be required based on preliminary geotechnical info and encountered groundwater.
v. What is the total area to be dredged or excavated? TBD acres
vi. What is the maximum area to be worked at any one time? TBD acres
vii. What would be the maximum depth of excavation or dredging? TBD feet
viii. Will the excavation require blasting? ☐Yes ☑No
ix. Summarize site reclamation goals and plan:
The site will be designed to be as close to a balanced site as possible to minimize offsite export of existing fill material.
All disturbed areas of the site will be graded smooth and stabilized with vegetation or pavement per the Site Plan.

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No
If Yes:
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): ____________

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No
If Yes, describe:

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No
If Yes:
- acres of aquatic vegetation proposed to be removed:
- expected acreage of aquatic vegetation remaining after project completion:
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):
- proposed method of plant removal:
- if chemical/herbicide treatment will be used, specify product(s):

v. Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use, or create a new demand for water? ☑Yes ☐No
If Yes:
i. Total anticipated water usage/demand per day: +/- 23,779 gallons/day
ii. Will the proposed action obtain water from an existing public water supply? ☑Yes ☐No
If Yes:
- Name of district or service area: Cortlandt Consolidated Water District
- Does the existing public water supply have capacity to serve the proposal? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No
- Do existing lines serve the project site? ☑Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☑No
If Yes:
- Describe extensions or capacity expansions proposed to serve this project:
- Source(s) of supply for the district:

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes ☑No
If, Yes:
- Applicant/sponsor for new district:
- Date application submitted or anticipated:
- Proposed source(s) of supply for new district:

v. If a public water supply will not be used, describe plans to provide water supply for the project:

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _______ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑Yes ☐No
If Yes:
i. Total anticipated liquid waste generation per day: +/- 19250 gallons/day
ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
Sanitary Wastewater

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑Yes ☐No
If Yes:
- Name of wastewater treatment plant to be used: Peekskill Wastewater Treatment Facility
- Name of district: Peekskill Sewer District, Waterbury Manor Sewer District
- Does the existing wastewater treatment plant have capacity to serve the project? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No

- Do existing sewer lines serve the project site? ☐Yes ☑No
- Will a line extension within an existing district be necessary to serve the project? ☐Yes ☑No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: ____________________

    New sanitary service lateral to be installed for the proposed development and will connect to existing sanitary sewer main.

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:
- Applicant/sponsor for new district: ____________________
- Date application submitted or anticipated: ____________________
- What is the receiving water for the wastewater discharge? ____________________

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: ____________________

____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑Yes ☐No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or +/-2.5 acres (impervious surface)

_____ Square feet or 8.7 acres (parcel size)

ii. Describe types of new point sources. Curbs and gutters.

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Onsite stormwater management facility/structures, then piped to existing drainage infrastructure.

- If to surface waters, identify receiving water bodies or wetlands: ____________________
- Will stormwater runoff flow to adjacent properties? ☐Yes ☑No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes ☑No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

____

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:
- ___________Tons/year (short tons) of Carbon Dioxide (CO_2)
- ___________Tons/year (short tons) of Nitrous Oxide (N_2O)
- ___________Tons/year (short tons) of Perfluorocarbons (PFCs)
- ___________Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- ___________Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- ___________Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): ______

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): ______

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

______

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐ Weekend ☐ Randomly between hours of ______ to ______.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): ______

iii. Parking spaces: Existing ______ Proposed ______ Net increase/decrease ______

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: ______

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action:

TBD

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

Con Edison

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☐No TBD

l. Hours of operation. Answer all items which apply.

i. During Construction: (Per Town of Cortlandt Town code §197-16)

- Monday - Friday: 7:00 AM - 7:00 PM
- Saturday: 7:00 AM - 7:00 PM
- Sunday: --
- Holidays: --

ii. During Operations:

- Monday - Friday: Senior Apartments - 24 hrs
- Saturday: 24 hrs
- Sunday: 24 hrs
- Holidays: 24 hrs

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☐ Yes ☑ No

If yes:

i. Provide details including sources, time of day and duration:

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☐ No

Describe:

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Building Mounted and Pole Mounted LED fixtures with full cut-offs are proposed to safely illuminate the entry drive, parking area, and points of ingress/egress for the building.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: Existing trees along the perimeter of the site will be evaluated for health conditions and preserved where possible. A landscape plan will be prepared to provide new buffer and decorative plantings where applicable.

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored ______

ii. Volume(s) ______ per unit time ______ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: ______

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☐ No **N/A**

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☐ No **N/A**

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: ______ tons per ______ (unit of time)
- Operation : ______ tons per ______ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: ______
- Operation: ______

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: ______
- Operation: ______

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): ______

ii. Anticipated rate of disposal/processing:

- ________ Tons/month, if transfer or other non-combustion/thermal treatment, or
- ________ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: ______ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: ______

ii. Generally describe processes or activities involving hazardous wastes or constituents: ______

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: ______

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: ______

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: ______

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Institutional and public assembly; government services; school; offices

ii. If mix of uses, generally describe: ______

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	+/- 2.3 acres	+/- 2.5 acres	+/- 0.2 acres
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Lawn and Landscaped Areas	+/- 6.4 acres	+/- 6.2 acres	+/- 0.2 acres

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No
i. If Yes: explain: ____________________

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No
If Yes,
i. Identify Facilities:
Cortlandt Healthcare; St. Columbanus Catholic School

e. Does the project site contain an existing dam? ☐ Yes ☑ No
If Yes:
i. Dimensions of the dam and impoundment:
- Dam height: ____________________ feet
- Dam length: ____________________ feet
- Surface area: ____________________ acres
- Volume impounded: ____________________ gallons OR acre-feet

ii. Dam's existing hazard classification: ____________________
iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No
If Yes:
i. Has the facility been formally closed? ☐ Yes ☐ No
- If yes, cite sources/documentation: ____________________

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: ____________________

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No
☐ Yes – Spills Incidents database Provide DEC ID number(s): ____________________
☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): ____________________
☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: ____________________

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☐ No
If yes, provide DEC ID number(s): ____________________
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? ☐Yes ☐No

- If yes, DEC site ID number: ______
- Describe the type of institutional control (e.g., deed restriction or easement): ______
- Describe any use limitations: ______
- Describe any engineering controls: ______
- Will the project affect the institutional or engineering controls in place? ☐Yes ☐No
- Explain: ______

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? +/- 27 feet

b. Are there bedrock outcroppings on the project site? ☐Yes ☑No
If Yes, what proportion of the site is comprised of bedrock outcroppings? ______%

c. Predominant soil type(s) present on project site:

ChC Charlton Fine Sandy Loam	33 %
Ub Udorthents	36 %
WdB Woobridge Loam	2 %

d. What is the average depth to the water table on the project site? Average: +/- 8 feet

e. Drainage status of project site soils:
☑ Well Drained: 33 % of site
☑ Moderately Well Drained: 38 % of site
☑ Poorly Drained 30 % of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 67 % of site
☑ 10-15%: 33 % of site
☐ 15% or greater: ______% of site

g. Are there any unique geologic features on the project site? ☐Yes ☑No
If Yes, describe: ______

h. Surface water features.
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐Yes ☑No
ii. Do any wetlands or other waterbodies adjoin the project site? ☑Yes ☐No
If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑Yes ☐No
iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 864-596 Classification C
- Lakes or Ponds: Name ______ Classification ______
- Wetlands: Name Federal Waters Approximate Size ______
- Wetland No. (if regulated by DEC) ______

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐Yes ☑No
If yes, name of impaired water body/bodies and basis for listing as impaired: ______

i. Is the project site in a designated Floodway? ☐Yes ☑No

j. Is the project site in the 100-year Floodplain? ☐Yes ☑No

k. Is the project site in the 500-year Floodplain? ☐Yes ☑No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑Yes ☐No
If Yes:
i. Name of aquifer: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:

squirrels

birds

frogs

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐ Yes ☑ No

If Yes:

i. Species and listing (endangered or threatened): _____

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:

i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☑ Yes ☐ No

If Yes:

i. CEA name: Peekskill Hollow Brook (located on north side of Oregon Road)

ii. Basis for designation: Exceptional or unique character

iii. Designating agency and date: Agency: Westchester County, Date: 1-31-90

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District

ii. Name: Van Cortlandt Upper Manor House (across the street on the north side of Oregon Road)

iii. Brief description of attributes on which listing is based:

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☐ Yes ☑ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s):

ii. Basis for identification:

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Hudson River (located approximately 2 miles from site)

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Hudson Highliands Scenic Area of Statewide Significance

iii. Distance between project and resource: over 2 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation:

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name NRP Properties LLC Date 2/1/2021, rev 2/12/2021, 6/23/2021

Signature ______ Title Secretary

PRINT FORM

EAF Mapper Summary Report

Wednesday, December 23, 2020 11:27 AM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes **See Note 1**
E.2.h.ii [Surface Water Features]	Yes **See Note 1**
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	864-596 **See Note 1**
E.2.h.iv [Surface Water Features - Stream Classification]	C
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No

E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	Yes **See Note 2**
E.3.a. [Agricultural District]	WEST001
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	Yes **See Note 3**
E.3.d [Critical Environmental Area - Name]	Peekskill Hollow Brook
E.3.d.ii [Critical Environmental Area - Reason]	Exceptional or unique character
E.3.d.iii [Critical Environmental Area – Date and Agency]	Agency:Westchester County, Date:1-31-90
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook. **See Note 4**
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Van Cortlandt Upper Manor House
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

NOTES:
(1) Waterbody is located on adjoining property to the east of site
(2) Site is adjacent to Ag District known as WEST001 located at 288-A & 288-B Locust Ave.
(3) CEA is located north side of Oregon Road
(4) Located on property on opposite side of Oregon Road

A. LAND USE

1. ***Existing Conditions***
The property located at 119 Oregon Road (SBL 23.11-1-12) is currently improved with the Colonial Terrace catering facility located within the Community Commercial ("CC") District (the "Project Site"). The site contains a multi-story main building which houses the Colonial Terrace catering and banquet facilities. There are a series of single-story frame buildings located to the rear of the main structure.

2. ***Proposed Project***
The proposed Overlook Terrace project would demolish the existing Colonial Terrace structure and accessory buildings. A new, three-story, 135-unit active adult residential rental community would be constructed (The "Project"). The Project will be age-restricted for active adults aged 55 and older (for head of households) with all affordable units, serving individuals with mixed incomes. The Project will contain approximately 96 one-bedroom and 39 two-bedroom units, together with approximately 146 onsite surface parking spaces. Overlook Terrace will include amenities such as a community room, fitness space, on-site leasing, communal courtyards, and walking paths. See Figures A-1, *Illustrative Site Plan,* A-2 *Building Rendering - Main Entry* and A-2 *Building Rendering – Perspective View*.

3. ***Proposed Zoning Amendments***
In order to facilitate the Project, the Applicant proposes the following:

- To amend Section 307-4 ("Definitions") of the Town of Cortlandt Zoning Ordinance to add the following definition of an "Active Adult Residential Community:"

  A building or buildings containing dwelling units specifically designed for and limited to residents, at least one of whom is aged 55 and older. No full-time medical care shall be provided on the Property.

- To amend Section 307-15 of the Zoning Ordinance (Notes to Table of Permitted Uses) to provide the following:

  A(13) An Active Adult Residential Community will be permitted in the Community Commercial (CC) District only pursuant to a Special Permit issued by the Town Board, and only on a lot that is eight (8) acres or larger, fronts and has a primary access on a state road or on Oregon Road, and which will connect to public water and sewer systems. Such development may have a density of up to 17 units per acre.

- To amend the Table of Permitted Uses (Section §§ 307-14 and 307-15, 307 Attachment 2:3) to add Active Adult Residential Community use to be authorized by Special Permit in the CC District.

- To amend the Table of Dimensional Regulations, Nonresidential Districts (Section § 307-17, 307 Attachment 5) as follows:

  NOTES:
  (4) An Active Adult Residential Community authorized by Special Permit from the Town Board in the CC District may have a density of up to 17 units per acre, a maximum building height of 50 feet with no more than 3 stories, and a maximum floor area of no more than 135,000 square feet.

- To amend Zoning Ordinance Section 307-2(C) ("Table of Required Off-Street Parking Spaces; rules for interpretation") to add the Active Adult Residential Community use and recommended parking standard as follows:

  TABLE OF REQUIRED OFF-STREET PARKING SPACES

Use	**Required Number of Spaces**
Active Adult Residential Community	**1 space per dwelling unit**

4. ***Consistency with 2016 Sustainable Comprehensive Plan***
The Project has been designed to be consistent with the Town's 2016 Sustainable Comprehensive Plan, Envision Cortlandt. One of the goals established in Envision Cortland, is to "create a wide range of housing choices throughout the Town that provide for the needs of an increasingly diverse population throughout all life stages."[1] In a survey taken of Cortlandt residents prior to issuing the Comprehensive Plan, survey respondents stated that more senior housing "should be encouraged in the Town."[2] Moreover, one of the main policies established in Envision Cortlandt is to "[r]evise zoning to allow a mix of uses including residential in commercial zoning districts."[3]

Envision Cortlandt further states that "Cortlandt's housing policies seek to sustain a full range of socioeconomic diversity while addressing the issues of housing availability, and accessibility for all members of the community. Residential development trends and demographics point toward an increased need for a broad range of housing to serve a varied range of incomes, ages, and family types and meet the needs of residents of all

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[1] Envision Cortlandt, p50.
[2] Id., p48.
[3] Id., p51.

abilities and in all life stages. While the town continues to be dominated by single-family homes, the demand for multi-generational and more reasonably priced housing options is increasing."[4] The proposed project would create housing options for older adults and seniors in the Town consistent with the goals of Envision Cortlandt.

[4] Id. p46.

PLOTTED BY: DIVNEY TUNG SCHWALBE, LLP MAIELLO, DONNA M. 6/24/2021 10:48 AM G:\CADD\858 NRP - CORTLANDT MANOR\858 FIG ILLUSTRATIVE PLAN ON AERIAL.DWG

AERIAL IMAGE SOURCE: GOOGLE EARTH, JUNE 2018

0 50 100

DIVNEY • TUNG • SCHWALBE
Intelligent Land Use

ILLUSTRATIVE SITE PLAN ON AERIAL

OVERLOOK TERRACE
TOWN OF CORTLANDT, NY

FIGURE NO A-1
06/23/21

BUILDING RENDERING - MAIN ENTRY
OVERLOOK TERRACE

FIGURE A-2

BUILDING RENDERING - PERSPECTIVE VIEW
OVERLOOK TERRACE

FIGURE A-3

B. TRANSPORTATION AND PARKING

1. *Traffic Study*

A comprehensive Traffic Impact Study to evaluate the Project has been prepared by Provident Design Engineers (PDE) and is included in Tab 2. Based on the analysis, PDE made the following findings:

- Access to the site will continue to be provided from Oregon Road, which is under local jurisdiction. This access point will be enhanced from a traffic operational and safety standpoint by terminating the western end of Donnelly Place prior to its intersection with the site driveway/Oregon Road. This will provide a more conventional and controlled point of access to Oregon Road and residents along Donnelly Place can continue to utilize the eastern end of Donnelly Place to access Oregon Road. Emergency access will be provided along Eton Downs Street.

- The proposed Project is conservatively estimated to generate only 38 Peak AM Hour trips and 47 Peak PM Hour trips. The trip generation rates were estimated using Institute of Transportation Engineers (ITE) trip generation rates and further verified with actual traffic counts performed at Jacobs Hill Apartments, which is a similar use in the area. The analysis is additionally conservative by not applying any credit to account for the potential trip generation of the existing as-of-right use, which has the potential to generate significantly higher trip rates during catering events.

- All Levels of Service will continue to be maintained from No-Build to Build conditions.

Based upon a conservative analysis that utilized higher trip generation rates than actual counted rates at a similar existing use, as well as ITE data, PDE concluded that the proposed Project will not result in a significant adverse traffic impact to the area roadway network. The existing site driveway will be enhanced from a traffic safety and operations standpoint.

2. *Parking*

The Project will provide a total of 146 off-street parking spaces. This equates to a parking ratio of 1.08 parking spaces per unit.

This parking ratio was verified with rates published by ITE, as well as actual parking counts performed at the Jacobs Hill Road Apartments. ITE Land Use Code 221 and Land Use Code 252 identify a Parking Ratio of 0.75 and 0.61, respectively. Based upon the two weeks of data collected at Jacobs Hill Apartments, it was determined that the Average Peak Parking Demand Ratio at that facility is 0.77 and the maximum Peak Parking Demand Ratio that occurred at any point during the two-week timeframe was 0.86.

Based upon the ITE data and actual parking counts, PDE concluded that the 1.08 proposed parking ratio will be more than adequate to support the proposed Project.

C. SUSTAINABILITY & GREEN TECHNOLOGY

As discussed in a memo prepared by Ettinger Engineering Associates (see Tab 1), the Applicant is pursuing LEED-Homes v4 certification for the Overlook Terrace Project and will pursue financial incentives under the NYSERDA program – New Construction Housing (PON 4337). As a part of this incentive program, the project will certify with the ENERGY STAR Multi Family New Construction ("MFNC") program and an energy model will be developed following the ENERGY STAR MFNC Simulation Guidelines. The mandatory ENERGY STAR MFNC energy efficiency features will be incorporated in the design. The project is targeting NYSERDA Tier 3 incentives.

Key energy-efficient design features of this all-electric development include Split VRF (variable refrigeration flow) systems, electric cooking ranges in all apartments, and electric washers and dryers. Domestic Hot Water will be provided using electric heat pump technology. The project will also include low-flow water fixtures and a high-performing building envelope. Solar photovoltaic (PV) systems will be installed on the roof to offset electricity purchase from the grid and support pursuit of the NYSERDA Tier 3 incentive mentioned above.

Other sustainable design features include enhanced indoor environmental quality, sustainable site development, and the use of environmentally preferable products. Field verification and testing will be conducted per LEED protocols to ensure high quality of construction. Construction waste management strategies will be incorporated, and waste reports will be generated throughout the construction phase to ensure diversion and recycling of waste materials.

D. EMERGENCY SERVICES

1. *Fire Protection*

The proposed building will include a fully automated fire suppression sprinkler system throughout the apartments and common areas. The anticipated building sprinkler fire flow demand has been preliminarily estimated to be 250 gallons per minute (gpm). Hydrant flow tests show both adequate pressure and water flow from the water mains. The hydrant flow was recorded to be 2,967 gpm with a residual pressure of 20 psi which meets the project fire flow demand.

Emergency fire vehicles will have access to the building from the main entrance driveway at Oregon Road and a secondary driveway connection at Eton Downs. Both driveways will exceed the minimum 20-foot lane width to accommodate emergency vehicles. Within the site, a looped driveway will allow full access around the building and on two sides of the building the parking aisle will be within 30-feet of the building façade to allow for aerial access to the building. The parking aisles will be 26-feet wide to accommodate the aerial fire apparatus vehicle. A town water main currently located on site will be relocated along the proposed driveway and parking aisles. Several fire hydrants will be placed along the water main to provide additional fire protection measures. The final location of the hydrants will be reviewed with the Town of Cortlandt Fire Advisory Board.

2. *Emergency Medical Services*

The Project Site is located within the Mohegan Emergency Medical Services district. The Mohegan Volunteer Fire Association Volunteer Ambulance Corps (MVFA-VAC) includes volunteer and contracted staffing services which provide basic life support and emergency medical services. MVFA-VAC is headquartered at 1975 East Main Street in Mohegan Lake, approximately 3.5 miles east of the Project Site. In addition to the basic life support services provided by the MVFA-VAC, advanced life support services (paramedics) are provided by Cortlandt Regional Paramedics (CRP). The CRP are headquartered on the property of the New York Presbyterian-Hudson Valley Hospital, approximately 3 miles south of the Project Site. The MVFA-VAC and CRP respond to approximately 1,400 EMS calls in the Cortlandt portion of service district annually.[5]

Justin Costable, Director of Operations for Cortlandt Regional Paramedics estimated that the proposed project could increase call volumes an additional 44-55 calls per year.[6] This would represent an approximately three to four percent increase in annual calls in the Cortlandt portion of the EMS district. It is anticipated that many of units proposed would be occupied by residents already living in the Town of Cortlandt, and in this case the need for ambulance services may not so much increase as shift in location.

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[5] Based on data provided by MVFA-VAC as part of MOD DGEIS.

[6] Email from Justin Costable, Director of Operations for Cortlandt Regional Paramedics on May 19, 2021.

E. FISCAL

1. *Existing Value and Tax Revenue*

The current market value of the Property is $2,117,666 with an assessed value of 31,765. As shown Table E-1, *Existing Value and Tax Revenue* the property generates approximately $66,313 in tax revenue, with $47,349 going to the Lakeland Central School District (LCSD) and $18,964 going to the Town, County and special districts.

TABLE E-1: EXISTING VALUE AND TAX REVENUE

Parcel	Full Market Value	Total Assessed Value
23.11-1.12	$2,117,666	$31,765

Jurisdiction	Assessed Value	Rate per $1,000	Tax Amount
Library	$31,765	7.540001	$240
General Town	$31,765	31.22	$992
Highway	$31,765	183.87	$5,841
County	$31,765	198.57	$6,308
Ambulance #3	$31,765	8.39	$267
Cortlandt Consolidated Water	$31,765	15.43	$490
County Refuse	$31,765	18.580002	$590
Mohegan Fire	$31,765	97.21	$3,088
Peekskill Sanitary Sewer	$31,765	34.33	$1,090
Waterbury Manor Sewer District	$31,765	1.860002	$59
Town/County/Special Districts	$31,765	$597	$18,964
Lakeland Central School District	$31,765	1,490.61	$47,349
Grand Total	**$31,765**	**2,087.61**	**$66,313**
Notes: Property tax rates are estimates based on assessed value and mill rates and may differ from actual tax bills; values are rounded and therefor may not sum to total.			
Sources: 2021 Town of Cortlandt Tax Roll. 2021 Town Tax Rates, 2020 School Tax Rate			

2. *Estimated Value and Tax Generation*

Based on rental and operational estimates from NRP Group, a market valuation for the Overlook Terrace project was prepared to estimate a net operating income (NOI) and a cap rate to establish an approximate full market value. Applying the Town's equalization rate results in an assessed/taxable value of approximately $112,089, as shown on TableE-2, *Estimated Valuation*.

TABLE E-2: ESTIMATED VALUATION

Annual Rent	$1,771,932
Effective Gross Income (at 5% vacancy)	$1,683,335
Operating Expenses	($960,383)
Net NOI	$722,952
Loaded Cap Rate	9.8%
Estimated Full Market Value	**$7,380,457**
Source: Estimated annual income and operating expenses from NRP Group	

Based on the estimated assessed value, the tax rates for the applicable taxing jurisdictions (Town, County, School District and special districts) were applied. As shown in Table E-3, *Estimated Tax Revenue,* the taxes generated by the proposed project based on the estimated $112,900 assessed value would total approximately $235,700. Approximately $67,000 would go to the Town, County and special districts and $168,000 would go to the LCSD.

TABLE E-3: ESTIMATED TAX REVENUE

Jurisdiction	Assessed Value	Rate per $1,000	Tax Amount
Library	$112,921	7.540001	$851
General Town	$112,921	31.22	$3,525
Highway	$112,921	183.87	$20,763
County	$112,921	198.57	$22,423
Ambulance #3	$112,921	8.39	$947
Cortlandt Consolidated Water	$112,921	15.43	$1,742
County Refuse	$112,921	18.580002	$2,098
Mohegan Fire	$112,921	97.21	$10,977
Peekskill Sanitary Sewer	$112,921	34.33	$3,877
Waterbury Manor Sewer District	$112,921	1.860002	$210
Town/County/Special Districts	$112,921	$597	$67,414
Lakeland Central School District	$112,921	1,490.61	$168,321
Grand Total	**$112,921**	**2,087.61**	**$235,735**
Notes: Property tax rates are estimates based on assessed value and mill rates, and may differ from actual tax bills; values are rounded and therefor may not sum to total.			
Sources: 2021 Town Tax Rates, 2020 School Tax Rate			

As discussed in Section A, Land Use, the Project will be age-restricted for active adults aged 55 and older (for head of households). It is not expected that there would be a significant number, if any, of public school-aged children residing on the Project Site. As discussed above, the Project is anticipated to generate approximately $168,000 in tax revenue to the LCSD, or $120,000 more than under existing conditions.

F. HISTORIC AND ARCHAEOLOGICAL RESOURCES

The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) reviewed the Project, including the demolition of the existing Colonial Terrace facility and new construction, and indicated in an April 14, 2021 correspondence that, "it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project." A copy of the OPRHP correspondence is included as Exhibit F-1.

The proposed structure has been designed to incorporate design elements similar to that of the existing Colonial Terrace, such as a front columned portico at the main entry, as shown on Figure A-2, *Building Rendering – Main Entry*. The main vehicular entrance will be maintained and enhanced with new trees. Photographs of the Colonial Terrace facility from the current owners will be displayed within common areas of the proposed Overlook Terrace for future residents and guests to view.

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

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

April 14, 2021

Matthew Steinberg
Associate
Divney Tung Schwalbe, LLP
1 North Broadway
Suite 1407
White Plains, NY 10601

Re: DEC
Overlook Terrace: Demolition & New Construction
119 Oregon Rd, Cortlandt Manor, NY 10567
21PR02362

Dear Matthew Steinberg:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project 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 OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Roger Daniel Mackay

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

G. UTILITIES

1. *Water Services*

a. Existing Water Services

The Project Site lies within the Cortlandt Consolidated Water District where it receives water service. A town owned 8-inch water main located on the site within an easement is connected to a water main in Oregon Road at one end and a water main in Eaton Downs at the other end. The water main generally follows the entry drive and along the main parking areas south pavement edge.

A hydrant flow test conducted on March 9, 2020 by Specialty Pipe Line Services provided the following results. A copy of the flow test data is included in the Tab 3.

Pressure Hydrant (hydrant used for recording pressures):

Location:	Corner of Eton Downs and Oregon Rd
Static pressure:	212 PSI
Residual pressure:	145 PSI

Flow Hydrant (hydrant to record flow and pressure):

Location:	Oregon Rd near driveway of Colonial Terrace Catering
Flow:	1680 GPM

Calculated Rate Capacity

at 20 PSI:	2967 GPM
Class:	AA
Marking color:	Light blue
% of pressure drop:	31.6% (212 psi to 145 psi)
Pitot:	100 PSI
Orifice size:	2 ½”

b. Proposed Water Service

Construction of the project will impact the town water main and will therefore need to be relocated in a new easement. The new water main will be dedicated to the Town of Cortlandt upon installation. The new water main will allow the building service to be connected along this main. See Site Utility Plan, SP-3 for location of relocated water main and building service connections. The construction impacts related to the town water main relocation will be temporary to allow for water main reconnections to a new water main.

The proposed project water demand for domestic use has been estimated to be 24,413[7] (gpd) gallons per day with a peak design flow of 89 gallons per minute (gpm). Irrigation water demand has been estimated to be approximately 22 gpm. It is recommended that irrigation use be scheduled during off peak water usage to reduce demands on the public water system.

Fire flow demand for the fully automated fire sprinkler system in the building is estimated to be 250 gallons per minute. Based on the water system test results, adequate pressure and flow for domestic and fire demands are available. Since static pressures exceed 200 psi, water services to the building may require pressure reducing valves as many plumbing systems and water fixtures are not rated for higher pressure.

All water main systems will be installed in accordance with the Town of Cortlandt standard specifications and requirements.

2. ***Sanitary Sewer Services***

a. Existing Conditions

The Project Site is in the Westchester County Peekskill Sewer District and the Woodbury Manor Sewer District. The project proposed to connect to an existing 8-inch Town of Cortlandt owned and operated sanitary sewer in Eaton Downs, near Oregon Road. The 8-inch existing sewer continues north across Oregon Road then west to Pump House Hill Road and north along Pump House Hill Road ultimately discharging to the Westchester County owned and operated trunk sewer located along Peekskill Hollow Brook. The County sewer conveys its sewage to the Peekskill Wastewater Treatment Plant, located in Peekskill, New York.

The Project Site is currently supported by a septic tank and an underground onsite sewage disposal system located in an easterly lawn area, north of the existing building. No connection was made to the existing town sewer. The existing subsurface system will be abandoned in accordance with the WCDOH rules and regulations during construction of the project.

From April 1 through April 30, 2021, a flow meter was installed in a town sewer manhole located just upstream of the Westchester County Trunk sewer connection and the road intersection of Pump House Road and Valley View Road. The meter monitored the flows continuously and recorded flow in 15-minute intervals. Any noted peaks were indicated within those intervals. The results showed an average weekly flow between 700,000 and 745,000 gallons and average daily flows between 100,000 and 107,000 gallons. Random peaks were also identified. Some peaks appeared to coincide with rainfall events which were also recorded throughout the monitoring period. Some

[7] Water usage based on wastewater demands plus 10%. Peak usage based on a factor of 6 times average daily demand.

of these peaks seems to increase a day or two days after a rainfall while others seemed to be random occurrences. It is not certain if rainfall events are the cause of these peaks for if other conditions may cause an increase in the higher peak flows. The sewer monitoring report as prepared by QAV Technologies has been included Tab 4.

Visual observations were conducted at the existing manholes on Pump House Road and Eaton Downs on March 30, 2017. Refer to Figure G-2, *Existing Sewer Lines* for location of manholes. These observations did not show any signs of backup or flooding of the pipes or structures and sewer flows appeared to flow adequately through each manhole except for the following observations. At MH 7 on Pump House Road, the nursing home connection showed signs of heavy debris deposited on the shelf of the manhole trough. At MH 12 minor debris accumulation on the edge of the shelf was noted. The sewer flows in the manholes do not appear to show any signs of backing up or flooding. It was also observed several of the manhole troughs located in the flatter section were not properly shaped resulting in more turbulent flow which can cause backups or result in debris getting caught on the pipe openings.

Maximum sewer flows were recorded as high as 420 gpm (0.6045 mgd) with five occurrences noted to have flows over 400 gpm. There were 2,792 (15-minute) monitoring intervals recorded. Of those, the following was recorded,

- 5 intervals with flow rates over 400 gpm (0.2%)
- 14 intervals with flow rates over 350 gpm (0.5%)
- 36 intervals with flow rates over 300 gpm (1.3%)
- 86 intervals with flow rates over 200 gpm (3.0%)
- 2695 intervals with flow rates under 200 gpm (97%)

b. Proposed Sewer Connection

A new 6-inch private sewer service line will connect the building to the existing sewer manhole located in Eaton Downs via gravity flow. The sewer service will be owned and maintained by the property owner. The 135 senior residential apartments will include 95 one-bedroom and 40 two-bedroom units. Using New York State Department of Environmental Conservation specified sewer flow rates for residential units, the sanitary flows have been conservatively estimated to be approximately 19,250 gallons per day. Because units are restricted to seniors over the age of 55, the sewer flows are typically lower than for family type housing due to smaller household size.

Although the project is located within the Waterbury Manor Sewer District, the existing buildings are not connected to the town sanitary sewer system. The proposed project will increase the sanitary flows to the town sewer system. The estimated average daily sanitary flow for the project of approximately 19,250 gallons per day may have a peak flow of approximately 53 gallons per minute.[8] See Table No. G-1, *Estimated Water and Wastewater Demands (NYSDEC Flow Values)* for a summary of this flow estimate.

c. **Waterbury Manor Sewer District**
The Waterbury Manor Sewer District provides sanitary sewer service from primarily single family and town homes and includes the Town of Cortlandt Town Hall building, Cortlandt Health Care facility and a few small businesses on Oregon Road. At the proposed project sewer connection on Eaton Downs, approximately 162 homes and Town Hall were identified as being connected to the sewer upstream of the project. See Figure G-1, *Waterbury Manor Sewer District*.

TABLE G-1: ESTIMATED WATER AND WASTEWATER DEMANDS (NYSDEC FLOW VALUES)

USE TYPE	AMOUNT		UNIT	UNIT FLOW[1] (gallons/day)	WATER DEMAND			SANITARY LOAD		
	APTS.	BEDS			UNIT FLOW[2] (10% additional)		AVERAGE DAILY FLOW (gpd)	UNIT FLOW[1]		AVERAGE DAILY FLOW (gpd)
1-BED, APARTMENTS	95	95	beds	110	121	gal/unit	11,495	110	gal/unit	10,450
2-BED, APARTMENTS	40	80	beds	110	121	gal/unit	9,680	110	gal/unit	8,800
IRRIGATION		2,604	gal	1	1	gal/unit	2,604	-	-	n/a

Avg. Daily Flow (gpd)		**23,779**			**19,250**
Flow (gpm)[3]		14.7			13.4
Design Peak Rate of Flow (gpm)[4]		88			53
Irrigation Peak Flow[5]		22			-

NOTES
[1] Unit flow values based on NYSDEC Design Standards for Wastewater Treatment Works, § B.6.b, Design Flow, March 2014.
[2] 10% added to NYSDEC Design Standards for Wastewater Treatment Works unit flow rate to obtain water demand flow rate.
[3] Flow based on 24 hour day, not including irrigation
[4] Peaking factor = 6.0 for water and 4.0 for sanitary
[5] Irrigation based on 1/2-inch water/sf/week, Assumed 4x/week and 130,000 sf coverage with 4 zones staggered irrigation

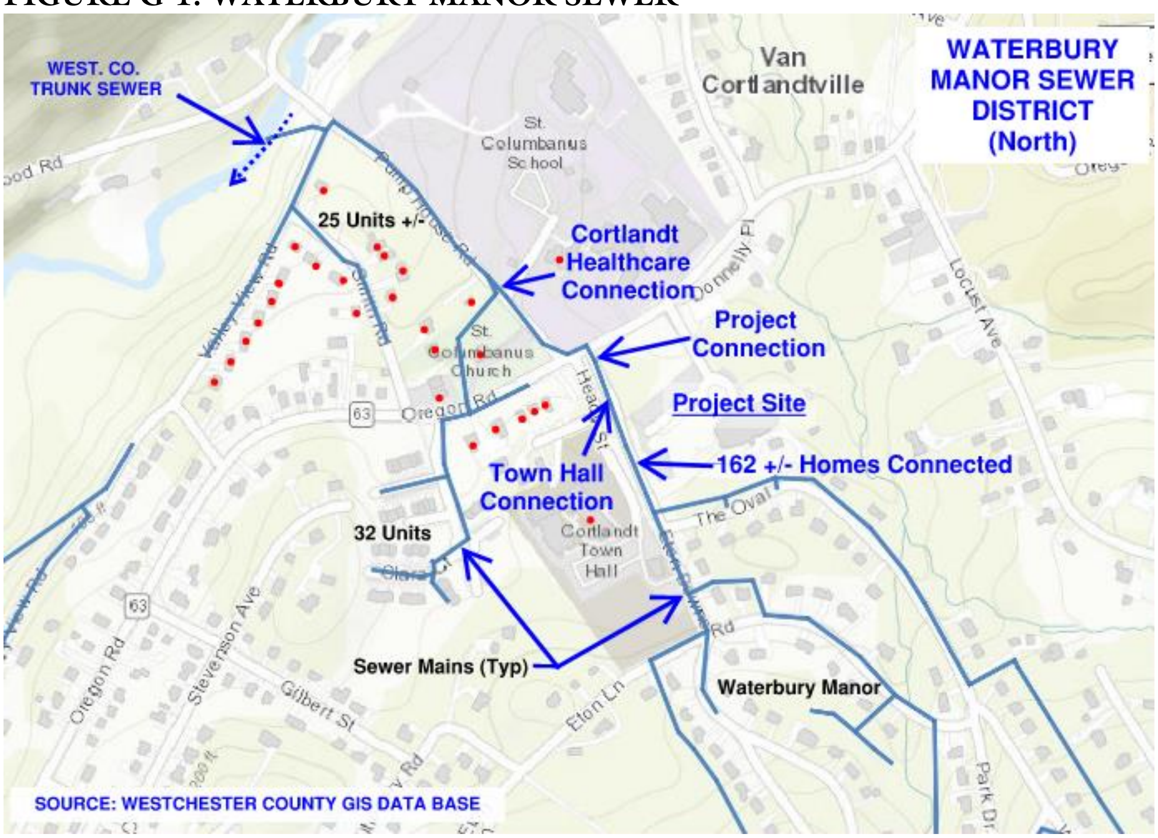
The results of the sewer monitoring reflected average sewer flows below 100 gpm and well within the capacity of the sewer mains. The sewer mains located on Pump House Road have slopes between 5% and 10% resulting in pipe capacities between 1,375 gpm and 2,000 gpm, well in excess of the monitored sewer flows. See Figure G-2, *Existing Sewer Lines,* for location of sewer mains (MH 8 to MH 1).

The sewer mains from Pump House Road to the proposed sewer connection on Eaton Downs have flatter slopes ranging from 0.45% to 1.39% with corresponding estimated pipe capacities between 438 and 767 gpm.

[8] Sanitary flow rates based on New York State Standards for Intermediate Sized Wastewater Treatment Systems, March 5, 2014, and a peaking factor of 4.

Since most sewer flows appear to be from the Waterbury Manor development, it is anticipated the higher flows will also be experienced at the flatter sewer main sections (between MH 12 and MH8). Assuming 25%[9] of the sewer flows are generated north of Oregon Road, the corresponding maximum peak flow rate recorded of 420 gpm would be approximately 315 gpm in the flatter sections of the sewer main. Together with the project flows of 53 gpm, the anticipated peak flow within this section of the sewer is approximately 368 gpm. The pipe section with the lowest pipe theoretical capacity between MH 9 and MH 8 is 438 gpm. Based on the existing pipe size, slope and recorded monitoring data the existing sewer system has capacity to accommodate the proposed project flows as well as the observed less frequent high spike flows which occur less than 3% of the time, and capacity to accommodate the proposed project flows at all other periods of typical flow rates. See sanitary sewer pipe data and pipe capacity analysis located in Tab 5.

FIGURE G-1: WATERBURY MANOR SEWER

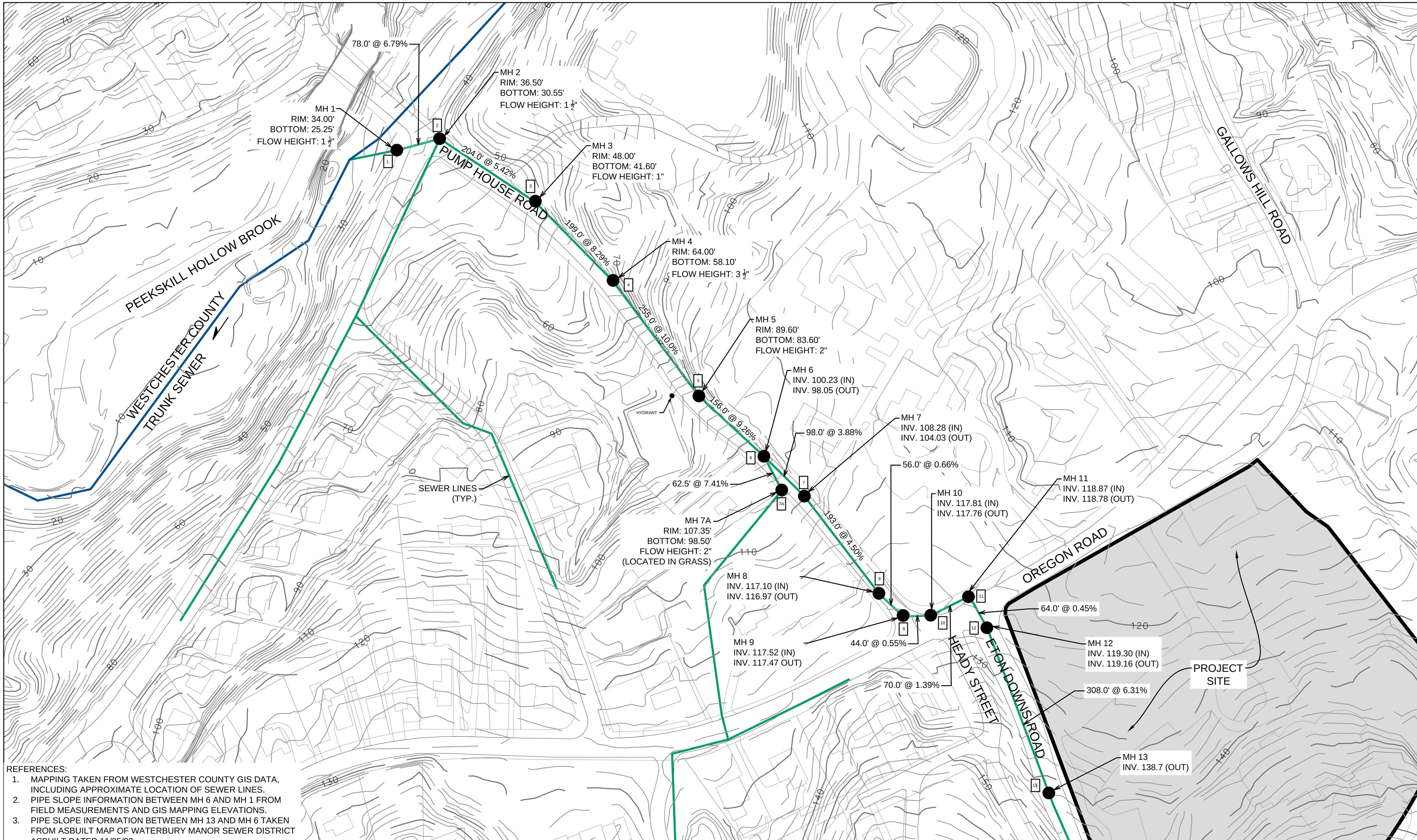


Further review with the Town of Cortlandt Engineering will be undertaken to further assess the system and if any improvements may be required to accommodate the project sewer flows.

[9] Based on approximate percentage of homes below (57 of 219) the project sewer connection.

Sewer flows from new private service laterals (with the capacity to convey more than 2,500 GPD) will require the review and approval of the Westchester County Department of Health and will be designed in strict accordance with local standards, the customary Ten States Standards, and regulatory Westchester County Department of Health (WCDOH) requirements. This will require, but shall not be limited to, the establishment of minimum pipe slopes based on pipe diameter (for self-cleansing velocities) and 4-foot minimum depth of cover over all sanitary sewer main pipes (for frost protection.)

PLOTTED BY: DIVNEY TUNG SCHWALBE, LLP CANCIO, ROLANDO C. 6/22/2021 9:19 AM L:\858 NRP - CORTLANDT MANOR\858 FIG NO.G2 EXISTING SEWER LINES 17X11 FIG.DWG



REFERENCES:
1. MAPPING TAKEN FROM WESTCHESTER COUNTY GIS DATA, INCLUDING APPROXIMATE LOCATION OF SEWER LINES.
2. PIPE SLOPE INFORMATION BETWEEN MH 6 AND MH 1 FROM FIELD MEASUREMENTS AND GIS MAPPING ELEVATIONS.
3. PIPE SLOPE INFORMATION BETWEEN MH 13 AND MH 6 TAKEN FROM ASBUILT MAP OF WATERBURY MANOR SEWER DISTRICT ASBUILT DATED 11/25/92

N

0 75 150

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EXISTING SEWER LINES

OVERLOOK TERRACE
CORTLANDT, NEW YORK

FIGURE NO. G2
06/23/21

H. LANDSCAPE AND LIGHTING

a. *Landscape*

The overall landscape intent for the Overlook Terrace project is to create areas of planting which respond to the site design and layout. All the disturbed areas of the site not occupied by building or pavement will be planted to create an aesthetically pleasing outdoor experience for residents and visitors. Upon passing through the stone walls of the site entrance (existing stone walls to remain), an allee of shade trees will frame the driveway to the proposed building's front door. Plant beds with annuals and perennials will provide seasonal interest around the perimeter of the drop off area. A deep planted area with shade trees, ornamental trees, and deciduous and evergreen shrubs will create a vibrant green buffer between the building façade and the front parking areas. The east and west parking areas flanking the building will be bordered by shade trees. Between these parking areas and the adjacent property lines, a mixture of shade, evergreen and ornamental trees will create a buffer that mitigates offsite views. The front yard of the site (the area between the north parking and Oregon Road) will be planted with a mixture of shade, evergreen and ornamental trees amongst a green lawn and two stormwater basins planted with a special seed mix of native grasses and wildflowers. The proposed trees will filter views of the site from Oregon Road. The existing trees to remain along Oregon Road and along Eton Downs Street will also provide a buffer between the site and offsite views. The disturbed area at the rear of the site will slope down to a proposed retaining wall. The slope will be planted with native shrubs selected for their colonization and erosion control characteristics. Lastly, a courtyard on the southeast side of the building will be designed for active recreation and a courtyard on the southwest side for passive recreation. Both courtyards will include a perimeter foundation planting of trees, shrubs and perennials to create lush, colorful gardens for resident enjoyment and to provide a buffer between the courtyard users and adjacent units. (see full-size drawing Sheet No. SP-4., *Landscape Plan)*.

The proposed plants in all landscaped areas are primarily native. There are some non-native (but non-invasive) plants included in the foundation planting schedule to expand the potential plant palette. Due to deer pressure in this area, tolerance to deer browse has been factored into the plant selection.

b. *Lighting*

The site will be illuminated with a few different light types to facilitate wayfinding and enhance safety and security. The selected lights are cutoff fixtures with no upward throw, and all are LED. The entry drive and far side of the parking areas will be lit with 18-foot-high pole mounted downlights. The walkway from the building to the Oregon Road bus stop will be lit with pedestrian scale, 14-foot-high poles with downlights. Along the near side of the east and west parking areas, at the south side of the building and in the courtyards, 10-foot-high wall mounted fixtures will light the parking areas, walkways and fire access lane. At the front of the building, 42-inch-high bollards will light the walkways to the front door.

I. STEEP SLOPES

Per Chapter 259, *Steep Slopes* steep slopes are ground areas with slopes greater than 15%. Within the proposed limit of disturbance there are approximately 1.4 acres of steep slopes, as shown on Figure I-1, *Existing Steep Slope Analysis*. Areas of regrading have been designed to blend into the existing contours of the site, to maximum extent practicable (see Figure I-2, *Proposed Steep Slopes Analysis)*. A stormwater pollution prevention plan (SWPPP) has been prepared for the project and describes the proposed erosion and sediment control measures that would be utilized during construction and after completion of the Project (see section J, Stormwater Management).

Section 259-6 of the Town Code includes criteria that the approving authority shall consider for a Steep Slope Permit. The following evaluates those criteria in terms of the Project:

A. Disturbance or alterations of trees and forests and topographical disturbances or alterations on steep slopes shall be in conformance with all provisions of this steep slopes ordinance as well as with all other applicable ordinances and regulations of the Town of Cortlandt, including, by way of example only, the requirements of Chapter 175 regarding flood damage control, Chapter 283 regarding trees, and Chapter 301 regarding diversion of watercourses.

The property was previously disturbed and developed with an existing catering facility that contains structures, parking lots and landscaped areas. The Project with this alternative would be designed to comply with other applicable ordinances and regulations of the Town of Cortlandt. The Project Site is not located within a flood plain, however, an Erosion Control Plan shall be prepared as part of the contract documents and will require that the erosion and sedimentation controls set forth thereon be implemented before the start of construction and further such controls will be monitored and maintained during construction.

B. Activities within wetlands shall be in conformance with Chapter 179, Freshwater Wetlands, Water Bodies and Watercourses, and, whether within or outside of wetlands, will not adversely affect any wetlands, water bodies, or watercourses.

There are no freshwater wetlands, water bodies or watercourse within the Project Site or limit of disturbance.

C. The proposed activity will not result in creep, sudden slope failure, or additional erosion.

An Erosion Control Plan shall be prepared as part of the contract documents and will require that the erosion and sedimentation controls set forth thereon be implemented before the start of construction and further such controls will be monitored and maintained during construction. Stabilization of the site shall also comply with the conditions or requirements of the Town, County and State.

D. The proposed activity will not adversely affect existing or proposed wells or sewage disposal systems.

Temporary and permanent soil stabilization measures will be implemented to protect the downstream work areas. There are no wells adjacent to the Project Site.

E. The proposed activity will not adversely affect any endangered or threatened species of flora or fauna.

No threatened or endangered species of plants or animals have been identified on the Project Site.

F. The proposed activity is in accordance with the principles and recommendations of the most recent Master Plan of the Town.

As discussed in Section I.F.1: *Land Use*, the Project is consistent with the policies and goals of the Town of Cortlandt 2016 Sustainable Comprehensive Plan.

G. The proposed activity constitutes the minimum disturbance necessary to allow the property owner a reasonable use of the property.

The proposed limit of disturbance has been designed to limit proposed construction activities to areas that have been previously disturbed. Activities impacting steep slopes have been limited to those required to construct the proposed development.

H. Disturbance or alteration of areas with steep slopes shall additionally be in conformance with the following provisions:

(1) The planning, design and development of buildings shall provide the maximum in structural safety, slope stability and human enjoyment while adapting the affected site to, and taking advantage of, the best use of the natural terrain and aesthetic character.

