November 20, 2019

To: Bonnie Sontag, Planning Board Chairperson
Re: Updates and Revisions to the Site Plan for 2-6 Market Street

Dear Chairperson Sontag,

As a response to feedback from the Planning Board at the Pre-Application conference, City Staff, and the City's peer reviewer Phil Christiansen we have updated and revised the Site Plans to address the following items:

- Stormwater Management – We have included a Stormwater Management Plan that details the existing and proposed conditions on the site. The proposed roof drains and connections to the city stormwater system have been included in the plan.
- Traffic Impacts – We have submitted a Traffic Assessment letter for of the project that examines existing traffic conditions and reviewed its access, circulation and parking. Specifically, the direction of travel was reversed and an audible/ visual alarm system is proposed for the vehicles backing over the sidewalk.
- Parking Configuration – The proposed angled parking uses an electric lift system for the six parking spaces located within the rear of the building. The lifts fit entirely inside each parking space. The driveway will maintain the minimum width of 13.5 feet as recommended by our Traffic Consultant. The 13th parking space will be designated short-term parking with a 15 min time limit. This space will be primarily used to offer temporary parking for vehicles using the lift system.
- Bicycle Parking – A common storage area will be provided within the building for the use of the unit owners. Bicycle storage will be provided.
- Retaining Walls – The existing poured concrete retaining wall along the abutting Market Street property will be retained and refaced with a stucco finish to match the proposed building. Additionally, the loose-stone walls along the abutting Summer Street property will be replaced with a poured concrete wall and be faced with stucco. Such wall will be located at least 18 inches from the foundation of the abutting house on Summer Street and any associated drainage issues will be addressed.
- Roadway Improvements – The proposed driveway is designed to integrate with the existing grades of both Summer and Market Streets. A curb-cut or driveway permit application – with the associated details - will be requested from the City for all work within the right of way. Note that we are proposing granite curbing in the two curb cut locations.

- Utilities – The gas, electric, sewer and water connections will be located as shown on the revised site plan. Subject to City approval, a final location plan can be provided to the Board prior to construction.
- Architectural Elevations – We have added details on the elevations to specify the building materials, lighting fixtures, as well as specifications for the windows and doors. A dimensioned scale has also been added to the elevations.
- Soil Conditions – A complete copy of the Massachusetts Contingency Plan report for this property has been provided.
- Snow Removal – Significant snowfall events will require snow to be removed from the site.
- Solid Waste Storage – All solid waste is proposed to be stored within the building.
- Demolition and Erosion Control – An erosion control plan has been submitted to show how the demolition- and construction-related activities on the site.
- Construction Sequencing – We expect construction to commence on the project in March 2020 with an estimated completion date of Dec. 2020. Once we have completed the site plan review process we intend to submit a Construction Management Plan to the City in advance of commencing construction.

We look forward to presenting these updates at the December 4th Public Hearing.

Respectfully,

Steven J. Lewis, Applicant

Cc: Eric Botterman, P.E. - Millennium Engineering
Scott Brown, AIA - Scott Brown Architects
Jeff Dirks, P.E. – Vanasse & Associates
Andy Port, Planning Director

Vanasse & Associates inc
Transportation Engineers & Planners

35 New England Business Center Drive
Suite 140
Andover, MA 01810

Ref: 8409

November 18, 2019

Mr. Andrew R. Port, AICP
Director of Planning & Development
Office of Planning & Development
City of Newburyport
60 Pleasant Street
Newburyport, MA 01950

Re: Proposed Mixed-Use Development
2-6 Market Street
Newburyport, Massachusetts

Dear Andy:

Vanasse & Associates, Inc. has prepared an assessment of the proposed mixed-use development to be located at 2-6 Market Street in Newburyport, Massachusetts (hereafter referred to as the "Project"). Specifically, this assessment provides an existing conditions context with the respect to the transportation system that serves the Project site and reviews access, circulation and parking for the Project. Based on this assessment, we have concluded that the Project has been designed to afford safe and efficient access and circulation, and that the parking is configured in a manner that will allow for proper vehicle maneuvering.

The following summarizes our review of access, circulation and parking for the Project.

PROJECT DESCRIPTION

The Project will entail the demolition of the existing one-story commercial building located at 2-6 Market Street in Newburyport, Massachusetts, to allow for the construction of a three-story, 8,000± square foot (sf) mixed-use building that will include two (2) ground floor commercial (office or retail) units that will front along Merrimac Street and five (5) residential units on the upper floors. The Project site encompasses approximately 5,358± sf of land that is bounded by Merrimac Street to the north, residential properties to the south, Market Street to the east and Summer Street to the west.

EXISTING CONDITIONS CONTEXT

Roadways

The Project site is bounded by Merrimac Street, Market Street and Summer Street, with residential properties to the south. Merrimac Street is a two-lane urban arterial roadway that traverses a general northwest-southeast

alignment between Spofford Street and Water Street, and accommodates approximately 14,635 vehicles per day.[1] Merrimac Street provides access to Newburyport Turnpike (Route 1) to the west of the Project site. Summer Street in a two-lane urban principal arterial roadway that traverses one-way northbound alignment parallel to Route 1 between High Street (Route 113) and Merrimac Street, and accommodates approximately 2,660 vehicles per day. Market Street is a two-way local access roadway that traverses a general north-south alignment between High Street and Merrimac Street and accommodates approximately 790 vehicles per day. Sidewalks are provided along both sides of Merrimac Street and Market Street, and along the east (Project) side of Summer Street. On-street parking is provided along both sides of Market Street and along the east side of Summer Street.

Public Transportation

Public transportation services are provided within the study area and along Merrimac Street by the Merrimack Valley Regional Transit Authority (MVRTA). MVRTA bus Route 54, *Amesbury-Newburyport-Salisbury*, provides service along Merrimac Street and is accessible from a stop located at the Newburyport Intermodal Parking Garage at 83 Merrimac Street and is within a 1-minute walking distance of the Project. In addition to the aforementioned stop, MVRTA buses operate on a " wave down" policy. To board a bus, passengers wave to the driver as the bus is approaching and must be on the same side of the street as the bus and in a safe spot. To get off the bus, a passenger presses the yellow signal tape that runs vertically between the bus windows.

Safety

A review of the current (2014 - 2016) Massachusetts Department of Transportation (MassDOT) Top Crash Locations database did not indicate any listed high crash locations in the vicinity of the Project site. That being said, a Road Safety Audit (RSA) was performed for the Route 1/Merrimac Street intersection by the Merrimack Valley Planning Commission in February 2013[2] that identifies suggestions for safety improvements at the Route 1 ramp intersections with Merrimac Street.

ACCESS, CIRCULATION AND PARKING

The Project site is currently accessed from a wide driveway that extends along the frontage of the property on Merrimac Street, as well as a driveway that intersects Summer Street at its intersection with Merrimac Street. This access configuration creates multiple conflicts for vehicles and pedestrians along Merrimac Street, a primary artery to the downtown. In conjunction with the Project, the existing driveways will be closed, the sidewalk will be restored/reconstructed along Merrimac Street, Summer Street and Market Street, and two new driveways will be constructed to serve the Project site that will intersect the east side of Summer Street and the west side of Market Street, respectively, parallel to the southern property line.

The Project site driveways will convey traffic in a one-way east-to-west direction, with vehicles entering from Market Street and exiting to Summer Street. This access configuration allows vehicles to enter the Project site from a lower volume roadway (Market Street), affording the opportunity to enter at a slower travel speed and to observe both pedestrians on the sidewalk and activity within the Project site before entering and without unduly inhibiting the flow of traffic. The one-way drive aisle through the Project site starts as a 14-foot wide driveway at Market Street and widens to 18-feet at the Summer Street driveway. Angled parking is planned along the north side of the drive aisle for 12 vehicles using a mechanical lift system, with one (1) parallel parking space to be

[1]All of the referenced traffic volumes were measured in 2018.
[2]*Road Safety Audit*, Route 1 at Merrimac Street; Merrimack Valley Planning Commission; February 15, 2013.

situated along the south side of the drive aisle approaching Summer Street, or a total of 13 parking spaces. For the angled parking, the parking angle has been established at 60-degrees, which requires a drive aisle width of 13.5-feet behind the parking spaces to allow for proper maneuvering.[3] Given that the proposed drive aisle is a minimum of 14-feet in width, the drive aisle exceeds the minimum recommended width for vehicle maneuvering for the angled parking spaces. The wider drive aisle width approaching Summer Street (18-feet) and the design of the landscape area adjacent to the Summer Street driveway allow for vehicle maneuvering to enter (back into) and exit the parallel parking space along the south side of the drive aisle.

Motorists will need to back into the Project site driveway and the sidewalk area that crosses the driveway along Market Street order to exit the angled parking spaces designated as P1/P2 on the Site Plan. While this is not an uncommon situation in an urban environment, the Project has been designed to accommodate this maneuver in a safe manner. The one-way circulation pattern which has vehicles entering from Market Street, a low volume roadway, allows for a motorist to observe activity within the driveway area and wait for a pedestrian to cross or for vehicle maneuvering associated with the P1/P2 parking spaces before entering without unduly impeding the flow of traffic. In order to warn pedestrians of the potential for a vehicle exiting the P1/P2 parking spaces that may cross into the driveway and sidewalk area, an LED sign ("Watch For Vehicle" or similar) with audible tone will be provided at the Market Street driveway. The audible tone can be adjusted in order to reduce the volume during overnight hours.

SUMMARY

VAI has completed an assessment of the proposed mixed-use development to be located at 2-6 Market Street in Newburyport, Massachusetts. This assessment has provided an existing conditions context with the respect to the transportation system that serves the Project site and reviewed access, circulation and parking for the Project. Based on this assessment, we have concluded that the Project has been designed to afford safe and efficient access and circulation, and that the parking is configured in a manner that will allow for proper vehicle maneuvering.

If you should have any questions regarding this assessment, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

Jeffrey S. Dirk

Jeffrey S. Dirk, P.E., PTOE, FITE
Partner

Professional Engineer in CT, MA, ME, NH, RI and VA

cc: S. Lewis – Newburyport Properties, LLC (via email)
N. Cracknell (via email)
File

[3] *The Dimensions of Parking, 5th Edition*; Urban Land Institute; Washington, D.C.; 2010.

MEI

MILLENNIUM ENGINEERING, INC.
Land Surveyors and Civil Engineers

November 20, 2019

Newburyport Planning Board
City Hall
60 Pleasant Street
Newburyport, MA 01950

Attn: Andy Port
City Planner

Subject: 2-6 Market Street
Response to Engineering Review Comments

Dear Andy:

In response to design review comments provided by Phil Christiansen dated January 25, 2019 we have prepared the following responses. Please not we have included design review comments and our response, to assist in the review of the proposed Site Plan project.

Existing Conditions Plan

The existing conditions plan should be revised to show the location and size of water sewer and drain lines in Summer Street, Merrimac Street and Market Street as well as gas lines. Overhead lines should also be shown. Spot grades along the southerly property line should be provided. The location of existing water, sewer and gas services should be shown on the plan. The existing building on the lot is shown to be built against the property line as shown on the existing conditions plan.

Response: The various utilities within the roadways have been added to the plans. The location of the existing building services is unknown . However, it is our understanding that these utilities will have to be located and capped prior to building demolition. Spot grades have been added.

Site Plan

The plan should be revised to show the location of the proposed water, sewer and drain locations as well as gas and electric

Response: The plans have been updated accordingly (see sheet 2)

The sewer service inverts at the proposed building and at the sewer line should be provided as well as the inverts on the sewer main into which the building will connect as well as the pipe size and slope and direction of flow.

Massachusetts: 62 Elm Street Salisbury MA 01952 Phone: 978-463-8980 Fax: 978-499-0029 www.mei-ma.com
New Hampshire: 13 Hampton Road Exeter NH 03833 603-778-0528 603-772-0689 www.mei-nh.com

Response: The plans have been updated where possible. The connection details will be in accordance with the Newburyport Sewer Department recommendations.

Water service connections for domestic water and fire protection should be shown. The applicant should discuss with the Water Department if separate services are needed for the residential and commercial uses.

Response: Proposed water connections have been added to the plans. We will coordinate the final design with the water department and adjust the plans if required.

The location of the proposed retaining wall and elevations at bottom and top of wall should be added to the plan.

Response: Elevations have been added accordingly

The location of downspout connections to the City's drainage system should be added to the plan. As well as the invert at the drain line and the invert at the building. The size and slope of the pipe into which the roof leaders will connect should also be provided.

Response: The plans have been updated accordingly

The applicant should clarify if the building outline shown on the plan represents the walls of the proposed building or the overhangs of the building.

Response: The building outlines shown are the building walls.

The curb line shown on the site plan at the intersection of Summer and Merrimac Streets does not match the curb line shown on the A1.0 drawing at that location.

Response: The plans have been updated accordingly

The proposed fencing should be shown on the plan

Response: Proposed fencing has been added to the plans . Currently, this fencing is shown on the neighbor's property, as it is our intention to come to an agreement with the neighbor relative to this issue. If an agreement can't be reached, then the fence will be set on top of the retaining wall. At that point, the connection to the wall will be designed appropriately. The fence will be as shown or equivalent.

A note should be added to the plans concerning snow removal.

Response: A note has been added to sheet 5

Additional Plans Needed in the Plan Set

Erosion and Sedimentation Control

In the submittal text in addressing Section XV.H.f.2 Erosion Control reference is made to a silt-sock or haybales used during construction. The locations do not appear on any plans. An Erosion and Sedimentation plan should be added to the plan set with the location of the control system shown and the type of control chosen. Catch basin inlet protection should also be shown.
This project involves demolition as well as construction and the erosion control plan should address both. It may be necessary to have two plans; one for each phase of the project.

Response: An erosion control plan has been added to the plans

Details Sheet

The following details should be put on detail sheet(s) to be added to the plan set for the project

Pavement cross-section
Sidewalk cross section
Sewer trench detail
Water services trench detail
Downspout connection detail to drain line
Water service detail including valving and thrust blocks.
Thrust Block Details
Sewer connection detail
Retaining wall detail
Erosion control details including catch basin protection
Granite curb detail
Granite curb transition detail
Handicap assess sidewalk detail
Lamp post detail
Pavement patch and overlay detail
Driveway apron detail
Fence detail

Response: Detail sheets has been added to the plan set (sheets 4 & 5). However, the lamp post detail has been incorporated into the architect's plans

Comments on Text Presentation

Frontage on Market Street 54' not 200'. Two hundred feet is the total frontage on all three streets. Only frontage on one street can be counted as frontage.

Response: Agreed

The text submitted suggests 12 off street parking spaces yet the drawing on page 15 has 13 spaces labeled. The Rear Elevation on Page 13 shows stacked parking for 12 cars. The cars are perpendicular to the proposed building and the elevation doesn't show the dumpster and recycle bin location at the southeasterly corner of the building nor the landscaped area on the southwesterly side of the building as shown on A1.0. The proposed site plan on page 15 and A1.0 shows 12 parking spaces but angled rather than perpendicular to the building and the dumpster area and landscaped area are shown.

Response: The plans now show 13 parking spaces.

The perpendicular parking would not work because of the limited turnaround area in the easterly end of the driveway. The stacked parking may not work with the angled arrangement if the dimensions shown in the figure on page16 for the length of the lifting unit is 19 feet 3 inches and has to be placed six inches from a wall. The corner of the lift would protrude into the driveway as shown in the attached pdf where the area taken up by the lift is shown in red superimposed on the plan A1.0.

Response: This issue is responded to in the cover letter.

In the text it is proposed that a retaining wall no more than six feet high is to be constructed at the rear of the property against the properties at 8 Market Street and 3 Summer Street. The wall only shows in the illustration in drawing A2.5. The wall should be shown on the site plan with elevation of the bottom and top of wall shown. The distance from the face of the wall to the parking area should be shown.

Response: The existing part of the retaining wall is being used as part of the rear wall of the existing building. We have identified the top of that wall. The new wall will be designed to match the existing wall. Where required retaining walls will be designed by a structural engineer. Elevations of the wall have been added.

The construction of the proposed wall is also an issue and its final placement will lessen the turnaround room behind the parking area.

Response: In the area where new wall is proposed, the intent is to remove the existing walls encroaching on the 2-6 Market Street property. The intent is to design the new wall to match the existing wall in thickness and material (concrete). This wall will be designed by a structural engineer.

The applicant should address if the demolition of the building will have any effect on the neighbor's property and structures.

Response: The retaining wall portion of the existing building will remain in place thus the demolition of the building is not anticipated to have any impact on the abutting properties.

Both a demolition sequence and a construction sequence should be added to the plans. The demolition will include removal of the building, sidewalks, existing curbing and asphalt parking area and sidewalks. It also includes disconnecting and capping existing water sewer and gas connections as well as electrical services. The required sedimentation control should be specified for each task.

Response: A demolition plan and sequence will be submitted with the demolition permit application. The demolition will be in accordance with all applicable state and local regulations. At this point in time a construction sequence has not been developed. However, a construction plan and sequence will be submitted as part of the building permit process.

The construction sequencing should address building construction, curb and sidewalk installation, utility installation and on-site paving. The plans should indicate if the asphalt placed at the new curb and over the service installation cuts should be patches or if a full top course overlay is proposed.

Response: See above.

We trust this letter and revised plans provide the Board with the necessary information for your review. If you have any questions or concerns, please feel free to contact our office anytime.

Sincerely,

Millennium engineering, Inc.

Eric W. Botterman, P.E.
Principal

STORMWATER CALCULATIONS

FOR: STEVEN LEWIS

SITE DEVELOPMENT

2-6 MARKET STREET

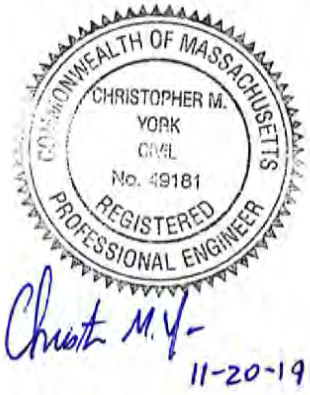
NEWBURYPORT, MA

TAX MAP 47 LOT No. 59

PREPARED BY:

MILLENNIUM ENGINEERING, INC.
62 ELM STREET
SALISBURY, MA 01952
(978) 463-8980

NOVEMBER 20, 2019



11-20-19

1.0 WATERSHED ANALYSIS: EXISTING CONDITIONS

The existing conditions were modeled using the tabular hydrograph method with a Type III synthetic storm distribution for the 2, 10 and 100-year storm recurrence intervals. Runoff hydrographs were produced to estimate existing peak discharge.

Flows for the three storm simulations are as follows:

Existing (Pre-development) Peak Runoff Rates (c.f.s.)

Subcatchment	Size	2 Yr	10 Yr	100 Yr
	(Acres)	Storm	Storm	Storm
100	0.14	0.4	0.6	0.9
		2 Yr	10 Yr	100 Yr
Offsite North		0.4	0.6	0.9

The pre-development drainage calculations can be found in Appendix A.