The Project has been designed to avoid or minimize disturbances to existing steep slopes and the creation of new steep slopes to the greatest extent practicable. The Project development has been located within areas of the Site that have previously been developed or disturbed. Any cut and fill slopes will be constructed in accordance with recommendations of a geotechnical engineer and subject to the approval of the Town Engineer.

(2) The terracing of building sites, including the mounding of septic tile fields, shall be kept to an absolute minimum.

The floor level of the new structure proposed has been designed so that terracing is not required. The project would connect to the existing public sanitary sewer system.

(3) Roads and driveways shall follow the natural topography to the greatest extent possible in order to minimize the potential for erosion and shall be consistent with all other applicable ordinances and regulations of the Town of Cortlandt and current engineering practices.

Proposed driveways have been configured to align with existing infrastructure to the greatest extent possible. Slopes at intersections with public roadways have been designed to be in compliance with applicable Town and State regulations.

(4) Replanting shall consist of indigenous vegetation and shall replicate the original vegetation on the site as much as possible.

A landscape plan featuring native plantings has been prepared and is included in the full size drawings accompanying this application. A mix of shade trees, evergreen trees and ground covers have been proposed.

(5) The natural elevations and vegetative cover of ridgelines shall be disturbed only if the crest of a ridge and the tree line at the ridge remain uninterrupted. This may be accomplished either by positioning buildings and areas of disturbance below a ridgeline or by positioning buildings and areas of disturbance at a ridgeline so that the elevation of the roofline of the building is no greater than the elevation of the natural tree line. However, under no circumstances shall more than 100 feet along the ridgeline, to a width of 100 feet generally centered on the ridgeline, be disturbed.

There are no ridgelines that would be disturbed by the Project.

(6) Any regrading shall blend in with the natural contours and undulations of the land.

The majority of the Project is concentrated to previously disturbed portions of the Site. Areas of regrading have been designed to blend into the existing contours of the site, to maximum extent practicable.

(7) **Cuts and fills shall be rounded off to eliminate sharp angles at the top, bottom and sides of regraded slopes. Visible construction cuts and permanent scarring should be minimized.**

Regraded slopes would be rounded at the top, bottom and sides.

(8) **The angle of cut and fill slopes shall not exceed a slope of one vertical to two horizontal except where retaining walls, structural stabilization or other methods acceptable to the Director of Technical Services are used.**

(9) **Tops and bottoms of cut and fill slopes shall be set back from structures a distance that will ensure the safety of the structure in the event of the collapse of the cut or fill slopes. Generally, such distance shall be considered to be six feet plus 1/2 the height of the cut or fill. Nevertheless, a structure built on a slope or at the toe of a slope is permitted if it is properly designed to retain the slope and withstand the forces exerted on it by the retained slope.**

The cut and fill slopes will be constructed in accordance with the recommendations of a geotechnical engineer and subject to the approval of the Town Engineer.

(10) **Disturbance of rock outcrops shall be by means of explosive only if labor and machines are not effective and only if rock blasting is conducted in accordance with all applicable laws and regulations of the Town of Cortlandt, County of Westchester, and the State of New York.**

Rock blasting is not anticipated, but should any blasting be necessary, it would be conducted in accordance with applicable Town and State regulations.

(11) **Disturbance of steep slopes shall be undertaken in workable units in which the disturbance can be completed and stabilized in one construction season so that areas are not left bare and exposed during the winter and spring thaw periods (December 15 through April 15).**

(12) **Disturbance of existing vegetative ground cover shall not take place more than 15 days prior to grading and construction.**

(13) **Temporary soil stabilization, including, if appropriate, temporary stabilization measures such as netting or mulching to secure soil during the grow-in period, must be applied to an area of disturbance within two days of establishing the final grade, and permanent stabilization must be applied within 15 days of establishing the final grade.**

(14) Soil stabilization must be applied within two days of disturbance if the final grade is not expected to be established within 60 days.

(15) Measures for the control of erosion and sedimentation shall be undertaken consistent with the Westchester County Soil and Water Conservation District's Best Management Practices Manual for Erosion and Sediment Control and New York State Guidelines for Urban Erosion and Sediment Control, as amended, or their equivalents satisfactory to the approval authority.

(16) All proposed disturbance of steep slopes shall be undertaken with consideration of the soils limitations characteristics contained in the Identification Legend, Westchester County Soils Survey, 1989, as prepared by the Westchester County Soil and Water Conservation District, in terms of recognition of limitation of soils on steep slopes for development and application of all mitigating measures and as deemed necessary by the approval authority.

In compliance with requirements established for the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-20-001) a Stormwater Pollution Prevention Plan has been prepared for the Project and would be implemented. As a result, an Erosion Control Plan will be included as part of the contract documents and will require that the erosion and sedimentation controls set forth thereon be implemented before the start of construction and further such controls will be monitored and maintained during construction. Stabilization of the site shall also comply with the conditions or requirements of the Town, County and State.

(17) Topsoil shall be stripped from all areas of disturbance, stockpiled and stabilized in a manner to minimize erosion and sedimentation and replaced elsewhere on the site at the time of final grading. Stockpiling shall not be permitted on slopes of greater than 10%.

Topsoil stockpiles will not be located on slopes that are greater than 10%.

(18) No organic material or rock with a size that will not allow appropriate compaction or cover by topsoil shall be used as fill material. Fill material shall be no less granular than the soil upon which it is placed and shall drain readily.

The utilization of fill material would be conducted in accordance with the recommendations of a geotechnical engineer.

(19) Compaction of fill materials in fill areas shall be such to ensure support of proposed structures and stabilization for intended uses.

Fill materials used to support structures will be prepared and stabilized in accordance with the recommendations of a qualified geotechnical engineer.

I Burden of proof.

(1) The presumption in all cases shall be that no disturbance or alteration of any steep slope shall be approved by the approval authority. The applicant shall in all cases have the burden of proof of demonstrating, by clear and convincing evidence, that the proposed activity is fully consistent with each of the findings set forth in § 259-2 and that each of the standards for approval set forth in Subsections A through G above has been fully and completely met.

(2) With respect to applications involving proposed disturbance or alteration of any steep slope with a grade of 30% or greater, the applicant shall have the additional burden of demonstrating, again by clear and convincing evidence, that the applicant's circumstances are compelling and exceptional, including, at a minimum, demonstrating by clear and convincing evidence that no reasonable use of the site, lot, or parcel is possible without disturbance to a steep slope area having a grade of 30% or greater.

As discussed above, the proposed limit of disturbance has been designed as efficiently as possible to limit proposed construction activities only that which is necessary for the Project.

PLOTTED BY: DIVNEY TUNG SCHWALBE, LLP CANCIO, ROLANDO C. 6/22/2021 2:38 PM L:\858 NRP - CORTLANDT MANOR\858 FIG SP-2B STEEP SLOPES EXISTING FIG.DWG

LEGEND (EXISTING SITE STEEP SLOPES)

	TOWN DESIGNATION	AREA (AC) WITHIN LOD
> 15%:	STEEP SLOPES (PER §259)	1.4
10-15%:	--	1.7
0-10%:	--	4.8
	TOTAL	7.9
	PROPOSED LIMIT OF DISTURBANCE (LOD)	

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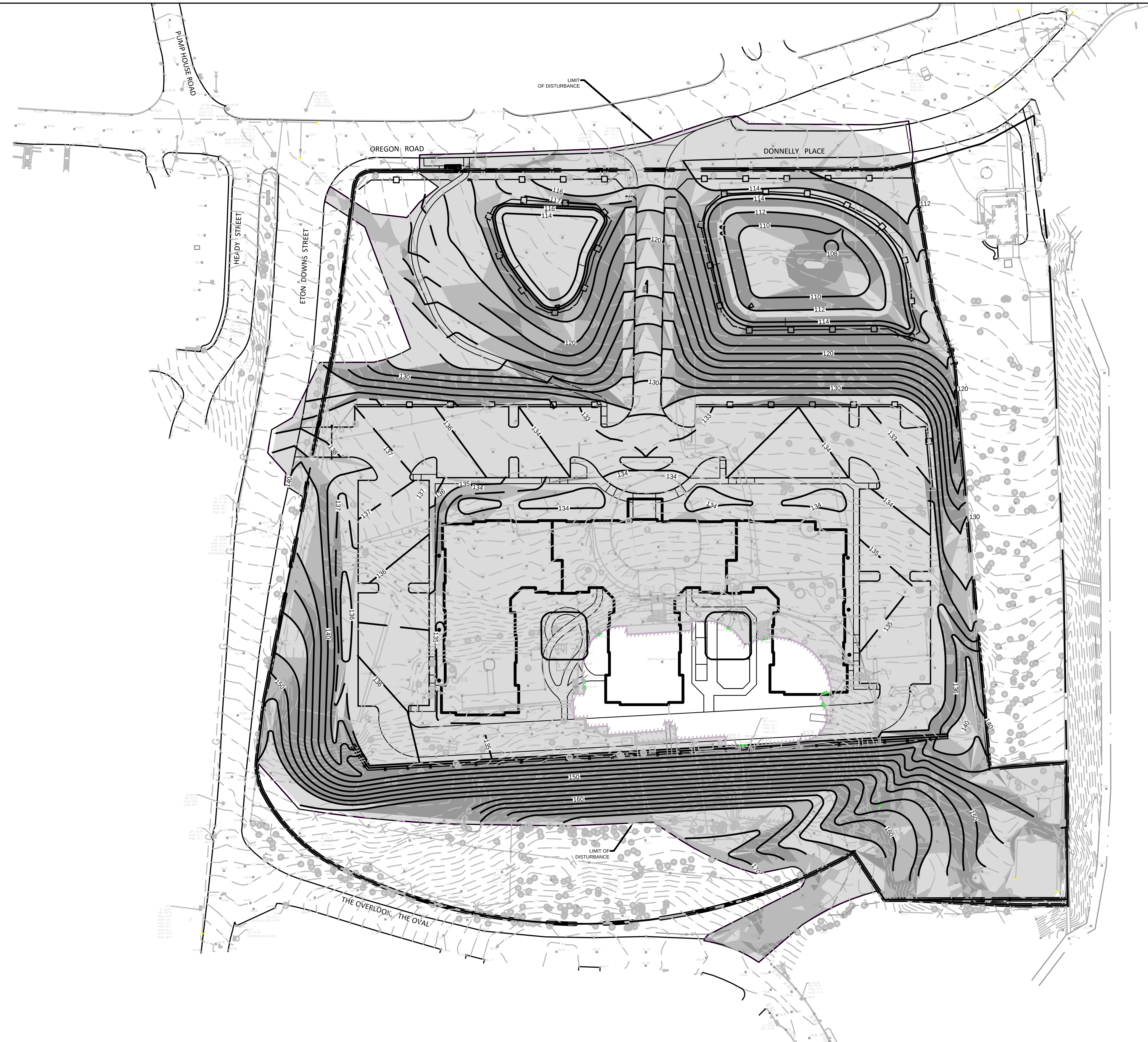
EXISTING STEEP SLOPES ANALYSIS

OVERLOOK TERRACE

CORTLANDT, NEW YORK

FIGURE NO. I-1

PLOTTED BY: DIVNEY TUNG SCHWALBE, LLP CANCIO, ROLANDO C. 6/22/2021 2:48 PM L:\858 NRP - CORTLANDT MANOR\858 FIG SP-2C STEEP SLOPES PROPOSED FIG.DWG



LEGEND (PROPOSED SITE STEEP SLOPES)

	TOWN DESIGNATION	AREA (AC) WITHIN LOD
> 15%:	STEEP SLOPES (PER §259)	2.2
10-15%:	--	0.6
0-10%:	--	5.1
	TOTAL	7.9
	PROPOSED LIMIT OF DISTURBANCE (LOD)	

0 50 100

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PROPOSED STEEP SLOPES ANALYSIS

OVERLOOK TERRACE

CORTLANDT, NEW YORK

FIGURE NO. I-2

J. STORMWATER MANAGEMENT

1. *Stormwater Pollution Prevention Plan (SWPPP)*

A SWPPP has been prepared to meet the requirements of the Town of Cortlandt, SPDES GP-0-20-001 and the New York State Stormwater Management Design Manual. The following is a brief summary of the proposed stormwater management plan for the Project. Please refer to the SWPPP for further information and details. A copy of the full SWPPP has been provided to the Director of Technical Services for review.

a. Existing Drainage Conditions

The entire site is approximately 9.3 acres and includes approximately 2.41acres of impervious cover. The site generally slopes down gradient from southeast to northwest. Currently, runoff from the site drains toward Oregon Road and into several drain inlets located on Oregon Road and Donnelly Place. These drains discharge to an unnamed stream located to the northeast of the site. The stream flows north through several properties before connecting with the Peekskill Hollow Creek. Peekskill Hollow Creek drains southwest into Annsville Creek, Peekskill Bay and ultimately into the Hudson River. Other than small drains within the site, there are no stormwater measures to provide storm water quality treatment or peak flow reduction.

b. Stormwater Management Plan

The stormwater management plan has been developed and will be implemented so that the quantity and quality of stormwater runoff during construction and after development are not significantly altered from preconstruction conditions. Primary stormwater management objectives are to replicate as close as possible pre-development hydrology and to avoid causing downstream flooding and flood damage and to employ all means practicable to mitigate increases in pollutant (total suspended solids and total phosphorus) loads that will occur as a result of the proposed Project.

c. Erosion & Sediment Control Plan

The goal of the proposed erosion and sediment control measures at the Project Site is to prevent erosion through runoff controls and soil stabilization.

Proposed runoff controls for the Project include diversion swales to keep stormwater runoff from undisturbed areas from flowing onto the limit of work area. Within the work area, temporary swales are designed to direct water away from disturbed areas. Check dams are proposed within the swales to allow for the settling of sediment.

Temporary and permanent soil stabilization include mulching, seeding and slope stabilization with plantings and/or fabrics. Mulching can be performed with wood chips, spray mulching and gravel. Temporary seeding is encouraged in disturbed areas outside of the current work area. This includes stockpiled material that is not anticipated to be used for a month or longer. Stabilizing steep slopes is imperative to protect the downstream work areas, and can include rolled matting, gabion walls, plant plugs and proprietary slope stabilization methods.

Upon final stabilization of the Project Site, permanent measures are required to be inspected, observed and maintained for the life of the project. The permanent measures will provide erosion and sediment control by slowing down runoff and removing pollutants. Stabilized vegetated areas will provide additional benefits by minimizing the impacts and reducing stormwater runoff. The property owner will be responsible for inspecting and maintaining permanent stormwater management structures and practices.

Date: June 15, 2021

To: Huda Iskandar (The NRP Group)

CC: Edward Ettinger (Ettinger Engineering Associates)
Brian McDonough (Ettinger Engineering Associates)
Aakash Gandhi (Ettinger Engineering Associates)

From: Pournamasi Rath (Ettinger Engineering Associates)

Project: 119 Oregon Rd
EEA Project No.: 2656
Subject: Sustainability Narrative
Revision: 0

Sustainability Narrative

The proposed new development at 119 Oregon Rd is designed to be a 3-story multifamily building with 135 dwelling units. The project is pursuing LEED-Homes v4 certification. It will pursue financial incentives under the NYSERDA program – New Construction Housing (PON 4337). As a part of this incentive program, the project will certify with the ENERGY STAR Multi Family New Construction ("MFNC") program and an energy model will be developed following the ENERGY STAR MFNC Simulation Guidelines. The mandatory ENERGY STAR MFNC energy efficiency features will be incorporated in the design. The project is targeting NYSERDA Tier 3 incentives.

Key energy-efficient design features of this all-electric development include Split VRF systems (LG or similar), electric cooking ranges in all apartments, and electric washers and dryers. Domestic Hot Water will be provided using electric heat pump technology. The project will also include low-flow water fixtures and a high-performing building envelope. Solar PV systems will be installed on the roof to offset electricity purchase from the grid and support pursuit of the NYSERDA Tier 3 incentive mentioned above.

Other sustainable design features include enhanced indoor environmental quality, sustainable site development, and the use of environmentally preferable products. Field verification and testing will be conducted per LEED protocols to ensure high quality of construction. Construction waste management strategies will be incorporated, and waste reports will be generated throughout the construction phase to ensure diversion and recycling of waste materials.

TRAFFIC IMPACT STUDY

PROPOSED SENIOR LIVING FACILITY
119 Oregon Road
Town of Cortlandt, Westchester County, New York

Prepared for

The NRP Group
One Union Square West, Suite 803
New York, New York 10003

Prepared by

Provident Design Engineering, PLLC
7 Skyline Drive
Hawthorne, New York

Date: June 23, 2021
PDE Project No. 21-022

TABLE OF CONTENTS

APPENDICES

SECTION 1 – EXECUTIVE SUMMARY

1.0 PROJECT DESCRIPTION

The Applicant has proposed to construct a 135-unit active adult community in the Town of Cortlandt, Westchester County, New York (See Figure No. 1 in Appendix B). The proposed Project would replace the Colonial Terrace at 119 Oregon Road. The existing access point along Oregon Road will be maintained and enhanced from a traffic operations and safety aspect. The western end of Donnelly Place will be terminated prior to its existing intersection with the existing site driveway/Oregon Road.

The existing site is comprised of The Mansion at Colonial Terrace, surrounded by at-grade parking, and a single-family home. The Existing Facility is a banquet/catering venue that can accommodate formal receptions, corporate meetings, and other events up to a maximum capacity of 700 people. The Existing Facility holds approximately 155 events per year, and the average capacity of an event is between 150 to 160 people. Vehicular access to the Existing Facility is provided via one main driveway located near the intersection of Oregon Road and Donnelly Place, which is utilized as the primary entrance/exit for event patrons, and one secondary driveway located along Waterbury Parkway which leads to the back-of-house area for the Existing Facility. The single-family home has its own private access driveway located along Donnelly Place.

Provident Design Engineering, PLLC (PDE), has been retained to analyze the potential for any traffic impacts associated with the proposed Project and to identify roadway improvements, if required, to mitigate any potential adverse environmental impacts.

This Study uses the standard Traffic Engineering methodology and has been prepared to document the findings and conclusions of the analysis undertaken to measure the traffic impacts associated with the proposed Project. For the purposes of this Study, it is anticipated that the Project will be completed and occupied by the Year 2024.

1.1 FINDINGS

Based on field observations and detailed analysis undertaken in preparation of this Study, the following findings are presented:

- The proposed Project is provided good regional and local vehicular access via Oregon Road, US Route 6 and Bear Mountain State Parkway.

- Access to the site will continue to be provided from Oregon Road, which is under local jurisdiction. This access point will be enhanced from a traffic operational and safety standpoint by terminating the western end of Donnelly Place prior to its intersection with the site driveway/Oregon Road. This will provide a more conventional and controlled point of access to Oregon Road and residents along Donnelly Place can continue to utilize the eastern end of Donnelly Place to access Oregon Road. Emergency access will be provided along Eton Downs Street.

- The proposed Project is conservatively estimated to generate only 38 Peak AM Hour trips and 47 Peak PM Hour trips. The trip generation rates were estimated using Institute of Transportation Engineers (ITE) trip generation rates and further verified with actual traffic counts performed at Jacobs Hill Apartments, which is a similar use in the area. The analysis is additionally conservative by not applying any credit to account for the potential trip generation of the existing as-of-right use, which has the potential to generate significantly higher trip rates during catering events.

- Table No. 1 summarizes the results of the capacity analyses conducted for each intersection included in this Study. Average delay, expressed in seconds per vehicle, is listed below each Level of Service.

TABLE NO. 1
OVERALL LEVEL OF SERVICE SUMMARY

INTERSECTION	**PEAK AM HOUR**		**PEAK PM HOUR**	
	No-Build	**Build**	**No-Build**	**Build**
	LOS Delay	**LOS Delay**	**LOS Delay**	**LOS Delay**
Oregon Rd & Clara Ct/Smith Rd	c 16.3	c 16.9	c 19.8	c 20.8
Oregon Rd & Pump House Rd/Eton Downs/Heady St	A 6.7	A 6.6	A 9.3	A 9.3
Oregon Rd & Healthcare Driveway	b 14.0	b 14.4	c 21.7	c 22.5
Oregon Rd & Gallows Hill Rd/Donnelly Pl	f 75.5	f 78.2	f 332.2	f 338.3
Oregon Rd & Locust Ave	B 12.0	B 12.0	B 17.9	B 18.0
Oregon Rd & Site Driveway	n/a	c 16.7	n/a	d 25.2

Notes:

- Delay is represented in seconds per vehicle.
- Levels of Service for signalized intersections are denoted by uppercase letters.
- Levels of Service for unsignalized intersections are denoted by lowercase letters.
- Overall delay at unsignalized intersections is based upon the critical approach.

As can be seen in the Table above, all Levels of Service will continue to be maintained from No-Build to Build conditions. Additionally, the site driveway will operate at acceptable Levels of Service ‘D’ or better during both Peak Hours and these Levels of Service will be even better throughout the rest of the day when the proposed Project generates less traffic and the background traffic along Oregon

Road is lower. It is noted that Gallows Hill Road experiences some lengthy delays during the Peak Hours under No-Build conditions; however, the proposed Project would not increase the delays on this approach by more than 3.6% during either Peak Hour. This very minor increase in delays is nominal and does represent a significant adverse traffic impact warranting mitigation.

- The proposed Project will provide a total of 146 off-street parking spaces. This equates to a parking ratio of 1.08 parking spaces per unit. This parking ratio was verified with rates published by ITE, as well as actual parking counts performed at the Jacobs Hill Road Apartments, which is a similar use located nearby. Based upon the ITE data and actual parking counts, it was determined that the proposed parking ratio is more than adequate to support the proposed Project.

1.2 CONCLUSIONS

It is the professional opinion of Provident Design Engineering, PLLC that the proposed Project will not result in a significant adverse traffic impact to the area roadway network. This is based upon a conservative analysis that utilized higher trip generation rates than actual counted rates at a similar existing use, as well as ITE data. Additionally, the analysis assumed no credit for the as-of-right existing use, which has the potential to generate significantly higher trip rates during catering events. The existing site driveway will be enhanced from a traffic safety and operations standpoint. Parking to be provided will be more than adequate to support the proposed Project based upon ITE data and actual parking counts performed at an existing similar use.

Respectfully submitted,

PROVIDENT DESIGN ENGINEERING, PLLC

Carlito Holt

Carlito Holt, P.E., P.T.O.E.
Managing Partner/Senior Project Manager

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SECTION 2 – TRAFFIC CONDITIONS AND VOLUME PROJECTIONS

2.0 STUDY METHODOLOGY

The existing traffic volumes were collected by representatives of PDE at adjacent roadways in the vicinity of the Site on May 19, 2021. The existing base traffic volumes were projected to the Design Year of 2024 utilizing a 1% growth rate compounded per year to which the site-generated traffic from the Project was added, resulting in the 2024 No-Build and 2024 Build Traffic Volumes respectively. Utilizing the No-Build and Build Traffic Volumes, PDE performed detailed capacity analyses of the key intersections to identify the operational characteristics and to measure the traffic impact of the proposed Project on the adjacent roadway system. Based upon the results of the analysis, comparisons of the No-Build and Build conditions for the Project were made and if significant impacts were experienced, mitigation was proposed.

2.1 DESCRIPTION OF EXISTING ROADWAY NETWORK

The following are brief descriptions of the roadways located in the vicinity of the Site:

<u>Oregon Road</u> – Oregon Road is a one lane per direction roadway generally traveling in the northeast/southwest direction. The lane widths are approximately 12 feet. There is striping provided (double yellow line in center of roadway and white shoulder line striping). 1-2-foot

shoulders are present. The posted speed limit is 30 miles per hour. Oregon Road is under local jurisdiction.

Pump House Road – Pump House Road is a one lane per direction roadway generally traveling in the north/south direction. The lane widths are approximately 11 feet. There is striping provided (double yellow line in center of roadway and white line striping on edges). 1-2-foot shoulders are present. The posted speed limit is 30 miles per hour. Pump House Road is under local jurisdiction.

Heady Street – Heady Street is a one lane per direction roadway traveling in the north/south direction. The lane widths are approximately 11 feet. There is striping provided (double yellow line in center of roadway and white line striping on edges). A 6-foot shoulder is present on the east side of the roadway. There is no posted speed limit however it is assumed to be 30 miles per hour. Heady Street is under local jurisdiction.

Donnelly Place – Donnelly Place is a one lane per direction roadway traveling in the east/west direction. The lane widths are approximately 11 feet. There is striping provided (double yellow line in center of roadway). No shoulders are present. There is no posted speed limit however it is assumed to be 30 miles per hour. Donnelly Place is under local jurisdiction.

Clara Court – Clara Court is a one lane per direction roadway traveling in the north/south direction. The lane widths are approximately 11 feet. There is no striping provided. No shoulders are present. There is no posted speed limit however it is assumed to be 30 miles per hour. Unmetered parking is present of the east side of the street. Clara Court is under local jurisdiction.

Smith Road – Smith Road is a one lane per direction roadway traveling in the north/south direction. The lane widths are approximately 11 feet. There is no striping provided. No shoulders are present. There is no posted speed limit however it is assumed to be 30 miles per hour. Unmetered parking is present. Smith Rd is under local jurisdiction.

Gallows Hill Road – Gallows Hill Rd is a one lane per direction roadway traveling in the north/south direction. The lane widths are approximately 11 feet. There is striping provided (double yellow in center of roadway and solid white on edges). No shoulders are present. There is no posted speed limit however it is assumed to be 30 miles per hour. Gallows Hill Rd is under local jurisdiction.

Locust Avenue – Locust Ave is a one lane per direction roadway traveling in the north/south direction. The lane widths are approximately 12 feet. There is striping provided (double yellow in center of roadway and solid white on edges). No shoulders are present. There is a posted speed limit of 30 miles per hour. Locust Ave is under local jurisdiction.

2.2 EXISTING TRAFFIC VOLUMES

The following study locations were identified, based upon the scope of the proposed Project and input received from Town officials and their Traffic Engineering Review Consultant:

1. Oregon Rd & Clara Ct/Smith Rd
2. Oregon Road and Pump House Road/Heady Street/Eton Downs Street
3. Oregon Rd & Cortlandt Healthcare Driveway
4. Oregon Rd & Gallows Hill Rd/Donnelly Pl
5. Oregon Rd & Locust Ave
6. Oregon Rd & Site Driveway

Representatives of PDE conducted turning movement traffic counts on Wednesday, May 19, 2021 from 6:00 to 9:00 AM and from 3:00 to 6:00 PM. In addition to the manual traffic counts, Automatic Traffic Recorder (ATR) machine counters were placed at two locations along Oregon Road and recorded traffic for a two-week period to verify the manual turning movement counts. Traffic signal timings were obtained from field visits conducted by PDE. Based upon the traffic counts conducted, the following Peak Hours were determined:

Peak AM Hour – 7:30 AM to 8:30 AM

Peak PM Hour - 4:30 PM to 5:30 PM

Due to adjustments in typical traffic patterns during the COVID-19 pandemic, PDE also referenced historical Bluetooth technology traffic data to verify the turning movement counts were representative of typical traffic volumes in the area pre-pandemic. Based upon a review of historical data from 2019, it was determined that the May 2021 turning movement traffic counts were generally 10% lower than the 2019 traffic volumes. Based on the foregoing, all turning movement count volumes were increase by 10% to represent the 2021 Existing Traffic Volumes. The existing Peak AM and Peak PM Hour Traffic Volumes are illustrated on Figure No. 2 in Appendix B. These Peak Hours represent the time periods when traffic impacts would be at their greatest.

2.3 2024 NO-BUILD TRAFFIC VOLUMES

In order to project to the future design year, a compounded annual growth rate of 1% per year was applied to the existing traffic volumes to form the 2024 No-Build Traffic Volumes. This growth rate was confirmed by the Town Traffic Engineering Review Consultant. The 2024 No-Build Traffic Volumes illustrated on Figure No. 3.

2.4 SITE-GENERATED TRAFFIC VOLUMES

The ability of any roadway network to accommodate anticipated traffic volumes is measured by comparing Peak Hour Traffic Volumes to roadway capacities. Thus, it is essential to determine the hourly traffic volumes to be generated by the proposed Project and add them to the No-Build Traffic Volumes to determine the Build Traffic Volumes.

In order to estimate the anticipated trips to be generated by the proposed Project, PDE studied a similar facility located on Jacobs Hill Road in the Town of Cortlandt. PDE installed an Automatic Traffic Recorder (ATR) device on Jacobs Hill Road for a two-week period to calculate the peak periods of site traffic and identify an actual counted trip rate of an existing similar use in the area. The Jacobs Hill Road counts identified an Average Peak Hour Trip Rate of 0.19 and 0.31 trips per unit, during the Peak AM and Peak PM Hours, respectively.

In addition to the Jacobs Hill Road Apartments, PDE also reviewed trip generation rates from the ITE publication entitled "Trip Generation", 10th Edition for Land Uses 221 (Multifamily Housing Mid-Rise) and 252 (Senior Adult Housing). The following Table provides a summary of the ITE Trip Generation Calculations:

TABLE 2
TRIP GENERATION CALCULATION TABLE

	PEAK AM HOUR			**PEAK PM HOUR**		
	ENTER	**EXIT**	**TRIP RATE (trips/unit)**	**ENTER**	**EXIT**	**TRIP RATE (trips/unit)**
ITE - LUC 221	13	35	0.36	35	24	0.44
ITE - LUC 252	11	17	0.20	19	16	0.26
Proposed Trip Generation	**12**	**26**	**0.28**	**27**	**20**	**0.35**

Based on the foregoing, the analysis contained herein conservatively utilized the Average Trip Generation Rate between the two ITE Land Uses, which results in a higher trip generation rate than the actual counted rate at the similar nearby use. Additionally, this trip generation is conservative in that it does not take any credit for residents/employees that will utilize the Bee Line Bus Stop located along the site frontage. Bus Route 16 passes through the immediate area. A schedule of Bus Route 16 is located in Appendix E. Furthermore, the analysis does not assume any credit for the as-of-right existing use, which has the potential to generate significantly higher trip rates during catering events.

2.5 ARRIVAL/DEPARTURE DISTRIBUTION

The arrival/departure distribution patterns for traffic to be generated by the Project were developed based upon the existing traffic volumes, potential destinations, and the existing roadway network. The resulting arrival and departure distributions associated with the Project are illustrated on Figures No. 4 and 5.

2.6 2024 BUILD TRAFFIC VOLUMES

The Site-generated Traffic Volumes in Figure No. 6 were distributed to the roadway network in accordance with the arrival/departure distributions illustrated in Figures No. 4 and 5. These volumes were combined with the 2024 No-Build Traffic Volumes on Figure No. 3 to form the 2024 Build Traffic Volumes which are illustrated on Figure No. 7.

SECTION 3 – TRAFFIC ANALYSIS

3.0 DESCRIPTION OF ANALYSIS

The following section contains a brief description of the procedure utilized in the preparation of this analysis for all the study locations listed:

- Capacity analysis is a method by which traffic volumes are compared to calculated roadway and intersection capacities to evaluate future traffic conditions. The methodology utilized is described in the Highway Capacity Manual published by the Transportation Research Board. In general, the term "Level of Service" is used to provide a qualitative evaluation based on certain quantitative calculations related to empirical values. The definitions of Level of Service as contained in the Highway Capacity Manual appear in Appendix A of this Report.

- In general, Level of Service A represents the best traffic operating condition. Levels of Service for signalized and unsignalized intersections are defined in terms of average delay. Delay is used as a measure of driver discomfort, frustration, efficiency, etc.

Capacity analyses were performed for the key locations with the Existing, 2024 No-Build and 2024 Build Traffic Volumes utilizing Highway Capacity Software (Synchro) developed for the FHWA. The capacity analyses worksheets are contained in Appendix D of this Report.

3.1 LOCATION NO. 1 – OREGON ROAD AND CLARA CT/SMITH ROAD

Existing Conditions

Oregon Road provides the eastbound and westbound approaches to this four-legged, unsignalized intersection. The eastbound Oregon Road approach provides one left-turn/through/right-turn. The westbound Oregon Road approach provides one left-turn/through/right-turn lane. Smith Road provides the southbound approach. The southbound approach provides one left-turn/through/right-turn lane. Clara Ct provides the northbound approach and provides one left-turn/through/right-turn lane. The intersection is stop sign controlled with stop signs facing Smith Rd and Clara Ct.

Capacity Analysis

Capacity analyses were conducted for this location utilizing the Existing, 2024 No-Build, and 2024 Build Traffic Volumes for the Peak AM and PM Hours. The results of these analyses are shown in the table in Appendix C. As indicated in the table there was no change in level of service from No-Build to Build conditions and no greater than a 1 second increase in average delay. As such, no improvements are required at this location.

3.2 LOCATION NO. 2 – OREGON ROAD AND PUMP HOUSE RD/ETON DOWNS/HEADY ST

Existing Conditions

Oregon Road provides the eastbound and westbound approaches to this five-legged, signalized intersection. The eastbound Oregon Road approach provides one left-turn/through/bear right-turn/right-turn lane. The westbound Oregon Road approach provides one hard left-turn/left-turn/through/right-turn lane. Heady Street provides the northbound approach. The northbound approach provides one left-turn/through/right-turn/hard right-turn lane. Eton Downs provides the northwest bound approach. The northwest bound approach provides one hard left-turn/bear left-turn/bear right-turn/hard right-turn lane. Pump House Road provides the southbound approach. The southbound approach provides one left-turn/bear left-turn/through/right-turn lane. The intersection is controlled by a semi-actuated signal. It is pre-timed between Eton Downs and Oregon Rd and will activate additional phases for Pump House Rd and Heady Street.

Capacity Analysis

Capacity analyses were conducted for this location utilizing the Existing, 2024 No-Build, and 2024 Build Traffic Volumes for the Peak AM and PM Hours. The results of these analyses are shown in the table in Appendix C. As indicated in the table there was no change in level of service from No-Build to Build conditions and all vehicular delays remain essentially unchanged. As such, no improvements are required at this location because of this Project.

3.3 LOCATION NO. 3 – OREGON ROAD AND CORTLANDT HEALTHCARE DRIVEWAY

Existing Conditions

Oregon Road provides the eastbound and westbound approaches to this three-legged, unsignalized intersection. The eastbound Oregon Road approach provides one left-turn/through lane. The westbound approach provides one through/right-turn lane. The Cortlandt Healthcare Driveway provides the southbound approach. It provides one left-turn/right-turn lane. The intersection is controlled by a stop sign on The Cortlandt Healthcare Driveway approach.

Capacity Analysis

Capacity analyses were conducted for this location utilizing the Existing, 2024 No-Build, and 2024 Build Traffic Volumes for the Peak AM and PM Hours. The results of these analyses are shown in the table in Appendix C. As indicated in the table there was no change in level of service from build No-Build to Build conditions and all average delays increased by less than 1 second. As such, no improvements are required at this location.

3.4 LOCATION NO. 4 – OREGON ROAD AND GALLOWS HILL RD/DONNELLY PLACE

Existing Conditions

Oregon Road provides the eastbound and westbound approaches to this four-legged, unsignalized intersection. The eastbound Oregon Road approach provides one left-turn/through/right-turn lane. The westbound bound approach provides one left-turn/through/right-turn lane. Donnelly Place provides the northbound approach. It provides one left-turn/through/right-turn lane. Gallows Hill Rd provides the northbound approach. It provides one left-turn/through/right-turn lane. The intersection is controlled by stop signs on the Donnelly Place and Gallows Hill Rd approaches.

Capacity Analysis

Capacity analyses were conducted for this location utilizing the Existing, 2024 No-Build, and 2024 Build Traffic Volumes for the Peak AM and PM Hours. The results of these analyses are shown in the table in Appendix C. As indicated in the table, the Gallows Hill Rd approach does experience some lengthy delays during the Peak Hours under No-Build conditions; however, the proposed Project would not increase the delays on this approach by more than 3.6% during either Peak Hour. This very minor increase in delays is nominal and does represent a significant adverse traffic impact warranting mitigation.

3.5 LOCATION NO. 5 – OREGON ROAD AND LOCUST AVENUE

Existing Conditions

Oregon Road provides the eastbound and westbound approaches to this three-legged, unsignalized intersection. The eastbound Oregon Road approach provides one through/right-turn lane. The westbound bound approach provides one left-turn/through lane. Locust Avenue provides the northbound approach. It provides one left-turn/right-turn lane. The intersection is controlled by a stop sign on the Locust Avenue approach.

Capacity Analysis

Capacity analyses were conducted for this location utilizing the Existing, 2024 No-Build, and 2024 Build Traffic Volumes for the Peak AM and PM Hours. The results of these analyses are shown in the table in Appendix C. As indicated in the table there was no change in level of service from No-Build to Build conditions and average delays remain essentially unchanged. As such, no improvements are required at this location.

3.6 LOCATION NO. 6 – OREGON ROAD AND SITE DRIVEWAY

Existing Conditions

Oregon Road provides the eastbound and westbound approaches to this three-legged, unsignalized intersection. The eastbound Oregon Road approach provides one through/right-turn lane. The westbound approach provides one left-turn/through lane. The Site Driveway provides the northbound approach. It provides one left-turn/right-turn lane. The intersection is controlled by a stop sign on the Site Driveway approach.

Capacity Analysis

Capacity analyses were conducted for this location utilizing the Existing, 2024 No-Build, and 2024 Build Traffic Volumes for the Peak AM and PM Hours. The results of these analyses are shown in the table in Appendix C. As indicated in the table, the site driveway will operate at acceptable Levels of Service 'D' or better during both Peak Hours and these Levels of Service will be even better throughout the rest of the day when the proposed Project generates less traffic and the background traffic along Oregon Road is lower.

Alternative Access Scheme

Based upon feedback from the Town, PDE analyzed an alternative access scheme that would restrict left-turns exiting the proposed site driveway and accommodate that maneuver via the Eton Downs access currently proposed to be emergency access only. Based upon the results of that analysis, the proposed roadway network could adequately accommodate the altered travel patterns; however, it is the opinion of PDE that the provision of vehicular access through Eton Downs would promote potential cut-through traffic by vehicles attempting to avoid the traffic signal. This could create unsafe conditions in the area for both vehicles and pedestrians. Since the proposed site driveway operates at acceptable Levels of Service under the currently proposed access scheme, it is the recommendation of PDE that the currently proposed access scheme of a full-movement site driveway to Oregon Road and an emergency access-only curb cut to Eton Downs be maintained to provide optimal traffic safety and operations in the area. Additionally, although the project-generated traffic could be adequately accommodated on the Eton Downs Street approach to Oregon Road, it is not prudent to unnecessarily increase average delays for existing residents utilizing that approach if the project-generated traffic can be adequately accommodated at the proposed site driveway.

SECTION 4 - PARKING

4.0 PARKING ANALYSIS

The proposed site plan will provide a total 146 off-street parking spaces. This equates to a parking ratio of 1.08 parking spaces per unit. In order to verify whether this parking supply is adequate, PDE referenced parking rates published by ITE, as well as actual parking counts performed at the Jacobs Hill Road Apartments, which is a similar use located nearby. ITE Land Use Code 221 and Land Use Code 252 identify a Parking Ratio of 0.75 and 0.61, respectively. Based upon the two weeks of data collected at Jacobs Hill Apartments, it was determined that the Average Peak Parking Demand Ratio at that facility is 0.77 and the maximum Peak Parking Demand Ratio that occurred at any point during the two-week timeframe was 0.86. Based on the foregoing, the 1.08 Parking Ratio to be provided for the proposed Project is more than adequate.

SECTION 5 –CONCLUSIONS

5.0 CONCLUSIONS

It is the professional opinion of Provident Design Engineering, PLLC that the proposed Project will not result in a significant adverse traffic impact to the area roadway network. This is based upon a conservative analysis that utilized higher trip generation rates than actual counted rates at a similar existing use, as well as ITE data. Additionally, the analysis assumed no credit for the as-of-right existing use, which has the potential to generate significantly higher trip rates during catering events. The existing site driveway will be enhanced from a traffic safety and operations standpoint and will operate at acceptable Levels of Service. Parking to be provided will be more than adequate to support the proposed Project based upon ITE data and actual parking counts performed at an existing similar use.

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APPENDIX A

LEVEL OF SERVICE STANDARDS

1. LEVEL OF SERVICE

CONCEPT

The Highway Capacity Manual, published by the Transportation Research Board of the U.S. Government, established a system by which highway facilities are examined for their adequacy to handle traffic volumes. The terminology "Level of Service" is used to provide a "qualitative" evaluation based on certain "quantitative" calculations which are related to empirical values.

Intersection Capacity, Delay and resultant Levels of Service are dependent upon a number of factors, including the following:

- Area Type
- Intersection geometrics
- Traffic volumes
- Parking conditions
- Pedestrian activity
- Vehicle Mix
- Bus Stop location and activity
- Peak Hour Factor
- Traffic Signal operation, if applicable

Ramp and weaving area Densities and resultant Levels of Service are dependent upon a number of factors, including the following:

- Number of lanes
- Configuration of weaving area
- Length of acceleration/deceleration lanes
- Vehicle speeds
- Traffic volumes
- Vehicle Mix
- Peak Hour Factor

FACTORS

SIGNALIZED INTERSECTIONS

Level of Service for Signalized Intersections is defined in terms of Delay, which is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. Specifically, Level of Service criteria are stated in terms of the Average Control Delay per vehicle for the peak 15-minute period within the hour analyzed.

Delay is a complex measure and is dependent upon a number of variables, including:

- Cycle length
- Ratio of Green time to Cycle length (G/C)

- Ratio of Volume to Capacity (V/C) for lane group or approach
- Traffic signal progression

UNSIGNALIZED INTERSECTIONS

Level of Service for Unsignalized Intersections is also defined in terms of Delay. The amount of Delay is based upon the availability of "gaps" in the mainline traffic stream and the acceptance of these gaps by motorists waiting on the side street to enter the main street traffic flow.

RAMP AND RAMP JUNCTIONS

Level of Service for ramp freeway junctions and the ramp proper are defined in terms of Density (passenger cars per mile per lane). Density is related to the traffic flow in the area of influence.

WEAVING AREAS

Level of Service for weaving areas is defined in terms of Density (passenger cars per mile per lane). Density is based on the ratio of weaving vehicles to non-weaving vehicles and on vehicle speeds in the weaving area of influence

CRITERIA

The criteria for the various Level of Service designations are as follows:

	SIGNALIZED	**UNSIGNALIZED**
LEVEL OF SERVICE	**Average Control Delay per Vehicle (Seconds)**	**Average Control Delay per Vehicle (Seconds)**
A	10.0 or less	10.0 or less
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 to 80.0	35.1 to 50.0
F	80.1 or greater	50.1 or greater

Level of Service	Ramp-Freeway Junction	Ramp Proper	Weaving Areas	
	Maximum Density pc/mi/ln	**Density Range pc/mi/ln**	**Maximum Density pc/mi/ln**	
			Freeway Weaving Area	**Multi-lane + C-D Weaving Area**
A	≤10	≤11	≤10	≤12
B	>10 - 20	>11 – 18	>10 - 20	>12 - 24
C	>20 - 28	>18 – 26	> 20 - 28	>24 - 32
D	>28 - 35	>26 – 35	>28 - 35	>32 - 36
E	>35	>35 – 45	>35 - 43	>36 - 40
F	Demand exceeds capacity	>45	>43	>40

DESCRIPTION

The following is a brief description of each of the six Level of Service designations as defined by the Highway Capacity Manual:

SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE A

Average Control Delay - 10.0 secs. or less

Describes operations with very low delay. Occurs when progression is extremely favorable and most vehicles arrive during the Green Phase and do not stop at all. Short cycle lengths may also contribute to low delay.

LEVEL OF SERVICE B

Average Control Delay - 10.1 to 20.0 secs.

Generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average delay.

LEVEL OF SERVICE C

Average Control Delay - 20.1 to 35.0 secs.

Higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this Level of Service. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.

LEVEL OF SERVICE D

Average Control Delay - 35.1 to 55.0 secs.

The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high Volume/Capacity (V/C) Ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LEVEL OF SERVICE E

Average Control Delay - 55.1 to 80.0 secs.

The limit of acceptable delay.

Higher delay values generally indicate poor progression, long cycle lengths, and high V/C Ratios. Individual cycle failures are frequent occurrences.

LEVEL OF SERVICE F

Average Control Delay - in excess of 80.0 secs.

Unacceptable to most drivers.

Occurs with oversaturation, i.e., arrival flow rates exceed the capacity of the intersection. May also occur at high V/C Ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.

UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE A
Average Control Delay - 10.0 secs. or less
Operations with little or no delay to minor turning movements.

LEVEL OF SERVICE B
Average Control Delay - 10.1 to 15.0 secs.
Operations with short delays on minor turning movements.

LEVEL OF SERVICE C
Average Control Delay - 15.1 to 25.0 secs.
Operations with average delays on minor turning movements.

LEVEL OF SERVICE D
Average Control Delay - 25.1 to 35.0 secs.
Operations with some delays on minor turning movements.

LEVEL OF SERVICE E
Average Control Delay - 35.1 to 50.0 secs.
Operations with long delays on minor turning movements.

LEVEL OF SERVICE F
Average Control Delay - In excess of 50.0 secs.
Operations where demand exceeds capacity. Very long delays with queuing may be experienced on the minor street approach.

RAMPS AND RAMP JUNCTIONS

LEVEL OF SERVICE A

Maximum Density - 10 pc/mi/ln

Unrestricted operations with no noticeable turbulence in the ramp influence area.

LEVEL OF SERVICE B

Maximum Density - 20 pc/mi/ln

Minimal levels of turbulence exist and speeds of vehicles in the influence area begin to decline.

LEVEL OF SERVICE C

Maximum Density - 28 pc/mi/ln

Level of turbulence becomes noticeable as average speed within the influence area declines. Driving conditions are still relatively comfortable at this level.

LEVEL OF SERVICE D

Maximum Density - 35 pc/mi/ln

Turbulence levels become intrusive. Queues may form on some high volume on-ramps but freeway operation remains stable.

LEVEL OF SERVICE E

Maximum Density - >35 pc/mi/ln

Conditions approaching and reaching capacity. Speeds are reduced and turbulence of merging/diverging vehicles becomes intrusive to all vehicles in the influence area. Flow levels approach capacity limits and minor changes in demand can cause ramp and freeway queues to occur.

LEVEL OF SERVICE F

Maximum Density – Demand flow exceeds limits

Unstable, or breakdown, operation. Approaching demand flows exceed the discharge capacity of the downstream freeway or ramp. Queues are visibly formed on the freeway and on-ramps and will continue to grow as long as the approaching demand exceeds the discharge capacity.

APPENDIX B

FIGURES

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Provident design engineering

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TEL: (914) 592-4040 WWW.PDERESULTS.COM

Site Location
Cortlandt Senior Living
Cortlandt, Westchester County, NY

Project No. 21-022
N.T.S.
June 2021

Figure No. 01

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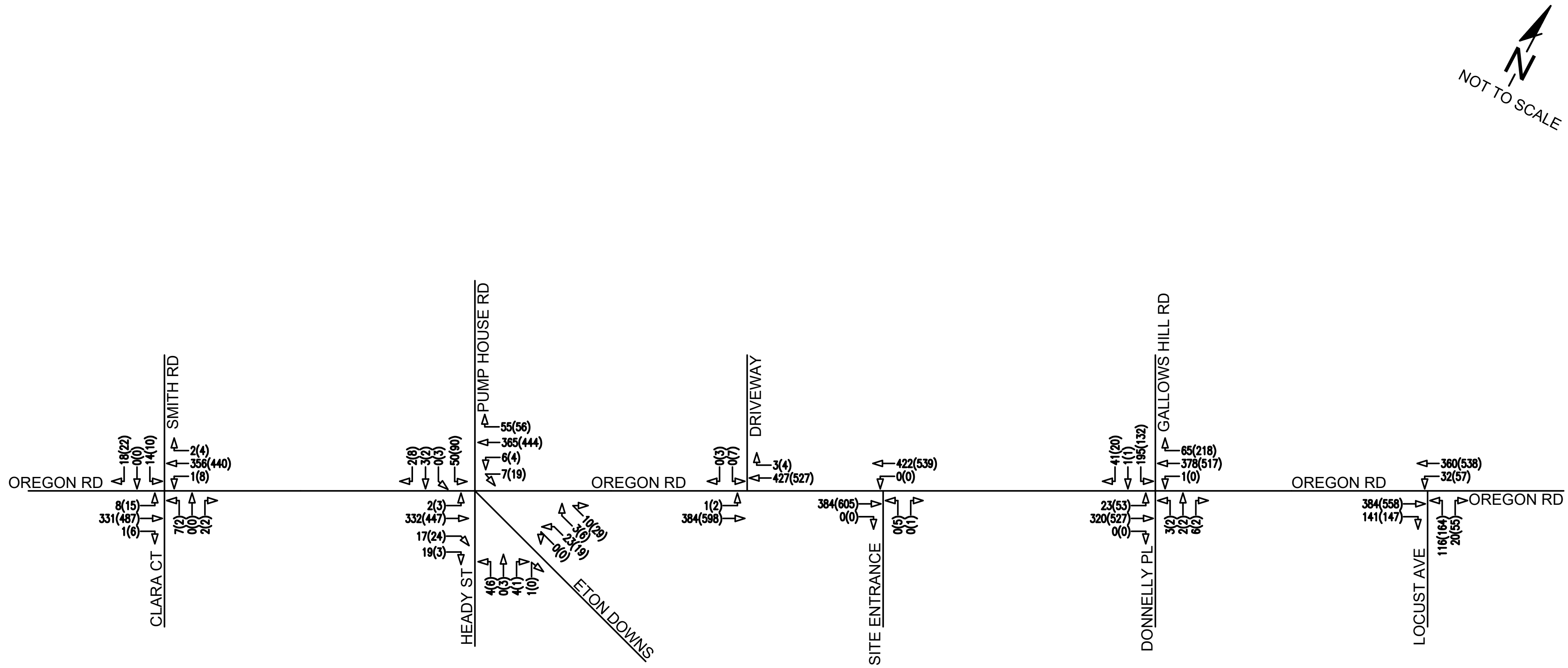

LEGEND

00 - VPH-PEAK AM HOUR (7:30-8:30)

(00) - VPH-PEAK PM HOUR (4:30-5:30)

Provident design engineering

7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532

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Existing Traffic Volumes

Cortlandt Senior Living

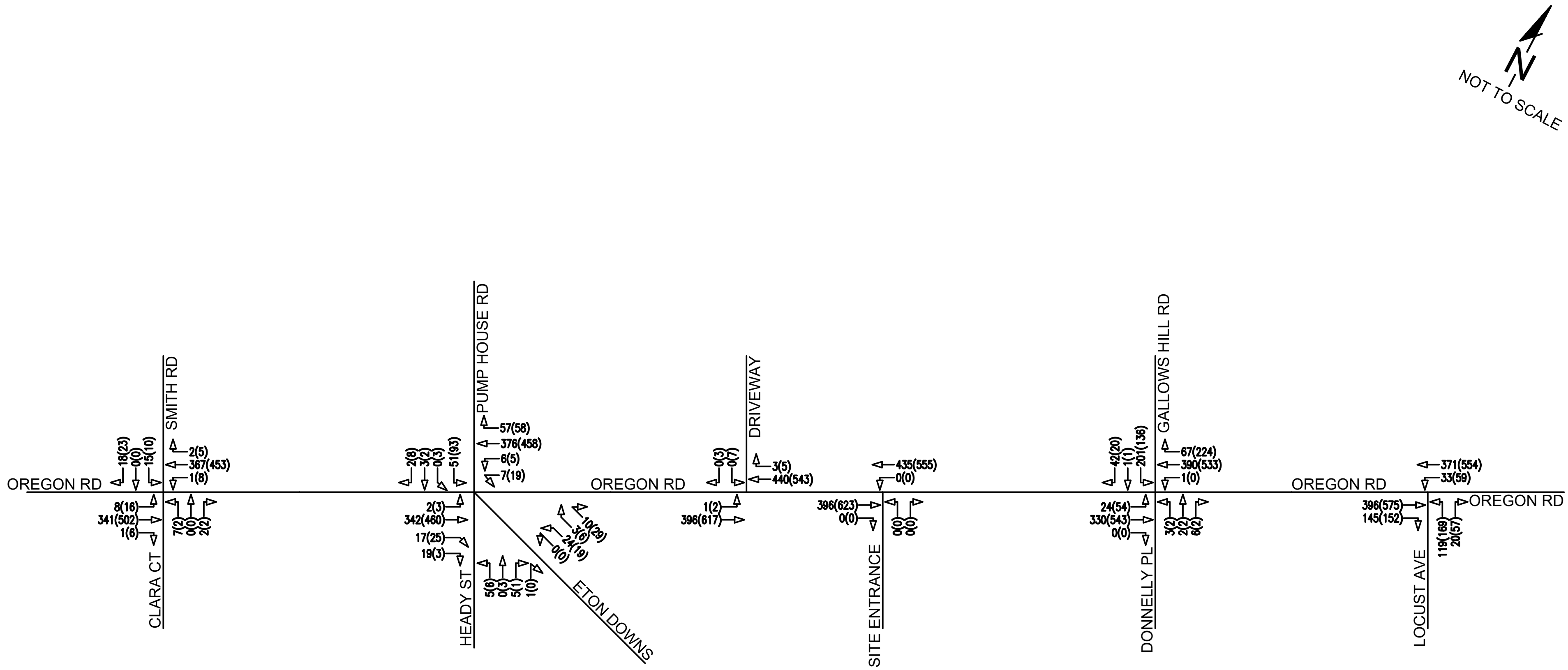
Cortlandt, Westchester County, NY

Project No. 21-022

N.T.S.

June 2021

Figure No. 02



LEGEND

00 - VPH-PEAK AM HOUR (7:30-8:30)
(00) - VPH-PEAK PM HOUR (4:30-5:30)

Provident
design engineering

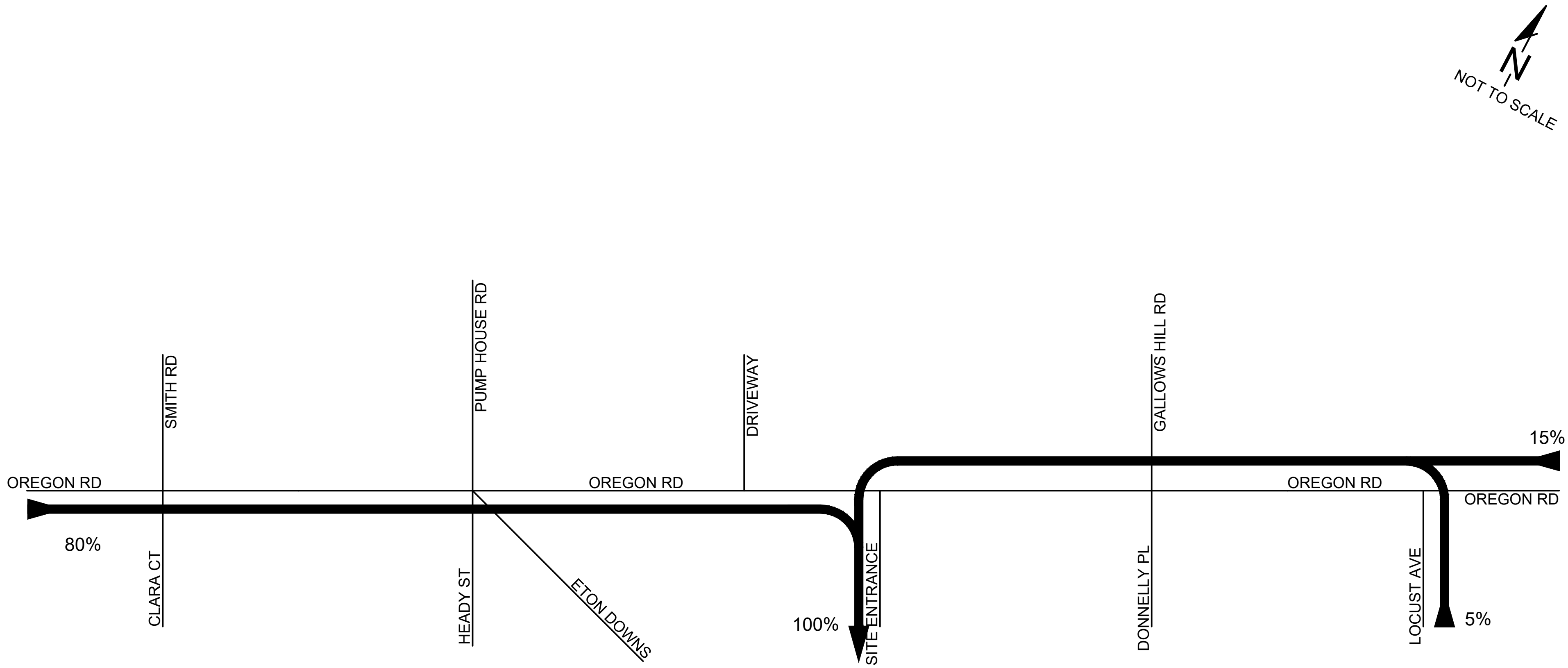
7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

No-Build Traffic Volumes
Cortlandt Senior Living
Cortlandt, Westchester County, NY

Project No. 21-022
N.T.S.
June 2021

Figure No. 03

Q:\PROJECTS-21\21-022 Cortlandt Senior Living\AutoCAD\Traffic\Analysis - Traffic Data Bank\TrafficFigures_8.5x11 Portrait.dwg



Provident design engineering

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TEL: (914) 592-4040 WWW.PDERESULTS.COM

Arrival Distribution

Cortlandt Senior Living

Cortlandt, Westchester County, NY

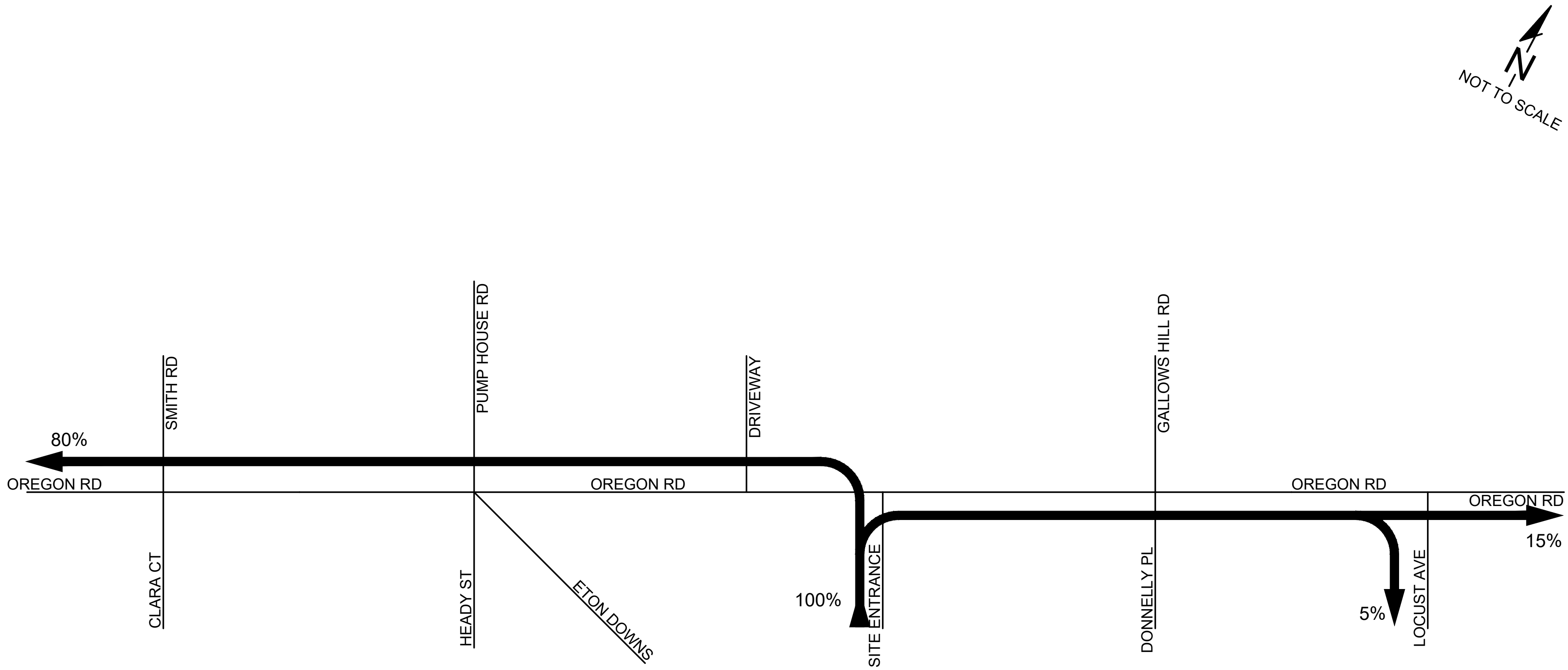
Project No. 21-022

N.T.S.

June 2021

Figure No. 04

Q:\PROJECTS-21\21-022 Cortlandt Senior Living\AutoCAD\Traffic\Analysis - Traffic Data Bank\TrafficFigures_8.5x11 Portrait.dwg



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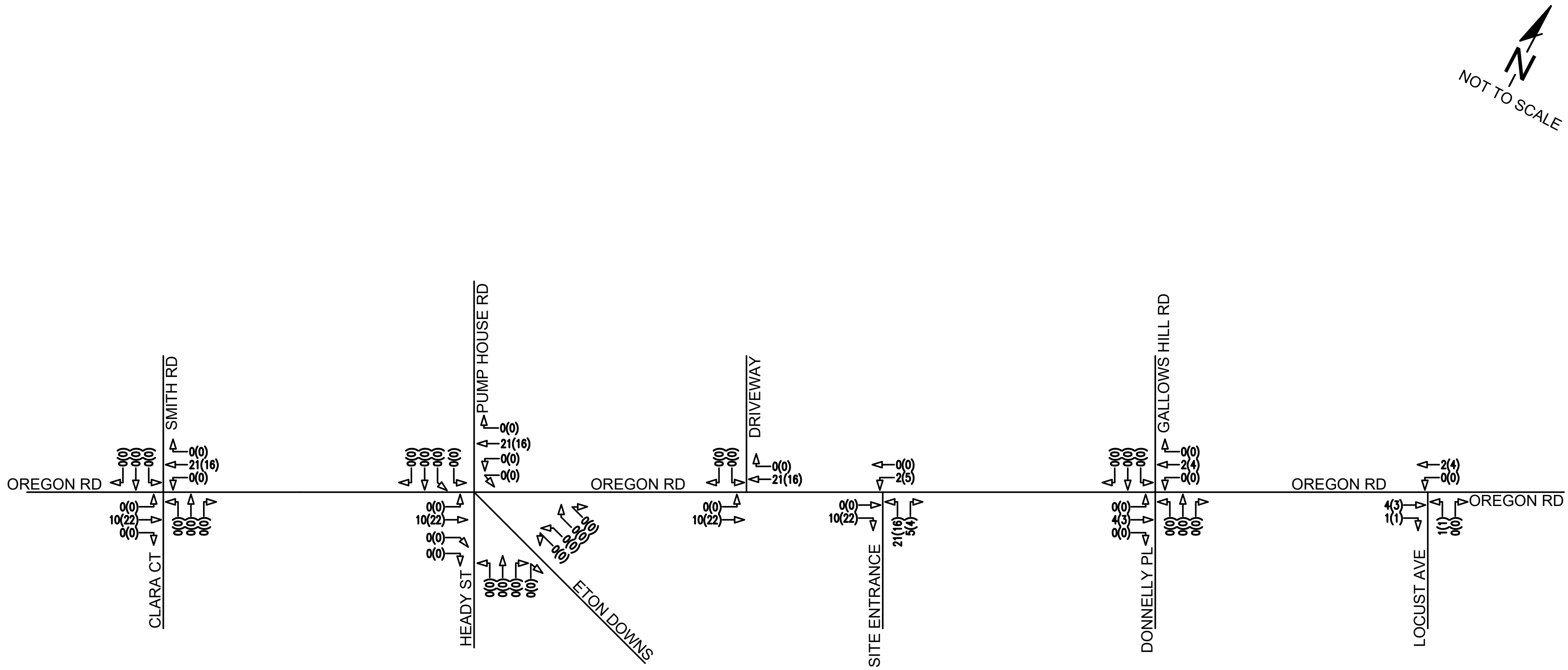
Departure Distribution
Cortlandt Senior Living
Cortlandt, Westchester County, NY

Project No. 21-022
N.T.S.
June 2021

Figure No. 05



LEGEND
00 - VPH-PEAK AM HOUR (7:30-8:30)
(00) - VPH-PEAK PM HOUR (4:30-5:30)

Provident design engineering

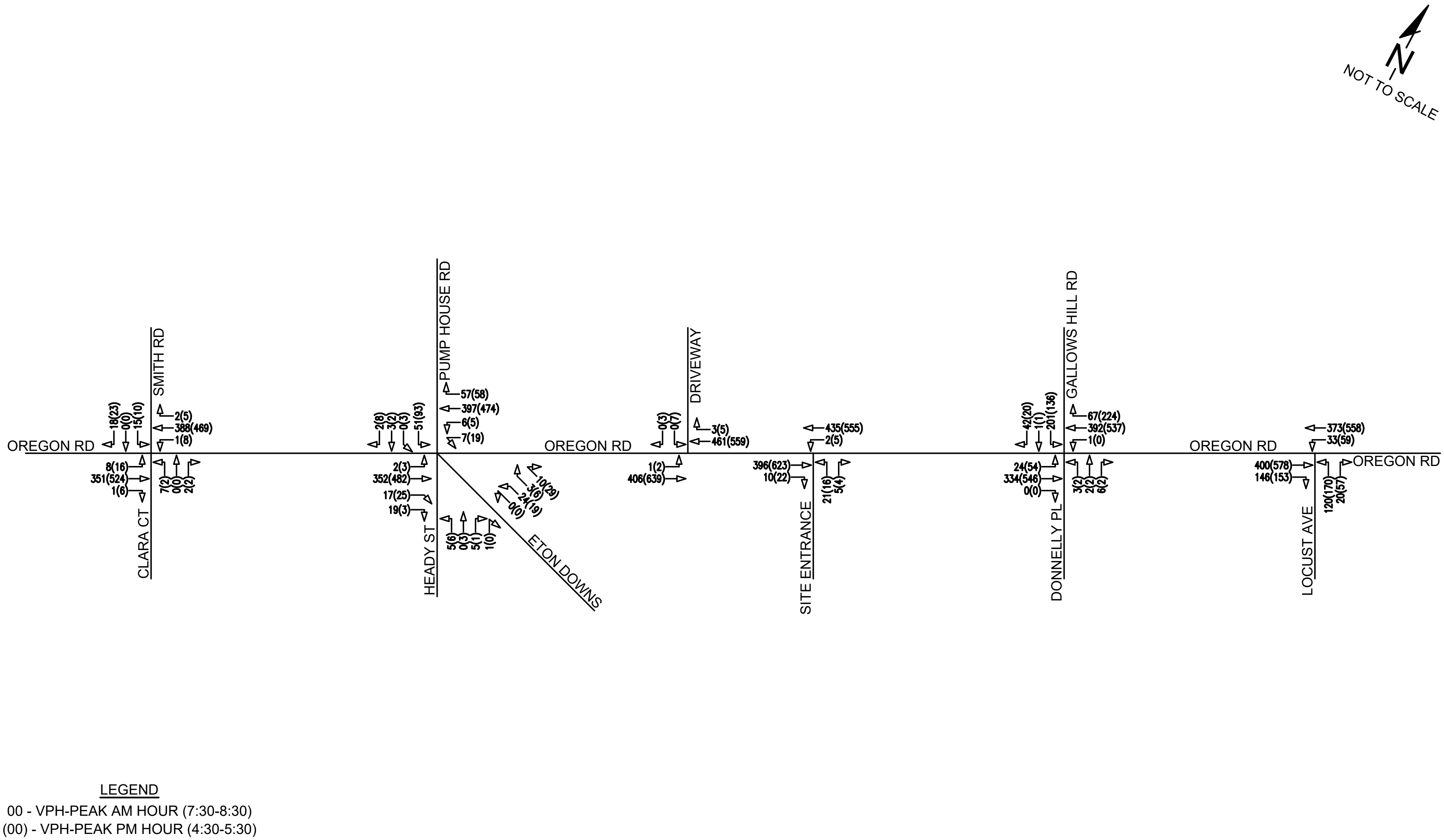
7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

Site Generated Traffic Volumes
Cortlandt Senior Living
Cortlandt, Westchester County, NY

Project No. 21-022
N.T.S.
June 2021

Figure No. 06

Q:\PROJECTS-21\21-022 Cortlandt Senior Living\AutoCAD\Traffic\Analysis - Traffic Data Bank\TrafficFigures_8.5x11 Portrait.dwg



Provident design engineering

7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

Build Traffic Volumes

Cortlandt Senior Living
Cortlandt, Westchester County, NY

Project No. 21-022
N.T.S.
June 2021

Figure No. 07

APPENDIX C

LEVEL OF SERVICE TABLES

TABLE C-1 PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE Oregon Road & Clara Rd/Smith Rd							
APPROACH		**PEAK AM HOUR**			**PEAK PM HOUR**		
		2021 **EXISTING**	**2024** **NO-BUILD**	**2024** **BUILD**	**2021** **EXISTING**	**2024** **NO-BUILD**	**2024** **BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Clara Ct							
NB	LTR	c 15.9	c 16.3	c 16.9	c 19.1	c 19.8	c 20.8
Smith Rd							
SB	LTR	b 13.9	b 14.3	b 14.8	c 16.4	c 16.8	c 17.5
Oregon Road							
EB	LTR	a 8.1	a 8.1	a 8.2	a 8.4	a 8.4	a 8.5
WB	LTR	a 8.0	a 8.0	a 8.1	a 8.5	a 8.6	a 8.6

TABLE C-2
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
Oregon Rd & Pump House Rd / Heady St

APPROACH		PEAK AM HOUR			PEAK PM HOUR		
		2021 EXISTING	**2024 NO-BUILD**	**2024 BUILD**	**2021 EXISTING**	**2024 NO-BUILD**	**2024 BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Heady Street							
NB	LTR	C 33.0	C 33.0	C 33.0	C 31.0	C 30.9	C 30.9
Eton Downs							
NWB	LTR	C 24.5	C 24.7	C 24.7	C 21.3	C 21.2	C 21.2
Pump House Road							
SB	LTR	D 41.4	D 41.3	D 41.3	D 42.5	D 42.7	D 42.7
Oregon Road							
EB	LTR	A 3.0	A 3.0	A 3.0	A 4.6	A 4.7	A 4.9
WB	LTR	A 3.2	A 3.3	A 3.4	A 5.0	A 5.2	A 5.3
INTERSECTION		**A 6.6**	**A 6.7**	**A 6.6**	**A 9.2**	**A 9.3**	**A 9.3**

TABLE C-3
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
Oregon Road & Healthcare Driveway

APPROACH		PEAK AM HOUR			PEAK PM HOUR		
		2021 EXISTING	**2024 NO-BUILD**	**2024 BUILD**	**2021 EXISTING**	**2024 NO-BUILD**	**2024 BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Healthcare Driveway							
SB	LR	b 13.8	b 14.0	b 14.4	c 20.7	c 21.6	c 22.5
Oregon Road							
EB	LT	a 8.3	a 8.3	a 8.4	a 8.6	a 8.7	a 8.7
WB	TR	a 0.0	a 0.0	a 0.0	a 0.0	a 0.0	a 0.0

TABLE C-4 PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE Oregon Road & Gallows Hill Rd/Donnelly Pl							
APPROACH		**PEAK AM HOUR**			**PEAK PM HOUR**		
		2021 **EXISTING**	**2024** **NO-BUILD**	**2024** **BUILD**	**2021** **EXISTING**	**2024** **NO-BUILD**	**2024** **BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Donnelly Pl							
NB	LTR	b 14.5	b 14.8	b 14.9	d 30.6	d 32.6	d 32.8
Gallows Hill Rd							
SB	LTR	f 61.6	f 75.5	f 78.2	f 268.7	f 332.2	f 338.3
Oregon Road							
EB	LTR	a 8.4	a 8.5	a 8.5	a 9.7	a 9.8	a 9.8
WB	LTR	a 8.0	a 8.0	a 8.0	a 8.6	a 8.7	a 8.7

TABLE C-5
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
Oregon Rd & Locust Ave

APPROACH		PEAK AM HOUR			PEAK PM HOUR		
		2021 EXISTING	2024 NO-BUILD	2024 BUILD	2021 EXISTING	2024 NO-BUILD	2024 BUILD
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Locust Ave							
NB	LTR	C 22.7	C 22.9	C 22.9	C 29.2	C 30.0	C 30.1
Oregon Road							
EB	LTR	B 17.9	B 18.4	B 18.6	C 28.4	C 31.2	C 31.7
WB	L	A 9.4	A 9.6	A 9.7	B 12.7	B 13.5	B 13.6
	TR	A 8.5	A 8.6	A 8.6	A 9.3	A 9.4	A 9.5
	OVERALL	A 8.6	A 8.7	A 8.7	A 9.6	A 9.8	A 9.9
INTERSECTION		**B 11.8**	**B 12.0**	**B 12.0**	**B 17.1**	**B 17.9**	**B 18.0**

TABLE C-6
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
Oregon Road & Site Driveway

APPROACH		PEAK AM HOUR			PEAK PM HOUR		
		2021 EXISTING	**2024 NO-BUILD**	**2024 BUILD**	**2021 EXISTING**	**2024 NO-BUILD**	**2024 BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Site Driveway							
NB	LR	a 0.0	a 0.0	c 16.7	a 0.0	a 0.0	d 25.2
Oregon Road							
EB	TR	a 0.0	a 0.0	a 0.0	a 0.0	a 0.0	a 0.0
WB	LT	a 0.0	a 0.0	a 8.2	a 0.0	a 0.0	a 9.0

APPENDIX D

CAPACITY ANALYSIS

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	2	332	17	19	7	6	365	55	4	1	4	1
Future Volume (vph)	2	332	17	19	7	6	365	55	4	1	4	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987					0.983			0.932		
Flt Protected							0.998			0.980		
Satd. Flow (prot)	0	1839	0	0	0	0	1827	0	0	1701	0	0
Flt Permitted		0.999					0.985			0.881		
Satd. Flow (perm)	0	1837	0	0	0	0	1804	0	0	1529	0	0
Right Turn on Red				No				No				Yes
Satd. Flow (RTOR)										1		
Link Speed (mph)		30					30			30		
Link Distance (ft)		518					276			165		
Travel Time (s)		11.8					6.3			3.8		
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
Adj. Flow (vph)	2	361	18	21	8	7	397	60	4	1	4	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	402	0	0	0	0	472	0	0	10	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)		0					0			0		
Link Offset(ft)		0					0			50		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		60	9	60	15		9	15		9	60
Number of Detectors	1	2			1	1	2		1	2		
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	100			20	20	100		20	100		
Trailing Detector (ft)	0	0			0	0	0		0	0		
Detector 1 Position(ft)	0	0			0	0	0		0	0		
Detector 1 Size(ft)	20	6			20	20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94					94			94		
Detector 2 Size(ft)		6					6			6		
Detector 2 Type		Cl+Ex					Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0					0.0			0.0		
Turn Type	Perm	NA			Perm	Perm	NA		Perm	NA		
Protected Phases		1					4			6!		
Permitted Phases	1				4	4	4		6!			
Detector Phase	1	1			4	4	4		6	6		
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0		

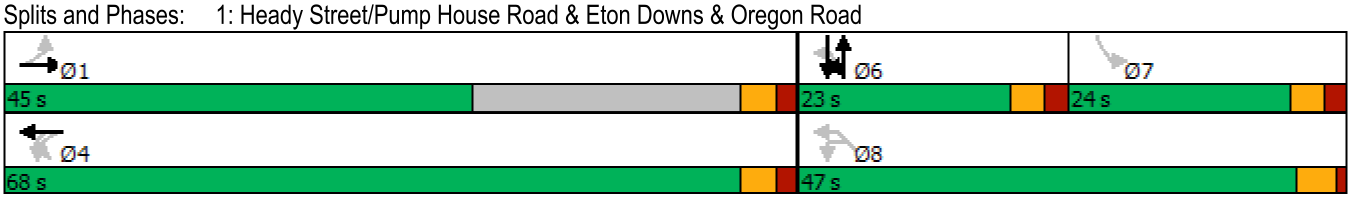
Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	50	1	3	2	1	23	3	10
Future Volume (vph)	50	1	3	2	1	23	3	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995			0.953		
Flt Protected			0.956			0.969		
Satd. Flow (prot)	0	0	1772	0	0	1720	0	0
Flt Permitted			0.956			0.969		
Satd. Flow (perm)	0	0	1772	0	0	1720	0	0
Right Turn on Red				Yes				Yes
Satd. Flow (RTOR)			1			19		
Link Speed (mph)			30			30		
Link Distance (ft)			307			230		
Travel Time (s)			7.0			5.2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1	3	2	1	25	3	11
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	60	0	0	40	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			0			12		
Link Offset(ft)			0			75		
Crosswalk Width(ft)			16			16		
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	60		9	60	60	60	60
Number of Detectors	1	1	2		1	1		
Detector Template	Left	Left	Thru		Left	Left		
Leading Detector (ft)	20	20	100		20	20		
Trailing Detector (ft)	0	0	0		0	0		
Detector 1 Position(ft)	0	0	0		0	0		
Detector 1 Size(ft)	20	20	6		20	20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94					
Detector 2 Size(ft)			6					
Detector 2 Type			Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)			0.0					
Turn Type	custom	Split	NA		Perm	Perm		
Protected Phases		6!	6					
Permitted Phases	7				8!	8!		
Detector Phase	7	6	6		8	8		
Switch Phase								
Minimum Initial (s)	3.0	5.0	5.0		5.0	5.0		

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Minimum Split (s)	23.0	23.0			23.0	23.0	23.0		23.0	23.0		
Total Split (s)	45.0	45.0			68.0	68.0	68.0		23.0	23.0		
Total Split (%)	39.1%	39.1%			59.1%	59.1%	59.1%		20.0%	20.0%		
Maximum Green (s)	40.0	40.0			63.0	63.0	63.0		18.0	18.0		
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0	2.0		
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		5.0					5.0			5.0		
Lead/Lag									Lead	Lead		
Lead-Lag Optimize?									Yes	Yes		
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
Recall Mode	Max	Max			Max	Max	Max		None	None		
Walk Time (s)	7.0	7.0			7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0			11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0			0	0	0		0	0		
Act Effct Green (s)		72.3					72.3			8.3		
Actuated g/C Ratio		0.83					0.83			0.10		
v/c Ratio		0.26					0.32			0.07		
Control Delay		3.0					3.2			33.0		
Queue Delay		0.0					0.0			0.0		
Total Delay		3.0					3.2			33.0		
LOS		A					A			C		
Approach Delay		3.0					3.2			33.0		
Approach LOS		A					A			C		
90th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		10.7	10.7		
90th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
70th %ile Green (s)	64.9	64.9			64.9	64.9	64.9		9.2	9.2		
70th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
50th %ile Green (s)	72.1	72.1			72.1	72.1	72.1		8.4	8.4		
50th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
30th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		7.3	7.3		
30th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
10th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		0.0	0.0		
10th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Skip	Skip		
Stops (vph)		83					103			10		
Fuel Used(gal)		2					2			0		
CO Emissions (g/hr)		152					125			9		
NOx Emissions (g/hr)		30					24			2		
VOC Emissions (g/hr)		35					29			2		
Dilemma Vehicles (#)		0					0			0		
Queue Length 50th (ft)		45					55			5		
Queue Length 95th (ft)		82					100			19		
Internal Link Dist (ft)		438					196			85		
Turn Bay Length (ft)												
Base Capacity (vph)		1520					1493			316		
Starvation Cap Reductn		0					0			0		
Spillback Cap Reductn		0					0			0		
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.26					0.32			0.03		

Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Minimum Split (s)	8.0	23.0	23.0		22.5	22.5		
Total Split (s)	24.0	23.0	23.0		47.0	47.0		
Total Split (%)	20.9%	20.0%	20.0%		40.9%	40.9%		
Maximum Green (s)	19.0	18.0	18.0		42.5	42.5		
Yellow Time (s)	3.0	3.0	3.0		3.5	3.5		
All-Red Time (s)	2.0	2.0	2.0		1.0	1.0		
Lost Time Adjust (s)			0.0			0.0		
Total Lost Time (s)			5.0			4.5		
Lead/Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	None		None	None		
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0	0		0	0		
Act Effct Green (s)			8.3			8.7		
Actuated g/C Ratio			0.10			0.10		
v/c Ratio			0.36			0.21		
Control Delay			41.4			24.5		
Queue Delay			0.0			0.0		
Total Delay			41.4			24.5		
LOS			D			C		
Approach Delay			41.4			24.5		
Approach LOS			D			C		
90th %ile Green (s)	0.0	10.7	10.7		11.2	11.2		
90th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
70th %ile Green (s)	0.0	9.2	9.2		9.7	9.7		
70th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
50th %ile Green (s)	0.0	8.4	8.4		8.9	8.9		
50th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
30th %ile Green (s)	0.0	7.3	7.3		7.8	7.8		
30th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
10th %ile Green (s)	0.0	0.0	0.0		0.0	0.0		
10th %ile Term Code	Skip	Skip	Skip		Skip	Skip		
Stops (vph)			50			23		
Fuel Used(gal)			1			0		
CO Emissions (g/hr)			61			26		
NOx Emissions (g/hr)			12			5		
VOC Emissions (g/hr)			14			6		
Dilemma Vehicles (#)			0			0		
Queue Length 50th (ft)			32			11		
Queue Length 95th (ft)			65			38		
Internal Link Dist (ft)			227			150		
Turn Bay Length (ft)								
Base Capacity (vph)			367			849		
Starvation Cap Reductn			0			0		
Spillback Cap Reductn			0			0		
Storage Cap Reductn			0			0		
Reduced v/c Ratio			0.16			0.05		

Intersection Summary	
Area Type: Other	
Cycle Length: 115	
Actuated Cycle Length: 87.3	
Natural Cycle: 55	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.36	
Intersection Signal Delay: 6.6	Intersection LOS: A
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 83.7	
70th %ile Actuated Cycle: 84.1	
50th %ile Actuated Cycle: 90.5	
30th %ile Actuated Cycle: 95.3	
10th %ile Actuated Cycle: 83	
! Phase conflict between lane groups.	

Splits and Phases: 1: Heady Street/Pump House Road & Eton Downs & Oregon Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	384	141	32	360	116	20
Future Volume (veh/h)	384	141	32	360	116	20
Number	4	14	3	8	5	12
Initial Q, 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
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	417	153	35	391	126	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence			No		No	
Cap, veh/h	634	233	418	1105	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.49	0.49	0.06	0.59	0.00	0.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	0.0	17.9	9.4	8.5	0.0	0.0
Ln Grp LOS	A	B	A	A	A	A
Approach Vol, veh/h	570			426	0	
Approach Delay, s/veh	17.9			8.6	0.0	
Approach LOS	B			A		

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			1.2	8.0				4.0
Phs Duration (G+Y+Rc), s			7.5	40.0				47.5
Change Period (Y+Rc), s			3.0	5.0				5.0
Max Green (Gmax), s			9.0	35.0				35.0
Max Allow Headway (MAH), s			3.8	5.3				5.2
Max Q Clear (g_c+I1), s			2.6	19.4				9.8
Green Ext Time (g_e), s			0.0	3.5				2.5
Prob of Phs Call (p_c)			0.50	1.00				1.00
Prob of Max Out (p_x)			0.02	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			1781	0				
Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				1305				1870
Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				479				0
Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			L (Pr/Pm)					

Lanes in Grp	0	0	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	35	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	842	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	17.6	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	418	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	529	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	9.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	391
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1105
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1105
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	570	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1784	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	867	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	867	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		13.9						
HCM 6th LOS		B						

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	331	1	1	356	2	7	1	2	14	1	18
Future Vol, veh/h	8	331	1	1	356	2	7	1	2	14	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	9	360	1	1	387	2	8	1	2	15	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	389	0	0	361	0	0	780	770	361	770	769	388
Stage 1	-	-	-	-	-	-	379	379	-	390	390	-
Stage 2	-	-	-	-	-	-	401	391	-	380	379	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1170	-	-	1198	-	-	313	331	684	318	332	660
Stage 1	-	-	-	-	-	-	643	615	-	634	608	-
Stage 2	-	-	-	-	-	-	626	607	-	642	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1170	-	-	1198	-	-	300	327	684	314	328	660
Mov Cap-2 Maneuver	-	-	-	-	-	-	300	327	-	314	328	-
Stage 1	-	-	-	-	-	-	637	609	-	628	607	-
Stage 2	-	-	-	-	-	-	606	606	-	632	609	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	15.9	13.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	341	1170	-	-	1198	-	-	441
HCM Lane V/C Ratio	0.032	0.007	-	-	0.001	-	-	0.081
HCM Control Delay (s)	15.9	8.1	0	-	8	0	-	13.9
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	14.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	320	1	1	378	65	3	2	6	195	1	41
Future Vol, veh/h	23	320	1	1	378	65	3	2	6	195	1	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	25	348	1	1	411	71	3	2	7	212	1	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	482	0	0	349	0	0	871	883	349	852	848	447
Stage 1	-	-	-	-	-	-	399	399	-	449	449	-
Stage 2	-	-	-	-	-	-	472	484	-	403	399	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1081	-	-	1210	-	-	271	285	694	280	298	612
Stage 1	-	-	-	-	-	-	627	602	-	589	572	-
Stage 2	-	-	-	-	-	-	573	552	-	624	602	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1081	-	-	1210	-	-	245	276	694	269	289	612
Mov Cap-2 Maneuver	-	-	-	-	-	-	245	276	-	269	289	-
Stage 1	-	-	-	-	-	-	609	585	-	572	571	-
Stage 2	-	-	-	-	-	-	530	551	-	598	585	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	14.5	61.6
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	391	1081	-	-	1210	-	-	298
HCM Lane V/C Ratio	0.031	0.023	-	-	0.001	-	-	0.864
HCM Control Delay (s)	14.5	8.4	0	-	8	0	-	61.6
HCM Lane LOS	B	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	7.6

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	384	427	3	1	1
Future Vol, veh/h	1	384	427	3	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	1	417	464	3	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	467	0	-	0	885	466
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	419	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1094	-	-	-	315	597
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	664	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1094	-	-	-	315	597
Mov Cap-2 Maneuver	-	-	-	-	315	-
Stage 1	-	-	-	-	631	-
Stage 2	-	-	-	-	664	-

Approach	EB		WB		SB	
HCM Control Delay, s	0		0		13.8	
HCM LOS					B	

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1094	-	-	-	412
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s)	8.3	0	-	-	13.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	384	0	0	422	0	0
Future Vol, veh/h	384	0	0	422	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	417	0	0	459	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	417	0	876	417
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	459	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1142	-	319	636
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	636	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1142	-	319	636
Mov Cap-2 Maneuver	-	-	-	-	319	-
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	636	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1142	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	3	447	24	3	19	4	444	56	6	3	1	1
Future Volume (vph)	3	447	24	3	19	4	444	56	6	3	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992					0.986			0.977		
Flt Protected							0.998			0.972		
Satd. Flow (prot)	0	1848	0	0	0	0	1833	0	0	1769	0	0
Flt Permitted		0.998					0.970			0.866		
Satd. Flow (perm)	0	1844	0	0	0	0	1782	0	0	1576	0	0
Right Turn on Red				No				No				Yes
Satd. Flow (RTOR)										1		
Link Speed (mph)		30					30			30		
Link Distance (ft)		518					276			165		
Travel Time (s)		11.8					6.3			3.8		
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
Adj. Flow (vph)	3	486	26	3	21	4	483	61	7	3	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	518	0	0	0	0	569	0	0	12	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)		0					0			0		
Link Offset(ft)		0					0			50		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		60	9	60	15		9	15		9	60
Number of Detectors	1	2			1	1	2		1	2		
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	100			20	20	100		20	100		
Trailing Detector (ft)	0	0			0	0	0		0	0		
Detector 1 Position(ft)	0	0			0	0	0		0	0		
Detector 1 Size(ft)	20	6			20	20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94					94			94		
Detector 2 Size(ft)		6					6			6		
Detector 2 Type		Cl+Ex					Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0					0.0			0.0		
Turn Type	Perm	NA			Perm	Perm	NA		Perm	NA		
Protected Phases		1					4			6!		
Permitted Phases	1				4	4	4		6!			
Detector Phase	1	1			4	4	4		6	6		
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0		

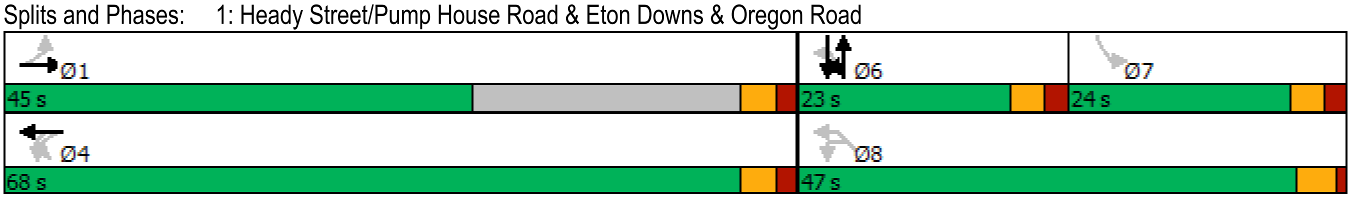
Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	90	3	2	8	1	19	6	29
Future Volume (vph)	90	3	2	8	1	19	6	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.989			0.914		
Flt Protected			0.957			0.982		
Satd. Flow (prot)	0	0	1763	0	0	1672	0	0
Flt Permitted			0.957			0.982		
Satd. Flow (perm)	0	0	1763	0	0	1672	0	0
Right Turn on Red				Yes				Yes
Satd. Flow (RTOR)			3			32		
Link Speed (mph)			30			30		
Link Distance (ft)			307			230		
Travel Time (s)			7.0			5.2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	3	2	9	1	21	7	32
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	112	0	0	61	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			0			12		
Link Offset(ft)			0			75		
Crosswalk Width(ft)			16			16		
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	60		9	60	60	60	60
Number of Detectors	1	1	2		1	1		
Detector Template	Left	Left	Thru		Left	Left		
Leading Detector (ft)	20	20	100		20	20		
Trailing Detector (ft)	0	0	0		0	0		
Detector 1 Position(ft)	0	0	0		0	0		
Detector 1 Size(ft)	20	20	6		20	20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94					
Detector 2 Size(ft)			6					
Detector 2 Type			Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)			0.0					
Turn Type	custom	Split	NA		Perm	Perm		
Protected Phases		6!	6					
Permitted Phases	7				8!	8!		
Detector Phase	7	6	6		8	8		
Switch Phase								
Minimum Initial (s)	3.0	5.0	5.0		5.0	5.0		

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Minimum Split (s)	23.0	23.0			23.0	23.0	23.0		23.0	23.0		
Total Split (s)	45.0	45.0			68.0	68.0	68.0		23.0	23.0		
Total Split (%)	39.1%	39.1%			59.1%	59.1%	59.1%		20.0%	20.0%		
Maximum Green (s)	40.0	40.0			63.0	63.0	63.0		18.0	18.0		
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0	2.0		
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		5.0					5.0			5.0		
Lead/Lag									Lead	Lead		
Lead-Lag Optimize?									Yes	Yes		
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
Recall Mode	Max	Max			Max	Max	Max		None	None		
Walk Time (s)	7.0	7.0			7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0			11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0			0	0	0		0	0		
Act Effct Green (s)		67.3					67.3			10.7		
Actuated g/C Ratio		0.76					0.76			0.12		
v/c Ratio		0.37					0.42			0.06		
Control Delay		4.6					5.0			31.0		
Queue Delay		0.0					0.0			0.0		
Total Delay		4.6					5.0			31.0		
LOS		A					A			C		
Approach Delay		4.6					5.0			31.0		
Approach LOS		A					A			C		
90th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		14.3	14.3		
90th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
70th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		12.0	12.0		
70th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
50th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		10.4	10.4		
50th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
30th %ile Green (s)	69.9	69.9			69.9	69.9	69.9		9.3	9.3		
30th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
10th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		7.2	7.2		
10th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
Stops (vph)		146					172			12		
Fuel Used(gal)		3					3			0		
CO Emissions (g/hr)		222					183			10		
NOx Emissions (g/hr)		43					36			2		
VOC Emissions (g/hr)		52					42			2		
Dilemma Vehicles (#)		0					0			0		
Queue Length 50th (ft)		72					84			5		
Queue Length 95th (ft)		138					161			21		
Internal Link Dist (ft)		438					196			85		
Turn Bay Length (ft)												
Base Capacity (vph)		1409					1361			323		
Starvation Cap Reductn		0					0			0		
Spillback Cap Reductn		0					0			0		
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.37					0.42			0.04		

Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Minimum Split (s)	8.0	23.0	23.0		22.5	22.5		
Total Split (s)	24.0	23.0	23.0		47.0	47.0		
Total Split (%)	20.9%	20.0%	20.0%		40.9%	40.9%		
Maximum Green (s)	19.0	18.0	18.0		42.5	42.5		
Yellow Time (s)	3.0	3.0	3.0		3.5	3.5		
All-Red Time (s)	2.0	2.0	2.0		1.0	1.0		
Lost Time Adjust (s)			0.0			0.0		
Total Lost Time (s)			5.0			4.5		
Lead/Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	None		None	None		
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0	0		0	0		
Act Effct Green (s)			10.7			11.2		
Actuated g/C Ratio			0.12			0.13		
v/c Ratio			0.52			0.25		
Control Delay			42.5			21.3		
Queue Delay			0.0			0.0		
Total Delay			42.5			21.3		
LOS			D			C		
Approach Delay			42.5			21.3		
Approach LOS			D			C		
90th %ile Green (s)	0.0	14.3	14.3		14.8	14.8		
90th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
70th %ile Green (s)	0.0	12.0	12.0		12.5	12.5		
70th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
50th %ile Green (s)	0.0	10.4	10.4		10.9	10.9		
50th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
30th %ile Green (s)	0.0	9.3	9.3		9.8	9.8		
30th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
10th %ile Green (s)	0.0	7.2	7.2		7.7	7.7		
10th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
Stops (vph)			91			29		
Fuel Used(gal)			2			1		
CO Emissions (g/hr)			115			35		
NOx Emissions (g/hr)			22			7		
VOC Emissions (g/hr)			27			8		
Dilemma Vehicles (#)			0			0		
Queue Length 50th (ft)			54			14		
Queue Length 95th (ft)			104			48		
Internal Link Dist (ft)			227			150		
Turn Bay Length (ft)								
Base Capacity (vph)			363			825		
Starvation Cap Reductn			0			0		
Spillback Cap Reductn			0			0		
Storage Cap Reductn			0			0		
Reduced v/c Ratio			0.31			0.07		

Intersection Summary	
Area Type: Other	
Cycle Length: 115	
Actuated Cycle Length: 88	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 9.2	Intersection LOS: A
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 87.3	
70th %ile Actuated Cycle: 85	
50th %ile Actuated Cycle: 83.4	
30th %ile Actuated Cycle: 89.2	
10th %ile Actuated Cycle: 95.2	
! Phase conflict between lane groups.	