2.0 WATERSHED ANALYSIS: POST-DEVELOPMENT CONDITIONS

The proposed developed conditions were modeled using the tabular hydrograph method with a Type III synthetic storm distribution for the 2, 10 and 100-year storm recurrence intervals. Runoff hydrographs were produced to estimate the post-development peak discharge.

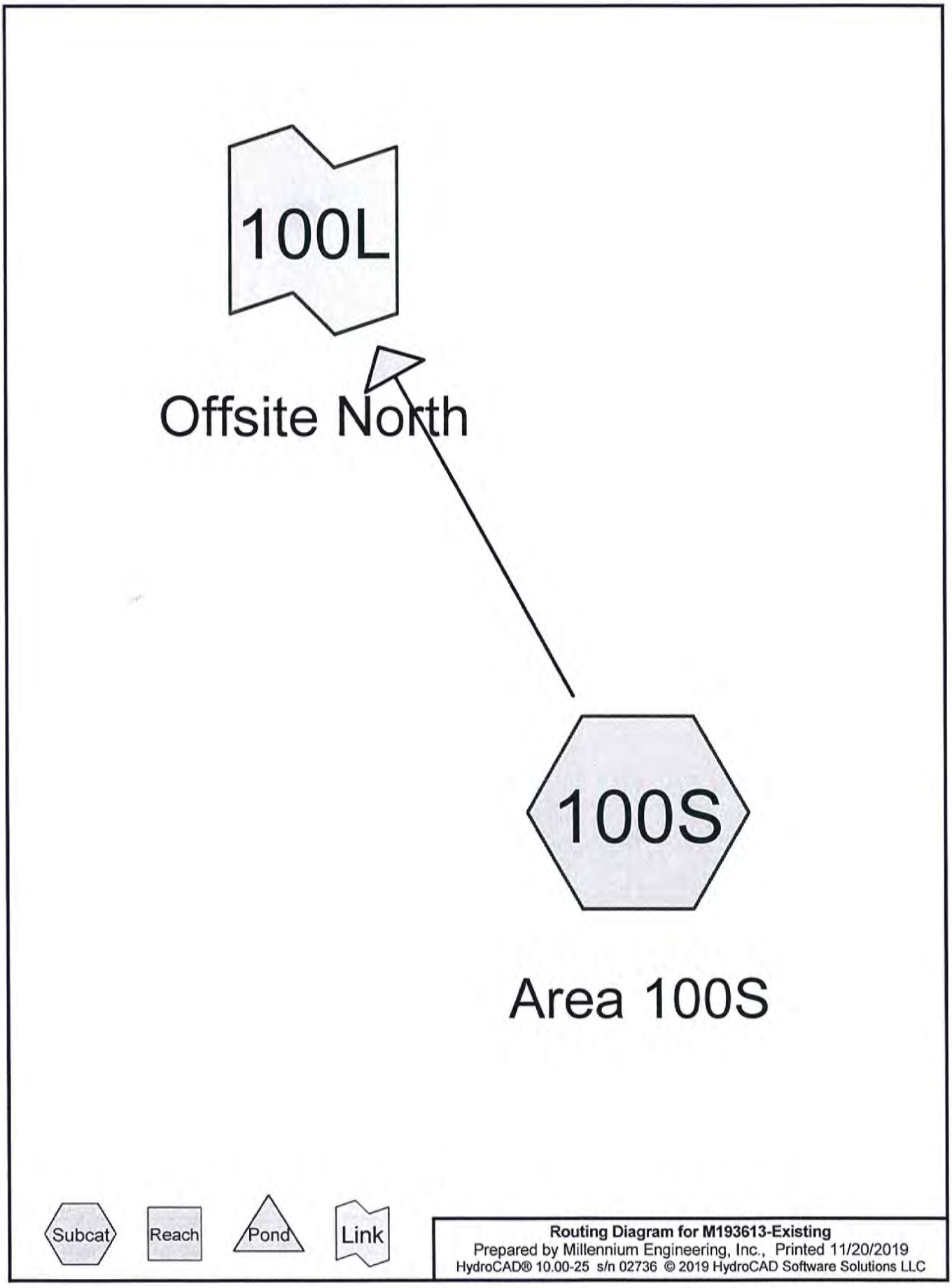
Flows for the three storm simulations are as follows:

Post-Developed Peak Runoff Rates (c.f.s.)

Subcatchment	Size	2 Yr	10 Yr	100 Yr
	(Acres)	Storm	Storm	Storm
100	0.14	0.4	0.6	0.9
		2 Yr	10 Yr	100 Yr
Offsite North		0.4	0.6	0.9

The post-development drainage calculations can be found in Appendix B.

8.0 APPENDIX A – PRE-DEVELOPMENT DRAINAGE CALCULATIONS



Routing Diagram for M193613-Existing
Prepared by Millennium Engineering, Inc., Printed 11/20/2019

Summary for Subcatchment 100S: Area 100S

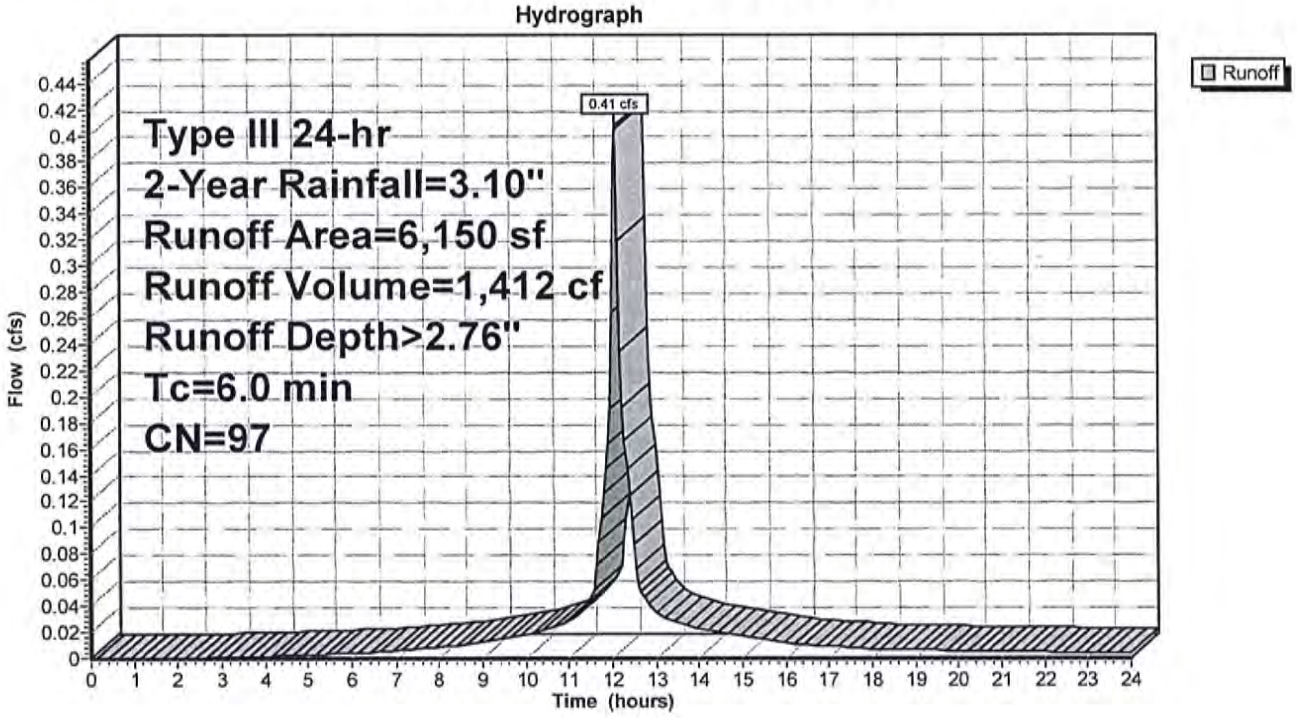
Runoff = 0.41 cfs @ 12.09 hrs, Volume= 1,412 cf, Depth> 2.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.10"

	Area (sf)	CN	Description
	1,460	98	Roofs, HSG A
	4,490	98	Paved parking, HSG A
*	200	72	Dirt, HSG A
	6,150	97	Weighted Average
	200		3.25% Pervious Area
	5,950		96.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 100S: Area 100S

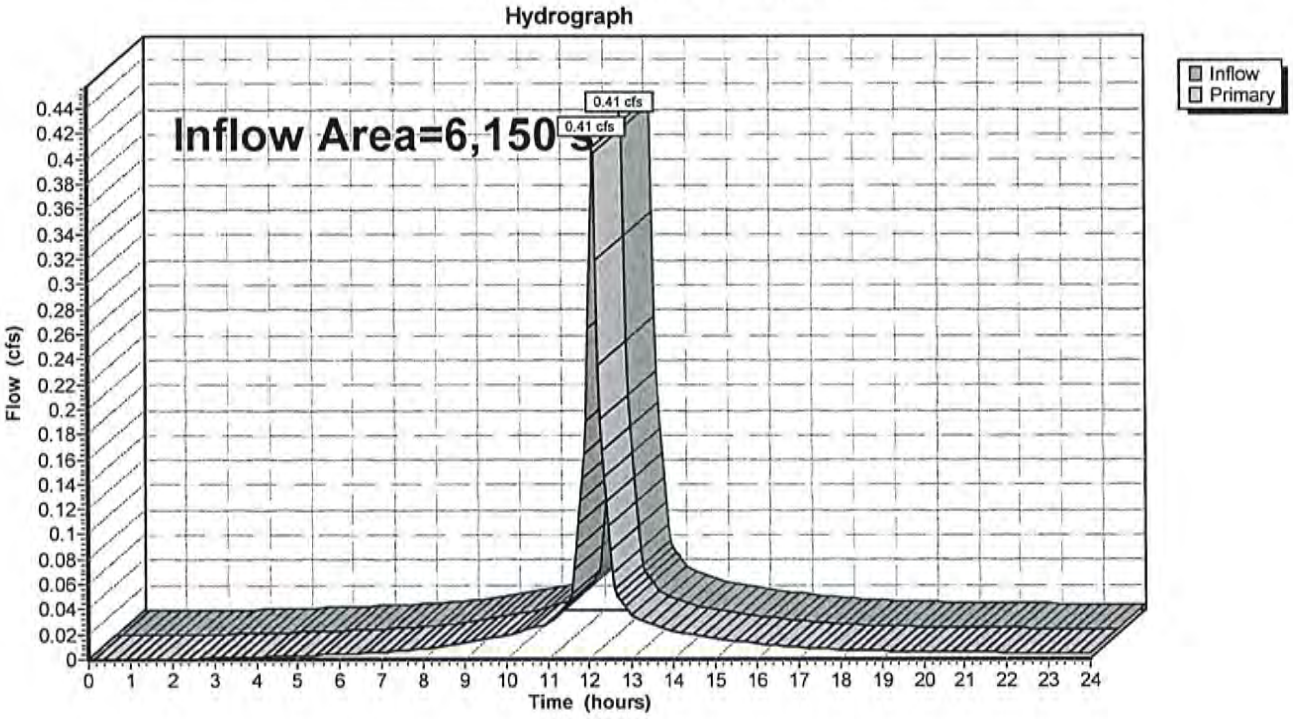


Summary for Link 100L: Offsite North

Inflow Area = 6,150 sf, 96.75% Impervious, Inflow Depth > 2.76" for 2-Year event
Inflow = 0.41 cfs @ 12.09 hrs, Volume= 1,412 cf
Primary = 0.41 cfs @ 12.09 hrs, Volume= 1,412 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 100L: Offsite North



Summary for Subcatchment 100S: Area 100S

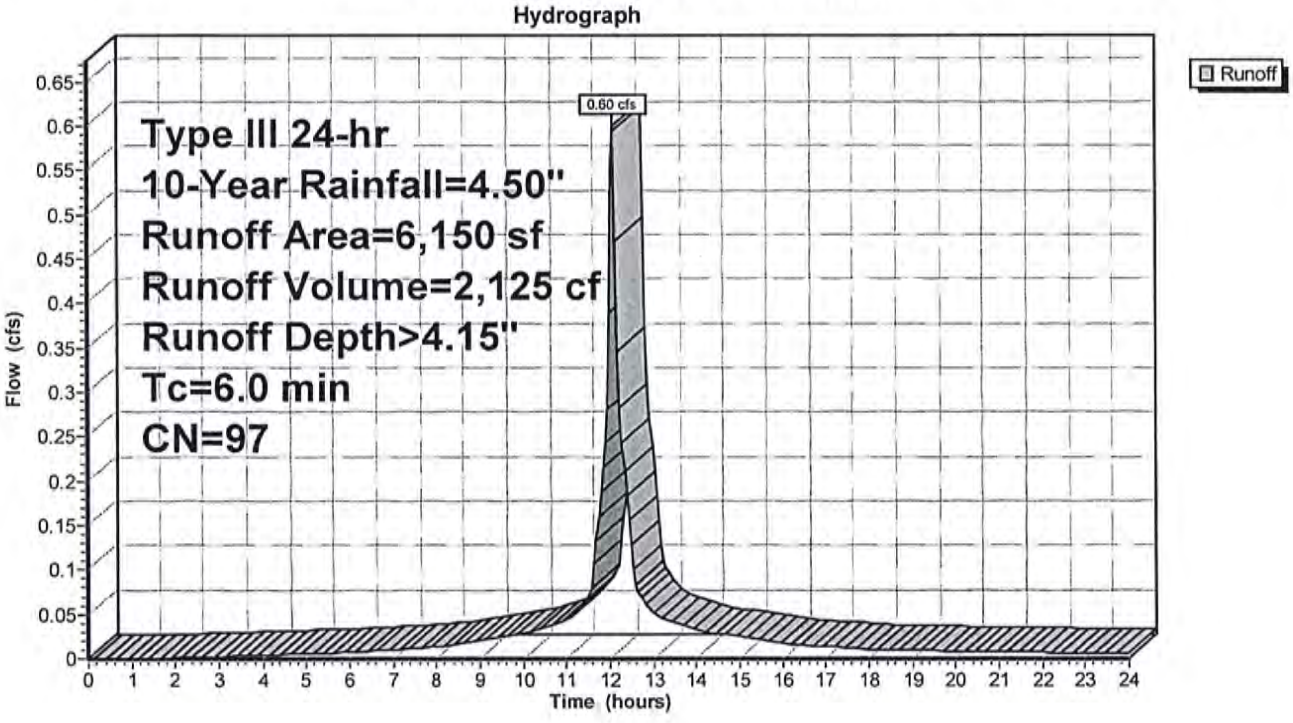
Runoff = 0.60 cfs @ 12.09 hrs, Volume= 2,125 cf, Depth> 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.50"

	Area (sf)	CN	Description
	1,460	98	Roofs, HSG A
	4,490	98	Paved parking, HSG A
*	200	72	Dirt, HSG A
	6,150	97	Weighted Average
	200		3.25% Pervious Area
	5,950		96.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 100S: Area 100S

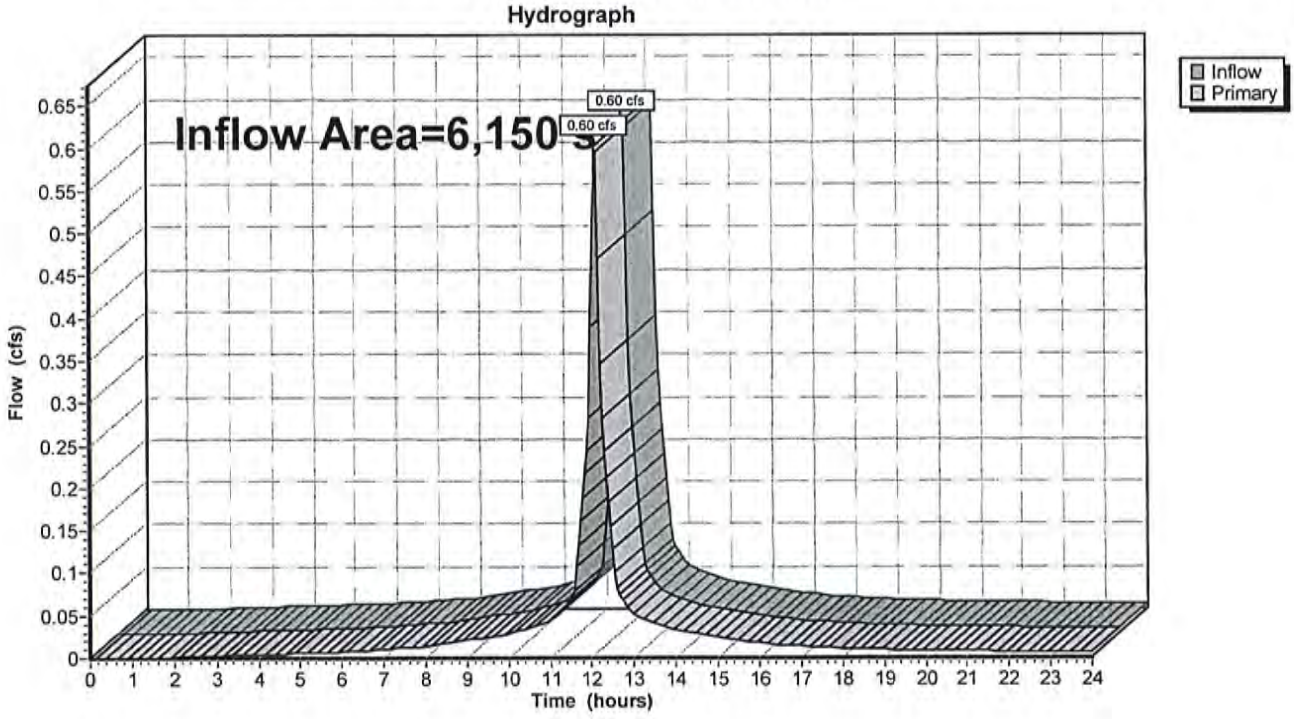


Summary for Link 100L: Offsite North

Inflow Area = 6,150 sf, 96.75% Impervious, Inflow Depth > 4.15" for 10-Year event
Inflow = 0.60 cfs @ 12.09 hrs, Volume= 2,125 cf
Primary = 0.60 cfs @ 12.09 hrs, Volume= 2,125 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 100L: Offsite North



Summary for Subcatchment 100S: Area 100S

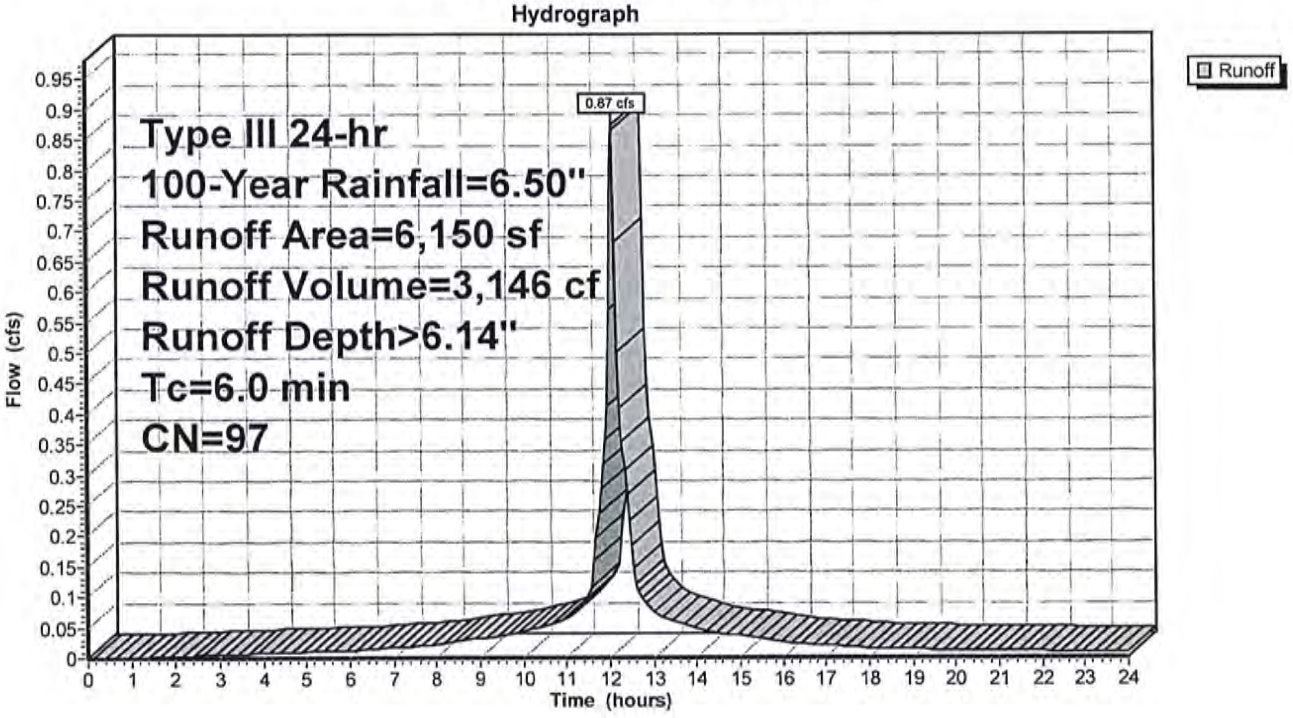
Runoff = 0.87 cfs @ 12.09 hrs, Volume= 3,146 cf, Depth> 6.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=6.50"

	Area (sf)	CN	Description
	1,460	98	Roofs, HSG A
	4,490	98	Paved parking, HSG A
*	200	72	Dirt, HSG A
	6,150	97	Weighted Average
	200		3.25% Pervious Area
	5,950		96.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 100S: Area 100S

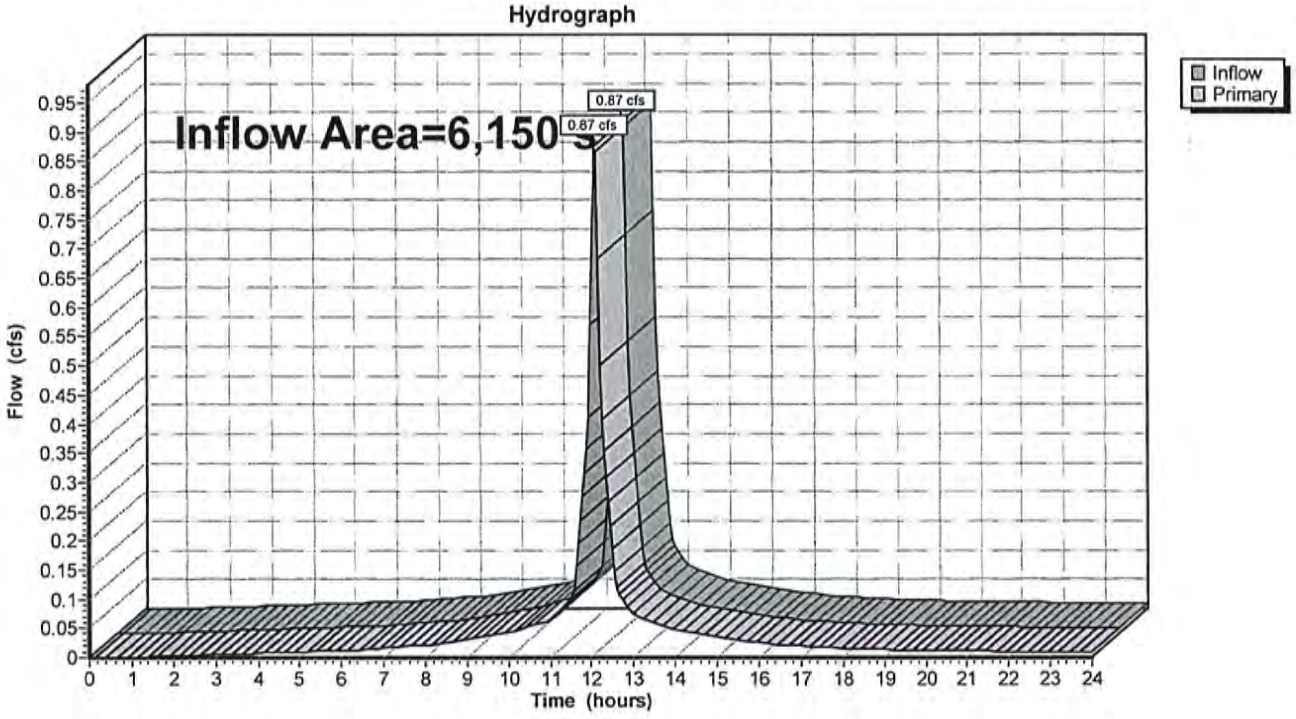


Summary for Link 100L: Offsite North

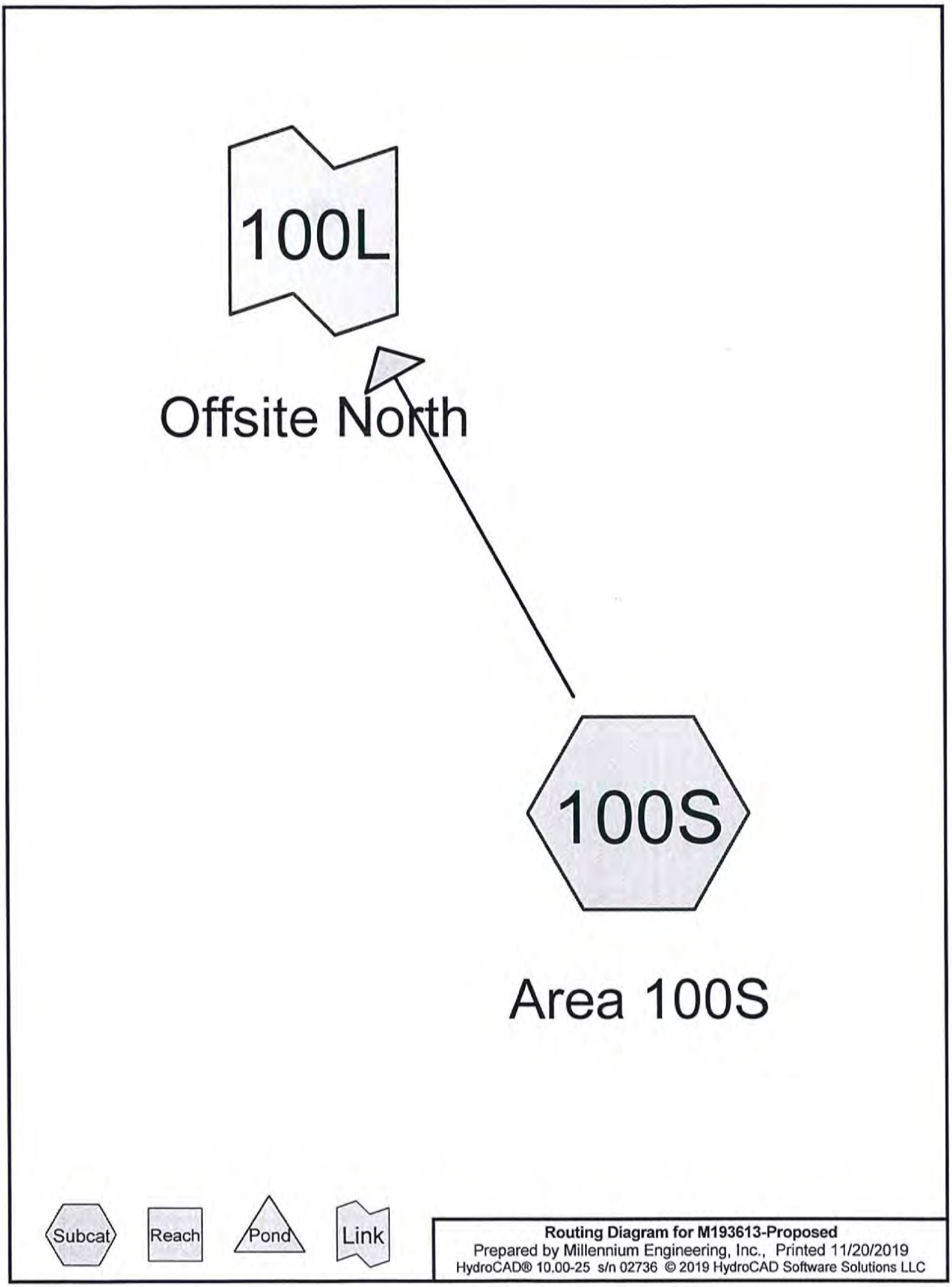
Inflow Area = 6,150 sf, 96.75% Impervious, Inflow Depth > 6.14" for 100-Year event
Inflow = 0.87 cfs @ 12.09 hrs, Volume= 3,146 cf
Primary = 0.87 cfs @ 12.09 hrs, Volume= 3,146 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 100L: Offsite North



9.0 APPENDIX B – POST-DEVELOPMENT DRAINAGE CALCULATIONS



Routing Diagram for M193613-Proposed
Prepared by Millennium Engineering, Inc., Printed 11/20/2019

Summary for Subcatchment 100S: Area 100S

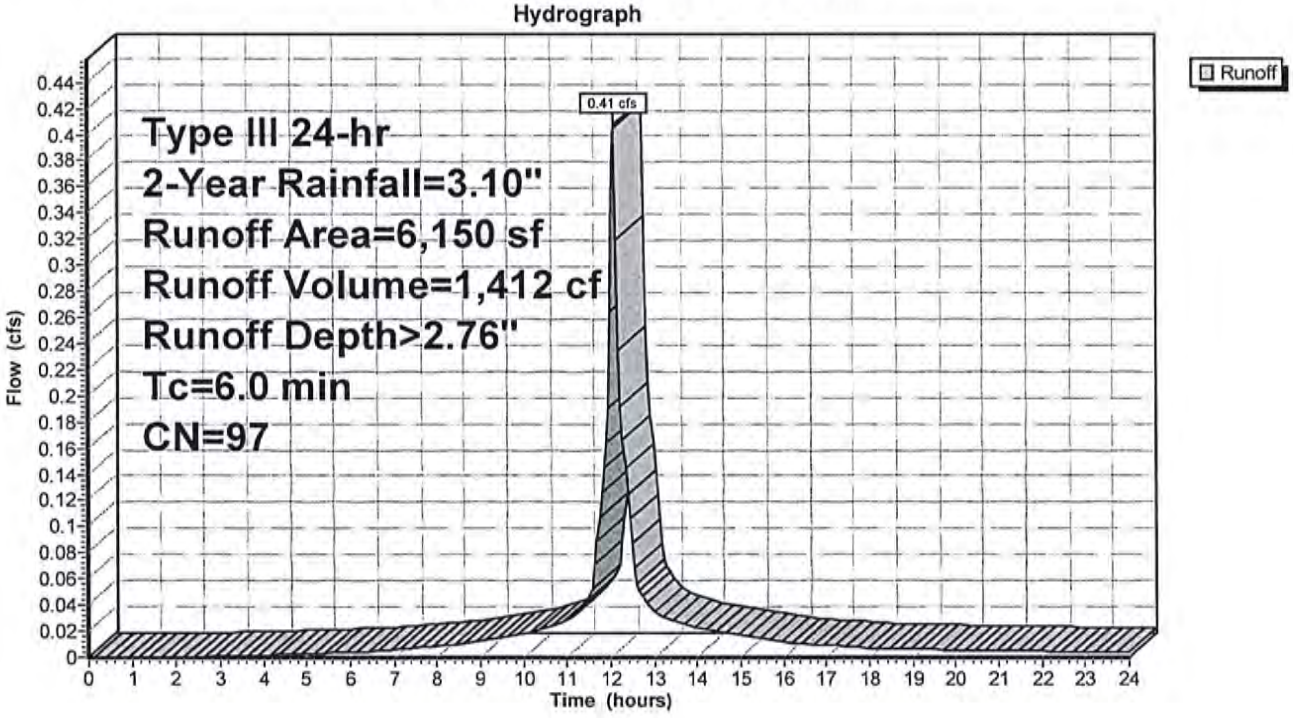
Runoff = 0.41 cfs @ 12.09 hrs, Volume= 1,412 cf, Depth> 2.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.10"

Area (sf)	CN	Description
2,270	98	Roofs, HSG A
3,755	98	Paved parking, HSG A
125	39	>75% Grass cover, Good, HSG A
6,150	97	Weighted Average
125		2.03% Pervious Area
6,025		97.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 100S: Area 100S

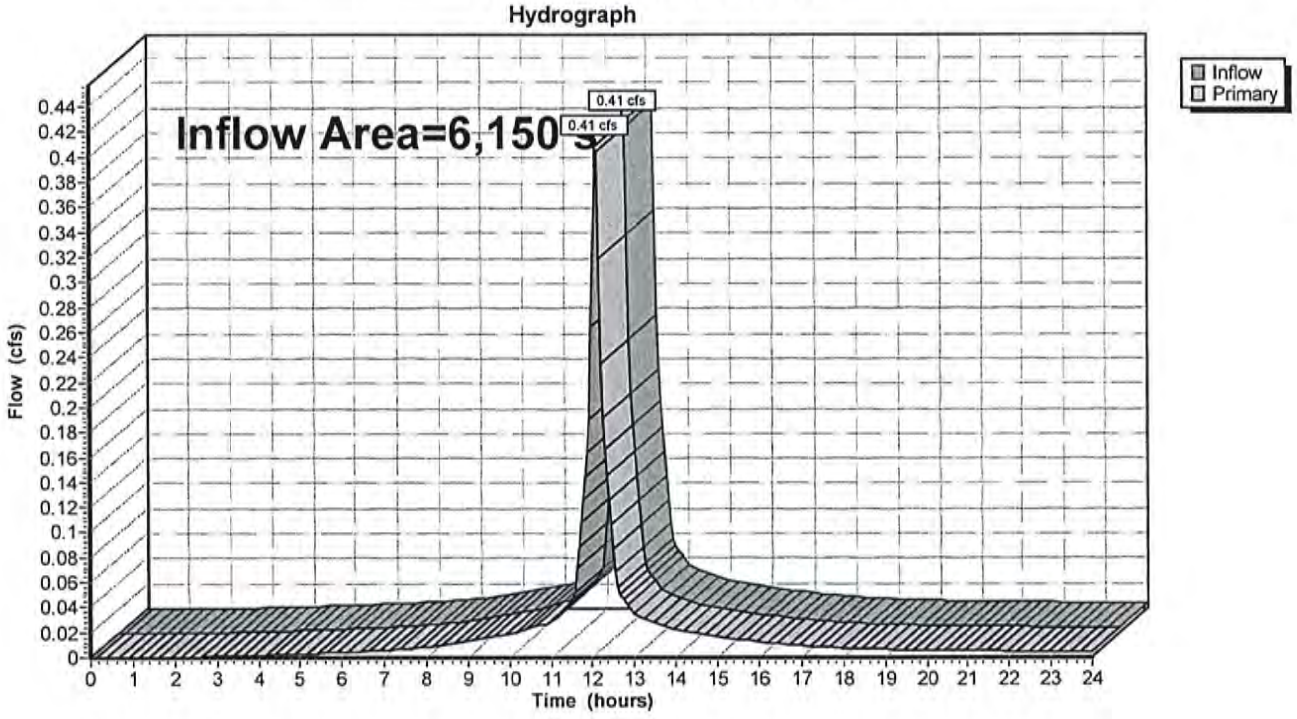


Summary for Link 100L: Offsite North

Inflow Area = 6,150 sf, 97.97% Impervious, Inflow Depth > 2.76" for 2-Year event
Inflow = 0.41 cfs @ 12.09 hrs, Volume= 1,412 cf
Primary = 0.41 cfs @ 12.09 hrs, Volume= 1,412 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 100L: Offsite North



Summary for Subcatchment 100S: Area 100S

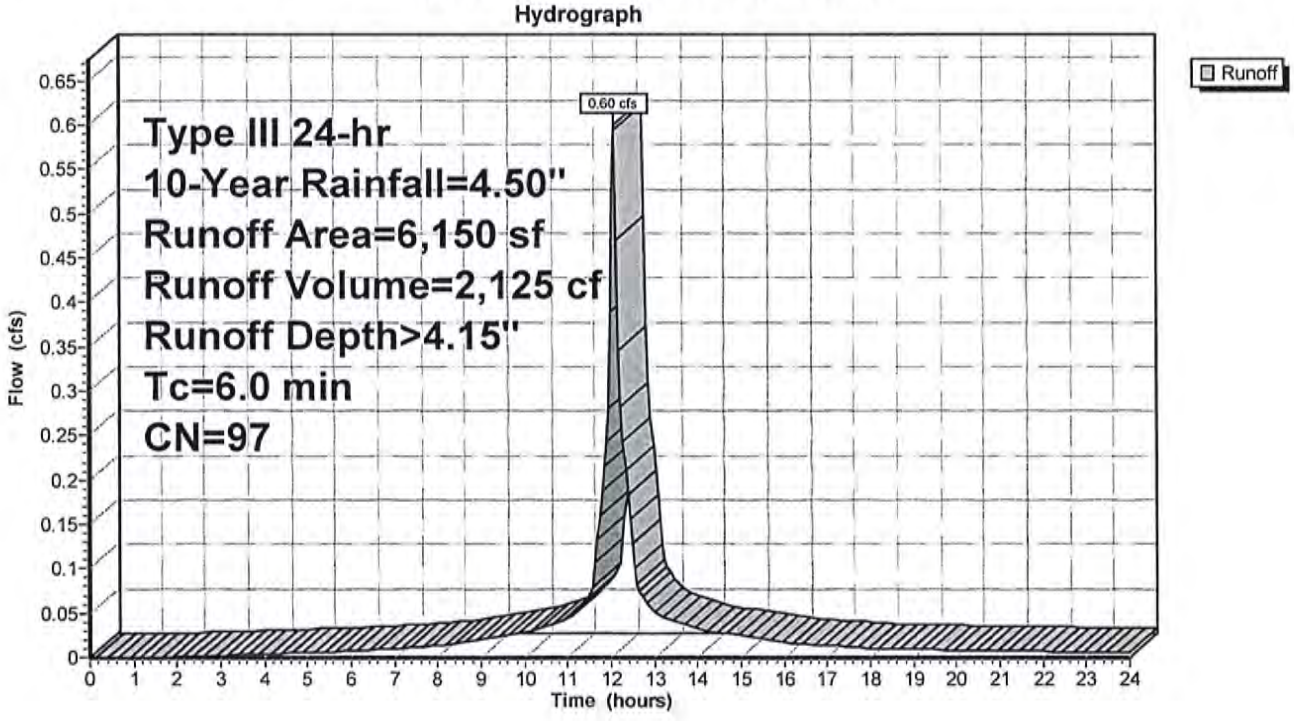
Runoff = 0.60 cfs @ 12.09 hrs, Volume= 2,125 cf, Depth> 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.50"