Splits and Phases: 1: Heady Street/Pump House Road & Eton Downs & Oregon Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	558	147	57	538	164	55
Future Volume (veh/h)	558	147	57	538	164	55
Number	4	14	3	8	5	12
Initial Q, 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
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	607	160	62	585	178	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence			No		No	
Cap, veh/h	693	183	332	1153	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.49	0.49	0.09	0.62	0.00	0.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	0.0	28.4	12.7	9.3	0.0	0.0
Ln Grp LOS	A	C	B	A	A	A
Approach Vol, veh/h	767			647	0	
Approach Delay, s/veh	28.4			9.6	0.0	
Approach LOS	C			A		

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			1.2	8.0				4.0
Phs Duration (G+Y+Rc), s			9.4	40.0				49.4
Change Period (Y+Rc), s			3.0	5.0				5.0
Max Green (Gmax), s			9.0	35.0				35.0
Max Allow Headway (MAH), s			3.8	5.3				5.2
Max Q Clear (g_c+I1), s			3.0	29.4				14.6
Green Ext Time (g_e), s			0.0	2.6				3.9
Prob of Phs Call (p_c)			0.71	1.00				1.00
Prob of Max Out (p_x)			0.07	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			1781	0				
Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				1427				1870
Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				376				0
Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			L (Pr/Pm)					

Lanes in Grp	0	0	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	62	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	701	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	7.6	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	332	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	397	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	12.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	585
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1153
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1153
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	767	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1803	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	27.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	27.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	876	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	876	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	11.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	28.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	12.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	487	6	8	440	4	2	1	2	10	1	22
Future Vol, veh/h	15	487	6	8	440	4	2	1	2	10	1	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	529	7	9	478	4	2	1	2	11	1	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	482	0	0	536	0	0	1076	1065	533	1064	1066	480
Stage 1	-	-	-	-	-	-	565	565	-	498	498	-
Stage 2	-	-	-	-	-	-	511	500	-	566	568	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1081	-	-	1032	-	-	197	223	547	201	222	586
Stage 1	-	-	-	-	-	-	510	508	-	554	544	-
Stage 2	-	-	-	-	-	-	545	543	-	509	506	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1081	-	-	1032	-	-	184	216	547	194	215	586
Mov Cap-2 Maneuver	-	-	-	-	-	-	184	216	-	194	215	-
Stage 1	-	-	-	-	-	-	499	497	-	542	537	-
Stage 2	-	-	-	-	-	-	515	536	-	495	495	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	19.1	16.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	261	1081	-	-	1032	-	-	352
HCM Lane V/C Ratio	0.021	0.015	-	-	0.008	-	-	0.102
HCM Control Delay (s)	19.1	8.4	0	-	8.5	0	-	16.4
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	28.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	527	1	1	517	218	2	2	2	132	1	20
Future Vol, veh/h	53	527	1	1	517	218	2	2	2	132	1	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	58	573	1	1	562	237	2	2	2	143	1	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	799	0	0	574	0	0	1384	1491	574	1375	1373	681
Stage 1	-	-	-	-	-	-	690	690	-	683	683	-
Stage 2	-	-	-	-	-	-	694	801	-	692	690	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	824	-	-	999	-	-	121	124	518	~ 123	146	450
Stage 1	-	-	-	-	-	-	435	446	-	439	449	-
Stage 2	-	-	-	-	-	-	433	397	-	434	446	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	824	-	-	999	-	-	105	111	518	~ 111	131	450
Mov Cap-2 Maneuver	-	-	-	-	-	-	105	111	-	~ 111	131	-
Stage 1	-	-	-	-	-	-	390	400	-	394	448	-
Stage 2	-	-	-	-	-	-	410	396	-	386	400	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	30.6	268.7
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	147	824	-	-	999	-	-	123
HCM Lane V/C Ratio	0.044	0.07	-	-	0.001	-	-	1.352
HCM Control Delay (s)	30.6	9.7	0	-	8.6	0	-	268.7
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	11.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	598	527	4	7	3
Future Vol, veh/h	2	598	527	4	7	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	2	650	573	4	8	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	577	0	-	0	1229	575
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	654	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	996	-	-	-	196	518
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	517	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	996	-	-	-	195	518
Mov Cap-2 Maneuver	-	-	-	-	195	-
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	517	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	996	-	-	-	240
HCM Lane V/C Ratio	0.002	-	-	-	0.045
HCM Control Delay (s)	8.6	0	-	-	20.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	0					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	605	0	0	539	0	0
Future Vol, veh/h	605	0	0	539	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	658	0	0	586	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	658	0	1244	658
Stage 1	-	-	-	-	658	-
Stage 2	-	-	-	-	586	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	930	-	192	464
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	556	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	930	-	192	464
Mov Cap-2 Maneuver	-	-	-	-	192	-
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	556	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	930	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	2	342	17	19	7	6	376	57	5	1	5	1
Future Volume (vph)	2	342	17	19	7	6	376	57	5	1	5	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987					0.983			0.932		
Flt Protected							0.998			0.980		
Satd. Flow (prot)	0	1839	0	0	0	0	1827	0	0	1701	0	0
Flt Permitted		0.999					0.986			0.881		
Satd. Flow (perm)	0	1837	0	0	0	0	1805	0	0	1529	0	0
Right Turn on Red				No				No				Yes
Satd. Flow (RTOR)										1		
Link Speed (mph)		30					30			30		
Link Distance (ft)		518					276			165		
Travel Time (s)		11.8					6.3			3.8		
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
Adj. Flow (vph)	2	372	18	21	8	7	409	62	5	1	5	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	413	0	0	0	0	486	0	0	12	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)		0					0			0		
Link Offset(ft)		0					0			50		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		60	9	60	15		9	15		9	60
Number of Detectors	1	2			1	1	2		1	2		
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	100			20	20	100		20	100		
Trailing Detector (ft)	0	0			0	0	0		0	0		
Detector 1 Position(ft)	0	0			0	0	0		0	0		
Detector 1 Size(ft)	20	6			20	20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94					94			94		
Detector 2 Size(ft)		6					6			6		
Detector 2 Type		Cl+Ex					Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0					0.0			0.0		
Turn Type	Perm	NA			Perm	Perm	NA		Perm	NA		
Protected Phases		1					4			6!		
Permitted Phases	1				4	4	4		6!			
Detector Phase	1	1			4	4	4		6	6		
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0		

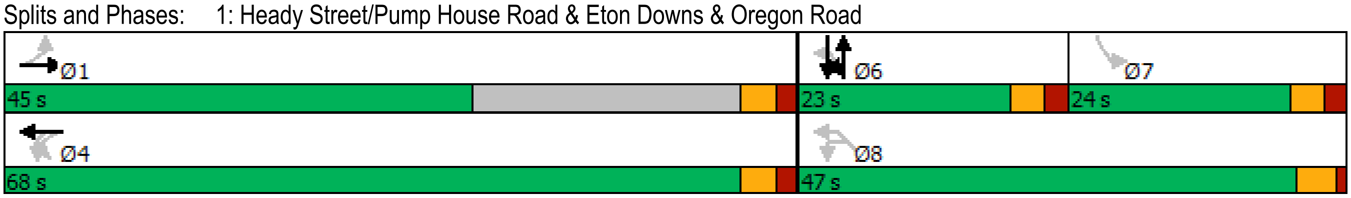
Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	51	1	3	2	1	24	3	10
Future Volume (vph)	51	1	3	2	1	24	3	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996			0.954		
Flt Protected			0.956			0.968		
Satd. Flow (prot)	0	0	1774	0	0	1720	0	0
Flt Permitted			0.956			0.968		
Satd. Flow (perm)	0	0	1774	0	0	1720	0	0
Right Turn on Red				Yes				Yes
Satd. Flow (RTOR)			1			19		
Link Speed (mph)			30			30		
Link Distance (ft)			307			230		
Travel Time (s)			7.0			5.2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	1	3	2	1	26	3	11
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	61	0	0	41	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			0			12		
Link Offset(ft)			0			75		
Crosswalk Width(ft)			16			16		
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	60		9	60	60	60	60
Number of Detectors	1	1	2		1	1		
Detector Template	Left	Left	Thru		Left	Left		
Leading Detector (ft)	20	20	100		20	20		
Trailing Detector (ft)	0	0	0		0	0		
Detector 1 Position(ft)	0	0	0		0	0		
Detector 1 Size(ft)	20	20	6		20	20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94					
Detector 2 Size(ft)			6					
Detector 2 Type			Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)			0.0					
Turn Type	custom	Split	NA		Perm	Perm		
Protected Phases		6!	6					
Permitted Phases	7				8!	8!		
Detector Phase	7	6	6		8	8		
Switch Phase								
Minimum Initial (s)	3.0	5.0	5.0		5.0	5.0		

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Minimum Split (s)	23.0	23.0			23.0	23.0	23.0		23.0	23.0		
Total Split (s)	45.0	45.0			68.0	68.0	68.0		23.0	23.0		
Total Split (%)	39.1%	39.1%			59.1%	59.1%	59.1%		20.0%	20.0%		
Maximum Green (s)	40.0	40.0			63.0	63.0	63.0		18.0	18.0		
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0	2.0		
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		5.0					5.0			5.0		
Lead/Lag									Lead	Lead		
Lead-Lag Optimize?									Yes	Yes		
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
Recall Mode	Max	Max			Max	Max	Max		None	None		
Walk Time (s)	7.0	7.0			7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0			11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0			0	0	0		0	0		
Act Effct Green (s)		72.0					72.0			8.3		
Actuated g/C Ratio		0.83					0.83			0.10		
v/c Ratio		0.27					0.33			0.08		
Control Delay		3.0					3.3			33.0		
Queue Delay		0.0					0.0			0.0		
Total Delay		3.0					3.3			33.0		
LOS		A					A			C		
Approach Delay		3.0					3.3			33.0		
Approach LOS		A					A			C		
90th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		10.7	10.7		
90th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
70th %ile Green (s)	64.4	64.4			64.4	64.4	64.4		9.2	9.2		
70th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
50th %ile Green (s)	71.3	71.3			71.3	71.3	71.3		8.4	8.4		
50th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
30th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		7.4	7.4		
30th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
10th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		0.0	0.0		
10th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Skip	Skip		
Stops (vph)		86					107			12		
Fuel Used(gal)		2					2			0		
CO Emissions (g/hr)		157					130			11		
NOx Emissions (g/hr)		31					25			2		
VOC Emissions (g/hr)		36					30			3		
Dilemma Vehicles (#)		0					0			0		
Queue Length 50th (ft)		46					57			6		
Queue Length 95th (ft)		84					104			21		
Internal Link Dist (ft)		438					196			85		
Turn Bay Length (ft)												
Base Capacity (vph)		1519					1492			317		
Starvation Cap Reductn		0					0			0		
Spillback Cap Reductn		0					0			0		
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.27					0.33			0.04		

Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Minimum Split (s)	8.0	23.0	23.0		22.5	22.5		
Total Split (s)	24.0	23.0	23.0		47.0	47.0		
Total Split (%)	20.9%	20.0%	20.0%		40.9%	40.9%		
Maximum Green (s)	19.0	18.0	18.0		42.5	42.5		
Yellow Time (s)	3.0	3.0	3.0		3.5	3.5		
All-Red Time (s)	2.0	2.0	2.0		1.0	1.0		
Lost Time Adjust (s)			0.0			0.0		
Total Lost Time (s)			5.0			4.5		
Lead/Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	None		None	None		
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0	0		0	0		
Act Effct Green (s)			8.3			8.7		
Actuated g/C Ratio			0.10			0.10		
v/c Ratio			0.36			0.22		
Control Delay			41.3			24.7		
Queue Delay			0.0			0.0		
Total Delay			41.3			24.7		
LOS			D			C		
Approach Delay			41.3			24.7		
Approach LOS			D			C		
90th %ile Green (s)	0.0	10.7	10.7		11.2	11.2		
90th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
70th %ile Green (s)	0.0	9.2	9.2		9.7	9.7		
70th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
50th %ile Green (s)	0.0	8.4	8.4		8.9	8.9		
50th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
30th %ile Green (s)	0.0	7.4	7.4		7.9	7.9		
30th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
10th %ile Green (s)	0.0	0.0	0.0		0.0	0.0		
10th %ile Term Code	Skip	Skip	Skip		Skip	Skip		
Stops (vph)			51			23		
Fuel Used(gal)			1			0		
CO Emissions (g/hr)			62			27		
NOx Emissions (g/hr)			12			5		
VOC Emissions (g/hr)			14			6		
Dilemma Vehicles (#)			0			0		
Queue Length 50th (ft)			32			12		
Queue Length 95th (ft)			65			39		
Internal Link Dist (ft)			227			150		
Turn Bay Length (ft)								
Base Capacity (vph)			368			851		
Starvation Cap Reductn			0			0		
Spillback Cap Reductn			0			0		
Storage Cap Reductn			0			0		
Reduced v/c Ratio			0.17			0.05		

Intersection Summary	
Area Type: Other	
Cycle Length: 115	
Actuated Cycle Length: 87.1	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.36	
Intersection Signal Delay: 6.7	Intersection LOS: A
Intersection Capacity Utilization 54.9%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 83.7	
70th %ile Actuated Cycle: 83.6	
50th %ile Actuated Cycle: 89.7	
30th %ile Actuated Cycle: 95.4	
10th %ile Actuated Cycle: 83	
! Phase conflict between lane groups.	

Splits and Phases: 1: Heady Street/Pump House Road & Eton Downs & Oregon Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	396	145	33	371	119	20
Future Volume (veh/h)	396	145	33	371	119	20
Number	4	14	3	8	5	12
Initial Q, 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
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	430	158	36	403	129	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence			No		No	
Cap, veh/h	634	233	408	1107	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.49	0.49	0.06	0.59	0.00	0.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	0.0	18.4	9.6	8.6	0.0	0.0
Ln Grp LOS	A	B	A	A	A	A
Approach Vol, veh/h	588			439	0	
Approach Delay, s/veh	18.4			8.7	0.0	
Approach LOS	B			A		

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			1.2	8.0				4.0
Phs Duration (G+Y+Rc), s			7.6	40.0				47.6
Change Period (Y+Rc), s			3.0	5.0				5.0
Max Green (Gmax), s			9.0	35.0				35.0
Max Allow Headway (MAH), s			3.8	5.3				5.2
Max Q Clear (g_c+I1), s			2.6	20.2				10.1
Green Ext Time (g_e), s			0.0	3.6				2.6
Prob of Phs Call (p_c)			0.51	1.00				1.00
Prob of Max Out (p_x)			0.02	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			1781	0				
Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				1305				1870
Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				479				0
Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			L (Pr/Pm)					

Lanes in Grp	0	0	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	36	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	828	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	16.8	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	408	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	516	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	403
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1107
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1107
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	588	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1784	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	867	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	867	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		14.2						
HCM 6th LOS		B						

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	341	1	1	367	2	7	1	2	15	1	18
Future Vol, veh/h	8	341	1	1	367	2	7	1	2	15	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	9	371	1	1	399	2	8	1	2	16	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	401	0	0	372	0	0	803	793	372	793	792	400
Stage 1	-	-	-	-	-	-	390	390	-	402	402	-
Stage 2	-	-	-	-	-	-	413	403	-	391	390	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1158	-	-	1186	-	-	302	321	674	306	322	650
Stage 1	-	-	-	-	-	-	634	608	-	625	600	-
Stage 2	-	-	-	-	-	-	616	600	-	633	608	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1158	-	-	1186	-	-	290	317	674	302	318	650
Mov Cap-2 Maneuver	-	-	-	-	-	-	290	317	-	302	318	-
Stage 1	-	-	-	-	-	-	628	602	-	619	599	-
Stage 2	-	-	-	-	-	-	596	599	-	624	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	16.3	14.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	330	1158	-	-	1186	-	-	422
HCM Lane V/C Ratio	0.033	0.008	-	-	0.001	-	-	0.088
HCM Control Delay (s)	16.3	8.1	0	-	8	0	-	14.3
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	17.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	24	330	1	1	390	67	3	2	6	201	1	42
Future Vol, veh/h	24	330	1	1	390	67	3	2	6	201	1	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	26	359	1	1	424	73	3	2	7	218	1	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	497	0	0	360	0	0	898	911	360	879	875	461
Stage 1	-	-	-	-	-	-	412	412	-	463	463	-
Stage 2	-	-	-	-	-	-	486	499	-	416	412	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1067	-	-	1199	-	-	260	274	684	268	288	600
Stage 1	-	-	-	-	-	-	617	594	-	579	564	-
Stage 2	-	-	-	-	-	-	563	544	-	614	594	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1067	-	-	1199	-	-	234	266	684	258	279	600
Mov Cap-2 Maneuver	-	-	-	-	-	-	234	266	-	258	279	-
Stage 1	-	-	-	-	-	-	598	576	-	562	563	-
Stage 2	-	-	-	-	-	-	519	543	-	588	576	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	14.8	75.5
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	378	1067	-	-	1199	-	-	286
HCM Lane V/C Ratio	0.032	0.024	-	-	0.001	-	-	0.927
HCM Control Delay (s)	14.8	8.5	0	-	8	0	-	75.5
HCM Lane LOS	B	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	8.8

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	396	440	3	1	1
Future Vol, veh/h	1	396	440	3	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	1	430	478	3	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	481	0	-	0	912	480
Stage 1	-	-	-	-	480	-
Stage 2	-	-	-	-	432	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1082	-	-	-	304	586
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	655	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1082	-	-	-	304	586
Mov Cap-2 Maneuver	-	-	-	-	304	-
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	655	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1082	-	-	-	400
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s)	8.3	0	-	-	14
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	396	0	0	435	0	0
Future Vol, veh/h	396	0	0	435	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	430	0	0	473	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	430	0	903	430
Stage 1	-	-	-	-	430	-
Stage 2	-	-	-	-	473	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1129	-	308	625
Stage 1	-	-	-	-	656	-
Stage 2	-	-	-	-	627	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1129	-	308	625
Mov Cap-2 Maneuver	-	-	-	-	308	-
Stage 1	-	-	-	-	656	-
Stage 2	-	-	-	-	627	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1129	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	3	460	25	3	19	5	458	58	6	3	1	1
Future Volume (vph)	3	460	25	3	19	5	458	58	6	3	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992					0.986			0.977		
Flt Protected							0.998			0.972		
Satd. Flow (prot)	0	1848	0	0	0	0	1833	0	0	1769	0	0
Flt Permitted		0.998					0.968			0.867		
Satd. Flow (perm)	0	1844	0	0	0	0	1778	0	0	1578	0	0
Right Turn on Red				No				No				Yes
Satd. Flow (RTOR)										1		
Link Speed (mph)		30					30			30		
Link Distance (ft)		518					276			165		
Travel Time (s)		11.8					6.3			3.8		
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
Adj. Flow (vph)	3	500	27	3	21	5	498	63	7	3	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	533	0	0	0	0	587	0	0	12	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)		0					0			0		
Link Offset(ft)		0					0			50		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		60	9	60	15		9	15		9	60
Number of Detectors	1	2			1	1	2		1	2		
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	100			20	20	100		20	100		
Trailing Detector (ft)	0	0			0	0	0		0	0		
Detector 1 Position(ft)	0	0			0	0	0		0	0		
Detector 1 Size(ft)	20	6			20	20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94					94			94		
Detector 2 Size(ft)		6					6			6		
Detector 2 Type		Cl+Ex					Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0					0.0			0.0		
Turn Type	Perm	NA			Perm	Perm	NA		Perm	NA		
Protected Phases		1					4			6!		
Permitted Phases	1				4	4	4		6!			
Detector Phase	1	1			4	4	4		6	6		
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0		

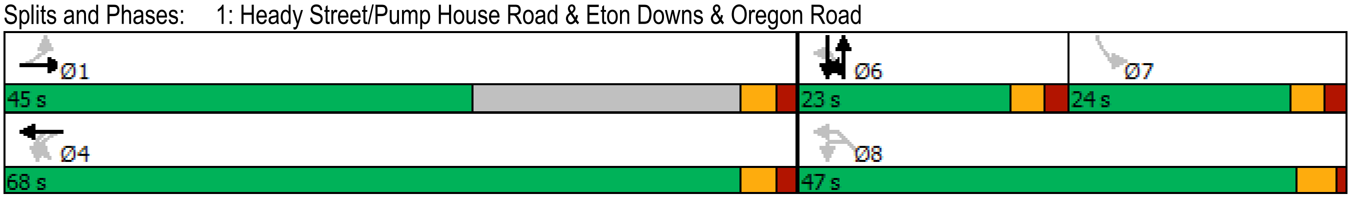
Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	93	3	2	8	1	19	6	29
Future Volume (vph)	93	3	2	8	1	19	6	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.989			0.914		
Flt Protected			0.957			0.982		
Satd. Flow (prot)	0	0	1763	0	0	1672	0	0
Flt Permitted			0.957			0.982		
Satd. Flow (perm)	0	0	1763	0	0	1672	0	0
Right Turn on Red				Yes				Yes
Satd. Flow (RTOR)			3			32		
Link Speed (mph)			30			30		
Link Distance (ft)			307			230		
Travel Time (s)			7.0			5.2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	101	3	2	9	1	21	7	32
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	115	0	0	61	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			0			12		
Link Offset(ft)			0			75		
Crosswalk Width(ft)			16			16		
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	60		9	60	60	60	60
Number of Detectors	1	1	2		1	1		
Detector Template	Left	Left	Thru		Left	Left		
Leading Detector (ft)	20	20	100		20	20		
Trailing Detector (ft)	0	0	0		0	0		
Detector 1 Position(ft)	0	0	0		0	0		
Detector 1 Size(ft)	20	20	6		20	20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94					
Detector 2 Size(ft)			6					
Detector 2 Type			Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)			0.0					
Turn Type	custom	Split	NA		Perm	Perm		
Protected Phases		6!	6					
Permitted Phases	7				8!	8!		
Detector Phase	7	6	6		8	8		
Switch Phase								
Minimum Initial (s)	3.0	5.0	5.0		5.0	5.0		

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Minimum Split (s)	23.0	23.0			23.0	23.0	23.0		23.0	23.0		
Total Split (s)	45.0	45.0			68.0	68.0	68.0		23.0	23.0		
Total Split (%)	39.1%	39.1%			59.1%	59.1%	59.1%		20.0%	20.0%		
Maximum Green (s)	40.0	40.0			63.0	63.0	63.0		18.0	18.0		
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0	2.0		
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		5.0					5.0			5.0		
Lead/Lag									Lead	Lead		
Lead-Lag Optimize?									Yes	Yes		
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
Recall Mode	Max	Max			Max	Max	Max		None	None		
Walk Time (s)	7.0	7.0			7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0			11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0			0	0	0		0	0		
Act Effct Green (s)		67.2					67.2			10.9		
Actuated g/C Ratio		0.76					0.76			0.12		
v/c Ratio		0.38					0.43			0.06		
Control Delay		4.7					5.2			30.9		
Queue Delay		0.0					0.0			0.0		
Total Delay		4.7					5.2			30.9		
LOS		A					A			C		
Approach Delay		4.7					5.2			30.9		
Approach LOS		A					A			C		
90th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		14.5	14.5		
90th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
70th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		12.1	12.1		
70th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
50th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		10.6	10.6		
50th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
30th %ile Green (s)	69.4	69.4			69.4	69.4	69.4		9.4	9.4		
30th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
10th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		7.3	7.3		
10th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
Stops (vph)		154					180			11		
Fuel Used(gal)		3					3			0		
CO Emissions (g/hr)		231					191			10		
NOx Emissions (g/hr)		45					37			2		
VOC Emissions (g/hr)		53					44			2		
Dilemma Vehicles (#)		0					0			0		
Queue Length 50th (ft)		76					89			5		
Queue Length 95th (ft)		145					171			21		
Internal Link Dist (ft)		438					196			85		
Turn Bay Length (ft)												
Base Capacity (vph)		1406					1356			323		
Starvation Cap Reductn		0					0			0		
Spillback Cap Reductn		0					0			0		
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.38					0.43			0.04		

Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Minimum Split (s)	8.0	23.0	23.0		22.5	22.5		
Total Split (s)	24.0	23.0	23.0		47.0	47.0		
Total Split (%)	20.9%	20.0%	20.0%		40.9%	40.9%		
Maximum Green (s)	19.0	18.0	18.0		42.5	42.5		
Yellow Time (s)	3.0	3.0	3.0		3.5	3.5		
All-Red Time (s)	2.0	2.0	2.0		1.0	1.0		
Lost Time Adjust (s)			0.0			0.0		
Total Lost Time (s)			5.0			4.5		
Lead/Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	None		None	None		
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0	0		0	0		
Act Effct Green (s)			10.9			11.4		
Actuated g/C Ratio			0.12			0.13		
v/c Ratio			0.52			0.25		
Control Delay			42.7			21.2		
Queue Delay			0.0			0.0		
Total Delay			42.7			21.2		
LOS			D			C		
Approach Delay			42.7			21.2		
Approach LOS			D			C		
90th %ile Green (s)	0.0	14.5	14.5		15.0	15.0		
90th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
70th %ile Green (s)	0.0	12.1	12.1		12.6	12.6		
70th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
50th %ile Green (s)	0.0	10.6	10.6		11.1	11.1		
50th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
30th %ile Green (s)	0.0	9.4	9.4		9.9	9.9		
30th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
10th %ile Green (s)	0.0	7.3	7.3		7.8	7.8		
10th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
Stops (vph)			95			29		
Fuel Used(gal)			2			1		
CO Emissions (g/hr)			119			35		
NOx Emissions (g/hr)			23			7		
VOC Emissions (g/hr)			28			8		
Dilemma Vehicles (#)			0			0		
Queue Length 50th (ft)			56			14		
Queue Length 95th (ft)			106			48		
Internal Link Dist (ft)			227			150		
Turn Bay Length (ft)								
Base Capacity (vph)			363			825		
Starvation Cap Reductn			0			0		
Spillback Cap Reductn			0			0		
Storage Cap Reductn			0			0		
Reduced v/c Ratio			0.32			0.07		

Intersection Summary	
Area Type: Other	
Cycle Length: 115	
Actuated Cycle Length: 88.1	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 69.9%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 87.5	
70th %ile Actuated Cycle: 85.1	
50th %ile Actuated Cycle: 83.6	
30th %ile Actuated Cycle: 88.8	
10th %ile Actuated Cycle: 95.3	
! Phase conflict between lane groups.	

Splits and Phases: 1: Heady Street/Pump House Road & Eton Downs & Oregon Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	575	152	59	554	169	57
Future Volume (veh/h)	575	152	59	554	169	57
Number	4	14	3	8	5	12
Initial Q, 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
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	625	165	64	602	184	62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence			No		No	
Cap, veh/h	693	183	319	1156	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.49	0.49	0.09	0.62	0.00	0.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	0.0	31.2	13.5	9.4	0.0	0.0
Ln Grp LOS	A	C	B	A	A	A
Approach Vol, veh/h	790			666	0	
Approach Delay, s/veh	31.2			9.8	0.0	
Approach LOS	C			A		

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			1.2	8.0				4.0
Phs Duration (G+Y+Rc), s			9.5	40.0				49.5
Change Period (Y+Rc), s			3.0	5.0				5.0
Max Green (Gmax), s			9.0	35.0				35.0
Max Allow Headway (MAH), s			3.8	5.3				5.2
Max Q Clear (g_c+I1), s			3.1	30.9				15.1
Green Ext Time (g_e), s			0.0	2.1				4.0
Prob of Phs Call (p_c)			0.72	1.00				1.00
Prob of Max Out (p_x)			0.07	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			1781	0				
Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				1426				1870
Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				376				0
Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			L (Pr/Pm)					

Lanes in Grp	0	0	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	64	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	686	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	319	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	381	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	13.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	602
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1156
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1156
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	790	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1803	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	28.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	28.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	876	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	876	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	31.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	13.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		21.4
HCM 6th LOS		C

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	502	6	8	453	5	2	1	2	10	1	23
Future Vol, veh/h	16	502	6	8	453	5	2	1	2	10	1	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	17	546	7	9	492	5	2	1	2	11	1	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	497	0	0	553	0	0	1110	1099	550	1098	1100	495
Stage 1	-	-	-	-	-	-	584	584	-	513	513	-
Stage 2	-	-	-	-	-	-	526	515	-	585	587	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1067	-	-	1017	-	-	187	212	535	190	212	575
Stage 1	-	-	-	-	-	-	498	498	-	544	536	-
Stage 2	-	-	-	-	-	-	535	535	-	497	497	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1067	-	-	1017	-	-	173	205	535	184	205	575
Mov Cap-2 Maneuver	-	-	-	-	-	-	173	205	-	184	205	-
Stage 1	-	-	-	-	-	-	487	487	-	531	530	-
Stage 2	-	-	-	-	-	-	505	529	-	483	486	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	19.8	16.8
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	248	1067	-	-	1017	-	-	343
HCM Lane V/C Ratio	0.022	0.016	-	-	0.009	-	-	0.108
HCM Control Delay (s)	19.8	8.4	0	-	8.6	0	-	16.8
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	34.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	543	1	1	533	224	2	2	2	136	1	20
Future Vol, veh/h	54	543	1	1	533	224	2	2	2	136	1	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	59	590	1	1	579	243	2	2	2	148	1	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	822	0	0	591	0	0	1423	1533	591	1414	1412	701
Stage 1	-	-	-	-	-	-	709	709	-	703	703	-
Stage 2	-	-	-	-	-	-	714	824	-	711	709	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	807	-	-	985	-	-	114	116	507	~ 115	138	439
Stage 1	-	-	-	-	-	-	425	437	-	428	440	-
Stage 2	-	-	-	-	-	-	422	387	-	424	437	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	807	-	-	985	-	-	98	103	507	~ 103	123	439
Mov Cap-2 Maneuver	-	-	-	-	-	-	98	103	-	~ 103	123	-
Stage 1	-	-	-	-	-	-	379	389	-	381	439	-
Stage 2	-	-	-	-	-	-	399	386	-	374	389	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	32.6	$ 332.2
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	137	807	-	-	985	-	-	114
HCM Lane V/C Ratio	0.048	0.073	-	-	0.001	-	-	1.497
HCM Control Delay (s)	32.6	9.8	0	-	8.7	0	-	$ 332.2
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	12.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	617	543	5	7	3
Future Vol, veh/h	2	617	543	5	7	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	2	671	590	5	8	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	595	0	-	0	1268	593
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	675	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	981	-	-	-	186	506
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	506	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	981	-	-	-	185	506
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	550	-
Stage 2	-	-	-	-	506	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	21.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	981	-	-	-	228
HCM Lane V/C Ratio	0.002	-	-	-	0.048
HCM Control Delay (s)	8.7	0	-	-	21.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	623	0	0	555	0	0
Future Vol, veh/h	623	0	0	555	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	677	0	0	603	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	677	0	1280	677
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	603	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	915	-	183	453
Stage 1	-	-	-	-	505	-
Stage 2	-	-	-	-	546	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	915	-	183	453
Mov Cap-2 Maneuver	-	-	-	-	183	-
Stage 1	-	-	-	-	505	-
Stage 2	-	-	-	-	546	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	915	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	2	352	17	19	7	6	397	57	5	1	5	1
Future Volume (vph)	2	352	17	19	7	6	397	57	5	1	5	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988					0.984			0.932		
Flt Protected							0.999			0.980		
Satd. Flow (prot)	0	1840	0	0	0	0	1831	0	0	1701	0	0
Flt Permitted		0.999					0.986			0.881		
Satd. Flow (perm)	0	1839	0	0	0	0	1807	0	0	1529	0	0
Right Turn on Red				No				No				Yes
Satd. Flow (RTOR)										1		
Link Speed (mph)		30					30			30		
Link Distance (ft)		518					276			165		
Travel Time (s)		11.8					6.3			3.8		
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
Adj. Flow (vph)	2	383	18	21	8	7	432	62	5	1	5	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	424	0	0	0	0	509	0	0	12	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)		0					0			0		
Link Offset(ft)		0					0			50		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		60	9	60	15		9	15		9	60
Number of Detectors	1	2			1	1	2		1	2		
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	100			20	20	100		20	100		
Trailing Detector (ft)	0	0			0	0	0		0	0		
Detector 1 Position(ft)	0	0			0	0	0		0	0		
Detector 1 Size(ft)	20	6			20	20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94					94			94		
Detector 2 Size(ft)		6					6			6		
Detector 2 Type		Cl+Ex					Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0					0.0			0.0		
Turn Type	Perm	NA			Perm	Perm	NA		Perm	NA		
Protected Phases		1					4			6!		
Permitted Phases	1				4	4	4		6!			
Detector Phase	1	1			4	4	4		6	6		
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0		

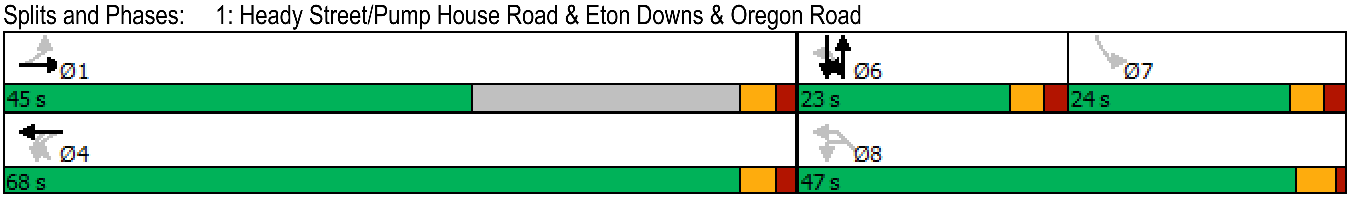
Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	51	1	3	2	1	24	3	10
Future Volume (vph)	51	1	3	2	1	24	3	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996			0.954		
Flt Protected			0.956			0.968		
Satd. Flow (prot)	0	0	1774	0	0	1720	0	0
Flt Permitted			0.956			0.968		
Satd. Flow (perm)	0	0	1774	0	0	1720	0	0
Right Turn on Red				Yes				Yes
Satd. Flow (RTOR)			1			19		
Link Speed (mph)			30			30		
Link Distance (ft)			307			230		
Travel Time (s)			7.0			5.2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	1	3	2	1	26	3	11
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	61	0	0	41	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			0			12		
Link Offset(ft)			0			75		
Crosswalk Width(ft)			16			16		
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	60		9	60	60	60	60
Number of Detectors	1	1	2		1	1		
Detector Template	Left	Left	Thru		Left	Left		
Leading Detector (ft)	20	20	100		20	20		
Trailing Detector (ft)	0	0	0		0	0		
Detector 1 Position(ft)	0	0	0		0	0		
Detector 1 Size(ft)	20	20	6		20	20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94					
Detector 2 Size(ft)			6					
Detector 2 Type			Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)			0.0					
Turn Type	custom	Split	NA		Perm	Perm		
Protected Phases		6!	6					
Permitted Phases	7				8!	8!		
Detector Phase	7	6	6		8	8		
Switch Phase								
Minimum Initial (s)	3.0	5.0	5.0		5.0	5.0		

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Minimum Split (s)	23.0	23.0			23.0	23.0	23.0		23.0	23.0		
Total Split (s)	45.0	45.0			68.0	68.0	68.0		23.0	23.0		
Total Split (%)	39.1%	39.1%			59.1%	59.1%	59.1%		20.0%	20.0%		
Maximum Green (s)	40.0	40.0			63.0	63.0	63.0		18.0	18.0		
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0	2.0		
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		5.0					5.0			5.0		
Lead/Lag									Lead	Lead		
Lead-Lag Optimize?									Yes	Yes		
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
Recall Mode	Max	Max			Max	Max	Max		None	None		
Walk Time (s)	7.0	7.0			7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0			11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0			0	0	0		0	0		
Act Effct Green (s)		72.0					72.0			8.3		
Actuated g/C Ratio		0.83					0.83			0.10		
v/c Ratio		0.28					0.34			0.08		
Control Delay		3.0					3.4			33.0		
Queue Delay		0.0					0.0			0.0		
Total Delay		3.0					3.4			33.0		
LOS		A					A			C		
Approach Delay		3.0					3.4			33.0		
Approach LOS		A					A			C		
90th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		10.7	10.7		
90th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
70th %ile Green (s)	64.4	64.4			64.4	64.4	64.4		9.2	9.2		
70th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
50th %ile Green (s)	71.3	71.3			71.3	71.3	71.3		8.4	8.4		
50th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
30th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		7.4	7.4		
30th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
10th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		0.0	0.0		
10th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Skip	Skip		
Stops (vph)		89					113			12		
Fuel Used(gal)		2					2			0		
CO Emissions (g/hr)		161					137			11		
NOx Emissions (g/hr)		31					27			2		
VOC Emissions (g/hr)		37					32			3		
Dilemma Vehicles (#)		0					0			0		
Queue Length 50th (ft)		48					61			6		
Queue Length 95th (ft)		87					111			21		
Internal Link Dist (ft)		438					196			85		
Turn Bay Length (ft)												
Base Capacity (vph)		1521					1494			317		
Starvation Cap Reductn		0					0			0		
Spillback Cap Reductn		0					0			0		
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.28					0.34			0.04		

Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Minimum Split (s)	8.0	23.0	23.0		22.5	22.5		
Total Split (s)	24.0	23.0	23.0		47.0	47.0		
Total Split (%)	20.9%	20.0%	20.0%		40.9%	40.9%		
Maximum Green (s)	19.0	18.0	18.0		42.5	42.5		
Yellow Time (s)	3.0	3.0	3.0		3.5	3.5		
All-Red Time (s)	2.0	2.0	2.0		1.0	1.0		
Lost Time Adjust (s)			0.0			0.0		
Total Lost Time (s)			5.0			4.5		
Lead/Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	None		None	None		
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0	0		0	0		
Act Effct Green (s)			8.3			8.7		
Actuated g/C Ratio			0.10			0.10		
v/c Ratio			0.36			0.22		
Control Delay			41.3			24.7		
Queue Delay			0.0			0.0		
Total Delay			41.3			24.7		
LOS			D			C		
Approach Delay			41.3			24.7		
Approach LOS			D			C		
90th %ile Green (s)	0.0	10.7	10.7		11.2	11.2		
90th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
70th %ile Green (s)	0.0	9.2	9.2		9.7	9.7		
70th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
50th %ile Green (s)	0.0	8.4	8.4		8.9	8.9		
50th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
30th %ile Green (s)	0.0	7.4	7.4		7.9	7.9		
30th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
10th %ile Green (s)	0.0	0.0	0.0		0.0	0.0		
10th %ile Term Code	Skip	Skip	Skip		Skip	Skip		
Stops (vph)			51			23		
Fuel Used(gal)			1			0		
CO Emissions (g/hr)			62			27		
NOx Emissions (g/hr)			12			5		
VOC Emissions (g/hr)			14			6		
Dilemma Vehicles (#)			0			0		
Queue Length 50th (ft)			32			12		
Queue Length 95th (ft)			65			39		
Internal Link Dist (ft)			227			150		
Turn Bay Length (ft)								
Base Capacity (vph)			368			851		
Starvation Cap Reductn			0			0		
Spillback Cap Reductn			0			0		
Storage Cap Reductn			0			0		
Reduced v/c Ratio			0.17			0.05		

Intersection Summary		
Area Type:	Other	
Cycle Length: 115		
Actuated Cycle Length: 87.1		
Natural Cycle: 60		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.36		
Intersection Signal Delay: 6.6		Intersection LOS: A
Intersection Capacity Utilization 56.0%		ICU Level of Service B
Analysis Period (min) 15		
90th %ile Actuated Cycle: 83.7		
70th %ile Actuated Cycle: 83.6		
50th %ile Actuated Cycle: 89.7		
30th %ile Actuated Cycle: 95.4		
10th %ile Actuated Cycle: 83		
! Phase conflict between lane groups.		

Splits and Phases: 1: Heady Street/Pump House Road & Eton Downs & Oregon Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	400	146	33	373	120	20
Future Volume (veh/h)	400	146	33	373	120	20
Number	4	14	3	8	5	12
Initial Q, 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
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	435	159	36	405	130	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence			No		No	
Cap, veh/h	635	232	403	1107	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.49	0.49	0.06	0.59	0.00	0.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	0.0	18.6	9.7	8.6	0.0	0.0
Ln Grp LOS	A	B	A	A	A	A
Approach Vol, veh/h	594			441	0	
Approach Delay, s/veh	18.6			8.7	0.0	
Approach LOS	B			A		

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			1.2	8.0				4.0
Phs Duration (G+Y+Rc), s			7.6	40.0				47.6
Change Period (Y+Rc), s			3.0	5.0				5.0
Max Green (Gmax), s			9.0	35.0				35.0
Max Allow Headway (MAH), s			3.8	5.3				5.2
Max Q Clear (g_c+I1), s			2.6	20.5				10.1
Green Ext Time (g_e), s			0.0	3.6				2.6
Prob of Phs Call (p_c)			0.51	1.00				1.00
Prob of Max Out (p_x)			0.02	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			1781	0				
Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				1307				1870
Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				478				0
Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			L (Pr/Pm)					

Lanes in Grp	0	0	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	36	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	823	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	403	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	512	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	405
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1107
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1107
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	594	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1784	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	867	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	867	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		14.4						
HCM 6th LOS		B						

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	351	1	1	388	2	7	1	2	15	1	18
Future Vol, veh/h	8	351	1	1	388	2	7	1	2	15	1	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	9	382	1	1	422	2	8	1	2	16	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	424	0	0	383	0	0	837	827	383	827	826	423
Stage 1	-	-	-	-	-	-	401	401	-	425	425	-
Stage 2	-	-	-	-	-	-	436	426	-	402	401	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1135	-	-	1175	-	-	286	307	664	291	307	631
Stage 1	-	-	-	-	-	-	626	601	-	607	586	-
Stage 2	-	-	-	-	-	-	599	586	-	625	601	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1135	-	-	1175	-	-	274	304	664	287	304	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	274	304	-	287	304	-
Stage 1	-	-	-	-	-	-	620	595	-	601	585	-
Stage 2	-	-	-	-	-	-	579	585	-	616	595	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	16.9	14.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	314	1135	-	-	1175	-	-	404
HCM Lane V/C Ratio	0.035	0.008	-	-	0.001	-	-	0.091
HCM Control Delay (s)	16.9	8.2	0	-	8.1	0	-	14.8
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	334	1	1	392	67	3	2	6	201	1	42
Future Vol, veh/h	24	334	1	1	392	67	3	2	6	201	1	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	26	363	1	1	426	73	3	2	7	218	1	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	499	0	0	364	0	0	904	917	364	885	881	463
Stage 1	-	-	-	-	-	-	416	416	-	465	465	-
Stage 2	-	-	-	-	-	-	488	501	-	420	416	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1065	-	-	1195	-	-	258	272	681	266	285	599
Stage 1	-	-	-	-	-	-	614	592	-	578	563	-
Stage 2	-	-	-	-	-	-	561	543	-	611	592	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1065	-	-	1195	-	-	232	263	681	255	276	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	263	-	255	276	-
Stage 1	-	-	-	-	-	-	595	574	-	560	562	-
Stage 2	-	-	-	-	-	-	517	542	-	584	574	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	14.9	78.2
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	375	1065	-	-	1195	-	-	283
HCM Lane V/C Ratio	0.032	0.024	-	-	0.001	-	-	0.937
HCM Control Delay (s)	14.9	8.5	0	-	8	0	-	78.2
HCM Lane LOS	B	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	8.9

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	406	461	3	1	1
Future Vol, veh/h	1	406	461	3	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	1	441	501	3	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	504	0	-	0	946	503
Stage 1	-	-	-	-	503	-
Stage 2	-	-	-	-	443	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1061	-	-	-	290	569
Stage 1	-	-	-	-	607	-
Stage 2	-	-	-	-	647	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1061	-	-	-	290	569
Mov Cap-2 Maneuver	-	-	-	-	290	-
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	647	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1061	-	-	-	384
HCM Lane V/C Ratio	0.001	-	-	-	0.006
HCM Control Delay (s)	8.4	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	396	10	2	435	21	5
Future Vol, veh/h	396	10	2	435	21	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	430	11	2	473	23	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	441	0	913	436
Stage 1	-	-	-	-	436	-
Stage 2	-	-	-	-	477	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1119	-	304	620
Stage 1	-	-	-	-	652	-
Stage 2	-	-	-	-	624	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1119	-	303	620
Mov Cap-2 Maneuver	-	-	-	-	303	-
Stage 1	-	-	-	-	652	-
Stage 2	-	-	-	-	623	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	336	-	-	1119	-
HCM Lane V/C Ratio	0.084	-	-	0.002	-
HCM Control Delay (s)	16.7	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	3	482	25	3	19	5	474	58	6	3	1	1
Future Volume (vph)	3	482	25	3	19	5	474	58	6	3	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993					0.986			0.977		
Flt Protected							0.998			0.972		
Satd. Flow (prot)	0	1850	0	0	0	0	1833	0	0	1769	0	0
Flt Permitted		0.998					0.968			0.867		
Satd. Flow (perm)	0	1846	0	0	0	0	1778	0	0	1578	0	0
Right Turn on Red				No				No				Yes
Satd. Flow (RTOR)										1		
Link Speed (mph)		30					30			30		
Link Distance (ft)		518					276			165		
Travel Time (s)		11.8					6.3			3.8		
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
Adj. Flow (vph)	3	524	27	3	21	5	515	63	7	3	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	557	0	0	0	0	604	0	0	12	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)		0					0			0		
Link Offset(ft)		0					0			50		
Crosswalk Width(ft)		16					16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		60	9	60	15		9	15		9	60
Number of Detectors	1	2			1	1	2		1	2		
Detector Template	Left	Thru			Left	Left	Thru		Left	Thru		
Leading Detector (ft)	20	100			20	20	100		20	100		
Trailing Detector (ft)	0	0			0	0	0		0	0		
Detector 1 Position(ft)	0	0			0	0	0		0	0		
Detector 1 Size(ft)	20	6			20	20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94					94			94		
Detector 2 Size(ft)		6					6			6		
Detector 2 Type		Cl+Ex					Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0					0.0			0.0		
Turn Type	Perm	NA			Perm	Perm	NA		Perm	NA		
Protected Phases		1					4			6!		
Permitted Phases	1				4	4	4		6!			
Detector Phase	1	1			4	4	4		6	6		
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0		

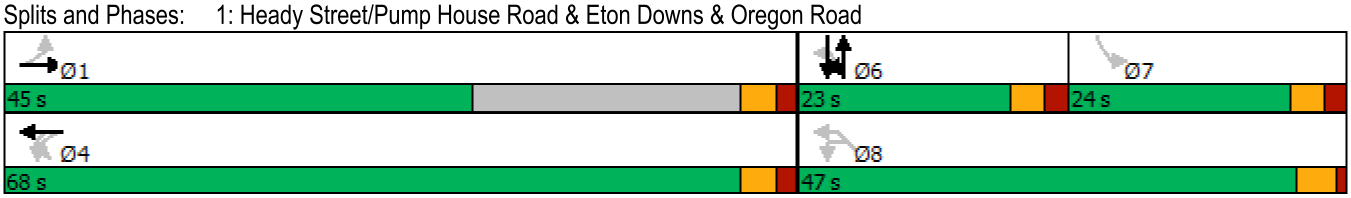
Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	93	3	2	8	1	19	6	29
Future Volume (vph)	93	3	2	8	1	19	6	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.989			0.914		
Flt Protected			0.957			0.982		
Satd. Flow (prot)	0	0	1763	0	0	1672	0	0
Flt Permitted			0.957			0.982		
Satd. Flow (perm)	0	0	1763	0	0	1672	0	0
Right Turn on Red				Yes				Yes
Satd. Flow (RTOR)			3			32		
Link Speed (mph)			30			30		
Link Distance (ft)			307			230		
Travel Time (s)			7.0			5.2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	101	3	2	9	1	21	7	32
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	115	0	0	61	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)			0			12		
Link Offset(ft)			0			75		
Crosswalk Width(ft)			16			16		
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	60		9	60	60	60	60
Number of Detectors	1	1	2		1	1		
Detector Template	Left	Left	Thru		Left	Left		
Leading Detector (ft)	20	20	100		20	20		
Trailing Detector (ft)	0	0	0		0	0		
Detector 1 Position(ft)	0	0	0		0	0		
Detector 1 Size(ft)	20	20	6		20	20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		
Detector 2 Position(ft)			94					
Detector 2 Size(ft)			6					
Detector 2 Type			Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)			0.0					
Turn Type	custom	Split	NA		Perm	Perm		
Protected Phases		6!	6					
Permitted Phases	7				8!	8!		
Detector Phase	7	6	6		8	8		
Switch Phase								
Minimum Initial (s)	3.0	5.0	5.0		5.0	5.0		

Lane Group	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Minimum Split (s)	23.0	23.0			23.0	23.0	23.0		23.0	23.0		
Total Split (s)	45.0	45.0			68.0	68.0	68.0		23.0	23.0		
Total Split (%)	39.1%	39.1%			59.1%	59.1%	59.1%		20.0%	20.0%		
Maximum Green (s)	40.0	40.0			63.0	63.0	63.0		18.0	18.0		
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0	2.0		
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		5.0					5.0			5.0		
Lead/Lag									Lead	Lead		
Lead-Lag Optimize?									Yes	Yes		
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
Recall Mode	Max	Max			Max	Max	Max		None	None		
Walk Time (s)	7.0	7.0			7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0			11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0			0	0	0		0	0		
Act Effct Green (s)		67.2					67.2			10.9		
Actuated g/C Ratio		0.76					0.76			0.12		
v/c Ratio		0.40					0.45			0.06		
Control Delay		4.9					5.3			30.9		
Queue Delay		0.0					0.0			0.0		
Total Delay		4.9					5.3			30.9		
LOS		A					A			C		
Approach Delay		4.9					5.3			30.9		
Approach LOS		A					A			C		
90th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		14.5	14.5		
90th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
70th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		12.1	12.1		
70th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
50th %ile Green (s)	63.0	63.0			63.0	63.0	63.0		10.6	10.6		
50th %ile Term Code	Hold	Hold			MaxR	MaxR	MaxR		Gap	Gap		
30th %ile Green (s)	69.4	69.4			69.4	69.4	69.4		9.4	9.4		
30th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
10th %ile Green (s)	78.0	78.0			78.0	78.0	78.0		7.3	7.3		
10th %ile Term Code	Dwell	Dwell			Dwell	Dwell	Dwell		Gap	Gap		
Stops (vph)		165					190			11		
Fuel Used(gal)		3					3			0		
CO Emissions (g/hr)		244					199			10		
NOx Emissions (g/hr)		47					39			2		
VOC Emissions (g/hr)		56					46			2		
Dilemma Vehicles (#)		0					0			0		
Queue Length 50th (ft)		81					93			5		
Queue Length 95th (ft)		154					178			21		
Internal Link Dist (ft)		438					196			85		
Turn Bay Length (ft)												
Base Capacity (vph)		1408					1356			323		
Starvation Cap Reductn		0					0			0		
Spillback Cap Reductn		0					0			0		
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.40					0.45			0.04		

Lane Group	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Minimum Split (s)	8.0	23.0	23.0		22.5	22.5		
Total Split (s)	24.0	23.0	23.0		47.0	47.0		
Total Split (%)	20.9%	20.0%	20.0%		40.9%	40.9%		
Maximum Green (s)	19.0	18.0	18.0		42.5	42.5		
Yellow Time (s)	3.0	3.0	3.0		3.5	3.5		
All-Red Time (s)	2.0	2.0	2.0		1.0	1.0		
Lost Time Adjust (s)			0.0			0.0		
Total Lost Time (s)			5.0			4.5		
Lead/Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		
Recall Mode	None	None	None		None	None		
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0		
Pedestrian Calls (#/hr)	0	0	0		0	0		
Act Effct Green (s)			10.9			11.4		
Actuated g/C Ratio			0.12			0.13		
v/c Ratio			0.52			0.25		
Control Delay			42.7			21.2		
Queue Delay			0.0			0.0		
Total Delay			42.7			21.2		
LOS			D			C		
Approach Delay			42.7			21.2		
Approach LOS			D			C		
90th %ile Green (s)	0.0	14.5	14.5		15.0	15.0		
90th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
70th %ile Green (s)	0.0	12.1	12.1		12.6	12.6		
70th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
50th %ile Green (s)	0.0	10.6	10.6		11.1	11.1		
50th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
30th %ile Green (s)	0.0	9.4	9.4		9.9	9.9		
30th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
10th %ile Green (s)	0.0	7.3	7.3		7.8	7.8		
10th %ile Term Code	Skip	Gap	Gap		Hold	Hold		
Stops (vph)			95			29		
Fuel Used(gal)			2			1		
CO Emissions (g/hr)			119			35		
NOx Emissions (g/hr)			23			7		
VOC Emissions (g/hr)			28			8		
Dilemma Vehicles (#)			0			0		
Queue Length 50th (ft)			56			14		
Queue Length 95th (ft)			106			48		
Internal Link Dist (ft)			227			150		
Turn Bay Length (ft)								
Base Capacity (vph)			363			825		
Starvation Cap Reductn			0			0		
Spillback Cap Reductn			0			0		
Storage Cap Reductn			0			0		
Reduced v/c Ratio			0.32			0.07		

Intersection Summary	
Area Type: Other	
Cycle Length: 115	
Actuated Cycle Length: 88.1	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 70.8%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 87.5	
70th %ile Actuated Cycle: 85.1	
50th %ile Actuated Cycle: 83.6	
30th %ile Actuated Cycle: 88.8	
10th %ile Actuated Cycle: 95.3	
! Phase conflict between lane groups.	