Area (sf)	CN	Description
2,270	98	Roofs, HSG A
3,755	98	Paved parking, HSG A
125	39	>75% Grass cover, Good, HSG A
6,150	97	Weighted Average
125		2.03% Pervious Area
6,025		97.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 100S: Area 100S

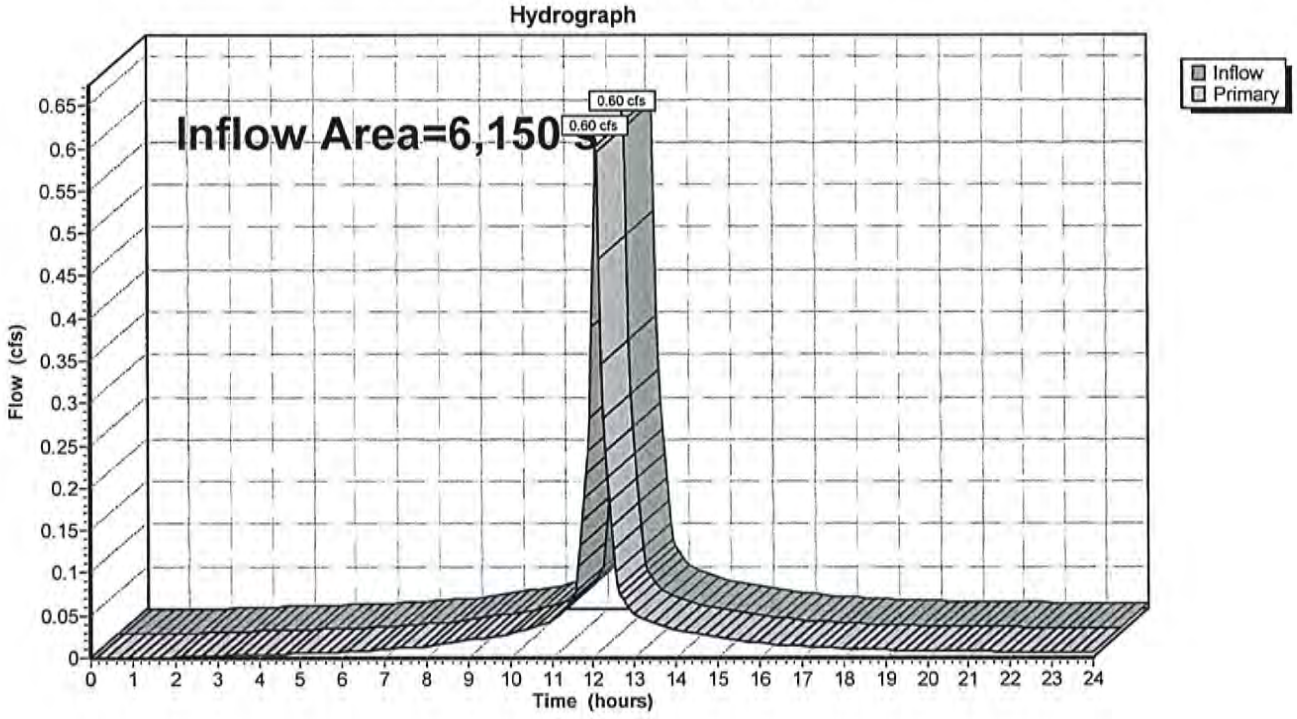


Summary for Link 100L: Offsite North

Inflow Area = 6,150 sf, 97.97% Impervious, Inflow Depth > 4.15" for 10-Year event
Inflow = 0.60 cfs @ 12.09 hrs, Volume= 2,125 cf
Primary = 0.60 cfs @ 12.09 hrs, Volume= 2,125 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 100L: Offsite North



Summary for Subcatchment 100S: Area 100S

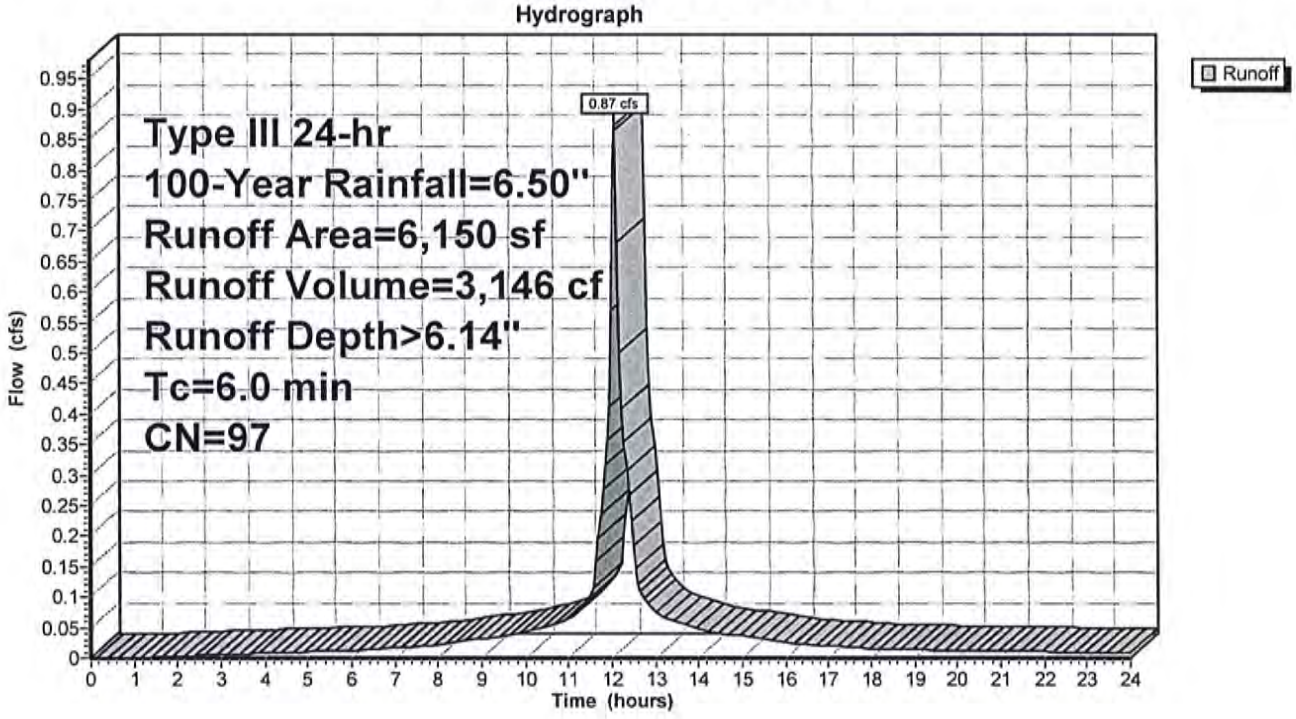
Runoff = 0.87 cfs @ 12.09 hrs, Volume= 3,146 cf, Depth> 6.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=6.50"

Area (sf)	CN	Description
2,270	98	Roofs, HSG A
3,755	98	Paved parking, HSG A
125	39	>75% Grass cover, Good, HSG A
6,150	97	Weighted Average
125		2.03% Pervious Area
6,025		97.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 100S: Area 100S

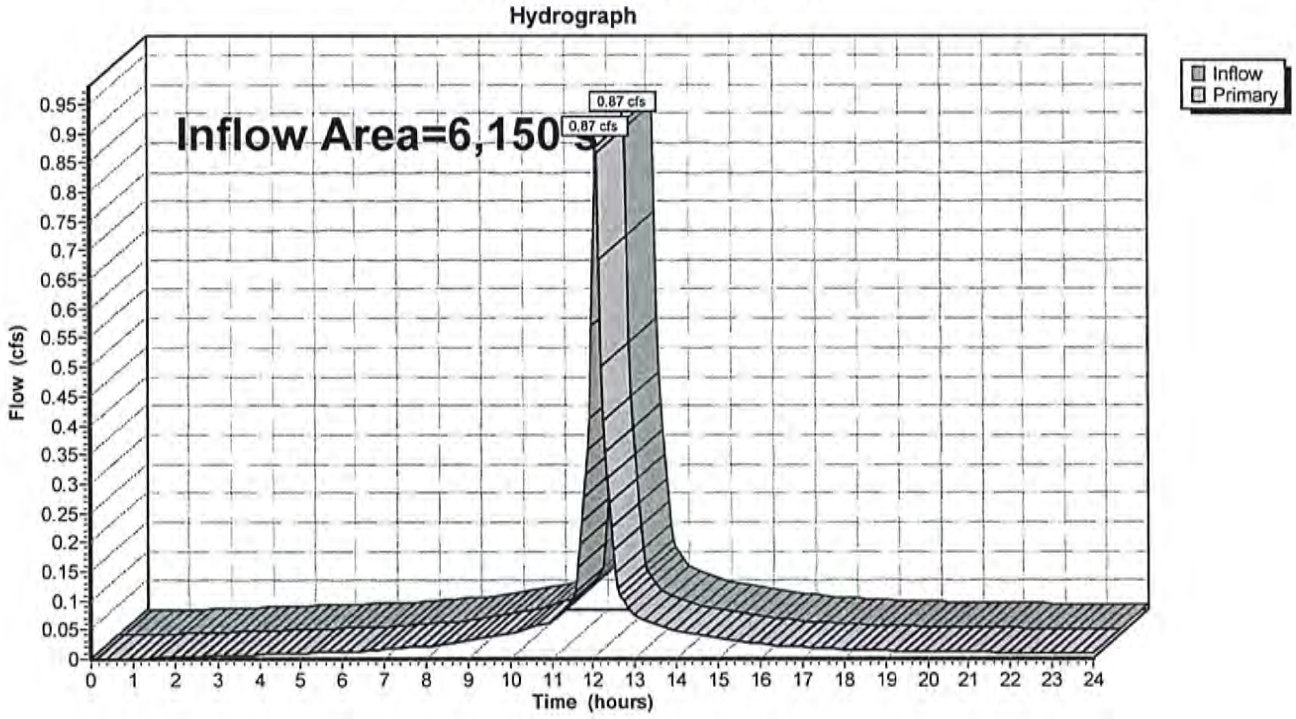


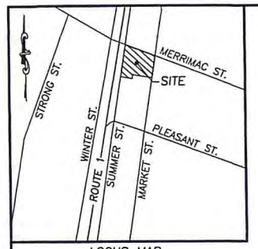
Summary for Link 100L: Offsite North

Inflow Area = 6,150 sf, 97.97% Impervious, Inflow Depth > 6.14" for 100-Year event
Inflow = 0.87 cfs @ 12.09 hrs, Volume= 3,146 cf
Primary = 0.87 cfs @ 12.09 hrs, Volume= 3,146 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 100L: Offsite North





LOCUS MAP
N.T.S.

MERRIMAC STREET (PUBLIC – VARIABLE WIDTH)

SUMMER STREET (PUBLIC – VARIABLE WIDTH)

MARKET STREET (PUBLIC – VARIABLE WIDTH)

PLAN BK. 122 PL. 6

16" DIP

SMH RIM=17.0

CROSS WALK

CB RIM=17.77 INV. OUT=14.02 (12" RCP) WATER LEVEL=12.77

30" SEWER MAIN

SMH RIM=21.0

EDGE OF TRAVELED WAY (TYPICAL)

S 66°37'26" E 57.71'

R=12.01' L=17.27'

T.B.M. #1

CB RIM=18.06 INV. IN=13.81 (12" RCP) INV. OUT=13.71 (15" RCP) WATER LEVEL=13.61

ISLAND

70.15'

EXISTING BIT. CONC. PARKING AREA

CONC.

S 15°45'35" W 54.14'

BUILDING OVERHANG

GARAGE DOOR

GARAGE FLOOR ELEV.=22.1

ENTRY DOORSILL ELEV.=23.4

SMH RIM=21.4

CB RIM=22.29 INV. OUT=16.84 (BRICK) NO WATER

8" DIP

6" DIP

CB RIM=23.06 INV. OUT=19.26 (CLAY) WATER LEVEL=19.26

47/59

LOT C

AREA=5,358 SF =0.12 AC

N 29°45'35" E

EMTR

OHW

CONC. STEPS

ENTRY

EXISTING 1 STORY CONC. BLOCK BUILDING

#2-#6

CONCRETE SIDEWALK

CONCRETE RETAINING WALL

TOW=28.32

STONE RETAINING WALLS TOW=23.95

TOW=25.55

TOW=25.12

31.88'

N 27°11'20" E 6.35'

33.75'

N 64°41'24" W

TOW=25.32

TOW=25.52

TOW=26.55

N 71°24'25" W 54.77'

GATE

CONC. STEPS

TOW=28.39

TOW=28.38

S 13°47'35" W 8.60'

TOW=27.65

47/58

N/F
PETER K MANNING
ANNE W RAWLS T/E
8 MARKET ST
NEWBURYPORT, MA 01950
BK. 28875 PG. 597

#8 EXISTING DWELLING

EXISTING DWELLING

47/61A

N/F
SANDRA A SCOLA
3 SUMMER STREET UNIT A
NEWBURYPORT, MA 01950
BK. 32958 PG. 458

47/61B

N/F
JOHN K. HICKEY
1 SUMMER STREET UNIT B
NEWBURYPORT, MA 01950
BK. 27741 PG. 411

#12 EXISTING DWELLING

EXISTING DWELLING

ZONING TABLE

ADDRESS – ASSESSORS MAP 47 LOT 59
ZONING DISTRICT: B-2 DCOD

	REQUIRED	EXISTING	PROPOSED
LOT AREA:	5,000 SF	5,358 SF	5,358 SF
LOT FRONTAGE:	60 FT	54.1 FT	54.1 FT
FRONT SETBACK:	0 FT	0.1 FT	**
SIDE SETBACK:	0 FT	0.0 FT	**
REAR SETBACK:	0 FT	31.0 FT	**
LOT COVERAGE:	100%	27%	**
OPEN SPACE:	N/A	1.4%	**
BLDG HEIGHT:	40 FT	12.9'	**

LEGEND

FND.	FOUND
N/F	NOW/FORMERLY
TOW	TOP OF WALL
EMTR	ELECTRIC METER
M	MONITORING WELL
	LIGHT POLE
GC	GRANITE CURB
CB	CATCH BASIN
SMH	SEWER MANHOLE
	WATER VALVE
BIT. CONC.	BITUMINOUS CONCRETE
	SIGN
	UTILITY POLE
	GUY
20	EXISTING CONTOUR ELEVATION
0/00	ASSESSORS MAP# PARCEL#

BASIS OF BEARINGS
PLAN BK. 122, PLAN 6

OWNER OF RECORD
STEPHEN J. AND NANCY C. WHITE, TRUSTEES
2–6 MARKET STREET
NEWBURYPORT, MA
BK. 31262 PG. 553

PLAN REFERENCES
PLAN BK. 122 PLAN 6
PLAN BK. 124 PLAN 64

VERTICAL DATUM
N.A.V.D. 1988

T.B.M. #1
MAG NAIL
ELEV. = 18.69

NOTES:

THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

RECORD UTILITY INFORMATION HAS NOT BEEN OBTAINED FOR LOCUS. VISIBLE SURFACE STRUCTURES HAVE BEEN LOCATED AND ARE SHOWN HEREON HOWEVER, SUBSURFACE UTILITY LINES ARE NOT SHOWN.

THE CERTIFICATIONS SHOWN HEREON ARE NOT INTENDED AS CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT CITY OF NEWBURYPORT ASSESSORS RECORDS.

I CERTIFY:
THAT THIS ACTUAL SURVEY WAS MADE ON THE GROUND ON SEPTEMBER 5, 2019, AND THAT THE STRUCTURES AND PHYSICAL FEATURES ARE LOCATED AS SHOWN TO THE BEST OF MY ABILITY AND BELIEF.

COMMONWEALTH OF MASSACHUSETTS
JEFFREY S. HORMANN #36381
REGISTERED PROFESSIONAL LAND SURVEYOR

PROFESSIONAL LAND SURVEYOR — DATE 11/20/19

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10'

PREPARED FOR
STEVEN LEWIS
11 WINDWARD DRIVE
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY
2	11-20-19	ADD UTILITY INFORMATION	ZTJ
1	11-4-19	ADD RET WALL ELEVATIONS	DRB

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=10' | CALC. BY: D.R.B. | PROJECT: M193613
DATE: OCT. 23, 2019 | CHKD. BY: J.S.H.

PLAN OF LAND
IN
NEWBURYPORT, MA
SHOWING
EXISTING CONDITIONS
AT
2–6 MARKET STREET
(MAP 47 – LOT 59)

EXISTING CONDITIONS PLAN

SHEET: 1 OF 5

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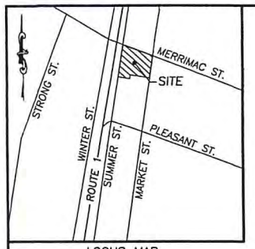
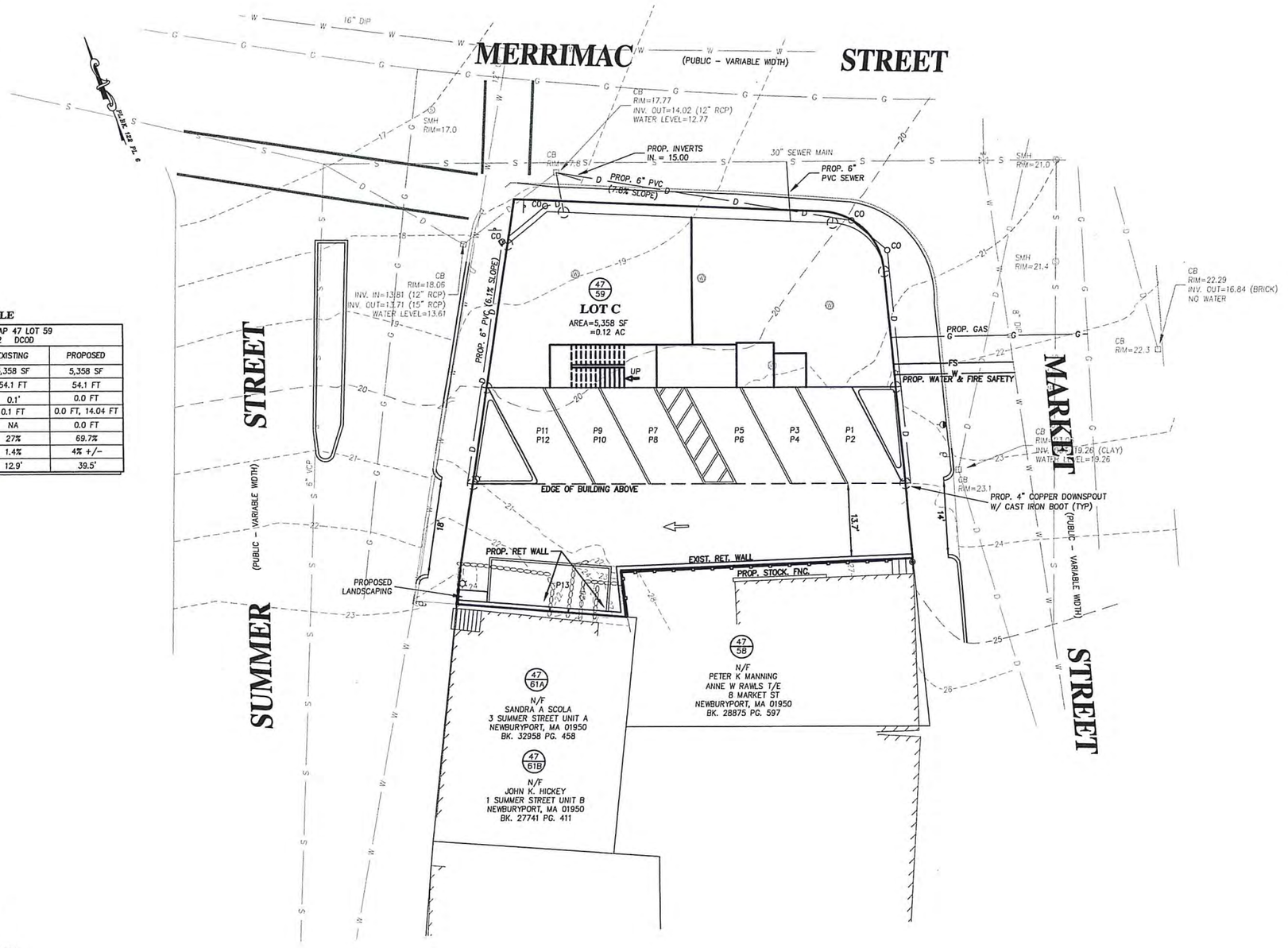


LOCUS MAP
N.T.S.

ZONING TABLE

ADDRESS – ASSESSORS MAP 47 LOT 59 ZONING DISTRICT: B-2 DCOD			
	REQUIRED	EXISTING	PROPOSED
LOT AREA:	5,000 SF	5,358 SF	5,358 SF
LOT FRONTAGE:	60 FT	54.1 FT	54.1 FT
FRONT SETBACK:	0 FT	0.1'	0.0 FT
SIDE SETBACK:	0 FT	0.1 FT	0.0 FT, 14.04 FT
REAR SETBACK:	0 FT	NA	0.0 FT
LOT COVERAGE:	100%	27%	69.7%
OPEN SPACE:	N/A	1.4%	4% +/–
BLDG HEIGHT:	40 FT	12.9'	39.5'



LEGEND

● I. ROD	IRON ROD
FND.	FOUND
N/F	NOW/FORMERLY
TOW	TOP OF WALL
EMTR	ELECTRIC METER
MW	MONITORING WELL
LIGHT POLE	
GC	GRANITE CURB
CB	CATCH BASIN
SMH	SEWER MANHOLE
WATER VALVE	
BIT. CONC.	BITUMINOUS CONCRETE
SIGN	
UTILITY POLE	
GUY	
20	EXISTING CONTOUR ELEVATION
0/00	ASSESSORS MAP# PARCEL#

BASIS OF BEARINGS

PLAN BK. 122, PLAN 6

OWNER OF RECORD

STEPHEN J. AND
NANCY C. WHITE, TRUSTEES
2-6 MARKET STREET
NEWBURYPORT, MA
BK. 31262 PG. 553

PLAN REFERENCES

PLAN BK. 122 PLAN 6
PLAN BK. 124 PLAN 64

VERTICAL DATUM

N.A.V.D. 1988

T.B.M. #1
MAG NAIL
ELEV. = 18.69

811 DigSafe DIAL DIG SAFE BEFORE YOU DIG

CONTRACTOR TO USE CAUTION WHEN EXCAVATING AS THIS PROPERTY IS SERVICED BY UNDERGROUND UTILITIES. LOCATIONS SHOWN HEREON COME DIRECTLY FROM UTILITY COMPANY PLANS AND, WHERE POSSIBLE, FROM MEASUREMENTS TAKEN IN THE FIELD. CONTRACTOR RESPONSIBLE FOR CONTACTING DIGSAFE AT LEAST 72 HOURS PRIOR TO EXCAVATION AND SHALL MAINTAIN ALL DIGSAFE MARKINGS DURING CONSTRUCTION.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10'

COMMONWEALTH OF MASSACHUSETTS
ERIC W. BOTTERMANN
CIVIL
No. 41089
REGISTERED PROFESSIONAL ENGINEER
11-20-19

PREPARED FOR

STEVEN LEWIS
11 WINDWARD DRIVE
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI **MILLENNIUM ENGINEERING, INC.**
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=10' | CALC. BY: Z.T.J.
DATE: NOV. 20, 2019 | CHKD. BY: J.S.H.
PROJECT: M193613

PLAN OF LAND
IN
NEWBURYPORT, MA
SHOWING
PROPOSED CONDITIONS
AT
2-6 MARKET STREET
(MAP 47 – LOT 59)

SITE PLAN

SHEET: 2 OF 5

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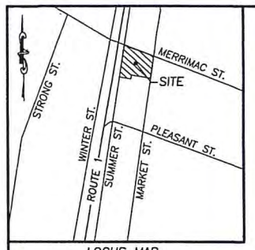

LOCUS MAP
N.T.S.

NOTE:

ONCE THE EXISTING BUILDING IS REMOVED, THE EXPOSED SOIL WILL BE STABILIZED WITH 2" THICK LAYER OF STRAW MULCH.

MERRIMAC STREET (PUBLIC – VARIABLE WIDTH)

SUMMER STREET (PUBLIC – VARIABLE WIDTH)

MARKET STREET (PUBLIC – VARIABLE WIDTH)

16" DIP

30" SEWER MAIN

PLBE 182 PL 8

SMH
RIM=17.0

CB
RIM=17.77
INV. OUT=14.02 (12" RCP)
WATER LEVEL=12.77

CB
RIM=17.88

SMH
RIM=21.0

SMH
RIM=21.4

CB
RIM=22.29
INV. OUT=16.84 (BRICK)
NO WATER

CB
RIM=22.3

CB
RIM=18.06
INV. IN=13.81 (12" RCP)
INV. OUT=13.71 (15" RCP)
WATER LEVEL=13.61

CB
RIM=23.06
INV. OUT=19.26 (CLAY)
WATER LEVEL=19.26

CB
RIM=23.1

6" VCP

8" DIP

47/59
LOT C
AREA=5,358 SF
=0.12 AC

UP

P11 P12 | P9 P10 | P7 P8 | P5 P6 | P3 P4 | P1 P2

-2.0% GRADE

-3.5% GRADE

PROP. RET WALL

EXIST. RET. WALL

PROPOSED LANDSCAPING

P13

BOT. OF WALL=22.2
TOP OF WALL=28.5 (EXIST. & PROP.)

BOT. OF WALL=23.2
TOP OF WALL=28.5 (EXIST. & PROP.)

BOT. OF WALL=24.1
TOP OF WALL=28.5 (EXIST. & PROP.)

BOT. OF WALL=22.7
TOP OF WALL=28

BOT. OF WALL=23.0
TOP OF WALL=23.5

BOT. OF WALL=22.0
TOP OF WALL=22.5

BOT. OF WALL=22.0
TOP OF WALL=22.5

47/58
N/F
PETER K MANNING
ANNE W RAWLS T/E
8 MARKET ST
NEWBURYPORT, MA 01950
BK. 28875 PG. 597

47/61A
N/F
SANDRA A SCOLA
3 SUMMER STREET UNIT A
NEWBURYPORT, MA 01950
BK. 32958 PG. 458

47/61B
N/F
JOHN K. HICKEY
1 SUMMER STREET UNIT B
NEWBURYPORT, MA 01950
BK. 27741 PG. 411

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10'

COMMONWEALTH OF MASSACHUSETTS
ERIC W. BOTTEMAN
CIVIL
No. 41010
REGISTERED PROFESSIONAL ENGINEER
11-20-19

PREPARED FOR

STEVEN LEWIS
11 WINDWARD DRIVE
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=10' | CALC. BY: Z.T.J.
DATE: NOV. 20, 2019 | CHKD. BY: E.W.B.
PROJECT: M193613

PLAN OF LAND
IN
NEWBURYPORT, MA
SHOWING
PROPOSED CONDITIONS
AT
2-6 MARKET STREET
(MAP 47 – LOT 59)

GRADING, EROSION AND SEDIMENT CONTROL PLAN

SHEET: 3 OF 5

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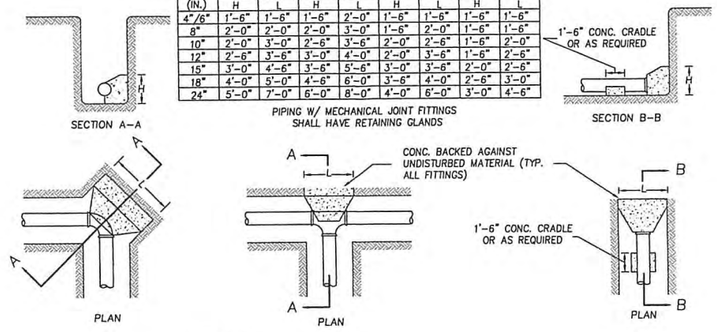
CONCRETE THRUST BLOCK DIMENSIONS								
PIPE DIA. (IN.)	TEE		90° BEND OR STUB		45° BEND		22.5° BEND	
	H	L	H	L	H	L	H	L
4"/6"	1'-6"	1'-6"	1'-6"	2'-0"	1'-6"	1'-6"	1'-6"	1'-6"
8"	2'-0"	2'-0"	2'-0"	3'-0"	1'-6"	2'-0"	1'-6"	1'-6"
10"	2'-0"	3'-0"	2'-6"	3'-6"	2'-0"	2'-6"	1'-6"	2'-0"
12"	2'-6"	3'-6"	3'-0"	4'-0"	2'-0"	3'-6"	1'-6"	2'-6"
15"	3'-0"	4'-6"	3'-6"	5'-6"	3'-0"	3'-6"	2'-0"	2'-6"
18"	4'-0"	5'-0"	4'-6"	6'-0"	3'-6"	4'-0"	2'-6"	3'-0"
24"	5'-0"	7'-0"	6'-0"	8'-0"	4'-0"	6'-0"	3'-0"	4'-6"

PIPING W/ MECHANICAL JOINT FITTINGS SHALL HAVE RETAINING GLANDS

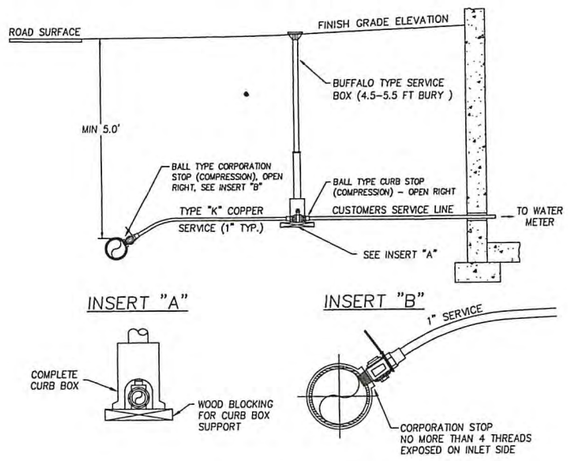


NOTES

1. VALUES SHOWN ARE FOR TEST PRESSURE OF 150 PSI WITH A 100 PSI SURGE ALLOWANCE.
2. THRUST BLOCKS SHALL NOT BE PLACED AGAINST THE FOLLOWING SOILS: PEAT, ORGANIC SILT AND ORGANIC SOILS, SOFT CLAY, RUBBISH FILL AND OTHER UNSUITABLE ARTIFICIAL FILL, SHATTERED SHALE, INORGANIC SILT AND VERY FINE SANDS.
3. POURED CONCRETE THRUST BLOCKS SHALL NOT COVER ANY JOINTS, CLAMPS, NUTS, BOLTS, ETC.

THRUST BLOCK DETAILS

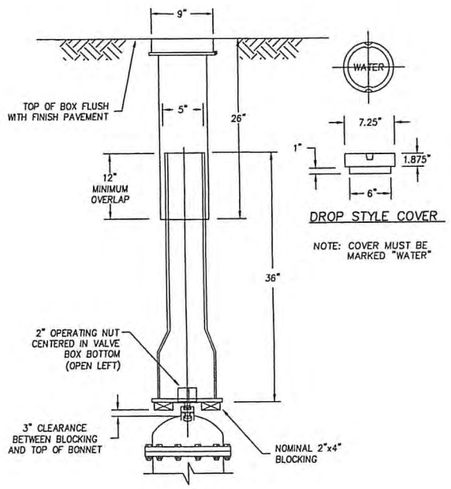
N.T.S.



1. CORPORATION AND CURB STOPS SHALL BE BRASS & MEET ALL APPLICABLE DEP STANDARDS.

TYPICAL COPPER SERVICE CONNECTION

N.T.S.



BOTTOM DETAIL

TYPICAL VALVE BOX DETAIL

N.T.S.

WATER NOTES:

1.) ALL WATER MAIN AND SERVICE COMPONENTS SHALL MEET AWWA STANDARDS.

2.) ALL MECHANICAL JOINT COMPONENTS SHALL BE INSTALLED USING APPROVED RETAINING GLANDS (GRIP RING, MEGA LUG, STAR GRIP).

3.) METAL WEDGES SHALL BE USED AT ALL BELL JOINTS TO ENSURE CONTINUITY FOR TRACING.

4.) GATE VALVES SHALL BE DUCTILE IRON EPOXY COATED (AWWA C550), WITH O-RING SEALS, URETHANE COATED WEDGE, STAINLESS STEEL NUTS AND BOLTS, AND ANTIROTATION SEATS TO PREVENT T-BOLTS FROM TURNING. VALVES SHALL OPEN RIGHT USING 2-INCH OPERATING NUT WITH ARROW CAST IN THE METAL.

5.) WATER MAINS SHALL BE PRESSURE TESTED TO 150 PSI AND WITNESSED BY THE NEWBURYPORT WATER WORKS CONSTRUCTION FOREMAN OR HIS DESIGNEE. ALL INSTALLATIONS MUST BE INSPECTED BY THE CONSTRUCTION FOREMAN OR HIS DESIGNEE.

6.) CHLORINATION SHALL MEET AWWA STANDARDS (ANSI/AWWA C651-05). BACTERIA SAMPLES SHALL BE TESTED BY AN APPROVED LAB WITH RESULTS SENT DIRECTLY TO NEWBURYPORT WATER WORKS THROUGH CERTIFIED MAIL, AND RECEIVED WITHIN 5 WORKING DAYS OR RESAMPLING MUST BE DONE. IF BACTERIA TEST IS POSITIVE THE WATER MAIN SHALL BE FLUSHED AND RECHLORINATED PRIOR TO RESAMPLING.

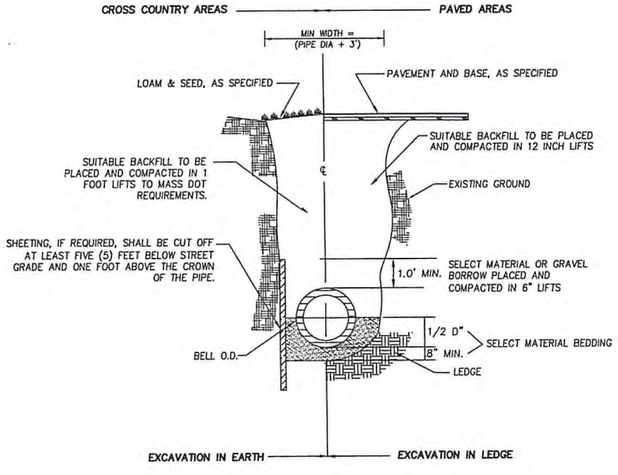
7.) NEWBURYPORT WATER WORKS PERSONNEL SHALL OPERATE ALL GATE VALVES AND HYDRANTS AND SHALL WITNESS AND INSPECT THE WATER MAIN AND APPURTENANCES PRIOR TO BURIAL. THEY SHALL ALSO PERFORM ALL TAPS UNLESS OTHERWISE APPROVED BY THE CONSTRUCTION FOREMAN. IF CONSENT IS GIVEN, AN APPROVED CONTRACTOR MUST DO THE TAPPING, AND THE CITY'S CONSTRUCTION FOREMAN OR HIS DESIGNEE MUST BE PRESENT DURING THE TAP.

8.) WATER MAINS AND SERVICES SHALL HAVE A MINIMUM 6" CLEARANCE FROM UNDERGROUND ROCK/LEDGE.

9.) NO WATER SHALL BE SUPPLIED TO THE CONTRACTOR OR BUILDER THROUGH A WATER SERVICE THAT HAS NOT BEEN PLACED "IN-SERVICE" BY THE NEWBURYPORT WATER DEPT.

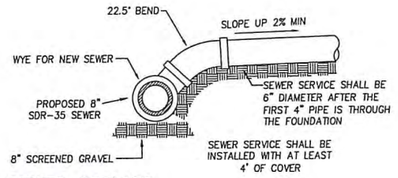
10.) ALL WATERMAINS, VALVES, AND EXPOSED IRON SHALL BE ENCASED IN POLYETHYLENE FOR CORROSION RESISTANCE. A MIN. 4 MIL THICK EPOXY LAYER SHALL BE APPLIED IN ACCORDANCE WITH ANSI/AWWA C105/A21.5

11.) ALL BOLTS USED FOR INSTALLATION OF THE WATERMAINS, HYDRANTS, WATER GATES, WATER SHUTOFFS, AND OTHER WATER ASSOCIATED STRUCTURES SHALL BE STAINLESS STEEL



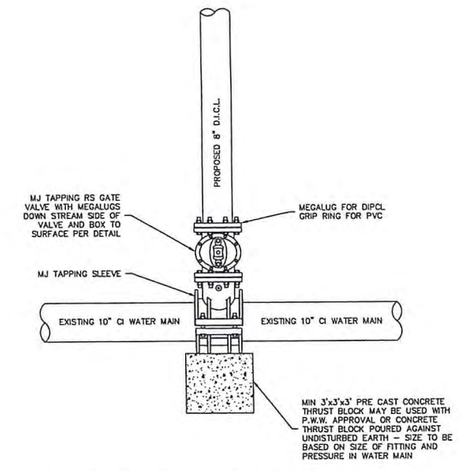
TYPICAL TRENCH DETAIL

N.T.S.