Splits and Phases: 1: Heady Street/Pump House Road & Eton Downs & Oregon Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	578	153	59	558	170	57
Future Volume (veh/h)	578	153	59	558	170	57
Number	4	14	3	8	5	12
Initial Q, 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
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	628	166	64	607	185	62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	693	183	316	1156	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.49	0.49	0.09	0.62	0.00	0.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	0.0	31.7	13.6	9.5	0.0	0.0
Ln Grp LOS	A	C	B	A	A	A
Approach Vol, veh/h	794			671	0	
Approach Delay, s/veh	31.7			9.9	0.0	
Approach LOS	C			A		

Timer:	1	2	3	4	5	6	7	8
Assigned Phs			3	4				8
Case No			1.2	8.0				4.0
Phs Duration (G+Y+Rc), s			9.5	40.0				49.5
Change Period (Y+Rc), s			3.0	5.0				5.0
Max Green (Gmax), s			9.0	35.0				35.0
Max Allow Headway (MAH), s			3.8	5.3				5.2
Max Q Clear (g_c+I1), s			3.1	31.1				15.2
Green Ext Time (g_e), s			0.0	2.0				4.1
Prob of Phs Call (p_c)			0.72	1.00				1.00
Prob of Max Out (p_x)			0.07	0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt			3	7				
Mvmt Sat Flow, veh/h			1781	0				
Through Movement Data								
Assigned Mvmt				4				8
Mvmt Sat Flow, veh/h				1426				1870
Right-Turn Movement Data								
Assigned Mvmt				14				18
Mvmt Sat Flow, veh/h				377				0
Left Lane Group Data								
Assigned Mvmt	0	0	3	7	0	0	0	0
Lane Assignment			L (Pr/Pm)					

Lanes in Grp	0	0	1	0	0	0	0	0
Grp Vol (v), veh/h	0	0	64	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	684	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	37.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	316	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	378	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	13.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	0	0	4	0	0	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	607
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	1156
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1156
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	0	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	794	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1803	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	29.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	29.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	876	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	876	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	31.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	10.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	14.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		21.7						
HCM 6th LOS		C						

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	524	6	8	469	5	2	1	2	10	1	23
Future Vol, veh/h	16	524	6	8	469	5	2	1	2	10	1	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	17	570	7	9	510	5	2	1	2	11	1	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	515	0	0	577	0	0	1152	1141	574	1140	1142	513
Stage 1	-	-	-	-	-	-	608	608	-	531	531	-
Stage 2	-	-	-	-	-	-	544	533	-	609	611	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1051	-	-	996	-	-	175	201	518	178	200	561
Stage 1	-	-	-	-	-	-	483	486	-	532	526	-
Stage 2	-	-	-	-	-	-	523	525	-	482	484	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1051	-	-	996	-	-	162	194	518	172	193	561
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	194	-	172	193	-
Stage 1	-	-	-	-	-	-	471	474	-	519	519	-
Stage 2	-	-	-	-	-	-	492	518	-	467	472	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	20.8	17.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	234	1051	-	-	996	-	-	326
HCM Lane V/C Ratio	0.023	0.017	-	-	0.009	-	-	0.113
HCM Control Delay (s)	20.8	8.5	0	-	8.6	0	-	17.5
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	35.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	546	1	1	537	224	2	2	2	136	1	20
Future Vol, veh/h	54	546	1	1	537	224	2	2	2	136	1	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	59	593	1	1	584	243	2	2	2	148	1	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	827	0	0	594	0	0	1431	1541	594	1422	1420	706
Stage 1	-	-	-	-	-	-	712	712	-	708	708	-
Stage 2	-	-	-	-	-	-	719	829	-	714	712	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	804	-	-	982	-	-	112	115	505	~ 114	136	436
Stage 1	-	-	-	-	-	-	423	436	-	426	438	-
Stage 2	-	-	-	-	-	-	420	385	-	422	436	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	804	-	-	982	-	-	97	102	505	~ 102	121	436
Mov Cap-2 Maneuver	-	-	-	-	-	-	97	102	-	~ 102	121	-
Stage 1	-	-	-	-	-	-	376	388	-	379	437	-
Stage 2	-	-	-	-	-	-	397	384	-	372	388	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	32.8	$ 338.3
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	136	804	-	-	982	-	-	113
HCM Lane V/C Ratio	0.048	0.073	-	-	0.001	-	-	1.51
HCM Control Delay (s)	32.8	9.8	0	-	8.7	0	-	$ 338.3
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	12.4

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.2					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	639	559	5	7	3
Future Vol, veh/h	2	639	559	5	7	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	2	695	608	5	8	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	613	0	-	0	1310	611
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	699	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	966	-	-	-	175	494
Stage 1	-	-	-	-	542	-
Stage 2	-	-	-	-	493	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	966	-	-	-	174	494
Mov Cap-2 Maneuver	-	-	-	-	174	-
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	493	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	966	-	-	-	216
HCM Lane V/C Ratio	0.002	-	-	-	0.05
HCM Control Delay (s)	8.7	0	-	-	22.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	623	22	5	555	16	4
Future Vol, veh/h	623	22	5	555	16	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	677	24	5	603	17	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	701	0	1302	689
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	613	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	896	-	177	446
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	541	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	896	-	176	446
Mov Cap-2 Maneuver	-	-	-	-	176	-
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	537	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	25.2
HCM LOS			D

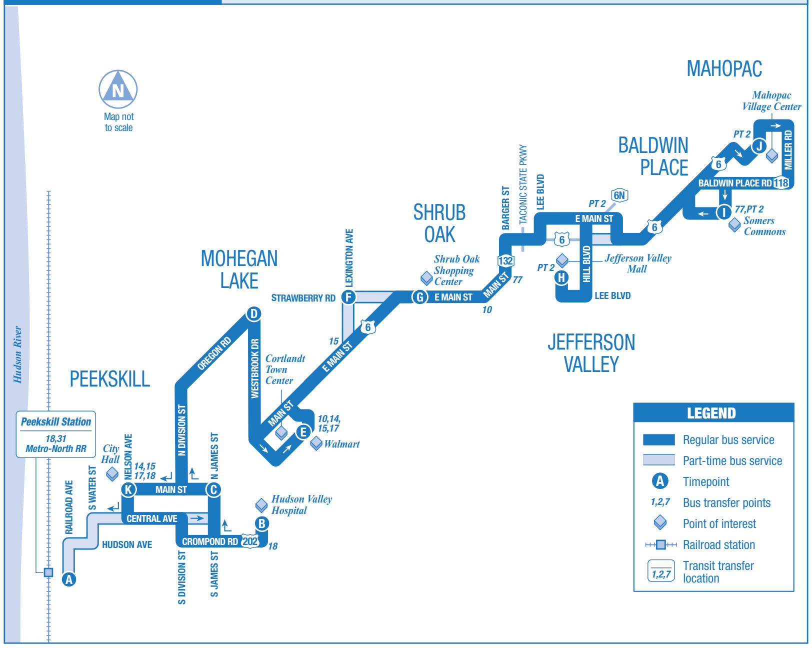
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	200	-	-	896	-
HCM Lane V/C Ratio	0.109	-	-	0.006	-
HCM Control Delay (s)	25.2	-	-	9	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

APPENDIX E

BEE LINE BUS ROUTE 16 SCHEDULE

ROUTE 16: Local

Peekskill • Yorktown



PEEKSKILL TO MAHOPAC VILLAGE CENTRE / MONDAY – FRIDAY

	A Peekskill RR Station (Hudson Line)	B Hudson Valley Hospital Center	C Main St at N James St	D Westbrook Dr at Red Mill Rd/ Oregon Rd	E Cortandt Town Center	F Lexington Ave at Strawberry Rd	G Shrub Oak Shopping Center	H Jefferson Valley Mall	I Somers Commons	J Mahopac Village Center
	PEEKSKILL			MOHEGAN LAKE			SHRUB OAK	JEFFERSON VALLEY	BALDWIN PLACE	MAHOPAC
AM	—	—	② 5:45	5:52	5:58	—	6:06	6:16	—	—
	—	—	6:50	6:57	7:04	—	—	—	—	—
	7:00	7:10	7:15	7:23	7:30	—	7:38	7:46	7:56	7:59
	7:48	7:58	8:03	8:11	8:18	—	8:26	8:34	8:44	8:47
	—	9:16	9:21	9:29	9:36	9:43	9:48	9:56	10:06	10:09
	—	10:15	10:20	10:28	10:35	—	10:43	10:51	11:01	11:04
	—	11:15	11:21	11:29	11:37	11:44	11:50	11:59	12:09	—
PM	—	12:15	12:21	12:29	12:37	—	12:46	12:55	1:05	—
	—	1:15	1:21	1:29	1:37	—	1:46	1:55	2:05	2:08
	—	2:30	2:35	2:43	2:50	—	3:00	3:10	3:18	—
	—	3:15	3:20	3:28	3:35	3:42	3:47	3:55	4:05	4:08
	—	① 4:20	4:25	4:33	4:40	4:47	4:52	5:00	—	—
	—	5:15	5:20	5:28	5:35	—	5:43	5:51	—	—
	6:11	—	6:16	6:24	6:31	—	6:39	6:47	6:57	7:00
	7:13	—	7:19	7:26	7:33	—	7:41	7:48	7:58	8:01
	—	8:20	8:25	8:32	8:38	—	8:45	8:52	9:02	—
	—	—	9:00	9:07	9:09	—	9:16	9:23	9:33	—

① This trip operates via U.S. 6 between Jefferson Valley Mall and Somers Corners.

② This trip does not serve Lee Blvd., E. Main St. and Hill Blvd.

MAHOPAC VILLAGE CENTRE TO PEEKSKILL / MONDAY – FRIDAY

	J Mahopac Village Center	I Somers Commons	H Jefferson Valley Mall	G Shrub Oak Shopping Center	F Lexington Ave at Strawberry Rd	E Cortandt Town Center	D Westbrook Dr at Red Mill Rd/ Oregon Rd	K Main St at Nelson Ave	B Hudson Valley Hospital Center	A Peekskill RR Station (Hudson Line)
	MAHOPAC	BALDWIN PLACE	JEFFERSON VALLEY	SHRUB OAK	MOHEGAN LAKE			PEEKSKILL		
AM	—	—	6:20	6:28	—	6:35	6:42	6:50	—	6:55
	—	—	—	—	—	7:10	7:17	7:25	—	7:30
	8:05	8:10	8:20	8:28	—	8:36	8:43	8:51	8:56	—
	9:00	9:05	9:15	9:23	9:30	9:35	9:42	9:50	9:55	—
	10:15	10:20	10:30	10:38	—	10:46	10:53	11:01	11:06	—
	—	11:15	11:25	11:33	11:40	11:45	11:52	12:00	12:05	—
PM	—	12:20	12:30	12:39	—	12:47	12:54	1:02	1:08	—
	—	1:15	1:25	1:33	1:40	1:45	1:52	2:00	2:05	—
	2:15	2:20	2:30	2:39	—	2:48	2:55	3:03	3:09	—
	—	3:25	3:35	3:43	—	3:51	3:58	4:06	4:11	—
	4:15	4:20	4:30	4:38	4:45	4:50	4:57	5:05	5:10	—
①	—	—	5:10	5:20	—	5:29	5:37	5:46	—	6:06
	—	—	6:00	6:08	—	6:16	6:23	6:31	—	6:36
	7:20	7:25	7:35	7:43	—	7:51	7:58	8:06	8:11	—
	8:10	8:15	8:25	8:33	—	8:41	8:48	8:56	—	—
	—	9:15	9:25	9:33	—	9:41	9:48	9:56	—	—
	—	9:40	9:50	9:58	—	10:06	10:13	10:21	—	—

① This trip operates via U.S. 6 between Jefferson Valley Mall and Somers Corners.

INSTRUCTIONS

The bus passes this location at listed times. Look for the column of times below the matching symbol in the schedule.

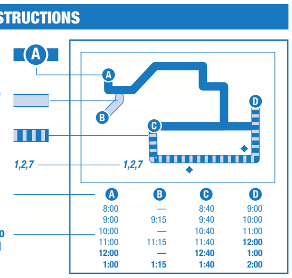
Only certain trips operate along this portion of the route. See the schedule for trips that operate here.

The bus operates express along the route. No stops are made unless indicated by the F symbol.

Transfer point. Shows where this bus intersects with other bus routes.

The bus stops at the times listed below the symbol. Light times are A.M.; **bold** times are **P.M.**

The timetable shows when the bus is scheduled to depart. Actual departure times may vary and depend upon traffic and weather conditions. Arrive at the bus stop about 5 minutes early to avoid missing the bus.



BEE-LINE HOLIDAY SCHEDULE

HOLIDAY	SCHEDULE IN EFFECT
New Years Day	Sunday
Martin Luther King, Jr. Day	Saturday
Presidents' Day	Saturday
Memorial Day	Sunday
Independence Day	Sunday
Labor Day	Sunday
Columbus Day	Weekday
Election Day	Weekday
Veterans Day	Weekday
Thanksgiving Day	No Service
Christmas Day	No Service

PEEKSKILL TO MAHOPAC VILLAGE CENTRE / SATURDAY

	B Hudson Valley Hospital Center	C Main St at N James St	D Westbrook Dr at Red Mill Rd/ Oregon Rd	E Cortandt Town Center	F Lexington Ave at Strawberry Rd	G Shrub Oak Shopping Center	H Jefferson Valley Mall	I Somers Commons	J Mahopac Village Center
	PEEKSKILL		MOHEGAN LAKE			SHRUB OAK	JEFFERSON VALLEY	BALDWIN PLACE	MAHOPAC
AM	6:45	6:50	6:57	7:03	—	7:10	7:18	7:27	7:30
	7:30	7:35	7:42	7:49	—	7:57	8:05	8:15	8:18
	8:35	8:40	8:47	8:54	8:59	9:04	9:12	9:22	9:35
	9:35	9:40	9:47	9:54	—	10:06	10:14	10:24	10:27
	10:50	10:55	11:02	11:09	11:17	11:23	11:31	11:41	—
PM	**12:00**	**12:05**	**12:12**	**12:19**	—	**12:27**	**12:33**	**12:43**	—
	12:50	**12:55**	**1:02**	**1:09**	—	**1:21**	**1:29**	**1:39**	**1:43**
	2:00	**2:05**	**2:12**	**2:19**	**2:27**	**2:33**	**2:41**	**2:51**	—
	3:00	**3:05**	**3:12**	**3:19**	—	**3:27**	**3:35**	**3:43**	—
	4:00	**4:05**	**4:12**	**4:19**	**4:27**	**4:33**	**4:41**	**4:51**	**4:54**
	5:10	**5:15**	**5:23**	**5:30**	—	**5:42**	**5:50**	**6:00**	—
	6:10	**6:15**	**6:23**	**6:30**	—	**6:42**	**6:50**	**7:00**	**7:03**
	7:30	**7:35**	**7:42**	**7:49**	—	**7:57**	**8:05**	**8:15**	—
	8:30	**8:35**	**8:42**	**8:49**	—	**8:57**	**9:05**	**9:15**	—
	—	**9:05**	**9:12**	**9:19**	—	**9:26**	**9:34**	**9:44**	—

MAHOPAC VILLAGE CENTRE TO PEEKSKILL / SATURDAY

	J Mahopac Village Center	I Somers Commons	H Jefferson Valley Mall	G Shrub Oak Shopping Center	F Lexington Ave at Strawberry Rd	E Cortandt Town Center	D Westbrook Dr at Red Mill Rd/ Oregon Rd	K Main St at Nelson Ave	B Hudson Valley Hospital Center
	MAHOPAC	BALDWIN PLACE	JEFFERSON VALLEY	SHRUB OAK	MOHEGAN LAKE			PEEKSKILL	
AM	7:35	7:40	7:50	7:58	—	8:06	8:14	8:22	8:27
	8:30	8:35	8:45	8:53	8:58	9:06	9:14	9:22	9:27
	—	9:40	9:50	9:58	—	10:06	10:14	10:22	10:27
	10:35	10:40	10:50	10:58	11:05	11:13	11:21	11:29	11:34
	—	11:55	**12:05**	**12:13**	—	**12:21**	**12:29**	**12:37**	**12:42**
PM	—	**1:00**	**1:10**	**1:18**	—	**1:30**	**1:38**	**1:46**	**1:51**
	1:50	**1:55**	**2:05**	**2:15**	**2:20**	**2:30**	**2:38**	**2:46**	**2:51**
	—	**3:05**	**3:15**	**3:25**	—	**3:37**	**3:45**	**3:53**	**3:58**
	—	**4:05**	**4:15**	**4:25**	**4:30**	**4:40**	**4:48**	**4:56**	**5:01**
	5:00	**5:05**	**5:15**	**5:25**	—	**5:35**	**5:43**	**5:51**	**5:56**
	—	**6:15**	**6:25**	**6:35**	—	**6:45**	**6:53**	**7:00**	**7:05**
	7:10	**7:15**	**7:25**	**7:35**	—	**7:43**	**7:51**	**7:58**	**8:03**
	—	**8:20**	**8:30**	**8:37**	—	**8:45**	**8:52**	**8:59**	—
	—	**9:20**	**9:30**	**9:37**	—	**9:45**	**9:52**	**9:59**	—
	—	**9:50**	**10:00**	**10:07**	—	**10:15**	**10:22**	**10:29**	—

PEEKSKILL TO MAHOPAC VILLAGE CENTRE / SUNDAY

	B Hudson Valley Hospital Center	C Main St at N James St	D Westbrook Dr at Red Mill Rd/ Oregon Rd	E Cortandt Town Center	F Lexington Ave at Strawberry Rd	G Shrub Oak Shopping Center	H Jefferson Valley Mall	I Somers Commons
	PEEKSKILL		MOHEGAN LAKE			SHRUB OAK	JEFFERSON VALLEY	BALDWIN PLACE
AM	9:30	9:35	9:43	9:50	—	10:00	10:08	10:18
	10:40	10:45	10:53	11:00	11:08	11:14	11:24	11:34
	11:30	11:35	11:43	11:50	—	**12:02**	**12:12**	—
PM	**12:40**	**12:45**	**12:53**	**1:00**	—	**1:12**	**1:22**	—
	1:30	**1:35**	**1:43**	**1:50**	**1:58**	**2:04**	**2:14**	**2:24**
	2:40	**2:45**	**2:53**	**3:00**	—	**3:12**	**3:22**	—
	3:40	**3:45**	**3:53**	**4:00**	**4:08**	**4:14**	**4:24**	**4:34**
	4:30	**4:35**	**4:43**	**4:50**	—	**5:02**	**5:12**	**5:22**
	5:50	**5:55**	**6:03**	**6:10**	—	**6:20**	**6:30**	**6:40**

MAHOPAC VILLAGE CENTRE TO PEEKSKILL / SUNDAY

	I Somers Commons	H Jefferson Valley Mall	G Shrub Oak Shopping Center	F Lexington Ave at Strawberry Rd	E Cortandt Town Center	D Westbrook Dr at Red Mill Rd/ Oregon Rd	K Main St at Nelson Ave	B Hudson Valley Hospital Center
	BALDWIN PLACE	JEFFERSON VALLEY	SHRUB OAK	MOHEGAN LAKE			PEEKSKILL	
AM	10:30	10:40	10:50	10:54	11:00	11:08	11:15	11:22
	11:40	11:50	**12:00**	—	**12:10**	**12:18**	**12:25**	**12:32**
PM	—	**12:40**	**12:50**	—	**1:00**	**1:08**	**1:15**	**1:22**
	—	**1:45**	**1:55**	**1:59**	**2:05**	**2:13**	**2:20**	**2:27**
	2:40	**2:50**	**3:00**	—	**3:10**	**3:18**	**3:25**	—
	—	**3:40**	**3:50**	**3:54**	**4:00**	**4:08**	**4:15**	**4:22**
	4:40	**4:50**	**5:00**	—	**5:10**	**5:18**	**5:25**	**5:32**
	5:30	**5:40**	**5:50**	—	**6:00**	**6:08**	**6:15**	—
	7:05	**7:15**	**7:25**	—	**7:35**	**7:43**	**7:50**	—

Bee-Line Cash and MetroCard Fares

Effective April 21, 2019

Cash Fares (Coins Only)

One Ride....................$2.75
Paper Transfer to Bee-Line & NYC Buses....................FREE
Senior/Disabled Reduced Fare One Ride....................$1.35
Senior/Disabled Paper Transfer to Bee-Line & NYC Buses....................FREE
BXM4C One Ride....................$7.50
BXM4C Senior/Disabled Reduced Fare (Off-Peak Only)....................$3.75

Pay-Per-Ride MetroCard Fares

(Includes One Transfer to Bee-Line Buses, NYC Buses & Subways)
One Ride with Transfer....................$2.75
Senior/Disabled Reduced Fare One Ride with Transfer....................$1.35

Unlimited Ride 30-Day MetroCard Fare..........$127.00

Unlimited Ride 7-Day MetroCard Fare..........$33.00

Transfers

(1) Paper transfers will be accepted on all local routes, except the same route initially boarded. Paper transfers must be obtained at the time of initial boarding.

(2) Pay-Per-Ride MetroCards will be accepted on all Bee-Line routes, except the same route initially boarded, NYC local buses and subways with no additional fare charged to the card, within two hours of the initial boarding.

Senior/Disabled Reduced Fares

Reduced fares are available to riders at least 65 years of age, certified disabled persons and valid Medicare card holders with proper photo identification.

MetroCard reduced fares are available only to holders of a personalized Reduced-Fare MetroCard.

For more information call (718) 330-1234 or go to www.mta.info/metrocard.

www.westchestergov.com/beelinebus

24-Hour Automated Schedule Information (914) 813-7777
Representatives are available 8 a.m. to 4 p.m. weekdays.
Lost & Found (914) 376-6361

Large print timetables are available upon request.
Hard of hearing individuals can use the New York State 711 Relay Service

Fares, schedule and equipment are subject to change.

the bee-line system

Effective March 20, 2017

LOCAL ROUTE

16

Peekskill
Jefferson Valley
Baldwin Place

ALSO SERVING
- Shrub Oak
- Mohegan Lake
- Cortlandt Town Center
- Peekskill RR Station
- Somers Commons

Get Real-time Bee-Line info through
GOOGLE MAPS

Westchester gov.com

www.westchestergov.com/beelinebus

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*UTILITY INSTALLATION, MAINT. AND REPAIR
*FIRE HYDRANT FLUSHING, MAINT. AND REPAIR
*FIRE HYDRANT FLOW TESTING
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30 SCENIC HILLS DRIVE,
POUGHKEEPSIE, NY 12603
Tele: 914-497-2058 Fax: 914-533-3433

Gerhard (Jerry) M. Schwalbe, P.E.
Divney Tung Schwalbe, LLP
One North Broadway
White Plains, New York 10601

March 9, 2020

Re: Fire flow test @ 119 Oregon Rd, Cortlandt, NY 10567 (Colonial Terrace Catering)

Dear Jerry,

Enclosed please find the fire hydrant flow data information for Colonial Terrace Catering, 119 Oregon Rd, Cortlandt, NY 10567. This flow test was performed on March 9, 2020 at approx.10am. NOTE: The water dept was fully involved and we flushed the hydrant they suggested. Both fire hydrants are on the same side of the road.

PRESSURE HYDRANT:

Location:	Corner of Eton Downs and Oregon Rd
Static pressure:	212 PSI
Residual pressure:	145 PSI

FLOW HYDRANT:

Location:	Oregon Rd near drive way of Colonial Terrace Catering
Flow:	1680 GPM
Calculated rate capacity at 20 PSI:	2967 GPM
Class:	AA
Marking color:	Light blue
% of pressure drop:	31.6%
Pitot:	100 PSI
Orifice size:	2 ½”

Let me know if you need any other info.

Respectfully,

Raymond Jovine, Owner

QAV

Technologies, LLC

We are flow !

Valley View Rd
Town of Cortlandt Manor NY
Flow Report

Prepared by,
Robert A. Snyder Jr.
QAV Technologies, LLC
May 14, 2021

Technologies, LLC
We are flow !

QAV Technologies, LLC
7 Prall Ct
Ringoes, NJ 08551
May 14, 2021

Cosimo Reale
Divney Tung Schwalbe
1 North Broadway
White Plains, NY 10601

Cosimo:

Enclosed you will find your final report of our sewer flow study for your project in Cortlandt Manor NY on Valley View Dr.

As requested, the flow sensor was installed on the downstream side of proposed manhole.

The equipment utilized for data collection in this study were Hach model 900 flow loggers with submerged area velocity sensor placed in the wastewater stream.

If you should have any questions or concerns about the data, please do not hesitate to contact us. We at QAV Technologies, LLC would like to thank you for allowing us the opportunity to service your flow monitoring needs and look forward to continuing our great working relationship in the future.

Sincerely,

Robert A. Snyder Jr.

Robert A. Snyder Jr.
Service Consultant
QAV Technologies, LLC
Phone: 551-497-2767
Email: bsnyder@qavtechnologies.com
Web: www.qavtechnologies.com

Divney
Tung
Schwalbe

Valley View
Rd.
Cortlandt
Manor
NY

Flow
Report
May 2021

Technologies, LLC
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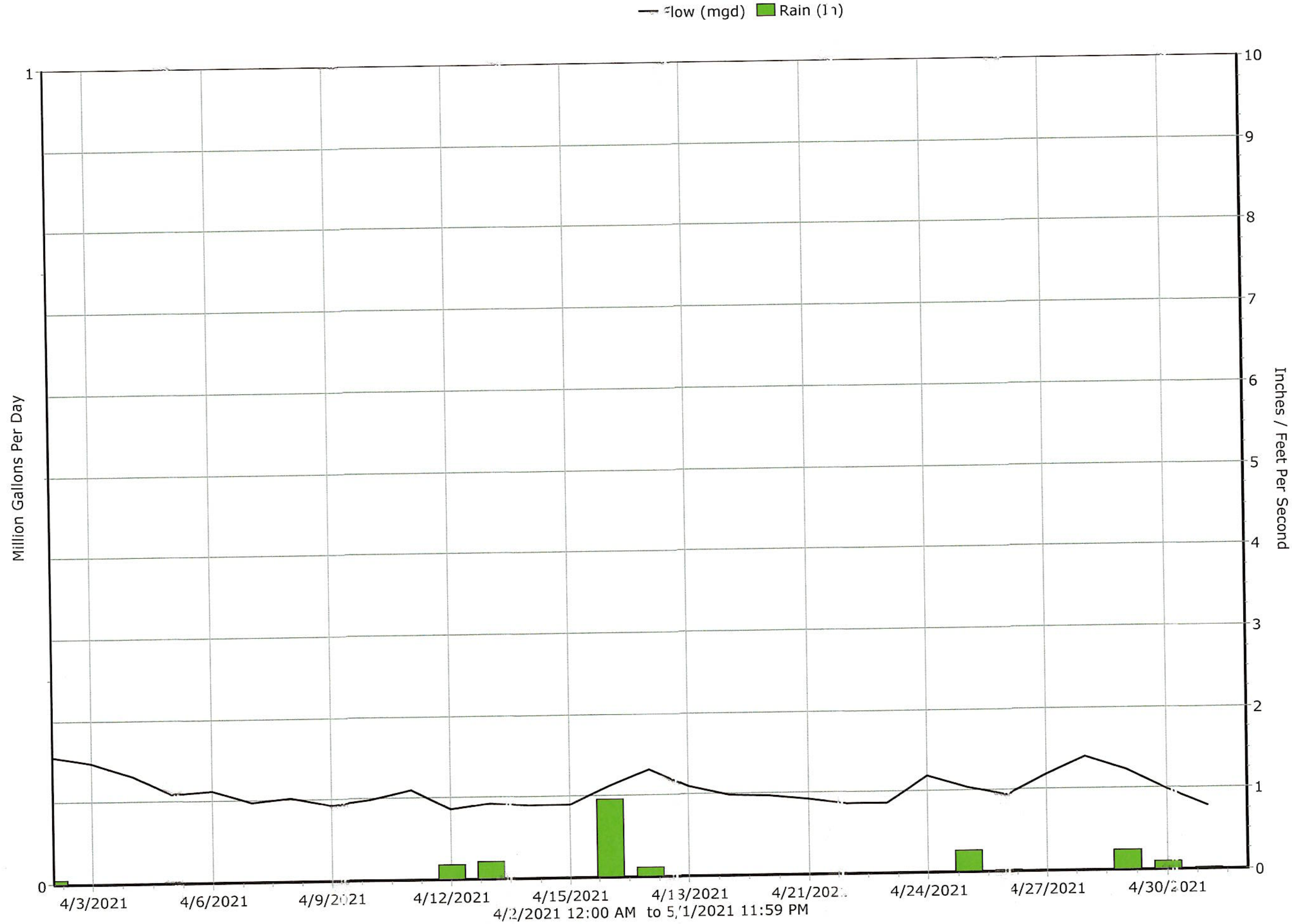
DAILY FLOW DATA

Pump House and Valley View Rd



Pump House and Valley View Rd
Flow Report

Units: Flow / Totals: Gallons

Date	Max	Min	Avg	Total	Week 1 Summary	Max	Min	Avg	Total
04/01/21									
04/02/21	0.2965	0.0943	0.1555	103,662.17					
04/03/21	0.6045	0.0563	0.1473	147,344.55					
04/04/21	0.5582	0.0615	0.1308	130,754.81					
04/05/21	0.3488	0.0606	0.1084	108,404.12					
04/06/21	0.4315	0.0519	0.1111	111,106.84					
04/07/21	0.3118	0.0422	0.0964	96,446.84	Week 2 Summary	Max	Min	Avg	Total
04/08/21	0.3416	0.0632	0.1015	101,540.52		0.4788	0.0271	0.0958	670,437.95
04/09/21	0.3284	0.0426	0.0923	92,314.66					
04/10/21	0.2557	0.0423	0.0995	99,507.33					
04/11/21	0.3037	0.0460	0.1095	109,541.56					
04/12/21	0.4670	0.0438	0.0858	85,779.54					
04/13/21	0.4788	0.0271	0.0919	91,865.08					
04/14/21	0.4045	0.0272	0.0899	89,889.26	Week 3 Summary	Max	Min	Avg	Total
04/15/21	0.4139	0.0325	0.0890	89,005.35		0.5908	0.0237	0.1042	729,532.15
04/16/21	0.3889	0.0385	0.1115	111,488.32					
04/17/21	0.5647	0.0567	0.1314	131,409.14					
04/18/21	0.5908	0.0413	0.1101	110,068.41					
04/19/21	0.2564	0.0358	0.0982	98,212.35					
04/20/21	0.2914	0.0344	0.0977	97,657.48					
04/21/21	0.4603	0.0237	0.0917	91,691.10	Week 4 Summary	Max	Min	Avg	Total
04/22/21	0.3739	0.0253	0.0859	85,911.40		0.5700	0.0177	0.1066	745,880.51
04/23/21	0.4491	0.0177	0.0861	86,109.43					
04/24/21	0.4954	0.0226	0.1176	117,618.66					
04/25/21	0.4817	0.0270	0.1045	104,451.42					
04/26/21	0.1683	0.0316	0.0943	94,321.53					
04/27/21	0.5225	0.0260	0.1183	118,306.14					
04/28/21	0.5700	0.0228	0.1392	139,161.91	Week 5 Summary	Max	Min	Avg	Total
04/29/21	0.4586	0.0321	0.1235	123,539.60		0.4641	0.0173	0.1055	257,147.58
04/30/21	0.4641	0.0173	0.0997	99,661.42					
05/01/21	0.3556	0.0191	0.0776	33,946.54					

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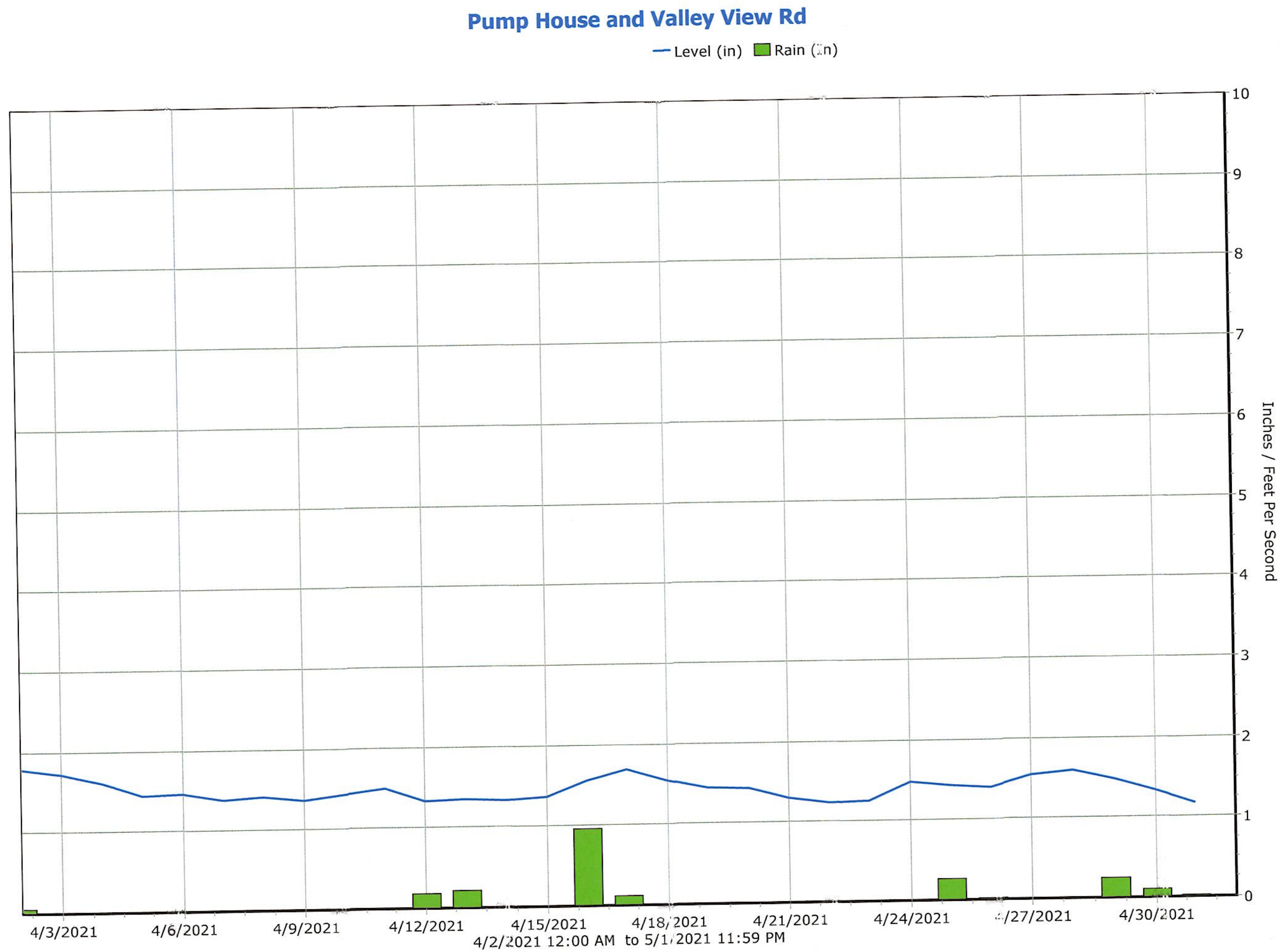
DAILY LEVEL DATA


Pump House and Valley View Rd
Level (in)
Rain (in)
Inches / Feet Per Second
10
9
8
7
6
5
4
3
2
1
0
4/3/2021
4/6/2021
4/9/2021
4/12/2021
4/15/2021
4/18/2021
4/21/2021
4/24/2021
4/27/2021
4/30/2021
4/2/2021 12:00 AM to 5/1/2021 11:59 PM

Pump House and Valley View Rd
Level Report

Units: Level / Totals:

Date	Max	Min	Avg	Total
04/01/21				
04/02/21	2.49	1.43	1.79	
04/03/21	3.92	1.21	1.72	
04/04/21	3.68	1.15	1.60	
04/05/21	2.60	1.16	1.44	
04/06/21	3.03	1.11	1.46	
04/07/21	2.39	1.12	1.38	
04/08/21	2.56	1.21	1.41	
04/09/21	2.48	1.13	1.36	
04/10/21	2.08	1.10	1.42	
04/11/21	2.30	1.10	1.49	
04/12/21	3.22	0.98	1.33	
04/13/21	3.28	0.84	1.35	
04/14/21	2.89	0.89	1.33	
04/15/21	2.94	1.01	1.36	
04/16/21	2.78	1.07	1.55	
04/17/21	3.72	1.26	1.69	
04/18/21	3.85	1.10	1.53	
04/19/21	2.08	1.18	1.44	
04/20/21	2.28	0.89	1.42	
04/21/21	3.18	0.78	1.29	
04/22/21	2.73	0.85	1.24	
04/23/21	3.13	0.72	1.25	
04/24/21	3.36	0.87	1.48	
04/25/21	3.29	0.97	1.43	
04/26/21	1.75	1.02	1.39	
04/27/21	3.50	1.03	1.54	
04/28/21	3.74	0.87	1.59	
04/29/21	3.17	0.92	1.47	
04/30/21	3.20	0.75	1.33	
05/01/21	2.63	0.78	1.17	

	Max	Min	Avg	Total
Week 1 Summary				
Week 2 Summary	3.28	0.84	1.39	
Week 3 Summary	3.85	0.78	1.47	
Week 4 Summary	3.74	0.72	1.42	
Week 5 Summary	3.20	0.75	1.36	

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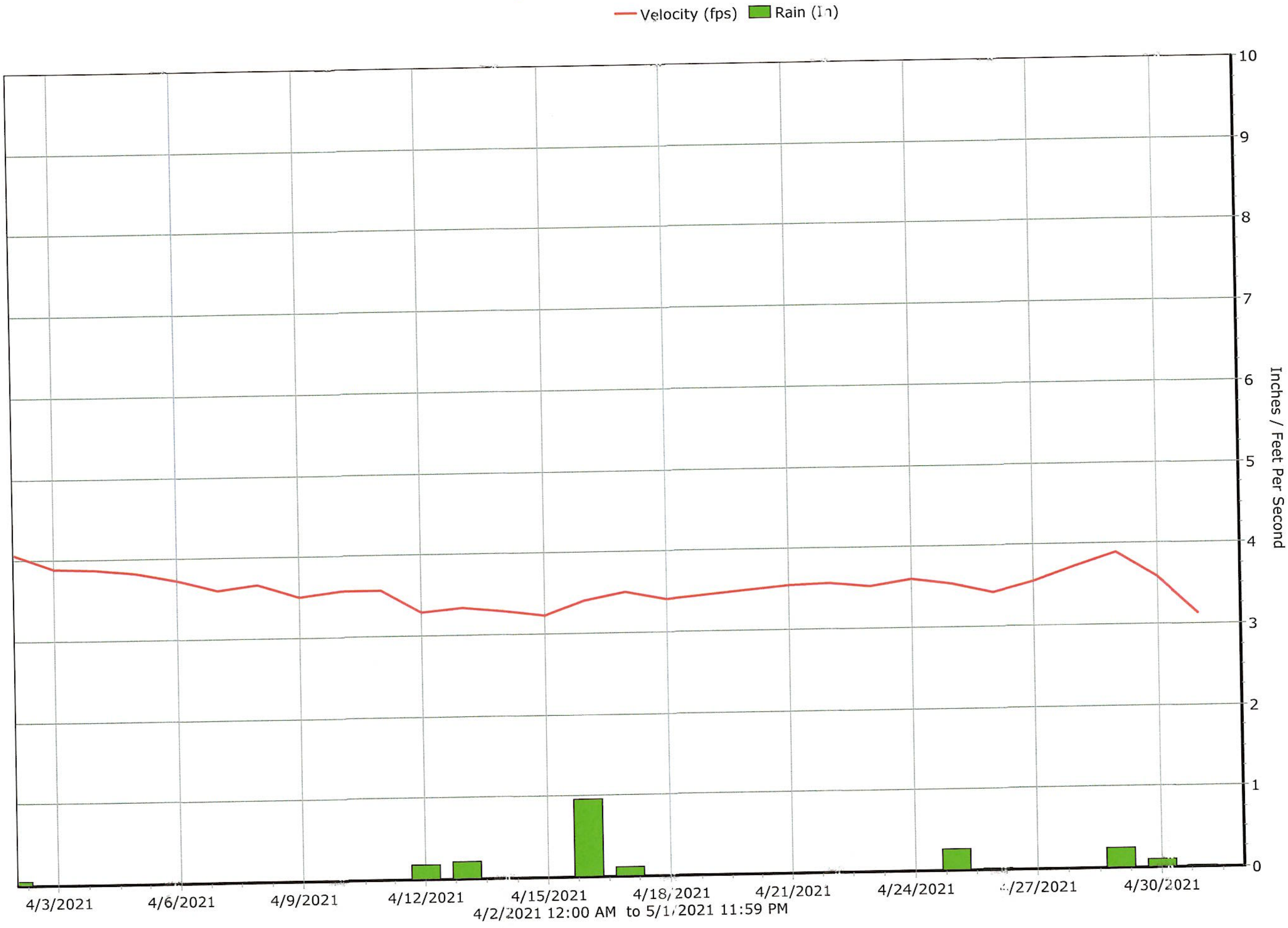
DAILY VELOCITY DATA

Pump House and Valley View Rd



Pump House and Valley View Rd
Velocity Report

Units: Velocity / Totals:

Date	Max	Min	Avg	Total		Max	Min	Avg	Total
04/01/21					Week 1 Summary				
04/02/21	5.50	3.27	4.07						
04/03/21	5.50	2.62	3.90						
04/04/21	5.50	3.00	3.87						
04/05/21	5.94	2.87	3.82						
04/06/21	5.69	2.70	3.72						
04/07/21	5.88	2.20	3.59		Week 2 Summary	5.90	1.98	3.46	
04/08/21	5.58	2.93	3.66						
04/09/21	5.77	2.18	3.50						
04/10/21	5.50	2.27	3.57						
04/11/21	5.81	2.47	3.57						
04/12/21	5.50	2.55	3.30						
04/13/21	5.90	2.13	3.34						
04/14/21	5.72	1.98	3.28		Week 3 Summary	5.73	1.65	3.43	
04/15/21	5.56	1.91	3.22						
04/16/21	5.73	1.91	3.40						
04/17/21	5.50	2.26	3.51						
04/18/21	5.50	2.19	3.41						
04/19/21	5.50	1.65	3.46						
04/20/21	5.52	1.68	3.50						
04/21/21	5.50	2.04	3.55		Week 4 Summary	5.90	1.54	3.56	
04/22/21	5.69	1.96	3.57						
04/23/21	5.84	1.76	3.52						
04/24/21	5.90	1.69	3.60						
04/25/21	5.50	1.67	3.53						
04/26/21	4.79	1.84	3.42						
04/27/21	5.50	1.54	3.54						
04/28/21	5.50	1.72	3.73		Week 5 Summary	5.93	1.62	3.63	
04/29/21	5.93	1.73	3.88						
04/30/21	5.53	1.62	3.59						
05/01/21	5.50	1.67	3.13						

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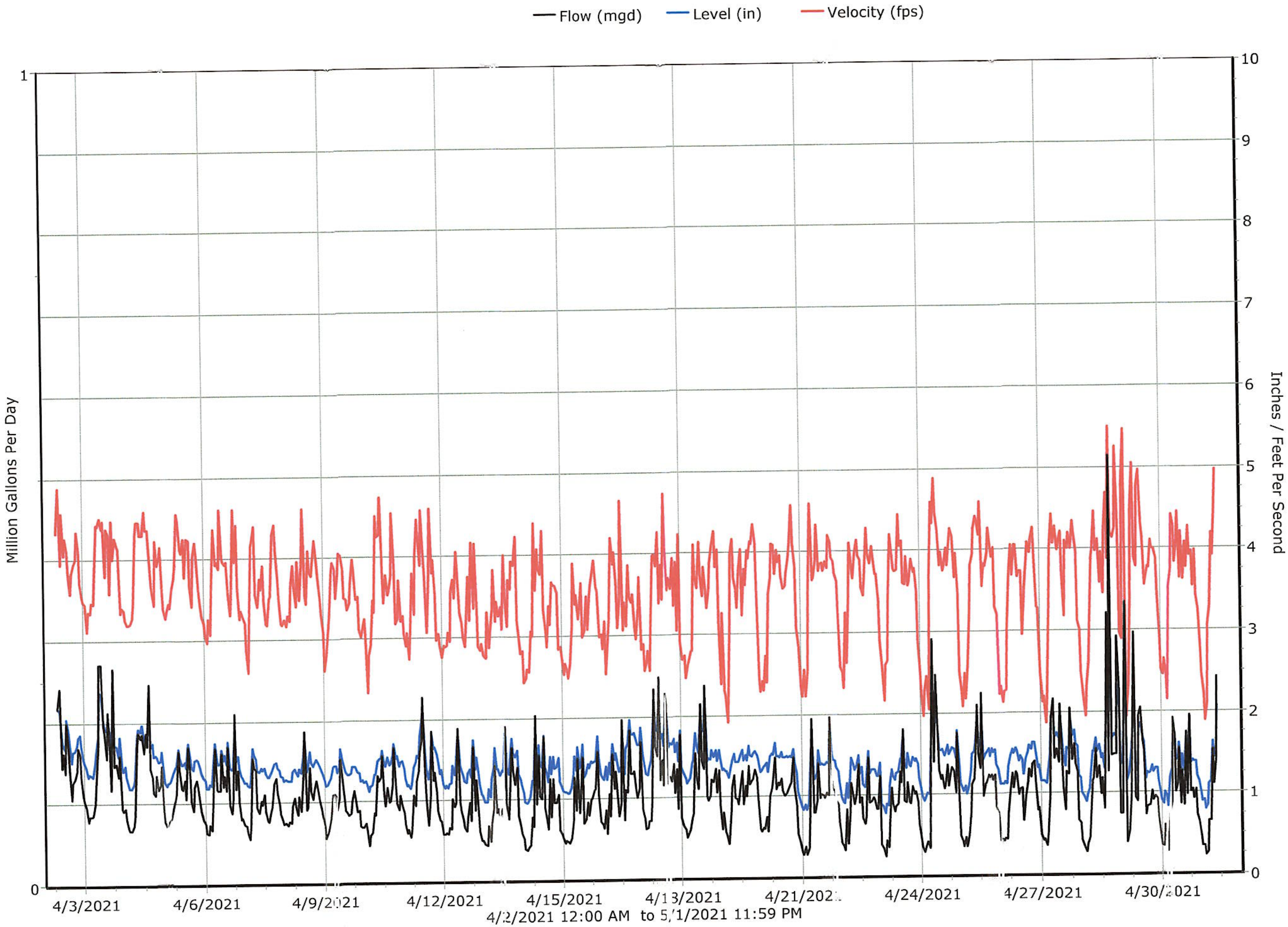
HOURLY DATA WITH SUMMARIES