SEWER SERVICE DETAIL

N.T.S.



TAPPING SLEEVE AND VALVE W/ BOX CONNECTION DETAIL

N.T.S.

PREPARED FOR

STEVEN LEWIS
11 WINDWARD DRIVE
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: N/A | CALC. BY: Z.T.J.
DATE: NOV. 20, 2019 | CHKD. BY: E.W.B. | PROJECT: M193613

PLAN OF LAND
IN
NEWBURYPORT, MA
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
2-6 MARKET STREET
(MAP 47 – LOT 59)

WATER AND SEWER DETAILS

SHEET: 4 OF 5

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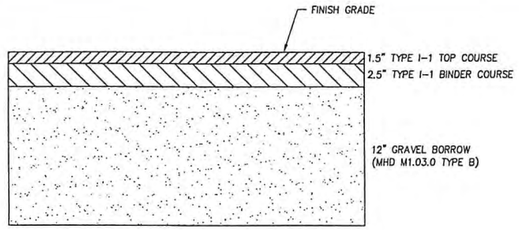
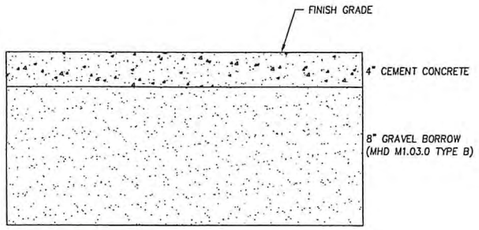


PAVED ROADWAY & PARKING LOT DETAIL

N.T.S.



CONCRETE SIDEWALK DETAIL

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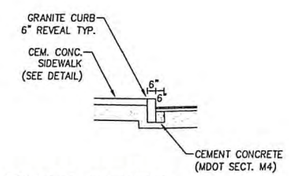
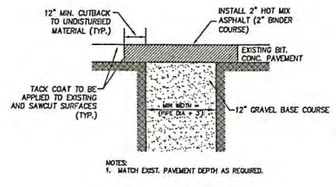


TYPICAL GRANITE CURB INSTALLATION

N.T.S.



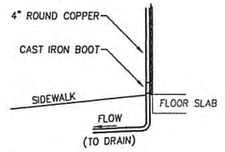
NOTES:
1. MATCH EXIST. PAVEMENT DEPTH AS REQUIRED.

TRENCH PATCH (IF REQ'D)

N.T.S.

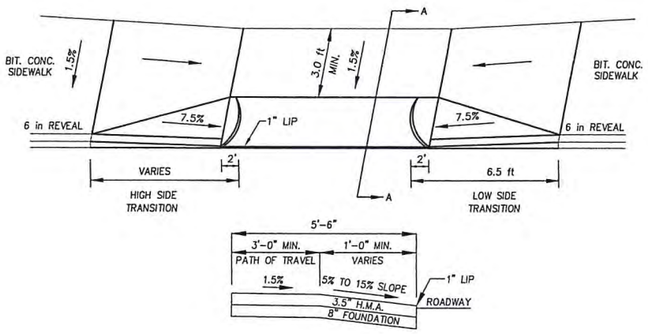
PAVEMENT NOTES

1.) ALL STUMPS, ROCKS AND LEDGE WITHIN THE LIMITS OF THE PROPOSED PAVED WAY SHALL BE REMOVED. ALL LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF 2' BELOW FINISHED PAVEMENT GRADE.
2.) ROADWAY SHALL NOT BE CONSTRUCTED DURING FREEZING WEATHER OR ON WET OR FROZEN SUBGRADE.
3.) GRADING AND ROLLING SHALL BE REQUIRED TO PROVIDE A SMOOTH, EVEN, AND UNIFORM COMPACTED BASE WHICH IS COMPACTED TO A MINIMUM DRY DENSITY OF 95 PERCENT.
4.) ALL UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SATISFACTORY MATERIAL AND BROUGHT UP TO GRADE WITH GRAVEL BORROW CONTAINING NO STONES GREATER THAN 6" DIAMETER.
5.) AT ALL TIMES DURING CONSTRUCTION, THE SUB-GRADE AND ALL DITCHES SHALL BE CONSTRUCTED AND MAINTAINED SO THAT THE ROADWAY WILL EFFECTIVELY BE DRAINED.
6.) THE CONTRACTOR SHALL REFER TO THE NEWBURYPORT RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND SECTION 6 AND APPENDIX I.
7.) IF NECESSARY, SNOW WILL BE REMOVED FROM THE SITE.



GUTTER DOWN SPOUT DETAIL

N.T.S.



SECTION A-A

CONC. DRIVEWAY RAMP DETAIL

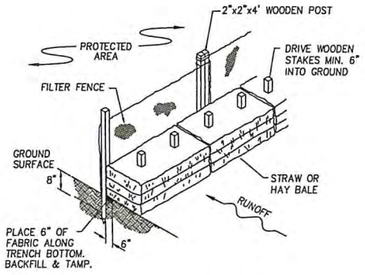
N.T.S.

NOTES:

1. RAMP CROSS SECTION TO BE SAME AS SIDEWALK; I.E. DEPTH OF SURFACE AND FOUNDATION.
2. PORTLAND CEMENT CONCRETE RAMPS ARE TO BE TEXTURED BY BROOMING IN A DIRECTION PARALLEL TO THE LENGTH OF THE RAMP.
3. BASE OF RAMP SHALL MEET PAVEMENT GUTTER SUCH THAT THERE IS NO DIFFERENCE IN ELEVATION. RAMP SHALL BE CONSTRUCTED SUCH THAT WATER DOES NOT "PUDDLE" AT THE BASE OF THE RAMP.
4. THE PAVEMENT AT THE BASE OF THE RAMP SHALL BE PART OF THE CONTINUOUS TOP COURSE. THE USE OF A "PAVEMENT PATCH" TO COMPLY WITH THE CONDITIONS IN NOTE 3, ABOVE IS PROHIBITED.
5. GRADING AND ROLLING SHALL BE REQUIRED TO PROVIDE A SMOOTH, EVEN, AND UNIFORM COMPACTED BASE WHICH IS COMPACTED TO A MINIMUM DRY DENSITY OF 95 PERCENT.
6. RAMPS SHALL CONFORM TO MASS DOT WHEELCHAIR RAMP STANDARDS – LATEST REVISION.

A.D.A. ACCESS RAMP DETAIL

N.T.S.



NOTES

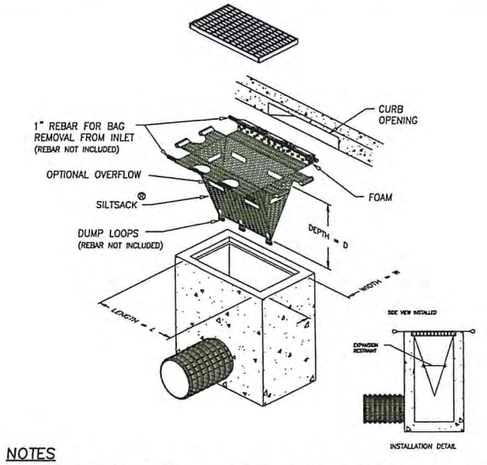
1. POSTS SHALL BE DOUBLED AND COUPLED AT FILTER CLOTH SEAMS.
2. FILTER CLOTH TO BE FASTENED SECURELY TO SUPPORT NETTING WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.

MAINTENANCE

1. SILT FENCE SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC ON THE SILT FENCE SHALL DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHALL BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

SILT FENCE/HAYBALE INSTALLATION

N.T.S.

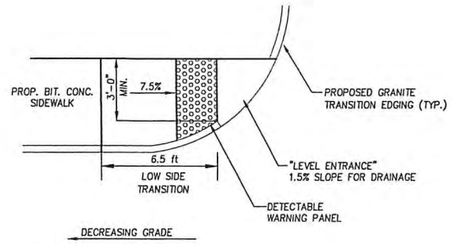


NOTES

1. TO INSTALL SILTSACK IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING. HOLD APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME. THIS IS THE AREA OF THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
2. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, SILTSACK IS FULL AND SHOULD BE EMPTIED.
3. TO REMOVE SILTSACK, TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE THE LIFTING OF SILTSACK.
4. TO EMPTY SILTSACK, PLACE UNIT WHERE THE CONTENTS WILL BE COLLECTED. PLACE THE REBAR THROUGH THE LIFT STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL LIFT SILTSACK FROM THE BOTTOM AND EMPTY THE CONTENTS. CLEAN OUT AND RINSE. RETURN SILTSACK TO ITS ORIGINAL SHAPE AND PLACE BACK IN THE BASIN.
5. SILTSACK IS REUSABLE. ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE SILTSACK FROM THE BASIN AND CLEAN. SILTSACK SHOULD BE STORED OUT OF SUNLIGHT UNTIL NEXT USE.

SILT SACK DETAIL

N.T.S.



ROADWAY PROFILE GRADE		HIGH SIDE TRANSITION LENGTH
%	G	ENGLISH UNITS
0	0.00	6'-6"
1	0.01	7'-8"
2	0.02	9'-0"
3	0.03	11'-0"
4	0.04	14'-0"
>4	>0.04	15'-0" MAX

COMMONWEALTH OF MASSACHUSETTS
ERIC W. BOTTERMAN
CIVIL
No. 41009
REGISTERED PROFESSIONAL ENGINEER
11-20-19

PREPARED FOR

STEVEN LEWIS
11 WINDWARD DRIVE
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: N/A | CALC. BY: Z.T.J.
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PROJECT: M193613

PLAN OF LAND
IN
NEWBURYPORT, MA
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
2-6 MARKET STREET
(MAP 47 – LOT 59)

ROADWAY AND DRAINAGE DETAILS

SHEET: 5 OF 5

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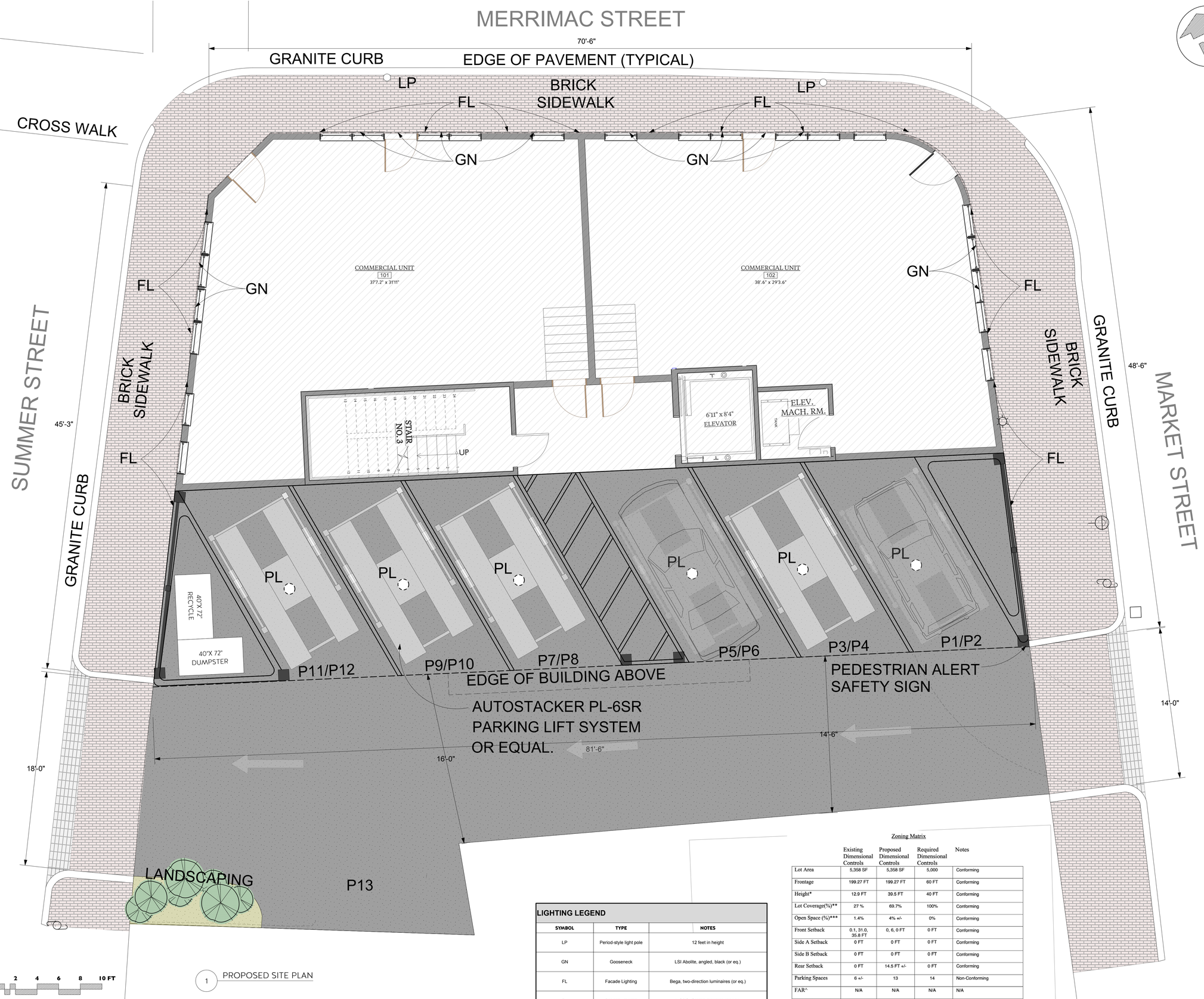

1 PROPOSED SITE PLAN

LIGHTING LEGEND		
SYMBOL	TYPE	NOTES
LP	Period-style light pole	12 feet in height
GN	Gooseneck	LSI Abolite, angled, black (or eq.)
FL	Facade Lighting	Bega, two-direction luminaires (or eq.)
PL	Parking Lighting	VCPG, Ceiling-mounted (or eq.)

Zoning Matrix

	Existing Dimensional Controls	Proposed Dimensional Controls	Required Dimensional Controls	Notes
Lot Area	5,358 SF	5,358 SF	5,000	Conforming
Frontage	199.27 FT	199.27 FT	60 FT	Conforming
Height*	12.9 FT	39.5 FT	40 FT	Conforming
Lot Coverage(%)**	27 %	69.7%	100%	Conforming
Open Space (%)***	1.4%	4% +/-	0%	Conforming
Front Setback	0.1, 31.0, 35.8 FT	0, 6, 0 FT	0 FT	Conforming
Side A Setback	0 FT	0 FT	0 FT	Conforming
Side B Setback	0 FT	0 FT	0 FT	Conforming
Rear Setback	0 FT	14.5 FT +/-	0 FT	Conforming
Parking Spaces	6 +/-	13	14	Non-Conforming
FAR^	N/A	N/A	N/A	N/A
# of Bedrooms^^	N/A	N/A	N/A	N/A

CAD File Name
2-6_MarketStreet_SD.vwx

SCOTT M. BROWN
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29 WATER STREET,
SUITE 209
NEWBURYPORT, MA 01950
T. 978.465.3535
WWW.SCOTTBROWNARCHITECT.COM

REGISTERED ARCHITECT SCOTT M. BROWN No. 10698 AMESBURY, MA

MARKET STREET CONDOS

2-6 MARKET STREET, NEWBURYPORT, MA

REVISION & REISSUE NOTES

No.	Date	Notes

Project #	Project Manager	Date
2019-33	M.L.	11.20.19

Scale: AS NOTED

SITE PLAN

A0.1

1 PROPOSED FRONT ELEVATION

0 2 4 6 8 10 FT

CAD File Name
2-6_MarketStreet_SD.vwx

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SUITE 209
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REGISTERED ARCHITECT
SCOTT M. BROWN
No. 10698
AMESBURY, MA

MARKET STREET CONDOS

2-6 MARKET STREET, NEWBURYPORT, MA

REVISION & REISSUE NOTES

No.	Date	Notes

Project #	Project Manager	Date
2019-33	M.L.	11.20.19

Scale: AS NOTED

FRONT ELEVATION

A2.1

1 PROPOSED RIGHT ELEVATION

2 PROPOSED LEFT ELEVATION

0 2 4 6 8 10 FT

CAD File Name
2-6_MarketStreet_SD.vwx

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T. 978.465.3535
WWW.SCOTTBROWNARCHITECT.COM

REGISTERED ARCHITECT SCOTT M. BROWN No. 10698 AMESBURY, MA

MARKET STREET CONDOS

2-6 MARKET STREET, NEWBURYPORT, MA

REVISION & REISSUE NOTES

No.	Date	Notes

Project #	Project Manager	Date
2019-33	M.L.	11.20.19

Scale: AS NOTED

RIGHT AND LEFT ELEVATIONS

A2.2

1 PROPOSED REAR ELEVATION

0 2 4 6 8 10 FT

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2-6_MarketStreet_SD.vwx

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WWW.SCOTTBROWNARCHITECT.COM

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SCOTT M. BROWN
No. 10698
AMESBURY, MA

MARKET STREET CONDOS

2-6 MARKET STREET, NEWBURYPORT, MA

REVISION & REISSUE NOTES

No.	Date	Notes

Project #	Project Manager	Date
2019-33	M.L.	11.20.19

Scale: AS NOTED

REAR ELEVATION

A2.3

LSI ABOLITE ANGLED REFLECTOR

Shown with Gooseneck Bracket Accessory

FINISH - Available in either Architectural Textured or High Gloss.

LAMP OPTIONS - Designed to accommodate Incandescent, Compact Fluorescent, and HID lamps. CFL and HID lamps available – order separately; Incandescent lamps by others.

BALLAST - CFL and HID require a Wall, Ceiling, or Remote Ballast. See Accessories page.

MOUNTING - Fixed hub tapped for 3/4" NPT conduit. Choose from a wide variety of wall and gooseneck brackets (see accessory section). Not designed for uplight applications.

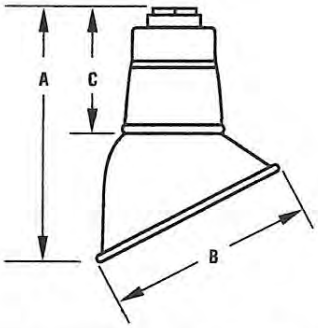
REFLECTOR - Heavy-duty, spun galvanized steel construction.