Pump House and Valley View Rd



Pump House and Valley View Rd
Hourly Report With Summaries

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 03/28/21			Monday 03/29/21			Tuesday 03/30/21			Wednesday 03/31/21			Thursday 04/01/21			Friday 04/02/21			Saturday 04/03/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00																			0.1039	1.51	3.48
01:00																			0.0953	1.44	3.46
02:00																			0.0774	1.33	3.12
03:00																			0.0850	1.36	3.35
04:00																			0.0844	1.35	3.34
05:00																			0.0860	1.34	3.47
06:00																			0.1009	1.50	3.45
07:00																			0.1255	1.61	3.79
08:00																0.2175	2.18	4.33	0.1703	1.82	4.42
09:00																0.2412	2.15	4.87	0.2713	2.37	4.41
10:00																0.1444	1.75	3.94	0.2706	2.35	4.51
11:00																0.1627	1.72	4.57	0.1953	2.01	4.37
12:00																0.1377	1.67	4.05	0.1880	1.93	4.47
13:00																0.1991	2.04	4.26	0.1548	1.89	3.80
14:00																0.1670	1.88	4.12	0.2115	2.05	4.37
15:00																0.1404	1.73	3.86	0.1627	1.79	4.31
16:00																0.1055	1.51	3.58	0.1165	1.61	3.58
17:00																0.1265	1.63	3.82	0.2666	2.32	4.47
18:00																0.1319	1.65	3.94	0.1456	1.72	4.01
19:00																0.1414	1.71	4.01	0.1494	1.69	4.27
20:00																0.1688	1.82	4.34	0.1325	1.58	4.16
21:00																0.1612	1.85	4.10	0.1596	1.81	4.13
22:00																0.1328	1.72	3.72	0.0933	1.45	3.34
23:00																0.1100	1.56	3.55	0.0900	1.39	3.40

Summary Report

AM																					
Total:																0.2882	2.49	5.50	0.6045	3.92	5.50
Max:																0.1218	1.52	3.50	0.0563	1.21	2.62
Min:																0.1914	1.95	4.43	0.1388	1.67	3.76
Avg:																					
PM																					
Total:																0.2965	2.33	5.50	0.5930	3.86	5.50
Max:																0.0943	1.43	3.27	0.0800	1.34	3.20
Min:																0.1435	1.73	3.94	0.1559	1.77	4.03
Avg:																					
Daily																					
Total																0.2965	2.49	5.50	0.6045	3.92	5.50
Max:																0.0943	1.43	3.27	0.0563	1.21	2.62
Min:																0.1555	1.79	4.07	0.1473	1.72	3.90
Avg:																					
Weekly																					
Total:																					
Max:																					
Min:																					
Avg:																					

Pump House and Valley View Rd
Hourly Report With Summaries

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/04/21			Monday 04/05/21			Tuesday 04/06/2[illegible]			Wednesday 04/07/[illegible]1			Thursday 04/0[illegible]/21			Friday 04/[illegible]9/21			Saturday 0[illegible]/10/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00	0.0948	1.45	3.37	0.0786	1.2[illegible]	3.39	0.0746	1.37	3.21	0.0734	1.25	3.27	0.0725	1.26	3.17	0.0708	1.27	3.08	0.0686	1.23	3.10
01:00	0.0803	1.33	3.26	0.0715	1.22	3.27	0.0639	1.18	3.05	0.0718	1.24	3.20	0.0753	1.28	3.24	0.0553	1.20	2.60	0.0728	1.25	3.24
02:00	0.0702	1.23	3.20	0.0758	1.25	3.35	0.0612	1.18	2.96	0.0627	1.21	2.87	0.0717	1.26	3.16	0.0614	1.22	2.80	0.0650	1.21	3.02
03:00	0.0664	1.18	3.19	0.0796	1.2[illegible]	3.45	0.0724	1.34	3.25	0.0551	1.20	2.59	0.0760	1.27	3.30	0.0671	1.25	2.97	0.0447	1.12	2.34
04:00	0.0664	1.18	3.21	0.0806	1.29	3.41	0.0666	1.32	3.06	0.0731	1.26	3.20	0.0747	1.27	3.22	0.0789	1.30	3.29	0.0585	1.19	2.78
05:00	0.0722	1.23	3.28	0.0940	1.38	3.62	0.1006	1.43	3.62	0.1543	1.67	4.15	0.0953	1.37	3.65	0.1088	1.43	3.81	0.0624	1.20	2.92
06:00	0.0836	1.30	3.45	0.1048	1.45	3.77	0.1676	1.73	4.36	0.1423	1.59	4.22	0.1051	1.41	3.91	0.1095	1.45	3.94	0.0865	1.33	3.46
07:00	0.1726	1.80	4.31	0.1113	1.4[illegible]	3.90	0.1161	1.50	3.93	0.1396	1.54	4.39	0.0952	1.38	3.65	0.1087	1.45	3.86	0.0824	1.33	3.32
08:00	0.1869	1.91	4.46	0.1642	1.6[illegible]	4.56	0.1144	1.48	3.96	0.0933	1.39	3.55	0.0843	1.33	3.41	0.0900	1.36	3.50	0.1309	1.49	4.51
09:00	0.1803	1.88	4.45	0.1409	1.5[illegible]	4.48	0.1155	1.49	3.87	0.0882	1.37	3.41	0.1062	1.41	3.95	0.1030	1.42	3.79	0.1253	1.50	4.24
10:00	0.1853	1.96	4.30	0.1191	1.48	4.12	0.1605	1.65	4.60	0.1015	1.42	3.74	0.0895	1.37	3.48	0.1520	1.66	4.06	0.1295	1.53	4.28
11:00	0.1627	1.78	4.30	0.1159	1.4[illegible]	4.07	0.1207	1.52	4.01	0.0969	1.40	3.61	0.1310	1.56	3.92	0.1277	1.50	4.02	0.1555	1.62	4.74
12:00	0.1869	1.87	4.58	0.1274	1.5[illegible]	4.25	0.1332	1.59	3.95	0.1096	1.43	3.91	0.1860	1.78	4.60	0.1040	1.41	3.85	0.1085	1.46	3.81
13:00	0.1701	1.84	4.35	0.1051	1.44	3.77	0.1154	1.48	3.92	0.0898	1.37	3.47	0.0911	1.37	3.53	0.0887	1.35	3.50	0.0944	1.43	3.44
14:00	0.2467	2.22	4.35	0.1678	1.73	4.25	0.1685	1.75	3.96	0.0770	1.31	3.20	0.0947	1.43	3.44	0.0860	1.32	3.48	0.1161	1.55	3.78
15:00	0.1431	1.69	4.13	0.1316	1.55	4.24	0.0977	1.43	3.55	0.0767	1.31	3.18	0.1420	1.62	4.09	0.0830	1.33	3.36	0.0988	1.45	3.54
16:00	0.1321	1.73	3.67	0.1028	1.45	3.66	0.0882	1.40	3.30	0.0888	1.36	3.50	0.1135	1.49	3.82	0.0865	1.34	3.44	0.1007	1.46	3.58
17:00	0.1130	1.57	3.58	0.0912	1.4[illegible]	3.42	0.1035	1.45	3.63	0.0935	1.39	3.54	0.1045	1.44	3.77	0.0999	1.42	3.68	0.1199	1.56	3.77
18:00	0.1095	1.59	3.43	0.1206	1.52	4.02	0.2094	1.34	4.60	0.1237	1.48	4.30	0.1132	1.48	3.93	0.1133	1.43	3.97	0.1655	1.70	4.54
19:00	0.1338	1.57	4.24	0.1274	1.53	4.20	0.1167	1.51	3.95	0.1291	1.50	4.41	0.1260	1.52	4.21	0.1055	1.43	3.83	0.1155	1.52	3.85
20:00	0.1173	1.51	3.93	0.1202	1.52	4.02	0.1388	1.58	4.42	0.1124	1.43	4.09	0.1122	1.47	3.93	0.0882	1.35	3.48	0.0978	1.56	3.17
21:00	0.1232	1.53	4.04	0.1004	1.44	3.63	0.1006	1.43	3.64	0.0983	1.39	3.74	0.1029	1.44	3.74	0.0888	1.35	3.51	0.0889	1.43	3.24
22:00	0.1458	1.63	4.15	0.0912	1.38	3.49	0.0793	1.32	3.25	0.0861	1.32	3.50	0.0915	1.38	3.49	0.0702	1.25	3.11	0.1068	1.48	3.70
23:00	0.0948	1.39	3.60	0.0796	1.3[illegible]	3.28	0.0813	1.32	3.35	0.0777	1.32	3.20	0.0825	1.34	3.30	0.0684	1.26	3.01	0.0933	1.49	3.21

Summary Report

	Sun Q	Sun Lv	Sun V	Mon Q	Mon Lv	Mon V	Tue Q	Tue Lv	Tue V	Wed Q	Wed Lv	Wed V	Thu Q	Thu Lv	Thu V	Fri Q	Fri Lv	Fri V	Sat Q	Sat Lv	Sat V
AM																					
Total:																					
Max:	0.3099	2.38	5.50	0.2898	2.1[illegible]	5.94	0.3148	2.41	5.69	0.3118	1.39	5.88	0.2598	2.10	5.50	0.3284	2.48	5.50	0.1946	1.74	5.39
Min:	0.0615	1.15	3.00	0.0606	1.1[illegible]	2.92	0.0519	1.11	2.70	0.0422	1.12	2.20	0.0632	1.21	2.93	0.0426	1.13	2.18	0.0423	1.10	2.27
Avg:	0.1185	1.52	3.73	0.1030	1.4[illegible]	3.78	0.1028	1.41	3.66	0.0960	1.38	3.52	0.0897	1.35	3.51	0.0944	1.37	3.48	0.0902	1.33	3.50
PM																					
Total:																					
Max:	0.5582	3.68	5.50	0.3488	2.6[illegible]	5.50	0.4315	3.03	5.50	0.1692	1.63	5.13	0.3416	2.56	5.58	0.2008	1.69	5.77	0.2557	2.08	5.50
Min:	0.0816	1.31	3.06	0.0618	1.2[illegible]	2.87	0.0737	1.27	3.11	0.0679	1.26	2.95	0.0752	1.29	3.15	0.0582	1.17	2.84	0.0768	1.34	2.97
Avg:	0.1430	1.68	4.00	0.1138	1.4[illegible]	3.85	0.1194	1.52	3.79	0.0969	1.38	3.67	0.1133	1.48	3.82	0.0902	1.35	3.52	0.1088	1.51	3.64
Daily																					
Total																					
Max:	0.5582	3.68	5.50	0.3488	2.1[illegible]	5.94	0.4315	3.03	5.69	0.3118	1.39	5.88	0.2598	2.10	5.58	0.3284	2.48	5.77	0.2557	2.08	5.50
Min:	0.0615	1.15	3.00	0.0606	1.1[illegible]	2.87	0.0519	1.11	2.70	0.0422	1.12	2.20	0.0632	1.21	2.93	0.0426	1.13	2.18	0.0423	1.10	2.27
Avg:	0.1308	1.60	3.87	0.1084	1.4[illegible]	3.82	0.1111	1.46	3.72	0.0964	1.38	3.59	0.1015	1.41	3.66	0.0923	1.36	3.50	0.0995	1.42	3.57

Weekly

	Q	Lv	V
Total:			
Max:	0.5582	3.68	5.94
Min:	0.0422	1.10	2.18
Avg:	0.1057	1.44	3.68

Pump House and Valley View Rd
Hourly Report With Summaries

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/11/21			Monday 04/12/21			Tuesday 04/13/21			Wednesday 04/14/21			Thursday 04/15/21			Friday 04/16/21			Saturday 04/17/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00	0.0867	1.39	3.28	0.0580	1.20	2.75	0.0508	1.05	2.92	0.0517	1.08	2.82	0.0514	1.10	2.74	0.0677	1.25	3.01	0.0854	1.54	2.81
01:00	0.0705	1.28	3.04	0.0583	1.15	2.91	0.0449	0.98	2.77	0.0385	0.97	2.43	0.0461	1.08	2.53	0.0631	1.24	2.83	0.0747	1.37	2.89
02:00	0.0606	1.19	2.90	0.0599	1.18	2.89	0.0434	0.97	2.73	0.0377	0.95	2.47	0.0489	1.08	2.66	0.0865	1.40	3.17	0.0609	1.30	2.56
03:00	0.0654	1.20	3.07	0.0580	1.15	2.90	0.0685	1.13	3.30	0.0403	0.96	2.59	0.0462	1.07	2.57	0.0567	1.24	2.52	0.0626	1.28	2.67
04:00	0.0547	1.15	2.74	0.0662	1.20	3.06	0.0489	1.03	2.87	0.0442	1.04	2.56	0.0448	1.07	2.48	0.1058	1.44	2.98	0.0711	1.36	2.80
05:00	0.0649	1.20	3.03	0.0650	1.22	2.96	0.0712	1.26	3.06	0.0782	1.23	3.07	0.0526	1.13	2.65	0.0786	1.29	3.20	0.0716	1.45	2.56
06:00	0.1067	1.42	3.79	0.1026	1.43	3.57	0.0887	1.39	3.34	0.0660	1.23	2.99	0.0736	1.29	3.12	0.1536	1.67	4.20	0.0991	1.60	3.09
07:00	0.0943	1.47	3.30	0.0922	1.32	3.71	0.1427	1.63	3.83	0.2030	1.88	4.39	0.1271	1.52	3.89	0.1110	1.47	3.87	0.2334	2.19	3.97
08:00	0.1252	1.56	4.00	0.0965	1.42	3.48	0.0840	1.39	3.20	0.0940	1.38	3.57	0.0860	1.35	3.38	0.1335	1.56	4.02	0.1617	1.86	3.98
09:00	0.1361	1.53	4.46	0.1882	1.84	4.05	0.0889	1.37	3.43	0.1537	1.67	4.07	0.1496	1.64	3.50	0.0970	1.40	3.61	0.1502	1.81	3.85
10:00	0.1588	1.79	4.24	0.0979	1.43	3.56	0.0795	1.30	3.26	0.1044	1.42	3.83	0.0827	1.37	3.21	0.0775	1.33	3.09	0.2478	2.25	4.26
11:00	0.1726	1.97	3.89	0.0876	1.38	3.30	0.0887	1.36	3.38	0.1001	1.40	3.75	0.1006	1.40	3.32	0.0932	1.40	3.46	0.1211	1.72	3.38
12:00	0.2262	2.15	4.57	0.0759	1.30	3.18	0.0785	1.35	3.10	0.1769	1.79	4.29	0.1512	1.67	3.65	0.1957	1.84	4.65	0.1464	1.78	3.86
13:00	0.1329	1.58	3.98	0.0665	1.23	3.02	0.1900	1.47	4.00	0.0884	1.39	3.32	0.0704	1.26	2.98	0.0731	1.30	3.06	0.1156	1.64	3.43
14:00	0.1029	1.40	3.78	0.0621	1.2[illegible]	2.89	0.0949	1.39	3.51	0.0750	1.31	3.08	0.0747	1.31	3.06	0.1100	1.60	3.40	0.2293	2.08	4.72
15:00	0.0698	1.26	3.06	0.0780	1.33	3.17	0.0764	1.31	3.13	0.0628	1.22	2.87	0.0961	1.43	3.49	0.1064	1.67	3.11	0.2163	2.09	4.06
16:00	0.1054	1.43	3.77	0.0979	1.38	3.75	0.1033	1.44	3.70	0.1247	1.52	3.37	0.0791	1.37	3.07	0.1826	1.96	3.86	0.1163	1.62	3.55
17:00	0.1844	1.83	4.58	0.0742	1.27	3.20	0.1639	1.75	3.59	0.0784	1.32	3.15	0.0994	1.46	3.50	0.1304	1.79	3.47	0.1266	1.67	3.69
18:00	0.1256	1.63	3.79	0.1647	1.73	4.16	0.1355	1.37	3.92	0.1250	1.52	3.66	0.1012	1.44	3.63	0.1299	1.78	3.41	0.1194	1.65	3.56
19:00	0.1346	1.65	3.95	0.0877	1.38	3.35	0.1186	1.33	3.88	0.0951	1.37	3.63	0.1095	1.47	3.83	0.1330	1.80	3.50	0.1413	1.71	3.94
20:00	0.1123	1.57	3.54	0.1245	1.52	4.16	0.1394	1.60	4.24	0.0959	1.39	3.62	0.1117	1.46	3.93	0.1092	1.71	3.10	0.1053	1.56	3.36
21:00	0.0879	1.51	2.96	0.0842	1.32	3.38	0.0794	1.32	3.19	0.1047	1.51	3.53	0.1576	1.77	3.60	0.1000	1.65	2.95	0.1346	1.67	3.90
22:00	0.0756	1.34	3.05	0.0620	1.2[illegible]	2.89	0.0671	1.25	2.93	0.0611	1.21	2.84	0.1041	1.50	3.54	0.1123	1.66	3.31	0.0861	1.45	3.05
23:00	0.0750	1.37	2.90	0.0505	1.06	2.83	0.0580	1.18	2.79	0.0574	1.15	2.87	0.0716	1.30	2.99	0.1688	1.87	3.70	0.1767	1.81	4.23

Summary Report

	Sunday Q	Sunday Lv	Sunday V	Monday Q	Monday Lv	Monday V	Tuesday Q	Tuesday Lv	Tuesday V	Wednesday Q	Wednesday Lv	Wednesday V	Thursday Q	Thursday Lv	Thursday V	Friday Q	Friday Lv	Friday V	Saturday Q	Saturday Lv	Saturday V
AM																					
Total:																					
Max:	0.2618	2.30	4.97	0.4670	3.2[illegible]	5.50	0.3223	2.[illegible]5	5.50	0.4045	[illegible].89	5.72	0.4139	2.94	5.56	0.2949	2.30	5.65	0.5647	3.72	5.50
Min:	0.0460	1.10	2.47	0.0438	0.9[illegible]	2.55	0.0271	0.[illegible]4	2.13	0.0272	[illegible].89	1.98	0.0325	1.01	1.91	0.0385	1.07	1.91	0.0567	1.26	2.26
Avg:	0.0997	1.43	3.48	0.0859	1.3[illegible]	3.26	0.0750	1.[illegible]4	3.17	0.0843	1.27	3.21	0.0758	1.26	3.00	0.0937	1.39	3.33	0.1200	1.65	3.24
PM																					
Total:																					
Max:	0.3037	2.27	5.81	0.3454	2.5[illegible]	5.50	0.4788	3.[illegible]8	5.90	0.3643	[illegible].68	5.50	0.3910	2.82	5.50	0.3889	2.78	5.73	0.4976	3.38	5.50
Min:	0.0541	1.14	2.76	0.0438	1.0[illegible]	2.55	0.0467	1.[illegible]2	2.40	0.0461	1.08	2.45	0.0413	1.05	2.38	0.0624	1.24	2.74	0.0692	1.28	2.71
Avg:	0.1194	1.56	3.66	0.0857	1.3[illegible]	3.33	0.1087	1.[illegible]6	3.50	0.0955	1.39	3.35	0.1022	1.45	3.44	0.1293	1.72	3.46	0.1428	1.73	3.78
Daily																					
Total																					
Max:	0.3037	2.30	5.81	0.4670	3.2[illegible]	5.50	0.4788	3.[illegible]8	5.90	0.4045	[illegible].89	5.72	0.4139	2.94	5.56	0.3889	2.78	5.73	0.5647	3.72	5.50
Min:	0.0460	1.10	2.47	0.0438	0.9[illegible]	2.55	0.0271	0.[illegible]4	2.13	0.0272	[illegible].89	1.98	0.0325	1.01	1.91	0.0385	1.07	1.91	0.0567	1.26	2.26
Avg:	0.1095	1.49	3.57	0.0858	1.3[illegible]	3.30	0.0919	1.[illegible]5	3.34	0.0899	1.33	3.28	0.0890	1.36	3.22	0.1115	1.55	3.40	0.1314	1.69	3.51

Weekly

	Q	Lv	V
Total:			
Max:	0.5647	3.72	5.90
Min:	0.0271	0.84	1.91
Avg:	0.1013	1.44	3.37

Pump House and Valley View Rd
Hourly Report With Summaries

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Saturday		
	04/18/21			04/19/21			04/20/21			04/21/21			04/22/21			04/23/21			04/24/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00	0.0744	1.36	2.91	0.0601	1.34	2.39	0.0562	1.32	2.29	0.0308	0.87	2.33	0.0417	0.98	2.57	0.0397	0.89	2.88	0.0457	1.07	2.52
01:00	0.0644	1.30	2.69	0.0808	1.34	3.26	0.0616	1.36	2.42	0.0276	0.83	2.22	0.0369	0.93	2.51	0.0337	0.85	2.55	0.0363	1.00	2.24
02:00	0.0603	1.23	2.74	0.0562	1.32	2.31	0.0598	1.38	2.30	0.0365	0.90	2.55	0.0329	0.91	2.32	0.0243	0.78	2.16	0.0287	0.92	1.97
03:00	0.0498	1.16	2.46	0.0542	1.31	2.23	0.0743	1.40	2.72	0.0274	0.83	2.22	0.0825	1.15	3.25	0.0431	0.89	2.59	0.0348	0.95	2.27
04:00	0.0575	1.22	2.62	0.0421	1.23	1.91	0.0570	1.30	2.39	0.0357	0.90	2.53	0.0413	0.98	2.62	0.0359	0.88	2.64	0.0415	1.01	2.44
05:00	0.0593	1.23	2.67	0.0812	1.37	3.09	0.1013	1.49	3.48	0.0723	1.16	3.52	0.0773	1.22	3.41	0.0667	1.11	3.39	0.0334	1.00	2.04
06:00	0.0747	1.40	2.79	0.1114	1.45	3.97	0.1108	1.53	3.67	0.1940	1.79	4.58	0.1146	1.45	4.10	0.1079	1.32	4.19	0.1261	1.47	3.69
07:00	0.0800	1.47	2.80	0.1258	1.52	4.17	0.1203	1.50	4.10	0.0791	1.21	3.65	0.0975	1.37	3.78	0.0890	1.23	4.05	0.2900	2.36	4.59
08:00	0.1533	1.78	4.10	0.0993	1.42	3.68	0.1482	1.65	4.08	0.0797	1.22	3.68	0.0889	1.32	3.66	0.0793	1.19	3.78	0.1396	1.60	4.33
09:00	0.1259	1.66	3.71	0.0968	1.43	3.55	0.1086	1.49	3.73	0.0933	1.29	3.89	0.1026	1.37	3.97	0.0862	1.26	3.75	0.2467	2.12	4.88
10:00	0.1100	1.55	3.57	0.0907	1.42	3.33	0.1171	1.49	4.02	0.1391	1.56	4.33	0.1371	1.49	4.13	0.0893	1.28	3.76	0.2091	1.96	4.45
11:00	0.2143	2.05	4.13	0.1117	1.51	3.78	0.1134	1.48	3.88	0.0975	1.38	3.76	0.0911	1.27	3.93	0.1287	1.44	4.45	0.1300	1.54	4.25
12:00	0.1445	1.81	3.73	0.1316	1.57	4.04	0.1212	1.54	3.96	0.1015	1.39	3.84	0.0969	1.34	3.89	0.1147	1.44	4.06	0.1176	1.54	3.81
13:00	0.1351	1.82	3.47	0.0910	1.44	3.22	0.1068	1.47	3.69	0.1008	1.37	3.86	0.0705	1.14	3.55	0.1798	1.78	4.11	0.1229	1.56	3.97
14:00	0.2365	2.27	3.82	0.1138	1.51	3.80	0.1009	1.47	3.55	0.0975	1.38	3.77	0.0653	1.10	3.45	0.0929	1.37	3.61	0.1069	1.47	3.74
15:00	0.0997	1.45	3.54	0.1001	1.44	3.60	0.1041	1.49	3.58	0.1036	1.41	3.87	0.0734	1.15	3.66	0.0900	1.33	3.59	0.1117	1.50	3.80
16:00	0.0963	1.48	3.32	0.1385	1.61	4.02	0.1068	1.47	3.74	0.1009	1.39	3.80	0.1464	1.54	4.28	0.1158	1.50	3.93	0.1355	1.60	4.01
17:00	0.1023	1.46	3.55	0.1152	1.50	3.93	0.1135	1.48	3.92	0.1960	1.90	4.20	0.0905	1.26	3.96	0.0906	1.36	3.56	0.1107	1.49	3.82
18:00	0.1221	1.58	3.88	0.1204	1.49	4.14	0.1174	1.48	4.10	0.1248	1.51	4.12	0.0929	1.32	3.83	0.0898	1.34	3.61	0.1260	1.55	4.11
19:00	0.1184	1.50	4.08	0.1221	1.52	4.10	0.1482	1.57	4.57	0.1082	1.44	3.93	0.0978	1.31	4.06	0.1106	1.46	3.90	0.1330	1.57	4.26
20:00	0.1351	1.58	4.27	0.1331	1.55	4.34	0.1103	1.41	4.11	0.1054	1.42	3.88	0.0944	1.31	3.92	0.1001	1.41	3.73	0.1286	1.55	4.16
21:00	0.1059	1.44	3.83	0.1226	1.51	4.12	0.0890	1.27	3.82	0.0935	1.34	3.73	0.0831	1.23	3.72	0.1041	1.44	3.78	0.1017	1.44	3.67
22:00	0.1325	1.57	4.03	0.0990	1.45	3.53	0.0541	1.05	3.06	0.0893	1.30	3.63	0.0823	1.23	3.72	0.0909	1.37	3.50	0.1752	1.78	3.96
23:00	0.0895	1.47	3.13	0.0595	1.30	2.47	0.0432	0.95	2.84	0.0661	1.16	3.24	0.1237	1.39	3.38	0.0633	1.20	2.88	0.0913	1.37	3.48

Summary Report

	Sun Q	Sun Lv	Sun V	Mon Q	Mon Lv	Mon V	Tue Q	Tue Lv	Tue V	Wed Q	Wed Lv	Wed V	Thu Q	Thu Lv	Thu V	Fri Q	Fri Lv	Fri V	Sat Q	Sat Lv	Sat V
AM																					
Total:																					
Max:	0.4819	3.30	5.50	0.1470	1.61	5.50	0.2914	2.28	5.52	0.3889	1.81	5.50	0.3210	2.44	5.69	0.2198	1.79	5.84	0.4954	3.36	5.90
Min:	0.0413	1.10	2.19	0.0358	1.13	1.65	0.0361	1.21	1.68	0.0237	0.78	2.04	0.0253	0.85	1.96	0.0177	0.72	1.76	0.0226	0.87	1.69
Avg:	0.0937	1.45	3.10	0.0842	1.33	3.14	0.0940	1.45	3.26	0.0761	1.16	3.27	0.0787	1.20	3.35	0.0687	1.09	3.35	0.1135	1.42	3.31
PM																					
Total:																					
Max:	0.5908	3.85	5.50	0.2564	2.03	5.50	0.2452	2.02	5.50	0.4603	2.18	5.50	0.3739	2.73	5.50	0.4491	3.13	5.50	0.4390	3.07	5.50
Min:	0.0645	1.33	2.60	0.0524	1.23	2.27	0.0344	0.89	2.52	0.0522	1.08	2.86	0.0367	0.92	2.54	0.0371	1.05	2.12	0.0635	1.21	2.92
Avg:	0.1265	1.62	3.72	0.1122	1.43	3.78	0.1013	1.39	3.74	0.1073	1.42	3.82	0.0931	1.28	3.78	0.1036	1.42	3.69	0.1217	1.53	3.90
Daily																					
Total																					
Max:	0.5908	3.85	5.50	0.2564	1.61	5.50	0.2914	2.28	5.52	0.4603	2.18	5.50	0.3210	2.44	5.69	0.4491	3.13	5.84	0.4954	3.36	5.90
Min:	0.0413	1.10	2.19	0.0358	1.13	1.65	0.0344	0.89	1.68	0.0237	0.78	2.04	0.0253	0.85	1.96	0.0177	0.72	1.76	0.0226	0.87	1.69
Avg:	0.1101	1.53	3.41	0.0982	1.44	3.46	0.0977	1.42	3.50	0.0917	1.29	3.55	0.0859	1.24	3.57	0.0861	1.25	3.52	0.1176	1.48	3.60

Weekly

	Q	Lv	V
Total:			
Max:	0.5908	3.85	5.90
Min:	0.0177	0.72	1.65
Avg:	0.0982	1.38	3.52

Pump House and Valley View Rd
Hourly Report With Summaries

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/25/21			Monday 04/26/21			Tuesday 04/27/21			Wednesday 04/28/21			Thursday 04/29/21			Friday 04/30/21			Saturday 05/01/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00	0.0487	1.13	2.50	0.0425	1.1[illegible]	2.23	0.0488	1.14	2.46	0.0415	1.01	2.49	0.0745	1.37	2.89	0.0357	0.91	2.51	0.0454	0.99	2.77
01:00	0.0414	1.07	2.27	0.0449	1.13	2.31	0.0422	1.15	2.12	0.0333	0.95	2.18	0.1885	1.83	4.82	0.0333	0.87	2.45	0.0346	0.90	2.44
02:00	0.0360	1.04	2.08	0.0413	1.12	2.13	0.0435	1.15	2.18	0.0271	0.90	1.94	0.3335	2.51	5.46	0.0596	1.00	2.64	0.0344	0.90	2.21
03:00	0.0467	1.10	2.49	0.0452	1.15	2.26	0.0364	1.12	1.86	0.0373	0.98	2.31	0.0387	1.15	1.93	0.0496	0.96	2.45	0.0221	0.80	1.88
04:00	0.0355	1.00	2.16	0.0436	1.1[illegible]	2.27	0.0499	1.25	2.22	0.0461	1.05	2.61	0.0529	1.24	2.34	0.0272	0.83	2.14	0.0263	0.84	2.08
05:00	0.0487	1.10	2.58	0.0760	1.33	3.04	0.0954	1.48	3.26	0.0694	1.23	3.10	0.0977	1.48	3.35	0.0727	1.18	3.53	0.0642	1.11	3.07
06:00	0.0764	1.28	3.25	0.1034	1.46	3.67	0.1908	1.95	4.03	0.1151	1.50	3.89	0.1648	1.71	4.48	0.0869	1.28	3.73	0.0651	1.14	3.28
07:00	0.1126	1.49	3.81	0.1247	1.55	4.05	0.2154	2.02	4.43	0.1188	1.51	4.00	0.2961	2.35	5.03	0.1917	1.82	4.41	0.1523	1.63	4.19
08:00	0.1188	1.53	3.94	0.1064	1.48	3.68	0.1424	1.69	4.06	0.1532	1.66	4.46	0.0944	1.31	3.89	0.1709	1.72	4.28	0.1097	1.43	3.91
09:00	0.1391	1.61	4.27	0.1257	1.55	4.05	0.1539	1.73	4.28	0.1187	1.51	3.98	0.0886	1.26	3.78	0.1004	1.39	3.82	0.1402	1.56	4.53
10:00	0.2097	1.97	4.40	0.1228	1.53	4.05	0.1373	1.67	3.98	0.1322	1.59	4.12	0.1946	1.78	4.76	0.1106	1.41	4.08	0.2413	2.06	4.96
11:00	0.1483	1.64	4.36	0.0984	1.40	3.66	0.2098	1.99	4.09	0.0986	1.43	3.58	0.2040	1.84	4.96	0.1536	1.61	4.44			
12:00	0.1313	1.57	4.18	0.1055	1.46	3.73	0.1392	1.63	4.22	0.1190	1.48	3.96	0.1637	1.67	4.30	0.0854	1.29	3.63			
13:00	0.2235	2.02	4.59	0.1062	1.4[illegible]	3.73	0.1070	1.48	3.70	0.0816	1.29	3.45	0.1521	1.62	4.15	0.1260	1.46	4.19			
14:00	0.0966	1.42	3.55	0.0664	1.22	2.95	0.0792	1.33	3.18	0.1498	1.66	4.23	0.0724	1.16	3.55	0.0839	1.27	3.61			
15:00	0.1116	1.49	3.82	0.0961	1.42	3.50	0.1272	1.56	4.10	0.3213	2.53	4.68	0.0828	1.26	3.64	0.1742	1.74	4.07			
16:00	0.1129	1.51	3.79	0.1133	1.50	3.85	0.1236	1.54	4.00	0.1271	1.62	3.87	0.0849	1.24	3.78	0.0975	1.38	3.75			
17:00	0.1230	1.56	3.96	0.1293	1.59	4.08	0.2039	1.96	4.20	0.5133	3.45	5.50	0.0843	1.24	3.76	0.1945	1.87	4.27			
18:00	0.1205	1.46	4.27	0.1201	1.54	3.96	0.1413	1.70	4.01	0.1452	1.67	4.20	0.1020	1.33	4.09	0.1005	1.36	3.91			
19:00	0.1239	1.55	4.02	0.1354	1.63	4.11	0.1610	1.77	4.34	0.1467	1.71	4.13	0.0915	1.25	4.00	0.1043	1.39	3.96			
20:00	0.1162	1.51	3.91	0.1395	1.6[illegible]	4.27	0.1359	1.61	4.18	0.1481	1.69	4.25	0.0949	1.30	3.98	0.0921	1.38	3.53			
21:00	0.1230	1.54	4.01	0.1141	1.50	3.87	0.1258	1.58	3.96	0.2925	2.32	5.25	0.0924	1.29	3.87	0.1045	1.38	3.97			
22:00	0.0849	1.36	3.30	0.0801	1.3[illegible]	3.29	0.0668	1.21	3.11	0.2295	2.05	4.26	0.0694	1.15	3.48	0.0731	1.20	3.42			
23:00	0.0778	1.30	3.20	0.0830	1.35	3.28	0.0627	1.18	3.02	0.0742	1.34	2.96	0.0463	0.99	2.88	0.0636	1.13	3.24			

Summary Report

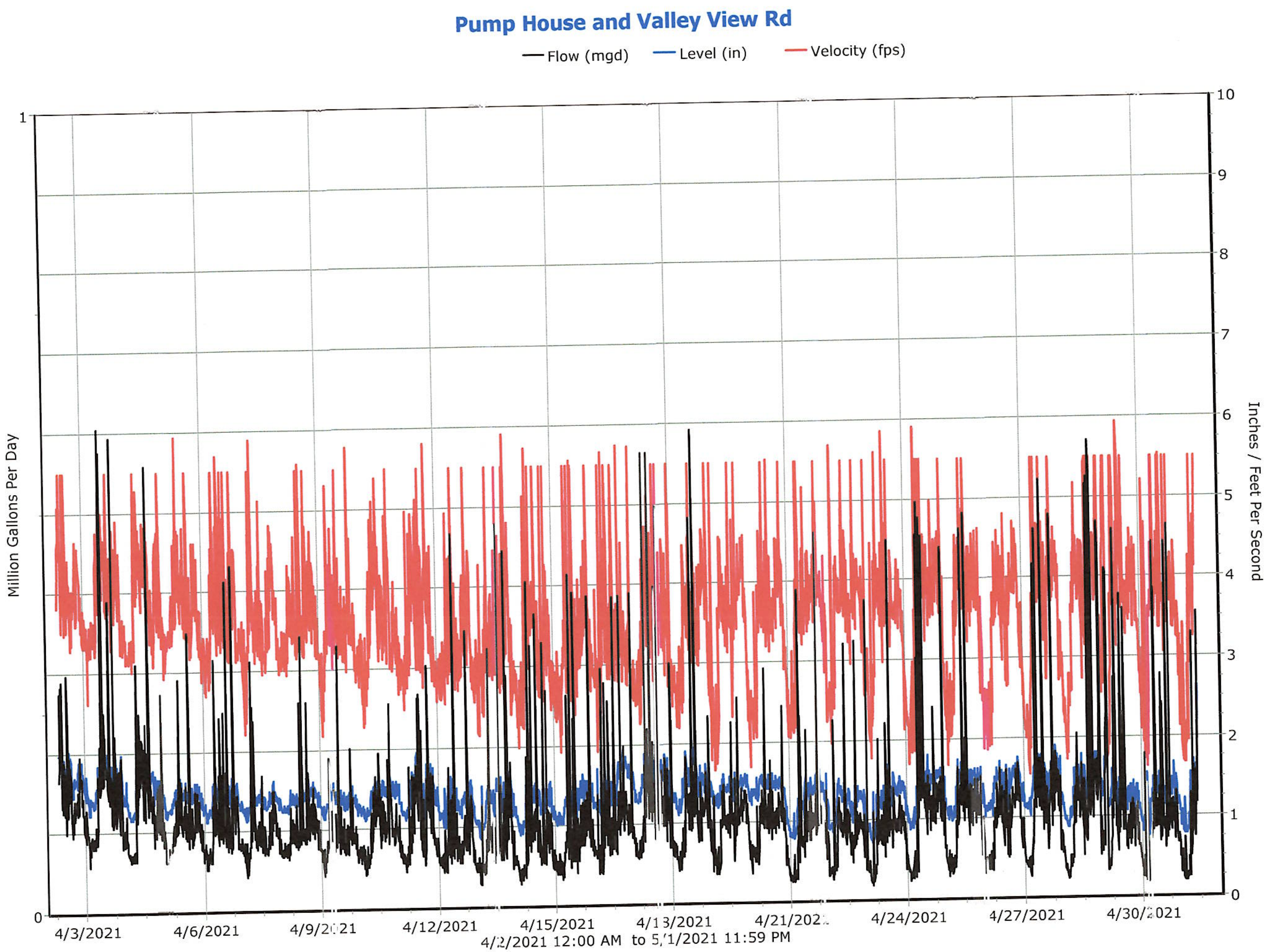
	Sunday Q	Sunday Lv	Sunday V	Monday Q	Monday Lv	Monday V	Tuesday Q	Tuesday Lv	Tuesday V	Wednesday Q	Wednesday Lv	Wednesday V	Thursday Q	Thursday Lv	Thursday V	Friday Q	Friday Lv	Friday V	Saturday Q	Saturday Lv	Saturday V
AM																					
Total:																					
Max:	0.4623	3.19	5.50	0.1615	1.7[illegible]	4.59	0.5225	3.50	5.50	0.2048	1.85	5.17	0.4586	3.17	5.93	0.4429	3.09	5.50	0.3556	2.63	5.50
Min:	0.0270	0.97	1.67	0.0316	1.0[illegible]	1.84	0.0260	1.03	1.54	0.0228	1.87	1.72	0.0321	1.08	1.73	0.0173	0.75	1.62	0.0191	0.78	1.67
Avg:	0.0885	1.33	3.18	0.0812	1.3[illegible]	3.12	0.1138	1.53	3.25	0.0826	1.28	3.22	0.1524	1.65	3.97	0.0910	1.25	3.38	0.0776	1.17	3.13
PM																					
Total:																					
Max:	0.4817	3.29	5.50	0.1683	1.7[illegible]	4.79	0.4786	3.[illegible]8	5.50	0.5700	[illegible].74	5.50	0.3604	2.66	5.50	0.4641	3.20	5.53	0.0000	0.00	0.00
Min:	0.0486	1.14	2.47	0.0497	1.1[illegible]	2.65	0.0549	1.[illegible]4	2.71	0.0511	1.10	2.54	0.0362	0.92	2.52	0.0482	1.06	2.74	0.0000	0.00	0.00
Avg:	0.1204	1.52	3.88	0.1074	1.4[illegible]	3.72	0.1228	1.55	3.83	0.1957	1.90	4.23	0.0947	1.29	3.79	0.1083	1.40	3.80	0.0000	0.00	0.00
Daily																					
Total																					
Max:	0.4817	3.29	5.50	0.1683	1.7[illegible]	4.79	0.5225	3.50	5.50	0.5700	[illegible].74	5.50	0.4586	3.17	5.93	0.4641	3.20	5.53	0.3556	2.63	5.50
Min:	0.0270	0.97	1.67	0.0316	1.0[illegible]	1.84	0.0260	1.03	1.54	0.0228	[illegible].87	1.72	0.0321	0.92	1.73	0.0173	0.75	1.62	0.0191	0.78	1.67
Avg:	0.1045	1.43	3.53	0.0943	1.3[illegible]	3.42	0.1183	1.54	3.54	0.1392	1.59	3.73	0.1235	1.47	3.88	0.0997	1.33	3.59	0.0776	1.17	3.13

Weekly	Q	Lv	V
Total:			
Max:	0.5700	3.74	5.93
Min:	0.0173	0.75	1.54
Avg:	0.1108	1.44	3.58

Technologies, LLC

We are flow !

15 MINUTE RAW DATA



Pump House and Valley View Rd
Flow (mgd)
Level (in)
Velocity (fps)
Million Gallons Per Day
Inches / Feet Per Second
1
0
10
9
8
7
6
5
4
3
2
1
0
4/3/2021
4/6/2021
4/12/2021
4/15/2021
4/24/2021
4/27/2021

Pump House and Valley View Rd
15 Minute AM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 03/28/21			Monday 03/29/21			Tuesday 03/30/21			Wednesday 03/31/21			Thursday 04/01/21			Friday 04/02/21			Saturday 04/03/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00																			0.1011	1.50	3.46
00:15																			0.0879	1.40	3.31
00:30																			0.1284	1.70	3.67
00:45																			0.0981	1.46	3.49
01:00																			0.0935	1.43	3.41
01:15																			0.0955	1.49	3.30
01:30																			0.0979	1.44	3.55
01:45																			0.0943	1.40	3.56
02:00																			0.0757	1.33	3.08
02:15																			0.0563	1.21	2.62
02:30																			0.0895	1.40	3.36
02:45																			0.0880	1.37	3.42
03:00																			0.0712	1.22	3.28
03:15																			0.0872	1.43	3.18
03:30																			0.0943	1.40	3.56
03:45																			0.0871	1.38	3.37
04:00																			0.0794	1.34	3.19
04:15																			0.0876	1.38	3.37
04:30																			0.0889	1.39	3.39
04:45																			0.0816	1.30	3.43
05:00																			0.0925	1.36	3.64
05:15																			0.0883	1.35	3.51
05:30																			0.0833	1.33	3.40
05:45																			0.0800	1.31	3.33
06:00																			0.0985	1.48	3.44
06:15																			0.1077	1.52	3.61
06:30																			0.0925	1.44	3.34
06:45																			0.1048	1.55	3.40
07:00																			0.0847	1.40	3.20
07:15																			0.1065	1.54	3.51
07:30																			0.1412	1.68	4.08
07:45																			0.1696	1.83	4.35
08:00																0.1632	1.96	3.81	0.1635	1.74	4.51
08:15																0.1823	1.96	4.25	0.1569	1.63	4.75
08:30																0.2738	2.49	4.57	0.1532	1.89	3.75
08:45																0.2506	2.30	4.67	0.2076	2.01	4.69
09:00																0.2823	2.36	5.07	0.1452	1.82	3.75
09:15																0.2629	2.44	4.51	0.1564	1.84	4.00
09:30																0.1314	1.52	4.41	0.1792	1.89	4.39
09:45																0.2882	2.26	5.50	0.6045	3.92	5.50
10:00																0.1243	1.72	3.50	0.1758	1.92	4.22
10:15																0.1313	1.66	3.89	0.1741	1.90	4.24
10:30																0.1593	1.85	4.03	0.5747	3.77	5.50
10:45																0.1627	1.78	4.35	0.1579	1.83	4.07
11:00																0.1876	1.91	4.53	0.1599	1.89	3.92
11:15																0.1218	1.62	3.72	0.1849	1.97	4.28
11:30																0.1742	1.58	5.50	0.2491	2.19	4.99
11:45																0.1671	1.76	4.55	0.1874	1.98	4.32

Pump House and Valley View Rd
15 Minute PM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 03/28/21			Monday 03/29/21			Tuesday 03/30/21			Wednesday 03/31/21			Thursday 04/01/21			Friday 04/02/21			Saturday 04/03/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
12:00																0.1339	1.82	3.46	0.2188	2.10	4.62
12:15																0.1750	1.59	5.50	0.1848	1.96	4.32
12:30																0.0997	1.43	3.64	0.1793	1.92	4.29
12:45																0.1422	1.85	3.61	0.1692	1.74	4.66
13:00																0.2965	2.31	5.50	0.1688	1.98	3.88
13:15																0.2232	2.33	4.08	0.1553	1.91	3.77
13:30																0.1560	1.85	3.96	0.1542	1.87	3.85
13:45																0.1206	1.68	3.50	0.1411	1.80	3.70
14:00																0.1922	2.00	4.35	0.1775	1.87	4.44
14:15																0.1395	1.78	3.72	0.3891	2.81	5.50
14:30																0.1816	1.91	4.41	0.1348	1.70	3.84
14:45																0.1545	1.82	3.99	0.1448	1.83	3.72
15:00																0.1756	1.95	4.13	0.1618	1.81	4.23
15:15																0.1655	1.89	4.08	0.1696	1.83	4.35
15:30																0.1261	1.63	3.83	0.1644	1.83	4.22
15:45																0.0943	1.44	3.40	0.1549	1.69	4.45
16:00																0.0957	1.50	3.27	0.1104	1.49	3.79
16:15																0.1242	1.56	4.02	0.1359	1.72	3.82
16:30																0.1000	1.52	3.35	0.1056	1.60	3.28
16:45																0.1023	1.45	3.67	0.1140	1.63	3.44
17:00																0.1192	1.63	3.61	0.5930	3.86	5.50
17:15																0.1399	1.69	4.02	0.1370	1.75	3.75
17:30																0.1156	1.57	3.69	0.1616	1.84	4.12
17:45																0.1310	1.63	3.98	0.1748	1.83	4.50
18:00																0.1280	1.66	3.79	0.2204	2.06	4.78
18:15																0.1249	1.62	3.82	0.1337	1.76	3.62
18:30																0.1347	1.65	4.03	0.1069	1.49	3.68
18:45																0.1399	1.67	4.11	0.1214	1.55	3.96
19:00																0.1433	1.56	4.63	0.1746	1.81	4.56
19:15																0.1512	1.76	4.10	0.1273	1.61	3.94
19:30																0.1213	1.66	3.58	0.1503	1.68	4.38
19:45																0.1499	1.87	3.73	0.1454	1.69	4.20
20:00																0.1231	1.54	4.05	0.1295	1.62	3.95
20:15																0.1937	1.95	4.55	0.1765	1.73	4.90
20:30																0.1742	1.88	4.32	0.1252	1.53	4.14
20:45																0.1843	1.91	4.44	0.0988	1.42	3.66
21:00																0.1580	1.78	4.21	0.1396	1.77	3.77
21:15																0.1679	1.85	4.24	0.1922	1.96	4.49
21:30																0.1662	1.89	4.09	0.1418	1.74	3.92
21:45																0.1526	1.86	3.85	0.1647	1.79	4.36
22:00																0.1351	1.76	3.69	0.1046	1.57	3.36
22:15																0.1427	1.74	3.95	0.0800	1.34	3.22
22:30																0.1294	1.69	3.73	0.0883	1.41	3.30
22:45																0.1239	1.71	3.51	0.1003	1.48	3.49
23:00																0.1200	1.60	3.73	0.0963	1.44	3.50
23:15																0.1018	1.53	3.37	0.1016	1.44	3.67
23:30																0.0955	1.49	3.31	0.0814	1.36	3.20
23:45																0.1225	1.61	3.77	0.0806	1.34	3.24

Pump House and Valley View Rd
15 Minute AM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/04/21			Monday 04/05/21			Tuesday 04/06/21			Wednesday 04/07/21			Thursday 04/08/21			Friday 04/09/21			Saturday 04/10/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00	0.0863	1.39	3.29	0.0951	1.38	3.67	0.0771	1.29	3.26	0.0726	1.25	3.22	0.0747	1.29	3.16	0.0757	1.29	3.21	0.0771	1.29	3.27
00:15	0.0827	1.35	3.30	0.0796	1.26	3.48	0.0665	1.23	3.02	0.0779	1.27	3.38	0.0663	1.23	3.00	0.0734	1.28	3.13	0.0564	1.16	2.77
00:30	0.1201	1.64	3.60	0.0608	1.19	2.92	0.0711	1.23	3.23	0.0695	1.24	3.13	0.0730	1.25	3.23	0.0747	1.28	3.20	0.0665	1.22	3.05
00:45	0.0901	1.43	3.29	0.0787	1.25	3.48	0.0838	1.35	3.34	0.0737	1.23	3.34	0.0761	1.27	3.30	0.0596	1.21	2.79	0.0742	1.25	3.29
01:00	0.0907	1.40	3.43	0.0790	1.26	3.48	0.0785	1.27	3.42	0.0848	1.28	3.62	0.0729	1.27	3.17	0.0665	1.24	2.97	0.0614	1.20	2.91
01:15	0.0857	1.35	3.39	0.0606	1.16	2.99	0.0714	1.22	3.28	0.0799	1.28	3.44	0.0663	1.24	2.99	0.0589	1.22	2.70	0.0775	1.27	3.37
01:30	0.0743	1.31	3.10	0.0728	1.24	3.27	0.0519	1.[illegible]1	2.74	0.0621	1.19	2.96	0.0779	1.29	3.29	0.0531	1.18	2.57	0.0728	1.24	3.26
01:45	0.0703	1.25	3.11	0.0738	1.23	3.35	0.0537	1.[illegible]2	2.79	0.0604	1.22	2.79	0.0842	1.31	3.49	0.0426	1.13	2.18	0.0797	1.27	3.44
02:00	0.0695	1.21	3.23	0.0791	1.26	3.45	0.0713	1.24	3.21	0.0566	1.17	2.76	0.0676	1.24	3.05	0.0766	1.30	3.21	0.0654	1.22	3.02
02:15	0.0723	1.25	3.20	0.0759	1.26	3.35	0.0521	1.[illegible]2	2.70	0.0422	1.12	2.20	0.0774	1.29	3.30	0.0661	1.26	2.92	0.0502	1.14	2.55
02:30	0.0723	1.26	3.18	0.0745	1.25	3.33	0.0578	1.[illegible]6	2.86	0.0844	1.30	3.53	0.0759	1.27	3.29	0.0463	1.14	2.36	0.0694	1.23	3.14
02:45	0.0669	1.19	3.18	0.0736	1.25	3.28	0.0637	1.[illegible]3	3.07	0.0675	1.25	3.01	0.0660	1.23	2.99	0.0565	1.18	2.72	0.0749	1.24	3.36
03:00	0.0679	1.22	3.12	0.0781	1.26	3.42	0.0648	1.[illegible]9	3.09	0.0536	1.19	2.56	0.0712	1.25	3.15	0.0586	1.20	2.76	0.0444	1.13	2.29
03:15	0.0657	1.18	3.16	0.0792	1.28	3.41	0.0791	1.27	3.42	0.0547	1.19	2.62	0.0811	1.28	3.46	0.0635	1.23	2.88	0.0423	1.10	2.27
03:30	0.0615	1.15	3.10	0.0799	1.26	3.52	0.0782	1.27	3.40	0.0456	1.13	2.35	0.0688	1.24	3.11	0.0599	1.23	2.74	0.0480	1.14	2.45
03:45	0.0705	1.19	3.38	0.0813	1.29	3.45	0.0677	1.22	3.10	0.0663	1.29	2.82	0.0831	1.31	3.45	0.0862	1.33	3.49	0.0442	1.11	2.32
04:00	0.0678	1.18	3.27	0.0744	1.24	3.36	0.0710	1.23	3.22	0.0735	1.26	3.22	0.0735	1.27	3.20	0.0800	1.32	3.30	0.0503	1.14	2.56
04:15	0.0683	1.18	3.29	0.0781	1.25	3.48	0.0597	1.21	2.78	0.0735	1.26	3.23	0.0632	1.21	2.93	0.0715	1.27	3.09	0.0778	1.27	3.39
04:30	0.0631	1.15	3.15	0.0854	1.37	3.33	0.0758	1.25	3.37	0.0668	1.23	3.02	0.0759	1.28	3.25	0.0831	1.32	3.43	0.0540	1.17	2.62
04:45	0.0665	1.21	3.11	0.0847	1.32	3.48	0.0601	1.[illegible]9	2.86	0.0786	1.30	3.30	0.0863	1.33	3.52	0.0808	1.31	3.35	0.0520	1.17	2.55
05:00	0.0752	1.24	3.38	0.0882	1.35	3.52	0.0700	1.27	3.02	0.0794	1.33	3.23	0.0699	1.25	3.10	0.0825	1.31	3.42	0.0688	1.24	3.10
05:15	0.0626	1.19	3.00	0.0952	1.38	3.68	0.0933	1.41	3.49	0.0932	1.39	3.55	0.1280	1.52	4.31	0.0777	1.31	3.21	0.0610	1.19	2.91
05:30	0.0746	1.23	3.41	0.1080	1.43	3.95	0.1318	1.57	4.21	0.3118	2.39	5.50	0.0931	1.35	3.69	0.1899	1.73	5.30	0.0572	1.18	2.76
05:45	0.0766	1.27	3.32	0.0847	1.36	3.34	0.1074	1.43	3.74	0.1325	1.55	4.31	0.0902	1.37	3.51	0.0850	1.37	3.32	0.0625	1.21	2.91
06:00	0.0732	1.23	3.33	0.0906	1.35	3.59	0.1457	1.60	4.54	0.0870	1.35	3.47	0.0845	1.33	3.44	0.1054	1.44	3.83	0.0646	1.21	3.01
06:15	0.0768	1.27	3.32	0.1027	1.43	3.77	0.1142	1.51	3.85	0.2537	2.06	5.50	0.1113	1.41	4.16	0.1006	1.43	3.67	0.0658	1.26	2.90
06:30	0.0640	1.16	3.15	0.1118	1.51	3.77	0.0957	1.42	3.55	0.1290	1.54	4.25	0.1128	1.44	4.07	0.1082	1.44	3.93	0.0952	1.36	3.74
06:45	0.1205	1.53	3.99	0.1142	1.49	3.94	0.3148	2.41	5.50	0.0997	1.43	3.64	0.1118	1.46	3.98	0.1240	1.48	4.31	0.1205	1.48	4.21
07:00	0.3099	2.38	5.50	0.0954	1.41	3.58	0.0969	1.45	3.48	0.1187	1.49	4.09	0.0995	1.39	3.78	0.1100	1.43	4.02	0.0817	1.33	3.32
07:15	0.1204	1.52	4.03	0.1399	1.54	4.59	0.1046	1.47	3.69	0.2359	1.87	5.88	0.0849	1.34	3.42	0.0882	1.40	3.34	0.0715	1.26	3.14
07:30	0.1116	1.49	3.86	0.1119	1.48	3.90	0.1536	1.61	4.74	0.0896	1.36	3.52	0.0875	1.37	3.41	0.0854	1.37	3.31	0.0922	1.39	3.51
07:45	0.1485	1.82	3.84	0.0979	1.44	3.54	0.1092	1.43	3.79	0.1143	1.45	4.08	0.1088	1.43	3.96	0.1511	1.58	4.77	0.0840	1.36	3.31
08:00	0.1514	1.80	3.98	0.0998	1.44	3.63	0.1031	1.41	3.85	0.1100	1.45	3.96	0.0875	1.36	3.43	0.1215	1.45	4.34	0.1109	1.43	4.06
08:15	0.1460	1.77	3.95	0.1496	1.60	4.66	0.1256	1.54	4.13	0.0983	1.42	3.64	0.0821	1.33	3.35	0.0796	1.34	3.20	0.1460	1.53	4.87
08:30	0.2024	1.99	4.63	0.1175	1.50	4.02	0.1282	1.54	4.22	0.0792	1.32	3.24	0.0876	1.34	3.51	0.0735	1.32	3.01	0.1249	1.47	4.39
08:45	0.2479	2.09	5.27	0.2898	2.15	5.94	0.1007	1.44	3.65	0.0855	1.36	3.37	0.0798	1.30	3.35	0.0852	1.34	3.43	0.1418	1.53	4.72
09:00	0.1893	1.91	4.60	0.1479	1.60	4.62	0.0827	1.35	3.30	0.0760	1.33	3.10	0.1022	1.41	3.81	0.1198	1.48	4.18	0.1259	1.48	4.37
09:15	0.1566	1.76	4.26	0.1621	1.66	4.77	0.0850	1.40	3.21	0.0864	1.36	3.39	0.1307	1.46	4.66	0.1152	1.45	4.11	0.1648	1.61	5.09
09:30	0.2078	1.98	4.78	0.1096	1.46	3.88	0.1688	1.[illegible]0	4.81	0.1074	1.45	3.86	0.1154	1.45	4.15	0.0860	1.38	3.31	0.1039	1.44	3.76
09:45	0.1676	1.87	4.17	0.1441	1.56	4.65	0.1256	1.53	4.16	0.0831	1.36	3.26	0.0766	1.31	3.19	0.0909	1.36	3.55	0.1065	1.47	3.74
10:00	0.2150	2.07	4.64	0.1548	1.62	4.72	0.2407	1.94	5.69	0.1028	1.43	3.75	0.0983	1.41	3.65	0.0785	1.32	3.21	0.1217	1.52	4.09
10:15	0.2100	2.04	4.62	0.1062	1.41	3.95	0.1685	1.67	4.92	0.1119	1.45	4.00	0.0909	1.35	3.61	0.1007	1.40	3.78	0.1362	1.55	4.43
10:30	0.1786	1.96	4.18	0.0961	1.40	3.61	0.0914	1.43	3.35	0.0923	1.39	3.51	0.0893	1.36	3.52	0.1003	1.41	3.75	0.1437	1.58	4.54
10:45	0.1376	1.75	3.76	0.1192	1.46	4.21	0.1413	1.59	4.43	0.0989	1.41	3.71	0.0797	1.35	3.15	0.3284	2.48	5.50	0.1164	1.48	4.04
11:00	0.1160	1.48	4.03	0.1152	1.49	3.98	0.1709	1.69	4.93	0.0810	1.36	3.19	0.0847	1.38	3.28	0.2486	2.04	5.50	0.1483	1.58	4.71
11:15	0.2042	2.03	4.54	0.1031	1.41	3.87	0.1072	1.45	3.84	0.0965	1.40	3.65	0.2598	2.10	5.50	0.0836	1.33	3.40	0.1513	1.63	4.60
11:30	0.1682	1.82	4.34	0.1143	1.47	4.02	0.1035	1.47	3.63	0.1291	1.52	4.31	0.0974	1.40	3.66	0.1082	1.41	4.04	0.1946	1.74	5.39
11:45	0.1623	1.79	4.29	0.1309	1.52	4.41	0.1014	1.45	3.63	0.0809	1.32	3.30	0.0822	1.36	3.24	0.0703	1.24	3.14	0.1279	1.53	4.25

Pump House and Valley View Rd
15 Minute PM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/04/21			Monday 04/05/21			Tuesday 04/06/21			Wednesday 04/07/21			Thursday 04/08/21			Friday 04/09/21			Saturday 04/10/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
12:00	0.1132	1.45	4.08	0.1329	1.54	4.37	0.0855	1.40	3.23	0.1692	1.53	5.13	0.0958	1.39	3.65	0.1281	1.50	4.39	0.1057	1.46	3.76
12:15	0.2342	2.13	4.87	0.1282	1.52	4.29	0.2474	2.03	5.50	0.0733	1.28	3.14	0.0993	1.42	3.67	0.0962	1.39	3.67	0.1129	1.49	3.89
12:30	0.2016	2.00	4.57	0.0921	1.38	3.55	0.0940	1.44	3.39	0.0904	1.37	3.51	0.3416	2.56	5.50	0.0883	1.35	3.52	0.0768	1.34	3.09
12:45	0.1986	1.91	4.81	0.1566	1.62	4.80	0.1058	1.43	3.68	0.1056	1.43	3.87	0.2073	1.77	5.58	0.1034	1.42	3.82	0.1386	1.55	4.52
13:00	0.1817	1.89	4.45	0.1351	1.54	4.43	0.1059	1.45	3.80	0.0836	1.35	3.33	0.0893	1.36	3.51	0.0764	1.30	3.19	0.0949	1.42	3.50
13:15	0.1768	1.82	4.58	0.0895	1.38	3.44	0.1020	1.46	3.64	0.0691	1.28	2.95	0.0963	1.39	3.66	0.0949	1.37	3.70	0.0926	1.40	3.48
13:30	0.1531	1.78	4.08	0.1025	1.44	3.72	0.0804	1.32	3.31	0.1016	1.42	3.76	0.0873	1.36	3.43	0.0898	1.36	3.51	0.0853	1.39	3.26
13:45	0.1689	1.84	4.30	0.0935	1.41	3.49	0.1735	1.71	4.91	0.1048	1.43	3.84	0.0915	1.38	3.51	0.0936	1.38	3.60	0.1048	1.52	3.53
14:00	0.1198	1.61	3.71	0.1234	1.50	4.20	0.0944	1.41	3.51	0.0902	1.39	3.44	0.0914	1.44	3.31	0.0762	1.27	3.29	0.1028	1.53	3.43
14:15	0.1520	1.75	4.15	0.1195	1.50	4.07	0.0924	1.36	3.63	0.0737	1.29	3.11	0.0826	1.38	3.18	0.1133	1.46	4.04	0.1343	1.60	4.16
14:30	0.5582	3.68	5.50	0.0795	1.33	3.24	0.4117	2.93	5.50	0.0727	1.29	3.10	0.1026	1.47	3.61	0.0710	1.24	3.19	0.1305	1.59	4.09
14:45	0.1567	1.82	4.06	0.3488	2.60	5.50	0.0753	1.29	3.19	0.0716	1.26	3.13	0.1021	1.45	3.67	0.0834	1.33	3.40	0.0968	1.46	3.44
15:00	0.1617	1.69	4.66	0.1573	1.63	4.76	0.0799	1.34	3.21	0.0775	1.30	3.24	0.1024	1.47	3.58	0.0678	1.23	3.09	0.0930	1.41	3.46
15:15	0.1530	1.73	4.27	0.1614	1.65	4.79	0.0820	1.37	3.18	0.0736	1.30	3.08	0.0824	1.38	3.16	0.0811	1.33	3.29	0.0838	1.41	3.11
15:30	0.1288	1.62	3.93	0.1157	1.49	4.00	0.0993	1.43	3.65	0.0690	1.28	2.98	0.2591	2.10	5.50	0.1002	1.41	3.76	0.1219	1.53	4.04
15:45	0.1288	1.71	3.65	0.0919	1.42	3.39	0.1297	1.57	4.15	0.0868	1.35	3.44	0.1239	1.53	4.12	0.0828	1.35	3.29	0.0962	1.43	3.54
16:00	0.1390	1.75	3.80	0.1148	1.49	3.98	0.0790	1.35	3.13	0.0947	1.38	3.66	0.0890	1.39	3.41	0.1054	1.42	3.90	0.0898	1.45	3.21
16:15	0.1127	1.65	3.36	0.0864	1.38	3.31	0.0987	1.43	3.45	0.0937	1.38	3.61	0.0993	1.46	3.52	0.0690	1.25	3.08	0.1084	1.46	3.86
16:30	0.1303	1.74	3.60	0.0807	1.36	3.16	0.0865	1.39	3.30	0.0783	1.31	3.24	0.1714	1.72	4.81	0.1030	1.42	3.81	0.1078	1.52	3.62
16:45	0.1464	1.77	3.94	0.1295	1.56	4.18	0.0886	1.40	3.34	0.0886	1.36	3.50	0.0944	1.40	3.54	0.0687	1.27	2.97	0.0966	1.40	3.64
17:00	0.1427	1.71	4.04	0.0841	1.40	3.19	0.1092	1.43	3.79	0.1226	1.48	4.25	0.0998	1.42	3.69	0.1040	1.43	3.80	0.0978	1.51	3.30
17:15	0.1042	1.55	3.39	0.0976	1.38	3.74	0.0737	1.30	3.11	0.0836	1.35	3.33	0.0867	1.37	3.36	0.0926	1.40	3.50	0.1867	1.80	4.91
17:30	0.0817	1.35	3.25	0.0890	1.42	3.29	0.1534	1.67	4.48	0.0848	1.38	3.28	0.1244	1.51	4.20	0.1011	1.45	3.61	0.1086	1.50	3.69
17:45	0.1234	1.66	3.64	0.0940	1.42	3.46	0.0776	1.33	3.15	0.0829	1.35	3.30	0.1069	1.45	3.83	0.1020	1.41	3.80	0.0866	1.43	3.17
18:00	0.1217	1.63	3.68	0.0937	1.42	3.47	0.1301	1.55	4.22	0.1263	1.48	4.40	0.1238	1.50	4.23	0.0870	1.35	3.46	0.0818	1.41	3.06
18:15	0.1073	1.70	3.06	0.1130	1.50	3.86	0.1415	1.61	4.38	0.1181	1.45	4.22	0.1322	1.54	4.36	0.2008	1.69	5.77	0.2557	2.08	5.50
18:30	0.1161	1.60	3.60	0.1261	1.54	4.14	0.4315	3.03	5.50	0.1006	1.41	3.76	0.1015	1.45	3.65	0.0818	1.32	3.34	0.1623	1.65	4.82
18:45	0.0928	1.43	3.38	0.1494	1.61	4.60	0.1344	1.57	4.30	0.1497	1.56	4.81	0.0953	1.43	3.50	0.0837	1.35	3.32	0.1621	1.66	4.78
19:00	0.0980	1.43	3.60	0.1265	1.55	4.11	0.1280	1.54	4.22	0.1489	1.52	4.55	0.1247	1.51	4.22	0.1136	1.46	4.05	0.1304	1.56	4.21
19:15	0.1346	1.57	4.32	0.1005	1.42	3.71	0.1177	1.51	3.99	0.1364	1.48	4.73	0.1183	1.49	4.06	0.1397	1.53	4.63	0.1370	1.57	4.38
19:30	0.1476	1.65	4.41	0.1480	1.60	4.60	0.1231	1.54	4.04	0.1103	1.43	4.04	0.1528	1.61	4.73	0.0857	1.36	3.35	0.0953	1.41	3.55
19:45	0.1551	1.65	4.62	0.1346	1.55	4.38	0.0979	1.44	3.54	0.1206	1.45	4.33	0.1083	1.46	3.85	0.0832	1.35	3.31	0.0992	1.54	3.26
20:00	0.1027	1.44	3.73	0.1164	1.51	3.95	0.1316	1.55	4.26	0.1332	1.49	4.59	0.1051	1.43	3.86	0.0961	1.39	3.68	0.0906	1.53	3.01
20:15	0.1109	1.49	3.83	0.1014	1.45	3.64	0.1422	1.53	4.52	0.1165	1.45	4.18	0.0894	1.41	3.34	0.0856	1.33	3.46	0.1011	1.59	3.19
20:30	0.0986	1.45	3.52	0.1250	1.55	4.08	0.1441	1.60	4.48	0.0941	1.38	3.64	0.1324	1.54	4.35	0.0886	1.36	3.48	0.0987	1.57	3.17
20:45	0.1570	1.66	4.63	0.1378	1.57	4.41	0.1372	1.57	4.40	0.1056	1.41	3.93	0.1219	1.50	4.18	0.0826	1.34	3.33	0.1009	1.54	3.33
21:00	0.1600	1.65	4.75	0.1169	1.51	3.94	0.1382	1.57	4.43	0.1100	1.43	4.01	0.1051	1.44	3.80	0.1043	1.43	3.83	0.0856	1.46	3.03
21:15	0.1066	1.48	3.71	0.1033	1.43	3.79	0.0975	1.41	3.64	0.0979	1.39	3.73	0.0965	1.43	3.52	0.0795	1.32	3.25	0.0792	1.41	2.97
21:30	0.1339	1.58	4.23	0.0873	1.40	3.30	0.0896	1.40	3.37	0.0914	1.35	3.63	0.0966	1.42	3.58	0.0766	1.28	3.30	0.0837	1.37	3.25
21:45	0.0924	1.41	3.46	0.0941	1.41	3.51	0.0770	1.34	3.11	0.0940	1.39	3.59	0.1134	1.45	4.05	0.0948	1.37	3.67	0.1071	1.49	3.71
22:00	0.0911	1.40	3.45	0.1011	1.42	3.72	0.0803	1.34	3.22	0.0925	1.36	3.66	0.0992	1.42	3.67	0.0843	1.32	3.44	0.0972	1.48	3.38
22:15	0.2726	2.17	5.50	0.1096	1.49	3.77	0.0836	1.34	3.35	0.1044	1.41	3.90	0.0754	1.29	3.19	0.0678	1.26	2.97	0.1305	1.60	4.08
22:30	0.1141	1.50	3.90	0.0777	1.32	3.19	0.0760	1.31	3.14	0.0759	1.27	3.30	0.0792	1.34	3.18	0.0706	1.24	3.18	0.0993	1.42	3.68
22:45	0.1055	1.46	3.74	0.0765	1.28	3.29	0.0772	1.29	3.29	0.0715	1.26	3.15	0.1122	1.48	3.92	0.0582	1.17	2.84	0.1003	1.43	3.67
23:00	0.1141	1.47	4.00	0.1014	1.42	3.74	0.0756	1.27	3.28	0.0797	1.31	3.31	0.0761	1.31	3.15	0.0752	1.31	3.13	0.1026	1.56	3.32
23:15	0.0816	1.33	3.31	0.0802	1.36	3.16	0.0789	1.30	3.32	0.0890	1.39	3.40	0.0997	1.43	3.65	0.0641	1.23	2.93	0.0942	1.48	3.26
23:30	0.0818	1.31	3.38	0.0749	1.24	3.36	0.0915	1.33	3.53	0.0679	1.27	2.96	0.0791	1.31	3.27	0.0651	1.22	3.01	0.0836	1.43	3.07
23:45	0.1016	1.44	3.69	0.0618	1.21	2.87	0.0791	1.31	3.27	0.0743	1.30	3.13	0.0752	1.30	3.15	0.0692	1.28	2.97	0.0927	1.49	3.20

Pump House and Valley View Rd
15 Minute AM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/11/21			Monday 04/12/21			Tuesday 04/13/21			Wednesday 04/14/21			Thursday 04/15/21			Friday 04/16/21			Saturday 04/17/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00	0.1161	1.56	3.76	0.0603	1.28	2.58	0.0522	1.04	3.04	0.0565	1.14	2.87	0.0630	1.18	3.03	0.0690	1.25	3.07	0.0919	1.57	2.93
00:15	0.0756	1.34	3.03	0.0568	1.22	2.63	0.0549	1.05	3.11	0.0575	1.13	2.94	0.0434	1.05	2.47	0.0731	1.28	3.15	0.0968	1.64	2.92
00:30	0.0709	1.32	2.92	0.0623	1.19	2.97	0.0522	1.03	2.85	0.0436	1.03	2.58	0.0473	1.07	2.64	0.0663	1.24	2.97	0.0754	1.50	2.58
00:45	0.0840	1.33	3.41	0.0527	1.10	2.83	0.0437	1.00	2.67	0.0491	1.03	2.89	0.0518	1.09	2.82	0.0625	1.23	2.84	0.0776	1.44	2.82
01:00	0.0655	1.33	2.67	0.0576	1.12	3.00	0.0564	1.05	3.17	0.0488	1.03	2.86	0.0387	1.01	2.35	0.0683	1.27	2.95	0.0828	1.43	3.02
01:15	0.0802	1.32	3.28	0.0637	1.17	3.10	0.0608	1.03	3.33	0.0330	0.94	2.23	0.0554	1.11	2.91	0.0580	1.20	2.72	0.0814	1.41	3.05
01:30	0.0625	1.22	2.88	0.0613	1.19	2.92	0.0334	0.90	2.39	0.0449	1.03	2.64	0.0437	1.11	2.30	0.0630	1.24	2.84	0.0593	1.28	2.55
01:45	0.0740	1.24	3.32	0.0505	1.13	2.61	0.0288	0.87	2.17	0.0272	0.89	1.98	0.0467	1.08	2.57	0.0631	1.24	2.83	0.0754	1.37	2.93
02:00	0.0560	1.17	2.74	0.0631	1.19	3.01	0.0271	0.84	2.13	0.0329	0.93	2.25	0.0467	1.07	2.61	0.0627	1.24	2.81	0.0676	1.33	2.75
02:15	0.0647	1.21	3.00	0.0661	1.18	3.18	0.0382	0.94	2.56	0.0346	0.93	2.36	0.0442	1.05	2.53	0.1373	1.70	3.93	0.0578	1.28	2.48
02:30	0.0653	1.21	3.05	0.0576	1.18	2.77	0.0556	1.05	3.17	0.0365	0.94	2.46	0.0394	1.02	2.34	0.0712	1.34	2.88	0.0575	1.28	2.47
02:45	0.0566	1.16	2.80	0.0527	1.16	2.60	0.0527	1.04	3.06	0.0468	1.01	2.82	0.0654	1.17	3.18	0.0747	1.32	3.07	0.0606	1.30	2.55
03:00	0.0678	1.22	3.11	0.0438	1.00	2.68	0.1262	1.51	4.28	0.0379	0.95	2.50	0.0535	1.13	2.76	0.0390	1.17	1.91	0.0567	1.26	2.50
03:15	0.0643	1.19	3.05	0.0679	1.22	3.13	0.0502	1.02	3.00	0.0390	0.96	2.53	0.0469	1.07	2.59	0.0649	1.30	2.74	0.0600	1.27	2.60
03:30	0.0640	1.19	3.05	0.0596	1.2	2.76	0.0435	0.93	2.77	0.0319	0.91	2.26	0.0449	1.05	2.57	0.0739	1.32	3.05	0.0630	1.29	2.67
03:45	0.0654	1.21	3.06	0.0608	1.16	3.02	0.0541	1.03	3.17	0.0523	1.04	3.05	0.0395	1.02	2.37	0.0491	1.17	2.39	0.0708	1.32	2.91
04:00	0.0460	1.10	2.47	0.0966	1.49	3.32	0.0472	1.01	2.87	0.0510	1.06	2.87	0.0545	1.12	2.85	0.0400	1.12	2.09	0.0795	1.39	3.04
04:15	0.0522	1.12	2.72	0.0658	1.25	2.94	0.0410	1.03	2.43	0.0395	1.03	2.33	0.0325	1.03	1.91	0.0497	1.26	2.19	0.0713	1.39	2.71
04:30	0.0533	1.14	2.69	0.0578	1.08	3.17	0.0511	1.03	3.00	0.0385	1.04	2.24	0.0395	1.04	2.29	0.2949	2.30	5.50	0.0582	1.28	2.49
04:45	0.0673	1.23	3.06	0.0447	0.98	2.81	0.0562	1.05	3.16	0.0479	1.03	2.82	0.0529	1.09	2.87	0.0385	1.07	2.13	0.0755	1.36	2.97
05:00	0.0687	1.22	3.16	0.0439	1.04	2.55	0.0421	1.05	2.38	0.0359	1.00	2.22	0.0362	1.03	2.14	0.0406	1.07	2.26	0.0838	1.39	3.18
05:15	0.0576	1.17	2.81	0.0620	1.17	3.04	0.0793	1.33	3.21	0.0445	1.08	2.43	0.0486	1.09	2.65	0.0646	1.23	2.93	0.0640	1.47	2.26
05:30	0.0782	1.27	3.40	0.0882	1.39	3.36	0.0789	1.34	3.18	0.0454	1.08	2.51	0.0589	1.19	2.81	0.1247	1.50	4.28	0.0664	1.46	2.36
05:45	0.0553	1.15	2.76	0.0660	1.26	2.88	0.0846	1.32	3.47	0.1870	1.75	5.11	0.0666	1.24	3.01	0.0844	1.36	3.32	0.0721	1.50	2.46
06:00	0.1763	1.72	4.97	0.0664	1.25	2.96	0.0700	1.30	2.94	0.0523	1.13	2.70	0.0671	1.25	2.99	0.1158	1.54	3.81	0.0911	1.62	2.78
06:15	0.0748	1.29	3.19	0.1747	1.7	4.93	0.0955	1.45	3.43	0.0582	1.18	2.81	0.0795	1.33	3.23	0.0714	1.30	3.00	0.1095	1.56	3.53
06:30	0.0695	1.24	3.11	0.1060	1.5	3.58	0.1171	1.50	4.02	0.0775	1.29	3.29	0.0686	1.27	2.96	0.2769	2.16	5.65	0.0957	1.61	2.95
06:45	0.1061	1.43	3.90	0.0634	1.25	2.81	0.0721	1.31	2.99	0.0760	1.31	3.17	0.0794	1.31	3.29	0.1503	1.69	4.32	0.1004	1.61	3.09
07:00	0.0699	1.30	2.92	0.0747	1.28	3.20	0.0756	1.30	3.16	0.4045	2.89	5.50	0.0917	1.37	3.57	0.0881	1.36	3.46	0.0782	1.48	2.73
07:15	0.0951	1.42	3.50	0.1166	1.4	4.35	0.3223	2.45	5.50	0.0759	1.29	3.21	0.0801	1.32	3.29	0.0939	1.42	3.45	0.1736	1.87	4.31
07:30	0.1157	1.61	3.57	0.1217	1.45	4.36	0.0859	1.35	3.40	0.2559	2.02	5.72	0.0737	1.27	3.18	0.1203	1.53	3.98	0.1172	1.70	3.34
07:45	0.0964	1.53	3.20	0.0558	1.12	2.92	0.0871	1.41	3.25	0.0758	1.32	3.12	0.2631	2.12	5.50	0.1418	1.56	4.57	0.5647	3.72	5.50
08:00	0.0820	1.41	3.05	0.1341	1.64	4.04	0.0837	1.41	3.14	0.1228	1.51	4.17	0.0919	1.39	3.50	0.0746	1.33	3.03	0.1082	1.67	3.16
08:15	0.1650	1.71	4.69	0.0844	1.4	3.16	0.1006	1.47	3.55	0.0836	1.33	3.40	0.0576	1.22	2.66	0.1028	1.43	3.76	0.1706	1.89	4.19
08:30	0.1156	1.57	3.71	0.1033	1.43	3.77	0.0686	1.30	2.88	0.1009	1.42	3.72	0.0990	1.40	3.73	0.1026	1.42	3.79	0.1494	1.82	3.86
08:45	0.1380	1.54	4.54	0.0642	1.22	2.95	0.0829	1.37	3.22	0.0686	1.27	2.97	0.0956	1.39	3.64	0.2539	2.07	5.50	0.2186	2.07	4.72
09:00	0.0936	1.38	3.59	0.0833	1.28	3.57	0.0716	1.29	3.03	0.3264	2.47	5.50	0.0652	1.24	2.93	0.1310	1.50	4.46	0.2157	2.07	4.65
09:15	0.1638	1.67	4.81	0.1415	1.60	4.39	0.0733	1.32	3.00	0.1234	1.58	3.92	0.4139	2.94	5.50	0.0928	1.42	3.44	0.1403	1.78	3.76
09:30	0.1543	1.57	4.92	0.0611	1.24	2.74	0.1000	1.40	3.77	0.0844	1.32	3.48	0.0719	1.28	3.07	0.0615	1.22	2.82	0.1379	1.75	3.76
09:45	0.1326	1.50	4.51	0.4670	3.22	5.50	0.1105	1.47	3.90	0.0807	1.30	3.39	0.0473	1.11	2.51	0.1029	1.44	3.72	0.1068	1.64	3.22
10:00	0.1316	1.49	4.56	0.1096	1.50	3.75	0.0992	1.44	3.59	0.0826	1.32	3.41	0.0838	1.34	3.35	0.0702	1.29	2.98	0.1733	1.85	4.40
10:15	0.1702	1.89	4.17	0.1255	1.54	4.13	0.0634	1.22	2.93	0.1071	1.42	3.95	0.0951	1.43	3.49	0.0630	1.25	2.81	0.1245	1.70	3.55
10:30	0.1787	1.88	4.41	0.0749	1.36	2.94	0.0559	1.14	2.84	0.1091	1.45	3.90	0.0725	1.29	3.08	0.0685	1.26	3.02	0.1296	1.74	3.58
10:45	0.1545	1.88	3.81	0.0816	1.30	3.41	0.0994	1.42	3.68	0.1188	1.50	4.05	0.0794	1.43	2.92	0.1083	1.54	3.56	0.5638	3.71	5.50
11:00	0.1701	1.95	4.00	0.1054	1.48	3.67	0.0718	1.30	3.02	0.0826	1.30	3.48	0.0553	1.22	2.56	0.1077	1.48	3.76	0.1152	1.71	3.27
11:15	0.1482	1.87	3.69	0.1183	1.50	4.05	0.0653	1.25	2.90	0.1033	1.39	3.95	0.2334	1.93	5.56	0.0690	1.30	2.89	0.1262	1.73	3.50
11:30	0.1104	1.77	2.97	0.0682	1.33	2.77	0.0749	1.30	3.13	0.1208	1.54	3.96	0.0588	1.24	2.65	0.1272	1.52	4.25	0.1031	1.65	3.08
11:45	0.2618	2.30	4.89	0.0586	1.2	2.72	0.1427	1.60	4.45	0.0938	1.38	3.62	0.0548	1.22	2.51	0.0690	1.28	2.95	0.1400	1.81	3.67

Pump House and Valley View Rd
15 Minute PM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/11/21			Monday 04/12/21			Tuesday 04/13/21			Wednesday 04/14/21			Thursday 04/15/21			Friday 04/16/21			Saturday 04/17/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
12:00	0.2245	2.11	4.71	0.0797	1.34	3.20	0.0794	1.37	3.10	0.1080	1.45	3.89	0.0591	1.17	2.88	0.1030	1.51	3.47	0.1143	1.68	3.31
12:15	0.2677	2.27	5.10	0.0663	1.27	2.87	0.0925	1.43	3.37	0.1473	1.56	4.35	0.3910	2.82	5.50	0.3834	2.78	5.50	0.2031	1.99	4.63
12:30	0.1482	1.97	3.44	0.0684	1.25	3.04	0.0753	1.34	3.01	0.3643	2.68	5.50	0.0697	1.29	2.97	0.1127	1.43	4.14	0.1197	1.69	3.46
12:45	0.2644	2.27	5.02	0.0891	1.33	3.61	0.0668	1.27	2.90	0.0880	1.37	3.43	0.0848	1.39	3.24	0.1837	1.64	5.50	0.1484	1.76	4.03
13:00	0.1511	1.72	4.26	0.0615	1.21	2.86	0.0842	1.33	3.23	0.1127	1.52	3.76	0.1133	1.49	3.91	0.0662	1.28	2.83	0.1515	1.78	4.04
13:15	0.0855	1.48	2.99	0.0703	1.26	3.09	0.4788	3.23	5.50	0.0678	1.28	2.89	0.0413	1.05	2.38	0.0907	1.37	3.53	0.0813	1.49	2.79
13:30	0.2227	1.88	5.50	0.0552	1.17	2.70	0.0889	1.36	3.48	0.1034	1.46	3.68	0.0666	1.27	2.89	0.0624	1.24	2.80	0.1008	1.59	3.15
13:45	0.0722	1.26	3.17	0.0789	1.27	3.43	0.1079	1.47	3.80	0.0699	1.30	2.93	0.0603	1.23	2.75	0.0730	1.29	3.08	0.1289	1.68	3.74
14:00	0.0773	1.30	3.25	0.0654	1.25	2.91	0.0862	1.34	3.45	0.0683	1.26	2.99	0.1079	1.46	3.82	0.1030	1.45	3.68	0.2170	1.99	4.96
14:15	0.0645	1.22	2.95	0.0597	1.20	2.83	0.0581	1.20	2.74	0.0623	1.27	2.71	0.0720	1.34	2.88	0.0933	1.54	3.07	0.3965	2.85	5.50
14:30	0.1343	1.52	4.52	0.0682	1.27	2.95	0.1522	1.62	4.64	0.1065	1.45	3.82	0.0552	1.20	2.61	0.1029	1.64	3.11	0.1556	1.75	4.28
14:45	0.1357	1.56	4.40	0.0552	1.12	2.87	0.0832	1.39	3.19	0.0629	1.25	2.80	0.0636	1.22	2.92	0.1406	1.78	3.76	0.1481	1.72	4.16
15:00	0.0740	1.30	3.10	0.0832	1.34	3.34	0.0615	1.27	2.67	0.0523	1.15	2.63	0.1009	1.46	3.59	0.1253	1.75	3.42	0.0999	1.60	3.11
15:15	0.0786	1.34	3.16	0.0770	1.35	3.05	0.1027	1.40	3.86	0.0555	1.20	2.61	0.0852	1.36	3.35	0.1151	1.70	3.28	0.1413	1.73	3.94
15:30	0.0727	1.25	3.23	0.0671	1.28	2.88	0.0582	1.19	2.78	0.0749	1.25	3.33	0.0736	1.34	2.96	0.0876	1.58	2.79	0.1265	1.67	3.70
15:45	0.0541	1.14	2.76	0.0846	1.34	3.40	0.0831	1.33	3.21	0.0683	1.28	2.92	0.1247	1.55	4.06	0.0976	1.63	2.95	0.4976	3.38	5.50
16:00	0.0871	1.32	3.59	0.0970	1.40	3.67	0.0882	1.33	3.40	0.0567	1.21	2.65	0.0809	1.37	3.14	0.1319	1.78	3.53	0.1158	1.63	3.51
16:15	0.0721	1.24	3.24	0.0981	1.37	3.83	0.1353	1.55	4.41	0.0595	1.21	2.76	0.0768	1.36	3.02	0.3854	2.71	5.73	0.0928	1.53	3.09
16:30	0.1009	1.36	3.99	0.1150	1.44	4.14	0.1170	1.43	4.05	0.3287	2.49	5.50	0.0849	1.41	3.17	0.1032	1.65	3.07	0.1139	1.58	3.61
16:45	0.1614	1.80	4.24	0.0816	1.32	3.36	0.0726	1.33	2.94	0.0540	1.19	2.58	0.0737	1.34	2.96	0.1099	1.70	3.13	0.1429	1.72	4.01
17:00	0.1428	1.66	4.20	0.0793	1.31	3.30	0.0814	1.32	3.34	0.1160	1.52	3.90	0.0823	1.38	3.17	0.1272	1.72	3.56	0.0993	1.59	3.12
17:15	0.1237	1.60	3.86	0.0751	1.28	3.23	0.0699	1.34	2.82	0.0776	1.32	3.19	0.0815	1.37	3.18	0.1174	1.77	3.16	0.1663	1.79	4.40
17:30	0.1675	1.79	4.45	0.0713	1.25	3.15	0.0593	1.23	2.70	0.0590	1.23	2.69	0.1279	1.64	3.83	0.1341	1.78	3.58	0.1270	1.68	3.67
17:45	0.3037	2.26	5.81	0.0711	1.26	3.14	0.4448	3.10	5.50	0.0612	1.22	2.82	0.1058	1.44	3.82	0.1427	1.87	3.56	0.1139	1.59	3.57
18:00	0.1341	1.62	4.09	0.0831	1.33	3.38	0.0788	1.35	3.08	0.0518	1.16	2.55	0.0746	1.30	3.13	0.1972	1.98	4.53	0.1297	1.73	3.61
18:15	0.1216	1.62	3.70	0.3454	2.58	5.50	0.0860	1.42	3.18	0.0594	1.24	2.67	0.0910	1.41	3.38	0.1043	1.69	3.00	0.1159	1.62	3.54
18:30	0.1333	1.70	3.80	0.1062	1.45	3.81	0.2883	2.15	5.90	0.1194	1.54	3.93	0.1306	1.56	4.23	0.0924	1.63	2.79	0.1341	1.69	3.87
18:45	0.1133	1.59	3.57	0.1243	1.57	3.96	0.0889	1.36	3.50	0.2694	2.15	5.50	0.1085	1.48	3.78	0.1259	1.80	3.31	0.0980	1.54	3.21
19:00	0.1329	1.61	4.10	0.0880	1.35	3.48	0.0842	1.40	3.16	0.0780	1.30	3.28	0.0880	1.39	3.36	0.1373	1.80	3.62	0.1195	1.63	3.64
19:15	0.1691	1.80	4.44	0.0670	1.23	3.03	0.1178	1.55	3.85	0.1159	1.46	4.11	0.1114	1.50	3.79	0.1136	1.75	3.11	0.1002	1.57	3.22
19:30	0.1422	1.70	4.06	0.0809	1.36	3.19	0.1607	1.69	4.62	0.1205	1.46	4.26	0.0973	1.41	3.62	0.1417	1.84	3.62	0.1817	1.86	4.56
19:45	0.0941	1.51	3.19	0.1150	1.56	3.70	0.1117	1.43	3.88	0.0662	1.27	2.88	0.1413	1.56	4.55	0.1396	1.80	3.66	0.1639	1.79	4.33
20:00	0.0990	1.53	3.30	0.1258	1.55	4.10	0.1482	1.61	4.57	0.1160	1.45	4.18	0.0938	1.42	3.47	0.1055	1.71	2.99	0.0973	1.56	3.15
20:15	0.0969	1.54	3.19	0.1395	1.59	4.39	0.1802	1.73	4.80	0.0844	1.34	3.39	0.1397	1.56	4.52	0.1113	1.71	3.15	0.1188	1.62	3.62
20:30	0.1655	1.75	4.52	0.0959	1.39	3.67	0.1503	1.64	4.51	0.0707	1.25	3.12	0.1191	1.49	4.12	0.1096	1.69	3.15	0.0775	1.42	2.86
20:45	0.0877	1.45	3.16	0.1367	1.55	4.46	0.0787	1.37	3.06	0.1123	1.52	3.77	0.0941	1.39	3.59	0.1103	1.72	3.10	0.1276	1.65	3.79
21:00	0.0998	1.58	3.17	0.1193	1.49	4.13	0.1026	1.43	3.58	0.1157	1.54	3.82	0.0840	1.37	3.26	0.0880	1.59	2.75	0.1685	1.82	4.38
21:15	0.0879	1.52	2.93	0.0873	1.36	3.44	0.0750	1.29	3.18	0.1139	1.56	3.68	0.3862	2.80	5.50	0.1254	1.75	3.42	0.1339	1.66	3.95
21:30	0.0842	1.49	2.91	0.0737	1.29	3.12	0.0932	1.33	3.60	0.0855	1.47	3.00	0.0875	1.51	2.97	0.0890	1.61	2.74	0.1320	1.65	3.92
21:45	0.0797	1.46	2.84	0.0567	1.16	2.82	0.0467	1.13	2.40	0.1038	1.48	3.62	0.0728	1.42	2.68	0.0977	1.66	2.89	0.1041	1.57	3.34
22:00	0.0870	1.47	3.07	0.0610	1.20	2.88	0.0658	1.25	2.89	0.0699	1.34	2.81	0.1105	1.52	3.69	0.0910	1.57	2.93	0.1091	1.58	3.46
22:15	0.0803	1.30	3.38	0.0715	1.27	3.12	0.0945	1.41	3.51	0.0618	1.17	3.03	0.0954	1.47	3.37	0.1238	1.72	3.47	0.0951	1.51	3.23
22:30	0.0649	1.28	2.79	0.0622	1.23	2.84	0.0516	1.16	2.56	0.0472	1.12	2.45	0.1033	1.50	3.54	0.1245	1.70	3.55	0.0696	1.33	2.82
22:45	0.0702	1.30	2.95	0.0534	1.14	2.72	0.0566	1.17	2.77	0.0656	1.21	3.06	0.1072	1.53	3.56	0.1098	1.63	3.32	0.0704	1.38	2.71
23:00	0.0671	1.31	2.77	0.0534	1.07	2.96	0.0572	1.19	2.72	0.0691	1.25	3.05	0.0682	1.36	2.67	0.1059	1.55	3.45	0.1095	1.58	3.48
23:15	0.0867	1.51	2.93	0.0494	1.07	2.76	0.0605	1.24	2.71	0.0550	1.11	2.89	0.0753	1.30	3.15	0.3889	2.73	5.72	0.2994	2.32	5.50
23:30	0.0833	1.42	3.07	0.0438	1.04	2.55	0.0628	1.17	3.06	0.0461	1.08	2.52	0.0811	1.34	3.25	0.0835	1.54	2.74	0.0692	1.28	2.97
23:45	0.0627	1.23	2.84	0.0553	1.08	3.05	0.0513	1.12	2.67	0.0595	1.14	3.03	0.0617	1.21	2.87	0.0971	1.65	2.90	0.2287	2.05	4.99

Pump House and Valley View Rd
15 Minute AM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/18/21			Monday 04/19/21			Tuesday 04/20/21			Wednesday 04/21/21			Thursday 04/22/21			Friday 04/23/21			Saturday 04/24/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00	0.0840	1.44	3.05	0.0792	1.44	2.85	0.0549	1.32	2.26	0.0291	0.91	2.07	0.0630	1.17	3.08	0.0459	0.93	3.14	0.0523	1.12	2.73
00:15	0.0599	1.27	2.59	0.0636	1.35	2.52	0.0361	1.21	1.68	0.0364	0.89	2.64	0.0315	0.91	2.23	0.0426	0.91	3.02	0.0554	1.16	2.74
00:30	0.0772	1.36	3.04	0.0583	1.32	2.39	0.0707	1.41	2.63	0.0261	0.81	2.18	0.0323	0.90	2.33	0.0356	0.86	2.75	0.0381	1.03	2.26
00:45	0.0764	1.38	2.94	0.0395	1.23	1.79	0.0630	1.32	2.57	0.0317	0.85	2.45	0.0398	0.95	2.65	0.0346	0.87	2.62	0.0368	0.98	2.34
01:00	0.0583	1.29	2.47	0.0668	1.39	2.54	0.0693	1.39	2.65	0.0305	0.86	2.35	0.0359	0.92	2.49	0.0381	0.89	2.76	0.0422	1.07	2.34
01:15	0.0631	1.26	2.77	0.1330	1.31	5.50	0.0583	1.34	2.35	0.0311	0.85	2.43	0.0335	0.91	2.37	0.0483	0.96	3.15	0.0334	0.96	2.17
01:30	0.0619	1.28	2.64	0.0656	1.34	2.62	0.0574	1.35	2.28	0.0237	0.79	2.04	0.0353	0.92	2.46	0.0248	0.78	2.18	0.0371	1.00	2.27
01:45	0.0744	1.37	2.90	0.0578	1.32	2.36	0.0615	1.36	2.41	0.0249	0.82	2.06	0.0429	0.98	2.73	0.0237	0.78	2.11	0.0325	0.95	2.16
02:00	0.0582	1.23	2.65	0.0664	1.33	2.69	0.0663	1.40	2.49	0.0319	0.86	2.46	0.0414	0.97	2.68	0.0207	0.74	1.98	0.0289	0.92	2.01
02:15	0.0717	1.31	2.97	0.0463	1.30	1.94	0.0510	1.34	2.04	0.0268	0.80	2.27	0.0253	0.85	1.96	0.0265	0.79	2.31	0.0226	0.87	1.69
02:30	0.0550	1.18	2.64	0.0553	1.32	2.27	0.0684	1.41	2.55	0.0282	0.82	2.33	0.0296	0.88	2.19	0.0227	0.77	2.06	0.0304	0.94	2.04
02:45	0.0561	1.19	2.68	0.0569	1.32	2.33	0.0534	1.35	2.12	0.0590	1.11	3.13	0.0356	0.92	2.46	0.0273	0.81	2.28	0.0328	0.96	2.13
03:00	0.0552	1.18	2.67	0.0358	1.22	1.65	0.0603	1.36	2.38	0.0242	0.78	2.14	0.0327	0.91	2.32	0.0177	0.72	1.76	0.0252	0.89	1.83
03:15	0.0588	1.21	2.74	0.0532	1.31	2.22	0.0498	1.29	2.12	0.0303	0.84	2.39	0.0346	0.92	2.40	0.0208	0.74	1.97	0.0353	0.96	2.31
03:30	0.0413	1.10	2.22	0.0584	1.34	2.34	0.0672	1.41	2.51	0.0279	0.83	2.24	0.2252	1.85	5.69	0.1107	1.34	4.45	0.0363	0.97	2.33
03:45	0.0439	1.15	2.20	0.0692	1.36	2.72	0.1198	1.56	3.87	0.0273	0.86	2.11	0.0375	0.93	2.57	0.0231	0.75	2.17	0.0423	1.00	2.61
04:00	0.0441	1.14	2.25	0.0435	1.29	1.86	0.0587	1.30	2.47	0.0382	0.90	2.72	0.0375	0.93	2.55	0.0284	0.81	2.36	0.0254	0.90	1.83
04:15	0.0640	1.24	2.89	0.0360	1.18	1.73	0.0503	1.26	2.21	0.0377	0.90	2.68	0.0466	1.00	2.85	0.0429	0.93	2.93	0.0437	1.02	2.62
04:30	0.0646	1.30	2.72	0.0462	1.23	2.09	0.0476	1.27	2.06	0.0391	0.95	2.58	0.0379	0.98	2.40	0.0395	0.93	2.70	0.0593	1.15	2.97
04:45	0.0572	1.22	2.63	0.0426	1.21	1.97	0.0714	1.35	2.84	0.0277	0.85	2.17	0.0430	0.99	2.70	0.0326	0.85	2.56	0.0378	0.99	2.35
05:00	0.0424	1.13	2.19	0.0513	1.24	2.32	0.0853	1.45	3.07	0.0663	1.13	3.41	0.0417	0.98	2.66	0.0443	0.97	2.86	0.0333	0.97	2.16
05:15	0.0755	1.29	3.21	0.0736	1.35	2.94	0.0893	1.44	3.25	0.0802	1.21	3.74	0.0601	1.12	3.14	0.0443	0.98	2.79	0.0275	0.94	1.85
05:30	0.0572	1.27	2.47	0.1038	1.46	3.68	0.1100	1.53	3.64	0.0937	1.28	4.02	0.1169	1.45	4.18	0.0769	1.19	3.68	0.0366	1.05	2.10
05:45	0.0620	1.23	2.83	0.0958	1.45	3.43	0.1205	1.54	3.96	0.0490	1.02	2.91	0.0906	1.33	3.68	0.1014	1.31	4.23	0.0363	1.06	2.04
06:00	0.0656	1.37	2.55	0.0934	1.42	3.46	0.0981	1.49	3.38	0.0688	1.16	3.41	0.1080	1.41	4.01	0.0781	1.21	3.62	0.0973	1.41	3.61
06:15	0.0946	1.55	3.07	0.0996	1.38	3.81	0.1240	1.53	3.94	0.3889	2.81	5.50	0.1278	1.52	4.30	0.0694	1.14	3.50	0.0339	1.02	2.02
06:30	0.0587	1.33	2.38	0.1127	1.45	4.03	0.1158	1.53	3.86	0.0867	1.24	3.91	0.1130	1.44	4.09	0.2007	1.73	5.59	0.0723	1.24	3.24
06:45	0.0801	1.35	3.17	0.1398	1.54	4.58	0.1052	1.52	3.53	0.2313	1.93	5.50	0.1094	1.43	3.99	0.0834	1.18	4.05	0.3009	2.22	5.90
07:00	0.0799	1.45	2.85	0.1226	1.52	4.12	0.1396	1.53	4.42	0.1089	1.34	4.39	0.1055	1.43	3.88	0.0725	1.15	3.64	0.1067	1.49	3.69
07:15	0.1043	1.57	3.32	0.1349	1.58	4.29	0.1318	1.47	4.64	0.0708	1.17	3.45	0.0899	1.34	3.61	0.0995	1.27	4.32	0.4558	3.16	5.50
07:30	0.0653	1.38	2.52	0.1470	1.61	4.53	0.0965	1.44	3.49	0.0696	1.16	3.43	0.0862	1.31	3.60	0.0995	1.28	4.27	0.1021	1.44	3.68
07:45	0.0706	1.46	2.51	0.0988	1.39	3.75	0.1133	1.51	3.84	0.0673	1.16	3.35	0.1086	1.42	4.02	0.0846	1.21	3.96	0.4954	3.36	5.50
08:00	0.1467	1.76	4.00	0.0970	1.44	3.52	0.1078	1.47	3.78	0.0813	1.24	3.64	0.0935	1.37	3.63	0.0752	1.16	3.73	0.1436	1.60	4.47
08:15	0.1831	1.90	4.47	0.0988	1.45	3.55	0.0923	1.41	3.44	0.0817	1.22	3.74	0.0967	1.37	3.75	0.0833	1.19	3.96	0.1236	1.54	4.06
08:30	0.1426	1.72	4.00	0.1086	1.40	4.10	0.1010	1.45	3.62	0.0763	1.19	3.65	0.0794	1.23	3.60	0.0692	1.13	3.57	0.1231	1.53	4.09
08:45	0.1410	1.73	3.92	0.0928	1.39	3.53	0.2914	2.23	5.50	0.0797	1.21	3.69	0.0863	1.29	3.68	0.0897	1.28	3.87	0.1681	1.72	4.71
09:00	0.1375	1.70	3.93	0.0939	1.45	3.37	0.1279	1.55	4.16	0.0556	1.05	3.20	0.0859	1.30	3.61	0.1058	1.36	4.14	0.4769	3.27	5.50
09:15	0.1140	1.62	3.48	0.0956	1.38	3.67	0.1041	1.47	3.67	0.0985	1.28	4.25	0.0871	1.30	3.67	0.0907	1.32	3.72	0.1385	1.57	4.44
09:30	0.1155	1.64	3.49	0.1109	1.46	3.95	0.1099	1.51	3.73	0.0905	1.33	3.69	0.1085	1.40	4.10	0.0682	1.15	3.41	0.1591	1.69	4.56
09:45	0.1366	1.68	3.96	0.0871	1.42	3.21	0.0924	1.43	3.38	0.1284	1.50	4.40	0.1291	1.48	4.51	0.0799	1.21	3.71	0.2124	1.94	5.02
10:00	0.1089	1.55	3.55	0.0976	1.48	3.39	0.0921	1.41	3.46	0.1273	1.49	4.38	0.3210	2.44	5.50	0.0873	1.29	3.69	0.1264	1.60	3.93
10:15	0.0928	1.45	3.32	0.0889	1.39	3.37	0.1158	1.52	3.88	0.1406	1.58	4.44	0.0779	1.20	3.68	0.1218	1.43	4.45	0.4540	3.15	5.50
10:30	0.1372	1.68	3.99	0.0947	1.44	3.43	0.1252	1.45	4.51	0.2142	1.91	5.17	0.0808	1.22	3.74	0.0532	1.07	2.96	0.1432	1.58	4.52
10:45	0.1010	1.51	3.43	0.0816	1.38	3.14	0.1353	1.59	4.25	0.0745	1.24	3.35	0.0689	1.11	3.62	0.0948	1.31	3.94	0.1130	1.50	3.85
11:00	0.0903	1.47	3.16	0.0974	1.47	3.44	0.0858	1.41	3.19	0.1054	1.43	3.86	0.0721	1.17	3.54	0.1009	1.35	4.00	0.1374	1.58	4.37
11:15	0.1801	1.85	4.57	0.1321	1.58	4.20	0.0994	1.43	3.46	0.0932	1.35	3.72	0.0942	1.33	3.82	0.1229	1.45	4.42	0.1355	1.57	4.33
11:30	0.1046	1.59	3.28	0.1093	1.47	3.83	0.0919	1.43	3.36	0.1032	1.41	3.87	0.0842	1.25	3.75	0.2198	1.79	5.84	0.1027	1.43	3.76
11:45	0.4819	3.30	5.50	0.1082	1.50	3.68	0.1765	1.59	5.52	0.0881	1.32	3.61	0.1140	1.33	4.62	0.0712	1.16	3.53	0.1444	1.59	4.55