SOCKETS - Incandescent (rated 660 Watt/600 Volt) and HID fixtures (4KV pulse rated) are medium base porcelain. Compact Fluorescent sockets feature smart push-pull thermoplastic design for ease of lamping.

c UL us LISTED wet location

ARRA Funding Compliant

DIMENSIONS



Fixture	Height (A)	Width (B)	Neck (C)	Weight (kg/lbs.)
AD 100	10" (254mm)	7" (178mm)	5" (127mm)	.9kg / 2.0 lbs.
AD 150	11-1/2" (292mm)	9" (229mm)	5-1/4" (133mm)	1.1kg / 2.0 lbs.
AD 200	13-1/2" (343mm)	11" (279mm)	5-1/2" (140mm)	1.1kg / 2.5 lbs.

All LSI ABOLITE products available as Wall, Pole, & Ceiling Mounted and can be used Indoors. (See Accessories page)

Also available in LED

Not Designed For Uplight Applications

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **AD 200 INC 120 MSV LDS96 WL PG3**

Luminaire Prefix	Lamp Wattage	Light Source	Line Voltage	Luminaire Finish	Mounting	Factory Installed Options	Field Installed Options
AD 100 AD 150 AD 200	(100 Watt Max.) (150 Watt Max.) (200 Watt Max.)	INC - Incandescent	120	MSV - Metallic Silver GWT - Gloss White GBK - Gloss Black GRD - Gloss Red GPT - Textured Graphite RUS - Textured Rust SVG - Satin Verde Green SCP - Satin Copper STQ - Satin Turquoise	LDS96WL - Factory prewired leads for use with stem or bracket mounting in wet locations **Not available with cord sets**	PG3 - Globe[4]	Gooseneck & Wall Brackets Remote Ballasts Wire Guards Stems
AD 200	26/32/42	CFL - Compact Fluorescent[2] (Globe option required)	UE				
AD 100 AD 150 AD 200	50 70 100	MP - Metal Halide[2,3] (for use with open optics in indoor applications only)	120 277				
AD 200	50 70 100	MH - Metal Halide[2] (PG3 Globe option required)					
	175[1]	PSMV - Pulse-Start Metal Halide[2] (PG3 Globe option required)					

FOOTNOTES:

1- Requires the use of Pulse-Start Medium Base Reduced Envelope lamp. Consult factory for other light sources available for export.

2- CFL, PSMV, and MH remote ballast required (see accessory section).

3- Damp location listed only.

4- For use with AD200 only.

Project Name _____ **Fixture Type** _____

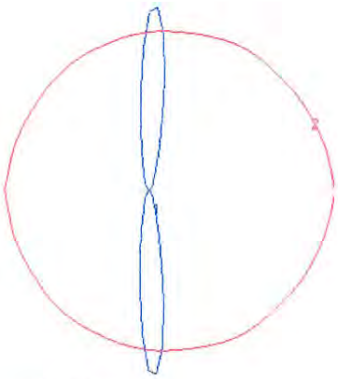
Catalog # _____

10/22/15

BEGA

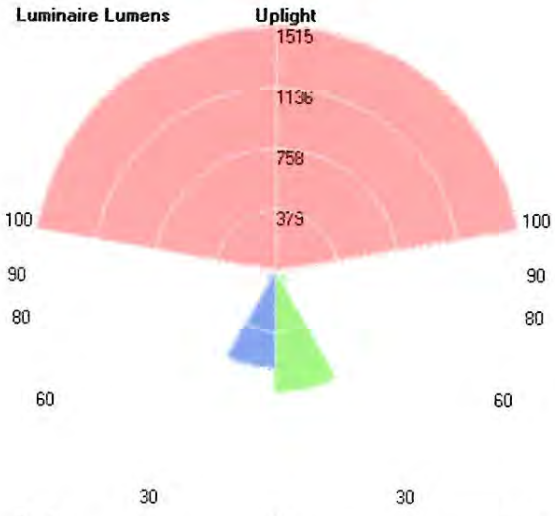
Photometric Filename: 24593.IES

TEST: LM24593
TEST LAB: BEGA
DATE: 7/6/2016
LUMINAIRE: 24 593
LAMP: 33W LED



Characteristics

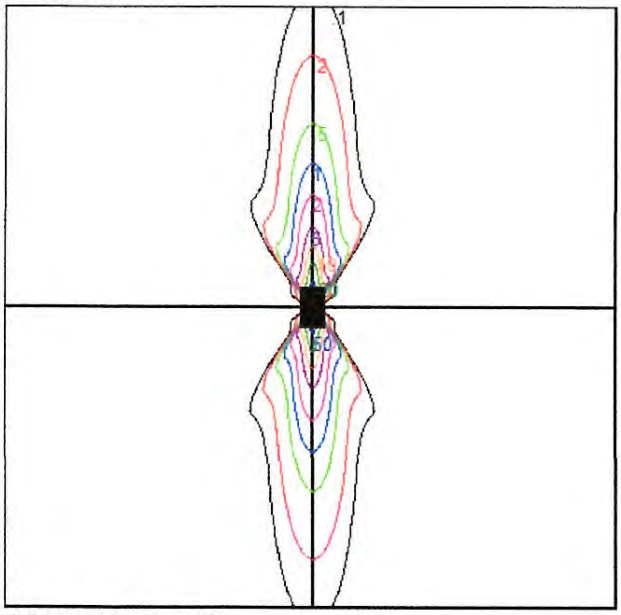
IES Classification	Type I
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3031
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	38
Ballast Factor	1.00
Upward Waste Light Ratio	0.50
Max. Cd.	11355.5 (0H, 177.5V)
Max. Cd. (<90 Vert.)	11355.5 (0H, 2.5V)
Max. Cd. (At 90 Deg. Vert.)	1.3 (0.0%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	.9 (0.0%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)



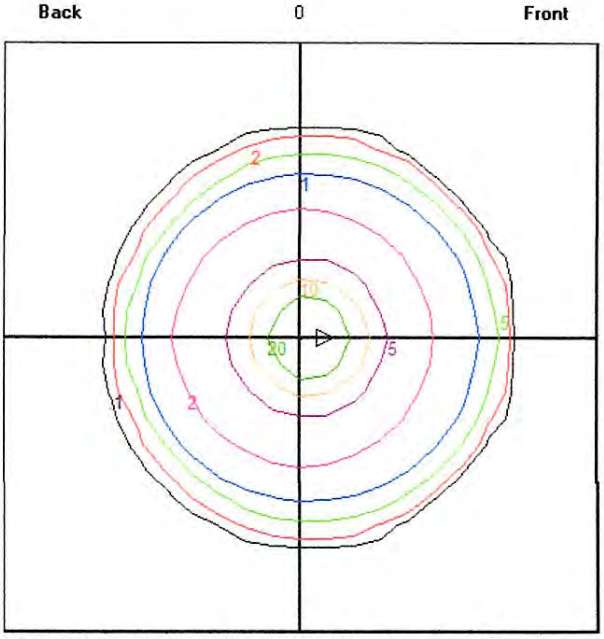
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	755.5	N.A.	24.9
FM (30-60)	88.3	N.A.	2.9
FH (60-80)	1.3	N.A.	0.0
FVH (80-90)	0.2	N.A.	0.0
BL (0-30)	603.7	N.A.	19.9
BM (30-60)	65.4	N.A.	2.2
BH (60-80)	1.0	N.A.	0.0
BVH (80-90)	0.2	N.A.	0.0
UL (90-100)	0.5	N.A.	0.0
UH (100-180)	1515.2	N.A.	50.0
Total	3031.3	N.A.	100.0

BUG Rating **B2-U5-G0**



Grid Spacing = 10 ft.
Isofootcandle grid on wall



Mounting Height = 15ft. Grid Spacing = 15 ft.
Isofootcandle grid on floor

In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

DS9 Cutoff Luminaire

DS9 A

SPECIFICATIONS

Construction

The luminaire has a luminaire base/ballast housing and an octagonal lens frame with hinged roof. The luminaires are available with a large variety of base styles to select from. All base/ballast housings, lens frames, roofs and finials are cast aluminum. The frames and luminaire bases are one-piece construction without field assembly. Lenses are clear, smooth acrylic. All hardware is stainless steel.

Installation

The luminaire mounts on a 3" O.D. x 3" tall tenon with six, ¼-20 socket set screws. The roof is hinged providing easy access to the lamp and ballast assembly. The ballast is easily accessible by removing the ballast plate. The ballast and socket assembly is furnished with a quick disconnect plug.

Optics

The luminaire utilizes a high performance reflector that is hydroformed, highly reflective and anodized with a Type V distribution, for use with a vertical lamp. Luminaire is furnished with an H.I.D. ballast and socket assembly. Luminaire is UL listed and labeled as suitable for wet locations. Sockets are glazed porcelain, medium base, with a copper alloy nickel-plated screw shell and center contact. Ballasts are core and coil, high power factor, regulating type.

Finish

The luminaire has a powder coat finish utilizing a premium TGIC polyester powder. The finish is a three-stage process which consists of drying, powder application and curing. Before coating, the parts are treated with a five-stage pretreatment process, consisting of a heated alkaline cleaner, rinse, phosphate coating, rinse and sealant.

ANTIQUE Street Lamps™

An AcuityBrands Company

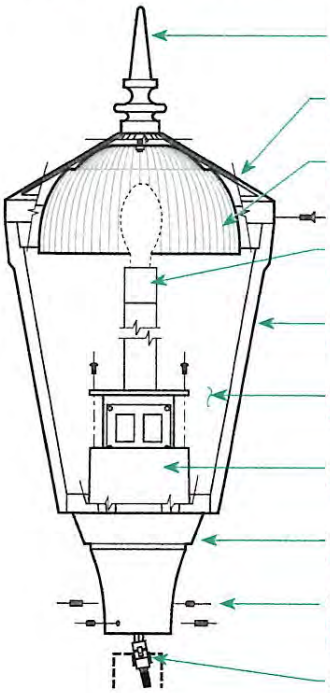
2011-B W. Rundberg Lane • Austin, TX 78758
ph. (800)410-8899 • fax (512)977-9622
www.antiquestreetlamps.com
Acuity Brands Lighting

DS9 Cutoff Luminaire

DS9 WITH LUMINAIRE BASE CHOICE

* bd dimensions are the diameter at the base

Twist & Lock photoelectric cell options available with luminaire bases S, N and AU only.



FINIAL
Cast aluminum

HINGED ROOF
Cast aluminum with stainless steel fastener

CUTOFF REFLECTOR
Hydroformed, highly reflective and anodized with type 5 distribution

PORCELAIN SOCKET
Medium base

LUMINAIRE FRAME
Cast aluminum

EIGHT LENS PANELS
Clear, smooth acrylic

BALLAST HOUSING
With factory prewired H.I.D. ballast assembly

LUMINAIRE BASE
Cast aluminum in a variety of styles

BASE SCREWS
(6) 1/4" stainless steel, socket set screws for fastening to 3"O.D. post tenon

QUICK DISCONNECT PLUG

Note: Lamp is not furnished with the luminaire.

ORDERING GUIDE

Sample Catalog no: **DS9 150S MED ACS TY5 TB1 PEB1 ANBK**

Series	Wattage/Lamp	Lens Material	Distribution	Voltage[1]	Options	Finish[3]
DS9 B DS9 X DS9 E DS9 D DS9 C DS9 P DS9 K DS9 M	*Metal Halide* 50M MED 70M MED 100M MED 150M MED	**ACS** Acrylic Clear Smooth	**TY5** IES Distribution type 5	**TB1** 120 volt **TB2** 208 volt **TB3** 240 volt **TB4** 277 volt **347** 347 volt **480** 480 volt	**SF** Single Fusing **DF** Double Fusing **PEB1** Photoelectric cell button120v **PEB2** Photoelectric cell button 208, 240, 277v **PER**[2] Twist-Lock Photocontrol Receptacle **PE1**[2] NEMA Twist & Lock PE 120, 208, 240v **PE3**[2] NEMA Twist & Lock PE 347v **PE4**[2] NEMA Twist & Lock PE 480v **PE7**[2] NEMA Twist & Lock PE 277v	**ANBK** Black **ANDB** Dark Bronze **ANDG** Dark Green **ANPP** Prime Painted **CM** Custom Match **CS** Custom Select RAL colors
DS9 A DS9 R DS9 L DS9 W DS9 S[2] DS9 N[2] DS9 AU[2]	*High Pressure Sodium* 35S MED 50S MED 70S MED 100S MED 150S MED					

NOTES:
1. Multi-tap Ballast (120, 208, 240, 277v). (120, 277, 347v in Canada). For wattages under 70S or 70M contact ASL for voltage availability.
2. Twist & Lock Photo Control only available with N, S, and AU bases.
3. For finish and color options, see Finish section in catalog or contact ASL.

ANTIQUE Street Lamps™
An AcuityBrands Company

VCPG LED
Parking Garage

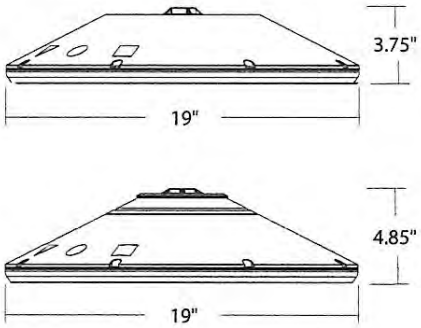
Catalog Number	
Notes	
Type	

Specifications

Diameter: 19"

Height: 3.75" (4.85" with Up-Light)

Weight (max, with no options): 18 lbs



Introduction

The all new VCPG LED (Visually Comfortable Parking Garage) luminaire is designed to bring glare control, optical performance and energy savings into one package. The recessed lens design of VCPG LED minimizes high angle glare, while its precision molded acrylic lens eliminates LED pixilation and delivers the required minimums, verticals and uniformity. The dedicated up-light module option reduces the contrast between the luminaire and the ceiling creating a more visually comfortable environment.

The VCPG LED delivers up to 87% in energy savings when replacing 175W metal halide luminaires. With over 100,000 hour life expectancy (12+ years of 24/7 continuous operation), the VCPG LED luminaire provides significant maintenance savings over traditional luminaires.

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: VCPG LED V4 P4 40K 70CRI T5M MVOLT SRM DNAXD

VCPG LED

Series	LED Light Engines	Package	Color temperature	Color Rendering Index	Distribution	Voltage		Mounting
VCPG LED	V4[1] 4 Light Engines V8[1] 8 Light Engines	P1[1] P2[1] P3[1] P4[1] P5[1] P6[1] P7[1]	30K 3000 K 35K 3500 K 40K 4000 K 50K 5000 K	70CRI 80CRI	T5M Type V, medium T5R[2] Type V, rectangular T5W Type V, wide T5E Type V entry LANE[2] Drive lane	MVOLT 347 480	For ordering with fuse 120 208 240 277 347 480	**Shipped included** PM Pendant mount standard (24-inch length supply leads) SRM Surface mount (24-inch length supply leads) **Shipped separately** YK Yoke/trunnion mount[9]

Options

Shipped installed

UPL1	Up-Light: 500 lumens
UPL2	Up-Light: 700 lumens
E8WC	Emergency battery backup, Certified in CA Title 20 MAEDBS (8W, -20°C min)[3,4,5]
E10WH	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)[3,4,5]
HA	High ambient (50°C, only P1-P4)
SF	Single fuse (120V, 277V, 347V)
DF	Double fuse (208V, 240V, 480V)
SPD10KV	10KV Surge Pack
LDS36	36in (3ft) lead length
LDS72	72in (6ft) lead length
LDS108	108in (9ft) lead length
DMG	External 0-10V leads (no controls)[6]

Shipped Separately

WG	Wire Guard
BDS	Bird Shroud[7]
HS	House Side Shield

Standalone Sensors/Controls[2]

PIR	Motion/ambient sensor for 8-15' mounting heights
PIRH	Motion/ambient sensor for 15-30' mounting heights
PIR3FC3V	Motion/ambient sensor for 8-15' mounting heights, pre programmed to 3fc and 35% light output
PIRH3FC3V	Motion/ambient sensor for 15-30' mounting heights, pre programmed to 3fc and 35% light output
PIR3FC3V924	UL924 Listed motion/ambient sensor for emergency circuit for 8-15' mounting heights, pre programmed to 3fc and 35% light output[10]
PIRH3FC3V924	UL924 Listed motion/ambient sensor for emergency circuit for 15-30' mounting heights, pre programmed to 3fc and 35% light output[10]

Networked Sensors/Controls[2]

NLTAIR2 PIR	nLIGHT AIR Wireless enabled motion/ambient sensor for 8-15' mounting heights
NLTAIR2 PIRH	nLIGHT AIR Wireless enabled motion/ambient sensor for 15'-30' mounting heights
XAD	XPoint™ Wireless enabled[8]
XAD924	XPoint™ Wireless enabled, UL 924 Listed for emergency circuit[8,10]
XAD PIR	XPoint™ Wireless enabled motion/ambient sensor for 8-15' mounting heights
XAD PIRH	XPoint™ Wireless enabled motion/ambient sensor for 15-30' mounting heights
XAD924 PIR	XPoint™ Wireless enabled, UL 924 Listed motion/ambient sensor for emergency circuits for 8-15' mounting heights[10]
XAD924 PIRH	XPoint™ Wireless enabled, UL 924 Listed motion/ambient sensor for emergency circuits for 15-30' mounting heights[10]

Finish

DWHXD	White
DNAXD	Natural aluminum
DDBXD	Dark bronze
DBLXD	Black

Ordering Information Cont.

Accessories

Ordered and shipped separately.

VCPGBDS DWHXD U	Bird shroud for PM (specify finish)
VCPGBDS YK DWHXD U	Bird shroud for YK (specify finish)
VCPGSRM U	Surface mount kit, with no Up-Light
VCPGUSRM U	Surface mount kit, with Up-Light
VCPGWG U	Wire guard
SLVSQ	Quick mount pendant swivel kit, square
SLVRD	Quick mount pendant swivel kit, round
VCPG YK DWHXD U	Yoke mount kit (specify finish)

NOTES

1 P1-P6 not available with V8. P7 not available with V4.
2 Not available with P7.
3 Not available with 347V or 480V.
4 E8WC and E10WH only rated up to 35°C ambient.
5 E8WC & E10WH only available with P1-P4 packages.
6 DMG option not available with standalone or networked sensors/controls.
7 BDS not available with UPL1 or UPL2.
8 XAD & XAD924 not available with PIR3FC3V924 and PIRH3FC3V924.
9 Only vertical height adjustment. No angle adjustment. Use PM and SLVSQ or SLVRD for mounting to angled ceiling or canopies.
10 Power interruption delay >30 milliseconds required for operation. Refer sequence of operations on page 4 for more details.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	Watts	Distribution Type	30K (3000K, 70 CRI)		35K (3500K, 70 CRI)		40K (4000K, 70 CRI)		50K (5000K, 70 CRI)	
			Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
P1	27W	T5E	3,581	135	3,670	138	3,815	144	3,876	146
		T5M	3,620	136	3,710	140	3,856	145	3,917	147
		T5W	3,592	135	3,681	139	3,827	144	3,888	146
		T5R	3,464	130	3,550	134	3,690	139	3,749	141
		LANE	3,507	132	3,594	135	3,736	141	3,796	143
P2	34W	T5E	4,577	135	4,691	138	4,876	144	4,954	146
		T5M	4,626	136	4,741	140	4,928	145	5,007	147
		T5W	4,591	135	4,705	139	4,891	144	4,968	146
		T5R	4,427	130	4,537	134	4,716	139	4,791	141
		LANE	4,482	132	4,594	135	4,775	141	4,851	143
P3	43W	T5E	5,808	134	5,952	137	6,187	143	6,286	145
		T5M	5,870	135	6,015	139	6,253	144	6,353	146
		T5W	5,825	134	5,970	138	6,205	143	6,304	145
		T5R	5,617	130	5,757	133	5,984	138	6,079	140
		LANE	5,688	131	5,829	134	6,059	140	6,155	142
P4	56W	T5E	7,391	131	7,575	135	7,874	140	7,999	142
		T5M	7,470	133	7,656	136	7,958	141	8,085	144
		T5W	7,414	132	7,597	135	7,898	140	8,023	143
		T5R	7,149	127	7,326	130	7,615	135	7,737	137
		LANE	7,238	129	7,418	132	7,711	137	7,834	139
P5	82W	T5E	10,189	124	10,442	127	10,854	132	11,027	134
		T5M	10,298	125	10,553	128	10,970	134	11,145	136
		T5W	10,220	124	10,473	128	10,887	133	11,060	135
		T5R	9,855	120	10,099	123	10,498	128	10,665	130
		LANE	9,978	121	10,226	124	10,629	129	10,799	131
P6	108W	T5E	12,878	120	13,197	123	13,719	127	13,937	129
		T5M	13,015	121	13,338	124	13,865	129	14,086	131
		T5W	12,917	120	13,237	123	13,760	128	13,979	130
		T5R	12,455	116	12,764	119	13,268	123	13,480	125
		LANE	12,611	117	12,924	120	13,435	125	13,649	127
P7	122W	T5E	15,503	125	15,887	128	16,515	133	16,778	135
		T5M	15,668	126	16,057	129	16,691	135	16,957	137
		T5W	15,549	125	15,935	129	16,564	134	16,828	136

Up-light Lumen Output

Up-light Option	Watts	Lumens
UPL1	6.5W	519
UPL2	8.5W	715

Lumen Multiplier for 80CRI

CCT	Multiplier
30K	0.926
35K	0.945
40K	0.967
50K	0.965

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.97	0.94	0.89

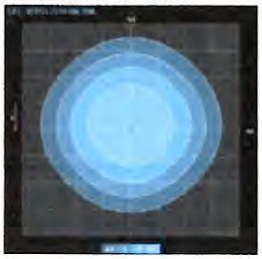
Electrical Load

Power Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	27W	0.22	0.13	0.12	0.10	0.08	0.06
P2	34W	0.28	0.16	0.14	0.13	0.10	0.08
P3	43W	0.37	0.21	0.18	0.16	0.13	0.09
P4	56W	0.48	0.28	0.24	0.21	0.16	0.12
P5	82W	0.68	0.40	0.35	0.30	0.24	0.18
P6	108W	0.91	0.52	0.45	0.39	0.32	0.23
P7	124W	1.03	0.59	0.51	0.44	0.37	0.27

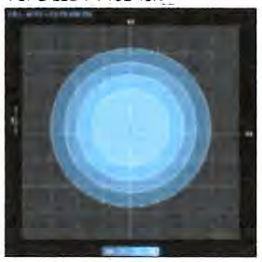
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting VCPG LED homepage.
Tested in accordance with IESNA LM-79 and LM-80 standards

VCPG LED P4 T5M 40K

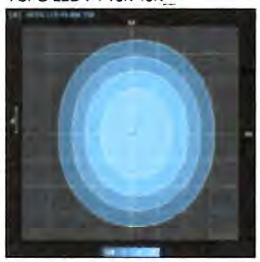


VCPG LED P4 T5E 40K_

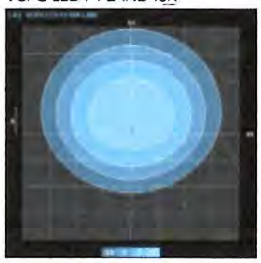


VCPG LED P4 T5W 40K

VCPG LED P4 T5R 40K_



VCPG LED P4 LANE 40K



Control/Sensor Options

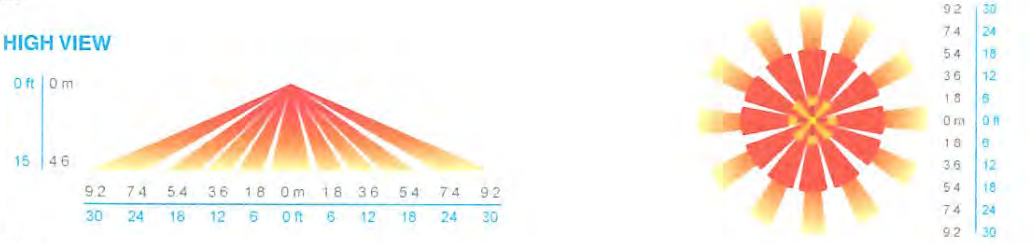
Motion/Ambient Sensor (PIR_, PIRH)

Motion/Ambeint sensor (Sensor Switch MSOD, Xpoint MSOD) is integrated into the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

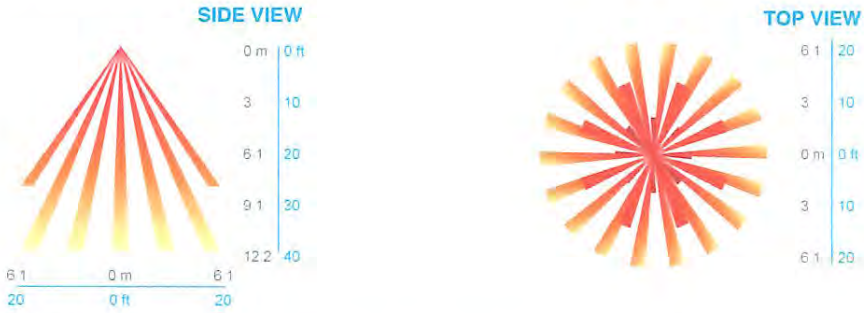
Networked Control (NLTAIR2)

nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

PIR



PIRH



Motion/Ambient Sensor Default Settings

Option	Dim Level	High Level (when triggered)	Photocell Operation	Motion Time Delay	Ramp-down Time	Ramp-up Time
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR3FC3V or PIRH3FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 3fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec

Sequence of Operations for UL924 Listed Controls/Sensors (PIR3FC3V924, PIRH3FC3V924, XAD924)

The UL924 listed control/sensor ("device") is designed to provide full light output for 90 minutes following power loss ("Egress Mode"), ignoring both manual and automatic dimming/occupancy/daylight control signals during this time. The sequence of operations is as follows:

- Normal condition: device can dim and turn off the luminaire as normal, in response to automatic and manual control.
- Utility power fails, and luminaire loses power.
- Backup power source activates, transfer switch moves the emergency circuit powering the luminaire onto the backup source, and luminaire regains power.
- The device detects this power interruption, if it is > 30ms (2 line cycles).
- The device ignores all dimming commands and controls the driver to full light output for 90 minutes.
- The device resumes normal dimming controls after 90 minutes.

These UL924 listed controls/sensors are not intended for use with Non-interruptible central emergency power systems. The power interruption, when transferring from normal utility power to emergency backup power, is required for the controller to activate its Egress Mode and provide full light output.

Mounting, Options & Accessories

PM – Pendant Mount
(compatible with ¾ NPT, pendant stem provided by others)

D = 19″
H = 4.1″

SRM – Surface Mount

D = 19″
H = 4.1″

SRM – Surface Mount with Up-Light

D = 19″
H = 5.3″

YK – Yoke/Trunnion Mount

D = 19″
H (Yoke) = 10″-18″

PIR & PIRH – Motion/ Ambient sensor

D = 19″
H = 4.6″ (no up-light)
or 5.6″ (with up-light)

BDS – Bird shroud for pendant mount

D = 19″
H = 8″

BDS – Bird shroud for yoke mount

D = 19″
H (Yoke) = 10″-18″

WG – Wire guard

D = 19″
H = 4.9″ (no uplight)
or 5.9″ (with up-light)

HS – House side shield

D = 19″
H = 7.1″ (no up-light) or 8.1″ (with up-light)

FEATURES & SPECIFICATIONS

INTENDED USE
The visually comfortable optics, energy savings, and long life of the VCPG LED Parking Garage luminaire make it an ideal choice for new commercial installations and retrofit parking garage opportunities. It is designed to meet or exceed recommended illuminance criteria when installed as a direct replacement of most HID parking garage luminaires. Its modern dayform and aesthetics also make it appealing for indoor low-bay applications.

CONSTRUCTION
Two-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. The LED driver is separated from the heat generating light engines and mounted in direct contact with the casting to promote low operating temperatures, higher lumen maintenance and long life. The housing is completely sealed against moisture and environmental contaminants (IP66) and is suitable for hose-down application.

FINISH
Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

OPTICS
Light guide technology provides a diffused light source, reducing glare from direct view of the LEDs. The light source is recessed into the luminaire, further reducing the high angle glare from the luminaire. A combination of precision molded micro prismatic acrylic lenses and back reflectors provide five different photometric distributions tailored specifically to parking garage applications. Up-light option comes with a dedicated light engine and custom optic designed to efficiently spread light on to the ceiling, thus reducing the cave effect.

ELECTRICAL
Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L89/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%, and a minimum 6.0 KV surge rating. When ordering the SPD10KV option, a separate 10kV (5kA) surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/IEEE C62.41.2).

INSTALLATION
Standard configuration accepts a rigid or free-swinging 3/4″ NPT stem for pendant mounting. The surface mount option attaches to a 4x4″ recessed or surface mount outlet box using a quick-mount kit (included); kit contains galvanized steel luminaire and outlet box plates and a full pad gasket. Kit has an integral mounting support that allows the luminaire to hinge down for easy electrical connections. Luminaire and plates are secured with set screws. Also, available with a yoke/trunnion mount option with 3/4″ NPT provision for flexible conduit entry (conduit by others); height can be adjusted from 10-18″. Supply leads are 24″ in length as standard. Longer supply leads are available as additional options. Design can withstand up to a 3.0 G vibration load rating per ANSI C136.31.

LISTINGS
CSA certified to U.S. and Canadian standards. IP66 rated for outdoor applications. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY
5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

AUTOSTACKER™

PL-6SR/SRX

6,000-lbs. Capacity / Scissors Parking Lift Platform

The Autostacker is the latest-model parking lift to hit the home and commercial markets. With the strength to handle loads up to 6,000 lbs. and the minimal footprint necessary for a home garage lift, the Autostacker is the perfect garage parking lift for any home or shop owner.

Other mechanical parking systems can appear unsightly in home garages. Plus, most lifts feature four columns that obstruct access around the garage. Autostacker has no posts whatsoever, so it looks like it belongs anywhere you put it. We know that low-profile vehicles often struggle to safely load onto lifts without the help of pricey specialty ramps. Autostacker features a patented, inclined platform that accommodates low-stance vehicles with ease. Solve your car stacking problems with the world's smartest low-profile home parking lift.

6,000-lb. (2,722 kg) Lifting Capacity

AUTOSTACKER™

1645 Lemonwood Drive, Santa Paula, CA 93060 USA • **Toll-free** 1-888-977-8225 • **Fax** 1-805-933-9160 • **www.autostacker.com**

AUTOSTACKER SPECIFICATIONS AND FEATURES

There are enough features and cool parking lift tweaks on Autostacker to keep you safer, happier and better cared for than with virtually any parking lift out there. Everything about the Autostacker screams, “Upgrade!” From the impressive lift capacity and superior drive-through clearance to the simple, post-free design that fits in most parking spaces, this is the parking lift you want with all the protection you deserve.

DIMENSIONS

PL-6SR
- Overall Width: 103” (2,620 mm)
- Overall Length: 143” (3,630 mm)
- Platform Lenth: 124” (3,150 mm)
- Platform Width: 83.75” (2,128 mm)
- Ramp Height (entry): 2” (51 mm)
- Under Clearance on top lock: 80” (2,032 mm)

PL-6SRX (Extra Wide)
- Overall Width: 111” (2,815 mm)
- Platform Width: 91.75” (2,331 mm)

POWER

Standard - Power Unit Console
- Single unit operation
- Motor Voltage: 208-240 VAC / 50/60Hz / 1Ph
- Power Consumption: 1,500 Watts
- Motor Horsepower: 2 HP
- Starting Amps: 25A
- Normal Running Amps: 12-18A

WHAT’S INCLUDED

- Right & left side superstructure
- Front wheel trough
- Ramp assembly with logo plate
- Lower front tie-bar
- Galvanized decking sections
- Front tire stops
- Power unit control console
- Complete assembly parts package
- Installation and operators manual

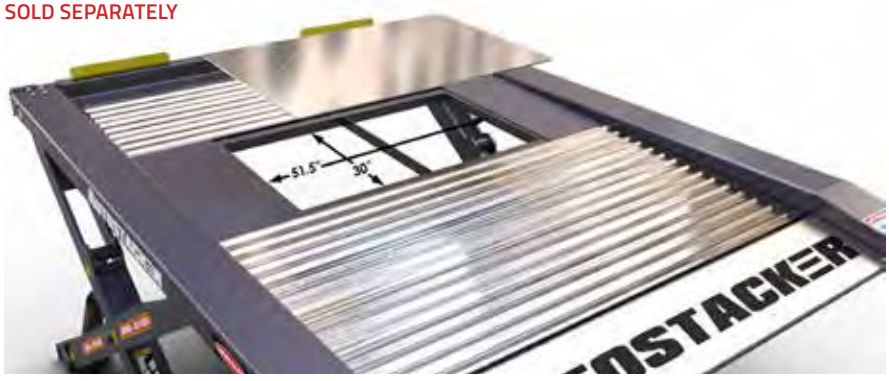
SPEED OF RISE

- **Standard power unit console:** 35 seconds
- **Optional multi-unit power unit console:** 20 seconds

Optional multi-unit power unit console available (Operates up to 12 lifts)

OPTIONAL ACCESS PANEL (51.5” x 30”)

SOLD SEPARATELY



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Minimize Your Liability!

The Engineering is Done!

- **Self-contained**
- **Timer Control Board**
- **Flashing letters and amber LEDs**
- **Voice Alert with speaker and volume control**
- **Power supply rated for parking facilities**
- **Ground mounted - steel enclosure**
- **Optional: Audio cut off timer**
- **Plays any MP3 audio warning file**

Solution

Warns Pedestrians, of a vehicle exiting a facility, with Voice and Flashing LED Alerts

Vehicle Exit Warning Post

MADE IN U.S.A PRODUCT

Proactive Protection

- Mitigate RISK
- Avoid lawsuits
- Reduce liability
- Protect pedestrians
- Avoid workers comp

The World is a Distracted Place

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CAR COMING POST Features

- Works with any parking system, motion detector, access control or as a stand-alone device
- Fully self-contained: No additional parts or enclosures needed
- Integrated full control system with Timers, Volume Control, Relays, MP3 Voice Board, and Speakers

PASS Signs
Pedestrian Alert Safety Signs

Have questions?
We make it easy for you.
480-689-1993
support@passsigns.com

Operations

How the System Operates

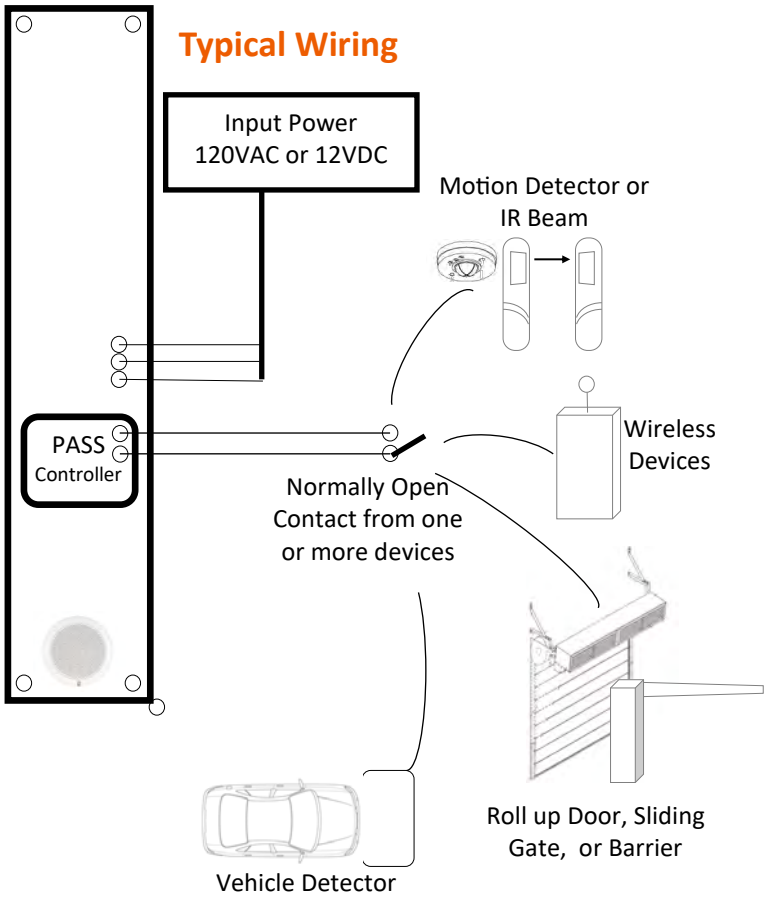
An output trigger from a traffic control device activates the system when a vehicle is detected exiting a parking facility or blind corner.
(see types of triggers diagram below)

A PASS Control board is integrated inside the Post Enclosure

The trigger is received on INPUT B of the PASS Control. This activates the two alerts - Voice, and Flashing LED

The duration of the alerts is controlled by the Activation Timer (0-60 Seconds)

Typical Wiring



Specifications

Dimensions

Height: 48”
Dimensions: 48” x 6” x 6”
Material: Steel

Finish

Enclosure: Powdered coated Hammered Copper
Lettering: White LED
LED Colors: Amber Yellow

Electrical

LED lighting 50,000 hrs
Power In: 120VAC or 12VDC 5A
Power Out: 12VDC
Trigger Input Requirement: Dry Normally Open
Waterproof transformer (120V/12V) is integrated inside the sign enclosure

Audio

PASS Signs VM-1 MP3 Board
40 Watt Speaker
Audio Message can be changed easily onsite with laptop and USB to MicroUSB cable (android cable)
Output is 0-90db

PASS Control Board (Integrated)

12VDC Input Power
12VDC Output Power (for motion or detector)
MP3 Voice Board
Activation Timer Dial 0-60 Seconds
Delay before Activation Dial 0-15 Seconds
Volume Dial 0-90dB
Input 1: Activates Sign
Output 1: Steady Output
Output 2: Flashing 1 sec On/Off Output
Speaker Output
Input 1 Test Button
Input 2 Test Button

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