Pump House and Valley View Rd
15 Minute PM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/18/21			Monday 04/19/21			Tuesday 04/20/21			Wednesday 04/21/21			Thursday 04/22/21			Friday 04/23/21			Saturday 04/24/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
12:00	0.0942	1.42	3.49	0.2259	1.90	5.50	0.1050	1.49	3.60	0.1125	1.48	3.91	0.1064	1.34	4.26	0.0764	1.24	3.41	0.0805	1.34	3.23
12:15	0.1826	2.04	4.03	0.0996	1.48	3.45	0.1336	1.53	4.22	0.0765	1.25	3.38	0.0857	1.28	3.70	0.1084	1.40	4.09	0.1423	1.60	4.42
12:30	0.1367	1.82	3.54	0.1034	1.46	3.68	0.1393	1.60	4.33	0.1242	1.48	4.34	0.0886	1.40	3.35	0.1114	1.44	4.02	0.0942	1.40	3.55
12:45	0.1644	1.94	3.89	0.0977	1.45	3.51	0.1068	1.49	3.68	0.0929	1.34	3.75	0.1070	1.35	4.24	0.1628	1.69	4.70	0.1534	1.80	4.03
13:00	0.1595	1.90	3.88	0.0992	1.49	3.44	0.0775	1.34	3.12	0.0767	1.24	3.47	0.0776	1.20	3.65	0.0954	1.36	3.74	0.1175	1.55	3.85
13:15	0.1436	1.86	3.60	0.0998	1.49	3.44	0.1384	1.60	4.31	0.1330	1.54	4.38	0.0695	1.13	3.59	0.0947	1.35	3.75	0.1185	1.56	3.81
13:30	0.1084	1.73	3.01	0.1126	1.54	3.71	0.1180	1.52	3.95	0.0953	1.35	3.78	0.0787	1.19	3.74	0.0799	1.27	3.45	0.1431	1.61	4.42
13:45	0.1287	1.80	3.40	0.0524	1.26	2.31	0.0932	1.44	3.38	0.0981	1.37	3.83	0.0563	1.05	3.23	0.4491	3.13	5.50	0.1126	1.51	3.81
14:00	0.5908	3.85	5.50	0.0876	1.42	3.22	0.0971	1.45	3.45	0.0914	1.38	3.51	0.0839	1.23	3.82	0.0876	1.35	3.47	0.1182	1.51	3.99
14:15	0.1288	1.77	3.46	0.1559	1.62	4.78	0.0919	1.43	3.35	0.1109	1.43	4.06	0.0703	1.14	3.57	0.0948	1.40	3.56	0.0863	1.35	3.41
14:30	0.1118	1.73	3.12	0.1062	1.49	3.68	0.1024	1.47	3.61	0.0920	1.33	3.73	0.0462	0.97	2.95	0.0906	1.33	3.69	0.1044	1.48	3.62
14:45	0.1145	1.72	3.21	0.1057	1.53	3.51	0.1123	1.51	3.79	0.0959	1.36	3.77	0.0606	1.05	3.48	0.0987	1.41	3.69	0.1187	1.53	3.93
15:00	0.1310	1.59	4.11	0.0849	1.37	3.29	0.0861	1.39	3.26	0.1048	1.44	3.79	0.0782	1.20	3.68	0.0774	1.24	3.46	0.1273	1.56	4.13
15:15	0.1034	1.48	3.59	0.1079	1.50	3.67	0.1102	1.51	3.72	0.0960	1.37	3.75	0.0814	1.22	3.75	0.0643	1.17	3.16	0.1173	1.52	3.91
15:30	0.0767	1.33	3.10	0.1035	1.48	3.62	0.1132	1.55	3.64	0.1102	1.42	4.05	0.0647	1.07	3.59	0.0999	1.41	3.71	0.1043	1.47	3.67
15:45	0.0878	1.38	3.36	0.1040	1.42	3.84	0.1068	1.43	3.70	0.1033	1.40	3.90	0.0693	1.12	3.61	0.1182	1.50	4.03	0.0979	1.45	3.51
16:00	0.1148	1.57	3.68	0.2564	2.08	5.50	0.1167	1.52	3.90	0.1352	1.57	4.32	0.1162	1.38	4.46	0.1391	1.59	4.37	0.1040	1.47	3.65
16:15	0.0783	1.39	2.97	0.0966	1.43	3.52	0.1057	1.45	3.74	0.0931	1.36	3.68	0.0757	1.18	3.63	0.1200	1.52	4.03	0.2394	2.13	4.98
16:30	0.1100	1.53	3.66	0.1030	1.46	3.65	0.0956	1.42	3.53	0.0825	1.29	3.49	0.3242	1.46	5.50	0.1089	1.48	3.79	0.0960	1.38	3.68
16:45	0.0821	1.44	2.97	0.0982	1.48	3.41	0.1090	1.43	3.78	0.0928	1.34	3.71	0.0695	1.14	3.52	0.0952	1.42	3.52	0.1024	1.43	3.75
17:00	0.1500	1.72	4.20	0.1182	1.50	4.02	0.0923	1.42	3.42	0.0970	1.38	3.72	0.0803	1.21	3.75	0.0958	1.42	3.54	0.1175	1.54	3.85
17:15	0.0814	1.36	3.20	0.1144	1.50	3.89	0.1045	1.44	3.77	0.1211	1.30	3.76	0.0756	1.17	3.69	0.0877	1.33	3.55	0.0943	1.40	3.55
17:30	0.0781	1.33	3.18	0.1189	1.51	4.02	0.1355	1.52	4.54	0.4603	1.18	5.50	0.1110	1.37	4.33	0.0849	1.32	3.50	0.1058	1.48	3.69
17:45	0.0999	1.44	3.62	0.1093	1.49	3.78	0.1219	1.55	3.94	0.1055	1.44	3.81	0.0951	1.28	4.06	0.0940	1.37	3.65	0.1251	1.53	4.17
18:00	0.1178	1.55	3.83	0.1418	1.58	4.48	0.1249	1.44	4.52	0.1101	1.44	3.98	0.0918	1.42	3.39	0.0863	1.31	3.58	0.1161	1.51	3.94
18:15	0.1228	1.63	3.73	0.1293	1.51	4.38	0.1255	1.53	4.16	0.0944	1.36	3.70	0.0831	1.23	3.77	0.1002	1.42	3.72	0.1438	1.60	4.49
18:30	0.1320	1.57	4.23	0.1024	1.40	3.86	0.1113	1.45	3.93	0.1896	1.30	4.99	0.0909	1.27	3.93	0.0873	1.29	3.71	0.1092	1.51	3.71
18:45	0.1156	1.56	3.72	0.1079	1.46	3.85	0.1079	1.47	3.80	0.1051	1.44	3.80	0.1060	1.34	4.25	0.0855	1.34	3.45	0.1350	1.57	4.31
19:00	0.1253	1.60	3.91	0.1279	1.55	4.17	0.1006	1.37	3.93	0.1100	1.47	3.86	0.0968	1.31	4.03	0.0895	1.37	3.47	0.1125	1.51	3.81
19:15	0.1090	1.48	3.81	0.1195	1.52	4.01	0.1241	1.49	4.30	0.1070	1.42	3.94	0.0973	1.31	4.03	0.1001	1.44	3.64	0.1321	1.55	4.32
19:30	0.1177	1.53	3.92	0.1146	1.46	4.08	0.2452	2.02	5.50	0.1180	1.49	4.07	0.1083	1.36	4.27	0.1239	1.50	4.24	0.1413	1.60	4.39
19:45	0.1215	1.38	4.66	0.1262	1.55	4.12	0.1229	1.42	4.55	0.0977	1.36	3.84	0.0889	1.26	3.90	0.1291	1.54	4.24	0.1461	1.61	4.51
20:00	0.1345	1.52	4.53	0.1296	1.49	4.45	0.1243	1.43	4.55	0.1045	1.44	3.79	0.0986	1.36	3.87	0.1005	1.42	3.69	0.1395	1.60	4.36
20:15	0.1188	1.53	3.94	0.1388	1.54	4.55	0.0886	1.37	3.44	0.1053	1.41	3.92	0.0929	1.29	3.95	0.0998	1.41	3.71	0.1210	1.53	4.03
20:30	0.1630	1.73	4.55	0.1388	1.60	4.31	0.1164	1.43	4.27	0.1173	1.47	4.12	0.0970	1.31	4.02	0.0834	1.33	3.39	0.1522	1.64	4.59
20:45	0.1240	1.55	4.06	0.1251	1.56	4.05	0.1118	1.41	4.16	0.0944	1.37	3.68	0.0892	1.28	3.84	0.1169	1.47	4.11	0.1016	1.44	3.68
21:00	0.1249	1.55	4.06	0.1337	1.49	4.59	0.1131	1.41	4.21	0.1013	1.38	3.90	0.0814	1.22	3.75	0.1022	1.43	3.74	0.1121	1.49	3.87
21:15	0.0990	1.33	4.02	0.1342	1.54	4.42	0.0901	1.32	3.69	0.0956	1.36	3.78	0.0909	1.29	3.86	0.1107	1.47	3.88	0.0980	1.44	3.56
21:30	0.0943	1.40	3.56	0.0986	1.44	3.56	0.0780	[illegible]	3.71	0.0966	1.38	3.72	0.0531	1.04	3.10	0.1110	1.48	3.85	0.0995	1.43	3.64
21:45	0.1053	1.48	3.66	0.1238	1.58	3.92	0.0747	[illegible]	3.66	0.0804	1.26	3.55	0.1071	1.37	4.17	0.0927	1.36	3.65	0.0972	1.41	3.61
22:00	0.0993	1.44	3.60	0.0987	1.46	3.50	0.0448	0.97	2.89	0.0717	1.23	3.25	0.1049	1.35	4.15	0.1088	1.46	3.85	0.1000	1.44	3.64
22:15	0.1017	1.46	3.60	0.1121	1.49	3.86	0.0703	[illegible]	3.38	0.0881	1.28	3.77	0.0828	1.25	3.69	0.0852	1.37	3.33	0.4390	3.07	5.50
22:30	0.2336	1.95	5.50	0.0955	1.43	3.50	0.0536	1.05	3.06	0.0603	1.11	3.19	0.0630	1.11	3.30	0.0957	1.41	3.59	0.0828	1.32	3.39
22:45	0.0954	1.45	3.43	0.0895	1.43	3.28	0.0476	1.00	2.92	0.1370	1.59	4.31	0.0787	1.20	3.72	0.0739	1.26	3.23	0.0789	1.30	3.30
23:00	0.0934	1.52	3.13	0.0544	1.27	2.37	0.0531	1.02	3.18	0.0522	1.08	2.86	0.0468	0.99	2.92	0.0970	1.41	3.60	0.1193	1.52	4.01
23:15	0.0645	1.34	2.60	0.0529	1.28	2.27	0.0460	0.97	2.94	0.0578	1.11	3.03	0.0374	0.93	2.56	0.0612	1.20	2.87	0.1163	1.49	4.02
23:30	0.0963	1.50	3.29	0.0760	1.39	2.91	0.0393	0.92	2.73	0.0859	1.27	3.72	0.0367	0.92	2.54	0.0371	1.05	2.12	0.0635	1.21	2.96
23:45	0.1039	1.51	3.50	0.0547	1.28	2.34	0.0344	0.89	2.52	0.0688	1.17	3.35	0.3739	0.73	5.50	0.0581	1.15	2.92	0.0660	1.25	2.92

Pump House and Valley View Rd
15 Minute AM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

	Sunday 04/25/21			Monday 04/26/21			Tuesday 04/27/21			Wednesday 04/28/21			Thursday 04/29/21			Friday 04/30/21			Saturday 05/01/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
00:00	0.0515	1.14	2.62	0.0508	1.16	2.53	0.0529	1.19	2.53	0.0584	1.12	3.02	0.0805	1.40	3.03	0.0395	0.94	2.68	0.0571	1.05	3.25
00:15	0.0434	1.11	2.28	0.0316	1.03	1.86	0.0550	1.14	2.81	0.0384	0.99	2.39	0.0754	1.38	2.89	0.0352	0.92	2.44	0.0286	0.88	2.12
00:30	0.0489	1.13	2.53	0.0470	1.14	2.39	0.0435	1.12	2.26	0.0355	0.97	2.30	0.0636	1.31	2.65	0.0431	0.95	2.83	0.0397	0.96	2.58
00:45	0.0508	1.14	2.59	0.0407	1.12	2.12	0.0440	1.13	2.26	0.0338	0.95	2.23	0.0783	1.39	2.98	0.0250	0.81	2.09	0.0564	1.08	3.11
01:00	0.0365	1.04	2.11	0.0525	1.16	2.61	0.0413	1.14	2.11	0.0330	0.95	2.18	0.1526	1.73	4.26	0.0498	0.99	3.09	0.0450	0.98	2.86
01:15	0.0425	1.08	2.35	0.0374	1.09	2.04	0.0450	1.17	2.20	0.0408	1.01	2.47	0.1634	1.74	4.52	0.0384	0.88	2.83	0.0392	0.93	2.67
01:30	0.0594	1.16	2.95	0.0497	1.15	2.49	0.0412	1.14	2.09	0.0297	0.93	2.04	0.2051	1.89	5.03	0.0223	0.79	1.94	0.0311	0.88	2.32
01:45	0.0270	1.00	1.67	0.0401	1.11	2.11	0.0413	1.14	2.10	0.0297	0.93	2.04	0.2329	1.95	5.48	0.0229	0.80	1.94	0.0229	0.81	1.92
02:00	0.0314	1.00	1.93	0.0360	1.09	1.94	0.0377	1.11	1.99	0.0228	0.87	1.72	0.3043	2.35	5.50	0.1787	1.68	5.20	0.0191	0.78	1.68
02:15	0.0394	1.07	2.21	0.0350	1.11	1.84	0.0396	1.13	2.03	0.0274	0.89	1.98	0.4104	2.92	5.50	0.0201	0.78	1.79	0.0257	0.83	2.08
02:30	0.0395	1.06	2.22	0.0538	1.18	2.59	0.0482	1.16	2.39	0.0322	0.94	2.16	0.4049	2.89	5.50	0.0203	0.77	1.83	0.0735	1.21	3.41
02:45	0.0339	1.04	1.97	0.0406	1.11	2.15	0.0485	1.19	2.33	0.0260	0.88	1.91	0.2145	1.87	5.35	0.0196	0.78	1.74	0.0192	0.79	1.67
03:00	0.0547	1.15	2.73	0.0412	1.11	2.17	0.0379	1.13	1.94	0.0240	0.87	1.80	0.0321	1.10	1.73	0.0190	0.77	1.71	0.0214	0.80	1.83
03:15	0.0449	1.12	2.35	0.0583	1.22	2.68	0.0497	1.23	2.27	0.0301	0.93	2.05	0.0342	1.12	1.78	0.1415	1.54	4.67	0.0264	0.83	2.14
03:30	0.0366	1.06	2.07	0.0361	1.11	1.90	0.0319	1.10	1.70	0.0426	1.00	2.60	0.0413	1.17	2.02	0.0206	0.78	1.81	0.0192	0.79	1.67
03:45	0.0504	1.07	2.80	0.0450	1.14	2.29	0.0260	1.03	1.54	0.0526	1.11	2.79	0.0471	1.21	2.19	0.0173	0.75	1.62	0.0213	0.78	1.88
04:00	0.0316	0.97	2.02	0.0527	1.19	2.52	0.0487	1.24	2.20	0.0518	1.11	2.73	0.0467	1.22	2.15	0.0256	0.81	2.12	0.0240	0.83	1.93
04:15	0.0335	1.00	2.06	0.0496	1.18	2.40	0.0540	1.26	2.37	0.0379	0.99	2.38	0.0374	1.14	1.90	0.0192	0.76	1.77	0.0284	0.86	2.18
04:30	0.0357	1.02	2.14	0.0342	1.07	1.91	0.0412	1.24	1.86	0.0522	1.10	2.79	0.0602	1.30	2.53	0.0244	0.82	2.01	0.0278	0.85	2.18
04:45	0.0414	1.03	2.44	0.0377	1.02	2.25	0.0557	1.25	2.46	0.0426	1.02	2.56	0.0675	1.32	2.76	0.0396	0.94	2.67	0.0249	0.83	2.02
05:00	0.0500	1.10	2.68	0.0673	1.29	2.85	0.0731	1.33	2.81	0.0526	1.12	2.74	0.0759	1.39	2.91	0.0732	1.21	3.43	0.0483	1.02	2.88
05:15	0.0541	1.15	2.71	0.0482	1.18	2.32	0.0660	1.32	2.70	0.0492	1.12	2.58	0.0830	1.42	3.07	0.0728	1.16	3.61	0.0238	0.82	1.95
05:30	0.0522	1.14	2.64	0.0949	1.43	3.48	0.1206	1.61	3.73	0.0885	1.37	3.45	0.1195	1.58	3.77	0.0739	1.18	3.58	0.0561	1.05	3.21
05:45	0.0386	1.02	2.30	0.0936	1.41	3.50	0.1218	1.60	3.79	0.0875	1.30	3.65	0.1125	1.55	3.67	0.0708	1.16	3.49	0.1286	1.54	4.24
06:00	0.0653	1.22	3.00	0.1068	1.47	3.75	0.1115	1.62	3.42	0.0954	1.40	3.59	0.0978	1.42	3.63	0.0842	1.25	3.74	0.0659	1.14	3.33
06:15	0.0660	1.24	2.98	0.1118	1.50	3.80	0.1241	1.67	3.64	0.1262	1.30	3.93	0.2744	2.18	5.50	0.0869	1.26	3.81	0.0505	1.05	2.90
06:30	0.0978	1.39	3.71	0.1076	1.49	3.73	0.4162	2.95	5.50	0.1005	1.41	3.74	0.1281	1.60	3.97	0.0906	1.33	3.68	0.0673	1.14	3.41
06:45	0.0767	1.28	3.30	0.0873	1.37	3.40	0.1114	1.57	3.57	0.1382	1.30	4.30	0.1588	1.63	4.82	0.0860	1.28	3.68	0.0766	1.23	3.48
07:00	0.0968	1.42	3.58	0.0946	1.42	3.48	0.1498	1.63	4.55	0.0929	1.39	3.55	0.1182	1.45	4.25	0.1281	1.49	4.41	0.0829	1.27	3.61
07:15	0.0977	1.39	3.70	0.1372	1.61	4.22	0.1273	1.60	3.96	0.1250	1.55	4.07	0.4586	3.17	5.50	0.0822	1.27	3.57	0.3285	2.48	5.50
07:30	0.1635	1.73	4.54	0.1428	1.60	4.44	0.1246	1.65	3.71	0.1304	1.56	4.20	0.4201	2.97	5.50	0.1137	1.42	4.18	0.0961	1.37	3.75
07:45	0.0923	1.42	3.41	0.1242	1.54	4.08	0.4599	3.13	5.50	0.1269	1.54	4.16	0.1876	1.81	4.88	0.4429	3.09	5.50	0.1017	1.39	3.89
08:00	0.1028	1.47	3.61	0.0998	1.47	3.49	0.1266	1.69	3.65	0.2048	1.35	5.17	0.0877	1.29	3.73	0.1062	1.38	4.08	0.1622	1.70	4.64
08:15	0.1100	1.47	3.86	0.1024	1.47	3.59	0.1676	1.79	4.45	0.1200	1.55	3.90	0.0975	1.35	3.89	0.0866	1.29	3.69	0.1032	1.40	3.91
08:30	0.1360	1.60	4.23	0.1053	1.47	3.69	0.1617	1.74	4.46	0.1460	1.54	4.41	0.1118	1.41	4.17	0.3847	2.79	5.50	0.0982	1.36	3.85
08:45	0.1263	1.56	4.07	0.1179	1.52	3.96	0.1136	1.55	3.69	0.1421	1.51	4.38	0.0808	1.21	3.77	0.1060	1.43	3.87	0.0751	1.28	3.24
09:00	0.1411	1.60	4.41	0.1033	1.45	3.70	0.1438	1.77	3.87	0.1494	1.54	4.51	0.0572	1.08	3.13	0.0852	1.32	3.48	0.1340	1.52	4.50
09:15	0.1160	1.53	3.86	0.1615	1.70	4.59	0.1728	1.77	4.67	0.1126	1.50	3.86	0.0844	1.26	3.69	0.1058	1.43	3.86	0.1534	1.61	4.73
09:30	0.1426	1.64	4.30	0.1084	1.49	3.72	0.1533	1.63	4.44	0.0988	1.40	3.71	0.1334	1.47	4.67	0.0904	1.31	3.76	0.1571	1.63	4.76
09:45	0.1569	1.69	4.50	0.1295	1.57	4.16	0.1456	1.71	4.12	0.1140	1.52	3.83	0.0793	1.22	3.64	0.1203	1.48	4.20	0.1164	1.46	4.12
10:00	0.1215	1.53	4.04	0.1385	1.59	4.36	0.1378	1.75	3.77	0.1108	1.47	3.90	0.0934	1.31	3.86	0.0871	1.27	3.78	0.1270	1.48	4.42
10:15	0.4623	3.19	5.50	0.1198	1.55	3.92	0.1739	1.73	4.66	0.1076	1.47	3.78	0.0861	1.27	3.75	0.0941	1.35	3.76	0.3556	2.63	5.50
10:30	0.1089	1.51	3.70	0.1390	1.58	4.40	0.1094	1.50	3.72	0.1668	1.78	4.45	0.2220	1.78	5.93	0.1341	1.51	4.53			
10:45	0.1460	1.65	4.36	0.0942	1.41	3.53	0.1280	1.66	3.78	0.1437	1.53	4.35	0.3768	2.75	5.50	0.1269	1.52	4.27			
11:00	0.1717	1.73	4.79	0.1040	1.43	3.81	0.5225	3.50	5.50	0.1035	1.46	3.67	0.3248	2.46	5.50	0.1365	1.54	4.47			
11:15	0.1239	1.52	4.17	0.0926	1.38	3.58	0.1230	1.61	3.81	0.1118	1.52	3.76	0.2508	2.05	5.50	0.1315	1.51	4.44			
11:30	0.0973	1.41	3.62	0.0646	1.22	2.97	0.0838	1.31	3.48	0.0991	1.43	3.61	0.1331	1.48	4.64	0.0688	1.17	3.35			
11:45	0.2003	1.91	4.86	0.1323	1.56	4.27	0.1099	1.55	3.57	0.0801	1.33	3.26	0.1072	1.37	4.18	0.2776	2.20	5.50			

Pump House and Valley View Rd
15 Minute PM Report

Flow Million Gallons/Day
Level Inches
Velocity Feet/Second

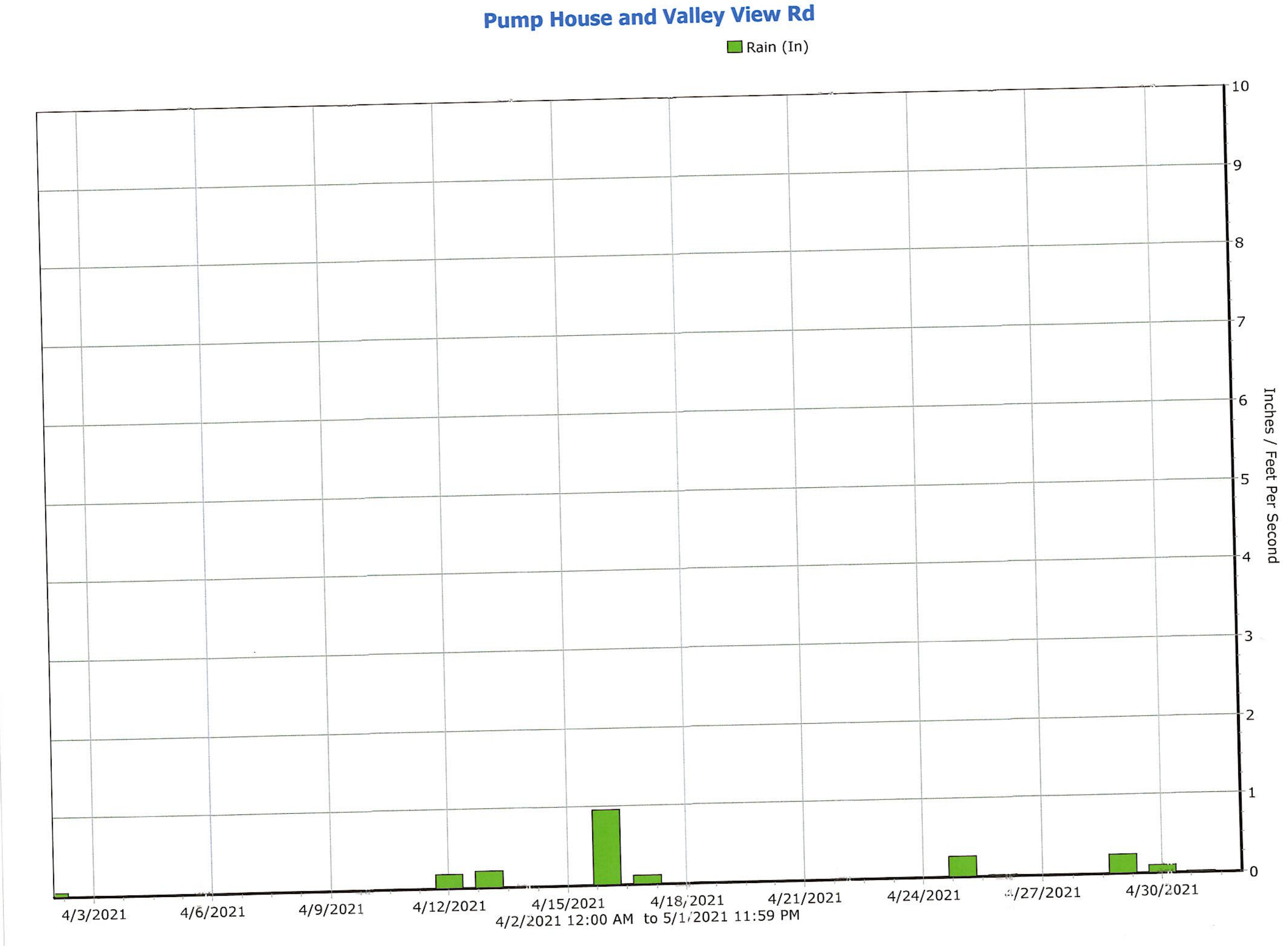
	Sunday 04/25/21			Monday 04/26/21			Tuesday 04/27/21			Wednesday 04/28/21			Thursday 04/29/21			Friday 04/30/21			Saturday 05/01/21		
	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V	Q	Lv	V
12:00	0.1455	1.61	4.48	0.1013	1.47	3.57	0.1196	1.64	3.60	0.0511	1.10	2.73	0.1072	1.40	4.05	0.0874	1.32	3.61			
12:15	0.1254	1.54	4.12	0.1296	1.56	4.18	0.1606	1.63	4.68	0.1480	1.34	4.44	0.0833	1.27	3.60	0.0721	1.21	3.35			
12:30	0.1406	1.63	4.26	0.1032	1.44	3.74	0.1439	1.65	4.26	0.1429	1.31	4.39	0.1039	1.36	4.07	0.0960	1.35	3.80			
12:45	0.1139	1.51	3.85	0.0877	1.37	3.43	0.1327	1.54	4.35	0.1340	1.57	4.27	0.3604	2.66	5.50	0.0860	1.26	3.77			
13:00	0.4817	3.29	5.50	0.1603	1.65	4.79	0.0928	1.49	3.20	0.0841	1.28	3.63	0.0881	1.29	3.73	0.2418	1.99	5.53			
13:15	0.1362	1.58	4.33	0.1476	1.62	4.50	0.1035	1.45	3.69	0.0956	1.38	3.69	0.3460	2.58	5.50	0.0864	1.29	3.67			
13:30	0.1429	1.63	4.35	0.0630	1.22	2.90	0.0945	1.42	3.51	0.0765	1.29	3.26	0.0834	1.26	3.66	0.0853	1.27	3.71			
13:45	0.1330	1.59	4.19	0.0540	1.15	2.71	0.1373	1.55	4.42	0.0700	1.22	3.21	0.0907	1.33	3.69	0.0906	1.29	3.86			
14:00	0.1006	1.45	3.62	0.1052	1.46	3.73	0.0653	1.21	3.05	0.0696	1.24	3.14	0.0872	1.24	3.94	0.0830	1.25	3.70			
14:15	0.1077	1.48	3.75	0.0497	1.10	2.65	0.0603	1.23	2.73	0.1385	1.54	4.56	0.0619	1.09	3.34	0.0954	1.35	3.80			
14:30	0.0792	1.33	3.21	0.0564	1.17	2.76	0.0852	1.40	3.22	0.1459	1.31	3.80	0.0818	1.25	3.64	0.0971	1.34	3.90			
14:45	0.0988	1.42	3.63	0.0542	1.16	2.67	0.1063	1.43	3.70	0.2452	2.03	5.43	0.0589	1.07	3.27	0.0602	1.14	3.05			
15:00	0.0998	1.45	3.59	0.0681	1.27	2.95	0.1099	1.52	3.68	0.5158	3.47	5.50	0.0867	1.33	3.54	0.0935	1.36	3.68			
15:15	0.1420	1.61	4.40	0.1284	1.60	4.00	0.1310	1.55	4.25	0.1051	1.47	3.70	0.1000	1.36	3.93	0.0893	1.31	3.71			
15:30	0.1101	1.51	3.72	0.1013	1.45	3.64	0.1313	1.57	4.19	0.1394	1.38	4.04	0.0726	1.17	3.53	0.4419	3.09	5.50			
15:45	0.0946	1.40	3.58	0.0868	1.36	3.40	0.1364	1.59	4.27	0.5250	3.52	5.50	0.0718	1.16	3.55	0.0723	1.20	3.41			
16:00	0.1417	1.60	4.39	0.1056	1.46	3.76	0.1676	1.69	4.82	0.1015	1.49	3.48	0.0868	1.26	3.81	0.1149	1.50	3.93			
16:15	0.0912	1.41	3.40	0.1062	1.49	3.67	0.1269	1.59	3.99	0.1155	1.54	3.79	0.0724	1.18	3.51	0.1071	1.44	3.87			
16:30	0.1100	1.51	3.73	0.1031	1.45	3.69	0.1104	1.52	3.70	0.1365	1.39	3.93	0.1152	1.40	4.35	0.0818	1.26	3.58			
16:45	0.1088	1.53	3.61	0.1381	1.60	4.30	0.0895	1.37	3.47	0.1551	1.74	4.28	0.0652	1.11	3.45	0.0862	1.30	3.63			
17:00	0.1346	1.59	4.25	0.1362	1.59	4.29	0.4786	3.23	5.50	0.5653	3.72	5.50	0.0939	1.30	3.94	0.1002	1.37	3.90			
17:15	0.1087	1.54	3.59	0.1295	1.57	4.13	0.1075	1.49	3.70	0.5700	3.74	5.50	0.0716	1.16	3.54	0.4641	3.20	5.50			
17:30	0.1364	1.59	4.29	0.1275	1.64	3.83	0.1205	1.55	3.87	0.5179	3.48	5.50	0.0826	1.24	3.73	0.1107	1.46	3.93			
17:45	0.1120	1.53	3.72	0.1239	1.54	4.06	0.1090	1.50	3.74	0.4001	2.87	5.50	0.0891	1.28	3.83	0.1029	1.43	3.76			
18:00	0.1488	1.62	4.55	0.1110	1.49	3.83	0.1136	1.53	3.78	0.0996	1.43	3.63	0.0838	1.23	3.81	0.0911	1.30	3.81			
18:15	0.1130	1.40	4.28	0.1174	1.52	3.94	0.1405	1.72	3.95	0.1489	1.72	4.19	0.1216	1.40	4.59	0.0826	1.25	3.68			
18:30	0.1268	1.55	4.15	0.1180	1.56	3.81	0.1296	1.65	3.83	0.1616	1.74	4.48	0.0873	1.27	3.80	0.1076	1.43	3.94			
18:45	0.0932	1.26	4.08	0.1341	1.58	4.24	0.1817	1.89	4.46	0.1708	1.80	4.50	0.1152	1.44	4.19	0.1206	1.48	4.21			
19:00	0.1145	1.55	3.74	0.1608	1.67	4.70	0.1538	1.74	4.25	0.1579	1.77	4.25	0.0886	1.27	3.84	0.0963	1.35	3.81			
19:15	0.1037	1.47	3.64	0.1222	1.59	3.85	0.1733	1.73	4.62	0.1634	1.73	4.54	0.1086	1.35	4.31	0.1213	1.47	4.28			
19:30	0.1277	1.56	4.12	0.1313	1.60	4.10	0.1574	1.73	4.21	0.1394	1.38	4.06	0.0613	1.08	3.37	0.0921	1.33	3.76			
19:45	0.1495	1.62	4.59	0.1272	1.65	3.79	0.1595	1.73	4.27	0.1261	1.37	3.69	0.1073	1.31	4.47	0.1075	1.41	4.00			
20:00	0.1332	1.57	4.26	0.1489	1.64	4.46	0.1306	1.61	4.01	0.1714	1.80	4.50	0.0872	1.21	4.06	0.1149	1.67	3.38			
20:15	0.1142	1.50	3.91	0.1683	1.75	4.60	0.1576	1.71	4.44	0.1594	1.74	4.40	0.0900	1.29	3.83	0.0725	1.22	3.35			
20:30	0.1033	1.48	3.61	0.1197	1.54	3.95	0.1419	1.63	4.31	0.1198	1.59	3.76	0.1112	1.39	4.23	0.0718	1.17	3.53			
20:45	0.1141	1.51	3.85	0.1212	1.52	4.06	0.1136	1.49	3.94	0.1418	1.52	4.34	0.0913	1.30	3.81	0.1093	1.46	3.86			
21:00	0.1156	1.53	3.85	0.1379	1.57	4.41	0.1391	1.61	4.28	0.1582	1.59	4.54	0.1159	1.40	4.37	0.1069	1.40	4.04			
21:15	0.1146	1.53	3.82	0.1145	1.52	3.83	0.1068	1.43	3.73	0.2460	2.03	5.45	0.0928	1.30	3.89	0.1306	1.51	4.42			
21:30	0.1529	1.63	4.62	0.1052	1.49	3.64	0.1510	1.75	4.15	0.2975	2.31	5.50	0.0701	1.17	3.43	0.0979	1.36	3.86			
21:45	0.1087	1.49	3.76	0.0986	1.43	3.61	0.1064	1.43	3.70	0.4683	3.22	5.50	0.0907	1.30	3.80	0.0826	1.28	3.56			
22:00	0.1009	1.44	3.64	0.0986	1.41	3.67	0.0576	1.20	2.71	0.4240	2.99	5.50	0.0841	1.27	3.66	0.0807	1.28	3.47			
22:15	0.0536	1.19	2.56	0.0779	1.29	3.31	0.0659	1.19	3.16	0.3441	2.57	5.50	0.0639	1.08	3.50	0.0670	1.14	3.41			
22:30	0.0899	1.39	3.42	0.0612	1.20	2.87	0.0611	1.14	3.09	0.0518	1.17	2.54	0.0656	1.15	3.30	0.0664	1.17	3.24			
22:45	0.0951	1.40	3.57	0.0829	1.34	3.32	0.0827	1.30	3.46	0.0983	1.46	3.50	0.0640	1.09	3.44	0.0782	1.23	3.57			
23:00	0.1024	1.42	3.77	0.0951	1.39	3.61	0.0765	1.24	3.42	0.0838	1.31	3.48	0.0469	1.02	2.80	0.0657	1.17	3.23			
23:15	0.0929	1.39	3.52	0.0995	1.42	3.68	0.0549	1.15	2.75	0.0568	1.24	2.55	0.0509	1.01	3.08	0.0773	1.20	3.66			
23:30	0.0672	1.23	3.05	0.0753	1.31	3.13	0.0612	1.16	3.05	0.0768	1.42	2.83	0.0514	1.01	3.12	0.0631	1.11	3.32			
23:45	0.0486	1.14	2.47	0.0619	1.27	2.70	0.0580	1.16	2.88	0.0794	1.40	2.99	0.0362	0.92	2.52	0.0482	1.06	2.74			

Technologies, LLC

We are flow !

RAIN

DATA



Pump House and Valley View Rd
Rain (In)
10
9
8
7
6
5
4
3
2
1
0
Inches / Feet Per Second
4/3/2021
4/6/2021
4/9/2021
4/12/2021
4/15/2021
4/18/2021
4/21/2021
4/24/2021
4/27/2021
4/30/2021
4/2/2021 12:00 AM to 5/1/2021 11:59 PM

Pump House and Valley View Rd
Rain Report

Units: Rain / Totals: Inches

Date	Max	Min	Avg	Total
04/01/21				
04/02/21	0.05	0.05	0.05	0.00
04/03/21	0.00	0.00	0.00	0.00
04/04/21	0.00	0.00	0.00	0.00
04/05/21	0.00	0.00	0.00	0.00
04/06/21	0.00	0.00	0.00	0.00
04/07/21	0.00	0.00	0.00	0.00
04/08/21	0.00	0.00	0.00	0.00
04/09/21	0.00	0.00	0.00	0.00
04/10/21	0.00	0.00	0.00	0.00
04/11/21	0.00	0.00	0.00	0.00
04/12/21	0.35	0.00	0.17	0.00
04/13/21	0.21	0.21	0.21	0.00
04/14/21	0.00	0.00	0.00	0.00
04/15/21	0.00	0.00	0.00	0.00
04/16/21	0.95	0.95	0.95	0.00
04/17/21	0.11	0.11	0.11	0.00
04/18/21	0.00	0.00	0.00	0.00
04/19/21	0.00	0.00	0.00	0.00
04/20/21	0.00	0.00	0.00	0.00
04/21/21	0.00	0.00	0.00	0.00
04/22/21	0.00	0.00	0.00	0.00
04/23/21	0.00	0.00	0.00	0.00
04/24/21	0.00	0.00	0.00	0.00
04/25/21	0.26	0.26	0.26	0.00
04/26/21	0.01	0.01	0.01	0.00
04/27/21	0.00	0.00	0.00	0.00
04/28/21	0.00	0.00	0.00	0.00
04/29/21	0.25	0.25	0.25	0.00
04/30/21	0.09	0.09	0.09	0.00
05/01/21	0.01	0.01	0.01	0.00

Summary	Max	Min	Avg	Total
Week 1 Summary				
Week 2 Summary	0.35	0.00	0.19	0.00
Week 3 Summary	0.95	0.11	0.53	0.00
Week 4 Summary	0.26	0.01	0.14	0.00
Week 5 Summary	0.25	0.01	0.12	0.00

OVERLOOK TERRACE - SENIOR HOUSING June 21, 2021

CORTLANDT, NEW YORK

Summary Sanitary Sewer Pipe Data (Town Asbuilt Information)

Pipe[(1)] Connection	Start Inv (ft)	End Invert (ft)	Pipe Length (ft)	Pipe Slope (S) (ft/ft)	%	Pipe Size
PROP Bldg to MH	131.00	124.00	109	0.064	6.42%	6
PROP MH TO MH	123.90	121.68	212	0.010	1.05%	6
PROP MH TO MH	121.58	120.00	96	0.016	1.65%	6
PROP MH TO EXIST MH 12	119.90	118.85	68	0.015	1.54%	6
EXIST MH 13 TO MH 12	138.74	119.30	308	0.063	6.31%	8
EXIST MH 12 TO MH 11	119.16	118.87	64	0.005	0.45%	8
EXIST MH 11 TO MH 10	118.78	117.81	70	0.014	1.39%	8
EXIST MH 10 TO MH 9	117.76	117.52	44	0.005	0.55%	8
EXIST MH 9 TO MH 8	117.47	117.10	56	0.007	0.66%	8
EXIST MH 8 TO MH 7	116.97	108.28	193	0.045	4.50%	8
EXIST MH 7 TO MH 6	104.03	100.23	98	0.039	3.88%	8
EXIST MH 6 TO MH 5	98.05	83.60	156	0.093	9.26%	8
EXIST MH 5 TO MH 4	83.60	58.10	255	0.100	10.00%	8
EXIST MH 4 TO MH 3	58.10	41.60	199	0.083	8.29%	8
EXIST MH 3 TO MH 2	41.60	30.55	204	0.054	5.42%	8
EXIST MH 2 TO MH 1	30.55	25.25	78	0.068	6.79%	8

Sewer information for MH's 13 through 6 taken from As-Bult information from Waterbury Manor Sewer District Partial As-Built Drawing, dated 11-25-92, Sheet No. AB-1. Surface (manhole rim covers) elevations for manholes 7 through 1 taken from West. Co. GIS mapping with field measurements of manhole depths to approximate pipe slopes.

OVERLOOK TERRACE - SENIOR HOUSING
CORTLANDT, NEW YORK

June 21, 2021

Sanitary Sewer Pipe Capacity Analysis

Pipe Capacity Calculations Based on Open Channel Flow Equations found in *Civil Engineering Reference Manual* - Michael R. Lindeburg

Where discharge flow, Q is represented by:

$$Q = (C)(A)\sqrt{(r_H * S)}$$

And the Manning's Coefficient, C is derived by:

$$C = \frac{1.49}{n}(r_H)^{1/6}$$

Pipe Segment	Slope (S) (ft/ft)	Flow Capacity (cfs)	Pipe Velocity (ft/sec)	Pipe Capacity (gal/day)	Pipe Capacity (gal/min)	Existing Peak Flow[1] (gal/min)	Proposed Peak Flow (gal/min)	Remaining Capacity (gal/min)
PROP Bldg to MH	0.0642	1.68	8.6	1,089,043	756	0	53	756
PROP MH TO MH	0.0105	0.68	3.5	439,762	305	0	53	305
PROP MH TO MH	0.0165	0.85	4.3	551,318	383	0	53	383
PROP MH TO EXIST MH 12	0.0154	0.83	4.2	534,010	371	0	53	371
EXIST MH 13 TO MH 12	0.0631	3.65	29.2	2,356,286	1,636	N/A - Upstream		N/A - Upstream
EXIST MH 12 TO MH 11	0.0045	0.98	5.0	631,341	438	315	53	70
EXIST MH 11 TO MH 10	0.0139	1.71	8.7	1,104,058	767	315	53	399
EXIST MH 10 TO MH 9	0.0055	1.07	5.5	692,683	481	315	53	113
EXIST MH 9 TO MH 8	0.0066	1.18	6.0	762,363	529	315	53	161
EXIST MH 8 TO MH 7	0.0450	3.08	15.7	1,990,153	1,382	420	53	909
EXIST MH 7 TO MH 6	0.0388	2.86	14.6	1,846,860	1,283	420	53	810
EXIST MH 6 TO MH 5	0.0926	4.42	22.5	2,854,479	1,982	420	53	1509
EXIST MH 5 TO MH 4	0.1000	4.59	23.4	2,965,891	2,060	420	53	1587
EXIST MH 4 TO MH 3	0.0829	4.18	21.3	2,700,664	1,875	420	53	1402
EXIST MH 3 TO MH 2	0.0542	3.38	17.2	2,182,837	1,516	420	53	1043
EXIST MH 2 TO MH 1	0.0679	3.78	19.3	2,444,814	1,698	420	53	1225

8" Pipe Diameter	0.67 feet	6" Pipe Diameter	0.50 feet
Hydraulic Radius	0.17 ft	Hydraulic Radius	0.13 ft
Cross-Sectional Area	0.35 ft²²	Cross-Sectional Area	0.20 ft²

Mannings n = 0.011

(1) - Existing Peak Flow Rate taken as a percentage of the total metered flow for MH's upstream of MH 8